

APPENDIX 4.3

Biological Resources

Memorandum

To: Steve Abbs
 Davidon Homes
 1600 S. Main Street
 Walnut Creek, CA 94596

From: Sam Oakley
 Master Arborist WE-9474B
 Consulting Arborist #556
 925.518.2028
 samoakley@arborwell.com

Subject: Arborist Letter for 28 Lot Revised Plan

Date: July 16, 2018

This letter is a summary of Options A, B, and the 28 Lot Revised Plan as they relate to proposed tree removals/values. A twenty-eight (28) lot revised plan has been proposed where eighteen (18) trees are proposed for removal (Table 1). The Revised Plan proposes a roundabout at D Street and Windsor Drive that requires nine (9) trees to be removed. The other nine (9) trees proposed for removal are along the Windsor Drive right of way.

Arborwell inventoried five hundred and nine (509) on-site trees greater than four (4) inches in diameter at fifty-four (54) inches above grade in 2013. An appraisal of the inventoried trees was performed for the revised plan and the amount of tree replacements to mitigate the proposed removals was quantified.

Table 1: each option is compared to number of lots, number of proposed tree removals, and appraised value for removals.

	Total Number of Lots	Number of Proposed Tree Removals	Appraised Tree Value of Proposed Removals
Option A	66	120*	\$352,300
Option B	63	119*	\$343,700
Revised Plan	28	18	\$41,100

*Does not include removal of nine (9) trees for the required roundabout on D Street, per the mitigation measure in the Revised Draft EIR.

The replacement size for the revised plan is based on the health and structural condition of the trees to be removed determined by the City of Petaluma. Because health and structure are interrelated, we assigned a *condition* rating for each tree that combined both the health and structure into one rating.

A Protected Tree in good or excellent condition is to be replaced at a 1:1 trunk diameter ratio, totaling eighty-nine (89) replacement inches (Table 2); a Protected Tree in marginal to fair condition replaced at a 1:2 trunk diameter ratio, totaling seventy and one half (70.5) replacement inches; Protected Trees in poor condition do not require replacement.

Table 2: mitigation inches for the Scott Ranch property for the revised plan.

Tree Condition Type	Total Inches	Mitigation Inches	Replacement Ration
Excellent/Good	89	89	1:1
Marginal/Fair	141	70.5	1:2
Poor		0	NA

Total Mitigation Inches: 159.5

Replacement tree ratios shall be applied as follows for the revised plan (replacement trees shall be at minimum 24-inch box size; replacement sizes were rounded to a whole number):

24-inch box replacement tree = 2-inch trunk replacement diameter = 80 trees (or)

36-inch box replacement tree = 3-inch trunk replacement diameter = 53 trees (or)

48-inch box replacement tree = 4-inch trunk replacement diameter = 40 trees

The appraised value for the revised plan was determined using the ISA’s Council of Tree & Landscape Appraiser’s (CTLA) Trunk Formula Method. The derived value is an approximation of an individual tree’s value and do not represent absolute values based on the inherent subjectivity of an appraisal. The total appraised value for the Scott Ranch property’s trees is **\$2,091,900**. The appraised value for trees to be removed for the revised plan is **\$41,100**, rounded to the nearest \$100. The trees to be preserved have an appraised value of **\$2,050,800**.

Table 3: inventory data for proposed removals under the revised plan.

Tree #	Common Name	Species	DBH (inches)	Condition	Protected?	Appraised Value (\$)
489	Coast Live Oak	<i>Quercus agrifolia</i>	13	Marginal	Yes	\$1,035.50
490	Coast Live Oak	<i>Quercus agrifolia</i>	12	Fair	Yes	\$1,155.98
491	Coast Live Oak	<i>Quercus agrifolia</i>	14	Good	Yes	\$1,670.87
492	Coast Live Oak	<i>Quercus agrifolia</i>	21	Fair	Yes	\$3,415.14
493	Coast Live Oak	<i>Quercus agrifolia</i>	19.5	Fair	Yes	\$2,953.04
494	Coast Live Oak	<i>Quercus agrifolia</i>	21	Fair	Yes	\$3,415.14
495	Coast Live Oak	<i>Quercus agrifolia</i>	17.5	Fair	Yes	\$2,390.15
496	Coast Live Oak	<i>Quercus agrifolia</i>	19	Marginal	Yes	\$2,158.93
497	Coast Live Oak	<i>Quercus agrifolia</i>	10	Fair	Yes	\$758.11
501	Coast Live Oak	<i>Quercus agrifolia</i>	8	Fair	Yes	\$1,642.35
502	London Plane	<i>Platanus acerifolia</i>	18	Good	Yes	\$7,251.76
503	London Plane	<i>Platanus acerifolia</i>	14	Good	Yes	\$4,455.65
504	Scarlet Oak	<i>Quercus coccinea</i>	8	Good	Yes	\$2,021.36
505	Scarlet Oak	<i>Quercus coccinea</i>	3	Good	Yes	\$476.63
506	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes	\$1,572.17
507	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes	\$1,572.17
508	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes	\$1,572.17
509	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes	\$1,572.17



PRUNUSKE CHATHAM, INC.

TREE REMOVAL FOR HELEN PUTNAM PARK EXTENSION
 Prepared on 3/20/19

**ALTERNATE 1:
 CLASS 1 TRAIL THROUGH PARK**

Tree #	Type	DBH (inches)	Health	Location / Reason for removal
38	Monterey cypress	33.5	Marginal	Will be in way of class 1 trail, poor health
48	Eucalyptus	54	Fair	Will be in way of new pedestrian bridge/class 1 trail over creek
49	Eucalyptus	67	Fair	Will be in way of new pedestrian bridge/class 1 trail over creek
51	Eucalyptus	14	Marginal	Will be in way of new pedestrian bridge/class 1 trail over creek, poor health
468	Eucalyptus	57	Fair	Roots lifting driveway, will be in way of barn center access

**ALTERNATE 2:
 CLASS 1 TRAIL ADJACENT TO D STREET**

Tree #	Type	DBH (inches)	Health	Location / Reason for removal
14	Coast live oak	7	Fair	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
15	Coast live oak	4	Fair	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
20	Monterey cypress	76	Marginal	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
21	Coast live oak	11	Fair	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
22	Coast live oak	18	Fair	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
23	Coast live oak	18	Fair	Along D Street, will be in way of new class 1 trail, under powerlines, poor health
468	Eucalyptus	57	Fair	Roots lifting driveway, will be in way of barn center access



PRUNUSKE CHATHAM, INC.

Health Terms Explained:

Fair: Higher level and/or incidence of deficiencies noted in health and/or structure, including possible hazardous conditions sign and symptoms observed, with higher corrective measures and input required to improve condition and, where applicable, mitigate hazard risk

Marginal: Significant deficiencies noted in health and/or structure, some irreversible, and may include hazardous condition signs and symptoms observed requiring corrective action

Notes:

1. Trees to be removed for Davidon development on Park property not included.
2. Tree number, type, DBH, and health derived from Arborwell Tree Preservation Plan dated January 15, 2016.

Scott Ranch 28 Lot Residential Application
 Tree Removal List

6/18/2019

Tree #	Common Name	Species	DBH (Inches)	Condition	Protected?
489	Coast Live Oak	<i>Quercus agrifolia</i>	13	Marginal	Yes
490	Coast Live Oak	<i>Quercus agrifolia</i>	12	Fair	Yes
491	Coast Live Oak	<i>Quercus agrifolia</i>	14	Good	Yes
492	Coast Live Oak	<i>Quercus agrifolia</i>	21	Fair	Yes
493	Coast Live Oak	<i>Quercus agrifolia</i>	19.5	Fair	Yes
496	Coast Live Oak	<i>Quercus agrifolia</i>	19	Marginal	Yes
497	Coast Live Oak	<i>Quercus agrifolia</i>	10	Fair	Yes
501	Coast Live Oak	<i>Quercus agrifolia</i>	8	Fair	Yes
502	London Plane	<i>Platanus acerifolia</i>	18	Good	Yes
503	London Plane	<i>Platanus acerifolia</i>	14	Good	Yes
504	Scarlet Oak	<i>Quercus coccinea</i>	8	Good	Yes
505	Scarlet Oak	<i>Quercus coccinea</i>	3	Good	Yes
506	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes
507	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes
508	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes
509	London Plane	<i>Platanus acerifolia</i>	8	Good	Yes

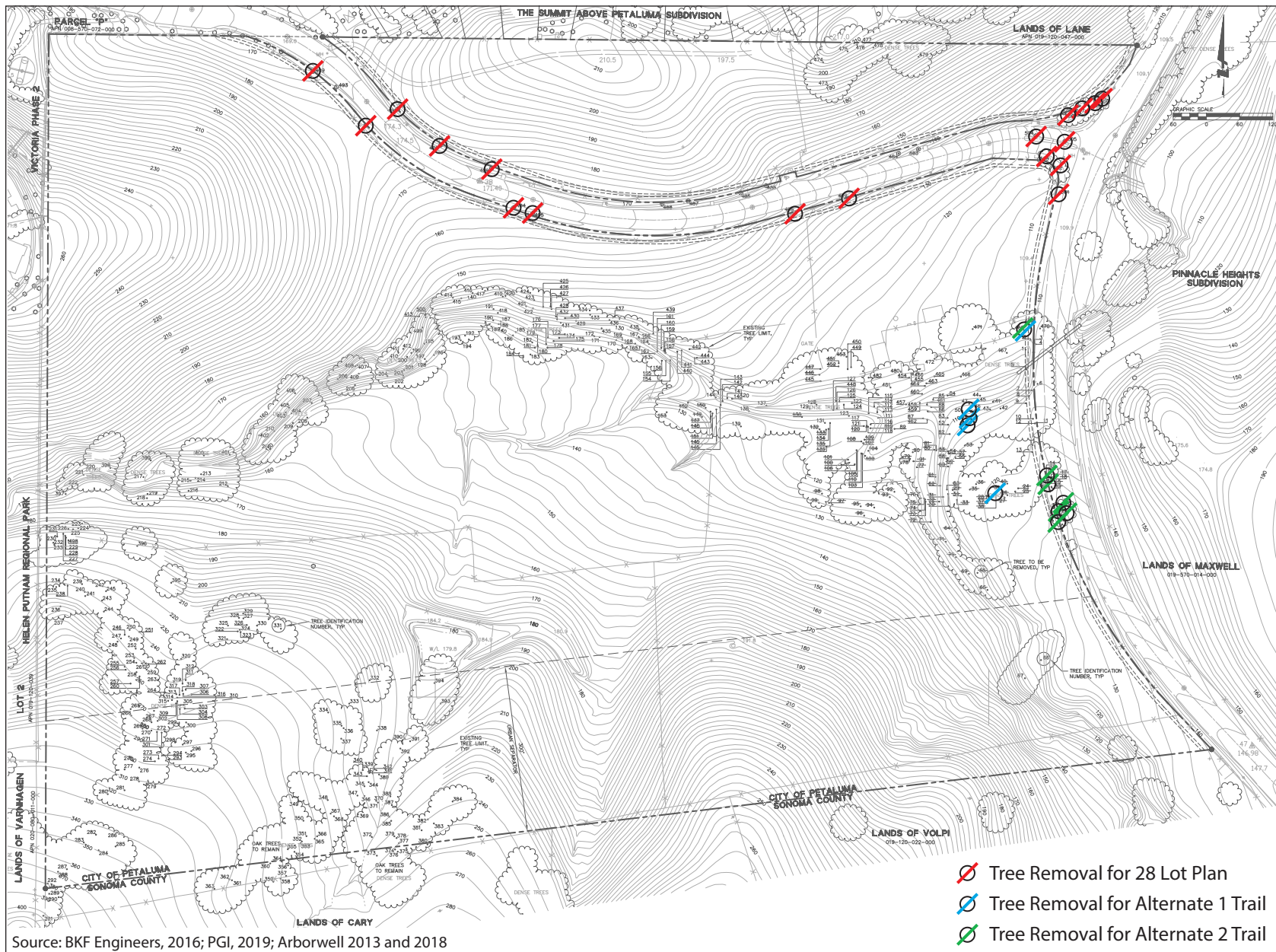


FIGURE 4.3-3. Tree Locations and Proposed Removal

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office File/ORM # PJD Date:

State City/County
Nearest Waterbody:
Location: TRS, LatLong or UTM:
Name/Address of Person Requesting PJD:

Identify (Estimate) Amount of Waters in the Review Area: Name of Any Water Bodies on the Site Identified as Tidal:
Non-Wetland Waters: Stream Flow: Section 10 Waters: Non-Tidal:
 linear ft width acres
Wetlands: acre(s) Cowardin Class:
 Office (Desk) Determination
 Field Determination: Date of Field Trip:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite quad name:
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is:
- Photographs: Aerial (Name & Date):
 Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and Date of Regulatory Project Manager
(REQUIRED)

Signature and Date of Person Requesting Preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Appendix A - Sites

District Office	San Francisco District	File/ORM #	2003-281630	PJD Date:	Dec 2, 2020
State	CA	City/County	Petaluma, Sonoma County	Person Requesting PJD	Mr. Steve Abbs

Site Number	Latitude	Longitude	Cowardin Class	Est. Amount of Aquatic Resource in Review Area	Class of Aquatic Resource
Tributary	38.22°	-122.65°	Riverine	0.317	Non-Section 10 wetland
Other Wetland	38.22°	-122.65°	Palustrine, emergent	0.271	Non-Section 10 wetland

Notes:

Please see attached table.



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
450 GOLDEN GATE AVENUE
SAN FRANCISCO, CALIFORNIA 94102

December 4, 2020

Regulatory Division

Subject: File No. SPN-2003-281630

Mr. Steve Abbs
Davidon Homes
1600 South Main Street, Suite 150
Walnut Creek, California 94596
sabbs@davidonhomes.com

Dear Mr. Abbs:

This correspondence is in reference to your submittal of Scott Ranch Jurisdictional Determination received on October 13, 2020, requesting a preliminary jurisdictional determination of the extent of navigable waters of the United States and waters of the United States occurring on a 60.44 acre site located in the City of Petaluma, Sonoma County, California (Latitude 38.22°, Longitude -122.65°).

All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended, 33 U.S.C. § 1344 *et seq.*

The enclosed delineation map titled "Preliminary Jurisdictional Determination pursuant to Section 404 Clean Water Act, SPN-2003-281630, Scott Ranch (UOP Petaluma Property, D Street and Windsor Drive)," in 1 sheet and date certified December 2, 2020, depicts the extent and location of wetlands, and other waters of the United States within the boundary area of the site that **may be** subject to U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. This preliminary jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of Scott Ranch on November 19, 2020, and a review of other data included in your submittal. While this preliminary jurisdictional determination was conducted pursuant to Regulatory Guidance Letter No. 16-01, *Jurisdictional Determinations*, it may be subject to future revision if new information or a change in field conditions becomes subsequently apparent. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two weeks of receipt.

You are advised that the preliminary jurisdictional determination may **not** be appealed through the U.S. Army Corps of Engineers' *Administrative Appeal Process*, as described in 33 C.F.R. pt. 331 (65 Fed. Reg. 16,486; Mar. 28, 2000). Under the provisions of 33 C.F.R Section 331.5(b)(9), non-appealable actions include preliminary jurisdictional determinations since they

are considered to be only advisory in nature and make no definitive conclusions on the jurisdictional status of the water bodies in question. However, you may request this office to provide an approved jurisdictional determination that precisely identifies the scope of jurisdictional waters on the site; an approved jurisdictional determination may be appealed through the *Administrative Appeal Process*. If you anticipate requesting an approved jurisdictional determination at some future date, you are advised not to engage in any on-site grading or other construction activity in the interim to avoid potential violations and penalties under Section 404 of the Clean Water Act. Finally, you may provide this office new information for further consideration and request a reevaluation of this preliminary jurisdictional determination.

You may refer any questions on this matter to Kendra Spicher by telephone at 415-503-6832 or by e-mail at Kendra.A.Spicher@usace.army.mil. All correspondence should be addressed to the Regulatory Division, North Branch, referencing the file number at the head of this letter. The San Francisco District is committed to improving service to our customers. The Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <https://www.spn.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

A handwritten signature in cursive script that reads "Sahrye Cohen".

Sahrye Cohen,
North Branch Chief, Regulatory Division

Enclosures

cc (w/ encls):
Sean Micallef
Zentner Planning and Ecology
120 A Linden Street
Oakland, CA 94607
seanm@zentner.com

Scott Ranch

Preliminary Jurisdictional Areas

Tributaries and channels (Other Waters)

<u>Area/Name</u>	<u>linear ft (lf)</u>	<u>Square ft (sf)</u>	<u>Acres</u>
Kelly Creek	1969.55	10253	0.235
D St. Trib	759.75	2681.87	0.062
Channel 3	50.7	50.7	0.001
Channel 12	253.68	507.36	0.012
Channel 12a	32.46	64.92	0.001
Channel 7	71.6	143.2	0.003
Channel 7a	32.04	64.08	0.001
Channel 1	8.6	4.9	0.000
Channel 14	57.9	115.8	0.003
Total:	3178.38	13770.03	0.317

Other Waters

<u>Area/Name</u>	<u>linear ft (lf)</u>	<u>Square ft (sf)</u>	<u>Acres</u>
Stockpond	NA	6629.96	0.152

Seasonal wetlands

<u>Area/Name</u>	<u>linear ft (lf)</u>	<u>Square ft (sf)</u>	<u>Acres</u>
S1A	NA	618.95	0.014
S2A	NA	146.88	0.003
S3A	NA	246.48	0.006
S4A	NA	112.98	0.003
S7A	NA	543.82	0.012
S8A	NA	5118.45	0.118
S9A	NA	595.21	0.014
S10A	NA	409.29	0.009
S11A	NA	1300.03	0.030
S13A	NA	184.53	0.004
S14A	NA	2522.9	0.058
Total:	NA	11799.52	0.271



**U.S. Army
Corps of Engineers**
San Francisco District
Regulatory Division

Preliminary Jurisdictional Determination for the Scott Ranch (UOP
Petaluma Property, D Street and Windsor Drive), Pursuant to Section 404
Clean Water Act

Scott Ranch (UOP Petaluma Property, D Street and Windsor Drive)
Petaluma, Sonoma County, California

(38.2181488044807°, -122.647754961389°)

Accurate as depicted in legend

Preliminary Jurisdictional Determination verified only within the designated Study Area. All drainages,
as depicted in the legend and on the map, are potential waters of the U.S. All boundaries shown for
these features are approximate.

File ID: 2003-281630

Date: December 2, 2020

In 1 Sheet



120A Linden Street, Oakland, CA 94607
Phone: 510.622.8110 Fax: 510.622.8116

FIGURE 5
Jurisdictional
Delineation

SCOTT RANCH
PETALUMA, CALIFORNIA



0 87.5' 175'

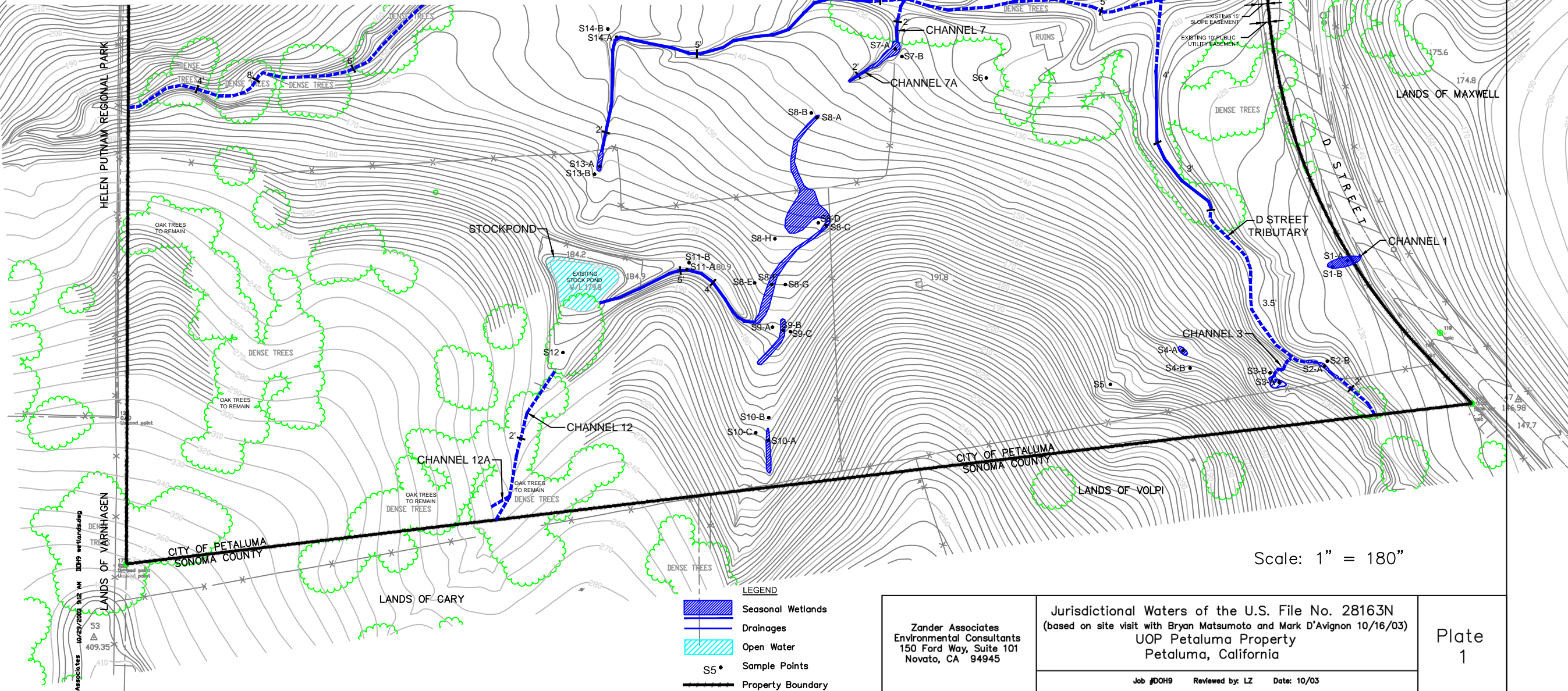
SCALE: 1" = 175'

SOURCE:
ZANDER ASSOCIATES

PROJECT NO. 1116

FILE: Z:\PROJECTS\1116 Scott Ranch
Permitting\Delineation\1116 Revised
Delineation 201125

DATE: 11.25.20



Scale: 1" = 180"

Zander Associates Environmental Consultants 150 Ford Way, Suite 101 Novato, CA 94945	Jurisdictional Waters of the U.S. File No. 28163N (based on site visit with Bryan Matsumoto and Mark D'Avignon 10/16/03) UOP Petaluma Property Petaluma, California	Plate 1
	Job #DOH9 Reviewed by: LZ Date: 10/03	