

APPENDIX D
WETLAND DELINEATION

**WETLAND DELINEATION
FOR THE**

±25.8-ACRE ROBLA ESTATES STUDY AREA

CITY OF SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA



Prepared for:

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TABLE OF CONTENTS

INTRODUCTION	1
Location and Setting.....	1
CONTACT INFORMATION	1
METHODOLOGY.....	4
FINDINGS.....	4
Soils.....	4
Climate.....	6
Hydrology	6
Vegetation.....	7
Ruderal Grassland	7
Mixed Woodland	7
Waters of the United States	7
Seasonal Wetland.....	12
Wetland Swale.....	12
Ditches	13
REFERENCES AND OTHER SOURCES.....	14

FIGURES

Figure 1. Site & Vicinity Map	2
Figure 2. Aerial Photo.....	3
Figure 3. Soils Map.....	5
Figures 4a-d. Site Photos.....	8-10
Figure 5. Wetland Delineation Map.....	11

TABLE

Table 1. Waters of the United States.....	12
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APPENDICES

Appendix A. Wetland Data Sheets	
Appendix B. Plant Species Observed on the Project Study Area	
Appendix C. USACOE Aquatic Resources Spreadsheet	

WETLAND DELINEATION FOR THE ±25.8-ACRE ROBLA ESTATES STUDY AREA

INTRODUCTION

Location and Setting

Salix Consulting, Inc. (Salix) has prepared a wetland delineation for the ±25.8-acre Robla Estates study area located in the vicinity of Northpointe, in the City of Sacramento, Sacramento County, California. The approximate coordinates for the center of the property are latitude 38.66621° and longitude -121.4488°. It is situated within the Del Paso Land Grant (not part of the Township and Range system, which was a survey of federal lands). The parcel is located on the Rio Linda, California 7.5-minute USGS topographic quadrangle (Figure 1).

The site occurs in the eastern Sacramento Valley, south of the unincorporated community of Rio Linda and directly south of the northern edge of the City of Sacramento city limits. The study area is bounded on the west by Rio Linda Boulevard, on the east by a bike trail, and on the north by a gravel access road. The site is mostly flat, with elevations ranging from approximately 45 feet near the northeast corner to 33 feet near an outfall in the northwest corner. Robla Elementary School is located near the southern corner of the study area and suburban residential neighborhoods are located to the south and east of the site. Land to the north and west of the site is mostly undeveloped (Figure 2).

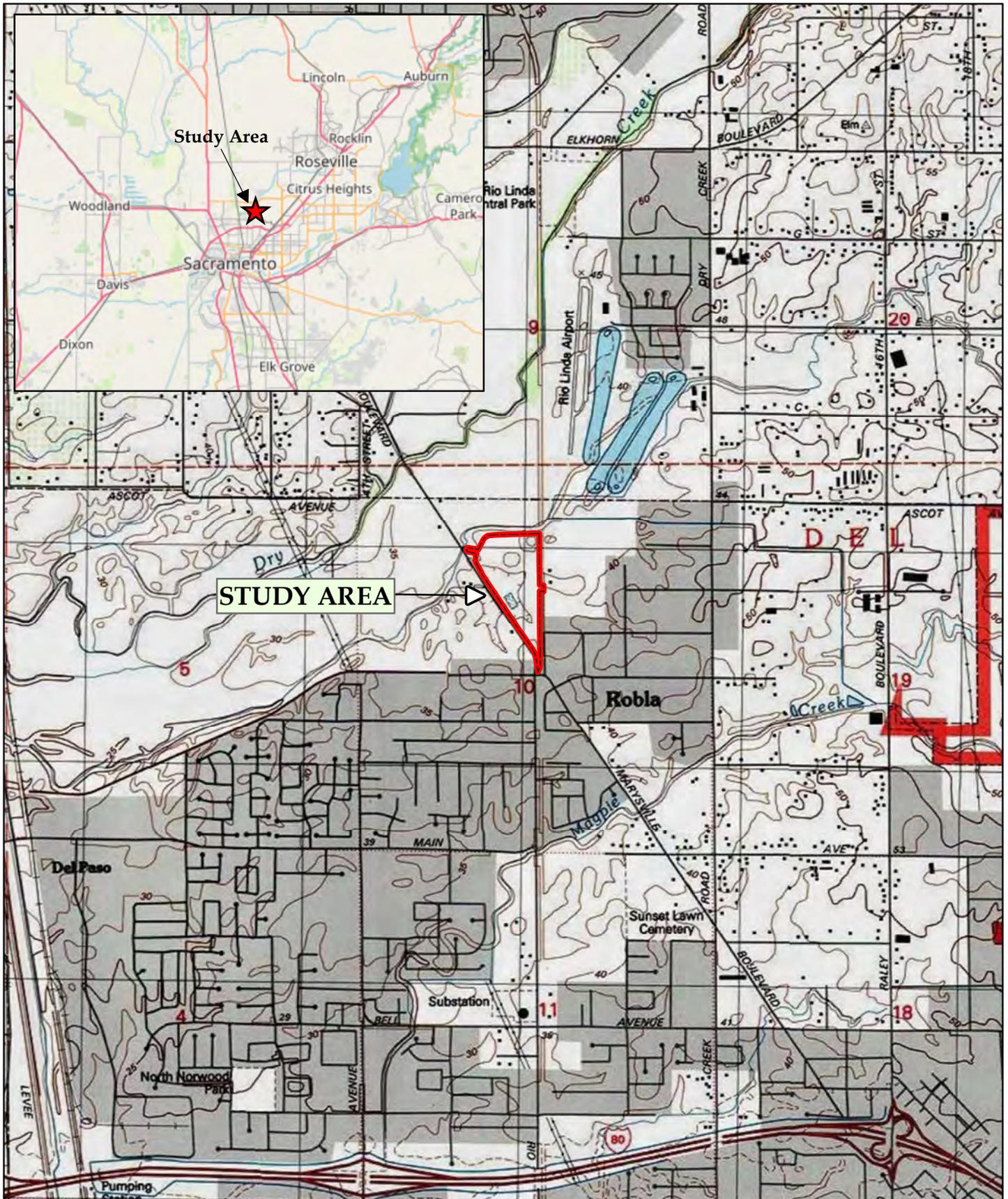
CONTACT INFORMATION

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Phone: (530) 888-0130
Contact: Jeff Glazner



Source Maps: USGS Topographic Map
 Rio Linda Quad 1:24,000
 Rancho Del Paso Land Grant

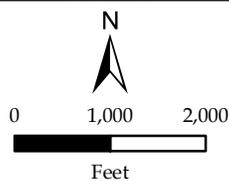
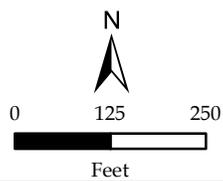


Figure 1
SITE AND VICINITY MAP
 Robla Estates
 City of Sacramento, Sacramento County, CA



 Study Area
 (±25.8 acres)
 Project Boundary
 (±21.1 acres)
Imagery provided by:
 Baker-Williams Engineering Group, May 2020
 Overlaid on Sac Regional GIS Coop, March 2018

Figure 2
AERIAL MAP
Robla Estates
 City of Sacramento, Sacramento County, CA

METHODOLOGY

Waters of the United States were delineated on May 3 and June 3, 2020 by Jeff Glazner. The delineation was conducted according to the 1987 Corps Manual (Environmental Laboratory 1987) as amended by the Arid West Regional Supplement (U.S. Army Corps of Engineers 2008). Potential waters of the U.S. were evaluated and mapped using a Trimble GeoXT 6000 GPS (submeter). Three-parameter data sheets (Appendix A) were filled out at four (4) locations as indicated on the Wetland Delineation Map. Representative ground photographs were taken to represent notable features of the site.

Information on soils of the study area was obtained from the U.S. Department of Agriculture – National Resource Conservation Service’s online Web Soil Survey (NRCS 2020). In the field, a Munsell Color chart was used to determine moist soil colors. Appendix B is a list of plants observed during the delineation, along with the scientific name and wetland status of each species. Where a plant species observed has a wetland indicator status (not UPL), plant nomenclature follows Lichvar et.al. (2016). Otherwise, species names are aligned with the *The Jepson Manual* (Baldwin et.al. 2012).

Field data collected with the GPS were differentially corrected and were used to create a Wetland Delineation Map using Arc GIS software. The Corps of Engineers Aquatic Resources spreadsheet is included in Appendix C.

FINDINGS

Soils

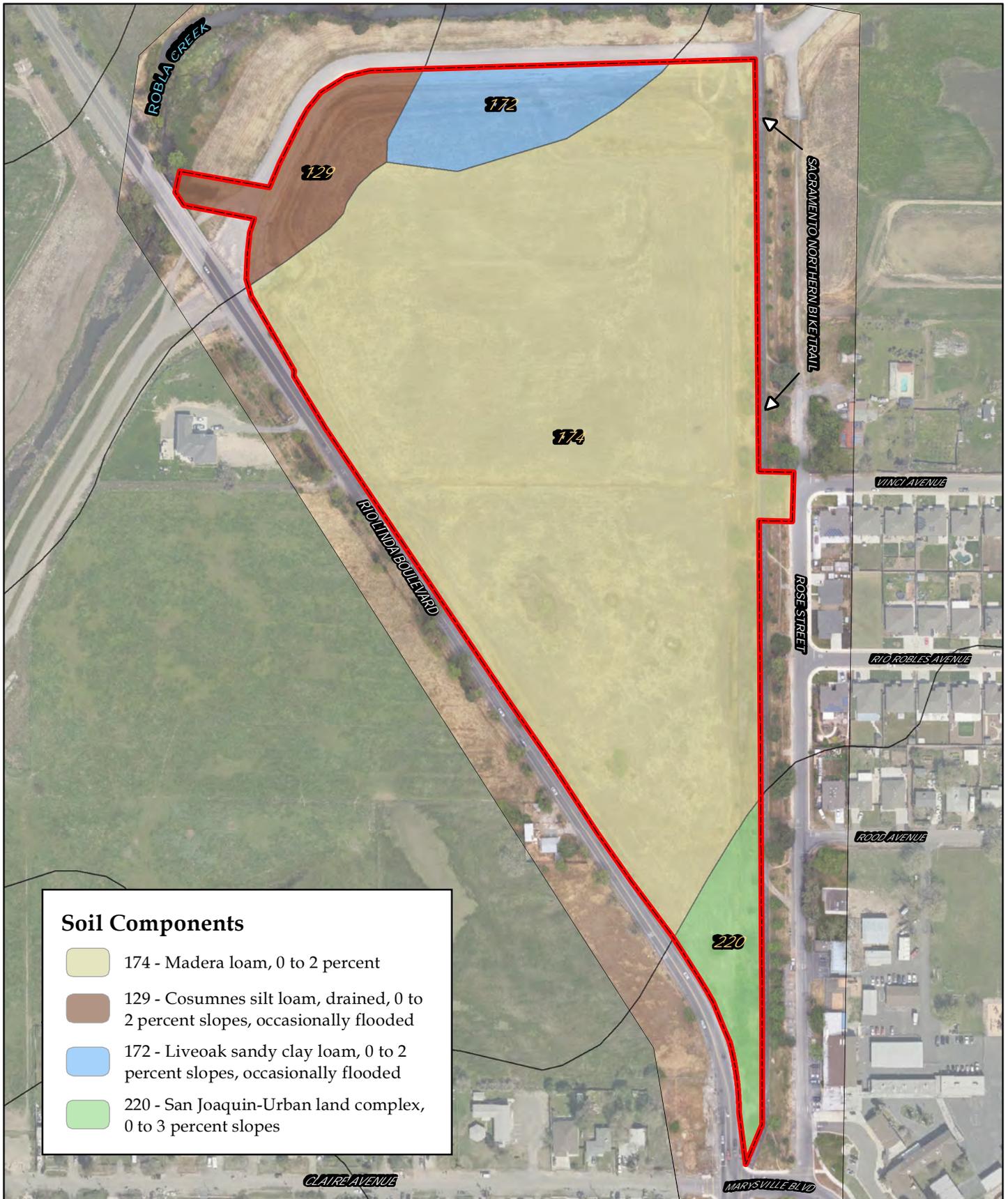
Four soil units have been mapped on the property (Figure 3): Andregg coarse sandy loam, 2 to 9 percent slopes, Andregg-Rock outcrop complex, 5 to 30 percent slopes, Xerorthents, cut and fill areas and Xerorthents, placer areas (NCRS 2020). The components of each complex are described below.

Cosumnes silt loam, drained, 0 to 2 percent slopes, occasionally flooded

The Cosumnes component, which makes up 85 percent of the map unit, is found in valleys and narrow low flood plains. Its parent material consists of alluvium and its natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. This soil is occasionally flooded, is not ponded, and meets hydric criteria. There is no zone of water saturation within a depth of 72 inches and there are no saline horizons within 30 inches of the soil surface.

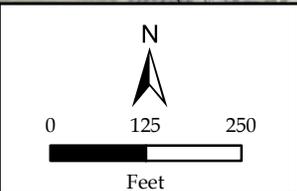
Liveoak sandy clay loam, 0 to 2 percent slopes, occasionally flooded

The Liveoak component, which makes up 85 percent of the map unit, is found on narrow high flood plains and valleys. Its parent material consists of alluvium derived from granite, and its natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. This soil is occasionally flooded, is not ponded, and does



Soil Components

- 174 - Madera loam, 0 to 2 percent
- 129 - Cosumnes silt loam, drained, 0 to 2 percent slopes, occasionally flooded
- 172 - Liveoak sandy clay loam, 0 to 2 percent slopes, occasionally flooded
- 220 - San Joaquin-Urban land complex, 0 to 3 percent slopes



□ Study Area
(±25.8 acres)

Imagery provided by:
Baker-Williams Engineering Group, May 2020
Overlaid on Sac Regional GIS Coop, March 2018

Figure 3
SOIL COMPONENTS
Robla Estates
City of Sacramento, Sacramento County, CA

not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches.

Madera loam, 0 to 2 percent slopes

The Madera component, which makes up 85 percent of the map unit, is found in valleys and low areas on low terraces. Its parent material consists of alluvium derived from granite and its natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. This soil is not flooded, is not ponded, and does not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches. There are no saline horizons within 30 inches of the soil surface.

San Joaquin-Urban land complex, 0 to 3 percent slopes

The San Joaquin component, which makes up 65 percent of the map unit, is found in valleys and low terraces. Its parent material consists of alluvium derived from granite, and its natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. This soil is not flooded, is not ponded, and does not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches.

The urban land component, which makes up 25 percent of the map unit, is a miscellaneous area.

Climate

The study area has a Mediterranean climate with cool, wet winters and hot, dry summers. The average high temperature is 74°, with the hottest months being July and August, averaging 93° and 92°, respectively. The low temperatures for these months averages 58° each month. The coolest months are December and January, averaging a high temperature of 54° and a low temperature of 38° each month. Annual precipitation averages 17.2 inches, nearly all of which occurs as rainfall between October and April. The wettest months are December, January, and February, each averaging more than 3 inches of rainfall.

Hydrology

The site occurs in the Lower Steelhead Creek HUC12 (180201110303) part of the greater Lower American HUC8 watershed (18020111). Surface water in the southern half of the site trends toward one of three features. A seasonal wetland located near the western boundary collects on-site surface water, while two seasonal wetlands located along the eastern boundary receive surface water runoff from a drainage east of the bike path. The three seasonal wetlands have no drainage outlet, and water within the wetlands evaporates or percolates into the ground.

Surface water in the northern portion of the study area trends toward a ditch along the base of a levee that follows the northern boundary of the study site. Water in the ditch passes through an outfall underneath the levee near the northwest corner of the study

area before exiting the site and draining into Robla Creek. Robla Creek continues southwest for approximately 2 miles before draining into Steelhead Creek. Water in Steelhead Creek flows in a southwesterly direction for approximately 8 miles before draining into the Lower American and Sacramento Rivers near Discovery Park in Sacramento, CA.

Vegetation

Two biological community are mapped within the study area - ruderal grassland and mixed woodland.

Ruderal Grassland

The majority of the study area, approximately 24.5 acres, is disturbed annual grassland (ruderal). This habitat type consists mostly of weedy annual grasses and forbs, and is regularly disked. Woody vegetation is minimal, represented by scattered trees and saplings, mostly in the southern portion of the site where tree of heaven (*Ailanthus altissima*) is scattered. Common species throughout the ruderal grassland include wild oat (*Avena fatua*), Italian ryegrass (*Festuca perennis*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow starthistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), red-stemmed filaree (*Erodium botrys*), English plantain (*Plantago lanceolata*), Italian thistle (*Carduus pycnocephalus*), turkey mullein (*Croton setiger*), prickly lettuce (*Lactuca serriola*), and ruby sand-spurrey (*Spergularia rubra*).

Mixed Woodland

Approximately 1.3 acres of the study area, located primarily along the eastern boundary following the bike trail, is mixed woodland. The mixed woodland is composed of native trees including valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*) and Goodding's black willow (*Salix gooddingii*) interspersed with planted trees and non-native species including silk tree (*Albizia julibrissin*), peach (*Prunus persica*), tree of heaven and ornamental pine (*Pinus sp.*). The herbaceous layer, which is regularly mowed, contains many of the same species as the ruderal grassland described above.

Waters of the United States

Two categories of potential waters of the United States have been mapped on the study area and including seasonal wetland and wetland swale. Table 1 provides an acreage summary of waters of the United States on the site, and waters are described in further detail beneath the table. Figures 4a through 4c show representative site photographs; Figure 5 is the wetland delineation map.



Looking west over outfall into Robla Creek toward Rio Linda Boulevard. Swale WS-1 choked with red sesbania. *Photo Date: 6-03-20.*



Looking southeast along western side of study area over culvert that drains into Robla Creek. *Photo Date: 5-03-20.*



Figure 4a

SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA



Looking southeast over SW-1. One large Goodding's willow occupies the center of the wetland. *Photo Date: 5-03-20.*



Looking northwest over northern portion of SW-1. *Photo Date: 5-03-20.*



Figure 4b

SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA



Looking south over SW-2 along eastern project area fence line.
Photo Date: 5-03-20.



Looking south from within SW-3 at outfall culvert that provides much of the water to this wetland. *Photo Date: 5-03-20.*

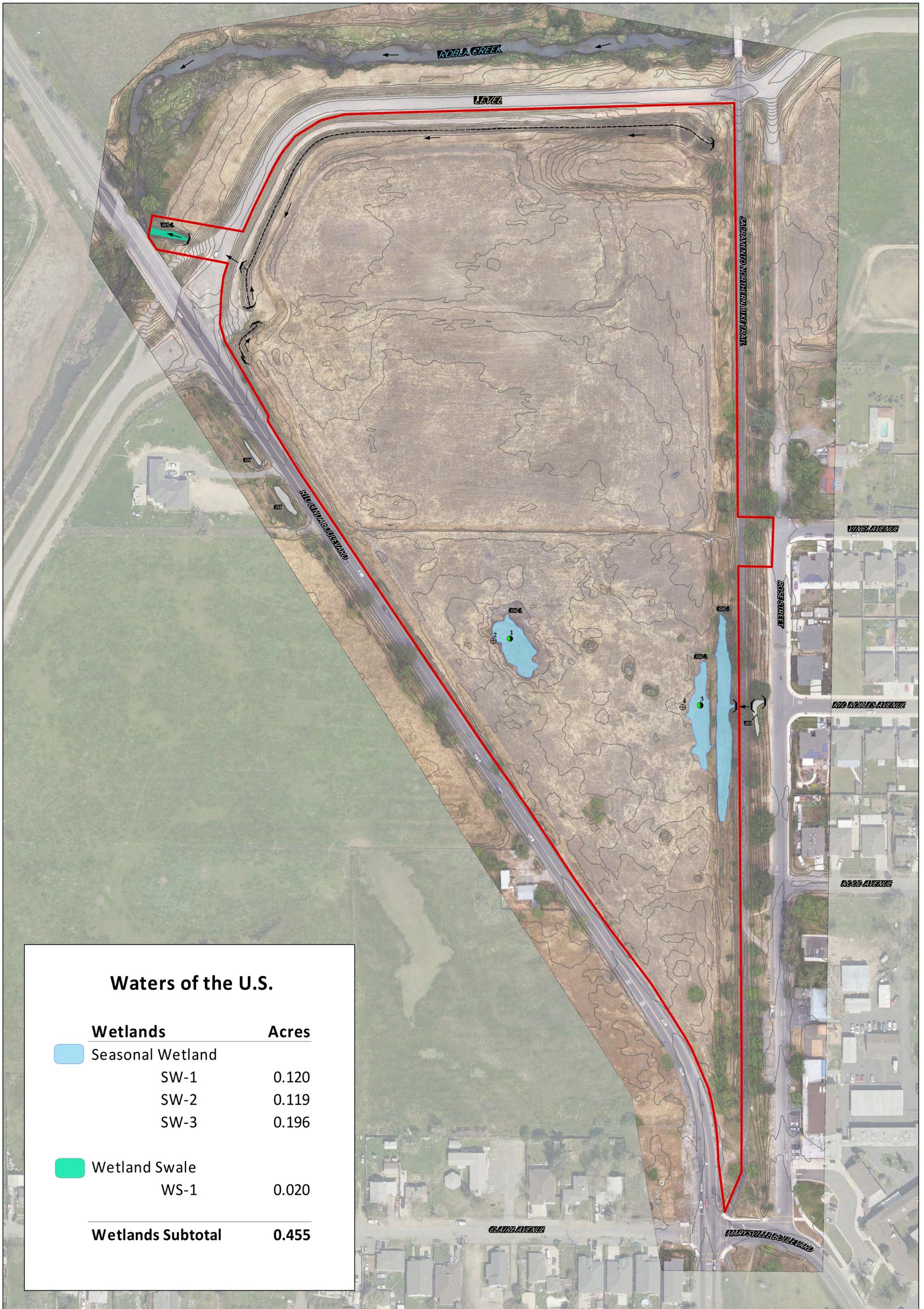


Figure 4c

SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA



Waters of the U.S.

Wetlands	Acres
■ Seasonal Wetland	
SW-1	0.120
SW-2	0.119
SW-3	0.196
■ Wetland Swale	
WS-1	0.020
Wetlands Subtotal	0.455

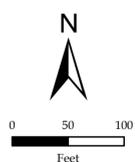
PREPARED BY:



PREPARED FOR:

Ralph Swift
Swift Construction and Development
P.O. Box 3038
Granite Bay, CA 95746

FIELDWORK: J. Glazner May-June 2020
DRAWN BY: J. Soch
COORDINATE SYSTEM: NAD83 CA State Plane II (0402) (US FT)
BASEMAP: Baker-Williams Engineering Group, May 2020
Overlaid on Sac Regional GIS Coop, March 2018



Study Area (±25.8 acres)



Upland Data Point



Wetland Data Point



Drainage Ditch



Offsite Wetlands

Figure 5

WETLAND DELINEATION MAP

Robla Estates

City of Sacramento, Sacramento County, CA

June 16, 2020

Table 1.
Waters of the United States

Type	Acreage
Wetland Type:	
Seasonal Wetland	
SW-1	0.120
SW-2	0.119
SW-3	0.196
Wetland Swale	
WS-1	0.020
Total	0.455

Seasonal Wetland

Three seasonal wetlands are mapped in the study area totaling 0.435 acre. Seasonal Wetland 1 (SW-1), which appears to be an excavated feature, is located in the western area of the site. It is approximately three feet deep and has exposed hardpan in the bottom. There is no outlet but the feature does not appear to fill to maximum. It supports a variable flora of mostly annual species, the most abundant being annual beard grass (*Polypogon monspeliensis*). Stalked popcorn-flower (*Plagiobothrys stipitatus*) is abundant in the basin as is prickly lettuce (*Lactuca serriola*), Italian ryegrass, curly dock (*Rumex crispus*) and creeping spikerush (*Eleocharis macrostachya*). One large Goodding's black willow also grows in the basin of Seasonal Wetland 1 (Figure 4b).

Seasonal Wetland 2 (SW-2) is located along the eastern study area boundary and is generally a low area of the field near the outfall of a storm drain originating in the subdivision just east of the study area. The wetland supports a mix of seasonal wetland and vernal pool species including spikerush, purslane speedwell (*Veronica peregrina* subsp. *xalapensis*), double-horned downingia (*Downingia bicornuta* var. *bicornuta*), common knotweed (*Polygonum aviculare*), and hyssop loosestrife (*Lythrum hyssopifolia*). The wetland is quite compromised by frequent disking and the subtle edge of the wetland is covered by dense Italian ryegrass (Figure 4c).

Seasonal Wetland 3 (SW-3) is adjacent to SW-2 but it is situated between the fence line and the bike trail within the mixed woodland strip. It is not as frequently disturbed and has a more well-defined edge. It contains more organic matter and is sparsely vegetated by Italian ryegrass, curly dock, and other wetland generalists (Figure 4c).

Wetland Swale

A wetland swale is mapped between the levee near Robla Creek to Robla Creek. This constructed swale originates at an outfall situated beneath the levee, which drains ditches located on the south side of the levee. The swale supports a dense population of red sesbania (*Sesbania punicea*). The herbaceous layer in the upper portion of the swale near the levee is mostly Bermudagrass (*Cynodon dactylon*), while the lower portion of the swale (near the confluence with Robla Creek) receives backwater from the creek and supports a mix of marsh species (Figure 4a).

Ditches

Ditches run along the toe of the levee that follows the northern boundary of the study area and along a small portion of the toe of slope running parallel to the boundary in the northwestern area of the site. These ditches are connected to culverts that drain water from surrounding areas and to the culvert that drains to Robla Creek under the levee (at the northwest corner of the study area). They carry minimal water and have not been mapped as potential waters of the U.S.

REFERENCES AND OTHER SOURCES

- Baldwin, Bruce G. (ed.). 2012. *The Jepson Manual - Vascular Plants of California*, Second Edition. University of California Press. Berkeley, CA.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List: 2016 Wetland Ratings*. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- Munsell Color. 2015. *Munsell Soil Color Charts*. Munsell Color, X-Rite. Grand Rapids, MI.
- U.S. Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. ed. J.S. Wakeley, R.W Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture, NRCS. *Web Soil Survey for Sacramento County Online*. <http://websoilsurvey.nrcs.usda.gov>. Accessed June 2020.
- Western Regional Climate Center. *Period of Record Monthly Climate Summary*. Period of Record : 11/10/1941 to 06/09/2016. Sacramento, California. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7630>

Appendix A.
Wetland Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Robla Estates City/County: City of Sacramento Sampling Date: 6-03-20
 Applicant/Owner: Ralph Swift State: CA Sampling Point: 01
 Investigator(s): Jeff Glazner Section, Township, Range: Rancho Del Paso Land Grant
 Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): LRR C Lat: 38.66513929 Long: -121.44896951 Datum: NAD83
 Soil Map Unit Name: 174 - Madera loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Excavated depression with exposed hardpan. Soil only 2" deep at data point location.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: 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. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Polypogon monspeliensis</u>	<u>35</u>	<u>x</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Plagiobothrys stipitatus</u>	<u>20</u>	<u>x</u>	<u>FACW</u>	
3. <u>Lactuca serriola</u>	<u>3</u>		<u>FACU</u>	
4. <u>Polygonum aviculare</u>	<u>2</u>		<u>FAC</u>	
5. <u>Festuca perennis</u>	<u>5</u>		<u>FAC</u>	
6. <u>Epilobium brachycarpum</u>	<u>5</u>		<u>UPL</u>	
7. <u>Lythrum hyssopifolia</u>	<u>10</u>		<u>OBL</u>	
8. <u>Epilobium densiflorum</u>	<u>2</u>		<u>FACW</u>	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust _____				

Remarks:

 Weedy flora in this excavated basin. One large Salix gooddingii in basin.

SOIL

Sampling Point: 01

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 ¹	Loc ²		
0-2	10YR 4/2	90	7.5 YR 4/6	10	C	M	Loam	
2+	Hardpan							

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

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

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

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

Remarks:
 Bottom of basin has exposed hardpan. Soil depth in much of basin very shallow.

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"/> 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 checked="" 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)
<input type="checkbox"/> Water Marks (B1) (Riverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drainage Patterns (B10)	<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 type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Remarks:
 Basin with evidence of seasonal ponding. Exposed hardpan. Basin 3+ feet deep with no outlet.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Robla Estates City/County: City of Sacramento Sampling Date: 6-02-20
 Applicant/Owner: Ralph Swift State: CA Sampling Point: 02
 Investigator(s): Jeff Glazner Section, Township, Range: Rancho Del Paso Land Grant
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): LRR C Lat: 38.66512771 Long: -121.44907792 Datum: NAD83
 Soil Map Unit Name: 174 - Madera loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland comparison to data point 01 -- on side slope of basin.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: 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. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Festuca perennis</u>	<u>50</u>	<u>x</u>	<u>FAC</u>	
2. <u>Sinapis arvensis</u>	<u>10</u>		<u>UPL</u>	
3. <u>Bromus diandrus</u>	<u>10</u>		<u>UPL</u>	
4. <u>Phalaris paradoxa</u>	<u>15</u>		<u>FAC</u>	
5. <u>Rumex crispus</u>	<u>10</u>		<u>FAC</u>	
6. <u>Carduus pycnocephalus</u>	<u>5</u>		<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u>0</u>				

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No _____

Remarks:

 Grassy slope.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Robla Estates City/County: City of Sacramento Sampling Date: 6-02-20
 Applicant/Owner: Ralph Swift State: CA Sampling Point: 03
 Investigator(s): Jeff Glazner Section, Township, Range: Rancho Del Paso Land Grant
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): LRR C Lat: 38.66479143 Long: -121.44773551 Datum: NAD83
 Soil Map Unit Name: 174 - Madera loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Seasonal wetland in low area of field near large culvert outfall draining from subdivision to east. Low area of field but not well-defined basin.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</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>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Eleocharis macrostachya</u>	<u>10</u>	<u>x</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Downingia bicornuta var. bicornuta</u>	<u>10</u>	<u>x</u>	<u>OBL</u>	
3. <u>Veronica peregrina subsp. xalapensis</u>	<u>10</u>	<u>x</u>	<u>OBL</u>	
4. <u>Lythrum hyssopifolia</u>	<u>10</u>	<u>x</u>	<u>OBL</u>	
5. <u>Lasthenia glaberrima</u>	<u>5</u>	_____	<u>OBL</u>	
6. <u>Rumex crispus</u>	<u>5</u>	_____	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u>10</u>				
Remarks: Vernal pool/seasonal wetland flora. Site is seasonally disked.				

Remarks:

Vernal pool/seasonal wetland flora. Site is seasonally disked.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Robla Estates City/County: City of Sacramento Sampling Date: 6-02-20
 Applicant/Owner: Ralph Swift State: CA Sampling Point: 04
 Investigator(s): Jeff Glazner Section, Township, Range: Rancho Del Paso Land Grant
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): LRR C Lat: 38.66478244 Long: -121.4478499 Datum: NAD83
 Soil Map Unit Name: 174 - Madera loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland comparison to data point 03. Near edge.	

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: <u>1</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>100</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
_____ = Total Cover					
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					
Herb Stratum (Plot size: _____)					
1. <u>Festuca perennis</u>	<u>60</u>	<u>x</u>	<u>FAC</u>		
2. <u>Bromus diandrus</u>	<u>5</u>		<u>UPL</u>		
3. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>		
4. <u>Convolvulus arvensis</u>	<u>10</u>		<u>UPL</u>		
5. <u>Malva neglecta</u>	<u>10</u>		<u>UPL</u>		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
_____ = Total Cover					
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust _____					
Remarks: Weedy grassland flora.					

SOIL

Sampling Point: 04

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 ¹	Loc ²		
0-12	10 YR 3/2	95	5YR 4/6	5	C	M	Clayey loam	

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

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

³Indicators 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 <input checked="" type="checkbox"/>
--	---

Remarks:
Disked soil. Redox evident.

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"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<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 <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
--	---

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

Remarks:
Upper edge of seasonal ponding area.

Appendix B.
Plant Species Observed

Appendix B - Robla Estates Plants Observed w-Wetland Status - May/June 2020

Taxon	Common Name	Wetland Status
<i>Achyrachaena mollis</i>	Blow-wives	FAC
<i>Acmispon americanus</i>	Spanish lotus	UPL
<i>Ailanthus altissima</i>	Tree of heaven	FACU
<i>Aira caryophyllea</i>	Silver European hairgrass	FACU
<i>Albizia julibrissin</i>	Silk tree	UPL
<i>Alisma triviale</i>	California water plantain	OBL
<i>Amsinckia menziesii</i>	Rancher's fireweed	UPL
<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	FAC
<i>Avena fatua</i>	Wild oat	UPL
<i>Brassica nigra</i>	Black mustard	UPL
<i>Brodiaea elegans subsp. elegans</i>	Elegant harvest brodiaea	FACU
<i>Bromus diandrus</i>	Ripgut grass	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Bromus madritensis</i>	Foxtail brome	UPL
<i>Carduus pycnocephalus</i>	Italian thistle	UPL
<i>Carex barbarae</i>	Whiteroot sedge	FAC
<i>Centaurea solstitialis</i>	Yellow starthistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Chenopodium album</i>	White pigweed	FACU
<i>Cichorium intybus</i>	Chicory	FACU
<i>Convolvulus arvensis</i>	Bindweed	UPL
<i>Crassula aquatica</i>	Water pygmy-weed	OBL
<i>Croton setiger</i>	Turkey mullein	UPL
<i>Cynodon dactylon</i>	Bermudagrass	FACU
<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
<i>Dichelostemma capitatum</i>	Blue dicks	FACU
<i>Dittrichia graveolens</i>	Stinkwort	UPL
<i>Downingia bicornuta var. bicornuta</i>	Double-horned downingia	OBL
<i>Dysphania ambrosioides</i>	Mexican tea	FAC
<i>Eleocharis macrostachya</i>	Creeping spikerush	OBL
<i>Elymus caput-medusae</i>	Medusahead	UPL
<i>Elymus glaucus</i>	Blue wildrye	FACU
<i>Elymus triticoides</i>	Beardless wildrye	FAC
<i>Epilobium brachycarpum</i>	Summer cottonweed	UPL
<i>Epilobium densiflorum</i>	Dense-flower spike-primrose	FACW
<i>Erigeron canadensis</i>	Canadian horseweed	FACU
<i>Erodium botrys</i>	Broad-leaf filaree	FACU
<i>Erodium cicutarium</i>	Red-stem filaree	UPL

Taxon	Common Name	Wetland Status
<i>Eryngium vaseyi</i>	Coyote thistle	FACW
<i>Eschscholzia californica</i>	California poppy	UPL
<i>Euthamia occidentalis</i>	Western goldenrod	FACW
<i>Festuca myuros</i>	Rattail sixweeks grass	FACU
<i>Festuca perennis</i>	Italian ryegrass	FAC
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Geranium molle</i>	Dove's-foot geranium	UPL
<i>Helminthotheca echioides</i>	Bristly ox-tongue	FAC
<i>Hirschfeldia incana</i>	Short-podded mustard	UPL
<i>Holocarpha virgata subsp. virgata</i>	Virgate tarweed	UPL
<i>Hordeum marinum subsp. gussoneanum</i>	Mediterranean barley	FAC
<i>Hordeum murinum</i>	Wall barley	FACU
<i>Hypericum perforatum subsp. perforatum</i>	Klamathweed	FACU
<i>Hypochaeris glabra</i>	Smooth cat's-ear	UPL
<i>Juncus balticus</i>	Baltic rush	FACW
<i>Juncus effusus</i>	Soft rush	FACW
<i>Juncus xiphioides</i>	Iris-leaved rush	OBL
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Lasthenia glaberrima</i>	Smooth goldfields	OBL
<i>Leersia oryzoides</i>	Rice cutgrass	OBL
<i>Leontodon saxatilis</i>	Long-beaked hawkbit	FACU
<i>Lepidium strictum</i>	Peppergrass	UPL
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Malva neglecta</i>	Common mallow	UPL
<i>Matricaria discoidea</i>	Pineapple-weed	FACU
<i>Medicago polymorpha</i>	California burclover	FACU
<i>Melilotus indicus</i>	Annual yellow sweetclover	FACU
<i>Phalaris lemmonii</i>	Lemmon's canary grass	FACW
<i>Phalaris paradoxa</i>	Paradox canary-grass	FAC
<i>Pinus sp.</i>	Ornamental Pine	UPL
<i>Plagiobothrys stipitatus</i>	Stalked popcorn-flower	FACW
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Platanus acerfolia</i>	Common cudonia	UPL
<i>Poa annua</i>	Annual bluegrass	FAC
<i>Polygonum aviculare</i>	Common knotweed	FAC
<i>Polypogon monspeliensis</i>	Annual beard grass	FACW
<i>Populus fremontii</i>	Fremont cottonwood	FAC
<i>Proboscidea louisianica subsp. louisianica</i>	Common unicorn plant	FACU
<i>Prunus avium</i>	Sweet cherry	UPL

Taxon	Common Name	Wetland Status
<i>Prunus persica</i>	Peach	UPL
<i>Pseudognaphalium canescens</i>	Wright's rabbit-tobacco	FACU
<i>Quercus agrifolia</i>	Coast live oak	UPL
<i>Quercus lobata</i>	Valley oak	FACU
<i>Raphanus sativus</i>	Wild radish	UPL
<i>Rumex acetosella</i>	Sheep sorrel	FACU
<i>Rumex crispus</i>	Curly dock	FAC
<i>Rumex pulcher</i>	Fiddle dock	FAC
<i>Salix gooddingii</i>	Goodding's black willow	FACW
<i>Schoenoplectus acutus</i>	Hardstem bulrush	OBL
<i>Sesbania punicea</i>	Red sesbania	FACW
<i>Silybum marianum</i>	Milk thistle	UPL
<i>Sinapis arvensis</i>	Wild mustard	UPL
<i>Sonchus asper subsp. asper</i>	Prickly sow-thistle	FAC
<i>Sonchus oleraceus</i>	Common sow-thistle	UPL
<i>Sorghum halepense</i>	Johnsongrass	FACU
<i>Spergularia rubra</i>	Ruby sand-spurrey	FAC
<i>Stellaria media</i>	Common chickweed	FACU
<i>Tragopogon dubius</i>	Yellow salsify	UPL
<i>Tribulus terrestris</i>	Puncture vine	UPL
<i>Trifolium dubium</i>	Little hop clover	UPL
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Triteleia hyacinthina</i>	White triteleia	FAC
<i>Veronica peregrina subsp. xalapensis</i>	Purslane speedwell	OBL
<i>Vicia sativa</i>	Common vetch	FACU
<i>Vicia villosa</i>	Winter vetch	UPL
<i>Xanthium strumarium</i>	Cocklebur	FAC

Appendix C.
USACOE Aquatic Resources Spreadsheet

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
SW-1	CALIFORNIA	PEM2	DEPRESS	Area	0.119626	ACRE	DELINEATE	38.66509804	-121.4489348	Robla Creek
SW-2	CALIFORNIA	PEM2	DEPRESS	Area	0.118539	ACRE	DELINEATE	38.66472851	-121.4477331	Robla Creek
SW-3	CALIFORNIA	PEM2	DEPRESS	Area	0.196498	ACRE	DELINEATE	38.66470905	-121.4475857	Robla Creek
WS-1	CALIFORNIA	PEM1	SLOPE	Area	0.019667	ACRE	DELINEATE	38.6672279	-121.4511801	Robla Creek



May 23, 2022

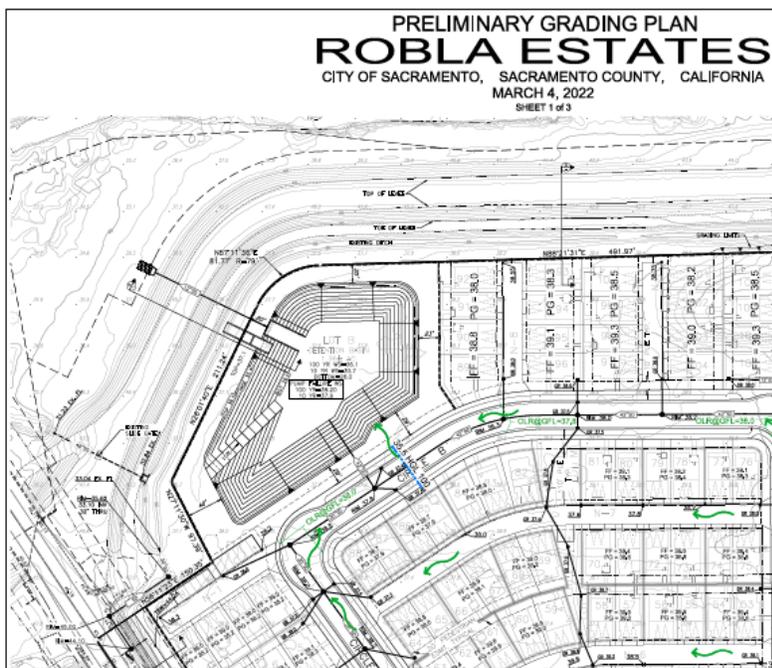
Michael Robertson
President
Baker-Williams Engineering Group
6020 Rutland Dr., Ste. 19
Carmichael, CA 95608

Subject: Addendum letter addressing proposed outfall into Robla Creek Corridor

Dear Mike:

This letter responds to the need for additional information on the proposed outfall location at the north end of Robla Estates project site. We evaluated this location from the levee during the fieldwork for the Aquatic Resources in 2020.

The location of the proposed outfall is on the water side of the Robla Creek levee as shown in the exhibit below.



The outfall is the overflow for the project detention basin. The outfall is piped through the levee and discharges at the tow of the levee into rock energy dissipaters. Water sheetflows from that location towards Robla Creek.



Looking northeast over outfall location.



Looking west over outfall location and Rio Linda Boulevard bridge over Robla Creek.

The outfall location is situated in an upland annual grassland habitat dominated by weedy grass and forb species including ripgut grass, soft chess, Bermudagrass, broadleaf filaree, chicory, and winter vetch (scientific names provide in original report). The area from the top of the levee slope to the creek is a flood terrace but below the Ordinary High Water Mark (OHWM). The OHWM is the line at the edge of a waterway that defines the limit of federal (Corps of Engineers) jurisdiction. Along Robla Creek, the OHWM is much nearer the active channel and more than 50 feet away from the outfall location.

This outfall location is not considered habitat for any special status plant or animal species. It is suitable foraging habitat for birds in the area, primarily ones utilizing Robla Creek.

Because the disturbance footprint is well above the OHWM, a 404 Permit is not required. And because a 404 Permit is not required, a 401 Water Quality Certification is also not required. However, because the discharge will occur on the water side of the levee, a Lake and Streambed Alteration Agreement (1602 Permit) from the California Department of Fish and Wildlife (CDFW) will be required.

In conclusion, the proposed outfall location will not cause impacts to aquatic resources or special status plant or animal species but will require application of a Lake and Streambed Alteration Agreement from CDFW.

If you have any questions or require additional information or analysis, please contact me at (530) 888-0130.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Glazner". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jeff Glazner
Principal