



# **Aquatic Resources Delineation Report**

Carmenere Estates

Town of Loomis, Placer County, California

2 April 2025



**Prepared for:**

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## 1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Carmenere Estates (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 97.9-acre Study Area is generally located west and east of Delmar Avenue, west of Bankhead Road, east of the Union Pacific Railroad right-of-way, and north of the Town of Loomis/City of Rocklin boundary. The Study Area is within Section 8, Township 11 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) (Figure 1).

### 1.1 Contact Information

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## 2.0 METHODOLOGY

Madrone biologists Matthew Shaffer and Daria Snider conducted a delineation of aquatic resources within the Study Area on 16, 17, and 18 October and 28 November 2018 and 25-26 April and 19 July 2023. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on ortho-rectified aerial photographs (Maxar 2022).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (USACE 2020) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2023) was used for plant nomenclature.

On behalf of our client, we are requesting an Approved Jurisdictional Determination for the Study Area (request form included as **Attachment D**).



### 3.0 EXISTING CONDITIONS

#### *West of Delmar Avenue*

The Study Area to the west of Delmar Avenue is generally characterized by annual brome grassland interspersed with seeps, seasonal wetland swales, an intermittent drainage, a seasonal pond, and a perennial unnamed tributary to Antelope Creek. A few small seasonal wetlands are present in depressional areas due to heavy cattle use. A rural residence is present in the northeastern portion of the site. Eucalyptus trees exist along several fence lines within the Study Area, primarily in the southern portion of the site. Isolated Valley oak (*Quercus lobata*) and other trees are scattered throughout the Study Area. The Study Area is bounded to the north by a private driveway and previously irrigated pasture nearly identical to that found within the study area, to the east by Delmar Avenue, to the south by rural residential parcels, and to the west by the Union Pacific Railroad.

The Study Area to the west of Delmar Avenue was irrigated for livestock grazing until approximately 2020. At that time, irrigation within the majority of the Study Area ceased, but some plant species [such as the dominance of Kentucky blue grass (*Poa pratensis*) in the uplands, and fowl blue grass (*P. palustris*) in the seasonal wetland swales] remain as evidence of this recent change. The northwestern field was an orchard in 1993, but the trees had been removed by 1999. Lastly, a perennial drainage and associated apparently constructed ponds were historically present within the Study Area but appear to have been undergrounded in 2004. The drainage now runs through much of the Study Area within a corrugated plastic culvert pipe that leaks in various locations, and as a result is mapped as a seasonal wetland swale.

The annual brome grassland within the Study Area is dominated by soft brome (*Bromus hordeaceus*), brome fescue (*Festuca bromoides*), valley tassels (*Castilleja attenuata*), greenstem filaree (*Erodium moschatum*), and Kentucky blue grass. Other common plant species occurring within the annual brome grasslands include clustered clover (*Trifolium glomeratum*), smooth cat's-ear (*Hypochaeris glabra*), and rattail fescue (*Festuca myuros*).

#### *East of Delmar Avenue*

The Study Area to the east of Delmar Avenue primarily consists of multiple fenced pastures along the center, southern, and eastern portions of the site. The pastures were being utilized for grazing by a free-ranging group of cattle during the survey. Although many plant species were unidentifiable at the time of the survey, generally the pastures support upland annual grassland and ruderal species, including greenstem filaree, yellow star-thistle (*Centaurea solstitialis*), English plantain (*Plantago lanceolata*), rose clover (*Trifolium hirtum*), cut-leaf geranium (*Geranium dissectum*), hairy hawkbit (*Leontodon saxatilis*), prickly lettuce (*Lactuca serriola*), turkey mullein (*Croton setiger*), field bindweed (*Convolvulus arvensis*), soft brome, Medusa head (*Elymus caput-medusae*), perennial ryegrass (*Festuca perennis*), wild oat (*Avena fatua*), and stinkwort (*Dittrichia graveolens*). Scattered valley oak, interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*) are present throughout the pastures, along with several planted exotic species including black walnut (*Juglans nigra*), olive (*Olea europaea*), and white poplar (*Populus alba*).

The northeast fenced parcel has not been grazed recently and features robust vegetation that is dominated by yellow star-thistle, along with some greenstem filaree, prickly lettuce, common madia (*Madia elegans*), skeleton weed (*Chondrilla juncea*), and black mustard (*Brassica nigra*). The eastern portion of the parcel is predominantly robust perennial ryegrass.

The central portion of the Study Area features oak savanna on sloped terrain with rock outcroppings transitioning to interior live oak woodland and finally riparian vegetation along Antelope Creek. Several old remnant ditches are located along the slopes and appear to have been historically used for irrigation or mining purposes. Herbaceous vegetation within the oak savanna is similar to the pasture areas. Vegetation within the oak woodland is robust and consists of several grassland and ruderal species such as soft brome, English plantain, rose clover, hairy hawkbit, prickly lettuce, turkey mullein, perennial ryegrass, ripgut brome (*Bromus diandrus*), hedgehog grass (*Cynosurus echinatus*), California poppy (*Eschscholzia californica*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), Fitch's spikeweed (*Centromadia fitchii*), sticky willy (*Galium aparine*), woolly mullein (*Verbascum thapsus*), and moth mullein (*Verbascum blattaria*). Tree and shrub species include predominantly interior live oak, with valley oak, blue oak, green ash (*Fraxinus pennsylvanica*), grey pine (*Pinus sabiniana*), tree of heaven (*Ailanthus altissima*), black locust (*Robinia pseudoacacia*), California buckeye (*Aesculus californica*), poison oak (*Toxicodendron diversilobum*), and coyote brush (*Baccharis pilularis*).

An old orchard and remnant homestead are located in the southwest corner of the Study Area. This area is disturbed, and features several remnant ditches, cement foundations, soil spoils, and piles of pressed grapes. Many exotic trees in this area are associated with the old orchard, including black walnut, olive, Mediterranean cypress (*Cupressus sempervirens*), Canary Island date palm (*Phoenix canariensis*), common persimmon (*Diospyros virginiana*), pomegranate (*Punica granatum*), and Callery pear (*Pyrus calleryana*).

### 3.1 Hydrology

Surface water within the Study Area is primarily driven by rainfall and groundwater seepage. To the west of Delmar Avenue all water features flow generally from the north to the south. Most of the features (apart from SW-1 and Seep-1, which appear to be isolated, and the roadside ditches) are tributary to the Perennial Drainage either on-site or off-site to the south. To the east of Delmar Avenue, the Study Area is roughly convex along the west-east vector, and slopes downhill from north to south.

The perennial drainage and the roadside ditches along Del Mar Avenue and the central portion of the Study Area flows into Antelope Creek, while surface water on the eastern portion of the site flows via an existing storm drain system to Sucker Ravine. Sucker Ravine is a tributary to Secret Ravine, which flows into Miners Ravine, then Dry Creek, then Steelhead Creek, then Bannon Slough, and ultimately the Sacramento River. Antelope Creek is a tributary to Dry Creek, which empties into the Sacramento River as previously described. The Study Area is located in the *Dry Creek Watershed* in the *Lower American-Sacramento River Watershed* (HUC 18020111) (USGS 1984).

### 3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2023), two soil mapping units occur within the Study Area (**Figure 2**): (106) Andregg course sandy loam, 2 to 9% slopes and (194) Xerofluvents, frequently flooded . Soil unit (194) consists of hydric components, while unit (106) may contain hydric inclusions (NRCS 2023).

### 3.3 Driving Directions

To access the Study Area from Sacramento, drive east on Interstate 80. Take exit 108 and head east on Rocklin Road. Turn right on Granite Drive and continue for 0.3 mile before turning left on Sierra Meadows Drive. In 0.7 mi, turn right on Pacific Street and continue for 0.4 mile before turning left onto Delmar Avenue. Take a left on Delmar Avenue to the Study Area.

## 4.0 RESULTS

A total of approximately 1.899 acres of aquatic resources were delineated within the Study Area, including approximately 1.704 acres of wetlands and 0.196 acre of other waters. Seasonal wetlands, seasonal wetland swales, seeps, intermittent drainages, perennial drainages, pond, and roadside ditches were delineated within the Study Area. A summary of the aquatic resources found on-site, and their acreages is shown in Table 1 below.

**Table 1. Aquatic Resources Delineated within the Study Area**

Resource Type		Acreage
<i>Wetlands</i>		
Seasonal Wetland		0.003
Seasonal Wetland Swale		0.545
Seep		1.155
<i>Other Waters</i>		
Intermittent Drainage		0.025
Perennial Drainage		0.129
Pond		0.036
Roadside Ditch		0.006
<b>Total</b>		<b>1.899</b>

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are included as **Figure 3** and **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheet* for the aquatic resources shown on **Figure 3** and **Attachment B** will be digitally transmitted with this document when it is submitted. Each of the feature types are described below.

#### 4.1 Seasonal Wetland

Two small seasonal wetlands occur within the western portion of the Study Area. Seasonal wetlands are depressional wetlands that pond water seasonally. The seasonal wetlands within the Study Area are largely dominated by low manna grass (*Glyceria declinata*), pennyroyal (*Mentha pulegium*), and hyssop loosestrife (*Lythrum hyssopifolia*).

DP-10 was collected within one of the seasonal wetlands. Wetland hydrology indicators at DP-10 included aquatic invertebrates, oxidized rhizospheres along living roots, and the presence of biotic crust. Soils were considered hydric based on the presence of Field Indicators F6 (Redox Dark Surface).

#### 4.2 Seasonal Wetland Swale

The Study Area supports seven seasonal wetland swales. Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff, and may detain it for short periods of time. The dominant species occurring within the seasonal wetland swales include spiny fruit buttercup (*Ranunculus muricatus*), Carter's buttercup (*R. bonariensis*), annual blue grass (*Poa annua*), and fowl blue grass. Additional plant species common in these features within the Study Area include water chickweed (*Montia fontana*), mayweed (*Anthemis cotula*), annual rabbit's-foot grass (*Polypogon monspeliensis*), and Bermuda grass (*Cynodon dactylon*).

DP-6 was collected within the lowest part of SWS-1 (DP-6). Three additional points were collected in a more marginal fringe area of SWS-2 (DPs 1- 3). DP-12 was collected within SWS-3. Wetland hydrology indicators at these points included soil saturation, high water table, oxidized rhizospheres along living roots, and presence of biotic crust. Soils at points above were considered hydric based on the presence of Field Indicators F3 (Depleted Matrix) and F6 (Redox Dark Surface). DP-22 was taken in SWS-5 in the eastern portion of the Study Area. Wetland hydrology indicators observed at DP-22 included nonriverine drift deposits (B3), drainage patterns (B3), and saturation visible on aerial imagery (C9). Soils at DP-22 was considered hydric based upon F6 (Redox Dark Surface).

#### 4.3 Seep

Four seeps were documented within the Study Area. Seeps are areas where groundwater reaches the surface through porous soil or cracks in rock. Seeps may form small pools on level or gently rolling terrain but generally result in seasonal or perennial soil saturation with minimal standing water and gentle flows in hilly to mountainous terrain. Four seeps were observed within the western portion of the Study Area. These features are dominated by perennial rye grass as well as common plant species such as Bird's-foot trefoil (*Lotus corniculatus*), pennyroyal, fowl blue grass, chicory (*Cichorium intybus*), Bermuda grass, tall fescue (*Festuca arundinacea*), Mediterranean barley (*Hordeum marinum*), Dallis grass (*Paspalum dilatatum*), and waterpepper (*Persicaria hydropiper*).

A data points 10, 15, and 18 were collected within the seeps. Wetland hydrology indicators at these points included soil saturation, high water table, saturation, oxidized rhizospheres along living roots, aquatic invertebrates, and presence of biotic crust. Soils at points above were considered hydric based on the presence of Field Indicators C3 (Oxidized Rhizospheres along Living Roots) and F6 (Redox Dark Surface).

### 4.3 Intermittent Drainage

One intermittent drainage has been mapped within the Study Area (ID-1). This feature flows out of a culvert under the railroad tracks and presumably conveys flow from west of the railroad tracks. The intermittent drainage is mostly unvegetated within the channel but supports a narrow hydrophytic fringe along the edges. Plant species within this hydrophytic fringe include tall nutsedge (*Cyperus eragrostis*), pennyroyal, needle spikerush (*Eleocharis acicularis*), rice cutgrass (*Leersia oryzoides*), and Australian rush (*Juncus usitatus*). The intermittent drainage was mapped at the OHWM, which was identified based on the extent of scour, topographic breaks, and changes in vegetation.

### 4.4 Perennial Drainage

Perennial drainages are streams or reaches of a stream that flows continuously during all of the calendar year as a result of ground water discharge or surface runoff. Two perennial drainages were identified within the Study Area. There is an unnamed perennial drainage within the southwestern portion of the Study Area and a portion of Antelope Creek located within the center portion of the Study Area. PD-1 occurs within the southwestern portion of the Study Area and is largely unvegetated within the channel, the water surface supports floating parrot's feather (*Myriophyllum aquaticum*), and waterpepper, pennyroyal, and low manna grass fringe the edges. The perennial drainage was mapped at the OHWM, which was identified based on the extent of scour, topographic breaks, and changes in vegetation.

Antelope Creek (PD-2 and PD-3), a perennial creek, travels from north to south through the center of the Study Area to the east of Delmar Avenue. Flows within the creek are perennial in nature, with steady-flowing water observed during the site visits. Vegetation within and along the banks of the creek is robust and includes tall flatsedge, curly dock, floating primrose willow (*Ludwigia peploides*), panicled willowherb (*Epilobium brachycarpum*), fringed willowherb (*Epilobium ciliatum*), common knotweed (*Persicaria lapathifolia*), common plantain (*Plantago major*), Johnsongrass (*Sorghum halepense*), cattail (*Typha* sp.), and rough cocklebur (*Xanthium strumarium*). Vegetation within the riparian corridor along Antelope Creek consists almost exclusively of Himalayan blackberry (*Rubus armeniacus*) thickets, with some pokeweed (*Phytolacca americana*). Tree cover includes valley oak, Oregon ash (*Fraxinus latifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), sandbar willow (*Salix exigua*), Goodding's black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepis*). In addition, black elderberry (*Sambucus nigra*), the host plant for the federally threatened valley elderberry longhorn beetle, was found within the riparian corridor. The creek is directly connected to the navigable Sacramento River, as previously described, and is therefore likely to be a jurisdictional water of the U.S. Data point DP-26 was collected within the creek; it contained hydrophytic vegetation, wetland hydrology, and was inundated with water. The creek

was mapped at the OHWM, which was identified based on sediment deposits, drift deposits, water marks, vegetation, topographic breaks, and aerial imagery.

#### **4.5 Pond**

There is one man-made pond within the eastern half of the Study Area. This pond was made by the placement of a small earthen dam across a swale. This pond is approximately two to three feet in depth and typically dries in the summer. At the time of the May 2024 survey the pond was two feet deep and contained abundant Sierran treefrog (*Pseudacris sierra*) tadpoles. This pond is grazed by cattle and is mostly unvegetated with scattered species occurring along the margins, such as common purslane (*Portulaca oleracea*), prostrate knotweed, and Bermuda grass. The OHWM of the pond was mapped based upon non-riverine water marks (B1).

#### **4.6 Roadside Ditch**

Two roadside ditches run along the western side of Delmar Avenue. The roadside ditches serve to convey stormwater runoff from the road into Antelope Creek to the south. These features are almost entirely unvegetated due to the scouring effects of water flow. These features were mapped at the OHWM, which was identified based on the extent of scour.

### **5.0 CONCLUSION AND ANALYSIS UNDER THE REVISED 2023 CLEAN WATER RULE**

The all but one aquatic resource within the Study Area are jurisdictional Waters of the U.S. as they have a continuous surface connection to a relatively permanent paragraph (a)(2) jurisdictional tributary.

Seep 1 within the Study Area appears to be hydrologically isolated, as water does not noticeably drain from this feature. As such, Madrone is of the opinion that this seep is non-jurisdictional since it does not have a continuous surface connection to an a(1) Water, or a relatively permanent water (RPW) a(2) impoundment or a(3) tributary, and thus do not satisfy the definition of "adjacent" as defined in 33 CFR Section 328.3(c)(2).

The applicant is requesting an Approved Jurisdictional Determination of the Aquatic Resources Delineation Map of the Study Area included in **Attachment B**. A JD request form is provided in **Attachment D**.

## 6.0 REFERENCES

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.
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- U.S. Army Corps of Engineers (USACE). 2020. National Wetland Plant List, version 3.5. Available online at <http://wetland-plants.usace.army.mil/> U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH
- U.S. Department of the Interior, Geological Survey (USGS). 2021. *Rocklin, California 7.5-minute Quadrangle*. Geological Survey. Denver, Colorado.

# Figures

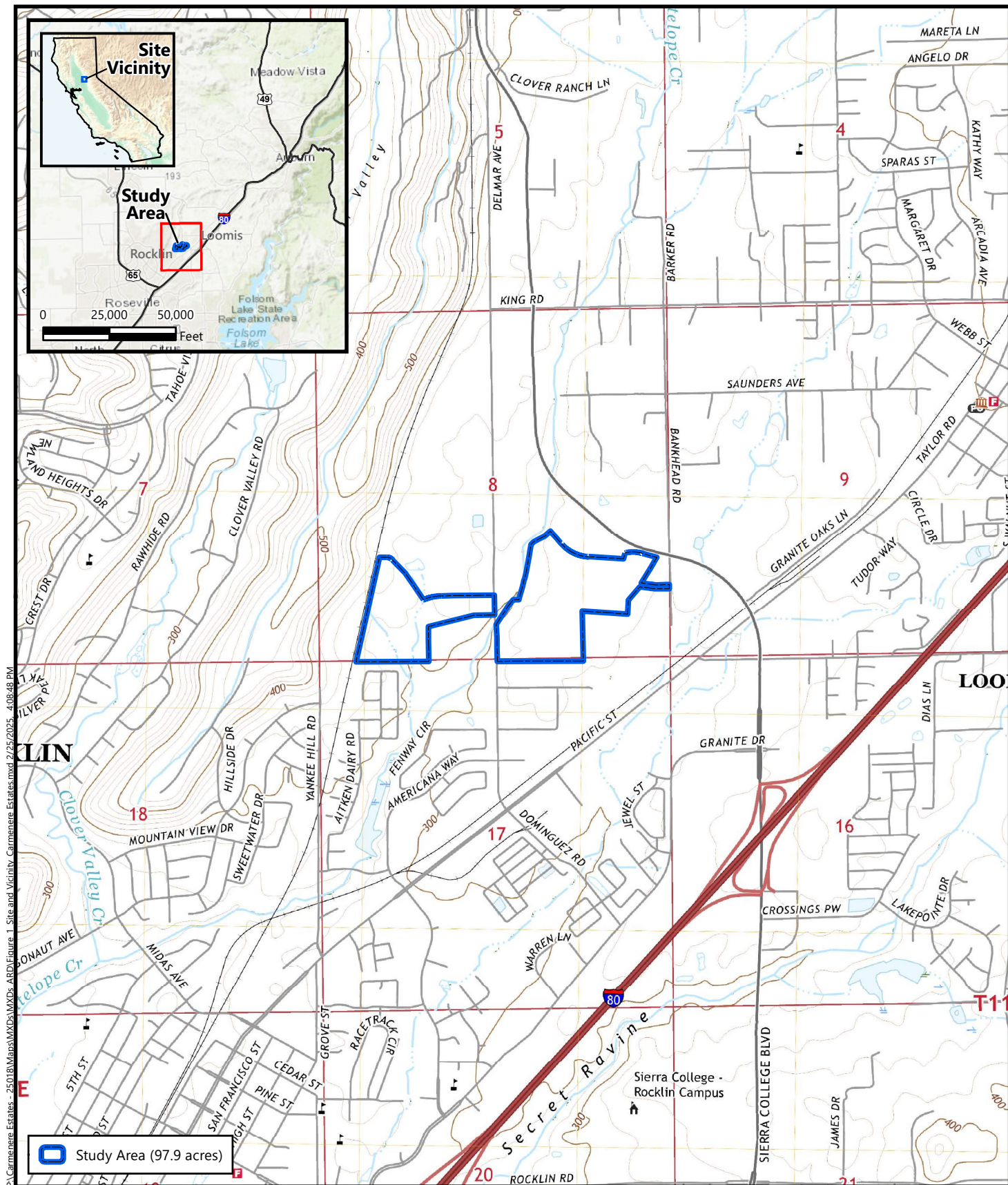
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Figure 1. Site and Vicinity

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources





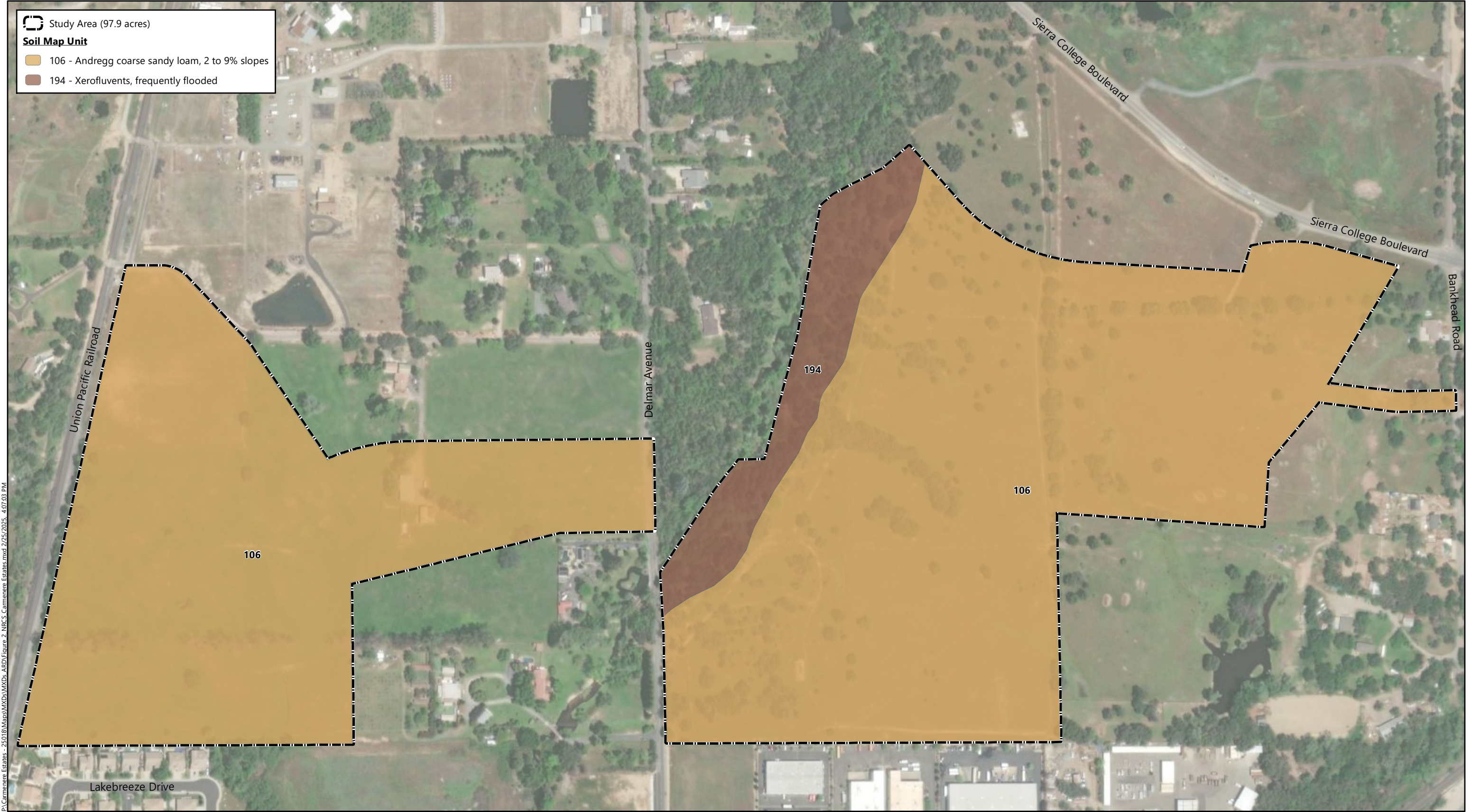
**Figure 1**  
**Site and Vicinity**

Source: United States Geologic Survey, 2021  
 "Rocklin" California 7.5-Minute Topographic Quadrangle  
 Sections 8, 9, and 17 Township 11 North, Range 7 East, MDB&M  
 Latitude (NAD83): 38.812568°, Longitude (NAD83): -121.218772°

Carmenere Estates  
 Town of Loomis, Placer County, California







P:\Carmenere Estates - 25018\Maps\MXDs\MXDs ARD\Figure 2 - NRCS Carmenere Estates.mxd 2/25/2025 4:07:03 PM



Soil Survey Source: *USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part*  
Aerial Source: Maxar, 26 April and 1 May 2022

**Figure 2**  
**Natural Resources Conservation Service Soils**

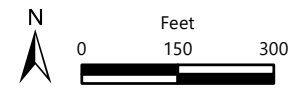
*Carmenere Estates*  
*Town of Loomis, Placer County, California*







P:\Carmenere Estates - 25018\Maps\MXD\MXDs ARD\Figure 3 Aquatic Resources Carmenere Estates.mxd 3/4/2025, 9:25:48 AM



Notes: Rounding may result in small summation errors.  
Aerial Source: Maxar, 26 April and 1 May 2022

**Figure 3**  
**Aquatic Resources**

Carmenere Estates  
Town of Loomis, Placer County, California





# Attachments

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Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation Map

Attachment C. Plant Species Observed within the Study Area

Attachment D. JD Request Form

# Attachment A

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## **Arid West Wetland Determination Data Forms**

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/25/23  
 Applicant/Owner: Building Engineering and Management, Inc. CA Sampling Point: DP1  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Topographic swale Local relief (concave, convex, none): Concave Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81259973 Long: -121.2250406 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>      </u>
Hydric Soil Present? Yes <u>X</u> No <u>      </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	
Remarks:  Representative seasonal wetland swale. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>10</u> x2 = <u>20</u> FAC species <u>50</u> x3 = <u>150</u> FACU species <u>30</u> x4 = <u>120</u> UPL species <u>      </u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>3.2</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Anthemis cotula</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	
2. <u>Poa palustris</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Poa annua</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
4. <u>Festuca myuros</u>	<u>5</u>	<u>      </u>	<u>FACU</u>	
5. <u>Sisymbrium officinale</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
6. <u>Persicaria species</u>	<u>T</u>	<u>      </u>	<u>OBL</u>	
7. <u>Ranunculus muricatus</u>	<u>10</u>	<u>      </u>	<u>FACW</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
8. <u>Trifolium ciliolatum</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
<u>90</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
<u>      </u> =Total Cover				
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

## SOIL

Sampling Point: DP1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR3/2	100					loamy sand	
2-6	7.5YR3/1	90	7.5YR3/4	10	C	PL	loamy sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): surface

**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/25/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP2  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Topographic swale Local relief (concave, convex, none): Concave Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.8122387 Long: -121.2246078 Datum: NAD 83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u> Hydric Soil Present? Yes <u>X</u> No <u>      </u> Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>      </u>
Remarks:  Representative seasonal wetland swale. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
	<u>0</u>	<u>      </u> =Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>50</u> x1 = <u>50</u> FACW species <u>10</u> x2 = <u>20</u> FAC species <u>30</u> x3 = <u>90</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>200</u> (B) Prevalence Index = B/A = <u>2.0</u>
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
	<u>0</u>	<u>      </u> =Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Montia fontana</u>	<u>50</u>	<u>X</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Poa annua</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	
3. <u>Anthemis cotula</u>	<u>10</u>	<u>      </u>	<u>FACU</u>	
4. <u>Ranunculus muricatus</u>	<u>10</u>	<u>      </u>	<u>FACW</u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
6. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
	<u>100</u>	<u>      </u> =Total Cover		
<b>Woody Vine Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
	<u>      </u>	<u>      </u> =Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:
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## SOIL

Sampling Point: DP2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 3/2	100					sandy loam	
2-6	7.5YR 3/1	90	7.5YR 3/4	10	C	PL	sandy clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes ☒ No ☐ Depth (inches): surface  
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	<u>Carmenere Estates</u>	City/County:	<u>Town of Loomis, Placer County</u>	Sampling Date:	<u>04/25/23</u>
Applicant/Owner:	<u>Building Engineering and Management, Inc.</u>	State:	<u>CA</u>	Sampling Point:	<u>DP3</u>
Investigator(s):	<u>Daria Snider</u>	Section, Township, Range:	<u>Section 8, Township 11 North, Range 7 East</u>		
Landform (hillslope, terrace, etc.):	<u>Topographic swale</u>	Local relief (concave, convex, none):	<u>Concave</u>	Slope (%):	<u>2-5</u>
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>38.81225613</u>	Long:	<u>-121.2246253</u>
		Datum:	<u>NAD 83</u>		
Soil Map Unit Name:	<u>106 - Andregg coarse sandy loam, 2 to 9% slopes</u>		NWI Classification:	<u>None</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?		Yes <u>      </u>	No <u>  X  </u>	(If no, explain in Remarks.)	
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	significantly disturbed?	Are "Normal Circumstances" present?	Yes <u>  X  </u>	No <u>      </u>
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	naturally problematic?	(If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes	<u>  X  </u>	No	<u>          </u>	<b>Is the Sampled Area within a Wetland?</b>	Yes	<u>  X  </u>	No	<u>          </u>
Hydric Soil Present?	Yes	<u>  X  </u>	No	<u>          </u>					
Wetland Hydrology Present?	Yes	<u>  X  </u>	No	<u>          </u>					
<b>Remarks:</b>  This is supposed to be an upland comparison to DP 2, but it is in fact a wetland. Rain year much wetter than normal.									

**VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: _____ )			Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1.	_____	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	_____ <b>2</b> _____ (A)
2.	_____	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	_____ <b>3</b> _____ (B)
3.	_____	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	_____ <b>67%</b> _____ (A/B)
4.	_____	_____	_____	_____	_____		
			<b>0</b>	=Total Cover			
Sapling/Shrub Stratum (Plot size: _____ )						Prevalence Index Worksheet:	
1.	_____	_____	_____	_____	_____	Total % Cover of:	Multiply by:
2.	_____	_____	_____	_____	_____	OBL species <b>0</b> x1 =	<b>0</b>
3.	_____	_____	_____	_____	_____	FACW species <b>10</b> x2 =	<b>20</b>
4.	_____	_____	_____	_____	_____	FAC species <b>50</b> x3 =	<b>150</b>
5.	_____	_____	_____	_____	_____	FACU species <b>30</b> x4 =	<b>120</b>
			<b>0</b>	=Total Cover		UPL species <b>0</b> x5 =	<b>0</b>
Herb Stratum (Plot size: <u>1 meter<sup>2</sup></u> )						Column Totals:	<b>90</b> (A) <b>290</b> (B)
1.	<i>Anthemis cotula</i>	25	X	FACU		Prevalence Index = B/A = <b>3.2</b>	
2.	<i>Poa palustris</i>	30	X	FAC			
3.	<i>Poa annua</i>	20	X	FAC			
4.	<i>Festuca myuros</i>	5		FACU			
5.	<i>Sisymbrium officinale</i>	T		UPL			
6.	<i>Persicaria species</i>	T		OBL			
7.	<i>Ranunculus muricatus</i>	10		FACW			
8.	<i>Trifolium ciliolatum</i>	T		UPL			
			<b>90</b>	=Total Cover			
Woody Vine Stratum (Plot size: _____ )						Hydrophytic Vegetation Indicators:	
1.	_____	_____	_____	_____	_____	<b>X</b>	Dominance Test is >50%
2.	_____	_____	_____	_____	_____		Prevalence Index is ≤3.0 <sup>1</sup>
			_____	=Total Cover			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
% Bare Ground in Herb Stratum <b>0</b>			% Cover of Biotic Crust <b>0</b>				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
						<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
						<b>Hydrophytic Vegetation Present?</b> Yes <b>X</b> No _____	
Remarks:							

## SOIL

Sampling Point: DP3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR3/2	100					loamy sand	
2-6	7.5YR3/1	90	7.5YR3/4	10	C	PL	loamy sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): surface
(includes capillary fringe)			

**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP4  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1-3  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81289483 Long: -121.2218657 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u>      </u>	Is the Sampled Area within a Wetland?	Yes <u>      </u> No <u>X</u>
Hydric Soil Present?	Yes <u>      </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u>      </u> No <u>X</u>		
Remarks:  Suspect due to hydrophytic vegetation. Rain year much wetter than normal.			

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>45</u> x2 = <u>90</u> FAC species <u>15</u> x3 = <u>45</u> FACU species <u>35</u> x4 = <u>140</u> UPL species <u>5</u> x5 = <u>25</u> Column Totals: <u>100</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3.0</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Indicators:</b> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Ranunculus muricatus</u>	<u>45</u>	<u>X</u>	<u>FACW</u>	
2. <u>Anthemis cotula</u>	<u>35</u>	<u>X</u>	<u>FACU</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Poa annua</u>	<u>15</u>	<u>      </u>	<u>FAC</u>	
4. <u>Bromus hordeaceus</u>	<u>T</u>	<u>      </u>	<u>FAC</u>	
5. <u>Capsella bursa-pastoris</u>	<u>T</u>	<u>      </u>	<u>FACU</u>	
6. <u>Sisymbrium officinale</u>	<u>5</u>	<u>      </u>	<u>UPL</u>	
7. <u>Erodium moschatum</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
8. <u>Hordeum murinum</u>	<u>T</u>	<u>      </u>	<u>FACU</u>	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>      </u> =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

## SOIL

Sampling Point: DP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/2	100					sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

No hydric soil indicators observed.

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	<u>Carmenere Estates</u>	City/County:	<u>Town of Loomis, Placer County</u>	Sampling Date:	<u>04/26/23</u>
Applicant/Owner:	<u>Building Engineering and Management, Inc.</u>	State:	<u>CA</u>	Sampling Point:	<u>DP5</u>
Investigator(s):	<u>Daria Snider</u>	Section, Township, Range:	<u>Section 8, Township 11 North, Range 7 East</u>		
Landform (hillslope, terrace, etc.):	<u>Terrace</u>	Local relief (concave, convex, none):	<u>None</u>	Slope (%):	<u>1-3</u>
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>38.81291601</u>	Long:	<u>-121.2215809</u>
		Datum:	<u>NAD83</u>		
Soil Map Unit Name:	<u>106 - Andregg coarse sandy loam, 2 to 9% slopes</u>		NWI Classification:	<u>None</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?		Yes <u>      </u>	No <u>  X  </u>	(If no, explain in Remarks.)	
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	significantly disturbed?	Are "Normal Circumstances" present?	Yes <u>  X  </u>	No <u>      </u>
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	naturally problematic?	(If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes	<u>  X  </u>	No	<u>      </u>	<b>Is the Sampled Area within a Wetland?</b>  Yes <u>      </u> No <u>  X  </u>
Hydric Soil Present?	Yes	<u>      </u>	No	<u>  X  </u>	
Wetland Hydrology Present?	Yes	<u>      </u>	No	<u>  X  </u>	
Remarks:  Suspect- bottom of this depression area. Rain year much wetter than normal.					

**VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: _____ )			Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1.	_____	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ <b>3</b> (A)		
2.	_____	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ <b>4</b> (B)		
3.	_____	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ <b>75%</b> (A/B)		
4.	_____	_____	_____	_____	_____			
			<b>0</b>	=Total Cover				
Sapling/Shrub Stratum (Plot size: _____ )						Prevalence Index Worksheet:		
1.	_____	_____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____		
2.	_____	_____	_____	_____	_____	OBL species <b>0</b> x1 = <b>0</b>		
3.	_____	_____	_____	_____	_____	FACW species <b>30</b> x2 = <b>60</b>		
4.	_____	_____	_____	_____	_____	FAC species <b>50</b> x3 = <b>150</b>		
5.	_____	_____	_____	_____	_____	FACU species <b>20</b> x4 = <b>80</b>		
			<b>0</b>	=Total Cover		UPL species _____ x5 = <b>0</b>		
Herb Stratum (Plot size: <u>1 meter<sup>2</sup></u> )						Column Totals: <b>100</b> (A) <b>290</b> (B)		
1.	<i>Ranunculus muricatus</i>	30	X	FACW		Prevalence Index = B/A = <b>2.9</b>		
2.	<i>Poa pratensis</i>	20	X	FAC				
3.	<i>Poa annua</i>	30	X	FAC				
4.	<i>Anthemis cotula</i>	20	X	FACU				
5.	<i>Festuca myuros</i>	T		FACU				
6.	<i>Matricaria discoidea</i>	T		FACU				
7.	_____	_____	_____	_____	_____			
8.	_____	_____	_____	_____	_____			
			<b>100</b>	=Total Cover				
Woody Vine Stratum (Plot size: _____ )						Hydrophytic Vegetation Indicators:		
1.	_____	_____	_____	_____	_____	<b>X</b> Dominance Test is >50%		
2.	_____	_____	_____	_____	_____	<b>X</b> Prevalence Index is ≤3.0 <sup>1</sup>		
			_____	=Total Cover		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)		
% Bare Ground in Herb Stratum <b>0</b>			% Cover of Biotic Crust <b>0</b>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
Remarks:						<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
						<b>Hydrophytic Vegetation Present?</b> Yes <b>X</b> No _____		

## SOIL

Sampling Point: DP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/2	100					sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

No hydric soil indicators observed.

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	<u>Carmenere Estates</u>	City/County:	<u>Town of Loomis, Placer County</u>	Sampling Date:	<u>04/26/23</u>
Applicant/Owner:	<u>Building Engineering and Management, Inc.</u>	State:	<u>CA</u>	Sampling Point:	<u>DP6</u>
Investigator(s):	<u>Daria Snider</u>	Section, Township, Range:	<u>Section 8, Township 11 North, Range 7 East</u>		
Landform (hillslope, terrace, etc.):	<u>Topographic swale</u>	Local relief (concave, convex, none):	<u>Concave</u>	Slope (%):	<u>2-5</u>
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>38.81150305</u>	Long:	<u>-121.2253783</u>
		Datum:	<u>NAD83</u>		
Soil Map Unit Name:	<u>106 - Andregg coarse sandy loam, 2 to 9% slopes</u>		NWI Classification:	<u>None</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?		Yes <u>      </u>	No <u>  X  </u>	(If no, explain in Remarks.)	
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	significantly disturbed?	Are "Normal Circumstances" present?	Yes <u>  X  </u>	No <u>      </u>
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	naturally problematic?	(If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>  <b>X</b>  </u>	No <u>          </u>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>      <b>X</b>      </u>	No <u>          </u>
Hydric Soil Present?	Yes <u>  <b>X</b>  </u>	No <u>          </u>			
Wetland Hydrology Present?	Yes <u>  <b>X</b>  </u>	No <u>          </u>			
<b>Remarks:</b>  Seasonal wetland swale - data point taken in lowest part of the channel. Rain year much wetter than normal.					

**VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: _____ )		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		0	=Total Cover	
Sapling/Shrub Stratum (Plot size: _____ )				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		0	=Total Cover	
Herb Stratum (Plot size: _____ 1 meter <sup>2</sup> )				
1.	<i>Poa palustris</i>	30	X	FAC
2.	<i>Poa annua</i>	30	X	FAC
3.	<i>Stellaria media</i>	20	X	FACU
4.	<i>Senecio vulgaris</i>	T		FACU
5.	<i>Rumex sp.</i>	1		--
6.	<i>Sisymbrium officinale</i>	5		UPL
7.	<i>Anthemis cotula</i>	12		FACU
8.	<i>Ranunculus muricatus</i>	2		FACW
9.	<i>Persicaria sp.</i>	T		OBL
10.	<i>Capsella bursa-pastoris</i>	T		FACU
11.	<i>Plantago lanceolata</i>	T		FAC
12.	<i>Cerastium glomeratum</i>	T		UPL
		100	=Total Cover	
% Bare Ground in Herb Stratum		0	% Cover of Biotic Crust	
			5	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u> x1 =	<u>0</u>
FACW species <u>2</u> x2 =	<u>4</u>
FAC species <u>60</u> x3 =	<u>180</u>
FACU species <u>32</u> x4 =	<u>128</u>
UPL species <u>5</u> x5 =	<u>25</u>
Column Totals: <u>99</u> (A)	<u>337</u> (B)
Prevalence Index = B/A = <u>3.4</u>	

**Hydrophytic Vegetation Indicators:**

X Dominance Test is >50%

  Prevalence Index is ≤3.0<sup>1</sup>

  Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

  Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?**

Yes	X	No
-----	---	----

Remarks:	
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## SOIL

Sampling Point: DP6

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 2/1	100					sandy loam	
2-12	10YR 4/1	80	7.5YR 3/4	20	C	PL	sandy clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP7  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5-10  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81155304 Long: -121.2253429 Datum: NAD 83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>      </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>      </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u>      </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u>      </u>		
Remarks:  Slope above seasonal wetland swale - upland. Rain year much wetter than normal.			

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>6</u> x1 = <u>6</u> FACW species <u>1</u> x2 = <u>2</u> FAC species <u>40</u> x3 = <u>120</u> FACU species <u>65</u> x4 = <u>260</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>112</u> (A) <u>388</u> (B) Prevalence Index = B/A = <u>3.5</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )	<u>      </u>	<u>      </u>	<u>      </u>	
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Indicators:</b> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <u>      </u>
5. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	<u>      </u>	<u>      </u>	<u>      </u>	
1. <u>Bromus hordeaceus</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	
2. <u>Festuca myuros</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Festuca perennis</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	
4. <u>Mentha pulegium</u>	<u>1</u>	<u>      </u>	<u>OBL</u>	
5. <u>Anthemis cotula</u>	<u>5</u>	<u>      </u>	<u>FACU</u>	
6. <u>Poa annua</u>	<u>10</u>	<u>      </u>	<u>FAC</u>	
7. <u>Ranunculus muricatus</u>	<u>1</u>	<u>      </u>	<u>FACW</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>
8. <u>Eleocharis acicularis</u>	<u>5</u>	<u>      </u>	<u>OBL</u>	
9. <u>Geranium dissectum</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
10. <u>Senecio vulgaris</u>	<u>T</u>	<u>      </u>	<u>FACU</u>	
11. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
12. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>112</u> =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

## SOIL

Sampling Point: DP7

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/3	90	10YR 3/4	10	C	PL	sandy loam	
4-12	10YR 4/1	90	10YR 3/4	10	C	PL	loamy sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes ☒ No ☐ Depth (inches): 4"**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP8  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5-10  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81163884 Long: -121.2252983 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>      </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>      </u> No <u>X</u>
Hydric Soil Present?	Yes <u>      </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u>      </u> No <u>X</u>		
Remarks:  DP higher on slope than DP 7; representative clear upland area. Rain year much wetter than normal			

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>20</u> x2 = <u>40</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>60</u> x4 = <u>240</u> UPL species <u>25</u> x5 = <u>125</u> Column Totals: <u>110</u> (A) <u>420</u> (B) Prevalence Index = B/A = <u>3.8</u>
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Anthemis cotula</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
2. <u>Festuca myuros</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	
3. <u>Hypochaeris glabra</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	
4. <u>Ranunculus muricatus</u>	<u>20</u>	<u>X</u>	<u>FACW</u>	
5. <u>Hordeum murinum</u>	<u>10</u>	<u>      </u>	<u>FACU</u>	
6. <u>Sisymbrium officinale</u>	<u>5</u>	<u>      </u>	<u>UPL</u>	
7. <u>Festuca perennis</u>	<u>5</u>	<u>      </u>	<u>FAC</u>	
8. <u>Centaurea solstitialis</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
9. <u>Erodium moschatum</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
<u>110</u> =Total Cover				
<u>      </u> =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:	<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>
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## SOIL

Sampling Point: DP8

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/2	100					sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No **X**

Remarks:

No hydric soil indicators observed.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes \_\_\_\_\_ No **X** Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No **X** Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No **X** Depth (inches): \_\_\_\_\_  
(includes capillary fringe)**Wetland Hydrology Present?** Yes \_\_\_\_\_ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	<u>Carmenere Estates</u>	City/County:	<u>Town of Loomis, Placer County</u>	Sampling Date:	<u>04/26/23</u>
Applicant/Owner:	<u>Building Engineering and Management, Inc.</u>	State:	<u>CA</u>	Sampling Point:	<u>DP9</u>
Investigator(s):	<u>Daria Snider</u>	Section, Township, Range:	<u>Section 8, Township 11 North, Range 7 East</u>		
Landform (hillslope, terrace, etc.):	<u>Hillslope</u>	Local relief (concave, convex, none):	<u>None</u>	Slope (%):	<u>2-5</u>
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>38.81140211</u>	Long:	<u>-121.225409</u>
		Datum:	<u>NAD83</u>		
Soil Map Unit Name:	<u>106 - Andregg coarse sandy loam, 2 to 9% slopes</u>		NWI Classification:	<u>None</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?		Yes <u>      </u>	No <u>  X  </u>	(If no, explain in Remarks.)	
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	significantly disturbed?	Are "Normal Circumstances" present?	Yes <u>  X  </u>	No <u>      </u>
Are Vegetation	<u>      </u> , Soil <u>      </u> , or Hydrology <u>      </u>	naturally problematic?	(If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>        </u>	No <u>  <b>X</b>  </u>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>        </u>	No <u>  <b>X</b>  </u>
Hydric Soil Present?	Yes <u>  <b>X</b>  </u>	No <u>        </u>			
Wetland Hydrology Present?	Yes <u>  <b>X</b>  </u>	No <u>        </u>			
<b>Remarks:</b>  Rain year much wetter than normal.					

**VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: _____ )		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1.	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ <b>1</b> (A)				
2.	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ <b>3</b> (B)				
3.	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ <b>33%</b> (A/B)				
4.	_____	_____	_____	_____					
		<b>0</b>	=Total Cover						
Sapling/Shrub Stratum (Plot size: _____ )					Prevalence Index Worksheet:				
1.	_____	_____	_____	_____	Total % Cover of:		Multiply by:		
2.	_____	_____	_____	_____	OBL species	<b>0</b>	x1 =	<b>0</b>	
3.	_____	_____	_____	_____	FACW species	<b>0</b>	x2 =	<b>0</b>	
4.	_____	_____	_____	_____	FAC species	<b>35</b>	x3 =	<b>105</b>	
5.	_____	_____	_____	_____	FACU species	<b>40</b>	x4 =	<b>160</b>	
		<b>0</b>	=Total Cover			UPL species	<b>25</b>	x5 =	<b>125</b>
					Column Totals:	<b>100</b>	(A)	<b>390</b>	(B)
					Prevalence Index = B/A = _____ <b>3.9</b>				
Herb Stratum (Plot size: <u>1 meter<sup>2</sup></u> )					Hydrophytic Vegetation Indicators:				
1.	<i>Hordeum murinum</i>	20	X	FACU	_____ Dominance Test is >50%				
2.	<i>Cerastium glomeratum</i>	20	X	UPL	_____ Prevalence Index is ≤3.0 <sup>1</sup>				
3.	<i>Veronica peregrina</i>	20	X	FAC	_____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)				
4.	<i>Ranunculus muricatus</i>	5		UPL	_____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5.	<i>Medicago lupulina</i>	10		FAC					
6.	<i>Festuca arundinacea</i>	10		FACU					
7.	<i>Anthemis cotula</i>	10		FACU					
8.	<i>Plantago lanceolata</i>	5		FAC					
9.	<i>Sisymbrium officinale</i>	T		UPL					
10.	<i>Senecio vulgaris</i>	T		UPL					
11.	_____	_____	_____	_____					
12.	_____	_____	_____	_____					
		<b>100</b>	=Total Cover			<b>Hydrophytic Vegetation Present?</b>			
% Bare Ground in Herb Stratum		<b>0</b>	% Cover of Biotic Crust		<b>0</b>	<b>Yes</b> _____ <b>No</b> _____ <b>X</b> _____			

Remarks:	
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## SOIL

Sampling Point: DP9

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR3/2	100					loamy sand	
2-6	7.5YR3/1	90	7.5YR3/4	10	C	PL	loamy sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_

(includes capillary fringe)

**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP10  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81237272 Long: -121.2238959 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>      </u>
Hydric Soil Present? Yes <u>X</u> No <u>      </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	
Remarks:  SW - well defined depression. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>10</u> x1 = <u>10</u> FACW species <u>40</u> x2 = <u>80</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>50</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.8</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
6. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Glyceria declinata</u>	<u>40</u>	<u>X</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
2. <u>Mentha pulegium</u>	<u>10</u>	<u>      </u>	<u>OBL</u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u>10</u>
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
6. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	=Total Cover
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>50</u> =Total Cover				=Total Cover
<u>Woody Vine Stratum</u> (Plot size:				



## SOIL

Sampling Point: DP10

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 2.5/1	100					sand	
2-8	7.5YR 3/1	95	7.5YR 4/6	5	C	PL	sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP11  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.8123526 Long: -121.2239211 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Potential upland. Rain year much wetter than normal.	

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>45</u> x2 = <u>90</u> FAC species <u>30</u> x3 = <u>90</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>10</u> x5 = <u>50</u> Column Totals: <u>105</u> (A) <u>310</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Glyceria declinata</u>	<u>30</u>	<u>X</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Poa annua</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	
3. <u>Ranunculus muricatus</u>	<u>15</u>		<u>FACW</u>	
4. <u>Anthemis cotula</u>	<u>15</u>		<u>FACU</u>	
5. <u>Festuca myuros</u>	<u>5</u>		<u>FACU</u>	
6. <u>Cerastium glomeratum</u>	<u>5</u>		<u>UPL</u>	
7. <u>Erodium moschatum</u>	<u>5</u>		<u>UPL</u>	
8. _____	_____	_____	_____	
	<u>105</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____		
Remarks:				

## SOIL

Sampling Point: DP11

<b>Profile Description:</b> (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features				
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture
0-5	7.5YR 3/2	90	7.5YR 3/3	10		PL	sandy loam
5-10	7.5YR 4/2	95	7.5YR 3/4	5		PL	sand

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.     <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

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**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)                  ☐ Sandy Redox (S5)
- ☐ Histic Epipedon (A2)        ☐ Stripped Matrix (S6)
- ☐ Black Histic (A3)              ☐ Loamy Mucky Mineral (F1)
- ☐ Hydrogen Sulfide (A4)        ☐ Loamy Gleyed Matrix (F2)
- ☐ Stratified Layers (A5) (**LRR C**)    ☒ Depleted Matrix (F3)
- ☐ 1 cm Muck (A9) (**LRR D**)        ☐ Redox Dark Surface (F6)
- ☐ Depleted Below Dark Surface (A11)   ☐ Depleted Dark Surface (F7)
- ☐ Thick Dark Surface (A12)       ☐ Redox Depressions (F8)
- ☐ Sandy Mucky Mineral (S1)       ☐ Vernal Pools (F9)
- ☐ Sandy Gleyed Matrix (S4)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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**Restrictive Layer (if present):**  
  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**                      Yes ☒      No ☐

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)			<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)			<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)			<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )	
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)			<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)			<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)			<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b>					
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____			
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP12  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81222429 Long: -121.2235591 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Creek. ID except wetland. Rain year much wetter than normal.	

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>90</u> x1 = <u>90</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>125</u> (B) Prevalence Index = B/A = <u>1.3</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Nasturtium officinale</u>	<u>90</u>	<u>X</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Anthemis cotula</u>	<u>5</u>		<u>FACU</u>	
3. <u>Poa annua</u>	<u>5</u>		<u>FAC</u>	
4. <u>Ranunculus muricatus</u>	<u>T</u>		<u>FACW</u>	
5. <u>Rumex crispus</u>	<u>T</u>		<u>FAC</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			
Remarks:				

## SOIL

Sampling Point: DP12

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)			<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)			<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)			<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )	
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)			<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)			<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)			<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b>					
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	1"		
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):			
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):			
(includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 04/26/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP13  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81221248 Long: -121.2235342 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Upland. Rain year much wetter than normal.	

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>5</u> x2 = <u>10</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>90</u> x4 = <u>360</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>385</u> (B) Prevalence Index = B/A = <u>3.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Hordeum murinum</u>	<u>90</u>	<u>X</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Ranunculus muricatus</u>	<u>5</u>	_____	<u>FACW</u>	
3. <u>Poa annua</u>	<u>5</u>	_____	<u>FAC</u>	
4. <u>Geranium dissectum</u>	<u>T</u>	_____	<u>UPL</u>	
5. <u>Carduus pycnocephalus</u>	<u>T</u>	_____	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			
Remarks:				

## SOIL

Sampling Point: DP13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/1	100					sandy loam	
3-6	7.5YR 4/1	95	7.5YR 3/4	5	C	M	sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP14  
 Investigator(s): Daria Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Topographic swale Local relief (concave, convex, none): Concave Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81265714 Long: -121.2251248 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks:  Upland comparison to 1. Rain year much wetter than normal.	

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>40</u> x3 = <u>120</u> FACU species <u>60</u> x4 = <u>240</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>360</u> (B) Prevalence Index = B/A = <u>3.6</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>40</u>	<u>X</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Anthemis cotula</u>	<u>40</u>	<u>X</u>	<u>FACU</u>	
3. <u>Festuca myuros</u>	<u>10</u>	_____	<u>FACU</u>	
4. <u>Leontodon saxatilis</u>	<u>10</u>	_____	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			
Remarks:				



## SOIL

Sampling Point: DP14

<b>Profile Description:</b> (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
<b>Depth</b>	<b>Matrix</b>		<b>Redox Features</b>				<b>Texture</b>	<b>Remarks</b>
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/2	100					sandy loam	No redox

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

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**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)                      ☐ Sandy Redox (S5)
- ☐ Histic Epipedon (A2)             ☐ Stripped Matrix (S6)
- ☐ Black Histic (A3)                 ☐ Loamy Mucky Mineral (F1)
- ☐ Hydrogen Sulfide (A4)          ☐ Loamy Gleyed Matrix (F2)
- ☐ Stratified Layers (A5) (**LRR C**)    ☒ Depleted Matrix (F3)
- ☐ 1 cm Muck (A9) (**LRR D**)         ☐ Redox Dark Surface (F6)
- ☐ Depleted Below Dark Surface (A11) ☐ Depleted Dark Surface (F7)
- ☐ Thick Dark Surface (A12)        ☐ Redox Depressions (F8)
- ☐ Sandy Mucky Mineral (S1)       ☐ Vernal Pools (F9)
- ☐ Sandy Gleyed Matrix (S4)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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<b>Restrictive Layer (if present):</b>  Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks: \_\_\_\_\_

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )	
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/22  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP15  
 Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81074386 Long: -121.2261846 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Seep. Rain year much wetter than normal.	

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>5</u> x1 = <u>5</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>75</u> x3 = <u>225</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>310</u> (B) Prevalence Index = B/A = <u>3.1</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>70</u>	<u>X</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Anthemis cotula</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
3. <u>Centaurea solstitialis</u>	<u>T</u>		<u>UPL</u>	
4. <u>Mentha pulegium</u>	<u>5</u>		<u>OBL</u>	
5. <u>Hordeum marinum</u>	<u>5</u>		<u>FAC</u>	
6. <u>Festuca bromoides</u>	<u>T</u>		<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>		
Remarks:				

## SOIL

Sampling Point: DP15

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )			
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP16  
 Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81072701 Long: -121.2261749 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks:  Upland to DP 14. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
			<u>0</u> =Total Cover	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>62</u> x4 = <u>248</u> UPL species <u>20</u> x5 = <u>100</u> Column Totals: <u>82</u> (A) <u>348</u> (B) Prevalence Index = B/A = <u>4.2</u>
<b>Sapling/Shrub Stratum (Plot size: _____)</b> 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover				
<b>Herb Stratum (Plot size: <u>1 meter<sup>2</sup></u>)</b> 1. <u>Bromus hordeaceus</u> <u>20</u> <u>X</u> <u>FACU</u> 2. <u>Hypochaeris glabra</u> <u>20</u> <u>X</u> <u>UPL</u> 3. <u>Anthemis cotula</u> <u>20</u> <u>X</u> <u>FACU</u> 4. <u>Festuca bromoides</u> <u>20</u> <u>X</u> <u>FACU</u> 5. <u>Centaurea solstitialis</u> <u>T</u> <u></u> <u>UPL</u> 6. <u>Cynodon dactylon</u> <u>2</u> <u></u> <u>FACU</u> 7. <u>Lactuca serriola</u> <u>T</u> <u></u> <u>FACU</u> 8. <u>Festuca perennis</u> <u>T</u> <u></u> <u>FAC</u> _____ =Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b> 1. _____ 2. _____ _____ =Total Cover				
% Bare Ground in Herb Stratum <u>18</u> % Cover of Biotic Crust <u>0</u>				
<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>				
Remarks:				

# SOIL

Sampling Point: DP16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	100					sandy loam	No redox

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
--	---

Remarks:

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP17  
Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 1-3  
Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81116489 Long: -121.2254235 Datum: NAD83  
Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No   X   (If no, explain in Remarks.)  
Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes   X   No         
Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes _____	No <u><b>X</b></u>	<b>Is the Sampled Area within a Wetland?</b>	Yes _____	No <u><b>X</b></u>
Hydric Soil Present?	Yes <u><b>X</b></u>	No _____			
Wetland Hydrology Present?	Yes <u><b>X</b></u>	No _____			
Remarks:					
Suspect - aerial signature and downhill of terminus of seep. Rain year much wetter than normal.					

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1.	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ 1 (A)	
2.	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ 3 (B)	
3.	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ 33% (A/B)	
4.	_____	0	=Total Cover			
Sapling/Shrub Stratum (Plot size: _____)					Prevalence Index Worksheet:	
1.	_____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____	
2.	_____	_____	_____	_____	OBL species 0 x1 = 0	
3.	_____	_____	_____	_____	FACW species 0 x2 = 0	
4.	_____	_____	_____	_____	FAC species 35 x3 = 105	
5.	_____	_____	_____	_____	FACU species 0 x4 = 0	
		0	=Total Cover		UPL species 60 x5 = 300	
Herb Stratum (Plot size: 1 meter <sup>2</sup> )					Column Totals: 95 (A) 405 (B)	
1.	<i>Festuca perennis</i>	30	X	FAC	Prevalence Index = B/A = 4.3	
2.	<i>Centaurea solstitatis</i>	20	X	UPL		
3.	<i>Hypochaeris glabra</i>	40	X	UPL		
4.	<i>Anthemis cotula</i>	T		FACU		
5.	<i>Hordeum marinum</i>	5		FAC		
6.	_____	_____	_____	_____		
7.	_____	_____	_____	_____		
8.	_____	_____	_____	_____		
		95	=Total Cover			
Woody Vine Stratum (Plot size: _____)					Hydrophytic Vegetation Indicators:	
1.	_____	_____	_____	_____	Dominance Test is >50%	
2.	_____	_____	_____	_____	Prevalence Index is ≤3.0 <sup>1</sup>	
					Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
					Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
					Hydrophytic Vegetation Present? Yes _____ No <b>X</b> _____	
Remarks:						

## SOIL

Sampling Point: DP17

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )			
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP18  
 Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81281768 Long: -121.2235446 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Seep. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>7</u> x1 = <u>7</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>85</u> x3 = <u>255</u> FACU species <u>8</u> x4 = <u>32</u> UPL species _____ x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>294</u> (B) Prevalence Index = B/A = <u>2.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>80</u>	<u>X</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Mentha pulegium</u>	<u>2</u>		<u>OBL</u>	
3. <u>Persicaria hydropiper</u>	<u>5</u>		<u>OBL</u>	
4. <u>Digitaria sanguinalis</u>	<u>1</u>		<u>FACU</u>	
5. <u>Anthemis cotula</u>	<u>2</u>		<u>FACU</u>	
6. <u>Poa palustris</u>	<u>5</u>		<u>FAC</u>	
7. <u>Festuca arundinacea</u>	<u>5</u>		<u>FACU</u>	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			
Remarks:				



## SOIL

Sampling Point: DP18

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )	
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

# **WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP19  
 Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.812706 Long: -121.2235277 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## **SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:

Upland comparison to DP 18. Rain year much wetter than normal.

## **VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>10</u> x3 = <u>30</u> FACU species <u>80</u> x4 = <u>320</u> UPL species <u>10</u> x5 = <u>50</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>4.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Anthemis cotula</u>	<u>40</u>	<u>X</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Festuca arundinacea</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
3. <u>Centaurea solstitialis</u>	<u>10</u>	_____	<u>UPL</u>	
4. <u>Festuca perennis</u>	<u>10</u>	_____	<u>FAC</u>	
5. <u>Digitaria sanguinalis</u>	<u>10</u>	_____	<u>FACU</u>	
6. <u>Festuca myuros</u>	<u>10</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>		

Remarks:

## SOIL

Sampling Point: DP19

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )			
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 07/19/23  
 Applicant/Owner: Building Engineering and Management, Inc. State: CA Sampling Point: DP20  
 Investigator(s): D. Snider Section, Township, Range: Section 8, Township 11 North, Range 7 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.8131514 Long: -121.2237943 Datum: NAD83  
 Soil Map Unit Name: 106 - Andregg coarse sandy loam, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:  Suspect location due to aerial signature. Rain year much wetter than normal.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____ )				<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>0</u> x1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>10</u> x2 = <u>20</u>
4. _____	_____	_____	_____	FAC species <u>5</u> x3 = <u>15</u>
5. _____	_____	_____	_____	FACU species <u>70</u> x4 = <u>280</u>
	<u>0</u>	=Total Cover		UPL species <u>0</u> x5 = <u>0</u>
				Column Totals: <u>85</u> (A) <u>315</u> (B)
				Prevalence Index = B/A = <u>3.7</u>
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Festuca arundinacea</u>	<u>50</u>	<u>X</u>	<u>FACU</u>	_____ Dominance Test is >50%
2. <u>Cichorium intybus</u>	<u>T</u>	_____	<u>FACU</u>	_____ Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Rumex pulcher</u>	<u>5</u>	_____	<u>FAC</u>	_____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Festuca perennis</u>	<u>T</u>	_____	<u>FAC</u>	_____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>Digitaria sanguinalis</u>	<u>10</u>	_____	<u>FACU</u>	
6. <u>Anthemis cotula</u>	<u>10</u>	_____	<u>FACU</u>	
7. <u>Juncus bufonius</u>	<u>10</u>	_____	<u>FACW</u>	
8. <u>Paspalum dilatatum</u>	<u>T</u>	_____	<u>FAC</u>	
	<u>85</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
		=Total Cover		
% Bare Ground in Herb Stratum <u>15</u>	% Cover of Biotic Crust <u>0</u>			
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>				
Remarks:				

## SOIL

Sampling Point: DP20

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )	
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/17/18  
 Applicant/Owner: Mima Capital, LLC. State: CA Sampling Point: DP21  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): <2  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81438352 Long: -121.2142759 Datum: NAD 83  
 Soil Map Unit Name: (106) Andregg coarse sandy loam, 2-9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>      </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>      </u> No <u>X</u>
Hydric Soil Present? Yes <u>      </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>      </u> No <u>X</u>	
Remarks: <u>Erodium dominated depression within ruderal pasture.</u>	

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>43</u> x4 = <u>172</u> UPL species <u>2</u> x5 = <u>10</u> Column Totals: <u>45</u> (A) <u>182</u> (B) Prevalence Index = B/A = <u>4.0</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Erodium botrys</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Centromadia fitchii</u>	<u>1</u>	<u>      </u>	<u>FACU</u>	
3. <u>Bromus hordeaceous</u>	<u>2</u>	<u>      </u>	<u>UPL</u>	
4. <u>Festuca perennis</u>	<u>T</u>	<u>      </u>	<u>FAC</u>	
5. <u>Trifolium hirtum</u>	<u>T</u>	<u>      </u>	<u>UPL</u>	
6. <u>Cynodon dactylon</u>	<u>2</u>	<u>      </u>	<u>FACU</u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>45</u> =Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>
% Bare Ground in Herb Stratum <u>55</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

## SOIL

Sampling Point: DP21

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/3	100					loamy sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: bedrock

Depth (inches): 3

**Hydric Soil Present?** Yes ☐ No ☒

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ☐ No ☒ Depth (inches):           

Water Table Present? Yes ☐ No ☒ Depth (inches):           

Saturation Present? Yes ☐ No ☒ Depth (inches):             
(includes capillary fringe)

**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology present

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/17/18  
 Applicant/Owner: Mima Capital, LLC. State: CA Sampling Point: DP22  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81313587 Long: -121.2141527 Datum: NAD 83  
 Soil Map Unit Name: (106) Andregg coarse sandy loam, 2-9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u> Hydric Soil Present? Yes <u>X</u> No <u>      </u> Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>      </u>
Remarks: Shallow swale that drains into pond. Within pasture and heavily grazed/trampled by cattle.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: <u>      </u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>      </u> (A)  Total Number of Dominant Species Across All Strata: <u>      </u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>      </u> (A/B)
1. <u>      </u>				
2. <u>      </u>				
3. <u>      </u>				
4. <u>      </u>				
	0	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>      </u> x1 = <u>      </u> FACW species <u>      </u> x2 = <u>      </u> FAC species <u>      </u> x3 = <u>      </u> FACU species <u>      </u> x4 = <u>      </u> UPL species <u>      </u> x5 = <u>      </u> Column Totals: <u>      </u> (A) <u>      </u> (B) Prevalence Index = B/A = <u>      </u>
1. <u>      </u>				
2. <u>      </u>				
3. <u>      </u>				
4. <u>      </u>				
	0	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Unknown seedling</u>	30	Y	N/A	
2. <u>Unknown seedling</u>	20	Y	N/A	
3. <u>Unknown seedling</u>	10		N/A	
4. <u>Polypogon monspeliensis</u>	T		FACW	
5. <u>Ranunculus bonariensis</u>	T		OBL	
6. <u>      </u>				
7. <u>      </u>				
8. <u>      </u>				
	60	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
1. <u>      </u>				
2. <u>      </u>				
	0	=Total Cover		
% Bare Ground in Herb Stratum <u>40</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Heavily grazed. Seedlings cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.



## SOIL

Sampling Point: DP22

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	7.5YR 3/2	95	7.5YR 3/4	5	C	PL, M	loam	
3-7	10YR 3/2	98	7.5 YR 3/4	2	C	M	sandy loam	
7-10	7.5YR 3/2	95	7.5YR 3/4	5	C	M	sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**
Type: bedrock  
Depth (inches): 10
**Hydric Soil Present?** Yes ☒ No ☐

Remarks: Distinct redox

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**
Surface Water Present? Yes ☐ No ☒ Depth (inches):             
Water Table Present? Yes ☐ No ☒ Depth (inches):             
Saturation Present? Yes ☐ No ☒ Depth (inches):             
(includes capillary fringe)
**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Exhibits signs of seasonal drainage

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/17/18  
 Applicant/Owner: Mima Capital, LLC. State: CA Sampling Point: DP23  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81319911 Long: -121.2137926 Datum: NAD 83  
 Soil Map Unit Name: (106) Andregg coarse sandy loam, 2-9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>      </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>      </u> No <u>X</u>
Hydric Soil Present? Yes <u>      </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>      </u> No <u>X</u>	
Remarks: Upland paired point with DPs 3 and 5.	

## VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>10</u> x5 = <u>50</u> Column Totals: <u>10</u> (A) <u>50</u> (B) Prevalence Index = B/A = <u>5.0</u>
Sapling/Shrub Stratum (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
Herb Stratum (Plot size: <u>1 meter<sup>2</sup></u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Centaurea solstitialis</u>	<u>10</u>	<u>      </u>	<u>UPL</u>	
2. <u>Erodeum botrys</u>	<u>T</u>	<u>      </u>	<u>FACU</u>	
3. <u>Unknown seedling</u>	<u>3</u>	<u>      </u>	<u>N/A</u>	
4. <u>Unknown seedling</u>	<u>2</u>	<u>      </u>	<u>N/A</u>	
5. <u>Unknown seedling</u>	<u>T</u>	<u>      </u>	<u>N/A</u>	
6. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>15</u> =Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>
Woody Vine Stratum (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
% Bare Ground in Herb Stratum <u>85</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Heavily grazed. Portion of cover consists of unknown seedlings that cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.

## SOIL

Sampling Point: DP23

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	7.5YR 2.5/2	100					loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**
 Type: bedrock  
 Depth (inches): 2
**Hydric Soil Present?** Yes ☐ No ☒

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**
 Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)
**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology present.

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/17/18  
 Applicant/Owner: Mima Capital, LLC. State: CA Sampling Point: DP24  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): <2  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81274209 Long: -121.2141316 Datum: NAD 83  
 Soil Map Unit Name: (106) Andregg coarse sandy loam, 2-9% slopes NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>      </u>
Hydric Soil Present? Yes <u>X</u> No <u>      </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	
Remarks: Stock pond utilized by cattle for drinking. Evidence of heavy trampling and mucky with minimal vegetation. Pond supported by man-made berm along southern side.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>1</u> x1 = <u>1</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>1</u> (A) <u>1</u> (B) Prevalence Index = B/A = <u>1.0</u>
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Lythrum hyssopifolium</u>	<u>1</u>		<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Unknown seedling</u>	<u>1</u>		<u>N/A</u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
6. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
7. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
8. <u>      </u>	<u>2</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: <u>      </u> )				
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>
2. <u>      </u>	<u>0</u>	=Total Cover		
% Bare Ground in Herb Stratum <u>98*</u> % Cover of Biotic Crust <u>      </u>				
Remarks: *Mostly bare mud, some leaf litter, algae. Unknown seedling cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.				

## SOIL

Sampling Point: DP24

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-1	2.5Y 2.5/1	100					silt loam	mucky
1-9	10YR 3/2	70	7.5YR 3/4	25	C	M	sandy loam	
			10R 3/4	5	C	M		
9-12	10YR 3/2	95	2.5YR 2.5/2	5	C	M	sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input checked="" type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_**Hydric Soil Present?** Yes ☒ No ☐

Remarks: Extensive distinct redox

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_

Water Table Present? Yes ☐ No ☒ Depth (inches): \_\_\_\_\_

Saturation Present? Yes ☒ No ☐ Depth (inches): 0

(includes capillary fringe)

**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Intermittent/perennial ponding of water

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/18/18  
 Applicant/Owner: Mima Capital, LLC. State: CA Sampling Point: DP25  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81399391 Long: -121.2173458 Datum: NAD 83  
 Soil Map Unit Name: (194) Xerofluvents, frequently flooded NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>      </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>      </u> No <u>X</u>
Hydric Soil Present? Yes <u>      </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>      </u> No <u>X</u>	
Remarks: Point taken in old remnant ditch.	

## VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>                    </u> )				
1. <u>Quercus wislizeni</u>	<u>80</u>	<u>Y</u>	<u>UPL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>                    </u> (A) Total Number of Dominant Species Across All Strata: <u>                    </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>                    </u> (A/B)
2. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
3. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
4. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
	<u>80</u>	<u>=Total Cover</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>                    </u> )				
1. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>          </u> Multiply by: <u>          </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>90</u> x5 = <u>450</u> Column Totals: <u>95</u> (A) <u>465</u> (B) Prevalence Index = B/A = <u>4.9</u>
2. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
3. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
4. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
5. <u>                    </u>	<u>0</u>	<u>=Total Cover</u>		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Rubus armeniacus</u>	<u>T</u>		<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Dominance Test is >50% <u>      </u> Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carduus pycnocephalus</u>	<u>10</u>		<u>UPL</u>	
3. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>	
4. <u>Cynosurus echinatus</u>	<u>T</u>		<u>UPL</u>	
5. <u>Unknown grass</u>	<u>40</u>	<u>Y</u>	<u>N/A</u>	
6. <u>Unknown seedling</u>	<u>35</u>	<u>Y</u>	<u>N/A</u>	
7. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	
8. <u>                    </u>	<u>90</u>	<u>=Total Cover</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>                    </u> )				
1. <u>                    </u>	<u>          </u>	<u>          </u>	<u>          </u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>
2. <u>                    </u>	<u>0</u>	<u>=Total Cover</u>		
% Bare Ground in Herb Stratum <u>10</u>		% Cover of Biotic Crust <u>          </u>		

Remarks: Unknown grass and seedling cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.

## SOIL

Sampling Point: DP25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 2/2	100					loam	
4-6	7.5YR 3/2	100					sandy loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: bedrock  
Depth (inches): 6Hydric Soil Present? Yes ☐ No ☒

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):           

Water Table Present? Yes ☐ No ☒ Depth (inches):           

Saturation Present? Yes ☐ No ☒ Depth (inches):           

(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Ditch old, with no signs of recent hydrology.

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Carmenere Estates City/County: Town of Loomis, Placer County Sampling Date: 10/18/18  
 Applicant/Owner: Evan Mackenzie (Building Engineering & Management, Inc.) State: CA Sampling Point: DP26  
 Investigator(s): Matt Shaffer Section, Township, Range: State: S8, T11N, R7E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.81224482 Long: -121.2189858 Datum: NAD 83  
 Soil Map Unit Name: (194) Xerofluvents, frequently flooded NWI Classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks.)  
 Are Vegetation       , Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>      </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>      </u>
Hydric Soil Present? Yes <u>X</u> No <u>      </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u>      </u>	
Remarks: Point taken within Antelope Creek. Extensive riparian corridor present	

## VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>      </u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>      </u> )				<b>Prevalence Index Worksheet:</b> Total % Cover of: <u>      </u> Multiply by: <u>      </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>32</u> x2 = <u>64</u> FAC species <u>13</u> x3 = <u>39</u> FACU species <u>25</u> x4 = <u>100</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>70</u> (A) <u>203</u> (B) Prevalence Index = B/A = <u>2.9</u>
1. <u>Salix gooddingii</u>	<u>T</u>	<u>      </u>	<u>FACW</u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
3. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
4. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
5. <u>      </u>	<u>0</u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Rubus armeniacus</u>	<u>5</u>	<u>      </u>	<u>FAC</u>	
2. <u>Sorghum halepense</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Cyperus eragrostis</u>	<u>7</u>	<u>      </u>	<u>FACW</u>	
4. <u>Persecaria lapathifolia</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	
5. <u>Xanthium strumarium</u>	<u>2</u>	<u>      </u>	<u>FAC</u>	
6. <u>Phytolacca americana</u>	<u>3</u>	<u>      </u>	<u>FAC</u>	
7. <u>Populus fremontii (saplings)</u>	<u>3</u>	<u>      </u>	<u>FAC</u>	
8. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>70</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>      </u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
2. <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	
<u>0</u> =Total Cover				
% Bare Ground in Herb Stratum <u>30*</u>	% Cover of Biotic Crust <u>      </u>			<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>      </u>

Remarks: \*Running water within creek.



## SOIL

Sampling Point: DP26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks: N/A point taken within Creek (flowing water)

## HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water Marks (B1) (Riverine)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): ~30
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 0

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Perennial water flow from north to south

## Attachment B

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### **Aquatic Resources Delineation Map**





Aquatic Resource Features		
Wetlands		
Seasonal Wetland		
Feature ID	Acreage	
SW-1	0.002	
SW-2	0.001	
	0.003	
Seasonal Wetland Swale		
Feature ID	Acreage	
SWS-1	0.265	
SWS-2	0.026	
SWS-3	0.071	
SWS-4	0.074	
SWS-5	0.074	
SWS-6	0.028	
SWS-7	0.006	
	0.545	
Seep		
Feature ID	Acreage	
Seep-1	0.211	
Seep-2	0.267	
Seep-3	0.133	
Seep-4	0.544	
	1.155	
Total Wetlands:	1.704	
Other Waters		
Intermittent Drainage		
Feature ID	Acreage	Linear Feet
ID-1	0.025	307
	0.025	307
Perennial Drainage		
Feature ID	Acreage	Linear Feet
PD-1	0.085	250
PD-2	0.039	167
PD-3	0.005	87
	0.129	504
Pond		
Feature ID	Acreage	Linear Feet
PD-3	0.036	-
	0.036	-
Roadside Ditch		
Feature ID	Acreage	Linear Feet
RD-1	0.006	255
RD-2	<0.001	7
	0.006	262
Total Other Waters:	0.196	1,073
Total Aquatic Resources:	1.899	acres

Note: Small summation errors may occur due to rounding.

Study Area (97.9 acres)

Reference Coordinate (NAD83)

DataPoints\_v1

Culvert

1' Contour (NAVD88 U.S. Feet)

**Aquatic Resources (1.899 acres)**

**Wetlands (1.704 acre)**

Seasonal Wetland (0.003 acre)

Seasonal Wetland Swale (0.545 acre)

Seep (1.155 acres)

**Other Waters (0.196 acre)**

Intermittent Drainage (0.025 acre)

Perennial Drainage (0.129 acre)

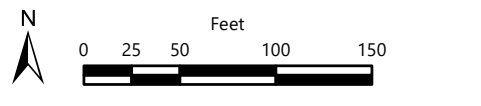
Pond (0.036 acre)

Roadside Ditch (0.006 acre)

Prepared For:  
**Building Engineering & Management, Inc.**  
c/o Mike Fournier  
4780 Rocklin Road  
Rocklin, California 95677  
**Sources:**  
**Aerial Source:** Mavir, 26 April 2022  
**Topographic Contours:** Building Engineering & Maintenance Inc.

**Delineation Performed by:** D. Brown, M. Shaffer, D. Snider  
**Map Prepared by:** N. Bente  
**Date Map Prepared:** 4 March 2025  
Made in accordance with the  
Updated Map and Drawing Standards for the  
South Pacific Division Regulatory Program,  
as amended on February 10, 2016.  
\* Small summation errors may occur due to rounding.

**Map Scale:**  
1 inch = 100 feet (at 11"x17")  
**Coordinate System**  
NAD 1983 State Plane CA II (U.S. Feet)



**Aquatic Resources Delineation**  
**Carmenerre Estates**  
Town of Loomis, Placer County, California  
  
MADRONE ECOLOGICAL CONSULTING  
4411 Sunset Boulevard, Suite 100  
Covina, California 91703  
(916) 821-3226 | www.madroneco.com



## Attachment C

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### **Plant Species Observed within the Study Area**

**Plant Species Observed within the  
Carmenere Estates Study Area  
16, 17, 18 October and 28 November 2018 and 25-26 April and 19 July 2023**

Species Name	Common Name	Wetland Indicator
		Status
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish lotus	UPL
<i>Aesculus californica</i>	California buckeye	UPL
<i>Ailanthus altissima</i>	Tree of heaven	FACU
<i>Aira caryophyllea</i>	Silver hair grass	FACU
<i>Ambrosia psilostachya</i>	Western ragweed	FACU
<i>Amsinckia intermedia</i>	Common fiddleneck	UPL
<i>Amsinckia retrorsa</i>	Rigid fiddleneck	UPL
<i>Anthemis cotula</i>	Mayweed	FACU
<i>Anthriscus caucalis</i>	Bur-chervil	UPL
<i>Avena barbata</i>	Slender wild oat	UPL
<i>Avena fatua</i>	Wild oat	UPL
<i>Baccharis pilularis</i>	Coyote brush	UPL
<i>Bidens frondosa</i>	Sticktight	FACW
<i>Brassica nigra</i>	Black mustard	UPL
<i>Briza minor</i>	Annual quaking grass	FAC
<i>Bromus diandrus</i>	Ripgut brome	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Bromus rubens</i>	Red brome	UPL
<i>Bromus sterilis</i>	Sterile brome	UPL
<i>Bromus tectorum</i>	Cheat grass, downy chess	UPL
<i>Calandrinia menziesii</i>	Red maids	FACU
<i>Capsella bursa-pastoris</i>	Shepherd's purse	FACU
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian thistle	UPL
<i>Castilleja attenuate</i>	Valley tassels	UPL
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Cerastium glomeratum</i>	Sticky mouse-ear chickweed	UPL
<i>Chondrilla juncea</i>	Skeleton weed	UPL
<i>Cichorium intybus</i>	Chicory	FACU
<i>Cirsium vulgare</i>	Bull thistle	FACU
<i>Claytonia perfoliata</i> subsp. <i>perfoliata</i>	Miner's lettuce	FAC
<i>Conium maculatum</i>	Poison hemlock	FACW
<i>Convolvulus arvensis</i>	Field bindweed	UPL
<i>Crassula tillaea</i>	Moss pygmyweed	FACU
<i>Croton setiger</i>	Turkey mullein	UPL
<i>Crypsis schoenoides</i>	Swamp grass	FACW
<i>Cupressus sempervirens</i>	Mediterranean cypress	UPL

<i>Cynodon dactylon</i>	Bermuda grass	FACU
<i>Cynosurus echinatus</i>	Hedgehog grass	UPL
<i>Cyperus eragrostis</i>	Tall nutsedge	FACW
<i>Digitaria sanguinalis</i>	Hairy crab grass	FACU
<i>Diospyros virginiana</i>	Common persimmon	FAC
<i>Dittrichia graveolens</i>	Stinkwort	UPL
<i>Eleocharis acicularis</i>	Needle spikerush	OBL
<i>Elymus caput-medusae</i>	Medusa head	UPL
<i>Epilobium brachycarpum</i>	Panicled willowherb	FAC
<i>Epilobium ciliatum</i>	Slender willow herb	FACW
<i>Erigeron bonariensis</i>	Flax-leaved horseweed	FACU
<i>Erodium cicutarium</i>	Redstem filaree	UPL
<i>Erodium moschatum</i>	Greenstem filaree	UPL
<i>Erythranthe guttata</i>	Common monkeyflower	OBL
<i>Eschscholzia californica</i>	California poppy	UPL
<i>Eucalyptus camaldulensis</i>	River red gum	FAC
<i>Festuca arundinacea</i>	Tall fescue	UPL
<i>Festuca bromoides</i>	Brome fescue	FACU
<i>Festuca microstachys</i>	Small fescue	UPL
<i>Festuca myuros</i>	Rattail sixweeks grass	FACU
<i>Festuca perennis</i>	Rye grass	FAC
<i>Fraxinus latifolia</i>	Oregon ash	FACW
<i>Fraxinus pennsylvanica</i>	Green ash	FACW
<i>Galium aparine</i>	Sticky willy	FACU
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Glyceria declinate</i>	Low manna grass	FACW
<i>Hordeum marinum</i>	Mediterranean barley	FAC
<i>Hordeum murinum</i>	Wall barley	FACU
<i>Hypochaeris glabra</i>	Smooth cat's-ear	UPL
<i>Hypochaeris radicata</i>	Rough cat's ear	FACU
<i>Juglans sp.</i>	Walnut	-
<i>Juncus balticus subsp. ater</i>	Baltic rush	FACW
<i>Juncus bufonius</i>	Toad rush	FACW
<i>Juncus usitatus</i>	Australian rush	FACW
<i>Juniperus sp.</i>	Juniper	FACU
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Leersia oryzoides</i>	Rice cutgrass	OBL
<i>Leontodon saxatilis</i>	Hairy hawkbit	FACU
<i>Logfia gallica</i>	Daggerleaf cottonrose	UPL
<i>Lotus corniculatus</i>	Bird's-foot trefoil	FAC
<i>Ludwigia peploides</i>	Floating primrose willow	OBL
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lupinus nanus</i>	Valley sky lupine	UPL

<i>Lysimachia arvensis</i>	Scarlet pimpernel	FAC
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Madia elegans</i>	Common madia	UPL
<i>Malva neglecta</i>	Common mallow	UPL
<i>Malva nicaeensis</i>	Bull mallow	UPL
<i>Matricaria discoidea</i>	Pineapple weed	FACU
<i>Medicago lupulina</i>	Black medick	FAC
<i>Mentha pulegium</i>	Pennyroyal	OBL
<i>Montia fontana</i>	Water chickweed, blinks	OBL
<i>Myriophyllum aquaticum</i>	Parrot's feather	OBL
<i>Nasturtium officinale</i>	Water cress	OBL
<i>Nicotiana acuminata</i>	Manyflower tobacco	UPL
<i>Olea europaea</i>	Olive	UPL
<i>Parentucellia viscosa</i>	Yellow glandweed	FAC
<i>Paspalum dilatatum</i>	Dallis grass	FAC
<i>Persicaria hydropiper</i>	Waterpepper	OBL
<i>Persicaria lapathifolia</i>	Common knotweed	FACW
<i>Petrorhagia dubia</i>	Hairypink	NL
<i>Phoenix canariensis</i>	Canary island date palm	UPL
<i>Phytolacca americana</i>	Poke weed	FAC
<i>Pinus sabiniana</i>	Grey pine	UPL
<i>Plagiobothrys nothofulvus</i>	Rusty popcornflower	FAC
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Plantago major</i>	Common plantain	FAC
<i>Platanus racemosa</i>	California sycamore	FAC
<i>Poa annua</i>	Annual blue grass	FAC
<i>Poa palustris</i>	Fowl bluegrass	FAC
<i>Poa pratensis</i>	Kentucky blue grass	FAC
<i>Polygonum aviculare subsp. depressum</i>	Prostrate knotweed	FAC
<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	FACW
<i>Populus alba</i>	White poplar	-
<i>Populus fremontii</i>	Fremont cottonwood	FAC
<i>Portulaca oleracea</i>	Common purslane	FAC
<i>Proboscidea louisianica</i>	Common devil's claw	FACU
<i>Punica granatum</i>	Pomegranate	UPL
<i>Pyrus sp.</i>	Pear tree	UNK
<i>Quercus douglasii</i>	Blue oak	UPL
<i>Quercus lobata</i>	Valley oak	FACU
<i>Quercus wislizeni</i>	Interior live oak	UPL
<i>Ranunculus bonariensis var. trisepalus</i>	Vernal pool buttercup	OBL
<i>Ranunculus californicus</i>	California buttercup	FACU
<i>Ranunculus muricatus</i>	Spiny-fruit buttercup	FACW
<i>Robinia pseudoacaria</i>	Black locust	FACU

<i>Rubus armeniacus</i>	Armenian blackberry	FAC
<i>Rumex acetosella</i>	Sheep sorrel	FACU
<i>Rumex crispus</i>	Curly dock	FAC
<i>Rumex pulcher</i>	Fiddle dock	FAC
<i>Salix exigua</i>	Sandbar willow	FACW
<i>Salix gooddingii</i>	Goodding's black willow	FACW
<i>Salix laevigata</i>	Red willow	FACW
<i>Salix lasiolepis</i>	Arroyo willow	FACW
<i>Sambucus nigra</i>	Black elderberry	FACU
<i>Senecio vulgaris</i>	Common groundsel	FACU
<i>Silybum marianum</i>	Milk thistle	UPL
<i>Sisymbrium officinale</i>	Hedge mustard	UPL
<i>Sonchus arvensis</i>	Perennial sow thistle	FACU
<i>Sorghum halepense</i>	Johnson grass	FACU
<i>Spergula arvensis</i>	Corn spurrey	UPL
<i>Spergularia rubra</i>	Red sand-spurrey	FAC
<i>Stellaria media</i>	Common chickweed	FACU
<i>Torilis arvensis</i>	Tall sock-destroyer	UPL
<i>Toxicodendron diversilobum</i>	Poison oak	FACU
<i>Trifolium ciliolatum</i>	Foothill clover	UPL
<i>Trifolium dubium</i>	Little hop clover	UPL
<i>Trifolium eriocephalum</i> subsp. <i>eriocephalum</i>	Hairy head clover	FAC
<i>Trifolium glomeratum</i>	Clustered clover	UPL
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Trifolium hybridum</i>	Alsike clover	FAC
<i>Trifolium incarnatum</i>	Crimson clover	UPL
<i>Trifolium subterraneum</i>	Subterranean clover	UPL
<i>Triphysaria versicolor</i>	Yellow owl's clover	NL
<i>Typha</i> sp.	Cattail	OBL
<i>Urtica urens</i>	Dwarf nettle	FAC
<i>Verbascum Blattaria</i>	Moth mullein	UPL
<i>Verbascum Thapsus</i>	Woolly mullein	FACU
<i>Veronica anagallis-aquatica</i>	Water speedwell	OBL
<i>Veronica peregrina</i>	Purslane speedwell	FAC
<i>Veronica persica</i>	Persian speedwell	FAC
<i>Vicia sativa</i>	Spring vetch	FACU
<i>Xanthium strumarium</i>	Rough cocklebur	FAC



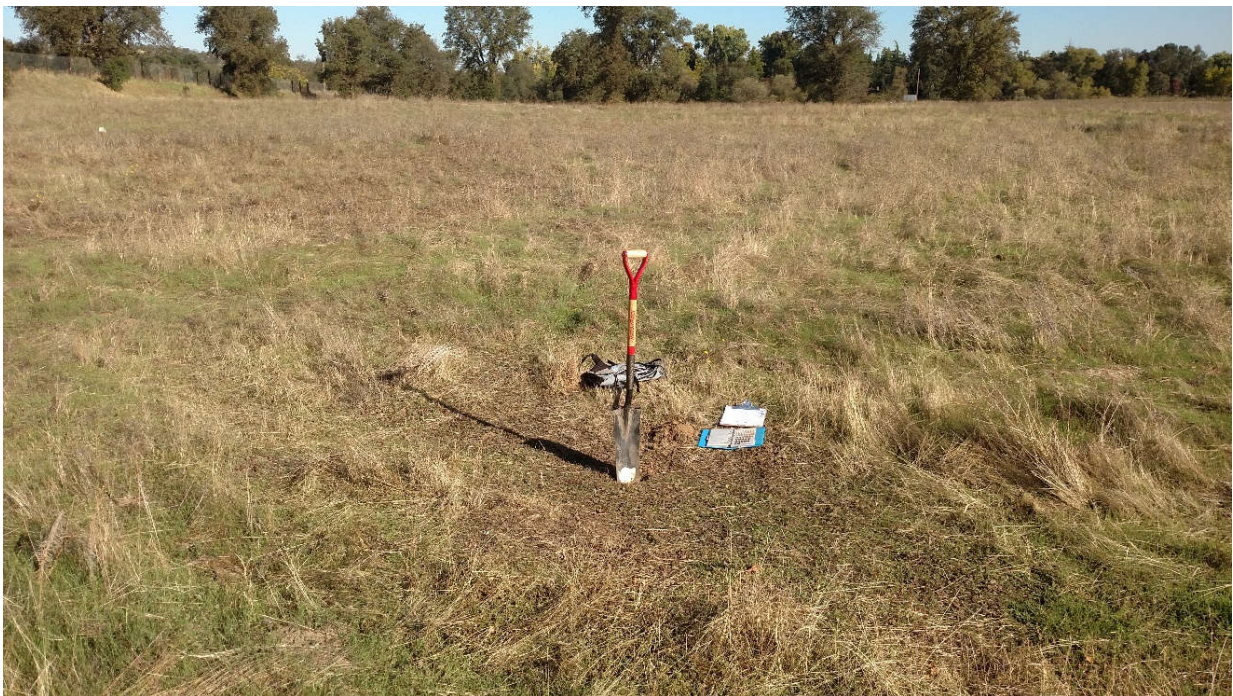
# Attachment D

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**JD Request Form**



**Intermittent Drainage ID-1 – 25 April 2023**



**Data Point DP-21 – 17 October 2018**





**Data Point DP-22 (within SWS-5) – 17 October 2018**



**Data Point DP-23 – 17 October 2018**





**Data point DP-24 (within Pond-1) – 17 October 2018**



**Facing southeast at seasonal wetland swale SWS-2 and Data point DP-14 and DP-1 – 19 July 2023**





**Data point DP-25 – 18 October 2018**



**Data point DP-26 (within PD-3) – 18 October 2018**





**Ungrazed parcel in the northeast portion of the Study Area, facing west – 16 October 2018**



**Grazed annual brome grassland, facing east – 16 October 2018**





**Riparian corridor along Antelope Creek, facing northwest – 16 October 2018**



**Remnant orchard, facing southeast – 18 October 2018**





**Oak savanna in the center of the Study Area, facing northwest – 18 October 2018**



**Seasonal wetland swale (SWS-7), facing southwest – 17 October 2018**





**Roadside ditch RD-1 facing south along Delmar Avenue – 19 July 2023**



**Antelope Creek (PD-3), facing northeast – 18 October 2018**





**Perennial drainage PD-1, facing south – 19 July 2023**