

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
WEB: WWW.COASTAL.CA.GOV



W12a

A-2-**HMB-25-0017 (VIDOVICH SFR)**

AUGUST 13, 2025

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**EXHIBIT 1: PROJECT LOCATION MAP – VIDOVICH SFR APPEAL
CITY OF HALF MOON BAY**

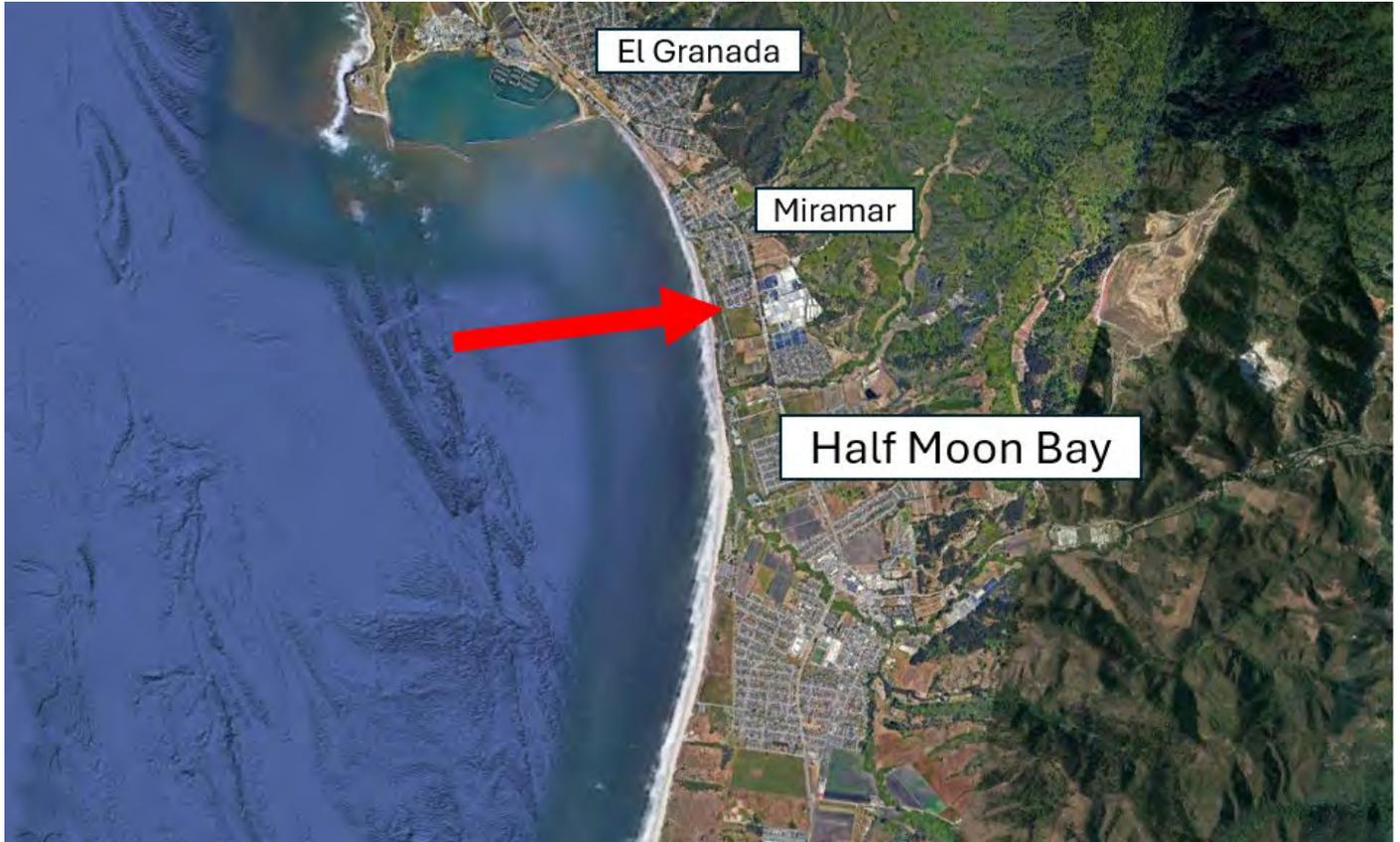
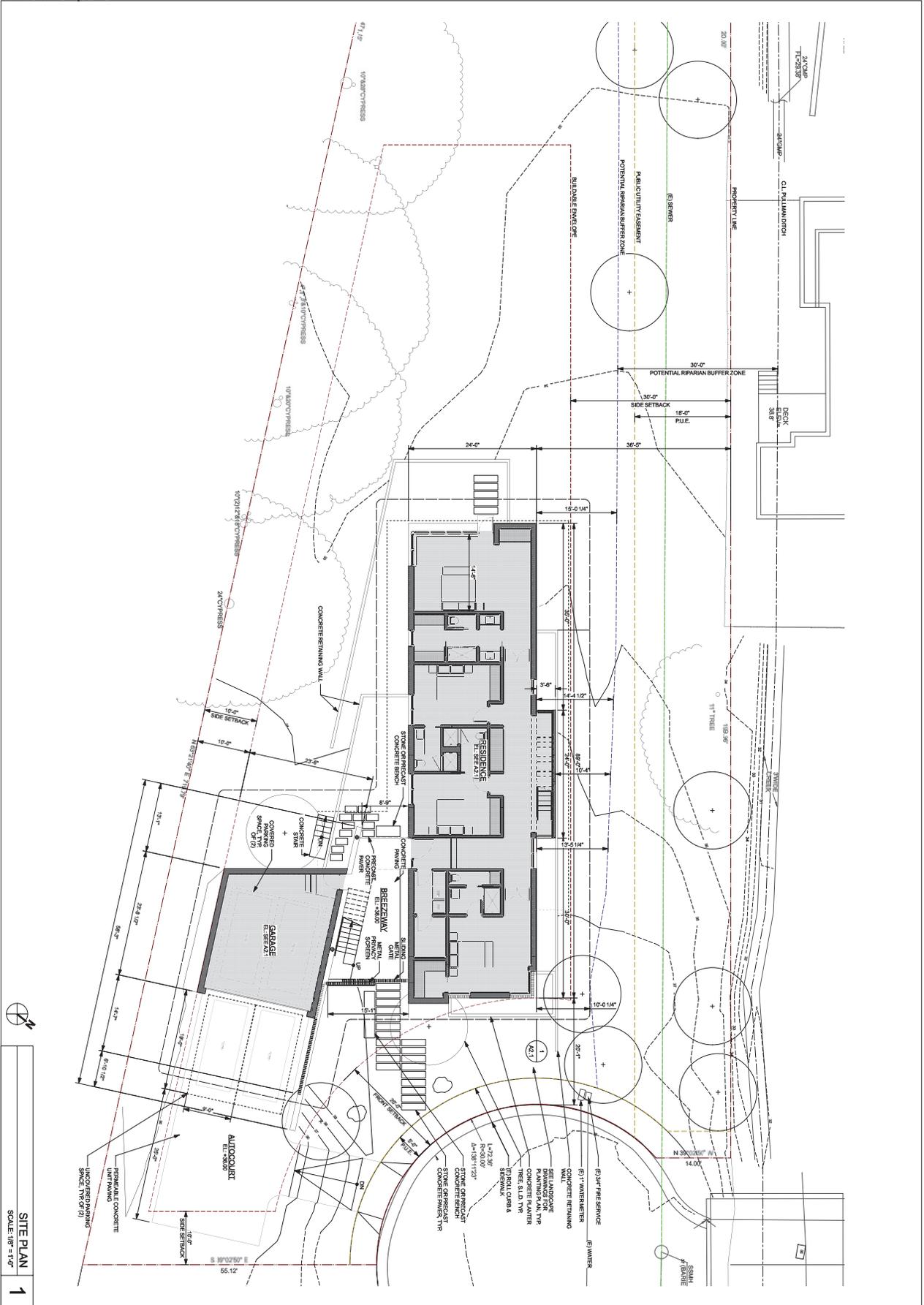


Figure 1: Project Vicinity Map. Project site is shown in red near the community of Miramar.



Figure 2: Project Location Map. The project site is shown in red, west of Champs Elysee Boulevard and inland of the California Coastal Trail.



SITE PLAN
 SCALE: 1/8" = 1'-0"
 1

A1.1

STAMP

Professional Engineer Seal for C. 15822, A. 15823, A. 15824, A. 15825, A. 15826, A. 15827, A. 15828, A. 15829, A. 15830, A. 15831, A. 15832, A. 15833, A. 15834, A. 15835, A. 15836, A. 15837, A. 15838, A. 15839, A. 15840, A. 15841, A. 15842, A. 15843, A. 15844, A. 15845, A. 15846, A. 15847, A. 15848, A. 15849, A. 15850, A. 15851, A. 15852, A. 15853, A. 15854, A. 15855, A. 15856, A. 15857, A. 15858, A. 15859, A. 15860, A. 15861, A. 15862, A. 15863, A. 15864, A. 15865, A. 15866, A. 15867, A. 15868, A. 15869, A. 15870, A. 15871, A. 15872, A. 15873, A. 15874, A. 15875, A. 15876, A. 15877, A. 15878, A. 15879, A. 15880, A. 15881, A. 15882, A. 15883, A. 15884, A. 15885, A. 15886, A. 15887, A. 15888, A. 15889, A. 15890, A. 15891, A. 15892, A. 15893, A. 15894, A. 15895, A. 15896, A. 15897, A. 15898, A. 15899, A. 15900, A. 15901, A. 15902, A. 15903, A. 15904, A. 15905, A. 15906, A. 15907, A. 15908, A. 15909, A. 15910, A. 15911, A. 15912, A. 15913, A. 15914, A. 15915, A. 15916, A. 15917, A. 15918, A. 15919, A. 15920, A. 15921, A. 15922, A. 15923, A. 15924, A. 15925, A. 15926, A. 15927, A. 15928, A. 15929, A. 15930, A. 15931, A. 15932, A. 15933, A. 15934, A. 15935, A. 15936, A. 15937, A. 15938, A. 15939, A. 15940, A. 15941, A. 15942, A. 15943, A. 15944, A. 15945, A. 15946, A. 15947, A. 15948, A. 15949, A. 15950, A. 15951, A. 15952, A. 15953, A. 15954, A. 15955, A. 15956, A. 15957, A. 15958, A. 15959, A. 15960, A. 15961, A. 15962, A. 15963, A. 15964, A. 15965, A. 15966, A. 15967, A. 15968, A. 15969, A. 15970, A. 15971, A. 15972, A. 15973, A. 15974, A. 15975, A. 15976, A. 15977, A. 15978, A. 15979, A. 15980, A. 15981, A. 15982, A. 15983, A. 15984, A. 15985, A. 15986, A. 15987, A. 15988, A. 15989, A. 15990, A. 15991, A. 15992, A. 15993, A. 15994, A. 15995, A. 15996, A. 15997, A. 15998, A. 15999, A. 16000.

DRAWING CONTENT
 SITE PLAN

ISSUANCE:
 PLANNING SUBMITTAL 1/27/2021

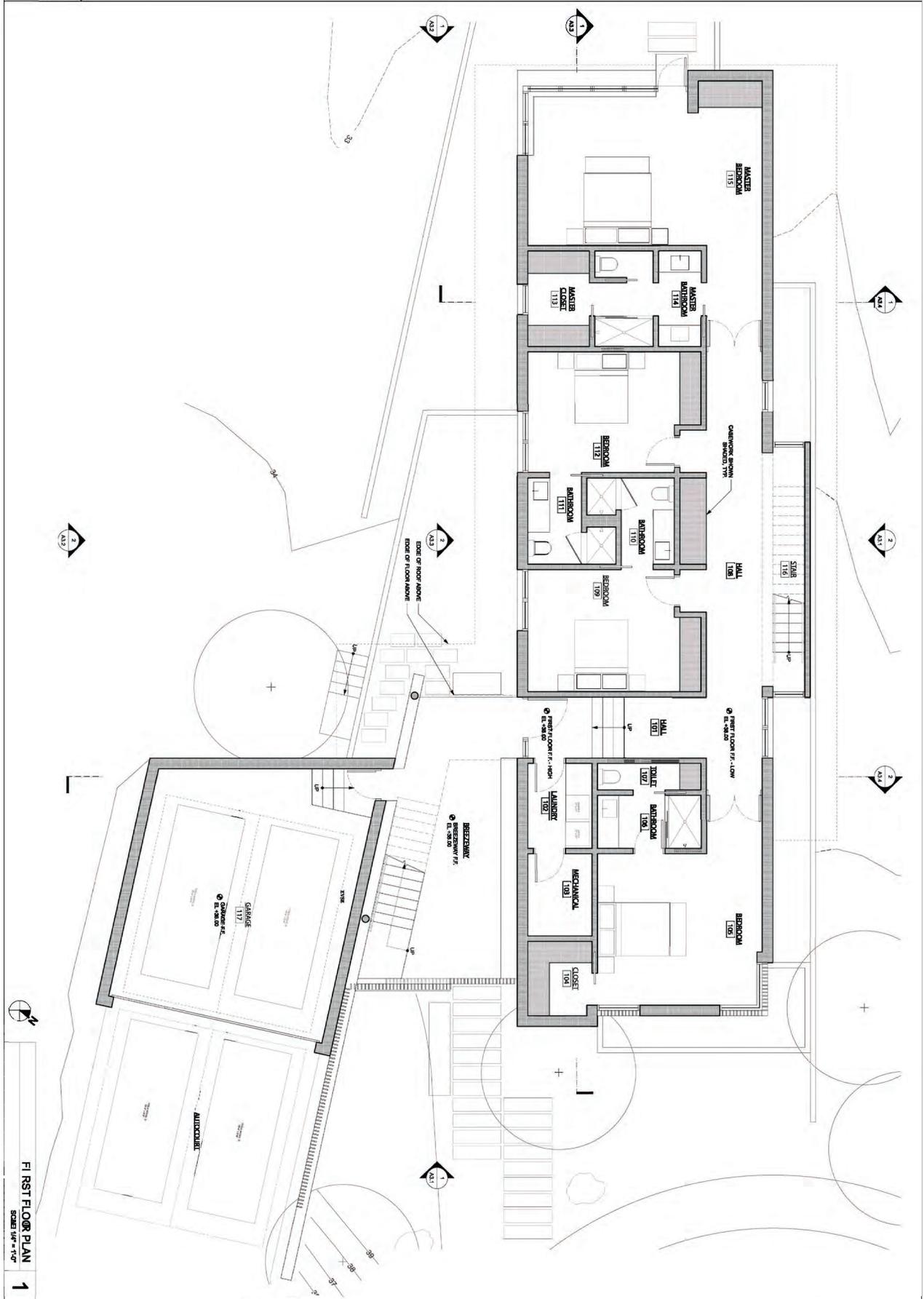
SHEET REVISIONS

PLANNING SUBMITTAL	1/26/2022
PLANNING SUBMITTAL	5/20/2020
REVISION 02	

PROJECT ADDRESS:
 2800 CHAMPS-ELYSEE
 HALF MOON BAY
 CA 94019

HAYES GROUP ARCHITECTS, INC.
 2857 SPRING STREET
 P. 650.385.0370
 F. 650.385.0370
 www.hayesgroup.com

HAYES GROUP ARCHITECTS, INC.
 ARCHITECTS



FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
1

A2.1



DRAWING CONTENT
FIRST FLOOR PLAN

STAMP

JOB NUMBER:
 SCALE:
 DATE:
 DRAWN BY:
 CHECKED BY:

SHEET REVISIONS

1	PLANNING SUBMITTAL	11/26/22
2	PERMISSION SUBMITTAL	5/30/2020

ISSUANCE:
 PLANNING SUBMITTAL 11/27/2021

PROJECT ADDRESS:
 2800 CHAMPS ELYSEE
 HALF MOON BAY
 CA 94019

HAYES GROUP ARCHITECTS, INC.
 2857 SPRING STREET
 P.O. BOX 385 0870
 F. BOX 385 0870
 www.hayesgroup.com



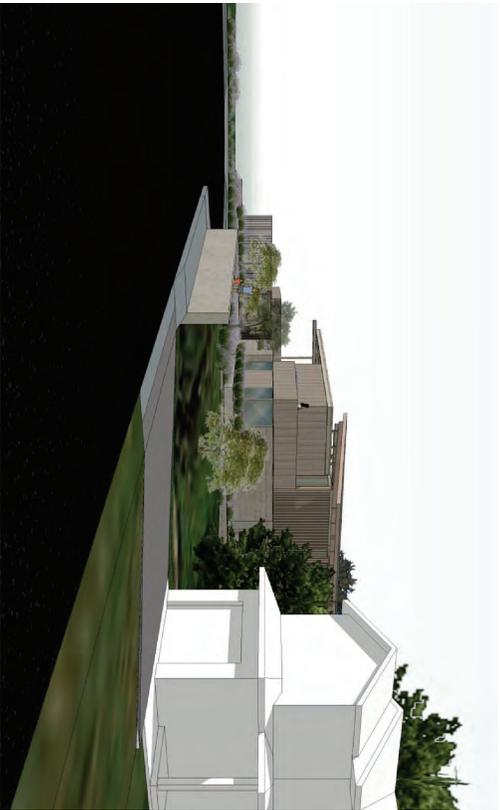
VIEW LOOKING NORTH FROM YOUNG AVE
 SCALE: N.T.S.



VIEW LOOKING SOUTHWEST FROM CHAMPS ELYSEE
 N.T.S.



VIEW LOOKING WEST FROM SIDEWALK TOWARD BREEZEWAY
 SCALE: N.T.S.



VIEW LOOKING SOUTH FROM 2804 CHAMPS ELYSEE
 SCALE: N.T.S.

**HAYES
 GROUNDS
 ARCHITECTS**

HAYES GROUP ARCHITECTS, INC.
 2657 SPRING STREET
 P. 650.385.0600 CA 94089
 F. 650.385.0370
 www.hayesgroup.com

PROJECT ADDRESS:
 2800 CHAMPS ELYSEE
 HALF MOON BAY
 CA 94019

ISSUANCE: 12/27/2021
 PLANNING SUBMITTAL

SHEET REVISIONS
 1. PLANNING SUBMITTAL 11/26/2022
 2. PLANNING SUBMITTAL 12/23/2022
 3. PLANNING SUBMITTAL 12/23/2022
 4. REVISION #2 5/30/2023

2

DRAWING CONTENT
 PERSPECTIVE VIEWS

STAMP


JOB NUMBER:
 SCALE:
 AS NOTED
 DRAWN BY:
 ALL drawings and written materials contained herein are the property of Hayes Group Architects, Inc. and shall remain the property of Hayes Group Architects, Inc. without the written consent of Hayes Group Architects, Inc.
 DRAWING NUMBER:

A4.1



VIEW LOOKING EAST FROM ALAMEDA AVE

SCALE: NTS 1

**HAYES
 GROUNDS
 ARCHITECTS**

HAYES GROUP ARCHITECTS, INC.
 2857 SPRING STREET
 P.O. BOX 382000
 SAN FRANCISCO, CA 94138
 P: 650.385.0370
 www.hayesgroup.com

PROJECT ADDRESS:
 2800 CHAMPS ELYSEE
 HALF MOON BAY
 CA 94019

ISSUANCE: 11/27/2021
PLANNING SUBMITTAL: 11/27/2021

- SHEET REVISIONS**
- △ PLANNING SUBMITTAL 11/27/2021
 - △ REVISION #2
 - △
 - △
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DRAWING CONTENT
PERSPECTIVE VIEWS

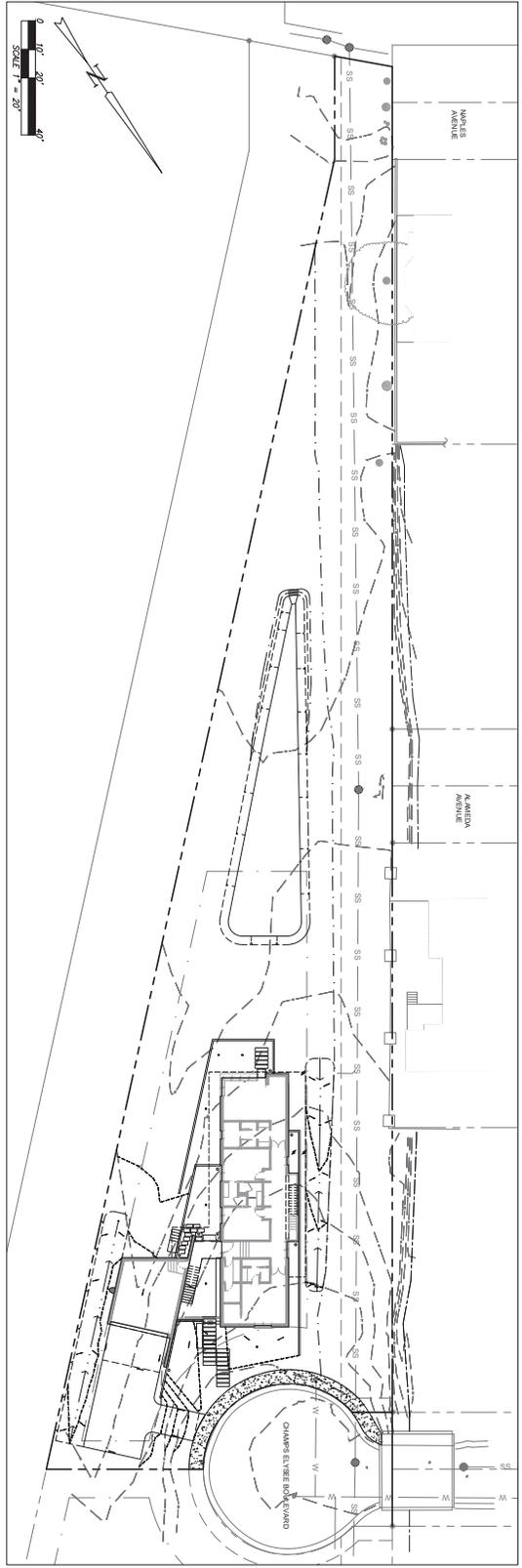
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JOB NUMBER:
SCALE:
DATE:
DRAWN BY:
 All drawings and written materials contained herein constitute the original and copyrighted work of Hayes Group Architects, Inc. and shall remain the property of Hayes Group Architects, Inc. without the written consent of Hayes Group Architects, Inc.

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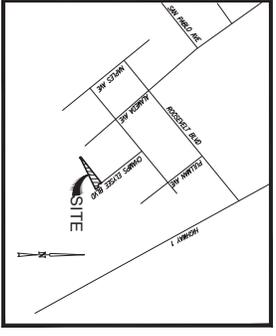
2800 CHAMPS ELYSEE BOULEVARD PROPERTY

HALF MOON BAY, CALIFORNIA



- NOTES:**
- CONSTRUCTION WORK SHALL BE LIMITED TO THE HOURS OF 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY. NO WORK SHALL BE PERFORMED ON SATURDAY, SUNDAY, OR PUBLIC HOLIDAYS.
 - CONFORMANCE WITH SECTION 14.40.01 OF THE HALF MOON BAY MUNICIPAL CODE. PROPERTY AND BUSINESS OWNERS AND A COPY OF SUCH NOTICE TO THE CITY ENGINEER A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY PLANNED DISRUPTION OF FOOTSTRAFFIC OR TRAFFIC.
 - CONSTRUCTION MATERIAL STORAGE: CONSTRUCTION MATERIAL SHALL NOT BE STORED IN THE STREET OR ON THE SIDEWALK.
 - UNDERGROUND UTILITIES SERVICES: ELECTRICAL, TELECOMMUNICATION, AND GAS AND UTILITY SERVICE TO THE PROPERTY SHALL BE THROUGH UNDERGROUND SERVICE CONNECTIONS ONLY. NO OPENING SHALL BE MADE IN THE SIDEWALK OR DRIVEWAY FOR ANY ABOVE-GROUND UTILITY SERVICE. (IF APPLICABLE), WATER (DOMESTIC AND FIRE), CABLE TELEVISION, TELEPHONE, ELECTRICAL, AND GAS.
 - CONNECTIONS THAT ARE LESS THAN TWENTY (20) FEET APART SHALL BE REPAIRED WITH A SINGLE TRENCH. CONNECTIONS THAT ARE MORE THAN TWENTY (20) FEET APART SHALL BE REPAIRED WITH A SINGLE TRENCH. ALL TRENCHES SHALL BE REPAIRED WITH A 2-INCH THICK ASPHALT CONCRETE OVERLAY PATCH ON EXISTING PAVEMENT ACROSS THE PROPERTY FRONTAGE.

VICINITY MAP



ABBREVIATION:

AMP	AMPERE	AMP	AMPERE
ASPH	ASPHALT	ASPH	ASPHALT
AV	AIR VALVE	AV	AIR VALVE
BE	BENCH MARK	BE	BENCH MARK
BO	BOX	BO	BOX
BR	BRICK	BR	BRICK
BS	BRICK SURFACE	BS	BRICK SURFACE
BU	BURIED	BU	BURIED
CA	CONCRETE	CA	CONCRETE
CB	CONCRETE BLOCK	CB	CONCRETE BLOCK
CC	CONCRETE CURB	CC	CONCRETE CURB
CD	CONCRETE DRIVEWAY	CD	CONCRETE DRIVEWAY
CE	CONCRETE EDGE	CE	CONCRETE EDGE
CF	CONCRETE FINISH	CF	CONCRETE FINISH
CG	CONCRETE GRASS	CG	CONCRETE GRASS
CH	CONCRETE HATCH	CH	CONCRETE HATCH
CI	CONCRETE INTERLOCK	CI	CONCRETE INTERLOCK
CJ	CONCRETE JUNCTION	CJ	CONCRETE JUNCTION
CK	CONCRETE KICK	CK	CONCRETE KICK
CL	CONCRETE LAY	CL	CONCRETE LAY
CM	CONCRETE MANTLE	CM	CONCRETE MANTLE
CO	CONCRETE OVERTURN	CO	CONCRETE OVERTURN
CP	CONCRETE PAVEMENT	CP	CONCRETE PAVEMENT
CQ	CONCRETE QUARRY	CQ	CONCRETE QUARRY
CR	CONCRETE RAMP	CR	CONCRETE RAMP
CS	CONCRETE SIDEWALK	CS	CONCRETE SIDEWALK
CT	CONCRETE TRENCH	CT	CONCRETE TRENCH
CU	CONCRETE UNDERLAY	CU	CONCRETE UNDERLAY
CV	CONCRETE VALVE	CV	CONCRETE VALVE
CW	CONCRETE WALL	CW	CONCRETE WALL
CX	CONCRETE WALK	CX	CONCRETE WALK
CY	CONCRETE YARD	CY	CONCRETE YARD
CZ	CONCRETE ZONE	CZ	CONCRETE ZONE
DA	DRIVEWAY	DA	DRIVEWAY
DB	DRIVEWAY BOX	DB	DRIVEWAY BOX
DC	DRIVEWAY CURB	DC	DRIVEWAY CURB
DD	DRIVEWAY DRIVE	DD	DRIVEWAY DRIVE
DE	DRIVEWAY EDGE	DE	DRIVEWAY EDGE
DF	DRIVEWAY FINISH	DF	DRIVEWAY FINISH
DG	DRIVEWAY GRASS	DG	DRIVEWAY GRASS
DH	DRIVEWAY HATCH	DH	DRIVEWAY HATCH
DI	DRIVEWAY INTERLOCK	DI	DRIVEWAY INTERLOCK
DJ	DRIVEWAY JUNCTION	DJ	DRIVEWAY JUNCTION
DK	DRIVEWAY KICK	DK	DRIVEWAY KICK
DL	DRIVEWAY LAY	DL	DRIVEWAY LAY
DM	DRIVEWAY MANTLE	DM	DRIVEWAY MANTLE
DN	DRIVEWAY OVERTURN	DN	DRIVEWAY OVERTURN
DO	DRIVEWAY OVERLAY	DO	DRIVEWAY OVERLAY
DP	DRIVEWAY PAVEMENT	DP	DRIVEWAY PAVEMENT
DQ	DRIVEWAY QUARRY	DQ	DRIVEWAY QUARRY
DR	DRIVEWAY RAMP	DR	DRIVEWAY RAMP
DS	DRIVEWAY SIDEWALK	DS	DRIVEWAY SIDEWALK
DT	DRIVEWAY TRENCH	DT	DRIVEWAY TRENCH
DU	DRIVEWAY UNDERLAY	DU	DRIVEWAY UNDERLAY
DV	DRIVEWAY VALVE	DV	DRIVEWAY VALVE
DW	DRIVEWAY WALL	DW	DRIVEWAY WALL
DX	DRIVEWAY WALK	DX	DRIVEWAY WALK
DY	DRIVEWAY YARD	DY	DRIVEWAY YARD
DZ	DRIVEWAY ZONE	DZ	DRIVEWAY ZONE

LEGEND:

DESCRIPTION	TO BE CONSTRUCTED	EXISTING
PROPERTY LINE	---	---
CENTRAL LINE	---	---
CURB AND GUTTER	---	---
SIDEWALK	---	---
CITY SURVEY MONUMENT	---	---
FIRE HYDRANTS	---	---
ELECTRODIPPER (REPAIRED/RELOCATED)	---	---
FULL BOX	---	---
P & E SERVICE POINT	---	---
SAWTOOTH SEWER	---	---
STORM SEWER	---	---
WATER	---	---
GAS	---	---
ELECTRIC CONDUIT	---	---
JOINT TRENCH	---	---
SAWTOOTH MANHOLE	---	---
STORM MANHOLE	---	---

SHEET INDEX:

C10	TITLE SHEET
C20	GROUND & UTILITY PLAN
C21	GROUND & UTILITY PLAN
C22	GROUND & UTILITY PLAN
C23	DETAILS & UTILITY PLAN
C24	EROSION CONTROL PLAN
C25	CONSTRUCTION BIDS

SITE ADDRESS: 2800 CHAMPS ELYSEE BOULEVARD PROPERTY, HALF MOON BAY, CALIFORNIA

PROJECT BENCHMARK: 171144, BEING A BENS DISK IN CONCRETE LOCATED ON FRECHMAN DRIVE ROAD AT HIGHWAY 1.

DATE: 05/20/2024

SCALE: 1" = 20'

DATE: 05/20/2024

SCALE: 1" = 20'

DATE: 05/20/2024

SCALE: 1" = 20'



NOTICE OF FINAL LOCAL ACTION
Coastal Development Permit
City of Half Moon Bay Planning Division
501 Main Street, Half Moon Bay, CA 94019
(650) 726-8250 FAX (650) 726-8261

**FINAL LOCAL GDP
ACTION NOTICE**
CCC Received: 6/05/25
CCC Reference: 2-HMB-25-0595
Appeal Period: 6/06-6/19/2025
Logged By: Galen Travis

Date: June 5, 2025 File: PDP-17-055

Applicant: Mark Massara
4285 Oak View Road
Santa Ynez, CA 93460

Planner: Scott Phillips, Senior Planner

This notice is being distributed to the Coastal Commission and to those who requested notice. The following project is located within the appeals jurisdiction of the Coastal Zone. The City Council approved the Coastal Development Permit on June 3, 2025, by Resolution No. C-2025-34. The City Council's decision is the final City decision on the project.

Project Description: PDP-17-055 Coastal Development Permit and Architectural Review for the construction of a new residence and associated site improvements within the Stoloski-Gonzalez PUD Land Use Designation and Residential High Density Planned Unit Development Zoning District

Project Location: 2800 Champs Elysee Blvd

Term of Permit: This permit shall expire one year from the date the appeal period ends if development authorized by the permit has not commenced.

Final Action: Approved by the City Council at a public hearing on June 3, 2025, based upon findings and conditions contained in Resolution C-2025-34.

This project is located within the Appeals Jurisdiction of the California Coastal Commission. The City's final action (approval) on this Coastal Development Permit is appealable to the California Coastal Commission.



June 5, 2025

California Coastal Commission
Attn: Isobel Cooper
455 Market Street, Suite 300
San Francisco, CA 94105

Subject: PDP-17-055 – Coastal Development Permit and Architectural Review for the construction of a new residence and associated site improvements within the Stoloski-Gonzalez PUD Land Use Designation and Residential High Density Planned Unit Development Zoning District.

Dear Ms. Cooper:

Attached is the Notice of Final Action for a Coastal Development Permit for the above project, which was approved by the Half Moon Bay City Council on June 3, 2025. The City Council's decision is the final City decision on this project.

This project *is* located within the Appeals Jurisdiction of the California Coastal Commission. The City's final action on this Coastal Development Permit is appealable to the California Coastal Commission. Approved by the City Council, Resolution C-2025-34, along with final approved drawings which may be accessed at the following link; <https://www.half-moon-bay.ca.us/DocumentCenter/View/6953/ATTACHMENT-3>

Should you have questions regarding the Notice of Final Action and supporting material, please contact me at wrescino@hmbcity.com.

Sincerely,

Whitney Rescino
Administrative Assistant
Community Development Department

RESOLUTION NO. C-2025-34

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HALF MOON BAY APPROVING THE COASTAL DEVELOPMENT PERMIT AND ARCHITECTURAL REVIEW TO ALLOW THE CONSTRUCTION OF A NEW 4,710 SQUARE-FOOT TWO-STORY RESIDENCE ON A 31,709 SQUARE-FOOT LOT AT 2800 CHAMPS ELYSEE BOULEVARD IN THE PLANNED UNIT DEVELOPMENT ZONING DISTRICT AND THE RESIDENTIAL-LOW DENSITY GENERAL PLAN DESIGNATION (APN 048-133-060)

WHEREAS, an application was submitted requesting approval of a Coastal Development Permit and Architectural Review to allow the construction of a new 4,710 square-foot two-story, single-family residence on a 31,709 square-foot lot at 2800 Champs Elysee Boulevard in the Planned Unit Development Zoning District and the Stoloski/Gonzalez Planned Development District General Plan designation (APN: 048-133-060) (the Project); and

WHEREAS, the procedures for processing the application have been followed as required by law; and

WHEREAS, the Architectural Advisory Committee (AAC) conducted duly noticed public design review sessions on September 22, 2022, and December 15, 2022, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, at the second meeting, the AAC was supportive of the revised design and had only minor suggestions for design changes, which were integrated into the Project design as feasible; and

WHEREAS, the Planning Commission conducted duly noticed public hearings on August 14, 2018, April 9, 2019, May 26, 2020, July 11, 2023, and September 10, 2024, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the Planning Commission considered the Local Coastal Land Use Plan when reviewing this Project and determined that the Project did not comply with certain applicable policies of the Land Use Plan; and

WHEREAS, the Planning Commission considered the municipal code, including the zoning ordinance when reviewing this Project and determined that the Project complied with the applicable regulations of the municipal code; and

WHEREAS, the Planning Commission considered all written and oral testimony presented for consideration; and

WHEREAS, the Planning Commission was not able to make the required findings for the requested Coastal Development Permit and Architectural Review and therefore did not approve the requested permits and Project, as set forth in Exhibit A to this resolution; and

WHEREAS, on September 10, 2024, the Planning Commission denied the requested permits by a 3-0 vote, with two of the Planning Commissioners absent; and

WHEREAS, an application for appeal was filed on September 13, 2024, appealing the Planning Commission's decision to the City Council; and

WHEREAS, on October 15, 2024, the City Council conducted a duly noticed public hearing to consider the appeal. After two unsuccessful motions, the City Council denied the appeal on a split vote (2 ayes and 2 no) with one councilmember recused; and

WHEREAS, on December 23, 2024, the Project applicant filed a lawsuit challenging the City's denial of the application in San Mateo Superior Court, Case No. 24-CIV-08216 (Lawsuit); and

WHEREAS, City consultant Schaaf & Wheeler completed in April 2025 modeling and analysis of on- and off-site Project impacts, to ensure that (i) the Project will not cause or contribute to flooding, as required by Land Use Plan (LUP) Policy 7-51, and (ii) the flood control measures will not create adverse direct and/or cumulative impacts on- or off-site, as required by LUP Policy 7-57; and

WHEREAS, on May 6, 2025, the City Council considered and exercised its discretion to approve a settlement agreement between the Project applicant and City to resolve the Lawsuit; and

WHEREAS, the settlement agreement required the City Council to consider the Project again at a public meeting; if the City Council approved the Project, the applicant agreed to dismiss the Lawsuit; and

WHEREAS, on June 3, 2025, the City Council conducted a duly noticed public hearing to consider the Project; and

WHEREAS, the City Council has determined that the Mitigated Negative Declaration and Mitigation, Monitoring and Reporting Program previously adopted with the approval of the Coastal Development Permit and Tentative Parcel Map for the property is adequate for evaluating and mitigating all potential environmental impacts associated with the construction of the new residence and associated improvements that are the subject of the requested Coastal Development Permit and Architectural Review. The construction of the new home is also categorically exempt from the California Environmental Quality Act per California Code of Regulations, Section 15303(a) – construction of one single-family residence; and

WHEREAS, the City Council has made the required findings for approval of the Project, set forth in Exhibit A to this resolution.

NOW, THEREFORE, BE IT RESOLVED that the City Council takes the following actions:

1. Finds that, on the basis of the whole record before it, there is no substantial evidence that the Project as proposed and mitigated will have a significant effect on the environment.
2. Approves the Project, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B.

PASSED AND ADOPTED by the City of Half Moon Bay City Council at a duly noticed public hearing held June 3, 2025.

I, the undersigned, hereby certify that the foregoing Resolution was duly passed and adopted on the 3rd day of June 2025, by the City Council of Half Moon Bay by the following vote:

Ayes, Councilmembers: NAGENGAST, PENROSE, RUDDOCK
 Noes, Councilmembers: JONSSON
 Absent, Councilmembers:
 Abstain, Councilmembers: BROWNSTONE

Attest:

APPROVED:

Maggie Rodriguez

Robert Brownstone

Maggie Rodriguez, Assistant City Clerk

Robert Brownstone, Mayor

EXHIBIT A
FINDINGS AND EVIDENCE
City Council Resolution C-25-34
PDP-17-055

Coastal Development Permit – Findings for Approval

The required Coastal Development Permit for this Project may be approved or conditionally approved only after the approving authority has made the following findings per Municipal Code Section 18.20.070:

1. **Local Coastal Program Land Use Plan** – *The development as proposed or as modified by conditions, conforms to the Local Coastal Program as certified by the California Coastal Commission on April 15, 2021.*

Compliance: The Project consists of construction of a new single-family residence on an infill site in an existing neighborhood where all public services and infrastructure are provided or can be easily extended to the site, including sewer, water, gas, and electric utilities. With the implementation of the required mitigation measures, the Project conforms to City requirements, will not impact coastal resources, and is consistent with the policies of the City's LUP.

LUP Policy 7-51. Flood Hazard Avoidance for New Development: Ensure that no new permitted development causes or contributes to flood hazards.

Compliance: The proposed development is not within a mapped flood zone. As shown by the September 11, 2024 and April 23, 2025 Schaaf & Wheeler reports, the Project will not cause or contribute to flood hazards. The report shows that potential impacts would only consist of a 0.4% increase in watershed flow, a .02-ft increase in water surface elevation in Pullman Ditch, and a .1-ft increase in water surface elevation at the property. Due to sensitivity of the modeling methods and conservative inputs used by the City's consultants, these represent maximum potential impacts. Moreover, the Project includes an irrevocable offer to dedicate a 30-foot easement adjacent to Pullman Ditch, which the City will be able to use to address any flooding issues, including those that are currently impacting the area.

LUP Policy 7-57. Flood Protection Evaluation: Require new development proposals to evaluate potential impacts to adjacent or downstream properties from all proposed structural flood protection measures to ensure that the flood protection measures will not create adverse direct and/or cumulative impacts either on-site or off-site.

Compliance: The April 23, 2025 Schaaf & Wheeler report and July 23, 2024 Waterways report show that the Project, including the associated flood protection measures, will not create adverse direct and/or cumulative impacts either on-site or off-site.

LUP Policy 2-71. Residential Siting and Design Standards: Require development of new and remodeled structures within established neighborhoods to be sited and designed to be:

- a. Compatible within each unique neighborhood area, including infrastructure and streetscape provisions such as walkways, street trees, and parking.
- b. Scaled and appropriate for the limitations of non-conforming sites, such as smaller residences on substandard sized parcels and those that must accommodate natural resources, hazards, watercourses, coastal access, and visual resource requirements.

Compliance: The proposed development is compatible within its neighborhood area and has been designed to avoid intrusion into habitat buffers.

Coastal Act 30240(b) and LUP Policy 6-12: *Development in areas adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.*

Compliance: The Pullman watercourse runs along the northern boundary of the subject property. The proposed Project has been designed to comply with the Riparian Buffer requirement within the Local Coastal Program Implementation Plan/Zoning Ordinance, which requires a 30-foot setback from the centerline of this span of the Pullman watercourse. Additionally, an update to the Biological Resource Assessment was prepared for the site and surrounding area and circulated to the resource agencies for a 45-day comment period. The biologist reviewed a copy of the plans. The report concluded that the mitigation measures included in the adopted Mitigated Negative Declaration are adequate for mitigating any potential effects on biological resources by the residential project. Given the distance of the subject improvements from the Pullman watercourse and the implementation of the required mitigation measures for biological resources, any significant impacts on environmentally sensitive habitat areas would be avoided.

LUP Policy 6-53. Non-Riparian Watercourse Buffers: Where a watercourse lacks riparian vegetation, the boundary of the watercourse is defined by the top of bank or similar confining topography. Proposed development along a non-riparian watercourse lacking riparian vegetation or other sensitive habitat value as determined by a site specific study, including man-made drainage ditches (e.g. non-riparian portions of Pullman Watercourse) but excluding active agriculture irrigation ditches, shall provide a minimum 20-foot buffer from the top of bank to provide space for potential meander belts and natural erosion and flooding hazards. The buffer requirements in Policies 6-49 and 6-50 shall apply to proposed development along a watercourse where a site-specific study identifies riparian vegetation or other sensitive habitat value.

Compliance: A non-riparian watercourse feature is located on the north side of the subject property. The proposed Project has been designed to comply with the non-riparian watercourses buffer requirements of the LUP (20 feet from top of bank) as well as the Zoning Ordinance buffer requirements (30 feet from the centerline). Additionally, a Biological

Resource Assessment and update were prepared for the site and surrounding area and included recommended mitigation measures. The mitigation measures included with the adopted CEQA document have been incorporated into the Conditions of Approval, including condition A8 requiring buffer protection, and the Mitigation Monitoring and Reporting Program in order to reduce or eliminate any potential impacts on biological resources to a less than significant level. No additional adverse impacts were identified during the most recent biological analysis that took place. Given the distance of the proposed improvements from the non-riparian watercourse, and the implementation of the required mitigation measures for biological resources, any significant impacts on environmentally sensitive habitat areas would be avoided.

LUP Policy 6-76: *Green Infrastructure:* Promote and prioritize the use of Low Impact Development (LID) strategies, Best Management Practices (BMPs), and on-site infiltration to create green infrastructure for treating and reducing stormwater runoff. In and adjacent to ESHA, use resource-dependent green infrastructure projects for natural restoration purposes and provision of buffer areas to allow for natural erosion, evolution of natural drainage flows, and sediment transport balance.

Compliance: Several LID strategies have been integrated into the Project, including stormwater runoff onto vegetated areas away from the Pullman watercourse. Additionally, grading has been limited to what is needed for the new home and stormwater detention basin installation. No grading would take place within the non-riparian watercourse buffer. BMPs would be implemented throughout construction. Policy compliance is demonstrated through the limited grading, in combination with the BMPs and stormwater detention.

LUP Policy 9-2: *Scenic Resource Protection:* New development shall be sited and designed to protect views to and along the ocean, to minimize the alteration of natural land form, to be visually compatible with the character of its setting, and, where feasible, to restore and enhance visual quality in visually degraded areas.

Compliance: The Project will require limited grading for the construction of the home foundation and flatwork including the driveway. The proposed development is visually compatible with the character of its neighborhood setting. The Project has been sited and designed to protect views of the ocean from Cabrillo Highway and views of the ridgeline from the California Coastal Trail.

LUP Policy 9-6: *Site Planning and Design for New Development:* Require new development to be subject to design review to ensure it is sited and designed to protect public views of scenic and visual resource areas and to be visually compatible with the character of the surrounding area. Measures to be considered may include, but are not limited to the following:

- a. Siting development in the least visible portion of the site;
- b. Breaking up the mass of new structures;
- c. Designing structures to blend into the surrounding natural landscape;
- d. Restricting building maximum size and height;

- e. Clustering or distributing development;
- f. Incorporating landscape elements and screening; and
- g. Conformance with any adopted design guidelines.

Compliance: The Project site is located within a designated visual resource area. The proposed residence is substantially similar to the bulk and mass of other developed residential lots within the Miramar neighborhood. The architecture and site improvements have been subject to design review by approval by the Planning Commission, with recommendations from the Architectural Advisory Committee (AAC). As shown in the evidence provided for Architectural Site and Design Review findings below, the Project is in compliance with the Design Review Findings. The proposed garage is attached to the main dwelling through an integral breezeway, resulting in a clustered development format. The mass, scale, and clustered development format will not impact the visual resource areas nearest this project site.

LUP Policy 9-10. *Fences, Walls, and Landscaping:* Ensure that fences, walls, and landscaping shall not block public views of or from scenic and visual resource areas including along scenic corridors, at parks and beaches, and other scenic public viewing areas through height restrictions and required landscape maintenance.

Compliance: The Project includes low-lying landscape walls around the perimeter of the new home. Split rail fence would be constructed along the riparian buffer edge and wrapped around the rear of the lot to limit access to the Further Restricted Area. Drought-tolerant, coastal-compatible landscaping has been included in the comprehensive landscape plan, which further supports compliance with this site planning and design policy of the LUP.

LUP Policy 9-12. *Town Boulevard Scenic Corridor:* Require that new development in close proximity to or easily visible from the Town Boulevard scenic corridor, including Highways 1 and 92:

- a. Protects views of visual resource areas as seen from the Town Boulevard, including views to the ocean, upland slopes (i.e., minimizes intrusions into the ridgeline), and the historic Johnston House;
- b. Incorporates design standards such as screening of commercial parking areas and landscaping provisions; and
- c. Is visually compatible with the surrounding land and development.

Update the IP with additional standards for new development along the Town Boulevard based on additional study of the scenic corridor. Assessment should, at a minimum, consider views of visual resource areas from the perspective of existing and potential development along the Town Boulevard and identify scenic segments along Highway 1 and 92, including views of the ridgelines and other visual resource areas. Development standards should address, at a minimum, appropriate building heights and setbacks, longest wall lines, minimum space between buildings, and streetscape design.

Compliance: The Project has been reviewed by the AAC on two occasions. The ACC considered story pole installations and the potential impact of the home design relative to the Town Boulevard Scenic Corridor and views from the California Coastal Trail. The conclusion was that the design is substantially compatible with surrounding land and development. The custom home was designed with unique site conditions on mind, including the angular shape of the lot and the mature Cypress trees along the southern property line.

LUP Policy 9-16. Broad Ocean Views: Ensure that areas providing broad, public ocean views, including as designated on Figure 9-1, are preserved and enhanced in association with new development projects. In such areas, structures shall be sited and designed to avoid obstruction of broad, public ocean views, shall not exceed 15 feet in height unless an increase in height would not obstruct public views to the ocean or would facilitate clustering of development so as to result in greater view protection, and shall ensure that any proposed landscaping, when mature, will not obstruct public views to the ocean.

Compliance: The new home is screened from view from Cabrillo Highway by the two neighboring homes to the east. Both neighboring homes are two story and one is currently under construction. Broad ocean views would not be impacted by the new home.

LUP Policy 9-17. California Coastal Trail Views. Ensure that views of the ocean, bluffs, upland slopes, and ridgelines from the California Coastal Trail are protected, particularly in areas adjacent to substantially undeveloped Planned Developments (PDs) including Surf Beach/Dunes Beach, Venice Beach, West of Railroad, and North Wavecrest. Require sufficient setbacks, height limits, and other design standards for any new development permitted near the trail to minimize impacts to visual resources.

Compliance: The Project will not obstruct ridgeline views from the California Coastal Trail as demonstrated by the story pole installation. The height and location of the installed story poles were verified by a licensed surveyor as demonstrated by a submitted verification letter from the surveyor and applicant.

Coastal Act 30244: *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Compliance: According to the LUP, the proposed single-family residence is located in an area identified as sensitive for archaeological resources; however, during environmental review, no known archeological resources were identified on the site or adjacent properties. If cultural resources or paleontological resources are unexpectedly encountered during subsurface excavation, the permit has been conditioned to require that construction halt until the find can be evaluated and appropriate mitigation identified.

LUP Policy 2-41: Continued Development in Substantially Developed Planned Developments. Allow continued development within substantially developed PDs provided that additional development falls within the maximum allowed buildout as established in the LUP and certified master plan for the PD. Additional development may be allowed as follows:

- a. Remaining parcels or phases as consistent with the approved master plan;
- b. Minor modification including changes of use of and additions to existing development as consistent with allowed uses and the siting and design requirements of the approved master plan and compatible with the existing development.

Compliance: The Project is located within the Stoloski/Gonzalez PD District. The entire PD site has been planned as a unit through the Subdivision Map, Planned Unit Development Plan, and subsequent settlement agreement that established development standards for the entire Stoloski/Gonzalez PD. The new residence and associated improvements conform to the development chapter and related policies of the LUP. The subject property is one of four lots within the Stoloski/Gonzalez PD. The new residence and site improvements conform to the development standards that were adopted with the Planned Development.

2. **Growth Management System** – *The development is consistent with the annual population limitation system established in the Land Use Plan and Zoning Ordinance.*

Evidence: The proposed site was granted a valid Measure D Certificate for the construction of one single-family residence. Therefore, the project conforms to the requirements of the City's growth management system.

3. **Zoning Provisions** – *The development is consistent with the use limitations and property development standards of the base district as well as the other requirements of the Zoning Ordinance.*

Evidence: The proposed residence conforms to all requirements of the approved PUD Development Standards associated with the subdivision approval, including lot coverage, setbacks, height, and parking, and to the Zoning Code's riparian buffer requirements.

4. **Adequate Services** – *The proposed development will be provided with adequate services and infrastructure in a manner that is consistent with the Local Coastal Program.*

Evidence: The site is located adjacent to an existing developed neighborhood and utilities and services are currently provided to the site. The utilities and roadway were extended from the City of Naples Subdivision shortly after the Final Parcel Map was recorded. As conditioned, a sewer permit through Granada Community Services District is required.

5. **California Coastal Act** – *Any development to be located between the sea and the first public road parallel to the sea conforms to the public access and public recreation policies of Chapter 3 of the California Coastal Act.*

Evidence: The proposed Project is located between the sea and the first public road parallel to the sea. The proposal is to construct a new single-family home and associated improvements on a vacant lot adjacent to an existing developed neighborhood. Adequate public access to the Coastal Trail, Naples Beach, and the coast is available approximately 300 feet away from the subject property, along Washington Boulevard. Therefore, sufficient access to coastal resources from the subject property and surrounding area is available as required by Chapter 18.40 of the Zoning Ordinance and the Project would not restrict public access or recreation opportunities.

General Plan Housing Element Conformance – Findings for Approval

The Project is consistent with the Housing Element as it relates to the residential use of the site.

Evidence: The subject property is identified as a site suitable for residential development within the Cycle 5 Housing Element and the Cycle 6 draft Housing Element.

Architectural Site and Design Review – Findings

The required Architectural and/or Site and Design Review for this Project may be approved or conditionally approved only after the approving authority has made the findings per Municipal Code Section 14.37.040. In making these findings, the City Council has considered the design approval criteria set forth in Municipal Code Section 14.37.035.

1. *That such buildings, structures, planting, paving and other improvements shall be so designed and constructed that they will not be of unsightly or obnoxious appearance to the extent that they will hinder the orderly and harmonious development of the city;*

Evidence: Zoning Code Section 18.06.010 states that the intent of the residential chapter is to establish residential districts and guide the orderly development within each district. It further states that the residential district regulations are intended to ensure provision of adequate light, air, privacy, and open space for each dwelling by establishing reasonable development standards for the mass, scale, and location on a building site for all new residential construction and to achieve a high standard of site and building design and design compatibility with surrounding neighborhoods. The proposed improvements have been designed in conformance with the requirements of the adopted PUD Development Standards. The proposed home, although large, is also in substantial conformance with the Single-Family Residential Design Guidelines, the objectives of which include ensuring compatible design within existing neighborhood contexts. The development is also in scale with the site which is significantly larger than most others in the adjacent Miramar neighborhood.

2. *That such buildings, structures, planting, paving and other improvements will not impair the desirability or opportunity to attain the optimum use and the value of the land and the*

improvements, or otherwise impair the desirability of living or working conditions in the same or adjacent areas; and

Evidence: The proposed project has been designed in conformance with the requirements of the PUD (Stoloski/Gonzalez) Zoning District which are intended to ensure provision of adequate light, air, privacy, and open space for each dwelling by establishing reasonable development standards for the mass, scale, and location on a building site within the four-parcel Stoloski/Gonzalez subdivision. The Project is also in substantial conformance with the Single-Family Residential Design Guidelines (RDG), the objectives of which include maintaining strong property values, compatible neighborhoods, and a healthy environment.

3. *The project has been designed in conformance and consistency with the Single-Family Residential Design Guidelines (where applicable).*

Evidence: The RDG encourages flexibility in architectural design to reflect the community's eclectic character and seek to achieve compatible design within existing neighborhoods. The current Project proposes a neo-traditional design that is compatible with the existing pattern of development in the surrounding area in terms of building placement/orientation, massing, and materials and colors. The surrounding neighborhood can be characterized as having an eclectic mixture of architectural styles and features. This Project in particular involves the construction of a new two-story custom home that reflects the triangular shape of the lot.

The proposed design completely screens the garage and vehicle parking from Champs Elysee Boulevard. Consistent with Guidelines 2-11 and 2-12, the proposed design does “[d]eemphasize the garages’ presence as viewed from the public right-of-way” and “[s]ituate detached garages to the side or rear of the house to diminish the prominence of the garage door.”

Environmental Review – Finding

CEQA – The Project will not have a significant effect on the environment. Based on the whole record before the City Council (including the Initial Study and Mitigated Negative Declaration for the Stoloski/Gonzalez subdivision and staff and consultant review of the proposed residence), there is no substantial evidence that the Project will have a significant effect on the environment.

Substantial evidence supports the conclusion that no subsequent environmental review is required because there are no substantial changes in the circumstances under which the Project is to be undertaken that would result in new or substantially more severe environmental impacts requiring major revisions to the adopted Mitigated Negative Declaration, and there is no new information that involves new significant environmental effects or a substantial increase in the severity of previously identified environmental effects that would require preparation of an EIR or a subsequent or supplemental Mitigated Negative

Declaration pursuant to Public Resources Code Section 21166 and CEQA Guidelines Sections 15162.

Evidence: An Initial Study (IS) and Draft Mitigated Negative Declaration (MND) were prepared and adopted for approval of the Stoloski/Gonzalez four-residential lot subdivision and associated Planned Unit Development Plan in conformance with the requirements of CEQA. The proposed residence is located on one of those four lots, conforms to the requirements of the Plan, and is required to comply with the mitigation measures in the MND as a condition of approval. City staff reviewed the proposed project and did not identify any adverse significant effects on the environment. The project biologist reevaluated the site and prepared an update to the biological resource evaluation. No changed circumstances or new impacts to biological resources were identified through the update process. The biologist concluded that the mitigation measures adopted with the previous MND are appropriate for the new house and site improvements.

EXHIBIT B
CONDITIONS OF APPROVAL
City Council Resolution C-25-34
PDP-17-055

A. The following Conditions shall apply to the subject site:

1. CONFORMANCE WITH APPROVED PLANS. Development of the site shall conform to the approved plans entitled New Residence 2800 Champs Elysee Boulevard, Half Moon Bay, CA 94019 with a City date stamp of August 26, 2024, except for any revisions required by this permit. The Community Development Director and City Engineer shall review any change in impervious surface area; and the Director shall review and may approve any deviation from the approved plans that is determined minor in nature. Any other change shall require the submittal of a major modification application and fees and shall be subject to a public hearing as required by Title 18. (Planning)
2. CONFORMANCE WITH CONDITIONS OF APPROVAL. The Community Development Director shall review and may approve any deviation from the Conditions of Approval that is determined minor in nature. Any other change shall require the submittal of a major modification application and fees and shall be subject to a public hearing as required by Title 18. (Planning)
3. CONFORMANCE WITH THE MUNICIPAL CODE. No part of this approval shall be construed to permit a violation of any part of the Half Moon Bay Municipal Code. (Planning)
4. PREVIOUS CONDITIONS OF APPROVAL. This Project shall comply with the previous conditions of approval including mitigation measures from PDP-009-10, Resolution C-04-12. (Planning)
5. DEED RESTRICTION. A deed restriction shall be prepared, reviewed by the Community Development Director and City Attorney and recorded at the County Recorder's Office. The deed restriction shall identify the Further Restriction Area as a no-build easement. The deed restriction shall further require ongoing maintenance of the split rail fencing along the southern edge of the riparian buffer. (Planning)
6. LIGHTING. All exterior lighting shall be fully shielded so that no light source is visible from outside the property, except as otherwise expressly approved. (Planning)
7. MAINTENANCE AND LIABILITY. It shall be the duty of the Property Owner(s) whose property is adjacent to any portion of a public street or place to maintain the project frontage in a safe and non-dangerous condition. Maintenance shall include removal and replacement of concrete to eliminate tripping hazards; and pruning and trimming of trees, shrubs, ground cover and other landscaping within the public right-of-way. The Property Owner has the

primary and exclusive duty to fund and perform such maintenance and repair, whether or not the City has notified the property owner of the need for such maintenance or repairs or has performed similar maintenance or repairs in the past, pursuant to §12.18.020 and §12.18.030 of the Half Moon Bay Municipal Code. (Engineering)

8. NON-RIPARIAN BUFFER PROTECTION. The applicant/owner shall protect the non-riparian buffer from encroachments and inappropriate uses. A split rail fence shall be installed and permanently maintained to demarcate the non-riparian buffer on the project site. No development or uses, including but not limited to grading and landscaping, are to be installed or conducted within the 30 foot riparian buffer from the centerline of Pullman watercourse on the Project site other than those types of developments or uses specifically allowed for, and only if permitted according to the standards of the Local Coastal Program. (Planning)
9. LANDSCAPE MAINTENANCE. The applicant/owner shall ensure that all landscaped areas and/or fences are continuously maintained, and all plant material is maintained free of refuse and weeds and in a healthy growing condition. (Planning)

B. The following Conditions shall be fulfilled prior to the issuance of building permits:

1. SIGNED CONDITIONS OF APPROVAL. The applicant/owner shall submit a signed copy of the conditions of approval to the Planning Division prior to issuance of a building permit. (Planning)
2. REQUIRED PLAN REVISIONS. Prior to issuance of building permits, the applicant shall submit revised plans providing the following:
 - a. Landscaping design and plans shall be updated to comply with the updated grading and drainage plans.
 - b. Solid railing along the east elevation balcony shall be modified to a glass railing. (Planning)
3. TSUNAMI DISCLOSURE AND DEED RESTRICTION. Prior to issuance of building permits, the permittee shall cause to be recorded a disclosure of hazard presence and a hold harmless clause against the property indemnifying the City from any harm caused to permitted development by tsunami inundation. The form of said disclosure and clause must be approved by the City Attorney. (Planning)
4. 30-FOOT EASEMENT. Prior to issuance of building permits, the property owner shall make an irrevocable offer to the City of dedication of an easement across the northerly 30 feet of the subject parcel, between Champs Elysee Boulevard to the east and State Parks land to the west. The purpose of the easement is to allow for possible future drainage improvements along the south side of the Pullman watercourse. The form and means of conveyance shall be reviewed and approved by the City Engineer and City Attorney prior to recording the easement at the San Mateo County Recorder and prior to issuance of the building permit. (Planning and Engineering)

5. FLOOD PROTECTION. Per Policy 7-55 of the Local Coastal Land Use Plan, the finished floor elevation shall be at least 2 feet above the 100-year flood event. In the event that the finished floor is less than 2 feet above the 100-year flood event, the house design shall be modified to be at least 2 feet above the 100-year flood event and subject to minor and major architectural modification review per conditions of approval A1 and A2. (Planning and Engineering)
6. U.S. ARMY CORPS OF ENGINEERS. The applicant shall obtain any necessary approvals that may be required from the U.S. Army Corps of Engineers. It is the applicant's responsibility to make sure the Project is in compliance with all of the Corps' requirements. (Engineering)
7. DEVELOPMENT IMPACT FEES. The following impact fees shall be paid to the City prior to issuance of building permits in conformance with the City's adopted Master Fee Schedule:
 - a) Sewer Connection Fee
 - b) Storm Drainage Fee
 - c) Capital Outlay Facilities Fee
 - d) Traffic Mitigation Fee
 - e) Park Facilities Fee (Planning and Engineering)
8. SCHOOL IMPACT FEES. The applicant shall provide proof of payment of required school Impact fees to Cabrillo Unified School District prior to issuance of building permits. (Building)
9. VALID MEASURE D CERTIFICATE. No building permit shall be issued unless the Measure D Certificate issued for the property has not expired and remains valid to the satisfaction of the Community Development Director. (Planning)
10. PROJECT BIOLOGIST. Prior to issuance of building permits, the applicant shall submit to the Director the name, company affiliation, and contact information of the Project biologist who will oversee the construction. The Project biologist shall be selected from the City's List of Pre-approved Biological Consultants to the satisfaction of the Community Development Director. The applicant shall notify the Community Development Director in writing within 24 hours of any change in the Project biologist. (Planning)
11. PROJECT BIOLOGIST REVIEW OF LANDSCAPE PLAN AND EXCLUSIONARY FENCING PLAN. Prior to issuance of building permits, the Project biologist shall review and approve the landscape plan and plant list, to ensure that the landscaping will not negatively impact sensitive habitat within the study area. Additionally, a temporary wildlife exclusionary fencing plan shall be prepared and reviewed by the biologist to confirm that the temporary exclusionary fencing plan is in compliance with the adopted mitigation measures. (Planning)
12. CONSTRUCTION PLANS. File Number PDP-17-055 and the Conditions of Approval for this Project, as well as PDP-009-10, Resolution C-04-12 shall be provided on the cover page of

the building permit application plan submittal. All plans, specifications, engineering calculations, diagrams, reports, and other data for construction of the building and required improvements shall be submitted with the appropriate permit application to the City's Building and Engineering Divisions for review and approval. Computations and back-up data will be considered a part of the required plans. Structural calculations and engineering calculations shall be prepared, wet-stamped, and signed by an engineer or architect licensed by the State of California. The plans must show the location of the sewer connection and property line sewer cleanout. Construction plans shall indicate that there shall be no staging/storage of materials or any other use of the Pullman watercourse buffer area for construction purposes. (Planning)

13. PRE-CONSTRUCTION SITE MEETING. A pre-construction site inspection shall take place with City staff and the Project construction representative to review the requirements of the biological surveys and mitigation measures and to review construction site management, including parking, construction hours, and other conditions of approval, before ground disturbance is authorized. (Planning, Building, Engineering)
14. WATER CONSERVATION IN LANDSCAPING. The permittee shall submit a detailed landscape plan to the satisfaction of the Community Development Director. If the Project includes 500 square feet or more of irrigated landscaping (new or rehabilitated) the permittee shall submit landscape and irrigation plans and an Outdoor Water Efficiency Checklist that demonstrate compliance with the City's Water Conservation in Landscaping Ordinance (Chapter 13.04 of the Municipal Code) prior to issuance of building permits to the satisfaction of the Community Development Director. (Planning)
15. SURVEY REQUIRED. Submit a detailed topographic/site boundary survey certified by a licensed surveyor with building application plans. The survey shall include a baseline elevation datum point on, or close to the construction site, indicating existing grade of the datum. This datum point shall be permanent, marked, shall remain fixed in the field, and shall not be disturbed throughout the building process. Examples of datum points include: fire hydrants, manhole covers, survey markers, and street curbs. This datum point shall be shown on all site plans including revised/resubmitted plans. The survey must show the footprint and roof plan of the proposed residence and identify the existing grade elevations at the corners and roof ridgeline of the residence. (Building)
16. EVIDENCE OF WATER CONNECTION CAPACITY. Prior to the issuance of building permits, the permittee shall submit a letter from Coastside County Water District certifying that the subject site has an adequately-sized water connection for this approved Project. (Building)
17. EVIDENCE OF SEWER CONNECTION CAPACITY- GRANADA COMMUNITY SERVICES DISTRICT. The permittee shall comply with all applicable requirements of the Granada Community

Services District. Prior to the issuance of building permits, the permittee shall demonstrate issuance of a sewer permit from Granada Community Services District. (Building)

18. ACCESSIBILITY REQUIREMENTS. The proposed Project, including street improvements, shall comply with State of California and federal (ADA) accessibility standards and with the line of sight requirements of Half Moon Bay Zoning Code Section 18.06.040(B). (Building)
19. LOT GRADING, MATERIALS, EQUIPMENT AND VEHICLE STORAGE. No lot site grading, preparation, storage, or placement of construction materials, equipment, or vehicles shall take place prior to issuance of a building permit. Any earth movement on or off the site in excess of 50 cubic yards shall require the submittal of a grading plan for review by the City Engineer and issuance of a grading permit. Lot Grading includes, but is not limited to, any leveling, scraping, clearing, or removal of lot surface area. Materials, Equipment, and Vehicles include, but are not limited to:
 1. All masonry, wood, and steel construction materials;
 2. All construction-related equipment and storage containers; and
 3. All construction-related vehicles, including temporary trailers.
 4. As part of the Grading Permit the following will also apply.
 - a. Maintenance. Maintain adjacent streets in a neat, clean, dust free and sanitary condition at all times and to the satisfaction of the City Engineer.
 - b. Street Restoration. Any damage caused to the adjacent streets shall comply to approved engineering standards for street restoration.
 - c. Visual Inspection. Prior to commencement of work, an initial visual inspection of the existing street condition will take place between contractor and public works inspector. Upon completion of work, a final visual inspection of the street condition will take place. Any damage caused to the street will require restoration per approved engineering standards.
 - d. BMPs. Adhere to all relevant BMP's per California Stormwater Quality Association (CASQA) BMP handbook, latest edition.
 - e. All trucks hauling soil, sand and other loose materials shall be covered with tarpaulins or equal.
 - f. Stockpiles. Stockpiles of soil and other construction related materials must be protected. Cover stockpiles with plastic until material is moved offsite.
 - g. Dust Control. Always provide sufficient dust control measures for the entire project.
 - h. Haul Route. Submit Haul route for approval, showing where and how the excavated soil will be transported off site. Transportation of the exported soil through the existing neighborhood to the north is not allowed.
 - i. Caltrans Legal Truck Access. If soils transport utilizes Hwy 1, verify with Caltrans Legal Truck Access for any requirements you may need when transporting on Hwy 1.

- j. Notification Letters. Contractor shall provide written notifications to all affected residents and property owners, Police and Fire, a minimum of one week prior to the start of work. (Engineering)

NOTE: The owner will be responsible for the maintenance of the drainage system.

20. COPPER BUILDING ELEMENTS. The building plans shall specify that all copper building elements will be pre-patinated at the factory, or if patination will occur on the site, the plans shall identify best management practices in conformance with the *San Mateo Countywide Water Pollution Prevention Program Requirements for Architectural Copper*, to the satisfaction of the City Engineer. (Engineering)
21. LOT DRAINAGE PLAN AND ON-SITE DETENTION. Construction plans submitted for building permits shall include a Lot Drainage Plan showing how the surface runoff is retained on the site. Plans shall include design details and supporting calculations for storm water detention on-site for the additional run-off from a twenty five year frequency storm of two hour duration. Plans shall show how the rear and side yards will properly drain to an approved BMP facility, and how the finished grades on the property relate to the existing grades on adjacent property. Predevelopment runoff from adjacent parcels shall be addressed in the lot drainage plan and incorporated into the on-site detention system. The Plan shall include pad elevation, finished floor elevation, site high and low points, drainage swales, area drains, and existing grade at adjacent property. The permittee shall provide appropriate measures to discharge the flood waters from any unfinished floor areas. (Engineering)
22. STORMWATER MANAGEMENT-TREATMENT (FOR NON-REGULATED PROJECTS). Non-regulated projects consist of single-family residences and other small projects that create and/or replace less than 5,000 square feet of impervious surface. Runoff from the site may not enter into Pullman watercourse. Construction plans submitted for building permits shall include a storm water management-treatment plan showing implementation of at least one of the six Low Impact Development (LID) measures listed below:
 - a. Direct runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use;
 - b. Direct roof runoff into vegetated areas;
 - c. Direct runoff from sidewalks, walkways, and/or patios into vegetated areas;
 - d. Direct runoff from driveways and /or uncovered parking lots into vegetated areas;
 - e. Construct sidewalks, walkways, and/or patios with permeable surfaces; or
 - f. Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces. (Engineering)

- g. Permittee shall also submit the 'stormwater checklist for small projects' with the building plan submittal. (Engineering)
23. EROSION AND SEDIMENT CONTROL. An erosion and sediment control plan shall be submitted that shows effective BMPs and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet. Pullman watercourse shall be protected from erosion and sedimentation. (Engineering)
24. UNDERGROUND UTILITIES/SERVICES. Electric, telecommunication, and cable and utility service to the property shall be through underground service connections only. No overhead utilities are allowed. Show locations of all utility service connections: sanitary sewer, storm drain (if applicable), water (domestic and fire), cable television, telephone, electrical, and gas. (Engineering)
25. FIRE CLEARANCE REQUIREMENTS. The permittee shall comply with all applicable fire and building codes and standards relating to fire and panic safety as identified by the Coastside Fire Protection District during the building permit process. (Fire)
26. HARD-WIRED SMOKE DETECTORS/ALARMS. Pursuant to the adopted California Building and Residential Code, State Fire Marshal regulations and current Coastside Fire District Ordinance, the permittee shall install smoke detectors which are hard-wired, interconnected and have battery backup in each new or reconditioned sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. A minimum of one detector per floor is required. For alterations: If there is an attic, basement, crawl space or removal of a wall or ceiling that provides access, then all smoke alarms shall be hardwired and interconnected. Building plan submittals shall demonstrate conformance with these requirements to the satisfaction of the Building Official prior to issuance of building permits. (Fire)
27. COASTSIDE COUNTY WATER DISTRICT - REGULATIONS. The Project shall comply with all applicable regulations and requirements of the Coastside County Water District. Water service shall not be in the same trench as other utilities. (Water District)

C. The following conditions shall be implemented prior to and during construction:

1. TIMING OF NESTING BIRD AND RAPTOR SURVEYS. Biological surveys related to nesting birds and raptors, shall be conducted on all trees on the site and within 500 feet from the site for nesting raptors and 300 feet from the site for songbirds, regardless of the timing of the bird breeding season. The raptor and bird surveys shall be completed within 72 hours prior to the start of construction. (Planning)

2. TREE PROTECTION REQUIREMENTS. The following tree protection measures shall be implemented during construction:
 - a) Prior to commencement of construction, construction fencing shall be placed around the drip line of all trees proposed for preservation.
 - b) No grading or other construction shall occur within the drip line of any tree proposed for preservation except in conformance with a Tree Protection Plan approved by the Community Development Director.
 - c) No vehicle, equipment or materials shall be parked or stored within the drip line of any tree proposed for preservation.
 - d) New drainage basin west of the residence shall be sited and designed to avoid impacts to the Heritage trees on the site. (Planning, Building)
3. ARCHAEOLOGY-DISCOVERY OF HUMAN REMAINS. Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the California Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American(s). If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the permittee shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. (Planning)
4. ARCHAEOLOGY-DISCOVERY OF RESOURCES. If subsurface historic or archaeological resources are uncovered during construction, all work shall stop, the applicant shall notify the Community Development Director and retain a qualified archaeologist to perform an archaeological reconnaissance and identify any mitigation measures required to protect archaeological resources. Subsurface excavation shall not resume until expressly authorized by the Director. (Building)
5. SITE PROTECTION REQUIREMENTS. Construction fencing shall be installed along the southern edge of the 30 foot riparian buffer and eastern edge of the Further Restriction Area in order to prohibit access and protect these areas during construction. (Planning)
6. CONSTRUCTION TRAILERS. Temporary construction trailers are permitted as accessory uses in conjunction with the development of this site, subject to the following conditions:
 - a. The construction trailer shall be used as a temporary construction office only.
 - b. Neither sanitation facilities nor plumbed water is permitted within the trailer.
 - c. No overnight inhabitation of the construction trailer is permitted.

- d. No construction trailers are permitted on site prior to building permit issuance.
- e. The construction trailer shall be removed prior to issuance of a certificate of occupancy. (Planning)

7. AIR QUALITY BEST MANAGEMENT PRACTICES. The Project shall implement the following standard BAAQMD dust control measures during all phases of construction on the Project site:

- All active construction areas shall be watered twice daily or more often if necessary. Increased watering frequency shall be required whenever wind speeds exceed 15 miles-per-hour.
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads and parking and staging areas at construction sites.
- Cover stockpiles of debris, soil, sand, and any other materials that can be windblown. Trucks transporting these materials shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day or as often as necessary to keep them free of dust and debris associated with site construction. The use of dry power sweeping is prohibited.
- Subsequent to clearing, grading, or excavating, exposed portions of the site shall be watered, landscaped, treated with soil stabilizers, or covered as soon as possible. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more.
- Installation of sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replanting of vegetation in disturbed areas as soon as possible after completion of construction.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of Half Moon Bay regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. (Building)

8. HAZARDOUS MATERIALS. Any materials deemed hazardous by the San Mateo County Department of Health that are uncovered or discovered during the course of work under this permit shall be disposed in accordance with regulations of the San Mateo County of Health. (Building)

9. COMPLIANCE WITH CBC. All structures shall be constructed in compliance with the standards of the 2016 California Codes of Regulations Title 24, including Building Code, Residential Code, Administrative Code, Mechanical Code, Plumbing Code, Electrical Code, Energy Code, Fire Code and Green Building Code to the satisfaction of the Building Official. (Building)
10. FIRST FLOOR HEIGHT VERIFICATION. Prior to below floor framing or concrete slab steel reinforcement inspection, a stamped and signed building height verification letter shall be submitted to the City from a licensed land survey certifying that the first-floor height as constructed is equal to (or less than) the elevation specified for the first floor height in the approved plans. (Building)
11. BUILDING PAD ELEVATION. The building pad shall be at least one-foot above the centerline crown of the roadway or the top of the curb. (Engineering)
12. OVERALL PROJECT HEIGHT. Maximum overall height of the Project, including any grading, foundation, pad, and building elevations shall be calculated using the elevation points indicated on the topographic survey map submitted at the time of application. The approved height of all projects developed in the City will be measured from existing grade as indicated on the submitted topographical survey. (Building)
13. COMPLETION OF UTILITIES. Any public utilities requiring relocation as a result of the construction of the building(s) or improvements under this permit shall be relocated at the owner's expense. (Building)
14. CONSTRUCTION HOURS. Construction work shall be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday; 8:00 a.m. to 6:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays, except as expressly authorized by the City Engineer in conformance with Section 14.40.020 of the Half Moon Bay Municipal Code. (Engineering)
15. NOTICE OF DISRUPTION. The permittee shall provide written notice to affected property and business owners and a copy of such notice to the City Engineer a minimum of two business days prior to any planned disruption of pedestrian or vehicular traffic, parking, or public service facilities. (Engineering)
16. CONSTRUCTION MATERIAL STORAGE. Construction material shall not be stored in the street right-of-way without issuance of a Temporary Encroachment Permit. (Engineering)
17. ENCROACHMENT PERMIT. The permittee shall obtain an Encroachment Permit for any construction activity within the City right-of-way or affecting City improvements. Haul route and traffic control plan shall be included with the Encroachment Permit submittal. All improvements constructed within the City right-of-way shall conform to City standards to the satisfaction of the City Engineer.

- a. Please note that an encroachment permit may need to be submitted and approved for if the electrical work is required in the City's ROW. Based on the plans, I do not see an electrical stub out.
- b. The encroachment permit application can be submitted after the issuance of the building permit. Please see the attached street encroachment permit application.
- c. Please note that work within the Public ROW shall not start until the City of Half Moon Bay has received the contractor's information.
 - i. The Contractor for this work shall be a minimum a Class A Licensed Contractor.
 - ii. Once the contractor's information has been obtained, please submit the Contractor's Certificate of Insurance and Endorsement naming the City of Half Moon Bay as additionally insured and naming the City of Half Moon Bay as the Certificate Holder.
 - iii. Once the contractor's information has been obtained, please ensure that the contractor has an active business license with the City of Half Moon Bay.
- d. If electrical work is needed, trenching would most likely need to occur. Since trenching would occur within the Public ROW, Traffic Control Plans will be required as part of the submittal of the encroachment permit. (Engineering)

D. The following conditions shall be implemented prior to issuance of an occupancy permit:

1. EXTERIOR COLORS AND MATERIALS. Exterior building colors and materials shall be in substantial conformance with those shown on the approved color and materials board date-stamped 5/25/2020 to the satisfaction of the Director of Community Development. (Planning)
2. CCTV OF EXISTING SANITARY SEWER LATERAL LINE. To ensure the integrity of the existing private sanitary sewer lateral that is stubbed out, the Public Works Department requires a CCTV video for the private sewer lateral prior to the Public Works final of the building permit. (Engineering)
3. CONSTRUCTION OF STREET IMPROVEMENTS. All street improvements shall be constructed in conformance with approved plans and permits prior to issuance of a certificate of occupancy to the satisfaction of the City Engineer. (Engineering)
4. DISPLAY OF SINGLE-FAMILY STREET ADDRESS. Prior to issuance of a Certificate of Occupancy, the residential dwelling shall display an internally-illuminated street address number in a prominent location on the dwelling, visible from the street (a minimum of 6 feet above the surface of the driveway), and with contrasting background and letters/numbers that are 4 inches in height with a minimum 3/4-inch stroke. Where a building is set back from the street or otherwise obscured, a street address with 3-inch

reflective numbers/letters shall also be provided near the driveway entrance leading to the dwelling. (Fire, Building)

E. Validity and Expiration of Permits

1. **EFFECTIVE DATE.** This site is located within the Coastal Appeal Zone. This permit shall take effect after expiration of the Coastal Commission appeal period, or if the permit is appealed to the Coastal Commission during the appeal period, it shall take effect after final Coastal Commission action. (Planning)
2. **ACCURACY OF APPLICATION MATERIALS.** The permittee shall be responsible for the completeness and accuracy of all forms and material submitted for this application. Any errors or discrepancies found therein may be grounds for the revocation or modification of this permit and/or any other City approvals. (Planning)
3. **PERMIT EXPIRATION.** The Coastal Development Permit (CDP) and Architectural Review shall expire one year from its date of final approval if the use/development has not commenced in conformance with this permit or the applicant has not obtained an extension of the permit. (Planning)
4. **PERMIT EXTENSION.** The Community Development Director may, at the Director's discretion, approve a Minor Amendment for a single one-year extension of this permit based on a written request and fee submitted to the Director prior to expiration of the permit. Submittal of a Building Permit application with development plans prior to expiration of the permit shall constitute an extension of this permit until the building permit is issued or until the Building Official determines the applicant is no longer diligently pursuing the required building permit. Any other extension shall require approval of a Major Permit Amendment prior to expiration of the permit. Any Major Permit Amendment Application to extend the permit shall be filed a minimum of ninety (90) days prior to permit expiration to ensure adequate processing time. (Planning)
5. **PERMIT RUNS WITH THE LAND.** The approval runs with the land and the rights and obligations thereunder, including the responsibility to comply with conditions of approval, shall be binding upon successors in interest in the real property unless or until such permits are expressly abandoned or revoked. (Planning)
6. **HOLD HARMLESS.** To the fullest extent allowed by law, the permittee agrees as a condition of approval of this application to indemnify, protect, defend with counsel selected by the City, and hold harmless, the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents, from and against an and all liabilities, claims, actions, causes of action, proceedings, suits, damages, judgments, liens, levies, costs and expenses of whatever nature, including reasonable attorney's fees and disbursements (collectively, "Claims") arising out of or in any way relating to the approval

of this application, any actions taken by the City related to this entitlement, any review by the California Coastal Commission conducted under the California Coastal Act Public Resources Code Section 30000 et seq., or any environmental review conducted under the California Environmental Quality Act, Public Resources Code Section 210000 et seq., for this entitlement and related actions. The indemnification shall include any Claims that may be asserted by any person or entity, including the permittee, arising out of or in connection with the approval of this application, whether or not there is concurrent, passive or active negligence on the part of the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents. The permittee's duty to defend the City shall not apply in those instances when the permittee has asserted the Claims, although the permittee shall still have a duty to indemnify, protect and hold harmless the City. (City Attorney).

OWNER'S/PERMITTEE'S CERTIFICATION:

I have read and understand and hereby accept and agree to implement the foregoing conditions of approval of the Coastal Development Permit.

APPLICANT:

Mark Massara
(Signature)

6/4/2025
(Date)

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
 455 MARKET ST., SUITE 228
 SAN FRANCISCO, CA 94105-2420
 (415) 904-5260
 NORTHCENTRALCOAST@COASTAL.CA.GOV

RECEIVED

JUN 18 2025

APPEAL FORM

CALIFORNIA
 COASTAL COMMISSION
 NORTH CENTRAL COAST

Appeal of Local Government Coastal Development Permit

Filing Information (STAFF ONLY)

District Office: North Central Coast

2-HMB-25-0595

Appeal Number: _____

June 18, 2025

Date Filed: _____

Brad Steinwede

Appellant Name(s): _____

APPELLANTS

IMPORTANT. Before you complete and submit this appeal form to appeal a coastal development permit (CDP) decision of a local government with a certified local coastal program (LCP) to the California Coastal Commission, please review [the appeal information sheet](#). The appeal information sheet describes who is eligible to appeal what types of local government CDP decisions, the proper grounds for appeal, and the procedures for submitting such appeals to the Commission. Appellants are responsible for submitting appeals that conform to the Commission law, including regulations. Appeals that do not conform may not be accepted. Appeals must be received no later than 5 pm on the last day of the appeal period. If you have any questions about any aspect of the appeal process, please contact staff in the Commission district office with jurisdiction over the area in question (see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>).

Note regarding emailed appeals. Please note that emailed appeals are accepted **ONLY** at the general email address for the Coastal Commission district office with jurisdiction over the local government in question. For the North Central Coast district office, the email address is NorthCentralCoast@coastal.ca.gov. An appeal emailed to some other email address, including a different district's general email address or a staff email address, will be rejected. It is the appellant's responsibility to use the correct email address, and appellants are encouraged to contact Commission staff with any questions. For more information, see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>).

Appeal of local CDP decision

Page 2

1. Appellant information¹

Name: Brad Steinwede
Mailing address: 2801 Champs Elysee Blvd., Half Moon Bay CA 94019
Phone number: 404 434 8828
Email address: bsteinwede@mac.com

How did you participate in the local CDP application and decision-making process?

- Did not participate Submitted comment Testified at hearing Other

I submitted comment and testified at the Planning Commission Meeting :

Describe: August 10, 2024, and the City Council Appeals on October 15, 2024,
and the Second Appeal on June 3, 2025.

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe:

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe: Submitted Comment and Testified 3 times.
Additionally, the City's procedures were violated. Once the October 15, 2024 appeal had been denied, the second appeal was in violation of City code Chapter 1,25 Appeals : 1,25.070

¹ If there are multiple appellants, each appellant must provide their own contact and participation information. Please attach additional sheets as necessary.

Appeal of local CDP decision

Page 3

2. Local CDP decision being appealed²

Local government name: City of Half Moon Bay
Local government approval body: City Council
Local government CDP application number: PDP-17-055
Local government CDP decision: CDP approval CDP denial³
Date of local government CDP decision: 10/15/24 Denied - 6/3/25 Approved

Please identify the location and description of the development that was approved or denied by the local government.

Describe: A new 4,710 sq foot residence at 2800 Champs Elysee, identified as
San Mateo County Assessor's Parcel Number 148-133-060
(THE PROPERTY)

² Attach additional sheets as necessary to fully describe the local government CDP decision, including a description of the development that was the subject of the CDP application and decision.
³ Very few local CDP denials are appealable, and those that are also require submittal of an appeal fee. Please see the [appeal information sheet](#) for more information.

Appeal of local CDP decision

Page 4

3. Applicant information

Applicant name(s):

Mark Massara

65 Ventura Street, Half Moon Bay 94019

Applicant Address:

4. Grounds for this appeal⁴

For appeals of a CDP approval, grounds for appeal are limited to allegations that the approved development does not conform to the LCP or to Coastal Act public access provisions. For appeals of a CDP denial, grounds for appeal are limited to allegations that the development conforms to the LCP and to Coastal Act public access provisions. Please clearly identify the ways in which the development meets or doesn't meet, as applicable, the LCP and Coastal Act provisions, with citations to specific provisions as much as possible. Appellants are encouraged to be concise, and to arrange their appeals by topic area and by individual policies.

Describe: Each of the following points are elaborated, some with photographic

reference, some by City testimony, and one certified by a Senior

Environmental Scientist in the accompanying attachments. a) LCP Chapter 7,

Shoreline Hazards : the property is not 300 feet from Coastal Bluffs b) LCP

Chapter 7, 7.12.h : as such property will trigger the stability of the Coastal Bluffs

c) LCP Chapter 6, Hydromodification : alter the natural hydrologic processes

of the surface water in the wet season. Mapped Liquefaction zone.

d) Chapter 7, the hydrological report by Schaaf & Wheeler used data 10+ years out of date

and based only on modeling. This Property has flooded his historically.

e) LCP Chapter 2, Open Space for Conservation & 7.12.f ground water table never been

measured in wet season when water table is surficial. Property adjacent to CLP

property. f) CDP is not in accordance with City Half Moon Bay codes and procedures.

⁴ Attach additional sheets as necessary to fully describe the grounds for appeal.

Appeal of local CDP decision

Page 5

5. Identification of interested persons

On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

Interested persons identified and provided on a separate attached sheet

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name Brad Steinwede

Signature 

Date of Signature 6/18/2025

7. Representative authorization

While not required, you may identify others to represent you in the appeal process. If you do, they must have the power to bind you in all matters concerning the appeal. To do so, please complete the representative authorization form below and check this box to acknowledge that you have done so.

I have authorized a representative, and I have provided authorization for them on the representative authorization form attached.

⁵ If there are multiple appellants, each appellant must provide their own certification. Please attach additional sheets as necessary.

⁶ If there are multiple appellants, each appellant must provide their own representative authorization form to identify others who represent them. Please attach additional sheets as necessary.

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300
 SAN FRANCISCO, CA 94105-2219
 VOICE (415) 904-5200
 FAX (415) 904-5400

**DISCLOSURE OF REPRESENTATIVES**

If you intend to have anyone communicate on your behalf to the California Coastal Commission, individual Commissioners, and/or Commission staff regarding your coastal development permit (CDP) application (including if your project has been appealed to the Commission from a local government decision) or your appeal, then you are required to identify the name and contact information for all such persons prior to any such communication occurring (see Public Resources Code, Section 30319). The law provides that failure to comply with this disclosure requirement prior to the time that a communication occurs is a misdemeanor that is punishable by a fine or imprisonment and may lead to denial of an application or rejection of an appeal.

To meet this important disclosure requirement, please list below all representatives who will communicate on your behalf or on the behalf of your business and submit the list to the appropriate Commission office. This list could include a wide variety of people such as attorneys, architects, biologists, engineers, etc. If you identify more than one such representative, please identify a lead representative for ease of coordination and communication. You must submit an updated list anytime your list of representatives changes. You must submit the disclosure list before any communication by your representative to the Commission or staff occurs.

Your Name _____

CDP Application or Appeal Number _____

Lead Representative

Name _____

Title _____

Street Address. _____

City _____

State, Zip _____

Email Address _____

Daytime Phone _____

Your Signature _____

Date of Signature _____

Additional Representatives (as necessary)

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Your Signature _____

Date of Signature _____

Appeal to overturn approval of Half Moon Bay PDP-17-055 for a new 4,710sq foot residence at 2800 Champs Elysee, identified as San Mateo County Assessor's Parcel Number 148-133-060 (THE PROPERTY). Submitted by Brad Steinwede

At the Planning Commission Meeting on August 10, 2024 there was an exchange between David Gorn, Planning Commissioner, Margaret Gossett, the Planning Commission Chair and City Staff, Scott Phillips and Maz Bozorginia. Following is a transcript ...

David Gorn " It appears that the property is within 300ft of the bluff tops."

Maz and Scott "The measurement that I'm coming up with is 475ft"

Margaret Gossett – "Do you have an update?"

Scott Phillips – "Yes Madam Chair I'd be happy to provide an update on the linear distance, in the area of the Pullman watercourse there isn't actually a bluff edge, its dunes. So, in this case it would be the beach, the beach would be the end point, and we are definitely more than 300 feet from the western edge of the property to the eastern edge of the beach. It's not a bluff top."

Margaret Gossett – "Where would you consider the bluff tops to end, where the culvert has collapsed, or where the beach is, or is it in this case there is no clear delineation of where the bluff tops end?"

Scott Phillips – "Like I mentioned this area includes dunes and not a bluff per se. In this case it would be the beach end."

I contest this, the LCP clearly states otherwise. Additionally, the Biological Report for the Pullman Ditch Culvert Replacement that was referenced by Chair Gossett, and appears on the Half Moon Bay website contains the following, written and certified by Senior Environment Scientist, Joanne Kerbavaz on June 20, 2022.

https://www.half-moon-bay.ca.us/DocumentCenter/View/5042/2020_01

The proposed project is within a coastal bluff area impacted by previous road construction, agriculture, and other activities.

The property is 210 feet from the Coastal Bluffs and as such according to the Half Moon Bay – Local Coastal Land Use Plan, Chapter 7 / California Code Regs. Tit 14 13577 would trigger the further deterioration of the already comprised Coastal Bluffs. The photo that concludes this appeal demonstrates the property's proximity to the bluffs and that it presently and historically has been a swale, if this were to be displaced the water would be

directed to the coastal bluffs. This forms the grounds of this appeal. The 210 feet has been verified by a laser measure, and GIS from the property to the inland edge of the bluffs.



Of major concern are the Coastal Dunes immediately adjacent to 2800 Champs Elysee. They are already seriously damaged by the high velocity flow of ground water, this is the low point in the dunes beach agricultural PUD and the Stoloski Gonzales sub-division; and water that flows through and over the Pullman Ditch.

This is sheet flow across the Coastal Trail



7.12 (h) of the Coastal Land Use Plan

Storms are becoming more frequent, and the atmospheric rivers that feed into the Pullman ditch have carved a deep and widening chasm through the bluffs. The further addition of impervious surfaces at 2800 Champs Elysee, being the closest property at 210 feet from the bluffs will send more water into the chasm, and if the swale is disturbed it will further exacerbate this and will impact sea level rise over time. This would impact not only this property but an entire community.

From Chapter 6 of the LCP **HYDROMODIFICATION**

I contest, that the building of the property at 2800, undeveloped land, 210 feet from the coastal bluffs, will result in the modification of natural hydrologic processes of the surface water present, through increased runoff from impervious surfaces, greater stormwater discharge.

These are photos of the incision through the bluffs at the Pullman Ditch, this leads, and is in close proximity to the culvert on the Coastal Trail.



Statement of Appeal

To support the denial of the project, the Planning Commission found that the project site is a coastal bluff in violation of LUP ESHA maps, the plain meaning of the HMB Zoning Code, existing intervening seaward properties and other physical development. Even though the applicant's property is not located on the beach, members of the Planning Commission insisted, even after staff repeatedly corrected them, that the applicant's property was located on a "coastal bluff."

Half Moon Bay – Local Coastal Land Use Plan

Chapter 7 – Page 17

Shoreline Hazards

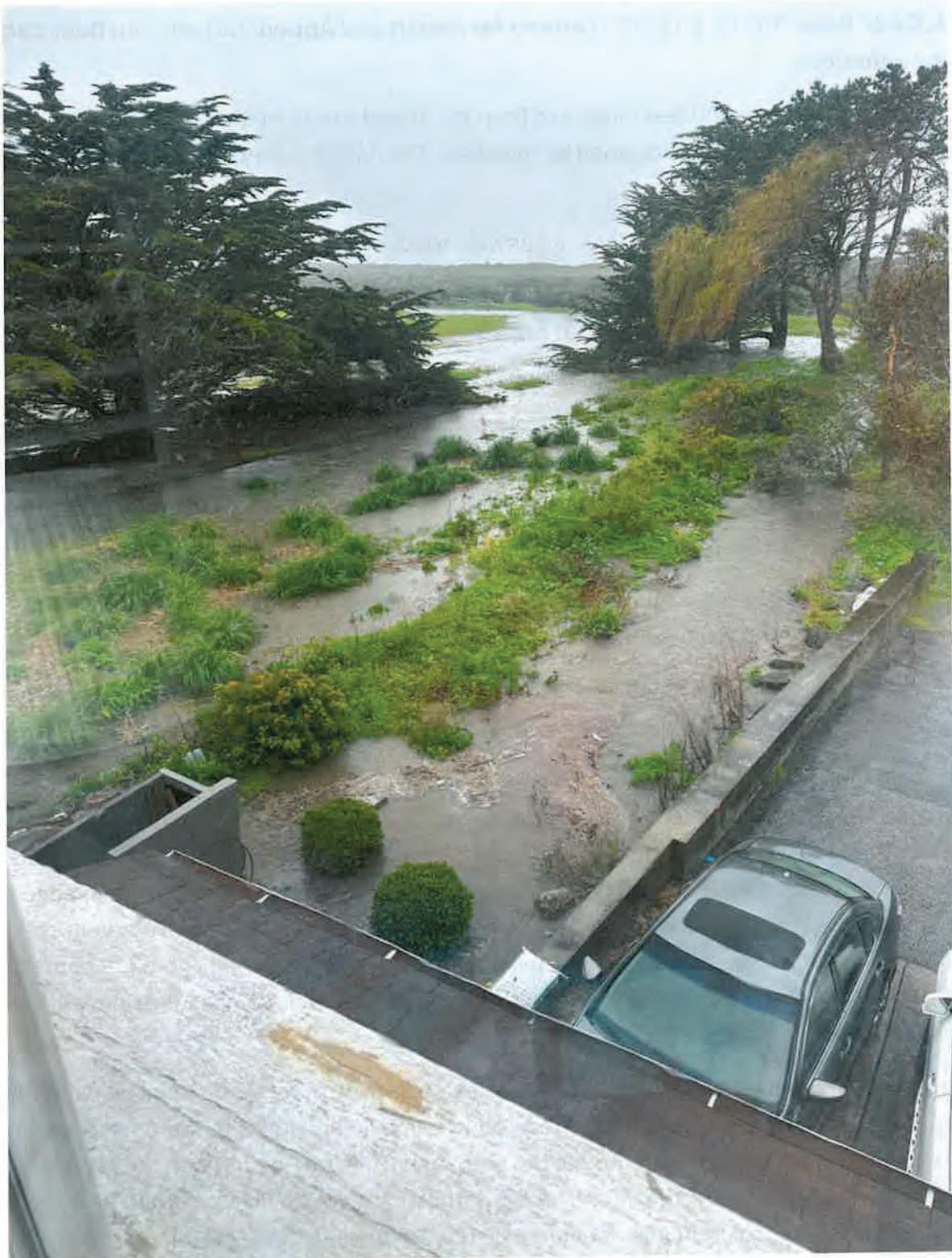
As sea level rise projections will likely continue to be revised over the course of the 2040 planning horizon, it is important for land use policies to consider **triggers**, thresholds, and various scenarios rather than specific sea level rise amounts or timing.

Blufftop and Beachfront Development

The LUP limits development on and near blufftops and beaches. Policies require new blufftop development and redevelopment to demonstrate stability of the site over its anticipated life span without relying on protective devices; establish performance standards for construction adjacent to beachfronts and blufftops to prevent negative impacts such as runoff and erosion and to restore already-impacted areas; and require setbacks to prevent erosion impacts over the life of the structure. Policies apply the industry standard for determining if and where a blufftop site is stable for development, called a factor of safety, of at least 1.5 for the static condition and 1.1 for seismic conditions. Factors of safety at increasing values above 1.0 lend increasing confidence in the stability of a slope. The factor of safety generally increases with distance from the bluff edge, so the point at which the minimum required factor of safety is reached typically constitutes a minimum blufftop setback. Erosion, wave runup, and sea level rise must also be considered.

“Blufftop and beachfront development” is defined as development within 300 feet landward of a bluff line or edge or 300 feet landward from the inland extent of the beach, pursuant to California Code of Regulations Section 13577(g) and (h). Typically, policies for beachfront development and beach setbacks apply where there are sand dunes or other low-lying areas rather than coastal bluffs. “Anticipated life span” is defined as the period over which a development is expected to be usable, with normal repairs and maintenance,

The property in question '2800 Champs Elysee' and proximity to the Coastal Bluffs



for the purpose for which it was designed. The anticipated life span may range from a minimum of 100 years for residential and commercial development to approximately 150 years for critical infrastructure.

Cal. Code Regs. Tit. 14, § 13577 - Criteria for Permit and Appeal Jurisdiction Boundary Determinations

(g) Beaches. Measure 300 feet landward from the inland extent of the beach. The back beach, or dry beach, if it exists, shall be included. The inland extent of the beach shall be determined as follows:

- (1) from a distinct linear feature (e.g., a seawall, road, or bluff, etc.);
- (2) from the inland edge of the further inland beach berm as determined from historical surveys, aerial photographs, and other records or geological evidence; or
- (3) where a beach berm does not exist, from the further point separating the dynamic portion of the beach from the inland area as distinguished by vegetation, debris or other geological or historical evidence.

(h) Coastal Bluffs. Measure 300 feet both landward and seaward from the bluff line or edge. Coastal bluff shall mean:

- (1) those bluffs, the toe of which is now or was historically (generally within the last 200 years) subject to marine erosion; and
- (2) those bluffs, the toe of which is not now or was not historically subject to marine erosion, but the toe of which lies within an area otherwise identified in Public Resources Code Section 30603(a)(1) or (a)(2).

Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge.

The termini of the bluff line, or edge along the seaward face of the bluff, shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the inland facing portion of the bluff. Five hundred feet shall be the minimum length of bluff line or edge to be used in making these determinations.

Partial transcript from the Half Moon Bay City Council Meeting held on June 3, 2025

Debbie Penrose, Councilmember

“I have to rely on a City Staff that I trust to hire a company to do the hydrology report that we received from Schaaf & Wheeler, and I have to rely on that report. I’m not an engineer; I have no other way to evaluate it.”

Debbie Ruddock, Vice Mayor and Chair for this hearing

“Sitting here and making a decision about this project, I have to myself is the record sufficient, do we have adequate information to make a decision tonight. And I believe we do. Since the Planning Commission and City Council acted, we have a new report by Schaaf & Wheeler which is a reputable engineering firm. As I’m not an engineer and as you’re not an engineer I have to rely on information provided by a reputable engineering firm and my own Staff, my own City Engineers. So, I have come to the conclusion that the record is adequate for me to support approval of this home. And as Councilmember Penrose so eloquently described the situation with your flooding, it’s terrible. I don’t think any of those houses should have been built there, I don’t think the Stoloski plan should have been approved.”

I contest this, the Schaaf & Wheeler report, page 5 “The rainfall intensity was obtained from the National Oceanic and Atmospheric Administration (NOAA) which is based on real-life gages.”

Unstated is the fact that the most recent NOAA Atlas for rainfall data, just released in 2024, is for data up to 2014 (assuming the authors used the most recent NOAA Atlas, which is not clearly stated). In other words, the data is **at least 10 years out of date**.

The use of historical data in an era of increasing climate severity is irresponsible. It is also apprehensible that Councilmembers and City Staff take reports on face value, particularly when this information was bought up during public comment.

The Schaaf & Wheeler report is also based on modelling only. **We contest that.**

Planning Commission Meeting – September 10, 2024

LCP Chapter 7 : **Localized Flooding, Erosion and Sedimentation**

Areas within the Planning Area where previous events or studies have identified that localized flooding may be a concern include, but are not limited to the Casa del Mar neighborhoods near Kehoe Watercourse, Miramar neighborhood near Roosevelt Drainage, **and Pullman Watercourse**, and the Grandview and Highland Park neighborhoods below

impoundments. Many of the studies are outdated or limited to small portions of the Planning Area.

David Gorn, Planning Commissioner

“I’m trying, I’m trying to see it, it’s hard to see it out of the context that it’s going to flood. I mean that this area has never experienced flooding is just not true. So, there will be a flood it will fail and what’s it going to look like when it does that. It’s a little hard to get past that.”

I also contest, that the Shaaf & Wheeler was included in the June 3 hearing. It was not a part of the October 15 hearing. New reports / information cannot be added.

I also contest, that the record is / or was adequate. The proximity to the Coastal Bluffs, less than 300 feet was not considered. This was also brought up in public comment, June 3 after being raised at the Planning Commission Meeting on September 10, 2024.

Planning Commission Meeting – September 10, 2024

Margaret Gossett, Planning Commission Chair

“The samples were pulled in May when the ground water was very low, so we don’t have ground water table data. In 2020, and at the last meeting we asked about ground water data during wet and dry seasons. The question that I can’t resolve in my mind is will the basin, will the water within the basin actually perc, if the ground water table is a foot, it’s surficial. I did read in an old report, the staff report from 2020, that the geologist in one of the reports said during the winter, the water table is very high. I’m just trying to figure out will the basin actually drain, and what happens if it quits draining.”

I contest that a ground water table in the wet season was never provided. **Reference LUP 7.12 f.** Also, that the building of the said basin will displace the swale. The basin was argued by the applicant to handle a 2 hour rain event, but only from the roof and downpipes of the proposed home. The water on the property from the Pullman Ditch that feeds the swale has never been accounted for. This inevitably will be directed in the direction of the bluffs. The Liquification mapped in this area is evidence of the water table being surficial during the wet season.

Finally, **I contest** the CDP filed on June 5, 2025 is not in accordance with Half Moon Bay City’s own codes and procedures, and as such is invalid and should not have been lodged. Chapter 1.25 Appeals : 1.25.070

“Decisions of city council on appeal shall be final and conclusive.”

The City had already heard this appeal on October 15, 2024 and denied a CDP.

On September 13, 2024, the Planning Commission's decision was appealed by the applicant for the Project. At the October 15, 2024, City Council meeting, after two unsuccessful motions, the Council denied the appeal on a split vote (2 ayes and 2 no's) with one councilmember recused. Because a tie vote is deemed denial of such an appeal, the City Council affirmed the Planning Commission's Resolution of Denial. The City Council staff report is available [here](#) and video of the meeting is available [here](#).

Harvey Rarback, Vice Mayor

"I move to deny the appeal and affirm the Planning Commissions decision based upon the findings and evidence in exhibit A of the draft resolution."

Jaoquin Jimenez, Mayor

"Second"

Catherine Engberg, City Attorney

"Alright, that was a 2-2 vote, and probably should have covered this earlier, so a 2-2 motion fails. I will note the council has a few options, you could make another motion at this point, but I will also note that it will take three votes to reverse the Planning Commission, so we've actually had this happen a couple of times this year with 4 council members considering the appeal. A 2-2 vote means the Planning Commission decision stands. At this point another council member could make a motion, or you could close proceedings."

Debbie Ruddock, Council Member

"I move that we uphold the appeal and amend the condition for hydrological work to incorporate comments from the peer review, Waterways Consulting."

Deborah Penrose, Council Member

"I'll second"

Harvey Rarback, Vice Mayor

"No"

Joaquin Jimenez, Mayor

"No"

Catherine Engberg, City Attorney

“Alright, motion fails at this point the motion fails, I suggest you have deadlocked and there will be no point making further motions. Unless someone disagrees, the appeal is effectively denied.”

Joaquin Jimenez, Mayor

“The hearing is closed.”

GAVEL

California State Parks Pullman Ditch Culvert Replacement Biological Report

Project and Property Description

California State Parks proposes to replace a failed culvert system and repair the Coastal Trail and the access road to Roosevelt Beach, a portion of Half Moon Bay State Beach. This project is necessary to allow continued flow through this channel, to restore vehicle access to the parking lot and restroom facility at Roosevelt Beach, and to avoid future damage to the Coastal Trail.

The culvert system to be replaced is within the Pullman Ditch, an artificial, earth-lined drainage that is fed by Caltrans culverts under Highway 1. The Caltrans culvert system collects run off from an approximately 140-acre drainage area on the eastern side of Highway 1. The input to Pullman Ditch includes drainage from agricultural fields, greenhouses, and the paved highway. The project area is on State Parks property approximately 300 feet northeast of the channel outlet on the beach. The project area is adjacent to the Coastal Trail and is used for public recreation and open space.

The proposed project is within a coastal bluff area impacted by previous road construction, agriculture, and other activities. The area is a low marine terrace, with soil composed of alluvial deposits from sedimentary rocks and other sources. The topography is fairly flat, sloping gently toward the ocean.

The proposed project will be within a previously developed area. The majority of land disturbance will be under the Coastal Trail, the access road to Roosevelt Beach, and the median between the two paved routes. Within the Pullman Ditch channel, the project includes a rebuilt concrete headwall on the upstream side of the culvert and a retaining wall and energy dissipation structures on the downstream side. The project will also include reconstruction of a portion of the roadway and repair of the Coastal Trail. A drawing of the project design superimposed upon an aerial photo is attached as Appendix A.

Figure 1: Project Location



Methodology

California State Parks environmental scientists have surveyed the project area several times over the course of planning for this project. Environmental scientists made repeated visits to the project area from 2020 to early 2022 and noted all species present within the area likely to be impacted by the proposed project. The entire project area was covered by a walking survey in August 2021 to characterize potential project impacts and determine the presence of sensitive species and habitats. An additional field check was conducted in January 2022 to look at the understory when leaves were off the deciduous trees and shrubs on the downstream side of the culvert.

A number of biological reports have been prepared for projects in and near the Pullman Ditch. In 2018, City of Half Moon Bay planning staff reviewed these reports and prepared a summary memo and a chart listing report conclusions. Copies of these documents are attached in Appendix B. The area of the proposed project was included within the study area for some of those biological reports, including the recent report prepared by WRA, Inc. for the Dunes at Half Moon Bay Project (WRA, 2018). These reports are a source of background information about the area and the potential sensitive resources, and are incorporated here by reference. State Parks environmental scientists reviewed those reports, and determined that there were not any changes from the survey conditions that would require a reevaluation of their conclusions regarding biological resources within this project area.

State Parks staff prepared an updated list of sensitive species known from the project vicinity in December 2021 based on records in the California Natural Diversity Data Base (CNDDDB). There were no additions to the list of potential sensitive species or to the records of sensitive species in the project vicinity since the previous reports. The maps of known occurrences and reviews of potential sensitive species in these earlier reports remain valid, and are incorporated into this study. Field reviews have added occurrences of two sensitive species from the project vicinity. These are described below.

RESULTS

Environmental Setting

The project is on the coastal terrace, within a larger area of previously disturbed coastal scrub.

Pullman Ditch is an artificial drainage ditch with soil bed and banks that extends from culverts under Highway 1 toward the ocean. Pullman Ditch carries water seasonally depending on runoff from upstream properties and discharges through the existing failed culverts into a channel that flows to the beach. The channel occasionally contains standing water in deeper holes near the downstream outlet of the existing culverts.

Biological Communities

Upland Portion

Vegetation on the upland portion of the project site is a mixture of ruderal vegetation and common coastal scrub species. The first sheet of the Habitat Type map from the City of Half Moon Bay Local Coastal Land Use Plan (Half Moon Bay Plan) (2020) is attached in Appendix C. Within the habitat type

classifications used in the Half Moon Bay Plan, this area is considered Central Coast Scrub. The fine scale vegetation map for San Mateo County (Golden Gate National Parks Conservancy, 2022) has mapped the vegetation as *Baccharis pilularis* Alliance (see Appendix C). In this Alliance the shrub layer is dominated by coyote brush (*Baccharis pilularis*) and other coastal shrubs intermixed with a variety of native and non-native forbes and grasses (California Native Plant Society, 2022). This area meets that definition, recognizing that some areas within this alliance, including the immediate project vicinity, have a high proportion of non-native species between native shrubs.

The Half Moon Bay Plan Habitat Types map (Appendix C) shows a portion of the Pullman Ditch upstream of the culvert as Central Coast Riparian Scrub. Based on field observations, this is not correctly mapped. The area is correctly mapped in the San Mateo fine scale vegetation map (Appendix C) as herbaceous vegetation (part of Californian Ruderal Grassland, Meadow & Scrub Group) and as part of the *Baccharis pilularis* Alliance. A report prepared for the San Mateo County fine scale vegetation mapping effort has more information on the vegetation classifications and mapping units used for the fine-scale map (Sikes, et al., 2021).

Pullman Ditch

The Pullman Ditch is an artificial channel cut within highly disturbed coastal scrub. The upland channel area is characterized by ruderal species include poison hemlock (*Conium maculatum*), mustards (*Hirshfeldia incana* and *Brassica rapa*), wild radish (*Raphanus sativus*), non-native thistles, and annual grasses. Central Coast Scrub species on the upstream side of the project site include Pacific aster (*Symphyotrichum chilense*) and California blackberry (*Rubus ursinus*). The adjacent field contains some additional Coastal Scrub species, including coyote brush (*Baccharis pilularis*), California sage (*Artemisia californica*), and yarrow (*Achillea millefolium*).

The Monterey pines (*Pinus radiata*) previously mapped by other biological surveys as adjacent to Pullman Ditch, including one tree on the outlet side of the culvert, are now dead or dying.

Downstream Portion

The downstream portion of Pullman Ditch appears to have had less impact from previous land use, but also appears to have been previously disturbed. The channel is lined by arroyo willow (*Salix lasiolepis*). Other native species within the project area include California blackberry (*Rubus ursinus*) and California bee plant (*Scrophularis californica*). Invasive species dominate the understory and the vegetation along the channel itself. Common species in the project area include wild radish, mustards, hemlock, and cape ivy (*Delairea oderata*).

Downstream of the project area, the area not covered by willow scrub is dominated by invasive species. The vegetation does include additional native species, such as red elderberry (*Sambucus racemosa*), coyote brush (*Baccharis pilularis*), and Pacific aster. There are a few individuals of bulrush (*Schoenoplectus* sp.) and cattail (*Typha* sp.) near the ocean end of the channel. At the beach end of the channel there is an approximately 200 square foot patch of invasive ice plant (*Carpobrotus edulis*).

The Half Moon Bay Plan Habitat Types map (Appendix C) classifies the area around the Pullman Ditch downstream of the culvert as Central Coast Riparian Scrub. The San Mateo County fine scale vegetation map classified the area as *Salix lasiolepis* Alliance (Golden Gate National Parks Conservancy, 2022). A portion of this map is included in Appendix C. Based on field surveys, this is a correct classification and fits the definition in the Half Moon Bay Plan for Central Coast Riparian Scrub. According to the fine-scale vegetation map, the total area of riparian scrub is 1.3 acres.

Sensitive Biological Communities

Pullman Ditch

Pullman Ditch is considered to be an intermittent stream, characterized by a sandy, unconsolidated bottom. Pullman Ditch has been classified as a non-wetland water, and as such is a sensitive resource (WRA, 2018). Previous studies have concluded that Pullman Ditch is subject to jurisdiction of the Army Corps of Engineers under Section 404 of the Clean Water Act, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife. California State Parks will consult with those agencies and obtain permits and agreements as required.

In a previous case, the California Coastal Commission (CCC) determined that the upstream portion of Pullman Ditch does not contain or support habitat for listed species and does not contain riparian habitat as defined in the Half Moon Bay Local Coastal Plan (WRA, 2018). Accordingly, Pullman Ditch itself is not considered an Environmental Sensitive Habitat Area (ESHA) by the CCC or the Half Moon Bay Plan.

The Half Moon Bay Plan identified the Pullman Ditch on the upstream side of the culvert as a Potential Environmentally Sensitive Habitat Area. A copy of Figure 6.4 from the Half Moon Bay Plan is included in Appendix C. Based on factors discussed below in the section on ESHA, this area should not be classified as ESHA.

Riparian Vegetation – Central Coast Riparian Scrub

The downstream portion of the project area contains riparian vegetation dominated by arroyo willow. This area meets the definition of a riparian community because the overstory is dominated by native riparian species, and can be considered a sensitive habitat area. The understory in most of the downstream area is dominated by exotic species that are not limited to riparian areas.

Central Coast Riparian Scrub can be considered a sensitive plant community because of its limited distribution. Central Coast Riparian scrub can also be considered sensitive habitat based on its potential value for wildlife.

The Half Moon Bay Plan (2020) identified the Central Coast Riparian Scrub on the downstream side of the culvert as a Potential Environmentally Sensitive Habitat Area. A copy of Figure 6.4 showing habitat classifications is included in Appendix C. Based on the factors discussed below in the section on ESHA, this area has the potential to be classified as ESHA, and will continue to be treated as potential ESHA for this analysis.

Special Status Plants

There are no special status plant species known to occur in this portion of Half Moon Bay State Beach, and there are none expected to occur. Appendix D contains a map of special status plant species known from within 5 miles of the project location prepared by WRA, Inc. for The Dunes at Half Moon Bay Biological Resources Evaluation (WRA, 2018).

Perennial Goldfields

Perennial goldfields (*Lasthenia californica* ssp. *macrantha*) occurs within Half Moon Bay State Beach. Perennial goldfields is listed by the California Native Plant Society (CNPS) as Rank 1B.2: Plants rare, threatened, or endangered in California and elsewhere (moderately threatened in California). There are known occurrences of perennial goldfields in other portions of Half Moon Bay State Beach, but not within the project vicinity. The habitat within the project area is not similar to that where perennial goldfields is found, and the plant was not observed during repeated field surveys.

The project area does not contain suitable habitat for any of the other species mapped from the vicinity, and none have been found in field surveys for this project and for previous projects in the area.

Wildlife

No mammals, reptiles or amphibians were observed within the immediate project area during any field surveys. During a winter survey, a stick house presumed to be associated with San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) was found within willow scrub on the south side of Pullman Ditch. This observation is discussed below under Special Status Animals. Other mammals expected to occur in the project vicinity include brush rabbit (*Sylvilagus bachmani*), coyote (*Canis latrans*), raccoon (*Procyon lotor*) and California vole (*Microtus californicus*).

Birds commonly seen in the project vicinity include those found along the ocean and coastal strand and species known from coastal scrub and grassland habitats. The dense willow thicket and intermittent presence of water on the downstream portion of the project area provide potential nesting and foraging habitat for a variety of species. Birds observed in the immediate vicinity of the project include white crowned sparrow, song sparrow, black phoebe, California towhee, and San Francisco common yellowthroat. Other birds expected to occur in the immediate vicinity of the project include common raven, American goldfinch and lesser goldfinch.

No aquatic species have been observed in Pullman Ditch. Flows in the channel are intermittent. There are no fish known from the channel upstream. The channel does not form a sufficient connection to the ocean to allow fish passage to the culvert site.

Special Status Animals

WRA, Inc prepared a map with information from the California Natural Diversity Data Base (CNDDDB) of recorded occurrences of special status animal species for The Dunes at Half Moon Bay Biological Resources Evaluation (WRA, 2018). The map is attached in Appendix D. Two species have occurrences

mapped in the vicinity of the Pullman Ditch project: San Francisco (saltmarsh) common yellowthroat and monarch butterfly (overwintering populations). An additional species, California red-legged frog, is known to occur within Half Moon Bay State Beach. The San Francisco dusky-footed woodrat had not previously been recorded from Half Moon Bay State Beach; a stick house associated with this animal was found in a winter survey of the project vicinity.

San Francisco (Saltmarsh) Common Yellowthroat

The San Francisco common yellowthroat (*Geothlypis trichas sinuosa*) was observed in the vicinity of the project during an August 2021 survey. San Francisco common yellowthroat is a US Fish and Wildlife Service (USFWS) Bird of Conservation Concern and a California Department of Fish and Wildlife (CDFW) Species of Special Concern. This subspecies of the common yellowthroat is found in riparian thickets and marshes and ranges along the coast from Marin County to Santa Cruz County (WRA, 2018). The San Francisco common yellowthroat is often found in the margin between moist and upland habitats; the proximity of various habitat types is thought to enhance the overall habitat value of an area. The diet of common yellowthroat in California is almost exclusively animal matter -- mainly insects and spiders (Shuford & Gardali, 2008).

San Francisco common yellowthroat typically nests near open water, but could potentially nest within riparian habitat (WRA, 2018). Yellowthroats build open-cup nests, typically near the ground in grasses, herbaceous vegetation, and some shrubs. Pairs can raise two broods and will renest following nest failure (Shuford & Gardali, 2008).

Monarch Butterfly

The Monarch butterfly (*Danaus plexippus*) is a CDFW Special-Status Invertebrate, and Monarch winter roosts are protected. Monarch butterflies are occasionally observed in the general area, and there have been known overwintering sites in eucalyptus groves at Frenchmans Creek, approximately one mile from the project site. There is no appropriate habitat for Monarch overwintering within the project area.

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*), a federally-listed threatened species and a California Species of Special Concern, has not been observed but has the potential to occur along the Pullman corridor. As determined in earlier studies of Pullman Ditch, it is possible, but unlikely, that California red-legged frog (CRLF) could traverse the project area as part of a pattern of overland dispersal on rainy nights. This portion of Pullman Ditch does not contain breeding habitat for CRLF. The channel does not typically hold water of enough depth for a long enough period to support breeding. Flow in the channel is flashy, and high winter flow would likely remove deposited egg masses.

San Francisco Dusky-footed Woodrat

The San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), is a California species of special concern. According to the Half Moon Bay Plan (2020), San Francisco dusky-footed woodrat are fairly common in riparian vegetation, Central Coast Scrub, and wooded habitats in the eastern portion of the Planning area. A stick house that appears to have been constructed by a San Francisco dusky-footed

woodrat was found within Central Coast Riparian Scrub near the project location during a site survey in January 2021. There are no direct observations of San Francisco dusky-footed woodrat in the area, but it is assumed that the stick house is occupied and that there could be additional stick houses within the riparian scrub.

Other Sensitive Species

There is no evidence of other sensitive species, including the federally endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), from the project vicinity. As presented in earlier biological reports, there is no suitable aquatic habitat for San Francisco garter snake (SFGS) within the project vicinity, and no corridor to allow SFGS to travel between reported SFGS locations and the project area.

Environmental Sensitive Habitat Areas

The Half Moon Bay Plan (2020) defines environmentally sensitive habitat areas (ESHAs) as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. The plan lists three types of ESHAs: terrestrial, wetlands, and watercourses. Terrestrial ESHAs may include habitat for special status and unique species. Wetland ESHAs may include perennial and seasonal freshwater marsh. Watercourse ESHAs may include perennial, intermittent, and ephemeral streams and channels with or without riparian vegetation.

The California Coastal Act (Section 30240) limits development within ESHAs to uses dependent on the resource, including nature study and low-intensity public access. Any allowable development must be done in a manner to avoid significant disruption of the habitat values. Any development adjacent to an ESHA must be designed to prevent impacts that would significantly degrade the ESHA, and must be compatible with the biological function of the habitat. The Coastal Act also requires that development adjacent to parks and recreation areas must be designed to prevent impacts on those areas. (City of Half Moon Bay, 2020)

Pullman Ditch

Pullman Ditch is considered an intermittent stream, but has not been classified as an ESHA (WRA, 2018). The Pullman Ditch channel in the project area does not support special species or habitats that are rare or valuable. Pullman Ditch on the upstream side of the culvert has a straight, graded channel within ruderal habitat. The channel does not retain water or support wetlands or riparian vegetation. The channel on the downstream side of the culvert is surrounded by riparian vegetation. Flow from the failed, perched culverts has eroded the channel and created plunge pools that may hold water when there is no flow in the channel. These pools can provide an ephemeral water source that has some potential value for wildlife. Access to this water is limited by the steep, incised banks of the channel.

Pullman Ditch is a highly disturbed artificial channel. The habitat value of the channel is unlikely to be disturbed or degraded by human activities. Aside from the role of Pullman Ditch providing water to support riparian vegetation, Pullman Ditch itself does not appear to have any special role in the ecosystem. Based on this evaluation, this area does not meet the definition of ESHA.

Riparian Vegetation – Central Coast Riparian Scrub

Riparian corridors are considered ESHA where they are found to be rare or especially valuable for their role in an ecosystem, such as contributing to the viability of special status species, and could be easily disturbed or degraded by human activities and development.

Riparian scrub can provide important features for wildlife including food, water, nesting sites, cover, and travel corridors. The riparian scrub on the downstream portion of the Pulman Ditch provides habitat for at least two Species of Special Concern -- the San Francisco common yellowthroat and San Francisco dusky footed woodrat.

Downstream of the culvert, arroyo willow forms the dominant canopy and the understory is dominated by invasive species. Arroyo willow is common along drainages in the vicinity. It easily colonizes moist ditches and has been planted by State Parks in restored channels and in water retention basins in portions of Half Moon Bay State Beach. Arroyo willow scrub is extremely resilient to disturbance, and is able to very quickly regrow and expand into new areas. The habitat is not easily damaged or degraded by human activities unless the area is completely transformed by development.

In this location, the Central Coast Riparian Scrub is not considered especially vulnerable to the impacts of sea level rise. Hazard mapping on the Our Coast Our Future web application projects that it would require over 3 feet of sea level rise for a 100-year flood flow to reach the project vicinity (Point Blue Conservation Science & U.S. Geological Survey, 2022). The projected flow would follow the existing channel, which should not preclude the continued presence of riparian scrub surrounding the channel. A copy of that map is included in Appendix E.

The Central Coast Riparian Scrub, although resilient under most circumstances, has the potential to be classified as ESHA and will continue to be treated as potential ESHA for this project.

Project Impacts

The proposed project will have limited impacts upon the natural resources of the area. Construction will be within an area that has previously been disturbed. The upstream (intake) portion of the culvert is within disturbed ruderal vegetation. The downstream (outlet) portion of the culvert is in an area that has value as riparian habitat. The project description includes measures to avoid impacts to the riparian habitat and sensitive species associated with that habitat.

Impacts to Threatened, Rare, Endangered or Unique Species

San Francisco Common Yellowthroat

The San Francisco common yellowthroat may forage within the riparian vegetation within the project area, and could possibly nest in the vicinity. Nests, if they do occur in this vicinity, would be more likely to be found less than 3 feet from the ground in grasses, herbaceous vegetation, and shrubs. Nesting habitat is not likely to occur within the area to be disturbed by the project. The project may have

temporary impacts to a small (less than 200 square foot) area of arroyo willow thicket, which may be used by San Francisco common yellowthroat for foraging and cover. Impact avoidance measures will include avoiding construction during the nesting season, doing a pre-construction survey for sensitive species, and having a qualified biologist on site during vegetation removal and work in the riparian area. Given the small project footprint and the availability of other suitable habitat within the vicinity, the temporary disturbance from project construction is not expected to have an impact on the species.

California Red-Legged Frog

It is possible that the California red-legged frog (CRLF) may traverse the project area during overland dispersal. The project will not reduce the possibility that CRLF would be able to use this area for that purpose in the future. Impact avoidance measures will include a pre-construction survey, and using a biological monitor with the ability to implement additional avoidance measures if required.

San Francisco Dusky-footed Woodrat

The observed stick house associated with the San Francisco dusky-footed woodrat is approximately 50 feet from the culvert location and is not within the area that will be impacted by the project. No additional stick houses were found in the vicinity. As part of pre-project surveys, a qualified biologist will survey the entire project area for stick houses prior to removing vegetation, and will monitor all vegetation removal to avoid impacts on woodrat houses.

Impacts to Sensitive Habitats

Pulman Ditch

Approximately 150 square feet of the upstream portion and approximately 300 square feet of the downstream portion of Pulman Ditch will be graded for the project. Approximately 200 square feet of the downstream portion of the channel will be covered with a concrete splash pad and new rock energy dissipators. Portions of this downstream area already contain concrete rubble and remnants of the previous culvert structure.

The impact to the Pullman Ditch channel will be minor. The proposed permanent structures are primarily within areas previously disturbed for construction of the failed culvert system. The project includes a small (less than 200 square feet) area of construction in the channel for the energy dissipators. The proposed work will not impair the flow within Pullman Ditch or reduce its habitat value. Increasing the diameter of the culverts, stabilizing the grade of the channel and reducing erosion on the downstream side should improve the habitat and increase the value of the channel as wildlife corridor.

Riparian Vegetation

The project may require removing vegetation from a small (less than 200 square feet) area of arroyo willow thicket. Given the availability of other similar habitat within the vicinity and the rapid re-growth of arroyo willow, the temporary impact from vegetation removal will not have a measurable impact on the natural resource values of this habitat. Impact avoidance measures will include having a qualified biologist on site during vegetation removal and other work in the riparian area. The biologist will direct

vegetation removal and minimize the removal of riparian habitat. It is expected that arroyo willows will be trimmed, but not removed. If any willows are removed, they will be replaced on at least a 3:1 basis.

Impacts to Environmentally Sensitive Habitat Areas

The Central Coast Riparian scrub on the downstream side of the culvert should be treated as potential ESHA. The proposed project involves the repair and replacement of existing facilities. By its very nature, the project requires work in the Pullman Ditch channel and in the adjacent riparian area on the downstream side of the channel. There are no feasible alternatives to avoid work within this potential ESHA. Replacing the failed culverts in Pullman Ditch is required to allow continued use of coastal access facilities at Roosevelt Beach and to avoid damage to the Coastal Trail.

Construction of the project has the potential to directly impact approximately 200 square feet of the channel bottom, banks, and overstory on the downstream side of the culvert. Appendix A includes a map with the project design drawn over an aerial photo that shows the arroyo willow overstory. The project includes measures to avoid and limit direct and indirect impacts to the potential ESHA. Replacing the failed culverts and repairing the access road will not change the use of the area or decrease the value of the habitat. The proposed project will not cause significant direct or cumulative impacts to the ESHA, to the special status species found within the area, or to the biological and hydrological functions of this area.

Impact Avoidance Measures

Construction will follow all standard Best Management Practices to avoid impacts to water quality and biological resources.

The following measures have been incorporated into the project:

- Work will be scheduled to avoid the rainy season, and to avoid times when there is flowing water in Pullman Ditch. The design plans will include methods to re-route flows around the project area in the event that it is not possible to avoid work when there is flowing water.
- Work will be scheduled outside of the bird nesting season. If it is not possible to avoid work during the nesting season, a qualified biologist will survey the area to make sure there are no impacts on nesting birds.
- Before construction, a qualified biologist will survey the area to determine the potential for sensitive species. The biologist will have the authority to halt construction and add additional impact avoidance measures, such as fencing.
- All construction personnel will be trained by a qualified biologist to recognize sensitive species that might occur within the project area and to know how to implement measures to avoid impacts, if necessary.
- A qualified biologist will monitor work within the riparian habitat. Vegetation removal within the riparian habitat will be kept to the minimum required to complete the project. As much as possible, the overstory of arroyo willow will be maintained.
- Areas disturbed by the project will be mulched to limit erosion and replanted with native species. If there is any loss of arroyo willow, these will be replanted on a minimum of 3:1 basis.

CERTIFICATION:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: June 20, 2022

Signed:



Joanne Kerbavaz

Senior Environmental Scientist

Report Preparation

Joanne Kerbavaz, Senior Environmental Scientist, California State Parks
MS, Ecology; AB Environmental Studies and Biology/Politics

Over 30 years experience preparing biological surveys and environmental documents in California, including over 20 years experience within State Parks in San Mateo and Santa Cruz counties.

References

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APPENDICES

APPENDIX A: PROJECT DESIGN

APPENDIX B: SUMMARY OF BIOLOGICAL REPORTS FOR PULLMAN DITCH

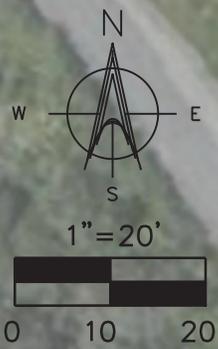
APPENDIX C: VEGETATION AND HABITAT MAPS

APPENDIX D: MAPS OF SPECIAL STATUS SPECIES

APPENDIX E: SEA LEVEL RISE PROJECTIONS

**California State Parks
Pullman Ditch Culvert Replacement
Biological Report**

APPENDIX A: PROJECT DESIGN



PULLMAN DITCH
FLOWLINE

48" REINFORCED
CONCRETE OR HDPE
PIPE

10' HIGH CONCRETE
RETAINING WALL

CONCRETE SPLASH PAD

RIP RAP

CONCRETE
HEADWALL

REBUILD AC
ROADWAY

ROADWAY

TRAIL



FACILITIES &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

PROJECT: HALF MOON BAY ROOSEVELT BEACH
- PULLMAN DITCH CULVERT REPLACEMENT

SHEET TITLE: PLAN EXHIBIT

SCALE: 1" = 20'

DATE:08/09/2021

SHEET
1 OF 1

Exhibit 4
A-2-HMB-25-0017
Page 31 of 108

**California State Parks
Pullman Ditch Culvert Replacement
Biological Report**

APPENDIX B: SUMMARY OF BIOLOGICAL REPORTS – PULLMAN DITCH



Date: March 27, 2018

To: Honorable Chair and Planning Commissioners

From: Scott Phillips, Associate Planner

Subject: Pullman Ditch Biological Report History

In response to the request by the Planning Commission, staff researched the record of projects and their associated biological resource assessments within the vicinity of the Pullman Ditch. The aerial photograph below (Figure 1) indicates the subject property in green and the locations of where biological reports have been conducted in the past. A chart summarizing the biological reports that have been prepared in the vicinity of Pullman Ditch, corresponding to the numbers on Figure 1 is included as Exhibit A.

Pullman Ditch itself is an artificial, earthen-lined drainage ditch that extends from the nursery /greenhouse complex on the east side of Highway 1 towards the ocean. The approximate location of Pullman Ditch is shown in red below in Figure 1. The construction date of Pullman Ditch is unknown but was likely constructed during the time that the greenhouses were being developed. In 2008, Caltrans installed drainage improvements in the form of a box culvert elbow along the western edge of the Highway 1, directing the water outfall from the drainage pipe under the highway directly west.

Biological analysis of Pullman Ditch was initially conducted in 2005 when several property owners along the northern side of the ditch submitted a Coastal Development Permit application for routine maintenance of the portion of the ditch within their property. HT Harvey & Associates prepared a Biological Resource Assessment, a copy of which is included as Exhibit B. The primary conclusion of this report was that no threatened or endangered species are likely to occur on the project site. Comments were received from the US Fish and Wildlife and CA Department of Fish and Wildlife requesting additional information. After receiving the comments, the application was later withdrawn and the maintenance did not take place.

Shortly after this, an application was then submitted for the new residence that is adjacent to the subject property to the north at 2786 Pullman Avenue. A biological resource assessment specific to this project was not recovered from the City's public record. It appears that the 2005 HT Harvey report for ditch maintenance was circulated for comments for the new residence at 2786 Pullman Avenue. It was utilized for this project because it had been completed recently and covered the vicinity of the project site. No comments were received during the 45 day review of the biological report but the project was appealed by the California Coastal Commission due to concerns of potential habitat impacts from the proposal. The Substantial Issue report is included as Exhibit C. Note that this report erroneously references the address of 2788 Pullman Avenue.

The address of 2786 was designated during building permit plan check. The appeal was eventually withdrawn and the final City decision was upheld. A copy of the appeal withdrawal notice is included as Exhibit D.

In 2007, an application was submitted for a new residence and extension of Champs Elysee Boulevard south towards Pullman Ditch. The project is slightly less than 100 feet away from the Pullman Ditch drainage feature, predicated the need for a Biological Resource Assessment to be prepared and circulated for comments. Coastrange Biological prepared the Biological Resource Assessment and no comments were received during the 45-day review. A copy of this report is included as Exhibit E. This report concludes that the likelihood that California Red Legged Frogs would inhabit the site is considered low because the ditch lacks the appropriate habitat. Additionally, the project site is not likely dispersal habitat between Pullman Ditch and potential breeding grounds in the region to the north, northeast, or west, due to the presence of dense residential development within the area. The residence and roadway were subsequently constructed in 2013.

In 2008, a Coastal Development Permit application was submitted by Caltrans for improvements to the ditch along the edge of the western side of Highway 1, within the Caltrans Public-Right-of-Way. Caltrans Environmental Section prepared the Biological Resource Assessment and Garcia and Associated prepared the Wetland Delineation. Similar to the previous HT Harvey report, the Caltrans reports concluded that the Pullman Ditch was not prime habitat for threatened or endangered species. A copy of the Caltrans Biological Reports are included as Exhibit F. No comments were received during the 45-day review.

In 2009, an application was submitted for a new residence at 2806 Alameda Ave. A Biological Resource Evaluation was prepared and circulated for comments. The California Coastal Commission provided comments with concerns that the project did not conform to the riparian buffer requirements. The project was scheduled for a Director Hearing but continued to a date uncertain after receiving several comment letters. The project was eventually withdrawn by the property owner due to inactivity.

In 2010, the land owner on the south side of the ditch (Stoloski) submitted an application for a Coastal Development Permit and Tentative Parcel Map to subdivide the triangular shaped property into 4 lots. WRA prepared a Wetland Delineation and Biological Resource Assessment, a copy of which is included as Exhibit G. The project was appealed to the CCC due to concerns over potential habitat impacts and insufficient public services available to the site. The project was then modified to remove the proposed culvert for Pullman Ditch from the scope of work. No substantial issue was found by the Coastal Commission and the City's decision was upheld.

As to date of this memorandum, one of the Champs Elysee Blvd. cul-de-sacs has been completed and the Pullman Ave. cul-de-sac is under construction. Applications for Coastal Development and Architectural Review have been submitted for new residences on the two newly created Champs Elysee lots. The biological report prepared for the tentative parcel map is currently being updated

to identify any changed biological conditions since 2010 and to identify any potential impacts from the proposed improvements that may not have been covered under the previous report.

In 2014, an application was submitted for a new residence at 2805 Champs Elysee Blvd. The Biological Resources Evaluation was prepared by Coastrange in October of that year and a copy of the document is included as Exhibit H. Comments were received from the California Coastal Commission with concerns about potential habitat impacts and that the project was inconsistent with the riparian buffer requirements of the LCP. A copy of the comment letter is included as Exhibit I. Staff worked with Coastal Commission staff during project review, including review of the complete Chain of Title for the property to verify lot legality. No appeal was filed following the Planning Commission approval of the project. The residence was then constructed in compliance with the mitigation measures associated with the Mitigation, Monitoring and Reporting Program adopted with the project approval.

In late 2016, a preliminary application was submitted for the Surf Beach / Dunes Beach Planned Unit Development. The biological analysis for this project included a study area that encompasses the western portion of the Pullman Ditch. The conclusions within this report are consistent with those found in the previous WRA report. The Surf Beach / Dunes Beach report been included for background reference (Exhibit J).

Applications for Environmental Review were recently submitted for the construction of new residences at 2804 Champs Elysee Blvd and 2806 Alameda Avenue. These sites are identified as #9 and #10 on Figure 1 below. Both of these sites include a portion on Pullman Ditch. Biological analysis and report preparation are currently underway for both of these projects.

This summary and volume of reports regarding Pullman Ditch were provided to the biological consultant preparing the habitat maps for the LCP update.

EXHIBITS

- A. Summary of Biological Reports within the vicinity of Pullman Ditch
- B. Ditch Maintenance Biological Resource Evaluation, prepared by HT Harvey and Associates, dated November 3, 2005
- C. Substantial Issue Report for 2786 Pullman Avenue, dated April 26, 2007
- D. Appeal Withdraw Notice 2786 Pullman Avenue
- E. New Residence at 2812 Champs Elysee Blvd, prepared by Coastrange Biological, dated September 2007
- F. Ditch Maintenance Biological Resource Evaluation and Wetland Delineation, Prepared by CALTRANS & Garcia and Associates (GANDA), dated December 5, 2007 and March 1, 2007
- G. Stoloski Report, Prepared by WRA, dated January 2010
- H. New Residence at 2805 Champs Elysee Blvd, prepared by Coastrange Biological, dated October 2014
- I. Comments received from the California Coastal Commission during the 45-day review on the Biological Resources Assessment for 2805 Champs Elysee Blvd
- J. Dunes Beach Hotel / Surf Beach RV Park, Prepared by WRA, dated August 2017

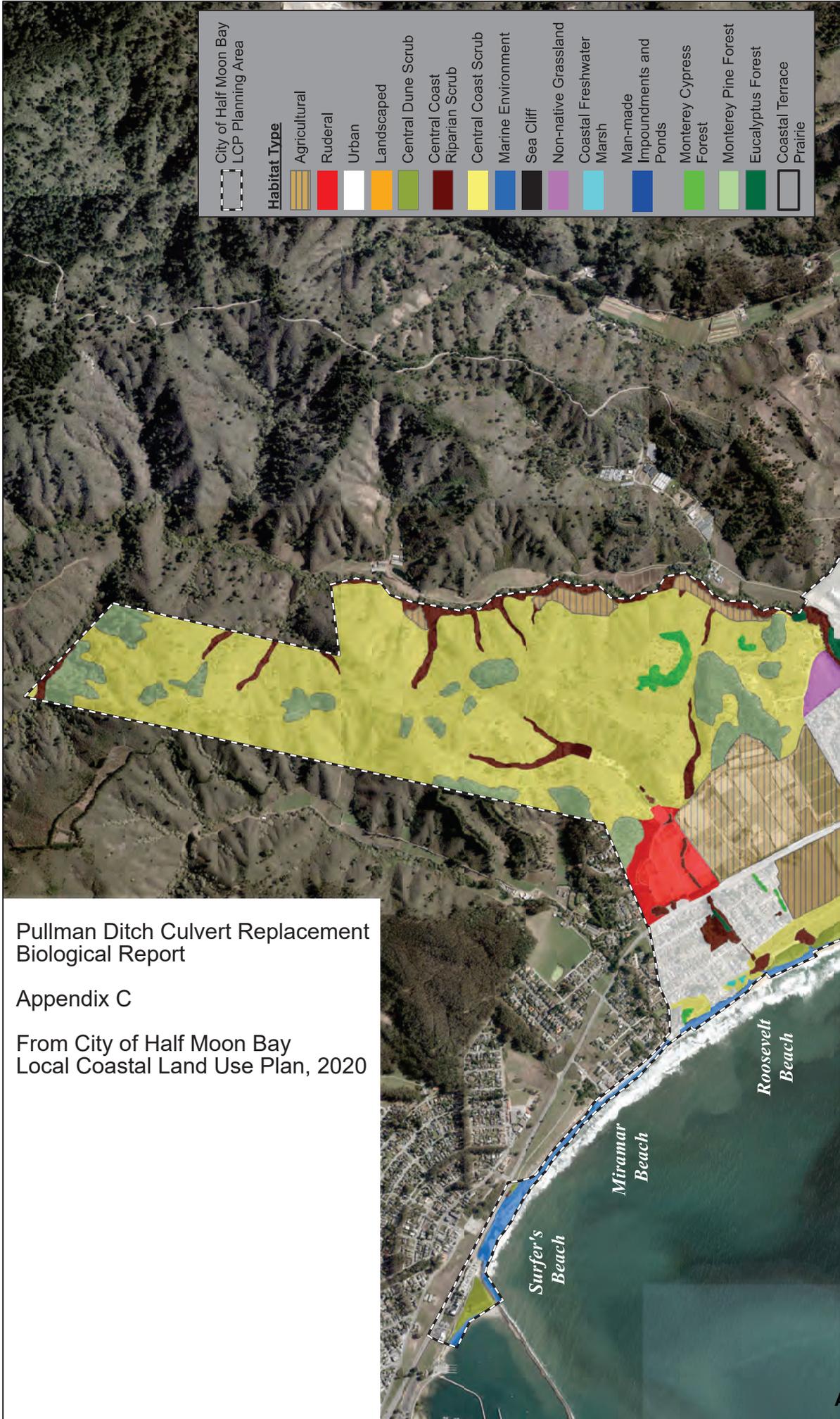


Figure 1 Aerial Photograph with the subject property in green and the locations of previous biological reports are shown in blue.

# of Site on Figure 1	PDP #	ADDRESS	APN	PROJECT	DATE OF REPORTS	TYPE OF REPORT	BIOLOGIST	AGENCY COMMENTS	REPORT CONCLUSIONS
1	PDP-050-05	Pullman Ditch	048-121-160, 048-112-140 AND 048-124-150	Property Owner Ditch Maintenance	11/3/2005	Biological Resource Evaluation	HT Harvey	US Fish and Wildlife Service and CA Depart. Of Fish and Game requested additional information related to SFGS and CRLF.	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
2	PDP-004-06 & PDP-045-08	2786 Pullman Avenue	048-121-090	New Residence				Project appealed to the CCC. No substantial issue determination made once it was discovered that the site is not adjacent to ditch. 1 way funnel fencing added as a requirement.	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
3	PDP-18-07, 32-09 and 64-13	2812 Champs Elysee Blvd	048-112-210	New residence	9/1/2007	Biological Resource Evaluation	Coastrange	no	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
4	PDP-036-08 & A	Caltrans Right of Way	R of W	Ditch Stabilization and new outfall elbow in ditch next to highway	12/05/2007 & 3/1/2007	BRE & Wetland Delineation	CALTRANS & Garcia and Associates (GANDA)	no, project appealed to City Council, Planning Commission decision upheld	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
5	PDP-005-09	2806 Alameda Ave	048-111-090	New residence	8/19/2009	Biological Resource Evaluation	WRA	CCC: e-mail received during 45-day with concerns with potential habitat impacts.	Project continued and withdrawn.
6	PDP-009-10	Champs Elysee and Pullman Ave	048-133-030, -140, 050, -060	- Stoloski Tentative Parcel Map	1/1/2010	BRE & Wetland Delineation	WRA	CCC: appealed City Council Decision due to potential habitat impacts and insufficient public services. Project was then modified to remove the culvert and City decision was upheld.	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
7	PDP-14-050	2805 Champs Elysee Blvd	048-121-160	New residence	10/1/2014	Biological Resource Evaluation	Coastrange	CCC: letter received during 45-day with concerns with potential habitat impacts and taking analysis	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
8	PDP-15-086	2782 Pullman Ave	048-121-100	Proposed New residence	3/1/2016	Biological Resource Evaluation	Coastrange	Regional Water Quality Control Board: concerned with impacts to trees from the project	Not suitable habitat for CRLF and SFGS but presence of CRLF as a uncommon dispersant is possible.
9	PDP-16-084	100 Young Avenue	multiple	Hotel / RV Park	8/1/2017	BRE & Wetland Delineation	WRA	CCC: comments received during 45-day review	Pullman Ditch identified as not suitable habitat for CRLF and SFGS
10	PDP-17-072	2804 Champs Elysee Blvd	048-112-140	New residence	In preparation	BRE & Wetland Delineation	WRA	Future	In Preparation
11	PDP-17-076	2806 Alameda Ave	048-111-090	New residence	In preparation	BRE & Wetland Delineation	WRA	Future	In Preparation

**California State Parks
Pullman Ditch Culvert Replacement
Biological Report**

APPENDIX C: VEGETATION AND HABITAT MAPS



Pullman Ditch Culvert Replacement Biological Report

Appendix C

From City of Half Moon Bay Local Coastal Land Use Plan, 2020

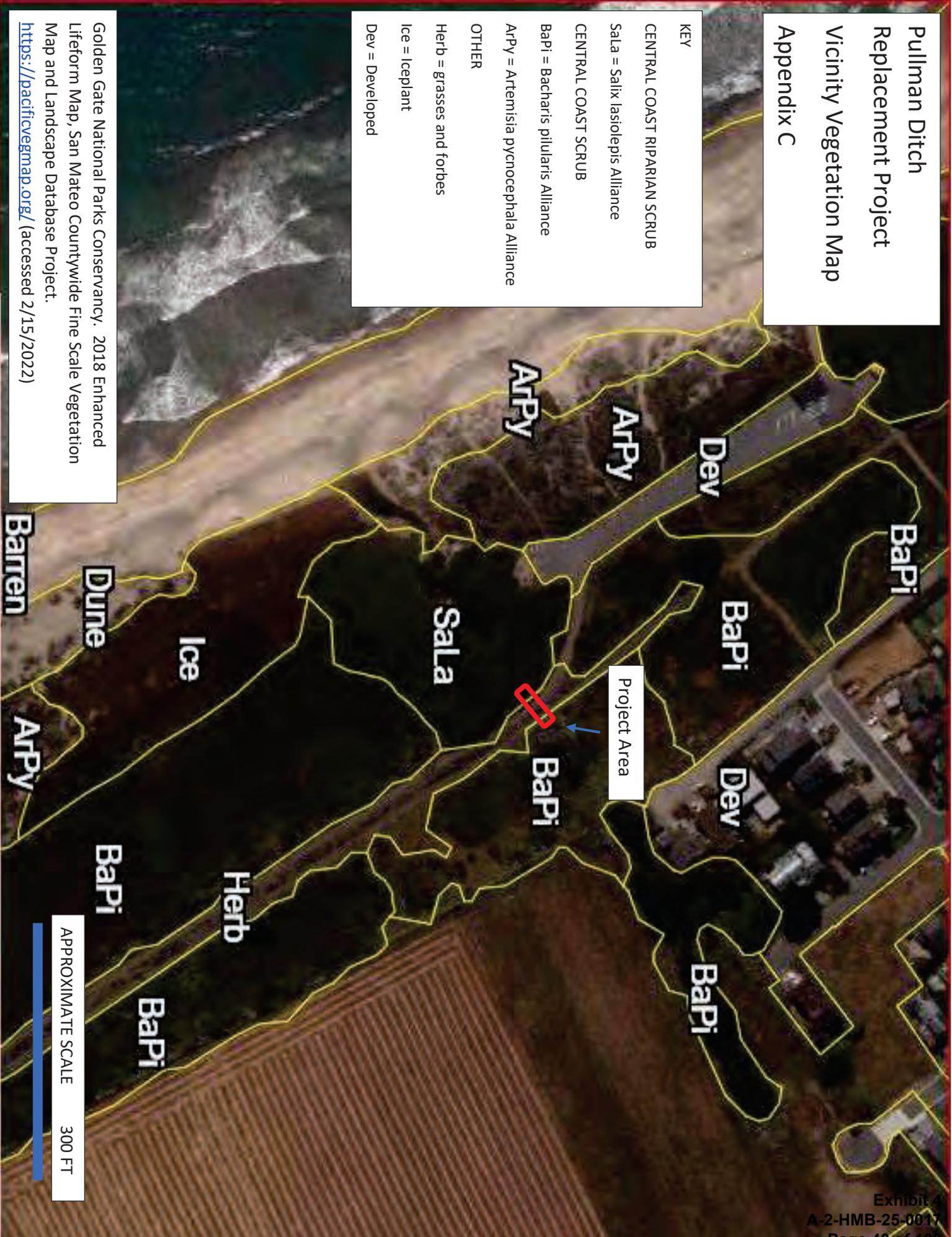
Huffman-Broadway Group, Inc.
ENVIRONMENTAL RESOLUTION CONSULTANTS

City Council Final October 20, 2020

Figure 6-1: Habitat Types in the LCP Planning Area, Sheet 1 of 3

Pullman Ditch
Replacement Project
Vicinity Vegetation Map
Appendix C

- KEY**
- CENTRAL COAST RIPARIAN SCRUB
 - Sala = Salix lasiolepis Alliance
 - CENTRAL COAST SCRUB
 - BaPi = Baccharis pilularis Alliance
 - ArPy = Artemisia pycnocephala Alliance
 - OTHER
 - Herb = grasses and forbes
 - Ice = Iceplant
 - Dev = Developed



Golden Gate National Parks Conservancy. 2018 Enhanced Lifeform Map, San Mateo Countywide Fine Scale Vegetation Map and Landscape Database Project.
<https://pacificvegmap.org/> (accessed 2/15/2022)

APPROXIMATE SCALE 300 FT

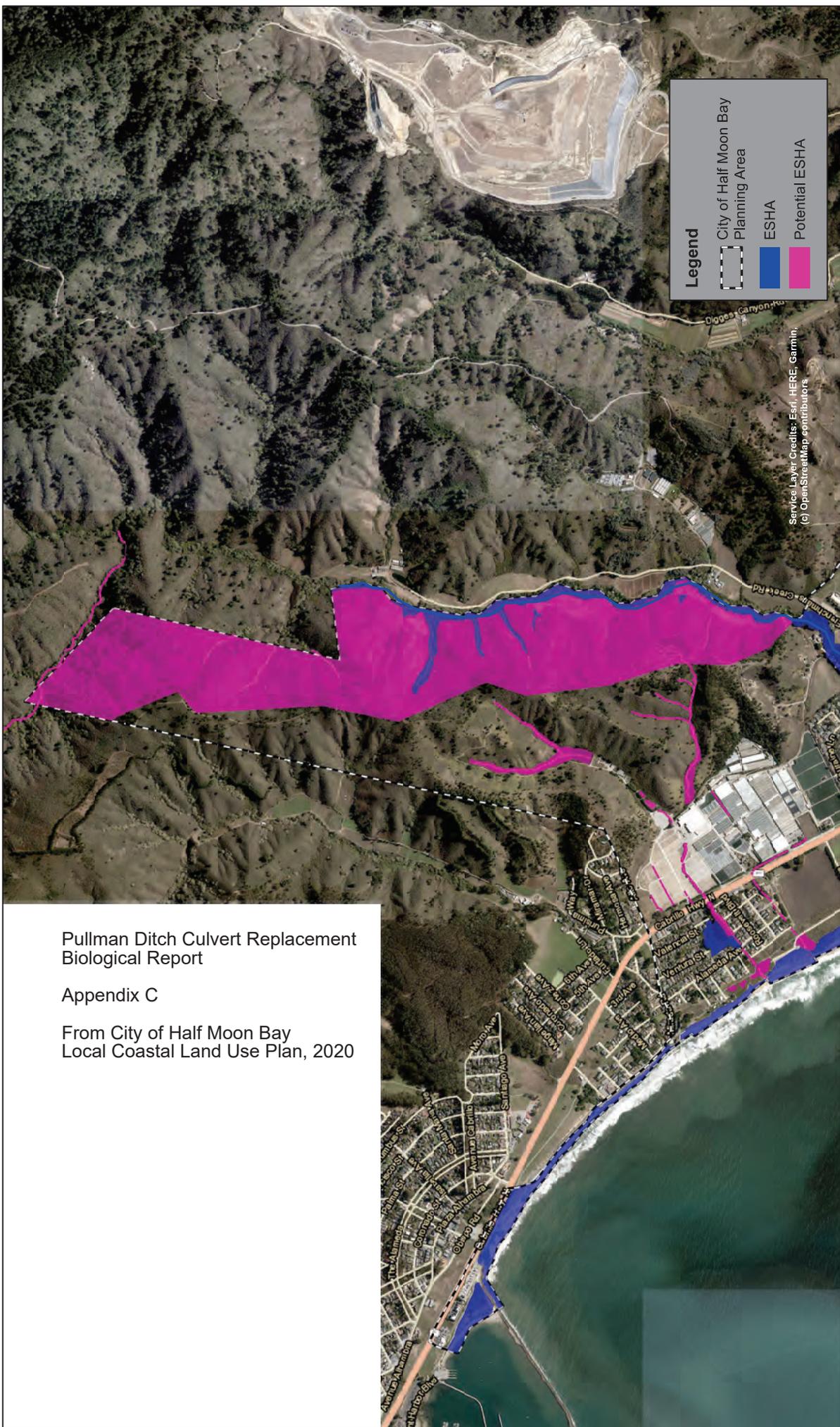


Pullman Ditch Culvert Replacement
Biological Report

Appendix C

From City of Half Moon Bay
Local Coastal Land Use Plan, 2020

Figure 6-2: Environmentally Sensitive Habitat Areas (ESHAs), Sheet 1 of 3



Pullman Ditch Culvert Replacement Biological Report

Appendix C

From City of Half Moon Bay Local Coastal Land Use Plan, 2020

Huffman-Broadway Group, Inc.
environmental resolution consultants
City Council Final October 20, 2020

Figure 6-4: Summary of ESHAs and Potential ESHAs, Sheet 1 of 3

**California State Parks
Pullman Ditch Culvert Replacement
Biological Report**

APPENDIX D: SPECIAL STATUS SPECIES MAPS

- | | | | |
|-----------------------------|------------------------------|-----------------------------|--------------------------------|
| 1, arcuate bush-mallow | 7, Franciscan onion | 13, Ornduff's meadowfoam | 19, San Francisco owl's-clover |
| 2, Blasdale's bent grass | 8, Hickman's cinquefoil | 14, perennial goldfields | 20, San Mateo woolly sunflower |
| 3, Choris' popcornflower | 9, Kellogg's horkelia | 15, rose leptosiphon | 21, western leatherwood |
| 4, coast yellow leptosiphon | 10, Kings Mountain manzanita | 16, San Francisco campion | 22, white-rayed pentachaeta |
| 5, coastal marsh milk-vetch | 11, Montara manzanita | 17, San Francisco collinsia | 23, woodland woollythreads |
| 6, fragrant fritillary | 12, Oregon polemonium | 18, San Francisco gumplant | |

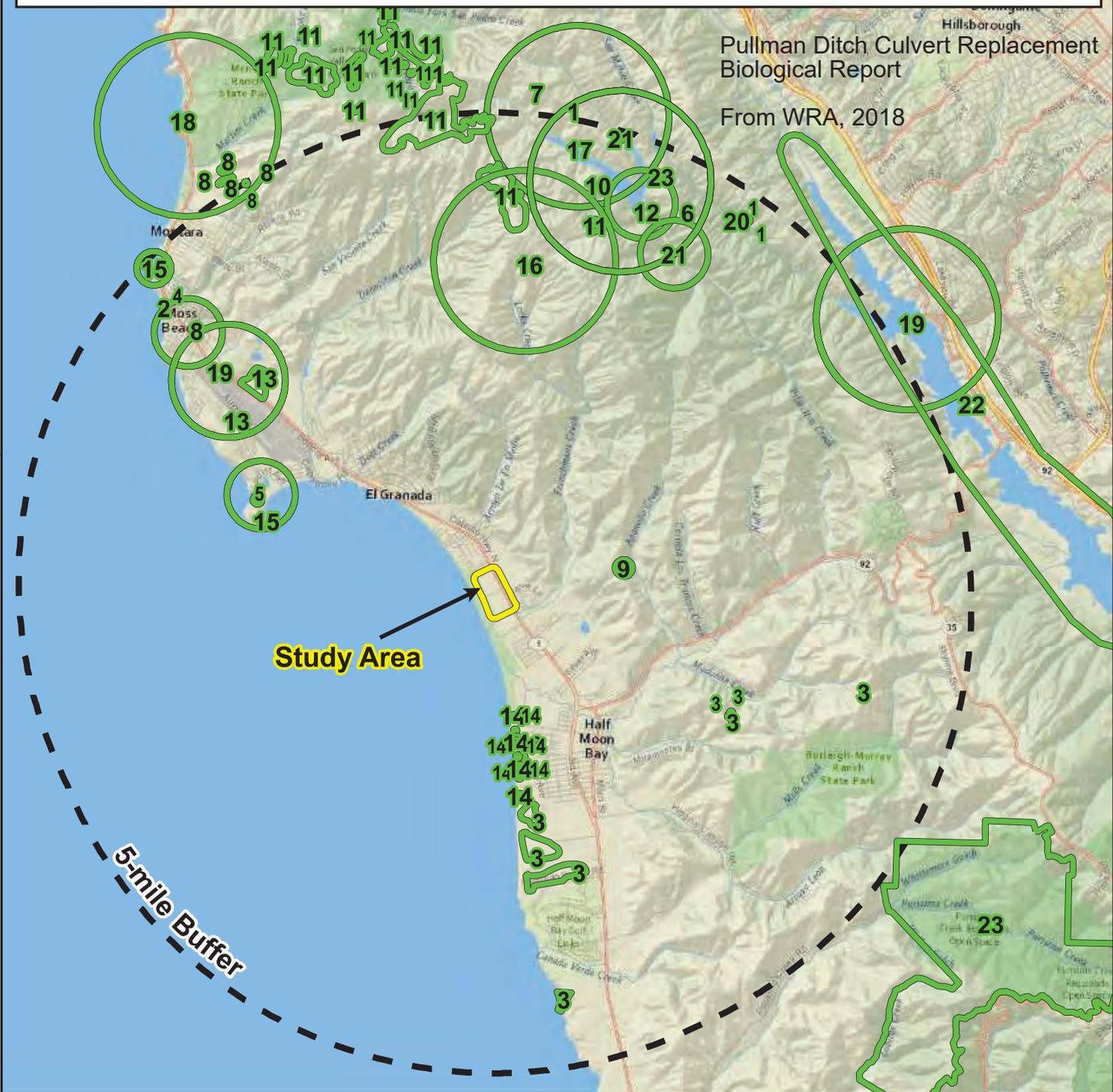


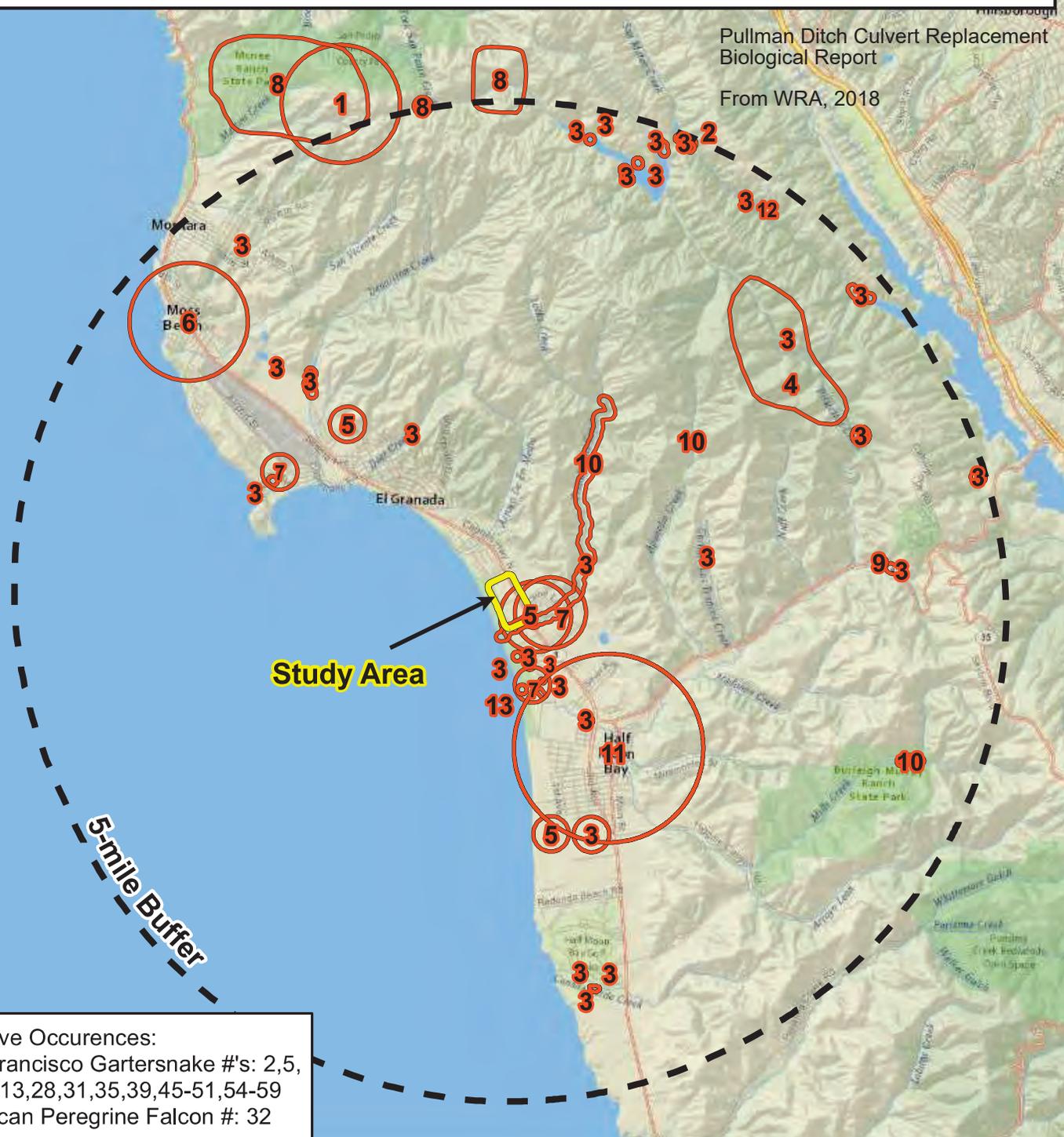
Figure 4. Special-Status Plant Species Documented within 5 Miles of the Study Area

The Dunes at Half Moon Bay
 Biological Resources Evaluation
 San Mateo County, California



Map Prepared Date: 5/23/2018
 Map Prepared By: smortensen
 Base Source: Esri Streaming - National Geographic
 Data Source(s): WRA, CNDDB April 2011

- | | | |
|--------------------------------|--------------------------------------------------|----------------------------------------------|
| 1, American badger | 5, monarch - California overwintering population | 9, San Francisco dusky-footed woodrat |
| 2, California giant salamander | 6, obscure bumble bee | 10, steelhead - central California coast DPS |
| 3, California red-legged frog | 7, saltmarsh common yellowthroat | 11, western bumble bee |
| 4, marbled murrelet | 8, San Bruno elfin butterfly | 12, western pond turtle |
| | | 13, western snowy plover |



Sensitive Occurences:
 -San Francisco Gartersnake #'s: 2,5, 7,9-11,13,28,31,35,39,45-51,54-59
 -American Peregrine Falcon #: 32

Figure 5. Special-Status Wildlife Species Documented within 5 Miles of the Study Area

The Dunes at Half Moon Bay
 Biological Resources Evaluation
 San Mateo County, California



Map Prepared Date: 5/23/2018
 Map Prepared By: smortensen
 Base Source: Esri Streaming - National Geographic
 Data Source(s): WRA, CNDDB April 2017

**California State Parks
Pullman Ditch Culvert Replacement
Biological Report**

APPENDIX E: SEA LEVEL RISE MAPS



SEA LEVEL RISE VULNERABILITY
From City of Half Moon Bay, 2016
Plan Half Moon Bay: Sea Level Rise
Vulnerability Assessment

Figure 2-3

**Potential Sea Level Rise And
Flooding - Reach I**

100 Year Flood + Sea Level Rise

- 0 cm (0.00 ft) SLR
- 25 cm (0.82 ft) SLR
- 50 cm (1.64 ft) SLR
- 91 cm (3.00 ft) SLR

- City of Half Moon Bay
- Planning Area



Data Source: Our Coast Our Future (OCOF) FEMA FIRM (Preliminary 9/14/2015); City of Half Moon Bay, 2014; San Mateo County GIS, 2014; NCI, 2015; Dyett & Bhatia, 2014

SEA LEVEL RISE PROJECTIONS: 100 CM SEA LEVEL RISE AND 100 YEAR STORM



Image and Legend from the Our Coast Our Future web platform (Point Blue Conservation Science and USGS 2022)

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
 455 MARKET ST., SUITE 228
 SAN FRANCISCO, CA 94105-2420
 (415) 904-5260
 NORTHCENTRALCOAST@COASTAL.CA.GOV

RECEIVED

JUN 18 2025

APPEAL FORM

CALIFORNIA
 COASTAL COMMISSION
 NORTH CENTRAL COAST

Appeal of Local Government Coastal Development Permit

Filing Information (STAFF ONLY)

District Office: North Central Coast

Appeal Number: 2-HMB-25-0595

Date Filed: June 18, 2025

Appellant Name(s): Anju Abel

APPELLANTS

IMPORTANT. Before you complete and submit this appeal form to appeal a coastal development permit (CDP) decision of a local government with a certified local coastal program (LCP) to the California Coastal Commission, please review [the appeal information sheet](#). The appeal information sheet describes who is eligible to appeal what types of local government CDP decisions, the proper grounds for appeal, and the procedures for submitting such appeals to the Commission. Appellants are responsible for submitting appeals that conform to the Commission law, including regulations. Appeals that do not conform may not be accepted. Appeals must be received no later than 5 pm on the last day of the appeal period. If you have any questions about any aspect of the appeal process, please contact staff in the Commission district office with jurisdiction over the area in question (see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>).

Note regarding emailed appeals. Please note that emailed appeals are accepted **ONLY** at the general email address for the Coastal Commission district office with jurisdiction over the local government in question. For the North Central Coast district office, the email address is NorthCentralCoast@coastal.ca.gov. An appeal emailed to some other email address, including a different district's general email address or a staff email address, will be rejected. It is the appellant's responsibility to use the correct email address, and appellants are encouraged to contact Commission staff with any questions. For more information, see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>.

Appeal of local CDP decision

Page 2

1. Appellant information:

Name: Anju Abel
Mailing address: 2801 Champs Elysee Blvd., Half Moon Bay CA 94019
Phone number: 646 408 2662
Email address: anjuabel@gmail.com

How did you participate in the local CDP application and decision-making process?

Did not participate Submitted comment Testified at hearing Other

Describe: Testified at Planning Commission August 10, 2024, and City Council Appeals October 15 2024
and June 3, 2025.

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe: _____

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe: Testified 3 times.

¹ If there are multiple appellants, each appellant must provide their own contact and participation information. Please attach additional sheets as necessary.

Appeal of local CDP decision

Page 4

3. Applicant information

Applicant name(s):

Mark Massara

Applicant Address:

65 Ventura Street,

Half Moon Bay

4. Grounds for this appeal⁴

For appeals of a CDP approval, grounds for appeal are limited to allegations that the approved development does not conform to the LCP or to Coastal Act public access provisions. For appeals of a CDP denial, grounds for appeal are limited to allegations that the development conforms to the LCP and to Coastal Act public access provisions. Please clearly identify the ways in which the development meets or doesn't meet, as applicable, the LCP and Coastal Act provisions, with citations to specific provisions as much as possible. Appellants are encouraged to be concise, and to arrange their appeals by topic area and by individual policies.

Describe: LCP Figure 6-2, Habitat ESHA - 2800 Champs Elysee directly borders Dune Habitat.

Development of this property and the activity of same development will disturb and potentially

damage ESHA. The proposed detention basin will redirect sheet flow. The large trees on the

property are where raptors launch to foraging habitat. Tree roots damaged during construction.

Applicant mislead City processed throughout. Impervious surfaces quoted neglected to include

the 4 car apron to the garage, the breezeway and courtyard. The runoff to the ESHA will be

exponentially increased. LCP Chapter 6 Wetlands : Western side of property is a wetland : please

see attachment for details. Soils are hydric. This is a liqification zone. The applicant represents

the property owner, whose primary residence is a 15,000 sq foot house in the Los Altos Hills.

Propery Owner is a SME in property development and water. Mercury News - December 18, 2024.

Water wars in a drying California : New money vs. old power in San Joaquin Valley

Silicon Valley developer John Vidovich has a pipeline. Cotton king J.G. Boswell is blocking it.

⁴ Attach additional sheets as necessary to fully describe the grounds for appeal.

Appeal of local CDP decision

Page 5

5. Identification of interested persons

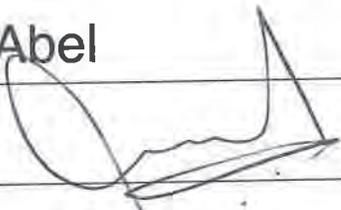
On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

Interested persons identified and provided on a separate attached sheet

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name Anju Abel

Signature 

Date of Signature 06/18/2025

7. Representative authorization⁶

While not required, you may identify others to represent you in the appeal process. If you do, they must have the power to bind you in all matters concerning the appeal. To do so, please complete the representative authorization form below and check this box to acknowledge that you have done so.

I have authorized a representative, and I have provided authorization for them on the representative authorization form attached.

⁵ If there are multiple appellants, each appellant must provide their own certification. Please attach additional sheets as necessary.

⁶ If there are multiple appellants, each appellant must provide their own representative authorization form to identify others who represent them. Please attach additional sheets as necessary.

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300
 SAN FRANCISCO, CA 94105-2219
 VOICE (415) 904-5200
 FAX (415) 904-5400

**DISCLOSURE OF REPRESENTATIVES**

If you intend to have anyone communicate on your behalf to the California Coastal Commission, individual Commissioners, and/or Commission staff regarding your coastal development permit (CDP) application (including if your project has been appealed to the Commission from a local government decision) or your appeal, then you are required to identify the name and contact information for all such persons prior to any such communication occurring (see Public Resources Code, Section 30319). The law provides that failure to comply with this disclosure requirement prior to the time that a communication occurs is a misdemeanor that is punishable by a fine or imprisonment and may lead to denial of an application or rejection of an appeal.

To meet this important disclosure requirement, please list below all representatives who will communicate on your behalf or on the behalf of your business and submit the list to the appropriate Commission office. This list could include a wide variety of people such as attorneys, architects, biologists, engineers, etc. If you identify more than one such representative, please identify a lead representative for ease of coordination and communication. You must submit an updated list anytime your list of representatives changes. You must submit the disclosure list before any communication by your representative to the Commission or staff occurs.

Your Name _____

CDP Application or Appeal Number _____

Lead Representative

Name _____

Title _____

Street Address. _____

City _____

State, Zip _____

Email Address _____

Daytime Phone _____

Your Signature _____

Date of Signature _____

Additional Representatives (as necessary)

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Your Signature _____

Date of Signature _____

Appeal to overturn approval of Half Moon Bay PDP-17-055 for a new 4,710sq foot residence at 2800 Champs Elysee, identified as San Matro County Assessor's Parcel Number 148-133-060 (THE PROPERTY). Submitted by Anju Abel

There was a **Waters and Wetlands Delineation Report** prepared in August 2022.

I contest, that this report is faulted on two counts and that the following photo on page 3, should be considered when assessing the property as a seasonal wetland.

Wetlands are considered valuable features, as they support diverse plant and animal species, including some found only in wetlands, and provide many functions such as protecting the quality of coastal waters by filtering or fixing contaminants; protecting the shoreline by acting as a buffer against waves and storms; detaining storm or flood waters; allowing for groundwater recharge; providing recreation areas; and contributing to an area's visual quality. In the Coastal Act, wetlands are referred to as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens" (Section 30121).

The photo shows that it detains storm or flood water, allows for groundwater recharge, and is covered periodically with shallow water.

Also of interest is that some of this water comes from Rocket Farms, and may contain contaminants that are being filtered from the shoreline.

Firstly, LCP Chapter 6, Wetlands page 34. Single-parameter vs. three-parameters.

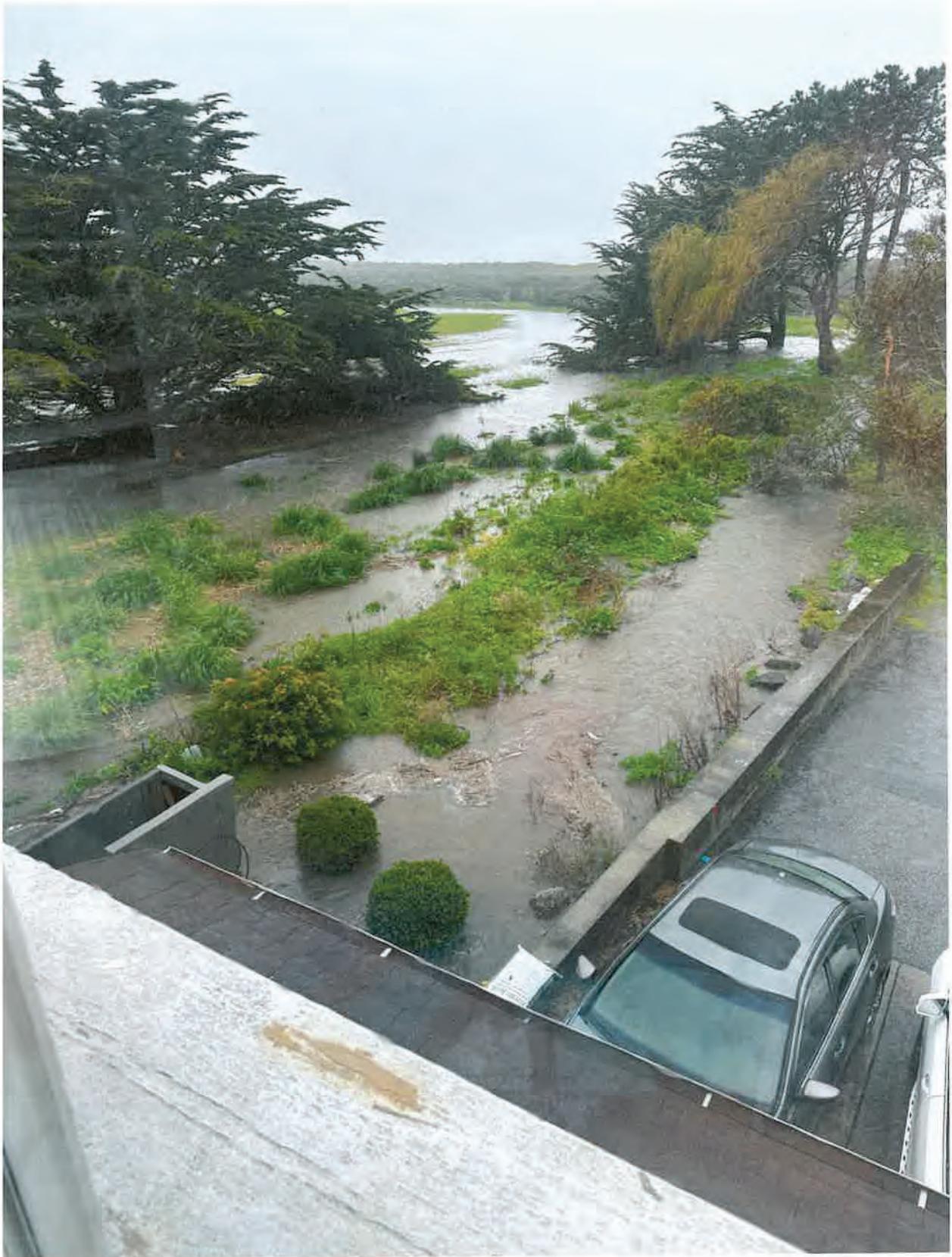
The Coastal Commission's definition of wetlands is a single-parameter definition that requires evidence of only one of three wetland indicators (hydrophytic vegetation, hydric soils, or saturated substrate). In contrast, the US Army Corps of Engineers uses a three-parameter definition that requires evidence of all three wetland indicators in order to classify an area as wetland. As a result, more areas qualify as wetlands under the Coastal Act than under the federal Clean Water Act. The LCP is consistent with the Coastal Act, and therefore uses the single-parameter definition.

From the **Waters and Wetlands Delineation Report**

While this survey was conducted during the dry season, the 1987 Corps methodology for conducting wetland delineations was not limited to time of year, with the exception of the growing season. Other wetland indicators such as hydric soils will be present in most situations regardless of time of year and can last for decades. The 1987 Corps of Engineers Manual states: Explicit in the definition is the consideration of three environmental parameters: hydrology, soil, and vegetation. Positive wetland indicators of all three parameters are normally present in wetlands. Although vegetation is often the most readily observed parameter, sole reliance on vegetation or either of the other parameters as the determinant of wetlands can sometimes be misleading. Many plant species can grow successfully in both wetlands and non-wetlands, and hydrophytic vegetation and hydric soils may persist for decades following alteration of hydrology that will render an area a non-wetland. The presence of hydric soils and wetland hydrology indicators in addition to vegetation indicators will provide a logical, easily defensible, and technical basis for the presence of wetlands. The combined use of indicators for all three parameters will enhance the technical accuracy, consistency, and credibility of wetland determinations. Therefore, all three parameters were used in developing the technical guideline for wetlands and all approaches for applying the technical guideline embody the multiparameter concept (USACE 1987).

Secondly, the report was compromised by the infill soils that were added in 2016.

No areas within the Study Area retained significant amounts of water, as the soil is moderately well drained (Denison loam, Farallone Coarse Loam and unidentified fill soils). The data sheets (Appendix D) describe the soil samples, vegetation, and hydrology found at this site. Soils were typically black (10 YR 2/1). No gleyed soils or redoximorphic features were observed. Orange and yellow-colored soils (10 YR 4/6, 10YR 3/6, 10YR 4/3, and 7.5YR 4/4) were sometimes encountered (Appendix B: Photos 2 and 4), and these soils appeared to be fill soils that had been brought into the site during previous grading/earth moving operations on site.



CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
 455 MARKET ST., SUITE 228
 SAN FRANCISCO, CA 94105-2420
 (415) 904-6260
 NORTHCENTRALCOAST@COASTAL.CA.GOV

**APPEAL FORM****Appeal of Local Government Coastal Development Permit****Filing Information (STAFF ONLY)**

District Office: North Central Coast

Appeal Number: 2-HMB-25-0595 / PDP-17-055

Date Filed: June 19, 2025

Appellant Name(s): Joe Farrell, John Rossi, Vic Froelicher, Susan Quaglietti

APPELLANTS

IMPORTANT. Before you complete and submit this appeal form to appeal a coastal development permit (CDP) decision of a local government with a certified local coastal program (LCP) to the California Coastal Commission, please review [the appeal information sheet](#). The appeal information sheet describes who is eligible to appeal what types of local government CDP decisions, the proper grounds for appeal, and the procedures for submitting such appeals to the Commission. Appellants are responsible for submitting appeals that conform to the Commission law, including regulations. Appeals that do not conform may not be accepted. Appeals must be received no later than 5 pm on the last day of the appeal period. If you have any questions about any aspect of the appeal process, please contact staff in the Commission district office with jurisdiction over the area in question (see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>).

Note regarding emailed appeals. Please note that emailed appeals are accepted **ONLY** at the general email address for the Coastal Commission district office with jurisdiction over the local government in question. For the North Central Coast district office, the email address is NorthCentralCoast@coastal.ca.gov. An appeal emailed to some other email address, including a different district's general email address or a staff email address, will be rejected. It is the appellant's responsibility to use the correct email address, and appellants are encouraged to contact Commission staff with any questions. For more information, see the Commission's [contact page](#) at <https://coastal.ca.gov/contact/#/>.

Page 2

1. Appellant information:

Name: Joe Farrell

Mailing address: 2805 Alameda Ave, Half Moon Bay, CA 94019

Phone number: 650.954.7862

Email address: jfarrellhmb@gmail.com

How did you participate in the local CDP application and decision-making process?

Describe:

I've submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the Agenda, including the last City Council meeting where the CDP was approved.

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe: **NA**

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe:

Met with various Planning Commissioners, City Council members, the attorney for the applicant, Mr. Mark Masara, and multiple hydrology experts. Submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the agenda, including the last City Council meeting where the CDP was approved.

Page 2

1. Appellant information:

Name: **John Rossi**

Mailing address: **2804 Champs Elysee Blvd. Half Moon Bay CA 94019**

Phone number: **805-410-2559**

Email address: **jrossi.91320@gmail.com**

How did you participate in the local CDP application and decision-making process?

Describe:

I've submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the Agenda, including the last City Council meeting where the CDP was approved.

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe: **NA**

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe:

Met with various Planning Commissioners, City Council members, the attorney for the applicant, Mr. Mark Masara, and multiple hydrology experts. Submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the agenda, including the last City Council meeting where the CDP was approved.

Page 2

1. Appellant information:

Name: Vic Froelicher

Mailing address: 2805 Champs Elysee Blvd HMB, CA 94019

Phone number: 650 245 0956

Email address: victorf@stanford.edu

How did you participate in the local CDP application and decision-making process?

I've submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the Agenda, including the last City Council meeting where the CDP was approved.

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Met with various Planning Commissioners, City Council members, the attorney for the applicant, Mr. Mark Masara, and multiple hydrology experts. Submitted comments, and testified at Planning Commission and City Council meetings where PDP-17-055 was on the agenda, including the last City Council meeting where the CDP was approved.

Page 5

5. Identification of interested persons

NA see page #8



1. Appellant information

Name: Susan Quaglietti

Mailing address: 2805 Champs Elysee Blvd, Half Moon Bay, CA 94019

Phone number: (650) 804-0968

Email address: squaglietti@gmail.com

How did you participate in the local CDP application and decision-making process?

Describe: **I have given public comments during the Planning Commission and City Counsel meeting where PDP-17-055 was on the agenda. I was present and commented at the last City Council meeting on 6/3/2025 when the CDP was approved.**

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe: **NA**

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe: **I was present at multiple Planning Commission and City Council meetings that discussed PDP-17-055, including the last meeting on 6/3/2025.**

Page 5

5. Identification of interested persons

On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

Describe: **This is N/A in my case.**

Interested persons identified and provided on a separate attached sheet *(page 8)*

Susan Quaglietti 6/18/2025

Appeal of local CDP decision
Page 3

2. Local CDP decision being appealed:

Local government name: City of Half Moon Bay

Local government approval body: **City Council**_____

Local government CDP application number: **PDP-17-055**_____

Local government CDP decision: CDP approval CDP denial: Planning Commission Denial on September 10, 2024, City Council Denial upon Appeal on October 15, 2024 and Final City Council Approval of CDP on June 3, 2025

Date of local government CDP decision: June 3, 2025_____

Please identify the location and description of the development that was approved or denied by the local government.

Describe: COASTAL DEVELOPMENT PERMIT AND ARCHITECTURAL REVIEW FOR A NEW RESIDENCE AT 2800 CHAMPS ELYSEE BLVD, HALF MOON BAY FILE NO. PDP-17-055, APN 048-133-060_The proposed Project includes the construction of a 4,710 square foot two-story single-family residence on a triangular 31,709 square foot lot located at 2800 Champs Elysee Blvd., identified as San Mateo County Assessor's Parcel Number 048-133-060 (the Property). A two-car garage is connected to the residence by a breezeway and courtyard between the two buildings. Extensive landscaping would be installed within the large triangular lot. A large stormwater detention basin would be installed behind the residence to detain on-site generated stormwater from the proposed residence improvements. Condition of Approval B4 in Exhibit B of Attachment 1 requires the Property owner to make an irrevocable offer to the City of Page 2 of 5 dedication of an easement along the northern portion of the Property, to allow for possible future drainage improvements._Determine that the project complies with the requirements of the previously adopted Initial Study / Mitigated Negative Declaration (IS/MND) associated with the subdivision and that the project is Categorically Exempt from environmental review pursuant to CEQA Guidelines Section 15303, New Construction.

Appeal of local CDP decision

Page 4

3. Applicant information

Applicant name(s): Mark Massara and John Vidovich

Applicant Address: Mark Massara, Law Office of Mark Massara, 4285 Oak View Rd, Santa Ynez, CA 93460

Applicant Address: John Vidovich's business address, 960 N. San Antonio Road, Los Altos, CA, 9

4. Grounds for Appeal:

For appeals of a CDP approval, grounds for appeal are limited to allegations that the approved development does not conform to the LCP or to Coastal Act public access provisions. For appeals of a CDP denial, grounds for appeal are limited to allegations that the development conforms to the LCP and to Coastal Act public access provisions. Please clearly identify the ways in which the development meets or doesn't meet, as applicable, the LCP and Coastal Act provisions, with citations to specific provisions as much as possible. Appellants are encouraged to be concise, and to arrange their appeals by topic area and by individual policies.

Describe: **See attached document titled:**

APPEAL OF HALF MOON BAY CITY COUNCIL APPROVAL OF A COASTAL DEVELOPMENT PERMIT AND ARCHITECTURAL REVIEW FOR A NEW RESIDENCE AT 2800 CHAMPS ELYSEE BLVD, FILE NO. PDP-17-055, APN 048-133-060.

5. Identification of interested persons

On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

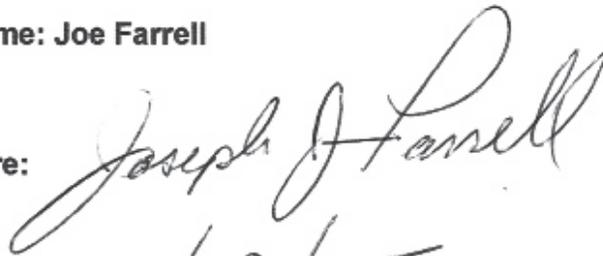
Interested persons identified and provided on a separate attached sheet (page 8)

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name: Joe Farrell

Signature:



Date:

6/19/25

5. Identification of interested persons

On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

Interested persons identified and provided on a separate attached sheet (page 8)

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name:

John Rossi

Signature:

John Rossi

Date:

19 JUNE 2025

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name: Vic Froelicher

Signature:

A handwritten signature in black ink, appearing to read "Vic Froelicher", written in a cursive style.

Date: June 18, 2025

A handwritten mark or signature in black ink, consisting of several loops and a cross-like shape at the end.

6. Appellant certification

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name: Susan Quaglietti

Signature: 

Date: 6/18/2025

Susan Quaglietti 6/18/2025

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY GAVIN NEWSOM, GOVERNOR **CALIFORNIA COASTAL COMMISSION**

455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400



DISCLOSURE OF REPRESENTATIVES

If you intend to have anyone communicate on your behalf to the California Coastal Commission, individual Commissioners, and/or Commission staff regarding your coastal development permit (CDP) application (including if your project has been appealed to the Commission from a local government decision) or your appeal, then you are required to identify the name and contact information for all such persons prior to any such communication occurring (see Public Resources Code, Section 30319). The law provides that failure to comply with this disclosure requirement prior to the time that a communication occurs is a misdemeanor that is punishable by a fine or imprisonment and may lead to denial of an application or rejection of an appeal.

To meet this important disclosure requirement, please list below all representatives who will communicate on your behalf or on the behalf of your business and submit the list to the appropriate Commission office. This list could include a wide variety of people such as attorneys, architects, biologists, engineers, etc. If you identify more than one such representative, please identify a lead representative for ease of coordination and communication. You must submit an updated list anytime your list of representatives changes. You must submit the disclosure list before any communication by your representative to the Commission or staff occurs.

Your Name _____

CDP Application or Appeal Number _____

Lead Representative *NA*
Name _____
Title _____
Street Address _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Your Signature _____

Date of Signature _____

Additional Representatives (as necessary)

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Your Signature _____
Joseph Paul

Date of Signature _____
6/19/2025

List names of persons who are interested in the local CDP decision and the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.) Interested persons are identified below:

Christopher Devcich and

Angela Neiman

2810 Alameda Ave, Half Moon Bay CA 94019

Email:christopher.devcich@gmail.com

Brad Steinwede and

Anju Able

2801 Champs Elysee Blvd, Half Moon Bay CA 94019

Email:bsteinwede@icloud.com

Brent and Jennifer Simmons

2782 Pullman Ave, Half Moon Bay CA 94019

Email:BSimmons@cleanwater1.com

Sandy and John Paoli

2647 Washington Ave, Redwood City CA

Email:sandunes1@aol.com

**APPEAL TO CALIFORNIA COASTAL COMMISSION OF HALF MOON BAY CITY COUNCIL
APPROVAL OF A COASTAL DEVELOPMENT PERMIT AND ARCHITECTURAL REVIEW
FOR A NEW RESIDENCE AT 2800 CHAMPS ELYSEE BLVD, FILE NO. PDP-17-055, APN
048-133-060.**

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Executive Summary

We respectfully contend that the record presents clear, cumulative inconsistencies with the City's certified Local Coastal Program (LCP) and the Coastal Act—particularly in biological resource protection, flood hazard avoidance, and public access—warranting a finding of substantial issue and full Commission review. Because the unpermitted 2016 grading continues to channel stormwater into the Coastal Trail, destabilize blufftop soils, and obliterate Environmentally Sensitive Habitat Areas (ESHA) along Pullman Watercourse—ongoing violations the LCP and Coastal Act expressly forbid—the Commission must find a “substantial issue,” assume de novo jurisdiction of 2800 Champs Élysée to fulfill its statutory duty. By tracing the project's troubled history and presenting comparative aerial imagery (Appendix A, Photos 1-4) showing active drainage channels and exposed fill within the ESHA buffer, we reveal a pattern of procedural oversight and policy nonconformance that cannot be remedied through piecemeal conditions or deferred mitigations.

Historical & Procedural Timeline: How LCP Findings Conflict with the 2800 Champs Élysée Project

2010–2014: Subdivision, Approval, and Appeal

The history of 2800 Champs Elysee begins with a 2010 application to subdivide the property. In 2012, the Half Moon Bay City Council approved the subdivision, which was promptly appealed to the California Coastal Commission on the basis that it violated key provisions of the City's certified Local Coastal Program (LCP).

On May 13, 2014, **Coastal Commission staff issued a detailed report recommending a finding of substantial issue**, citing multiple LCP conformance problems. Staff identified significant policy conflicts in the areas of **biological resources, land use, and flood hazards**. Specifically, the proposed land division would **impact ESHA** associated with the Pullman Ditch, **lacked adequate riparian setbacks**, allowed development in an area without the required **Specific Plan** under the LCP's PUD zoning regulations, and posed a **flood hazard to the nearby Coastal Trail and adjacent residences**—all of which are located within a known floodplain.

The staff report emphasized that the appeal raised substantial issues related to the subdivision's inconsistency with the City's certified **biological resource protections, land use policies, and flooding standards**. An **addendum to the staff report** further outlined three major deficiencies:

1. **Absence of a Specific Plan** for the Planned Development (PD) district.
2. **Failure to apply LCP-sensitive habitat policies** appropriately.
3. Improper narrowing of the definition of ESHA, which—under the City’s LCP—includes habitats “**containing or supporting**” unique, rare, or endangered species as defined by the California Fish and Game Commission, even if species were not physically observed onsite at the time of review.

Dr. Dixon, the Coastal Commission’s Senior Ecologist, reviewed the environmental record and confirmed that **Pullman Ditch supports foraging and dispersal habitat** for two federally protected species: the **California red-legged frog** and the **San Francisco garter snake**. Both the **U.S. Fish and Wildlife Service (USFWS)** and the **California Department of Fish and Wildlife (CDFW)** agreed. Based on these ecological findings, Dr. Dixon concluded that a **50-foot riparian buffer** should have been required, **not the 30-foot setback** that was approved. He further observed that the prescribed guidelines for assessing endangered species were not properly followed during the field evaluation.

In addition, staff noted that the City’s failure to implement a Planned Unit Development Plan (PUDP), as required by its own LCP, constituted **piecemeal planning** that could undermine the planning framework for the entire PD district.

Despite the clear and well-substantiated concerns outlined by Coastal Commission staff, the Commission voted “**no substantial issue**,” effectively ending review of the appeal. In response, the Executive Director issued a **12-page memo dated June 9, 2014**, aimed at **re-educating the Commission** on the proper procedures and standards for conducting substantial issue hearings—guidance that remains relevant to this day.

2015–2018: Site Altered Before Public Review

In late 2016, [unpermitted grading](#) raised the site’s elevation and disrupted natural drainage patterns—which may have contributed to persistent flooding of neighboring properties and the observed degradation of the Environmentally Sensitive Habitat Area (ESHA) buffer (see Appendix A photos). In 2018, the adjacent coastal access road to Roosevelt Beach closed due to [erosion and scour](#)—a loss that could reflect the cumulative effect of that unpermitted work alongside severe flooding events. Under CDP HMB-12-005 (Resolution No. C-04-12), Condition HYD-1, all grading was strictly confined to the dry season (April 1 – October 31). The late-2016 Champs Elysee Avenue roadway regrading fell outside that window (~ November 2016 - January 2017)—potentially jeopardizing water quality and downstream habitat—and the concurrent dumping of fill onto 2800 Champs Elysee to form the cul-de-sac appears to

constitute a second, distinct breach of the approved work limits. This ongoing loss of coastal access raises fundamental questions about the project's compatibility with the Coastal Act's public-access mandate.

August 14, 2018: Zoning Ambiguity and Omitted Context

At the initial Planning Commission hearing, confusion dominated the discussion. Commissioners could not determine whether the parcel was governed by a PUD, a PD, or another zoning designation. Staff attempted to clarify this by referencing the SurferBeach/Dunes Beach PUD, but the record was incomplete.

Key context was missing. Studies provided were not discussed. Public commenters and commissioners raised concerns about tree surgery near the Coastal Trail and called for Coastal Act Chapter 1 policies to be formally included in the record.

The Commission continued the hearing to a future date, citing unresolved questions.

April 9, 2019: Evidence Mounts, But Analysis Falls Short

At the second Planning Commission hearing, members of the public raised new evidence: substantial fill had already been added to the site in late 2016. When asked, staff acknowledged they were previously unaware of the elevation changes. The applicant noted plans to import 14 more cubic yards of fill, but provided no accounting of what had already been placed.

Residents described frequent flooding in the neighborhood, noting new patterns of pooling and overflow since the regrading. The City's own 2011 hydrology report had flagged undersized Highway 1 culverts as a risk. Yet the project failed to account for how additional site runoff could exacerbate downstream flooding if those culverts were upgraded.

The Planning Commission again continued the item, requesting design revisions and further environmental review.

May 26, 2020: Seeking Clarity: Commissioner Highlights Lack of Subterranean Flow Analysis

On **May 26, 2020**, the Half Moon Bay Planning Commission held a continued hearing on the 2800 Champs Elysee project to address unresolved issues from the April 2019 meeting, particularly the lack of environmental review, basement-related drainage risks, and incomplete

hydrologic analysis. The applicant presented a new design with a full basement, increasing the total square footage, and proposed exporting **975 cubic yards of excavated soil** to agricultural lands to the south—an activity not permitted. Stormwater was to be managed using two dry wells intended to retain runoff onsite. However, the **groundwater table had risen from 12 feet to 8 feet**, matching the lowest depth of the proposed basement, raising additional

1 serious concerns about flooding and water displacement.

Commissioners questioned whether the basement could function as a **subterranean dam**, obstructing groundwater flow and causing flooding on adjacent parcels. A **soil expert testified that impermeable clay soils extended as deep as 12.5 feet**, raising doubts about whether the dry wells could function without mechanical pumping. Despite these findings, staff continued to rely on a previously adopted IS/MND with an updated BRE and did not recommend an exception to the CEQA exemption review—even though the City attorney noted that **Guideline 15300.2** may apply given the site's altered conditions.

Despite the project's complexity—including earth movement exceeding 975 cubic yards and proximity to sensitive hydrologic features—no CEQA exception review was requested. Instead, there was an updated BRE for the original subdivision only and it did not properly vet current site conditions which had changed significantly.

Additional issues arose during the hearing. A **Coastal Commission staff email** submitted earlier that day raised concerns about the potential for **wetlands near willow stands**, but staff did not share the email with the Commission, prompting criticism. It was also revealed that **unauthorized and damaging tree surgery** had occurred on protected **Monterey cypress trees** in a **restricted zone**—work not authorized by an arborist and **under code enforcement** investigation. Strangely, the **unpermitted 2016–2017 soil dumping and regrading in the 30-foot buffer zone** were reported at the 2019 hearing alongside the tree issues, yet the **City took no action**. Public commenters described encountering groundwater just 2 feet below ground, shared concerns about the cumulative effect of fill, and questioned the legality and environmental impact of soil export.

With major concerns still unresolved—ranging from groundwater dynamics and bluff stability to CEQA applicability and wetland concerns by the California Coastal Commission—the Commission voted to **continue the item to a date uncertain**, citing insufficient environmental analysis and failure to resolve the foundational questions first raised in 2019.

July 11, 2023: Persistent Concerns and Pattern Recognition

By the July 11, 2023 Planning Commission hearing, many of the previously raised concerns remained unresolved. The house design was revised to eliminate the basement and introduce dry wells to manage stormwater runoff. The applicant reiterated a 30-foot easement offer, which

had been a required condition since the initial approval discussions. Public commenters pointed out this misleading characterization.

Neighbors testified about persistent flooding, including one home that had flooded up to nine times in the past two years. Despite proposed mitigation, the plan lacked robust evidence demonstrating that new development would not worsen existing flood conditions. Commissioners questioned whether soils had been properly tested to ensure that water would percolate as proposed, and whether the redirected flow might form new wetlands or destabilize blufftop resources.

The Coastal Trail was also reported to be actively eroding, and concern was voiced that any additional burden from new development could exacerbate the situation. The Commission again continued the item, affirming that additional analysis and stronger alignment with LCP policies were still needed before the project could move forward.

September 10, 2024: A Procedural Denial, A Substantive Failure: What the Planning Commission Got Wrong

At its hearing on the proposed development at 2800 Champs Elysee, the Half Moon Bay Planning Commission voted to deny the project. On the surface, this may appear to reflect a decision to uphold the City's Local Coastal Program and the public concerns raised. But the context makes the intent clear: **this denial was made expressly to enable the applicant to appeal to the City Council.** In practice, it became a procedural pass-through—not a policy conclusion.

To their credit, the commissioners took seriously the complexity of the issues before them. They listened patiently to hours of public testimony and asked thoughtful questions. They acknowledged many of the community's concerns. But sympathy and attentiveness are not substitutes for policy consistency. And in this case, **the Planning Commission moved the project forward without resolving fundamental legal and environmental deficiencies.**

The facts were on the record: a biological survey confirmed that the site includes **suitable foraging habitat for the California red-legged frog and the San Francisco garter snake.** The site borders **Pullman Ditch**, a riparian corridor with clear ecological function. The proposed **30-foot buffer**—offered without a vegetation management plan, without subsurface hydrologic protections, and without any mitigation for runoff—falls well short of minimum scientific and regulatory standards. And still, the vote moved forward.

What the public asked for was simple: apply the law. **LCP Policies 6-32 through 6-35** protect habitat for special-status species. **LCP Policies 6-46 through 6-55** require safeguards for watercourses. **Coastal Act Section 30240** prohibits development that would significantly

disrupt ESHA or fail to buffer it adequately. These are not aspirational goals. They are binding obligations. The project as presented did not meet them.

And yet, the message from the dais was that those concerns could be addressed “later,” presumably at the Council level or during building permit review. That is not how coastal law is supposed to work. The Planning Commission has a clear responsibility: to ensure consistency **before** a project advances—not after. By voting to deny, the Commission effectively signaled that the process **would proceed even without policy compliance**.

To be clear, this isn’t about bad faith or neglect. Commissioners are public servants. They face enormous pressure to be responsive—to neighbors, to applicants, to staff. But this was a moment that called for a stronger stance. Instead, **the system defaulted to expediency over principle**.

The community is not appealing to be obstructive. We are asking for stewardship. We appeal for processes grounded in facts. For the rules of the LCP and the Coastal Act to be treated as thresholds, not suggestions.

The vote at this hearing was a turning point—not because it concluded the debate, but because it revealed that **despite real concerns and known inconsistencies, the project was pushed forward anyway**. That is not the standard the coast deserves. And it is not the process coastal law requires.

October 15, 2024: Safeguarding Our Shoreline: Justification for Denying the 2800 Champs Elysées Appeal

The City Council’s decision to deny the 2800 Champs Elysée appeal was firmly grounded in the robust, site-specific evidence amassed in the record. Neighbors’ firsthand reports of neighborhood flooding spurred a watershed-scale hydrological analysis, whose 10-year storm models dramatically depict inundation not only across the property but onto the coastal trail and adjacent roadway. Despite the applicant’s assertions that the parcel lies outside a flood hazard zone—and that a basin could withstand a 1,000-year event—the City Engineer’s maps confirm otherwise, and no credible stormwater plan shows where runoff near the bluff would be safely conveyed. Dr. Jimmy Benjamin’s expert testimony further demonstrated that the bluff’s fine soils are highly susceptible to entrained-flow erosion, yet the project includes no provisions for controlling that uplift of sediment. In light of these unaddressed flooding and erosion hazards—alongside the lack of feasible mitigation for public safety—the Council’s tie vote to uphold denial reflects the Commission’s mandate to protect coastal resources and prioritize community well-being over speculative construction in a demonstrably unsafe setting.

December 23, 2024: Litigation Initiated

On December 23, 2024, the applicant filed a lawsuit against the City of Half Moon Bay, alleging due process and taking violations. The City, facing the financial burden of litigation, was placed in the difficult position of defending a policy-based denial under legal threat.

June 3, 2025: CDP Approved via Settlement Agreement (Applicant Waives Legal Challenge)

The City Council voted 3–1 to settle the lawsuit and approve the Coastal Development Permit. Although additional hydrology reports were submitted, the new analysis did not address the core issues raised over multiple years: cumulative drainage effects, flooding history, or the loss of public coastal access. Despite the Council’s reliance on the Schaaf & Wheeler Flood Impact Study, the analysis never updates the temporal distribution of rainfall to reflect NOAA’s current Atlas 14 curves—instead it applies the Santa Clara County Manual hyetograph pattern (based on 2017 data with different soil and rainfall conditions) for its HEC-HMS watershed model. Notably, the topographical survey maps filed with San Mateo County conflict directly with the survey data in the recent Schaaf & Wheeler report (see Bibliography), raising fundamental questions about the accuracy of the approved grading elevations. And although the memorandum notes that “rainfall intensity was obtained from the National Oceanic and Atmospheric Administration (NOAA),” those peak intensity values are plugged solely into a standalone Rational Method calculation for the 0.68-acre lot rather than used to recalibrate the full watershed hydrograph or verify against recent high-intensity storms. By clinging to outdated hyetographs and neglecting NOAA’s updated frequency and temporal data, the report likely underestimates peak flows and fails to capture true overbank and coastal-trail inundation—leaving the decision to overturn denial unsupported by the best available precipitation science. Given these shortcomings, it would be prudent to have this report evaluated by an independent third-party hydrological expert to ensure its conclusions are robust and grounded in current data.

I. Findings & Substantial Issue Determination

In light of these sustained inconsistencies, we urge the Commission to find that the appeal raises a substantial issue under Section 30625(a) of the Coastal Act and to take jurisdiction for a full de novo review of CDP PDP-17-055 for 2800 Champs Élysée.

1. LCP Policy 7-51 (Flood Hazard Avoidance for New Development)

“New development shall be sited and designed to preserve natural drainage patterns and to avoid substantial alteration of natural drainage courses.”

Analysis: Beginning in late 2016, unpermitted regrading on the 2800 Champs Élysée parcel diverted sheetflow off-site, altered natural drainage courses, and funneled runoff toward adjacent properties and Pullman Watercourse—directly contravening the

requirement to preserve existing drainage patterns.

2. LCP Policy 7-57 (Flood Protection Evaluation)

“Require new development proposals to evaluate potential impacts to adjacent or downstream properties from all the proposed structural flood protection measures to ensure that the flood protection measures will not create adverse direct and/or cumulative impacts either on-site or off-site.”

Analysis: The applicant’s drainage study omits upstream watershed inputs and existing storm-drain infrastructure, fails to assess cumulative on- and off-site impacts, and thus does not satisfy the comprehensive evaluation mandated by Policy 7-57.

3. LCP Policy 7-12 (Site-Specific Shoreline Hazards Evaluation)

“All new development proposed in areas that may be subject to shoreline hazards... shall require the submittal of a site-specific evaluation report of shoreline hazard risks over the anticipated life of the proposed development... Analyses shall be conducted by a qualified professional... and shall establish the appropriate setback... based on... a 100-year storm event and... demonstrated factors of safety... The evaluation shall include... historic and projected rates of erosion; ground and surface water conditions; seismic forces; effects of siting, grading, and drainage on slope stability; and potential erodibility and mitigation measures.”

Analysis: The Shaff Wheeler report relies on outdated, on-site data; ignores off-site flows, subsurface groundwater interactions, sea-level rise projections, and seismic factors; and omits mitigation measures for erosion—falling far short of the thorough hazard assessment required by Policy 7-12.

4. LCP Policy 2-1 (Coastal Development Permit Requirement)

“A coastal development permit is required for any project that meets the definition of ‘development’ pursuant to Coastal Act Section 30106. ‘Development’ explicitly includes grading, filling, excavation, and all other changes to land or structures, and no such activity may commence within the Coastal Zone without a CDP.”

Analysis: The applicant’s extensive 2016–17 grading and fill unquestionably constitute “development” under Section 30106, yet no CDP was ever obtained—rendering the grading unlawful and triggering the requirement for a permit.

These findings demonstrate that the project’s flood-control and permitting deficiencies raise substantial issues of LCP and Coastal Act compliance, warranting full Commission jurisdiction to remedy the unpermitted grading, ensure accurate hazard evaluation, and secure the required development permits. Because the existing 10-year standard fails to prevent erosive flooding, it is imperative to upsize controls to handle 100-year storms.

II. ESHA Protections

[Chapter 6 Natural Resources](#)

6-3. ESHA Mapping. Review and update the ESHA maps to incorporate significant new information from completed biological studies. Areas meeting the criteria in Policy 6-1 shall be designated as ESHA on the ESHA habitat map (Figure 6-2), the ESHA special status species map (Figure 6-3), and a summary map (Figure 6-4).

The ESHA maps are not intended to be a static resource, as the resources on the ground are the determining factor. Revisions to the ESHA maps shall be treated as LCP amendments and shall be submitted for certification by the Coastal Commission as warranted by significant changes. Areas qualifying for ESHA designation shall be afforded ESHA protections upon determination, rather than upon map amendment certification.

6-5. Protection of Illegally Degraded ESHA. Any area mapped as ESHA or otherwise determined to have previously been ESHA shall not be deprived of the LCP's ESHA protections on the basis that, illegally and/or without a permit, habitat has been removed, filled, or degraded, or species that are rare or especially valuable because of their nature or role in an ecosystem have been eliminated.

6-10. Protection and Enhancement of ESHA. Protect and, where possible, enhance or restore environmentally sensitive habitat areas (ESHAs).

6-13. Pre-Existing Development and ESHA. Where an area within or adjacent to any pre-existing permitted development or land use is confirmed to meet the definition of ESHA, the pre-existing use may continue provided that the use has not lapsed for more than one year at any point in time and that any changes to the site that constitute new development are sited and designed to avoid new impacts to ESHA and to avoid any increases to existing non-conformities. Implementation of best management practices and avoidance measures is encouraged for qualifying continuing uses.

6-17. Terrestrial ESHA Buffer Zones. Require buffer zones (i.e., areas between terrestrial ESHA and proposed development) of sufficient size to ensure the biological integrity and preservation of the habitat they are designed to protect. Maintain buffers with native vegetation to serve as transitional habitat and provide distance and physical barriers to human intrusion. Terrestrial ESHA (including the marine environment, sea cliffs, dunes, coastal terrace prairie, and non-aquatic habitat for special status or unique species) shall have a minimum buffer width of 100 feet from proposed

development. Larger buffers may be required if site-specific evidence indicates that a larger buffer is necessary to maintain biological integrity and to protect the ESHA against impacts of proposed development. Terrestrial ESHA buffers may be reduced only where the following can be demonstrated through evidence provided by site-specific evaluation pursuant to Policy 6-8, and only as specified below:

b. Where the only building site is not located entirely within the required buffer; no alternative building site, size, or design is feasible to accommodate the development entirely outside of the required buffer; no new adverse impacts to the ESHA will occur; and the reduced buffer would provide equivalent protection of the biological integrity of the ESHA given the site-specific characteristics of the resource and of the type and intensity of disturbance, as conclusively demonstrated by a qualified biologist to the satisfaction of the City and all jurisdictional regulatory agencies: the buffer may be reduced to **no less than 50 Feet**.

6-46. Riparian Corridors Definition. Riparian corridors are defined on the ground by an association of native, and in some cases non-native, plant and animal species within or adjacent to a watercourse that contribute to the function or distinction of the riparian habitat. Boundaries of riparian corridors are determined by the limit of riparian vegetation or top of bank, or other confining topography, whichever is greater. The limit of riparian vegetation is determined by the drip line of riparian canopy trees or the limit of riparian shrubs or herbaceous vegetation.

6-47. Permitted Uses in Riparian Corridors. Permit only the following uses within riparian corridors:

- a. Education and research activities;
- b. Consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code;
- c. Habitat restoration and fish and wildlife management activities; and
- d. Necessary water supply projects.

Where no feasible alternative exists, permit the following uses:

- e. Stream-dependent aquaculture, provided that any non-stream-dependent facilities are located outside of the corridor;
- f. Flood, sedimentation, or erosion control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development;
- g. Bridges providing an important public transportation or resource-dependent function where supports do not significantly impact the riparian corridor or its resources, such as free-span designs;
- h. Pipelines and stormwater runoff facilities;
- i. Repair, maintenance, or incidental improvement of roadways or road crossings that do not increase the capacity of the roadway;
- j. Existing agricultural uses; and
- k. New agricultural uses, including agricultural irrigation conveyance systems,

provided no riparian vegetation is removed and no soil, nutrients, waste, or other material is allowed to enter stream channels.

6-48. Standards in Riparian Corridors. Require new development permitted in riparian corridors to adhere to the following standards:

- a. Minimize removal of native vegetation;
- b. Minimize land exposure during construction and use temporary vegetation or mulching to protect critical areas;
- c. Minimize erosion, sedimentation, and runoff by appropriately grading and replanting modified areas with native species;

6-49. Riparian Corridor Buffers. Buffer zones shall be required for development proposed along both sides of riparian corridors to provide habitat protection and space for meander belts and vegetation growth. Riparian buffer zones shall apply as follows:

- a. For all perennial watercourses (i.e. Pilarcitos Creek, Frenchmans Creek, Arroyo Leon, and Arroyo Cañada Verde west of Highway 1) and certain intermittent watercourses (i.e. Kehoe Watercourse and Wavecrest Arroyo): buffer zones shall extend a minimum of 50 feet from the outer limit of the riparian vegetation or 100 feet from the top of the bank, whichever is greater.
- b. For all other intermittent and ephemeral watercourses with riparian vegetation (e.g. Roosevelt Creek, the riparian corridor in the northwestern area of Ocean Colony, and Arroyo Cañada Verde east of Highway 1): buffer zones shall extend a minimum of 35 feet from the outer limit of riparian vegetation or the top of bank, whichever is greater.

6-50. Riparian Corridor Buffer Adjustments. A larger riparian corridor buffer may be required based on site-specific evidence that a larger buffer is necessary to maintain and protect the biological integrity of the riparian habitat and functional capacity of the watercourse from the impacts of proposed development. A riparian buffer may be reduced below what is required by Policy 6-49 only where the following can be demonstrated through evidence provided by site-specific evaluation pursuant to Policy 6-8, and only as specified below:

- a. Where the only building site is located entirely within the required buffer; no alternative development site, size, or design is feasible; and the proposed development is compatible with the continued viability of the riparian corridor: 6-51 the buffer may be reduced for all riparian corridors to no less than 20 feet from the outer limit of riparian vegetation or from top of bank, whichever is greater, provided that design alternatives that maximize the buffer width are utilized; or
- b. Where the only building site is not located entirely within the required buffer; no alternative development site, size, or design is feasible to accommodate the development entirely outside of the required buffer; no new adverse impacts to the riparian corridor will occur; and the reduced buffer would provide equivalent protection of the biological integrity of the riparian corridor given the site-specific characteristics of the resource and of the type and intensity of

disturbance, as conclusively demonstrated by a qualified biologist to the satisfaction of the City and all jurisdictional regulatory agencies:

- i. The buffer may be reduced to no less than 35 feet from the outer limit of riparian vegetation or 50 feet from the top of bank, whichever is greater, for development proposed adjacent to perennial and intermittent watercourses pursuant to Policy 6-49(a); or
- ii. The buffer may be reduced to no less than 25 feet from the outer limits of riparian vegetation or from the top of bank, whichever is greater, for development proposed adjacent to all other intermittent and ephemeral watercourses pursuant to Policy 6-49(b). 6-51. Permitted Uses within Riparian Corridor Buffer Zones. Permit only the following

Analysis

All prior, unpermitted grading and fill on the 2800 Champs Elysée parcel immediately abutting Pullman Watercourse exceeded the limited, low-impact encroachments expressly allowed under **Policy 6-47** and must therefore be fully **restored** under **Policies 6-3, 6-5, and 6-13** before any new development proceeds. The restored riparian corridor (as defined in **6-46**) may only incur the minimal improvements outlined in **6-48** and remain free of invasive plantings per 6-50. Because Pullman Watercourse supports riparian vegetation used by California red-legged frog and San Francisco garter snake for foraging (Table 6-1), Policy **6-49** (30–50 ft buffer) — reinforced by the general “sufficient to avoid significant adverse impacts” mandate of **6-17** and the non-applicability of **6-53**’s 20 ft buffer for non-vegetated channels — governs the required setback. Finally, any restoration or buffer adjustment must be paired with a **multi-year adaptive management and monitoring plan** to verify full recovery of ESHA foraging and refuge functions prior to project approval.

For completeness and to satisfy all appeal requirements, the following additional Chapter 6 policies also apply (exact LCP definitions and zoning codes):

1. **Policy 6-32 (“Special Status Species List & Guidelines”)** – “The City shall maintain and regularly update a list of special status species, including those listed or proposed for listing under state or federal endangered-species laws, and develop management guidelines to ensure their protection.”
2. **Policy 6-33 (“Unique Species Definitions & Management”)** – “The City shall define ‘unique species’ as those of scientific, historic, or local significance and adopt species-specific management guidelines, including required buffer widths and mitigation ratios.”
3. **Policy 6-34 (“Permitted Uses in Non-Aquatic Habitat”)** – “Where non-aquatic habitat supports special status or unique species, only resource-dependent, low-impact activities are permitted following a site-specific ESHA determination.”
4. **Policy 6-35 (“Impact-Avoidance Standards for Special/Unique Species”)** – “Regardless of ESHA designation, all proposed activities in areas supporting special status or unique species must incorporate pre-construction surveys, timing restrictions to avoid critical life

stages, and exclusion fencing.”

5. **Policy 6-50 (“Prohibition of Invasive Plantings in Riparian Corridors”)** – “No non-native or invasive plant species shall be planted within riparian corridors, to prevent undermining habitat functions.”
6. **Policy 6-51 (“Wetland Restoration & Transition Standards”)** – “The City shall require restoration of wetlands to pre-disturbance elevations and vegetation communities, with appropriate transition zones, where tidal or freshwater marsh is impacted.”
7. **Policy 6-52 (“Dune and Coastal Bluff Habitat Protection”)** – “The City shall protect dune and coastal bluff habitats by prohibiting intrusive grading and requiring stabilization techniques that maintain natural landforms and vegetation.”

Zoning Code 18.38.085(D) – Rare/Endangered Species Buffer

Requires any development adjacent to habitat for rare or endangered species to establish and maintain a protective buffer consistent with LCP ESHA setback, planting, and invasive-species standards.

III. Public Access & Recreational Opportunities

The unpermitted regrading on the 2800 Champs Élysée parcel—located just upslope of Young Avenue and separated from the roadway by a roughly 20-foot unimproved strip of land—may have contributed to the closing of the thoroughfare and continues to funnel floodwaters onto the future roadbed, directly conflicting with the Coastal Act’s public-access mandates:

Section 30210 (Public Access & Posting). “Maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people...” By regrading the parcel without CEQA-required mitigation or permanent posting, the applicant has neither preserved existing access along Young Avenue nor ensured any future recreational opportunities.

Section 30211 (Non-Interference with Access). “Development shall not interfere with the public’s right of access to the sea... including... use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.” The altered slope and uncontrolled runoff from the parcel risk severing Young Avenue’s function as the public’s route to the beach—impeding pedestrian and emergency access and unlawfully interrupting acquired shoreline access.

If the Commission finds a substantial issue, it should require the applicant to:

1. **Design and install engineered drainage and erosion-control measures** at the downslope edge of the 2800 Champs Élysée parcel to intercept and safely convey storm flows away from Young Avenue’s roadway prism; and
2. **Provide a written guarantee** that these measures will be maintained in perpetuity, thereby securing continued, unobstructed public access consistent with Sections 30210 and 30211.

IV. Water Quality & Biological Productivity (Coastal Act § 30231)

Section 30231:

“The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Analysis:

Although opportunistic grasses and weeds now colonize the fill, the applicant’s unpermitted grading and placement of soil removed pre-existing vegetation and destabilized the underlying soils. This disturbance continues to exacerbate sediment-laden runoff into Pullman Watercourse and the adjacent wetlands, impairing both water quality and ecological productivity.

Moreover, the currently proposed 30 ft buffer zone is insufficient to intercept fine sediments or to treat upland pollutants effectively. In the absence of properly engineered swales or bioretention features, this narrow buffer cannot fulfill the Coastal Act’s requirement under Section 30231 to protect and, where feasible, restore riparian habitat functions.

Finally, no measures have been incorporated to manage or treat concentrated stormwater flows, nor has any effort been made to reestablish native vegetation within the disturbed corridor. This omission leaves the site in ongoing violation of the mandate to “maintain and, where feasible, restore” natural vegetation buffers and to prevent “substantial interference” with surface water flow.

If the Commission finds a substantial issue, it should require the applicant to:

1. Design and implement engineered runoff controls (e.g. bioswales, sediment traps, or constructed wetlands) to restore the natural flow to treat all stormwater from the 2800 Champs Élysée parcel so the water does not enter Pullman Watercourse. Further, restore the top of the south bank of Pullman Watercourse to the original elevation prior to 2016 unpermitted development (regrading and soil dumping) to enhance water quality and biological productivity.
2. Restore native riparian vegetation throughout the disturbed corridor in accordance with a detailed planting and maintenance plan, ensuring full function of the buffer as a water-quality treatment zone.
3. Demonstrate through monitoring (e.g. periodic turbidity and nutrient testing) that post-restoration runoff meets water-quality standards appropriate for supporting optimal biological productivity, with contingency measures to address any exceedances.

V. ESHA Adjacent Development (Coastal Act § 30240)

Section 30240(a): “Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas.”

Section 30240(b): “Development in areas adjacent to environmentally sensitive habitat areas ... shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat ... areas.”

Analysis:

The 2800 Champs Élysée project sits adjacent to Pullman Watercourse ESHA. Its unpermitted grading and fill have stripped riparian vegetation, altered hydrology, and significantly disrupted habitat values—none of which constituted a resource-dependent use—thereby directly contravening both subsections of § 30240.

If the Commission finds a substantial issue, it should require the applicant to:

1. **Redesign all grading and fill** so that no work occurs within the mapped ESHA or its LCP-required buffer; and
2. **Limit any remaining on-site activity** to resource-dependent uses (e.g., biotechnical restoration methods) that avoid any significant disruption of habitat values.

VI. Threshold for Commission Review: Key Precedents

Pacific Ridge (CCC A-3-2009)

“California Coastal Commission decision enforcing a 50-ft ESHA buffer for a subdivision in Half Moon Bay.”

Hodge (CCC A-2-SMC-11-041-A1-EDD)

“California Coastal Commission decision upholding the Executive Director’s determination to deny an amendment authorizing an accessory dwelling unit within a deed-restricted habitat restoration area, requiring remediation of 2005 unpermitted wetland fill, permanent deed restrictions, and long-term monitoring to protect ESHA and public access in Half Moon Bay.”

VII. Conclusion: Substantial Issue & Forward Path

This project’s history of unpermitted grading, flawed hazard evaluations, and erosion of habitat and access protections demonstrates systemic failures to implement the certified LCP and Coastal Act. The Commission should require the applicant to restore site elevations, re-establish riparian buffers, implement an adaptive monitoring and management plan, and install engineered drainage controls at the downslope edge of the parcel to prevent future flooding of Young Avenue—while retaining full discretion to impose any further mitigation necessary to protect coastal resources and public access. These measures enforce the public-resource protections embodied in the certified LCP and Coastal Act, satisfy the “essential nexus” and “rough proportionality” tests of *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987) and *Dolan v. City of Tigard*, 512 U.S. 374 (1994), and the total-loss rule of *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992). They remedy past, unpermitted impacts rather than impose new exactions and therefore do not constitute a taking under the Fifth Amendment.

Accordingly, we respectfully urge the Commission to:

1. Find that this appeal raises a substantial issue under Section 30625(a) and take de novo jurisdiction over CDP PDP-17-055 for 2800 Champs Élysée.
2. Require the applicant to carry out the restoration and mitigation measures described above.

A full hearing will allow the Commission—not only to remedy past violations but also to secure the long-term protection of coastal resources, safeguard riparian habitat and endangered species, ensure reliable flood management on the parcel, and guarantee unobstructed public access for generations to come.

Thank you for your careful consideration and steadfast commitment to upholding California’s coastal policies.

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Appendix A - Photos

Cul-de-Sac Fill: Elevation Build-Up at 2800 Champs Élysée (Google Earth)

Photo 1: April 30, 2016 – Pre-Grading



Photo 2. November 30, 2016 - Unpermitted Grading Activities on 2800 Champs Elysee

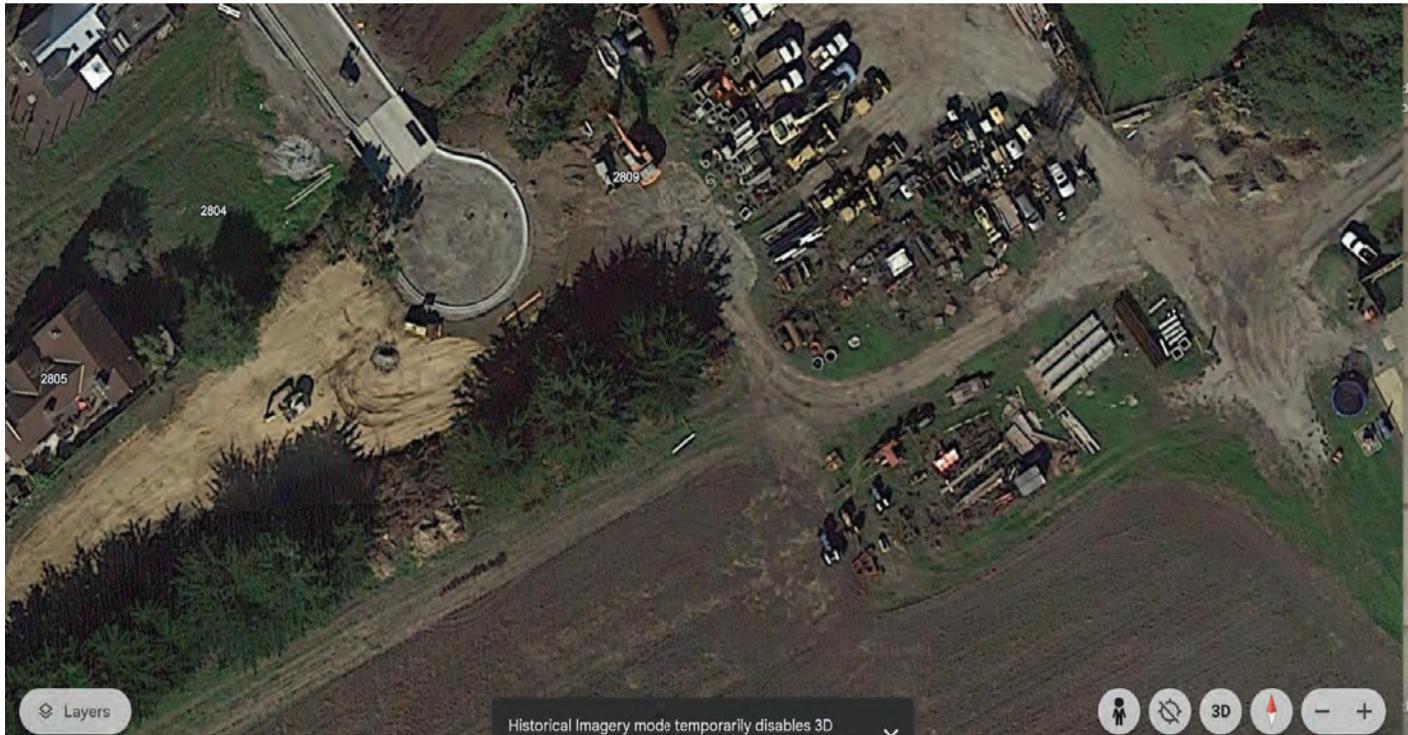


Photo 3: January 10, 2017 – Evidence of Grading 15 ft from Watercourse (Unpermitted)



Photo 4: September 30, 2017 – Post-Grading

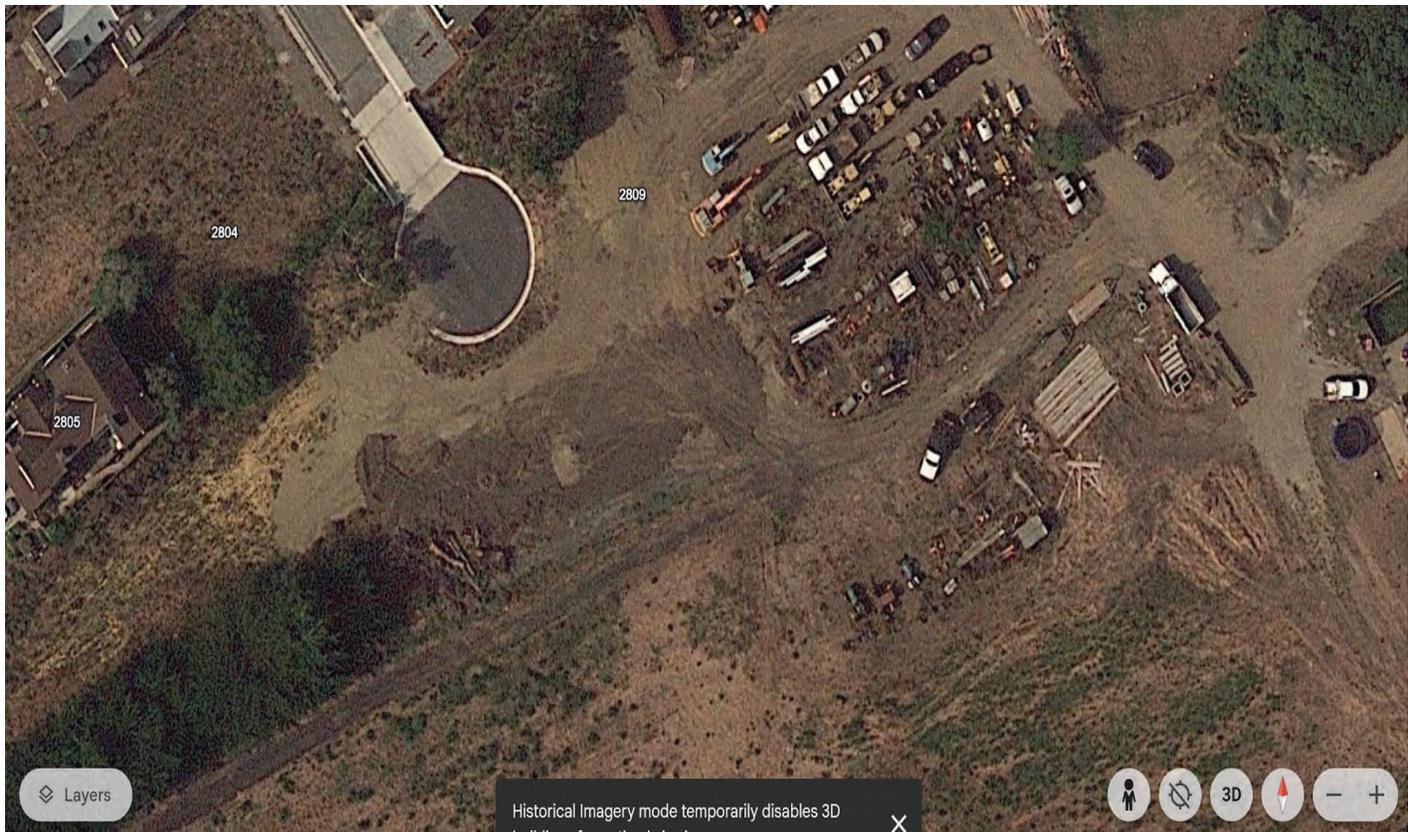


Photo 5. 2804 Champs Elysees, December 13, 2020



Photo 6. 2804 Flooding on Dec. 31, 2022 - (fire dept pumped first floor living space)

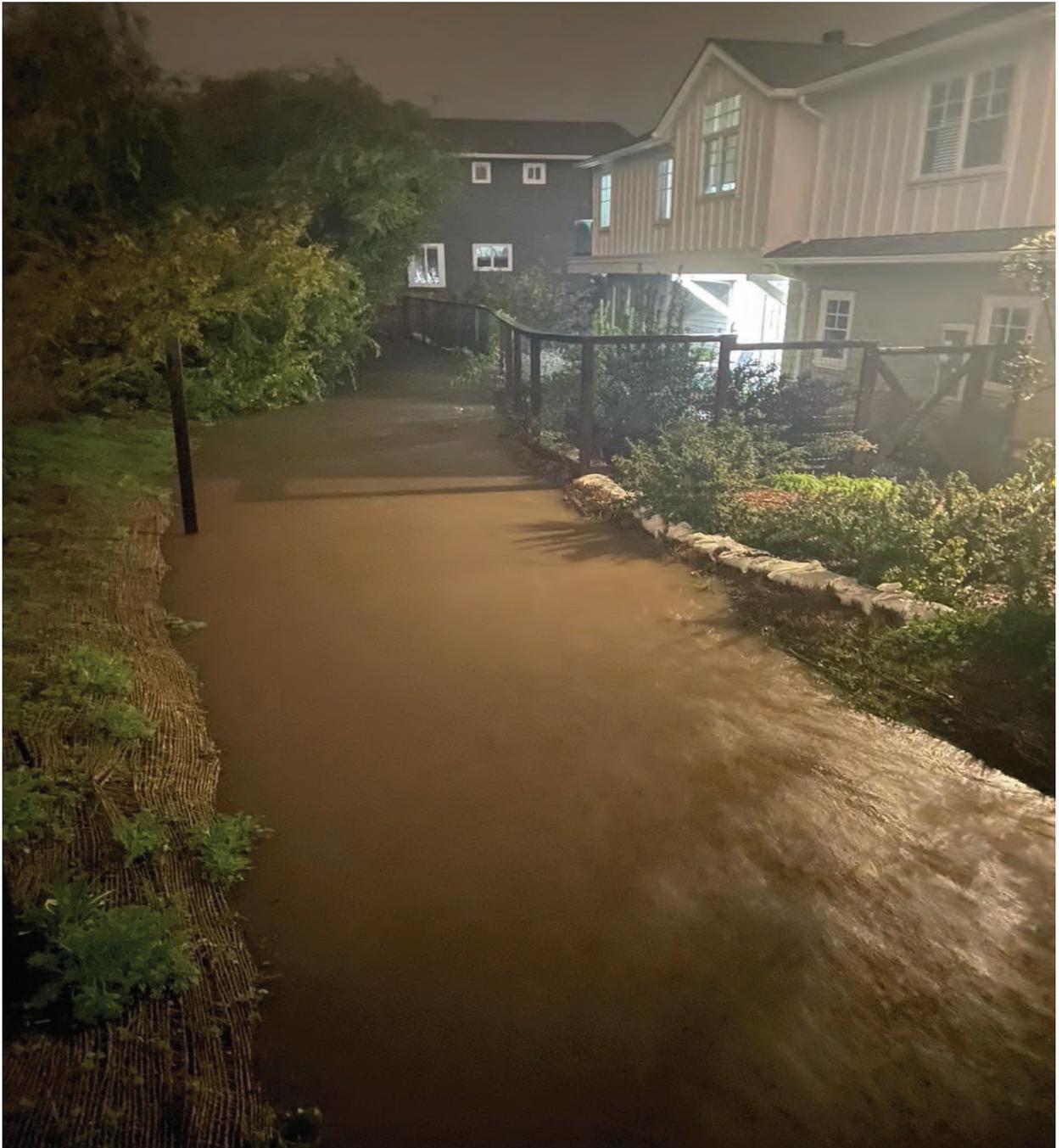


Photo 7. 2804 Champs Elysee Jan. 16, 2020 Before Home was Built - (LCP 7-55 violation by City and Developer).



Photo 8. 2805 Champs Elysee January 16, 2020



Photo 9. Flooding on 2800 Champs Elysee March 28, 2023



Appeal of local CDP decision
Page 2

1. Appellant information¹

Name: John M. Rossi
Mailing address: 2804 Champs Elysee Blvd. Half Moon Bay CA 94019
Phone number: 805-410-2559
Email address: jrossi.91320@gmail.com

How did you participate in the local CDP application and decision-making process?

Did not participate Submitted comment Testified at hearing Other

Describe: Submitted comments and provided testimony at the following Half Moon Bay Planning Commission Meetings:

August 10, 2024
1st Appeal meeting on October 15, 2024
2nd Appeal meeting on June 3, 2025

If you did *not* participate in the local CDP application and decision-making process, please identify why you should be allowed to appeal anyway (e.g., if you did not participate because you were not properly noticed).

Describe: _____

Please identify how you exhausted all LCP CDP appeal processes or otherwise identify why you should be allowed to appeal (e.g., if the local government did not follow proper CDP notice and hearing procedures, or it charges a fee for local appellate CDP processes).

Describe: Submitted a hydrology report countering developer sponsored hydrology report. Information was ignored by the Half Moon Bay City Council during the aforementioned meetings.

Provided verbal testimony that was ignored during aforementioned meetings (not responded to and not captured in minutes) related to Half Moon Bay City council lack of adherence to appropriate CDP procedure and guidelines.

¹ If there are multiple appellants, each appellant must provide their own contact and participation information. Please attach additional sheets as necessary.

Appeal of local CDP decision

Page 4

3. Applicant information

Applicant name(s):

John M Rossi

Applicant Address:

2804 Champs Elysee Blvd. Half Moon Bay CA 94019

4. Grounds for this appeal⁴

For appeals of a CDP approval, grounds for appeal are limited to allegations that the approved development does not conform to the LCP or to Coastal Act public access provisions. For appeals of a CDP denial, grounds for appeal are limited to allegations that the development conforms to the LCP and to Coastal Act public access provisions. Please clearly identify the ways in which the development meets or doesn't meet, as applicable, the LCP and Coastal Act provisions, with citations to specific provisions as much as possible. Appellants are encouraged to be concise, and to arrange their appeals by topic area and by individual policies.

Describe: **Does not meet:**

1) LCP Chapter 6, Hydromodification: alteration of natural hydrologic processes on the surface water in the wet season. Mapped liquefaction zone.

2) LCP Chapter 7 (Shoreline Hazards): PDP-17-055 is not 300 feet from Coastal Bluffs

3) Chapter 7, 7.12h: "property will trigger the stability of the Coastal Bluffs

4) Chapter 7: Hydrological report by Schaaf and Wheeler (on file with the City) used historical flood data that is 10+ year out of date and does not factor in updated that models that take into account global climate change

5) Schaaf and Wheeler report does not adequately capture and describe well documented historical flooding of the proposed site

6) LCP Chapter 2, Open Space for Conservation and LCP 7.12f, ground water table was not measured during "wet season" and instead was done when water table evaluation is superficial and not representative.

7) Property directly adjacent to CLP property

8) LCP Chapter 2: CDP is not in accordance with the City of Half Moon Bay established codes and procedures

⁴ Attach additional sheets as necessary to fully describe the grounds for appeal.

Appeal of local CDP decision

Page 5

5. Identification of interested persons

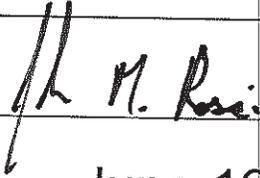
On a separate page, please provide the names and contact information (i.e., mailing and email addresses) of all persons whom you know to be interested in the local CDP decision and/or the approved or denied development (e.g., other persons who participated in the local CDP application and decision making process, etc.), and check this box to acknowledge that you have done so.

Interested persons identified and provided on a separate attached sheet

6. Appellant certifications

I attest that to the best of my knowledge, all information and facts in this appeal are correct and complete.

Print name John M Rossi

Signature 

Date of Signature June 19, 2025

7. Representative authorization⁶

While not required, you may identify others to represent you in the appeal process. If you do, they must have the power to bind you in all matters concerning the appeal. To do so, please complete the representative authorization form below and check this box to acknowledge that you have done so.

I have authorized a representative, and I have provided authorization for them on the representative authorization form attached.

⁵ If there are multiple appellants, each appellant must provide their own certification. Please attach additional sheets as necessary.

⁶ If there are multiple appellants, each appellant must provide their own representative authorization form to identify others who represent them. Please attach additional sheets as necessary.

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300
 SAN FRANCISCO, CA 94105-2219
 VOICE (415) 904-5200
 FAX (415) 904-5400

**DISCLOSURE OF REPRESENTATIVES**

If you intend to have anyone communicate on your behalf to the California Coastal Commission, individual Commissioners, and/or Commission staff regarding your coastal development permit (CDP) application (including if your project has been appealed to the Commission from a local government decision) or your appeal, then you are required to identify the name and contact information for all such persons prior to any such communication occurring (see Public Resources Code, Section 30319). The law provides that failure to comply with this disclosure requirement prior to the time that a communication occurs is a misdemeanor that is punishable by a fine or imprisonment and may lead to denial of an application or rejection of an appeal.

To meet this important disclosure requirement, please list below all representatives who will communicate on your behalf or on the behalf of your business and submit the list to the appropriate Commission office. This list could include a wide variety of people such as attorneys, architects, biologists, engineers, etc. If you identify more than one such representative, please identify a lead representative for ease of coordination and communication. You must submit an updated list anytime your list of representatives changes. You must submit the disclosure list before any communication by your representative to the Commission or staff occurs.

Your Name _____

CDP Application or Appeal Number _____

Lead Representative

Name _____

Title _____

Street Address. _____

City _____

State, Zip _____

Email Address _____

Daytime Phone _____

Your Signature _____

Date of Signature _____

Additional Representatives (as necessary)

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Name _____
Title _____
Street Address. _____
City _____
State, Zip _____
Email Address _____
Daytime Phone _____

Your Signature _____

Date of Signature _____

EXHIBIT 5: APPLICABLE LCP PROVISIONS – VIDOVICH SFD APPEAL
CITY OF HALF MOON BAY

Coastal Access and Recreation Policies

LUP Policy 5-1. Maximum Coastal Access and Recreational Opportunities. Provide maximum coastal access and recreational opportunities for all people consistent with public safety needs and the need to protect public rights, rights of property owners, and natural resource areas from overuse

LUP Policy 5-4. Public Access and Sea Level Rise. Require new development adjacent to public access and recreation areas vulnerable to coastal bluff erosion or sea level rise to be sited and designed to anticipate eventual loss and necessary replacement of such public access and recreation areas.

LUP Policy 5-7. Public Access Maximized in New Development. New development shall ensure that public access opportunities are maximized by including measures to offset any temporary and potentially permanent impacts to public access caused by the project. To the extent possible, development shall provide public access improvements, including within the private development project (e.g. visitor-serving development), where appropriate

LUP Policy 5-10. Mitigation for Impacts to Public Coastal Access. Where adverse impacts to existing public coastal access cannot be avoided by new development and no feasible alternative exists, ensure that impacts are mitigated such as through the dedication of a new access or trail easement in perpetuity or the provision of improvements to other public coastal access points in Half Moon Bay.

Natural Resources Policies

LUP Policy 6-3. ESHA Mapping. Review and update the ESHA maps to incorporate significant new information from completed biological studies. Areas meeting the criteria in Policy 6- 1 shall be designated as ESHA on the ESHA habitat map (Figure 6-2), the ESHA special status species map (Figure 6-3), and a summary map (Figure 6-4). The ESHA maps are not intended to be a static resource, as the resources on the ground are the determining factor. Revisions to the ESHA maps shall be treated as LCP amendments and shall be submitted for certification by the Coastal Commission as warranted by significant changes. Areas qualifying for ESHA designation shall be afforded ESHA protections upon determination, rather than upon map amendment certification.

LUP Policy 6-5. Protection of Illegally Degraded ESHA: Any area mapped as ESHA or otherwise determined to have previously been ESHA shall not be deprived of the LCP's ESHA protections on the basis that, illegally and/or without a permit, habitat has

been removed, filled, or degraded, or species that are rare or especially valuable because of their nature or role in an ecosystem have been eliminated.

LUP Policy 6-10. Protection and Enhancement of ESHA. Protect and, where possible, enhance or restore environmentally sensitive habitat areas (ESHAs).

LUP Policy 6-13. Pre-Existing Development and ESHA. Where an area within or adjacent to any pre-existing permitted development or land use is confirmed to meet the definition of ESHA, the pre-existing use may continue provided that the use has not lapsed for more than one year at any point in time and that any changes to the site that constitute new development are sited and designed to avoid new impacts to ESHA and to avoid any increases to existing non-conformities. Implementation of best management practices and avoidance measures is encouraged for qualifying continuing use.

LUP Policy 6-17. Terrestrial ESHA Buffer Zones. Require buffer zones (i.e., areas between terrestrial ESHA and proposed development) of sufficient size to ensure the biological integrity and preservation of the habitat they are designed to protect. Maintain buffers with native vegetation to serve as transitional habitat and provide distance and physical barriers to human intrusion. Terrestrial ESHA (including the marine environment, sea cliffs, dunes, coastal terrace prairie, and non-aquatic habitat for special status or unique species) shall have a minimum buffer width of 100 feet from proposed development. Larger buffers may be required if site-specific evidence indicates that a larger buffer is necessary to maintain biological integrity and to protect the ESHA against impacts of proposed development. Terrestrial ESHA buffers may be reduced only where the following can be demonstrated through evidence provided by site specific evaluation pursuant to Policy 6-8, and only as specified below: (a) Where the only building site is located entirely within the required buffer; no alternative development site, size, or design is feasible; and the proposed development is compatible with the continued viability of the adjacent ESHA: the buffer may be reduced to no less than 20 feet provided that design alternatives that maximize the buffer width are utilized; or (b) Where the only building site is not located entirely within the required buffer; no alternative building site, size, or design is feasible to accommodate the development entirely outside of the required buffer; no new adverse impacts to the ESHA will occur; and the reduced buffer would provide equivalent protection of the biological integrity of the ESHA given the site-specific characteristics of the resource and of the type and intensity of disturbance, as conclusively demonstrated by a qualified biologist to the satisfaction of the City and all jurisdictional regulatory agencies: the buffer may be reduced to no less than 50 feet.

LUP Policy 6-18. Standards in Terrestrial ESHA and Terrestrial ESHA Buffers. Site and design new development permitted in or adjacent to terrestrial ESHA to avoid adverse impacts to ESHA. Methods for avoiding impacts include, but are not limited to utilizing raised boardwalks, installing informative signage and exclusion fencing, and implementing construction best management practices.

LUP Policy 6-36. Wetlands Definition. Wetlands shall be defined according to the single-parameter definition in Section 30121 of the Coastal Act and Section 13577(b) of the Coastal Commission's Regulations. Wetlands shall include land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to

support the growth of hydrophytes. Wetlands may also include land where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

LUP Policy 6-37. Wetland Delineation. Require a survey, data forms, and analysis with the delineation of all wetland areas when a preliminary biological inventory or biological study indicates the presence or potential for wetland species or indicators. Wetland delineations should typically be conducted during the rainy season and must be conducted in accordance with Policy 6-36. Wetlands Definition, the definitions of wetland boundaries contained in section 13577(b) of the California Code of Regulations, and applicable guidance from the California Coastal Commission.

LUP Policy 6-38. Wetland Condition. The condition of a wetland does not affect its regulatory status as a defined wetland pursuant to the Coastal Act. Thus, poorly functioning or degraded areas that meet the definition of wetlands are subject to the LCP's wetland protection policies, including if illegally removed per Policy 6-5.

LUP Policy 6-39. Wetland Protection. Protect and, where feasible, restore the biological productivity and the quality of wetlands for both on- and off-site benefits.

LUP Policy 6-40. Permitted Uses in Wetlands. Permit the diking, filling, or dredging of wetlands only where there is no feasible, less environmentally damaging alternative and where feasible mitigation measures will be implemented to minimize adverse environmental effects, and only for the following uses: (a) Education and research activities; (b) Public trails; (c) Habitat restoration and fish and wildlife management activities; and (d) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers, maintenance of existing intake and outfall lines, and emergency repairs. Other uses specified in Section 30233 of the Coastal Act may only be allowed pursuant to an LCP amendment.

LUP Policy 6-41. Wetland Buffer Zones. Wetland buffer zones for proposed development shall extend a minimum of 100 feet landward from the edge of the delineated wetland. A larger buffer may be required based on site-specific evidence that a larger buffer is necessary to protect the functional capacity of the wetland ecosystem or to protect any sensitive species from the impacts of proposed development. A wetland buffer may be reduced to less than 100 feet only where the following can be demonstrated through evidence provided by site-specific evaluation pursuant to Policy 6-8, and only as specified below: (a) Where the only building site is located entirely within the required buffer; no alternative development site, size, or design is feasible; and the proposed development is compatible with the continued viability of the adjacent wetland, including protection of any sensitive species: the buffer may be reduced to no less than 20 feet provided that design alternatives that maximize the buffer width are utilized; or (b) Where the only building site is not located entirely within the required buffer; no alternative development site, size, or design is feasible to accommodate the development entirely outside the required buffer; no new adverse impacts to the wetland will occur; and the reduced buffer would provide equivalent protection of wetland resources, as conclusively demonstrated by a professional

biologist to the satisfaction of the City and all jurisdictional regulatory agencies: the buffer may be reduced to no less than 50 feet.

LUP Policy 6-42. Permitted Uses within Wetland Buffer Zones. *Within wetland buffer zones, permit only the following uses: (a) Uses allowed within wetlands pursuant to Policy 6-40; (b) Public scenic overlooks; (c) Existing agricultural uses; (d) New agricultural uses, provided that they prevent impacts on the adjacent wetlands and protect the function of the buffer; (e) Temporary disruption (e.g. less than six months) for the construction, alteration, repair and maintenance of existing or newly permitted facilities or structures if there are no feasible alternatives and the disruption is repaired and restored to at least an equivalent condition; and (f) Native landscaping.*

LUP Policy 6-43. Standards in Wetlands and Wetland Buffer Zones. *Require that development permitted in wetlands and wetland buffer zones minimizes adverse impacts during and after construction. Specifically, require that: (a) All construction which alters wetland vegetation is required to replace the vegetation including “no action” in order to allow for natural reestablishment and pursuant to applicable mitigation requirements; (b) All construction takes place during daylight hours; (c) All paths are elevated (e.g. boardwalks) so as not to impede movement of water, not to compact soil, and otherwise not to disturb wetland plants and animals; (d) All outdoor lighting is prohibited within wetlands, minimized in the wetland buffer zone, and down-cast and directed away from any wetland so as to not affect wildlife; (e) Noise from motorized machinery is kept to less than 45-dBA at the wetland boundary, except for farm machinery; (f) No herbicides are used in wetlands and wetland buffer zones unless there are no feasible alternatives and as specifically approved by the County Agricultural Commissioner and all jurisdictional regulatory agencies; and (g) Any permit for development includes necessary mitigation, monitoring, reporting and maintenance programs.*

LUP Policy 6-46. Riparian Corridors Definition. *Riparian corridors are defined on the ground by an association of native, and in some cases non-native, plant and animal species within or adjacent to a watercourse that contribute to the function or distinction of the riparian habitat. Boundaries of riparian corridors are determined by the limit of riparian vegetation or top of bank, or other confining topography, whichever is greater. The limit of riparian vegetation is determined by the drip line of riparian canopy trees or the limit of riparian shrubs or herbaceous vegetation.*

LUP Policy 6-47. Permitted Uses in Riparian Corridors. *Permit only the following uses within riparian corridors: (a) Education and research activities; (b) Consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code; (c) Habitat restoration and fish and wildlife management activities; and (d) Necessary water supply projects. Where no feasible alternative exists, permit the following uses: (e) Stream-dependent aquaculture, provided that any non-stream-dependent facilities are located outside of the corridor; (f) Flood, sedimentation, or erosion control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; (g) Bridges providing an important public transportation or resource dependent function where supports do not significantly impact the riparian corridor or its resources, such as free-span designs; (h) Pipelines and stormwater runoff facilities; (i) Repair, maintenance, or incidental*

improvement of roadways or road crossings that do not increase the capacity of the roadway; (j) Existing agricultural uses; and (k) New agricultural uses, including agricultural irrigation conveyance systems, provided no riparian vegetation is removed and no soil, nutrients, waste, or other material is allowed to enter the stream channels.

LUP Policy 6-48 Standards in Riparian Corridors. Require new development permitted in riparian corridors to adhere to the following standards: (a) Minimize removal of native vegetation; (b) Minimize land exposure during construction and use temporary vegetation or mulching to protect critical areas; (c) Minimize erosion, sedimentation, and runoff by appropriately grading and replanting modified areas with native species; (d) Use only native plant species when replanting, and monitor replanted species and replace as necessary to ensure establishment; (e) Provide sufficient passage upstream and downstream for native and anadromous fish as specified by the California Department of Fish and Wildlife and the National Marine Fisheries Service; (f) Minimize adverse effects of waste water discharges and entrainment; (g) Prevent depletion of groundwater supplies and substantial interference with surface and subsurface water flows; (h) Encourage wastewater reclamation; (i) Maintain natural vegetation buffer areas that protect riparian habitats; (j) Minimize alteration of natural streams; (k) Conform with Chapter 7. Environmental Hazards policies for minimizing risks and avoiding contribution to flood and erosion hazards; (l) Maintain hydrologic function and sediment transport function of drainages; and (m) Provide mitigation and long-term monitoring and reporting for any adverse impacts incurred upstream or downstream as a result of permitted development

LUP Policy 6-49. Riparian Corridor Buffers. Buffer zones shall be required for development proposed along both sides of riparian corridors to provide habitat protection and space for meander belts and vegetation growth. Riparian buffer zones shall apply as follows: (a) For all perennial watercourses (i.e. Pilarcitos Creek, Frenchmans Creek, Arroyo Leon, and Arroyo Cañada Verde west of Highway 1) and certain intermittent watercourses (i.e. Kehoe Watercourse and Wavecrest Arroyo): buffer zones shall extend a minimum of 50 feet from the outer limit of the riparian vegetation or 100 feet from the top of bank, whichever is greater. (b) For all other intermittent and ephemeral watercourses with riparian vegetation (e.g. Roosevelt Creek, the riparian corridor in the northwestern area of Ocean Colony, and Arroyo Cañada Verde east of Highway 1): buffer zones shall extend a minimum of 35 feet from the outer limit of riparian vegetation or the top of bank, whichever is greater.

LCP Policy 6-50. Riparian Corridor Buffer Adjustments. A larger riparian corridor buffer may be required based on site-specific evidence that a larger buffer is necessary to maintain and protect the biological integrity of the riparian habitat and functional capacity of the watercourse from the impacts of proposed development. A riparian buffer may be reduced below what is required by Policy 6-49 only where the following can be demonstrated through evidence provided by site-specific evaluation pursuant to Policy 6-8, and only as specified below: (a) Where the only building site is located entirely within the required buffer; no alternative development site, size, or design is feasible; and the proposed development is compatible with the continued viability of the riparian corridor: the buffer may be reduced for all riparian corridors to no less than 20 feet from the outer limit of riparian vegetation or from top of bank, whichever is greater, provided that design alternatives that maximize the buffer width are utilized; or (b) Where the only building site is not located entirely within the required buffer; no alternative development site, size, or design is feasible to accommodate

the development entirely outside of the required buffer; no new adverse impacts to the riparian corridor will occur; and the reduced buffer would provide equivalent protection of the biological integrity of the riparian corridor given the site-specific characteristics of the resource and of the type and intensity of disturbance, as conclusively demonstrated by a qualified biologist to the satisfaction of the City and all jurisdictional regulatory agencies: (a) The buffer may be reduced to no less than 35 feet from the outer limit of riparian vegetation or 50 feet from the top of bank, whichever is greater, for development proposed adjacent to perennial and intermittent watercourses pursuant to Policy 6-49(a); or (b) The buffer may be reduced to no less than 25 feet from the outer limits of riparian vegetation or from the top of the bank, whichever is greater, for development proposed adjacent to all other intermittent and ephemeral watercourses pursuant to Policy 6-49(b).

LUP Policy 6-78. ESHA Protection from Runoff. *In areas in or adjacent to an ESHA, plan, site, and design development to protect the ESHA from any significant disruption of habitat values resulting from the discharge of stormwater or dry-weather runoff flows.*

LUP Policy 6-79. Stormwater Management. *Reduce impacts from erosion and water quality degradation by managing development project runoff stormwater discharge rates and implementing hydromodification management measures. Update storm event standards and precipitation models with best available science on climate change as necessary.*

LUP Policy 6-81. Siting and Design. *Site and design development to avoid adverse impacts to coastal waters by incorporating measures designed to achieve the following: (a) Protect, restore, and enhance areas that provide important water quality benefits, areas necessary to maintain riparian and aquatic biota and/or that are susceptible to erosion and sediment loss; (b) Limit increases of impervious surfaces, especially impervious surfaces directly connected to the storm drain system; (c) Minimize the transport of pollutants from development into runoff and coastal waters; (d) Limit land disturbance activities such as clearing and grading, and cut-and-fill to reduce erosion and sediment loss; and (e) Preserve, restore, and enhance natural watercourses and vegetation.*

LUP Policy 6-83. Construction Best Management Practices (BMPs). *Require new development proposals to include construction phase erosion control and polluted runoff control plans. These plans shall specify BMPs that will be implemented to minimize erosion and sedimentation, provide adequate sanitary and waste disposal facilities and prevent contamination of runoff by construction chemicals and materials.*

LUP Policy 6-84. Drainage and Runoff Control Plans. *Require new development proposals to include post-construction phase drainage and polluted runoff control plans. Such plans shall: (a) Specify site design, source control and treatment control BMPs that will be implemented to minimize post-construction polluted runoff, and shall include the monitoring and maintenance plans for these BMPs; (b) Ensure that post-construction structural BMPs (or suites of BMPs) are designed to treat, infiltrate, or filter the amount of stormwater runoff produced by all storms up to and including the 10-year 2-hour storm event; (c) Ensure dry weather runoff does not exceed the pre-development baseline flow rate to receiving waterbodies; (d) Complement and utilize existing drainage patterns and systems where they are in proper functioning condition, conveying drainage from the developed area of the site in a non-erosive manner that avoids downstream cumulative*

impacts; and (e) Restore disturbed or degraded natural drainage systems where feasible, except where there are geologic or public safety concerns.

Environmental Hazards Policies

LUP Policy 7-1. Hazard Avoidance. All new development shall be sited, sized, and designed to minimize risks to life and property and protect coastal resources from geologic, flood, and fire hazard over the life of the development. Coastal resources to be protected may occur on- or off-site, upstream or downstream. Development standards shall anticipate that hazards may be compounded by climate change.

LUP Policy 7-8. Shoreline Hazards and New Development. Ensure that new development, including land division, is sized, sited and designed to be safe from shoreline hazards such as coastal flooding, shoreline erosion, tsunami inundation, seawater intrusion, and other sea level rise impacts without requiring a shoreline protection device at any time over the anticipated life span of the structure.

LUP Policy 7-12. Site-Specific Shoreline Hazards Evaluation. All new development proposed in areas that may be subject to shoreline hazards, including all beaches and beachfronts, blufftops, and areas mapped in Figure 7-1, shall require the submittal of a site-specific evaluation report of shoreline hazard risks over the anticipated life of the proposed development. Analyses shall be conducted by a qualified professional with expertise in coastal processes and shall establish the appropriate setback from the beach or bluff edge based on the anticipated life of the structure, best available science including utilizing the highest projected sea level rise amounts appropriate for the type of proposed development with a 100-year storm event and for blufftop development, a demonstrated factor of safety greater than or equal to 1.5 for static conditions and greater than or equal to 1.1 for seismic conditions. The evaluation shall include an analysis of the following: (a) Historic and projected rates of erosion over the anticipated life span of the proposed development, including potential erosion considering future sea level rise, and possible changes in shore configuration and sand transport. Sources to be investigated include recorded land surveys and tax assessment records, historic maps and photographs where available, and best available science on sea level rise and erosion projections such as that developed by USGS, the National Academy of Engineering, the National Academy of Science, the California Geological Survey, and the California Coastal Commission; (b) Cliff geometry and site topography, extending the surveying work beyond the site as needed to depict geomorphic conditions that might affect the site and the proposed development; (c) Geologic conditions, including soil, sediment and rock types and characteristics in addition to structural features such as bedding, joints, and faults; (d) Evidence of past or potential landslide conditions, the implications of such conditions for the proposed development, and the potential effects of the development on landslide activity; (e) Wave and tidal action, including effects of marine erosion on bluffs; (f) Ground and surface water conditions and variations, including 100-year riverine flooding and its impact/interaction with bluff erosion and ocean forces at creek mouths and low-lying areas, changes to groundwater resulting from rising sea levels, and hydrologic changes caused by the development (e.g., introduction of irrigation water to the ground- water system; alterations in surface drainage); (g) Potential effects of seismic forces resulting from a maximum credible earthquake; (h) Effects of the proposed development including siting and design of structures, landscaping, drainage, grading, and impacts of construction activity on the stability of the site and

adjacent area; (i) Any other factors that may affect slope stability; and (j) Potential erodibility of site and mitigating measures to be used to ensure minimized erosion problems during and after construction (i.e., landscaping and drainage design).

LUP Policy 7-13. Blufftop Development Setbacks. Permit new blufftop development only if, as demonstrated by the site-specific evaluation required by Policy 7-12: (a) Design and setback provisions are adequate to assure stability and structural integrity for the anticipated life span of the development, taking into consideration long-term future erosion and short-term episodic erosion including the influence of sea level rise, plus an added geologic stability factor of safety greater than or equal to 1.5 for the static condition and greater than or equal to 1.1 for the seismic condition, without reliance on existing or proposed shoreline protective devices; and (b) The development (including associated stormwater runoff, foot traffic, grading, irrigation, and septic tanks) will neither create nor contribute to erosion, geologic instability of the site or surrounding area, or otherwise harm coastal resources. Setbacks may also be needed to protect visual resources as well as ESHA. In such cases, the most protective setback requirement applies. Setbacks shall also include room for buffers from hazards and/or ESHAs as applicable.

LUP Policy 7-16. Grading near Beachfront or Blufftop. Require that any grading necessary to establish proper drainage, install minor improvements (e.g. trails), restore eroded areas, restore habitat, or provide permitted accessways directs water runoff away from the beach or edge of the bluff or requires runoff to be handled so as to prevent damage to the beach or bluff from surface and percolating water.

LUP Policy 7-44. Minimize Geologic Hazard Consequences. New development in areas of high geologic and seismic hazard shall minimize risk to life and property and neither create nor contribute to geologic and seismic hazards. Geologic and seismic hazards are defined to include soil stability, erosion, sedimentation, landslides, subsidence, seismicity, and liquefaction.

LUP Policy 7-46. Geological Reports. Require submittal of a site-specific geologic hazards report prepared by a qualified professional for new development proposed in areas of high geologic hazard risk, including as indicated on the Seismic Hazards and Liquefaction Potential map (Figure 7-3). The report shall describe the threats and impacts from geologic hazards arising from, for example, seismic events, watercourse erosion, landslides, expansive soils, and subsidence areas. Reports shall identify appropriate hazard setbacks, siting and design options, and mitigation measures where necessary to minimize potential impacts to life and property.

LUP Policy 7-57. Flood Protection Evaluation. Require new development proposals to evaluate potential impacts to adjacent or downstream properties from all proposed structural flood protection measures to ensure that the flood protection measures will not create adverse direct and/or cumulative impacts either on-site or off-site.

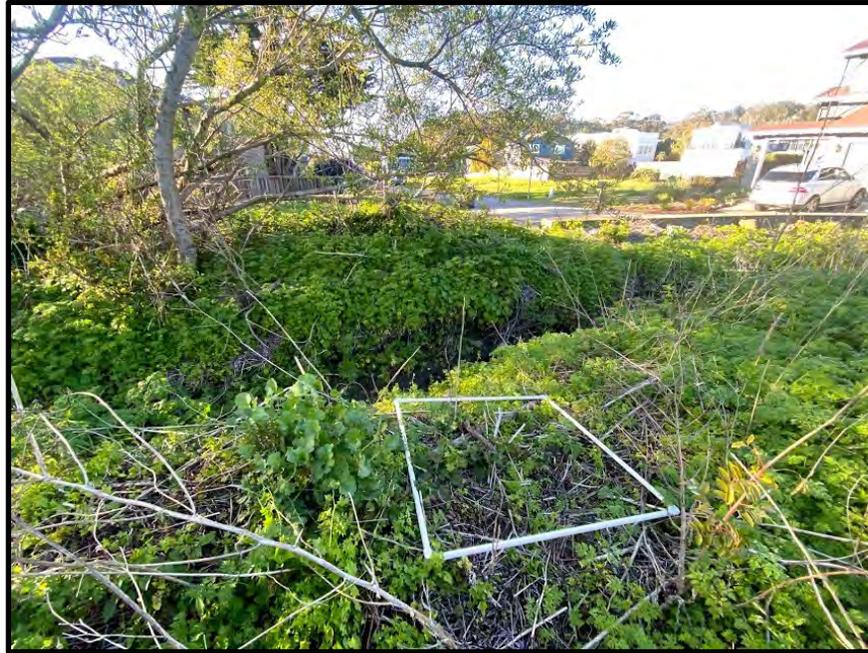
It is important to note that all of the cited LCP policies, as well as all that are included within the City's LCP, derive from the authority of Chapter 3 of the Coastal Act, which is the guiding policy document that dictates the LUP provisions. The Coastal Act includes ESHA protection and coastal hazards provisions, including, in relevant part:

Section 30240. (a) *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values ... (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30253. *New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area ...*

Waters and Wetlands Delineation Report

For the Property at 2800 Champs Elysee Blvd
Accessor's Parcel Number 048-133-060



July 2021

Prepared for

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Introduction

This report presents the findings of a delineation of potential jurisdictional wetlands and waters of the United States and State as defined by state and federal agencies for the Property at 2800 Champs Elysée Boulevard (Assessor's Parcel Number 048-133-060), in Half Moon Bay, San Mateo County, California (Appendix A, Figures 1, 2, and 3).

The City of Half Moon Bay requested that a delineation be conducted to verify current site conditions. Investigations took place on March 3, 2021 and a Biological Resources Assessment (BRA) was prepared for this site in 2011 by WRA, Inc (WRA) and updated in May of 2018.

Potential jurisdictional features in the Study Area have been scrutinized based on federal and state regulations, including Sections 404 and 401 of the Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act, Sections 1600-1616 of the California Fish and Game (CDFW) Code, and Section 30121 of the California Coastal Act overseen by the California Coastal Commission (CCC). This report was prepared in accordance with the United States Army Corps of Engineers (USACE) May 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Region. The USACE manual, in conjunction with the previously listed regulations, serves as the guidance document for identifying waters and wetland features under the jurisdiction of USACE, the Regional Water Quality Control Board (RWQCB), and the CDFW. The CDFW has jurisdiction over stream-dependent riparian areas, as defined by Section 2785 of the California Fish and Game Code. Additionally, the project falls within the California coastal zone. The CCC is responsible for determining the presence of wetlands subject to regulation under the California Coastal Act, with the assistance of CDFW and depending on the USACE's jurisdictional definition, but with stricter definitions. The results of this delineation are preliminary until verified by USACE and CCC.

Site Location and Proposed Project

The Study Area includes the undeveloped project footprint (parcel) located west of the cul-de-sac on the south end of Champs Elysée Boulevard, just inland of Roosevelt Beach, in the north central portion of the Half Moon Bay U.S. Geological Survey (USGS) 7.5-minute quadrangle (Appendix A, Figure 3). The center of the Study Area is at approximately 37° 48' 89" north latitude and -122° 45' 17" west longitude. The Study Area includes an approximately 0.73-acre (31,709 ft²) parcel (APN 048-133-060) bordered by Pullman Watercourse Watercourse to the north, Champs Elysée Boulevard to the east, agricultural fields to the south, and Naples Avenue to the west (Appendix A, Figures 1- 4).

Purpose of the Delineation

This delineation was performed to identify potential jurisdictional waters and wetland features within the proposed development.

Regulatory Setting

The discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically requires authorization from USACE, pursuant to Section 404 of the CWA (33 USC 1344); RWQCB, pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act; and CDFW, pursuant to Sections 1600 through 1616 of the California Fish and Game Code. Permits, licenses, variances, or similar authorization may also be required by other local statutes. The applicable CWA and other federal and state regulations are described in the following sections.

Federal Regulations

Clean Water Act Section 404

The CWA serves as the primary federal law protecting the quality of the nation's wetlands and surface waters (other waters). Under Section 404, USACE and the U.S. Environmental Protection Agency (USEPA) regulate the discharge of dredged and fill materials into the waters of the United States. Waters of the United States include: 1) waters used for commerce and subject to tides; 2) interstate waters and wetlands; 3) other waters such as intrastate lakes, rivers, streams, and wetlands; 4) impoundments of waters; 5) tributaries of waters; 6) territorial seas; and 7) wetlands adjacent to waters.

The CWA defines wetlands as a subset of waters of the United States that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3[b]; 40 CFR 230.3[t]).

The definition of waters of the United States has been revised based on subsequent rulings by the U.S. Supreme Court (Court). Two cases brought before the Court, *Rapanos v. United States* (No. 04 1034) and *Carabell v. Army Corps of Engineers* (No. 04-1384), challenged USACE interpretation of waters of the United States (USACE/USEPA 2007). On June 19, 2006, the Court ruled in favor of tightening the definition of "waters of the United States." Per the Court's decision, a water or wetland constitutes "navigable waters" under CWA if it possesses a "significant nexus" to waters that are currently navigable or could feasibly be made navigable. A significant nexus requires that there be "more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of a traditionally navigable water" (USACE 2008).

On June 5, 2007, USACE and USEPA issued a joint memorandum that provided new guidelines for establishing whether wetlands or other waters of the United States fall within USACE jurisdiction (USACE/USEPA 2007). Under these guidelines, the agencies assert jurisdiction over traditional navigable waters (TNWs), wetlands adjacent to TNWs, non-navigable tributaries to TNWs that are relatively permanent waters (RPWs), and wetlands that abut RPWs. The agencies may take jurisdiction over non-navigable tributaries that are not RPWs, wetlands that are adjacent to non-RPWs, and wetlands adjacent to but not directly abutting a relatively permanent, non-navigable tributary. The revised guidance states that swales or erosional features and Watercoursees excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water will generally not be subject to CWA jurisdiction.

Some wetlands and waters may also be considered outside of USACE jurisdiction as a result of the Court's decision in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (531 U.S. 159 [2001]). Isolated wetlands and waters are those areas that do not have a surface or groundwater connection to, and are not adjacent to navigable waters of the United States, and which do not otherwise exhibit an interstate commerce connection. The agencies will generally not assert jurisdiction over swales, erosional features, or Watercoursees excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Executive Order 11990 for the Protection of Wetlands

Executive Order 11990 for the Protection of Wetlands (May 24, 1977) establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. If wetland effects cannot be avoided, all practicable measures to minimize impacts must be included.

Executive Order Executive Order 13778 for Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule

On January 23, 2020 the USEPA and USACE enacted the Navigable Waters Protection Rule (NWPR) to redefine "waters of the United States" to include four categories. Their landward extent was defined following the definitions provided in the Corps of Engineers regulations [33 CFR §328.3]:

(a) *Jurisdictional waters*. The Clean Water Act defines "waters of the United States" as:

- (1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
- (2) Tributaries;

- (3) Lakes and ponds, and impoundments of jurisdictional waters; and
- (4) Adjacent wetlands.

(b) *Non-jurisdictional waters*. The following are not “waters of the United States”:

- (1) Waters or water features that are not identified in (a)(1) through (4) above;
- (2) Groundwater, including groundwater drainage through subsurface drainage systems;
- (3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
- (4) Diffuse stormwater run-off and direction sheet flow over upland;
- (5) Watercourses that are not territorial seas or traditional navigable waters, or tributaries, and those portions constructed in adjacent wetlands that do not satisfy the conditions of adjacent wetlands;
- (6) Prior converted cropland;
- (7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
- (8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and clog cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of lakes and ponds, and impoundments of jurisdictional waters;
- (9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- (10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- (11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and

(12) Waste treatment systems.

(c) *Definitions.* In this section, the following definitions apply:

(1) *Adjacent wetlands.* Wetlands that (i) abut, meaning to touch at least at one point or side of territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters; (ii) are inundated by flooding from territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters in a typical year; (iii) are physically separated from a water defined territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters only by a natural berm, bank, dune, or similar natural feature; or (iv) are physically separated from territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

(2) *Ditch.* A constructed or excavated channel used to convey water.

(3) *Ephemeral.* Surface water flowing or pooling only in direct response to precipitation (e.g. rain or snow fall).

(4) *High tide line.* The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along the shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings of characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide.

(5) *Intermittent.* Surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g. seasonally when the groundwater table is elevated or when snowpack melts).

(6) *Lakes and ponds, and impoundments of jurisdictional waters.* Standing bodies of open water that contribute surface water flow to territorial seas or traditional navigable waters in a typical year either directly or through one or tributaries, lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands. A lake,

pond, or impoundment of a jurisdictional water does not lose its jurisdictional status if it contributes to surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a culvert, dike, spillway, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. A lake or pond, or impoundment of a jurisdictional waters is also jurisdictional if it is inundated by flooding from territorial seas or traditional navigable waters, tributaries, lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands in a typical year.

- (7) *Ordinary high-water mark*. That line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- (8) *Perennial*. Surface water flowing continuously year-round.
- (9) *Prior converted cropland*. Any area that prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. An area is no longer considered prior converted cropland for purposes of the CWA when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(16) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least one in the immediately preceding five years.
- (10) *Snowpack*. Layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation.
- (11) *Tidal waters and waters subject to the ebb and flow of the tide*. Those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters and waters subject to the ebb and flow of the tide end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.
- (12) *Tributary*. A river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters in a typical year either directly or through one of more tributaries, lakes,

ponds, and impoundments of jurisdictional waters, or adjacent wetlands. A tributary must be perennial or intermittent in a typical year.

- (13) *Typical year*. When precipitation and other climatic variables are within the normal periodic range (e.g. seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.
- (14) *Upland*. Any land area that under normal circumstances does not satisfy all three wetland factors (i.e. hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) of this section, and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.
- (15) *Waste treatment system*. Includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

Wetlands. Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

State Regulations

Porter-Cologne Water Quality Control Act and Clean Water Act Section 401

Waters of the state are regulated by RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." Under this definition, isolated wetlands that may not be subject to regulations under federal law are considered waters of the state. Additionally, the California RWQCB adopted State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (RWQCB, 2019) and uses the methods of delineation prescribed in the USACE manuals (USACE 1987; USACE 2010) which was followed in conducting this wetland delineation.

RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters that may not be regulated by other programs (such as Section 404 of the CWA). Projects that require a Section 404 CWA permit or fall under other federal jurisdiction and have the potential to impact waters of the state are required to obtain a Section 401 Water Quality Certification. If a project does not require a federal license or permit but involves

activities that may result in a discharge of harmful substances to waters of the state, RWQCB has the option to regulate such activities under its authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

California Coastal Commission

Coastal Act Section 30121 defines the term “wetland” as: “lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. The Coastal Commission’s regulations (California Code of Regulations Title 14 (14 CCR)) establish a “one parameter definition” that only requires evidence of a single parameter to establish wetland conditions:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats. (14 CCR Section 13577).

As opposed to wetlands definitions, which describe general parameters that must be shown to establish three wetland conditions (hydrology, soils, and vegetation), the delineation of wetlands in the field typically requires substantial evidence of indicators, which are the physical, chemical, or biological features of an area that can be easily observed or assayed and that are usually correlated with the presence of a wetland parameter; and methodologies that guide the process of distinguishing wetland from non-wetland conditions. Such field tools are needed because the various characteristics of wetlands typically occur on physical gradients (i.e., wet to dry conditions, hydric to nonhydric soils, and hydrophytic to meso/xerophytic vegetation). The Coastal Commission’s regulations acknowledge these distinctions by specifying some general decision rules for establishing the upland boundary of wetlands:

...the upland limit of a wetland shall be defined as:

a. the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover.

b. the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or

c. in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not. (14 CCR Section 13577)

Sections 1600 to 1616 of the California Fish and Game Code

Streams, lakes, and riparian vegetation that provide habitat for fish and other wildlife species are subject to CDFW jurisdiction under Sections 1600 to 1616 of the California Fish and Game Code. These sections regulate any activity that may 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement (SAA) issued for the project.

The term "stream" also includes creeks and rivers and is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term also includes ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Stream-dependent riparian habitat is defined in the California Fish and Game Code (Section 2785) as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Removal of stream-dependent riparian vegetation or wetlands may also require a SAA from CDFW.

Local Regulations

The Half Moon Bay Local Coastal Land Use Plan (LCLUP) and the Zoning Ordinance together constitute the "Local Coastal Program" (LCP) for the City's coastal zone. Appendix A, Special Definitions, defines wetlands below.

For San Mateo County, it is appropriate to adapt the definition of wetland used by the U. S. Fish and Wildlife Service (Classification of Wetlands and Deep-Water Habitats of the United States, (1977). This definition embraces several important concepts which are relevant to the San Mateo Coast: (1) the relationship of the water table with respect to the ground surface; (2) the duration of the water on or at the surface; (3) the soil types involved with the permanent or temporary saturated conditions; and (4) the flora and fauna adapted to the wet conditions.

The City LCLUP additionally requires that construction remain outside a 100-foot buffer of Wetlands and a 50-foot buffer from riparian habitat and/or the top of bank if no riparian vegetation is present. The City has, however, acquired a reduced wetland buffer for this project, which requires a 30-foot buffer on riparian habitats and a 20-foot buffer on wetlands.

Methodology

This section identifies the methodology used to conduct the jurisdictional delineation of waters of the state and the United States, including data sources and field work procedures.

Study Area

The Study Area encompasses a total of 0.73 acres (31,709 ft²; Appendix A) and includes a roughly triangular parcel wedged between an agricultural field and Pullman Creek, and bounded to the north and south by Champs Elysée Boulevard and Naples Avenue (Appendix A, Figures 1-4).

Pre-field Survey Literature Review

The following resources were reviewed prior to conducting field investigations to obtain information on wetlands and other water features that may occur in the Study Area:

- United States Geological Survey 7.5-minute topographic quadrangles
- National Wetlands Inventory maps (USFWS, 2020)
- Mapped soil units (NRCS, 2020)
- Google Earth Pro Aerial photographs from 1991 through 2018
- Biological Resource Assessment (WRA 2011)

Field Surveys

A formal delineation was conducted by BioMaAS staff on March 3, 2021 and updated on May 18, 2021 using the routine onsite determination method described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010), USACE San Francisco District (2016a) Information Requested for Verification of Corps Jurisdiction guidance, and U.S. Army Corps of Engineers San Francisco District Updated Map and Drawing Standards (2016b), were also used as part of the on-site wetlands analysis and report preparation. The wetland indicator status of plants is based on the National Wetland Plant List (NWPL) Arid West 2018 (USACE 2018). Scientific nomenclature for plant species in this report is based on the Jepson eFlora (Jepson Flora Project

2021). When the scientific nomenclature from the National Wetland Plant List 2016 (USACE 2018) differs from the Jepson eFlora nomenclature, the Jepson eFlora taxon is reported first and the USACE 2018 taxon is provided in brackets.

Weather conditions during the survey were sunny and clear, with a high temperature of 63 degrees Fahrenheit. The entire Study Area was walked prior to sample assessment, in such a manner as to view all areas to determine the location of representative sites to assess the presence or absence of jurisdictional features.

Data points were taken at twenty representative locations within the Study Area (SP1 through SP20) to identify the three wetland parameters (vegetation, soils, and hydrologic conditions), as recorded on wetland determination data forms and the approved jurisdictional delineation form (Appendix D). Data were collected using a sub-meter accurate hand-held Trimble GeoXT device. These data were transferred into Geographic Information Systems (GIS) and were used to produce the jurisdictional delineation map (Appendix A, Figure 4) and calculate the area (in acres) of potential jurisdictional features in the Study Area.

Findings

The results of the field survey and delineation of jurisdictional waters of the state and United States are described in the following subsections. A summary of findings is presented, followed by documentation of vegetation, soils, and hydrology conditions supporting these findings. The extent of the mapped features most likely extend beyond the Study Area boundary (based on publicly available aerial imagery interpretation), however, they are not mapped in this report.

The results of this delineation are preliminary until verified by USACE.

Summary of Findings

Based on the results of the field survey, there are no jurisdictional waters of the state or the United States present within the Study Area. Approximately 478 linear feet of potentially jurisdictional non-wetland waters run adjacent to the Study Area, just beyond its northern boundary.

No jurisdictional wetlands that are potentially regulated by the USACE were identified within the Study Area (Appendix A, Figure 4). However, a total of 0.131 acres of wetlands that are potentially regulated by the CCC were identified within the Study Area (Appendix A, Figure 4). Additionally, 4.2 square feet of Riparian Habitat, potentially regulated by CDFW, RWQCB, and the CCC, cross into the Study Area.

A summary of these findings can be found in Table 1.

Table 1
Jurisdictional Features in the Study Area

Feature	Area (acres) within the Study Area	Area (square feet) within the Study Area	Agency Jurisdiction (Y/N)			
			USACE	RWQCB	CDFW	CCC
CCC Wetland 1	0.099	4,312.4	N	N	N	Y
CCC Wetland 2	0.001>	17.5	N	N	N	Y
CCC Wetland 3	0.031	1,350.4	N	N	N	Y
Riparian Habitat	0.001>	4.2	N	Y	Y	Y
Total Waters and Wetlands of US and State Area	0.131	5,706.4	N	Y	Y	Y

Notes:

--: not applicable

CDFW: California Department of Fish and Wildlife

RWQCB: Regional Water Quality Control Board

USACE: U.S. Army Corps of Engineers

CCC: California Coastal Commission

Wetland Features

Three one or two parameter wetland features were identified in the Study Area (Appendix A, Figure 4) totaling to 0.131 acres. The features meet the criteria for CCC, as recorded in the wetland determination data forms for representative paired sampling points (Appendix D). Sample Points SP11, SP12, SP15, SP25, SP26, SP27, SP29, SP28, and SP34 are found within these wetlands.

No areas within the Study Area retained significant amounts of water, as the soil is moderately well drained (Denison loam and Farallone Coarse Loam). The data sheets (Appendix D) describe the soil samples, vegetation, and hydrology found at this site. Soils were typically black (10 YR 2/1) to dark yellowish brown (10 YR 4/4). No gleyed soils were observed, but mottled soils at SP24, SP25, SP26, SP27, SP28 and SP34 revealed the presence of redox features (Appendix D).

The previously completed Biological Resource Assessment (WRA 2011) did not identify features potentially regulated by CDFW, USACE, RWQCB, and LCP/CCC. The delineation conducted in March 2021 agrees with this assessment that the site does not contain wetland features indicative of USACE wetlands within the Study Area because no Sample Point exhibited indicators of all three wetland parameters (hydrophytic vegetation, wetland soil, and wetland hydrology).

However, because the Study Area is within the Coastal Zone, only one of the three jurisdictional parameters is necessary to qualify as a wetland under the CCC regulations. Wetlands were identified based primarily on vegetation, with the dominance of poison hemlock, a FAC species which attained 80% cover in some areas. Several sample points within Wetlands 1 and 3 also demonstrated natural wetland soils in the form of lighter redoxomorphic features mottled with the darker natural soils.

Riparian Habitat

Riparian habitat is defined as native woody hydrophytes occurring along the edge of a wetland or water feature. The overstory of arroyo willow (*Salix lasiolepis* - FACW) exists on the north side of Pullman Watercourse, the ephemeral drainage running adjacent to the Study Area. The overstory barely reaches into the northern edge of the Study Area. Because Pullman Watercourse is an ephemeral feature, and because the riparian vegetation does not provide 50 percent cover along the length of the feature, Pullman Watercourse does not qualify as riparian habitat under the LCP Land Use Plan's definition of riparian habitat (Chapter 3). However, the arroyo willow habitat may be considered riparian habitat by CDFW and the RWQCB. Sprouting arroyo willows occur near SP27 and SP 34. However, because these do not have canopies or dominate the vegetation community, these are not considered riparian trees or habitat. They do, however, indicate wetland vegetation.

Ephemeral Drainage "Ditches/Watercourses"

Pullman Watercourse, a human-created ephemeral drainage feature (ED, "Watercourse" features in maps, Appendix A, Figure 4) was identified adjacent to the Study Area. Although Pullman Watercourse was not within the Study Area, it will be described here, as its proximity may have implications for working immediately adjacent to it. Pullman Watercourse has a length of approximately 478 feet along the northern edge of the Study Area, but exceeding it to the east and west. Only 403 feet of Pullman Watercourse were daylighted, the remaining being contained within culverts. It had an average width of approximately 4.0 feet. The Watercourse meets the criteria for other waters feature (instead of a wetland), as recorded in the wetland determination data forms for representative paired sampling points SP6, SP7, and SP8, and as summarized in Section 4.4. The Watercourse was dry during the March 3, 2021 site visit, but contained 2 inches of water the day after rainfall on March 6, 2021. This feature evidently does not contain relatively permanent flows; and thus, it is best characterized as an ephemeral feature (only wet during period of heavy precipitation when runoff from the watershed reaches the drainage). There is an obvious deep bed and steep bank. Vegetation is largely absent from the channel bed, sharply contrasting with vegetation growing on the top of bank suggesting flashy, high-velocity flow regime. Neighbors living adjacent to Pullman Watercourse reported that the Watercourse often floods and overflows after high rain events. It also appears that runoff from

the upstream nursery generates high flows as well. No high-water mark was observed by drift or water line signature, which is further evidence of the drought conditions present in water year 2020-2021.

Several 24" culverts carry Pullman Watercourse under side-yards adjacent to the Study Area. The headwaters of the Watercourse originate on the far side of Highway 1 and are fed by runoff piped by two 24" culverts and other human-created Watercourses. Some of the flows in Pullman Watercourse is irrigation runoff from nurseries (WRA 2011), which corroborates statements from neighbors of the property. The Watercourse flow is culverted downstream under the Half Moon Bay Coastal Trail, and from there, runoff flows into the Pacific Ocean at Roosevelt Beach.

The National Wetland Inventory (USFWS 2020) maps were reviewed for aquatic resources and wetlands in and adjacent to the Study Area and Pullman Watercourse is not an identified feature on the NWI map, nor is it identified as a blue line (intermittent or perennial) stream by the City of Half Moon Bay.

There are topographic lines which correspond with the upstream alignment of Pullman Watercourse represented by the USGS maps (Appendix A, Figure 3). The previously completed Biological Resource Assessments (WRA 2011) also identified Pullman Watercourse as an ephemeral drainage, and the delineation conducted in March 2021 concludes that it is potentially under the jurisdictional of CDFW, USACE, RWQCB, and LCP/CCC.

Because Pullman Watercourse is just outside of the Study Area, there are no acres of ED within the Study Area that would be impacted by construction. However, the top of bank, which would qualify as waters of the state and wetlands under CCC, RWQCB, and CDFW jurisdictions, runs within 1-10 feet of the boundary of the Parcel. Native wetland vegetation exists beyond the bed and bank of the ED Watercourse, and CDFW jurisdiction of this feature within the Study Area would therefore be extended from the ED Watercourse areas delineated on Appendix A, to the wetland feature delineated in blue.

Vegetation

Habitats within the Study Area include ruderal, Monterey cypress (*Hesperocyparis macrocarpa* - NL) woodland, and arroyo willow thicket. Vegetation within these communities was recorded in the wetland determination data sheets (Appendix B- photos, and Appendix D- datasheets). Communities were identified based on vegetation alliances in A Manual of California Vegetation (Sawyer et al. 2009) and generalized categories pertaining to the site during field observation. The vegetation communities also match the habitats mapped in the BRA (WRA 2011). The vast majority of the Study Area is ruderal with Monterey cypress stands on the southern border with a patch of Arroyo willow thicket. Adjacent communities include agricultural fields (east) and

coyote brush (*Baccharis pilularis*-NL) scrub (south). Lands to the north are developed with single family home subdivision (Figures 1-3).

Ruderal

The ruderal habitat in the Study Area supports plant species that are typical of disturbed habitats in the Half Moon Bay area. Dominant plants include non-native forbs and grasses such as Italian ryegrass (*Festuca perennis*-FACU), poison hemlock (*Conium maculatum*-FAC), prickly ox-tongue (*Helminthotheca echioides*-FAC), field mustard (*Brassica rapa*-NL), Cape ivy (*Delairea odorata*-NL), brome fescue (*Festuca bromoides*-FAC), Pampas grass (*Cortaderia jubata*-UPL), and Bermuda buttercup (*Oxalis pes-caprae*-NL). Native species that were able to establish in this zone include Spreading rush (*Juncus patens*-FAC), and the vine California blackberry (*Rubus ursinus*-FACU). In the tree layer, a shrubby ornamental non-native, small-leaf elm (*Ulmus parvifolia*-UPL) overhangs part of the Study Area and Pullman Watercourse. Generally, the ruderal habitat falls within upland areas. However, an area along the northern edge of the Study Area was dominated by poison hemlock (*Conium maculatum*), prickly ox-tongue (*Helminthotheca echioides*), and brome fescue (*Festuca bromoides*), all facultative (FAC) wetland species, thus meeting the jurisdictional parameter for wetland vegetation. An additional area, CCC wetland 2, barely crossed into the Study Area, and was dominated by bristly ox-tongue.

Riparian Thicket

An arroyo willow thicket forms a very small area overhanging Pullman Watercourse just south of Alameda Avenue, and extends very slimly into the Study Area. The shrub layer within the understory is co-dominated by native California blackberry and the herbaceous layer is predominantly poison hemlock and Cape ivy. Because arroyo willow is a wetland species, and so is poison hemlock, the understory of the riparian thicket represents a CCC wetland, in addition to a riparian zone, as defined by CDFW.

Monterey Cypress Stands

Monterey cypress stands form the border between the parcel and the adjacent agricultural land. These trees stand some 15-30 feet tall, and were likely planted prior to the building of the adjacent neighborhood. Very little grows in the understory, although Bermuda buttercup and poison hemlock may be present. The soils under these stands are highly organic, but represent upland soils. The Monterey cypress stands fall within upland portions of the Study Area.

Soil Types

The NRCS Web Soil Survey identifies [Farallone course sandy loam](#), nearly level (FcA) over the majority of the Study Area (65%) and [Denison loam](#), nearly level (DmA) over the remainder (35%) of the site. Please refer to Appendix C for soils information obtained from the NRCS on-

line web soils survey for the site, Appendix B for photos of soil samples, and Appendix D for datasheets.

As described in the USDA, NRCS Official Soil Series Descriptions (accessed March 2021), the [Denison loam series](#) (DmA) consists of very deep, moderately well drained soils that developed from moderately fine textured granite alluvium. Denison soils are on old coastal terraces adjacent to the coast in central California and have slopes of 0 to 50 percent. These soils are only moderately well drained because perched water tables occur during periods of heavy precipitation or irrigation. It has slow to rapid runoff and very slow permeability. [Tierra](#) and [Watsonville](#) soils, and Elkhorn, Farallone and Miramar components are associated with this series. The surface soils are described as very dark brown 10 YR 2/1 loam between zero to 16 inches, with a hard clay layer at approximately sixteen inches depth.

The NRCS Official Soil Series Descriptions (accessed March 2021) describe the Farallone series as very deep, well-drained soils that formed in alluvial material derived from granitic rocks. Farallone soils are found on alluvial plains and valleys and have slopes of 0 to 10 percent and occur below 250 meters in elevation. They are subject to occasional overflow from local streams. Farallone soils are associated with the Denison, Miramar, and Watsonville soils. The soil colors are dark to light brown, from 10 YR 2/1 to 10 YR 5/2 and 10 YR 3/1.

Soil pits were dug within both the Denison loam and Farallone series soil types, with the more westerly soil pits falling into the Denison loam.

Native soils were, in many cases, beneath a 6-8 inch layer of fill material containing lighter-colored gravels and sands. The demarcation between the fill material and the native soils were typically obvious (see Photo

Two of the soil pits were dug within the channel of Pullman Watercourse. The remaining were dug within the parcel, which sits on a mostly flat terrace. This soil color was calibrated while wet. Generally, soils within the test pits exhibited dark coloring of 10 YR 2/1 consistent with the described parent material which is inherently dark and not an indicator of hydric conditions. There were no manganese concretions, hydrogen sulfide odors observed at the site, nor any indicator of prolonged presence of water, such as water marks. No gleyed-color greysols were observed.

However, mottles were found in several of the samples, and redox features were present as 7 YR 6/6, 7.5 YR 5/8, 10 YR 5/8, 10 YR 6/6, 10 YR 4/4 or 10YR 4/6 in SP24, SP25, SP26, SP27, SP28 and SP34 Soil pit 4 (SP4) featured an oxidized rhizosphere in the top six inches of the sample, but the soil colors at this location were consistent with the regular range of the soil profile (10 YR 2/1 to 10 YR 6/6), indicating that the soils had not been significantly transformed by hydrologic

conditions. Because these wetland locations did not also have wetland hydrology, so they do not qualify for USACE wetlands, but do fall within CCC jurisdiction.

Hydrology

Water conveyed within the ephemeral drainage flows to the southwest and is large carried through underground drainage culverts to the Pacific Ocean. During the site visit, surface water was not observed. Two inches of water was observed the morning following a rain event on March 6. Pullman Watercourse contained as much as 6 inches of water during subsequent visits. There is an obvious, well defined bed and bank with an ordinary highwater mark as indicated by a vegetation line as noted in Appendix D.

CCC Wetland 3 follows what appears to be a linear feature parallel to Pullman Watercourse (see Photo 33 in Appendix B), and may, in fact, be the former bank of Pullman Watercourse, which has since been culverted and rerouted beneath a private residence just north of Wetland 3. CCC Wetland 3 drains back into the watercourse where the watercourse daylights adjacent to Alameda Avenue. There is a very slight depression along the northern edge of CCC Wetland 3, indicating drainage patterns. Drainage patterns are a secondary wetland indicator of hydrology, and without additional wetland indicators, do not demonstrate that wetland hydrology is present.

CCC Wetland 1 is slightly terraced above adjacent areas (see Photo 34 in Appendix B), and exhibits neither primary nor secondary indicators of wetland hydrology. CCC Wetland 1 is only considered a wetland because of the dominance of FAC vegetation.

The only hydric indicator observed within the soil pits was an oxidized rhizosphere in SP4. However, there are no other indicators at SP4. Therefore, none of the soils pits demonstrated wetland hydrology, including within the ephemeral drainage.

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Plant List

Plant Species Observed within the Study Area

Scientific Name ¹	Common Name	Wetland Status ²
<i>Avena fatua</i> *	wild oat	UPL
<i>Avena barbata</i>	slender oat	UPL
<i>Baccharis pilularis</i>	coyote brush	NL
<i>Brassica nigra</i> *	common mustard	UPL
<i>Brassica rapa</i>	field mustard	FACU
<i>Bromus hordeaceus</i> *	soft chess	FACU
<i>Conium maculatum</i>	poison hemlock	FACW
<i>Cortaderia jubata</i> *	pampas grass	FACU
<i>Delairea odorata</i> *	German ivy	NL/UPL
<i>Dactylis glomerata</i>	orchardgrass	FACU
<i>Ehrharta erecta</i> *	panic veldt grass	UPL
<i>Epilobium ciliatum</i>	fringed willowherb	FACW
<i>Erigeron canadensis</i>	Canada horseweed	FACU
<i>Festuca bromoides</i>	brome fescue	FAC
<i>Festuca perennis</i>	Italian Rye grass	FACU
<i>Foeniculum vulgare</i>	Fennel	FACU
<i>Galium aparine</i>	Common bedstraw	FACU
<i>Geranium dissectum</i> *	cut-leaf geranium	NL/UPL
<i>Geranium molle</i> *	Crane's bill geranium	UPL
<i>Hedera helix</i>	English Ivy	FAC
<i>Helminthotheca echioides</i>	bristly ox-tongue	FAC
<i>Hesperocyparis macrocarpa</i>	Monterey cypress	UPL
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	foxtail barley	FAC
<i>Juncus hesperius</i>	Coast rush	OBL
<i>Juncus patens</i>	spreading rush	FACW
<i>Linum bienne</i> *	flax	UPL
<i>Lotus corniculatus</i>	bird's-foot trefoil	FAC
<i>Lysimachia arvensis</i>	scarlet pimpernel	FAC
<i>Medicago lupulina</i>	black medic	FACU
<i>Medicago polymorpha</i> *	bur clover	FACU
<i>Melilotus indicus</i>	yellow sweetclover	FACU
<i>Oxalis pes-caprae</i> *	Bermuda buttercup	NL/UPL
<i>Phalaris aquatica</i>	Bulbous canarygrass	FACU

Scientific Name ¹	Common Name	Wetland Status ²
<i>Plantago lanceolata</i> *	English plantain	FACU
<i>Rubus ursinus</i>	California blackberry	FACU
<i>Rumex acetosella</i>	Common sheep sorrel	FACU
<i>Rumex crispus</i> *	curly dock	FAC
<i>Rytidosperma penicillatum</i>	hairy oat grass	FACU
<i>Salix lasiolepis</i>	arroyo willow	FACW
<i>Scrophularia californica</i>	California bee plant	FAC
<i>Solanum furcatum</i> *	forked nightshade	UPL
<i>Sonchus asper</i> *	spiny sowthistle	FACU
<i>Sonchus oleraceus</i>	common sow thistle	FACU
<i>Sisyrinchium bellum</i>	western blue-eyed grass	FACW
<i>Toxicodendron diversilobum</i>	poison oak	FAC
<i>Ulmus parvifolius</i>	small-leaved elm	NL
<i>Urtica dioica</i>	stinging nettle	FAC
<i>Vicia benghalensis</i> *	purple vetch	UPL
<i>Vicia sativa</i> *	garden vetch	UPL

*= Non-native plant species.

¹Scientific nomenclature is based on the CalFlora and *Jepson eFlora* (Jepson Flora Project 2020) and the wetland indicator status is based from the *National Wetland Plant List* 2018 (USACE 2018). When the nomenclature differs between these two sources, the *Jepson eFlora* taxon is reported first and the USACE 2018 taxon is provided in brackets.

²Wetland status indicator based on the *National Wetland Plant List* (USACE 2018) for the Western Mountains, Valleys and Coast 2016 Regional Wetland Plant List.

Abbreviations

CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
Court	Supreme Court
CWA	Clean Water Act
Dma	Denison Loam
DP	data point
ED	ephemeral drainage
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FcA	Farallon Course Sandy Loam
FID	former irrigation channel
NWPL	National Wetland Plant List
OBL	obligate wetland
RPW	relatively permanent waters
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SW	seasonal wetland
TNW	traditional navigable waters
UPL	Upland plant species
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

Appendices

Appendix A

Figures

Figure 1: Project Location

Figure 2: Study Area

Figure 3: USGS 7.5-Minute Map

Figure 4: Jurisdictional Delineation Map

Appendix B

Images of Sample Sites

Appendix C

Soils Map

Appendix D

Data Sheets

Appendix A
Figures



Path: F:\OneDrive - Wilson Geographics\Project\BiosMaAS\2018_2020_Champs_Elysee\Map\Documents\Figure1 - Project_Location.mxd



BioMaAS

SOURCE: NAIP 2018, ESRI 2020

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

FIGURE 1
Project Location



Path: F:\OneDrive - Wilson Geographics\Project\BioskAs0210310_2000_Champs_Elysee\Map\Documents\Figure2_StudyArea.mxd

BioMaAS

SOURCE: NAIP 2018, San Mateo County 2017

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

 Project Boundary

FIGURE 2
Study Area



Path: F:\OneDrive - Wilson Geographic\Projects\Bioscience\2013\10_2000_Champs_Elysee\Map\Document\Figure1_USGS.mxd

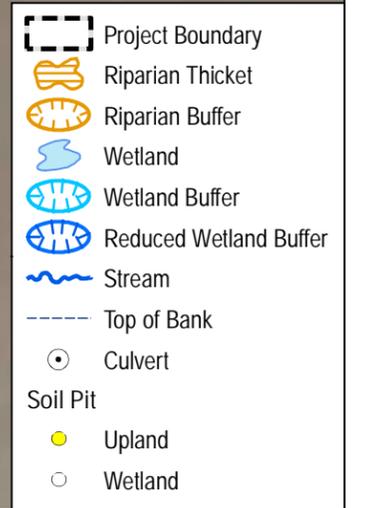
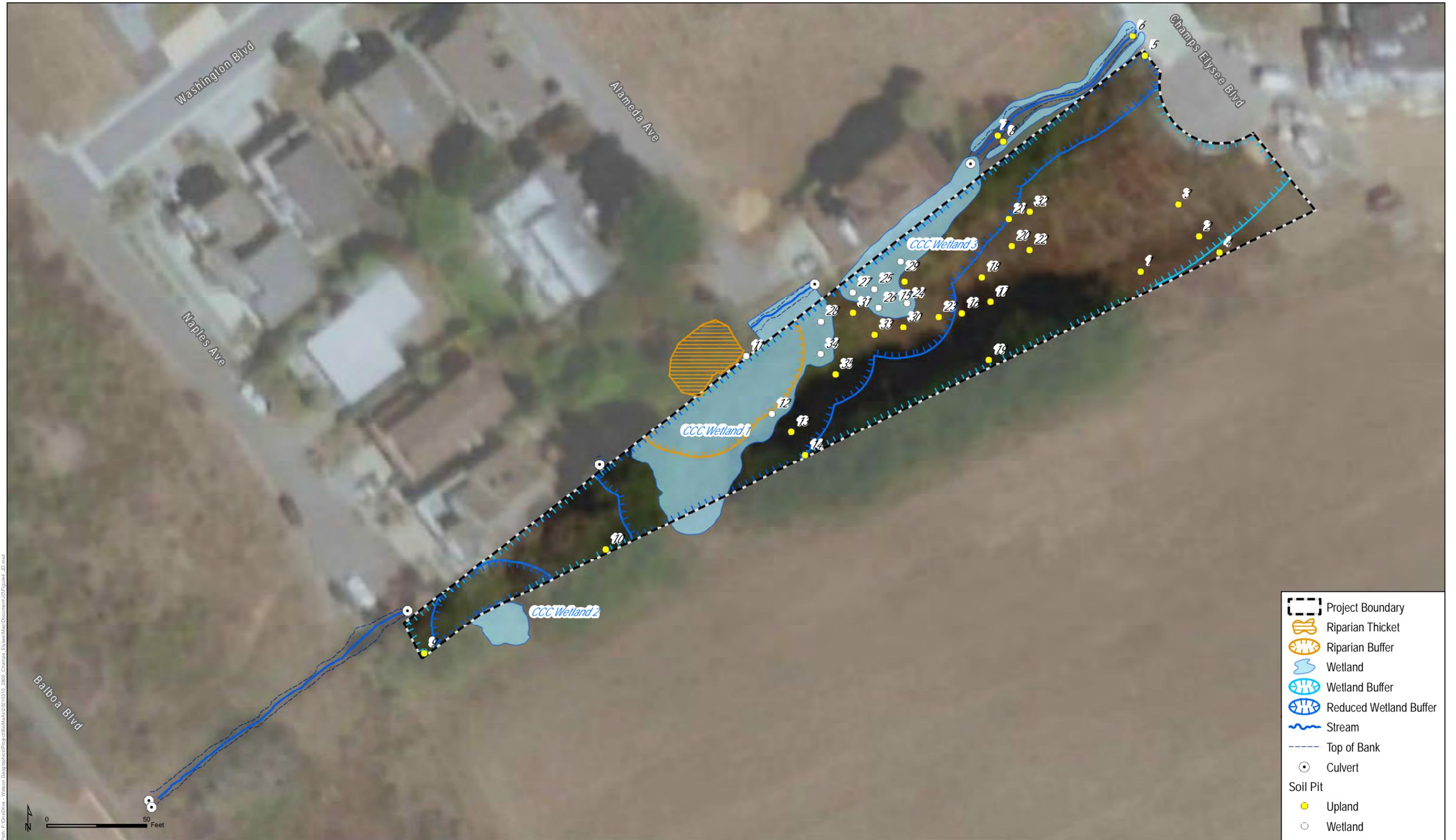
SOURCE: USGS Half Moon Bay 7.5-Minute Series Quadrangle, National Geographic Society, i-cubed 2013

FIGURE 3

USGS 7.5 Minute Quadrangle

BioMaAS

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA



Appendix B
Images of Sample Sites



Photo 1. Overview of the Project Area, looking northeast from the center of the parcel, and showing CCC Wetland 3.



Photo 2. Overview of the Project Area, looking west from the southwestern corner.



Photo 3. Showing overview of dry Pullman Ditch, just outside the northern boundary of the parcel, from the end of Chams Elysee Boulevard.



Photo 4. Showing overview of Pullman Ditch, just outside the northern boundary of the parcel, from the end of Chams Elysee Boulevard, the morning after a rain event.



Photo 5. Looking east at CCC Wetland 1, within the Project Area (left); and Pullman Ditch with its riparian thicket on the opposite bank (right).



Photo 6. Overview of the western edge of the Study Area, showing where the project area ends before the Half Moon Bay Coastal Trail, and CCC Wetland 2.

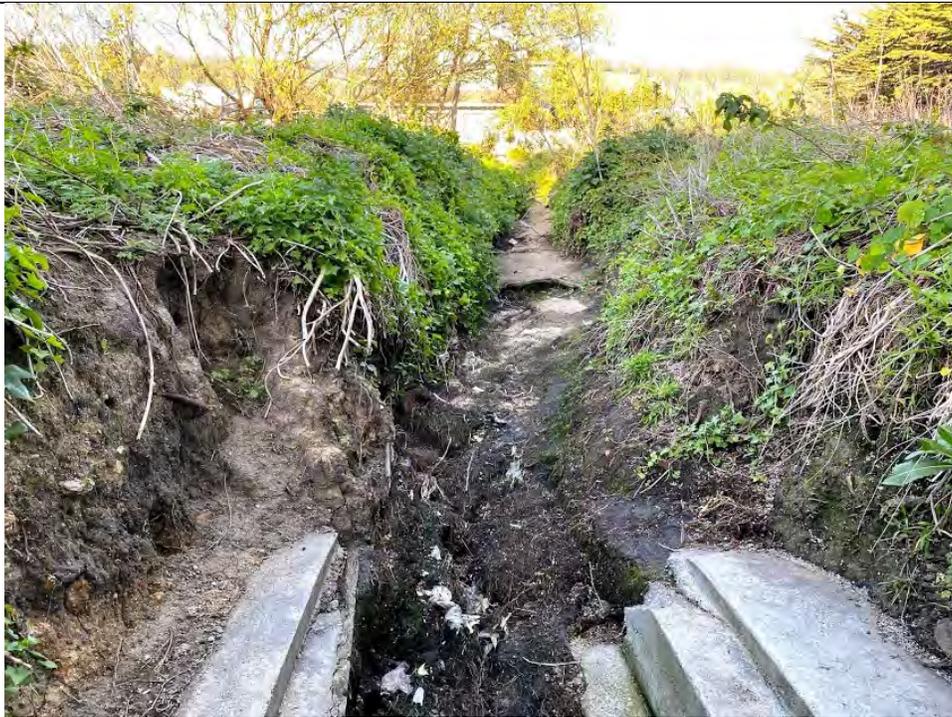


Photo 5. Looking west from a culvert in Pullman Ditch, showing the edge of the Project Area on the left.



Photo 6. Showing a demarcation in vegetation where upland (left) meets CCC Wetland 1 (right).



Photo 7. Sample Point 1, showing poison hemlock (*Conium maculatum*), fumitory (*Fumaria officinalis*), and wild radish (*Raphanus sativus*).



Photo 8. Sample Point 2, showing dominant poison hemlock (*Conium maculatum*), fumitory (*Fumaria officinalis*), and wild radish (*Raphanus sativus*).



Photo 9. Sample Point 3, showing dominant black medic (*Medicago lupulina*) and other small forbs.



Photo 10. Sample Point 4, showing dominant field mustard (*Brassica rapa*) with poison hemlock, sweetclover (*Melilotus indicus*), and blessed milkthistle (*Silybum marianum*).



Photo 11. Sample Point 4, showing an oxidized rhizosphere. Not enough other hydrologic features were observed at this sample point, however, to make it a wetland.



Photo 12. Sample Point 5, showing the bank of Pullman Creek dominated by dominant California blackberry (*Rubus ursinus*), poison hemlock, and Cape ivy (*Delairea odorata*).



Photo 13. Sample Point 6, showing fringed willowherb in the channel of Pullman Creek.



Photo 14. Sample Point 7, showing the channel of Pullman Creek.



Photo 15. Sample Point 8, showing the bank of Pullman Creek under a small-leaved elm (*Ulmus parvifolius*) within the Project area.



Photo 16. Sample Point 9, showing the western edge of the Project Area, where dominant species include sweet fennel (*Foeniculum vulgare*), slender oat (*Avena barbata*), and other forbs.



Photo 17. Sample Point 10, under the canopy of Monterey cypress (*Hesperocyparis macrocarpa*).



Photo 18. Sample Point 11, showing the bank of Pullman Creek dominated by poison hemlock, Cape ivy (*Delairea odorata*), under a canopy of arroyo willow (*Salix lasiolepis*). This sample point falls within CCC Wetland 1 and under the Riparian Dripline.



Photo 19. Sample Point 12, showing dominant Pampas grass (*Cortaderia jubata*) with poison hemlock, spreading rush (*Juncus patens*), and other forbs. This location is within a CCC wetland.



Photo 20. Sample Point 12, showing well-drained upland soils of the Denison Series, in spite of wetland vegetation.



Photo 21. Sample Point 13, showing an upland area dominated by Harding grass (*Phalaris aquatica*), bristly ox-tongue, and smaller forbs.

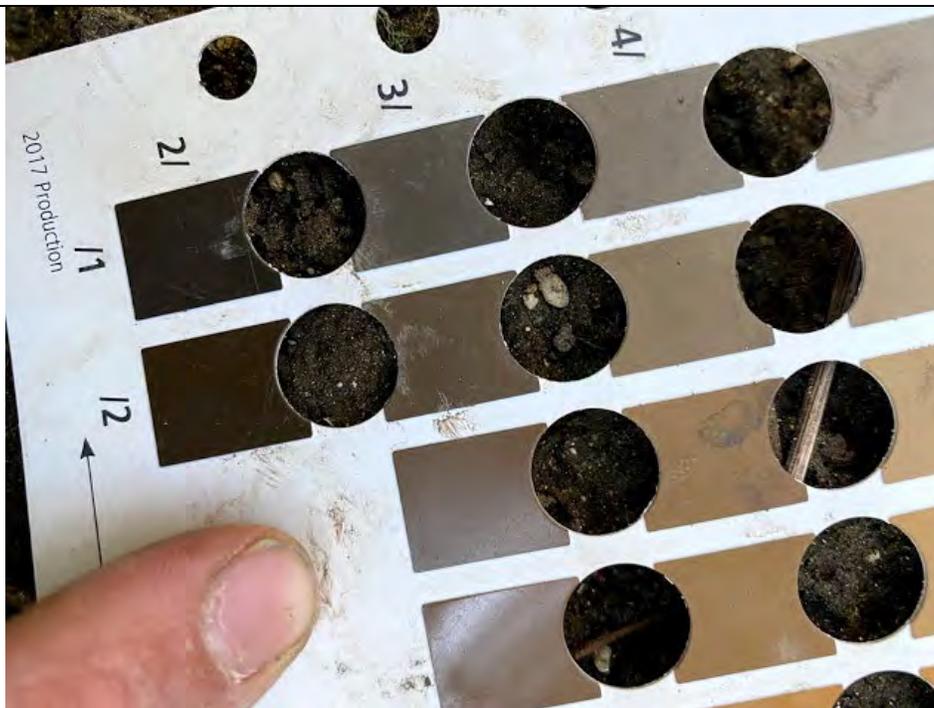


Photo 22. Sample Point 13, showing typical black soil of the Denison Loam.



Photo 23 Sample Point 14, under the canopy of a Monterey cypress.



Photo 24. Sample Point 15, dominated by wild carrot (*Daucus carota*), bristly ox-tongue, brome fescue (*Festuca bromoides*), and other small herbs. This location falls within Wetland 3.



Photo 25. Sample Point 15, showing lighter-colored fill materials overlying native dark soils.



Photo 26. Sample Point 16, showing a mix of forb species including Harding grass, bristly ox-tongue, and garden vetch.



Photo 27. Sample Point 16, showing typical soils of the Farallon series, with black soils at 10 YR 2/1.



Photo 28. Sample Point 17, showing soil pit dug in area dominated by spring vetch (*Vicia sativa*), Italian wildrye (*Festuca perenne*), bristly ox-tongue, and other herbs.



Photo 29. Sample Point 18, showing a mix of FAC and UPL forbs. Wild carrot, bristly ox-tongue, and Bermuda buttercup (*Oxalis pes-caprae*) are present.



Photo 30. Sample Point 26, showing mottled soils indicative of wetlands.



Photo 31. Sample Point 19, showing Monterey cypress-dominated stands.



Photo 32. Sample Point 20 prior to sampling, showing Pampas grass, French broom (*Genista monspessulana*), brome fescue, and a variety of other species associated with coastal terraces.



Photo 33. CCC Wetland 3 appears to follow the old banks of Pullman Creek, and is indicated by the dominance of poison hemlock running parallel to residences on the northern edge of the footprint. Most of Wetland 1 is a 1-parameter wetland, but portions also contain wetland soils.



Photo 34. CCC Wetland 1 is considered a 1-parameter wetland because of the dominance of the FAC poison hemlock. The area is on a raised terrace and lacks wetland soils and hydrology.

Appendix C
Soils Map



Path: F:\Data\Draw - Wilson\Geographies\Presentations\AS02\10310_2000 - Champs Elysee\Map\Document\10310AppendixC_SoilsMap.mxd

BioMaAS

SOURCE: NAIP 2018, USDA NRCS 2020

APPENDIX C
Soils

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

Appendix D
Data Sheets

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 1
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): Slightly concave Slope (%): 3
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/> 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: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.3</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. _____				OBL species _____ x 1 = _____
2. _____				FACW species _____ x 2 = _____
3. _____				FAC species <u>30</u> x 3 = <u>90</u>
4. _____				FACU species <u>10</u> x 4 = <u>40</u>
5. _____				UPL species <u>55</u> x 5 = <u>275</u>
_____ = Total Cover				Column Totals: <u>95</u> (A) <u>405</u> (B)
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>4.2</u>
1. <u>Raphanus sativus</u>	<u>20</u>	<u>Y</u>	<u>NL</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Fumaria officinalis</u>	<u>25</u>	<u>Y</u>	<u>NL</u>	
3. <u>Conium maculatum</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Brassica rapa</u>	<u>10</u>		<u>FACU</u>	
5. <u>Silybum marianum</u>	<u>10</u>		<u>NL</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>95</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____				
2. _____				
<u>95</u> = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Sampling Point: _____

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		
1-16"	10 YR 2/1	100						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 2
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): Slightly concave Slope (%): 3
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet:	
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. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>30</u> x 3 = <u>90</u>	
3. _____	_____	_____	_____	FACU species <u>10</u> x 4 = <u>40</u>	
4. _____	_____	_____	_____	UPL species <u>60</u> x 5 = <u>275</u>	
5. _____	_____	_____	_____	Column Totals: <u>90</u> (A) <u>90</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>1</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Medicago alba</u>	<u>53</u>	<u>Y</u>	<u>UPL</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Helminthotheca echioides</u>	<u>15</u>	<u>N</u>	<u>FAC</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Holcus lanatus</u>	<u>10</u>	<u>N</u>	<u>FAC</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Foeniculum vulgare</u>	<u>2</u>	<u>N</u>	<u>NL</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Vicia sativa</u>	<u>5</u>	<u>N</u>	<u>UPL</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>Festuca perennis</u>	<u>5</u>	<u>N</u>	<u>FAC</u>		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>90</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>90</u> = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	78					Loamy	
1-10	10 YR 5/4	20					Gritty	Fill material
1-5	7.5 YR 5/8	2						Fill material

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Remarks:
Fill material on top.

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

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? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 3
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): Slightly concave Slope (%): 3
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/> 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: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)				
1. <u>Festuca bromoides</u>	5	N	FAC	
2. <u>Helminthotheca echioides</u>	10	Y	FAC	
3. <u>Holcus lanatus</u>	2	N	FAC	
4. <u>Brassica rapa</u>	3	N	FACU	
5. <u>Medicago lupulina</u>	20	Y	FACU	
6. <u>Festuca perennis</u>	5	N	FAC	
7. <u>Glebionis coronaria</u>	5	N	NL	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50 = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
50 = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks:				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.5 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species 22 x 3 = 66

FACU species 23 x 4 = 92

UPL species 5 x 5 = 25

Column Totals: 50 (A) 183 (B)

Prevalence Index = B/A = 3.66

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Sampling Point: _____

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		
1-12	10 YR 3/1	77	10 YR 5/4	1			Loamy, sand	Fill
5-7	10 YR 5/2	20	10 YR 5/4	1			Loamy sand	Fill
7-9	10 YR 4/1	20	10 YR 5/4	1			Pebbles, gravel	Fill
12-16	10 YR 5/1	100						Native

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:
Fill material on top. Native soil not mottled.

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 4
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 3
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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>3</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.3</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____	
1. _____				OBL species _____ x 1 = _____	
2. _____				FACW species _____ x 2 = _____	
3. _____				FAC species <u>25</u> x 3 = <u>75</u>	
4. _____				FACU species <u>23</u> x 4 = <u>220</u>	
5. _____				UPL species <u>5</u> x 5 = <u>25</u>	
_____ = Total Cover				Column Totals: <u>53</u> (A) <u>320</u> (B)	
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>6</u>	
1. <u>Conium maculatum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Silybum marianum</u>	<u>10</u>	<u>N</u>	<u>NL</u>		
3. <u>Fumaria officinalis</u>	<u>5</u>	<u>N</u>	<u>NL</u>		
4. <u>Brassica rapa</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>		
5. <u>Melilotus indicus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>		
6. <u>Lactuca sativa</u>	<u>5</u>	<u>N</u>	<u>NL</u>		
7. <u>Cardamine oligiosperma</u>	<u>5</u>	<u>N</u>	<u>FAC</u>		
8. _____					
9. _____					
10. _____					
11. _____					
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	95	10 YR 6/4	1			Loamy	Gritty
1-12	10 YR 5/4	4					Loamy	

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"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 5
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): bank slope Local relief (concave, convex, none): slope Slope (%): 20
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
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>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____	
1. _____	_____	_____	_____	OBL species _____ x 1 = _____	
2. _____	_____	_____	_____	FACW species _____ x 2 = _____	
3. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>	
4. _____	_____	_____	_____	FACU species <u>10</u> x 4 = <u>40</u>	
5. _____	_____	_____	_____	UPL species <u>35</u> x 5 = <u>175</u>	
_____ = Total Cover				Column Totals: <u>65</u> (A) <u>275</u> (B)	
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>4.2</u>	
1. <u>Conium maculatum</u>	<u>20</u>	<u>N</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Delairea odorata</u>	<u>30</u>	<u>Y</u>	<u>NL</u>		
3. <u>Geranium molle</u>	<u>5</u>	<u>N</u>	<u>NL</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. <u>Rubus ursinus</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-6	10 YR 3/1	70					Loamy	Rocky
6-12	10 YR 5/8	20					Loamy	Rocky
12-16	10 YR 5/1	100						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 6
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): thalweg Local relief (concave, convex, none): convex Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Pinus sp.</u>	15	Y	NL	Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	2 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	50 (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species <u>5</u> x 2 = <u>10</u>	
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	
= Total Cover				UPL species <u>15</u> x 5 = <u>75</u>	
<u>Herb Stratum</u> (Plot size: _____)				Column Totals:	<u>20</u> (A) <u>85</u> (B)
1. <u>Epilobium ciliatum</u>	5	Y	FACW	Prevalence Index = B/A = <u>4.25</u>	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	____ 2 - Dominance Test is >50%	
5. _____	_____	_____	_____	____ 3 - Prevalence Index is ≤3.0 ¹	
6. _____	_____	_____	_____	____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	____ 5 - Wetland Non-Vascular Plants ¹	
8. _____	_____	_____	_____	____ Problematic Hydrophytic Vegetation ¹ (Explain)	
9. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes _____	No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	65					rocky, gravel	Streambed
1-12	10 YR 5/4	35					gravel	

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:
Fill material on 1-6 inches

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 7
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): thalweg Local relief (concave, convex, none): convex Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
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>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. _____	_____	_____	_____	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
_____ = Total Cover				Column Totals: _____ (A) _____ (B)
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>0</u>
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
<u>% Bare Ground in Herb Stratum</u> _____				
Remarks:				

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	65					Rocky, gravelly	Streambed
1-12	10 YR 5/4	35					Rocky, gravelly	

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"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

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"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 8
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Bank Local relief (concave, convex, none): sloped Slope (%): 25
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Ulmus parvifolia</u>	40	Y	NL	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:	0.3 (A/B)
4. _____	_____	_____	_____	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Prevalence Index worksheet:	
2. _____	_____	_____	_____	Total % Cover of:	Multiply by:
3. _____	_____	_____	_____	OBL species _____	x 1 = _____
4. _____	_____	_____	_____	FACW species <u>5</u>	x 2 = <u>10</u>
5. _____	_____	_____	_____	FAC species _____	x 3 = _____
= Total Cover				FACU species _____	x 4 = _____
Herb Stratum (Plot size: _____)					
1. <u>Delairea odorata</u>	20	Y	NL	UPL species <u>40</u>	x 5 = <u>200</u>
2. _____	_____	_____	_____	Column Totals: <u>5</u> (A)	<u>210</u> (B)
3. _____	_____	_____	_____	Prevalence Index = B/A = <u>42</u>	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
5. _____	_____	_____	_____	___ 1 - Rapid Test for Hydrophytic Vegetation	
6. _____	_____	_____	_____	___ 2 - Dominance Test is >50%	
7. _____	_____	_____	_____	___ 3 - Prevalence Index is ≤3.0 ¹	
8. _____	_____	_____	_____	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
9. _____	_____	_____	_____	___ 5 - Wetland Non-Vascular Plants ¹	
10. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
11. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
= Total Cover				Hydrophytic Vegetation Present?	
Woody Vine Stratum (Plot size: _____)					
1. <u>Rubus ursinus</u>	5	Y	FACU	Yes _____	No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-2	Detritus							
2-12	10 YR 2/1						gritty	sandy, rocky, with organics

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 Soils³:
<input checked="" type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 9
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): sloped Slope (%): 25
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.5</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>35</u> x 3 = <u>105</u>	
3. _____	_____	_____	_____	FACU species <u>1</u> x 4 = <u>4</u>	
4. _____	_____	_____	_____	UPL species <u>30</u> x 5 = <u>150</u>	
5. _____	_____	_____	_____	Column Totals: <u>66</u> (A) <u>269</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>4</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Foeniculum vulgare</u>	<u>5</u>		<u>NL</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Festuca perennis</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Helminthotheca echioides</u>	<u>5</u>		<u>FAC</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>5</u>		<u>NL</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Avena barbata</u>	<u>20</u>	<u>Y</u>	<u>NL</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>Daucus carota</u>	<u>1</u>		<u>FACU</u>		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>66</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>66</u> = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	80			C	M	gritty	loamy, sandy
1-12	10 YR 2/1	20					gritty	loamy, sandy

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 10
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): sloped Slope (%): 25
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Hesperocyparis macrocarpa</u>	<u>40</u>		<u>NL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____				Total Number of Dominant Species Across All Strata: <u>51</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____				Prevalence Index worksheet:	
	<u>40</u>	= Total Cover			Total % Cover of: _____ Multiply by: _____
Sapling/Shrub Stratum (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____				FACW species _____ x 2 = _____	
2. _____				FAC species _____ x 3 = _____	
3. _____				FACU species _____ x 4 = _____	
4. _____				UPL species <u>51</u> x 5 = <u>255</u>	
5. _____				Column Totals: <u>51</u> (A) <u>255</u> (B)	
				Prevalence Index = B/A = <u>5</u>	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Oxalis pes-caprae</u>	<u>5</u>		<u>NL</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Erhardta erecta</u>	<u>6</u>		<u>NL</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____					<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____					<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____					
9. _____					
10. _____					
11. _____					
	<u>11</u>	= Total Cover		Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
Woody Vine Stratum (Plot size: _____)					
1. _____					
2. _____					
	<u>51</u>	= Total Cover			
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Sampling Point: _____

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		
1-4	Organics							
4-12	10 YR 2/1	100					loamy	

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 11
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Bank Local relief (concave, convex, none): sloped Slope (%): 25
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: Ongoing drought (precipitation is less than 30% of normal)			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	10	Y	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	10	= Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.66</u> (A/B)
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Schinus terebinthifolius</u>	2	Y	NL	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species <u>10</u> x 2 = <u>20</u>
4. _____	_____	_____	_____	FAC species <u>80</u> x 3 = <u>240</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
	2	= Total Cover		UPL species <u>22</u> x 5 = <u>110</u>
				Column Totals: <u>112</u> (A) <u>370</u> (B)
				Prevalence Index = B/A = <u>3.3</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Conium maculatum</u>	80	Y	FAC	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Delairea odorata</u>	20	_____	NL	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____	___ 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	___ 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	100	= Total Cover		
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
	51	= Total Cover		
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	100					Gritty	

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 12
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): depression in field Local relief (concave, convex, none): convex Slope (%): 25
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	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>0.4</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>80</u> (A) <u>270</u> (B) Prevalence Index = B/A = <u>3.3</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)	1. <u>Cortaderia jubata</u>	<u>20</u>	<u>Y</u> <u>FACU</u>	
2. <u>Helminthotheca echioides</u>	<u>20</u>	<u>Y</u> <u>FAC</u>		
3. <u>Juncus patens</u>	<u>10</u>	_____	<u>FACW</u>	
4. <u>Conium maculatum</u>	<u>20</u>	<u>Y</u> <u>FAC</u>		
5. <u>Geranium dissecta</u>	<u>5</u>	_____	<u>NL</u>	
6. <u>Fumaria officinalis</u>	<u>5</u>	_____	<u>NL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				
% Bare Ground in Woody Vine Stratum _____				
Remarks:				

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No _____

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	80					gritty	
1-6	organics	15						
6-12	10 YR 5/2	5					gritty	

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<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"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 13
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	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. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>65</u> x 4 = <u>260</u> UPL species <u>5</u> x 5 = <u>250</u> Column Totals: <u>85</u> (A) <u>550</u> (B) Prevalence Index = B/A = <u>6.5</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)	1. <u>Phalaris aquatica</u>	<u>65</u>	<u>Y</u> <u>FACU</u>	
2. <u>Helminthotheca echioides</u>	<u>5</u>	_____	<u>FAC</u>	
3. <u>Juncus patens</u>	<u>5</u>	_____	<u>FACW</u>	
4. <u>Geranium molle</u>	<u>5</u>	_____	<u>FAC</u>	
5. <u>Geranium dissecta</u>	<u>5</u>	_____	<u>NL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
<u>85</u> = Total Cover				
% Bare Ground in Herb Stratum <u>15</u>				
Remarks:				

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	80					gritty	
1-6	organics	15						
1-12	10 YR 5/2	5					gritty	

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 checked="" type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

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"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 14
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/> 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: Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Hesperocyparis macrocarpa</u>	<u>70</u>	<u>Y</u>	<u>NL</u>	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. _____	_____	_____	_____	Prevalence Index worksheet:	
	<u>70</u>	= Total Cover			Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____				FACW species _____ x 2 = _____	
2. _____				FAC species _____ x 3 = _____	
3. _____				FACU species _____ x 4 = _____	
4. _____				UPL species <u>70</u> x 5 = <u>350</u>	
5. _____				Column Totals: <u>70</u> (A) <u>350</u> (B)	
				Prevalence Index = B/A = <u>5</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. _____					<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____					<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____					<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____					<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____					
9. _____					
10. _____					
11. _____					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
1. _____					
2. _____					
	<u>70</u>	= Total Cover			
<u>% Bare Ground in Herb Stratum</u> <u>100</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	organics	100						
2-12	10 YR 2/1	95						
2-12	organics	5						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 15
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	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. _____	_____	_____	_____		
_____ = Total Cover				Prevalence Index worksheet:	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)					
1. <u>Genista monspessulana</u>	<u>10</u>	<u>Y</u>	<u>NL</u>		Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>25</u> x 3 = <u>75</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>70</u> (A) <u>285</u> (B) Prevalence Index = B/A = <u>4</u>
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					
<u>Herb Stratum</u> (Plot size: _____)					
1. <u>Cortaderia jubata</u>	<u>10</u>	_____	<u>NL</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>		
3. <u>Oxalis pes-caprae</u>	<u>20</u>	<u>Y</u>	<u>NL</u>		
4. <u>Daucus carota</u>	<u>15</u>	_____	<u>FACU</u>		
5. <u>Festuca bromoides</u>	<u>15</u>	_____	<u>FAC</u>		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
2. _____	_____	_____	_____		
_____ = Total Cover					
<u>% Bare Ground in Herb Stratum</u> <u>20</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-8	10 YR 5/8	20	10 YR 4/4	10	RM	M		Fill material
1-8	10 YR 2/1	40	10 YR 4/4	30	RM	M		Fill material
8-12	10 YR 2/1	95	10 YR 5/8	5				

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 16
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>60</u> x 3 = <u>180</u>	
3. _____	_____	_____	_____	FACU species <u>17</u> x 4 = <u>68</u>	
4. _____	_____	_____	_____	UPL species <u>20</u> x 5 = <u>100</u>	
5. _____	_____	_____	_____	Column Totals: <u>97</u> (A) <u>348</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>3.5</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Vicia sativa</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Helminthotheca echioides</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Geranium dissecta</u>	<u>5</u>	_____	<u>NL</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Daucus carota</u>	<u>5</u>	_____	<u>FACU</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Festuca bromoides</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>Phalaris aquatica</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Geranium molle</u>	<u>5</u>	_____	<u>NL</u>		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>Melilotus indicus</u>	<u>2</u>	_____	<u>FACU</u>		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>57</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>57</u> = Total Cover					
% Bare Ground in Herb Stratum <u>43</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	70	10 YR 5/3	20	C	M	gritty	fill material
1-12	10 YR 5/3	20	10 YR 5/4	3	C	M	gritty	fill material
12-16	10 YR 2/1	100						native soil

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 16
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</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>50</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 <u>60</u> x 3 = <u>180</u> FACU species <u>35</u> x 4 = <u>140</u> UPL species <u>20</u> x 5 = <u>100</u> Column Totals: <u>97</u> (A) <u>420</u> (B) Prevalence Index = B/A = <u>4.3</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Vicia sativa</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Helminthotheca echioides</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Geranium dissecta</u>	<u>5</u>	_____	<u>NL</u>	
4. <u>Daucus carota</u>	<u>5</u>	_____	<u>FACU</u>	
5. <u>Festuca bromoides</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
6. <u>Phalaris aquatica</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
7. <u>Geranium molle</u>	<u>10</u>	_____	<u>NL</u>	
8. <u>Melilotus indicus</u>	<u>5</u>	_____	<u>FACU</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>35</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	70	10 YR 5/3	20	C	M		
			10 YR 5/4	3	C	M		

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 18
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	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. _____	_____	_____	_____		
_____ = Total Cover				Prevalence Index worksheet:	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)					
1. <u>Genista monspessulana</u>	<u>10</u>	<u>Y</u>	<u>NL</u>		Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>25</u> x 3 = <u>75</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>70</u> (A) <u>285</u> (B) Prevalence Index = B/A = <u>4</u>
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					
<u>Herb Stratum</u> (Plot size: _____)					
1. <u>Cortaderia jubata</u>	<u>10</u>	_____	<u>NL</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>		
3. <u>Oxalis pes-caprae</u>	<u>20</u>	<u>Y</u>	<u>NL</u>		
4. <u>Daucus carota</u>	<u>15</u>	_____	<u>FACU</u>		
5. <u>Festuca bromoides</u>	<u>15</u>	_____	<u>FAC</u>		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
2. _____	_____	_____	_____		
_____ = Total Cover					
<u>% Bare Ground in Herb Stratum</u> <u>30</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-8	10 YR 5/8	20	10 YR 4/4	10		M		Fill
1-8	10 YR 2/1	40	10 YR 4/4	30		M		Fill
8-12	10 YR 2/1	95					loamy	Native loam
8-12	10 YR 5/8	5					gritty, loam	Native 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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

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? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 19
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Hesperocyparis macrocarpa</u>	<u>70</u>	<u>Y</u>	<u>NL</u>	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. _____	_____	_____	_____	Prevalence Index worksheet:	
	<u>70</u>	= Total Cover			Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____				FACW species _____ x 2 = _____	
2. _____				FAC species _____ x 3 = _____	
3. _____				FACU species _____ x 4 = _____	
4. _____				UPL species <u>70</u> x 5 = <u>350</u>	
5. _____				Column Totals: <u>70</u> (A) <u>350</u> (B)	
				Prevalence Index = B/A = <u>5</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. _____					<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____					<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____					<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____					<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____					
9. _____					
10. _____					
11. _____					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
1. _____					
2. _____					
% Bare Ground in Herb Stratum <u>100</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-2	organics	100						
2-12	10 YR 2/1	95						
2-12	organics	5						

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.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

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 – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: March 1, 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 20
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</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>0</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 <u>30</u> x 3 = <u>90</u> FACU species <u>23</u> x 4 = <u>92</u> UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>78</u> (A) <u>307</u> (B) Prevalence Index = B/A = <u>3.9</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u> <u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)	1. <u>Cortaderia jubata</u>	<u>10</u>	<u>NL</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>	
3. <u>Oxalis pes-caprae</u>	<u>15</u>	<u>Y</u>	<u>NL</u>	
4. <u>Daucus carota</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
5. <u>Festuca bromoides</u>	<u>10</u>	_____	<u>FAC</u>	
6. <u>Plantago lanceolata</u>	<u>5</u>	_____	<u>FACU</u>	
7. <u>Lysimachia arvensis</u>	<u>3</u>	_____	<u>FACU</u>	
8. <u>Hordeum murinum</u>	<u>10</u>	_____	<u>FAC</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	1. _____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>12</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-8	10 YR 5/8	20	10 YR 4/4	10		M	Fill	
1-8	10 YR 5/4	40	10 YR 4/4	30		M	loamy Fill	
8-12	10 YR 2/1	95	10 YR 5/8	5		M	gritty native	

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.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

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 – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 21
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	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>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0.25</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____	x 1 = _____
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	FACW species _____	x 2 = _____
2. <u>Baccharis pilularis</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	FAC species <u>30</u>	x 3 = <u>60</u>
3. _____	_____	_____	_____	FACU species <u>20</u>	x 4 = <u>80</u>
4. _____	_____	_____	_____	UPL species <u>15</u>	x 5 = <u>25</u>
5. _____	_____	_____	_____	Column Totals:	<u>65</u> (A) <u>165</u> (B)
_____ = Total Cover				Prevalence Index = B/A = <u>2.5</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Helminthotheca echioides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Festuca perennis</u>	<u>10</u>	_____	<u>FAC</u>	_____ 2 - Dominance Test is >50%	
3. <u>Vicia sativa</u>	<u>5</u>	_____	<u>UPL</u>	_____ 3 - Prevalence Index is ≤3.0 ¹	
4. <u>Geranium dissectum</u>	<u>10</u>	_____	<u>NL</u>	_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>	_____ 5 - Wetland Non-Vascular Plants ¹	
6. <u>Cortaderia jubata</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes _____	No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>15</u>					

Remarks:

SOIL

Sampling Point: _____

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		
1-5	10 YR 4/4	85					gravelly	Fill material
1-5	10 YR 5/6	15					gravelly	Fill material on top
5-12	10 YR 5/8	95						
12-16	10 YR 1/2	100						Dark but w/o mottles

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Remarks:
Natural soils dark, but not showing wetland hydrology. Lighter coloration in higher strata likely due to fill materials.

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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)	

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

Remarks:
On a terrace, about 5-8 inches higher than adjacent areas.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 22
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	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>0</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>	
3. _____	_____	_____	_____	FACU species <u>15</u> x 4 = <u>60</u>	
4. _____	_____	_____	_____	UPL species <u>30</u> x 5 = <u>150</u>	
5. _____	_____	_____	_____	Column Totals: <u>65</u> (A) <u>270</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>4.1</u>	
<u>Herb Stratum</u> (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Indicators:	
1. <u>Helminthotheca echioides</u>	<u>15</u>	_____	<u>FAC</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Festuca perennis</u>	<u>5</u>	_____	<u>FAC</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>5</u>	_____	<u>UPL</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>10</u>	_____	<u>NL</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>Medicago lupulina</u>	<u>5</u>	_____	<u>FACU</u>		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Cirsium vulgare</u>	<u>10</u>	_____	<u>FACU</u>		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>Bromus diandrus</u>	<u>15</u>	_____	<u>NL</u>		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>25</u>	_____	_____	_____		

Remarks:

SOIL

Sampling Point: _____

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		
1-16"	10 YR 2/1	75						
	10 YR 4/3	25						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 23
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species <u>61</u> x 5 = <u>300</u>
				Column Totals: <u>81</u> (A) <u>360</u> (B)
				Prevalence Index = B/A = <u>4.4</u>
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <u>Helminthotheca echioides</u>	<u>5</u>	_____	<u>FAC</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Festuca perennis</u>	<u>5</u>	_____	<u>FAC</u>	<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>60</u>	_____	<u>UPL</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>1</u>	_____	<u>NL</u>	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>91</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes _____ No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
<u>91</u> = Total Cover				
% Bare Ground in Herb Stratum <u>9</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-16"	10 YR 2/1	95						
	10 YR 4/3	5						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 24
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>40</u> x 3 = <u>120</u>	
3. _____	_____	_____	_____	FACU species _____ x 4 = _____	
4. _____	_____	_____	_____	UPL species <u>40</u> x 5 = <u>200</u>	
5. _____	_____	_____	_____	Column Totals: <u>80</u> (A) <u>320</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>4</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Helminthotheca echioides</u>	<u>15</u>		<u>FAC</u>		<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Festuca perennis</u>	<u>5</u>		<u>FAC</u>		<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>5</u>		<u>UPL</u>		___ 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>10</u>		<u>NL</u>		___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Festuca bromoides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		___ 5 - Wetland Non-Vascular Plants ¹
6. <u>Sonchus asper</u>	<u>5</u>		<u>NL</u>		___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Oxalis pes-caprae</u>	<u>5</u>		<u>NL</u>		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>moss sp.</u>	<u>5</u>		<u>NL</u>		
9. <u>Bromus hordeaceus</u>	<u>10</u>		<u>UP</u>		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>80</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>80</u> = Total Cover					
% Bare Ground in Herb Stratum <u>20</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	95						
3-12	10 YR 5/4	20	10 YR 6/8	10			sandy	Mottled dark material
3-12	10 YR 2/1	70						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 25
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. <u>Salix lasiolepis</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species <u>5</u> x 2 = <u>10</u>
4. _____	_____	_____	_____	FAC species <u>45</u> x 3 = <u>135</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species <u>35</u> x 5 = <u>175</u>
				Column Totals: <u>85</u> (A) <u>320</u> (B)
				Prevalence Index = B/A = <u>3.7</u>
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Festuca perennis</u>	<u>5</u>	_____	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>10</u>	_____	<u>UPL</u>	___ 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>10</u>	_____	<u>NL</u>	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Conium maculatum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	___ 5 - Wetland Non-Vascular Plants ¹
6. <u>Sonchus asper</u>	<u>5</u>	_____	<u>NL</u>	___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Oxalis pes-caprae</u>	<u>5</u>	_____	<u>NL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>moss sp.</u>	<u>5</u>	_____	<u>NL</u>	
9. <u>Festuca bromoides</u>	<u>10</u>	_____	<u>FAC</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	95						
3-12	10 YR 5/4	20	10 YR 6/8	10			sandy	mottles
3-12	10 YR 2/1	70						

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.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

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 – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28, 5/18/21
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 26
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species <u>80</u> x 3 = <u>240</u>
5. _____	_____	_____	_____	FACU species <u>1</u> x 4 = <u>4</u>
_____ = Total Cover				UPL species <u>13</u> x 5 = <u>65</u>
				Column Totals: <u>94</u> (A) <u>309</u> (B)
				Prevalence Index = B/A = <u>3.2</u>
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>	
2. <u>Conium maculatum</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>1</u>	_____	<u>UPL</u>	___ 3 - Prevalence Index is ≤3.0 ¹
4. <u>Geranium dissectum</u>	<u>1</u>	_____	<u>NL</u>	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Festuca bromoides</u>	<u>20</u>	_____	<u>FAC</u>	___ 5 - Wetland Non-Vascular Plants ¹
6. <u>Bromus hordeaceus</u>	<u>1</u>	_____	<u>FACU</u>	___ Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Oxalis pes-caprae</u>	<u>1</u>	_____	<u>NL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>Cortaderia jubata</u>	<u>5</u>	_____	<u>UPL</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>89</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>94</u> = Total Cover				
% Bare Ground in Herb Stratum <u>11</u>				

Remarks:

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	95	10 YR 5/4	4				mottled
3-12	10 YR 5/4	20	10 YR 6/8	10			sandy	mottled
3-12	10 YR 2/1	70						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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)	

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

Remarks:
Terraced

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 27
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.50</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
= Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species <u>35</u> x 3 = <u>105</u>
4. _____	_____	_____	_____	FACU species <u>30</u> x 4 = <u>120</u>
5. _____	_____	_____	_____	UPL species <u>8</u> x 5 = <u>40</u>
= Total Cover				Column Totals: <u>73</u> (A) <u>570</u> (B)
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>7.8</u>
1. <u>Helminthotheca echioides</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Cortaderia jubata</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Vicia sativa</u>	<u>1</u>		<u>UPL</u>	
4. <u>Geranium dissectum</u>	<u>1</u>		<u>NL</u>	
5. <u>Festuca bromoides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
6. <u>Bromus hordeaceos</u>	<u>1</u>		<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum <u>32</u>	<u>73</u>			
Remarks:				

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	95						
3-12	10 YR 5/4	20	10 YR 6/8	10			sandy	mottled in dark soils
3-12	10 YR 2/1	70						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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:

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 5/18/2021 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 34
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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) 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. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>75</u> x 3 = <u>225</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>100</u> (A) <u>315</u> (B) Prevalence Index = B/A = <u>3.15</u>
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Helminthotheca echioides</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Cortaderia jubata</u>	<u>5</u>	_____	<u>FACU</u>	
3. <u>Vicia sativa</u>	<u>5</u>	_____	<u>UPL</u>	
4. <u>Geranium dissectum</u>	<u>5</u>	_____	<u>NL</u>	
5. <u>Festuca bromoides</u>	<u>10</u>	_____	<u>FAC</u>	
6. <u>Conium maculatum</u>	<u>40</u>	_____	<u>FAC</u>	
7. <u>Juncus patens</u>	<u>10</u>	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	70						
1-3	10 YR 5/4	30						
3-12	10 YR 2/1	70	7 YR 6/8				sandy	mottled

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"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 29
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)			

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	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. _____	_____	_____	_____		
= Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>80</u> (A) <u>295</u> (B) Prevalence Index = B/A = <u>3.6</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	1. <u>Genista monspessulana</u>	<u>10</u>	<u>Y</u>		<u>NL</u>
2. _____	_____	_____	_____		_____
3. _____	_____	_____	_____		_____
4. _____	_____	_____	_____		_____
5. _____	_____	_____	_____		_____
= Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<u>Herb Stratum</u> (Plot size: _____)	1. <u>Helminthotheca echioides</u>	<u>10</u>	_____		<u>FAC</u>
2. <u>Cortaderia jubata</u>	<u>5</u>	_____	_____		<u>FACU</u>
3. <u>Vicia sativa</u>	<u>20</u>	_____	_____		<u>UPL</u>
4. <u>Geranium dissectum</u>	<u>5</u>	_____	_____		<u>NL</u>
5. <u>Festuca bromoides</u>	<u>10</u>	_____	_____		<u>FAC</u>
6. <u>Conium maculatum</u>	<u>30</u>	_____	_____		<u>FAC</u>
7. _____	_____	_____	_____		_____
8. _____	_____	_____	_____		_____
9. _____	_____	_____	_____		_____
10. _____	_____	_____	_____		_____
11. _____	_____	_____	_____	_____	
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
<u>Woody Vine Stratum</u> (Plot size: _____)	1. _____	_____	_____		_____
2. _____	_____	_____	_____		_____
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
% Bare Ground in Herb Stratum <u>40</u>					
Remarks:					

SOIL

Sampling Point: _____

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		
1-6	10 YR 6/3	80	10 YR 6/8	20				Fill material
6-12	10 YR 2/1	100						

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 30
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: 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)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Genista monspessulana</u>	<u>10</u>	<u>Y</u>	<u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover	<u>10</u>	_____	_____	
<u>Herb Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. <u>Helminthotheca echioides</u>	<u>10</u>	_____	<u>FAC</u>	
2. <u>Delairea odorata</u>	<u>5</u>	_____	<u>NL</u>	
3. <u>Vicia sativa</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Geranium dissectum</u>	<u>10</u>	_____	<u>NL</u>	
5. <u>Grass sp.</u>	<u>20</u>	_____	<u>Unk.</u>	
6. <u>Conium maculatum</u>	<u>10</u>	_____	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	<u>75</u>	_____	_____	
<u>Woody Vine Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover	<u>85</u>	_____	_____	
% Bare Ground in Herb Stratum <u>25</u>	_____	_____	_____	

Remarks:

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	70	10 YR 4/4	30				

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 Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 31
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
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>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
= Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. <u>Genista monspessulana</u>	<u>10</u>	<u>Y</u>	<u>NL</u>	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>	
3. _____	_____	_____	_____	FACU species _____ x 4 = _____	
4. _____	_____	_____	_____	UPL species <u>65</u> x 5 = <u>325</u>	
5. _____	_____	_____	_____	Column Totals: <u>85</u> (A) <u>385</u> (B)	
= Total Cover				Prevalence Index = B/A = <u>4.5</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Helminthotheca echioides</u>	<u>20</u>	_____	<u>FAC</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Oxalis pes-caprae</u>	<u>5</u>	_____	<u>NL</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Fumaria officinalis</u>	<u>10</u>	_____	<u>NL</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Bormus hordeaceus</u>	<u>20</u>	_____	<u>UPL</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum <u>25</u>					

Remarks:

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	80						
1-12	10 YR 4/4	20						

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.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

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 – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 32
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/> 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: Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.25</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>20</u> x 3 = <u>60</u> FACU species _____ x 4 = _____ UPL species <u>65</u> x 5 = <u>325</u> Column Totals: <u>85</u> (A) <u>385</u> (B) Prevalence Index = B/A = <u>4.5</u>
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Helminthotheca echioides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Oxalis pes-caprae</u>	<u>10</u>	_____	<u>NL</u>	
3. <u>Vicia sativa</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Fumaria officinalis</u>	<u>10</u>	_____	<u>NL</u>	
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				
Remarks:				

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	80	10 YR 4/4	20				

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 Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 33
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	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>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.25</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>	
3. _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>	
4. _____	_____	_____	_____	UPL species <u>55</u> x 5 = <u>275</u>	
5. _____	_____	_____	_____	Column Totals: <u>85</u> (A) <u>355</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>4.1</u>	
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Helminthotheca echioides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Oxalis pes-caprae</u>	<u>10</u>	_____	<u>NL</u>		<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Vicia sativa</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Fumaria officinalis</u>	<u>5</u>	_____	<u>NL</u>		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>Cortaderia jubata</u>	<u>5</u>	_____	<u>FACU</u>		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>20</u>					

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 5/18/2021 2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 34
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (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>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	Total % Cover of: _____ Multiply by: _____	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species <u>10</u> x 2 = <u>20</u>	
4. _____	_____	_____	_____	FAC species <u>75</u> x 3 = <u>225</u>	
5. _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>	
= Total Cover				UPL species <u>10</u> x 5 = <u>50</u>	
<u>Herb Stratum</u> (Plot size: _____)				Column Totals: <u>100</u> (A) <u>315</u> (B)	
1. <u>Helminthotheca echioides</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index = B/A = <u>3.15</u>	
2. <u>Cortaderia jubata</u>	<u>5</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
3. <u>Vicia sativa</u>	<u>5</u>	_____	<u>UPL</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
4. <u>Geranium dissectum</u>	<u>5</u>	_____	<u>NL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
5. <u>Festuca bromoides</u>	<u>10</u>	_____	<u>FAC</u>	<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
6. <u>Conium maculatum</u>	<u>40</u>	_____	<u>FAC</u>	____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
7. <u>Juncus patens</u>	<u>10</u>	_____	<u>FACW</u>	____ 5 - Wetland Non-Vascular Plants ¹	
8. _____	_____	_____	_____	____ Problematic Hydrophytic Vegetation ¹ (Explain)	
9. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

SOIL

Sampling Point: _____

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		
1-3	10 YR 2/1	70						
1-3	10 YR 5/4	30						
3-12	10 YR 2/1	70	10 YR 6/6	30			sandy	mottled

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"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Champs Elysee City/County: Half Moon Bay, San Mateo Sampling Date: 3/28/2021
 Applicant/Owner: City of Half Moon Bay, California State: CA Sampling Point: 35
 Investigator(s): Ivan Parr Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	

Remarks:
 Vegetation has been tilled within the last year. Ongoing drought (precipitation is less than 30% of normal)

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.25</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. <u>Genista monspessulana</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>
4. _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>
5. _____	_____	_____	_____	UPL species <u>55</u> x 5 = <u>275</u>
_____ = Total Cover				Column Totals: <u>85</u> (A) <u>355</u> (B)
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index = B/A = <u>4.1</u>
1. <u>Helminthotheca echioides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:
2. <u>Oxalis pes-caprae</u>	<u>10</u>	_____	<u>NL</u>	
3. <u>Vicia sativa</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Fumaria officinalis</u>	<u>5</u>	_____	<u>NL</u>	
5. <u>Grass sp.</u>	<u>20</u>	<u>Y</u>	<u>Unk.</u>	
6. <u>Cortaderia jubata</u>	<u>5</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				

Remarks:

SOIL

Sampling Point: _____

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		
1-12	10 YR 2/1	100						

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p>___ Histic Epipedon (A2)</p> <p>___ Black Histic (A3)</p> <p>___ Hydrogen Sulfide (A4)</p> <p>___ Depleted Below Dark Surface (A11)</p> <p>___ Thick Dark Surface (A12)</p> <p>___ Sandy Mucky Mineral (S1)</p> <p>___ Sandy Gleyed Matrix (S4)</p>	<p>___ Sandy Redox (S5)</p> <p>___ Stripped Matrix (S6)</p> <p>___ Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p>___ Loamy Gleyed Matrix (F2)</p> <p>___ Depleted Matrix (F3)</p> <p>___ Redox Dark Surface (F6)</p> <p>___ Depleted Dark Surface (F7)</p> <p>___ Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p>___ 2 cm Muck (A10)</p> <p>___ Red Parent Material (TF2)</p> <p>___ Very Shallow Dark Surface (TF12)</p> <p>___ Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
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<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <p>___ Surface Water (A1)</p> <p>___ High Water Table (A2)</p> <p>___ Saturation (A3)</p> <p>___ Water Marks (B1)</p> <p>___ Sediment Deposits (B2)</p> <p>___ Drift Deposits (B3)</p> <p>___ Algal Mat or Crust (B4)</p> <p>___ Iron Deposits (B5)</p> <p>___ Surface Soil Cracks (B6)</p> <p>___ Inundation Visible on Aerial Imagery (B7)</p> <p>___ Sparsely Vegetated Concave Surface (B8)</p>		<p>Secondary Indicators (2 or more required)</p> <p>___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p>___ Salt Crust (B11)</p> <p>___ Aquatic Invertebrates (B13)</p> <p>___ Hydrogen Sulfide Odor (C1)</p> <p>___ Oxidized Rhizospheres along Living Roots (C3)</p> <p>___ Presence of Reduced Iron (C4)</p> <p>___ Recent Iron Reduction in Tilled Soils (C6)</p> <p>___ Stunted or Stressed Plants (D1) (LRR A)</p> <p>___ Other (Explain in Remarks)</p>	<p>___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p>___ Drainage Patterns (B10)</p> <p>___ Dry-Season Water Table (C2)</p> <p>___ Saturation Visible on Aerial Imagery (C9)</p> <p>___ Geomorphic Position (D2)</p> <p>___ Shallow Aquitard (D3)</p> <p>___ FAC-Neutral Test (D5)</p> <p>___ Raised Ant Mounds (D6) (LRR A)</p> <p>___ Frost-Heave Hummocks (D7)</p>
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<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Waters and Wetlands Delineation Report

For the Property at 2800 Champs Elysee Blvd
Accessor's Parcel Number 048-133-060



August 2022¹

Prepared for:
The City of Half Moon Bay
501 Main Street
Half Moon Bay, CA 94019

Prepared by:
BioMaAS
1278 Indiana Street #300
San Francisco, CA 94107

¹ A previous version of this report was prepared in July 2021, however due to the complexity of the site, including history of disturbance and introduction of fill soils, the site was reassessed to more accurately document conditions on site.

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APPENDICES

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Introduction

This report presents the findings of a delineation of potential jurisdictional wetlands and waters of the United States and State as defined by state and federal agencies for the Property at 2800 Champs Elysée Boulevard (Assessor's Parcel Number 048-133-060), in Half Moon Bay, San Mateo County, California (Appendix A, Figures 1, 2, and 3).

The City of Half Moon Bay requested that a wetland delineation be conducted to verify current site conditions. On-site data collection was conducted on June 14 and July 8, 2022, by certified wetland delineators (biologist Patrick Kobernus and botanist Chris Rogers).

Potential jurisdictional features in the Study Area were assessed based on federal and state regulations, including Sections 404 and 401 of the Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act, Sections 1600-1616 of the California Fish and Game (CDFW) Code, and Section 30121 of the California Coastal Act overseen by the California Coastal Commission (CCC). This report was prepared in accordance with the United States Army Corps of Engineers (USACE) May 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Region. The USACE manual, in conjunction with the previously listed regulations, serves as the guidance document for identifying waters and wetland features under the jurisdiction of USACE, the Regional Water Quality Control Board (RWQCB), and the CDFW. The CDFW has jurisdiction over stream-dependent riparian areas, as defined by Section 2785 of the California Fish and Game Code. Additionally, the project falls within the California coastal zone. The California Coastal Commission (CCC) is responsible for determining the presence of wetlands subject to regulation under the California Coastal Act, with the assistance of CDFW and depending on the USACE's jurisdictional definition, but with stricter definitions. The results of this delineation are preliminary until verified by USACE and CCC.

Site Location and Proposed Project

The Study Area includes the undeveloped project footprint (parcel) located west of the cul-de-sac on the south end of Champs Elysée Boulevard, just inland of Roosevelt Beach, in the north central portion of the Half Moon Bay U.S. Geological Survey (USGS) 7.5-minute quadrangle (Appendix A, Figure 3). The center of the Study Area is at approximately 37° 48' 89" north latitude and -122° 45' 17" west longitude. The Study Area includes an approximately 0.73-acre (31,709 ft²) parcel (APN 048-133-060) bordered by Pullman Ditch (AKA Pullman Watercourse) to the north, Champs Elysée Boulevard to the east, agricultural fields to the south, and Naples Avenue to the west (Appendix A, Figures 1- 4).

Purpose of the Delineation

This delineation was performed to identify potential jurisdictional waters and wetland features within the proposed development.

Regulatory Setting

The discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically requires authorization from USACE, pursuant to Section 404 of the CWA (33 USC 1344); RWQCB, pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act; and CDFW, pursuant to Sections 1600 through 1616 of the California Fish and Game Code. Permits, licenses, variances, or similar authorization may also be required by other local statutes. The applicable CWA and other federal and state regulations are described in the following sections.

Federal Regulations

Clean Water Act Section 404

The CWA serves as the primary federal law protecting the quality of the nation's wetlands and surface waters (other waters). Under Section 404, USACE and the U.S. Environmental Protection Agency (USEPA) regulate the discharge of dredged and fill materials into the waters of the United States. Waters of the United States include: 1) waters used for commerce and subject to tides; 2) interstate waters and wetlands; 3) other waters such as intrastate lakes, rivers, streams, and wetlands; 4) impoundments of waters; 5) tributaries of waters; 6) territorial seas; and 7) wetlands adjacent to waters.

The CWA defines wetlands as a subset of waters of the United States that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3[b]; 40 CFR 230.3[t]).

The definition of waters of the United States has been revised based on subsequent rulings by the U.S. Supreme Court (Court). Two cases brought before the Court, *Rapanos v. United States* (No. 04 1034) and *Carabell v. Army Corps of Engineers* (No. 04-1384), challenged USACE interpretation of waters of the United States (USACE/USEPA 2007). On June 19, 2006, the Court ruled in favor of tightening the definition of "waters of the United States." Per the Court's decision, a water or wetland constitutes "navigable waters" under CWA if it possesses a "significant nexus" to waters that are currently navigable or could feasibly be made navigable. A

significant nexus requires that there be “more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of a traditionally navigable water” (USACE 2008).

On June 5, 2007, USACE and USEPA issued a joint memorandum that provided new guidelines for establishing whether wetlands or other waters of the United States fall within USACE jurisdiction (USACE/USEPA 2007). Under these guidelines, the agencies assert jurisdiction over traditional navigable waters (TNWs), wetlands adjacent to TNWs, non-navigable tributaries to TNWs that are relatively permanent waters (RPWs), and wetlands that abut RPWs. The agencies may take jurisdiction over non-navigable tributaries that are not RPWs, wetlands that are adjacent to non-RPWs, and wetlands adjacent to but not directly abutting a relatively permanent, non-navigable tributary.

Executive Order 11990 for the Protection of Wetlands

Executive Order 11990 for the Protection of Wetlands (May 24, 1977) establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. If wetland effects cannot be avoided, all practicable measures to minimize impacts must be included.

Revising the Definition of "Waters of the United States"

The Environmental Protection Agency and U.S. Army Corps of Engineers are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice (EPA, 2021). On November 18, 2021, the U.S. Environmental Protection Agency and the Department of the Army (“the agencies”) announced the signing of a proposed rule to revise the definition of “waters of the United States.” On December 7, 2021, the proposed rule was published in the Federal Register. The public comment period closed on February 7, 2022.

The agencies propose to put back into place the pre-2015 definition of “waters of the United States,” updated to reflect consideration of Supreme Court decisions. This familiar approach would support a stable implementation of “waters of the United States” while the agencies continue to consult with states, tribes, local governments, and a broad array of stakeholders in both the current implementation and future regulatory actions.

State Regulations

Porter-Cologne Water Quality Control Act and Clean Water Act Section 401

Waters of the state are regulated by RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Under this definition, isolated wetlands that may not be subject to regulations under federal law are considered waters of the state.

Additionally, the California RWQCB adopted State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (RWQCB, 2019) and uses the methods of delineation prescribed in the USACE manuals (USACE 1987; USACE 2010) which was followed in conducting this wetland delineation.

RWQCB protects all waters in its regulatory scope but has special responsibility for isolated wetlands and headwaters that may not be regulated by other programs (such as Section 404 of the CWA). Projects that require a Section 404 CWA permit or fall under other federal jurisdiction and have the potential to impact waters of the state are required to obtain a Section 401 Water Quality Certification. If a project does not require a federal license or permit but involves activities that may result in a discharge of harmful substances to waters of the state, RWQCB has the option to regulate such activities under its authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

The (State) Water Code defines “waters of the state” broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the state” includes all “waters of the U.S.”²

California Coastal Commission

Coastal Act Section 30121 defines the term “wetland” as: “lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. The Coastal Commission’s regulations (California Code of Regulations Title 14 (14 CCR)) establish a “one parameter definition” that only requires evidence of a single parameter to establish wetland conditions:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats. (14 CCR Section 13577).

² (Procedures for Discharges of Dredged or Fill Material to Waters of the State, 2019)
https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf

As opposed to wetlands definitions, which describe general parameters that must be shown to establish three wetland conditions (hydrology, soils, and vegetation), the delineation of wetlands in the field typically requires substantial evidence of indicators, which are the physical, chemical, or biological features of an area that can be easily observed or assayed and that are usually correlated with the presence of a wetland parameter; and methodologies that guide the process of distinguishing wetland from non-wetland conditions. Such field tools are needed because the various characteristics of wetlands typically occur on physical gradients (i.e., wet to dry conditions, hydric to nonhydric soils, and hydrophytic to meso/xerophytic vegetation). The Coastal Commission's regulations acknowledge these distinctions by specifying some general decision rules for establishing the upland boundary of wetlands:

...the upland limit of a wetland shall be defined as:

a. the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover.

b. the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or

c. in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not. (14 CCR Section 13577)

It is important to recognize the importance of hydrologic conditions in creating and maintaining wetlands. Recurrent saturation of the substrate at or near the surface is the one condition that sustains all other characteristics of wetlands. Water at or near the surface supports the development of hydrophytic vegetation and hydric soils, rather than the reverse. Therefore, the hydrologic factor has special status as the agent of causation or control over creating and sustaining wetlands.

The California Coastal Commission relies on a one-parameter definition of wetlands. Section 30121 of the California Coastal Act has a broad definition for a wetland:

"Wetland means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater, marshes, open or closed brackish water marshes, swamps, mudflats, or fens."

However, the CCC Administrative Regulations (Title 14 CCR Section 13577 (b)) provides a more explicit definition:

"Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitat."

In addition to the above definition, the Statewide Interpretive Guidelines for Identifying and Mapping Wetlands and Other Wet Environmentally Sensitive Habitat Areas³ provides technical criteria for use in identifying and delineating wetlands and other ESHAs within the Coastal Zone. The technical criteria presented in the guidelines are based on the Coastal Act definition and indicate that wetland hydrology is the most important parameter for determining a wetland, recognizing that:

"...the single feature that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water, and this is the feature used to describe wetlands in the Coastal Act. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil, and therefore only plants adapted to these wet conditions (hydrophytes) could thrive in these wet (hydric) soils. Thus, the presence or absence of hydrophytes and hydric soils make excellent physical parameters upon which to judge the existence of wetland habitat areas for the purposes of the Coastal Act, but they are not the sole criteria."

The technical criteria require that saturation of soil in a wetland must be at or near the surface continuously for a period of time. The meaning of "at or near the surface" generally is considered to be approximately 1 foot from the surface or less (the root zone), and the saturation must be continuously present for a period of time (generally greater than two weeks) to create the necessary soil reduction (anaerobic) processes that create wetland conditions. For example, water from rain during a storm that causes saturation near the surface but then evaporates or infiltrates to 18 inches or deeper below the surface shortly after the storm does not meet the generally accepted criteria for wetland hydrology. This element of the wetland delineation methodology is important for the interpretation of wetland conditions.

³ CCC (California Coastal Commission). 1981. Statewide Interpretive Guidelines. Accessed at <https://www.coastal.ca.gov/wetrev/wetappa.html>

According to Cowardin, et al , the definition of a wetland is as follows:

"In general terms, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of the classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season each year."

California Coastal Act Wetlands - One Parameter Wetlands

The CCC requires observation of one diagnostic feature of a wetland such as wetland hydrology, dominance by wetland vegetation (hydrophytes), or presence of hydric soils as a basis for asserting jurisdiction under the Coastal Act. Therefore, the presence of hydrophytic vegetation, hydric soils or hydrology alone can confirm the presence of a wetland as defined by the CCC but does not automatically lead to this conclusion.

By definition, facultative (FAC) plant species have equal probability of occurring in wetlands and non-wetlands, and a Facultative Wetland (FACW) plant species has a 66% probability of occurring in wetlands. Considering a facultative and/or a facultative wetland plant species to be a hydrophyte in all circumstances is contrary to their designation. For example, Italian ryegrass (*Festuca perennis*) is a FAC species that occurs in a wide range of habitats and site conditions, including seasonal wetlands, but more commonly as a dominant or co-dominant species in annual grasslands, ruderal (i.e., chronically disturbed) sites, pastures, and erosion control applications, even occasionally in woodlands and shrublands. Identifying such circumstances as a one-parameter wetland on the basis of a facultative or facultative wetland plant species being present, in the absence of supporting evidence of hydric soils or hydrology, would potentially be an erroneous conclusion. The presence of Italian ryegrass in the upland grassland portions of a property does not lead to suspicion that the entire sloping hillside qualifies as any kind of wetland.

Furthermore, FAC and FACW species are more prominent in grasslands in coastal areas, not due to the presence of hydric soils or wetland hydrology, but rather due to the additional moisture from summertime fog. This additional moisture within open grasslands will often be enough to extend the growing season but is not likely to result in saturation conditions that create hydric

soil indicators and/or wetland hydrology. It is also true that grassland habitats can have pooled water during and immediately after heavy rain events, which can cause overland sheet flow. This pooling and saturation can last for days in some circumstances; however, this also cannot be construed as an indicator of wetland hydrology. Ponding and/or saturation must occur for a significant amount of time (typically two weeks or more) for hydric soil and wetland hydrology indicators to develop.

Sections 1600 to 1616 of the California Fish and Game Code

Streams, lakes, and riparian vegetation that provide habitat for fish and other wildlife species are subject to CDFW jurisdiction under Sections 1600 to 1616 of the California Fish and Game Code. These sections regulate any activity that may 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement (SAA) issued for the project.

The term "stream" also includes creeks and rivers and is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term also includes ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Stream-dependent riparian habitat is defined in the California Fish and Game Code (Section 2785) as "lands which contain habitat which grows close to, and which depends upon soil moisture from a nearby freshwater source." In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Removal of stream-dependent riparian vegetation or wetlands may also require a SAA from CDFW.

Local Regulations

The Half Moon Bay Local Coastal Land Use Plan (LCLUP) and the Zoning Ordinance together constitute the "Local Coastal Program" (LCP) for the City's coastal zone. Section 6.53 of the LDLUP has language that applies directly to Pullman Ditch which occurs along the northern boundary of the project area:

Section 6-53. Non-Riparian Watercourse Buffers. Where a watercourse lacks riparian vegetation, the boundary of the watercourse is defined by the top of bank or similar confining topography. Proposed development along a non-riparian watercourse lacking riparian vegetation or other sensitive habitat value as determined by a site-specific study, including man-made drainage ditches (e.g., non-riparian portions of Pullman Watercourse) but excluding active agriculture irrigation ditches, shall provide a minimum 20-foot buffer from the top of bank to provide space for potential meander belts and natural erosion and flooding hazards. The buffer requirements in Policies 6-49 and 6-50 shall apply to proposed development along a watercourse where a site-specific study identifies riparian vegetation or other sensitive habitat value.

In addition, the Zoning Ordinance includes the following language that applies to the property (section 18.38.075 Riparian corridors and buffer zones):

D. Riparian Buffer Zone. The riparian buffer zone is defined as:

- 1. Land on both sides of riparian corridors which extends from the "limit of riparian vegetation" fifty feet outward for perennial streams and thirty feet outward for intermittent streams; or*
- 2. Land along both sides of riparian corridors which extends fifty feet from the bank edge for perennial streams and thirty feet from the midpoint of intermittent streams, where no riparian vegetation exists.*

Methodology

This section identifies the methodology used to conduct the jurisdictional delineation of waters of the state and the United States, including data sources and field work procedures.

Study Area

The Study Area encompasses a total of 0.73 acres (31,709 ft²; Appendix A) and includes a roughly triangular parcel wedged between an agricultural field and Pullman Ditch and bounded to the north and south by Champs Elysée Boulevard and Naples Avenue (Appendix A, Figures 1-4).

Pre-field Survey Literature Review

The following resources were reviewed prior to conducting field investigations to obtain information on wetlands and other water features that may occur in the Study Area:

- United States Geological Survey 7.5-minute topographic quadrangles
- National Wetlands Inventory maps (USFWS, 2020)
- Mapped soil units (NRCS, 2020)

- Google Earth Pro Aerial photographs from 1991 through 2021
- Biological Resource Assessment (WRA 2011)
- DRAFT Aquatic Assessment at 2800 Champs Elysee Boulevard, Half Moon Bay, California (WRA, April 28, 2022)

Field Surveys

A formal wetland delineation was conducted by BioMaAS staff in July 2022 (This report replaces previous versions completed in March and May 2021). The delineation was conducted using the routine onsite determination method described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010), USACE San Francisco District (USACE 2016a) Information Requested for Verification of Corps Jurisdiction guidance, and U.S. Army Corps of Engineers San Francisco District Updated Map and Drawing Standards (USACE 2016b), were also used as part of the on-site wetlands analysis and report preparation. The wetland indicator status of plants is based on the National Wetland Plant List (NWPL) Western Mountains, Valleys, and Coast Region (USACE 2020). Scientific nomenclature for plant species in this report is based on the Jepson eFlora (Jepson Flora Project 2021).

Weather conditions during each survey were sunny and clear, with a high temperature of 70 degrees Fahrenheit. The entire Study Area was walked to view all areas to determine the location of representative sites to assess the presence or absence of jurisdictional features.

Data points were taken at six representative locations within the Study Area (SP1 through SP6) to identify the three wetland parameters (vegetation, soils, and hydrologic conditions), as recorded on wetland determination data forms and the approved jurisdictional delineation form (Appendix D). Data were collected using a sub-meter accurate hand-held Trimble GeoXT device. Appendix A, Figure 4 shows the location of these data points.

Findings

The results of the field survey and delineation of jurisdictional waters of the state and United States are described in the following subsections. A summary of findings is presented, followed by documentation of vegetation, soils, and hydrology conditions supporting these findings. The results of this delineation are preliminary until verified by USACE.

Summary of Findings

Based on the results of the field survey, there are no jurisdictional Waters of the State or Waters of the United States present within the Study Area. Approximately 478 linear feet of potentially jurisdictional non-wetland waters run adjacent to the Study Area, just beyond its northern boundary.

Similarly, no jurisdictional wetlands that are potentially regulated by the USACE, RWQCB or the CCC were identified within the Study Area (Appendix A, Figure 4).

No areas within the Study Area retained significant amounts of water, as the soil is moderately well drained (Denison loam, Farallone Coarse Loam and unidentified fill soils). The data sheets (Appendix D) describe the soil samples, vegetation, and hydrology found at this site. Soils were typically black (10 YR 2/1). No gleyed soils or redoximorphic features were observed. Orange and yellow-colored soils (10 YR 4/6, 10YR 3/6, 10YR 4/3, and 7.5YR 4/4) were sometimes encountered (Appendix B: Photos 2 and 4), and these soils appeared to be fill soils that had been brought into the site during previous grading/earth moving operations on site.

The previously completed Biological Resource Assessment (WRA 2011) did not identify features potentially regulated by CDFW, USACE, RWQCB, and LCP/CCC. This delineation agrees with that assessment which states that the site does not contain wetland features indicative of USACE or State wetlands within the Study Area because no sample points exhibited indicators of wetland parameters (hydrophytic vegetation, wetland soil, and/or wetland hydrology). Furthermore, though drought conditions in 2022 may have influenced soil moisture in the study area, soil and hydrology indicators would still be present (e.g., redoximorphic features, etc.), if wetlands were actually present on site.

Ephemeral Drainage “Ditches/Watercourses”

Pullman Ditch, a human-created ephemeral drainage feature (Appendix A, Figure 4) is located adjacent to the Study Area. Although Pullman Ditch was not within the property boundary, it is described here, as its proximity may have implications for development of the property (Study Area). Pullman Ditch is located just off the property boundary (within 1 – 10 feet of the northern boundary) and has a length of approximately 478 feet along the northern edge of the property boundary. A total of 403 feet of Pullman Ditch is daylighted, the remaining being contained underground within culverts. It had an average width of approximately 4.0 feet and has near vertical earthen banks in the daylighted sections.

The headwaters of the watercourse originates in the hills to the east and flows through developed properties (plant nurseries) on the east side of Highway 1. The Watercourse is fed by

runoff through two 24" culverts and other human-created agricultural ditches that drain into the study area. The Watercourse is again culverted downstream of the study area under the Half Moon Bay Coastal Trail, and from there flows into the Pacific Ocean at Roosevelt Beach.

No water or sign of water was observed in the channel on June 14 and July 8, 2022; however, it was observed to have 2 inches of water the day after rainfall on March 6, 2021 by BioMaAS biologists. This feature does not support intermittent or permanent flows; and thus, it is best characterized as an ephemeral feature (only wet during period of heavy precipitation when runoff from the watershed reaches the drainage). Vegetation is largely absent from the channel bed, suggesting a flashy, short duration flow regime. Neighbors living adjacent to Pullman Ditch reported that the Watercourse often floods and overflows after high rain events. No high-water mark was observed within the channel.

The National Wetland Inventory (USFWS 2022) maps were reviewed for aquatic resources and wetlands in and adjacent to the Study Area and Pullman Ditch is not an identified feature on the NWI map, nor is it identified as a blue line (intermittent or perennial) stream in the City of Half Moon Bay LCLUP (City of Half Moon Bay 2020). Pullman Ditch is identified as a non-riparian watercourse within the Study Area (Figure 6-2; Section 6-53 of the City of Half Moon Bay LCLUP (City of Half Moon Bay 2020). Therefore, a minimum 20-foot development buffer is required from Pullman Ditch (Figure 4).

There are topographic lines which correspond with the upstream alignment of Pullman Ditch represented by the USGS maps (Appendix A, Figure 3). The previously completed Biological Resource Assessments (WRA 2011) also identified Pullman Ditch as an ephemeral drainage. No wetlands were found to be associated with Pullman Ditch in the study area. However, the Pullman Ditch below OHW water would potentially qualify as Waters of the US, and Waters of the State, and therefore potentially under the jurisdictional of CDFW, USACE, RWQCB, and LCLUP/CCC.

Vegetation

Plant communities within the Study Area include ruderal (weedy/disturbed habitat) and Monterey cypress (*Hesperocyparis macrocarpa* - NL) woodland. Vegetation within these communities was recorded on the wetland determination data sheets (Appendix D) and photo documented (Appendix B: Photos). Communities were identified based on vegetation alliances in A Manual of California Vegetation (Sawyer et al. 2009) and generalized categories pertaining to the site during field observation. Adjacent communities include agricultural fields (east) and coyote brush (*Baccharis pilularis*-NL) scrub (south). Lands to the north are developed with single family homes (Appendix A: Figures 1 and 2). Vegetation on site has been disturbed in the recent

past, as most of the site has been used for farming since at least prior to 2002⁴ however the western portion of the site, southwest of the end of Alameda Avenue was partially covered by arboreal vegetation, likely riparian thicket, and this area was cleared of all vegetation up to the northern property line in 2016⁵. Vegetation on this southwest corner of the study area appears to still be recovering from this disturbance and will likely succeed to a denser stand of coastal scrub and invasive species (jubata grass (*Cortaderia jubata*), poison hemlock (*Conium maculatum*)), with more tree cover (willow thicket and Monterey cypress trees) over time in the absence of site disturbance events (i.e. grading, fire, mowing, or grazing). Due to this state of vegetation succession at the time of this delineation, normal circumstances were marked as being not present at sample point #6, which is located in this southwest portion of the Study Area. The remainder of the site has had been used for farming periodically since at least prior to 2002.

Ruderal

The ruderal habitat in the Study Area consists of plant species that are typical of disturbed habitats in the Half Moon Bay area. Dominant plants include non-native forbs and grasses such as Italian ryegrass (*Festuca perennis*-FACU), poison hemlock (FAC), bristly oxtongue (*Helminthotheca echioides*-FAC), field mustard (*Brassica nigra*-NL), Cape ivy (*Delairea odorata*-FAC), rat-tail six-weeks grass (*Vulpia myuros*-FACU), and Jubata grass (FACU). Native species observed in this plant community included Spreading rush (*Juncus patens*-FAC), Pacific American aster (*Symphotrichum chilense*-FAC) and California blackberry (*Rubus ursinus*-FACU). This plant community is dominant throughout the property, with the exception of the southern edge which is comprised of Monterey cypress trees. In most cases, this plant community is considered upland, depending on hydrologic conditions.

Riparian Habitat

Riparian habitat/thicket is defined as native woody hydrophytes occurring along the edge of a wetland or water feature. The site has some patches of arroyo willow, typically small saplings mixed in with the brush (Appendix B: Photo 3), and a stand of arroyo willow (*Salix lasiolepis* - FACW) exists on the north side of Pullman Ditch, just outside the study area (Appendix A: Figure 4). The shrub layer within the understory is co-dominated by native California blackberry and the herbaceous layer is predominantly poison hemlock and Cape ivy. Pullman Ditch functions as an ephemeral stream and therefore riparian buffer zones for intermittent and perennial streams as

⁴ Google Earth image dated; 07-08-2002

⁵ Google Earth image dated: 11-02-2016

stated in the HMB Municipal Code would not apply to this feature⁶. Previously, this willow stand was larger and extended onto the southwestern portion of the property, however this area was cleared of vegetation in 2016⁷, as stated previously.

Monterey Cypress Stands

Monterey cypress stands form the border between the parcel and the adjacent agricultural land. These trees were likely planted prior to the building of the adjacent neighborhood. The understory is mostly devoid of vegetation other than some sparse weedy grasses, such as rat-tail six weeks grass. The soils under these stands are highly organic, upland soils and did not show any fill inclusions (SP-3 and SP-5).

Soil Types

The NRCS Web Soil Survey identifies Farallone course sandy loam, nearly level (FcA) over the majority of the Study Area (65%) and Denison loam, nearly level (DmA) over the remainder (35%) of the site. Please refer⁷ to Appendix C for soils information obtained from the NRCS on-line web soils survey for the site.

As described in the USDA, NRCS Official Soil Series Descriptions (Appendix C), the Denison loam series (DmA) consists of very deep, moderately well drained soils that developed from moderately fine textured granite alluvium. Denison soils are on old coastal terraces adjacent to the coast in central California and have slopes of 0 to 50 percent. These soils are only moderately well drained because perched water tables occur during periods of heavy precipitation or irrigation. It has slow to rapid runoff and very slow permeability. Tierra and Watsonville soils, and Elkhorn, Farallone and Miramar components are associated with this series. The surface soils are described as very dark brown 10 YR 2/1 loam between zero to 16 inches, with a hard clay layer at approximately sixteen inches depth.

The NRCS Official Soil Series Descriptions describe the Farallone series as very deep, well-drained soils that formed in alluvial material derived from granitic rocks. Farallone soils are found on alluvial plains and valleys and have slopes of 0 to 10 percent and occur below 250 meters in elevation. They are subject to occasional overflow from local streams. Farallone soils are associated with the Denison, Miramar, and Watsonville soils. The soil colors are dark to light brown, from 10 YR 2/1 to 10 YR 5/2 and 10 YR 3/1.

Soil pits were dug within both the Denison loam and Farallone series soil types, with the more westerly soil pits falling into the Denison loam. The soils on site exhibit very dark colors and as a

⁶ Section 18.38.075 of Half Moon Bay Municipal Code, Zoning Ordinance

⁷ Google Earth Version 7.3.4.8642 (64-bit). Imagery date: 11/02/2016. Accessed July 25, 2022.

result can be misinterpreted as hydric soils, as low-chroma is often cited as an indicator of saturated conditions⁸. Native soils were, in many cases, beneath a 6-8 inch layer of fill material containing lighter-colored gravels and sands.

Generally soils within the test pits exhibited dark coloring of 10 YR 2/1 consistent with the described parent material which is inherently dark and not an indicator of hydric conditions. No areas within the Study Area retained significant amounts of water, as the soil is moderately well drained (Denison loam and Farallone Coarse Loam). The data sheets (Appendix D) describe the soil samples, vegetation, and hydrology found at this site. Soils were typically black (10 YR 2/1) to dark yellowish brown (10 YR 4/4). No gleyed soils or redoximorphic features were observed. Orange and yellow-colored soils (10 YR 4/6, 10YR 3/6, 10YR 4/3, and 7.5YR 4/4) were sometimes encountered (Appendix B: Photos 2 and 4), and these soils appeared to be fill soils that had been brought into the site during previous grading/earth moving operations (Appendix D).

Hydrology

No wetland hydrology indicators were observed at any of the sample points (Appendix D). Drought conditions in 2022 (only 4.41 inches from January 1 to June 30, 2022)⁹, likely impacted the level of moisture in the soil at the site, however the site lacked indicators of wetland hydrology such as oxidized rhizospheres along living roots, or any hydric soil indicators. Sample Points 3 and 5 are located in sparsely vegetated depressions that likely exhibit some pooling of water during the rainy season. These features were determined to not meet the criteria for wetland indicator B8 (Sparsely vegetated concave surface), as the barren ground in these areas were more likely due to shading and allelopathic affects of the adjacent Monterey Cypress trees (Appendix B: Photo 5; Appendix D).

Water conveyed within the Pullman Ditch flows to the southwest and is largely carried through underground drainage culverts to the Pacific Ocean. During the site visits in June and July 2022, surface water was not observed in the open portions of the channel. Two inches of water was observed the morning following a rain event on March 6, 2021.

Timing of Field Surveys

Field data collection was conducted on June 14 and July 8, 2022 during the growing season. The growing season for Half Moon Bay is almost year-round (all months with the exception of

⁸ <https://documents.coastal.ca.gov/reports/2001/11/W22a-11-2001.pdf>

⁹ Precipitation data from station US1CASM0007, HALF MOON BAY 0.5 SSW, CA US, <https://www.ncdc.noaa.gov/cdo-web/search?datasetid=GSOY>. Accessed August 5, 2022.

January)¹⁰. The purpose of conducting wetland delineations during the growing season is to ensure that plant species at all sample points are identifiable at the time of survey (and not dormant due to 'cold temperatures or reduced moisture". Early senescence of plants in the late summer/fall can make it difficult for identification of species, especially grasses. The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACE 2010) describes the end of the growing season as *"when woody deciduous species lose their leaves and/or the last herbaceous plants cease flowering and their leaves become dry or brown, generally in the fall due to cold temperatures or reduced moisture availability. Early plant senescence due to the initiation of the summer dry season in some areas does not necessarily indicate the end of the growing season.* Many of the plant species within the study area were still green at the time of the field surveys in June and July 2022 (Appendix B), and all plants observed were identifiable to species.

While this survey was conducted during the dry season, the 1987 Corps methodology for conducting wetland delineations was not limited to time of year, with the exception of the growing season. Other wetland indicators such as hydric soils will be present in most situations regardless of time of year and can last for decades. The 1987 Corps of Engineers Manual states: *Explicit in the definition is the consideration of three environmental parameters: hydrology, soil, and vegetation. Positive wetland indicators of all three parameters are normally present in wetlands. Although vegetation is often the most readily observed parameter, sole reliance on vegetation or either of the other parameters as the determinant of wetlands can sometimes be misleading. Many plant species can grow successfully in both wetlands and nonwetlands, and hydrophytic vegetation and hydric soils may persist for decades following alteration of hydrology that will render an area a nonwetland. The presence of hydric soils and wetland hydrology indicators in addition to vegetation indicators will provide a logical, easily defensible, and technical basis for the presence of wetlands. The combined use of indicators for all three parameters will enhance the technical accuracy, consistency, and credibility of wetland determinations. Therefore, all three parameters were used in developing the technical guideline for wetlands and all approaches for applying the technical guideline embody the multiparameter concept (USACE 1987).*

While vegetation should not be relied on in some situations, hydric soils can only form under anaerobic conditions. In *Field Indicators of Hydric Soils in the United States* (2018), the Introduction states: *"Prolonged anaerobic conditions promote certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements. These processes result in distinctive characteristics that persist*

¹⁰ Plant zone maps accessed August 10, 2022. <https://www.plantmaps.com/94019>

in the soil during both wet and dry periods, making them particularly useful for identifying hydric soils in the field." (USACE 2018).

This study was conducted at a suitable time of year to detect wetland indicators, if present. No state or federal jurisdictional wetlands or state or federal jurisdictional waters were identified within the study area.

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Abbreviations

CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
Court	Supreme Court
CWA	Clean Water Act
Dma	Denison Loam
DP	data point
ED	ephemeral drainage
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FcA	Farallon Course Sandy Loam
FID	former irrigation channel
NWPL	National Wetland Plant List
OBL	obligate wetland
RPW	relatively permanent waters
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SW	seasonal wetland
TNW	traditional navigable waters
UPL	Upland plant species
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

Appendices

Appendix A	Figures
	Figure 1: Project Location
	Figure 2: Study Area
	Figure 3: USGS 7.5-Minute Map
	Figure 4: Jurisdictional Delineation Map
Appendix B	Images of Sample Sites
Appendix C	Soils Map
Appendix D	Data Sheets



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BioMaAS

SOURCE: NAIP 2018, ESRI 2020

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

FIGURE 1
Project Location



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BioMaAS

SOURCE: NAIP 2018, San Mateo County 2017

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

 Project Boundary

FIGURE 2
Study Area



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SOURCE: USGS Half Moon Bay 7.5-Minute Series Quadrangle, National Geographic Society, i-cubed 2013

FIGURE 3

USGS 7.5 Minute Quadrangle

BioMaAS

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA



-  Project Boundary
-  Potential Riparian Thicket
-  Potential Riparian Buffer
-  Pullman Ditch
-  20' Buffer
-  Culvert
-  Soil Pit
-  Sample Point

BioMaAS

SOURCE: NAIP 2018

2800 Champs Elysee Blvd Project (APN 048-133-060), Half Moon Bay, CA

FIGURE 4
Jurisdictional Delineation

Appendix B: Images of Study Area and Sample Sites



Photo 1. Vegetation on east side of site. Higher elevation with upland fill soils and ruderal vegetation. Photo date: 07-25-2022.



*Photo 2. Fill soils and native soil
At Sample Point 1. Photo date:
6/14/2022.*



Photo 3. View of interior of site dominated by native brush and Jubata grass. Photo date 06/14/2022.



Photo 4. Sample Point 2 soil sample showing layer of fill soil. Photo date: 06/14/2022.



*Photo 5. Sample Point 3 located along cypress tree line.
Photo date: 06/14/2022.*



*Photo 6. View of western side of site, Salix babylonica tree in
background. Photo date: 06/14/2022.*



Photo 7. View of arroyo willow patch (riparian thicket) adjacent to Pullman ditch retaining wall on southeast side of Alameda Ave. Photo date: 07/25/2022.

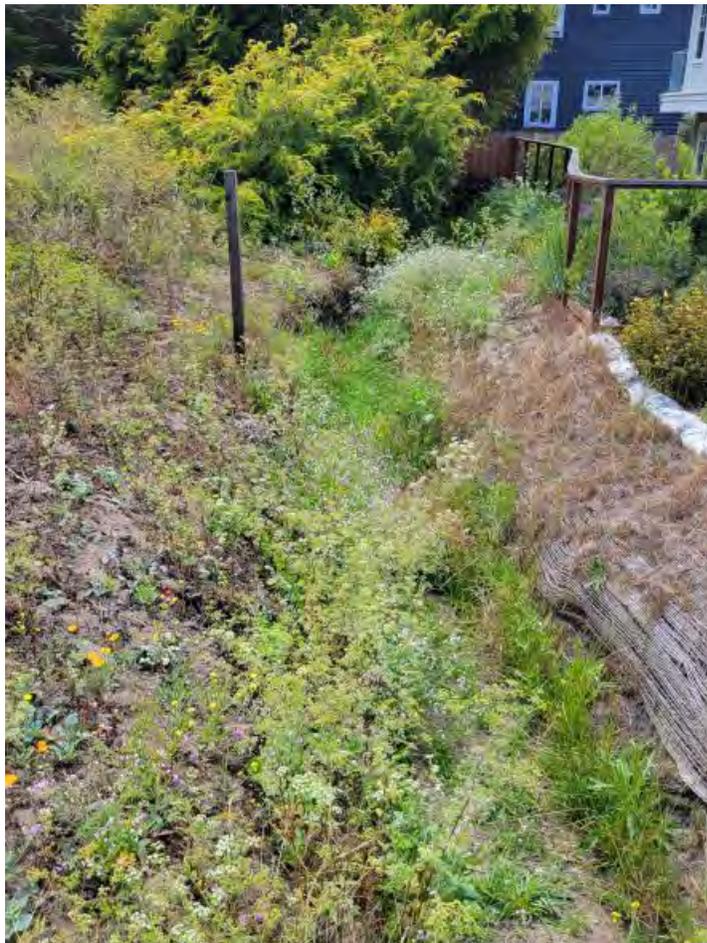
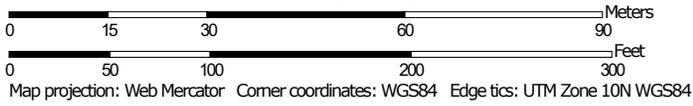


Photo 8. View of Pullman Ditch, west of Champs Elysee Blvd. Photo date: 07/25/2022.

Soil Map—San Mateo Area, California
(2800 Champs Elysee)



Map Scale: 1:1,140 if printed on A landscape (11" x 8.5") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,000.

Warning: Soil Map may not be valid at this scale.
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Mateo Area, California
Survey Area Data: Version 15, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2019—Jun 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DmA	Denison loam, nearly level	1.7	29.3%
FcA	Farallone coarse sandy loam, nearly level	4.0	70.7%
Totals for Area of Interest		5.7	100.0%

LOCATION FARALLONE CA

Established Series
Rev. RJW/RWK/ET/GML/JTW
01/2020

FARALLONE SERIES

The Farallone series consists of very deep, well drained soils that formed in alluvial material derived from granitic rocks. Farallone soils are on alluvial plains and valleys and have slopes of 0 to 10 percent. The mean annual precipitation is about 760 millimeters and the mean annual air temperature is about 13.5 degrees C.

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, isomesic Cumulic Haplustolls

TYPICAL PEDON: Farallone coarse sandy loam, on a west facing slope of 2 percent at 17 meters elevation in a cultivated field. (Colors are for dry soil unless otherwise noted).

Ap--0 to 20 centimeters; dark gray (10YR 4/1) coarse sandy loam, black (10YR 2/1) moist; weak coarse granular structure; slightly hard, friable, nonsticky and nonplastic; common fine roots; porous; many fine and medium tubular pores; slightly acid (pH 6.4); clear irregular boundary.

A--20 to 51 centimeters; dark gray (10YR 4/1) coarse sandy loam, black (10YR 2/1) moist; weak coarse granular structure; slightly hard, friable, nonsticky and nonplastic; common fine roots; porous; slightly acid (pH 6.4); gradual smooth boundary. (combined thickness of A horizons, 36 to 61 centimeters thick)

AC--51 to 122 centimeters; dark gray (10YR 4/1) coarse sandy loam, very dark gray (10YR 3/1) moist; very weak medium and fine subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine roots; many very fine pores; slightly acid (pH 6.3); diffuse smooth boundary. (51 to 89 centimeters thick)

C--122 to 152 centimeters; dark grayish brown (10YR 4/2) stratified sandy loam and coarse sandy loam, very dark grayish brown (10YR 3/2) moist; structureless massive; slightly hard, friable, nonsticky and nonplastic; porous; slightly acid (pH 6.3).

TYPE LOCATION: San Mateo County, California; 300 meters east of State Highway No. 1, and about 1.6 kilometers north of the city of Half Moon Bay, CA.; latitude 37 degrees, 28 minutes, 44.72 seconds N. and longitude 122 degrees 26 minutes, 23.58 seconds W., WGS84; UTM Zone 10; 4148168.78n, 549522.77e; U.S.G.S. 7.5 minute Half Moon Bay quadrangle.

RANGE IN CHARACTERISTICS:

Soil moisture: Soil becomes moist in October or early November and remains moist until May. The soils meet the criteria for the xeric moisture regime but have an ustic moisture regime due to the isomesic temperature regime.

Mean annual soil temperature: 13 to 15 degrees C. The difference between the mean summer temperature and mean winter temperature is less than 6 degrees C. The soils have an isomesic temperature regime.

Particle size control section weighted average:

Rock fragments: 0 to 35 percent, with 0 to 35 percent gravel and 0 to 15 percent cobbles.

Clay content: averages 10 to 18 percent clay

Reaction: 6.1 to 6.3, slightly acid

A horizons

Color: 10YR 4/1 or 3/1, dry; 10YR 3/1 or 2/1 moist

Texture: coarse sandy loam, sandy loam, fine sandy loam or loam

Clay content: 10 to 18 percent

C horizon

Color: 10YR 4/2 or 5/2, dry; 10YR 3/1, 3/2 or 4/1 moist

Texture: coarse sandy loam or sandy loam; stratified

Clay content: 10 to 18 percent

COMPETING SERIES: There are no competing series.

GEOGRAPHIC SETTING: Farallone soils are on smooth, gently sloping alluvial fans and flood plains subject to occasional overflow from local streams. Soils frequently occur in small or narrow valleys as long stringers. They formed in alluvial materials derived from from granitic rocks. Elevations are usually below 250 meters. The climate is characterized by warm, dry summers and cool, moist winters. Mean annual precipitation is 700 to 900 millimeters. Mean annual air temperature about 13.5 degrees C. Frost-free season is about 365 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Denison](#), [Miramar](#) and [Watsonville](#) soils. Denison soils have an argillic horizon and are on low terraces. Miramar soils are on mountains and are 50 to 100 cm to weathered bedrock. Watsonville soils formed in sedimentary alluvium on old marine terraces and have an albic horizon over an argillic horizon with a fine particle-size control section.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Well drained; saturated hydraulic conductivity is moderate. The narrow valley stringers occasionally have seeps following the strata seams.

USE AND VEGETATION: Farallone soils are used mainly for agricultural fields, range and as watershed lands. Native vegetation is coyote brush, lupine, and poison oak, with an understory of annual grasses and forbs with a few perennial grasses.

DISTRIBUTION AND EXTENT: Southern portions of Coastal Redwood Belt, MLRA 4B These soils are of small extent.

SOIL SURVEY REGIONAL OFFICE (SSRO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: San Mateo County, California, 1941

REMARKS:

Diagnostic horizons and features recognized in this pedon are:

Mollic epipedon: 0 to 122 cm

Particle Size Control Section: 25 to 100 cm

Series was changed from inactive to active in June of 2019. At this time, the taxonomic classification was updated from Coarse-loamy, mixed, thermic Fluventic Haploxerolls to Coarse-loamy, mixed, superactive, isomesic Cumulic Haplustolls. Soil temperature data supporting the isomesic soil temperature regime was collected from 1980 through 1982. Soils with an isomesic soil temperature regime that meet the criteria for a xeric soil moisture regime have an ustic soil moisture regime.

LOCATION DENISON CA

Established Series
Rev: ENV-DJE-WMJ-RJW-JEM
02/97

DENISON SERIES

The Denison series consists of very deep, moderately well drained soils developed from moderately fine textured granitic alluvium. The Denison soils occur on low terraces adjacent to the coast in central California. The mean annual precipitation is 20 to 30 inches, and the mean annual temperature is about 55 degrees F.

TAXONOMIC CLASS: Fine, smectitic, isomesic Pachic Argixerolls

TYPICAL PEDON: Denison clay loam - on a west facing slope of about 1/2 percent in a cultivated field, 40 feet east of the cliff 1200 yards east of the village of Princeton.

A1--0 to 5 inches; black (10YR 2/1) clay loam, black (10YR 2/1) moist with common fine white specks (due to quartz grains); cloddy due to tillage, clods break to weak fine granules; very hard when dry, friable when moist, plastic and sticky when wet; numerous worm casts; abundant very fine roots; many very fine pores; medium acid, pH 5.8; abrupt smooth lower boundary. (4 to 7 inches thick)

A2--5 to 10 inches; black (10YR 2/1) clay loam, black (10YR 2/1) moist with common fine white specks (due to quartz grains); weak very coarse and coarse prisms break to weak medium granules; very hard when dry, friable when moist, plastic and sticky when wet; many worm casts; abundant very fine roots; many very fine pores; slightly acid, pH 6.3; clear wavy lower boundary. (4 to 8 inches thick)

Bt1--10 to 23 inches; black (10YR 2/1) clay, black (10YR 2/1) moist with common fine white specks (due to quartz grains); strong very coarse prisms break to weak coarse blocks; extremely hard when dry, firm when moist, very plastic and very sticky when wet; common very fine roots; many very fine, mainly tubular pores; moderate continuous clay films; very few hard "shot" concretions, 1/8 inch in diameter; slightly acid, pH 6.2; clear wavy lower boundary. (8 to 15 inches thick)

Bt2--23 to 34 inches; black (10YR 2/1) clay, black (10YR 2/1) moist with common fine white specks (due to quartz grains); moderate very coarse prisms break to weak coarse and medium blocks; extremely hard when dry, very firm when moist, very plastic and very sticky when wet; few very fine roots; many very fine, mainly tubular pores; moderately thick continuous clay films; occasional hard, black "shot" concretions about 1/8 inch in diameter; many slickensides; slightly acid, pH 6.5; clear irregular lower boundary. (9 to 15 inches thick)

Bt3--34 to 45 inches; mottled dark gray and light yellowish brown (2.5Y 4/1 and 6/3) clay, very dark gray and olive brown (2.5Y 3/1 and 4/3) moist with common fine white specks (due to quartz grains); weak coarse prisms break to moderate medium blocks; extremely hard when dry, firm when moist, very plastic and very sticky when wet; very few very fine roots; many very fine, mainly tubular pores; moderate, continuous clay films, common slickensides; "tongues" of Bt2 horizon penetrate this horizon; neutral, pH 7.0; clear wavy lower boundary. (10 to 18 inches thick)

C1--45 to 52 inches; olive (5Y 5/3) heavy clay loam, darker olive (5Y 4/3) moist with common fine and medium mottles of black, yellowish brown and white; weak, coarse prisms break to weak medium, fine and very fine blocks; very hard when dry, firm when moist, very plastic and sticky when wet; very few, very fine roots; many very fine, mainly tubular pores; moderate, continuous clay films; common slickensides; neutral, pH 7.3; clear wavy lower boundary. (6 to 12 inches thick)

C2--52 to 61 inches; pale olive (5Y 6/3) silty clay loam, olive (5Y 4/3) moist with few medium mottles of black and common fine mottles of yellowish brown and white; moderate coarse prisms break to moderate coarse and medium blocks; very hard when dry, firm when moist, very plastic and sticky when wet; very few roots; many very fine pores; moderately developed clay films on vertical surfaces; many root holes are lined and filled with dark colored clay; slickensides common; mildly alkaline, pH 7.5 (noncalcareous); abrupt smooth lower boundary. (0 to 15 inches thick)

C3--61 to 70 inches; light olive brown (2.5Y 5/3) loam, (2.5Y 4/3) moist with few medium black mottles and common fine yellowish brown and white mottles; massive, with common, widely spaced vertical cracks; soil along cracks has prominent dark olive brown clay films and tubular pores are lined with clay; hard when dry, friable when moist, plastic and sticky when wet; neutral, pH 7.3.

RANGE IN CHARACTERISTICS: Climate is warm, dry but foggy summers and cool, wet winters; an average January temperature of 50 degrees F., and average July temperature of 59 degrees F.; and a mean annual temperature of about 55 degrees F.

Surface textures range from loam to clay loam. Texture of the Bt varies from heavy sandy clay loam to clay. In depressed spots, brown and yellowish brown mottles occur in the B and C horizons.

COMPETING SERIES: These are the [Cronkhite](#) and [Tunitas](#) series. Cronkhite soils are deep with paralithic contacts at 40 to 60 inches. Tunitas soils formed in alluvium from sedimentary and basic igneous rock sources.

GEOGRAPHIC SETTING: Denison soils are on alluvial plains and terraces adjacent to the Pacific Ocean. Slopes range from 0 to 15 percent. They formed in alluvium from moderately fine textured granitic alluvium. Elevation is 50 to 300 feet. The mean annual rainfall is 20 to 30 inches with warm, dry but foggy summers and cool, wet winters; an average January temperature of 50 degrees F., and average July temperature of 59 degrees F.; and a mean annual temperature of about 55 degrees F.; and a frost free season of over 325 days, frequently 365 days.

DRAINAGE AND PERMEABILITY: Moderately well drained; slow to medium runoff; slow permeability.

USE AND VEGETATION: Original vegetation was a dense cover of grasses. Most areas have been cultivated. Now they are commonly used for raising Brussels sprouts, artichokes, cabbage and sugar beets. Good yields are obtained. Small grains and other field crops and flowers are also grown.

DISTRIBUTION AND EXTENT: The soils are inextensive and occur on terraces adjacent to the coast, north of the town of Half Moon Bay in San Mateo County, California.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Soil Survey of San Mateo County, California, 1959.

REMARKS: This soil is classified as follows:

USDA yearbook: Brunizem

Revised Classification: 5.530

Univ. of Calif., Storie and Weir: Prairie, Profile Group III

Last revised by the state on 4/88.

National Cooperative Soil Survey
U.S.A.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPS ELISEE City/County: HALF MOON BAY, SMC Sampling Date: 6/14/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 1
 Investigator(s): P. KOBERNUS, C. ROGERS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): FLAT Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: <u>SITE WAS CLEARED IN 2016 TO BARE GROUND (GOOGLE EARTH).</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>GENISTA MONSPESSULANA</u>	<u>5</u>	<u>Y</u>	<u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
Herb Stratum (Plot size: <u>2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>HELMINTHOTHICA ECHINOIDES</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
2. <u>CONIUM MACULATUM</u>	<u>12</u>	_____	<u>FAC</u>	
3. <u>CORTADERIA JUBATA</u>	<u>12</u>	_____	<u>FACU</u>	
4. <u>HOLBUS LANATUS</u>	<u>2</u>	_____	<u>FAC</u>	
5. <u>BAIZA MINOR</u>	<u>1</u>	_____	<u>FAC</u>	
6. <u>SYMPHYOTRICHUM CHILENSE</u>	<u>1</u>	_____	<u>FAC</u>	
7. <u>PLAPHANUS SATIVUS</u>	<u>1</u>	_____	<u>NL</u>	
8. <u>SONCHUS ASPER</u>	<u>1</u>	_____	<u>FACU</u>	
9. <u>FESTUCA MYUROS</u>	<u>5</u>	_____	<u>FACU</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
<u>THATCH</u> % Bare Ground in Herb Stratum <u>30</u>	_____	_____	_____	
Remarks: _____				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>56</u>	x 3 = <u>168</u>
FACU species <u>18</u>	x 4 = <u>72</u>
UPL species _____	x 5 = _____
Column Totals: <u>74</u> (A)	<u>240</u> (B)

Prevalence Index = B/A = 3.24

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No

SOIL

6/14/22

Sampling Point 1

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	Loc ²		
0-2"	10YR 3/2	100					SANDY LOAM	ROOT ZONE
2-11"	10YR 3/6	5					"	GRANITE/FILL
	10YR 2/1	30					"	NATIVE SOIL
	10YR 4/6	65					"	GRANITE/FILL
11-18"	10YR 2/1						"	NATIVE SOIL

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.)

<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: NO REDOX FEATURES, NATIVE MOLLISOL (FAR ALLONGE COURSE SANDY LOAM) HAS NATURALLY DARK MATRIX COLOR, LOW CHROMA.

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

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

Wetland Hydrology Present? Yes _____ No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPS ELYSEE City/County: HALF MOON BAY/SMC Sampling Date: 6/14/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 2
 Investigator(s): P. KOBERNUS, C. ROGERS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): CONVEX (SLIGHTLY) Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: <u>SITE WAS CLEARED OF VEGETATION TO BARE GROUND IN 2016.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>UNK. ELM</u>	<u>3</u>		<u>NL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</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: <u>5m</u>)				
1. <u>SALIX LASIOLEPIS</u>	<u>5</u>		<u>FACW</u>	
2. <u>BACCHARUS PILULARIS</u>	<u>3</u>		<u>NL</u>	
3. _____				
4. _____				
5. _____				
= Total Cover				
Herb Stratum (Plot size: <u>2m</u>)				
1. <u>CONTADERIA SUBATA</u>	<u>30</u>		<u>FACU</u>	
2. <u>HELMINTHOTHeca ECHINOIDES</u>	<u>15</u>		<u>FAC</u>	
3. <u>CINISIUM VULGARIS</u>	<u>1</u>		<u>FACU</u>	
4. <u>FESTUCA MYUROS</u>	<u>20</u>		<u>FACU</u>	
5. <u>CONIUM MACULATUM</u>	<u>2</u>		<u>FAC</u>	
6. <u>BRASSICA NIGRA</u>	<u>1</u>		<u>NL</u>	
7. <u>DELAINEA ODERATA</u>	<u>1</u>		<u>FAC</u>	
8. <u>RAPHANUS SATIVUS</u>	<u>3</u>		<u>NL</u>	
9. <u>ACHILLEA MILIFOLIUM</u>	<u>1</u>		<u>FACU</u>	
10. <u>SONCHUS ASPER</u>	<u>1</u>		<u>FACU</u>	
11. <u>LYSIMACHIA AURENSIS</u>	<u>1</u>		<u>FAC</u>	
= Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>THATCH +</u> <u>24</u>				
= Total Cover				
Remarks: _____				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>				

- Hydrophytic Vegetation Indicators:**
- ___ 1 - Rapid Test for Hydrophytic Vegetation
 - ___ 2 - Dominance Test is >50%
 - ___ 3 - Prevalence Index is ≤3.0¹
 - ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - ___ 5 - Wetland Non-Vascular Plants¹
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

SOIL

6/14/22

Sampling Point: 2

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 2/1	66					SANDY LOAM	ROOT ZONE
	10YR 4/6	33						ORANGE, SANDY FILL
2-14"	10YR 2/1							NATIVE SOIL

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.)**
- | | | |
|------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | Indicators for Problematic Hydric Soils³: |
| <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) (except MLRA 1) | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |
- 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

Remarks: NO REDOX FEATURES.

HYDROLOGY

- Wetland Hydrology Indicators:**
- Primary Indicators (minimum of one required; check all that apply)
- | | | |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | Secondary Indicators (2 or more required) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

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 – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPS ELYSEE City/County: HALF MOON BAY/SMC Sampling Date: 6/14/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 3
 Investigator(s): P. KOBERNUS, C. ROGERS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): CONCAVE Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No _____	Is the Sampled Area within a Wetland?	Yes _____	No _____
Hydric Soil Present?	Yes _____	No _____			
Wetland Hydrology Present?	Yes _____	No _____			
Remarks: <u>POINT LOCATED IN SHALLOW SWALE, WITH MOSTLY BARE GROUND, UNDER PARTIAL CANOPY OF MONTEREY CYPRESS.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>HESPEROCYDENS MACROCARPA</u>	<u>25</u>		<u>NL</u>	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>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
2. _____				
3. _____				
4. _____				
<u>25</u> = 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: <u>5m</u>)				
1. <u>RUBUS URSINUS</u>	<u>1</u>		<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
<u>1</u> = Total Cover				
Herb Stratum (Plot size: <u>2m</u>)				
1. <u>POLYPOGON MONSIELIENSIS</u>	<u>5</u>		<u>FACW</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>FESTUCA ALUNDINACEA</u>	<u>3</u>		<u>NL</u>	
3. <u>SONCHUS ASPER</u>	<u>1</u>		<u>FACU</u>	
4. <u>LYTHUM HISSOPIFOLIUM</u>	<u>1</u>		<u>OBL</u>	
5. <u>FESTUCA MYUROS</u>	<u>1</u>		<u>FACU</u>	
6. <u>MATRICARIA DISCOIDEA</u>	<u>1</u>		<u>FACU</u>	
7. <u>PSEUDOGNAPHALINA LUTEALBUM</u>	<u>1</u>		<u>FACW</u>	
8. <u>CYPERUS ERAGROSTIS</u>	<u>1</u>		<u>FACW</u>	
9. _____				
10. _____				
11. _____				
<u>14</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>86</u> = Total Cover				
Remarks: _____				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>				

SOIL

6/14/22

Sampling Point: 3

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		
0-4"	10YR 2/1	100					SANDY LOAM	NATIVE SOIL, WITH COARSE, ANGULAR ROCK - SLIGHTLY LIGHTER COLOR DUE TO MORE ROCK.
4-16"	10YR 2/1	100						
16-18 1/2"	10YR 3/1	100						

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.)**
- | | | |
|------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | Indicators for Problematic Hydric Soils³: |
| <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) (except MLRA 1) | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |
| | | |
| | | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Remarks: NO REDOX FEATURES

Hydric Soil Present? Yes _____ No

HYDROLOGY

- Wetland Hydrology Indicators:**
- Primary Indicators (minimum of one required; check all that apply)**
- | | | |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | Secondary Indicators (2 or more required) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

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 – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPS ELYSEE City/County: HALF MOON BAY/SMC Sampling Date: 7/8/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 4
 Investigator(s): P. KOBERNUS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): FLAT Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: <u>VEGETATION IS MOWED FOR FIRE BREAK, SITE WAS CLEANED TO BARE GROUND IN 2016.</u>					

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>4</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
4. _____				Prevalence Index worksheet:
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5M</u>)				OBL species _____ x 1 = _____
1. <u>BACCHARIS PILULARIS</u>	<u>20</u>		<u>NL</u>	FACW species _____ x 2 = _____
2. <u>HESPEROLYDEUS MACROCARPA</u>	<u>3</u>		<u>NL</u>	FAC species _____ x 3 = _____
3. _____				FACU species _____ x 4 = _____
4. _____				UPL species _____ x 5 = _____
5. _____				Column Totals: _____ (A) _____ (B)
<u>23</u> = Total Cover				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>2M</u>)				Hydrophytic Vegetation Indicators:
1. <u>COTADERIA SUBATA</u>	<u>10</u>		<u>FACU</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>HELMINTHOTHeca ECHIOIDES</u>	<u>10</u>		<u>FAC</u>	<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>RUMEX CRISPUS</u>	<u>1</u>		<u>FAC</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>DAUCUS CAROTA</u>	<u>2</u>		<u>FACU</u>	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>FESTUCA MYUROS</u>	<u>20</u>		<u>FACU</u>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. <u>ACHILLEA MILLEFOLIUM</u>	<u>5</u>		<u>FACU</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>BRASSICA NIGRA</u>	<u>1</u>		<u>NL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
9. _____				
10. _____				
11. _____				
<u>49</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>(+THATCH) 51</u> = Total Cover				
Remarks: _____				

SOIL

Sampling Point: 4

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		
0-9"	10YR 2/2	40					SANDY LOAM	
	7.5YR 4/4	5						
	10YR 4/3	40						FILL SOIL - NOT REDOX UNDECOMPOSED SAND

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 Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:

VERY HARD GROUND. PALE, ORANGE COLORS ARE FILL SOILS, NOT REDOX/MORPHIC FEATURES.

HYDROLOGY

Wetland Hydrology Indicators:

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

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (Includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

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

Remarks:

NO EVIDENCE OF SATURATION OR INUNDATION.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPS ELYSEE City/County: HALF MOON BAY / SMC Sampling Date: 7/8/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 5
 Investigator(s): P. KOBERNUS, C. ROGERS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): SWALE Local relief (concave, convex, none): CONCAVE Slope (%): 1
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>HESPEROLYPERIS MACROCARPA LfO</u>			<u>NL</u>	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)																
2. _____																				
3. _____																				
4. _____																				
_____ = Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	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 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																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
_____ = Total Cover																				
Herb Stratum (Plot size: <u>2m</u>)																				
1. <u>FESTUCA PERENNIS</u>	<u>35</u>		<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>HELMINTHOTHeca ECHINOIDES</u>	<u>5</u>		<u>FAC</u>																	
3. <u>BROMUS HORDEACEOUS</u>	<u>10</u>		<u>FACU</u>																	
4. <u>AVENA BARBATA</u>	<u>1</u>		<u>NL</u>																	
5. <u>HOLCUS LANATUS</u>	<u>2</u>		<u>FAC</u>																	
6. <u>DAUCUS CAROTA</u>	<u>1</u>		<u>FACU</u>																	
7. <u>SONCHUS ASPER</u>	<u>1</u>		<u>FACU</u>																	
8. <u>MELILOTUS INDICUS</u>	<u>1</u>		<u>FACU</u>																	
9. _____																				
10. _____																				
11. _____																				
_____ = Total Cover																				
Woody Vine Stratum (Plot size: _____)																				
1. _____																				
2. _____																				
_____ = Total Cover																				
% Bare Ground in Herb Stratum																				
<u>STARCH AND</u>	<u>44</u>																			
_____ = Total Cover																				
Remarks:																				

SOIL

Sampling Point 5

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		
0-1"	10YR 2/1	100						CLAY LOAM w/SOME FINE (0.5-3mm DIAMETER) LIGHT COLORED UNDECOMPOSED GRANITE
1-12"	10YR 2/1	100						
12-15"	10YR 2/1	50						
"	10YR 2/2	50						

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 Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks: NO OXIDIZED ROOT CHANNELS AND NO REDOX FEATURES.

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)

- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

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: CRACKS IN SURFACE DUE TO SHRINK/SWELL OF CLAY SOIL. FOG DRIP FROM CYPRESS TREES MAY PROVIDE ADDITIONAL MOISTURE. GRASSES SUCKING UP MOISTURE FROM TOP 1" ONLY. ONLY CYPRESS ROOTS ARE BELOW 1" DEPTH.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2800 CHAMPELYSEE City/County: HALF MOON BAY / SMC Sampling Date: 7/8/22
 Applicant/Owner: CITY OF HALF MOON BAY State: CA Sampling Point: 6
 Investigator(s): D. KOBERNUS, C. ROGERS Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): FLAT Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ 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 _____	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: <u>SITE WAS CLEARED TO BARE GROUND IN 2016.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>SALIX BABILONICA</u>	<u>10</u>		<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u>	(A)
2. <u>HESPEROCYPERIS</u>	<u>5</u>		<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>3</u>	(B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66%</u>	(A/B)
4. _____				Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: <u>5m</u>) 1. <u>RUBUS URSINUS</u> <u>5</u> <u>FACU</u> 2. <u>HESPEROCYPERIS</u> <u>1</u> <u>NL</u> 3. _____ 4. _____ 5. _____				OBL species _____ x 1 = _____	
_____ = Total Cover				FACW species _____ x 2 = _____	
Herb Stratum (Plot size: <u>2m</u>) 1. <u>CONIUM MACULATUM</u> <u>30</u> <u>FAC</u> 2. <u>RAPHANUS SATIVUS</u> <u>10</u> <u>NL</u> 3. <u>DELDERIA ODERATA</u> <u>3</u> <u>FACW</u> 4. <u>HELMINTHOTHICA ECHIOIDES</u> <u>12</u> <u>FAC</u> 5. <u>RUMEX SALICIFOLIUS</u> <u>2</u> <u>FACU</u> 6. <u>CORTADERIA JUBATA</u> <u>10</u> <u>FACU</u> 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				FAC species _____ x 3 = _____	
_____ = Total Cover				FACU species _____ x 4 = _____	
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____				UPL species _____ x 5 = _____	
_____ = Total Cover				Column Totals: _____ (A) _____ (B)	
% Bare Ground in Herb Stratum <u>THATCH</u> = <u>33</u> = Total Cover				Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- ___ 1 - Rapid Test for Hydrophytic Vegetation
 - 2 - Dominance Test is >50%
 - ___ 3 - Prevalence Index is ≤3.0¹
 - ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - ___ 5 - Wetland Non-Vascular Plants¹
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No _____

Remarks: THIS SITE HAS SALIX BABILONICA - LIKELY A PLANTED TREE - THAT FACTORS INTO THE VEGETATION, PASSING THE DOMINANCE TEST. SITE DOES NOT EXHIBIT HYDRIC SOILS OR WETLAND HYDROLOGY.

SOIL

7/8/22
 Sampling Point 6

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		
0-6"	7.5YR 2.5/1	100						SOME SMALL ROCK (UNDECOMPOSED GRANITE) IN BOTH LAYERS WITH MORE IN TOP 6".
6"-16"	10YR 2/1	100						

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.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- 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

Remarks:
 6-16" - CONIUM ROOTS - NO OXIDIZED ROOT CHANNELS IN UPPER PART OF LAYER.
 DARK MOLLISOLS - NO HYDRIC SOIL INDICATORS

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

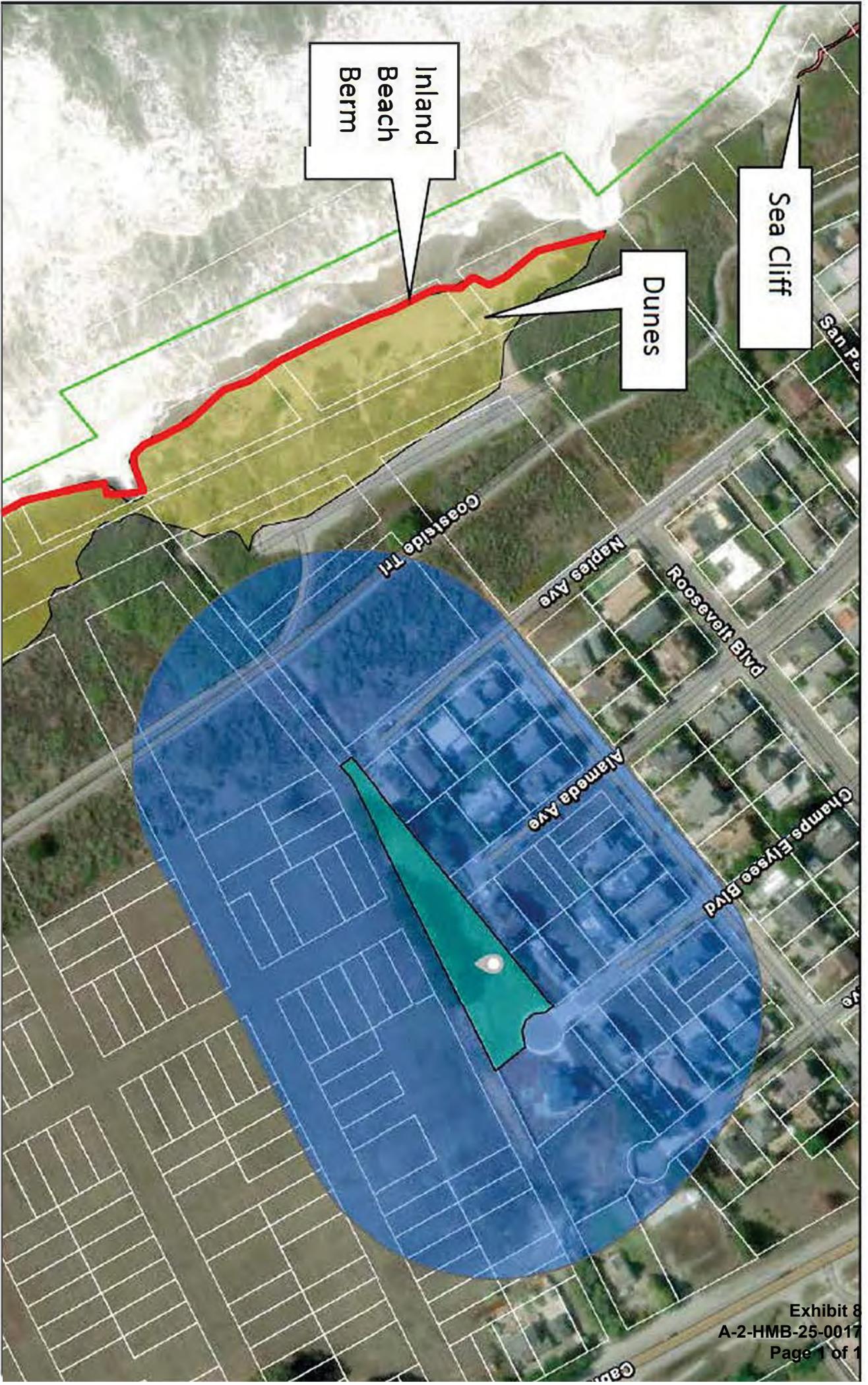
Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

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

Remarks:



9/27/2024

- 300 feet
- Sea Cliffs
- Dunes Habitat

SIMPLIFIED CITY BOUNDARY

Inland Beach Berm

Dunes

Sea Cliff

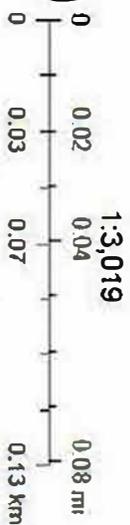
Coastside Trl

Naples Ave

Roosevelt Blvd

Alameda Ave

Champs Elysee Blvd



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