



Negative Declaration & Notice Of Determination

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

ENVIRONMENTAL DETERMINATION NO. ED19-081

DATE: April 19, 2019

PROJECT/ENTITLEMENT: Augustine Minor Use Permit DRC2018-00165

APPLICANT NAME: Jason & Erin Augustine **Email:** Jason.Augustine@glennburdette.com
ADDRESS: 1370 Woodside Drive, San Luis Obispo CA 93401
CONTACT PERSON: Bryan Ridley (Agent) **Telephone:** (805)704-0535

PROPOSED USES/INTENT: A request by Jason and Erin Augustine for a Minor Use Permit (DRC2018-00165) to allow for the construction of a two-story 3,445-square-foot (sf) single family dwelling with an 840 sf attached garage and a 596 sf detached accessory dwelling unit, with associated access driveway, fire truck turnaround, and landscaping. The project will result in the disturbance of 0.7 acres of an 82.89-acre parcel. The project is within the Rural Lands land use category.

LOCATION: The project is located 0.2 miles north of the intersection of Sequoia Dr. and Harmony Dr., adjacent to and immediately north of the City of San Luis Obispo. The site is located in the San Luis Obispo Sub Area North within the San Luis Obispo Planning Area.

LEAD AGENCY: County of San Luis Obispo
Dept of Planning & Building
976 Osos Street, Rm. 200
San Luis Obispo, CA 93408-2040
Website: <http://www.sloplanning.org>

STATE CLEARINGHOUSE REVIEW: YES NO

OTHER POTENTIAL PERMITTING AGENCIES: None

ADDITIONAL INFORMATION: Additional information pertaining to this Environmental Determination may be obtained by contacting the above Lead Agency address or (805)781-5600.

COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT 4:30 p.m. (2 wks from above DATE)

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination State Clearinghouse No. _____

This is to advise that the San Luis Obispo County _____ as *Lead Agency* *Responsible Agency* approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures and monitoring were made a condition of approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the 'Lead Agency' address above.

Katie Nall (kinall@co.slo.ca.us)

County of San Luis Obispo

Signature	Project Manager Name	Date	Public Agency
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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: A request by Jason and Erin Augustine for a Minor Use Permit (DRC2018-00165) to allow for the construction of a two-story 3,445-square-foot (sf) single family dwelling with an 840 sf attached garage and a 596 sf detached accessory dwelling unit, with associated access driveway, fire truck turnaround, and landscaping. The project will result in the disturbance of 0.7 acres of an 82.89-acre parcel. The project is within the Rural Lands land use category and is located 0.2 miles north of the intersection of Sequoia Dr. and Harmony Dr., adjacent to and immediately north of the City of San Luis Obispo. The site is located in the San Luis Obispo Sub Area North within the San Luis Obispo Planning Area.

ASSESSOR PARCEL NUMBER(S): 070-304-005

Latitude: 35 degrees 16' 18" N Longitude: 120 degrees 37' 50" W **SUPERVISORIAL DISTRICT # 3**

B. EXISTING SETTING

PLAN AREA: San Luis Obispo **SUB:** San Luis Obispo(North) **COMM:** N/A

LAND USE CATEGORY: Rural Lands

COMB. DESIGNATION: Airport Review, GSA Geologic Hazard Area, Sensitive Resource Area

PARCEL SIZE: 82.89 acres

TOPOGRAPHY: Steeply sloping (50% Slope AVG)

VEGETATION: Coastal scrub

EXISTING USES: Undeveloped

SURROUNDING LAND USE CATEGORIES AND USES:

<i>North:</i> Rural Lands; undeveloped	<i>East:</i> Rural Lands; undeveloped
<i>South:</i> Residential Rural; single-family residence(s)	<i>West:</i> Rural Lands; single-family residence(s)



C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, at least one issue was identified as having a potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.



COUNTY OF SAN LUIS OBISPO INITIAL STUDY CHECKLIST

1. AESTHETICS	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) <i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other: _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Aesthetics

Setting. The San Luis Obispo North sub-area is defined topographically by two parallel mountain ranges - the Santa Lucia Range along the northeast boundary and the Irish Hills along the southwest boundary. The valleys between the two ranges are punctuated by a chain of volcanic morros - Islay Hill southeast of the City of San Luis Obispo and Cerro San Luis, Bishop's Peak, Chumash Peak and Cerro Romauldo to the northwest. The proposed project is located directly east of the City of San Luis Obispo's Urban Reserve Line and Sphere of Influence in the City's Goldtree Hillside planning area, which extends up the hill from the Alrita Street neighborhood. This area as defined by the City of San Luis Obispo's Land Use Element can accommodate minor expansion including single-family residences.

The project site is on the south western corner of the parcel, on the western side of an ephemeral blue line stream. Existing vegetation is predominately annual grasses with woodland along the creek which runs through the center of the parcel and along the eastern side of the structure. Vehicular access is provided by a private road off of Sequoia Drive, within the City of San Luis Obispo. The proposed single-family residence is within the San Luis Obispo Highway Design Corridor Area, and is visible from Highway 227/Broad Street, a scenic highway. This standard is intended to protect views of scenic backdrops and background vistas and foreground views from scenic roads and highways.



The Highway Design Corridor standards restricts the project from silhouetting against the sky, grading on slopes greater than 30 percent, and minimizing the building height and mass by using low-profile design and landscape to screen.

The property is located on steeply sloping topography (over 20%) surrounded by Rural Lands zoned lots. The neighboring residences to the west are at a similar elevation and are slightly visible from the highway corridor. Views of the site from residences within the City are periodically blocked by the intervening buildings and vegetation along the roads.

Impact. The applicant is proposing a two-story single-family residence with an attached two-car garage and an accessory dwelling. The proposed project could have a potentially significant impact on visual resources since it would be visible from important County and City scenic roadways. Two visual simulations for the proposed project were prepared, one from key viewing angles along Highway 227, and another along Johnson Avenue and Orcutt Road. The photo-simulations demonstrate that the site will be visible from important County and City scenic roadways.

Along Highway 227/Broad Street, both pedestrian and vehicular traffic moves perpendicular to the line of sight toward the building site, which is filtered through existing development and tall clusters of vegetation. The building site is located about one to one and a half miles from the corridor. This distance along with the proposed muted color palette of the residence decreases the visual impacts along Highway 227. Visual simulation photos were taken at different vantage points along Johnson Avenue and Orcutt Road. The project site was screened from most viewpoints along these roads due to topography or vegetation. Brief views of the project site are again filtered through existing structures and vegetation. There are no highways or roadways where the project is visible for an extended duration of travel. The project will not change the visual character or introduce a new use to the area because of the other residences in the project vicinity.

The proposed two-story residence proposes a maximum building height of 19.91 feet above the average natural grade. The proposed combination of materials (cultured stone, wood decking, standing seam sheet metal roof, wood trims, glass, cast in place concrete) will avoid massing effects and provide for a variety of color and material. The muted color palette will blend with the hillside vegetation. Grading for the proposed driveway will also be visible from Highway 227.

The project will also result in new sources of light and glare when compared with existing conditions. Nighttime lighting for the project has the potential to be visually intrusive in the landscape and be a source of nighttime glare. Exterior lighting is proposed adjacent to doorways as required for safety in the Uniform Building Code.

Mitigation/Conclusion. Based on the above-discussed visual setting and potential project impacts, visual resources will be impacted. Compliance with the County's exterior lighting ordinance Section 22.10.060 will reduce the lighting and glare impact to less than significant. The project is subject to the Highway Corridor Design Standard in LUO Section 22.10.095 requiring the use of landscaping to screen new development. The project will be conditioned to meet this LUO development requirement by use of drought tolerant vegetation planted along the northern, western and southern edges of the site area to help screen the project from public vantage points. In order to reduce visual impacts to a less than significant level, the project is subject to additional mitigation measures which have been included in Exhibit B.



2. AGRICULTURAL RESOURCES

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Impair agricultural use of other property or result in conversion to other uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Conflict with existing zoning for agricultural use, or Williamson Act program?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Agricultural Resources

Setting. The proposed project site is located in the Rural Lands land use category on an approximately 82.89-acre parcel. The parcel does not have any history of agricultural use.

Project Elements. The following area-specific elements relate to the property’s importance for agricultural production:

Land Use Category: Rural Lands

Historic/Existing Commercial Crops: None

State Classification: Not prime farmland

In Agricultural Preserve? Yes, in the Edna Valley AG Preserve Area

Under Williamson Act contract? No

The soil type(s) and characteristics on the subject property include:

Los Osos-Diablo complex (30 - 50% slope). This steeply sloping loamy claypan soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class VI without irrigation and Class is not rated when irrigated.

Obispo Rock outcrop complex (15 - 75% slope). This moderately to very steeply sloping, shallow clayey serpentine soil is considered very poorly drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Impact. The project is located in a predominantly non-agricultural area with no agricultural activities occurring on the property or immediate vicinity. No significant impacts to agricultural resources are anticipated.

Mitigation/Conclusion. No mitigation measures are necessary.

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Expose any sensitive receptor to substantial air pollutant concentrations?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create or subject individuals to objectionable odors?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be inconsistent with the District's Clean Air Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GREENHOUSE GASES				
f) <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Air Quality

Setting. The Air Pollution Control District (APCD) has developed and updated their [CEQA Air Quality Handbook \(2012\)](#) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

The property contains Franciscan Complex units which is associated with serpentinite rocks and naturally occurring asbestos. However, during geologic testing, no serpentinite was observed within the test trenches. No plant species known to be found near serpentinite rock was found on the project site either, indicating the absence of naturally occurring asbestos.

The project proposes to disturb soils that have been given wind erodibility ratings of 4 and 6, which is considered moderate to moderately high.



Greenhouse Gas (GHG) Emissions are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

The passage of AB32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the greenhouse gas emissions reduction goal for the State of California into law. The law required that by 2020, State emissions must be reduced to 1990 levels. This is to be accomplished by reducing greenhouse gas emissions from significant sources via regulation, market mechanisms, and other actions. Subsequent legislation (e.g., SB97-Greenhouse Gas Emissions bill) directed the California Air Resources Board (CARB) to develop statewide thresholds.

In March 2012, the San Luis Obispo County Air Pollution Control District (APCD) approved thresholds for GHG emission impacts, and these thresholds have been incorporated into the APCD's CEQA Air Quality Handbook. APCD determined that a tiered process for residential / commercial land use projects was the most appropriate and effective approach for assessing the GHG emission impacts. The tiered approach includes three methods, any of which can be used for any given project:

1. Qualitative GHG Reduction Strategies (e.g. Climate Action Plans): A qualitative threshold that is consistent with AB 32 Scoping Plan measures and goals; or,
2. Bright-Line Threshold: Numerical value to determine the significance of a project's annual GHG emissions; or,
3. Efficiency-Based Threshold: Assesses the GHG impacts of a project on an emissions per capita basis.

For most projects the Bright-Line Threshold of 1,150 Metric Tons CO₂/year (MT CO₂e/yr) will be the most applicable threshold. In addition to the residential/commercial threshold options proposed above, a bright-line numerical value threshold of 10,000 MT CO₂e/yr was adopted for stationary source (industrial) projects.

It should be noted that projects that generate less than the above-mentioned thresholds will also participate in emission reductions because air emissions, including GHGs, are under the purview of the California Air Resources Board (or other regulatory agencies) and will be "regulated" either by CARB, the Federal Government, or other entities. For example, new vehicles will be subject to increased fuel economy standards and emission reductions, large and small appliances will be subject to more strict emissions standards, and energy delivered to consumers will increasingly come from renewable sources. Other programs that are intended to reduce the overall GHG emissions include Low Carbon Fuel Standards, Renewable Portfolio standards and the Clean Car standards. As a result, even the emissions that result from projects that produce fewer emissions than the threshold will be subject to emission reductions.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is 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.

Impact. As proposed, the project will result in the disturbance of approximately 30,500 square feet, which will include moving approximately 2,200 cubic yards of cut and 550 cubic yards of fill material. This will result in the creation of construction dust, as well as short- and long-term vehicle emissions. The project will be moving less than 1,200 cubic yards/day of material and will disturb less than four acres of area, and therefore will be below the general thresholds triggering construction-related mitigation. The project is also not in close proximity to sensitive receptors that might otherwise result in nuisance complaints and be subject to limited dust and/or emission control measures during



construction.

From an operational standpoint, based on Table 1-1 of the CEQA Air Quality Handbook (2012), the project will not exceed operational thresholds triggering mitigation. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant air quality impacts are expected to occur.

This project is a single-family residence. Using the GHG threshold information described in the Setting section, the project is expected to generate less than the Bright-Line Threshold of 1,150 metric tons of GHG emissions. Therefore, the project's potential direct and cumulative GHG emissions are found to be less significant and less than a cumulatively considerable contribution to GHG emissions. Section 15064(h)(2) of the CEQA Guidelines provide guidance on how to evaluate cumulative impacts. If it is shown that an incremental contribution to a cumulative impact, such as global climate change, is not 'cumulatively considerable', no mitigation is required. Because this project's emissions fall under the threshold, no mitigation is required.

Mitigation/Conclusion. No serpentine soils were found within the digging area. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan and will not require any additional mitigation measures beyond those required by Ordinance.



4. BIOLOGICAL RESOURCES

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in a loss of unique or special status species* or their habitats?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) <i>Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) <i>Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish & Wildlife or U.S. Fish & Wildlife Service?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Species – as defined in Section 15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.

Biological Resources

Setting. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Grassland, coastal scrub, riparian woodland, coast live oak woodland

Name and distance from blue line creek(s): An unnamed “blue line” tributary crosses through the subject property.

Habitat(s): Herbaceous, Shrub, Tree, Urban Built Up

The project is within the following combining designation(s), which identifies this general area as biologically sensitive: Sensitive Resource Area (SRA), Terrestrial Habitat (TH), Stream and Riparian Vegetation Area (SRVA).

A Biological Resource Assessment was conducted at the project site on August 14, 16, 23, and 28 in 2017 and February 7, 2018 by V.L. Holland. The entire parcel consists of grassland, coastal scrub, and coast live oaks with a small ephemeral creek lined by a narrow corridor of riparian woodland. The building site is mostly covered by coastal valley grassland such as purple needlegrass. A search on the California Department of Fish and Game Natural Diversity Data Base (CNDDDB) provided an extensive list of special status species, 74 plant and 85 wildlife species, that have the potential to be found within 1 mile of the project site.

Stipa Pulchra (purple needlegrass) was found on the building site, no other special status plant species were found in the building site because the site is highly disturbed and most special-status plant species on the California Department of Fish and Game Natural Diversity Data Base (CNDDDB) are highly restricted in distribution range, in habitat requirements, and have never been reported growing near this site. The coast live oak woodland and riparian woodland are considered sensitive.



The survey revealed no signs (scat, tracks, fur, sounds, or live observations) of special status wildlife species. Several species of wildlife are known to be in the surrounding, undisturbed hillsides and may wander into the home site area on occasion. For the most part, special status animal species that occur within San Luis Obispo are highly restricted both in distribution range and in habitat.

Impact. The proposed project has a limited potential to directly and/or indirectly impact special-status wildlife and habitat. Direct impacts to special-status species could result from injury or death via construction-related disturbances such as trampling or crushing from equipment or other construction activities such as grading, vegetation removal, and foundation installation. Indirect impacts could result from construction noise, harassment, dust emissions, or other disruption during construction activities. The total area of disturbance is estimated to be 0.7 acres of the 89.82-acre parcel.

The project was designed to minimize ground disturbance through the use of a stepped structure. The building site is on 16% slopes and has three levels which step down the hill. This helps minimize grading for large building pads. The building site is proposed around a previously disturbed and graded area mixed with non-native annual grasses and native shrubs and perennials. Purple Needlegrass (*Stipa Pulchra*) is found in the access easement along the proposed driveway as well as in a grassland near the southwest portion of the building site. Based on the measurements in the field and on aerial photographs, the Purple Needlegrass population does not meet the threshold of significance. No other sensitive plant species will be impacted from the project.

Due to the proximity of the ephemeral blue line stream to the proposed project footprint, there is potential for direct and indirect impacts to the stream in the form of hazardous materials spills and/or sedimentation. The National Wetlands Inventory map was reviewed, and no wetlands or riparian areas occur on or within the immediate vicinity of the project site.

Impacts to Reptiles and Amphibians. No impacts to California red-legged frogs or western pond turtle are expected. The location is beyond the listed amphibians known ranges and the ephemeral blue line stream does not provide an appropriate habitat. There is a low likelihood that they would be encountered during project development, but they could be crushed or trampled while traveling across the site.

Impacts to Sensitive and Nesting Birds. Direct impacts to protected nesting bird species are most likely to occur if construction activities take place during the typical avian nesting season, generally February 1 through September 15. Indirect impacts may occur due to construction-related disturbances that may deter nesting or cause nests to fail. Although no sign of special status birds were recorded on the site, the ecology and topography of the site presents a potential for nesting birds such as the lark sparrow or burrowing owl. Direct impacts to wintering burrowing owls could occur if they are present during the construction phase. Impacts could include crushing a burrow, although no burrows were found on the site.

The site is not located in a wilderness area, or wildlife preserve. It is unlikely any bird nest would occur within the vicinity of the site as the grasses are heavily grazed and would not provide sufficient cover. The project site area will not disturb sensitive native vegetation, significant wildlife species, or special status species. Over 79 acres of the 80-acre parcel will be left undisturbed for the wildlife species in the area and no special status plants were found in the area of disturbance. Therefore, no impacts to the local wildlife or the special status wildlife are expected as a result of the proposed project.



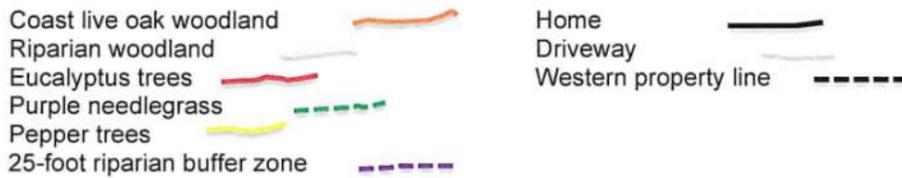
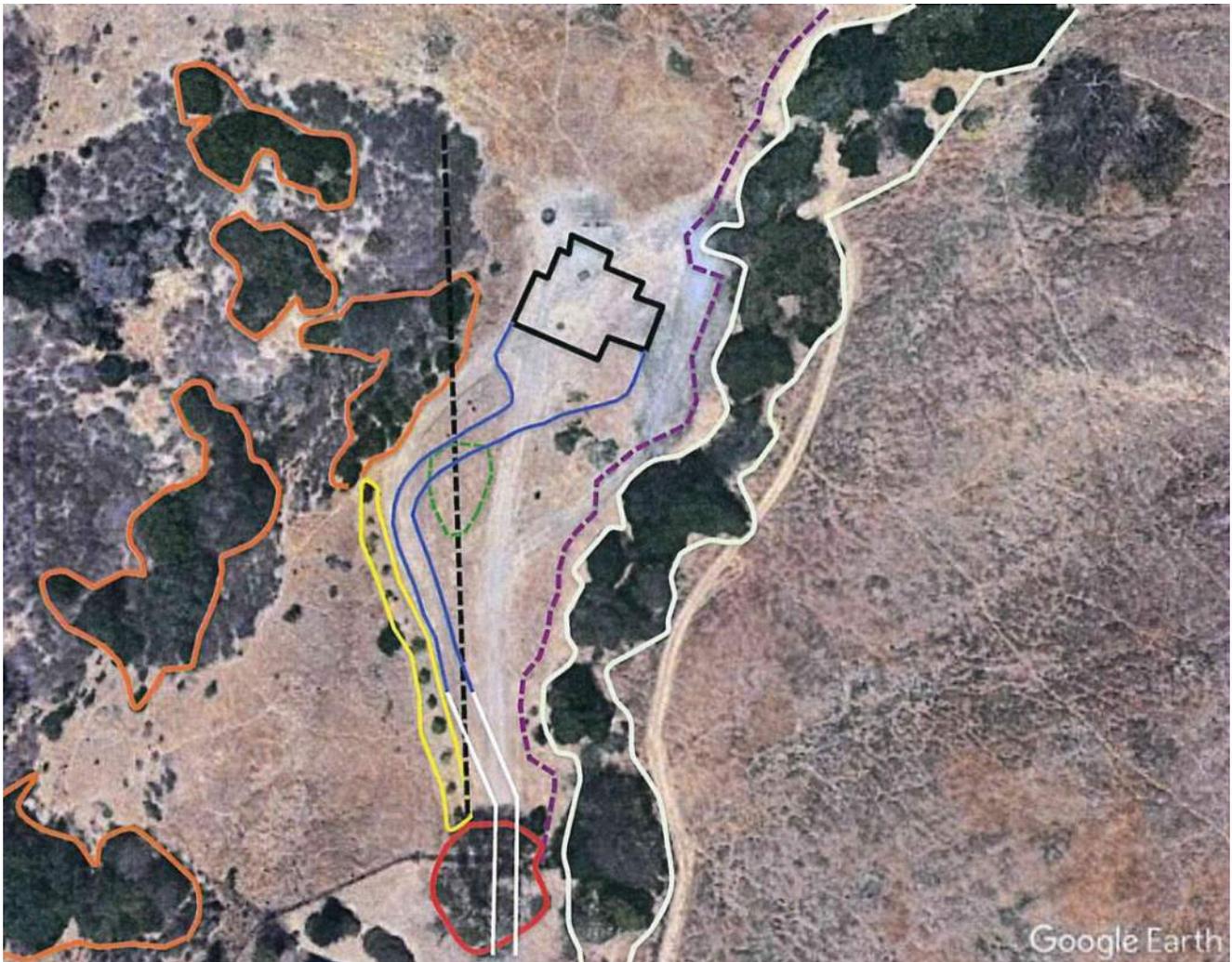


Figure 1. Vegetation map of the proposed home site and surrounding areas (V.L. Holland, February 2018).

Mitigation/Conclusion. The project site currently consists of previously disturbed lands. No special status plant or animal species were observed directly on the building site during the biological survey. The biologist has recommended additional mitigation measures to protect the riparian woodland along the creek. The project is also conditioned to comply with the County’s standard ordinance requirements. The avoidance and minimization measures in Exhibit B along with standard protection measures will reduce the anticipated impacts to a less than significant level.

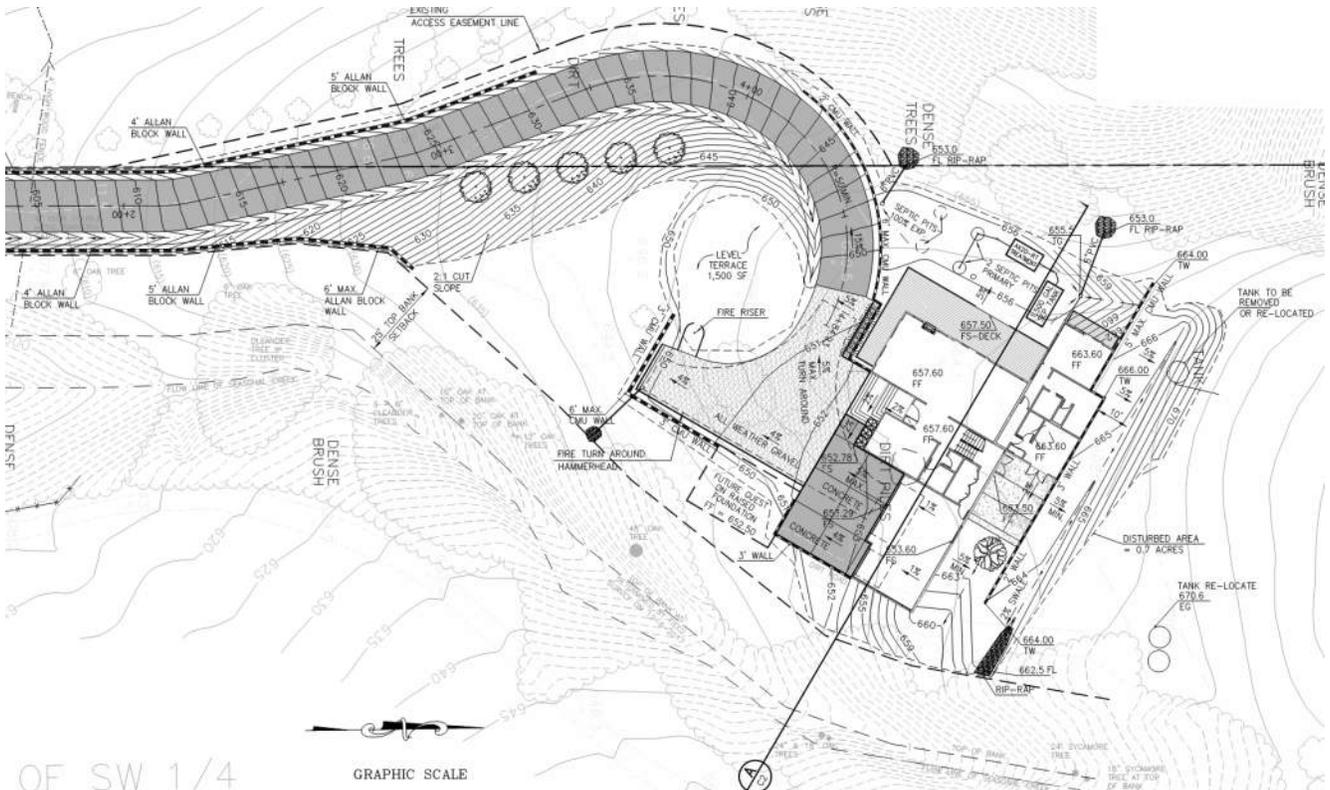


Figure 2. Grading Plan for the proposed project with 25-foot setbacks from the riparian woodland.

5. CULTURAL RESOURCES

Will the project:

- a) *Disturb archaeological resources?*
- b) *Disturb historical resources?*
- c) *Disturb paleontological resources?*
- d) *Cause a substantial adverse change to a Tribal Cultural Resource?*
- e) *Other:* _____

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Cultural Resources

Setting. The project is located in an area historically occupied by the Obispan Chumash. No historic structures are present and no paleontological resources are known to exist in the area.

In order to meet AB52 tribal consultation requirements, outreach to four Native American tribal groups had been conducted (Northern Salinan, Xolon Salinan, Yak Tityu Tityu Northern Chumash, and the Northern Chumash Tribal Council). No comments were received from any of the tribal groups.

The project is within 300 feet of an ephemeral creek. Potential for the presence or regular activities of the Native American increases in close proximity to reliable water sources. Background research was completed to determine whether the Project area had been subject to previous archaeological inventories; and to identify any previously recorded archaeological sites in the immediate vicinity. This effort included a records search at the Central Coast Information Center (CCIC) of the California Historical Resources Information System (CHRIS), located at University of California, Santa Barbara.



Impact. On June 25, 2018, a records search was conducted at the CCIC that encompassed the Project area plus a buffer radius of 0.25 mile. The current Project area has not previously been investigated for cultural resources, background research at the CCIC revealed no previous reports have been completed within the project site. Three prior cultural resource investigations within a 500-foot radius of the project area. Of the three reports, two were negative for cultural resources and one study identified a historic electrical transmission line with an associated substation. This resource will not be impacted by the proposed project.

A Phase I (surface) survey was conducted on areas within or directly adjoining the footprint of the proposed development (Val Kirstine, Padre Associates Inc., July 3, 2018). No evidence of cultural materials was noted on the property. Per AB52, tribal consultation was performed, and no comments were received. Impacts to historical or paleontological resources are not expected.

Mitigation/Conclusion. While this study found a low sensitivity for cultural materials within the Project area, there is always the potential for encountering prehistoric or historic-period materials during construction. LUO Section 22.10.040 standards for archeological resources discovery during construction activities are considered sufficient to mitigate potential impacts to cultural resources, in the event of a discovery. No significant cultural resource impacts are expected to occur, and no mitigation measures above what area already required by ordinance are necessary.



6. GEOLOGY AND SOILS

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) <i>Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Per Division of Mines and Geology Special Publication #42

Setting. The following relates to the project's geologic aspects or conditions:

Topography: Steeply sloping

Within County's Geologic Study Area?: Yes

Landslide Risk Potential: Low

Liquefaction Potential: Low

Nearby potentially active faults?: Yes Distance? Approximately 1 mile Northeast

Area known to contain serpentine or ultramafic rock or soils?: Yes

Shrink/Swell potential of soil: Not known

Other notable geologic features? None

Geology and Soils

Setting. The project site is within the Geologic Study area designation and is subject to the preparation of a geological report per the County's Land Use Ordinance [LUO section 22.14.070 (c), to evaluate the area's geological stability. An Engineering Geologic Investigation (Geo Solutions, August 2018) was prepared to evaluate the area's geological stability relating to the proposed use and determined that the site is appropriate from the geotechnical perspective for the construction of a single-family



residence. This report was reviewed by County Geologist, Brian Papurello, who concurred with the findings of the report and indicated that the proposed site development will not have a significant negative impact on the existing site geologic conditions (Brian Papurello, October 10, 2018).

The report found the closest known active fault is a portion of the Los Osos fault which is located approximately 4.5 miles west of the site. The San Andreas fault is the most likely active fault to produce ground shaking at the site, however, it is not expected to impact the project due to its distance from the site.

A sedimentation and erosion control plan is required for all construction and grading projects (LUO Sec. 22.52.120) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts.

Impact. As proposed, the project will result in the disturbance of approximately 0.7 acres of an 82.89-acre parcel to construct the single-family residence, garage, and driveway. The proposed single-family residence is to be on a cut pad with associated retaining walls. The proposed driveway improvements consists of cut and fill slopes. The intensification of impervious surfaces on the project site will increase the volume and velocity of runoff generated by the site compared with existing conditions. Based on the NRCS soil survey, soils covering the project site exhibit moderate to moderately high susceptibility for erosion. Erosion of graded areas and discharge of sediment down slope will likely result, if adequate temporary and permanent measures are not taken before, during and after vegetation removal and grading. Compliance with relevant provision of the Building Code and Land use Ordinance will address potential impacts to erosion.

The Engineering Geologic Investigation found low potential for both landslides and liquefaction on the site. To address drainage impacts, the geological report included several design measures above what would be required under the Uniform Building Code (see Mitigation Measure section). The project is considered near geologic formations that can generate naturally-occurring asbestos, however serpentinite was not observed within the trenches dug on the project site.

The project was referred to the Building Division and the Department of Public Works for review. Grading activities are subject to the provisions of the California Building Code and County standards for grading and road construction. A complete grading and drainage plan will be required prior to building permit issuance in accordance with Section 22.52.110 of the Land Use Ordinance. In addition, the project is required to provide a complete erosion and sedimentation control plan in accordance with Section 22.52.120. The recommendations of the Public Works and Building Departments will be incorporated as conditions of approval.

Mitigation/Conclusion. As required by ordinance, the project will be required to submit a complete grading and drainage and erosion prevention plan to demonstrate compliance with County regulations relating to the prevention of erosion. The Engineering Geologic Investigation concluded the proposed development is geologically suitable provided that the project complies with the Uniform Building Code and Land Use Ordinance. No additional mitigation measures are necessary.



7. HAZARDS & HAZARDOUS MATERIALS - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Impair implementation or physically interfere with an adopted emergency response or evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Be within a 'very high' fire hazard severity zone?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Be within an area classified as a 'state responsibility' area as defined by CalFire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Hazards and Hazardous Materials

Setting. With regards to potential fire hazards, the subject project is within the Moderate to High Fire Hazard Severity Zones. Based on the County's fire response time map, it will take approximately 0-10 minutes to respond to a call regarding fire or life safety (Refer to the Public Services section for further



discussion on Fire Safety impacts). The project is not located in an area of known hazardous material contamination.

Impact. The project does not propose the use of hazardous materials, nor the generation of hazardous wastes. The proposed project is not found on the 'Cortese List' (which is a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5). The project does not present a significant fire safety risk. The project is not expected to conflict with any regional emergency response or evacuation plan.

Mitigation/Conclusion. Cal Fire has no significant concern or recommendation for the area of review and has attached a fire safety plan required to be completed prior to final inspection for the proposed project. No significant impacts as a result of hazards or hazardous materials are anticipated, and no mitigation measures are necessary.



8. NOISE

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Expose people to noise levels that exceed the County Noise Element thresholds?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Generate permanent increases in the ambient noise levels in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Cause a temporary or periodic increase in ambient noise in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise

Setting. The project is located in the City's Goldtree Hillside planning area, which consists of open space, single family residences, and vacant lots. Consequently, noise levels on the project site and in the vicinity are low and there are no sources of loud noise beyond those associated with home ownership. Sensitive receptors in the vicinity of the project site include single family residences on lots ranging in size from 5-15 acres. The access roads, Sequoia Drive and Harmony Way carry low traffic volumes. The project is within the Airport Review designation and the area is subject to relatively low aircraft flyovers.

The Noise Element establishes a threshold for acceptable exterior noise levels for sensitive uses (such as residences) of 60 decibels along transportation noise sources, and provides an estimate of the distance from certain roadways where noise levels will exceed those levels. Based on the Noise Element's projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area.

Impact. Construction Impacts. Construction activities may involve the use of heavy equipment for grading and for the delivery and movement of materials on the project site. The use of construction machinery will also be a source of noise. Construction-related noise impacts would be temporary and localized. The nearest residences are approximately 350 feet to the south and 650 feet to the west of the project site. County regulations limit the hours of construction to day time hours between 7:00AM and 9:00 PM weekdays, and from 8:00AM to 5:00PM on weekends.

Operational Impacts. With regard to transportation-related noise sources, a single-family residence constructed on the project site would contribute about 10 average daily trips to Sequoia Drive and Southwood Drive. Following construction, noise generated by the project would be comparable to the background noise generated by surrounding residences and traffic noise.

Mitigation/Conclusion. No significant noise impacts are anticipated. Based on the Noise Element's projected future noise generation from known stationary and vehicle-generated noise sources, the

project is within an acceptable threshold area. Compliance with County standards for the management of construction noise will ensure impacts to surrounding residences will be less than significant. No additional mitigation measures are recommended.



9. POPULATION/HOUSING

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Population/Housing

Setting In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County's Inclusionary Housing Ordinance requires provision of new affordable housing in conjunction with both residential and nonresidential development and subdivisions.

Impact. The project will not result in a need for a significant amount of new housing, and will not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts are anticipated. The project will mitigate its cumulative impact to the shortage of affordable housing stock by providing affordable housing unit(s) by payment of the in-lieu fee for residential projects, as required by ordinance. No mitigation measures are necessary.

11. RECREATION

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase the use or demand for parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Affect the access to trails, parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Other _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Recreation

Setting. The County's Parks and Recreation Element does not show that a potential trail goes through the proposed project. The project is not proposed in a location that will affect any trail, park, recreational resource, coastal access, and/or Natural Area.

Impact. The proposed project will not create a significant need for additional park, Natural Area, and/or recreational resources.

Mitigation/Conclusion. No significant recreation impacts are anticipated, and no mitigation measures are necessary.

12. TRANSPORTATION/CIRCULATION

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce existing "Level of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Provide for adequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Conflict with an applicable congestion management program?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Result in a change in air traffic patterns that may result in substantial safety risks?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Transportation

Setting.

Airport Review Combining Designation. The project is within the County’s Airport Review combining designation (AR). The AR is used to recognize and minimize the potential conflict between new development around the San Luis Obispo Regional Airport and the ability of aircraft to safely and efficiently maneuver to and from this airport. This includes additional standards relating to limiting structure/vegetation heights as well as avoiding airport operation conflicts (e.g., exterior lighting, radio/electronic interference, etc.). The Airport Land Use Plan (ALUP) provides guidance for and limitations to the type of development allowed within the AR designation.

The County has established the acceptable Level of Service (LOS) on roads for this urban area as “D” or better. The existing road network in the area, including the project’s access streets Sequoia Drive and Harmony Way, is operating at acceptable levels. Based on existing road speeds and configuration (vertical and horizontal road curves), sight distance is considered acceptable.

Referrals were sent to County Public Works, no significant traffic-related concerns were identified.

Impact. The proposed project is estimated to generate about 10 trips per day, based on the Institute of Traffic Engineer’s manual of 10/unit. This small amount of additional traffic will not result in a



significant change to the existing road service or traffic safety levels. The project does not conflict with adopted policies, plans and programs on transportation.

Mitigation/Conclusion. The project does not conflict with the San Luis Obispo County Regional Airport and associated Airport Land Use Plan. The project does not conflict with the County's Bike Plan. No significant traffic impacts were identified, and no mitigation measures above what are already required by ordinance are necessary.



13. WASTEWATER

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Adversely affect community wastewater service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Wastewater

Setting. Regulations and guidelines on proper wastewater system design and criteria are found within the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (California OWTS Policy), and the California Plumbing Code. These regulations include specific requirements for both on-site and community wastewater systems and are applied to all new wastewater systems.

The California OWTS Policy includes the option for public agencies in California to prepare and implement a Local Agency Management Program (LAMP), subject to approval by the Central Coast Water Board. Once adopted, the LAMP will ensure local agency approval and permitting of onsite wastewater treatment systems protective of groundwater quality and public health and will incorporate updated standards applicable to onsite wastewater treatment systems. At this time, the California OWTS Policy standards supercede San Luis Obispo County Codes in Title 19. Until the County’s LAMP is approved, the County permitting authority is limited to OWTS that meet Tier 1 requirements, as defined by the California OWTS Policy and summarized in the County’s **Updated Criteria Policy Document BLD-2028 (dated 06/21/18)**. All other onsite wastewater disposal systems, including all seepage pit systems, must be approved and permitted through the Central Coast Water Board.

For onsite wastewater treatment (septic) systems, there are several key factors to consider for a system to operate successfully, including the following:

- ✓ Sufficient land area to meet the criteria for as currently established in Tier 1 Standards of the California OWTS Policy; depending on rainfall amount, and percolation rate, required parcel size minimums will range from 1 acre to 2.5 acres;
- ✓ The soil’s ability to percolate or “filter” effluent before reaching groundwater supplies (30 to 120 minutes per inch is ideal);
- ✓ The soil’s depth (there needs to be adequate separation from bottom of leach line to bedrock [at least 10 feet] or high groundwater [5 feet to 50 feet depending on percolation rates]);
- ✓ The soil’s slope on which the system is placed (surface areas too steep creates potential for daylighting of effluent);
- ✓ Potential for surface flooding (e.g., within 100-year flood hazard area);
- ✓ Distance from existing or proposed wells (between 100 and 250 feet depending on circumstances); and



- ✓ Distance from creeks and water bodies (100-foot minimum).

To assure a septic system can meet existing regulation criteria, proper conditions are critical. Above-ground conditions are typically straight-forward and most easily addressed. Below ground criteria may require additional analysis or engineering when one or more factors exist:

- ✓ the ability of the soil to “filter” effluent is either too fast (percolation rate is faster or less than 30 minutes per inch and has “poor filtering” characteristics) or is too slow (slower or more than 120 minutes per inch);
- ✓ the topography on which a system is placed is steep enough to potentially allow “daylighting” of effluent downslope; or
- ✓ the separation between the bottom of the leach line to bedrock or high groundwater is inadequate.

Analysis.

On August 4, 2018, Geo Solutions visited the site and performed percolation tests on four locations of depths between 4 and 5 feet deep. The average stabilized percolation rate for the tested area was an average of 85 minutes per inch. Ground water was not encountered in the exploratory trench which was excavated to 10 feet below ground surface. Prior to construction permit issuance, additional testing will be required by the Environmental Health Division/Building Division to verify acceptable conditions exist for on-site systems. Leach line locations will also be reviewed at this time to verify adequate setbacks are provided from any existing or proposed wells (100 feet for individual wells, 200 feet for community wells).

Based on Natural Resource Conservation Service (NRCS) Soil Survey map, the soil type(s) for the project as provided in the previous Agricultural Resource section Los Osos-Diablo complex (30 - 50% slope) and Obispo Rock outcrop complex (15 - 75% slope). The main limitation(s) of this soil for wastewater effluent include:

- shallow depth to bedrock**, which is an indication that there may not be sufficient soil depth to provide adequate soil filtering of effluent before reaching bedrock. Once effluent reaches bedrock, the chances increase for the effluent to infiltrate cracks that could lead directly to groundwater source or surrounding wells without adequate filtering, or allow for daylighting of effluent where bedrock is exposed to the earth’s surface. In this case, due to limited availability of information relating to the shallow depth to bedrock characteristic, the following additional information will be needed prior to issuance of a building permit: soil borings at leach line location(s) showing that there is adequate distance to bedrock. If adequate distance cannot be shown, a County-approved plan for an engineered wastewater system showing how the CPC/California OWTS Policy criteria can be met will be required.
- steep slopes**, where portions of the soil unit contain slopes steep enough to result in potential daylighting of wastewater effluent. In this case, the proposed seepage pits are located on the nearly level portion of the subject property that is sufficiently set back from any steep slopes to avoid potential daylighting of effluent.
- slow percolation**, where fluids will percolate too slowly through the soil for the natural processes to effectively break down the effluent into harmless components. The Basin Plan identifies the percolation rate should be greater than 30 and less than 120 minutes per inch. In this case, the soils report identified percolation rates for the soil ranges from 60 to 120 minutes per inch for all leach line locations, with an average of 85 minutes per inch.

Impacts/Mitigation. No additional measures above what is already required for a standard septic system is needed.



Based on the following project conditions or design features, wastewater impacts are considered less than significant:

- ✓ The project has sufficient land area per the County’s Land Use Ordinance to support an on-site system;
- ✓ The soil’s percolation rate is between 30 to 120 minutes per inch;
- ✓ There is adequate soil separation between the bottom of the leach line to bedrock or high groundwater;
- ✓ The soil’s slope is between 20% and 30% and proposes an engineered system;
- ✓ The leach lines are outside of the 100-year flood hazard area;
- ✓ There is adequate distance between proposed leach lines and existing or proposed wells;
- ✓ The leach lines are at least 100 feet from creeks and water bodies.

Conclusion. Based on the above discussion and information provided, the site is capable of accommodating an on-site system that will meet CPC/Basin Plan requirements. Prior to building permit issuance and/or final inspection of the wastewater system, the applicant will need to show to the County compliance with the County Plumbing Code/Central Coast Basin Plan, including any above-discussed information relating to potential constraints. The applicant will be required to provide an engineered septic system plan per the soils report recommendations prepared by GeoSolutions as well as meet the requirements of the Regional Water Quality Control Board. Septic design shall comply with local regulations per the Regional Water Quality Control Board. Therefore, based on the project being able to comply with these regulations, potential groundwater quality impacts are considered less than significant.

14. WATER & HYDROLOGY

Will the project:

QUALITY

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any water quality standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



14. WATER & HYDROLOGY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QUANTITY				
h) <i>Change the quantity or movement of available surface or ground water?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Adversely affect community water service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure, etc.), or inundation by seiche, tsunami or mudflow?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Water

Setting. The subject property is not within a defined groundwater basin and is located within the Laguna Lake Watershed. The project proposes to obtain its water from an individual onsite well. An existing well is located at the south western corner of the parcel.

The topography of the project is steeply sloping. The closest creek (unnamed) from the proposed development is on property. As described in the NRCS Soil Survey, the soil surface is considered to have low erodibility.

DRAINAGE – The following relates to the project’s drainage aspects:

Within the 100-year Flood Hazard designation? No

Closest creek? Unnamed Distance? Approximately 30 feet to the west of the proposed residence

Soil drainage characteristics: Well drained

For areas where drainage is identified as a potential issue, the Land Use Ordinance (LUO Sec. 22.52.110 or CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

SEDIMENTATION AND EROSION – Soil type, area of disturbance, and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project’s soil types and descriptions are listed in the previous Agriculture section under “Setting”. As described in the NRCS Soil Survey, the project’s soil erodibility is as follows:

Soil erodibility: Moderate to Moderately High



A sedimentation and erosion control plan is required for all construction and grading projects (LUO Sec. 22.52.120, CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Projects involving more than one acre of disturbance are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

Impact – Water Quality/Hydrology

With regards to project impacts on water quality the following conditions apply:

- ✓ Approximately 0.7 acres of site disturbance is proposed and the movement of approximately 2,750 cubic yards of material;
- ✓ The project will be subject to standard County requirements for drainage, sedimentation and erosion control for construction and permanent use;
- ✓ The project is not within a 100-year Flood Hazard designation;
- ✓ All disturbed areas will be permanently stabilized with impermeable surfaces and landscaping;
- ✓ Stockpiles will be properly managed during construction to avoid material loss due to erosion;
- ✓ The project is subject to the County’s Plumbing Code (Chapter 7 of the Building and Construction Ordinance [Title 19]), and/or the “Water Quality Control Plan, Central Coast Basin” for its wastewater requirements, where wastewater impacts to the groundwater basin will be less than significant;
- ✓ All hazardous materials and/or wastes will be properly stored on-site, which include secondary containment should spills or leaks occur;

Water Quantity

Based on the project description, as calculated on the County’s water usage [worksheet](#), the project’s water usage is estimated as follows:

Indoor:	0.18 acre feet/year (AFY);
Outdoor:	0.15 AFY
Total Use:	0.33 AFY
Water Conservation:	0 AFY
Total Use w/ Conservation:	0.33 AFY

Sources used for this estimate include one or more of the following references: County’s Land Use Ordinance, 2000 Census data, Pacific Institute studies (2003), City of Santa Barbara Water Demand Factor & Conservation Study ‘User Guide’ (1989).

A well test was preformed by Aqua Engineering. The test averaged about 14.419 gallons per minute for 4 hours. Based on available water information, there are no known constraints to prevent the project from obtaining its water demands.

Mitigation/Conclusion. There are two wells mapped on the parcel. It is recommended by the Environmental Health Division to destroy it if it will not be used or to verify it is an appropriate distance from all wastewater systems. As specified above for water quality, existing regulations and/or required plans will adequately address surface water quality impacts during construction and permanent use of the project. Additional measures concerning grading and construction timing are found in Exhibit B. Based on these standard and additional mitigation measures, no significant impacts from water use are anticipated.



15. LAND USE

Will the project:

	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be potentially incompatible with surrounding land uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Land Use

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., CAL FIRE for Fire Code, etc.). The project was found to be consistent with these documents (refer also to Exhibit A on reference documents used).

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

The proposed project is subject to the following Planning Area Standard(s) as found in the County's LUO:

1. LUO Section 22.10.095 C
2. LUO Section 22.14.070
3. LUO Section 22.14.100
4. LUO Section 22.96
5. LUO Section 22.96.020 (22.14.030)
6. LUO Section 22.96.040

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required were determined necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE

Potentially Significant Impact can & will be mitigated Insignificant Impact Not Applicable

Will the project:

- a) *Have the potential to 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, 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 pre-history?*

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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- b) *Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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- c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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For further information on CEQA or the County's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: <http://resources.ca.gov/ceqa/> for information about the California Environmental Quality Act.



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:

<u>Contacted</u>	<u>Agency</u>	<u>Response</u>
<input checked="" type="checkbox"/>	County Public Works Department	Attached
<input checked="" type="checkbox"/>	County Environmental Health Services	None
<input type="checkbox"/>	County Agricultural Commissioner's Office	Not Applicable
<input checked="" type="checkbox"/>	County Airport Manager	None
<input type="checkbox"/>	Airport Land Use Commission	Not Applicable
<input type="checkbox"/>	Air Pollution Control District	Not Applicable
<input type="checkbox"/>	County Sheriff's Department	Not Applicable
<input checked="" type="checkbox"/>	Regional Water Quality Control Board	None
<input type="checkbox"/>	CA Coastal Commission	Not Applicable
<input type="checkbox"/>	CA Department of Fish and Wildlife	Not Applicable
<input type="checkbox"/>	CA Department of Forestry (Cal Fire)	Not Applicable
<input type="checkbox"/>	CA Department of Transportation	Not Applicable
<input type="checkbox"/>	Community Services District	Not Applicable
<input checked="" type="checkbox"/>	Other <u>City of San Luis Obispo</u>	Attached
<input type="checkbox"/>	Other _____	Not Applicable

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

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

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



In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study. These documents can be found in the original file with San Luis Obispo County:

1. Bracket Architecture Office. 2018. *Visual Simulation Method & Analysis*. December 2018.
2. City of San Luis Obispo. 2014. *City of San Luis Obispo Land Use Element*. February 2019.
3. Geo Solutions, Inc. 2018. *Engineering Geology Investigation Parcel 5 Harmony Way*. August 29, 2018.
4. Geo Solutions, Inc. 2018. *Percolation Testing Report Parcel 5 Harmony Way*. August 7, 2018.
5. Geo Solutions, Inc. 2018. *Soils Engineering Report Parcel 5 Harmony Way*. August 7, 2018.
6. Padre Associates, Inc. 2018. *Phase I Archaeological Study 1650 Harmony Way*. August 2018.
7. V.L.Holland. 2018. *Biological Resources Survey Report Proposal Harmony Way*. February 17, 2018.



Exhibit B - Mitigation Summary Table

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, are responsible to verify compliance with these COAs.

- VS-1 Cut and Fill Slopes. **At the time of application for construction permit**, the applicant shall clearly delineate the vertical height of all cut and fill slopes on the project construction drawings and the border of cut slopes and fills rounded off to a minimum radius of five feet. Cuts and fills shall be screened from public vantage points along public roads. Any visible cuts shall be stockpiled with at least 8" of topsoil for the reestablishment of vegetation. As soon as the grading work has been completed, the cut and fill slopes shall be reestablished with non-invasive, fast-growing vegetation. **Prior to final inspection**, the applicant shall provide verification to the satisfaction of the County that these measures have been met.
- VS-2 Exterior Colors & Material Palette. **At the time of application for construction permit**, the applicant shall submit architectural elevations of all proposed structures to the Department of Planning and Building for review and approval in consultation with the Environmental Coordinator. The elevations shall show exterior finish materials, colors, and height above the existing natural ground surface. Colors shall minimize the structure massing of new development by reducing the contrast between the proposed development and the surrounding environment. Colors shall be compatible with the natural colors of the surrounding environment, including vegetation, rock outcrops, etc. Darker, non-reflective, earth tone colors shall be selected for walls, and chimneys etc. The proposed metal roofing materials shall be non-reflective material and shall be of earth tone colors. All color selections shall fall within a "chroma" and "value" of 6 or less, as described in the Munsell Book of Color (review copy available at County.)
- VS-3 Exterior Light Plan. **At the time of application for construction permits**, the Applicant shall submit an Exterior Lighting Plan for County review and approval. The Plan shall define the height, location, and intensity of all exterior lighting. All lighting fixtures shall be positioned "down and into" the development, and shielded so that neither the lamp nor the related reflector interior surface is visible from surrounding properties and Highway 227. All lighting poles, fixtures, and hoods shall be dark colored. When nighttime lighting is required for construction, temporary lighting shall be hooded to the extent consistent with safety. Lighting fixtures shall be directed away from the highway to avoid glare and, when near a residence, shall be pointed away from the residence.
- VS-4 Revised Landscape Plan - Upon application for construction permits, the applicant shall submit a revised landscape plan to the County Department of Planning and Building for review and approval. The revised plans shall be developed and signed by a licensed landscape architect and shall show additional screen planting for the purpose of screening of the structures (residence and water tank) as follows:
 - a. The screen plants shall be strategically located downslope (at the South and West facades of the structures) and uphill behind the residence. Placement of various tree types and understory vegetation (height, growth rate) shall be placed downslope to create a more natural setting around the proposed structure. Screen planting shall cover 75% of the proposed residence and tank(s) as seen from Highway 1, upon maturity or 10 years, whichever occurs first.



- b. Screen planting shall include evergreen trees capable of growing to a minimum height of 35 feet tall. Trees shall be planted from a minimum fifteen gallon container size. Shrubs shall be planted among the screen trees. Shrubs shall be planted from five gallon containers. All landscaping plants shall be native to the area and utilize plants identified in the County's Approved Plant List.
- c. Trees and shrubs within the screen planting area shall be maintained in perpetuity. Trees and shrubs within the screen planting area that die shall be replaced.

Prior to final inspection, the applicant shall implement the approved revised landscape/screening plan.

VS-5 Landscape Performance. Prior to final inspection for the single-family residence, the approved landscape plan shall be implemented, and the applicant shall provide a letter to the San Luis Obispo County Department of Planning and Building for approval demonstrating that the applicant has entered into a contract with a qualified professional for the purpose of monitoring the success of the screen planting area. The monitoring contract shall include a requirement that the monitor conduct at a minimum an annual site visit and assessment of the planting success for five years. At the end of the 5-year monitoring period, the monitoring report shall be submitted to the San Luis Obispo County Department of Planning and Building for approval and shall be used as a determining factor in assessing the successful establishment of the planting as it relates to the bond posted by the applicant. If it is determined that the success criteria has not been met then the applicant shall submit a supplemental landscape screening plan with additional recommendations to achieve the required screening. The plan shall include additional monitoring requirements (as recommended by the landscape architect) to ensure the required screening is achieved.

Biological Resources

BR-1 **Construction Impact Minimization.** The following general measures are shall be shown on construction plans and implemented during active construction:

- a. 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.
- b. Secondary containment such as drip pans shall be used to prevent leaks and spills of potential contaminants where they may enter drainages.
- c. Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated areas. Absorbent pads shall be available to absorb any spilled or leaked fuels/oils.
- d. Construction equipment shall be inspected by the operator regularly to ensure that equipment is in good working order and no fuel or lubricant leaks are present.

BR-2 **Sensitive Habitat Protection - Avoidance.** There shall be no cutting, alteration or disturbance of the existing *Coast Live Oak* or *Riparian Woodland* habitat (as shown in Figure 1) (V.L. Holland, February 2018) Furthermore:

- a. Adequate measures (e.g., highly visible temporary fencing, etc.) shall be installed prior to any construction to clearly delineate that this habitat will be avoided.



- b. Temporary fencing shall be placed along the edge of the riparian woodland along the creek to clearly mark the 25-foot setback buffer zone. No disturbances shall occur in the buffer zone or anywhere in the riparian woodland.
- c. Temporary fencing shall be placed 10 feet outside the canopy of the Coast Live Oaks along the western margin of the site. No disturbances shall occur in this area.
- d. Best Management Practices for sedimentation and erosion control shall be applied to prevent sediment from entering into this habitat.
- e. All temporary and permanent vegetation planting within 50 feet of habitat edge shall be compatible with existing habitat vegetation and shall not include any plants considered 'invasive' (as identified on the latest California Invasive Plant Council list).
- f. All proposed uses and/or structures shall be setback adequately from the riparian edge, per the approved plans (see Figure 2. Grading Plan on page 12 of the Mitigated Negative Declaration).
- g. Construction activities shall not occur during the typical nesting season between February 1 and August 31. If construction activities cannot avoid the typical nesting season, to minimize project-related impacts to nesting birds, a retained biologist shall perform a pre-construction survey **prior to the initiation of ground disturbance** to identify nests and burrows. The completed survey report shall be submitted to the County for review/approval. Any recommendations of protection measures (e.g. buffers, staking, etc.) shall be reviewed and approved of by the County, and installed prior to any site disturbance. As applicable, any such measures shall be kept in good working order for the duration of the construction phase. Amending or changing the measures (e.g. reducing a recommended buffer) shall be reviewed and approved of by the County.
- h. A letter from CAL FIRE shall be submitted identifying that no vegetation removal/modification within the sensitive habitat is needed for fire protection purposes.
- i. After improvements are/construction is completed, only passive uses shall occur within the habitat setback/ buffer area, and no activities shall occur within the sensitive habitat, as defined in Figure 2.

BR-3 Sensitive Habitat Protection – Limited Impacts. To minimize impacts to the sensitive habitat (see Figure 1. Vegetation map on page 11 of the Mitigated Negative Declaration), the applicant agrees to the following:

- a. No invasive plant species listed in the California Invasive Plant Council website should be included in the landscaping of the home site. These plants could invade the adjacent native plant communities and negatively affect the native plants and plant communities.
- b. Vegetation clearance or modification for fire safety purposes shall be limited to the minimum setbacks required by CAL FIRE. Where feasible, all efforts will be made to retain as much of this sensitive vegetation within the setback as possible (e.g. remove/trim only enough vegetation to create non-contiguous islands of native vegetation).
- c. Adequate protection for all remaining sensitive habitat shall be installed prior to any vegetation removal or work beginning, and shall be kept in good working order during construction (e.g., highly visible fencing, BMPs for sedimentation and erosion control, etc.).
- d. A sediment and erosion control plan shall be prepared to protect the areas around the home site (riparian woodland, coast live oak woodland, and coastal scrub). The erosion control will prevent sedimentation of the ephemeral creek channel near the

site. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed of should it become necessary.

- e. No livestock shall be allowed within the sensitive habitat area.
- f. All allowed uses within the sensitive habitat area shall be “passive”, where the use will have either no or minimal impact on the habitat.

Monitoring (Biological Resource Measures BR-1 through BR-3). Required at the time of application for construction permits/prior to ground disturbance. Compliance will be verified by the County Department of Planning and Building, in consultation with the Environmental Coordinator.

Wastewater

WW-1 Prior to issuance of grading or construction permit, the applicant shall obtain approval from the Central Coast Water Board for on-site septic system.

Monitoring (Wastewater Measure WW-1). Compliance will be verified by the County Department of Planning and Building prior to issuance of grading or construction permits.



**DEVELOPER'S STATEMENT FOR
AUGUSTINE / MINOR USE PERMIT / DRC2018-00165**

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.

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

The following mitigation measures address impacts that may occur as a result of the development of the project.

Visual and Aesthetic Resources

- VS-1 Cut and Fill Slopes. **At the time of application for construction permit**, the applicant shall clearly delineate the vertical height of all cut and fill slopes on the project construction drawings and the border of cut slopes and fills rounded off to a minimum radius of five feet. Cuts and fills shall be screened from public vantage points along public roads. Any visible cuts shall be stockpiled with at least 8" of topsoil for the reestablishment of vegetation. As soon as the grading work has been completed, the cut and fill slopes shall be reestablished with non-invasive, fast-growing vegetation. **Prior to final inspection**, the applicant shall provide verification to the satisfaction of the County that these measures have been met.

- VS-2 Exterior Colors & Material Palette. **At the time of application for construction permit**, the applicant shall submit architectural elevations of all proposed structures to the Department of Planning and Building for review and approval in consultation with the Environmental Coordinator. The elevations shall show exterior finish materials, colors, and height above the existing natural ground surface. Colors shall minimize the structure massing of new development by reducing the contrast between the proposed development and the surrounding environment. Colors shall be compatible with the natural colors of the surrounding environment, including vegetation, rock outcrops, etc. Darker, non-reflective, earth tone colors shall be selected for walls, and chimneys etc. The proposed metal roofing materials shall be non-reflective material and shall be of earth tone colors. All color selections shall fall within a "chroma" and "value" of 6 or less, as described in the Munsell Book of Color (review copy available at County.)

- VS-3 Exterior Light Plan. **At the time of application for construction permits**, the Applicant shall submit an Exterior Lighting Plan for County review and approval. The Plan shall define the height, location, and intensity of all exterior lighting. All lighting fixtures shall be positioned "down and into" the development, and shielded so that neither the lamp nor the related reflector interior surface is visible from surrounding properties and Highway 227. All lighting poles, fixtures, and hoods shall be dark colored. When nighttime lighting is required for construction, temporary lighting shall be hooded to the extent consistent with safety. Lighting fixtures shall be directed away from the highway to avoid glare and, when near a residence, shall be pointed away from the residence.

- VS-4 Revised Landscape Plan - Upon application for construction permits, the applicant shall submit a revised landscape plan to the County Department of Planning and Building for

review and approval. The revised plans shall be developed and signed by a licensed landscape architect and shall show additional screen planting for the purpose of screening of the structures (residence and water tank) as follows:

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- b. Screen planting shall include evergreen trees capable of growing to a minimum height of 35 feet tall. Trees shall be planted from a minimum fifteen gallon container size. Shrubs shall be planted among the screen trees. Shrubs shall be planted from five gallon containers. All landscaping plants shall be native to the area and utilize plants identified in the County's Approved Plant List.
- c. Trees and shrubs within the screen planting area shall be maintained in perpetuity. Trees and shrubs within the screen planting area that die shall be replaced.

Prior to final inspection, the applicant shall implement the approved revised landscape/screening plan.

Monitoring: (Visual Recourse Measures VR-1 to VS-4) Required at the time of application for construction permits. Compliance will be verified by the County Department of Planning and Building, in consultation with the Environmental Coordinator.

VS-5 Landscape Performance. Prior to final inspection for the single-family residence, the approved landscape plan shall be implemented, and the applicant shall provide a letter to the San Luis Obispo County Department of Planning and Building for approval demonstrating that the applicant has entered into a contract with a qualified professional for the purpose of monitoring the success of the screen planting area. The monitoring contract shall include a requirement that the monitor conduct at a minimum an annual site visit and assessment of the planting success for five years. At the end of the 5-year monitoring period, the monitoring report shall be submitted to the San Luis Obispo County Department of Planning and Building for approval and shall be used as a determining factor in assessing the successful establishment of the planting as it relates to the bond posted by the applicant. If it is determined that the success criteria has not been met then the applicant shall submit a supplemental landscape screening plan with additional recommendations to achieve the required screening. The plan shall include additional monitoring requirements (as recommended by the landscape architect) to ensure the required screening is achieved.

Monitoring: (Visual Recourse Measures VR-5) Required prior to final inspection. Compliance will be verified by the County Department of Planning and Building, in consultation with the Environmental Coordinator.

Biological Resources

BR-1 Construction Impact Minimization. The following general measures are shall be shown on
Page 2 of 5

construction plans and implemented during active construction:

- a. 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.
- b. Secondary containment such as drip pans shall be used to prevent leaks and spills of potential contaminants where they may enter drainages.
- c. Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated areas. Absorbent pads shall be available to absorb any spilled or leaked fuels/oils.
- d. Construction equipment shall be inspected by the operator regularly to ensure that equipment is in good working order and no fuel or lubricant leaks are present.

BR-2 **Sensitive Habitat Protection - Avoidance.** There shall be no cutting, alteration or disturbance of the existing *Coast Live Oak* or *Riparian Woodland* habitat (as shown in Figure 1) (V.L. Holland, February 2018) Furthermore:

- a. Adequate measures (e.g., highly visible temporary fencing, etc.) shall be installed prior to any construction to clearly delineate that this habitat will be avoided.
- b. Temporary fencing shall be placed along the edge of the riparian woodland along the creek to clearly mark the 25-foot setback buffer zone. No disturbances shall occur in the buffer zone or anywhere in the riparian woodland.
- c. Temporary fencing shall be placed 10 feet outside the canopy of the Coast Live Oaks along the western margin of the site. No disturbances shall occur in this area.
- d. Best Management Practices for sedimentation and erosion control shall be applied to prevent sediment from entering into this habitat.
- e. All temporary and permanent vegetation planting within 50 feet of habitat edge shall be compatible with existing habitat vegetation and shall not include any plants considered 'invasive' (as identified on the latest California Invasive Plant Council list).
- f. All proposed uses and/or structures shall be setback adequately from the riparian edge, per the approved plans (see Figure 2. Grading Plan on page 12 of the Mitigated Negative Declaration).
- g. Construction activities shall not occur during the typical nesting season between February 1 and August 31. If construction activities cannot avoid the typical nesting season, to minimize project-related impacts to nesting birds, a retained biologist shall perform a pre-construction survey **prior to the initiation of ground disturbance** to identify nests and burrows. The completed survey report shall be submitted to the County for review/approval. Any recommendations of protection measures (e.g. buffers, staking, etc.) shall be reviewed and approved of by the County, and installed prior to any site disturbance. As applicable, any such measures shall be kept in good working order for the duration of the construction phase. Amending or changing the measures (e.g. reducing a recommended buffer) shall be reviewed and approved of by the County.
- h. A letter from CAL FIRE shall be submitted identifying that no vegetation removal/modification within the sensitive habitat is needed for fire protection purposes.

- i. After improvements are/construction is completed, only passive uses shall occur within the habitat setback/ buffer area, and no activities shall occur within the sensitive habitat, as defined in Figure 2.

BR-3 Sensitive Habitat Protection – Limited Impacts. To minimize impacts to the sensitive habitat (see Figure 1. Vegetation map on page 11 of the Mitigated Negative Declaration), the applicant agrees to the following:

- a. No invasive plant species listed in the California Invasive Plant Council website should be included in the landscaping of the home site. These plants could invade the adjacent native plant communities and negatively affect the native plants and plant communities.
- b. Vegetation clearance or modification for fire safety purposes shall be limited to the minimum setbacks required by CAL FIRE. Where feasible, all efforts will be made to retain as much of this sensitive vegetation within the setback as possible (e.g. remove/ trim only enough vegetation to create non-contiguous islands of native vegetation).
- c. Adequate protection for all remaining sensitive habitat shall be installed prior to any vegetation removal or work beginning, and shall be kept in good working order during construction (e.g., highly visible fencing, BMPs for sedimentation and erosion control, etc.).
- d. A sediment and erosion control plan shall be prepared to protect the areas around the home site (riparian woodland, coast live oak woodland, and coastal scrub). The erosion control will prevent sedimentation of the ephemeral creek channel near the site. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed of should it become necessary.
- e. No livestock shall be allowed within the sensitive habitat area.
- f. All allowed uses within the sensitive habitat area shall be “passive”, where the use will have either no or minimal impact on the habitat.

Monitoring (Biological Resource Measures BR-1 through BR-3). Required at the time of application for construction permits/prior to ground disturbance. Compliance will be verified by the County Department of Planning and Building, in consultation with the Environmental Coordinator.

Wastewater

WW-1 Prior to issuance of grading or construction permit, the applicant shall obtain approval from the Central Coast Water Board for on-site septic system.

Monitoring (Wastewater Measures WW-1) Compliance will be verified by the County Department of Planning and Building prior to issuance of grading or construction permit.

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 Agent(s)

4/18/19

Date

BRYAN RIDUEY, AUTHORIZED AGENT
Name (Print)

New 1/3/19



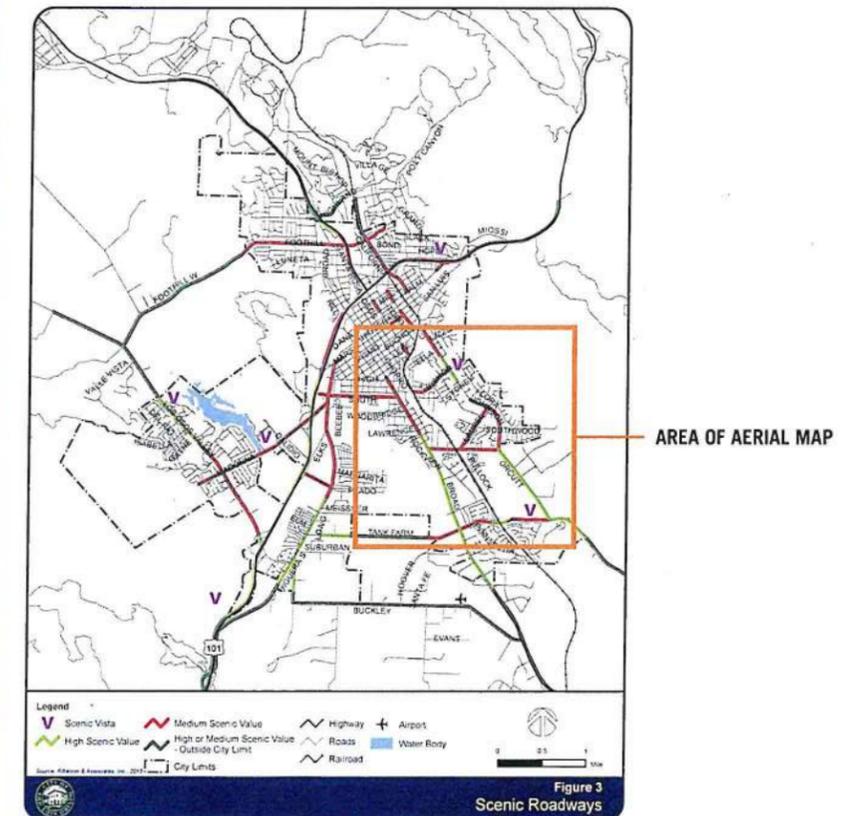
HIGHWAY 227 CORRIDOR + SCENIC ROADWAYS AERIAL MAP

VISUAL SIMULATION METHOD + ANALYSIS

OVERVIEW

Two photographic surveys were performed to analyze the visual impacts of the proposed single-family residential project at the subject property (APN 070-304-005). The first survey evaluated views from Highway 227 in compliance with the San Luis Obispo County Title 22 Land Use Ordinance for Highway Corridor Sensitive Resource Areas. The second survey evaluated views and visibility from Scenic Roadways as designated by the City of San Luis Obispo General Plan Circulation Element. The photographic surveys involved transit by car along the entirety of the designated highway and roadways, followed by a more detailed pedestrian survey. The map to the left shows the highway and roadways visited, with the numbered callouts identifying vantage points where photographs were taken to demonstrate visibility and visual impacts. These photographs represent the limited number of locations where the project is intermittently visible, there are no highways or roadways where the project is visible for an extended duration of travel. Overall, visibility of the project site is very low.

Solid white lines represent the highway and roadways where the project was intermittently visible, dashed lines represent portions of the highway and roadways where there was nominal or no visibility. Views 1-2, and 4-11 (solid orange) represent vantage points for which photosimulations were completed. Views 3 and 12-15 (hollow orange) represent locations where the residence would be nominally visible or fully obscured by existing vegetation and development.



CITY OF SAN LUIS OBISPO CIRCULATION ELEMENT SCENIC ROADWAYS MAP

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102

HIGHWAY 227 CORRIDOR

The Highway 227 corridor was analyzed for vantage points where the subject property and building site were visible. According to the San Luis Obispo County Title 22 Land Use Ordinance section 22.10.095.C.7 the subject property is located in the area shown in Figure 10-29. Per subsection 'b' therein, "views from Broad Street shall replace those from other scenic highways or the railroad in determining compliance with the above standards for Sensitive Resource Areas." These views are numbered 1-7.

The building site is located 1.2 to 1.5 miles from the corridor and is only visible between the intersections with Lawrence Drive (northern limit) and Industrial Way (southern limit). Visibility is possible from the portions of Highway 227 adjacent to the San Luis Obispo County Airport, but at greater than 2.0 miles distance the building will be miniscule within one's field of vision and therefore was not included in this analysis. It is worth mentioning that the setback dimension cited in section 22.10.095.C.3.b for zoning clearance eligibility is 100' from the right-of-way, a dimension exceeded by more than 63 times in this project's case. This distance significantly diminishes visual impacts.

Both pedestrian and vehicular traffic along Highway 227 moves perpendicular to the line of sight toward the building site which is filtered through existing development and tall clusters of vegetation. Visibility is therefore intermittent, the obstructions preventing extended gazes. As evidenced by the visual simulation views, the building site is only nominally visible in a static frame, and nearly non-visible when traveling by car, bus, or bicycle.

CITY OF SAN LUIS OBISPO SCENIC ROADWAYS

As the project site is within the City of San Luis Obispo's Sphere of Influence and subject to referral to the San Luis Obispo Community Development Department, additional visual analysis was performed to determine impacts to scenic roadways and vistas as defined in the City of San Luis Obispo Circulation Element, specifically figure 3, Scenic Roadways. These views are numbered 8-15.

As with the views from Highway 227 the line of sight toward the building site is filtered through existing development and tall clusters of vegetation. The most direct opportunity to see the project is along Orcutt Road heading north from Tank Farm Road to Johnson Avenue. This moderately undulating scenic roadway still provides very limited visibility of the proposed project as the riparian trees to the east of the project site form a natural visual barrier. Additionally, as seen in view 10, the small portion of the project that is visible represents a meager

fraction of the field of view, around the same size as the solar panel set upon the high voltage power line armature.

All of the views from the scenic roadways had to be sought out and glimpsed in between trees and buildings. There is no prolonged exposure and therefore very limited impact to the visual resource of the hillside.

PROJECT DESIGN

The building is set as low on the property as is possible, taking advantage of a relatively small lower slope area at the southwest corner of the lot. Of the approximately 83 acres of land available, the buildable portion for a single-family residence is limited to less than 0.35 acre, or 0.4%. At this height the building does not impact any natural features above it on the hillside, nor does it impact the ridgeline or create any silhouetting against the sky from any sensitive view corridor or visual resource.

The building design is simple in its massing, relying on two main gabled forms intersecting perpendicular to each other, to maximize access to the beautiful views, and negotiate the steep terrain. The gabled roofs are sloped at 8:12 pitch, fitted with standing seam metal roofing. The siding for the house is an agrarian inspired fiber cement shiplap. The muted colors are low chroma and at the darker end of the value spectrum, compatible with County guidelines to use body colors no brighter than 6 in chroma and value on the Munsell Color Scale as noted in section 22.10.095.C.3.g of the Land Use Ordinance. An accent mass on the south east side of the residence and a west facing decorative chimney are clad in cultured stone in a range of golden tan tones evoking the summer and autumn hillside. Deep awnings provide shade and shadow. A small accessory dwelling features a single-gable roof complimentary to the main residence and shares the same color palette.

Access to the building site is provided by a proposed driveway. Due to maximum slopes defined by Cal Fire standards (16%), the driveway must be partially graded into the existing hillside rather than built atop the existing sloped terrain. This means that the driveway is set below the hillside and is therefore less visible or not visible from a distance as the side embankments rise up from both sides of the driveway. An existing tree line parallels the proposed driveway location and will be supplemented with additional plantings of *Melaleuca armillaris* (drooping melaleuca) to provide a landscaped screen.

SUMMARY

The muted color palette blends the project into the hillside vegetation and the proposed landscape screening masks the majority of the project where it is not otherwise screened by existing vegetation and development. When considered in aggregate with the adjacent built environment, the project exists within the horizontal band of visual perception of the developed city. It is not not further up the hillside past adjacent buildings and infrastructure. Lastly, the siting of the project provides natural screening from existing development, existing vegetation, and the undulation of the hillside terrain.

The development of lots for single-family residential, does not preclude visibility of the structure. The nearest view is view 11, one-half mile from the project site. When seen from this distance and beyond the project blends into the hillside development pattern in muted colors and obscured by vegetation.

VISUAL ANALYSIS PROCESS

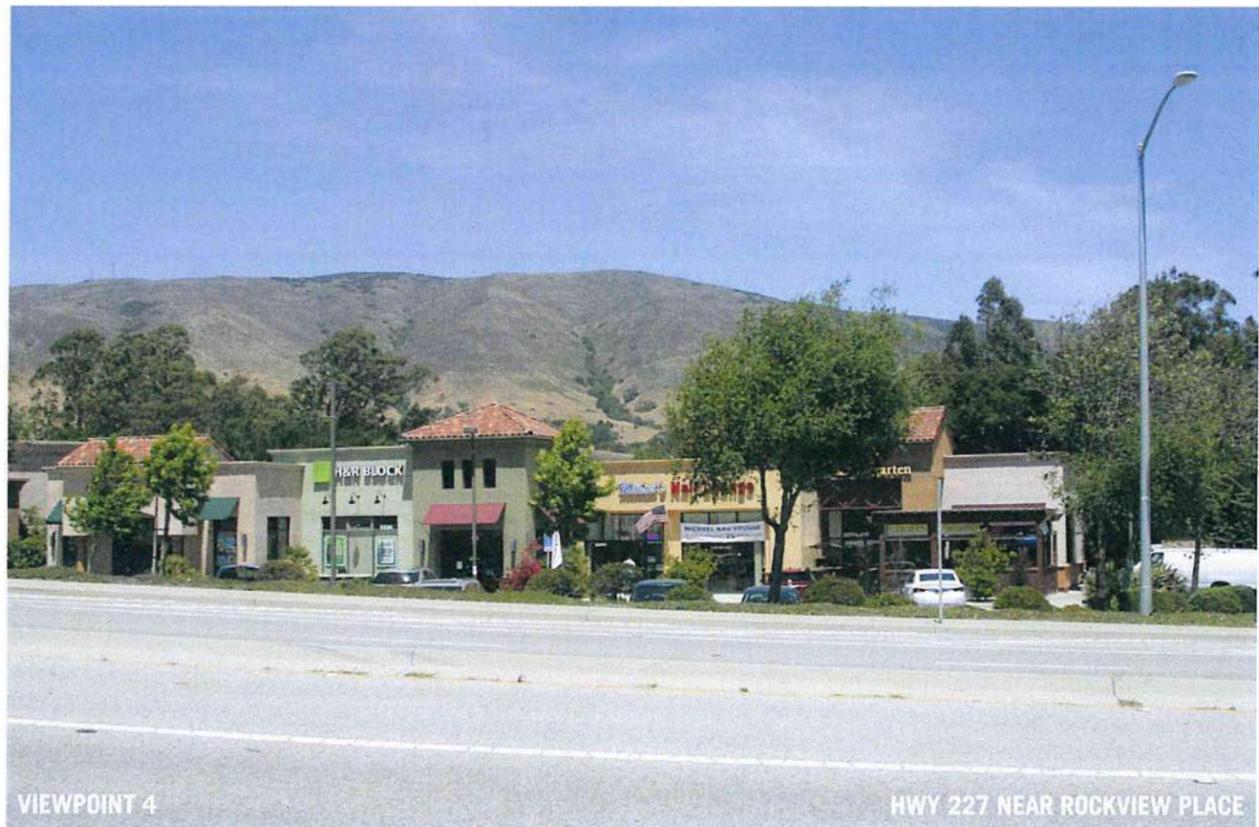
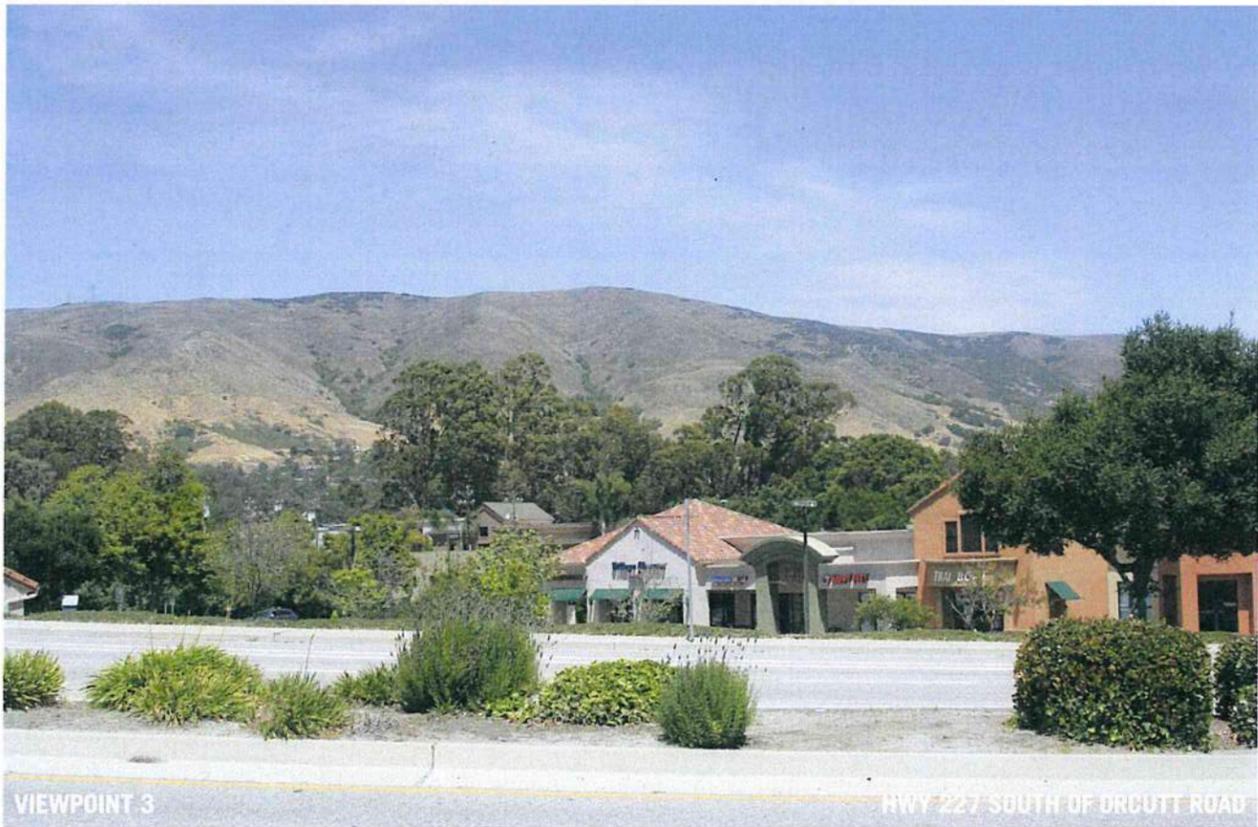
The visual analysis was prepared using the following publicly and commercially available software.

Google Earth Pro
Trimble SketchUp Pro
Adobe Photoshop CC
AutoCAD LT

The source photographs were taken with a zoom lens set to a focal length of 28mm. The crop factor for the camera in use is 1.6, leading to an effective focal length of 44.8mm. Human vision does not directly correlate to camera optics, but a focal length of in the 40mm-50mm range is analogous.

The visual analysis was prepared by Bryan Ridley (C-33512) a licensed architect as prescribed in the County of San Luis Obispo Land Use Ordinance 22.10.095.C.4.





ORIGINAL PHOTOGRAPHS

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



VIEWPOINT 5

HWY 227 NEAR CAPITOLIO WAY



VIEWPOINT 6

HWY 227 SOUTH OF CAPITOLIO WAY



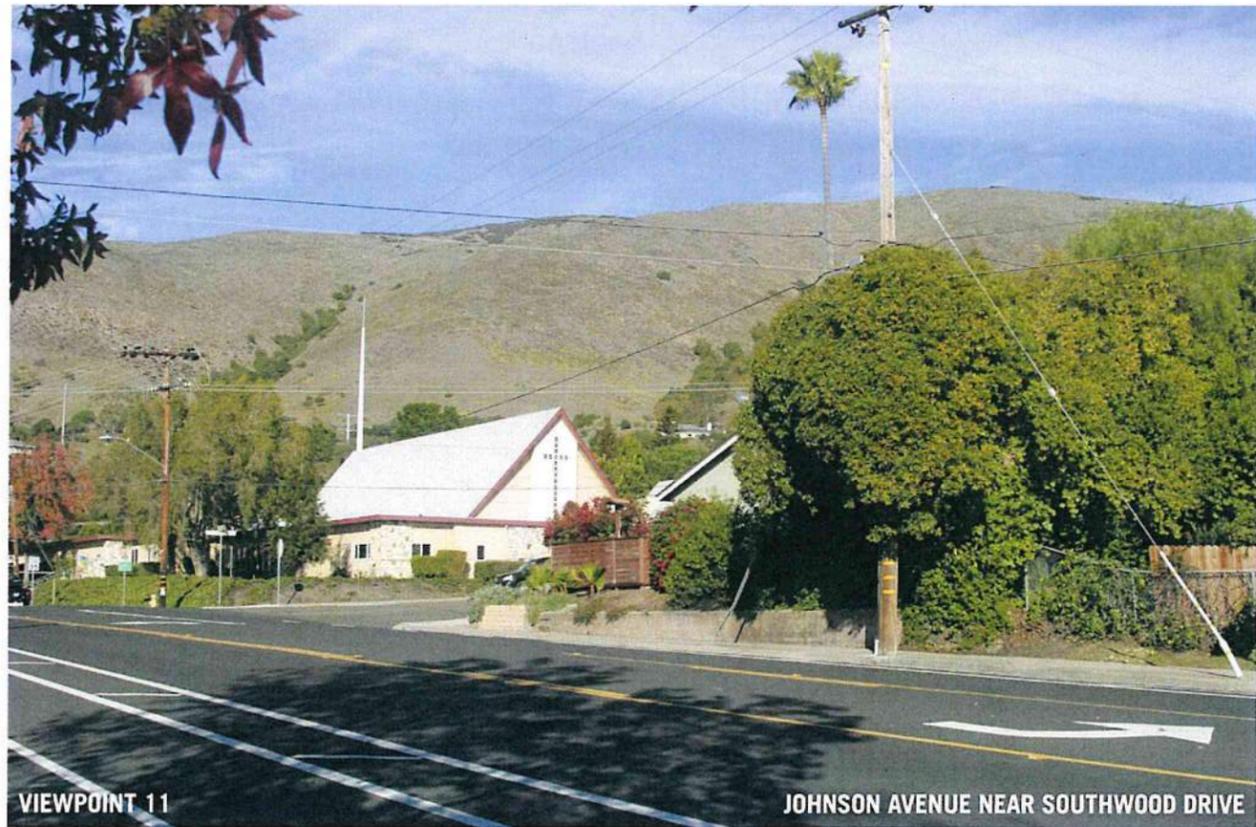
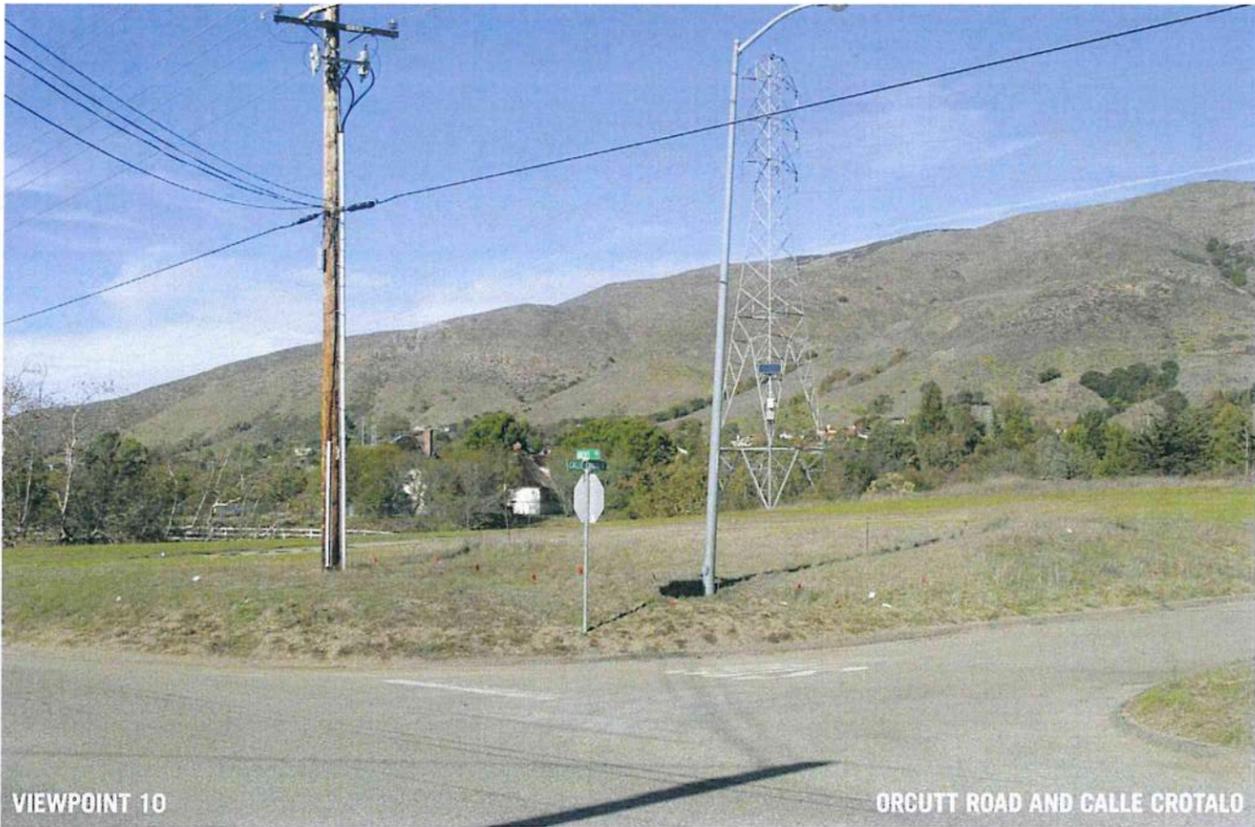
VIEWPOINT 7

HWY 227 NORTH OF INDUSTRIAL WAY

ORIGINAL PHOTOGRAPHS

Augustine Residence

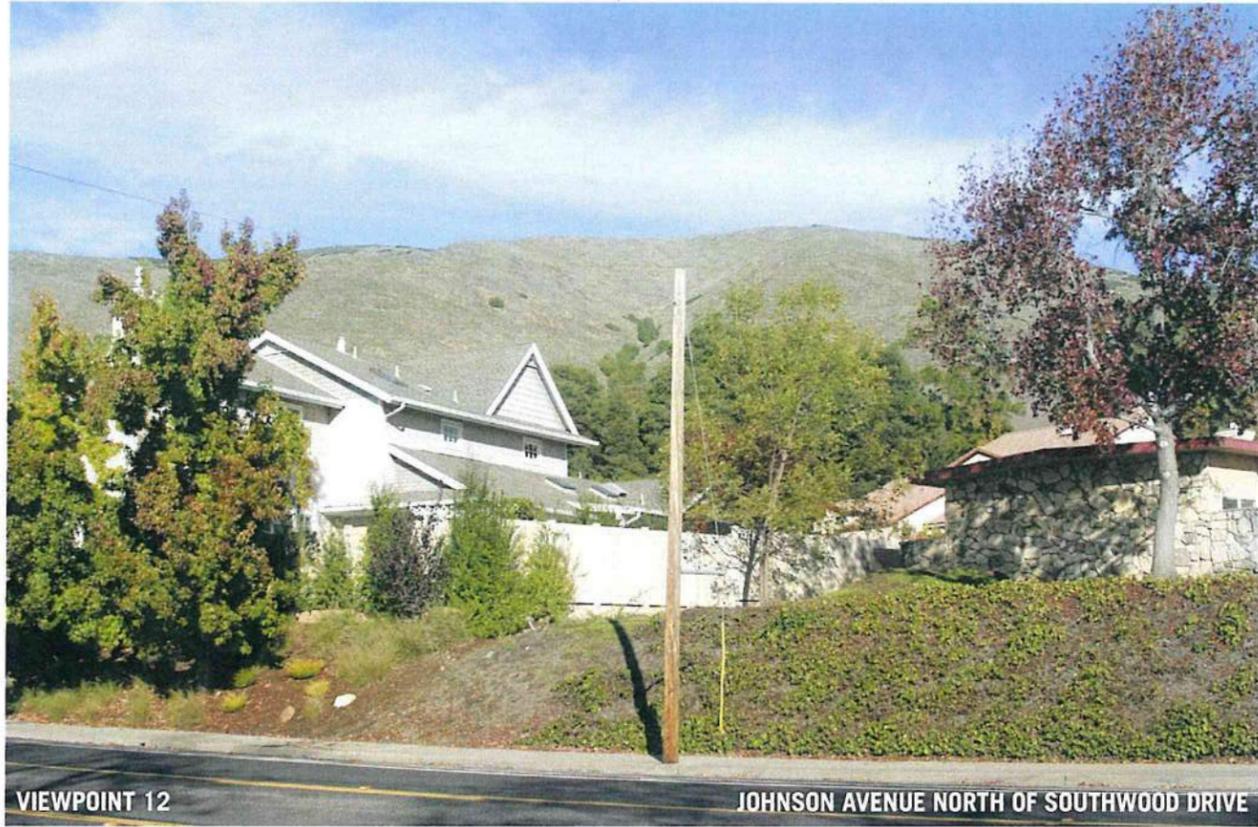
Harmony Way, San Luis Obispo CA
19.0102



ORIGINAL PHOTOGRAPHS

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



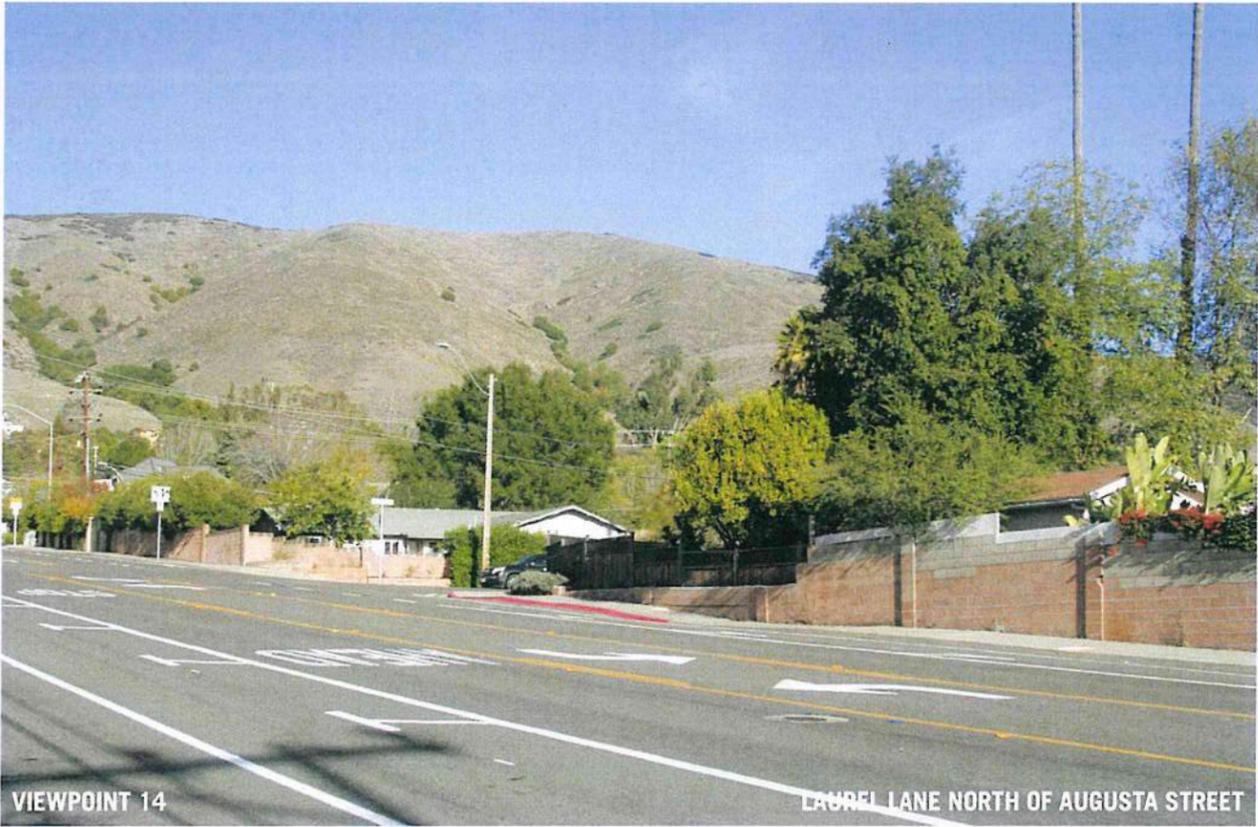
VIEWPOINT 12

JOHNSON AVENUE NORTH OF SOUTHWOOD DRIVE



VIEWPOINT 13

JOHNSON AVENUE AND LAUREL LANE



VIEWPOINT 14

LAUREL LANE NORTH OF AUGUSTA STREET



VIEWPOINT 15

LAUREL LANE NORTH OF SOUTHWOOD DRIVE

ADDITIONAL PHOTOGRAPHS - NOMINAL TO NO PROJECT SITE VISIBILITY

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 1 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 NEAR PERKINS LANE

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 2 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 AND ORCUTT ROAD

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102

8 Highway Corridor + Scenic Roadway Visual Analysis





PROJECT COMPLETELY
OBSCURED BY TREES

PROJECT SIMULATION VIEWPOINT 3 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 SOUTH OF ORCUTT ROAD

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 4 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 NEAR ROCKVIEW PLACE

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 5 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 NEAR CAPITOLIO WAY

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 6 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 SOUTH OF CAPITOLIO WAY

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 7 - SLO COUNTY SCENIC HIGHWAY

HIGHWAY 227 NORTH OF INDUSTRIAL WAY

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 8 - CITY OF SAN LUIS OBISPO SCENIC ROADWAY

SOUTH STREET

Augustine Residence
Harmony Way, San Luis Obispo CA
19.0102

Highway Corridor + Scenic Roadway Visual Analysis

14 **bracket**
architecture office



PROJECT SIMULATION VIEWPOINT 9 - CITY OF SAN LUIS OBISPO SCENIC ROADWAY

TANK FARM ROAD AND ORCUTT ROAD

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



PROJECT SIMULATION VIEWPOINT 10 - CITY OF SAN LUIS OBISPO SCENIC ROADWAY

ORCUTT ROAD AND CALLE CROTALO

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



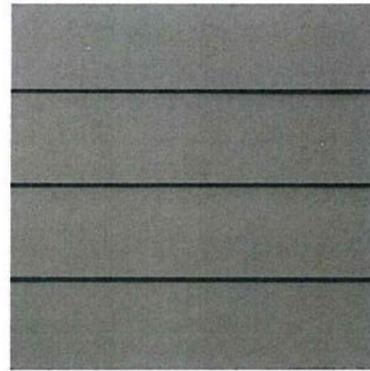
PROJECT SIMULATION VIEWPOINT 11 - CITY OF SAN LUIS OBISPO SCENIC ROADWAY

JOHNSON AVENUE NEAR SOUTHWOOD DRIVE

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102

FIBER CEMENT HORIZONTAL
LAP SIDING
PAINT, PRIMARY



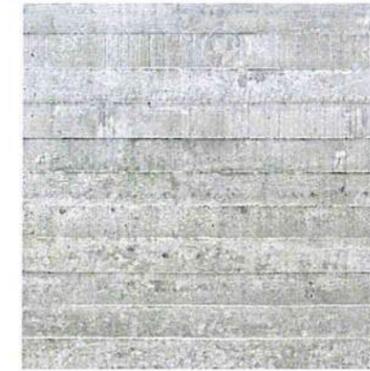
STANDING SEAM SHEET METAL
ROOF
COOL OLD TOWN GRAY



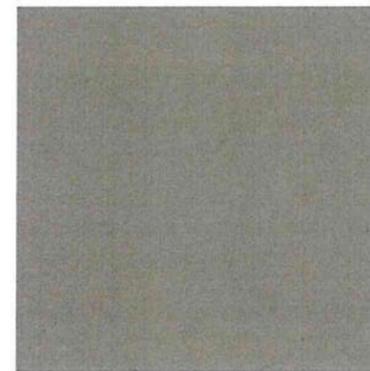
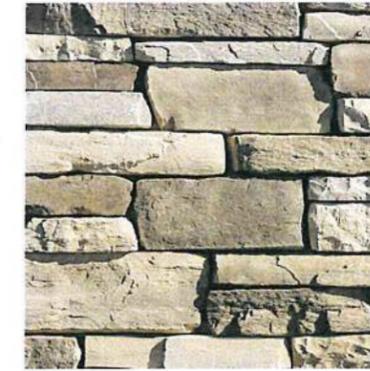
TIMBER BEAM, RAFTER, OR
KICKER WOOD STAIN + SEALER
CHOCOLATE



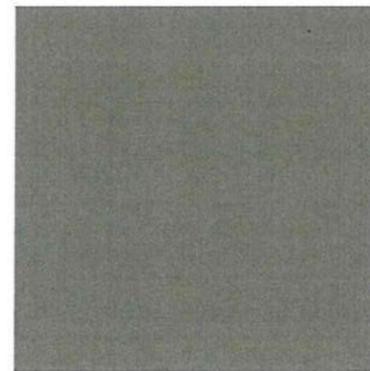
BOARD FORMED CAST-IN-PLACE
CONCRETE
NATURAL



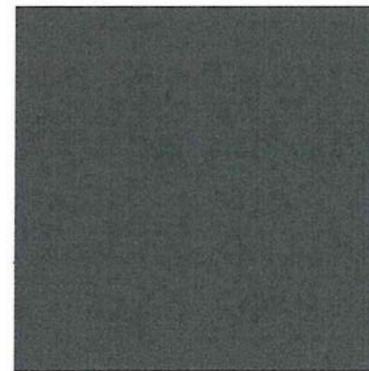
CULTURED STONE
ELDORADO STONE CLIFFSTONE
BOARDWALK



PAINT, PRIMARY
SW7048 URBANE BRONZE



PAINT, STEEL
SW7069 IRON ORE



PAINT, ACCENT
SW6990 CAVIAR



COMPOSITE WOOD DECKING
ASHWOOD

MATERIAL + COLORS

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102



SOUTH PERSPECTIVE ELEVATION WITH MATERIAL + COLORS

Augustine Residence

Harmony Way, San Luis Obispo CA
19.0102

BIOLOGICAL RESOURCES SURVEY REPORT PROPOSAL

Harmony Way 80-Acre Parcel: APN 070-304-005

Prepared for:

**John Bellisario
Ferreira Inc.
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Prepared by:

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February 17, 2018

As County-approved biologists, 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 our knowledge and belief; and I further certify that I were present throughout the site visit(s) associated with this report.

V. L. Holland, Ph.D.
Consulting biologist

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EXECUTIVE SUMMARY

The project site (APN 070-304-005) is located on an 80-acre parcel at the end of the northern extension of Harmony Way, San Luis Obispo, San Luis Obispo County. It is approximately 0.1 miles north of the San Luis Obispo City limits. This portion of Harmony Way is accessed through a gate at the end of the intersection of Sequoia Drive and Harmony Way. Harmony Way is paved up to existing residence that adjoins the subject parcel's southern boundary. From the end of the paved road, there is an unpaved road that provides access to the proposed building site, which is located in the southwest corner of the 80-acre parcel. The owners will be applying for a permit to construct a home on this small highly disturbed portion of the 80-acre parcel.

We conducted biological resource surveys of the site on August 14, 16, 23, and 28, 2017 and February 7, 2018. The purpose of these studies was to examine the existing vegetation, flora, and wildlife and to provide a better understanding of the potential biological issues associated with the site. Special attention is given to the presence or potential presence of rare and endangered species and sensitive habitats.

The vegetation on the home site is disturbed **coastal valley grassland**. The vegetation around the margin of the home site includes three other plant communities: **coastal scrub, coast live oak woodland, and riparian woodland**. A mosaic of coastal scrub and coast live oak woodland occur near the home site's western margin, and riparian woodland lines the ephemeral creek near its eastern margin. None of these areas will be affected by the construction of the home and a 25-foot buffer zone will be established along the riparian woodland to further protect this area. The rest of the 80-acre parcel will not be disturbed.

To determine the special status plant and wildlife species that could potentially be present on the project site, we conducted a search for target special status plants known to occur within the San Luis Obispo and eight surrounding quadrangles. To generate these lists, we referred to the most recent edition of the California Department of Fish and Game Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichen List (CNDDDB) and the most recent edition of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* database, both of which are accessible through the internet (<http://www.dfg.ca.gov/whdab/html/cnddb.html> and www.cnps.org).

After an intensive search of the home site, we did not find any special status plant or wildlife species, and none are expected to use the site. No sensitive habitats will be disturbed by the project and the ephemeral creek and riparian woodland will be further protected by a 25-foot buffer zone.

The disturbed home site has low wildlife value because of the unpaved roads and other disturbances. We did not find any special status wildlife species on or near the site. In addition, we did not find suitable habitat on or near the home site for any special status wildlife species.

The proposed construction of a home is limited to a small area in the southwest corner of the 80-acre parcel. The rest of the parcel will not be disturbed. The plant communities and wildlife habitats along the ephemeral creek, the nearby hillsides, and the canyons will not be disturbed by the proposed project. In addition, the mosaic of habitats that occur on the 80-acre parcel outside the home site will not be affected by the proposed project.

The construction of the home on the proposed home site should have no significant impacts to the biological resources found within or immediately around the project site if suggested mitigation measures are followed. No sensitive habitats, special status plant species, or wildlife species will be impacted.

INTRODUCTION AND PURPOSE

The project site (APN 070-304-005) is located on an 80-acre parcel at the end of the northern extension of Harmony Way, San Luis Obispo County, CA. This portion of Harmony Way is accessed through a gate at the end of the intersection of Sequoia Drive and Harmony Way. The southern boundary of the 80-acre subject parcel is approximately 0.3 miles north of this intersection and approximately 0.1 miles north of the San Luis Obispo city limits. Alrita Street, a road that also extends north of the San Luis Obispo city limits, is approximately 0.2 miles west of the subject parcel (Figures 1-4). Harmony Way is paved up to existing residence and to the subject lot's southern boundary (Figures 5 and 8; Photo 1). From the end of the paved road, there is an unpaved road that provides access to the proposed building site on the subject parcel, which is located in the southwest corner of the 80-acre parcel (Figures 1-4). The area of disturbance is less than one-acre. The rest of the 80-acre parcel will not be disturbed (Figures 1-6; Photos 3-4).

The area of the proposed home site is highly disturbed and covered by ruderal coastal valley grassland with a few widely scattered native grasses, shrubs, small, planted trees, and unpaved roads. There is a mosaic of grassland, coast live oaks, and coastal scrub in the canyon that forms the western margin of the proposed home site and riparian woodland along an ephemeral creek that lines the eastern margin of the site (Figure 8; Photos 8-13).

The owners are applying for a permit to construct a home and driveway on the highly disturbed portion of the site (Figures 5 and 8; Photos 1-6). No disturbances will occur to the narrow corridor of riparian woodland along the ephemeral creek or the coast live oaks and coastal scrub on the hillsides and canyons west and north of the home site. Drs. V. L. Holland, David Keil, and/or Mike McGovern conducted the biological resource surveys of the site on August 14, 16, and 23, 2017 and February 7, 2018. The results of these studies are discussed in this report.

The purpose of this study is to characterize the biological resources in and around the home site. We also discuss the riparian vegetation along the small ephemeral creek channel and the coastal scrub and coast live oak woodland in the canyon off site. This report provides technical information and evaluates the study site in sufficient detail to assess the potential effects of the proposed project on the biological resources, especially special status species and habitats.

Special attention is given to the presence or potential presence of rare and endangered species and sensitive habitats. During our analysis of the site, we carefully searched the entire section of the creek channel that occurs near the eastern margin of the home site and the adjacent upland areas for sensitive habitats and species of concern known to occur in the San Luis Obispo and eight surrounding quadrangles (Appendices 2 and 3; Tables 6, 7, 8, and 9). Several special status plants occur on the serpentine hillsides north of the home site, but none was found on or around the proposed area of disturbance for the home site.

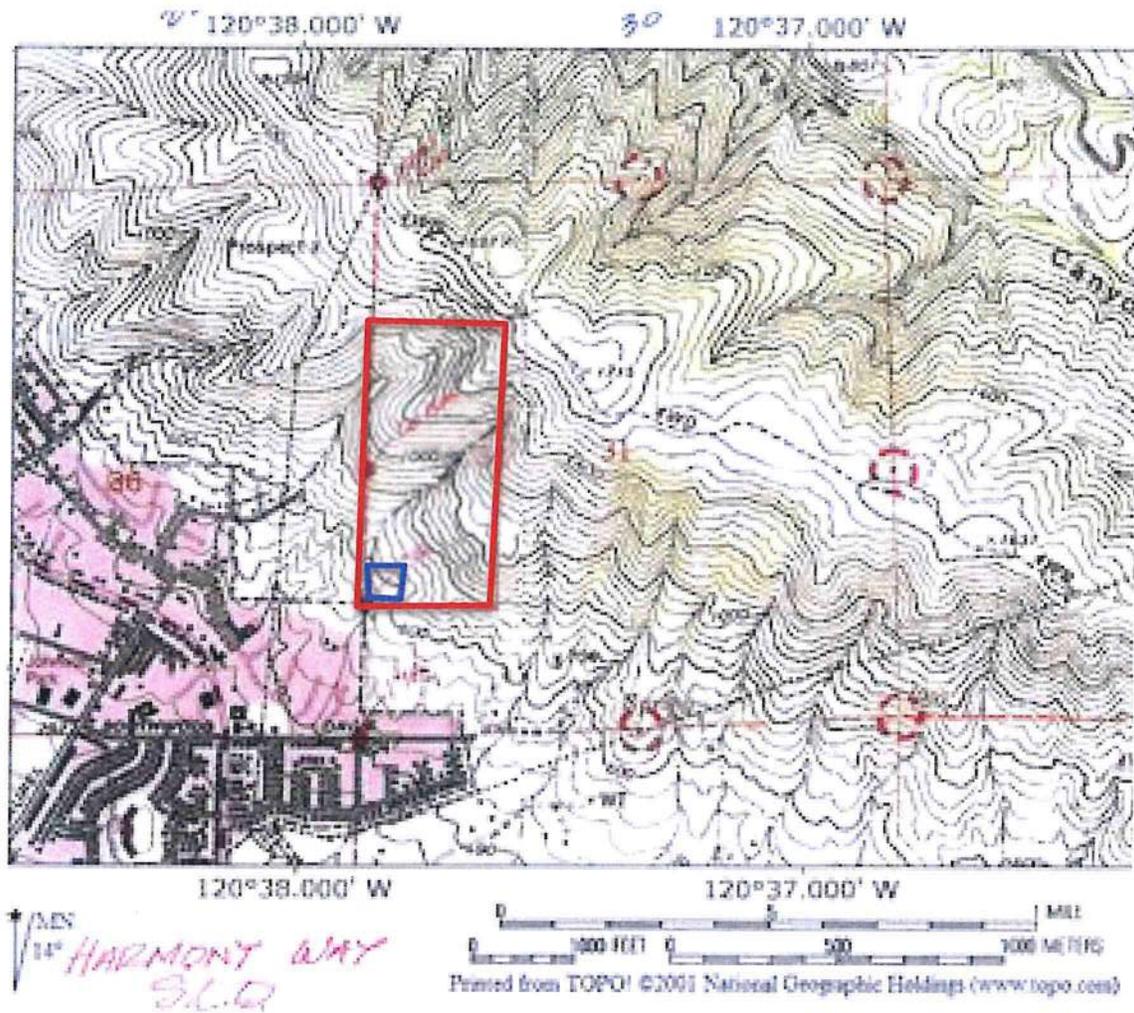


Figure 1. Topography, location, and approximate boundaries of the 80-acre Harmony Way parcel. The approximate boundaries of the parcel are outlined in red. The general area of the proposed home site, which is located in the southwestern corner of the 80-acre parcel is outlined in blue.



Figure 2. The approximate boundaries of the 80-acre parcel are outlined in red. The area of the proposed home site, which is located in the southwestern corner of the parcel, is outlined in blue.

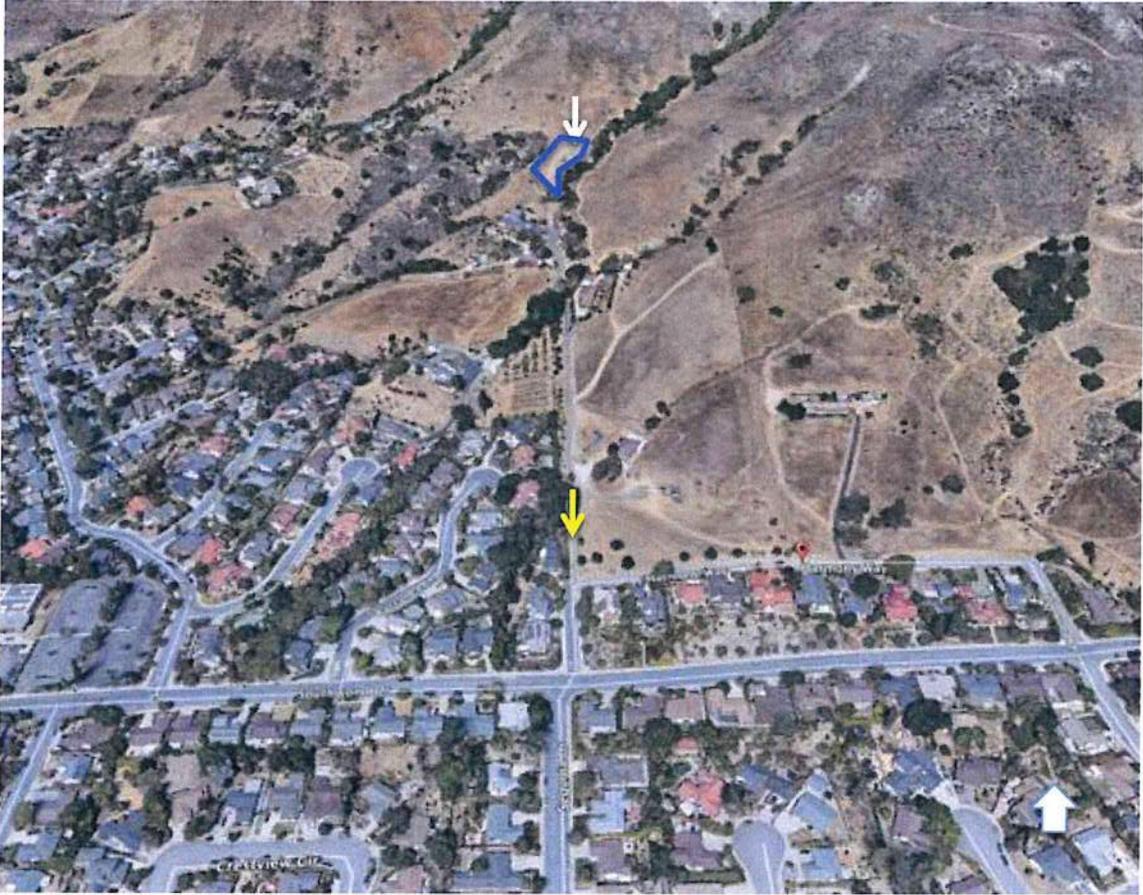


Figure 3. Vicinity map showing the general location of the proposed home site (outlined in blue) on the 80-acre parcel in relationship to the surrounding homes. The entrance gate (yellow arrow) is located near the intersection of Harmony Way and Sequoia Street.



Figure 5. Approximate location of the proposed home (outlined in black) and driveway (outlined in blue) on the home site (outlined in red) at the end of Harmony Way. The home site will be setback from the edge of the riparian woodland (white arrow) by a minimum of 25 feet, and no disturbances will occur to the creek or riparian woodland. The black dashed line shows the approximate location of the western property line. The home site will have an easement to access the area just west of the property line. The coastal scrub (gray) and coast live oak woodland (dark green) along the western margin of the site will not be disturbed. Also, refer to Figure 6 below.

- Estimated boundaries where potential parcel disturbance will occur —
- Location of home —
- Western property line - - -
- Driveway —

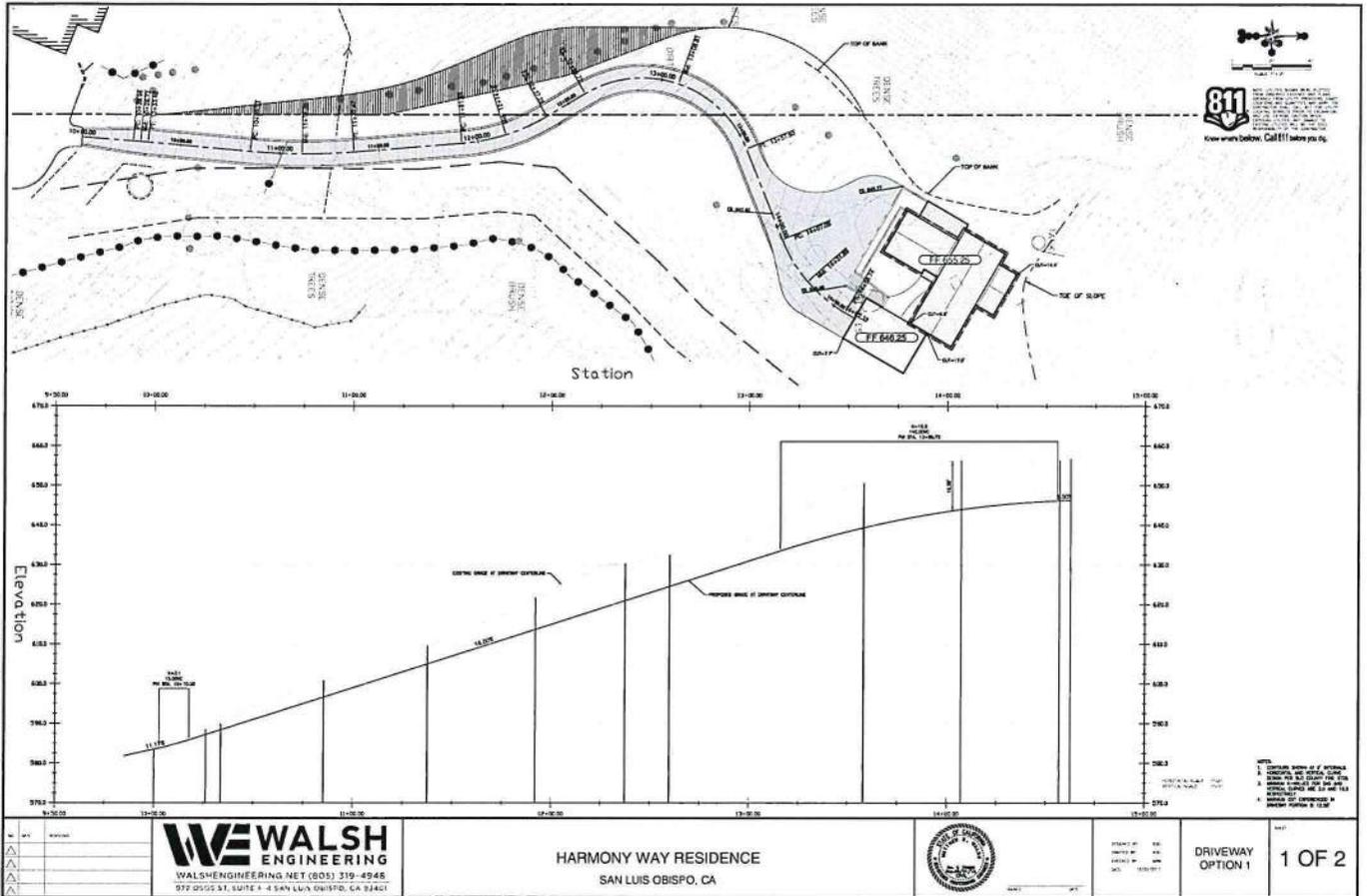


Figure 6. The design, location, and topography of the driveway and home site on Harmony Way. The owner will provide a larger, more readable version of this illustration.

EXISTING CONDITIONS, LOCATION, AND PHYSICAL FEATURES

Location and Physical Features

The parcel is accessed through a gate just north of the intersection of Sequoia and Harmony Way. The southern limit of the parcel and proposed location of the home site is approximately 0.2 – 0.3 miles north of this intersection and 0.1 miles north of the San Luis Obispo city limits (Figures 1-6). The proposed home site adjoins an existing residence along the home site's southern boundary. The paved portion of this section of Harmony Way ends at this existing residence. Access to the subject parcel is via an unpaved road that ascends a small slope to a relatively flat portion of the parcel where the home is proposed (Figure 8; Photos 3-6). The proposed home site currently has unpaved roads, which are mostly barren, lined by ruderal coastal valley grassland (Figure 8; Photos 1-2). There is a mosaic of grassland, coastal scrub, and coast live oaks in the canyon near the western margin of the proposed home site (Figure 8; Photos 8-9) and a small ephemeral creek lined by a narrow corridor of riparian woodland near the eastern margin (Figure 8; Photos 10-13). Coastal valley grassland covers the hillside east of the ephemeral creek, and a mosaic of coastal valley grassland, patches of coastal scrub, and scattered coast live oaks cover the south-facing hillsides north of the proposed home site (Figure 8; Photos 1-10).

The parcel is located just north of the San Luis Obispo city limits and is situated in an area of large parcels with single-family homes and small areas of agricultural development (Figures 1-4). A mixture of *Umbellularia californica* (California bay-laurel), *Quercus agrifolia* (coast live oaks), *Platanus racemosa* (California sycamore), and *Salix lasiolepis* (arroyo willow) line the ephemeral creek near the eastern boundary of the home site. This small ephemeral creek originates in a small canyon on the hillside above the home site and flows downhill in roughly a north to south direction partially through culverts toward the city of San Luis Obispo (Figures 5 and 8; Photos 3, 4, and 10-13). The section of the creek within the city limits (north of Southwood Drive) runs between Colina Court and Barranca Court where it flows through the lots and becomes part of the back yards (Figures 2-4). While the creek does flow during winter rains and did flow for a period of time during the 2016-17 rainy season, no signs of flowing or standing water or moist soil were found along the section of creek that traverses the subject parcel near the home site during our August 2017 and February 2018 site surveys.

The topography of the 80-acre subject parcel is variable (Figures 1, 4, and 6). The steep slopes that characterize most of the parcel east and north of the proposed home site consists of a series of hillsides, ridges, and canyons with ephemeral creeks (Photos 1-13). The elevation ranges from approximately 600 feet along the southern boundary of the 80-acre parcel to approximately 1500 feet at the northern boundary (Figures 1 and 2).

The home site is located on a relatively flat area in the southwest corner of the 80-acre parcel that ranges from 600 feet to 670 feet in elevation (Figures 4-8; Photos 3-6). An unpaved road that ascends a small slope to the flat area accesses the site (Figure 8; Photo 1-2). As mentioned above, there is a small canyon that slopes westward near the western margin of access easement and home site. A mosaic of grassland, coastal scrub, and coast live oaks cover these slopes (Figure 8; Photos 8-9). The eastern margin of the home site is defined by a 25-foot buffer setback from the edge of the riparian woodland that lines the small ephemeral creek channel (Figures 8; Photos 4 and 10-13).

Climate

The general climate is classified as Subtropical Humid Mesothermal Cool-Summer Mediterranean with frequent fog (***Csbn***) using the Köppen-Trewartha system (Trewartha and Horn 1983). Winter high temperatures average approximately 62°F (16.7°C) and average low temperatures are near 41°F (5°C). Winter lows below 32°F (0°C) may occur from mid-November through mid-February. Summer high temperatures average approximately 77°F (25°C), and average low temperatures are near 52°F (11°C). Summer highs above 90°F (32°C) are not uncommon. Precipitation falls as rain, primarily from October through April, and averages approximately 16 inches (400 mm) per year. Less than one inch of precipitation is typically recorded from 1 May to 30 September, but overnight and morning fog with near 100% humidity is relatively common unless drier, down sloping winds descend from the Salinas Valley over the Santa Lucia Range to overwhelm the onshore flow of marine air (Felton 1965).

Soils

According to soil mapping delineations in the San Luis Obispo County Soil Survey (Ernstrom 1977) and the 2017 USDA Web Soil Survey (websoilsurvey.nrcs.usda.gov), the soils on and around the proposed home site and surrounding areas are classified in the Los Osos-Diablo complex on 15 to 50 percent slopes. Higher on the hillside (northern part of the 80-acre parcel) the soils are classified as Obispo-Rock outcrop complex 15 to 75% slopes with little to no soil development (Figure 7).

This Los Osos-Diablo complex occurs in the lower portion hillside (southern portion of the 80-acre parcel) and includes the proposed home site and surrounding areas (Figure 7). The soils are a mix of the Los Osos series and the Diablo series. The Los Osos series is in the Order Mollisols and Suborder xerolls while the Diablo series is in the Order Vertisol and Suborder Xererts. Both of these soil classifications are residuum soils weathered from parent material of sandstone (and also shale, and/or mudstone). These soils are considered to be poorly consolidated, non-hydric, non-saline, nutrient poor, rapidly permeable, and well-drained with a relatively low water holding capacity. Erosion hazard is severe on the steep slopes. Overall, the Los Osos-Diablo complex and local climate can support native vegetation consisting of a mosaic of grassland, coastal scrub, chaparral, and coast live oak woodland depending on microhabitat conditions. These soils are not considered prime agricultural soils.

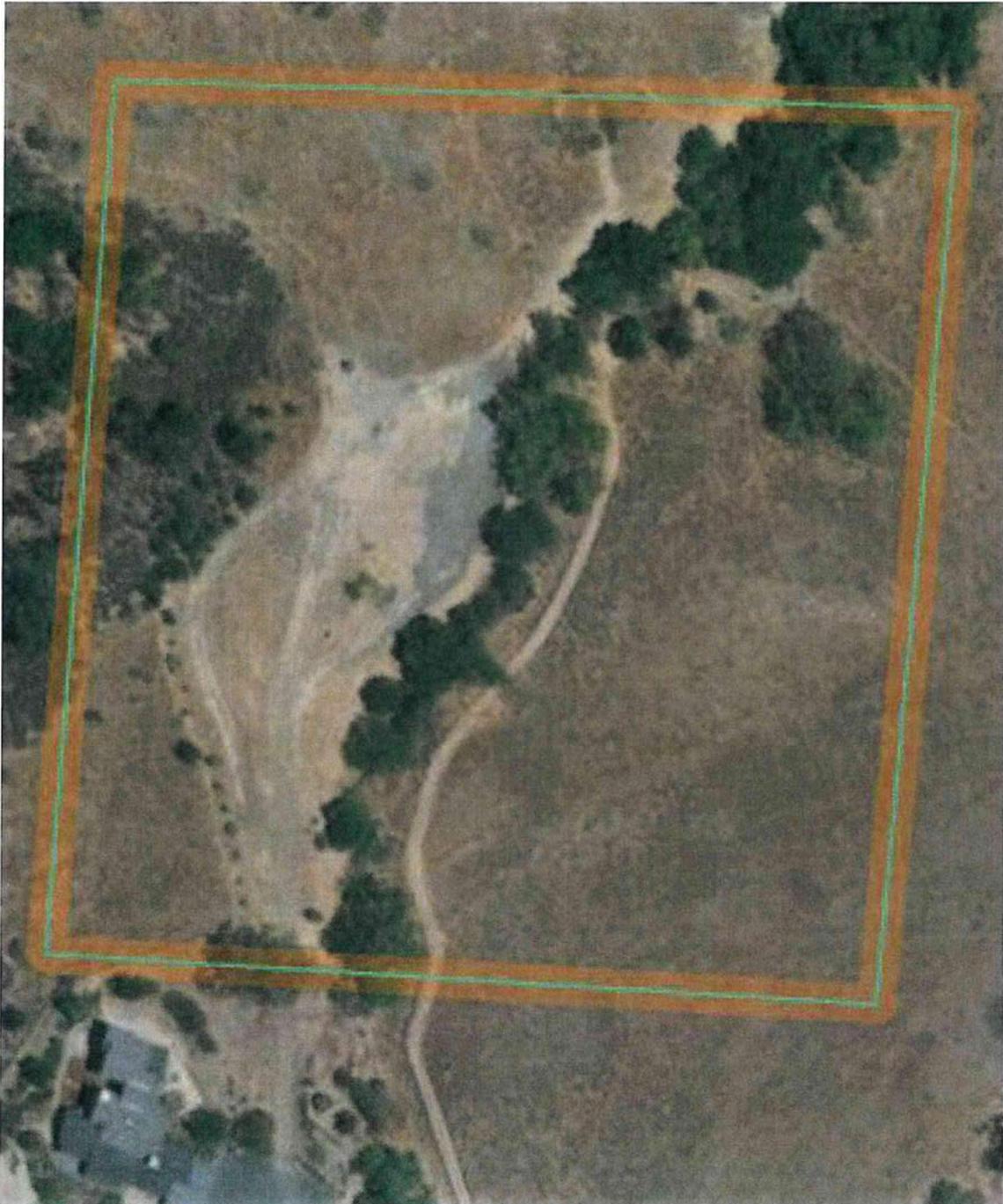


Figure 7. Soils Map of the Harmony Way subject parcel. The entire site has been classified as 165. Los Osos-Diablo complex 15 to 50 percent slopes.

FLORISTIC, VEGETATION, AND WILDLIFE INVENTORY

Methods

Drs. V. L. Holland, David Keil, and/or Mike McGovern conducted biological surveys of the subject site on August 14, 16, 23, and 28, 2017 and February 7, 2018. The purpose of these surveys was to carefully examine the existing flora, vegetation, wildlife, and biological habitats on the site with special attention given to the presence or potential presence of special-status species and sensitive habitats that might be impacted by the proposed project. During the analysis of the site, the entire proposed home site, the ephemeral creek channel, and the surrounding upland areas were carefully searched to determine if any of the target special-status species and habitats known to occur in the San Luis Obispo and the eight surrounding 7.5 minute/24,000 feet scale quadrangles (Tables 6-9) are present (Figures 5 and 8). We examined the creek upstream and downstream from the home site and the upland areas immediately around the home site. We have also examined the vegetation on the hillsides west and north of the project site in previous surveys.

The biological surveys were conducted during the day light hours between 8:00 a.m. and 6:00 p.m. The weather on the survey days was sunny to slightly overcast with mild temperatures and little wind. During these surveys, we were able to identify many of the plants on the site using reproductive, vegetative features, and/or dried remains of the 2017 season's standing crop. However, a spring survey would be necessary to make sure all species present are identified.

This study area was also carefully searched for any evidence of sensitive wildlife species (scat, tracks, burrows, and visual or auditory observations) and habitats that are listed by the U. S. Fish and Wildlife Service, California Department of Fish and Wildlife, or are known to occur in the general vicinity of the site (Table 9). Trees near the home site were examined for nests, roosting sites, etc. No protocol wildlife surveys were conducted because the area was considered outside the range of wildlife species with specific protocol survey requirements or was determined not to support suitable habitat for these species.

Consistent with recommended biological survey methodology, we carefully examined the proposed home site, upland areas immediately around the home site, and the riparian woodland along the ephemeral creek using overlapping transects that zigzagged through the study area. The plant species found within this study area are listed on Tables 1-4 and Appendix 1. We also made stops to listen for and observe wildlife. Notes were taken of any wildlife or signs of wildlife (including scat, tracks, burrows, and visual or auditory observations). Photographs were also taken. Common wildlife species that were observed or known to occur in the area are listed on Table 5.

These methods allowed us to conduct a thorough and careful search for evidence of both sensitive and non sensitive plant species, wildlife species (including scat, tracks, burrows, and visual or auditory observations), and sensitive habitats that are listed by the U. S. Fish and Wildlife Service, California Department of Fish and Game, California Native Plant Society, or are known to occur in the general vicinity of the site.

During our examinations of the site, we recorded species presence and relative abundance with the goal of recording all species present on the site, including any rare species. To accomplish this, we surveyed the site until no new plant species were found. While only repeated surveys conducted during all seasons, and even over a few years, provide an inventory nearing one hundred percent completeness, we are confident that the results of our studies provide an accurate inventory of the species present on and near the site during our August 2017 and February 2018 surveys, including any potential rare species known to occur in the general vicinity of the site. However, while some plants were in reproductive condition, many grasses and forbs had to be identified using vegetative features or by the dried remains of the 2017 standing crop. A spring survey would allow a more thorough listing of the plant species present on the site.

References used to verify plant identifications include relevant floras: The Jepson Manual: Vascular Plants of California (Baldwin, et al. 2012); Vascular Plants of San Luis Obispo County, California (Hoover 1970); Vascular Plants of San Luis Obispo County, California, 2nd ed. (Keil & Hoover, unpublished); and herbarium specimens housed at the Hoover Herbarium, Cal Poly State University. Nomenclature follows that of the Jepson Manual (Baldwin, et al, 2012), and on-line revisions that can be accessed on the following website (<http://ucjeps.berkeley.edu/IJM.html>). Wildlife references are listed in the bibliography.

FLORA, VEGETATION, AND WILDLIFE ON SITE

Flora

We made a list of all the plant species encountered in the study area during our August 2017 and February 2018 surveys, which included the home site and the areas immediately around the home site. A list of these plant species is provided in the discussion of the plant communities found in the study area (Tables 1-4 and Appendix 1).

We found a total of 45 plant species on and around the site consisting of 7 trees (4 native; 3 introduced and planted), 11 shrubs (all native to the site), and 37 grasses and forbs, 16 of which are native to the site. Of the 45 species on the site, 31 are native and 24 are introduced. All the trees and shrubs found in the coastal scrub, coast live oak woodland, and riparian area are native species. In contrast, approximately 43% of the herbaceous species found on the site are native, the introduced species (57% of the herbs) by far

cover most of the ground in the coastal valley grassland and home site. The native species were widely scattered among the introduced annuals. The results of the floristic analysis are summarized below.

Life form	Total	Native	Introduced
Trees	7	4	3
Shrubs	11	11	0
Herbs (Grasses and Forbs)	37	16	21
TOTAL	45	31	24

Vegetation

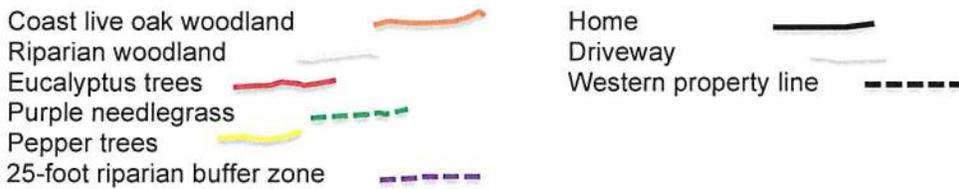
Vegetation is shaped by the interactions among long-term climate, short-term weather events, local landforms, soils, hydrology, physical tolerances of individual plant species, disturbances, and land use history by animals, including humans. Plant associations are spatially and temporally dynamic. Definitions and boundaries are relative and respond to the sharpness of the controlling environmental factors. Plant communities are not usually discrete but often transition into one another, forming ecotones or transition zones.

Disturbed coastal valley grassland with barren areas covers most the proposed home site. *Stipa pulchra* (purple needlegrass), a native grass, forms a small population in the coastal valley grassland between the two unpaved roads, southwest of the proposed location of building location, partially in the access easement west of the home site (Figure 8; Photo 14). We also found purple needlegrass plants widely scattered in other locations on the site where they intermix with and are part of the coastal valley grassland.

The vegetation around but not within the home site includes three other plant communities: **coastal scrub, coast live oak woodland, and riparian woodland** (Figure 8). A mosaic of coastal scrub and coast live oak woodland occur near the home site’s western margin west of the access easement (Figure 8; Photos 8-9). Riparian woodland lines the ephemeral creek near home site’s eastern margin (Figure 8; Photos 10-13). These plant communities are discussed in this report because of their proximity to the home site; however, none of these areas will be affected by the construction of the home and a 25-foot buffer zone will be established along the riparian woodland to further protect this area. The rest of the 80-acre parcel will not be disturbed.



Figure 8. Vegetation map of the Harmony Way proposed home site and surrounding areas. The riparian woodland along the small ephemeral creek is outlined in light green, and the coast live oak woodland is outlined in orange. The patches of coastal scrub are the gray areas among the oak woodland, the Eucalyptus tree is outlined in red, and the row of Peruvian and Brazilian pepper trees with a few planted coast live oaks is outlined in yellow. The rest of the vegetation in the area is coastal valley grassland (tan) with a small patch of purple needlegrass (outlined in green). The approximate location of the home is outlined in black, the approximate location of the driveway is outlined in blue, and the approximate location of the 25-foot setback from the riparian woodland is shown by the maroon dashed line. The black dashed line shows the approximate location of the western property line. The home site will have an easement to access the area just west of the property line.



A mosaic of coastal scrub and grassland with scattered coast live oaks largely covers the upper slopes of the 80-acre parcel, which are well outside the home site. Coast live oak woodland and riparian areas are found in the small canyons with drainages that flow from near the ridgeline toward the City of San Luis Obispo in a north to south direction (Figures 2-4; Photos 3 and 10). Patches of *Opuntia phaeacantha* (prickly pear cactus) are found around the home site and on the hillsides around (north of) the home site (Photos 2 and 7). None of the plant communities outside the home site will be affected by the construction of the home.

1. Coastal valley grasslands and ruderal grasslands (non-native annual grassland/California annual grassland series)

Coastal valley grasslands cover much of the southern portion of the 80-acre parcel including the area in which the proposed home site is located (Figure 8; Photos 1-7). Coastal valley grasslands are habitats in which the dominant plants are introduced, annual grasses and forbs; however, native plants and perennials can also be present depending on location and environmental conditions. In addition, there can be widely scattered native shrubs in the grassland if a shrubland like coastal scrub is nearby. In contrast, *California native grasslands* are grasslands in which the dominant plants are various species of California native perennial grasses that grow as individual bunches or tussocks rather than as continuous turf. Usually a diversity of other annual or perennial grasses and herbs grow among the tussocks. California native grasslands occur in some areas on the upper hillsides well above the home site. A small population of the native grass *Stipa pulchra* (purple needlegrass) occurs southwest of the proposed location of the home, partially in the access easement west of the study site and is also widely scattered in other grassland locations (Figure 8; Photo 14).

California Native Grasslands historically formed the dominant vegetation on over 17 million acres, or 17%, of California land area prior to Spanish settlement. Less than 10,000 acres of California grassland remains intact within California, and less than 1% has any protected status. Most of the historic California native grasslands have been converted to grasslands dominated by introduced annual grasses and forbs. Changes in the composition and structure of California grasslands are mostly due to introduction of grazing livestock during the Spanish mission period and the concomitant invasion of alien plant species adapted to heavy grazing from Eurasia. Urban development, agriculture, and changes in land use patterns have also resulted in the loss of native and valley grasslands locally as well as statewide.

The perennial, native bunch grasses, which dominated California grasslands before Spanish settlement, are found in scattered locations on the hillsides high above the subject parcel's proposed home site and also on the hillsides along the eastern boundary of San Luis Obispo. These sites represent some of the few remaining sites where the California native grasslands have maintained a significant presence. Native grasslands also occur in the hillsides east of Cal Poly, east of the Bowden Ranch Estates, and in other scattered hillside areas around the City of San Luis Obispo where

they are often associated with serpentinite outcrops. There are likely native grasses on the steep hillsides on the 80-acre parcel above the home site, but none of these areas will be disturbed.

Coastal valley grasslands cover much of the hillsides around the home site where they integrate with coastal scrub and are part of the understory in the coast live oak woodland and riparian woodland along the margins of the home site. As mentioned previously, the home site is highly disturbed by unpaved roads and as a result has barren areas interspersed with grasses and forbs typical of coastal valley grassland (also classified as California annual grassland series by Sawyer and Keeler-Wolf, 1995, and non-native grassland by Holland, 1986).

Because of the disturbances on the home site, weedy plants common to ruderal communities are common in the open grassland areas. Most of the grasses and forbs found in ruderal communities are also common in coastal valley grasslands. As a result, these grasslands and ruderal communities are very similar in species composition and other features. That is the reason we include them together in this discussion. Ruderal or disturbed coastal valley grasslands occur in the areas that have been disturbed by roadsides, trails, areas heavily used by humans, and fallow fields. In addition to the grasses and forbs common on the home site, there is also a small patch of *Baccharis pilularis* (coyote bush) and *Opuntia phaeacantha* (prickly pear cactus) south of the proposed home location (Photo 7). Also, a few small coyote bushes are widely scattered in other parts of the grassland on the site. In the easement area west of the western property line, a row of *Schinus molle* (Peruvian pepper tree) and *Schinus terebinthifolia* (Brazilian pepper tree) have been planted in a row along the edge of the grassland (Figure 8; Photo 1-2).

A very small drainage occurs on the grassland covered hillside northeast of the home site. This small channel has a couple of *Baccharis salicifolia* (mule fat) and a few *Cyperus eragrostis* (common umbrella sedge) along with typical grassland species. This area will not be disturbed by the proposed project.

The introduced, annual grasses and forbs of the coastal valley grassland have seeds that germinate in the fall and mostly reach reproductive maturity in late winter to late spring; although some flower and set seed in the summer. After setting seed, the annual plants dry, and the seeds are stored in the soil until they germinate the following fall. The species composition of coastal valley grasslands varies from site to site and from year to year depending on local ecological conditions and weather conditions.

Although some California's native plant species have a weedy habit and are able to grow under disturbed conditions in grasslands, they often fail to become established because of competition from aggressive, weedy Eurasian species. Most successful weeds produce large quantities of seeds and readily invade disturbed sites. Many have features that allow their seeds to be widely dispersed. The majority of the

grasses and forbs found in the coastal valley grasslands on and around the home site are annual, weedy plants found in disturbed grassland areas in the local area. The most common species are listed on Table 1 below and in Appendix 1

As discussed previously, there is a small population of *Stipa pulchra* (purple needlegrass) in the coastal valley grassland area southwest of the proposed building site (Figure 8). This population mixes with and is surrounded by introduced, weedy grasses and forbs of the annual grassland. Based on measurements in the field and on aerial photographs, the *Stipa pulchra* (purple needlegrass) stand is estimated to cover approximately 0.037 acres (1,600 sq. ft.) on the home site and access easement, which equates to 0.0005% of the entire 80-acre site. Therefore, it does not meet the threshold of significance used by the County of San Luis Obispo, and no mitigation is required.

Table 1. Plant species in ruderal and coastal valley grassland on and around the proposed home site on the Harmony Way parcel, San Luis Obispo County, CA.

Scientific Name	Common Name	Origin ¹
TREES		
<i>Eucalyptus globulus</i>	blue gum	cultivated
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	planted native
<i>Schinus molle</i>	Peruvian pepper-tree	cultivated
<i>Schinus terebinthifolius</i>	Brazilian pepper-tree	cultivated
SHRUBS		
<i>Artemisia californica</i>	California sagebrush	native
<i>Baccharis pilularis</i>	coyote bush	native
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	sawtooth goldenbush	native
<i>Opuntia phaeacantha</i>	brown-spined prickly-pear	native
HERBS		
<i>Asclepias fascicularis</i>	narrow-leaved milkweed	native
<i>Avena barbata</i>	slender wild oats	naturalized
<i>Blitum californicum</i> [<i>Chenopodium californicum</i>]	California goosefoot	native
<i>Brachypodium hybridum</i>	false brome	naturalized
<i>Brassica nigra</i>	black mustard	naturalized
<i>Bromus diandrus</i>	ripgut brome	naturalized
<i>Calystegia macrostegia</i> subsp. <i>cyclostegia</i>	coast morning glory	native
<i>Centaurea melitensis</i>	totalote, Maltese star thistle	naturalized
<i>Continued</i>		

Scientific Name	Common Name	Origin ¹
<i>Croton setiger</i>	turkey-mullein	native
<i>Cynodon dactylon</i>	Bermuda grass	naturalized
<i>Erodium botrys</i>	storkbill filaree	naturalized
<i>Erodium moschatum</i>	greenstem filaree	naturalized
<i>Festuca perennis</i>	ryegrass	naturalized
<i>Geranium dissectum</i>	cut-leaved geranium	naturalized
<i>Grindelia hirsutula</i>	California gumplant	native
<i>Helminthotheca echioides</i>	bristly oxtongue	naturalized
<i>Hirschfeldia incana</i>	short-pod mustard, perennial mustard	naturalized
<i>Lactuca saligna</i>	slender lettuce	naturalized
<i>Lactuca serriola</i>	prickly lettuce	naturalized
<i>Lupinus succulentus</i>	arroyo lupine	native
<i>Lysimachia arvensis</i> [<i>Anagallis arvensis</i>]	scarlet pimpernel	Introduced
<i>Medicago polymorpha</i>	California bur-clover	naturalized
<i>Pseudognaphalium californicum</i>	California everlasting	native
<i>Silybum marianum</i>	milk thistle	naturalized
<i>Sisyrinchium bellum</i>	blue-eyed-grass	native
<i>Stachys bullata</i>	coast hedge-nettle	native
<i>Stipa pulchra</i>	purple needlegrass	native
<i>Torilis arvensis</i>	common hedge-parsley	naturalized
<i>Vicia sativa</i> subsp. <i>sativa</i>	common vetch	naturalized
<i>Vicia villosa</i> subsp. <i>varia</i>	narrow-leaved vetch	naturalized

—Nomenclature follows The Jepson Manual, 2nd edition (Baldwin et al. 2012) and updates.

—Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Introduced or naturalized species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

2. Coastal Scrub

Note that coastal scrub does not occur on the home site but does occur on the sides of the canyon along the eastern edge of the site. The coastal scrub will not be affected by the proposed project but is included in this report because it is found on the slopes just east of the home site as well on the upper hillsides of the 80-acre parcel (Figures 5 and 8; Photos 2-3 and 8-9).

Coastal scrub is typically dominated by small to medium sized (3-6 feet tall) shrubs with a sparse herbaceous understory. Both the density and the composition of the shrub cover vary from site to site as does the herbaceous understory. In some places there is barren soil in patches among the shrubs, which indicates both rodent consumption of small herbs and grasses as well as an allelopathic effect of the leaf litter. In other places, grasslands integrate with coastal scrub and grow among scattered shrubs. The dominant shrubs in this plant community are comparatively soft-stemmed plants that undergo significant dieback during the summer drought (summer deciduous). For this reason, coastal scrub is sometimes referred to as "soft chaparral"

as opposed to the "hard chaparral" or "true chaparral", which is composed mostly of evergreen, hard-wooded shrubs. Well-developed patches of the coastal scrub community occur along the sides of the canyons and steep hillsides west and north of the proposed home site. Coastal scrub is the dominant plant cover on the steep, rocky hillsides. The patches of coastal scrub just west of the home site are dominated by *Salvia mellifera* (black sage), *Artemisia californica* (California sagebrush), *Toxicodendron diversilobum* (poison oak), and *Baccharis pilularis* (coyote bush); however, several other shrubs also occur in the coastal scrub locally around the study site (Figure 8; Table 2; Appendix 1; Photos 8-9). None of the areas of coastal scrub will be affected by the proposed project.

Table 2. List of common shrubs found in the coastal scrub on the hillsides around the Harmony Way project site.

Scientific Name	Common Name	Origin
SHRUBS		
<i>Acmispon glaber</i> var. <i>glaber</i>	common deerweed	Native
<i>Artemisia californica</i>	California sagebrush	Native
<i>Baccharis pilularis</i>	coyote bush	Native
<i>Diplacus aurantiacus</i> Jeps. var. <i>aurantiacus</i> [<i>Mimulus aurantiacus</i> var. <i>aurantiacus</i>]	common bush monkeyflower	Native
<i>Eriogonum fasciculatum</i>	California buckwheat	Native
<i>Frangula californica</i> subsp. <i>californica</i>	California coffeeberry	Native
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	sawtooth goldenbush	native
<i>Opuntia phaeacantha</i>	brown-spined prickly-pear	native
<i>Salvia mellifera</i>	black sage	Native
<i>Toxicodendron diversilobum</i>	poison-oak	Native

—Nomenclature follows The Jepson Manual, 2nd edition (Baldwin et al. 2012) and updates.

—Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Introduced or naturalized species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

3. Coast Live Oak Woodland

Note that coast live oak woodland does not occur on the home site but patches of coast live oaks do occur along the western margin of the site and on the sides of the canyon (Figure 8; Photos 8-9). Coast live oak woodlands also occur on some of the upper hillsides above the home site; however, in these areas the oak woodlands are found along the drainages that traverse the hillsides. Some drainages, such as the one along the eastern margin of the home site, support *Quercus agrifolia* (coast live oak) mixed with *Platanus racemosa* (Sycamore), *Salix lasiolepis* (arroyo willow), and *Umbellularia californica* (California bay-laurel) forming a type of riparian woodland. The coast live oak woodlands near the home site will not be affected by the proposed project; however, we include them in this report because of their proximity to the building site.

Coast live oak woodlands are one of the most characteristic and interesting vegetation types of California's central coast. In most areas, these woodlands consist of pure populations of *Quercus agrifolia* (coast live oaks), which form dense, closed canopy woodlands in moister hillside areas (e.g. north-facing slopes) and more open woodlands in drier areas. In some moist areas, other trees, such as *Umbellularia californica* (California bay-laurel), may mix with the coast live oaks.

In the case of the 80-acre subject parcel, the patches of coast live oak woodlands are restricted to the small canyons and drainages that traverse the hillsides in a more or less north to south direction (Figures 2, 3 and 8; Photos 1, 2, 8, and 9). The hillside on which the parcel is situated is part of a series of south-facing slopes that extend along the eastern edge of San Luis Obispo. A mosaic of coastal valley grasslands, coastal scrub, and chaparral covers the dry hillsides; however, corridors and patches of coast live oak woodland do occur along the small canyons and drainages.

The understory vegetation of the coast live oak woodland varies in species composition and density from place to place depending on the level of disturbance and microhabitat. In some areas, there is a thick litter layer with only a few scattered herbs and shrubs while in other areas the understory consists of species typical of the coastal valley grasslands with a few scattered native shrubs. Where coast live oak woodland and coastal scrub integrate, the oak woodland understory may consist of small thickets of native shrubs. Some of the common understory plant species in the coast live oak woodland on the hillsides near the subject property are listed on Table 3.

Table 3. Common plant species in and around the coast live oak woodlands near the Harmony Way project site.

Scientific Name	Common Name	Origin
TREES		
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	Native
SHRUBS		
<i>Acmispon glaber</i> var. <i>glaber</i>	common deerweed	Native
<i>Artemisia californica</i>	California sagebrush	Native
<i>Baccharis pilularis</i>	coyote bush	Native
<i>Diplacus aurantiacus</i> Jeps. var. <i>aurantiacus</i> [<i>Mimulus aurantiacus</i> var. <i>aurantiacus</i>]	common bush monkeyflower	Native
<i>Frangula californica</i> subsp. <i>tomentella</i>	woolly coffeeberry	Native
<i>Heteromeles arbutifolia</i>	toyon, Christmas berry, california-holly	Native
<i>Salvia mellifera</i>	black sage	Native
<i>Toxicodendron diversilobum</i>	poison-oak	Native
Continued		

Scientific Name	Common Name	Origin
HERBS		
<i>Asclepias fascicularis</i>	narrow-leaved milkweed	native
<i>Avena barbata</i>	slender wild oats	naturalized
<i>Blitum californicum</i> [<i>Chenopodium californicum</i>]	California goosefoot	native
<i>Brachypodium hybridum</i>	false brome	naturalized
<i>Brassica nigra</i>	black mustard	naturalized
<i>Bromus carinatus</i> var. <i>marginatus</i>	mountain brome	native
<i>Bromus diandrus</i>	ripgut brome	naturalized
<i>Bromus hordeaceus</i>	soft chess brome	Introduced
<i>Bromus rubens</i>	red brome	Introduced
<i>Calystegia macrostegia</i> subsp. <i>cyclostegia</i>	coast morning glory	native
<i>Carduus pycnocephalus</i>	Italian thistle	Introduced
<i>Cerastium glomeratum</i>	annual mouse-ear chickweed	Introduced
<i>Claytonia perfoliata</i> subsp. <i>perfoliata</i>	common miner's lettuce	Native
<i>Erodium botrys</i>	storkbill filaree	naturalized
<i>Erodium moschatum</i>	greenstem filaree	naturalized
<i>Festuca myuros</i>	rattail fescue	Introduced
<i>Festuca perennis</i>	ryegrass	naturalized
<i>Galium aparine</i>	cleavers, common bedstraw	Native
<i>Grindelia hirsutula</i>	California gumplant	native
<i>Lupinus succulentus</i>	arroyo lupine	native
<i>Marah fabacea</i>	manroot, wild cucumber vine	Native
<i>Medicago polymorpha</i>	California bur-clover	naturalized
<i>Pseudognaphalium californicum</i>	California everlasting	native
<i>Salvia spathacea</i>	hummingbird sage	Native
<i>Stachys bullata</i>	coast hedge-nettle	native
<i>Stipa pulchra</i>	purple needlegrass	native
<i>Vicia sativa</i> subsp. <i>sativa</i>	common vetch	naturalized
<i>Vicia villosa</i> subsp. <i>varia</i>	narrow-leaved vetch	naturalized

—Nomenclature follows The Jepson Manual, 2nd edition (Baldwin et al. 2012) and updates.

—Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Introduced or naturalized species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

4. Riparian Woodland

Note that riparian woodland does not occur on the home site but does occur along the ephemeral creek near the eastern margin of the building site. There will be a 25-foot setback buffer zone along the edge of the riparian woodland to further protect the biological resources (Figure 8; Photos 10-13).

In general, riparian woodlands along the central coast of California consist of a corridor of woodland vegetation along drainages, creeks, rivers, and other waterways. While the structure and composition of the riparian vegetation varies from place to place along creek banks in the central coast, well-developed

riparian woodlands often have several species of hydrophytic trees including *Salix* spp. (willows), *Populus* spp (cottonwoods), *Platanus racemosa* (sycamore) and *Alnus* spp. (alders). In addition, others, such as *Quercus agrifolia* (coast live oak) and *Umbellularia californica* (California bay-laurel) may join the riparian trees along the creek but are considered more typical of upland woodland communities such the coast live oak woodlands. This is the case for the subject parcel where California bay-laurel and coast live oaks mix with a typical riparian trees, California sycamore and arroyo willow. The understory vegetation typically consists of shade tolerant shrubs, grasses, and forbs that may be sparse to dense depending on the canopy density and other environmental conditions.

Riparian communities often form narrow to locally broad corridors of dense to open woodland vegetation along drainages and creeks. The lateral extent of the woodland depends on the size and nature of the creek channel and its banks, the amount of water carried, and on the depth and lateral extent of the subterranean aquifers. The trees and shrubs of the riparian corridors are mostly deciduous plants that require a permanent water supply. Because of California's summer drought, many riparian species are restricted to areas immediately along lakes and where water is always available (at least in the soil or stream sediments though not always at the surface).

In the case of the subject parcel, the riparian woodland forms a narrow corridor of woodland vegetation along the small ephemeral drainage that traverses the 80-acre parcel and occurs near the western margin of the proposed home site (Figure 8; Photos 10-13). Because of the ephemeral nature of the drainage, coast live oaks and California bay-laurels form a dominant part of the overstory. Both of these trees are more typical of upland areas but do occur along drainages in areas in which the upland areas are too dry to support trees, such as the subject site. California sycamores are also a dominant component of the riparian woodland on the subject parcel and mix with the coast live oaks and California bay-laurels. Arroyo willows are also present but not as common. Sycamore and arroyo willow trees are typical riparian species that are restricted to riparian areas, flood plains, or areas with a shallow water table. Other common local riparian indicator trees such as *Salix laevigata* (red willow) and *Populus balsamifera* ssp. *trichocarpa* (Black cottonwood) were not found on and near the subject site.

While the ephemeral creek does flow during winter rains and did flow for a period of time during the 2016-17 rainy season, no signs of flowing water, standing water, wetlands, or moist soil was found along the creek channel during our August 2017 and February 2018 surveys. The creek channel is narrow, gravelly, and rocky. The creek channel is well defined by steep banks in some areas, but in other areas, it lacks significant banks and is not well defined (Photos 10-13). As a result, the riparian understory vegetation along the creek channel is mostly sparse. However, in open areas along the riparian woodland, the adjacent coastal valley grassland species extend under the trees and form the understory.

In the denser shade of the trees and near the drainage channel many areas are mostly barren and covered by litter with little to no understory vegetation. A few shrubs such as *Toxicodendron diversilobum* (poison oak), which is the most common shrub, *Baccharis pilularis* (coyote bush), *Baccharis salicifolia* (mule fat), *Heteromeles arbutifolia* (toyon), and *Frangula californica* subsp. *californica* (California coffeeberry) are widely scattered along the creek banks. There are also a few herbs typical of riparian understory such as *Carex spissa* (San Diego Sedge), *Cyperus eragrostis* (common umbrella sedge), *Carduus pycnocephalus* (Italian thistle), *Elymus triticoides* (beardless wild rye), and *Rumex* spp. (docks) widely scattered along the creek.

Creek channels are often flushed of vegetation during the winter/spring storms. Afterward the channels are devoid of vegetation; however, sometimes a sparse to locally dense temporary vegetation develops in some areas on the sand and gravel bars along the creek. Species such as *Cyperus eragrostis* (common umbrella sedge) and *Carex spissa* (San Diego Sedge) are sometimes found widely scattered along the creek channel. The plants characteristic of riparian environments are joined by some species common to the surrounding grassland plant communities. In some places a sparse waif flora of plants are found. The seeds of these plants are washed into the creek gravels by winter storms and germinate in the riparian area. These plants include a mixture of introduced weeds and native species more characteristic of non-riparian vegetation. The fate of most of the plants of the stream channel is to be washed out by the winter floods that scour the channel nearly free of vegetation. Common species in the overstory (trees) and understory (shrubs and herbs) in the riparian woodland near the eastern margin of the Harmony Way home site are listed in Table 4.

Table 4. Common plant species in the riparian communities on and near the Harmony Way project site, San Luis Obispo County, CA.

Scientific Name	Common Name	Origin
TREES		
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	Native
<i>Umbellularia californica</i>	California bay-laurel	Native
<i>Platanus racemosa</i>	California sycamore	Native
<i>Salix lasiolepis</i>	arroyo willow	native
SHRUBS AND SUBSHRUBS		
<i>Artemisia californica</i>	California sagebrush	Native
<i>Baccharis pilularis</i>	coyote bush	Native
<i>Baccharis salicifolia</i>	mule fat	native
<i>Continued</i>		

Scientific Name	Common Name	Origin
SHRUBS AND SUBSHRUBS		
<i>(Continued from previous page)</i>		
<i>Frangula californica</i> subsp. <i>californica</i>	California coffeeberry	Native
<i>Heteromeles arbutifolia</i>	toyon, Christmas berry	Native
<i>Toxicodendron diversilobum</i>	poison-oak	Native
HERBS		
<i>Asclepias fascicularis</i>	narrow-leaved milkweed	native
<i>Avena barbata</i>	slender wild oats	naturalized
<i>Blitum californicum</i> [<i>Chenopodium californicum</i>]	California goosefoot	native
<i>Brachypodium hybridum</i>	false brome	naturalized
<i>Brassica nigra</i>	black mustard	naturalized
<i>Bromus carinatus</i> var. <i>marginatus</i>	mountain brome	native
<i>Bromus diandrus</i>	ripgut brome	naturalized
<i>Bromus hordeaceus</i>	soft chess brome	Introduced
<i>Carex spissa</i>	sawgrass sedge	native
<i>Cynodon dactylon</i>	Bermuda grass	naturalized
<i>Cyperus eragrostis</i>	common umbrella sedge	native
<i>Elymus triticoides</i>	beardless wild rye	Native
<i>Epilobium brachycarpum</i>	tall willow-herb	Native
<i>Festuca perennis</i>	ryegrass	naturalized
<i>Geranium dissectum</i>	cut-leaved geranium	naturalized
<i>Helminthotheca echioides</i>	bristly oxtongue	naturalized
<i>Pseudognaphalium californicum</i>	California everlasting	native
<i>Rumex kernerii</i>	Kerner's dock	naturalized
<i>Rumex pulcher</i>	fiddle dock	naturalized
<i>Sanicula crassicaulis</i>	common sanicle	native
<i>Scrophularia californica</i> subsp. <i>californica</i>	California figwort	native
<i>Silybum marianum</i>	milk thistle	naturalized
<i>Stachys bullata</i>	coast hedge-nettle	native
<i>Torilis arvensis</i>	common hedge-parsley	naturalized
<i>Vicia sativa</i> subsp. <i>sativa</i>	common vetch	naturalized
<i>Vicia villosa</i> subsp. <i>varia</i>	narrow-leaved vetch	naturalized

—Nomenclature follows The Jepson Manual, 2nd edition (Baldwin et al. 2012) and updates.

—Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Introduced or naturalized species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

WILDLIFE

The proposed home site on the 80-acre subject parcel has been highly disturbed and offers little in the way of wildlife habitat; however, the rest of the 80-acre parcel appears to be relatively undisturbed. The riparian woodland, coast live oak woodland, coastal scrub, and coastal valley grassland on the hillsides and canyons around the home site do offer wildlife habitat, and some of these wildlife species may wander into the proposed home site. None of these adjacent habitat areas will be disturbed by the proposed project; so no impacts to biological resources and wildlife habitats will occur in these areas. The home site will occupy less than one acre leaving the remaining 79 acres undisturbed. The common wildlife species observed or known to occur in grasslands near the project site are listed on Table 5. None of these species will be significantly impacted by the proposed project.

Wildlife in Grassland

Grasslands on and around the study site provide foraging areas and habitat for a number of vertebrate wildlife species as well as invertebrates such as snails, butterflies, bees, beetles, etc. Wildlife species such as sparrows, scrub jays, crows, mocking birds, Eurasian collared dove, mourning dove, quail, and house finches forage in grasslands. Raptors, such as white-tailed kites, red-shouldered hawks, red-tailed hawks, American kestrels, and common barn owls hunt in grassland areas and use the nearby trees in the riparian and oak woodlands, and shrubs in the coastal scrub to observe their grassland prey. Some amphibians and reptiles, such as pacific chorus frogs, western fence lizards, southern alligator lizards, common king snakes, rattlesnakes, and gopher snakes, also hunt in the grasslands. California ground squirrels, Botta's gophers, western harvest mice, and California voles feed on the grassland plants, and are prey species for predators such as coyotes, bobcats, foxes, and mountain lions. What appeared to be California vole runways were observed in the matted grass on the subject site. Mule deer forage while bobcats, coyotes, and mountain lions prey upon the deer, jackrabbits, cottontail rabbits, California ground squirrels, Botta's gophers, western harvest mice, and other rodents in the grasslands. Some wildlife species use the woodlands and shrublands on the hillside and canyons for cover and nesting sites but depend on the adjacent open grasslands for foraging and hunting.

Wildlife in Coastal Scrub

Coastal scrub was not found within the area of potential disturbance, and will not be affected by the proposed project; however, it is included in our discussion because of its proximity to the site. Coastal scrub (and chaparral) vegetation with its dense to open shrub canopy and variety of plant species, provides cover, nesting sites, and foraging opportunities for some amphibians, reptiles, birds, mammals, and other animals. Some shrubs such as bush monkeyflower provide abundant nectar resources for hummingbirds, and dense shrubs provide protection for small mammals and birds. Barren soil in patches

among the shrubs indicates both rodent consumption of small herbs and grasses as well as an allelopathic effect of the leaf litter. Insects rising from flowers and vegetative material in the coastal scrub provide food for insectivorous birds. Some common wildlife species known to occur in coastal scrub on and around the subject parcel are listed in Table 5.

The wildlife species found in coastal scrub are highly variable from patch to patch. This is partly because patches overlap and integrate within other habitat types, and because they may change with time. Often the wildlife species composition is as much a function of the age of the coastal scrub patch as its proximity to other vegetation types such as grasslands and woodlands. Since many of these patches occur in a mosaic of habitat types, species that are characteristic of other associated habitats may be found utilizing the coastal scrub.

Wildlife in Coast Live Oak Woodland

Coast live oak woodland was not found within the area of potential disturbance. Coast live oak woodland is important for animal cover, providing vertical and horizontal structure, potential nesting sites for birds, and shelter for numerous mammals. They also provide an important food source for wildlife species. Snags within the woodlands can provide potential roosts for raptors or nesting cavities for owls, kestrels, woodpeckers, nuthatches, wrens, chickadees, and bluebirds, and fallen logs can provide habitat for invertebrates. Invertebrates provide an important food source for small mammals, reptiles, and birds. Woodland vegetation reduces wind and moderate temperature extremes compared to open, treeless areas. In addition, fog drip and reduced insolation in woodlands reduce some of the environmental extremes that occur outside of the woodland.

Some amphibians and reptiles such as pacific chorus frogs, western fence lizard, southern alligator lizard, common king snake, and gopher snake hunt in the grasslands among the trees. Several avian species forage in grassland understory, including western meadowlarks, mourning doves, western kingbirds, sparrows, quail, turkeys, and house finches. Raptors, such as red-tailed hawks, red-shoulder hawks, kestrels, and barn owls, also hunt in woodland habitats as well as in the riparian zones. In addition, the woodlands provide potential nesting opportunities and roosting sites to observe prey. However, no nests were found during my surveys of the site.

Small mammals including deer mice, California ground squirrel, Botta's pocket gopher, western harvest mouse, and California voles feed on herbaceous plants and are prey for predators such as skunks, bobcats, and coyote. Mule deer forage in oak woodlands, and large carnivores prey upon the deer, rabbits, and other small mammals. The coast live oak woodland will not be disturbed or affected by the proposed project.

Some common wildlife species known to occur in coast live oak woodland around the subject parcel are listed in Table 5.

Wildlife in Riparian Communities

Riparian woodland was not found within the area of potential disturbance

Riparian woodlands, depending on their location, amount of water flow, duration of water flow, and presence of standing water can be of significant importance to wildlife. Like the coast live oak woodlands, riparian woodlands provide vertical and horizontal structure and potential cover, foraging opportunities, and shelter for wildlife species. Riparian vegetation supports numerous insects that are important food resources for omnivorous and insectivorous wildlife species. These, in turn, can provide prey for carnivorous species. A variety of vertebrates, including opossums, raccoons, mule deer, rodents, and various bird species, may visit riparian areas for shelter and water when it is available. Snags within the riparian woodland provide potential roosting sites for raptors and may provide nesting cavities for owls, kestrels, woodpeckers, nuthatches, wrens, chickadees, and bluebirds. Fallen logs become homes for invertebrates that are important food sources for numerous vertebrate species including amphibians, snakes, and birds. Riparian woodland reduces wind and moderates temperature extremes, and fog drip and reduced insolation reduces some of the environmental extremes that occur in open areas.

Some riparian and creek wildlife species depend on, or require, standing or flowing water (e.g. California red-legged frogs). These species will not occur on or near the project site. However, many species found in the riparian woodland are also found in the coast live oak woodland and do not depend on flowing or standing water. In the case of the subject site there is flowing and/or standing water for only a few months of the year; therefore, any species that require a permanent source of water will not survive.

The ephemeral creek on the subject site originates in a canyon near the ridgeline. It is lined by coast live oak woodland and riparian woodland and forms a narrow woodland corridor along ephemeral creek (Figure 8; Photos 10-13). The drainage channel and riparian woodland offers a conduit onto and off the property. The riparian zone also offers some opportunity for utilization by invertebrates, as well as some reptiles, small mammals, and birds. These wildlife species could potentially forage in the riparian woodland. Wildlife species expected to use riparian areas are listed on Table 5. Impacts to the wildlife species that currently use the riparian habitat on the site will not be significantly affected by the proposed project because the riparian woodland habitat will not be disturbed and will have a 25-foot setback buffer to protect it. In addition, the entire riparian area near the home site will not be affected by the proposed project.

Riparian communities are considered sensitive by California Department of Fish and Wildlife and frequently qualify as wetlands based on the United States Forest Service wetland classification system (Cowardin et al., 1979).

Table 5. List of some of the common wildlife species known to occur in local areas of coastal valley grassland, coastal scrub, coast live oak woodland, and riparian woodland on hillsides around the proposed home site on Harmony Way. None of these species are considered rare or have special status.

X = observed on or known to occur on or near the project site

Scientific Name	Common Name	Observed on or Around Site (X)
AMPHIBIANS AND REPTILES		
<i>Gerrhonotus multicarinatus</i>	Southern alligator lizard	X
<i>Lampropeltis getula californiae</i>	California king snake	
<i>Pituophis melanoleucus</i>	Pacific gopher snake	
<i>Sceloporus occidentalis</i>	Western fence lizard	X
BIRDS		
<i>Aphelocoma californica</i>	Western scrub jay	X
<i>Aphelocoma coerulescens</i>	Scrub jay	
<i>Buteo jamaicensis</i>	Red tailed hawk	X
<i>Callipepla californica</i>	California quail	X
<i>Calypte anna</i>	Anna's hummingbird	X
<i>Carpodacus mexicanus</i>	House finch	X
<i>Cathartes aura</i>	Turkey vulture	X
<i>Certhia Americana</i>	Brown creeper	
<i>Colaptes auratus</i>	Northern flicker	X
<i>Corvus corax</i>	Raven	
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	
<i>Falco sparverius</i>	American kestrel	X
<i>Hirundo pyrrhonota</i>	Cliff swallow	
<i>Hirundo rustica</i>	Barn swallow	
<i>Junco hyemalis</i>	Dark-eyed junco	X
<i>Melanerps formicivorus</i>	Acorn woodpecker	X
<i>Mimus polyglottos</i>	Northern mocking bird	X
<i>Molothrus ater</i>	Brown headed cowbird	
<i>Picoides nuttallii</i>	Nuttall's woodpecker	
<i>Pipilo crissalis</i>	California towhee	X
<i>Pipilo maculatus</i>	Spotted towhee	
<i>Psaltriparus minimus</i>	Bushtits	
<i>Sayornis nigricans</i>	Black phoebe	X
<i>Selasphorus sasin</i>	Allen's hummingbird	X
<i>Sialia mexicana</i>	Western bluebird	
<i>Streptopelia decaocto</i>	Eurasian collared dove	X
<i>Sturnela vulgarus</i>	European starling	
<i>Toxostoma redivivum</i>	California thrasher	
<i>Zenaida macroura</i>	Mourning dove	X
<i>Zonotrichia leucophrys</i>	White-crowned sparrow	X
Continued		

MAMMALS		
<i>Canis latrans</i>	Coyote	X
<i>Didelphis virginiana</i>	Opossum	X
<i>Lepus californicus</i>	Brush rabbit	X
<i>Microtus californicus</i>	California vole	X
<i>Neotoma fuscipes</i>	Dusky-footed wood rat	
<i>Odocoileus hemionus</i>	Mule deer	X
<i>Procyon lotor</i>	Raccoon	X
<i>Scapanus latimanus</i>	Mole	
<i>Sciurus griseus</i>	Western gray squirrel	
<i>Spermophilus beecheyi</i>	California ground squirrel	X
<i>Thomomys bottae</i>	Botta's pocket gopher	X

SPECIAL STATUS PLANT SPECIES

To determine the rare plant species that could potentially be present on the project site, we conducted a search for target special status plants known to occur within the San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A, Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). 7.5 minute/24,000 scale quadrangles. The results of this search are found in Tables 6-8 (Appendix 2). Table 6 provides information on the current rarity status of these target special status species, and Table 7 provides information on life form, flowering period, and elevation range. We also investigated the habitat requirements for all the special status species found in our nine-quadrangle search and evaluated whether or not potential habitats for these species exist on the project site. Results of these investigations and determinations are shown on Table 8. To generate these lists, we referred to the most recent edition of the California Department of Fish and Game Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichen List (CNDDDB) and the most recent edition of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* database, both of which are accessible through the internet (<http://www.dfg.ca.gov/whdab/html/cnddb.html> and www.cnps.org).

This search revealed 75 special status plant species that occur within the San Luis Obispo and eight surrounding quadrangles, 34 of these plant species have been reported to occur within the San Luis Obispo quadrangle (Table 6-8 Appendix 2). Those found in the San Luis Obispo quadrangle are in bold in Table 6. Most of the rare plants on the list are not expected to occur on the study site, which is highly disturbed, because they are highly restricted in distribution range, in habitat requirements, and have never been reported growing in the San Luis Obispo quadrangle or near the site. However, there are several rare plants known to occur on the hillsides above (north of) the home site near the ridgeline. There are

areas serpentine soils, which support several rare plants in this series of hillsides along the eastern border of San Luis Obispo. We carefully searched for any signs of these species on the project site, but none was found.

I conducted careful biological surveys of the home site and surrounding areas. While the home site is covered with coastal valley grassland, the nearby areas have coastal scrub, coast live oak woodland, and riparian woodland. We examined all of these communities, including the ephemeral creek and riparian woodland along the eastern margin of the home site, for any special status species. We included in this survey areas both up stream and down stream from the project site as well as the upland areas immediate adjacent to the project site on both sides of the creek. We also examined some of the off-site creek areas along Harmony Way.

The home site is mostly highly disturbed by dirt roads and human activity. Some areas are devoid of any vegetation and the proposed new home will be built in a highly disturbed section (Figure 5 and 8; Photos 1-6). The property was carefully examined for rare species listed on Table 6 (Appendix 1), especially those known to occur in the hillsides east of San Luis Obispo. There is no evidence of any of these species on or near the home site. Please refer to Table 8 (Appendix 1) for information about the habitats in which special status species occur. The timing of these surveys falls within a period of time when many of the plants would be identifiable using reproductive and/or vegetative features as well as the dried remains of this season's standing crop. Most grasses and forbs had to be identified using vegetative features and the dried remains of the 2017 standing crop. Trees and shrubs can be identified using vegetative features. The coast live oak woodland and riparian woodland are considered sensitive; however, there will be no disturbances or impacts to any of these areas on the site.

SPECIAL STATUS WILDLIFE SPECIES

To determine the special status wildlife species that could potentially be present on the project site, we conducted a search for target special status species known to occur within the San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A), Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). 7.5 minute/24,000 scale quadrangles (Table 9 in Appendix 3). To generate this list, we referred to the most recent edition of the California Department of Fish and Game Natural Diversity Data Base (CNDDDB) and other appropriate publications. A survey for special status wildlife species was conducted on the home site and surrounding areas to determine actual and potential utilization of this site by wildlife species that have special listing. The special status wildlife species revealed in the nine-quadrangle search are listed in Table 9.

The project site occurs in a highly disturbed area of coastal valley grassland that has several areas completely devoid of any vegetation (Figure 8; Photos 1-6). The coastal scrub, coast live oak woodland, and riparian woodland are all outside the proposed areas of disturbance. None of these will be affected by the proposed project. Since we live near the project site, we know that there are several wildlife species that utilize the habitats on the hillsides above San Luis Obispo. Only a few wildlife species were found on the home site itself, and no signs (scat, tracks, fur, sounds, or live observations) of special status wildlife species were observed. However, several species of wildlife are known to be in the surrounding, undisturbed hillsides and may wander into the home site area on occasion. Because the home site occupies less than one acre, over 79 acres of the 80-acre parcel will be left undisturbed for the wildlife species in the area.

For the most part, special status animal species that occur within the San Luis Obispo and surrounding quadrangles (Table 9; Appendix 3) are highly restricted both in distribution range and in habitat requirements and are not expected to occupy the habitats found on and near the site. For example, some rare animal species occur in salt or brackish water, e.g., the Tidewater goby; some require permanent standing water, e.g., Steelhead; some occur in vernal pools, e.g., the fairy shrimp; some occur only in specific soils and or other substrate conditions, e.g., the globose dune beetle (fore dune sands) and Morro Bay shoulderband snail; some require specific roosting sites, e.g., the bat species; some require large, deep bodies of water, e.g., the western pond turtle and red-legged frogs; some require permanent standing water to lay their eggs; e.g. coast range newt. In addition, the site is simply out of the geographic range in which many special status species have been found, e.g., Atascadero June beetle. None of the specialized habitats listed above occur on or near the subject site. However, while some of the species listed in Table 9 have ranges that could potentially include the 80-acre parcel and perhaps pass by the home site. These wildlife species have access to an abundance of habitats within the over 79 acres on the parcel that will not be disturbed. Therefore, no impacts to the local wildlife or the special status wildlife in expected as a result of the proposed project.

As mentioned earlier, we conducted careful biological surveys of the proposed project site and the surrounding areas. We included in this survey the areas both up stream and down stream as well as the upland areas immediate adjacent to the project site on both sides of the creek and of the home site. My findings indicate that while there is a variety of wildlife found on the hillsides around the home site, there is no or very marginal habitat on the project site itself for any of the special status wildlife species listed in Table 9. Please refer to Appendix 2 for information about the habitats of these special status species and why it was concluded they are not present on the project site.

CONCLUSION AND RECOMMENDATIONS

No special status plant or wildlife species that occur on the Department of Fish and Game Natural Diversity Data Base CNDDDB lists of Special Status Species or in the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* database for San Luis Obispo and eight surrounding quadrangles were found on the subject property (Tables 6-9 in Appendices 2 and 3), and none are expected to occur on the site. In Appendices 2 and 3 we discuss potential special status species of plants and wildlife in detail and explain why they do not occur on the site and/or not expected to use the subject site.

The home site is mostly highly disturbed, and some areas are devoid of vegetation. As a result, the home site has low wildlife habitat value. The plant communities and wildlife habitats along the ephemeral creek and the hillsides and canyons around the home site will not be disturbed by the proposed project. In addition, there will be a 25-foot buffer zone along the edge of the riparian woodland to protect this area. It should also be noted that less than one acre of disturbed grassland on the 80-acre parcel will be affected by the proposed project leaving over 79 acres of parcel undisturbed and unaffected by the proposed project.

There is a small population of the native grass *Stipa pulchra* (purple needlegrass) in a grassland area southwest of the proposed location of the home (Figure 8; Photo 14). This population mixes with and is surrounded by introduced, weedy grasses and forbs of the annual grassland. Based on measurements in the field and on aerial photographs, the *Stipa pulchra* (purple needlegrass) stand is estimated to cover 0.037 acres (1,600 sq. ft.). Much of the population is in the access easement west of the western parcel boundaries, but part of it is on the project site. The size of this populations equates to 0.0005% of the entire 80-acre site.

The environmental threshold used as the guideline for *Stipa pulchra* (purple needlegrass) populations by the County of San Luis Obispo and by the California Department of Fish and Wildlife (CDFW) state that if the stand of *Stipa pulchra* (purple needlegrass) covers less than 10% the site and covers an area less than 0.25 acres, it does not meet the threshold of significance. Based on measurements in the field and on aerial photographs, the *Stipa pulchra* (purple needlegrass) population does not meet the threshold of significance, and no mitigation is required.

Typically, it is recommended that disturbances and/or construction activities should occur outside the typical nesting season (September 1 to February 1) if possible to avoid impacts to potential active bird nests. We did not find any bird nests in the trees near the home site during our surveys; however, because our surveys were outside the typical nesting season, further nesting studies of the

site may be needed. If this is the case, a nesting survey should be conducted within two weeks of starting construction to make sure no nesting birds will be affected. If active nests are found, adequate buffer zones will need to be established.

During our surveys of the project site, we were able to identify many of the plants (including the target rare plants listed on Tables 6-8) on the site using reproductive, vegetative features, and/or dried remains of this season's standing crop. However, there are others that were not in identifiable condition. Therefore, a spring survey would be necessary to prepare a more complete list of the plants present on the site and to make sure that no special status plant species are present.

We recommend that a 25-foot setback buffer zone along the riparian woodland be clearly marked off with stakes or fencing in the areas where construction will occur. No disturbances should occur in the buffer zone or anywhere in the riparian woodland.

We recommend that a setback be established at least 10 feet outside the canopy of the coast live oaks along the western margin of the site. This zone should be clearly marked by stakes or fencing, and no disturbances should occur in this area. Much of this area is in the access easement west of the western boundary of the parcel and should not be affected by the construction activities.

No invasive plant species listed in the California Invasive Plant Council website should be included in the landscaping of the home site. These plants could invade the adjacent native plant communities and negatively affect the native plants and plant communities.

A sediment and erosion control plan shall be prepared that seeks to protect the areas around the home site (riparian woodland, coast live oak woodland, and coastal scrub). Erosion control measures could include installation of the silt fencing, use straw bales, erosion mats, sand bags, and/or hydraulically applied soil binder such as FlexTerra to prevent erosion and runoff from the site during and immediately after construction. The erosion control will prevent sedimentation of the ephemeral creek channel near the site. The plan shall also describe how any and all pollutants originating from construction equipment would be collected and disposed of should it become necessary.

Current Best Management Practices (BMP) shall be utilized to minimize impacts to the native habitat areas (e.g., riparian woodland) around the construction site. Washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing of equipment, tools, roads, etc. shall not be allowed in any location where the tainted water could affect the ephemeral creek and adjacent sensitive biological resources.

REFERENCES

- Allaback, M. 2000. Letter to U.S. Fish and Wildlife Service providing comments on the Draft California Red-legged Frog Recovery Plan.
- Althouse and Meade, Inc. 2015. Biological Letter Report for 1590 Tiburon Way, APN 076-532-006 County of San Luis Obispo, California. June.
- Amphibia Web. 2009. http://amphibiaweb.org/cgi-bin/amphib_query?where_genus=Rana&where-species=b
- Baicich, P. J. and C.J.O. Harrison. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Second Edition. Academic Press; Sand Diego, CA 347 pp.
- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Barbour, M. G. and J. Major, Eds. 1988. Terrestrial Vegetation of California (new expanded edition). California Native Plant Society.
- Barbour, M.G., T. Keeler-Wolf, and A. Schoenherr. 2007. Terrestrial Vegetation of California. Third Edition. U. C. Press.
- Barry, W.J. 1972. The Central Valley Prairie. Vol. 1. California Prairie Ecosystem. Technical Report. Sacramento: Department of Parks and Recreation.
- Biswell, H.H. 1956. Ecology of California grasslands. *Journal of Range Management* 9: 19-24.
- Bulger, J. 1998. Wet season dispersal and habitat use by juvenile California red-legged frogs (*Rana aurora draytonii*) in forest and rangeland habitats of the Santa Cruz Mountains. A research proposal submitted to the U.S. Fish and Wildlife Service, Sacramento, California.
- California Department of Fish and Game (CDFG). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24.
- California Department of Fish and Game (CDFG), California Natural Diversity Database. 2018. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly Publication. 86 pp. May.
- California Department of Fish and Game (CDFG). 2000. Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities. Revised May 8, 2000.
- California Department of Fish and Game, The Resources Agency. 1990. California's Wildlife, Volume III, Mammals. Edited by D.C. Zeiner, W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. Sacramento.
- California Department of Fish and Game. 2018. California Terrestrial Natural Communities Recognized by the California Natural Diversity Data Base.
- California herps. 2011. <http://www.claiforniaherps.com/frogs/pages/r.boylII.html#status>
- California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. California Native Plant Society. December 9, 1983, revised June 2, 2001
- California Native Plant Society (CNPS). 2018. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA.
- California's Wildlife Volume II: Birds. California Department of Fish and Game. California. Natural History Museum of Los Angeles County, Science Series 26:1-148.

- Consortium of California Herbaria database. 2017. <http://ucjeps.berkeley.edu/consortium/>
- Cook, D. G. and M. R. Jennings. 2007. Microhabitat use of the California red-legged frog (*Rana draytonii*) and introduced bullfrog (*Rana catesbeiana*) in a seasonal marsh. *Herpetologica* 63:430-440.
- Ernstrom, Daniel J. 1984. Soil Survey of San Luis Obispo County, California, Coastal Part. U.S. Department of Agriculture, Soil Conservation Service.
- Fellers, G. M., and P. M. Kleeman. 2007. California red-legged frog (*Rana draytonii*) movement and habitat use: Implications for conservation. *Journal of Herpetology* 41:276-286.
- Felton, E.L. 1965. *California's Many Climates*. Palo Alto: Pacific Books.
- Garth, J.S. and J.W. Tilden. 1986. *California Butterflies*. University of California Press, Berkeley. 246 p.
- Hall, C.A., Jr., W.G. Ernst, S.W. Prior, and J.W. Wiese. 1979. Geologic map of the San Luis Obispo-San Simeon Region, California. U.S. Geological Survey, Miscellaneous Investigations Series, MAP I-1097.
- Harvey, Michael J., J. Scott Altenbach, and Troy L. Best. 2011. *Bats of the United States and Canada*. Johns Hopkins University Press, Baltimore, Maryland.
- Hayes, M. P., and M. R. Jennings. 1986. Decline of ranid frog species in western North America: Are bullfrogs (*Rana catesbeiana*) responsible? *Journal of Herpetology* 20(4):490-509.
- Hayes, M.P. and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylei*): Implications for management. Pp. 144-158. In *Proceedings of the symposium on the management of amphibians, reptiles and small mammals in North America*.
- Hayes, M.P. and M.R. Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *The Southwestern Naturalist* 30(4): 601-605.
- Hayes, M.P. and M.R. Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *The Southwestern Naturalist* 30(4): 601-605. Helena Chemical Company. 2004. Technical data sheet No. AGDX080596, for Agri-Dex product.
- Hickman, James C. 1993. *The Jepson Manual*. University of California Press, Berkeley and Los Angeles, California.
- Holland, V.L. and D.J. Keil. 1996. *California Vegetation*. Dubuque: Kendall/Hunt Publishing Co.
- Hoover, Robert F. 1970. *The Vascular Plants of San Luis Obispo County, California*. University of California Press. Berkeley, Los Angeles, and London.
- Huenneke, L.F. 1989. Distribution and regional patterns of California grasslands. Pp. 1-12 In: Huenneke, L.F., and H.A. Mooney (eds.), *Grassland Structure and Function: California Annual Grassland*. Dordrecht: Kluwer Academic Publishers.
- Ingles, Lloyd G. 1965. *Mammals of the Pacific States; California, Oregon, Washington*. Stanford University Press, Stanford, California.
- Jennings, M. 1998. Electronic database of California red-legged frog occurrences
- Jennings, M. R. 1988a. Origin of the population of *Rana aurora draytonii* on Santa Cruz Island, California. *Herpetological Review* 19(4): 76.
- Jennings, M. R. 1988b. Natural history and decline of native ranids in California. pp. 61-72 In: H. F. DeLisle, P. R. Brown, B. Kaufman, and B. M. McGurty (editors), *Proceedings of the*

- conference on California herpetology. Southwestern Herpetologists Society, Special Publication
- Jennings, M. R., and M. P. Hayes. 1985. Pre-1900 overharvest of the California red-legged frog (*Rana aurora draytonii*): The inducement for bullfrog (*Rana catesbeiana*) introduction. *Herpetologica* 41(1): 94-103
- Jennings, M. R., and M.P. Hayes. 1989. Final report of the status of the California red-legged frog (*Rana aurora draytonii*) in the Pescadero Marsh Natural Preserve. Report for the California Department of Parks and Recreation, Sacramento, California, under Contract (4-823-9018).
- Jennings, M. R., and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Final Report Submitted to The California Department of Fish and Game. 255 pp
- Jennings, M.R., M.P. Hayes, and D.C. Holland. 1992. A petition to the U.S. Fish and Wildlife Service to place the California red-legged frog (*Rana aurora draytonii*) and the western pond turtle (*Clemmys marmorata*) on the list of endangered and threatened wildlife and plants. 21 pp.
- Jennings, Mark R. and Marc P. 1985. Pre-1900 Overharvest of California re-legged frogs (*Rana aurora draytonii*): The inducement for bullfrog (*Rana catesbeiana*) Introduction. *Herpetologica* 41(1): 94-103.
- Jepson Flora Project Editors. 2012. Second Edition of The Jepson Manual: Vascular Plants of California. Treatments for public viewing (<http://ucjeps.berkeley.edu/jepsonmanual/review/>).
- Kays, Roland W. and Don E. Wilson. 2002. Princeton Field Guides, Mammals of North America. Princeton University Press, Princeton and Oxford.
- Keeley, J.E. 1990. The California Valley Grassland. Pp. 3–23 In: Schoenherr, A.A. (ed.), Endangered Plant Communities of Southern California. Southern California Botanists Special Publication 3.
- Keil, D. J. and R. F. Hoover. In prep. Vascular Plants of San Luis Obispo County, California, 2nd edition.
- Krebs, Charles J. 1998. Ecological Methodology. Benjamin Cummings. 620 pp.
- Mayer, Ken E. and William Laudenslayer. 1988. A Guide to Wildlife Habitats of California. CA. Dept of Forestry and Fire Protection. 165 pp.
- Murie, Olaus J. 1974. Peterson Field Guides, Animal Tracks. Houghton Mifflin Company, Boston, New York.
- North American Butterfly Association. 2001 Checklist of North American Butterflies Occurring North of Mexico-Second Edition.
- Pavlik, B. M., P. M. Muick, S. Johnson, and M. Popper. 1991. Oaks of California. Cachuma Press and the California Oak Foundation, Los Olivos.
- Rathbun, G. and M. Jennings. 1993. Letter to Naomi Mitchell, U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office, Ventura, California, regarding Environmental Impact Statement for the C.T. Ranch development.
- Reed, P. B., Jr. 1988. National List of Plant Species that Occur in Wetlands: National Summary. U. S. Fish and Wildlife Service, Washington, DC. Biol. Rpt. 88(24). 244 pp.
- Sawyer, John O., Todd Keeler-Wolf, and Julie M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

- Schuford, David W. and Thomas Gardali, Editors. 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Studies of Western Birds No. 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Scott, James A. 1986. The Butterflies of North America. Stanford University Press, Stanford, California. 583 p.
- Scott, N. and G. Rathbun. 1998. Essays provided to Ina Pisani in response to a working draft of California red-legged frog recovery plan
- Sibley, David Allen. 2001. The Sibley Guide to Bird Life & Behavior. National Audubon Society. Alfred A. Knopf, New York.
- Stebbins, R.C. 1985. A field guide of western reptiles and amphibians. Second edition, revised. Houghton Mifflin Company, Boston, Massachusetts Tatarian, Patricia 2008. Movement patterns of California red-legged frogs (*Rana draytonii*) in an inland California Environment. Herpetological Conservation and Biology 3(2): 155-169
- Stebbins, Robert C. 2003. Peterson Field Guides Western Reptiles and Amphibians, 3rd edition. Houghton Mifflin Company, Boston, New York.
- Trewartha, G.T., and L.H. Horn. 1983. *An Introduction to Climate*. Ed. 5. New York: McGraw-Hill.
- U. S. D. A. 1984. Soil Conservation Service. Soil Survey of San Luis Obispo County, California. Coastal Part.
- U.S. Fish and Wildlife Service (USFWS). 2005. Revised guidance on site assessments and field surveys for the California red-legged frog. U.S. Fish and Wildlife Service, Portland, Oregon. 26.
- U.S. Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-legged Frog (PDF). Portland, Oregon.
- U.S. Fish and Wildlife Service. 2010. Federal Register. 50 CFR Part 17. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-Legged Frog. Final Rule.
- U.S. Geological Survey. Amphibian declines and deformities web page <http://armi.usgs.gov/>.
- United States Department of Agriculture (USDA). 2012. Aerial photomosaic of San Luis Obispo County. National Agriculture Imagery Program (NAIP).
- United States Department of the Interior, Fish and Wildlife Service. 1996. Endangered and U.S. Army Corps of Engineers. Revised 1995. Wetlands Delineation Manual. Environmental Technical Services Co., Austin, TX.
- United States Department of the Interior, Fish and Wildlife Service. 1990. Endangered and Threatened Wildlife and Plants; Review of Plant Taxa for Listing as Endangered or Threatened Species; Federal Register 55 (35): 6184-6229.
- Warner, R. E. and K. M. Hendrix (eds.). 1984. California riparian systems. Ecology, Conservation and Productive Management. U. C. Press, Berkeley. 1035 pp.
- Zeiner, D. C., W. F. Laudenslayer, Jr, K. E. Mayer, and M. White (eds). 1990. California's Wildlife Volumes I, II, and III. California Statewide Wildlife Habitat Relationship System. The Resources Agency, California Department of Fish and Game.

APPENDIX 1. LIST OF PLANT SPECIES OBSERVED ON THE HARMONY WAY PARCEL, SAN LUIS OBISPO COUNTY, CA

Scientific Name	Common Name	Origin²	Family
TREES			
<i>Eucalyptus globulus</i>	blue gum	cultivated	MYRTACEAE
<i>Platanus racemosa</i>	California sycamore	native	PLATANACEAE
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	native	FAGACEAE
<i>Salix lasiolepis</i>	arroyo willow	native	SALICACEAE
<i>Schinus molle</i>	Peruvian pepper-tree	cultivated	ANACARDIACEAE
<i>Schinus terebinthifolius</i>	Brazilian pepper-tree	cultivated	ANACARDIACEAE
<i>Umbellularia californica</i>	California bay	native	LAURACEAE
SHRUBS			
<i>Artemisia californica</i>	California sagebrush	native	ASTERACEAE
<i>Baccharis pilularis</i>	coyote bush	native	ASTERACEAE
<i>Baccharis salicifolia</i>	mule fat	native	ASTERACEAE
<i>Diplacus aurantiacus</i>	common bush monkeyflower	native	PHRYMACEAE
<i>Frangula californica</i> subsp. <i>tomentella</i>	woolly coffeeberry	native	RHAMNACEAE
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	sawtooth goldenbush	native	ASTERACEAE
<i>Heteromeles arbutifolia</i>	toyon	native	ROSACEAE
<i>Opuntia phaeacantha</i>	brown-spined prickly- pear	native	CACTACEAE
<i>Salvia mellifera</i>	black sage	native	LAMIACEAE
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	blue elderberry	native	ADOXACEAE
<i>Toxicodendron diversilobum</i>	poison-oak	native	ANACARDIACEAE
HERBS			
<i>Asclepias fascicularis</i>	narrow-leaved milkweed	native	APOCYNACEAE
<i>Avena barbata</i>	slender wild oats	naturalized	POACEAE
<i>Blitum californicum</i> [<i>Chenopodium</i> <i>californicum</i>]	California goosefoot	native	CHENOPODIACEAE
<i>Brachypodium hybridum</i>	false brome	naturalized	POACEAE
<i>Brassica nigra</i>	black mustard	naturalized	BRASSICACEAE
<i>Continued</i>			

Scientific Name	Common Name	Origin ²	Family
<i>Bromus carinatus</i> var. <i>marginatus</i>	mountain brome	native	POACEAE
<i>Bromus diandrus</i>	ripgut brome	naturalized	POACEAE
<i>Calystegia macrostegia</i> subsp. <i>cyclostegia</i>	coast morning glory	native	CONVOLVULACEAE
<i>Carex spissa</i>	sawgrass sedge	native	CYPERACEAE
<i>Centaurea melitensis</i>	toçalote, Maltese star thistle	naturalized	ASTERACEAE
<i>Croton setiger</i>	turkey-mullein	native	EUPHORBIACEAE
<i>Cynodon dactylon</i>	Bermuda grass	naturalized	POACEAE
<i>Cyperus eragrostis</i>	common umbrella sedge	native	CYPERACEAE
<i>Erodium botrys</i>	storkbill filaree	naturalized	GERANIACEAE
<i>Erodium moschatum</i>	greenstem filaree	naturalized	GERANIACEAE
<i>Festuca perennis</i>	ryegrass	naturalized	POACEAE
<i>Geranium dissectum</i>	cut-leaved geranium	naturalized	GERANIACEAE
<i>Grindelia hirsutula</i>	California gumplant	native	ASTERACEAE
<i>Helminthotheca echioides</i>	bristly oxtongue	naturalized	ASTERACEAE
<i>Hirschfeldia incana</i>	short-pod mustard, perennial mustard	naturalized	BRASSICACEAE
<i>Lactuca saligna</i>	slender lettuce	naturalized	ASTERACEAE
<i>Lactuca serriola</i>	prickly lettuce	naturalized	ASTERACEAE
<i>Lupinus succulentus</i>	arroyo lupine	native	FABACEAE
<i>Medicago polymorpha</i>	California bur-clover	naturalized	FABACEAE
<i>Pseudognaphalium californicum</i>	California everlasting	native	ASTERACEAE
<i>Rumex kernerii</i>	Kerner's dock	naturalized	POLYGONACEAE
<i>Rumex pulcher</i>	fiddle dock	naturalized	POLYGONACEAE
<i>Sanicula crassicaulis</i>	common sanicle	native	APIACEAE
<i>Scrophularia californica</i> subsp. <i>californica</i>	California figwort	native	SCROPHULARIACEAE
<i>Silybum marianum</i>	milk thistle	naturalized	ASTERACEAE
<i>Sisyrinchium bellum</i>	blue-eyed-grass	native	IRIDACEAE
<i>Stachys bullata</i>	coast hedge-nettle	native	LAMIACEAE
<i>Stipa pulchra</i>	purple needlegrass	native	POACEAE
<i>Torilis arvensis</i>	common hedge-parsley	naturalized	APIACEAE
<i>Vicia sativa</i> subsp. <i>sativa</i>	common vetch	naturalized	FABACEAE
<i>Vicia villosa</i> subsp. <i>varia</i>	narrow-leaved vetch	naturalized	FABACEAE

² Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Naturalized species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Cultivated species were deliberately planted on the study site.

APPENDIX 2. SPECIAL STATUS PLANT SPECIES:

Tables 6, 7, and 8 in this appendix list the special status plant species revealed by the nine-quadrangle search as described in this report. Table 8 provides information on the current rarity status of these target special status species, and Table 9 provides information on life form, flowering period, and elevation range. Table 10 lists habitats in which these special status species are found and whether those habitats occur on the project site. References include the California Department of Fish and Game Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichen List (CNDDDB) and the most recent edition of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* database.

Table 6. List of Special Status Plants Found in the San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A), Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). Current Rarity Status is also included. Species found in San Luis Obispo quadrangle are in bold.

<i>Scientific Name</i>	Common Name	CNPS Rare Plant Rank	State Rank	Global Rank	State Status	Federal Status
<i>Agrostis hooveri</i>	Hoover's bent grass	1B.2	S2	G2		
<i>Arctostaphylos cruzensis</i>	Arroyo de la Cruz manzanita	1B.2	S3	G3		
<i>Arctostaphylos luciana</i>	Santa Lucia manzanita	1B.2	S3	G3		
<i>Arctostaphylos morroensis</i>	Morro manzanita	1B.1	S1	G1		FT
<i>Arctostaphylos osoensis</i>	Oso manzanita	1B.2	S1	G1		
<i>Arctostaphylos pechoensis</i>	Pecho manzanita	1B.2	S2	G2		
<i>Arctostaphylos pilosula</i>	Santa Margarita manzanita	1B.2	S3	G3		
<i>Arctostaphylos rudis</i>	sand mesa manzanita	1B.2	S2	G2		
<i>Arctostaphylos tomentosa</i> ssp. <i>daciticola</i>	dacite manzanita	1B.1	S1	G4T1		
<i>Arenaria paludicola</i>	marsh sandwort	1B.1	S1	G1	SE	FE
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Miles' milk-vetch	1B.2	S2	G5T2		
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	S1S2	G3		
<i>Bryoria pseudocapillaris</i>	false gray horsehair lichen	3.2	S2	G3		
<i>Bryoria spiralis</i>	twisted horsehair lichen	1B.1	S1S2	G3		
<i>California macrophylla</i>	round-leaved filaree	1B.2	S3?	G3?		
<i>Calochortus obispoensis</i>	San Luis mariposa lily	1B.2	S2	G2		
Continued on next page						

Scientific Name	Common Name	CNPS Rare Plant Rank	State Rank	Global Rank	State Status	Federal Status
<i>Calochortus simulans</i>	La Panza mariposa lily	1B.3	S2	G2		
<i>Calycadenia villosa</i>	dwarf calycadenia	1B.1	S3	G3		
<i>Camissoniopsis hardhamiae</i>	Hardham's evening-primrose	1B.2	S2	G2		
<i>Carex obispoensis</i>	San Luis Obispo sedge	1B.2	S2S3	G2G3		
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	San Luis Obispo owl's- clover	1B.2	S2	G5T2		
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	1B.1	S2	G3T2		
<i>Chenopodium littoreum</i>	coastal goosefoot	1B.2	S2	G2		
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	dwarf soaproot	1B.2	S2S3	G5T2T3		
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	1B.2	S1	G4?T1	SE	FE
<i>Chorizanthe breweri</i>	Brewer's spineflower	1B.3	S3	G3		
<i>Chorizanthe rectispina</i>	straight-awned spineflower	1B.3	S1	G1		
<i>Cirsium fontinale</i> var. <i>obispoense</i>	San Luis Obispo fountain thistle	1B.2	S2	G2T2	SE	FE
<i>Cirsium occidentale</i> var. <i>lucianum</i>	Cuesta Ridge thistle	1B.2	S2	G3G4T2		
<i>Cirsium rhotophilum</i>	Surf thistle	1B.2	S1	G1	ST	
<i>Cirsium scariosum</i> var. <i>loncholepis</i>	La Graciosa thistle	1B.1	S1	G5T1	ST	FE
<i>Cladium californicum</i>	California sawgrass	@B.2	S2	G4		
<i>Cladonia firma</i>	popcorn lichen	2B.1	S1	G4		
<i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Pismo clarkia	1B.1	S1	G4T1	SR	FE
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	dune larkspur	1B.2	S2	G4T2		
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	Eastwood's larkspur	1B.2	S2	G4T2		
<i>Delphinium umbraculorum</i>	umbrella larkspur	1B.3	S3	G3		
<i>Dithyrea maritima</i>	beach spectaclepod	1B.1	S1	G1	ST	
<i>Dudleya abramsii</i> ssp. <i>bettinae</i>	Betty's dudleya	1B.2	S1	G4T1		
<i>Dudleya abramsii</i> ssp. <i>murina</i>	mouse-gray dudleya	1B.3	S2	G4T2		
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	1B.1	S2	G3T2		
<i>Eriastrum luteum</i>	yellow-flowered eriastrum	1B.2	S2	G2		
<i>Erigeron blochmaniae</i>	Blochman's leafy daisy	1B.2	S2	G2		
<i>Eriodictyon altissimum</i>	Indian Knob mountainbalm	1B.1	S1	G1	SE	FE
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button-celery	1B.1	S1	G5T1		
<i>Extriplex joaquinana</i>	San Joaquin spearscale	1B.2	S2	G2		
<i>Fritillaria ojaiensis</i>	Ojai fritillary	1B.2	S2?	G2?		
<i>Fritillaria viridea</i>	San Benito fritillary	1B.2	S2	G2		
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	3.2	S1	G5T1Q		
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	1B.1	S1	G4T1		
Continued on next page						

Scientific Name	Common Name	CNPS Rare Plant Rank	State Rank	Global Rank	State Status	Federal Status
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	1B.1	S2?	G4T2		
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	1B.2	S2	G3T2		
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1	S2	G4T2		
<i>Layia jonesii</i>	Jones' layia	1B.2	S2	G2		
<i>Lupinus ludovicianus</i>	San Luis Obispo County lupine	1B.2	S1	G1		
<i>Malacothamnus gracilis</i>	slender bush-mallow	1B.1	S1	G1Q		
<i>Malacothamnus palmeri</i> var. <i>involucratus</i>	Carmel Valley bush-mallow	1B.2	S3	G3T3Q		
<i>Malacothamnus palmeri</i> var. <i>palmeri</i>	San Lucia bush-mallow	1B.2	S2	G3T2Q		
<i>Monardella palmeri</i>	Palmer's monardella	1B.2	S2	G2		
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	southern curly-leaved monardella	1B.2	S2	G3T2		
<i>Monardella undulata</i> ssp. <i>undulata</i>	San Luis Obispo monardella	1B.2	S2	G3T2		
<i>Monolopia gracilens</i>	woodland woollythreads	1B.2	S3	G3		
<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	shinning navarretia	1B.2	S2	G4T2		
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	1B.2	S2	G3G4T2		
<i>Plagiobothrys uncinatus</i>	hooked popcorn-flower	1B.2	S2	G2		
<i>Poa diaboli</i>	Diablo Canyon blue grass	1B.2	S2	G2		
<i>Sanicula maritima</i>	adobe sanicle	1B.1	S2	G2	SR	
<i>Scrophularia atrata</i>	black-flowered figwort	1B.2	S2S3	G2G3		
<i>Senecio aphanactis</i>	chaparral ragwort	2B.2	S2	G3		
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i>	Cuesta Pass checkerbloom	1B.2	S1	G3T1	SR	
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewel-flower	1B.2	S2	G2T2		
<i>Suaeda californica</i>	California seablite	1B.1	S1	G1		FE
<i>Sulcaria isidiifera</i>	splitting yarn lichen	1B.1	S1	G1		
<i>Trifolium hydrophilum</i>	saline clover	1B.2	S2	G2		
<i>Tropidocarpum capparideum</i>	caper-fruited tropidocarpum	1B.1	S1	G1		

Key to numbers and symbols used in Table 6 are listed below and on the next page.

From: California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA.

California Rare Plant Rank 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

Plants with a California Rare Plant Rank of 1A are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

All of the plants constituting California Rare Plant Rank 1A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, and impacts proposed to individuals or their habitat, they must be analyzed during preparation of environmental documents relating to the California Environmental Quality Act (CEQA), or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

Plants with a California Rare Plant Rank of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of taxa in the CNPS Inventory, with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125; (c) and/or §15380.

California Rare Plant Rank 2A: Plants Presumed Extirpated in California, But Common Elsewhere

Plants with a California Rare Plant Rank of 2A are presumed extirpated because they have not been observed or documented in California for many years. This list only includes plants that are presumed extirpated in California, but more common elsewhere in their range.

All of the plants constituting California Rare Plant Rank 2A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these species be rediscovered, any impacts proposed to individuals or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Except for being common beyond the boundaries of California, plants with a California Rare Plant Rank of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Federal Endangered Species Act. With California Rare Plant Rank 2B, we recognize the importance of protecting the geographic range of widespread species. In this way we protect the diversity of our own state's flora and help maintain evolutionary processes and genetic diversity within species.

All of the plants constituting California Rare Plant Rank 2B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 3: Plants About Which More Information is Needed - A Review List

Plants with a California Rare Plant Rank of 3 are united by one common theme - we lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting California Rare Plant Rank 3 are taxonomically problematic. For each California Rare Plant Rank 3 plant we have provided the known information and indicated in the "Notes" section of the CNPS Inventory record where assistance is needed. Data regarding distribution, endangerment, ecology, and taxonomic validity are welcomed and can be submitted by emailing the Rare Plant Botanist at asims@cnps.org.

All of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 4: Plants of Limited Distribution - A Watch List

Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a California Rare Plant Rank 4 plant change, we will transfer it to a more appropriate rank.

Some of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380. This may be particularly appropriate for:

- The type locality of a California Rare Plant Rank 4 plant,
- Populations at the periphery of a species' range,
- Areas where the taxon is especially uncommon,
- Areas where the taxon has sustained heavy losses, or
- Populations exhibiting unusual morphology or occurring on unusual substrates.

Threat Ranks

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

California Dept. of Fish & Game**Endangered Species (CE)**

Plant taxa whose prospects for survival are in immediate jeopardy from one or more causes

Threatened Species (CT)

Plant taxa not presently threatened with extinction, but likely to become endangered within the foreseeable future in the absence of special protection and management efforts

Rare Species (CR)

Plant taxa not presently threatened with extinction, but occurring in such small numbers throughout its range that they may become endangered if habitat conditions worsen

State Ranking

S1 = Less than 6 EOs or less than 1,000 individuals or less than 2,000 acres

S2 = 6-20 EOs or 1,000-3,000 individuals or 2,000-10,000 acres

S3 = 21-100 EOs or 3,000-10,000 individuals or 10,000-50,000 acres

S4 = Apparently secure in California – No threat rank

S5 = Demonstrably secure in California – No threat rank

Number following S ranks:

1 – Very threatened

2 – Threatened

3 – No current threats

U. S. Dept. of Fish and Wildlife**Endangered Species (FE)**

Taxa in danger of extinction throughout all or a significant portion of their range

Threatened Species (FT)

Taxa likely to become endangered within the foreseeable future throughout all or a significant portion of their range

Candidate Species (C)

Taxa for which the Service has on file enough substantial information on biological vulnerability and threat (s) to support proposals to list them as endangered or threatened species, but such action has been delayed by other listing activity

Global Ranking**GX Presumed Extinct**

Believed to be extinct throughout its range. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

GH Possibly Extinct

Known from only historical occurrences, but may nevertheless still be extant; further searching needed.

G1 Critically Imperiled

Critically imperiled globally because of extreme rarity or because of some factor (s) making it especially vulnerable to extinction. Typically 5 or fewer occurrences or very few remaining individuals (<1,000) or acres (<2,000) or linear miles (<10).

G2 Imperiled

Imperiled globally because of rarity or because of some factor (s) making it very vulnerable to extinction or elimination. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000) or acres (2,000 to 10,000) or linear miles (10 to 50).

G3 Vulnerable

Vulnerable globally either because very rare and local throughout its range, found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction or elimination. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.

G4 Apparently Secure

Uncommon but not rare (although it may be rare in parts of its range, particularly on the periphery), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern. Typically more than 100 occurrences and more than 10,000 individuals.

G5 Secure

Common, widespread, and abundant (although it may be rare in parts of its range, particularly on the periphery). Not vulnerable in most of its range. Typically with considerably more than 100 occurrences and more than 10,000 individuals.

T# Intraspecific Taxon (trinomial)

The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1.

Table 7. List of Special Status Plants Found in the San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A), Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). along with life form, flowering period, and elevation range

Scientific Name	Common Name	Life Form	Flower Period	Elevation Range (m)	
				Low	High
<i>Agrostis hooveri</i>	Hoover's bent grass	perennial herb	Apr-Jul	6	610
<i>Arctostaphylos cruzensis</i>	Arroyo de la Cruz manzanita	perennial evergreen shrub	Dec-Mar	60	310
<i>Arctostaphylos luciana</i>	Santa Lucia manzanita	perennial evergreen shrub	Dec-Mar	350	850
<i>Arctostaphylos morroensis</i>	Morro manzanita	perennial evergreen shrub	Dec-Mar	5	205
<i>Arctostaphylos osoensis</i>	Oso manzanita	perennial evergreen shrub	Feb-Mar	95	500
<i>Arctostaphylos pechoensis</i>	Pecho manzanita	perennial evergreen shrub	Nov-Mar	125	850
<i>Arctostaphylos pilosula</i>	Santa Margarita manzanita	perennial evergreen shrub	Dec-May	75	1100
<i>Arctostaphylos rudis</i>	sand mesa manzanita	perennial evergreen shrub	Nov-Feb	25	322
<i>Arctostaphylos tomentosa</i> ssp. <i>daciticola</i>	dacite manzanita	perennial evergreen shrub	Mar-May	100	300
<i>Arenaria paludicola</i>	marsh sandwort	perennial stoloniferous herb	May-Aug	3	170
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Miles' milk-vetch	annual herb	Mar-Jun	20	90
<i>Atriplex coulteri</i>	Coulter's saltbush	perennial herb	Mar-Oct	3	460
<i>Bryoria pseudocapillaris</i>	false gray horsehair lichen	fruticose lichen epiphytic		0	90
<i>Bryoria spiralifera</i>	twisted horsehair lichen	fruticose lichen epiphytic		0	30
<i>California macrophylla</i>	round-leaved filaree	annual herb	Mar-May	15	1200
<i>Calochortus obispoensis</i>	San Luis mariposa lily	perennial bulbiferous herb	May-Jul	50	730
<i>Calochortus simulans</i>	La Panza mariposa lily	perennial bulbiferous herb	Apr-Jun	325	1150
<i>Calycadenia villosa</i>	dwarf calycadenia	annual herb	May-Oct	240	1350
<i>Camissoniopsis hardhamiae</i>	Hardham's evening-primrose	annual herb	Mar-May	140	945
<i>Carex obispoensis</i>	San Luis Obispo sedge	perennial rhizomatous herb	Apr-Jun	10	820
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	San Luis Obispo owl's-clover	annual herb hemiparasitic	Mar-May	10	430
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	annual herb	May-Nov	0	230
<i>Chenopodium littoreum</i>	coastal goosefoot	annual herb	Apr-Aug	10	30
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	dwarf soaproot	perennial bulbiferous herb	May-Aug	305	1000
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	annual herb hemiparasitic	May-Nov	0	30
<i>Chorizanthe breweri</i>	Brewer's spineflower	annual herb	Apr-Aug	45	800
<i>Chorizanthe rectispina</i>	straight-awned spineflower	annual herb	Apr-Jul	85	1035
<i>Cirsium fontinale</i> var. <i>obispoense</i>	San Luis Obispo fountain thistle	perennial herb	Feb-Sep	35	385
<i>Cirsium occidentale</i> var. <i>lucianum</i>	Cuesta Ridge thistle	perennial herb	Apr-Jun	500	750
continued on next page					

Scientific Name	Common Name	Life Form	Flower Period	Elevation Range (m)	
				Low	High
<i>Cirsium rathophilum</i>	Surf thistle	perennial herb	Apr-Jun	3	60
<i>Cirsium scariosum</i> var. <i>loncholepis</i>	La Graciosa thistle	perennial herb	May-Aug	4	220
<i>Cladium californicum</i>	California sawgrass	squamulose lichen terrestrial		30	75
<i>Cladonia firma</i>	popcorn lichen	annual herb	May-Jul	25	185
<i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Pismo clarkia	perennial herb	Apr-Jun	0	200
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	dune larkspur	perennial herb	Feb-Mar	75	500
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	Eastwood's larkspur	perennial herb	Apr-Jun	400	1600
<i>Delphinium umbraculorum</i>	umbrella larkspur	perennial rhizomatous herb	Mar-May	3	50
<i>Dithyrea maritima</i>	beach spectaclepod	perennial herb	May-Jul	20	180
<i>Dudleya abramsii</i> ssp. <i>bettinae</i>	Betty's dudleya	perennial leaf succulent	May-Jun	90	525
<i>Dudleya abramsii</i> ssp. <i>murina</i>	mouse-gray dudleya	perennial herb	Apr-Jun	5	450
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	annual herb	May-Jun	290	1000
<i>Eriastrum luteum</i>	yellow-flowered eriastrum	perennial rhizomatous herb	Jun-Aug	3	45
<i>Erigeron blochmaniae</i>	Blochman's leafy daisy	perennial evergreen shrub	Mar-Jun	80	270
<i>Eriodictyon altissimum</i>	Indian Knob mountainbalm	annual/perennial herb	Jun-Aug	3	45
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button-celery	annual herb	Apr-Oct	1	835
<i>Extriplex joaquinana</i>	San Joaquin spearscale	perennial bulbiferous herb	Feb-May	225	998
<i>Fritillaria ojaiensis</i>	Ojai fritillary	perennial bulbiferous herb	Mar-May	200	1525
<i>Fritillaria viridea</i>	San Benito fritillary	perennial herb	Jun-Sep	15	400
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	perennial herb	Feb-Sep	70	810
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	perennial herb	Apr-Sep	10	200
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	perennial herb	Jan-Nov	5	520
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	annual herb	Feb-Jun	1	1220
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	annual herb	Mar-May	5	400
<i>Layia jonesii</i>	Jones' layia	perennial herb	Apr-Jul	50	525
<i>Lupinus ludovicianus</i>	San Luis Obispo County lupine	perennial deciduous shrub	May-Oct	190	575
<i>Malacothamnus gracilis</i>	slender bush-mallow	perennial deciduous shrub	Apr-Oct	30	1100
<i>Malacothamnus palmeri</i> var. <i>involucratus</i>	Carmel Valley bush-mallow	perennial deciduous shrub	May-Jul	60	360
<i>Malacothamnus palmeri</i> var. <i>palmeri</i>	San Lucia bush-mallow	perennial rhizomatous herb	Jun-Aug	200	800
<i>Monardella palmeri</i>	Palmer's monardella	annual herb	Apr-Sep	0	300
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	southern curly-leaved monardella	perennial rhizomatous herb	May-Sep	10	200
<i>Monardella undulata</i> ssp. <i>undulata</i>	San Luis Obispo monardella	annual herb	Feb-Jul	100	1200
continued on next page					

Scientific Name	Common Name	Life Form	Flower Period	Elevation Range (m)	
				Low	High
<i>Monolopia gracilens</i>	woodland woollythreads	annual herb	Mar-Jul	65	1000
<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	shinning navarretia	annual herb	Apr-Sep	0	100
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	annual herb	Apr-May	300	760
<i>Plagiobothrys uncinatus</i>	hooked popcorn-flower	perennial rhizomatous herb	Mar-Apr	120	400
<i>Poa diaboli</i>	Diablo Canyon blue grass	perennial herb	Feb-May	30	240
<i>Sanicula maritima</i>	adobe sanicle	perennial herb	Mar-Jul	10	500
<i>Scrophularia atrata</i>	black-flowered figwort	annual herb	Jan-May	15	800
<i>Senecio aphanactis</i>	chaparral ragwort	perennial herb	May-Jun	600	800
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i>	Cuesta Pass checkerbloom	annual herb	Mar-Oct	95	1000
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewel-flower	perennial evergreen shrub	Jul-Oct	0	15
<i>Suaeda californica</i>	California seablite	fruticose lichen epiphytic		20	30
<i>Sulcaria isidiifera</i>	splitting yarn lichen	annual herb	Apr-Jun	0	300
<i>Trifolium hydrophilum</i>	saline clover	annual herb	Mar-Apr	1	455
<i>Tropidocarpum capparideum</i>	caper-fruited tropidocarpum				

Table 8. Habitat Requirements of Special Status Plants Found in San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A, Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). along with Preferred Habitats and whether Potential Habitats Occur on site.

Scientific Name	Habitat	Found or Expected on Site
<i>Agrostis hooveri</i>	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Valley and foothill grassland/usually sandy	NO. Not reported from San Luis Obispo quadrangle. Hoover's bent grass was not observed on the subject parcel and is not expected on the disturbed sites but could potentially but unlikely be present on the hillside
<i>Arctostaphylos cruzensis</i>	Broadleafed upland forest, Coastal bluff scrub, Closed-cone coniferous forest, Chaparral, Coastal scrub, Valley and foothill grassland/sandy	NO. Not reported from San Luis Obispo quadrangle. Endemic to northwestern corner of San Luis Obispo County. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos luciana</i>	Chaparral, Cismontane woodland on shale	NO. Endemic to southern Santa Lucia Range. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos morroensis</i>	Chaparral (maritime), Cismontane woodland, Coastal dunes (pre-Flandrian), Coastal scrub/Baywood fine sand	NO. Endemic to sandy soils around southern end of Morro Bay. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos osoensis</i>	Chaparral, Cismontane woodland on dacite porphyry buttes	NO. Not reported from San Luis Obispo quadrangle. Endemic to western portion of the Morros east of Morro Bay. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos pechoensis</i>	Closed-cone coniferous forest, Chaparral, Coastal scrub on siliceous shale	NO. Endemic to western end of San Luis Range. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos pilosula</i>	Broadleafed upland forest, Closed-cone coniferous forest, Chaparral, Cismontane woodland/Sometimes sandstone.	NO. Occurs from eastern end of San Luis Range to west-central San Luis Obispo County. Does occur in the Squire Canyon area. Unlikely that potential habitat could be present; however, this evergreen shrub would have been readily recognizable during field surveys and it was not found.
<i>Arctostaphylos rudis</i>	Chaparral (maritime), Coastal scrub/sandy	NO. Not reported from San Luis Obispo quadrangle. Occurs on old stabilized dunes. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arctostaphylos tomentosa</i> ssp. <i>daciticola</i>	Chaparral, Cismontane woodland on dacite porphyry buttes	NO. Not reported from San Luis Obispo quadrangle. Endemic to western portion of the Morros east of Morro Bay. Not expected on the site. Potential habitat not present. This evergreen shrub would have been readily recognizable during field surveys.
<i>Arenaria paludicola</i>	Marshes and swamps (freshwater or brackish)/sandy, openings	NO. Not reported from San Luis Obispo quadrangle. Highly restricted to freshwater wetlands in western San Luis Obispo County; nearly extinct. Not expected on the site. Potential habitat not present.
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Coastal scrub (clay)	NO. Not expected on the site. Potential habitat not present on home site and unlikely in surrounding areas.
<i>Continued on next page</i>		

Scientific Name	Habitat	Found or Expected on Site
<i>Atriplex coulteri</i>	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland/alkaline or clay	NO. Not reported from San Luis Obispo quadrangle. Occurs in coastal sites with salty soil. Not expected on the site. Potential habitat not present.
<i>Bryoria pseudocapillaris</i>	Coastal dunes (SLO Co.), North Coast coniferous forest (immediate coast). Usually on conifers	NO. Not reported from San Luis Obispo quadrangle. Fruticose lichen epiphytic. No appropriate host or habitats on site and not expected on subject parcel.
<i>Bryoria spiralifera</i>	North Coast coniferous forest (immediate coast)/Usually on conifers	NO. Not reported from San Luis Obispo quadrangle. Fruticose lichen epiphytic. No appropriate host or habitats on site and not expected on subject parcel.
<i>California macrophylla</i>	Cismontane woodland, Valley and foothill grassland/clay	Not reported from San Luis Obispo quadrangle. Potential habitat not present or very marginal.
<i>Calochortus obispoensis</i>	Chaparral, Coastal scrub, Valley and foothill grassland/often serpentinite	NO. Occurs in San Luis Range in serpentine grasslands. Not expected on the site. Potential habitat not present near home site. Potential habitat on upper hills possible.
<i>Calochortus simulans</i>	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/sandy, often granitic, sometimes serpentinite	NO. Occurs in interior of San Luis Obispo County, especially in La Panza Range. Not expected on the site. Potential habitat not present.
<i>Calycadenia villosa</i>	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland/rocky, fine soils	NO. Occurs in interior of San Luis Obispo County in La Panza Range. Not expected on the site. Potential habitat not present.
<i>Camissoniopsis hardhamiae</i>	Chaparral, Cismontane woodland/sandy, decomposed carbonate, disturbed or burned areas	NO. Not reported from San Luis Obispo quadrangle. Occurs in interior of San Luis Obispo County in hills east of Santa Margarita. Not expected on the site. Potential habitat not present and out of range.
<i>Carex obispoensis</i>	Closed-cone coniferous forest, Chaparral, Coastal prairie, Coastal scrub, Valley and foothill grassland/often serpentinite seeps, sometimes gabbro; often on clay soils	NO. Potential habitat marginal near site so not expected to occur. No serpentinite seeps or gabbro or clay soils.
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	Meadows and seeps, Valley and foothill grassland/sometimes serpentinite	NO. It was not observed on the site and not expected to occur. Potential habitat if present is marginal. No meadows, seeps, or appropriate grasslands on the site and no serpentinite.
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Valley and foothill grassland (alkaline soils)	NO. It was not observed on the site and not expected to occur on the site. Potential habitat (vernal or temporary pools, meadows, or seeps) not present. No <i>Centromadia</i> species were found on the site.
<i>Chenopodium littoreum</i>	Coastal dunes	NO. Never reported from San Luis Obispo quadrangle. Known only from coastal dunes of western San Luis Obispo and Santa Barbara counties. No appropriate habitats on site and not expected on subject parcel.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	Chaparral (serpentinite)	NO. Not found on the site. Potential habitat not present on the site because there are no serpentinite or chaparral. Not expected to occur on site unless in upper hillsides.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Coastal dunes, Marshes and swamps (coastal salt)	NO. Never reported from San Luis Obispo quadrangle. Known only from coastal dunes and salt marshes of western San Luis Obispo and Santa Barbara counties. Not expected on the site. Potential habitat not present and out of range
<i>Chorizanthe breweri</i>	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Coastal scrub/serpentinite, rocky or gravelly	NO. It was not found on the site and not expected to occur. This species is restricted to serpentine-derived soils; so potential habitat may occur on upper hillsides.
<i>Continued on next page</i>		

Scientific Name	Habitat	Found or Expected on Site
<i>Chorizanthe rectispina</i>	Chaparral, Cismontane woodland, Coastal scrub	NO. Occurs in interior of San Luis Obispo County in hills east of Santa Margarita. Not expected on the site. Potential habitat not present and out of range
<i>Cirsium fontinale</i> var. <i>obispoense</i>	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/serpentinite seeps, drainages	NO. This species is known only from west central San Luis Obispo County where it is restricted to permanently wet seeps and springs on soils derived from serpentine. Not expected on the site. Potential habitat not present.
<i>Cirsium occidentale</i> var. <i>lucianum</i>	Chaparral (openings)/Serpentinite. Often steep rocky slopes and disturbed roadsides.	NO. Endemic to southern Santa Lucia Range. Not found on the site. No appropriate habitats such as serpentinite chaparral or rocky slopes on the project site. Not expected on the site.
<i>Cirsium rhotophilum</i>	Coastal bluff scrub, Coastal dunes	NO. Never reported from San Luis Obispo quadrangle. Known only from coastal dunes of western San Luis Obispo ad Santa Barbara counties. Not expected on the site. Potential habitat not present and out of range.
<i>Cirsium scariosum</i> var. <i>loncholepis</i>	Cismontane woodland, Coastal dunes, Coastal scrub, Marshes and swamps (brackish), Valley and foothill grassland/mesic, sandy	NO. Known only from coastal dunes and wetlands of western San Luis Obispo and Santa Barbara counties. Not expected on the site. Potential habitat not present and out of range
<i>Cladium californicum</i>	Meadows and seeps, Marshes and swamps Alkaline or Freshwater	NO. Never reported from San Luis Obispo quadrangle. No meadows, seeps, or marshes on the site. Not expected on the site. Potential habitat not present
<i>Cladonia firma</i>	Coastal dunes (stabilized), Coastal scrub/On soil, detritus, and/or moss	NO. Never reported from San Luis Obispo quadrangle. Squamulose lichen terrestrial found on sand dunes. Not expected on the site. Potential habitat not present and out of range.
<i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Chaparral (margins, openings), Cismontane woodland, Valley and foothill grassland/sandy	NO. Never reported from San Luis Obispo quadrangle. Occurs in eastern San Luis Range and adjacent areas near the site; however, it is primarily in sandy soil around oak trees; potential habitat marginal if present, not found during the appropriate season, and not expected on subject parcel.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	Chaparral (maritime), Coastal dunes	NO. Never reported from San Luis Obispo quadrangle. Not found on the site. Not known from hills north of Arroyo Grande. No appropriate habitats such as coastal dunes on the project site. No <i>Delphinium</i> species were encountered on the site.
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	Chaparral (openings), Valley and foothill grassland/Serpentinite, coastal	NO. No appropriate soils (serpentinite) or habitats (openings in chaparral) on site. Not found on the site and not expected to occur on the site. No <i>Delphinium</i> species were encountered on the site.
<i>Delphinium umbraculorum</i>	Chaparral, Cismontane woodland	NO. Not reported from San Luis Obispo quadrangle. Known only from coastal dunes of western San Luis Obispo ad Santa Barbara counties. Not expected on the site. Potential habitat not present and out of range.
<i>Dithyrea maritima</i>	Coastal dunes, Coastal scrub (sandy)	NO. Not reported from San Luis Obispo quadrangle. No appropriate habitats of active dunes with blowing sand. Not expected on the site. Potential habitat not present and out of range.
<i>Dudleya abramsii</i> ssp. <i>bettinae</i>	Chaparral, Coastal scrub, Valley and foothill grassland/serpentinite, rocky	NO. Not found on the site during appropriate season. No appropriate habitats such as serpentinite rock on the project site. Potential habitat may occur on upper, rocky hillsides.
<i>Continued on next page</i>		

Scientific Name	Habitat	Found or Expected on Site
<i>Dudleya abramsii</i> ssp. <i>murina</i>	Chaparral, Cismontane woodland, Valley and foothill grassland/serpentinite	NO. Not found on the site. No appropriate habitats such as serpentinite rock on the project site. Potential habitat may occur on upper, rocky hillsides.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland/rocky, often clay or serpentinite	NO. Known from central San Luis Obispo County in Santa Lucia and La Panza ranges. Not found on the site. Not expected on the site. Potential habitat not present. Potential habitat may occur on upper, rocky hillsides.
<i>Eriastrum luteum</i>	Broadleafed upland forest, Chaparral, Cismontane woodland/sandy or gravelly	NO. Not reported from San Luis Obispo quadrangle. Not found on the site.
<i>Erigeron blochmaniae</i>	Coastal dunes, Coastal scrub	NO. Not reported from San Luis Obispo quadrangle. Known from coastal areas of San Luis Obispo County. Not expected on the site. Potential habitat not present and out of range.
<i>Eriodictyon altissimum</i>	Chaparral (maritime), Cismontane woodland, Coastal scrub/sandstone	NO. Not reported from San Luis Obispo quadrangle. Known from sandy soils derived from dunes or sandstone. Nearest site is Indian Knob. Not expected on the site. Potential habitat not present. It is readily recognizable and was not found on the site.
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Vernal pools	NO. Occurs in low-lying sites around San Luis Obispo. No appropriate vernal pool habitats on the site. This species was not found on the site and not expected to occur on the site.
<i>Extriplex joaquinana</i>	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland/alkaline	NO. Not reported from San Luis Obispo quadrangle. Occurs in interior sites with alkaline soils. Not expected on the site. Potential habitat not present and out of range.
<i>Fritillaria ojaiensis</i>	Broadleafed upland forest (mesic), Chaparral, Cismontane woodland, Lower montane coniferous forest/rocky	NO. Known in San Luis Obispo County from western slopes of Santa Lucia Range; Not reported from the area and not found on the site. No appropriate habitats and not expected on the site.
<i>Fritillaria viridea</i>	Chaparral (serpentinite)/Sometimes stream banks, sometimes rocky	NO. Known in San Luis Obispo County from western slopes of Santa Lucia Range; SLO County reports may be misidentification of <i>F. ojaiensis</i> ; related <i>F. affinis</i> known from Prefumo Canyon; Not found on the site. No chaparral or serpentinite soils on site. Not expected on subject parcel.
<i>Horkelia cuneata</i> var. <i>puberula</i>	Chaparral (maritime), Cismontane woodland, Coastal scrub/sandy or gravelly	NO. Known from sandy soil at eastern and southern end of San Luis Range and southward. Not expected on the site. This species is readily recognizable and was not found on the site.
<i>Horkelia cuneata</i> var. <i>sericea</i>	Closed-cone coniferous forest, Chaparral (maritime), Coastal dunes, Coastal scrub/sandy or gravelly, openings	NO. Not reported from San Luis Obispo quadrangle. Known from sandy soil near coast in southern part of SLO County. Not expected on the site. Potential habitat not present and out of range. This species is readily recognizable and was not found on the site.
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	Coastal bluff scrub, Coastal dunes, Coastal scrub	Not reported from San Luis Obispo quadrangle. Occurs near coast. Subject site is out of range.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Marshes and swamps (coastal salt), Playas, Vernal pools	NO. Not reported from San Luis Obispo quadrangle. In San Luis Obispo County known from small area at southern end of Morro Bay Salt Marsh. Not expected on the site. Potential habitat not present and out of range.
<i>Layia jonesii</i>	Chaparral, Valley and foothill grassland/clay or serpentinite	NO. Not found on the site. No appropriate serpentinite soils or habitats on site. No species of <i>Layia</i> were found on the site. Not expected on the site.
<i>Continued on next page</i>		

Scientific Name	Habitat	Found or Expected on Site
<i>Lupinus ludovicianus</i>	Chaparral, Cismontane woodland/sandstone or sandy	NO. Not reported from San Luis Obispo quadrangle. Endemic to west-central San Luis Obispo County; known from eastern end of San Luis Range (Indian Knob). Not found on the site. Potential habitat marginal if present. Nearest site is Indian Knob. This species is readily recognizable and was not found on the site
<i>Malacothamnus gracilis</i>	Chaparral/Usually rocky	NO. Not reported from San Luis Obispo quadrangle. Potential habitat not present on the site. Out of species range Not found on the site and potential habitat not present.
<i>Malacothamnus palmeri</i> var. <i>involutus</i>	Chaparral, Cismontane woodland/serpentinite	NO. Not reported from San Luis Obispo quadrangle. Potential habitat not present; no serpentinite. Not found on the site.
<i>Malacothamnus palmeri</i> var. <i>palmeri</i>	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub (openings)/Sandy.	NO. Not reported from San Luis Obispo quadrangle. Known only from coastal dunes of western San Luis Obispo and Santa Barbara counties; synonym of <i>M. undulata</i> subsp. <i>crispa</i> . Not expected on the site. Potential habitat not present and out of range.
<i>Monardella palmeri</i>	Chaparral, Cismontane woodland, Coastal scrub	NO. Not found on site. Potential, but very marginal, habitat may occur in habitats away from home site, but no habitat occurs within project site.
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	Chaparral (rocky)	NO. Not reported from San Luis Obispo quadrangle. Habitat not present on the subject site.
<i>Monardella undulata</i> ssp. <i>undulata</i>	Coastal dunes, Coastal scrub (sandy)	NO. Not reported from San Luis Obispo quadrangle. Known only from coastal sand hills and dunes of western San Luis Obispo and Santa Barbara counties. Not expected on the site. Potential habitat not present and out of range.
<i>Monolopia gracilens</i>	Broadleafed upland forest (openings), Chaparral (openings), Cismontane woodland, North Coast coniferous forest (openings), Valley and foothill grassland/Serpentine	NO. Not reported from San Luis Obispo quadrangle. Known from western end of San Luis Range (Pecho Creek) northwest along coast and into Santa Lucia Range; no appropriate habitats and not expected on subject parcel.
<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	Cismontane woodland, Valley and foothill grassland, Vernal pools/Sometimes clay	NO. No vernal pools on site. Site is highly disturbed. Not expected to be on site.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coastal dunes	NO. Not reported from San Luis Obispo quadrangle. This coastal dune species was not found on the site during appropriate season. Not expected on the site. Potential habitat not present and out of range.
<i>Plagiobothrys uncinatus</i>	Chaparral (sandy), Cismontane woodland, Valley and foothill grassland	NO. Known from central north San Luis Obispo County. Not expected on the site. Potential habitat is very marginal if present and out of range. Not found on the site.
<i>Poa diaboli</i>	Closed-cone coniferous forest, Chaparral (mesic), Cismontane woodland, Coastal scrub/shale; sometimes burned areas	NO. Not reported from San Luis Obispo quadrangle. Known from westernmost portion of San Luis Range. Not expected on the site. Potential habitat not present and out of range.
<i>Sanicula maritima</i>	Chaparral, Coastal prairie, Meadows and seeps, Valley and foothill grassland/clay, serpentinite	NO. Known from seasonally wet areas of clay soils often derived from serpentine in San Luis Obispo area and along San Simeon coast; not found on the site and no suitable habitat observed on subject parcel.
<i>Scrophularia atrata</i>	Closed-cone coniferous forest, Chaparral, Coastal dunes, Coastal scrub, Riparian scrub	NO. Not reported from San Luis Obispo quadrangle. Known from eastern end of San Luis Range (Indian Knob) southward into northwestern Santa Barbara County; Potential habitat could be present, but this species is easily recognized and was not found on the site.
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Scientific Name	Habitat	Found or Expected on Site
<i>Senecio aphanactis</i>	Chaparral, Cismontane woodland, Coastal scrub/sometimes alkaline	NO. Known from widely scattered sites in western half of San Luis Obispo County. No appropriate habitats found on the parcel and not observed on site.
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i>	Closed-cone coniferous forest, Chaparral/rocky, serpentinite	NO. Endemic to southern Santa Lucia Mountains of San Luis Obispo County. Not expected on the site. Potential habitat not present and out of range.
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	Chaparral, Cismontane woodland, Valley and foothill grassland/serpentinite	NO. Synonym of <i>Streptanthus glandulosus</i> subsp. <i>glandulosus</i> ; known from serpentine outcrops in Prefumo Canyon; Not expected on the site. Potential habitat not present and out of range.
<i>Suaeda californica</i>	Marshes and swamps, (coastal salt)	NO. Not reported from San Luis Obispo quadrangle. Endemic to salt marsh areas from Cayucos to Morro Bay. Not expected on the site. Potential habitat not present and out of range.
<i>Sulcaria isidiifera</i>	Coastal scrub (old growth). On branches of oaks and shrubs	NO. Not reported from San Luis Obispo quadrangle. Fruticose lichen epiphytic. Not found on site. Potential habitat may be present but out of range. No impacts to oaks as a result of the proposed project.
<i>Trifolium hydrophilum</i>	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools	NO. Known in San Luis Obispo County from serpentine-derived wet clay soils. These habitats not found on the subject site. Not expected on subject parcel.
<i>Tropidocarpum capparideum</i>	Valley and foothill grassland (alkaline hills)	NO. Not reported from San Luis Obispo quadrangle. Known in San Luis Obispo County from Santa Margarita Ranch. Not expected on the site. Potential habitat not present and out of range.

APPENDIX 2. SPECIAL STATUS WILDLIFE SPECIES:

The list of the special status wildlife species that could potentially be present on the project site based on a nine-quadrangle search is listed below. Reference: California Department of Fish and Game Natural Diversity Data Base (CNDDB).

Table 9. CNDDB list of Special Status Wildlife Found in the San Luis Obispo (246C), Pismo Beach (221B), Lopez Mountain (246D), Port San Luis (222A), Morro Bay South (247D), Morro Bay North (247A, Arroyo Grande NE (221A), Santa Margarita (246A), and Atascadero (246B). Current Rarity Status is also included.

Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
MOLLUSKS						
<i>Helminthoglypta walkeriana</i>	Morro shoulderband (=banded dune) snail	FE	None	None	No	None
<i>Pyrgulopsis taylori</i>	San Luis Obispo pyrg	None	None	None	No	None
<i>Tryonia imitator</i>	mimic tryonia (=California brackish water snail)	None	None	None	No	None
CRUSTACEANS						
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT	None	None	No	None
<i>Linderiella occidentalis</i>	California linderiella	None	None	None	No	None
INSECTS						
<i>Bombus crotchii</i>	Crotch's bumble bee	None	None	None	No	None
<i>Bombus occidentalis</i>	western bumble bee	None	None	None	No	None
<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	None	None	None	No	None
<i>Coelus globosus</i>	globose dune beetle	None	None	None	No	None
<i>Danaus plexippus pop. 1</i>	monarch - California overwintering population	None	None	None	No	None
<i>Plebejus icarioides moroensis</i>	Morro Bay blue butterfly	None	None	None	No	None
<i>Polyphylla nubila</i>	Atascadero June beetle	None	None	None	No	None
FISH						
<i>Eucyclogobius newberryi</i>	tidewater goby	FE	None	SSC	No	None
<i>Gasterosteus aculeatus williamsoni</i>	unarmored threespine stickleback	FE	SE	FP	No	None
<i>Lavinia symmetricus subditus</i>	Monterey roach	None	None	SSC	No	None
<i>Oncorhynchus mykiss irideus</i>	steelhead - south-central California coast DPS	FT	None	None	No	None
AMPHIBIANS						
<i>Ambystoma californiense</i>	California tiger salamander	FT	Threatened	SSC	No	None
<i>Anaxyrus californicus</i>	Arroyo toad	FE	None	SSC	No	None
<i>Batrachoseps incognitus</i>	San Simeon slender salamander	None	None	None	No	None
<i>Batrachoseps minor</i>	Lesser slender salamander	None	None	SSC	No	None
<i>Rana draytonii</i>	California red-legged frog	FT	None	SSC	No	None
<i>Rana boylei</i>	foothill yellow-legged frog	None	None	SSC	No	None
<i>Spea hammondi</i>	Western spadefoot	None	None	SSC	No	None
<i>Taricha torosa</i>	Coast Range newt	None	None	SSC	No	None

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Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
REPTILES						
<i>Anniella pulchra nigra</i>	black legless lizard	None	None	SSC	No	None
<i>Anniella pulchra pulchra</i>	silvery legless lizard	None	None	SSC	No	None
<i>Emys marmorata</i>	western pond turtle	None	None	SSC	No	None
<i>Thamnophis hammondi</i>	two-striped garter snake	None	None	SSC	No	None
<i>Phrynosoma blainvillii</i>	coast horned lizard	None	None	SSC	No	None
BIRDS						
<i>Accipiter cooperii</i>	Cooper's hawk	None	None	WL	No	None
<i>Agelaius tricolor</i>	tricolored blackbird	None	None	SSC	No	None
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None	None	WL	No	None
<i>Ammodramus savannarum</i>	grasshopper sparrow	None	None	SSC	No	None
<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	No	None
<i>Ardea alba</i>	great egret	None	None	None	No	None
<i>Ardea herodias</i>	great blue heron	None	None	None	No	None
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	None	None	WL	No	None
<i>Athene cunicularia</i>	burrowing owl	None	None	SSC	No	None
<i>Baeolophus inornatus</i>	oak titmouse	None	None	SSC	No	None
<i>Branta bernicla</i>	brant	None	None	SSC	No	None
<i>Botaurus lentiginosus</i>	American bittern	None	None	None	No	None
<i>Buteo regalis</i>	ferruginous hawk	None	None	WL	No	None
<i>Chaetura vauxi</i>	Vaux's swift	None	None	SSC	No	None
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	None	SSC	No	None
<i>Charadrius montanus</i>	mountain plover	None	None	SSC	No	None
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT	CE	None	No	None
<i>Egretta thula</i>	snowy egret	None	None	None	No	None
<i>Elanus leucurus</i>	white-tailed kite	None	None	FP	No	None
<i>Eremophila alpestris actia</i>	California horned lark	None	None	WL	No	None
<i>Falco columbarius</i>	merlin	None	None	WL	No	None
<i>Falco mexicanus</i>	prairie falcon	None	None	WL	No	None
<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Delisted	FP	No	None
<i>Gavia immer</i>	common loon	None	None	SSC	No	None
<i>Gymnogyps californianus</i>	California condor	FE	CE	FP	No	None
<i>Haematopus bachmani</i>	black oystercatcher	None	None	None	No	None
<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	CE	FP	No	None
<i>Ixobrychus exilis</i>	least bittern	None	None	SSC	No	None
<i>Lanius ludovicianus</i>	loggerhead shrike	None	None	SSC	No	None
<i>Larus californicus</i>	California gull	None	None	WL	No	None
<i>Laterallus jamaicensis coturniculus</i>	California black rail	None	CT	FP	No	None
<i>Numenius americanus</i>	long-billed curlew	None	None	WL	No	None
<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	None	No	None
<i>Pandion haliaetus</i>	osprey	None	None	WL	No	None
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	None	CE	None	No	None
<i>Pelecanus occidentalis californicus</i>	California brown pelican	Delisted	Delisted	FP	No	None
<i>Phalacrocorax auritus</i>	double-crested cormorant	None	None	WL	No	None
<i>Progne subis</i>	purple martin	None	None	SSC	No	None
<i>Rallus longirostris obsoletus</i>	California clapper rail	FE	CE	FP	No	None
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	FE	CE	FP	No	None
<i>Setophaga petechial</i>	yellow warbler	None	None	SSC	No	None
<i>Spinus lawrencei</i>	Lawrence's goldfinch	None	None	None	No	None
<i>Sternula antillarum browni</i>	California least tern	FE	CE	FP	No	None
<i>Thalasseus elegans</i>	elegant tern	None	None	WL	No	None
continued on next page						

Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
MAMMALS						
<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	No	None
<i>Callorhinus ursinus</i>	northern fur-seal	None	None	None	No	None
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	Cand. CE	SSC	No	None
<i>Dipodomys heermanni morroensis</i>	Morro Bay kangaroo rat	FE	CE	FP	No	None
<i>Eumetopias jubatus</i>	Steller (=northern) sea-lion	Delisted	None	None	No	None
<i>Eumops perotis californicus</i>	western mastiff bat	None	None	SSC	No	None
<i>Macrotus californicus</i>	California leaf-nosed bat	None	None	SSC	No	None
<i>Myotis yumanensis</i>	Yuma myotis	None	None	None	No	None
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None	None	SSC	No	None
<i>Neotoma macrotis luciana</i>	Monterey dusky-footed woodrat	None	None	SSC	No	None
<i>Nyctinomops macrotis</i>	big free-tailed bat	None	None	SSC	No	None
<i>Taxidea taxus</i>	American badger	None	None	SSC	No	None

DISCUSSION AND CONCLUSIONS REGARDING SPECIAL STATUS WILDLIFE SPECIES ON THE PROJECT SITE

As discussed previously, the home site is covered by coastal valley grassland that has been highly disturbed by dirt roads and other human activity. This small area provides only marginal wildlife habitat and likely would only be visited by transients or wildlife flying over or just passing through. However, some of the species listed in Table 9 have ranges that could potentially include the riparian woodland, coast live oak woodland, and/or coastal scrub outside the small area where the home is proposed. None of these habitats, which occur on over 79 acres of the 80-acre parcel, will be affected by the proposed project. The small amount of coastal valley grassland lost by the proposed project will be less than significant as there are many acres of grassland on the site that will not be affected. The proposed project has no impact on the over 79 acres of the parcel north and east of the home site. In addition, there will be a 25-foot buffer along the edge of the riparian woodland to further protect the biological resources along this small ephemeral creek.

For the most part, special status animal species that occur within the San Luis Obispo and surrounding quadrangles (Table 9) are highly restricted both in distribution range and in habitat requirements and are not expected to occupy the habitats found near the site, especially those along the small ephemeral creeks where the project is proposed. For example, some rare animal species occur in salt or brackish water, e.g., the Tidewater goby; some require permanent standing water, e.g., Steelhead; some occur in vernal pools, e.g., the fairy shrimp; some occur only in specific soils and or other substrate conditions, e.g., the globose dune beetle (fore dune sands) and Morro Bay shoulderband snail; some require specific roosting sites, e.g., the bat species; some require large, deep bodies of water, e.g., the western pond turtle and red-legged frogs; some require permanent standing water to lay their eggs; e.g. coast range newt. In addition, the site is simply out of the geographic range in which many special status species have been found, e.g., Atascadero June beetle. In addition, some

species are not found or expected on the site because they are secretive and avoid areas with human activity.

None of the specialized habitats listed above occur on or near the subject site. However, as mentioned previously, some of the species listed in Table 9 have ranges that could potentially include the riparian woodland, coast live oak woodland, and/or coastal scrub near the home site, none of these habitats will be affected by the proposed project. The small amount of coastal valley grassland lost by the proposed project will be less than significant as there are many acres of grassland on the site that will not be affected.

The special status species of mollusks, insects, crustaceans, fish, and amphibians listed from the San Luis Obispo and surrounding quadrangles (Table 9) either do not have appropriate habitat on the study site, or the site is located out of their known ranges. For example, the subject parcel is out of range and does not have suitable habitats for the listed mollusks. The Morro Bay shoulderband snail is only known to occur in limited numbers on stabilized, vegetated, Flandrian and pre-Flandrian dunes in the general vicinity of Morro Bay and Los Osos, California. The San Luis Obispo pyra occurs in largely in brackish water, and the California brackish water snail only occurs in brackish water. No wetlands or brackish water habitats occur on the subject parcel.

Fish: Steelhead is a species that is listed as threatened by the federal government. This fish occurs in well-vegetated stream margins, gravel bedded rivers and streams with shaded deep pools and perennial water available. Tidewater goby is a small fish found in brackish, shallow lagoons and lower stream reaches where water is relatively still. Monterey roach is a cyprinid fish that is mostly a bottom feeder on filamentous algae, aquatic insects, and crustaceans. They move into shallow, flowing water, over bottoms covered with small rocks, and form up into schools. The three-spined stickleback usually inhabits coastal waters or freshwater bodies. It can live in fresh, brackish, or salt water. It prefers slow-flowing water with areas of emerging vegetation. It can be found in ditches, ponds, lakes, backwaters, quiet rivers, sheltered bays, marshes, and harbors. Clearly the small ephemeral creek does not provide habitat for any of these fish.

Amphibians: None of the special status species of amphibians were found or are expected to use the subject site because of the absence of appropriate habitat, or the site is located out of their known ranges. These species are discussed in detail below.

The U.S. Fish and Wildlife Service (USFWS) and a California Special Concern species by the California Department of Fish and Game (CDFG) list California red-legged frog (*Rana aurora draytonii*) as Threatened. California red-legged frogs (CRF hereafter) have historically been found in riparian habitats throughout the coastal areas of California and in some inland areas. They were likely

widespread throughout San Luis Obispo County and were probably found in most streams with permanent pools, as well as permanent ponds, lakes, and marshes. Unfortunately, today CRF have disappeared from almost all of its former range.

Jennings and Hayes (1985) and Tatarian (2008) report that CRF typically occur in habitats with deep sheltered pools of water and stands of overhanging protective vegetation. *Typha* (cat-tails), *Scripus* (tules), and *Salix* (willows) are typically associated with the presence of CRF. Canopy cover keeps the water temperature low, which is a particularly important habitat requirement for CRF according to Hayes (1990). Accessibility to such habitat is important for the long-term survival of this species and can be a factor limiting population density and distribution. Even in intermittent stream habitats, CRF require pools of permanent standing water, usually 20 inches deep with dense shoreline or emergent vegetation. U.S. Fish and Wildlife Service (1996) found that incised stream channels with portions narrower and deeper than 18 inches also provide habitat for CRF. Other studies have found that individual CRF have been found using channels and pools of various depths; however minimum depths of at least 12 to 18 inches, generally from late spring to the fall, are required (M. Allaback, 2000).

CRF usually occur in habitats that typically lack introduced bullfrogs, non-native fish, and other introduced predators and competitors (Hayes and Jennings 1989). According to Stebbins (1985) and Tatarian (2008) sufficient pond depth and emergent vegetation cover are both critical, because they offer means of escape from predators and provide vegetation areas to deposit eggs during the breeding season. Biological surveys of the creek channel and riparian areas on the subject property indicate that these habitat requirements for CRF do not exist on the site.

The Designation of Critical Habitat for the CRF, as described by the USFWS (2006), consists of the following four main habitat elements. (1) For successful breeding and reproduction, the aquatic habitat must have a permanent water source that supports pools of water with a minimum depth of 20 inches (although this may vary now). These pools must be able to maintain water for the entire tadpole-rearing season, a minimum of 20 weeks. (2) The area must have a non-breeding aquatic habitat that provides food, space, and vegetative cover that is spatially distinct from breeding habitat. (3) The property must have upland areas (up to 300 feet from the water's edge) that is associated with the aquatic habitat described above and provide shelter (i.e., boulders, rocks, trees, shrubs, or logs), forage, maintenance of the water quality, and dispersal areas. (4) The adjacent upland areas must also provide barrier-free dispersal habitat that is at least 300 feet wide. The upland area must also connect at least two (or more) suitable breeding habitats (as defined previously) that are within 1.25 miles of each other.

The small ephemeral creek along the eastern margin of the home site does not provide habitat for California red-legged frogs. There will be a 25-foot buffer out from the riparian woodland to further protect the biological resources.

The Coast Range newt is a California species that occurs in wet forests, oak forests, chaparral, and rolling grasslands. It utilizes ponds, reservoirs, and pools in streams to breed, typically beginning in December or January or with the first heavy rains. Eggs are attached to submerged vegetation or stones. Larvae transform and begin to live on land at the end of the summer or in early fall. In summer they can be found in moist habitats under woody debris, or in rock crevices and animal burrows, but can also sometimes be seen wandering overland in moist habitats any time of the year. No appropriate habitats occur for this species on or near the project site. The small ephemeral creek along the eastern margin of the home site does not provide habitat for the coast range newt. In addition, this riparian area will not be affected by the proposed project, and there will be a 25-foot buffer out from the riparian woodland to further protect the biological resources.

The California tiger salamander is a California species that is restricted to grasslands and low foothill regions (typically below 2000 feet but up to 3,500 in coastal areas). They occur and breed in natural ephemeral or vernal pools but also occur in seasonal ponds (e.g. stock ponds) that are allowed to go dry. In the Coastal region, California tiger salamanders occur in scattered populations from Sonoma County to Santa Barbara County. We found no vernal pools or ephemeral ponds on or near the home site. The small ephemeral creek along the eastern margin of the home site does not appear to provide habitat for and the proposed project will not affect the California tiger salamander. In addition, there will be a 25-foot buffer out from the riparian woodland to further protect the biological resources.

Arroyo toad occurs in washes, arroyos, sandy riverbanks, and riparian areas. It has extremely specialized habitat needs, which includes exposed sandy streambanks with scattered vegetation for shelter, stable terraces for burrowing, and still pools with no predatory fishes. For breeding, the arroyo toad requires still pools of water with sandy or gravel bottoms that have not been heavily silted. The arroyo toad was not found on or expected to use the subject site. The seasonal drainage on site does not provide the specialized habitat required by this species and is not suitable for breeding.

Lesser slender salamander is endemic to a small area in the southern Santa Lucia Mountains of San Luis Obispo County. It is found in moist locations above 1,300 ft. (400 m) in forests composed of mixed oak, tanbark oak, sycamore and laurel. It was not found on or expected to use the site subject site. The site is out of the known range of this species and is below 1,300 feet elevation.

The San Simeon slender salamander is endemic to the Santa Lucia Range in southwestern Monterey and northern San Luis Obispo Counties. Its distribution is not well known, but it is found in habitats that range from open oak woodlands near the coast to closed-canopy forest including open yellow pine forest and the leaf-litter of laurel and sycamore woodland on Pine Mountain and Rocky Butte in northern San Luis Obispo County. This species was not found on the subject site, which is not within its known range, and it not expected to use the site.

Western spadefoot occurs primarily in grassland habitats but can be found in oak woodlands, chenopod scrub, alkali sink, and in sandy, gravelly washes and river floodplains. Must have vernal pools for breeding and egg lying. It was not found on or expected to use the site subject site. There were no areas for ephemeral pools found along the seasonal drainage.

Foothill yellow-legged frog at one time was found from northern Oregon west of the Cascades south to the San Gabriel Mountains in southern California, and along the western side of the Sierra Nevada to the edge of the Tehachapi Mountains. However, it is now absent or very rare along the California coast south of Monterey County and only a few populations have survived in the foothills of the southern Sierra Nevada Mountains. Foothill yellow-legged frog habitats include streams and rivers with rocky substrate that traverse woodlands and forest and have exposed, open sunny banks. This species was not found on the subject site, which is not within its known range, and it not expected to use the site.

The listed special status reptiles (Table 9) have very limited potential habitat on or around the subject parcel; so they are not likely to use the site. Black and silvery legless lizards typically occur in sand dunes along the coast where they are fairly common in sandy soils of Montana de Oro State Park, Los Osos, and Morro Bay. These species of legless lizards are adapted for burrowing in sandy or loamy soils but can also occur in leaf litter or under logs in moist environments. The creek on the subject property is ephemeral and dry much of the year and does not appear to provide habitat for the legless lizards. There is a remote chance that legless lizards might occur plant communities on the larger 80-acre parcel; however, no impact to the potential presence of these species will occur as a result of the proposed project. The home site and areas around the home site do not provide habitat for and will not affect the legless lizards.

Coast Range newts are found in somewhat similar habitats as the black and silvery legless lizards, and none of these occur on the home site. Very marginal habitat may occur in some areas of the 80-acre parcel; however, these areas will not be disturbed by the proposed project. The same is true for the two-striped garter snake, which prefers moist habitats. Although the ephemeral creek on the property is dry much of the year, the shade and the two-striped garter snake's ability to travel may allow them to find areas off the property with appropriate habitat for foraging and shelter. However, it is highly unlikely that the two-

stripped garter snake would utilize the home site or areas immediately around the home site. The home site does not provide habitat for or will not affect the coast range newt.

The coast horned lizard is a California reptile species of concern whose populations are in decline. Historically, the horned lizard was found along the Pacific coast from Baja California north to the Bay Area, and inland as far north as Shasta Reservoir. This species also extends inland to the Kern Plateau east of the crest of the Sierra Nevada. However its current range is more scattered and fragmented. Horned lizards are found in open areas of loose or sandy soil and low vegetation and have been found in various places in San Luis Obispo County. No horned lizards were observed during field surveys, and no habitat for this species was found on the project site. The proposed will not affect the coast horned lizard.

Western pond turtles require ponds, lakes, or deeper waters to avoid predators and to feed. They can live on land and will often travel overland in search of a source of water or a place to over summer in underground burrows in dry years. No appropriate aquatic or wetland habitats for western pond turtles occur on the project site, and no signs of them were found. The proposed project will not impact habitat for western pond turtles.

Birds: There are several special status bird species reported from the San Luis Obispo and surrounding quadrangles (Table 9) but most of them do not have appropriate habitats on or near the home site. For example, all of the shore birds and those associated with inland water sources, such as the gulls, rails, terns, plovers, pelicans, brants, herons, egrets, oystercatchers, and loons, would not be expected to use the subject site. In addition, condors could potentially do a rare fly over but would not use the site as habitat.

There are nine special status species of raptors reported from the San Luis Obispo and surrounding quadrangles (Table 9), but most of these would not find appropriate habitats on the subject site. Most raptors, such as the golden eagles, northern harriers, and bald eagles, hunt and forage in large open areas that are away from development; therefore, they could potentially use some of the areas on the 80-acre parcel but not use the home site other than an occasional fly by.

The subject parcel is also not appropriate habitat for ospreys, which prefers habitats with open water or large streams. Coopers hawks and sharp shinned hawks, however, may visit the general area at times to take advantage of hunting near and within the woodland canopy near the home site. Their evolutionary path has adapted them for such habitat. The white tailed kite may also forage in small areas of open grassland, and it is possible, although unlikely, that they could visit this area seasonally. We would not expect any of the listed special

status raptors to utilize the home site other than an occasional fly by. The proposed project will not affect these species

The two special status species of owls listed on Table 9 are not expected to utilize the subject site. Burrowing owls range from the Mississippi to the Pacific and from the Canadian Prairie Provinces into South America where they are found in dry, open areas such as grasslands, prairies, savannas, deserts, and farmlands. Burrowing owls get their name because they live in underground burrows, which provide shelter and a permanent nesting site. Unlike other owls, burrowing owls are diurnal species that live in the ground utilizing the burrows of other burrowing animals. This species is most generally associated with interior habitats of eastern San Luis Obispo County (Carrizo plain, Elkhorn Plains, and Cuyama Valley) but occasionally are seen near the coast. Occurrence of this species along the coast is most generally expected along the northern county coast (Cambria area) and even then occurrence is rare. A search of the project site and surrounding areas yielded no signs of burrowing owl activity. Burrowing owls prefer open areas with low ground cover and it may be possible for them to find habitat on or near the 80-acre parcel but not the area immediately around the home site. The proposed project will not affect burrowing owls.

In contrast to burrowing owls, California spotted owls occur in densely forested habitats. They are considered a resident species and bellwether species of old-growth forests. California spotted owls nest in old abandoned nests of birds of prey, in tree holes, and sometimes in rock crevices. They are nocturnal owls that feeds on small mammals and birds. The forested habitat used by this species does not exist on the study site. The proposed project will not affect the spotted owl.

A large number of special status passerine birds have been reported from the San Luis Obispo and surrounding quadrangles (Table 9), but most would not find appropriate habitats on the subject parcel. For example, tricolored blackbirds are found in western coastal North America where they are native to California and parts of Oregon, Washington, and Nevada. The largest populations are found in the San Joaquin Valley of California, as well as coastal areas. Tricolored blackbirds are typically found in freshwater marsh areas that have dense growths of cattails, bulrushes, and tules. This vegetation provides nesting and foraging sites. The tricolored blackbird populations have declined by over 80% in the last 80 years and may continue to decline as a result of continued habitat loss and disturbance in colonies established in agricultural fields of California (especially the San Joaquin Valley). Currently, over 40% of the world's population nests in agricultural fields of the San Joaquin Valley, which are continuing to disappear or be disturbed. No appropriate aquatic or wetland habitats for this species occur on and near the project site. The proposed project will not affect this species.

Western yellow-billed cuckoo was once common along the streams and rivers of the American West including California but is now a candidate for protection

under the Endangered Species Act. Most of the remaining breeding pairs are found in Arizona, California, and New Mexico. Yellow-billed cuckoos prefer open woodlands with clearings and dense, low vegetation. No western yellow-billed cuckoos were observed on or near the study site, and no appropriate habitat for this species occurs on or near the home site. The proposed project will not affect the western yellow-billed cuckoo.

California horned lark is a species of concern that occupies coastal plains, open fields, and grasslands from Sonoma County to San Diego County. It is also occupies most of the San Joaquin Valley. In San Luis Obispo County, horned larks occur primarily in open fields, short-grass grasslands, rangelands, saltbush scrub, and salt flats (e.g. Carrizo Plain). Grasses, shrubs, forbs, rocks, litter, clods of soil, and other surface irregularities provide cover. No signs of California horned larks were found on the project site, and no appropriate habitat conditions are present on the home site. There is a remote possibility that California horned larks could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The proposed project will not affect the California horned lark.

The grasshopper sparrow prefers large open expanses of grassland often near water sources. This property lacks a permanent source of water. No signs of the grasshopper sparrow were found on the project site, and it is highly unlikely that this species will use the study site. There is a remote possibility that California horned larks could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The proposed project will not affect the grasshopper sparrow.

Oak titmouse is almost entirely restricted to the dry slopes of California that surround the central San Joaquin Valley. This species prefers open woodlands of warm, dry oak and oak-pine at low to mid-elevations but can also be found in forests as long as adequate oak trees are present. This species was not found on subject site. The oak woodland area may offer some marginal habitat; however, there is low potential for this species to occur on the site. We would not expect this species to use the subject site.

Vaux's swift is found in habitats that include old growth coniferous or deciduous forests. Vaux's Swifts typically nest in old growth forests in hollow tree snags. This species was not found on or expected to use the subject site. No old growth or appropriate forest habitats are present on the subject site.

American Bittern is mostly a coastal species, which is a common winter visitor to coastal freshwater marshes that contain dense cattails or bulrushes and is also a rare or irregular visitor to the salt marshes of Morro Bay. This species was not found on or expected to use the subject site. No suitable wetland habitats occur on site for this species.

Purple martin is a species of concern in California and is often in association with human settlement. Their breeding habitat is throughout temperate North America in open areas across eastern North America, and also some locations on the west coast from British Columbia to Mexico. Purple martins are insectivores and are attracted to the large populations of insects that occur near wetlands; therefore, they prefer open spaces that are situated close to bodies of water. Due to urban development and human interactions in their natural habitats, purple martins are now accustomed to human interaction and live in close proximity with humans today. They tend to find shelter in urban areas where humans put in birdhouse specifically for purple martin's nests. They are usually absent from areas where no such nest sites are provided. Historically, this species inhabited forest edges, montane forests, and deserts and nested in abandoned woodpecker cavities. Some populations that breed in the western United States continue to live in these natural settings, however most utilize human-made birdhouses.

Purple martins suffered a severe population crash in the 20th Century widely linked to the release and spread of European Starlings in North America. Starlings and house sparrows compete with martins for nest cavities and will fight with martins over nest sites. Starlings have even been known to kill purple martins, especially nestling young. Where purple martins once gathered by the thousands, by the 1980s they had all but disappeared. Purple martins were not observed on the site or expected to use the home site. There is a remote possibility that purple martins could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The proposed project will not affect the Purple martin.

The lark sparrow is a common bird in the United States and southern Canada. These birds forage on the ground or in low bushes. They mainly eat seeds but also prey on insects, including grasshoppers, in the breeding season. They will breed in a variety of open habitats including grasslands and cultivated areas. They nest on the ground close to clumps of grass or other vegetation. No habitat for lark sparrows occurs on the home site. There is a remote possibility that lark sparrows could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The proposed project will not affect the lark sparrow.

Belding's savanna sparrows are one of seventeen subspecies of savanna sparrows. These birds forage on the ground or in low bushes, particularly in winter when they are also found in grazed, low-growth grassland. They mainly eat seeds, but also eat insects in the breeding season. They are typically encountered as pairs or family groups in the breeding season, and assemble in flocks for winter migration. Belding's savanna sparrows were not found on or near the study site; however, there is a remote possibility that Belding's savanna sparrows could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The proposed project will not affect the Belding's savanna sparrows.

The southern California rufus-crowned sparrow habitat includes moderate to steep, dry, rocky slopes vegetated with low growing scattered shrubs interspersed with patches of grasses and forbs or rock outcrops. This sparrow often occurs in coastal scrub dominated by *Artemisia californica* (California sagebrush) but also may occur in coastal bluff scrub, low chaparral on serpentine outcrops, sparse chaparral recovering from a burn, and edges of tall chaparral. It is generally absent from dense, unbroken stands of coastal scrub and chaparral. Nests are on the ground at the base of rocks, grass tufts, or saplings, or may be 0.3-1 meters above ground in the branches of shrubs or trees. There is a possibility that California rufus-crowned sparrow could find habitat in the northern portion of the 80-acre parcel and other nearby areas. None of these areas will be affected by the proposed project. The potential habitat for this species on the 79 plus acres around the home site will not be disturbed; therefore there will be no impact to the southern California rufus-crowned sparrow.

Lawrence gold finches nest along the central and southern California coastal ranges, the Sierra Nevada foothills, and into Baja California. They over winter in the deserts of southern Arizona. The typical nesting habitat is dry and open woodlands that are near both brushy areas and grassy fields, and usually within 0.5 mi (0.80 km) of a small body of water. This species may nest in other habitats, including rural residential areas, but not in deserts or dense forests. Outside the nesting season it occurs in many open habitats including deserts, suburbs, and city parks. The grassland habitat on the 80-acre parcel may provide suitable habitat for this species, but none were observed on or around the home site. The potential habitat for this species on the over 79 acres around the home site will not be disturbed; therefore there will be no impact to the Lawrence gold finch.

Loggerhead shrikes are often found in open pastures or grasslands and appear to prefer trees like red cedar and hawthorn trees for nesting. The hawthorn's thorns and the cedar's pin-like needles protect and conceal the shrike from predators. Loggerhead shrikes may also nest in fencerows or hedgerows near open pastures. They require elevated perches as lookout points for hunting, and they forage in adjacent open pastures and grasslands with shorter vegetation. The shorter vegetation increases their hunting efficiency while taller vegetation often requires more time and energy to search for prey. As a result, these birds gravitate towards areas of shorter vegetation. They are also more common in large areas of grassland and oak savannas. The grassland habitat on the 80-acre parcel may provide suitable habitat for this species, but none were observed on or around the home site. The potential habitat for this species on the over 79 acres around the home site will not be disturbed; therefore there will be no impact to the loggerhead shrike.

Impacts to nesting birds during future project development need to be considered; however, the construction of the home should not impact any special

status and other bird species that are protected by the Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code.

Typically, it is recommended that disturbances and/or construction activities should occur outside the typical nesting season (September 1 to February 1) if possible to avoid impacts to potential active bird nests. We did not find any bird nests in the trees near the home site during our surveys; however, because our surveys were outside the typical nesting season, further nesting studies of the site may be needed. If this is the case, a nesting survey should be conducted within two weeks of starting construction to make sure no nesting birds will be affected. If active nests are found, adequate buffer zones will need to be established.

Several species of mammals use the habitats within the 80-acre parcel; however, there is very limited use of the home site by mammals largely because the site is highly disturbed and provides only marginal habitat. We found nothing in the way of trails, scat, or diggings to suggest that small mammals use the home site area. However, the habitats on the 80-acre parcel away from the home site are relatively undisturbed and are used by a variety of mammals, including herbivores, omnivores, and carnivores such as those listed on Table 5. The proposed project is on a small area of the 80-acre parcel. None of the mammal habitats on the over 79 acres north and east of the home site will be affected. Therefore, we do not anticipate any impacts to the mammals that currently use the habitats on the larger parcel.

Most of the special status mammals reported from the San Luis Obispo and surrounding quadrangles (Table 9), have specialized habitat requirements that are not present on the subject parcel. For example, there are obviously no appropriate habitats for marine mammals such as northern fur seals and Steller sea lions. Other mammals such as the Morro Bay kangaroo rat have specialized habitat needs as well as highly restricted ranges. Morro Bay kangaroo rats, which are believed to be extirpated, only occur in the Baywood fine sands with coastal dune scrub vegetation found around Morro Bay, Los Osos, and Montana de Oro State Park. No Morro Bay kangaroo rats have been found since the 1980s. Clearly no habitat for this species occurs on the subject parcel.

No wood rat nests were observed on the property, and if they occur, it would be away from the proposed home site. There is a possibility wood rats could use the patches of riparian and coast live oak woodland, but these areas will not be affected by the proposed project. None of the potential wood rat sites on the 80-acre parcel will be affected by the proposed project.

The American badger is a species of special concern in California that inhabits the western United States. Badgers are largely solitary and almost entirely nocturnal, foraging at night and then remaining underground during the daylight hours. It would be a vagrant that moved across the landscape, digging a new

burrow every day or two. Badgers can be found in grasslands where they often dig burrows and forage for small mammals and reptiles; however, badgers can also visit a variety of habitats. No signs of badgers were observed, and no diggings or burrows were found. American badgers may use some of the habitats on the over 79 acres of the parcel that will not be affected by the proposed project; therefore, the proposed project will not affect the American badger.

No bat species were observed on or near the home site and no habitat for these bats was found on the site. However, a few species of special status bats potentially may be in the hillsides within the general area of the subject property. Therefore, there is a remote possibility that Pallid bats, Townsend's big-eared bats, big free-tailed bats, western mastiff bat, big free-tailed bats, California leaf-nosed bat and/ or Yuma bats might find habitat somewhere on the 80-acre parcel on the steep hillsides above the home site. As a result, they could potentially fly over the home site area but would not use the site in any significant way. We found no bats or signs of bats on the site. The proposed project will not impact any special status bat species.

APPENDIX 3. Photos of Harmony Way parcel and home site

Photo 1. An unpaved road provides access to the home site on Harmony Way parcel. The riparian woodland along the ephemeral creek is on the right and the planted Peruvian and Brazilian pepper trees are on the left. The hills to the north (top of photo) are covered mostly by a mosaic of grassland and coastal scrub.



Photo 2. The Harmony Way home site is covered by disturbed coastal valley grassland traversed by dirt roads. The road on the left is located in the access easement west of the subject parcel's property line while the road on the right is on the subject parcel.



Photo 3. The Harmony Way home site is located in a relatively flat area covered by disturbed coastal valley grassland (black arrow). The riparian woodland (right side) is near the eastern margin of the home site. The table is on the home site and the water tank is on the edge of the home site. (August 2017)



Photo 4. The Harmony Way home site (black arrow) is located in a relatively flat area covered by disturbed coastal valley grassland. The riparian woodland (right side) is near the eastern margin of the home site. The table is on the home site and the water tank is on the edge of the home site. The wooden stakes show the location of the home. (February 2018)



Photo 5. View of the Harmony Way home site (black arrow) looking southwest. (August 2017)



Photo 6. View of the Harmony Way home site (black arrow) looking southwest. (February 2018)



Photo 7. There is a patch of coyote bush and brown-spined prickly-pear cactus in the grassland south of the proposed location of the home.

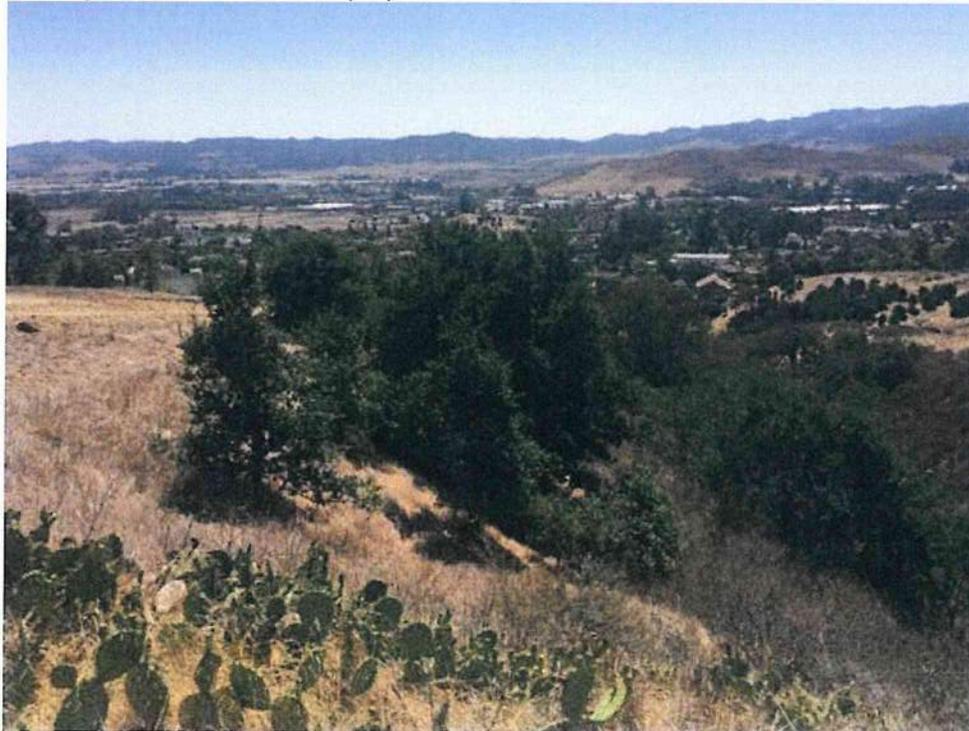


Photo 8. View of the western margin of the Harmony Way home site and access easement showing the mosaic of coast live oaks, coastal scrub, and patch of brown-spined prickly-pear cactus in the canyon.



Photo 9. View of the canyon near the western margin of the access easement and Harmony Way home site showing the mosaic of coast live oaks and coastal scrub.

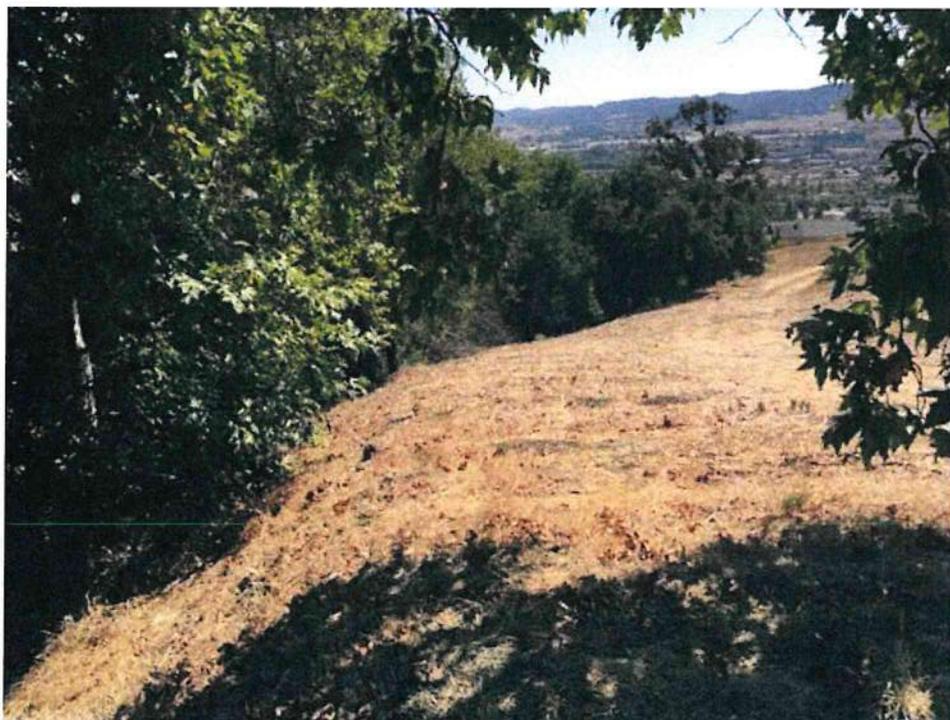


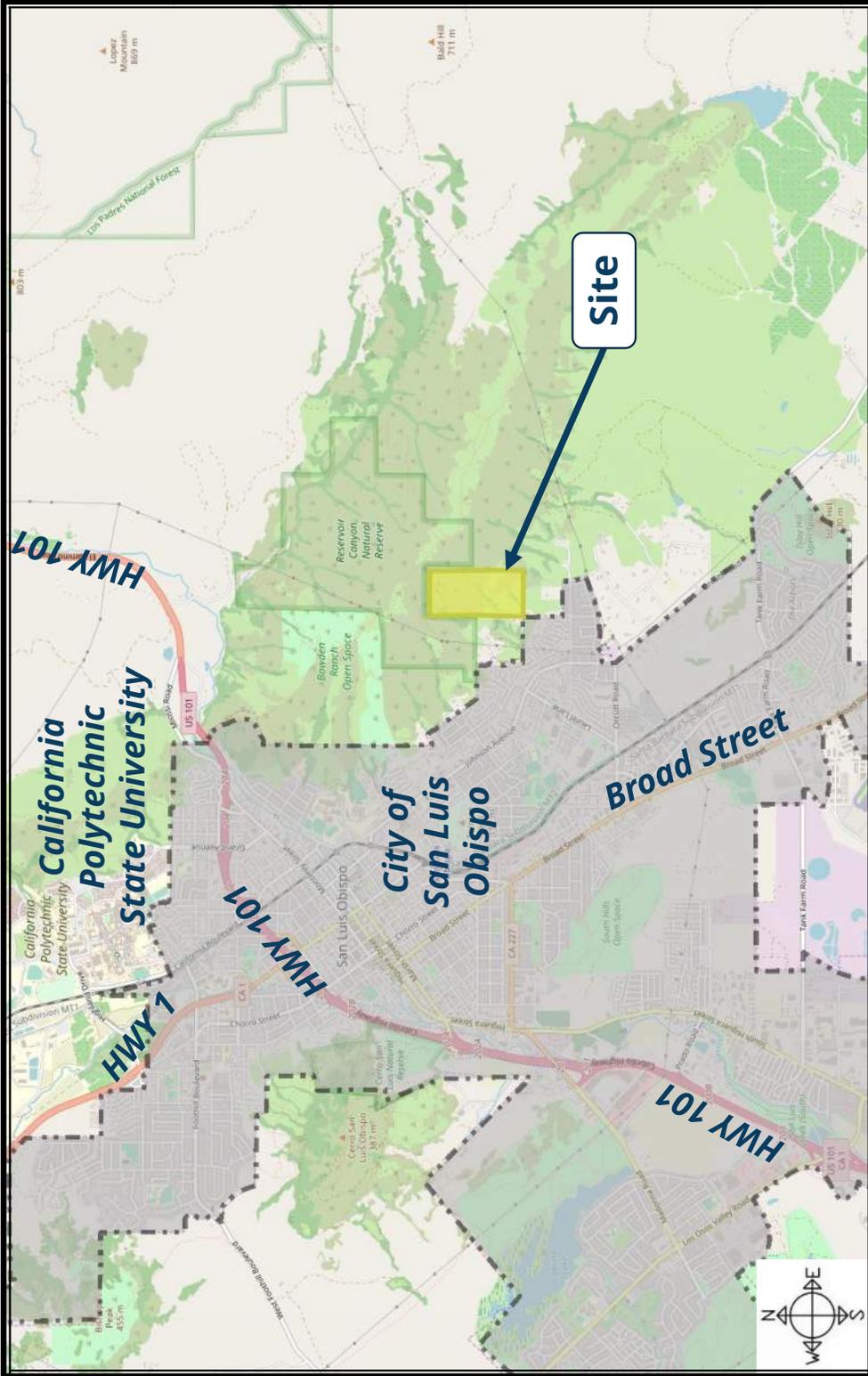
Photo 10. View of the edge of the riparian woodland along the ephemeral creek near the eastern margin of the Harmony Way home site. There will be a 25-foot buffer setback from the riparian woodland to protect this area.



Photo 11. View of the ephemeral creek in an area where the channel is rocky and not well defined by creek banks. Note the litter along the channel and grassland species along the upland areas.



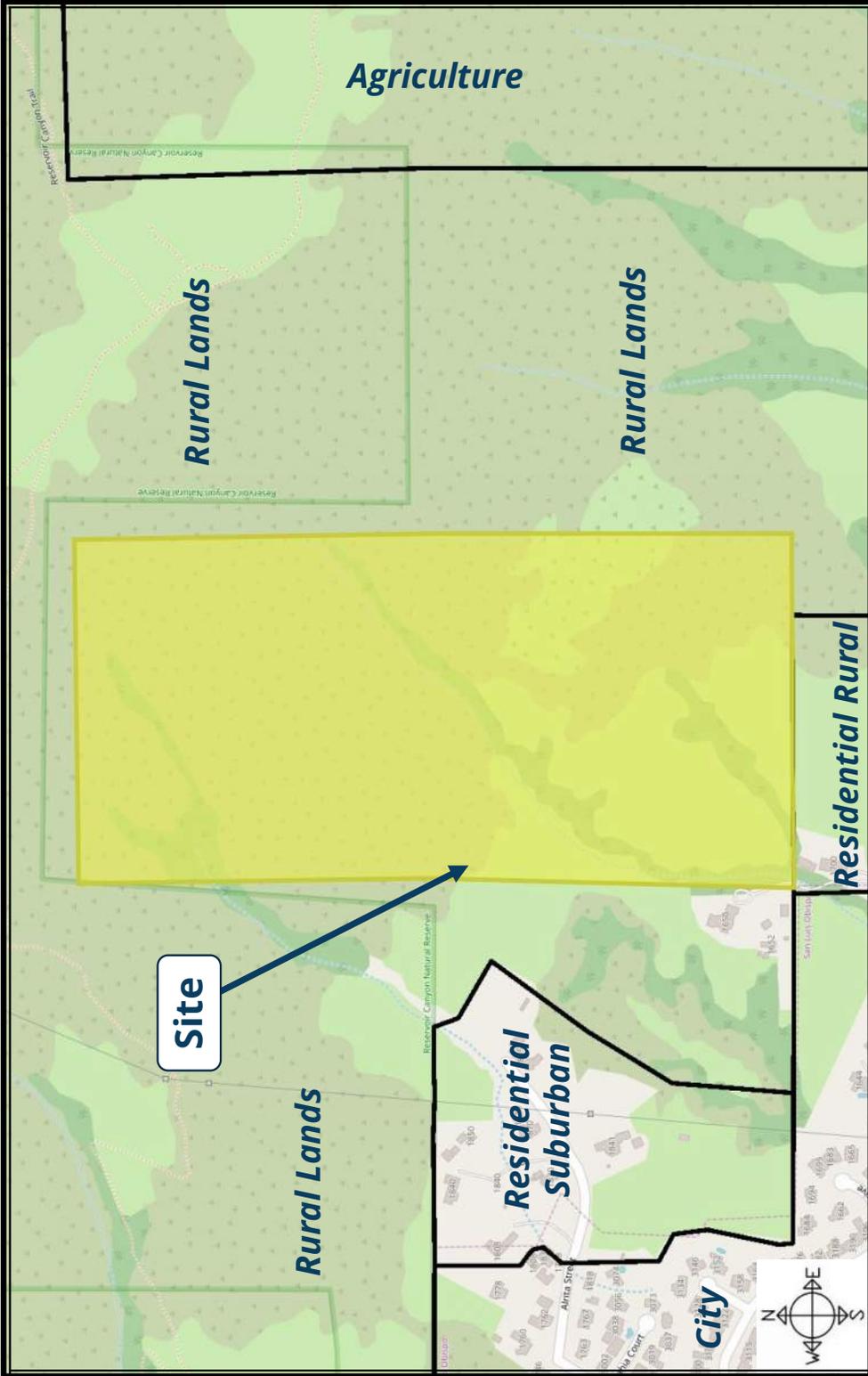
Photo 12. View of the ephemeral creek in a section with a rocky, well-defined channel. There is grassland in the open areas of the riparian woodland but the understory is sparse under the shade of the trees.



Vicinity Map
DRC2018-00165

COUNTY OF SAN LUIS OBISPO

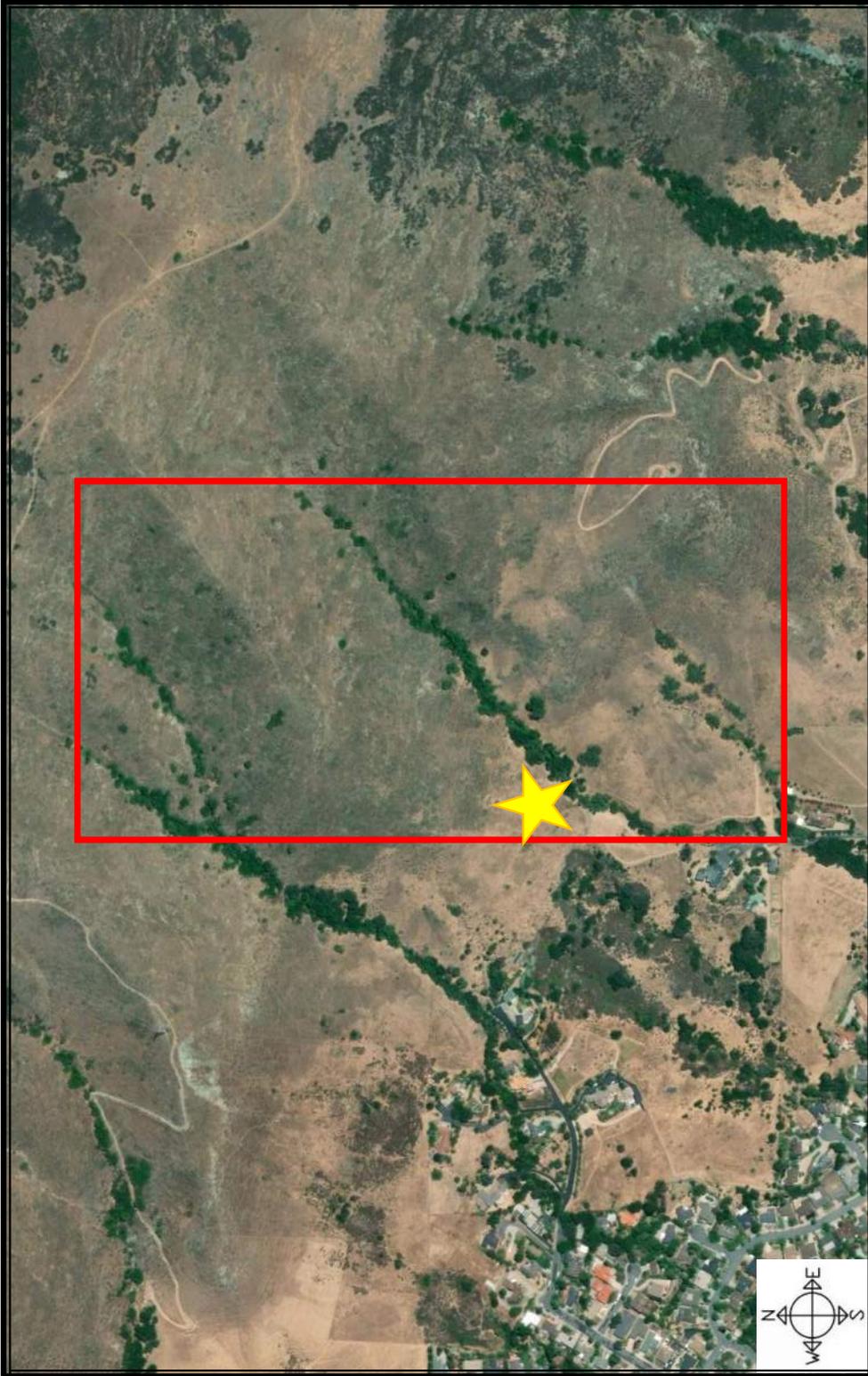




**Land Use Category Map
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

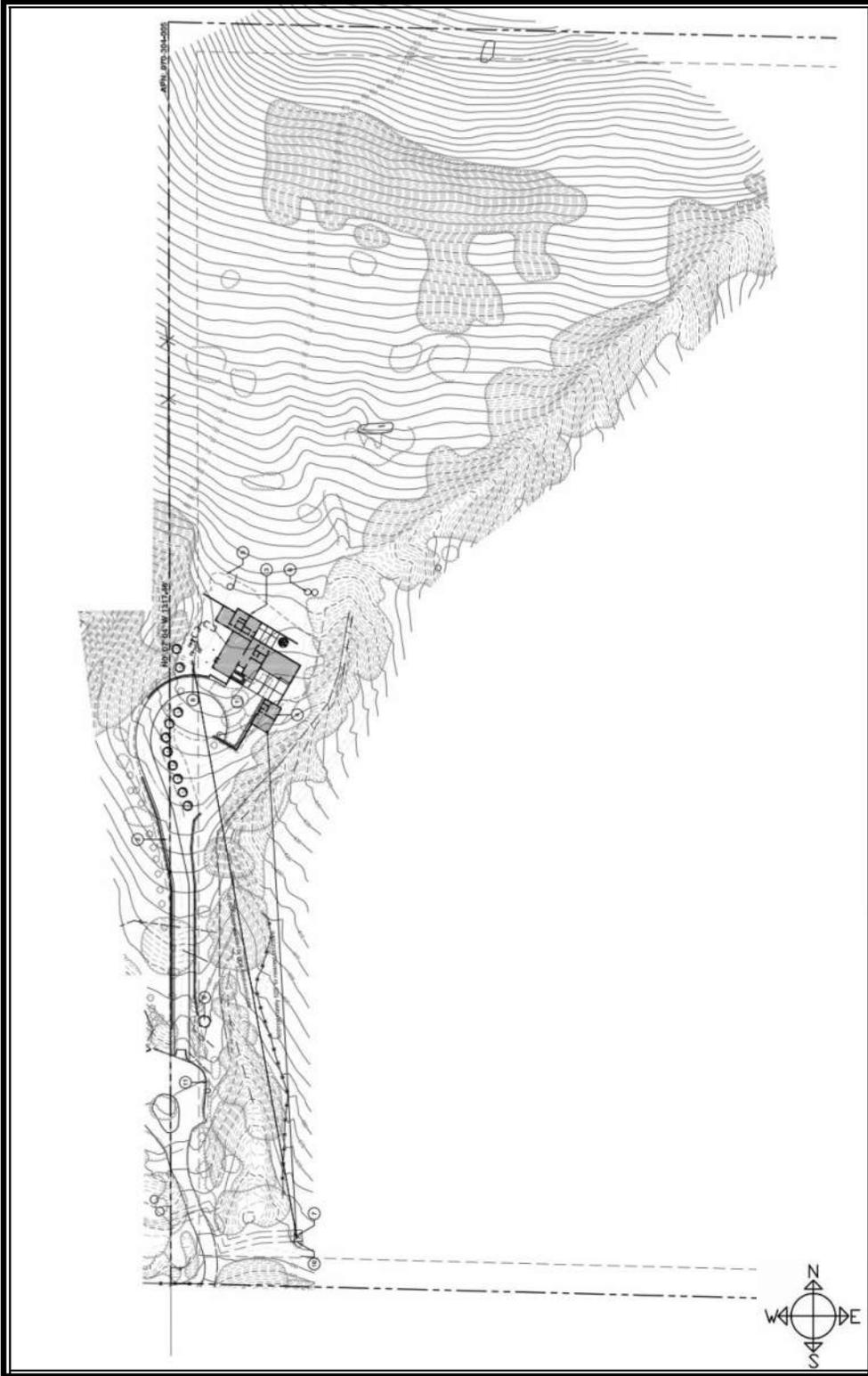




Aerial
DRC2018-00165

COUNTY OF SAN LUIS OBISPO

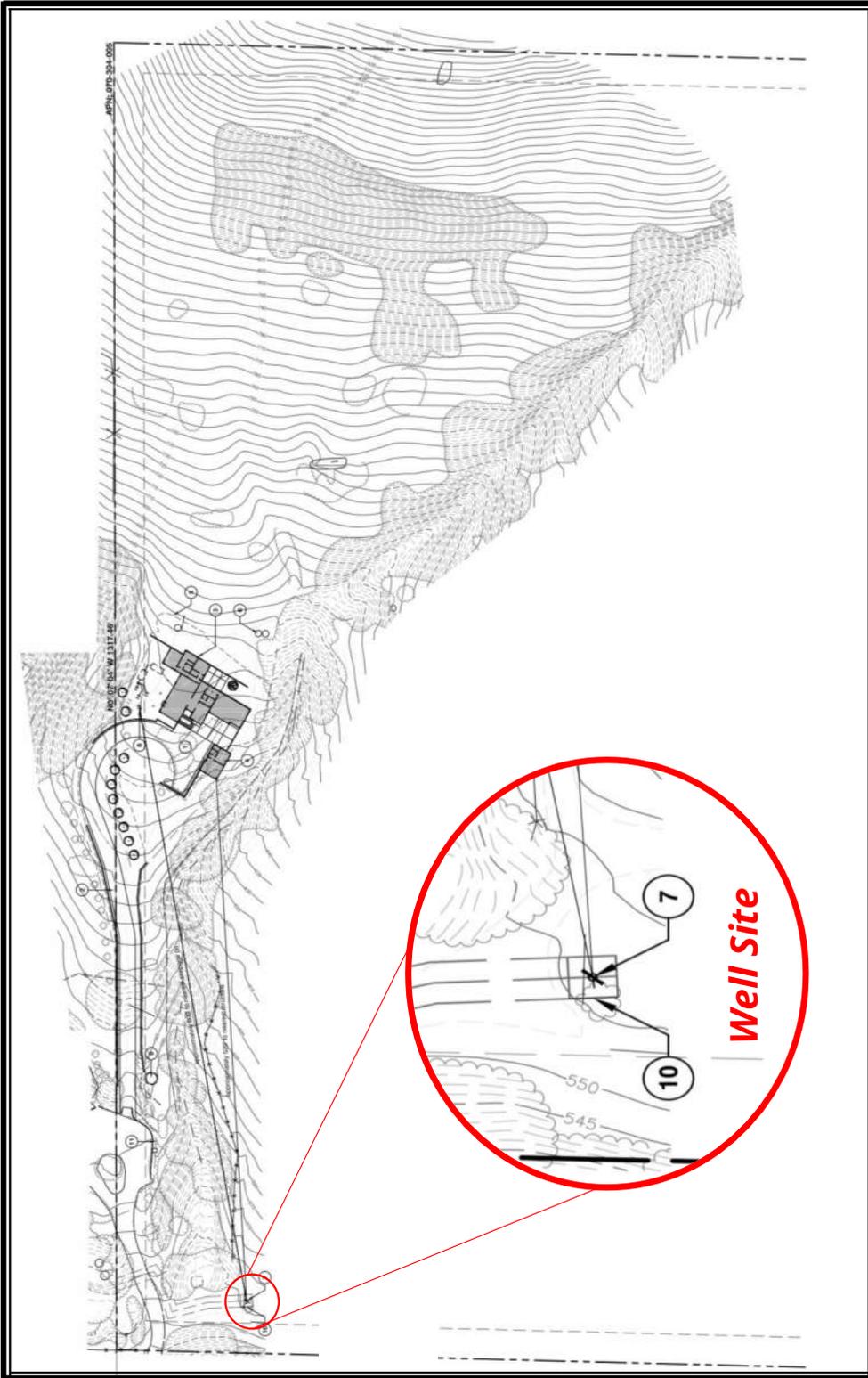




**Site Map
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

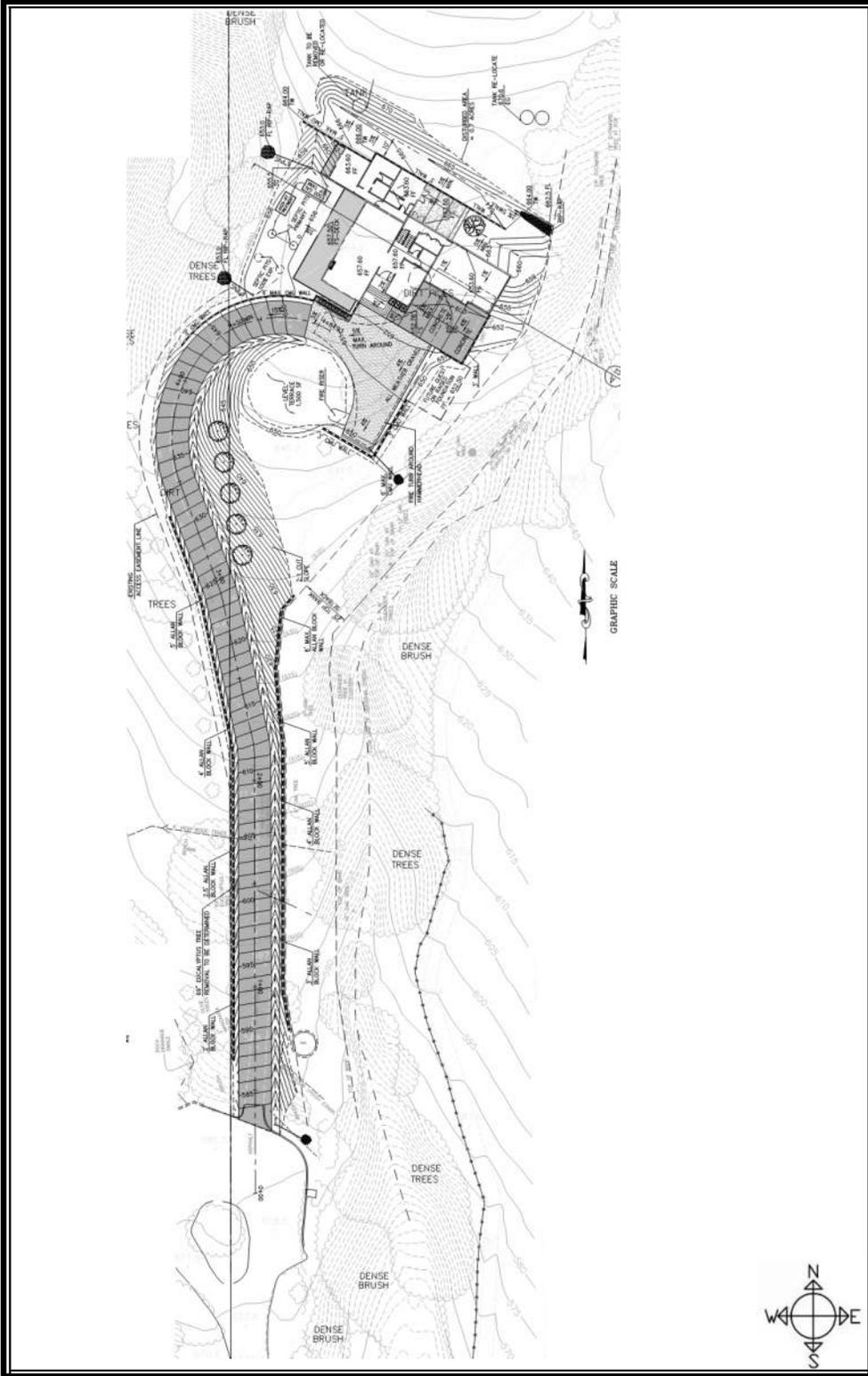




Well Site
DRC2018-00165

COUNTY OF SAN LUIS OBISPO

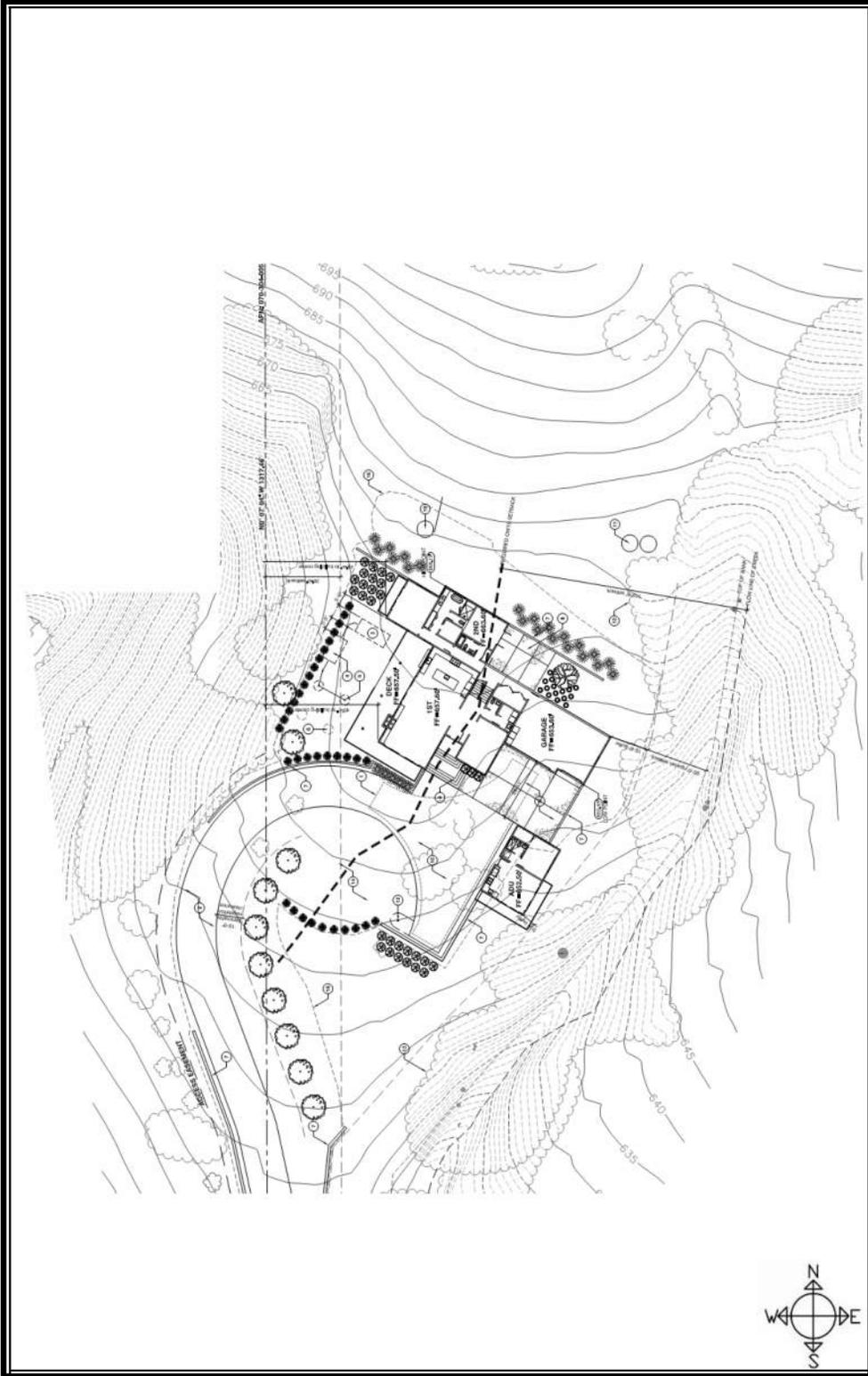




**Grading Plan
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

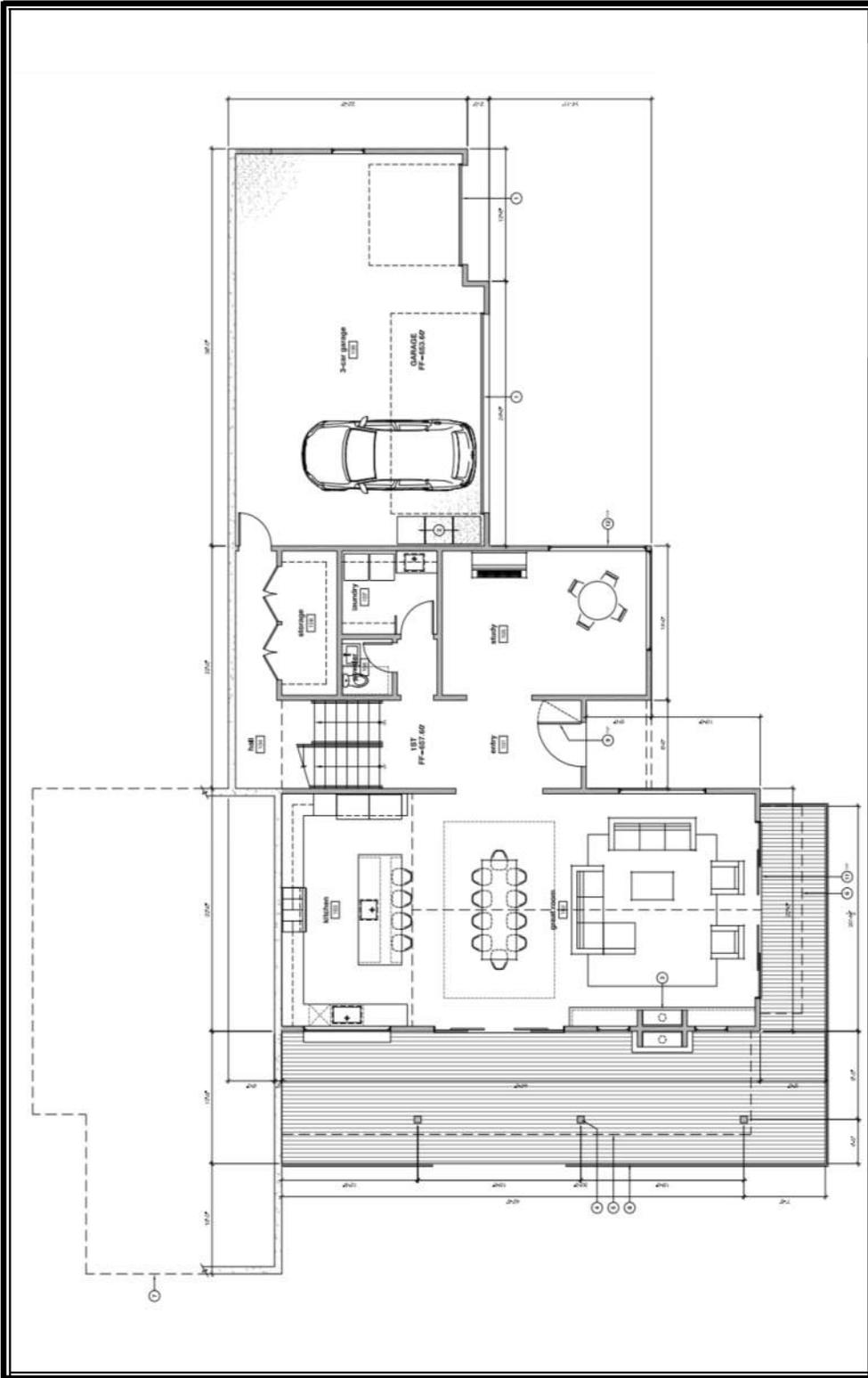




**Natural Grade Calculation
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

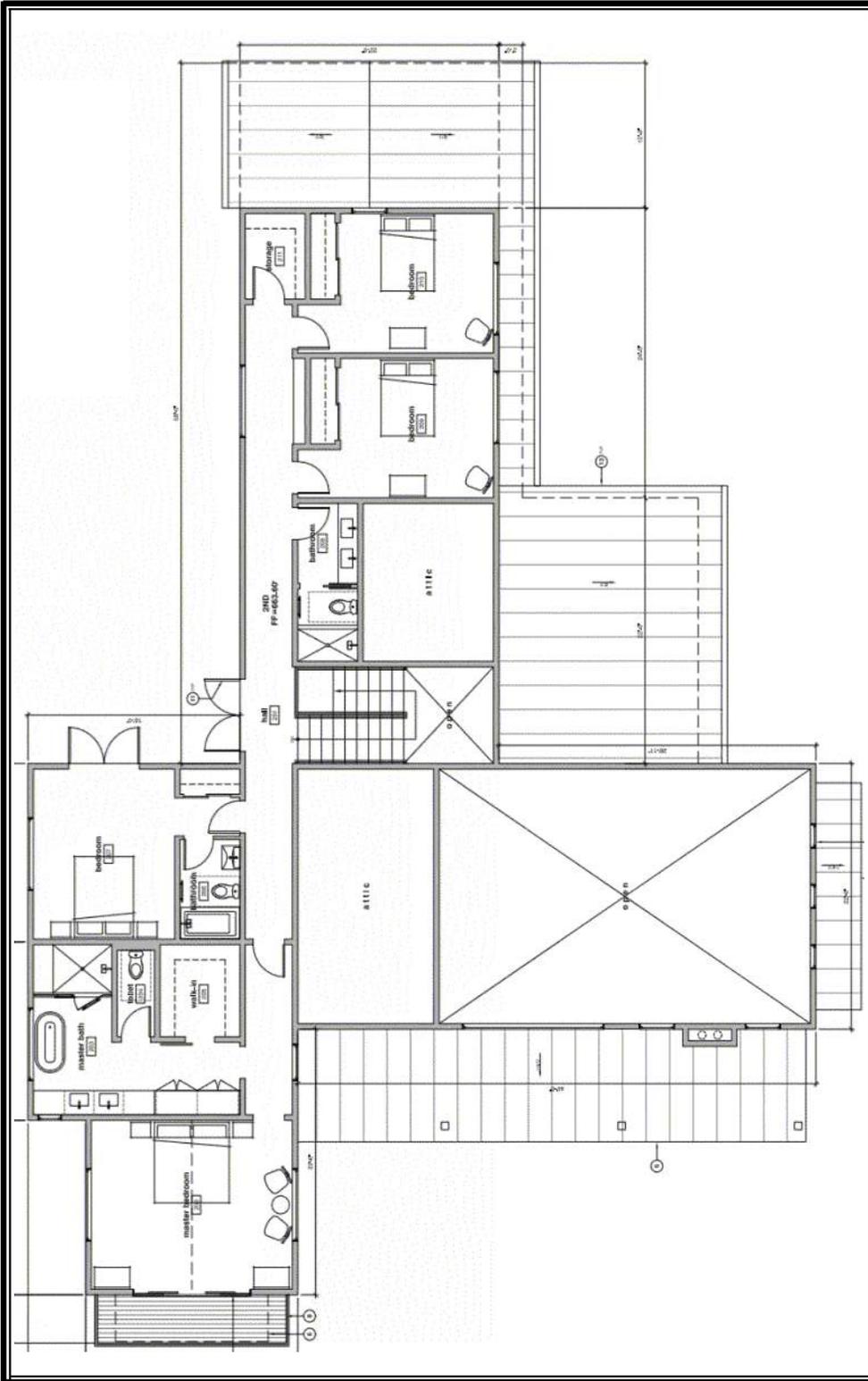




**First Floor Plans
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

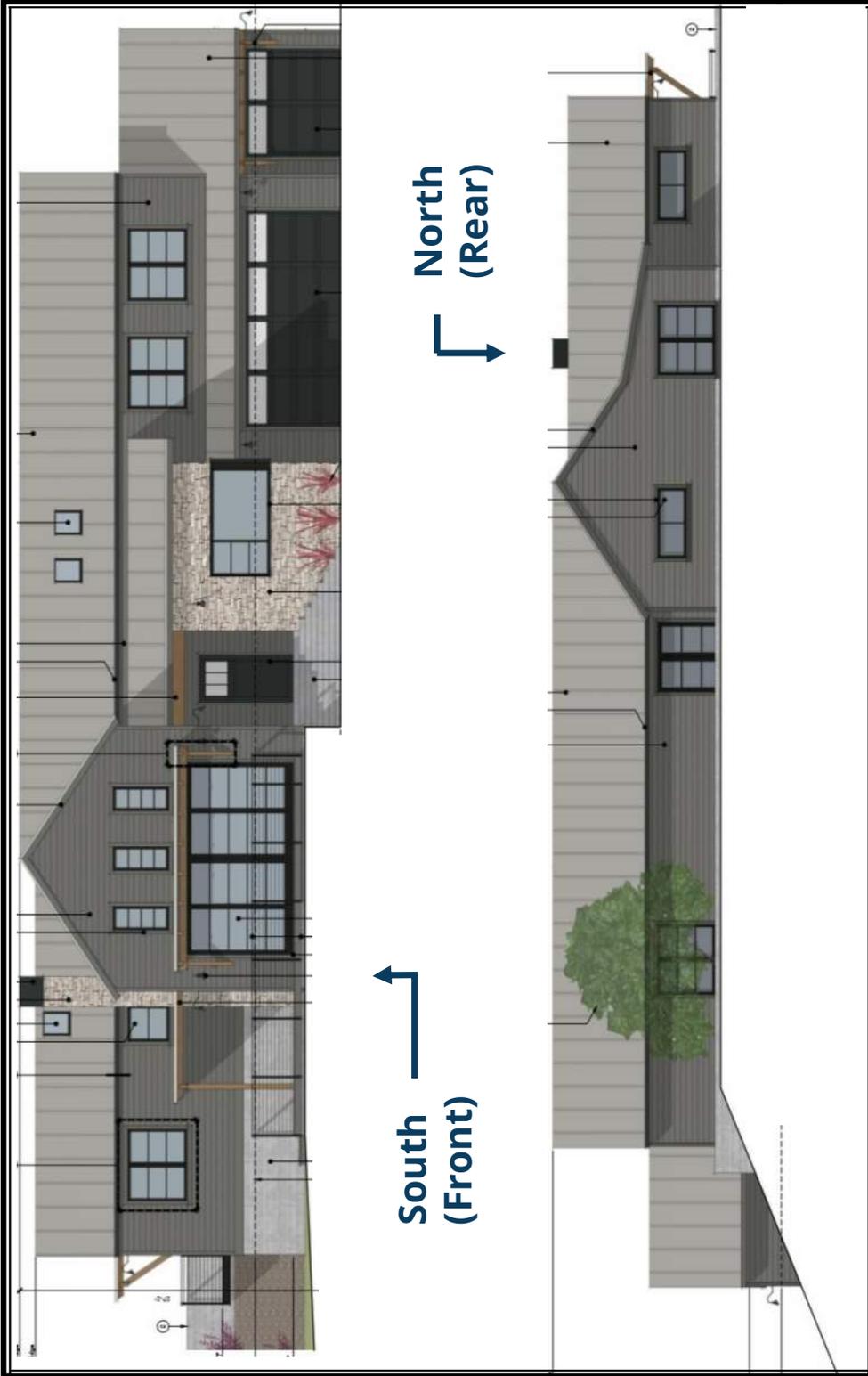




**Second Floor Plans
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO





South
(Front)

North
(Rear)



COUNTY OF SAN LUIS OBISPO

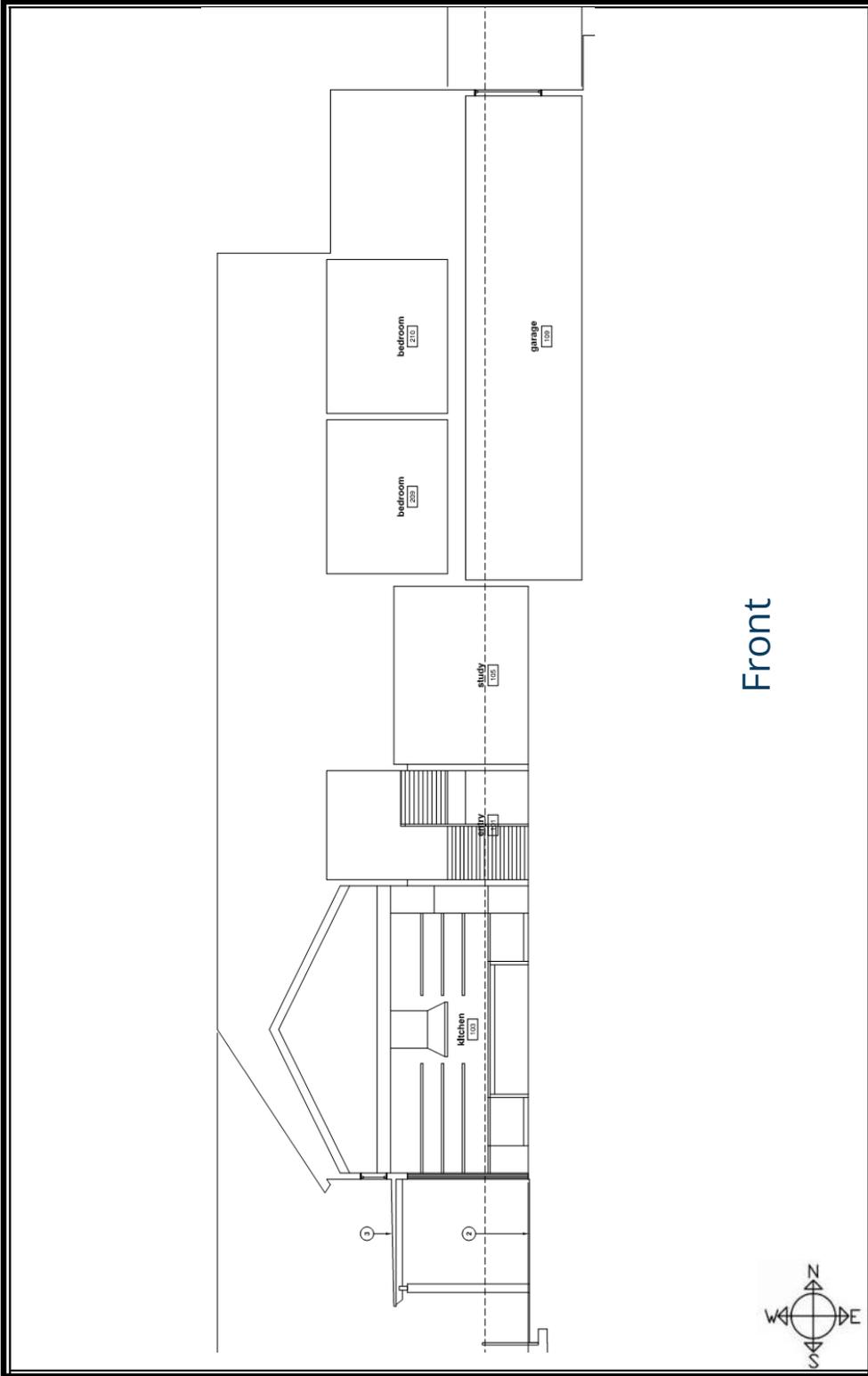
Elevations
DRC2018-00165



**Elevations
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

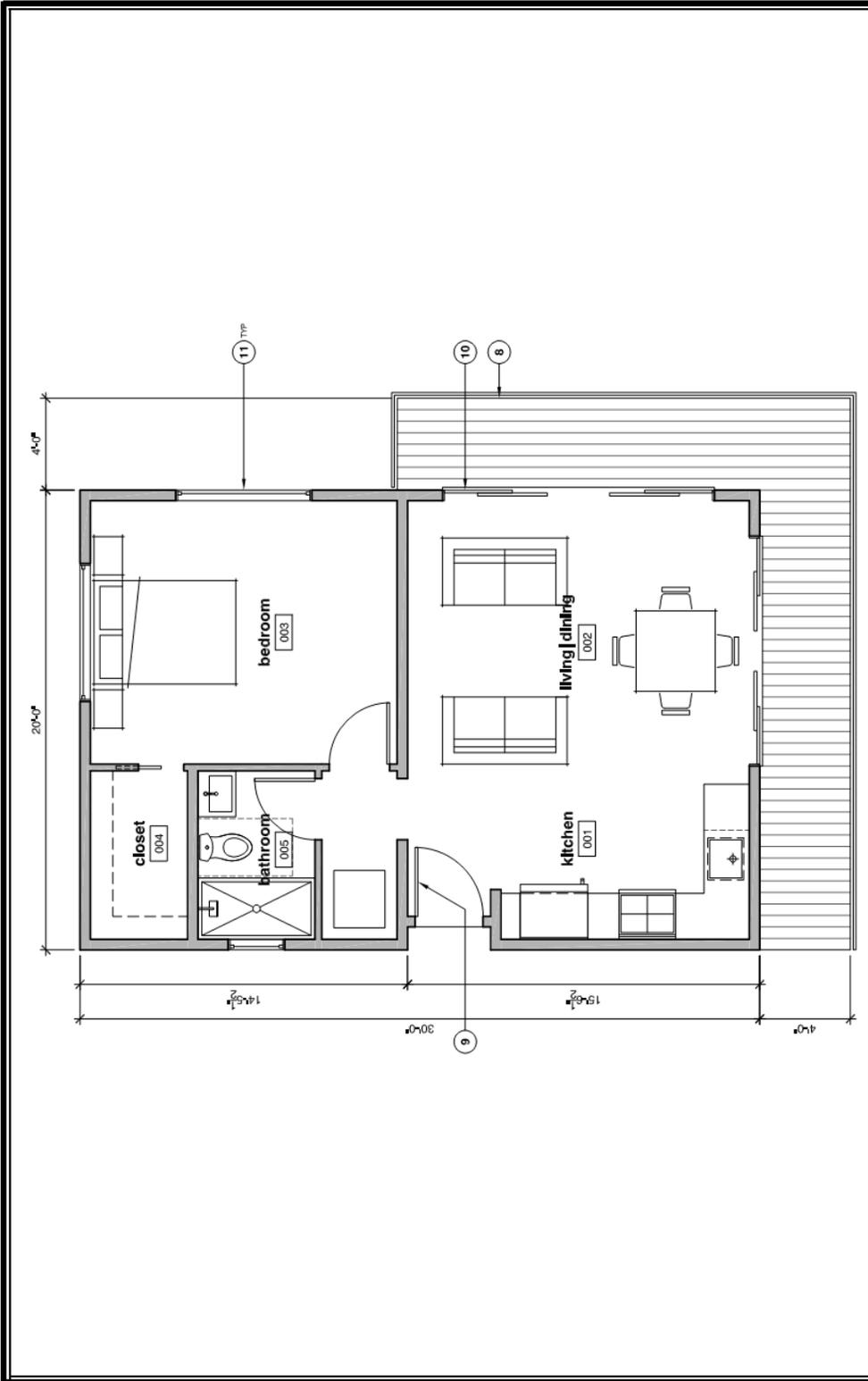




**Cross Section
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO

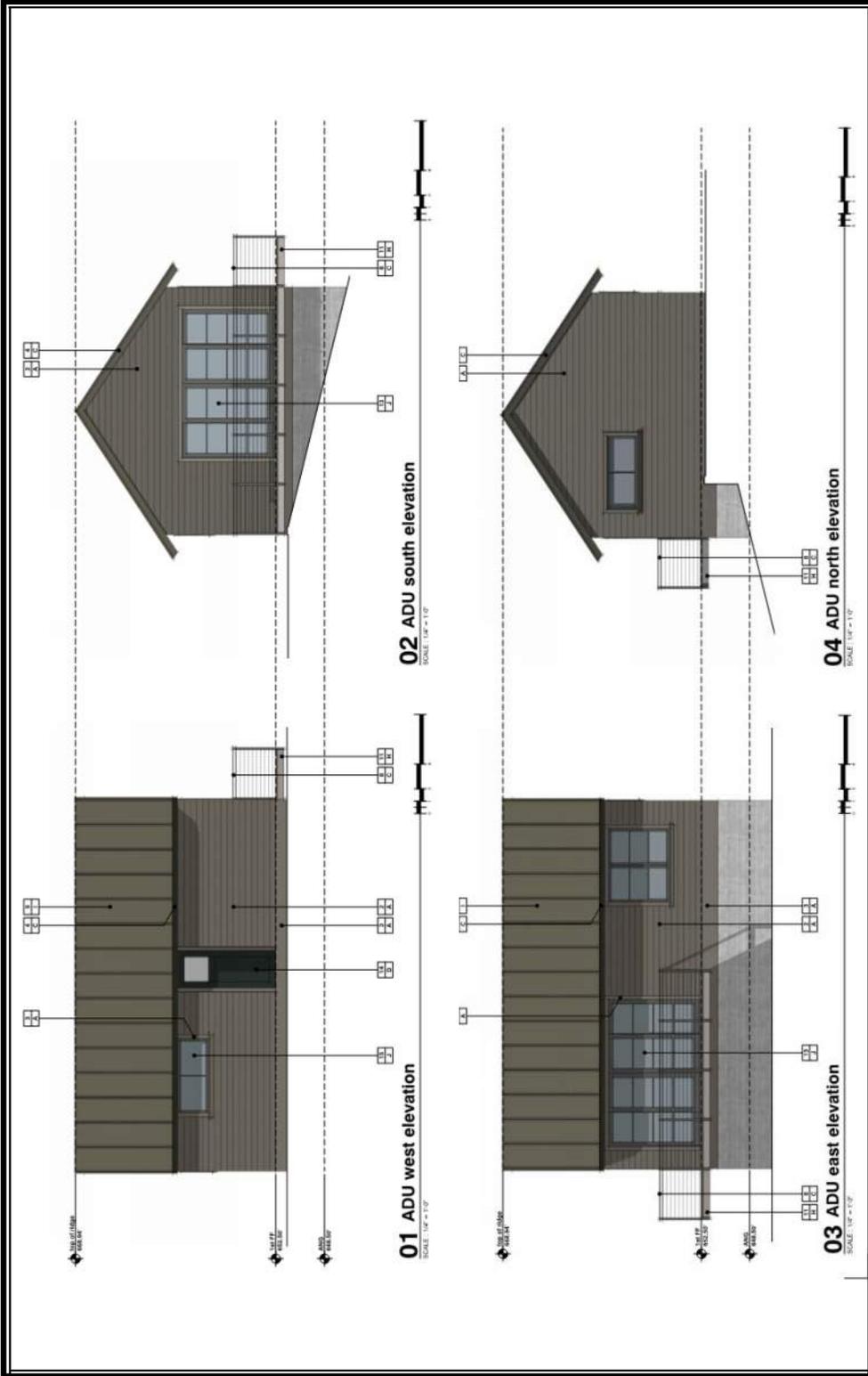




**Guest House Plan
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO





**Guest House Elevations
DRC2018-00165**

COUNTY OF SAN LUIS OBISPO





Date: September 13, 2018
To: Katie Nall, Project Planner
From: Glenn Marshall, Development Services
Subject: Public Works Project Referral for DRC2018-00165, Augustine MUP, Sequoia Dr, San Luis Obispo, APN 070-304-005

Thank you for the opportunity to provide information on the proposed subject project. It has been reviewed by several divisions of Public Works, and this represents our consolidated response.

Public Works Comments:

- A. Project access driveway is being proposed across neighboring parcel (Par 3 of 43/PM/80). A condition is being recommended to require evidence of a recorded easement be provided prior to permit issuance. Recommend that evidence be provided prior to accepting this application as complete.
- B. Project site may be located within the City of San Luis Obispo Sphere of Influence per Memorandum of Agreement (MOA). The applicant is encouraged with meet with the City to determine what road improvement fees would be applicable to this project.
- C. The proposed project is within a drainage review area. Drainage plan is required to be prepared by a registered civil engineer and it will be reviewed at the time of Building Permit submittal by Public Works. The applicant should review Chapter 22.52.110 or 23.05.040 of the Land Use Ordinance prior to future submittal of development permits.
- D. This project may be a regulated project as it is located in a Stormwater Management Area and is therefore required to submit a Stormwater Control Plan (SWCP) Application. The Stormwater Control Plan application, SWCP template, and LID Handbook guidance can be found at:
<https://www.slocounty.ca.gov/Departments/Planning-Building/Stormwater/Services/Stormwater-Requirements-for-New-Construction.aspx>
- E. If the project site disturbs 1.0 acre or more the applicant must enroll for coverage under California's Construction General Permit, which may require preparation of a project Stormwater Control Plan even though its located outside a Stormwater Management Area.

Recommended Project Conditions of Approval:
Access

- 1. **Prior to issuance of construction permits**, the applicant shall provide evidence to the Department of Planning and Building that project's offsite access easement over Parcel 3 of 43/PM/80 have been recorded with the County Clerk.
- 2. **At the time of application for construction permits**, the applicant shall provide evidence to the Department of Planning and Building that onsite circulation and pavement structural sections have been designed and shall be constructed in conformance with Cal Fire, or the regulating fire agency standards and specifications back to the nearest public maintained roadway.

Fees

3. **Prior to commencing Land Use Permit activities**, the project is located within the City of San Luis Obispo Sphere of Influence per Memorandum of Agreement approved by the Board on October 18, 2005. The applicant shall submit evidence to the County that all City impact fees applicable to this project have been paid, or that none are required.

Drainage

4. **At the time of application for construction permits**, the applicant shall submit complete drainage plans prepared by a licensed civil engineer for review and approval in accordance with Section 22.52.110 (Drainage) or 23.05.040 (Drainage) of the Land Use Ordinance.
5. **At the time of application for construction permits**, the applicant shall submit complete erosion and sedimentation control plan for review and approval in accordance with 22.52.120.
6. **At the time of application for construction permits**, the applicant shall demonstrate that the project construction plans are in conformance with their Stormwater Control Plan.

Stormwater Pollution Prevention Plan (SWPPP)

7. **At the time of application for construction permits**, if the project disturbs more than 1.0 acre or is part of a common plan of development, the applicant must enroll for coverage under California's Construction General Permit. Sites that disturb less than 1.0 acre must implement all required elements within the site's erosion and sediment control plan as required by San Luis Obispo County Codes.

Stormwater Control Plan (SWCP):

8. **At the time of application for construction permits**, the applicant shall demonstrate whether the project is subject post-construction stormwater requirements by submitting a Stormwater Control Plan application.
 - a. The applicant must submit a Stormwater Control Plan (SWCP) prepared by an appropriately licensed professional to the County for review and approval. Applicants must utilize the County's latest SWCP template.
 - b. If applicable, the applicant shall submit a draft stormwater operations and maintenance plan for review by the County. The operations and maintenance plan may be incorporated into existing or proposed CC&Rs or drafted as an Agreement.
 - c. If applicable, following approval by the County, the applicant shall record with the County Clerk-Recorder a Stormwater Operations and Maintenance plan to document on-going and permanent storm drainage control, management, treatment, inspection and reporting.
 - d. If applicable, the applicant shall submit a draft General Notice to document the location and type of control measures that were installed to mitigate Performance Requirement No. 2. Following approval by the County, the applicant shall record the General Notice with the County Clerk-Recorder. The recorded control measures shall remain in good working order in perpetuity.
9. **Prior to approval of the improvement plans or construction permits**, if necessary, the applicant shall submit a draft Storm Water Operations and Maintenance Plan for all structural post-construction storm water treatment or retention facilities and it must be provided for review.

10. **Prior to acceptance of the improvements**, the Stormwater Operations and Maintenance plan and General Notice must be updated to reflect as-built changes, approved by the County, and re-recorded with the County Clerk-Recorder as amendments to the original document.

G:\Development_DEVSERV Referrals\Land Use Permits\MUP\DRC2018\DRC2018-00165 Augustine MUP SLO.docx



CAL FIRE – SAN LUIS OBISPO

FIRE SAFETY PLAN



Date: **September 20, 2018**

Project Number: DRC2018-00165

Project City: San Luis Obispo

Owner Name: Jason/ Erin Augustine

City, State, Zip: San Luis Obispo, Ca. 93401

Agent Name: Bryan Ridley

City, State, Zip: San Luis Obispo, Ca. 93401

Project Description: New 3445sf. SFD. 596sf. accessory dwelling

Project Location: Sequoia Dr./ Harmony Dr.

Cross Street:

Owner Address: 1370 Woodside Dr.

Owner Phone(s): 805-234-5629

Agent Address: P.O. Box 1810

Agent Phone(s): 805-704-0535

- The following **checked** items are required to be completed prior to final inspection of this project.
- Fire department final inspection can be scheduled by calling **(805) 543-4244, extension #3490**.
- Inspections will be completed on **Tuesday** for South County areas and **Thursday** for North County areas.
- Please have your County issued permit card on site and visible.
- Visit our website at www.calfireslo.org for more information.

This project is located approximately **8** minutes from the closest CAL FIRE/San Luis Obispo County Fire Station. The project **is** located in State Responsibility Area for wildland fires, and **is** designated as a **Moderate** Fire Hazard Severity Zone. This project is required to comply with all fire safety rules and regulations including the California Fire Code, the Public Resources Code and any standards referenced therein.

The following CHECKED standards are required:	
<input checked="" type="checkbox"/>	SETBACK 30-foot building setback from property line required for parcels 1 acre in size or larger **Note: All setbacks are subject to S.L.O County Planning Department approval.
<input checked="" type="checkbox"/>	FIRE SPRINKLERS A fire sprinkler system is required for this project per local Fire Code.
<input checked="" type="checkbox"/>	Fire alarm bell must be installed and working at final inspection (If required by NFPA 13D).
<input checked="" type="checkbox"/>	TANK A water storage tank is required that gravity feeds a residential fire connection
<input checked="" type="checkbox"/>	7500 gallons of minimum water storage is required for fire protection
<input type="checkbox"/>	Note: 2500 Gallon minimum. Structures within 50 feet of project are calculated as part of the tank capacity requirement. C-16 or FPE will calculate capacity of tank if project is sprinklered.
<input type="checkbox"/>	Tanks must be steel or concrete in High and Very High Fire Hazard Severity zones
<input checked="" type="checkbox"/>	Automatic Fill, Sight Gauge & Venting System required
<input checked="" type="checkbox"/>	Minimum 4-inch plumbing: Schedule 40 PVC or Iron Pipe
<input checked="" type="checkbox"/>	System must gravity drain to the Fire Department Connection
<input checked="" type="checkbox"/>	Fire connection shall be located on the approach to the structure(s)
<input checked="" type="checkbox"/>	Fire connection must be located not less than 50 feet & no more than 150 feet from the structure
<input checked="" type="checkbox"/>	Fire connection must be located 10-12 feet from the edge of the driveway/road & 24-36" above finished grade
<input checked="" type="checkbox"/>	Fire connection outlet valve must be a 2-1/2" brass National Standard male thread with brass or plastic cap. The outlet must face toward the driveway at a 90° angle.
<input checked="" type="checkbox"/>	If fire connection has less than 20 psi, then the word "DRAFT" will be clearly and permanently marked on the fire connection
<input checked="" type="checkbox"/>	Must maintain a 3 foot clear space around the circumference of the connection at all times
<input checked="" type="checkbox"/>	Blue dot reflector must be located near fire connection, visible to approaching vehicles
<input type="checkbox"/>	HYDRANT A fire hydrant is required that can deliver 750 gallons per minute for 2 hours.
<input type="checkbox"/>	****Must submit a completed Community Water System Verification Form
<input type="checkbox"/>	Must have two 2 1/2" outlets and one 4" outlet with National Standard threads
<input type="checkbox"/>	Must be located within 8 feet of the roadway
<input type="checkbox"/>	Place a blue dot road reflector on roadway, just off center, on the side of the hydrant
<input type="checkbox"/>	Hydrant must be located within 500 feet of the residence.
<input type="checkbox"/>	Must maintain a 3 foot clear space around the hydrant at all times

<input type="checkbox"/>	ACCESS ROAD A 20-foot wide access road is required
<input type="checkbox"/>	All weather surface capable of supporting 20 tons
<input type="checkbox"/>	10 feet of fuel modification is required on both sides of road
<input type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"
<input type="checkbox"/>	Where road exceeds a 12% grade, it must be a nonskid surface
<input type="checkbox"/>	If road exceeds a 16% grade, it must be certified by an engineer
<input type="checkbox"/>	Road must be named & posted using the County standard signage
<input checked="" type="checkbox"/>	DRIVEWAY must be 16 feet wide
<input checked="" type="checkbox"/>	All weather surface capable of supporting 20 tons
<input checked="" type="checkbox"/>	Where driveway exceeds a 12% grade, it must be a paved nonskid surface
<input checked="" type="checkbox"/>	10 feet of fuel modification is required on both sides of the driveway
<input checked="" type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"
<input checked="" type="checkbox"/>	Driveways exceeding 300 feet require a fire engine turnaround within 50 feet of residence/structure
<input checked="" type="checkbox"/>	Driveways exceeding 800 feet require a turnout(s) at midpoint and no more than 400 feet apart (Exception: 16' wide driveways)
<input type="checkbox"/>	BRIDGE is required to support a fire engine load weight of 20 tons
<input type="checkbox"/>	Bridge must have a sign indicating load & vertical clearance limits at entrances
<input type="checkbox"/>	One-lane bridge: minimum 10', turnouts at both ends, one-way signs, clear visibility
<input checked="" type="checkbox"/>	GATE entrance shall be 2 feet wider than width of traffic lane & located 30 feet from roadway.
<input checked="" type="checkbox"/>	Center line of lane turning radius must be at least 25 feet
<input checked="" type="checkbox"/>	Electric gates shall be maintained <u>operational at all times</u> and shall provide Fire Department emergency access via a "Knox" switch. A Knox application must be requested from the Prevention Bureau. Manual gates may be secured by a padlock.
<input checked="" type="checkbox"/>	Must be setback a minimum of 30 feet from the SLO County maintained road
<input checked="" type="checkbox"/>	100' FLAMMABLE VEGETATION MANAGEMENT around structures required.
<input checked="" type="checkbox"/>	Maintain a fire clearance of 30 feet around all buildings & structures
<input checked="" type="checkbox"/>	Within the area of 30'-100' from structures, additional fire reduction measures shall be required.
<input checked="" type="checkbox"/>	Remove limbs located within 10 feet of chimney & trim dead/dying limbs that overhang the roof. Leaves, needles, or dead growth shall be removed from the roof
<input checked="" type="checkbox"/>	LPG TANKS Minimum separation from buildings & property lines for LPG above ground tanks is: 10 feet for 125-500 gallon container; 25 feet for 501-2,000 gallon container
<input checked="" type="checkbox"/>	Maintain a minimum vegetation clearance of 10 feet around LPG tanks or containers
<input checked="" type="checkbox"/>	IGNITION RESISTANT CONSTRUCTION REQUIREMENTS This project must meet all requirements of Chapter 7A of the 2016 California Building Code for Fire-Resistance-Rated Construction. Please contact the San Luis Obispo County Department of Planning & Building for more information at (805) 781-5600.
<input checked="" type="checkbox"/>	A Class A non-combustible roof is required that meets all requirements of Chapter 7A of the 2013 California Building Code.
<input checked="" type="checkbox"/>	ADDRESS Each residence requires separate address numbers, assigned by the San Luis Obispo County Department of Planning and Building. Please contact (805) 781-5157 for more information.
<input checked="" type="checkbox"/>	Highly visible with contrasting background permanent address numbers shall be placed at the driveway entrance <u>and</u> directional signs at each T or Y intersection (minimum 6" letter/number height, 1/2 inch stroke). Reflective numbers are highly recommended!
<input checked="" type="checkbox"/>	Highly visible address numbers shall be placed on the residence(s). (Minimum 6" letter/number height with 1/2 inch stroke).
<input checked="" type="checkbox"/>	SMOKE & CARBON MONOXIDE DETECTOR Smoke detectors are required in all sleeping areas and in hallways leading to sleeping areas.
Comments:	

Please note: Any changes made to this project shall cancel the Fire Safety Plan and require new plans to be submitted to CAL FIRE for review and the issuance of a new fire plan. If this project is not completed within the time allotted by the Building Permit; it will be required to meet all applicable fire codes in effect at the time a new permit is issued and before final inspection of the structure. Any future change of occupancy will also require compliance with all codes in effect at that time.

Tony Gomes

Inspector

Fire Captain



October 10, 2018

File No.: 0916-01
SLO Co. File No. DRC2018-00165

Mr. & Mrs. Jason and Erin Augustine
C/o Bracket Architecture Office
P.O. Box 1810
San Luis Obispo, California 93401

Attention: Mr. Bryan Ridley

Subject **Review of Engineering Geology Investigation**

Project: Augustine Residence
 Harmony Way (APN 070-304-005)
 San Luis Obispo Area of San Luis Obispo County, California

References: 1. Engineering Geology Investigation, Parcel 5, Harmony Way, APN: 070-304-005, San Luis Obispo Area of San Luis Obispo County, California, Project No. SL09905-3, prepared by Geosolutions, Inc., dated August 29, 2018.

Dear Mr. & Mrs. Augustine:

The purpose of this letter is to summarize our findings and review of the above referenced engineering geology investigation (Reference 1).

The report was reviewed for conformance with section 22.14.070 of the San Luis Obispo County Land Use Ordinance (LUO) and the San Luis Obispo County Guidelines for Engineering Geology Reports. It is our opinion that the referenced report presents a comprehensive outline, modeling the site engineering geology and geologic constraints.

Our findings are congruent with the conclusions and recommendations of the report prepared by Geosolutions, Inc., dated August 29, 2018. The itemized geologic recommendations summarized on page 3 (Section 3.0, Items 1-7, Reference 1) should be included as conditions of approval prior to the issuance of permits.

October 10, 2018

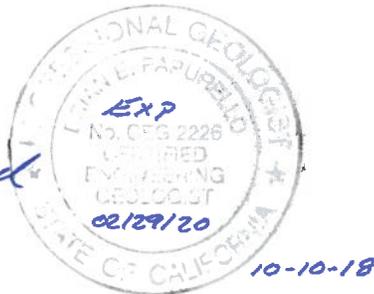
File No.: 0916-01
SLO Co. File Nos. DRC2018-00165

Please contact me at (831) 443-6970 or bpapurello@landseteng.com if you have questions regarding this matter.

Respectfully,
LandSet Engineers, Inc.



Brian Papurello, CEG 2226



Doc. No. 1810-115.REV

Copies: Addressee (1)
Mr. Kathryn Nall, San Luis Obispo Co., Dept. of Planning & Building (1)
Mr. Jeffrey Pfof, Geosolutions, Inc. (1)
SLO County Geology files

SAN LUIS OBISPO COUNTY ENGINEERING GEOLOGY REPORT REVIEW FORM

The San Luis Obispo County Planning and Building Department uses the following checklist as part of reviewing engineering geology reports. Explanatory notes are appended and keyed to each numbered item.

Checklist item within consulting report	Adequately described: satisfactory	Additional data needed: unsatisfactory
1. Project Description	X	
2. SLO County Geological Study Area Map	X	
3. Site Location	X	
4. Regional Geologic Map	X	
5. Original engineering geologic map of site	X	
6. Aerial photograph interpretation	X	
7. Subsurface site geology	X	
8. Geologic cross sections	X	
9. Active faulting and coseismic deformation across the site	X	
10. Landslides	X	
11. Flooding, severe erosion, deposition	X	
12. On-site septic systems	X	
13. Hydrocollapse of alluvial fan soils	X	
14. Evaluation of historical seismicity and regional faults	X	
15. Characterize and classify geologic site class	X	
16. Probabilistic evaluation of earthquake ground motion	X	
17. Peak ground acceleration for MCE levels of ground motion	X	
18. Site coefficients F_a & F_v and spectral accelerations $S_s, S_1, S_{MS}, S_{M1}, S_{DS}$ & S_{D1}	X	
19. Geologic setting for liquefaction analysis	X	
20. Liquefaction methodology	N/A	
21. Bluff erosion	N/A	
22. Tsunami or seiche potential	X	
23. Expansive soil	X	
24. Naturally occurring asbestos	X	
25. Radon and other hazardous gasses	X	
26. Geologic constraints anticipated during grading operations	X	
27. Areas of cut and fill, preparation of the ground, and depth of removals	N/A	
28. Subdrainage plans for groundwater	N/A	
29. Final grading report and as-built map	N/A	
30. Summary sheet	X	
31. Age of report	X	
32. Engineering geology report signed by CEG	X	



Community Development

919 Palm Street, San Luis Obispo, CA 93401-3249
805.781.7170
slocity.org

October 16, 2018

Katie Nall
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, CA 93408

SUBJECT: Proposed minor use permit for a new 3,445 sf single family residence with attached garage and accessory dwelling unit at Sequoia Drive and Harmony Drive

The 2016 City/County Memorandum of Understanding states that the County and City should work cooperatively to plan for future uses and public services and facilities to improve and maintain area circulation, connections, and to preserve agricultural land and open space. Thank you for the opportunity to provide input on the above referenced entitlement application.

Community Development Department Comments

The project site is located within the City of San Luis Obispo's Greenbelt area and is in an important transition area just outside the City's urban reserve line in a highly sensitive visual resource area as identified in the City's Conservation and Open Space General Plan Element.

The proposed project raises concerns that the proposed construction and associated grading for access on the steep slopes of this site above existing City development will result in detrimental impacts to City viewsheds and identified General Plan scenic corridors and points around the City as identified in the City of San Luis Obispo General Plan Conservation and Open Space Element section Figure 11: Scenic Roadways and Vistas, and Circulation Element Figure 3, Scenic Roadways.

The submitted Highway Corridor Visual Analysis is inadequate to determine impacts to City scenic corridors. The applicant should provide additional visual resource analysis which can be peer reviewed and which provides accurate simulation of project impacts from multiple vantage points in the City and from several designated scenic corridors from which this site would be visible as discussed above. Unless adequate information can be shown that the project would clearly not result in adverse impacts to scenic vistas and resources, an initial study should be prepared to assess the potential environmental effects of the project as required by the California Environmental Quality Act (CEQA).

City of San Luis Obispo referral response
Augustine MUP; initial submittal comments

The City requests to continue to be notified/consulted on further project review such as any significant project modifications, environmental review, and upcoming hearings.

Please feel free to contact me if you have any questions or would like any assistance to arrange a meeting. I can be contacted by phone at 805-781-7166, or by e-mail: bleveille@slocity.org

Thank you for considering City comments on the proposed project.

Sincerely,



Brian Leveille, AICP

Senior Planner

Long Range Planning

City of San Luis Obispo, Community Development Department

CC: San Luis Obispo City Council
Michael Codron, Community Development Director
Xzandrea Fowler, Deputy Director of Community Development
Tim Bochum, Deputy Director of Public Works
Hal Hannula, Supervising Civil Engineer
Jake Hudson, Traffic Operations Manager
Bob Hill, Natural Resources Manager