

**ATTACHMENT 2**

**OAK HILLS ESTATE RESIDENTIAL PROJECT**

**FINAL ENVIRONMENTAL IMPACT REPORT  
REVISION LETTER No. 1**

**SCH No. 2015111069  
COUNTY EIR No. 17EIR-00000-00001**

**June 4, 2018**

**Project Case Nos. 15RZN-00000-00002, 15TRM-00000-00001,  
15DVP-0000-00010, and 17RDN-00000-00006**

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*Prepared by:*

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## **1.0 PROJECT DESCRIPTION**

The Oak Hills Estate project evaluated in the Final Environmental Impact Report (Final EIR) dated October, 2017 includes requests for a Rezone, Vesting Tentative Tract Map, Development Plan and Road Naming entitlements. The project would rezone a 16.88-acre parcel from Residential Ranchette (RR-10) to Design Residential (DR-1.8); divide the existing parcel into 29 residential lots and one open space lot; and facilitate the subsequent development of 29 single-family residences. Approximately 7.23 acres of the project site (43%) would be retained as natural open space. The project property is identified as Assessor's Parcel Number (APN) 097-371-010 and is located north of Oak Hill Drive in Vandenberg Village.

## **2.0 BACKGROUND**

The Draft EIR prepared for the Oak Hills Estate project was circulated for a 45-day public comment period between February 2 and March 20, 2017. A public hearing to accept comments on the adequacy of the Draft EIR was held on March 8, 2017. The Draft EIR, in combination with responses to all written and verbal comments that were received, comprise the Final EIR.

Comments on the Draft EIR submitted by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) identified project-related impacts to federally listed plant and animal species that were not fully evaluated by the Draft EIR. These potential impacts were in regard to project-related "take" of El Segundo blue butterfly (federal endangered), California red-legged frog (federal threatened), vernal pool fairy shrimp (federal threatened), and Vandenberg monkeyflower (federal endangered). In response to the comments additional impact analysis and mitigation measures were added to a Revised Draft EIR that was circulated for public review between July 11 and August 25, 2017.

On March 13, 2018 the Board of Supervisors conducted a hearing on the Oak Hills Estate project and proposed Final EIR that is dated October, 2017. That hearing was continued to provide the applicant time to provide information about three possible changes to the proposed project description, including: identify a new biological resources mitigation site; evaluate whether the project design could include a recreation area on the project site; and to provide information about possible restoration measures within the ephemeral stream channel located on the central portion of the project site.

Additional information regarding the changes to the project is provided below in Section 3.0. This Revision Letter has been prepared to update the October, 2017 Final EIR to reflect the changes to the project and to provide the required environmental analysis of the changes. Pursuant to CEQA Guidelines Section 15088.5, the project description changes and associated analyses documented in this Revision Letter do not require recirculation of the Final EIR as the changes are not significant new information that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement.

### **3.0 PROJECT DESCRIPTION CHANGES**

#### **3.1 Additional Off-Site Mitigation Location**

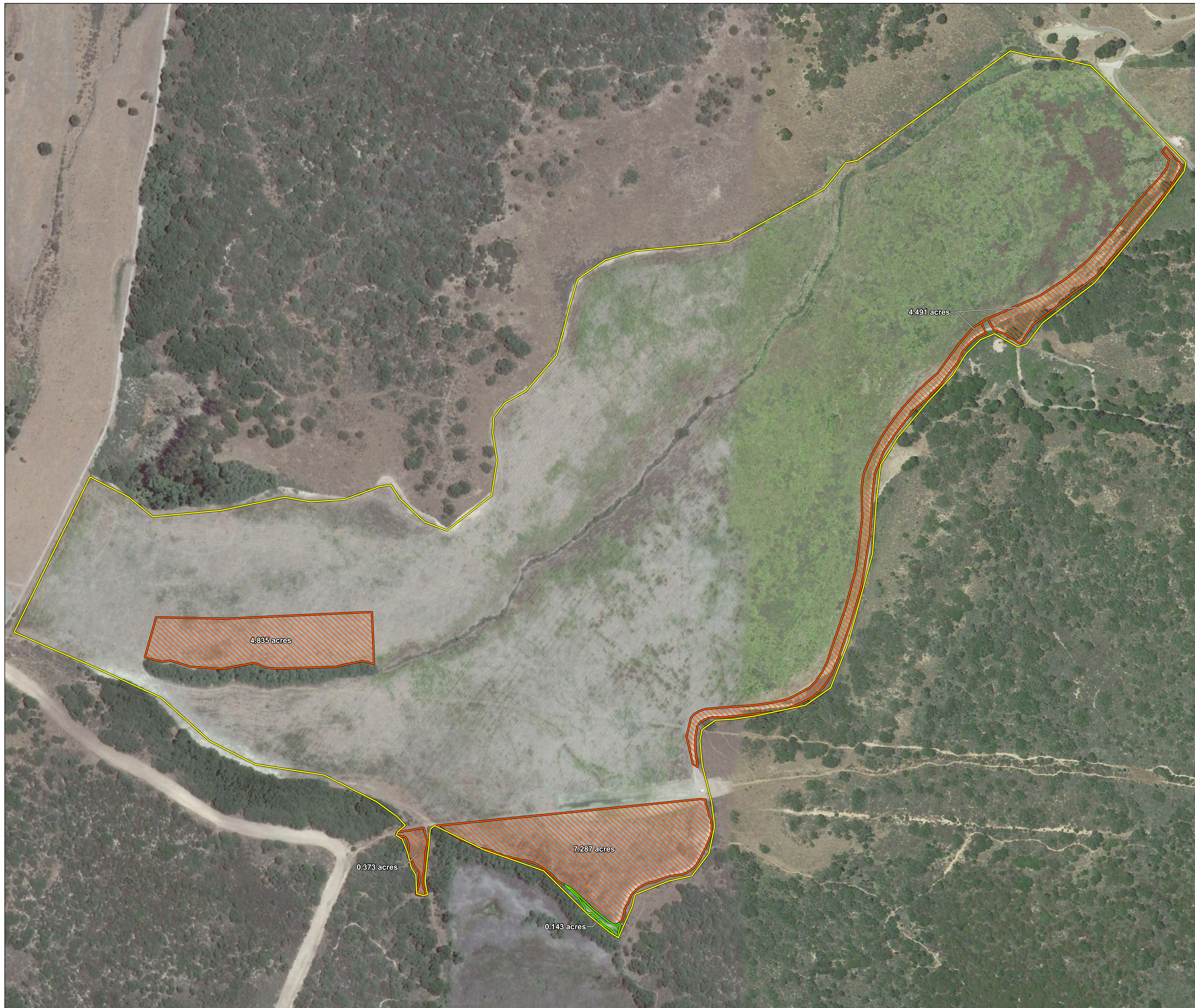
The Oak Hills Estate project would result in impacts to sensitive biological resources, including maritime chaparral habitat, rare plants, and native oak trees. Mitigation for those impacts was proposed to occur both on the project site and on portions of a 123-acre parcel owned by the Vandenberg Village Community Services Department (VVCSD). The October, 2017 Final EIR includes Mitigation Measures BIO-2.1 and BIO-2.2, which require the preparation and implementation of approved final restoration plans for the project site and the off-site location owned by the VVCSD, respectively. Mitigation measure BIO-2.2 required that the final off-site restoration plan identify at least 13.23 acres suitable for habitat restoration and oak tree planting; and proposed habitat mitigation sites must be located on previously disturbed land that support non-native vegetation; and be located in areas not subject to fuel modification for wildfire hazard reduction. The implementation of these requirements at the VVCSD mitigation site resulted in a proposal to conduct restoration activities at multiple and generally small locations located throughout the 123-acre mitigation site.

The project applicant has identified an additional mitigation site located on a 172-acre portion of the 5,300-acre Burton Mesa Ecological Reserve (BMER). The proposed restoration area was historically used for agricultural purposes and is extensively disturbed. The restoration area is located in the northern portion of the BMER, east of Vandenberg Air Force Base, and approximately one mile northwest of the Oak Hills Estate project site. A Draft *Burton Mesa Ecological Reserve Offsite Mitigation Area and Lot 54 Oak Planting Conceptual Mitigation Plan* (Rincon, May 30, 2018) has been prepared for the BMER mitigation area (Attachment 1) and the proposed restoration sites are depicted on Figure 1. In addition to describing proposed mitigation/restoration activities to be conducted on the BMER site, the draft mitigation plan also proposes that approximately 45 of the oak tree required to mitigate the Oak Hills Estate project's impacts to oak trees be planted adjacent to Clubhouse Road on the previously identified mitigation site owned by the VVCSD that is commonly referred to as "Lot 54" (Figure 2).

The BMER (APN 097-350-021) is owned by the State of California (i.e., the State Lands Commission) and is managed by the California Department of Fish and Wildlife (CDFW). In addition to managing the BMER, CDFW controls access to the BMER property and makes recommendations to the State Lands Commission related to their decision whether to allow or not allow activities such as the proposed restoration activities to occur on State property.

The draft mitigation plan for the BMER site is generally similar in form and content to the draft mitigation plan prepared for the VVCSD-owned mitigation site, and describes the restoration concepts that would be implemented to mitigate Oak Hills Estate project's impacts to central maritime chaparral, oak trees, and special status plants. A final mitigation plan for the BMER site must be prepared and the final plan would include detailed restoration and monitoring

Figure 1



## Oak Hills Offsite Mitigation Plan, Burton Mesa Ecological Reserve

The Final EIR determined that the project would permanently impact maritime chaparral, oak trees, and special status plants. Restoration would occur in part at Burton Mesa Ecological Reserve to restore a fallow farm field to natural habitat.

Table 1. Maritime Chaparral Restoration Targets

Metric	Area
Habitat Impacted	6.92 acres
Mitigation Ratio	2 : 1 (replaced: impacted)
<b>Total Acreage Required</b>	<b>13.84 acre</b>
Onsite Mitigation	0.61 acre
Offsite Mitigation	13.23 acres
<b>Total Mitigation Acreage</b>	<b>13.84 acres</b>

Table 2. Offsite Restoration Special Status Plant Targets

Restoration Habitat	Included Special Status Species	Special Status Plant Replacement Ratio	Individuals or Acreage Required*	Explanation
Maritime chaparral - 13.23 acres to be restored at BMER	Purisma manzanita	2:1	38 plants	Special status plant restoration and oak plantings will be fully integrated into the restoration of maritime chaparral. This table documents the required number of individuals or acreage that will be incorporated into the plantings. Some species will be seeded, and more than the required number of plants are anticipated to germinate. **Note that El Segundo blue butterfly did not have a specific target for number of host plants.
	sand mesa manzanita	2:1	54 plants	
	mesa horkelia	2:1	13.23 acres	
	curly-leaved dune mint	2:1	100 plants	
	Lompoc ceanothus	1:1	7 plants	
	Paniculate tarplant	1:1	3 plants	
	Lompoc wallflower	1:1	35 plants	
	California spineflower	1:1	25 plants	
	Blochman's ragwort	1:1	10 plants	
	El Segundo blue butterfly host plants	**	-	
Oak trees	10:1			

\*Pending actual number impacted; table reflects FEIR's conservative position regarding number impacted.

Table 3. Proposed Plant Palette.

Scientific Name	Common Name
<i>Arctostaphylos purissima</i>	La Purisma manzanita
<i>Arctostaphylos rudis</i>	sand mesa manzanita
<i>Ceanothus cuneatus</i> var. <i>fasciculatus</i>	Lompoc ceanothus
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	Mountain mahogany
<i>Deinandra paniculata</i>	paniculate tarplant
<i>Ericameria ericoides</i>	Mock heather
<i>Eriogonum parvifolium</i>	Coast buckwheat
<i>Erysimum capitatum</i> var. <i>lompocense</i>	Lompoc wallflower
<i>Frangula californica</i>	California coffeeberry
<i>Heteromeles arbutifolia</i>	toyon
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia
<i>Mimulus aurantiacus</i> ( <i>lompocensis</i> ) <sup>1</sup>	Lompoc sticky monkeyflower
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	curly-leaved dune mint
<i>Mucronea californica</i>	California spineflower
<i>Quercus agrifolia</i>	Coast live oak
<i>Rhamnus crocea</i>	Spiny redberry
<i>Salvia mellifera</i>	Black sage
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	Blue elderberry
<i>Senecio blochmaniae</i>	Blochman's ragwort

### Legend

- Offsite Mitigation Area
- Proposed Restoration Sites  
Maritime Chaparral, Oaks and Rare Plants
- Riparian Enhancement Area

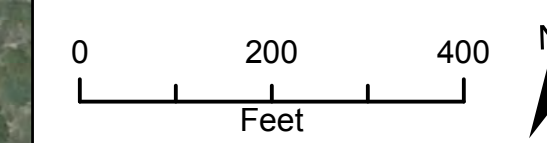
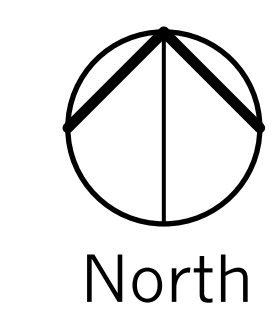
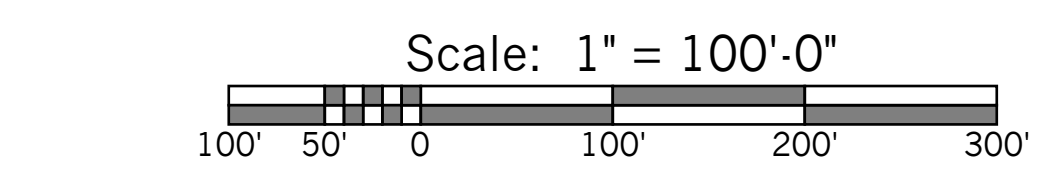
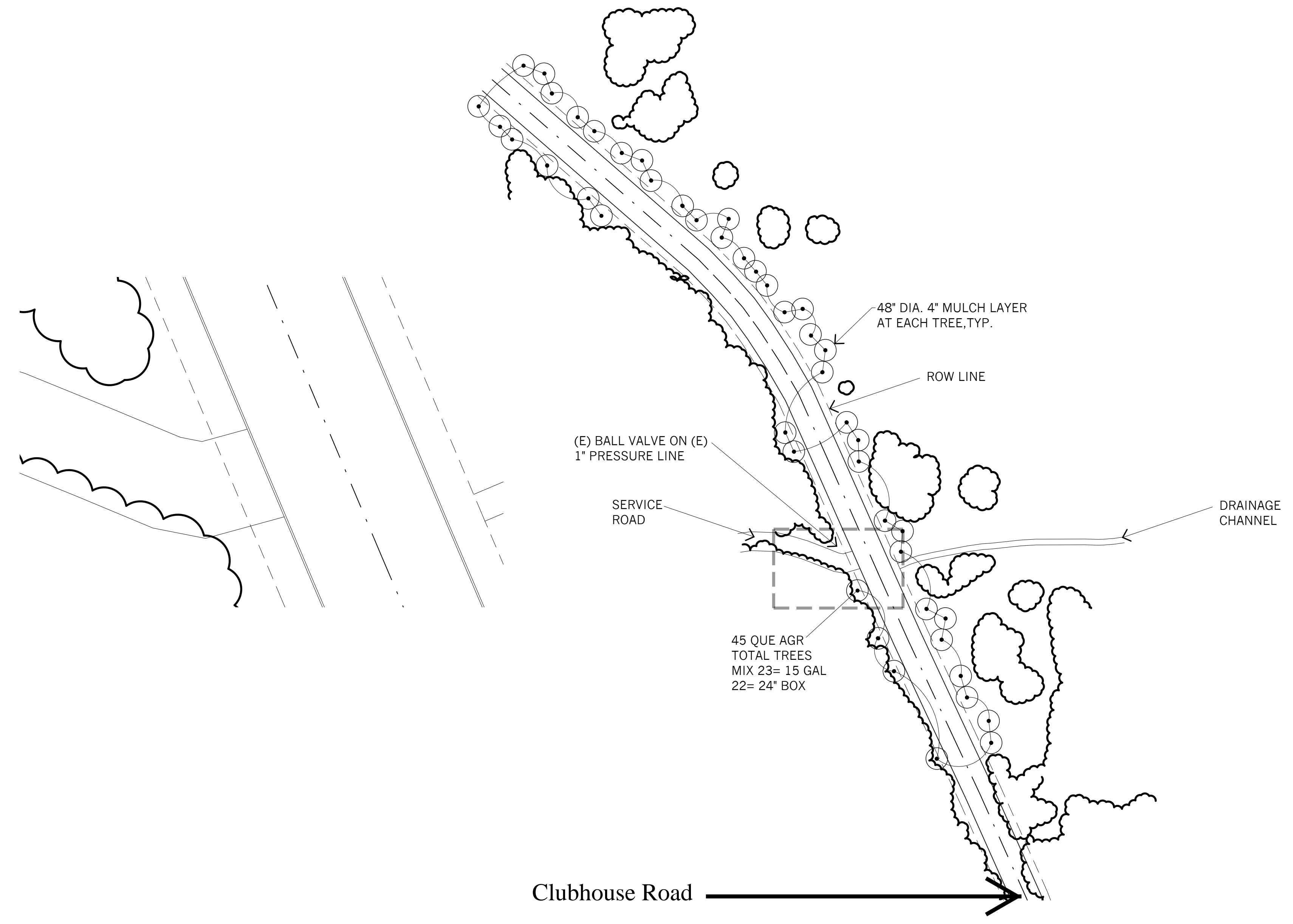


Figure 2: VVCSD Property Oak Tree Planting Concept Plan

Plant List

ABBREV	SIZE	BOTANICAL NAME / COMMON NAME	WUCOLS RATING
<b>TREES</b>			
QUE AGR	15G/24"B/ 36"B	QUERCUS AGRIFOLIA / COAST LIVE OAK LOW BRANCHING FORM	VL



revision
△
△
△
△

Owner:  
 Gary Blake,  
 Managing Member  
 Oak Hills Estate, LLC

Project:  
 OAK HILLS OFF-SITE  
 MITIGATION

Sheet Title:  
**PLANTING PLAN**

**firma**  
 landscape architecture  
 planning, spatial studies,  
 ecological restoration

Principal: David W. Foote ASLA  
 Registration No. 2117  
 187 Tank Farm Road Suite 230  
 San Luis Obispo CA 93401  
 805.781.9600 fax 805.781.9603

job no. 21727  
 plan check  
 issue date:  
 bid set  
 issue date:

SHEET  
**L.3**  
 OF SHEETS

requirements, a long-term management plan for the restoration site, and an agreement establishing long-term funding for the management of the mitigation site after required mitigation restoration is complete. After a final mitigation plan has been prepared and accepted by CDFW and the County, the project applicant must obtain from CDFW a Right of Entry to allow the implementation of the proposed restoration actions, and an approved lease agreement from the State Lands Commission to allow the restoration to occur on State property.

### **3.2 On-Site Stream Channel Restoration**

The Board of Supervisors requested that the Oak Hills Estate project consider conducting restoration activities within the stream channel located in the central portion of the project site. Restoration of the stream channel would enhance the habitat value of the project site but is not required to reduce or mitigate any environmental impacts of the project.

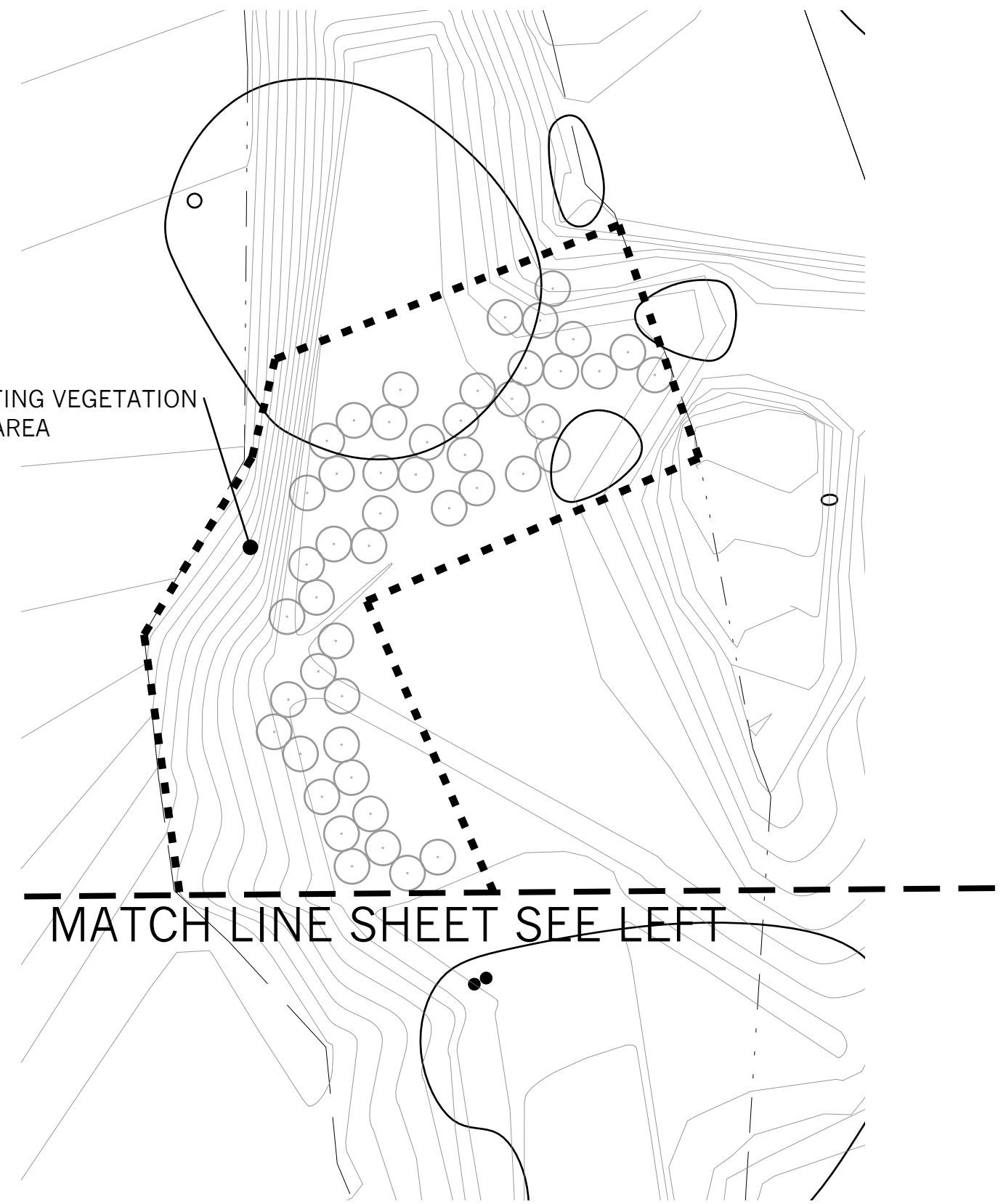
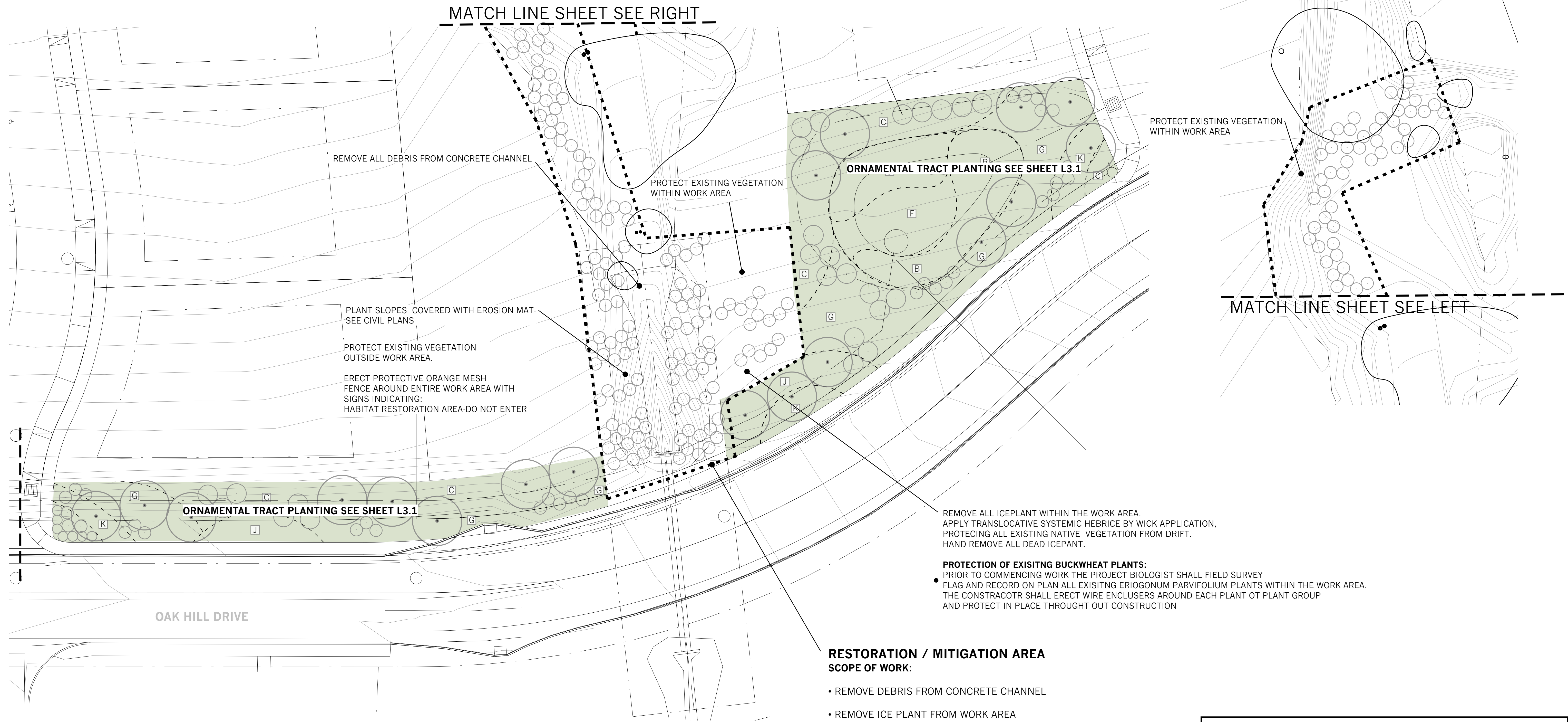
The stream channel in the central portion of the project site is an ephemeral drainage that extends across the project site and empties into a culvert beneath Oak Hill Road. Portions of the stream channel banks are steep and are extensively eroded. The proposed stream restoration would be conducted in the southern portion of the channel and include the removal of debris from the existing erosion-control concrete channel; the removal of invasive ice plant and broken concrete debris that does result in damage to existing native vegetation; installing erosion protection slope fabric; planting a variety of native plant species; and the installation of temporary spray irrigation. Figure 3 depicts the proposed central stream channel restoration area. The restoration activities proposed for the stream channel would be conducted in conjunction with other proposed on-site restoration activities described by a previously prepared plan titled *Oak Hills Estate Project Open Space Management Plan* (Final EIR Appendix B). Final EIR mitigation measure BIO-2.1 has been revised to require that the stream channel restoration be included in a revised Open Space Management Plan.

### **3.3 Playground Facility**

The Board of Supervisors requested that the Applicant evaluate whether the project could provide an on-site playground to enhance the project and to provide a benefit to the neighborhood and community. Providing project-related recreation facilities is not required to reduce or mitigate any environmental impacts of the project.

In lieu of providing on-site playground improvements, the Oak Hills Estate project applicant has proposed to make a contribution of \$50,000 to the Vandenberg Village Park & Playground Coalition. The Coalition is a non-profit corporation and public charity that has a goal of constructing a playground in Vandenberg Village. The Coalition has identified a site for the potential future development of a playground. The site is on a 1.5-acre, County-owned parcel on the west side of Constellation Road, approximately 500 feet south of Burton Mesa Boulevard and 1,000 feet north of Highway 1. Figure 4 depicts the location of the potential playground site and provides a master plan showing possible future playground improvements. The proposed monetary contribution to the Playground Coalition by the Oak Hills Estate project would assist the Coalition in implementing its goals to develop a playground in Vandenberg Village. The

Figure 3



REMOVE ALL DEBRIS FROM CONCRETE CHANNEL

PROTECT EXISTING VEGETATION WITHIN WORK AREA

ORNAMENTAL TRACT PLANTING SEE SHEET L3.1

PROTECT EXISTING VEGETATION WITHIN WORK AREA

PLANT SLOPES COVERED WITH EROSION MAT - SEE CIVIL PLANS

PROTECT EXISTING VEGETATION OUTSIDE WORK AREA.

ERECT PROTECTIVE ORANGE MESH FENCE AROUND ENTIRE WORK AREA WITH SIGNS INDICATING: HABITAT RESTORATION AREA-DO NOT ENTER

ORNAMENTAL TRACT PLANTING SEE SHEET L3.1

REMOVE ALL ICEPLANT WITHIN THE WORK AREA. APPLY TRANSLOCATIVE SYSTEMIC HEBRICE BY WICK APPLICATION, PROTECTING ALL EXISTING NATIVE VEGETATION FROM DRIFT. HAND REMOVE ALL DEAD ICEPANT.

**PROTECTION OF EXISTING BUCKWHEAT PLANTS:**  
 PRIOR TO COMMENCING WORK THE PROJECT BIOLOGIST SHALL FIELD SURVEY FLAG AND RECORD ON PLAN ALL EXISTING ERIOGONUM PARVIFOLIUM PLANTS WITHIN THE WORK AREA. THE CONTRACTOR SHALL ERECT WIRE ENCLUSERS AROUND EACH PLANT OR PLANT GROUP AND PROTECT IN PLACE THROUGHOUT CONSTRUCTION

**RESTORATION / MITIGATION AREA SCOPE OF WORK:**

- REMOVE DEBRIS FROM CONCRETE CHANNEL
- REMOVE ICE PLANT FROM WORK AREA
- PROTECT ALL EXISTING NATIVE VEGETATION
- INSTALL CHANNEL EROSION PROTECTION SLOPE FABRIC PER CIVIL PLANS.
- INSTALL NATIVE RESTORATION PLANT SPECIES
- INSTALL TEMPORARY SPRAY IRRIGATION

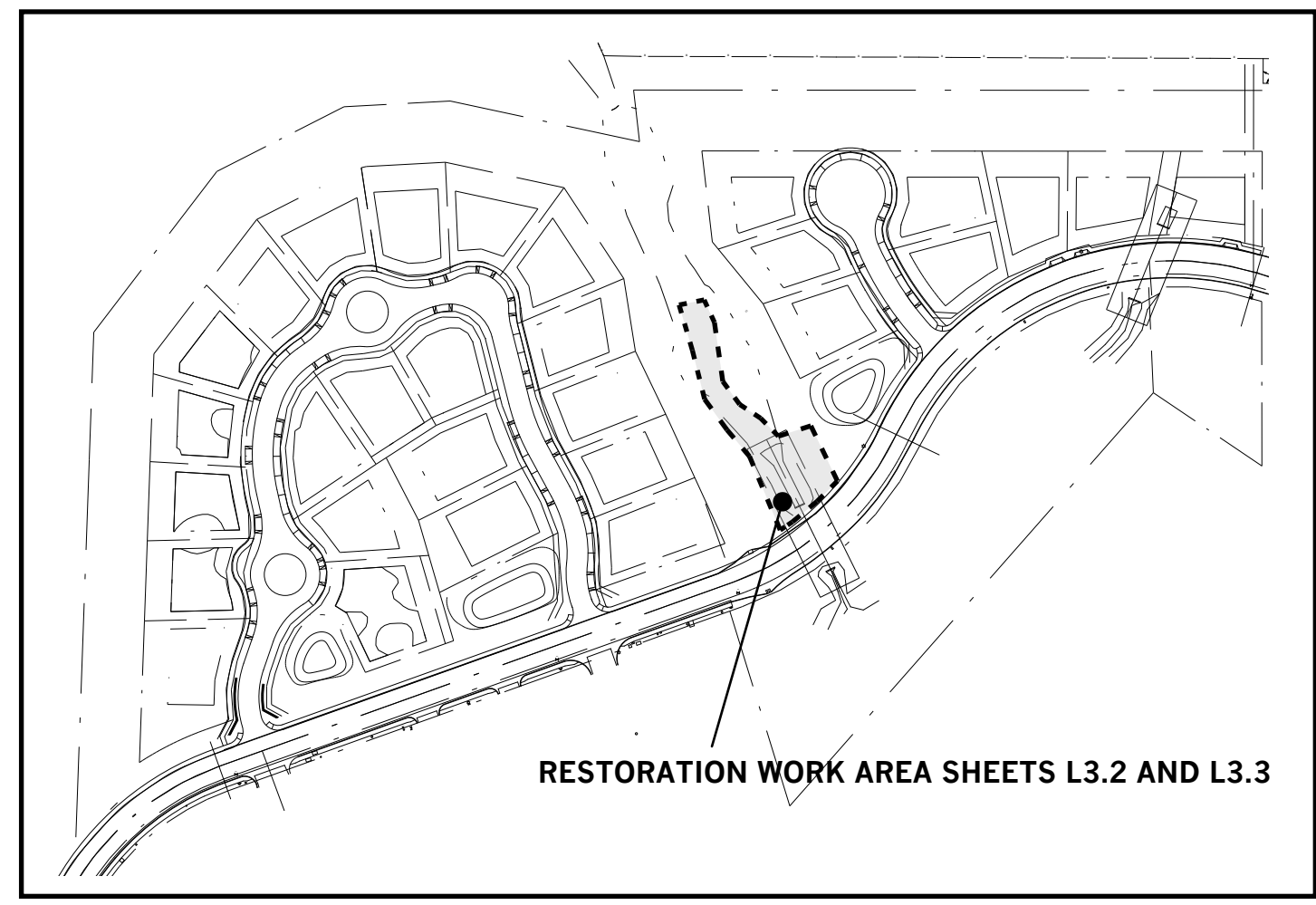
**PLANT LIST**

ERIOGONUM PARVIFOLIUM	COAST BUCKWHEAT
BACCHARIS PILULARIS	COYOTE BUSH
LEYMUS CONDENSATUS	CALIFORNIA WILD RYE
SALVIA MILLIFERA	BLACK SAGE
ARTEMISIA CALIFORNICA	COASTAL SAGEBRUSH
MIMULUS AURANTIACA	MONKEY FLOWER

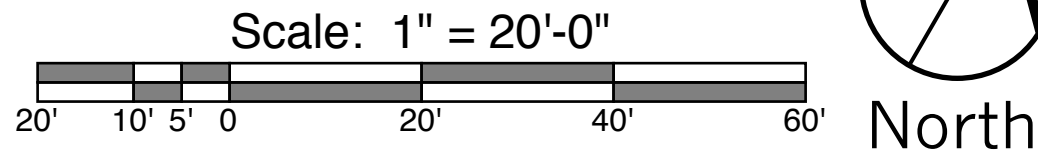
**ESTABLISHMENT AND MONITORING**

THE OAK HILLS ESTATES OPEN SPACE MANAGEMENT PLAN (OSMP) PREPARED BY RINCON DATED MAY 2017 SHALL BE FOLLOWED FOR ESTABLISHMENT AND MONITORING REQUIREMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING OSMP SECTIONS:

- 4.1 HABITAT MITIGATION
- 4.2 PROTECTED TREES
- 4.3 SPECIAL STATUS SPECIES
- 4.4 EL SEGUNDO BUTTERFLY HABITAT



TRACT PLAN SHEET KEY MAP 1"=200'



revision
△
△
△
△

Owner: Gary Blake, Managing Member Oak Hills Estate, LLC

Project: OAK HILLS ESTATES

Sheet Title: DRAINAGE CHANNEL RESTORATION PLAN

Principal: David W. Foote ASLA  
 Registration No. 2117  
 187 Task Center Drive  
 San Luis Obispo CA 93401  
 805.781.9800 fax 805.781.9803

**firma**  
 landscape architecture  
 planning  
 environmental studies  
 ecological restoration

job no. 21727  
 plan check  
 issue date:  
 bid set  
 issue date:

L-3.2

Figure 4

PHASE A

- Priority One:  
- Tot-Lot Play area for ages 2-6
- Priority Two:  
- Play area for ages 6-12
- Priority Three:  
- Paved Flexible Use Space

PHASE B

- Priority Four:  
- Cut-in on-site parking
- Picnic Tables and Benches

PHASE C

- Priority Five:  
- Recognition of Chumash in relation to Burton Mesa Plant Community
- Priority Six:  
- Performance Area with raised deck
- Priority Seven:  
- Installation of Public Restroom



AERIAL PHOTO, VANDENBERG VILLAGE



# VANDENBERG VILLAGE PARK & PLAYGROUND MASTER PLAN





Oak Hills Estate project only proposes to contribute money towards the potential future development of the playground in Vandenberg Village and would not result in the construction of a playground. The proposed contribution would not result in physical changes to existing environmental conditions and would not have the potential to result in significant environmental impacts. Future construction of a playground would separately require compliance with CEQA.

#### **4.0 ENVIRONMENTAL ANALYSIS OF PROPOSED PROJECT REVISIONS**

##### **4.1 Aesthetics**

The Final EIR concluded that conducting off-site sensitive plant and habitat restoration activities at the property owned by the VVCSD would result in beneficial aesthetic effects because the restoration activities would occur at previously disturbed locations. Similarly, the Draft *Burton Mesa Ecological Reserve Offsite Mitigation Area and Lot 54 Oak Planting Conceptual Mitigation Plan* proposes to conduct native habitat restoration and oak tree planting on portions of the BMER mitigation site that have been disturbed by past agricultural activities, and to plant oak trees on the VVCSD-owned “Lot 54” (Figure 2). The re-establishment of native habitat and plant populations at the BMER mitigation site would result in beneficial visual effects that are similar to those described by the Final EIR. In addition, all planting and maintenance details for all off-site habitat restoration must be included in a final and approved mitigation plan for the BMER and VVCSD sites as required by mitigation measures BIO-2.2a and BIO-2.2b, which are described below in Section 4.3.2. Therefore, implementation of the mitigation plan would result in beneficial aesthetic impacts that are similar to those identified by the FEIR. The proposed off-site restoration activities would not result in or contribute to the significant and unavoidable aesthetic impacts (Class I) aesthetic impacts identified by the Final EIR that would result from the conversion of the vacant project site to an urban residential use. Further, planting oak trees at the VVCSD-owned “Lot 54” property would provide the beneficial aesthetic effects at that site as was identified by the Final EIR. No new or revised mitigation measures are required.

The Final EIR states that native trees growing along and within the banks of the ephemeral stream located on the project property contribute to the site’s open space character, and that the removal of native trees and vegetation would result in significant changes to the visual character of the site. The proposed stream channel restoration would not remove any existing native vegetation and includes planting native vegetation within the southern portion of the channel. In addition, all planting and maintenance details for all native vegetation planted on the project site must be included in a revised and approved *On-site Habitat and Open Space Protection Plan* (Final EIR mitigation measure BIO-2.1). Therefore, the proposed stream channel restoration would not result in a significant aesthetic impact resulting from the removal of native vegetation, and would have the beneficial effect of providing additional native plants in the channel. The proposed stream channel restoration would not result in additional significant aesthetic impacts or increase the severity of any previously identified impacts, and no new or revised mitigation measures are required.

The Final EIR concluded that the Oak Hills Estate project would result in a significant and unavoidable (Class I) cumulative aesthetic impact. This impact would result primarily from the

conversion of the project site from an open space area to an urban residential use. Proposed habitat restoration on the BMER and on-site stream channel would not cause a new significant environmental impact nor substantially increase the severity of this previously identified cumulative impact.

## **4.2 Air Quality**

The Final EIR concluded that the Oak Hills Estate project would not result in significant short- or long-term air quality impacts. The evaluation of project-related air quality impacts included short-term emissions, such as emissions from temporary commute and hauling trips, that would result from conducting off-site habitat restoration activities at the VVCSD-owned mitigation site. Habitat restoration activities that would be conducted at the BMER restoration site would be similar to those previously proposed to occur at the VVCSD-owned property, and resulting air emissions would also be similar. Conducting restoration activities in the stream channel located on the central portion of the project site would include the removal of debris and invasive ice plants, and planting a variety of native plant species. These types of activities would not be a substantial source of air emissions. Therefore, the proposed on- and off-site restoration activities would not result in additional significant project-specific or cumulative air quality impacts or increase the severity of any previously identified air quality impacts. No new or revised mitigation measures are required.

## **4.3 Biological Resources**

### **4.3.1 Project Impacts**

The Oak Hills Estate project would result in significant impacts to sensitive maritime chaparral habitat, sensitive plants, and oak trees. Mitigation to reduce impacts to those resources to a less than significant level was proposed to occur both at the project site and at an off-site property owned by the VVCSD that is commonly referred to as "Lot 54." Mitigation/restoration activities previously proposed to occur at the VVCSD site were described in a report titled *Offsite Mitigation Report and Concept Plan* (Final EIR Appendix D-3), and the Final EIR determined that sufficient area suitable to conduct the required mitigation was available at Lot 54. In addition, Final EIR mitigation measure BIO-2.2 (Off-site Habitat Restoration Plan) required that a final restoration plan be prepared that describes specific mitigation methodologies, planting locations, success criteria, and monitoring requirements; and that the final plan be approved by the County prior to the first zoning clearance (i.e., grading) for the project.

### **4.3.2 Off-Site Mitigation Plan**

In response to comments by the Board of Supervisors, an additional potentially suitable off-site mitigation location on the BMER has been identified, and a new off-site conceptual mitigation plan titled *Burton Mesa Ecological Reserve Offsite Mitigation Area and Lot 54 Oak Planting Conceptual Mitigation Plan* has been prepared (Attachment1). The new conceptual mitigation plan describes existing conditions at the proposed BMER mitigation site, and the proposed approach and implementation measures to mitigate the Oak Hills Estate project's impacts to

maritime chaparral habitat, oak trees and special status plants. The plan also describes oak tree mitigation planting that is still proposed to occur on the VVCSD-owned property (Lot 54).

The new mitigation concept plan has been developed in cooperation with staff from the California State Lands Commission (CSLC) and the California Department of Fish and Wildlife (CDFW). In a letter dated June 8, 2018 (Attachment 2), CDFW states they are willing to allow project-related mitigation to occur on the BMER if specified conditions are met. The conditions require that prior to recordation of the final tract map the applicant: a) submit and receive approval of a final mitigation plan; b) the applicant obtain a lease agreement approved by CSLC; c) the applicant obtain a Right of Entry Permit approved by CDFW; and d) the applicant prepare a mitigation site long-term maintenance and funding plan that has been approved by CDFW and CSLC. CDFW also requested that prior to grading on the Oak Hills Project site, the final approved mitigation plan be implemented; funding for long-term mitigation area maintenance be secured; and the applicant obtain an approved U.S. Fish and Wildlife Incidental Take Permit and associated Habitat Conservation Plan.

Final EIR mitigation measure BIO-2.2 has been revised to add requirements specific to the current proposal to conduct habitat restoration/project mitigation on the BMER and VVCSD sites. In addition, the mitigation measure has been revised so that the “prior to recordation” requirements identified by CDFW are included in mitigation measure BIO-2.2a, and “prior to grading” requirements identified by CDFW are included in mitigation measure BIO-2.2b. The revised mitigation measures are provided below and would ensure that implementation of an approved off-site mitigation plan, along with other biological resource impact mitigation measures identified by the Final EIR, would be adequate to reduce the Oak Hills Estate project’s impacts to biological resources to a less than significant level. Similar to the analysis included in the Final EIR, the identified mitigation measures would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No additional mitigation measures are required.

#### **FINAL EIR MITIGATION MEASURE BIO 2.2a**

**BIO-2.2a: Off-Site Habitat Mitigation.** The Owner/Applicant shall complete the following requirements to mitigate the habitat, oak tree, and sensitive plant impacts of Oak Hills Estate project to a less than significant level. Approved mitigation activities shall occur on at least 13.23 acres of land that have been identified on a 172-acre portion of the Burton Mesa Ecological Reserve (BMER) (097-350-021). Approved mitigation for impacts to oak trees shall also occur on the VVCSD-owned open space parcel (APN 097-371-067) located adjacent to Clubhouse Road. Required sensitive plant mitigation, habitat restoration, and oak tree planting must be located on previously disturbed land or areas that support non-native vegetation. The areas identified for off-site mitigation shall not include areas of established native habitat or adversely affect existing sensitive plants or trees.

Prior to the recordation of Tract Map 14,180, the following items must be submitted to P&D:

- A detailed final mitigation plan that has been reviewed and approved by P&D, the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), California State Lands Commission (CSLC) and County Fire. The Vandenberg Village Community Services District shall also approve portions of the final mitigation pertaining to the planting of oak trees on their property.
- An approved Lease Agreement to conduct restoration activities on the BMER executed with the State Lands Commission.
- A long-term maintenance and funding plan for restoration activities conducted on the BMER and VVCSD-owned property. The Plan shall clearly state who will fund and be responsible for long-term maintenance, who will monitor for success, and specific remedial measures. The plan shall be approved by P&D, CDFW and CSLC.
- An approved Right of Entry Permit from CDFW to conduct restoration activities on the BMER.

**Plan Requirements:** All mitigation sites shall have topography and soils that are suitable for restoration of central maritime chaparral habitat at a 2:1 ratio and be able to support an oak tree replacement ratio of 10:1. The mitigation sites shall include a suitable buffer from areas designated as urban in the Comprehensive Plan and from existing developed areas (i.e., residential development and roadways) to minimize the potential for adverse edge effects to the restored habitat. At minimum, mature tree canopies shall be approximately 30 feet from areas where existing or future land uses will require vegetation management for wildfire hazard reduction. Proposed plant and habitat restoration areas shall be at least 100 feet from areas where existing or future land uses will require vegetation management.

The Owner/Applicant shall submit to P&D for review and approval of an off-site mitigation plan prepared by a P&D-approved biologist designed to restore central maritime chaparral habitat, sensitive plants, and coast live oak trees. At minimum the mitigation plan shall include the following:

- a. Goals and objectives for the restoration of impacted maritime chaparral, sensitive plants, and coast live oak trees.
- b. Surveys to identify the location(s) of proposed restoration sites, existing native habitat and special status species located on or near the restoration site(s), and methods to protect identified native habitat and special status species.
- c. A restoration schedule with milestones.
- d. Sources of plant materials, including salvage from the Oak Hills Estate project site if feasible.
  - i. The project shall include specific measures to maintain native ant species, and discourage the Argentine ant (*Linepithema humile*) from populating the restoration areas. This includes inspection by the project biologist (preferably off-site prior to shipment to the site) of native container stock scheduled to be installed. The biologist shall inspect all specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration

areas shall avoid the use of chemicals which would impact or kill native ant species (i.e., herbicides/pesticides).

- e. Plant sources, planting methods and locations, timing, plant density, plant protection, weed control, temporary irrigation, and maintenance details consistent with the performance criteria described in item “g” below. All native plant materials used for restoration shall be from local sources.
- f. A fencing and signage plan to limit encroachment into restored areas. Fencing or other barriers shall be designed to prevent unauthorized motor vehicle entry, reduce human and pet intrusion, while maintaining access for wildlife to move through the area.
- g. Performance criteria that specify the minimum requirements for size, ground coverage and health of replacement plants including a period of time without supplemental watering. The maintenance requirements shall be no less than 5 years unless satisfactory habitat as determined by the County or other appropriate agency is established before that time. Required maintenance may also be extended for a longer period of time until all approved restoration objectives and performance criteria are achieved.

At minimum, restoration and plant protection success criteria shall include the following:

- 1. Plant protection and restoration areas must be self-sustaining (i.e., have been without irrigation, planting or seeding for a minimum of two years prior to consideration of successful completion.
  - 2. The percent of plant cover in plant protection and restoration areas shall be similar to existing conditions at the project site as documented by the approved On-Site Habitat and Open Space Protection Plan.
  - 3. Native shrubs and trees shall have at least 80 percent survivorship at the end of the required monitoring period.
  - 4. Non-native species cover will be no more than five (5) percent cover.
  - 5. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists shall not be present.
- h. Measures that would be implemented if it is determined that performance criteria are not being met in conformance with the approved restoration schedule. The applicant or successor(s) in interest shall be responsible for replanting and maintaining restoration areas until required performance criteria are achieved.
  - i. The off-site restoration plan must be consistent with and incorporate the mitigation requirements specified by the USFWS-approved Incidental Take Permit and Habitat Conservation Plan.
  - j. The off-site restoration plan must describe methods that will be used to provide funding for the long-term maintenance of required mitigation/restoration areas.

**Timing:** The approved final mitigation plan, CDFW Right of Entry, CDFW-approved long-term maintenance funding plan, and CSLC lease agreement shall be submitted to P&D prior to the recordation of Tract Map 14,180.

### **FINAL EIR MITIGATION MEASURE BIO 2.2b**

**BIO-2.2b: Off-Site Habitat Restoration Plan Implementation.** The Owner/Applicant shall implement the approved habitat, oak tree, and sensitive plant mitigation plan required by Mitigation Measure BIO-2.2a. Approved mitigation activities shall occur on at least 13.23 acres of land that have been identified on a 172-acre portion of the Burton Mesa Ecological Reserve (BMER) (097-350-021). Mitigation for project-related impacts to oak trees shall also occur on the VVCSD-owned open space parcel (APN 097-371-067) located adjacent to Clubhouse Road.

**Timing:** Prior to issuance of a zone clearance for grading or conducting any other activities on the project site that have to potential to cause impacts to habitat, the Owner/Applicant shall:

- Implement the elements of the approved mitigation plan and secure funding approved by CDFW for the long-term maintenance of restoration conducted on the BMER as required by CDFW.
- Submit to P&D a copy of the approved U.S. Fish and Wildlife Incidental Take Permit and applicable Habitat Conservation Plan that is required for the proposed project.
- Submit to P&D concurrence from CDFW regarding required habitat restoration for state-listed species.
- Post a performance security to P&D to ensure installation and maintenance of the proposed off-site restoration on the BMER site and the VVCSD site for a minimum of five years or until all approved restoration performance criteria are achieved. The applicant or successor(s) in interest may request release of the performance securities after required oak tree performance criteria are achieved, and restoration on the BMER site has been accepted as complete by P&D and CDFW. Long-term maintenance of the BMER restoration area shall be conducted in conformance with approved long-term restoration area maintenance requirements specified by the approved mitigation plan. The County shall periodically inspect the BMER and oak tree mitigation sites to ensure habitat vegetation and oak tree establishment and compliance with approved plans.

**Plan Requirements:** The Owner/Applicant shall include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures prior to issuance of grading permits. Comply with and depict this measure on all Grading Plans.

**Monitoring:** The applicant or successor(s) in interest shall be responsible for maintaining restoration areas until required performance criteria are achieved and in conformance with approved long-term restoration area maintenance requirements specified by the approved

Mitigation Plan. No less than quarterly monitoring reports for restoration on the BMER and VVCSD site shall be submitted to P&D compliance staff for the first year after restoration planting is complete. After the first year, annual monitoring reports shall be submitted to P&D until habitat restoration planting on the BMER is accepted as complete by CDFW, and oak tree mitigation on the VVCSD-owned property is accepted as complete by P&D. P&D compliance staff signature shall release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan.

### **4.3.3 On-Site Stream Channel Restoration**

The Board of Supervisors requested that the Oak Hills Estate project provide information about possible restoration activities within the stream channel located in the central portion of the project site to enhance habitat value. The proposed additional restoration activities would supplement other proposed on-site restoration activities, such as planting oak trees and sensitive plants, which are required to reduce the project's impacts to sensitive biological resources to a less than significant level. Although the additional restoration activities in the on-site stream channel are not required to reduce a project-related impact to a less than significant level, Final EIR mitigation measure BIO-2.1 (On-site Habitat and Open Space Protection Plan) has been revised to require that the stream channel restoration be included in the required on-site habitat mitigation plan. Revised mitigation measure BIO-2.1 is provided below.

The U.S. Fish and Wildlife Service has reviewed the proposed stream channel restoration plan and stated that the plan is acceptable provided that restoration efforts do not disturb existing buckwheat plants and soil adjacent to the plants, which would have the potential to result in adverse impacts to the endangered El Segundo blue butterfly (Kendra Chan, May 24, 2018). This requirement has been added to revised mitigation measure BIO-2.1. Implementation and maintenance of the stream channel restoration in accordance with the requirements of revised mitigation measure BIO-2.1 would have a beneficial environmental effect and would not result in significant impacts to on-site biological resources. The implementation of the proposed on-site mitigation plan, along with other biological resource impact mitigation measures identified by the Final EIR, would be adequate to reduce the Oak Hills Estate project's project-specific impacts to biological resources to a less than significant level. Similar to the analysis included in the Final EIR, the identified mitigation measures would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No additional mitigation measures are required.

### **FINAL EIR MITIGATION MEASURE BIO 2.1**

**BIO-2.1: On-Site Habitat and Open Space Protection Plan.** The Owner/Applicant shall submit for P&D approval a revised On-Site Habitat and Open Space Protection Plan for maritime chaparral, oak trees, spikerush emergent wetland, the stream channel located in the central portion of the project site, and special status species to be retained on-site within the dedicated open space parcel and FMZ-2. The On-Site Habitat and Open Space

Protection Plan shall be prepared by a P&D-approved arborist and/or biologist and designed wherever possible to protect maritime chaparral that will not be impacted during construction and protect this habitat from construction activity and occupancy of the project; including long-term occupancy of homes, long-term management of the open space (including FMZ-2). The existing Open Space Management Plan (OSMP) as an option to preparing a stand-alone document, may be revised to incorporate all requirements and submitted in place of the On-Site Habitat and Open Space Protection Plan. Measures to replace, restore, and/or enhance native vegetation communities within the project site consistent with mitigation restoration planting acreage stated in MM BIO-1.2 (Special Status Plant Species Protection and Restoration) shall include the following restoration criteria:

- a. A section detailing any special status plant translocation for the project that details the logistics and timing of the translocation activities. The On-Site Habitat and Open Space Protection Plan must identify specific transplant locations.
- b. Seed and/or cuttings and/or container stock shall be collected from the plant species prior to their removal from the site by a qualified botanist or restoration expert. Container stock may be utilized only for perennial species. Plants may also be salvaged and stored for replanting, where possible. The method (e.g., seed, cuttings, or container stock) shall be determined for each individual species by a qualified botanist. Habitat enhancement shall be initiated prior to habitat impacts, or as construction schedules and seasonal requirements allow, with a minimum requirement that plant propagation be initiated prior to ground disturbance.
  - i. The project shall include specific measures to maintain native ant species, and discourage the Argentine ant (*Linepithema humile*) from populating the open space. This includes inspection by the project biologist (preferably off-site prior to shipment to the site) of native container stock scheduled to be installed. The biologist shall inspect all specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration areas shall avoid the use of chemicals which would impact or kill native ant species (i.e., herbicides/pesticides).
- c. Rare plant collection samplings, data, and records shall be collected by a qualified botanist prior to the seed cutting/collections and the data shall be reported to CDFW. The actual specimens shall be deposited at local herbarium(s) for proper data and record keeping. The data and information collected shall be available for all desired herbarium(s) (e.g., California Polytechnic University at San Luis Obispo, University of California at Santa Barbara, Santa Barbara Botanic Garden).
- d. If required, the applicant shall obtain the necessary permit or authorization from the appropriate regional and/or state agency (e.g., CDFW) prior to seed/cutting collections.



- e. Seed and/or cuttings shall be redistributed or planted in areas within the portions of the project open space that have the appropriate habitat characteristics (e.g., slope, aspect, amount of sunlight) necessary to support the transplanted species.
- f. Survivorship of planted material shall be 80 percent at the end of a 5-year or required monitoring period. Designated open space and mitigation sites shall be maintained in perpetuity.
- g. Identify success criteria to be met, reporting requirements, funding mechanisms, and long-term protections on open space that are mitigation receiver sites for rare plants and special status plant communities. At minimum, restoration and plant protection success criteria shall include the following:
  - 1. Plant protection and restoration areas must be self-sustaining (i.e., have been without irrigation, planting or seeding for a minimum of two years prior to consideration of successful completion.
  - 2. The percent of plant cover in plant protection and restoration areas shall be similar to existing conditions at the project site as documented by the approved On-Site Habitat and Open Space Protection Plan.
  - 3. Native shrubs and trees shall have at least 80 percent survivorship at the end of the 5-year monitoring period.
  - 4. Non-native species cover will be no more than five (5) percent cover.
  - 5. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists shall not be present.
- h. All areas of maritime chaparral and oaks that can be preserved or avoided, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland shall be demarcated on the On-Site Habitat and Open Space Protection Plan.
- i. All areas of maritime chaparral and oaks within the designated open space and habitat buffer that can be avoided during fire management, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland, shall have limited disturbance within FMZ-2.
- j. To the maximum extent feasible based on recommendations of an approved arborist, oak trees that are to be removed shall be boxed and replanted within the County approved off-site restoration area consistent with an approved Tree Protection Plan in MM BIO-3.2 (Tree Protection Plan). Depict original & new location for these specimens on the Off-Site Habitat Restoration Plan.
- k. Depict approved lots and building envelopes.
- l. Depict equipment storage and construction staging and parking areas.
- m. Depict the type and location of protective fencing or other barriers to be in place to protect the maritime chaparral, coyote brush scrub, and the spikerush emergent wetland areas (this includes protective fencing and signage [stating to keep out of the

- area] between the spikerush emergent wetland and the proposed development [specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site]). Also depict the type and location of protective fencing on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve.
- n. Comply with and specify the following as notes on On-Site Habitat and Open Space Protection Plan and Building & Grading Plans:
    - i. To avoid damage during construction and restoration activities , all on-site maritime chaparral, coyote brush scrub, buckwheat plants, and the spikerush emergent wetland shall be temporarily fenced with chain-link or other material satisfactory to P&D. Fencing shall be located at least around the outer drip lines of trees and within 5 feet of all plants, and staked to prevent any collapse.
    - ii. Protective fencing/staking/barriers shall be maintained throughout all grading & construction activities. A qualified botanist shall provide oversight during the installation of fencing, flagging or survey tape and he/she or a designee (e.g., construction foreman) will return to the site once a week during the duration of construction activities to ensure that the fence remains intact. On-Site Habitat Management and Open Space Protection Plan.
    - iii. For excavation or trenching required w/in the dripline or sensitive root zone of any specimen within the habitat.
    - iv. Cleanly cut any roots of one inch in diameter or greater.
    - v. Avoid tree removal and trimming.
    - vi. If the use of hand tools is deemed infeasible, P&D may authorize work with rubber-tired construction equipment weighing five tons or less. If significant large rocks are present, or if spoil placement will impact surrounding trees, then a small tracked excavator (i.e., 215 or smaller track hoe) may be used as determined by P&D staff and under the direction of a P&D approved biologist.
  - o. In the event of unexpected damage or removal of habitat:
    - i. If it becomes necessary (as authorized by P&D) to disturb or remove any plants w/in the habitat area, a P&D-approved biologist shall direct the work. Where feasible, specimens shall be boxed and replanted.
    - ii. If a P&D-approved biologist certifies that it is not feasible to replant, plants shall be replaced at a minimum using the replacement ratios identified in MM BIO-1.2 under the direction of the P&D-approved biologist.
    - iii. If replacement plants cannot all be accommodated on-site, a plan must be approved by P&D to include replacement in the Off-Site Restoration Plan in MM BIO-2.2a and 2.2b.
  - p. Grading shall be designed to ensure that habitat areas have proper drainage during and after construction, per biologist recommendations.

- q. The On-Site Habitat and open Space Protection Plan shall describe public outreach to be implemented to educate the residents of the project site about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and minimizing the use of rodenticides. A public outreach program will be provided for this project for the surrounding neighborhoods to promote, protect and restore the natural habitats on the project site by fostering education and ongoing community involvement.
- r. The On-Site Habitat and Open Space Protection Plan shall describe proposed restoration efforts to be implemented on the Burton Mesa Ecological Reserve to repair ground disturbance and plant removal that occurred when project-related geotechnical investigations were conducted. The Plan must also provide documentation that CDFW has reviewed and concurs with proposed restoration and maintenance efforts to be conducted on the Reserve.

**Plan Requirements and Timing:** The Owner/Applicant shall submit a final On-Site Habitat and Open Space Protection Plan that has been approved by P&D prior to issuance of grading permits. The Owner/Applicant shall note or graphically depict all plan components listed above, as well as all temporary and/or permanent protection measures and comply with and depict this measure on all Grading and Building Plans. The Owner/Applicant shall post a performance security to ensure installation and maintenance for a minimum of five years prior to issuance of a grading permit. The Owner/Applicant shall also demonstrate to P&D permit compliance staff that all required components of the approved plan are in place as required prior to zoning clearance issuance for the first residential structure. P&D permit compliance staff signature shall release the installation security upon satisfactory installation of all items in the approved plans and maintenance security upon successful implementation of the On-Site Habitat and Open Space Protection Plan (or Owner/Applicant's revised Open Space Management Plan).

**Monitoring:** P&D staff shall inspect the site to ensure that maritime chaparral, oak trees, spikerush emergent wetland, buckwheat plants, and special status species identified for protection were not damaged or removed or, if damage or removal occurred, that correction is completed as required by the revised On-Site Habitat and Open Space Protection Plan. P&D staff shall oversee implementation of the On-Site Habitat and Open Space Protection Plan.

#### 4.4 Cultural Resources

The Final EIR determined that even minor ground disturbances at the VVCSD-owned off-site mitigation property while conducting sensitive plant and habitat restoration activities could have the potential to result in significant impacts to cultural resources. It was also determined that this potential impact to cultural resources would be reduced to a less than significant level by mitigation measures CUL-1 (Preconstruction/Pre-restoration Meeting); CUL-2 (Stop Work at Encounter); and CUL-3 (Cultural Phase 2 & 3). The proposed BMER habitat mitigation site has historically been used for farming, which resulted in periodic disturbances of the ground surface.

The proposed habitat restoration activities at the BMER site would consist of planting trees and plants, which would result in ground disturbances similar to those caused by previous agricultural operations. Therefore, the potential for restoration activities at the BMER site to impact undisturbed and significant cultural resources would be very low. The potential for impacts to cultural resources at the BMER and VVCSD mitigation sites would be reduced to a less than significant level by the mitigation measures included in Final EIR. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in additional significant impacts to cultural resources or increase the severity of any previously identified impacts. Similar to the analysis included in the Final EIR, the identified mitigation measures would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No new or revised mitigation measures are required.

Cultural resource investigations conducted for the Oak Hills Estate project determined that it is unlikely that construction activities at the project site would encounter cultural resources. However, the Final EIR concluded that the unexpected discovery of cultural resources would have the potential to result in significant impacts, and such impacts would be reduced to a less than significant level with the implementation of mitigation measures CUL-1, CUL-2 and CUL-3. The implementation of the previously identified mitigation measures would also reduce the potential for proposed stream channel restoration activities to result in significant project-specific and cumulative cultural resource impacts. No additional mitigation measures are required.

#### **4.5 Geology/Soils**

The habitat restoration activities previously proposed to occur at the VVCSD-owned mitigation site would not have resulted in structural development that could be affected by geologic hazards, and the Final EIR determined that planting native vegetation in previously disturbed portions of the property would have the beneficial effect of minimizing potential erosion-related impacts. Habitat restoration activities proposed to be conducted at the BMER restoration site would be similar to those proposed for the VVCSD property, and would also have the beneficial effect of revegetating previously disturbed areas. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in additional significant geology/soils impacts or increase the severity of any previously identified impacts. Similar to the analysis included in the Final EIR, the identified mitigation measures would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No new or revised mitigation measures are required.

Soils at the project site are highly erodible, which has resulted in the creation of an incised stream channel on the central portion of the project site. The habitat restoration activities proposed for the southern portion of the on-site stream channel would predominately consist of planting native vegetation, which would help to stabilize the channel. No restoration activities are proposed that would result in substantial disturbances of the channel, such as removing existing broken or intact concrete that was previously placed in the channel. Therefore, the proposed stream channel restoration activities would not result in additional significant project-specific or cumulative geology/soil impacts or increase the severity of any previously identified impacts. No new or revised mitigation measures are required.

#### **4.6 Greenhouse Gas**

The Final EIR concluded that the Oak Hills Estate project would not result in significant short- or long-term impacts resulting from emissions of greenhouse gases. The evaluation of project-related greenhouse gas impacts included short-term emissions that would result from conducting off-site habitat restoration activities at the VVCSD-owned mitigation site, such as emissions from temporary commute and hauling trips. Habitat restoration activities that would be conducted at the BMER restoration site would be similar to those previously proposed to occur at the VVCSD-owned property, and resulting air emissions would also be similar. Conducting restoration activities in the stream channel located on the central portion of the project site would include the removal of debris and invasive ice plants, and planting a variety of native plant species. These types of activities would not be a substantial source of greenhouse gas emissions. Therefore, the proposed on- and off-site restoration activities would not result in additional significant project-specific or cumulative greenhouse gas emission impacts or increase the severity of any previously identified greenhouse gas impacts. No new or revised mitigation measures are required.

#### **4.7 Hydrology and Water Quality**

The Final EIR determined that habitat restoration activities at the VVCSD-owned off-site mitigation property would have a short-term demand for irrigation water but would not result in a long-term water demand. Therefore, restoration efforts would not result in a significant water supply impact. Restoration activities at the VVCSD site would not result in grading, changes in topography, an increase in impervious surface area, or changes to existing storm water runoff characteristics. As a result, restoration activities on the VVCSD property would not result in significant hydrology or water quality impacts. Habitat restoration activities proposed for the BMER restoration site would have a short-term water demand that is similar to restoration efforts proposed at the VVCSD site, and would not result in substantial ground disturbance or changes to the site's existing runoff characteristics. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in additional project-specific or cumulative hydrology impacts or increase the severity of any previously identified impacts.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation, which would help to minimize the potential for erosion within the channel. Proposed activities such as the removal of invasive ice plant and broken concrete would only occur in areas where existing native vegetation would not be disturbed. The restoration activities would not result in an increase in impervious surfaces, changes to runoff water characteristics, or adverse water quality impacts. The additional on-site restoration activities would not result in additional significant hydrology or water quality impacts, or increase the severity of any previously identified project-specific or cumulative impacts. No new or revised mitigation measures are required.

#### **4.8 Land Use**

Habitat restoration activities proposed on the VVCSD-owned off-site mitigation property would have occurred on a 123-acre open space parcel adjacent to the Clubhouse Estates residential development project. The Final EIR determined that habitat restoration activities at the VVCSD site would not result in significant land use conflicts resulting from nuisance noise, short- or long-term traffic generation, conflicts with nearby neighborhoods, odors, or loss of solar access. Habitat restoration activities proposed to be conducted at the BMER restoration site would occur on a 127-acre portion of the State-owned Reserve, and there are no residences located near the site. Restoration activities at the BMER site would be similar to those proposed for the VVCSD property and would not result in significant project-specific or cumulative land use conflicts with adjacent open space or other land uses. No new or revised mitigation measures are required.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation. Vegetation planting and maintenance would not result in significant short- or long-term land use conflicts with land uses located near the project site or future residences located on the project site. No new or revised mitigation measures are required.

#### **4.9 Noise**

The Final EIR determined that habitat restoration activities at the VVCSD-owned off-site mitigation property would not require the use of heavy construction equipment and would not result in temporary short-term noise impacts. The restoration of habitat and planting native plants and trees would not result not be a long-term source of noise and would not result in significant impacts to nearby residential areas. Habitat restoration activities proposed for the BMER restoration site would also not require the use of heavy construction equipment and would not result in the creation of a long-term noise source. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in additional project-specific or cumulative noise impacts or increase the severity of any previously identified impacts. No new or revised mitigation measures are required.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation. Vegetation planting and maintenance would not be a substantial short- or long-term source of noise and would not result in significant noise impacts to future residences on the project site. No new or revised mitigation measures are required.

#### **4.10 Public Services**

The Final EIR determined that habitat restoration activities at the VVCSD-owned off-site mitigation property would not result in student enrollment growth at local schools, generate waste water that requires treatment and disposal, generate a substantial amount of solid waste, or require police or other emergency services. Habitat restoration activities proposed to be conducted at the BMER restoration site would be similar to those proposed for the VVCSD

property, and would result in significant project-specific or cumulative public service impacts. No new or revised mitigation measures are required.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation. Vegetation planting and maintenance would not result in significant short- or long-term demands for public services and no new or revised mitigation measures are required.

#### **4.11 Transportation and Circulation**

Vehicle access to the VVCSD-owned off-site mitigation property is provided from Clubhouse Road and residential streets in the Clubhouse Estates residential project. The Final EIR determined that the habitat restoration activities at the VVCSD-owned site would generate a small amount of traffic, approximately six round trips per day initially and fewer trips for long-term maintenance. Due to the limited number of vehicle trips generated, restoration activities would not result in or contribute to significant project-related traffic impacts. Access to the BMER restoration site would be from a gated private road that intersects with Harris Grade Road, approximately two miles east of the restoration site. Habitat restoration activities proposed for the BMER restoration site would be similar to those proposed at the VVCSD site and would not generate a substantial amount of traffic. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in significant project-specific or cumulative traffic-related impacts or increase the severity of any previously identified impacts. No new or revised mitigation measures are required.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation at the same time other on-site habitat restoration activities are conducted. Vegetation planting and maintenance would not generate a substantial amount of traffic and would not result in new significant project-specific or cumulative impacts. No new or revised mitigation measures are required.

#### **4.12 Fire Protection**

The Final EIR states that the VVCSD-owned off-site mitigation property is located in a high fire hazard area, however, proposed restoration activities would occur more than 100 feet from residences adjacent to the site, and would not result in the development of structures that would increase the potential for wildfire hazards. Potential fire hazard impacts that may result from the operation of vehicles at the restoration site would be reduced to a less than significant level with the implementation of mitigation measure FP-1 (Construction Fire Protective Measures). Habitat restoration activities proposed to be conducted at the BMER restoration site would be similar to those proposed for the VVCSD property, however, planting native plants on the BMER property would not substantially increase wildfire risks on the Reserve or adjacent areas because there are no residences or other structures located on or near the restoration site. Similar to the restoration activities proposed for the VVCSD site, habitat restoration on the Reserve would have the potential to result in short-term construction operation- and equipment-related fire protection

impacts, however, the mitigation requirements included in Final EIR (mitigation measure FP-1) would be adequate to reduce potential fire protection impacts at the BMER restoration site to a less than significant level. Therefore, the proposal to conduct habitat restoration at the BMER site would not result in additional significant fire protection impacts or increase the severity of any previously identified impacts. Similar to the analysis included in the Final EIR, the identified mitigation measure would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No new or revised mitigation measures are required.

The habitat restoration activities proposed for the stream channel located near the center of the Oak Hills Estate project site would predominately consist of planting native vegetation and would supplement other habitat restoration efforts proposed to be conducted at the project site. The wildfire risk associated with planting native vegetation at the project site would be reduced to a less than significant level by mitigation measures FP-2 (Fuel Management Plan) and FP-3 (Oak Hills Estate Design Guidelines Fuel Management Revisions). The additional on-site restoration activities would not result in any new fire protection impacts or substantially increase the severity of previously identified fire protection impacts. Similar to the analysis included in the Final EIR, the identified mitigation measures would also reduce the potential cumulative impacts of the proposed project to a less than significant level. No new or revised mitigation measures are required.

#### **4.13 Policy Consistency**

The Final EIR includes an evaluation of the Oak Hills Estate project's consistency with applicable policies of the Santa Barbara County Comprehensive Plan. The evaluation concluded that the project would be potentially consistent with each of the identified policies. Revisions to the proposed project to conduct biological resource impact mitigation at the BMER would not affect the project's potential consistency with the Comprehensive Plan because: restoration activities proposed to occur on the BMER (i.e., creating native habitat, removing invasive weeds, and planting native plants and trees) are similar to the restoration activities previously proposed to occur on the VVCSD-owned mitigation site; the implementation of an approved final mitigation plan at the BMER would reduce the project's impacts to biological resources to a less than significant level; implementation of the BMER restoration plan would not result in additional significant environmental impacts; and the BMER restoration plan would not substantially change existing land use conditions at or near the restoration site. The proposal to conduct habitat restoration in the ephemeral stream located on the central portion of the project site would be an extension of currently proposed habitat restoration activities and would not result in significant environmental impacts or other conditions on the project site that would have the potential to be inconsistent with Comprehensive Plan policies.

Minor revisions to the Final EIR's analysis of the proposed project's consistency with applicable Comprehensive Plan policies are provided below to ensure that the Final EIR's policy consistency analysis of the Oak Hills Estate project accurately reflects the habitat restoration and playground funding elements that have been added to the project description.



<b>Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines</b>	
<b>Goals, Policies, Actions, and Development Standards</b>	<b>Consistency Discussion</b>
<i>Land Use Element – Parks/Recreation Policies</i>	
<p><b>Policy 3.</b> Future development of parks should emphasize meeting the needs of local residents.</p>	<p><b>Consistent.</b> The project proponent would be required to pay County Parks (Quimby) fees prior to map recordation consistent with County requirements. Hiking opportunities are also available to future project residents at the Burton Mesa Ecological Reserve through a trail entrance adjacent to the project site. In addition, the project would make a monetary contribution for the future development of a playground in Vandenberg Village, which if developed would meet the needs of local residents. Therefore, the project is consistent with this policy.</p>
<i>Lompoc Area Guidelines</i>	
<p><b>Guideline A-6.</b> Development should be sited and designed to avoid disruption and fragmentation of significant natural resources, minimize removal of oaks and Bishop Pines and other significant native vegetation, preserve wildlife corridors, and provide reasonable levels of habitat restoration.</p>	<p><b>Consistent.</b> The proposed project site is adjacent to the Burton Mesa Ecological Reserve and would not result in significant direct impacts to the Reserve. Potential indirect impacts to the Reserve (e.g., edge effects) would be minimized by preserving on-site open space adjacent to the Reserve boundaries. The project was designed to minimize removal of coast live oaks to the extent feasible but would impact between 74 and 127 oak trees. Proposed mitigation measure BIO-3.2 requires the preparation and implementation of a Tree Protection Plan, and mitigation measure BIO-3.3 requires the implementation of an approved Tree Replacement Plan that would require impacted oak trees to be replaced at a ratio of 10:1.</p> <p>The project would, result in the removal of up to 6.92 acres of moderate-quality maritime chaparral habitat. Mitigation measure BIO-2.1 requires the implementation of an On-Site Habitat and Open Space Protection Plan, and mitigation measures BIO-2.2a and 2.2b require implementation of an approved Off-Site Habitat Restoration Plan. These plans would minimize impacts to on-site habitat that is to be preserved and maintained, and would require that impacted maritime chaparral be replaced at a 2:1 ratio at approved locations on the project site and on the Burton Mesa Ecological Reserve. The project would preserve the small (0.02-acre) wetland located on the project site, but does have the potential to result in short- and long-term impacts on the wetland through sedimentation and water quality degradation (0.01 acre is located in FMZ-2). These potential impacts would be reduced to a less than significant level with the implementation of regulatory requirements, such as the preparation and implementation of an approved SWPPP, SWMP, and MM BIO-2.1 and MM FP-2.1, which address avoidance of this habitat area through the implementation of fences and signs. With the implementation of these mitigation</p>

<b>Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines</b>	
<b>Goals, Policies, Actions, and Development Standards</b>	<b>Consistency Discussion</b>
<b>Guideline A-7.</b> Recognizing that many animals that depend on the riparian system of streams also depend upon the adjacent upland habitat often exceeding 100 feet from streams, development should be sited and buffered to the greatest extent feasible from riparian areas known to support such species, while preserving reasonable use of the property.	measures, the project is consistent with this policy. <b>Consistent.</b> The project site does not include riparian habitats. The project would, however, improve habitat conditions in the southern portion of the ephemeral stream located on the central portion of the project site by planting additional native vegetation. The additional restoration would improve habitat quality on the project site. Therefore the proposed project is consistent with this policy.

#### 4.14 Other CEQA Mandated Sections

**Effects Found Not to be Significant.** The Final EIR concluded that the Oak Hills Estate project would not have the potential to result in significant environmental impacts related to certain environmental issue areas, including Agriculture and Forestry, Energy, Hazard and Hazardous Materials, Population and Housing, Recreation, and Mineral Resources.

Proposed habitat restoration activities at the BMER would restore native habitat at a fallow agricultural field, and would not require the removal of or result in constraints to any existing agricultural operations. Similarly, proposed restoration activities within the on-site ephemeral stream channel would not remove or adversely affect any agricultural operations. There are no mining operations conducted on or near the proposed on- or off-site habitat restoration sites. Therefore, the revised project would not result in significant Agriculture and Forestry impacts, or impacts to Mineral Resources.

The revisions to the proposed project that would result in additional on-site habitat restoration and the implementation of restoration activities at the BMER and VVCSD sites would not use an excessive amount of energy or use energy in a wasteful manner. The project revisions would not require the use of hazardous materials, result in the removal of existing dwelling units, or result in a substantial increase in the population of the project area. Therefore, the project revisions would not result in significant Energy, Hazards and Hazardous Materials, or Population and Housing impacts.

**Significant Environmental Effects Which Cannot be Avoided if the Project is Implemented.**

The Final EIR concluded that the Oak Hills Estate project would result in significant and unavoidable aesthetic impacts resulting from the conversion of the project site from vacant land to a site developed with 29 single-family residences. However, as demonstrated by the analysis provided in Sections 4.1 through 4.12 above, the proposed project revisions would not result in any new significant environmental impacts, or increase the severity of any previously identified impacts. Therefore, the proposed project revisions would not result in any additional significant and unavoidable impacts.

**Growth Inducing Effects.** The Final EIR concluded that the Oak Hills Estate project would not result in significant growth inducing impacts. The revisions to project-related habitat restoration

requirements would not foster substantial population growth, promote substantial economic growth in the project area, or result in the development of infrastructure that would remove an impediment to future growth. Therefore, the proposed project revisions would not result in significant growth inducing impacts.

**Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project should it be Implemented.** The revisions to project-related habitat restoration requirements would not require the substantial use of non-renewable resources, have the potential to result in irreversible damage from environmental accidents, or result in a irretrievable commitments of resources. Therefore, the proposed project revisions would not result in significant irreversible environmental changes.

## **5.0 IMPACT SUMMARY AND FINDINGS**

### **5.1 Impact Summary**

The Final EIR determined that the Oak Hills Estate project would result in a significant and unavoidable (Class I) aesthetic impacts resulting from the conversion of the project site from vacant land to a site developed with 29 single-family residences. Proposed revisions to the project's on- and off-site restoration plans would not adversely affect the visual character of the proposed restoration sites or contribute to the previously identified Class 1 aesthetic impacts. Implementation of the proposed on- and off-site restoration plans would not result in any Class I environmental impacts not previously identified by the Final EIR.

The Final EIR determined that the Oak Hills Estate project would result in a significant and mitigatable (Class II) aesthetic, biological resources, cultural resources, geology and soils, hydrology and water quality, noise, public service, traffic safety, and fire protection impacts. Proposed revisions to the project's on- and off-site restoration plans would not result in additional Class II environmental impacts that were not previously identified by the Final EIR, and would not increase the severity of any of the previously identified Class II impacts. Proposed revisions to Final EIR mitigation measures BIO-2.1 and BIO-2.2 (BIO-2.2a and BIO-2.2b) ensure that with the implementation of the approved final restoration/mitigation plans, the proposed project's impacts to biological resources will be reduced to a less than significant level. The implementation of other mitigation measures currently identified by the Final EIR would be adequate to reduce potential Class II cultural resources and fire protection impacts of the revised restoration plans to a less than significant level and no additional or modified mitigation measures are required.

The Final EIR determined that the proposed project would result in less than significant (Class III) impacts related to Agriculture and Forestry, Air Quality, Energy, Greenhouse Gas Emissions, Hazard and Hazardous Materials, Population and Housing, Recreation, Land Use, and Mineral Resources. Implementation of the proposed on- and off-site restoration plans would not result in a substantial increase in the severity of any of the identified Class III impacts.

## **5.2 Findings**

It is the finding of the Board of Supervisors that based on revisions to the Final EIR as described above, impacts resulting from implementation of the Oak Hills Estate project would not otherwise result in a change in the levels of impact identified in the existing analysis contained in the Final EIR. As such, the revisions to that analysis incorporated into the Final EIR by this Revision Letter dated June 4, 2018 may be used to fulfill the environmental review requirements for the current project, and the information contained herein does not require recirculation of the project EIR pursuant to CEQA Guidelines Section 15088.5.

### **ATTACHMENTS**

1. Burton Mesa Ecological Reserve Offsite Mitigation Area and Lot 54 Oak Planting Conceptual Mitigation Plan.
2. California Department of Fish and Wildlife letter dated June 8, 2018.

*Oak Hills Estate, LLC*

# **Oak Hills Estate Project**

## **Burton Mesa Ecological Reserve Offsite Mitigation Area and Lot 54 Oak Planting Conceptual Mitigation Plan**



**May 30, 2018**

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**BURTON MESA ECOLOGICAL RESERVE OFFSITE  
MITIGATION AREA AND LOT 54 OAK PLANTING  
CONCEPTUAL MITIGATION PLAN**

**OAK HILLS ESTATE PROJECT  
VANDENBERG VILLAGE, SANTA BARBARA COUNTY,  
CALIFORNIA**

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May 30, 2018

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- Appendix A. Photo Plate
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- Appendix C. Plan Sheets: Offsite Restoration at Burton Mesa Ecological Reserve and Oak Planting at Lot 54





## EXECUTIVE SUMMARY

This offsite mitigation baseline report and conceptual mitigation plan has been prepared to document the existing conditions and sensitive biological resources of a site with potential to benefit from restoration and enhancement efforts as offsite mitigation for the Oak Hills Estate Project, and outlines the approach to offsite mitigation for project-related impacts. The proposed offsite mitigation area (POMA) is located on the Burton Mesa Ecological Reserve, near the community of Vandenberg Village, in Santa Barbara County, California, and consists of approximately 13.23 acres of focused mitigation areas within an approximately 172-acre portion of an open space parcel owned by the State of California and managed by California Department of Fish and Wildlife. Vegetation in the POMA consists of a fallow farm field, and riparian woodland associated with an ephemeral drainage. The drainage and riparian area within the field would not be impacted. An additional riparian area along the margin of the field provides opportunities for additional restoration.

The Oak Hills Estate project has the potential to result in adverse effects to several biological resources including: sensitive habitats, oak trees, and special status species. A portion of mitigation will be implemented onsite. Additionally, approximately 50 trees will be planted along Clubhouse Drive. The remainder of the required mitigation is proposed for offsite mitigation. Oak Hills Estate is in discussions with the California State Lands Commission and California Department of Fish and Wildlife regarding the final mitigation areas, right of entry agreement, and long-term funding for management of the site after restoration is complete.

This report evaluates feasibility of conducting mitigation activities consisting of restoration, planting, and weed control within a focused portion of the POMA to replace functions and values lost at the nearby Oak Hills Estate Project. Offsite mitigation is feasible, as is described throughout this report. Through evaluation of onsite conditions and existing resources, an area approximately 13.23 acres in size that would benefit from restoration and enhancement activities was identified to mitigate impacts to maritime chaparral, rare plants, and oak trees. Additional acreage is also available in the 172-acre area evaluated; however, the selected 13.23-acre area represents the preferred restoration locations to build on natural recruitment that is already occurring in the proposed site. The selected area is a fallow farm field with very little native vegetation, and so sufficient space is available for mitigation plantings of rare plants and oak trees without significantly impacting existing resources. Control of invasive weeds currently present in the POMA, which threaten existing resources, would benefit the resources already onsite and adjacent to the site. Enhancement activities would speed transition of an existing early seral stage plant community to the climax maritime chaparral type with a diverse species composition and heterogeneous structure. This report also summarizes proposed planting of approximately 50 oak trees along Clubhouse Drive, in fulfillment of a small percentage of the required oak replanting efforts.

Offsite mitigation for project-related impacts to maritime chaparral, oak trees, and special status plants, would include creation of maritime chaparral, planting of coast live oak trees, and establishment of special status plant species populations within the POMA. Plantings would be carefully sited to avoid impacts to existing native vegetation. No heavy equipment is proposed for use in the restoration effort. Weed control efforts would target perennials that disrupt open



sand areas that are important habitat for listed species adjacent to mitigation planting areas. Restoration of degraded habitat to higher quality habitat would replace functions and values lost on the Oak Hills Estate Project site. A small number of the required replacement oaks would also be planted at Lot 54 along Clubhouse Drive.

The POMA was also evaluated to consider the potential for restoration and enhancement activities to result in adverse effects to existing resources. Through this analysis, constraints in the form of existing resources were identified, and through targeted restoration and management efforts, impacts to these resources can be avoided. Restoration efforts would result in net benefits to special status plants and wildlife species through creation of higher quality, heterogeneous chaparral habitat and control of invasive species.



## 1.0 INTRODUCTION

Rincon Consultants, Inc. (Rincon) prepared this report to provide preliminary documentation of baseline biological conditions at the offsite mitigation site on the Burton Mesa Ecological Reserve (BMER) and outline the conceptual approach to offsite mitigation for the Oak Hills Estate project in Vandenberg Village. This plan also summarizes oak tree planting proposed along Clubhouse Drive on Lot 54.

A comprehensive Open Space Management Plan (OSMP) was previously prepared to address the recommended mitigation measures outlined in the Biological Resources Assessment (BRA) that was prepared by Rincon (2015), and outlined the onsite approach to mitigation. Due to lack of available acreage to meet all mitigation needs onsite, additional offsite mitigation is required. A previous conceptual report for offsite mitigation was prepared for proposed restoration at Lot 54; however, based on discussions with agency staff and ongoing coordination with California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS), an alternative offsite location has been identified on the BMER. The only mitigation planting activity that will remain at Lot 54 is the planting of approximately 50 oaks from container stock along Clubhouse Drive, a small percentage of the total number of oaks proposed for planting.

On November 15, 2017, representatives from Oak Hills Estate, Rincon, CDFW, and USFWS met at the BMER to review potential restoration areas. In December 2017, Rincon prepared and submitted a conceptual restoration proposal for CDFW and the California State Lands Commission (SLC) to consider. CDFW and SLC conferred internally over the next few months, and on April 4, 2018, representatives from SLC, CDFW, Oak Hills Estate and Rincon met to review the proposal. At that time CDFW and SLC confirmed that the proposal for mitigation at BMER was acceptable and the group outlined the next steps to finalize the restoration plan. These steps include finalizing specific restoration areas to ensure all existing easements are avoided, finalize the restoration, monitoring and long term management plan, develop a memorandum of understanding, secure a lease from SLC for the restoration activities, and develop long-term funding for management of the site.

The development of the necessary plans and agreements is in progress. This report provides information regarding the BMER offsite mitigation, explains the rationale for site selection and expected success of proposed restoration efforts, and demonstrates that the anticipated mitigation requirements for the Oak Hills Estate project can be met. Any potential adverse impacts to existing or baseline biological resources would be avoided and/or minimized upon implementation of restoration activities. Prior to implementation, a final detailed restoration, monitoring, and long-term management plan will be prepared to address offsite mitigation at the BMER. This plan would include specific methodology, success criteria, planting locations, monitoring, and adaptive management strategies for offsite mitigation, including an agreement outlining long-term funding for management of the site after restoration is complete.

Required mitigation includes the following:

- Habitat restoration
- Oak tree restoration
- Sensitive and rare plant restoration



- Weed control

The plan may also include protective fencing in some areas.

The first part of this report summarizes existing biological conditions within an approximately 172-acre offsite location, a portion of which would be restored through this project. The second part of the report identifies specific portions of that site that have been prioritized for restoration as mitigation for impacts resulting from Oak Hills Estate. Final determination of the actual restoration locations within the larger area is pending confirmation from SLC and CDFW to ensure that the selected sites would avoid conflicts with existing and anticipated uses, including existing utility easements. Final locations may be shifted or reconfigured slightly. The report explains how the restoration effort would be designed to avoid adverse impacts to existing biological resources currently present at the offsite mitigation area, while replacing functions and values lost at the project site. Finally, this report briefly summarizes proposed oak planting at Lot 54.

## **1.1 PROJECT LOCATION**

The associated project, the Oak Hills Estate project, is generally located within an undeveloped area in the community of Vandenberg Village, Santa Barbara County, California (Figure 1). Specifically, the approximately 16.88-acre site is adjacent to Oak Hill Drive between Stanford Circle and Doral Drive. The POMA is within and immediately adjacent to a fallow field on the BMER, approximately one mile west-northwest of the project site (Figure 1).

The POMA is a portion of Assessor's Parcel Number 097-350-021, occupying approximately 172 acres of the approximately 1,187-acre parcel owned by the State of California (i.e., SLC) and managed by CDFW, as depicted on Figure 2. The approximate center of the POMA occurs at latitude 34.728088°N and longitude 120.473931°W (WGS-84 datum) and is depicted on the *Lompoc*, California United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The POMA is in the northern section of the BMER, near the western edge of the BMER, just east of Vandenberg Air Force Base. It is access from a private road behind a locked gate off Harris Grade approximately two miles east of the POMA, and access for any purpose other than recreational hiking uses of existing trails requires an agreement with CDFW and SLC.

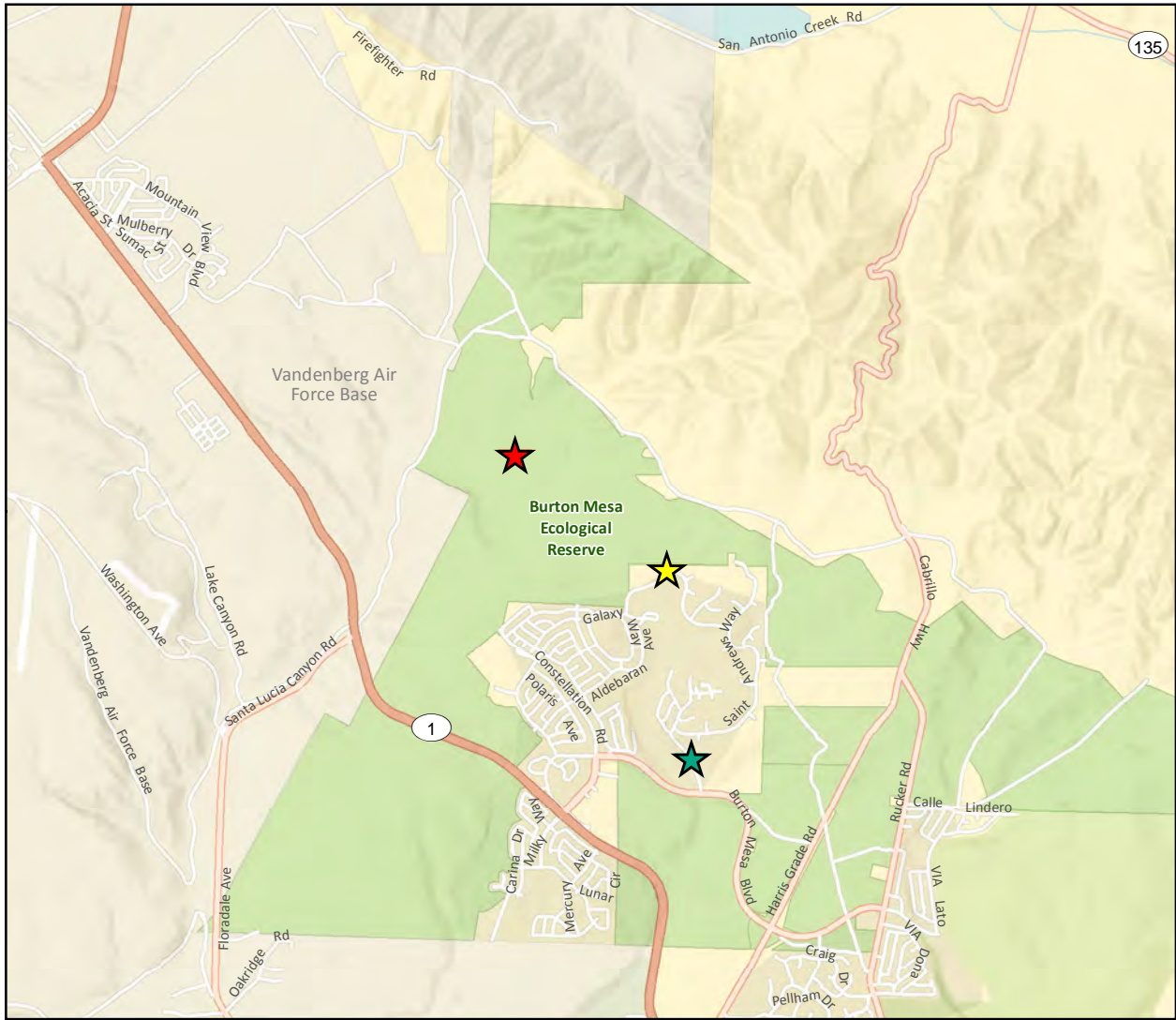
Oak planting at Lot 54 is proposed in the open space lot that is bisected by Clubhouse Drive. Proposed plantings would occur along Clubhouse Drive, between Burton Mesa Boulevard and Oakmont Avenue. The general location is depicted on Figure 1. Specific planting locations are shown on the plan sheets in Appendix C.

## **1.2 PROJECT DESCRIPTION**

The proposed Oak Hills Estate project consists of a subdivision for 29 single-family housing units, with lot sizes ranging between 9,269 and 14,837 square feet in size. A two-way road loop, emergency access road, and a cul-de-sac would be constructed to provide access to lots. The project includes stormwater facilities, including basins. These project components were used to determine the "permanent impact area" of the Oak Hills Estate project. The project also includes

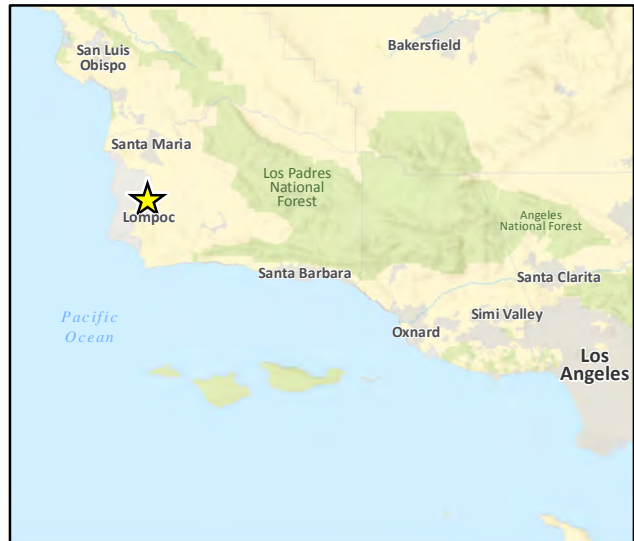
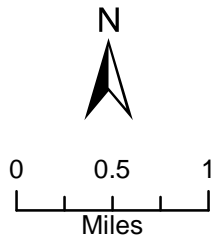


Oak Hills Estate Project  
**BMER Offsite Mitigation and Lot 54 Oak Planting Conceptual Plan**



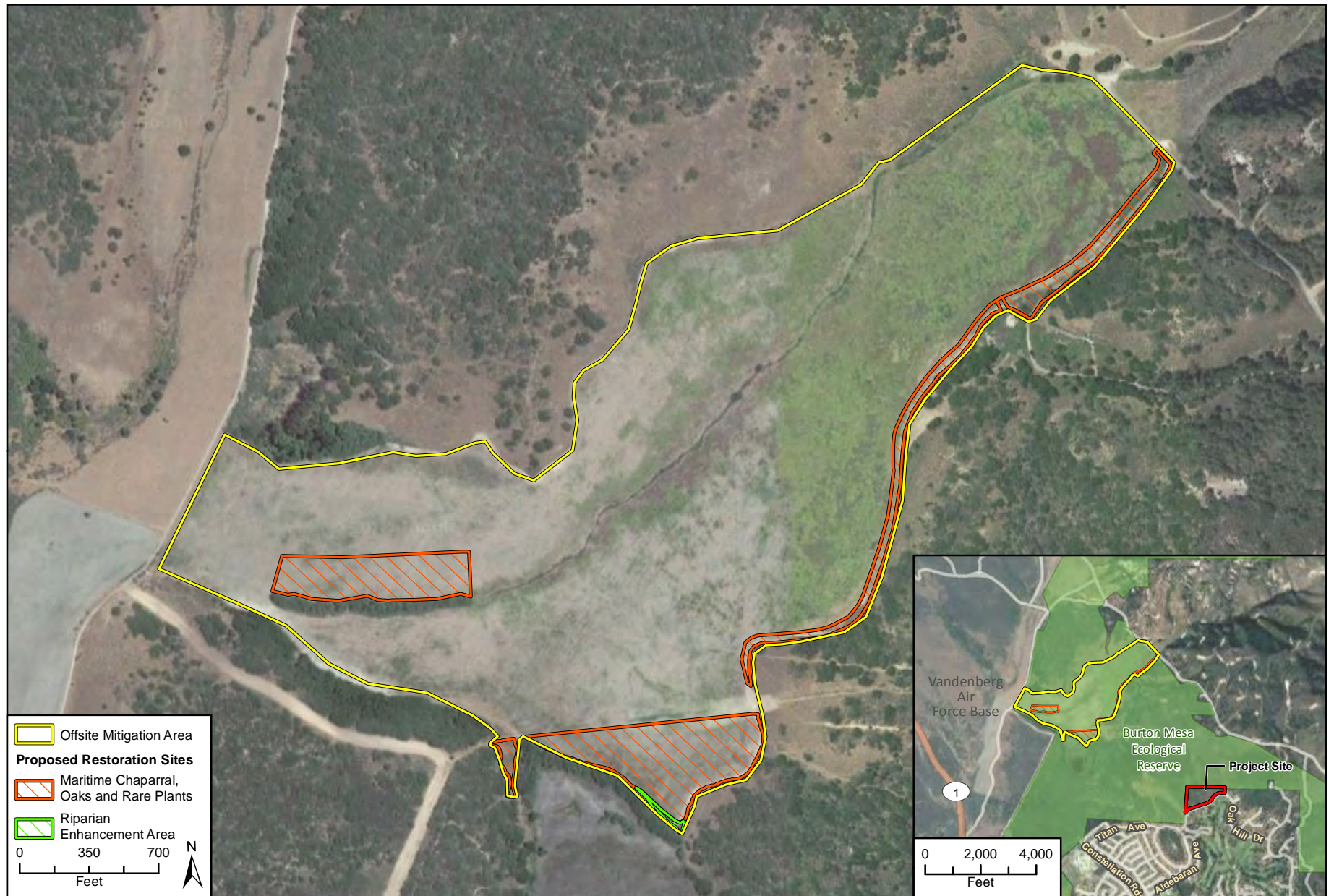
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- ★ Project Site
- ★ Offsite Mitigation Area
- ★ Lot 54 - Oak Tree Planting



Project Vicinity

Figure 1



Imagery provided by Google and its licensors © 2018.

Offsite Mitigation Area

Figure 2

30 feet of defensible space in which moderately intensive fuel management activities, such as selective pruning and thinning of dead vegetation, would occur and an additional 70 feet of lower intensity fuel management, in accordance with *General Guidelines for Creating Defensible Space* (California Department of Forestry and Fire Protection, 2006). The proposed project would include open spaces within a 100-foot buffer inside the north and west edges of the property, as well as open space associated with a drainage setback near the center of the site.

The project would impact coast live oak trees, maritime chaparral, and rare plants, and is expected to require both on and offsite mitigation for impacts to biological resources. Figure 2 depicts focused mitigation areas summing to 17.13 acres within the 172-acre POMA, to allow flexibility in finalizing specific restoration areas, flexibility with planting density and restoration and enhancement activities, and to allow additional room for oak tree planting. Note that final locations may shift slightly during coordination with CDFW and SLC to ensure full avoidance of existing easements, utilities and access roads, but the focused areas would be located within the larger POMA, a fallow farm field recently retired from agricultural uses, as shown on Figure 2 and in Appendix C. Plan sheets enclosed in Appendix C also depict planting locations for approximately 50 oak trees to be installed from containers on Lot 54.

### **1.3 SUPPORTING STUDIES AND DOCUMENTS**

The locations of and extent of impacts resulting from the Oak Hills Estate project were determined based on information gathered by Rincon, which supported preparation of a Biological Resources Assessment, a Tree Report, and a Jurisdictional Delineation, as well as preparation of an onsite OSMP, which incorporates the onsite portion of the proposed mitigation. These reports were prepared by Rincon in 2015 and were referenced regarding species, vegetation types, and other biological resources at the impact site to evaluate the proposed POMA for suitability to serve as a mitigation receiver site. Additionally, the final impact analysis and mitigation requirements in the FEIR have been incorporated into this restoration planning exercise.

Rincon completed a desktop review of resources at the POMA and also completed a feasibility site visit with CDFW and USFWS. The site visit was conducted to consider current existing site conditions and to evaluate the potential for restoration, while considering the presence of sensitive biological resources that adjoin the proposed restoration area, including sensitive plant and animal species, sensitive plant communities, potentially jurisdictional waters of the U.S. and state of California, including wetlands, and habitat for federally and state protected nesting birds. The field visit was completed by Rincon Principal/Senior Ecologist Colby J. Boggs and Senior Biologist Meg Perry, accompanied by CDFW, USFWS, and Oak Hills Estates representatives on November 15, 2017. During the site visit, the attendees reviewed existing conditions, discussed existing easements and infrastructure to be avoided, and reviewed current conditions. The group also noted natural recruitment of oak trees, manzanitas, and other native plants into the proposed restoration area, a positive indicator that the site is suitable for restoration. Representative photos are provided in Appendix A.

During the field visit, vegetation types were identified and potential locations for focused restoration efforts within the general POMA were identified, pending final results of a title



search and confirmation that current and future utility projects would be avoided. The vegetation classification system used for this analysis is based on A Manual of California Vegetation, Second Edition (Sawyer et al., 2009) and A Manual of California Vegetation, Online Edition (CNPS 2016b) and Preliminary Descriptions of the Terrestrial Communities of California (Holland, 1986); but has been modified as needed to accurately describe the existing habitats observed on site.

Finally, Rincon completed database and literature reviews, including a review of previous reports documenting conditions in and near the open space parcel that contains the POMA. Queries of the USFWS Information, Planning, and Conservation System (IPaC; 2018), CDFW California Natural Diversity Database (CNDDDB; 2018), and the California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (2016a) were conducted to obtain comprehensive information regarding state and federally listed species as well as other special status species considered to have potential to occur within the *Lompoc*, California USGS 7.5-minute topographic quadrangle. The results of these scientific database queries are presented in list format as Appendix B.

The habitat requirements for each regionally occurring special status species known from the vicinity were assessed and compared to the type and quality of the habitats observed within the site during the field survey. The recent history of the site as a farm field has reduced suitability for special status plants; however, some recruitment was noted, including seedlings of the La Purisima manzanita (*Arctostaphylos purissima*). Several sensitive species were eliminated from consideration as potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or known regional distribution. Species that are known or have potential to occur were considered in developing the conceptual mitigation approach for the BOMA. Additionally, a sequence of aerial photographs was reviewed to understand previous disturbances in the vicinity of proposed restoration efforts.

Rincon also discussed proposed restoration efforts with USFWS and CDFW representatives and considered information regarding proximity to occurrences of El Segundo Blue Butterfly (ESBB; *Euphilotes battoides allyni*), and potential net gain in conservation value through restoration of the site.





## 2.0 MITIGATION PROPOSAL CONTEXT

### 2.1 LAND USE, OWNERSHIP, AND RESPONSIBLE PARTIES

The party responsible for implementation of the mitigation and monitoring components of the mitigation effort is Oak Hills Estate, LLC or their successor in interest. The POMA property is owned by the State of California, and is managed by CDFW. Restoration efforts on the site would be governed by an agreement with CDFW and SLC. Formal agreements with these agencies are currently being processed. Final designation of responsible parties should be confirmed with the County prior to initiation of restoration activities. Funding assurance for all maintenance and monitoring activities will be a part of the final agreement between Oak Hills Estate, CDFW, and SLC.

### 2.2 BIOLOGICAL RESOURCES ASSESSMENT RECOMMENDATIONS AND FEIR REQUIREMENTS

The BRA prepared by Rincon (2015) determined the project would impact the following biological resources: maritime chaparral, coast live oak (*Quercus agrifolia*) trees with diameter at breast height (DBH) greater than or equal to six inches, La Purisima manzanita (California Rare Plant Rank [CRPR] 1B.1), mesa horkelia (*Horkelia cuneata* ssp. *puberula*, CRPR 1B.1), sand mesa manzanita (*Arctostaphylos rudis*, CRPR 1B.2), southern curly-leaved dune mint (*Monardella sinuata* ssp. *sinuata*, CRPR 1B.2), Lompoc ceanothus (*Ceanothus cuneatus* var. *fasciculatus*, CRPR 4.2), paniculate tarplant (*Deinandra paniculata*, CRPR 4.2), Lompoc wallflower (*Erysimum capitatum* var. *lompocense*, CRPR 4.2), California spineflower (*Mucronea californica*, CRPR 4.2), and Blochman’s ragwort (*Senecio blochmaniae*, CRPR 4.2). The project would also impact an unnamed, artificial ephemeral drainage. The BRA recommended compensatory mitigation for these impacts. The Final EIR for the project identified required mitigation for these species and habitat types, and a full discussion of the resources present in the Oak Hills Estate project area and the regulatory framework for requiring mitigation is presented in the BRA and Final EIR under separate cover.

The findings are summarized here to present the resources for which mitigation is needed at the POMA. The mitigation ratios for project impacts to these biological resources are summarized in Table 1 below.

**Table 1. Summary of Oak Hills Estates Mitigation Ratio Requirements**

Species	Replacement Ratio	Explanation
Purisima manzanita	2:1	(area or individuals restored/created/enhanced: impacted occupied area or individuals)
sand mesa manzanita	2:1	
mesa horkelia	2:1	
curly-leaved dune mint	2:1	
Lompoc ceanothus	1:1	
Paniculate tarplant	1:1	
Lompoc wallflower	1:1	



Species	Replacement Ratio	Explanation
California spineflower	1:1	
Blochman's ragwort	1:1	
Oak trees	10:1	(replaced: removed)
Maritime chaparral	2:1	(area restored/created/enhanced: impacted)
El Segundo blue butterfly	*	*restoration as directed by USFWS

The CDFW identifies habitat types that it considers to be sensitive. One sensitive habitat type occurs within the project site: maritime chaparral. Mitigation would occur in part on site, and in part within the POMA. Restoration of maritime chaparral would also incorporate habitat enhancement for ESBB through incorporation of plantings of the host plant, coast buckwheat (*Eriogonum parvifolium*).

Implementation of the project would require removal of approximately seventy (74) coast live oak trees with DBH of six inches or greater. Oak tree protection and preservation is typically mandated at local levels. Accordingly, project mitigation requirements for oak tree impacts are established by the County. Mitigation would occur in part onsite, and in part within the POMA, with limited oak tree planting of approximately 50 trees also occurring on Lot 54. Note that this is a small percentage of the total oak planting anticipated, and the remainder would occur on the POMA.

La Purisima manzanita, sand mesa manzanita, southern curly-leaved dune mint, and mesa horkelia are CRPR 1B special status plant species that would be impacted by implementation of the project. The remaining special status plant species found on the project site are CRPR 4 species. Since these species are neither formally state or federally listed Rare, Threatened, or Endangered, the County as the lead CEQA agency, rather than the regulatory agencies, is responsible for implementing appropriate mitigation measures so that less than significant levels of impacts are achieved for these CRPR 1B plant species through the CEQA process. CRPR List 4 species have limited distribution globally but are fairly common within their range. Suitable mitigation for these CRPR 1B and 4 plant species was established in the BRA and OSMP. Vandenberg monkeyflower, a species recently listed as federally endangered has some potential to occur at Oak Hills Estate, but was not detected during the botanical surveys of the Oak Hills Estate site. However, this species is known to be present in the vicinity of the POMA, and occupied habitat would be avoided during mitigation planting work. Control of invasive species within the POMA would indirectly benefit Vandenberg monkeyflower adjacent to the POMA.

The Final EIR determined that the project would permanently impact approximately 6.92 acres of maritime chaparral. At a 2 to 1 mitigation ratio, 13.84 acres of mitigation acreage for impacts to maritime chaparral would be required. Open space at Oak Hills Estate would be used in part for mitigation. The Final EIR concluded that approximately 0.61 acre of area is available onsite for mitigation planting, leaving the need for about 13.23 acres of offsite mitigation area to meet mitigation ratios for chaparral impacts. The target for offsite mitigation is to enhance and restore up to 13.23 acres of habitat for maritime chaparral species, rare plants, and coast live oak



trees. Figure 2 depicts approximately 17 acres of suitable areas for restoration, and additional suitable areas are present in the POMA in the same fallow, retired farm field for restoration.

### **3.0 EXISTING BASELINE CONDITIONS**

The POMA was selected as an excellent candidate for restoration due to its recent transition from an active farm field to a fallow field that will no longer be used for farming. The site was also identified independently by USFWS as a high priority for restoration. This section summarizes the existing conditions at the POMA, based on the desktop review and site visit. Discussions regarding the general environmental setting, vegetation communities present, plants and animals observed and documented in previous reports, potential special status species that may occur in the POMA, and other possible constraints regarding the biological resources on site are presented below.

#### **3.1 TOPOGRAPHY AND SOILS**

The POMA is located in northern coastal Santa Barbara County in a gently sloped area of the Burton Mesa that slopes approximately west toward Vandenberg Air Force Base. Elevations range from approximately 310 feet above mean sea level in the southwest corner to 440 feet in the northeast corner. The site was previously farmed for several decades, but has recently become fallow.

The NRCS Web Soil Survey of Santa Barbara County, California, Northern Santa Barbara Area, delineates seven soil map units in the POMA: Elder sandy loam, 2 to 9 percent slopes, eroded; Elder sandy loam, 9 to 15 percent slopes, eroded; Elder loam, 2 to 9 percent slopes, MLRA 14; Elder shaly loam, 0 to 2 percent slopes, eroded; Marina sand, 9 to 30 percent slopes; Botella clay loam, 0 to 2 percent slopes, eroded; Botella clay loam, 2 to 9 percent slopes, MLRA 14; and Terrace escarpments, loamy. Site-specific soil observations are generally consistent with those mapped by the NRCS Web Soil Survey, however, some of the NRCS soil map boundaries differ from site conditions. Sandy areas were confirmed to be present in some areas.

#### **3.2 VEGETATION COMMUNITIES**

Two vegetation communities or land cover types are associated with the POMA: arroyo willow riparian and fallow farm field. Vegetation was reviewed during the site visit to characterize the POMA site and identify focused areas that would benefit from restoration and enhancement efforts, as well as resources to avoid. Adjacent to the POMA, oak woodland, coastal scrub, and chaparral communities are present. Additionally, a perennial pond with emergent wetland vegetation and riparian woodland is present immediately south of the POMA. The arroyo willow riparian and fallow field habitat types within the POMA are described in more detail below.

##### **Arroyo willow riparian**

A band of willows forms canopy over an ephemeral drainage that enters the POMA from the northeast, and terminates near the west edge of the field. Arroyo willow (*Salix lasiolepis*) is dominant, forming a canopy of mature medium-sized trees with some sapling and shrub-sized



individuals intermixed. Occasional red willow (*Salix laevigata*) trees are also present at low cover. Giant wild rye (*Elymus condensatus* [= *Leymus condensatus*]), forms a regular component of the herb layer at low cover. Poison hemlock (*Conium maculatum*) occurs irregularly on upper banks in some pockets along the riparian band. Mugwort (*Artemisia douglasiana*) and poison oak (*Toxicodendron diversilobum*) are associates present at low percent cover in this community type. Nettle (*Urtica dioica*), beardless wild rye (*Elymus triticoides*), seaside heliotrope (*Heliotropium curassavicum*), and California brome (*Bromus carinatus*) were also observed but are not a major component of this vegetation community in the POMA. Tree canopy in the POMA is fairly even, consisting of multi-stemmed willows regularly spaced such that canopies of adjacent trees overlap. This vegetation type is consistent with the MCV2 *Salix lasiolepis* Shrubland Alliance (Sawyer et al. 2009).

### **Fallow farm field**

Agricultural operations have occurred for over a century in the vicinity of the project area, and the POMA is in a field that was managed for crop production. At the time of the site visit the field lay fallow, and had not been cultivated for at least the past two years. The field is now dominated by ruderal herbs such as mustards (*Brassica nigra*; *Hirschfeldia incana*), Russian thistle (*Salsola tragus*), thistles (*Carduus pycnocephalus*; *Cirsium vulgare*), horseweed (*Erigeron canadensis*), and annual grasses such as bromes (*Bromus diandrus*, *B. hordeaceus*, *B. madritensis* subsp. *rubens*). Vegetation in the northeastern portion was very dense, comprised primarily of waist to chest-high herbs and sub-shrubs spaced tightly together. Vegetative cover was considerably lower in the southwestern portion with patches of bare soil between ruderal species. Some shrub cover was present, including coyote brush (*Baccharis pilularis*). This vegetation community is highly disturbed and is not consistent with any of the MCV2 Alliances. Further, early successional communities are not all described in the MCV2 classification system. However, young recruits of oak trees, La Purisima manzanita, coyote brush, and annual native herbs are present, indicating the site is in the very early stages of reverting to a natural community. The edge of the fallow field consists of an access road. Based on discussions with CDFW, a long term goal for the reserve includes relocation of that access road away from the current location to avoid conflicts between site access and existing ESBB habitat along the road margins. The road relocation effort would be completed by others, but will be considered in final siting of the restoration planting to ensure that the restoration work is not in conflict with the future road location.

## **3.3 JURISDICTIONAL WETLANDS, OTHER WATERS, AND STREAMBED/RIPARIAN HABITATS**

As noted above, the POMA contains an ephemeral drainage. A portion of the drainage is vegetated with a well-developed riparian woodland. Immediately south of the POMA, a perennial pond, wetland, and riparian are present. Restoration efforts for chaparral, oak trees, and rare plants would avoid impacting the drainage and riparian area. A small area of currently degraded habitat adjacent to the pond and wetland area may be restored to extend the riparian band and reduce cover of noxious weeds currently present there. Mitigation efforts could be implemented without impacting jurisdictional areas.



### 3.4 SPECIAL STATUS SPECIES

Special status species in this baseline report are defined as species that are of management concern to the state and/or federal resource agencies, which includes those species that are:

- Listed as endangered, threatened, or candidate for listing under the federal Endangered Species Act (FESA);
- Listed as rare, endangered, threatened, or proposed for listing under the California Endangered Species Act (CESA);
- Bird Species of Conservation Concern as recognized by the U.S. Fish and Wildlife Service (USFWS);
- Species that have been designated as Fully Protected by the CDFW;
- Species that have been designated as Species of Special Concern by the CDFW;
- Species that meet the definitions of rare, endangered, or threatened under CEQA, which includes plant species recognized by a California Rare Plant Rank (CRPR; Ranks 1A, 1B, and 2); and
- CRPR 3 and 4 plant species (Rank 3 and 4 species are typically not considered for analysis under CEQA except where they are designated as rare or otherwise protected by local government).

#### 3.4.1 Special Status Plant Species

Based on the database and literature review of records from the *Lompoc, California* USGS 7.5-minute topographic quadrangle and the USFWS IPaC list of federally listed species, 36 special status plant species are known to or have the potential to occur within the vicinity of the POMA (Appendix B). Habitat for special status plants is currently limited due to the long history of cultivation at the site. However, one of these species was documented in the POMA during the site visit in the form of seedlings recruiting into the fallow field, a positive sign that portions of the site have suitable conditions for the target species. As restoration progresses, additional special status plants are anticipated to recruit into the site where soils are suitable. These species include:

- Hoover's bent grass (*Agrostis hooveri*) –CRPR 1B.2
- Santa Ynez groundstar (*Ancistrocarphus keilii*) – CRPR 1B.1
- Aphanisma (*Aphanisma blitoides*) – CRPR 1B.2
- Eastwood's brittle-leaf manzanita (*Arctostaphylos crustacea* ssp. *eastwoodiana*) – CRPR 1B.1
- La Purisima manzanita (*Arctostaphylos purissima*) – CRPR 1B.1
- Sand mesa manzanita (*Arctostaphylos rudis*) – CRPR 1B.2
- Lompoc ceanothus (*Ceanothus cuneatus* var. *fasciculatus*) – CRPR 4.2
- Island mountain mahogany (*Cercocarpus betuloides* var. *blancheae*) – CRPR 4.3
- Seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*) – state endangered; CRPR 1B.1
- Paniculate tarplant (*Deinandra paniculata*) – CRPR 4.2
- Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) – CRPR 1B.2
- Vandenberg monkeyflower (*Diplacus vanderbergensis* [= *Mimulus fremontii* var. *vanderbergensis*]) –federally endangered; CRPR 1B.1



- Saints' daisy (*Erigeron sanctarum*) – CRPR 4.2
- Mesa Horkelia (*Horkelia cuneata* var. *puberula*) – CRPR 1B.1
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*) – CRPR 1B.2
- Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) – CRPR 1B.2
- Southern curly-leaved dune mint (*Monardella sinuata* ssp. *sinuata*) – CRPR 1B.2
- California spineflower (*Mucronea californica*) – CRPR 4.2
- California adder's tongue (*Ophioglossum californicum*) – CRPR 4.2
- Branching phacelia (*Phacelia ramosissima* var. *ramosissima*) – CRPR 3.2
- Black-flowered figwort (*Scrophularia atrata*) – CRPR 1B.2
- Chaparral ragwort (*Senecio aphanactis*) – CRPR 2.2

### 3.4.2 Special Status Wildlife Species

No special status animal species were detected during the site visit; however, previous reports from the vicinity document ESBB near the margins of the POMA. As with special status plants, the history of cultivation over the majority of the POMA has limited its potential to support resident special status wildlife and other than the willow riparian area, has primarily provided movement opportunities. However, as the site reverts to natural habitat, enhanced through restoration efforts, potential for special status wildlife will be greatly enhanced. Twenty-two special status animal species were identified within the *Lompoc, California* USGS 7.5-minute topographic quadrangle as well as the USFWS IPaC list of federally listed species, and as restoration progresses, the site is anticipated to become suitable for at least thirteen species:

- California legless lizard (*Anniella pulchra* [= *Anniella pulchra pulchra*]) – state Species of Special Concern
- Southwestern willow flycatcher (*Empidonax traillii extimus*) – federal Endangered and state Endangered
- western pond turtle (*Emys marmorata*) – state Species of Special Concern
- El Segundo blue butterfly (*Euphilotes battoides allyni*) – federal Endangered
- Western red bat (*Lasiurus blossevillii*) – state Species of Special Concern
- Blainville's horned lizard (*Phrynosoma blainvilli*) – state Species of Special Concern
- California red-legged frog (*Rana draytonii*) – federal Threatened and state Species of Special Concern
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*) – state Species of Special Concern
- Western spadefoot (*Spea hammondi*) – state Species of Special Concern
- Yellow warbler (*Setophaga petechia*) – state Species of Special Concern
- American badger (*Taxidea taxus*) – state Species of Special Concern
- Two-striped garter snake (*Thamnophis hammondi*) – state Species of Special Concern
- least Bell's vireo (*Vireo bellii pusillus*) – federal Endangered and state Endangered

California red-legged frog was previously reported from just north of the POMA in a cistern. Enhanced habitat quality in the restoration area will improve cover and potential for movement of the California red-legged frog from the known location to other aquatic habitats regionally. In addition, native vegetation will provide additional areas of suitable habitat for nesting birds.



### **3.4.2 Critical Habitat**

The POMA is located immediately adjacent to the USFWS Designated Critical Habitat for Vandenberg monkeyflower. The final rule for designating critical habitat for Vandenberg monkeyflower identifies the following Primary Constituent Elements (PCEs):

1. *Native maritime chaparral communities of Burton Mesa comprising maritime chaparral and maritime chaparral mixed with coastal scrub, oak woodland, and small patches of native grasslands. The mosaic structure of the native plant communities (arranged in a mosaic of dominant vegetation and sandy openings (canopy gaps)) may change spatially as a result of succession, and physical processes such as windblown sand and wildfire.*
2. *Loose sandy soils on Burton Mesa. As mapped by the Natural Resources Conservation Service (NRCS), these could include the following soil series: Arnold Sand, Marina Sand, Narlon Sand, Tangair Sand, Botella Loam, Terrace Escarpments, and Gullied Land. (USFWS, 2015)*

Vandenberg monkeyflower is documented from sandy areas south of the POMA, and restoration of native habitats, and associated removal of invasive species, is anticipated to indirectly benefit these monkeyflower populations by reducing the available invasive species seed bank that can blow into the known occupied areas. Mitigation efforts will avoid impacts to and create additional habitat for Vandenberg monkeyflower within the POMA. Additionally, invasive species control in restoration areas will indirectly benefit Vandenberg monkeyflower in the POMA.

### **3.5 PROTECTED TREES**

Red and arroyo willows are present in the riparian band within the POMA. Seedling coast live oak trees are also present in low numbers the POMA. Restoration areas have been sited to avoid impacts to riparian habitat, and to enhance natural recruitment of native seedlings. Impacts to native trees due to implementation of the proposed restoration and enhancement activities would be avoided, and proposed planting would enhance native oak tree cover in the mitigation site.

### **3.6 LOT 54 TREE PLANTING SITE**

Proposed oak tree plantings at Lot 54 would be limited to areas that are accessible from Clubhouse Drive. Proposed plantings would primarily be sited to create a tree screen along the margin of the open space lot, replacing dead pine trees that were removed over the past five years. Plantings would be sited to avoid conflicts with known sensitive biological resources on Lot 54, including special status plants, wildlife, riparian areas and wetlands. The proposed plantings at this site represent a small percentage of the total proposed oak planting.

## **4.0 OFFSITE MITIGATION APPROACH**

The project has the potential to result in adverse effects to several biological resources including: sensitive habitats, oak trees, and special status species. A portion of the mitigation



will occur onsite. The remainder would be mitigated through restoration of a portion of this POMA, which has been deemed feasible through evaluation of site conditions, observations of natural recruitment, and a review of similar projects undertaken in the Burton Mesa. This section explains in greater detail the area that would be enhanced to mitigate for the project-related impacts to sensitive habitats, oak trees, and special status species, and outlines the mitigation recommendations that are associated with implementation of the project. Note that oak tree planting at Lot 54 is discussed in Section 4.3.2; the remainder of this section is focused on the POMA.

## **4.1 MITIGATION-SITE SELECTION**

Offsite mitigation efforts would be conducted within a portion of the BMER. Specifically, up to 13.23 acres of fallow farm field and abandoned access road would be targeted for focused mitigation and restoration efforts, and would be sufficient, in combination with on-site mitigation, to offset project-related impacts to maritime chaparral, special status plants species, and oak trees. Note that additional restoration area is available within the 172-acre area evaluated, and final determinations of planting sites will be made in cooperation with CDFW. The selected areas shown are locations where seedling germination and/or suitable soils have been noted, however, the entire 172-acre POMA has not been surveyed for seedlings in close detail. Existing biological resources within and adjacent to the POMA would be retained and enhanced. The selected areas have very little native vegetation due to the past history of farming. Invasive species are a major concern in maritime chaparral, and the proposed restoration would include provision of funds for long-term management.

## **4.2 SITE SELECTION RATIONALE**

The offsite mitigation site option was selected based on the soil type, topography, and environmental conditions which are characteristic of central maritime chaparral, oak trees, and target special status mitigation species.

Preliminary sites were selected based on observation of natural recruitment of manzanitas (*Arctostaphylos* spp.) and coast live oak trees associated with maritime chaparral, proximity to known ESBB observations in the last six years, and avoidance of expected modifications to an access route and utility lines. Portions of these preliminary sites include areas mapped as containing Marina sands, and other areas were directly observed to support young manzanitas and oaks. The existing access road around the southern margin of the field would be abandoned and relocated by other entities to approximately 35 feet north from its currently location, to reduce negative effects on coast buckwheat along the road margins and the associated ESBB living on and under these buckwheat plants. The final restoration planting plan will be sited to ensure that the relocated road is avoided by our proposed planting efforts. A portion of our proposed restoration area may include creation of a physical barrier, such as symbolic fencing or split rail fencing, to ensure encroachment from the access road does not enter restoration areas.

When possible the mitigation areas were configured to provide continuity with existing natural habitat areas, to expand the extent of natural vegetation and enhance wildlife corridors. Note





that additional restoration area is available within the 172-acre POMA area evaluated; however, the selected areas shown are the preferred locations for restoration and enhancement plantings, pending confirmation from CDFW. These areas would help create a wider buffer from existing coast buckwheat plants along the field's margin.

The selected mitigation site is located in close proximity to the project area. Early seral stage of vegetation within the focused mitigation areas suggest that plantings of maritime chaparral species would establish successfully and would promote more rapid transition to a natural vegetation community. Control of invasive species and restoration to encourage recovery of maritime chaparral is expected to enhance survival of listed and other special status species in the mitigation area and adjacent habitat, and result in benefits for wildlife habitat. For the purposes of this project, supplementing onsite mitigation with off-site mitigation would result in net benefits to habitat quality and connectivity on the BMER over the existing condition.

### **4.3 CONCEPTUAL APPROACH**

Offsite mitigation for project-related impacts to maritime chaparral, oak trees, and special status plants, would include creation, restoration and enhancement of maritime chaparral, planting of coast live oak trees, and establishment of special status plant species populations within a 13.23-acre portion of the approximately 172-acre POMA. Plantings would be carefully sited to avoid impacts to existing native vegetation, especially seedlings of special status plants and oak trees and riparian areas. No heavy equipment is proposed for use in the restoration effort; standard landscaping equipment may be used, including hand-held tools. Weed control efforts would target perennials that disrupt the open sand areas that are important habitat for listed species adjacent to mitigation planting areas.

Restoration would be accomplished through a combination of protecting naturally recruiting native plants, seeding and container stock planting, with regular weed control and maintenance efforts for a period of five years, or until restoration plantings are fully established, whichever is longer. The proposed restoration areas attempt to facilitate recovery of native vegetation contiguous with areas already vegetated with natives to reduce edge effects and potential for weed invasion. The areas are also close to existing or anticipated access points to facilitate maintenance and monitoring of the restoration without additional disturbance of natural areas.

#### **4.3.1 Central Maritime Chaparral**

Central maritime chaparral would be created in areas currently vegetated with non-native annual grasses and ruderal species, and would leverage existing natural recruitment of seedlings as much as possible. This approach would utilize planting of container stock and/or seed to restore maritime chaparral. Intensive weed management is anticipated to be needed to create Central Maritime Chaparral habitat.

#### **4.3.2 Oak Mitigation**

The project would result in the removal of approximately 74 mature coast live oak trees (with DBH  $\geq$  6 inches) which are found scattered within the central maritime chaparral. Mitigation will be fulfilled by replacing removed trees at a ratio of 10:1 (oaks replaced: oaks removed), which amounts to a total of 740 trees at the completion of the project, the majority of which



would be planted in the POMA. Oak tree mitigation areas would be included as part of the maritime chaparral mitigation within the POMA since coast live oak is an integral component of maritime chaparral. Mitigation oak trees would be planted as container stock and/or acorns and would be located in clusters near existing oak woodlands in the POMA. Container stock and acorns would be provided with mulch and browse protection in some form (tubes, cages, etc.) to enhance survival.

The target is to achieve at least 50 percent of the goal number of trees from acorns, with the remainder planted from containers grown from local stock. A mixture of acorns and container stock are proposed for installation because use of directly planted acorns can provide some advantages. For instance, planting directly from acorns that have been collected, floated to remove nonviable individuals, and planted at the appropriate time allows the oak to establish a natural root system undisturbed by the transplant process that. Use of locally collected acorns ensures local genetic diversity is well-represented, and reduces potential for bringing in weeds, pathogens and non-native invertebrates that can be transported even when nursery stock is produced from local seed sources. Several studies have found that oaks and other woody plants established from seedlings can be weaned from irrigation or survive without supplemental irrigation more effectively than container stock, and that after the first year, growth rates are comparable to or exceed that of plants installed from containers (e.g., Young and Evans 2002; McCreary 1995; Matsuda et al. 1989). Acorns would be planted in excess of the goal due to the known lower survival rate in the first year after planting. Studies comparing irrigation effects on acorn and container stock plantings suggest that after the first year, effects on size of the seedling trees is not significantly correlated to the original planting method (McCreary et al. 2002 and Costello et al. 2002). Success of oak tree planting efforts will evaluate the number of successfully established young oak trees on an annual to ensure sufficient numbers are established, and will require replacement plantings and follow-up monitoring if targets are not met.

A small number of these plantings would occur at Lot 54 where container stock would be installed along Clubhouse Drive. Proposed plantings would primarily be sited to create a tree screen along the margin of the open space lot. The proposed plantings at this site represent a small percentage of the total proposed oak planting.

### **4.3.3 Special Status Plant Mitigation**

Special status plant mitigation would be implemented as part of the mitigation effort for loss of central maritime chaparral and would partially occur within the POMA as well as onsite. Plants would be placed under the guidance of a restoration ecologist to ensure specific planting locations are suitable for the plant, and do not impact existing resources. Container stock and seed would be used, and would be sourced from local stock.

### **4.3.4 Riparian Restoration and Enhancement**

As noted above, the POMA contains an ephemeral drainage. Immediately south of the POMA, a perennial pond, wetland, and riparian are present. A small area of currently degraded habitat adjacent to the pond and wetland area extends into the POMA. Restoration in this area would include control of noxious weeds currently present there to reduce potential for these species to spread into the restoration area, and replacement with native species to enhance and extend



riparian cover and create a transition zone between riparian and upland habitats that is dominated by native species rather than weeds.

### 4.3.5 Lot 54 Oak Planting

Approximately 50 coast live oak trees would be planted along either side of Clubhouse Drive at Lot 54 to establish a screen of native woody vegetation along the margins of the open space.

## 4.4 PROPOSED PLANT PALETTE

Table 2 lists the preliminary plant palette, subject to approval from CDFW. Plantings would include both seeds and container stock.

**Table 2. Preliminary Plant Palette**

Scientific Name	Common Name
<i>Arctostaphylos purissima</i>	La Purisima manzanita
<i>Arctostaphylos rudis</i>	sand mesa manzanita
<i>Ceanothus cuneatus</i> var. <i>fasciculatus</i>	Lompoc ceanothus
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	Mountain mahogany
<i>Deinandra paniculata</i>	paniculate tarplant
<i>Ericameria ericoides</i>	Mock heather
<i>Eriogonum parvifolium</i>	Coast buckwheat
<i>Erysimum capitatum</i> var. <i>lompocense</i>	Lompoc wallflower
<i>Frangula californica</i>	California coffeeberry
<i>Heteromeles arbutifolia</i>	toyon
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia
<i>Mimulus aurantiacus</i> ( <i>lompocensis</i> ) <sup>1</sup>	Lompoc sticky monkeyflower
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	curly-leaved dune mint
<i>Mucronea californica</i>	California spineflower
<i>Quercus agrifolia</i>	Coast live oak
<i>Rhamnus crocea</i>	Spiny redberry
<i>Salvia mellifera</i>	Black sage
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	Blue elderberry
<i>Senecio blochmaniae</i>	Blochman's ragwort

<sup>1</sup> Variety *lompocensis* is not currently recognized in Jepson but stock would be from local plants with the variety *lompocensis* traits

Planting of buckwheat would be restricted to locations at least 20 feet from the new access route to avoid creating access route/ESBB conflicts.

## 4.4 IMPLEMENTATION MEASURES

To ensure no impacts are made to existing sensitive biological resources in the POMA, and to maximize the chance of mitigation success, the following implementation measures are recommended:



- Prior to implementation of the mitigation efforts, sensitive biological resources such as existing seedlings of rare plants and oak trees would be flagged for avoidance.
- A qualified restoration ecologist would be present during installation or planting to ensure that sensitive biological resources are avoided and plants are positioned in appropriate areas and configurations.
- Mitigation creation and enhancement areas should be clearly demarcated
- All planting and maintenance staff should be trained to recognize sensitive biological resources including all potential rare plants in the POMA. Staff should also be trained to recognize all target weed species.
- A specific habitat restoration and management plan would be prepared that outlines planting techniques, procedures for tracking planting efforts, weed control methods, monitoring, and management through the establishment phase.
- All activities would be subject to a Right of Entry agreement from CDFW.

## 4.5 SUMMARY

This document outlines an approach to supplement onsite mitigation for the Oak Hills Estate to ensure impacts are offset. The proposed restoration would replace functions and values lost onsite in close proximity to the location of impact and would have additional benefits to wildlife through restoration of the fallow field to native vegetation. With the County's approval of the conceptual approach, the applicant would next pursue development of a Restoration, Monitoring, and Long-term Management Plan (Plan) that addresses specifics of offsite mitigation, and continue to coordinate closely with SLC, CDFW, and USFWS to finalize details of the restoration and long-term funding for the future management of the restoration site. The funding required for long-term management of the site would be determined through a Property Analysis Record (PAR) analysis completed using the Center for Natural Lands Management's software package, an industry- standard for determining management funding needs for preserves, or equivalent methodology. Long-term funding would take the form of an endowment and/or letter of credit, dependent upon final agreement with SLC and CDFW.

The Plan would detail specific procedures for restoration efforts, including quantities, locations, and specifications for planting and care of rare plants and oak trees; locations and specific techniques for targeted weed control; monitoring and maintenance regimens, and adaptive management techniques. The Final Plan and OSMP (and associated addendum) would require County approval prior to implementation.



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# Appendix A

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*Site Photos*

## APPENDIX A. PHOTO PLATE



Photo 1. Existing ruderal vegetation with a few coyote brush recruits in the proposed restoration area.



Photo 2. Ruderal vegetation in the former farm field. A portion of the field would be restored to support maritime chaparral, rare plants, and oak trees.





Photo 3. A young La Purisima manzanita within the fallow field.

# **Appendix B**

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*Database Query Results*



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Query Criteria: Quad> IS <(Lompoc (3412064))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agrostis hooveri</i> Hoover's bent grass	PMPOA040M0	None	None	G2	S2	1B.2
<i>Ancistrocarphus keilii</i> Santa Ynez groundstar	PDASTD5020	None	None	G1	S1	1B.1
<i>Anniella pulchra</i> northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arctostaphylos crustacea ssp. eastwoodiana</i> Eastwood's brittle-leaf manzanita	PDERI041H4	None	None	G4T2	S2	1B.1
<i>Arctostaphylos purissima</i> La Purisima manzanita	PDERI041A0	None	None	G2	S2	1B.1
<i>Arctostaphylos refugioensis</i> Refugio manzanita	PDERI041B0	None	None	G3	S3	1B.2
<i>Arctostaphylos rudis</i> sand mesa manzanita	PDERI041E0	None	None	G2	S2	1B.2
<i>Astragalus didymocarpus var. milesianus</i> Miles' milk-vetch	PDFAB0F2X3	None	None	G5T2	S2	1B.2
<i>Central Coast Arroyo Willow Riparian Forest</i> Central Coast Arroyo Willow Riparian Forest	CTT61230CA	None	None	G3	S3.2	
<i>Central Maritime Chaparral</i> Central Maritime Chaparral	CTT37C20CA	None	None	G2	S2.2	
<i>Chorizanthe rectispina</i> straight-awned spineflower	PDPGN040N0	None	None	G2	S2	1B.3
<i>Cordylanthus rigidus ssp. littoralis</i> seaside bird's-beak	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<i>Delphinium parryi ssp. blochmaniae</i> dune larkspur	PDRAN0B1B1	None	None	G4T2	S2	1B.2
<i>Diplacus vandenbergensis</i> Vandenberg monkeyflower	PDSCR1B381	Endangered	None	G1	S1	1B.1
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<i>Horkelia cuneata var. puberula</i> mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
<i>Lasiurus blossevillii</i> western red bat	AMACC05060	None	None	G5	S3	SSC



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Lasiurus cinereus</i></b> hoary bat	AMACC05030	None	None	G5	S4	
<b><i>Layia heterotricha</i></b> pale-yellow layia	PDAST5N070	None	None	G2	S2	1B.1
<b><i>Lepidium virginicum var. robinsonii</i></b> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<b><i>Lonicera subspicata var. subspicata</i></b> Santa Barbara honeysuckle	PDCPR030R3	None	None	G5T2?	S2?	1B.2
<b><i>Monardella sinuata ssp. sinuata</i></b> southern curly-leaved monardella	PDLAM18161	None	None	G3T2	S2	1B.2
<b><i>Myotis yumanensis</i></b> Yuma myotis	AMACC01020	None	None	G5	S4	
<b><i>Neotoma lepida intermedia</i></b> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<b><i>Oncorhynchus mykiss irideus pop. 10</i></b> steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
<b><i>Phrynosoma blainvillii</i></b> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Salvadora hexalepis virgultea</i></b> coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
<b><i>Scrophularia atrata</i></b> black-flowered figwort	PDSCR1S010	None	None	G2?	S2?	1B.2
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<b><i>Southern California Steelhead Stream</i></b> Southern California Steelhead Stream	CARE2310CA	None	None	GNR	SNR	
<b><i>Southern Cottonwood Willow Riparian Forest</i></b> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<b><i>Southern Willow Scrub</i></b> Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
<b><i>Spea hammondi</i></b> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Trimerotropis occulens</i></b> Lompoc grasshopper	IIORT36310	None	None	G1G2	S1S2	

**Record Count: 39**

## Plant List

### Inventory of Rare and Endangered Plants

34 matches found. Click on scientific name for details

Search Criteria
Found in Quad 3412064

[Modify Search Criteria](#)
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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Abronia maritima</a>	red sand-verbena	Nyctaginaceae	perennial herb	Feb-Nov	4.2	S3?	G4
<a href="#">Agrostis hooveri</a>	Hoover's bent grass	Poaceae	perennial herb	Apr-Jul	1B.2	S2	G2
<a href="#">Ancistrocarphus keilii</a>	Santa Ynez groundstar	Asteraceae	annual herb	Mar-Apr	1B.1	S1	G1
<a href="#">Arctostaphylos crustacea ssp. eastwoodiana</a>	Eastwood's brittle-leaf manzanita	Ericaceae	perennial evergreen shrub	Mar	1B.1	S2	G4T2
<a href="#">Arctostaphylos pechoensis</a>	Pecho manzanita	Ericaceae	perennial evergreen shrub	Nov-Mar	1B.2	S2	G2
<a href="#">Arctostaphylos purissima</a>	La Purisima manzanita	Ericaceae	perennial evergreen shrub	Nov-May	1B.1	S2	G2
<a href="#">Arctostaphylos refugioensis</a>	Refugio manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar(May)	1B.2	S3	G3
<a href="#">Arctostaphylos rudis</a>	sand mesa manzanita	Ericaceae	perennial evergreen shrub	Nov-Feb	1B.2	S2	G2
<a href="#">Astragalus didymocarpus var. milesianus</a>	Miles' milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S2	G5T2
<a href="#">Ceanothus cuneatus var. fascicularis</a>	Lompoc ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	4.2	S4	G5T4
<a href="#">Cercocarpus betuloides var. blancheae</a>	island mountain-mahogany	Rosaceae	perennial evergreen shrub	Feb-May	4.3	S4	G5T4
<a href="#">Chorizanthe rectispina</a>	straight-awned spineflower	Polygonaceae	annual herb	Apr-Jul	1B.3	S2	G2
<a href="#">Cordylanthus rigidus ssp. littoralis</a>	seaside bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Apr-Oct	1B.1	S2	G5T2
<a href="#">Deinandra paniculata</a>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	4.2	S4	G4
<a href="#">Delphinium parryi ssp. blochmaniae</a>	dune larkspur	Ranunculaceae	perennial herb	Apr-Jun	1B.2	S2	G4T2
<a href="#">Diplacus vandenbergensis</a>	Vandenberg monkeyflower	Phrymaceae	annual herb	Apr-Jun	1B.1	S1	G1
<a href="#">Erigeron sanctarum</a>	saints' daisy	Asteraceae	perennial	Mar-Jul	4.2	S3	G3

<a href="#"><u>Eriodictyon capitatum</u></a>	Lompoc yerba santa	Namaceae	rhizomatous herb perennial evergreen shrub	May-Sep	1B.2	S2	G2
<a href="#"><u>Eriogonum elegans</u></a>	elegant wild buckwheat	Polygonaceae	annual herb	May-Nov	4.3	S3S4	G3G4
<a href="#"><u>Erysimum capitatum var. lompocense</u></a>	San Luis Obispo wallflower	Brassicaceae	perennial herb	Feb-May	4.2	S3	G5T3
<a href="#"><u>Horkelia cuneata var. puberula</u></a>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
<a href="#"><u>Horkelia cuneata var. sericea</u></a>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.1	S1?	G4T1?
<a href="#"><u>Layia heterotricha</u></a>	pale-yellow layia	Asteraceae	annual herb	Mar-Jun	1B.1	S2	G2
<a href="#"><u>Lepidium virginicum var. robinsonii</u></a>	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	4.3	S3	G5T3
<a href="#"><u>Lonicera subspicata var. subspicata</u></a>	Santa Barbara honeysuckle	Caprifoliaceae	perennial evergreen shrub	May-Aug(Dec-Feb)	1B.2	S2?	G5T2?
<a href="#"><u>Mimulus subsecundus</u></a>	one-sided monkeyflower	Phrymaceae	annual herb	May-Jul	4.3	S3S4	G3G4Q
<a href="#"><u>Monardella sinuata ssp. sinuata</u></a>	southern curly-leaved monardella	Lamiaceae	annual herb	Apr-Sep	1B.2	S2	G3T2
<a href="#"><u>Mucronea californica</u></a>	California spineflower	Polygonaceae	annual herb	Mar-Jul(Aug)	4.2	S3	G3
<a href="#"><u>Ophioglossum californicum</u></a>	California adder's-tongue	Ophioglossaceae	perennial rhizomatous herb	(Dec)Jan-Jun	4.2	S4	G4
<a href="#"><u>Phacelia hubbyi</u></a>	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	4.2	S4	G4
<a href="#"><u>Phacelia ramosissima var. austrolitoralis</u></a>	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	3.2	S3	G5?T3
<a href="#"><u>Prunus fasciculata var. punctata</u></a>	sand almond	Rosaceae	perennial deciduous shrub	Mar-Apr	4.3	S4	G5T4
<a href="#"><u>Scrophularia atrata</u></a>	black-flowered figwort	Scrophulariaceae	perennial herb	Mar-Jul	1B.2	S2?	G2?
<a href="#"><u>Senecio aphanactis</u></a>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3

## Suggested Citation

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## Questions and Comments

[rareplants@cnps.org](mailto:rareplants@cnps.org)

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# IPaC resource list

U.S. Fish & Wildlife Service

## Local office

Ventura Fish And Wildlife Office

(805) 644-1766

(805) 644-3958

2493 Portola Road, Suite B

Ventura, CA 93003-7726

## Endangered species

### Birds

NAME	STATUS
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a></p>	Endangered
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p>	Endangered

### Amphibians

NAME	STATUS
<p>California Red-legged Frog <i>Rana draytonii</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a></p>	Threatened
<p>California Tiger Salamander <i>Ambystoma californiense</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a></p>	Endangered



## Insects

NAME	STATUS
El Segundo Blue Butterfly <i>Euphilotes battoides allyni</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/3135">https://ecos.fws.gov/ecp/species/3135</a>	Endangered

## Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened

## Flowering Plants

NAME	STATUS
Gambel's Watercress <i>Rorippa gambellii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4201">https://ecos.fws.gov/ecp/species/4201</a>	Endangered
La Graciosa Thistle <i>Cirsium loncholepis</i> There is final critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6547">https://ecos.fws.gov/ecp/species/6547</a>	Endangered
Lompoc Yerba Santa <i>Eriodictyon capitatum</i> There is final critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/364">https://ecos.fws.gov/ecp/species/364</a>	Endangered
Marsh Sandwort <i>Arenaria paludicola</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves. This location overlaps the critical habitat for the following species:

NAME	TYPE
Vandenberg Monkeyflower <i>Diplacus vandenbergensis</i> For information on why this critical habitat appears for your project, even though Vandenberg Monkeyflower is not on the list of potentially affected species at this location, contact the local field office <a href="https://ecos.fws.gov/ecp/species/9079#crithab">https://ecos.fws.gov/ecp/species/9079#crithab</a>	Final

## **Appendix C**

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*Plan Sheets: Offsite Restoration at Burton Mesa Ecological  
Reserve and Lot 54 Oak Planting*

## Oak Hills Offsite Mitigation Plan, Burton Mesa Ecological Reserve

The Final EIR determined that the project would permanently impact maritime chaparral, oak trees, and special status plants. Restoration would occur in part at Burton Mesa Ecological Reserve to restore a fallow farm field to natural habitat.

Table 1. Maritime Chaparral Restoration Targets

Metric	Area
Habitat Impacted	6.92 acres
Mitigation Ratio	2 : 1 (replaced: impacted)
<b>Total Acreage Required</b>	<b>13.84 acre</b>
Onsite Mitigation	0.61 acre
Offsite Mitigation	13.23 acres
<b>Total Mitigation Acreage</b>	<b>13.84 acres</b>

Table 2. Offsite Restoration Special Status Plant Targets




Restoration Habitat	Included Special Status Species	Special Status Plant Replacement Ratio	Individuals or Acreage Required*	Explanation
Maritime chaparral - 13.23 acres to be restored at BMER	Purísima manzanita	2:1	38 plants	Special status plant restoration and oak plantings will be fully integrated into the restoration of maritime chaparral. This table documents the required number of individuals or acreage that will be incorporated into the plantings. Some species will be seeded, and more than the required number of plants are anticipated to germinate. **Note that El Segundo blue butterfly did not have a specific target for number of host plants.
	sand mesa manzanita	2:1	54 plants	
	mesa horkelia	2:1	13.23 acres	
	curly-leaved dune mint	2:1	100 plants	
	Lompoc ceanothus	1:1	7 plants	
	Paniculate tarplant	1:1	3 plants	
	Lompoc wallflower	1:1	35 plants	
	California spineflower	1:1	25 plants	
	Blochman's ragwort	1:1	10 plants	
	El Segundo blue butterfly host plants	**	-	
Oak trees	10:1	-		

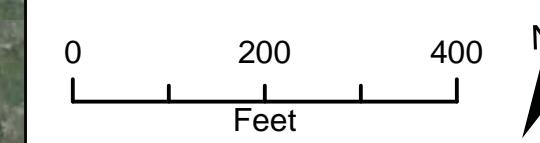
\*Pending actual number impacted; table reflects FEIR's conservative position regarding number impacted.

Table 3. Proposed Plant Palette.

Scientific Name	Common Name
<i>Arctostaphylos purissima</i>	La Purísima manzanita
<i>Arctostaphylos rudis</i>	sand mesa manzanita
<i>Ceanothus cuneatus</i> var. <i>fasciculatus</i>	Lompoc ceanothus
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	Mountain mahogany
<i>Deinandra paniculata</i>	paniculate tarplant
<i>Ericameria ericoides</i>	Mock heather
<i>Eriogonum parvifolium</i>	Coast buckwheat
<i>Erysimum capitatum</i> var. <i>lompocense</i>	Lompoc wallflower
<i>Frangula californica</i>	California coffeeberry
<i>Heteromeles arbutifolia</i>	toyon
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia
<i>Mimulus aurantiacus</i> ( <i>lompocensis</i> ) <sup>1</sup>	Lompoc sticky monkeyflower
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	curly-leaved dune mint
<i>Mucronea californica</i>	California spineflower
<i>Quercus agrifolia</i>	Coast live oak
<i>Rhamnus crocea</i>	Spiny redberry
<i>Salvia mellifera</i>	Black sage
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	Blue elderberry
<i>Senecio blochmaniae</i>	Blochman's ragwort

### Legend

-  Offsite Mitigation Area
-  Proposed Restoration Sites  
Maritime Chaparral, Oaks and Rare Plants
-  Riparian Enhancement Area



**California Green Building Code Section A5.602 Non Residential Occupancies Application Checklist**

**5.304.2 Outdoor potable water use.** For new water service, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas of at least 1,000 square feet but not more than 5,000 square feet. separate submeters shall be installed for outdoor potable water use. Applies to additions or alterations.

**A5.304.2.1 Outdoor potable water use.** For new water service not subject to the provisions of *Water Code* Section 535, separate meters or submeters shall be installed for outdoor potable water use for landscaped areas of at least 500 square feet but not more than 1,000 square feet (the level at which Section 5.304.2 applies).

Compliance Method: Dedicated Landscape Water Meter on sheet L-2

**5.304.3 Irrigation design.** In new nonresidential projects with at least 1,000 square feet but not more than 2,500 square feet of landscaped area (the level at which the MLO applies), install irrigation controllers and sensors which include the following criteria and meet manufacturer's recommendations. Applies to additions or alterations.

**5.304.3.1 Irrigation controllers.** Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:

- Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
- Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Compliance Method: weather sensor with controller with non-volatile memory sheet L-2 schedule.

**A5.304.4 Potable water reduction.** Provide water-efficient landscape irrigation design that reduces the use of potable water beyond the initial requirements for plant installation and establishment in accordance with Section A5.304.4.1 or A5.304.4.2. Calculations for the reduction shall be based on the water budget developed pursuant to Section 5.304.1.

**A5.304.4.1 Tier 1** – Reduce the use of potable water to a quantity that does not exceed 60 percent of ETc times the landscape area.

**A5.304.4.2 Tier 2** –Reduce the use of potable water to a quantity that does not exceed 55 percent of ETc times the landscape area.

Note: Methods used to accomplish the requirements of this section shall include, but not be limited to, the items listed in A5.304.4.

**A5.304.4.3 Verification of compliance.** A calculation demonstrating the applicable potable water use reduction required by this section shall be provided.

Compliance Method: Calculation table on sheet L-1

**A5.304.5 Potable water elimination.** Provide a water efficient landscape irrigation design that eliminates the use of potable water beyond the initial requirements for plant installation and establishment.

Methods used to accomplish the requirements of this section shall include, but not be limited to, the items listed in Section A5.304.4.

Compliance method: NA

**A5.304.6 Restoration of areas disturbed by construction.** Restore all areas disturbed during construction by planting with local native and/or noninvasive vegetation.

Compliance Method:NA

**A5.304.7 Previously developed sites.** On previously developed or graded sites, restore or protect at least 50 percent of the site area with native and/or noninvasive vegetation.

Compliance method: NA

**A5.304.8 Graywater irrigation system.** Install graywater collection system for onsite subsurface irrigation using graywater collected from bathtubs, showers, bathroom wash basins and laundry water. See *California Plumbing Code*.

Compliance method: NA, see A5.304.5 compliance

**MWLO Compliance Checklist – California Code of Regulations Title 23, Division 2, Chapter 2.7**

Code Section Applicable to This Project	Plan Reference
<b>492.3 Landscape Documentation Package</b> Project Information, date & applicant Water supply type Compliance statement Water Efficient Landscape Worksheet	Info in Titleblock Pot.\ Non-Pot. X Sheet L.O Sheet L.O
<b>492.4 Calculation Factors</b> ETAF factors shown in the Table ETO factor from MWLO Appendix A or nearest location Plant factor from WUCOLS and adjusted for soil and microclimate SLA	Sheet L.O Sheet L.O Sheet L.O X
<b>492.5 Soils</b> Soil Management Report is compliant with: (C) In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots. (2) The project applicant, or his/her designee, shall comply with one of the following: (A) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or (B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.	L.O spec section 2.02 soil amend. X  X X √
<b>492.6 Landscape Design Plan</b> (1) Plant Material (A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. Methods to achieve water efficiency shall include one or more of the following: 1. protection and preservation of native species and natural vegetation; 2. selection of water-conserving plant, tree and turf species, especially local native plants; 3. selection of plants based on local climate suitability, disease and pest resistance; 4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and 5. selection of plants from local and regional landscape program plant lists. 6. selection of plants from local Fuel Modification Plan Guidelines.	X √ √ √  NA X
<b>492.6 cont.</b> (B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D). (D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape (E) High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians. (F) A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). (G) The use of invasive plant species, such as those listed by the California Invasive Plant Council, is strongly discouraged.	Sheet L.2  No Turf No medians NA None, Sheet L.2.0
<b>492.6 cont. Soils</b> (A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement. (B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5). (C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil.	Sheet L.1 spec section 2.02 and details sheet L.3.0
<b>492.6 cont. Hydro-zones and surfaces</b> (b) The landscape design plan, at a minimum, shall: (1) delineate and label each hydrozone by number, letter, or other method; (2) identify each hydrozone as low, moderate, high water, or mixed water use. (Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation); (3) identify recreational areas; (4) identify areas permanently and solely dedicated to edible plants; (5) identify areas irrigated with recycled water; (6) identify type of mulch and application depth; (7) identify soil amendments, type, and quantity; (8) identify type and surface area of water features; (9) identify hardscapes (pervious and non-pervious); (10) identify location, installation details, and 24-hour retention or in filtration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater.	Sheet L.2.0 Sheet L.2.0 NA NA NA Sheet L.1 Sheet L.1 NA NA NA NA
<b>492.7 Irrigation Design Plan - Equipment</b> (A) Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000 sq.ft. and residential irrigated landscapes of 5,000 sq. ft. or greater. (B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required for irrigation scheduling in all irrigation systems. (C) If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance. 1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system. 2. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation. (D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain. (E) Manual shut-off valves (such as a gate valve, ball valve, or butter-fly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair. (F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements. (G) Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non-residential landscapes and residential landscapes of 5000 sq. ft. or larger. (H) Master shut-off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features. (I) The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures. (J) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems. (K) The design of the irrigation system shall conform to the hydro-zones of the landscape design plan. (L) The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance. (M) All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers/International Code Council's (ASABE/ICC) 802-2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.	L1.0  L1.0 L1.0 and detail L3.0  L2.0 note  L2.0 schedule  L.2  Sheet L.2  NA NA NA NA NA NA Sheet L.2.0 Sheet L.O
<b>492.7 cont. Sprinklers</b> (O) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone. (P) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations. (Q) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations. (R) Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass. (S) Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur.	NA NA NA NA NA NA
<b>492.7 cont. Sprinklers and Overspray</b> (T) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray. (U) Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if: 1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or 2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping. (V) Slopes greater than 25% shall not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour.	Sheet L1.0  See below  √ X Sheet L1.0 schedule
<b>492.7 cont Hydrozone</b> (2) Hydrozone (A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use. (B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone. (C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.	Sheet L2.0  Sheet L2.0
(F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.	Sheet L2
<b>492.7 cont.</b> (b) The irrigation design plan, at a minimum, shall contain: (1) location and size of separate water meters for landscape; (2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices; (3) static water pressure at the point of connection to the public water supply; (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station; (5) recycled water irrigation systems as specified in Section 492.14; (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"	Sheet L.2 Sheet L.2 Sheet L.2 Sheet L.2 NA
<b>Section 492.8 Grading Plan</b>	See Civil Plans
<b>Section 492.9 Certificate of Completion</b>	Submitted after completion
<b>Section 492.10 Irrigation Scheduling</b>	Sheet L.O, spec section 3.07 (E). Submitted after completion
<b>Section 492.11 Landscape and Irrigation Maintenance Schedule</b>	Submitted after completion
<b>Section 492.14 Recycled Water</b> (a) Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards.	NA or ref

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Owner:	Gary Blake, Managing Member Oak Hills Estate, LLC
Project:	OAK HILLS OFF-SITE MITIGATION
Sheet Title:	Code Compliance
Principal: David W. Fiske ASPE Registered Professional Engineer 187 Tank Farm Road Suite 2317 San Luis Obispo CA 93401 805.781.9900 fax. 805.781.9803	
<b>firma</b> landscape architecture planning environmental studies ecological restoration	
job no. 21727	
plan check issue date:	
bid set issue date:	
SHEET	
L.O	
OF SHEETS	



**PLAN CHECK ONLY**  
Not for Bidding



### Irrigation Schedule

SYMBOL	DESCRIPTION	MODEL	NOTES
	EMITTER	TORO TURBO-SC DPJ08-A (2 GPH)	Dtl.21,22,L-5
	CONTROLLER	RAINBIRD TBOS2CM6-TBOS-II, CONTROL MODULE 6 STATIONS W/ TBOS-II FIELD TRANSMITTER	PER MANUFACTURER
⊕	PRESSURE REGULATOR	WILKENS 500XL SERIES	Dtl.20,L-5
⊖	R.P. BACKFLOW	WILKENS 975XL - 1"	Dtl.11,L-5
⊕	ELECTRIC CONTROL VALVE (DRIP)	IRRITROL 700 SERIES ULTRAFLOW, size per plan	Dtl.10,L-5
▽	PRESSURE REGULATOR FILTER (DRIP)	WILKENS 500XL SERIES AG PRODUCTS #4E, Size to match valve	Dtl.20,L-5
---	PRESSURE LINE	SCHEDULE 40 PVC, 18" Deep	Dtl.12,L-5
---	LATERAL LINE	CLASS 200 PVC, 12" Deep	Dtl.12,L-5
⊖	DRIP ZONE	RAINBIRD XBS POLYETHYLENE HOSE .613 I.D.	Dtl.21,22,L-5
==	PVC SLEEVE	PVC SCH 40, 2x LINE SIZE	

#### CONVENTIONAL TUBING EMITTER SCHEDULE

Plant Size	Emitter Number Per Plant
1 G	1 GPH EMITTER 1
5 G	1 GPH EMITTER 2
15G	2 GPH EMITTER 2
24" BOX	2 GPH EMITTER 3
36" BOX	2 GPH EMITTER 6
48" BOX	2 GPH EMITTER 9

#### SLEEVING, PIPE LOCATIONS AND SPRAY HEADS

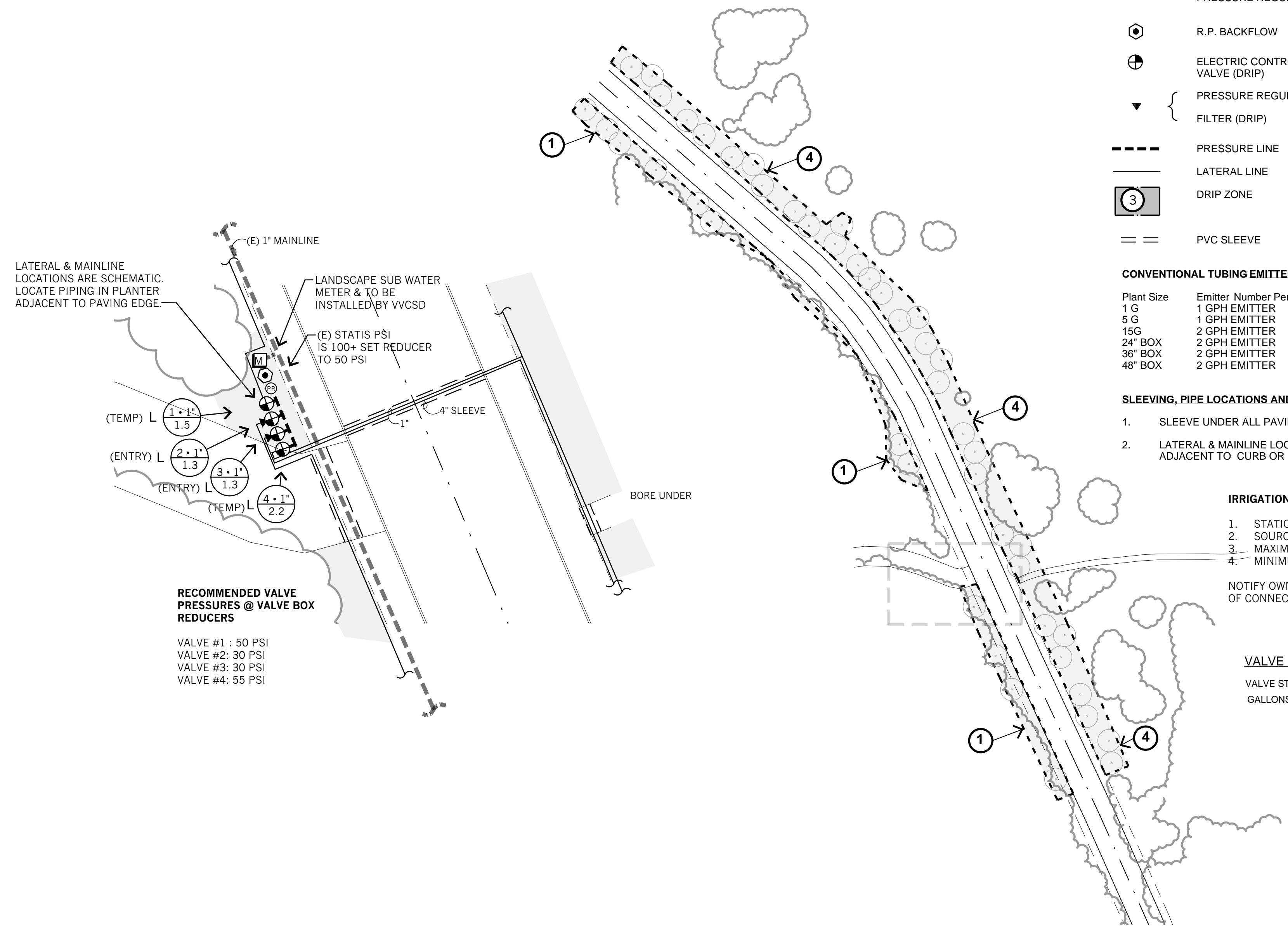
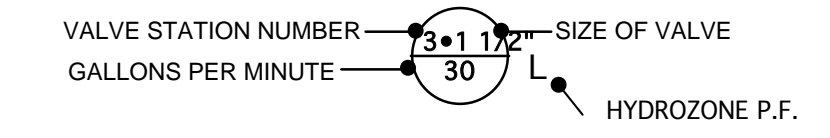
- SLEEVE UNDER ALL PAVING PER SPECIFICATIONS.
- LATERAL & MAINLINE LOCATIONS ARE SCHEMATIC. LOCATE PIPING IN PLANTER ADJACENT TO CURB OR PAVING EDGE.

#### IRRIGATION OPERATING PRESSURE

- STATIC PRESSURE: APPROX. 138 PSI
- SOURCE / DATE: MIKE GARNER 10/16/17
- MAXIMUM CIRCUIT FLOW: 2.2 GPM
- MINIMUM CALCULATED OPERATING PRESSURE: 30 PSI FOR DRIPLINE

NOTIFY OWNER / APPROVING AGENCY IN WRITING OF STATIC PRESSURE AT POINT OF CONNECTION BEFORE START OF CONSTRUCTION.

#### VALVE CALLOUT SYMBOL



LATERAL & MAINLINE LOCATIONS ARE SCHEMATIC. LOCATE PIPING IN PLANTER ADJACENT TO PAVING EDGE.

LANDSCAPE SUB WATER METER & TO BE INSTALLED BY VVSCD

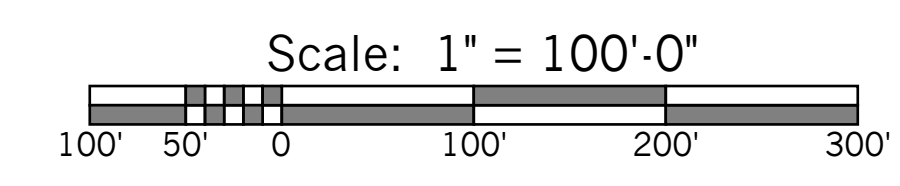
(E) STATIC PSI IS 100+ SET REDUCER TO 50 PSI

- (TEMP) L 1.5
- (ENTRY) L 2.1
- (ENTRY) L 3.1
- (ENTRY) L 4.1
- (TEMP) L 2.2

#### RECOMMENDED VALVE PRESSURES @ VALVE BOX REDUCERS

- VALVE #1 : 50 PSI
- VALVE #2: 30 PSI
- VALVE #3: 30 PSI
- VALVE #4: 55 PSI

NOTE: ALL HORIZONTAL PLAN DATA IS FROM A SCALED GOOGLE EARTH PHOTOGRAPH AND VVSCD RECORD DRAWINGS. ROW WIDTH IS ASSUMED TO BE 60FT. PAVEMENT WIDTH VARIES. ON THE BASIS OF THERE, ALL PL & IRR IMPLEMENTED TO LOCATED OUTSIDE OF THE ROW, EXCEPT @ ROAD CROSSINGS.



#### WATER EFFICIENT LANDSCAPE COMPLIANCE STATEMENT

TOTAL PERMANENT LANDSCAPE IS LESS THEN 500SF IN TOTAL. THEREFORE IS EXEMPT FROM WELO

"I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"

David Foote, Firma Consultants Inc.



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Owner: Gary Blake, Managing Member Oak Hills Estate, LLC

Project: OAK HILLS OFF-SITE MITIGATION

Sheet Title: IRRIGATION PLAN

Principal: David W. Foote ASLA  
 Registration No. 2117  
 187 Tank Farm Road Suite 230  
 San Luis Obispo CA 93401  
 805.781.8600 fax 805.781.8603

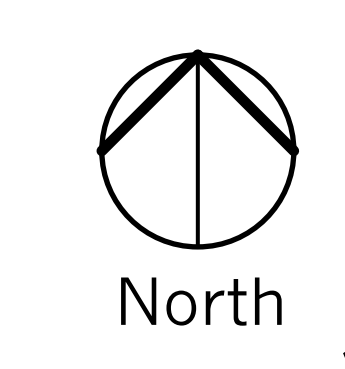
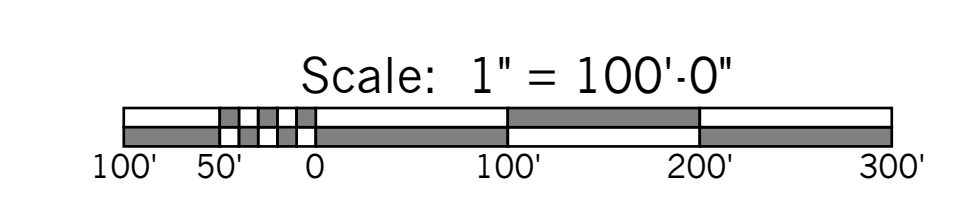
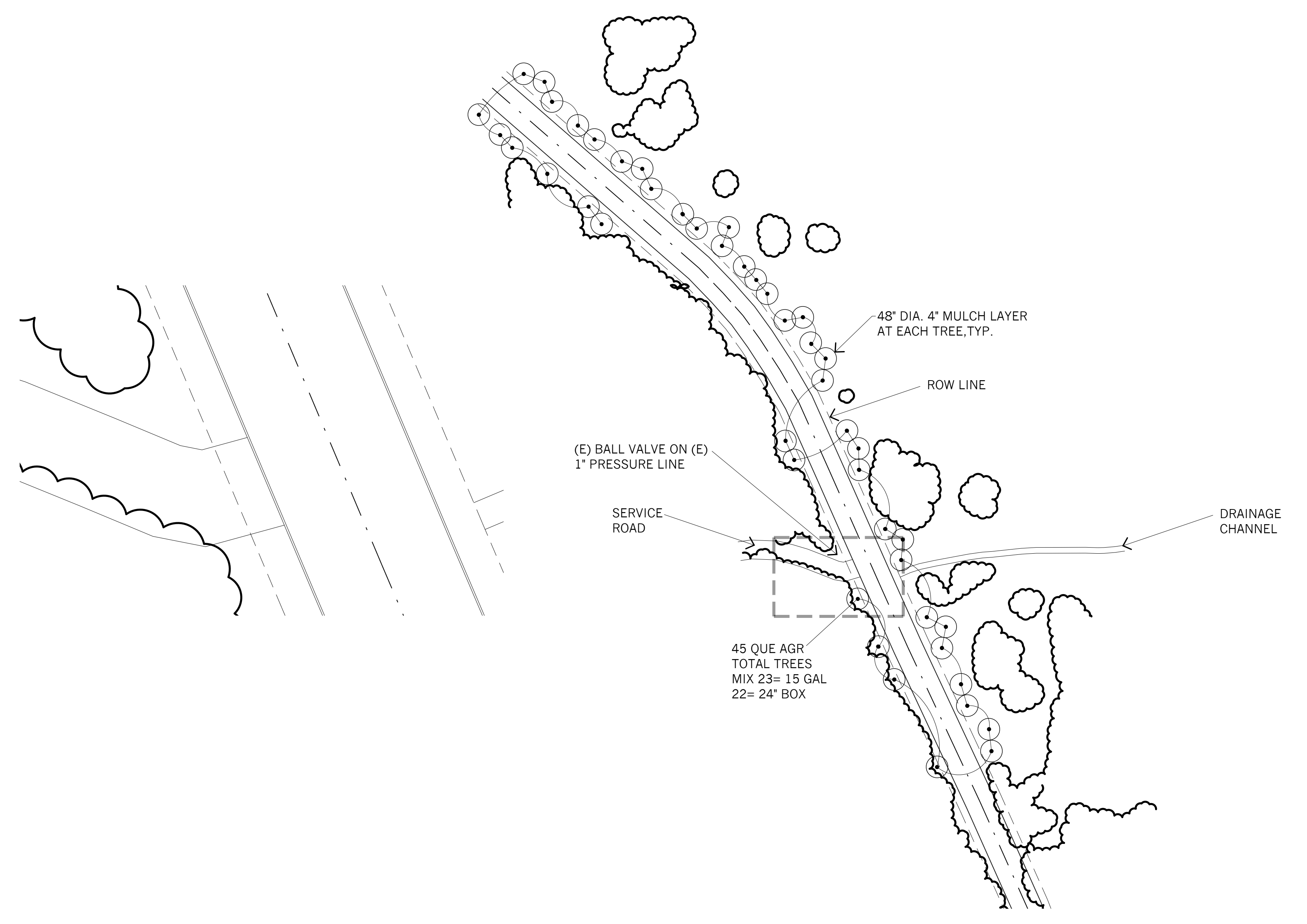
**firma**  
 landscape architecture  
 planning, design, studies  
 ecological restoration

job no. 21727  
 plan check  
 issue date:  
 bid set  
 issue date:

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**L.2**  
 OF SHEETS

# Plant List

ABBREV	SIZE	BOTANICAL NAME / COMMON NAME	WUCOLS RATING
<b>TREES</b>			
QUE AGR	15G/24"B/ 36"B	QUERCUS AGRIFOLIA / COAST LIVE OAK LOW BRANCHING FORM	VL



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Owner:  
Gary Blake,  
Managing Member  
Oak Hills Estate, LLC

Project:  
OAK HILLS OFF-SITE  
MITIGATION

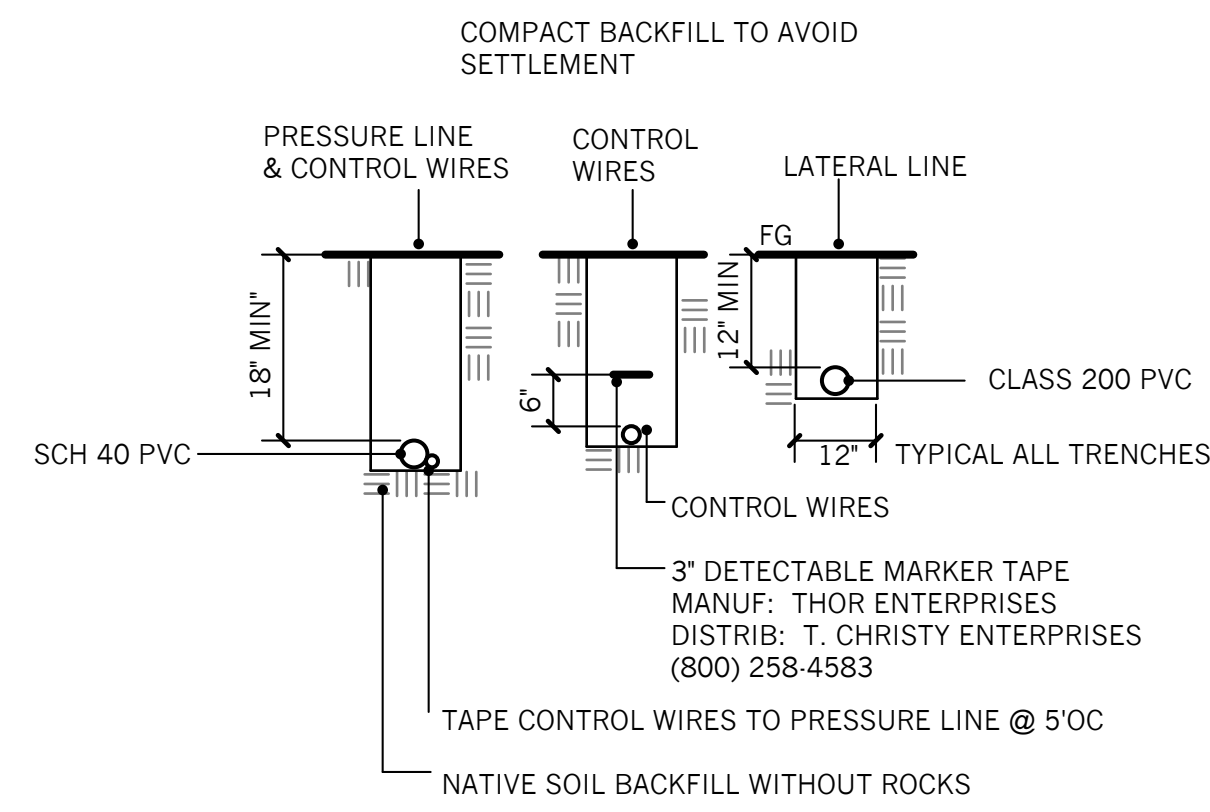
Sheet Title:  
**PLANTING PLAN**

**firma**  
landscape architecture  
planning, spatial studies  
ecological restoration

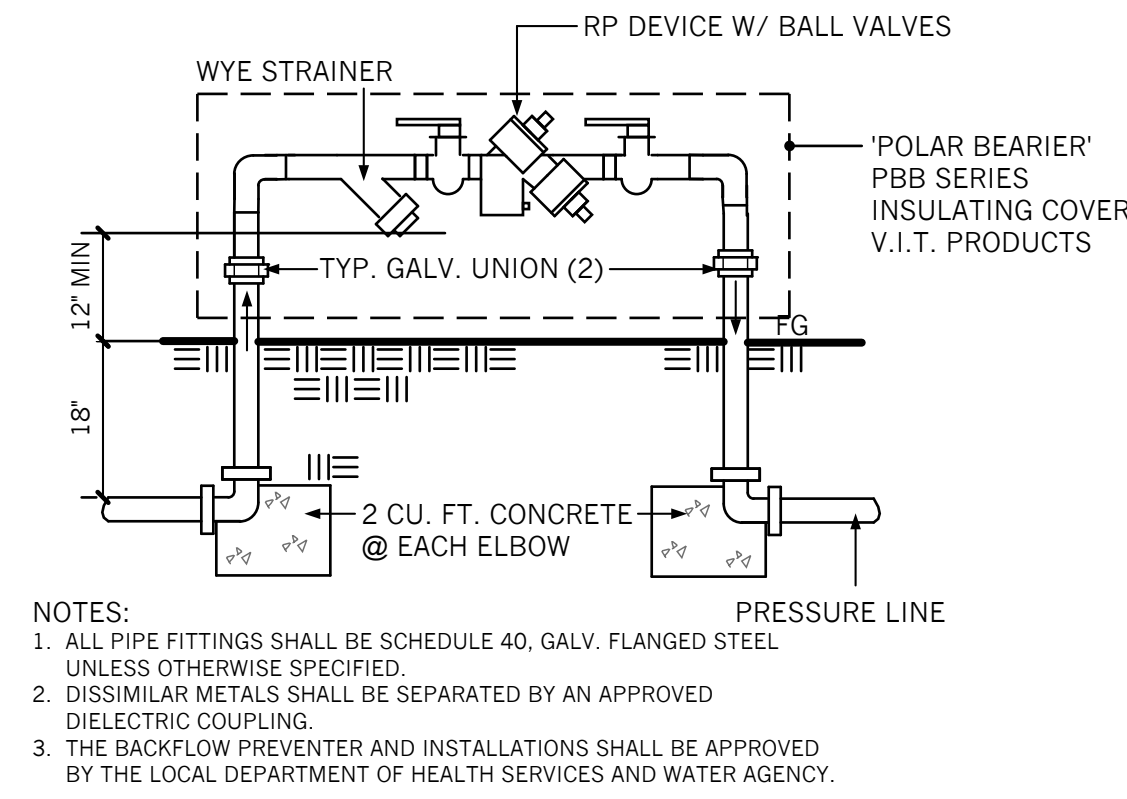
Principal: David W. Foote ASLA  
Registration No. 2117  
187 Tank Farm Road Suite 230  
San Luis Obispo CA 93401  
805.781.9600 fax 805.781.9603

job no. 21727  
plan check  
issue date:  
bid set  
issue date:

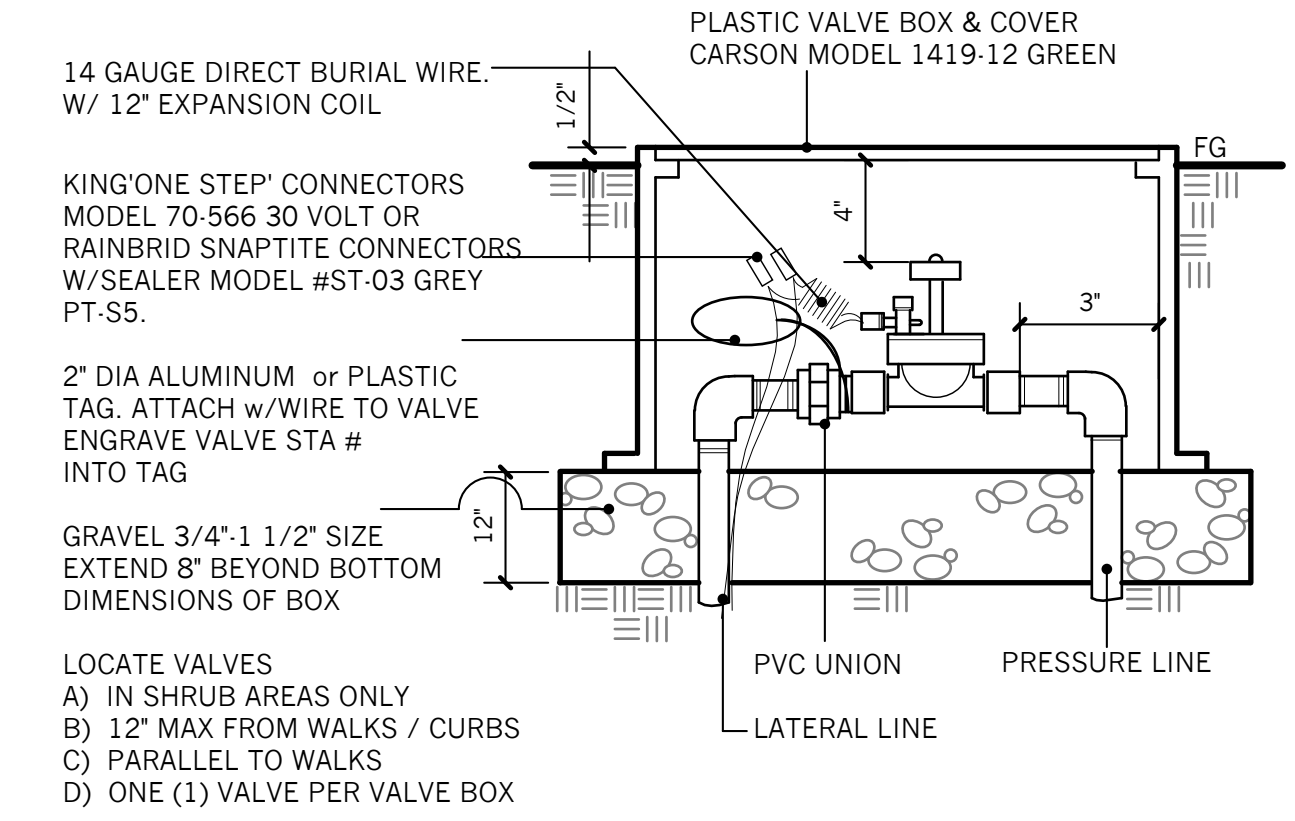
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OF SHEETS



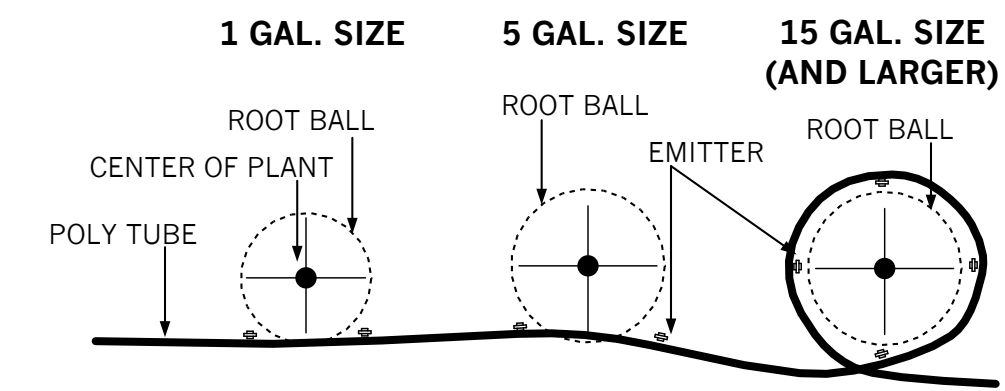
12 TRENCHING



11 REDUCED PRESSURE BACKFLOW DEVICE

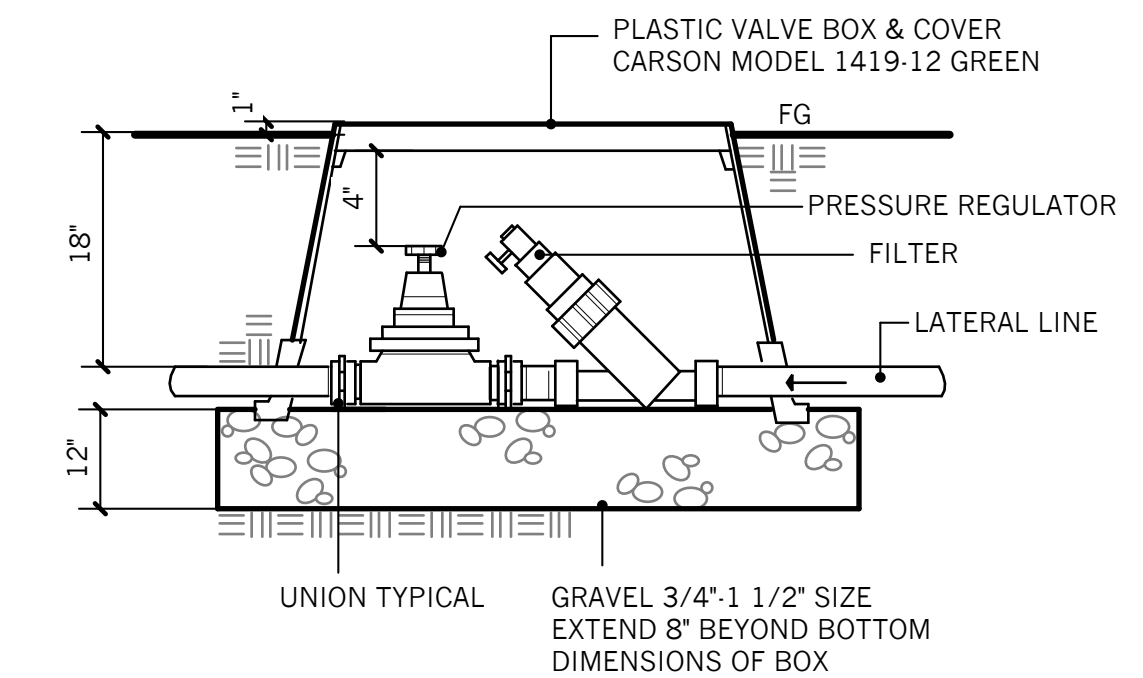


10 ELECTRIC CONTROL VALVE

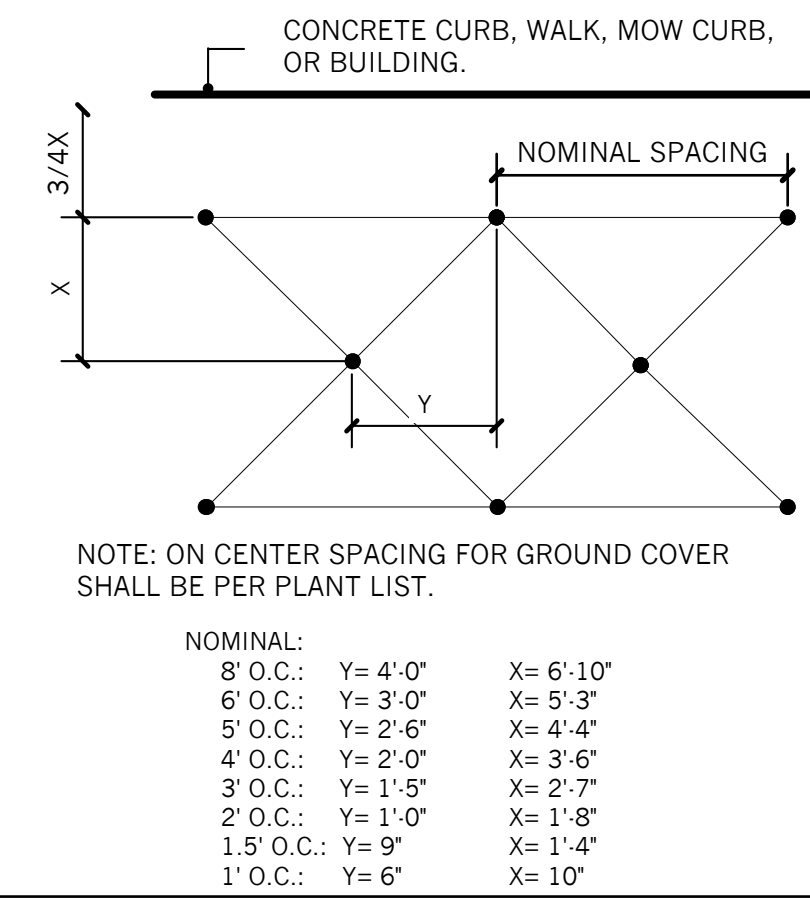


**PLAN VIEW**  
**NOTE:** PLACE EMITTER AT EDGE OF ROOTBALL. **DO NOT** PLACE TUBE & EMITTER AGAINST STEM / TRUNK OF PLANT.

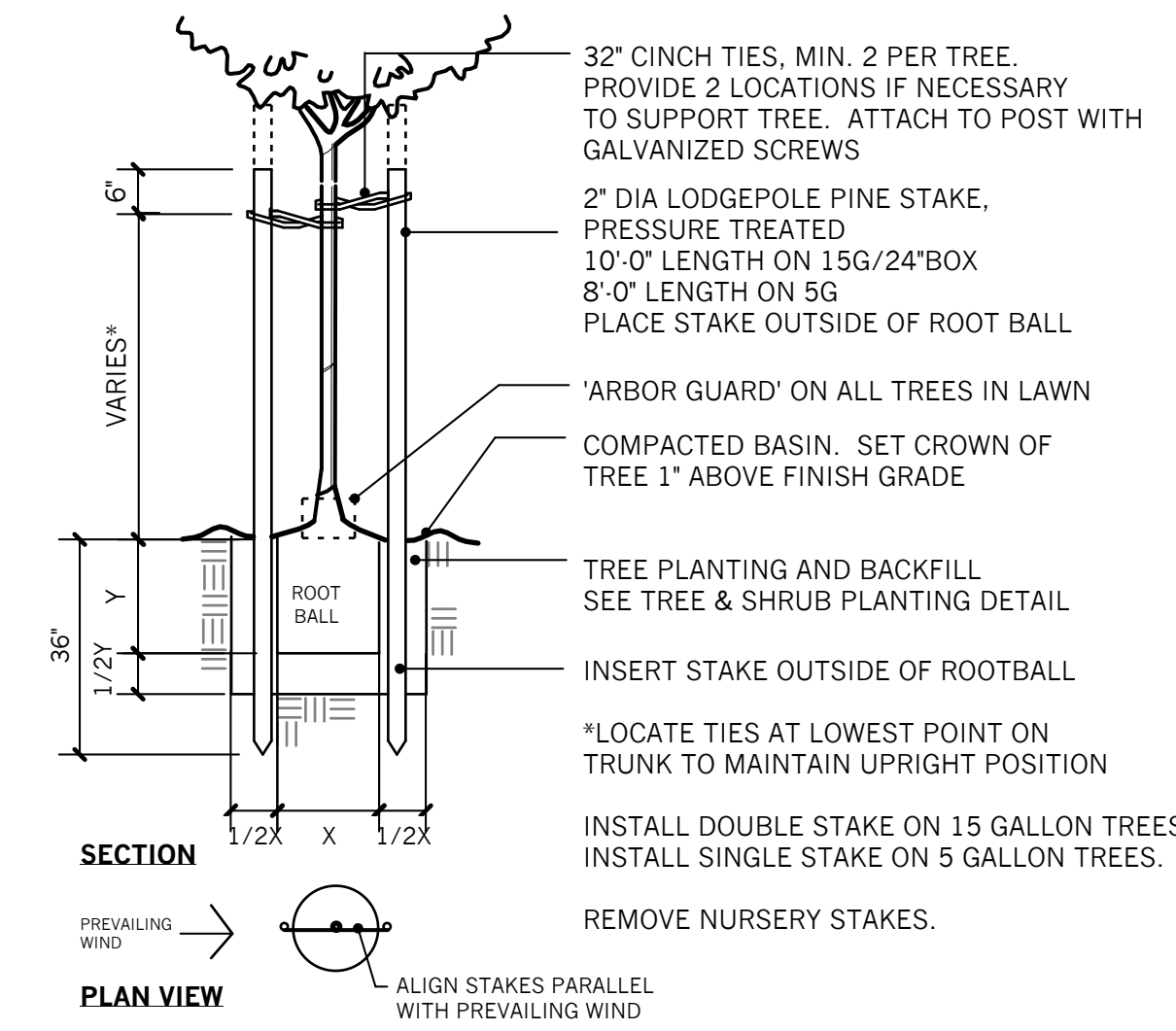
21 DRIP EMITTER PLACEMENT



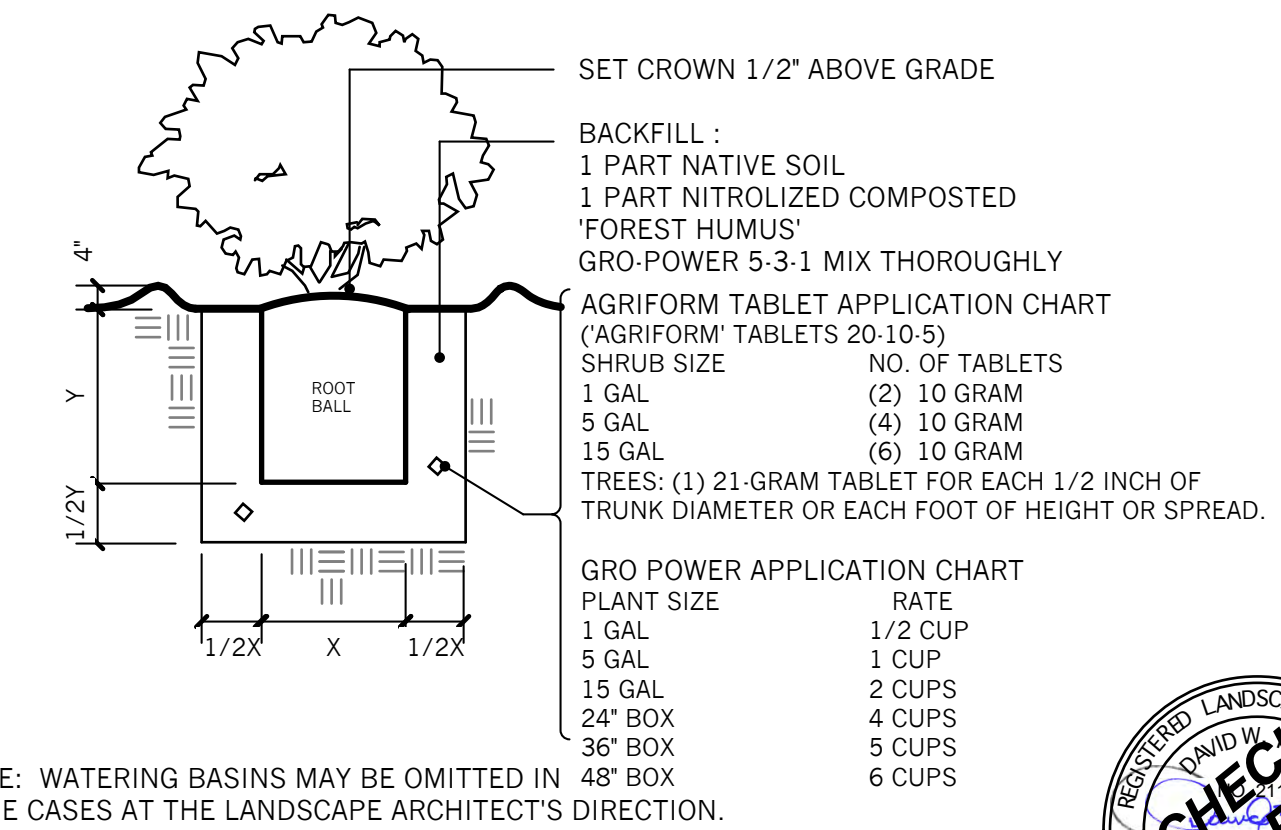
20 FILTER & REGULATOR



33 TRIANGULAR GROUND COVER SPACING



41 TREE PLANTING



40 TREE, SHRUB & GROUND COVER PLANTING

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 △  
 Owner: Gary Blake, Managing Member Oak Hills Estate, LLC

Project: OAK HILLS OFF-SITE MITIGATION

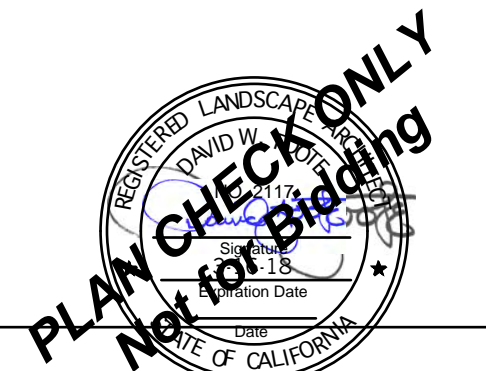
Sheet Title: IRRIGATION & PLANTING DETAILS

Principal: David W. Fische ASLA  
 187 Tank Farm Road Suite 230  
 San Luis Obispo CA 93401  
 805.781.9900 fax. 805.781.9803

**firma**  
 landscape architecture  
 planning  
 environmental studies  
 ecological restoration

job no. 21727  
 plan check  
 issue date:  
 bid set  
 issue date:

SHEET  
 L-4  
 OF SHEETS







State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
3883 Ruffin Road  
San Diego, CA 92123  
(858) 467-4201  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



## Attachment 2

June 8, 2018

David Swenk  
2624 Airpark Drive  
Santa Maria, CA 93455  
[david@urbanplanningconcepts.com](mailto:david@urbanplanningconcepts.com)

Subject: **Proposal to perform off-site mitigation for the Oak Hills Project on Burton Mesa Ecological Reserve**

Dear Mr. Swenk,

The California Department of Fish and Wildlife (Department) is in discussions with the landowners of Oak Hills Estate project, located at APN 097-371-010, in regards to providing offsite mitigation on 13.19 acres of lands within the Burton Mesa Ecological Reserve (BMER), owned by the State Lands Commission (SLC) and managed under lease by the Department. The Department is working with the landowner to allow offsite mitigation for impacts to federally endangered species on the ecological reserve. We are discussing with the project developer's consultants the scope, design, and long-term maintenance of the mitigation. The Department is willing to allow the off-site mitigation to occur on BMER if the following conditions are met:

The Department recommends the County of Santa Barbara condition the project to require a mitigation restoration plan prior to map recordation that encompasses the following elements to be approved by the US Fish and Wildlife Service, the Department and the SLC:

- A detailed restoration/mitigation plan to be reviewed and approved by the Department, FWS and SLC and any additional California Environmental Quality Act compliance for the proposed mitigation area;
- An approved Lease Agreement executed with the State Lands Commission;
- Long term maintenance of the restoration area accomplished through a long term maintenance and funding plan for BMER and approved by the Department and SLC;
- CDFW issuance of a Right of Entry Permit for the activity.

The Department also recommends the Project Proponents implement the elements of the plan and secure funding prior to conducting any grading or causing any impacts to habitat. For mitigation surrounding habitat restoration for federally listed species on site as annotated in the project EIR (SCH #2015111069), evidence of a USFWS Incidental Take Permit and applicable Habitat Conservation Plan provided by the Service prior to issuance of a grading permit. Any listed State species identified for habitat restoration

David Swenk  
June 8, 2018  
Page 2

onsite shall have the necessary concurrence from California Department of Fish and Wildlife.

With the addition of these conditions, the Department does not object to the approval of TM 14,180 and will work in good faith with the landowner in developing and implementing the mitigation plan and its requirements at the Regional Manager's discretion.

If you have any questions, please contact the Land Manager, Richard Brody at (310) 455-3243 or [Richard.brody@wildlife.ca.gov](mailto:Richard.brody@wildlife.ca.gov), or Tim Dillingham at (858) 627-3939, or [tim.dillingham@wildlife.ca.gov](mailto:tim.dillingham@wildlife.ca.gov).

Sincerely,

Rick Mayfield  
Environmental Program Manager

cc:

Richard Brody, CDFW  
Christine Found-Jackson, CDFW  
Lands Chron File