CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

F13a

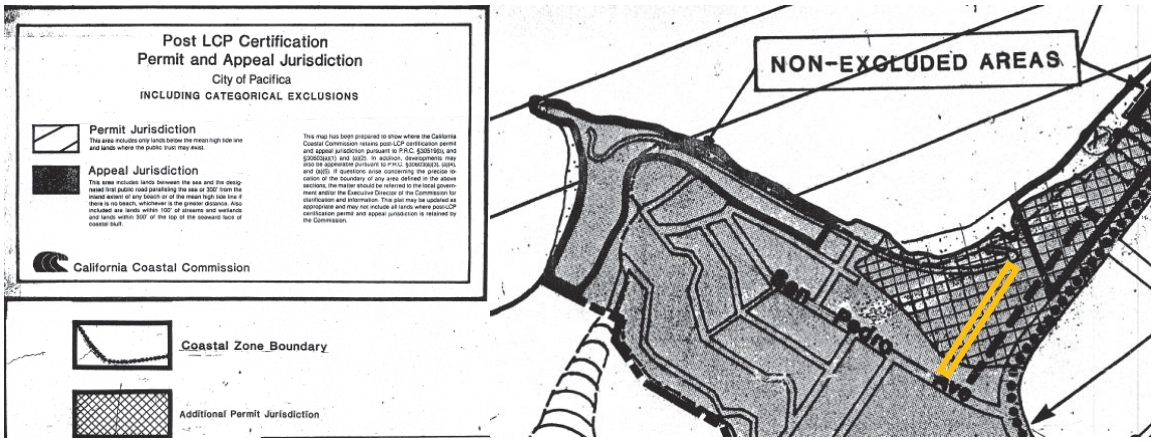
2-19-0026 (RHODES MIXED-USE DEVELOPMENT)

FEBRUARY 12, 2021

EXHIBITS

Table of Contents

505 SAN PEDRO AVENUE – PROJECT LOCATION MAP
City of Pacifica, San Mateo County



505 SAN PEDRO AVENUE – SITE PHOTOS

COMMERCIAL DEVELOPMENT FOR NORCAL SURF SHOP
505 SAN PEDRO AVE., A.P.N. 023-072-010, PACIFICA

ABBREVIATIONS

@	AT
#	NUMBER
AB	ANCHOR BOLT
A/C	AIR CONDITIONER
AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATE
ASF	ABOVE SUBFLOOR
AS	ABOVE SLAB
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
CAB	CABINET
CB	CATCH BASIN
CL	CENTERLINE
CLG	CEILING
CLST	CLOSET
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
D	DRYER
DBL	DOUBLE
DEPT	DEPARTMENT
DEG	DEGREES
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
ENG	ENGINEER
EQPT	EQUIPMENT
EXT	EXTERIOR
FAU	FORCED AIR UNIT
FAR	FLOOR AREA RATIO
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FIN	FINISH
FL	FLOOR
FLUOR	FLUORESCENT
FOUND	FOUNDATION
FP	FIREPLACE
FT	FOOT OR FEET
FTG	FOOTING
FURN	FURNACE
G	GAS
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GD	GARBAGE DISPOSAL
GL	GLASS
GR	GRADE
GYP BD	GYPSUM BOARD
HC	HANDICAP
HDR	HEADER
HDWD	HARDWOOD
HT	HEIGHT
HORIZ	HORIZONTAL
HR	HOUR
INSUL	INSULATION
INT	INTERIOR
JT	JOINT OR JOINT TRENCH
LINEN	LINEN CLOSET
LAM	LAMINATE
LAV	LAVATORY
LT	LIGHT
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOULDING
MTD	MOUNTED
MTL	METAL
N	NORTH
(N)	NEW
N/A	NOT APPLICABLE
NA	NOT AVAILABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NR	NON-RATED
NSF	NET SQUARE FEET
NTS	NOT TO SCALE
O	OVEN
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER OR OVERFLOW DRAIN
OFF	OFFICE
OPNG	OPENING
OH	OVERHANG
O/H	OVERHEAD
OPP	OPPOSITE
PL	PLATE OR PROPERTY LINE
PLYWD	PLYWOOD
PR	PAIR
PT	POINT OR PRESSURE TREATED
R	RADIUS
RAG	RETURN AIR GRILLE
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCED OR REINFORCEMENT
REQD	REQUIRED
REV	REVISION
RHB	RADIANT HEATING BOILER
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT-OF-WAY
S	SOUTH
SB	SETBACK
SCHED	SCHEDULE
SD	SMOKE DETECTOR OR STORM DRAIN
SF	SQUARE FEET OR SQUARE FOOT
SH	SHOWER HEAD
SHT	SHEET
SHWR	SHOWER
SHTG	SHEATHING
SIM	SIMILAR
SL	SLIDING
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUB	SUBCONTRACTOR
SUBFLR	SUBFLOOR
SW	SHEAR WALL
SYM	SYMMETRICAL
T	TILE, TREAD, TOP, OR TRANSFORMER
T & G	TONGUE AND GROOVE
TBD	TO BE DETERMINED
TEL	TELEPHONE
THK	THICK
TO	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PLATE
TOS	TOP OF SUBFLOOR
TOW	TOP OF WALL
TP	TOP OF PAVEMENT
TV	TELEVISION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WEST, WASHER, OR WATER
W/	WITH
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
W x H	WIDTH BY HEIGHT
WNDW	WINDOW
W/O	WITHOUT
WP	WATERPROOF
WR	WATER RESISTANT
WT	WEIGHT

PROJECT SCOPE

DEVELOPMENT OF CURRENTLY VACANT LOT FOR NEW SITE OF NORCAL SURF SHOP. DEVELOPMENT TO CONSIST OF NEW 2-STORY SURF SHOP BUILDING WITH STORAGE BASEMENT, SKATEPARK ENCLOSED WITH CHAINLINK FENCING AND A ROOF, STORAGE BUILDING (2 STORIES) FOR SURFSHOP, 2 PARKING LOT AREAS, 2-STORY BUILDING WITH RETAIL SPACE AT LOWER LEVEL AND 2 RESIDENTIAL UNITS ABOVE, AND VARIOUS AREAS OF LANDSCAPING.

PLANNING DATA

PROJECT COMMON ADDRESS:
505 SAN PEDRO AVENUE
PACIFICA, CA 94044

ASSESSORS PARCEL NUMBER:
023-072-010

ZONING:
C-2

BUILDING CODE DATA

TYPE OF OCCUPANCIES:	M/A5/S/R3/U
CONSTRUCTION TYPE:	VB
BEARING AND NON-BEARING WALLS (LESS THAN 5' FROM PROPERTY LINE):	1-HOUR
OPENINGS NOT PERMITTED LESS THAN 3' FROM PROPERTY LINE	
NUMBER OF STORIES:	2

ALL WORK TO CONFORM TO 2013 CBC, CFC, CPC, CMC, CEC, 2013 CALIFORNIA ENERGY CODE, AND 2013 CGBC

SYMBOLS

- SECTION CUT, DETAIL NUMBER / SHEET ON WHICH IT OCCURS
- DETAIL NUMBER / SHEET ON WHICH IT OCCURS
- REVISION CLOUD
- 1 — REVISION NUMBER
- 1 — GRIDLINE IDENTIFICATION
- +8'-0" — CEILING HEIGHT
- 2% SLOPE — DOWNSLOPE INDICATION
- SHOWER HEAD
- SD — SMOKE DETECTOR

DRAWING INDEX

ARCHITECTURAL / CIVIL	
A0.0	TITLE SHEET
A0.1	EXISTING SITE PHOTOS
C1.01	EXISTING CONDITIONS
C2.01	GRADING PLAN
C3.01	UTILITY PLAN
C4.01	SWMP
A1.0	OVERALL SITE PLAN
A1.1	PARTIAL SITE PLAN 1 OF 5
A1.2	PARTIAL SITE PLAN 2 OF 5
A1.3	PARTIAL SITE PLAN 3 OF 5
A1.4	PARTIAL SITE PLAN 4 OF 5
A1.5	PARTIAL SITE PLAN 5 OF 5
A2.1	BLDG #1 FLOOR AND ROOF PLANS
A2.2	SKATEPARK & BLDG #2 FLOOR AND ROOF PLANS
A2.3	BLDG #3 FLOOR AND ROOF PLANS
A3.1	BLDG #1 ELEVATIONS
A3.2	SKATEPARK & BLDG #2 ELEVATIONS
A3.3	BLDG #3 ELEVATIONS

FIRE NOTES

* FIRE SPRINKLER SYSTEM REQUIRED AT EACH PROPOSED BUILDING, UNDER A SEPARATE PERMIT. INSTALL PER NFPA 72.
* FIRE ALARM SYSTEM SHALL BE MONITORED PER 2013 CFC.
* SMOKE DETECTORS AND CARBON MONITORS REQUIRED PER 2013 CBC.
* KEY BOX REQUIRED (TO BE APPLIED FOR THROUGH FIRE DEPARTMENT).
* PORTABLE FIRE EXTINGUISHERS REQUIRED.
* CLEARLY VISIBLE ADDRESS IDENTIFICATION REQUIRED.
* UTILITY IDENTIFICATION REQUIRED.
* DOORS SHALL BE EASILY OPENABLE IN ONE MOTION WITHOUT SPECIAL KNOWLEDGE, KEY, ORE EFFORT PER 2013 CBC. USE OF THUMB OPERATED DEADBOLTS PROHIBITED, UNLESS INTEGRATED WITH LATCH.
* EXIT SIGNS AND EMERGENCY ILLUMINATION REQUIRED PER 2013 CBC.

PROJECT DIRECTORY

SERVICE	COMPANY	CONTACT	TELEPHONE
APPLICANT	NORCAL SURF SHOP	SHAWN RHODES	(650) 207-6508
OWNER	-	RICK LEE	-
DRAFTING / 3D RENDERINGS	-	BRIAN BRINKMAN	(650) 922-7993
GEOTECHNICAL ENGINEER	EARTH INVESTIGATIONS	JOEL BALDWIN	(650) 557-0262
BIOLOGICAL REPORT	THOMAS REID ASSOCIATES	PATRICK KOBERNUS	(650) 327-0429
HYDROLOGY STUDY / DESIGN	O'CONNELL DESIGNS	MIKE O'CONNELL	(650) 303-0495

PROJECT INFORMATION

LOT SIZE	37,538 SQ.FT.
PROPOSED LOT COVERAGE	13,081 SQ.FT. / 37,538 SQ.FT. = 34.85%
LANDSCAPED / NATURAL VEGETATION AREAS	7,941 SQ.FT. / 37,538 SQ.FT. = 21.15%
PAVED AREAS	16,516 SQ.FT. / 37,538 SQ.FT. = 44.00%
BLDG. #1 - NORCAL SURF SHOP	
BUILDING FOOTPRINT	3,500 SQ.FT.
LOCKERS/RENTALS FOOTPRINT	736 SQ.FT.
ARTIFICIAL SOD AREA	374 SQ.FT.
1ST FLOOR LEASABLE AREA	3,500 SQ.FT.
2ND FLOOR LEASABLE AREA	2,975 SQ.FT.
GROSS LEASABLE AREA	6,475 SQ.FT.
SKATEPARK	
ENCLOSED FOOTPRINT	4,730 SQ.FT.
BLDG. #2 - STORAGE BUILDING FOR SURF SHOP	
BUILDING FOOTPRINT	1,540 SQ.FT.
1ST FLOOR STORAGE AREA	1,540 SQ.FT.
2ND FLOOR STORAGE AREA	1,470 SQ.FT.
GROSS STORAGE AREA	3,010 SQ.FT.
BLDG. #3 - RETAIL SPACE WITH 2 RESIDENTIAL UNITS ABOVE	
BUILDING FOOTPRINT	2,516 SQ.FT.
GARBAGE/RECYCLING ENCLOSURE FOOTPRINT	107 SQ.FT.
GROSS LEASABLE AREA (RETAIL - 1ST FLOOR)	422 SQ.FT.
1ST FLOOR RESIDENTIAL GARAGE AREA	503 SQ.FT.
1ST FLOOR RESIDENTIAL COMMON AREA	159 SQ.FT.
1ST FLOOR RETAIL/OFFICE STORAGE AREA	161 SQ.FT.
2ND FLOOR RESIDENTIAL COMMON AREA	124 SQ.FT.
LIVING AREA (RESIDENTIAL UNIT #1)	1,077 SQ.FT.
DECK AREA (RESIDENTIAL UNIT #1)	113 SQ.FT.
LIVING AREA (RESIDENTIAL UNIT #2)	900 SQ.FT.
DECK AREA (RESIDENTIAL UNIT #2)	237 SQ.FT.
PARKING	
# OF SPACES ON SITE	24 UNCOVERED + 2 COVERED = 26

REV	DATE	DESCRIPTION
3	03/31/14	PRELIMINARY PLAN SET 2
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5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL

PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

SHEET TITLE:
TITLE SHEET

SHEET:
A0.0

VIEW OF THE PROPERTY LOOKING SOUTH FROM JUST TO THE NORTH

VIEW OF THE PROPERTY AND DRAINAGE CULVERT FROM THE NORTH

VIEW OF THE ENTRANCE TO THE PROPERTY FROM SAN PEDRO AVENUE

VIEW OF THE PROPERTY LOOKING SOUTHWEST FROM BEHIND THE EXISTING SHOPPING CENTER

VIEW OF THE NORTHERN END OF THE PROPERTY AND BEYOND, LOOKING FROM THE EAST

VIEW OF THE PROPERTY LOOKING NORTHEAST FROM ACROSS SAN PEDRO AVENUE

REV	DATE	DESCRIPTION
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A.P.N. 023-072-010
PACIFICA, CA 94044

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

SHEET TITLE:
PHOTOS OF SITE

SHEET:
A0.1

2-19-0026
Exhibit 3
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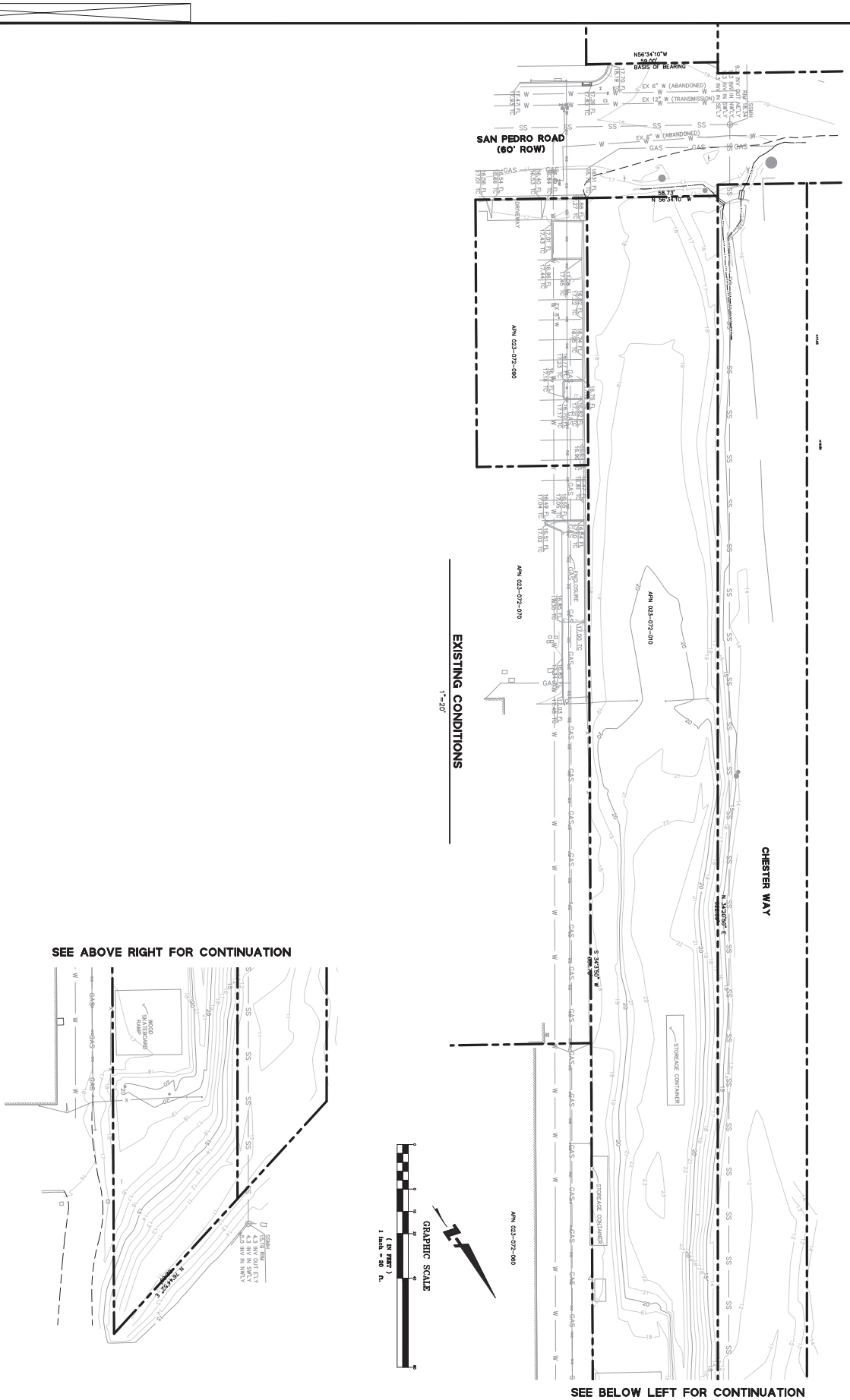


NORCAL SURF SHOP
TBD SAN PEDRO AVENUE
PACIFICA, CALIFORNIA

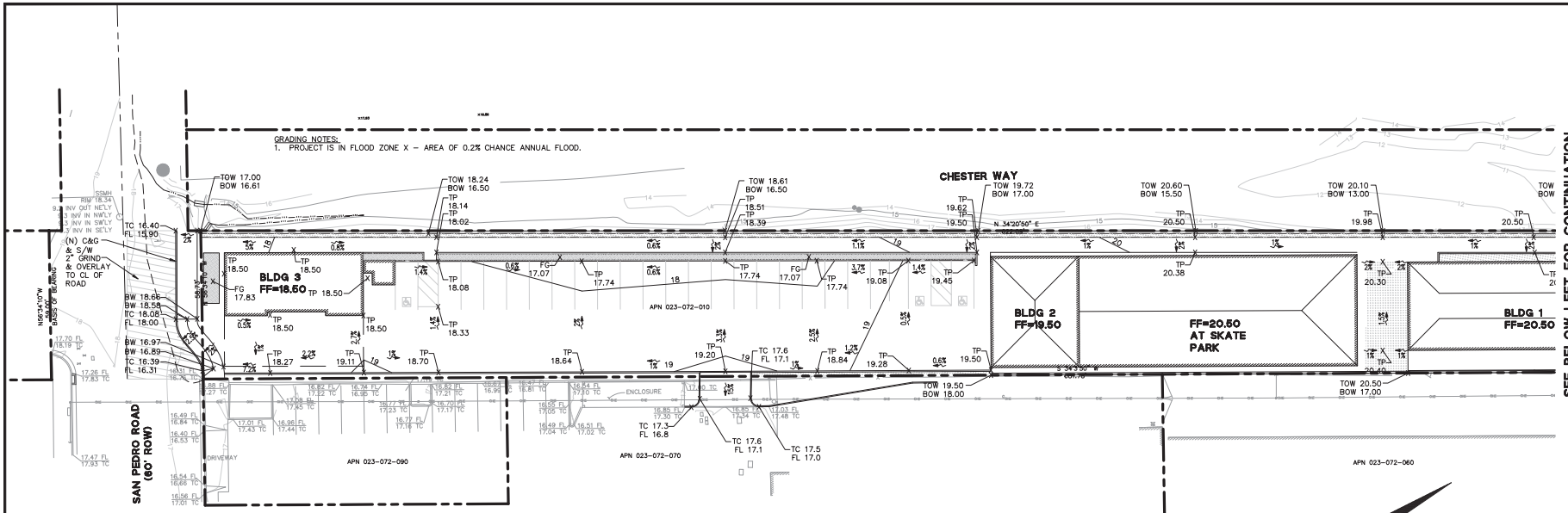
EXISTING CONDITIONS

No.	Revisions	Approved

MIKE O'CONNELL, P.E.
900 ROSITA ROAD
PACIFICA, CA 94044
650.303.0495

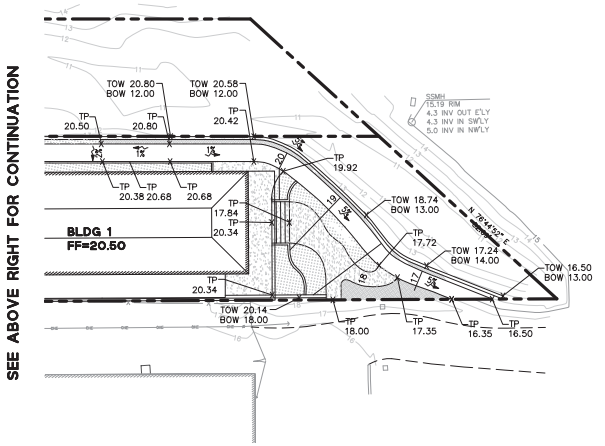
REGISTERED PROFESSIONAL ENGINEER
MICHAEL O'CONNELL
No. 75811
EXP. 06/30/16
CIVIL
STATE OF CALIFORNIA

DATE 3/15/15
SCALE 1"=20'
DRAWN MO
JOB NO. 2015-007
SHEET C1.01



PRELIMINARY GRADING PLAN
1"=20'

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.



PRELIMINARY GRADING PLAN CONTINUED
1"=20'

MIKE O'CONNELL, P.E.
900 ROSITA ROAD
PACIFICA, CA 94044
650.303.0495

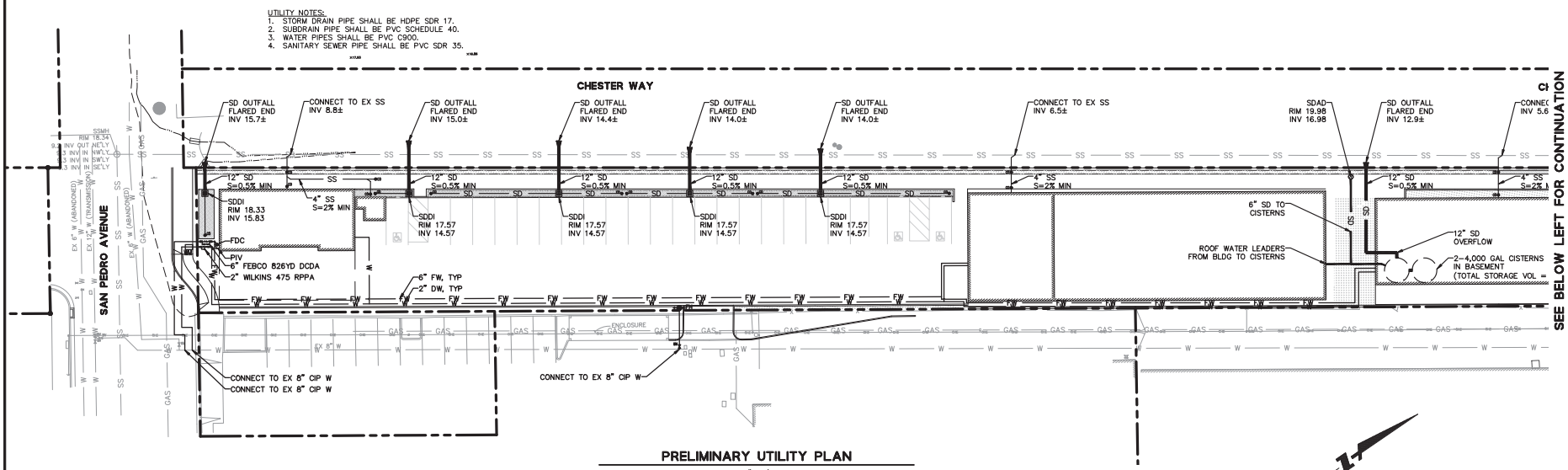
GRADING PLAN

No.	Revisions	Approved

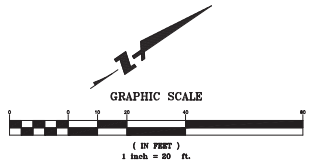
NORCAL SURF SHOP
TBD SAN PEDRO AVENUE
PACIFICA, CALIFORNIA

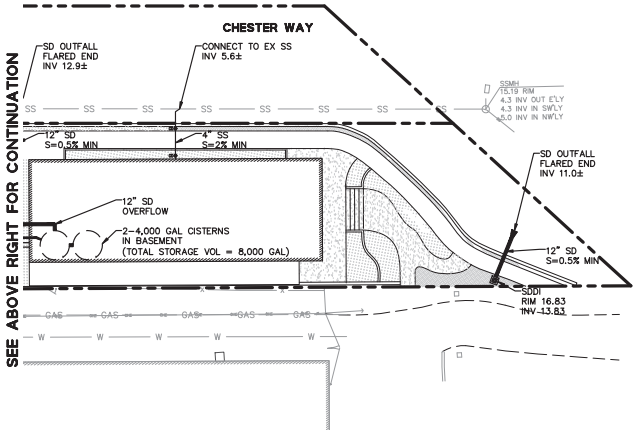
REGISTERED PROFESSIONAL ENGINEER
No. 75811
EXP. 06/30/16
CIVIL
STATE OF CALIFORNIA

DATE	3/15/15
SCALE	1"=20'
DRAWN	MO
JOB NO.	2015-007
SHEET	C2.01



PRELIMINARY UTILITY PLAN
1"=20'





PRELIMINARY UTILITY PLAN CONTINUED
1"=20'

MIKE O'CONNELL, P.E.
900 ROSITA ROAD
PACIFICA, CA 94044
650.303.0495

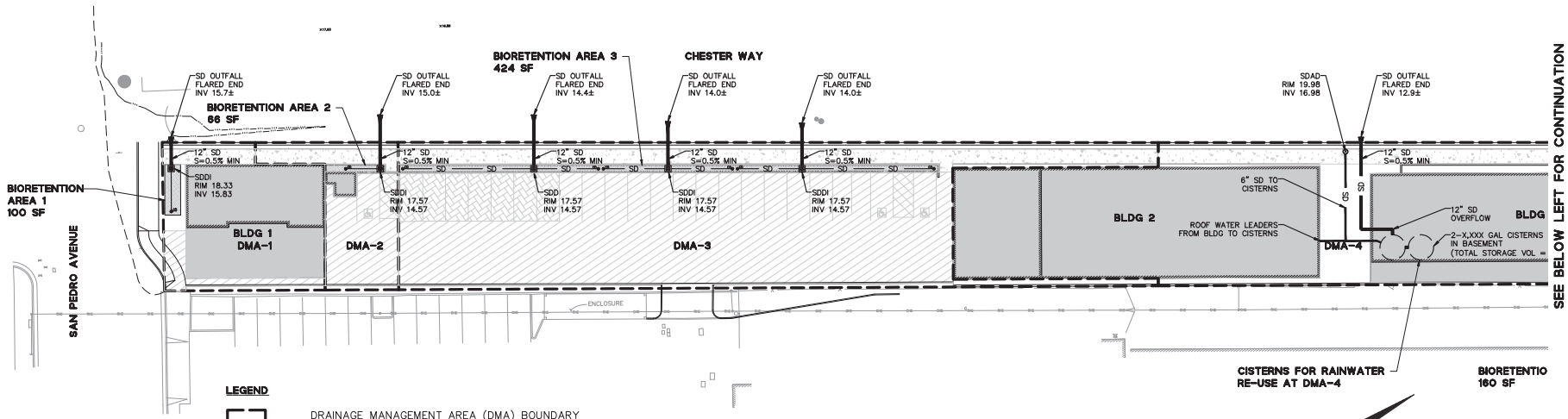
PRELIMINARY UTILITY PLAN

No.	Revisions	Approved

NORCAL SURF SHOP
TBD SAN PEDRO AVENUE
PACIFICA, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. 75811
EXP. 06/30/16
CIVIL
STATE OF CALIFORNIA

DATE	3/15/15
SCALE	1"=20'
DRAWN	MO
JOB NO.	2015-007
SHEET	C3.01

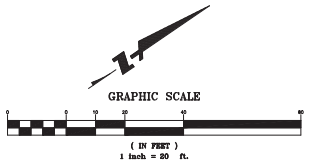


LEGEND

- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- ROOF AREA
- PAVEMENT AREA
- SIDEWALK AREA
- PERVIOUS LANDSCAPE AREA
- PERVIOUS PAVERS

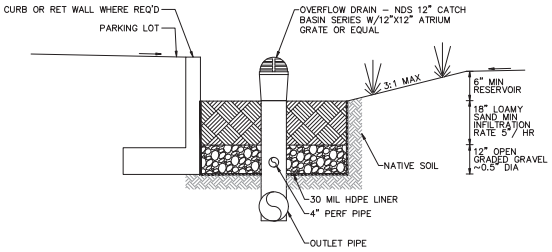
PRELIMINARY STORMWATER MANAGEMENT PLAN

1"=20'



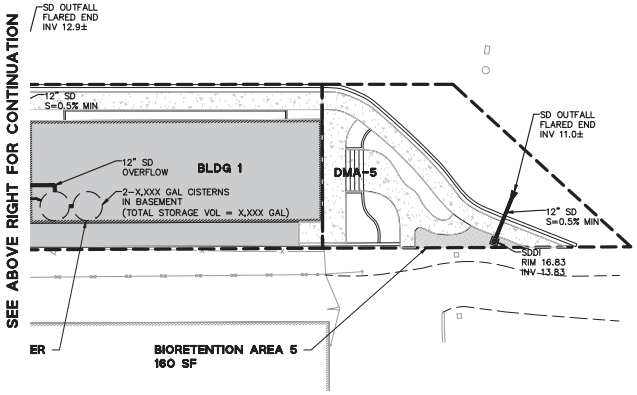
Stormwater Management Compliance Table

Drainage Management Area	Area (SF)	Roof Area (SF)	Pavement Area (SF)	Sidewalk Area (SF)	DMA Impervious Area (SF)	DMA Pervious Area (SF)	Bioretention Area Required (SF)	Bioretention Area Provided (SF)
DMA-1	3,504	2,482	375	225	3,082	422	123	125
DMA-2	1,928	169	1,187	356	1,690	278	86	86
DMA-3	17,266	--	8,479	1,602	10,296	6,967	410	410
DMA-4	13,918	10,570	--	1,103	11,673	2,245	N/A - Cisterns	N/A - Cisterns
DMA-5	4,170	--	--	1,447	1,447	2,723	58	160
Total	40,786	13,159	10,040	4,952	28,151	12,635	--	--



TYPICAL BIORETENTION PLANER DETAIL

1"=20'



PRELIMINARY STORMWATER MANAGEMENT PLAN CONTINUED

1"=20'

MIKE O'CONNELL, P.E.
900 ROSITA ROAD
PACIFICA, CA 94044
650.303.0495

PRELIMINARY STORMWATER MANAGEMENT PLAN

No.	Revisions	Approved

NORCAL SURF SHOP
TBD SAN PEDRO AVENUE
PACIFICA, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
MIKE O'CONNELL
No. 75811
EXP. 06/30/16
CIVIL
STATE OF CALIFORNIA

DATE	3/15/15
SCALE	1"=20'
DRAWN	MO
JOB NO.	2015-007
SHEET	C4.01

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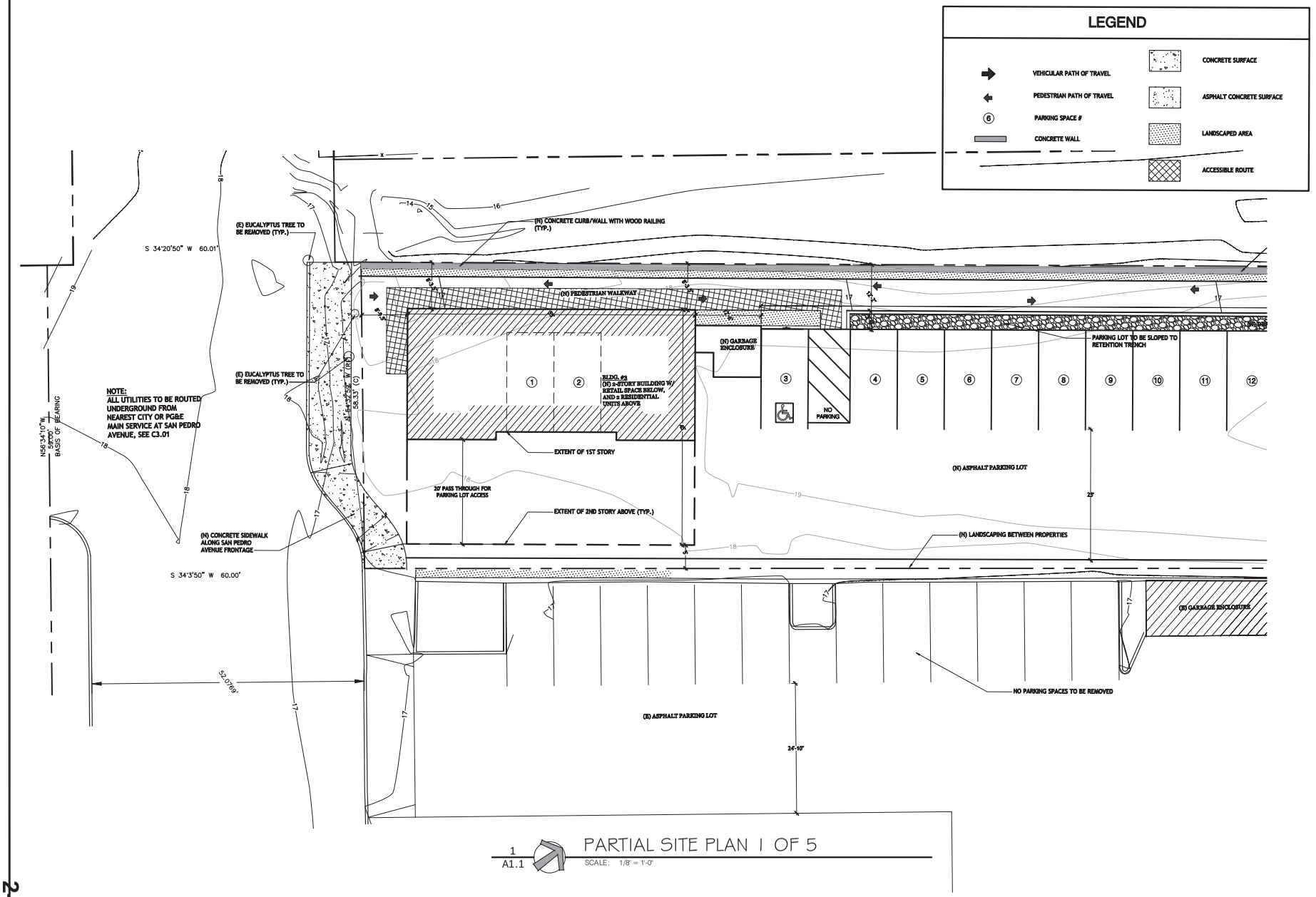
PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
OVERALL SITE PLAN

SHEET:
A1.0



1 / A1.1 PARTIAL SITE PLAN 1 OF 5

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

REV.	DATE	DESCRIPTION
3	03/31/14	PRELIMINARY PLAN SET 2
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NORCAL SURF SHOP
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PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

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A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
PARTIAL SITE PLAN 1 OF 5

SHEET:
A1.1

REV	DATE	DESCRIPTION
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PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
PARTIAL SITE PLAN 2 OF 5

SHEET:
A1.2

LEGEND

- VEHICULAR PATH OF TRAVEL
- PEDESTRIAN PATH OF TRAVEL
- PARKING SPACE #
- CONCRETE WALL
- CONCRETE SURFACE
- ASPHALT CONCRETE SURFACE
- LANDSCAPED AREA
- ACCESSIBLE ROUTE

(N) CONCRETE CURB/WALL WITH WOOD RAILING (TYP.)

(N) PEDESTRIAN WALKWAY

(N) 6' HIGH CONCRETE WALL BETWEEN PARKING LOT AND PEDESTRIAN WALKWAY WITH LIGHTS (E) WALL FOR PARKING AREA (SIMILAR TO BEACH PARKING LOT)

PARKING LOT TO BE SLOPED TO RETENTION TRENCH

(N) ASPHALT PARKING LOT

(N) LANDSCAPING BETWEEN PROPERTIES

NEW GATE WITH KNOX BOX FOR NORTH COAST FIRE AUTHORITY USE WHEN NEEDED. GATE TO BE CLOSED AT ALL OTHER TIMES.

(E) ASPHALT PARKING LOT

(E) ASPHALT ALLEYWAY

(E) RETAIL BUILDING (TYP.)

(E) ASPHALT PARKING LOT

(E) RETAIL BUILDING (TYP.)

(E) ASPHALT PARKING LOT

(E) GARAGE BUILDINGS

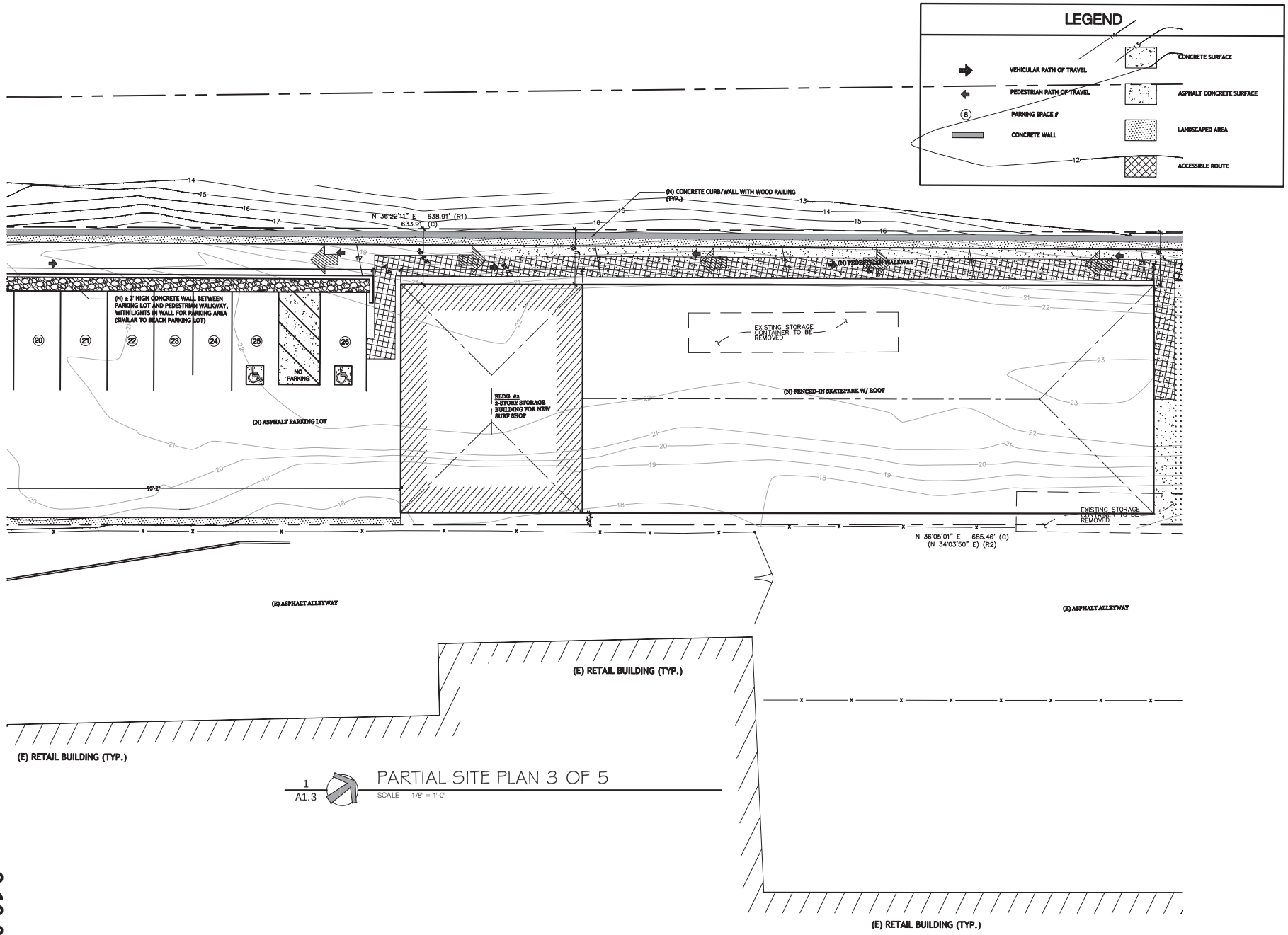
NO PARKING SPACES TO BE REMOVED

NO PARKING

1 A1.2

PARTIAL SITE PLAN 2 OF 5

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



1 A1.3 PARTIAL SITE PLAN 3 OF 5

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

REV	DATE	DESCRIPTION
3	03/31/14	PRELIMINARY PLAN SET 2
4	04/16/14	PLANNING SUBMITTAL
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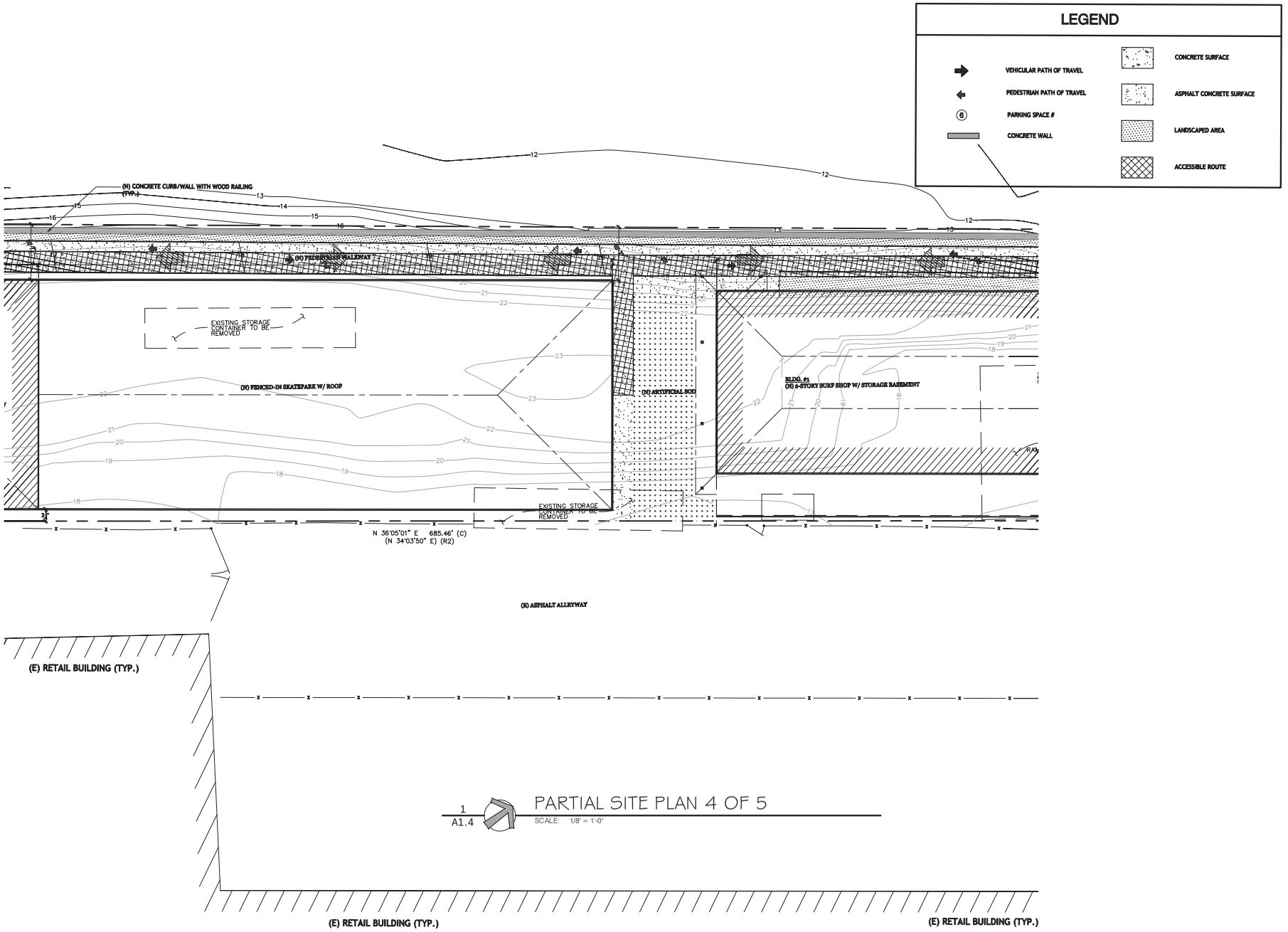
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
PARTIAL SITE PLAN 3 OF 5

SHEET:
A1.3



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PARTIAL SITE PLAN 4 OF 5

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

REV.	DATE	DESCRIPTION
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4	04/16/14	PLANNING SUBMITTAL
5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL

PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
PARTIAL SITE PLAN 4 OF 5

SHEET:
A1.4

REV	DATE	DESCRIPTION
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4	04/16/14	PLANNING SUBMITTAL
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7	01/20/16	PLANNING RESUBMITTAL

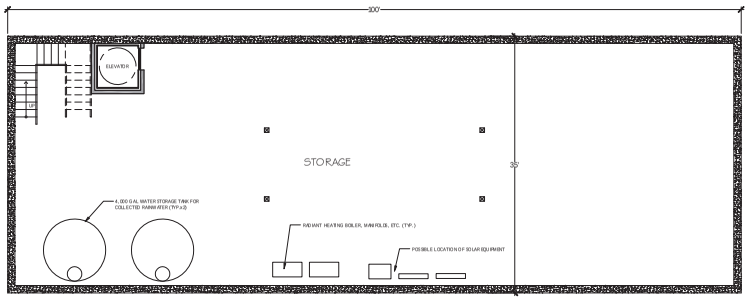
PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
PARTIAL SITE PLAN 5 OF 5

SHEET:
A1.5



1 A2.1 BLDG #1 BASEMENT FLOOR PLAN
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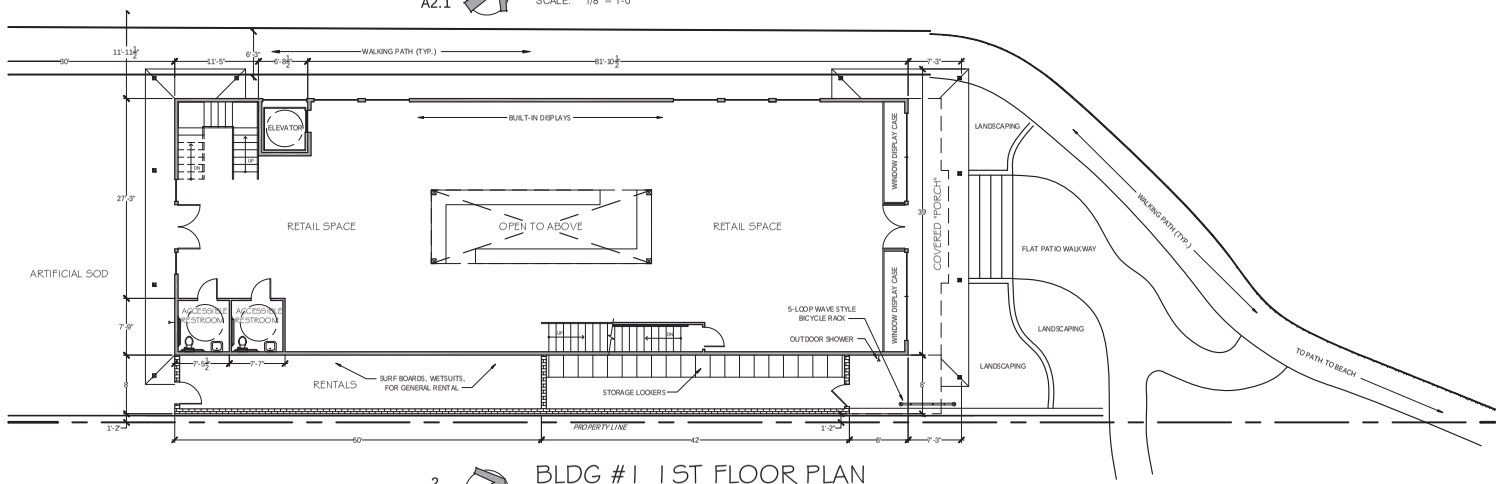

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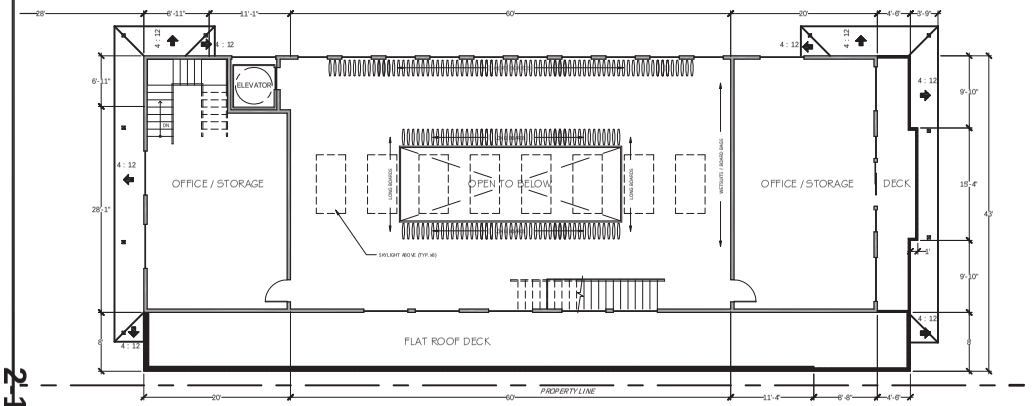

3 A2.1 BLDG #1 2ND FLOOR PLAN
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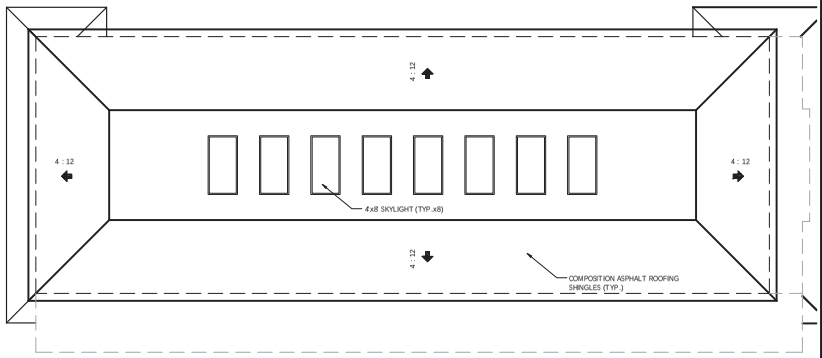

4 A2.1 BLDG #1 ROOF PLAN
SCALE: 1/8" = 1'-0"

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4	04/16/14	PLANNING SUBMITTAL
5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL

PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
BLDG #1
FLOOR AND
ROOF PLANS

SHEET:
A2.1

REV	DATE	DESCRIPTION
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4	04/16/14	PLANNING SUBMITTAL
5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL

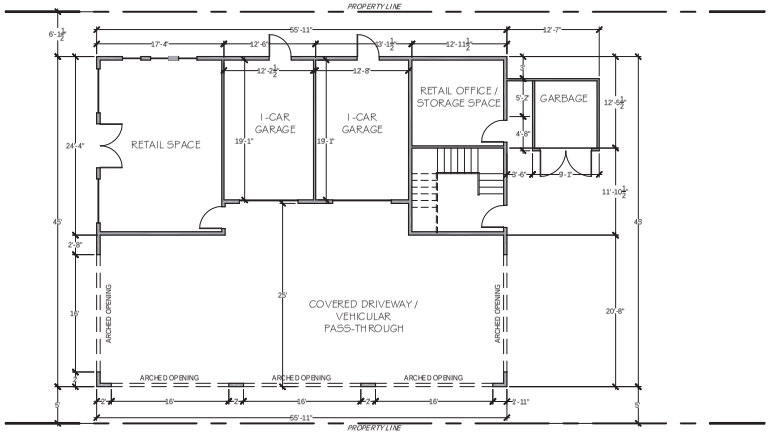
PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
SKATEPARK & BLDG #2 FLOOR AND ROOF PLANS

SHEET:
A2.2



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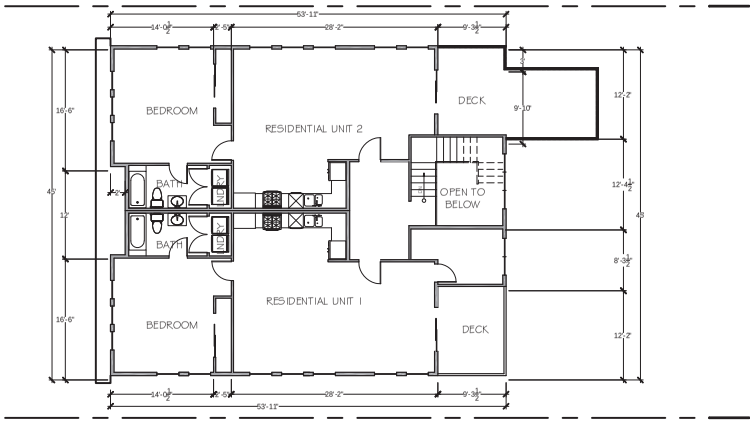

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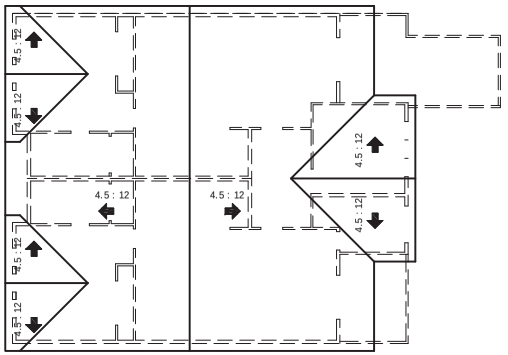

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REV.	DATE	DESCRIPTION
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4	04/16/14	PLANNING SUBMITTAL
5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL

PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
BLDG #3
FLOOR AND
ROOF PLANS

SHEET:
A2.3

2-19-0026
Exhibit 3
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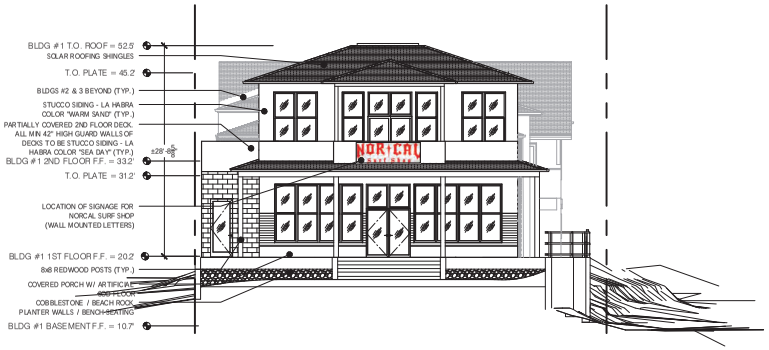
1 A3.1 BLDG #1 NORTHWEST ELEVATION

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



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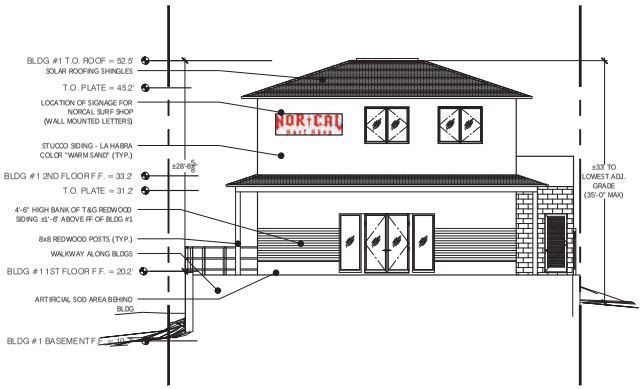

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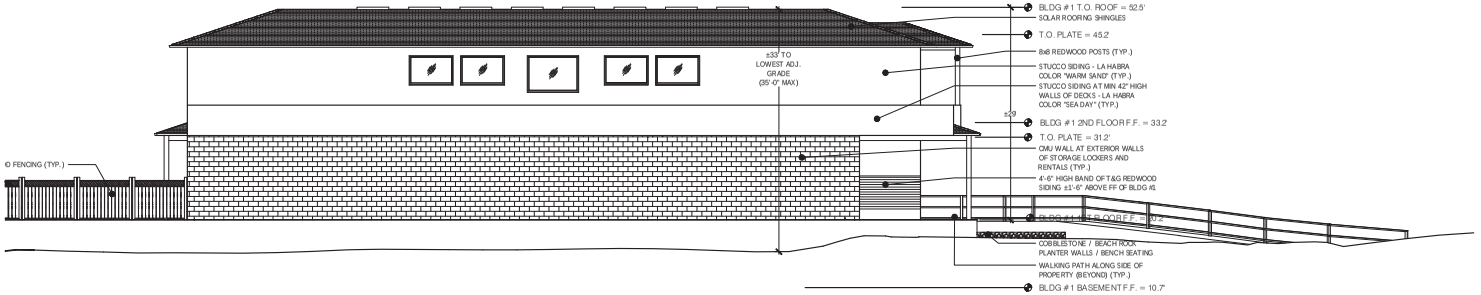

4 A3.1 BLDG #1 SOUTHEAST ELEVATION

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

REV	DATE	DESCRIPTION
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5	10/06/14	PLANNING SUBMITTAL
6	04/13/15	DESIGN REVIEW COMMENTS
7	01/20/16	PLANNING RESUBMITTAL
8	04/10/17	BLDG #1 MINOR EXTERIOR CHANGES

PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

SHEET TITLE:
BLDG #1 ELEVATIONS

SHEET:
A3.1

2-19-0026
Exhibit 3
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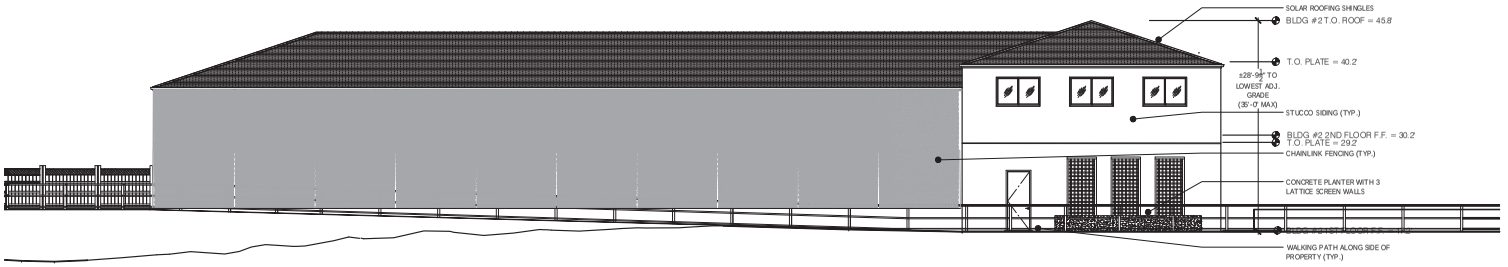

1 A3.2 SKATEPARK & BLDG #2 NORTHWEST ELEVATION

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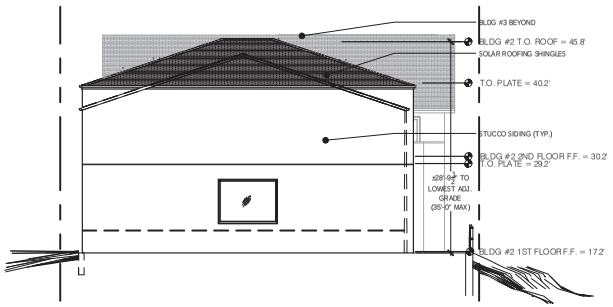
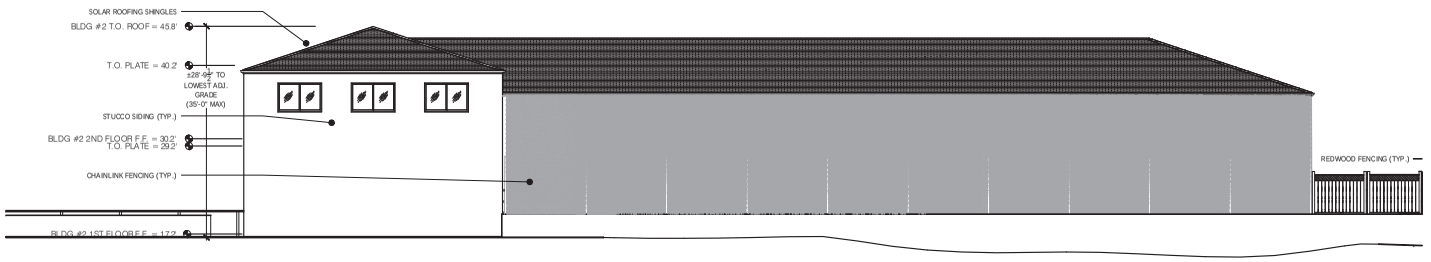


2 A3.2 SKATEPARK & BLDG #2 NORTHEAST ELEVATION

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

3 A3.2 SKATEPARK & BLDG #2 SOUTHWEST ELEVATION

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



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REV.	DATE	DESCRIPTION
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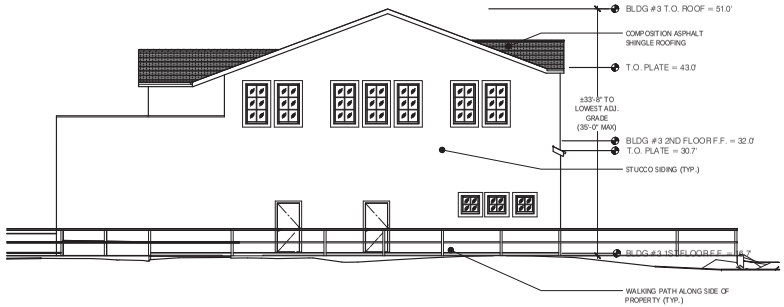
PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

SHEET TITLE:
SKATEPARK & BLDG #2 ELEVATIONS

SHEET:
A3.2



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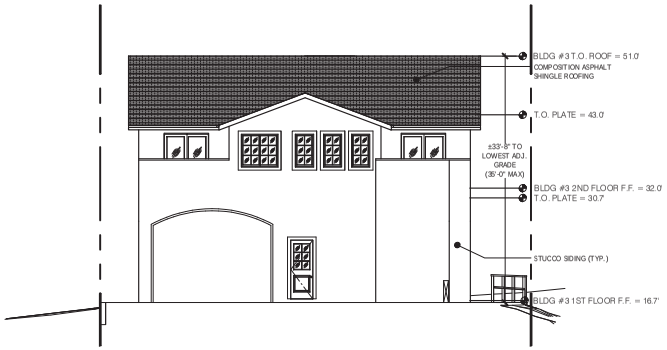

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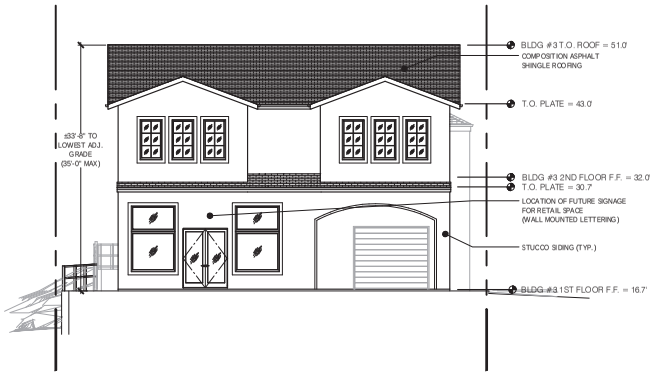

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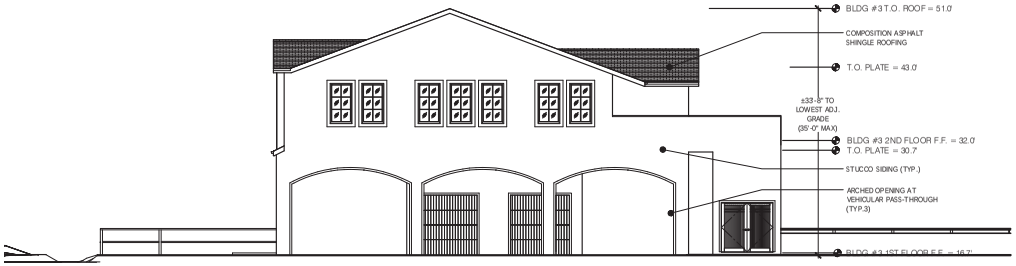

4 A3.3 BLDG #3 SOUTHEAST ELEVATION

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

REV.	DATE	DESCRIPTION
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PROJECT NAME:
NORCAL SURF SHOP
DEVELOPMENT OF VACANT LOT

PROJECT ADDRESS:
A.P.N. 023-072-010
PACIFICA, CA 94044

PROJECT SCOPE:
DEVELOPMENT OF EXISTING VACANT LOT ON PEDRO POINT

SHEET TITLE:
BLDG #3 ELEVATIONS

SHEET:
A3.3

CITY OF PACIFICA
Planning, Building, and Code Enforcement
1800 Francisco Blvd. • Pacifica, California 94044-2506
(650) 738-7341 • www.cityofpacifica.org

Scenic Pacifica
Incorporated Nov. 22, 1957

NOTICE OF FINAL LOCAL ACTION

California Coastal Commission
Attn: Patrick Foster, Coastal Planner
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

November 20, 2018

VIA CERTIFIED MAIL

RE: **Coastal Development Permit CDP-346-14, 505 San Pedro Avenue (APN 023-072-010)**

Pursuant to Coastal Act Section 30603(d), Coastal Commission Regulations Section 13571, and Pacifica Zoning Code Section 9-4.4304(n), this notice will serve to confirm that the City of Pacifica approved the above-referenced Coastal Development Permit, and to furnish the following additional information:

APPLICANT NAME/ADDRESS: Shawn Rhodes, 5460 Coast Highway, Pacifica, CA 94044

PROJECT DESCRIPTION: (Note: A portion of the site is located within the Coastal Commission's permit jurisdiction; however, the following description is applicable to the project as a whole.) File No. 2014-002 – Construction of three buildings and associated improvements as follows: Building #1 – two-story surf shop building for retail sales, surfboard rentals, lockers, and office/storage space with a storage basement and outdoor shower; Building #2 – two-story building for storage and surfboard shaping attached to a covered skatepark enclosed by an open-work fence; Building #3 – two-story mixed-use building with retail space and office/storage on the ground floor and two residential units on the second story; Off-street parking area for 24 uncovered car spaces and two garage spaces on the first floor of Building #3 for the residential units above with the request for a reduction in off-street parking and covered parking requirements; and, removal of two heritage trees.

DECISION: The subject permit was approved by the Planning Commission of the City of Pacifica on November 5, 2018, based on the required findings contained and adopted in the resolution of approval.

APPEAL PROCEDURES: The appeals process may involve the following:

LOCAL
- ☒ The local appeal period ended on 11/15/2018, and no appeal was filed; or,
- ☐ The permit was appealed to and decided by the City Council, exhausting the local appeals process.

STATE
- ☒ The project IS within the Appeals Zone and the permit IS appealable to the State of California Coastal Commission if the appeal is made in writing to the Coastal Commission prior to the close of business on the 10th working day from the date of receipt of this notice by the Executive Director of the Commission. For additional information, contact the California Coastal Commission, 45 Fremont Street, Suite 2000, San Francisco, CA 94105-2219, (415) 904-5260; or,
- ☐ The project is NOT in the Appeals Zone and the permit is NOT appealable to the Coastal Commission.

Additional information may be obtained by contacting the Pacifica Planning Department at 1800 Francisco Boulevard, Pacifica, CA 94044, (650) 738-7341.

Tina Wehrmeister
Planning Director

Attachments: ☒ Resolution of Approval with conditions ☒ Staff Report(s) ☒ Meeting Minutes ☒ Project Plans

505 SAN PEDRO AVENUE, PACIFICA
WETLAND DELINEATION

PREPARED FOR:

Shawn Rhodes

PREPARED BY:

Coast Ridge Ecology, LLC
1410 31st Avenue
San Francisco, CA 94122

November 2019

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APPENDICES

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

This report presents the results of a formal delineation of waters of the United States, including wetlands, at an undeveloped property (drainage channel) adjacent to 505 San Pedro Avenue, Pacifica, California (APN 023-72-010). The property drainage channel is within an unaccepted city of Pacifica Right of Way. The purpose of the delineation of the drainage channel is to assist the California Coastal Commission in identifying the type and extent of waters subject to federal and state jurisdiction and to inform potential impacts from future development of the adjacent property at 505 San Pedro Avenue.

Fieldwork was performed by Coast Ridge Ecology staff biologists in September and October 2019 using the routine determination method described in the *1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual,* in incorporation with the USACE 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0*). Wetland vegetation types were mapped in the field using a Trimble GeoExplorer unit on September 18, October 21, and October 25, 2019.

Field data was analyzed to determine a wetland boundary. A total of 0.088 acres of potentially jurisdictional federal wetlands (i.e. three-parameter) are present within the study area and may be subject to jurisdiction under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. A total of 0.248 acres of potentially jurisdictional state wetlands (i.e. one-parameter) are present within the study area, and may be subject to jurisdiction under the California Coastal Commission. Wetland areas within the study area are composed of freshwater wetlands dominated by water smartweed (*Persicaria amphibia*), arroyo willow *(Salix lasiolepis*), small-fruited bulrush *(Scirpus microcarpus*), and perennial rye grass *(Festuca perennis*). These wetlands are all located within portions of the channel bottom of the drainage channel, with the exception of the one-parameter Arroyo willow wetlands on the north side of the drainage channel, which extend up the channel bank. **Appendix A** provides completed data sheets for the study area. **Appendix B** provides representative photographs.

The drainage channel feature adjacent to the property at 505 San Pedro Avenue is a man-made constructed feature, that is highly degraded due to construction and ongoing maintenance of a City of Pacifica sewer line that runs underneath the feature. The channel has been used as an illegal dumping area for decades and refuse such as gas cans, mattresses, appliances, plastic garbage, concrete rubble, bricks, and other refuse are present within the channel and buried within the soil.

In the city of Pacifica, construction projects within the coastal zone are regulated through the City's Local Coastal Land Use Plan (LCLUP). The City regulates construction projects through the LCLUP, to bring projects into conformance with the California Coastal Act of 1976.

The LCLUP states that "As a general rule, a buffer of at least 100 feet measured from the outward edge of riparian vegetation would be appropriate unless such a width is determined to be unnecessary for protecting the resources of the habitat area". The California Coastal Commission has required buffers of 100 feet from the edge of riparian vegetation in areas where such buffers are feasible. However, it is not unusual for the Commission to allow smaller buffers in urbanized areas where the existing land use patterns do not allow for increased riparian buffer areas.

Based on the existing condition of the drainage channel, and the setback distances, the proposed project would not present a source of physical, chemical or biological disturbance to the wetland habitats including the arroyo willow stand (AW-1). Additional measures to ensure the channel is not impacted by construction activities would include planting of native plant species suitable for the boundary area adjacent to the channel, and installation of appropriate erosion/ sediment controls such as silt fencing, fiber rolls, and erosion control blankets along the top of the bank. These measures would be suitable to protect the resource and improve the quality of this resource.

Any economic use of the subject property would result in a reduction of the recommended 100-foot buffer because of the proximity of any development on the property to wetland habitat. The CCC has established precedent by issuing permits allowing even more intensive uses that resulted in direct impacts to sensitive coastal resources, consistent with the mandate of Coastal Act § 30010 that prevents taking of private property without compensation (see CCC Appeal Numbers A-2-SMC-11-040 & A-2-SMC-11-041 concerning a controversial project near Half Moon Bay that was ultimately approved).

These conclusions should be regarded as preliminary and subject to verification by the U.S. Army Corps of Engineers prior to performing any work that would impact wetland resources on site.

2. SETTING

2.1 SITE DESCRIPTION

The study area encompasses approximately 1.6 acres of land located at 505 San Pedro Avenue (project site) and the drainage channel adjacent to the property in Pacifica, California. The applicant (Shawn Rhodes) is proposing to develop the parcel at 505 San Pedro Avenue, which is 0.86 acres. The adjacent drainage channel is 0.74 acres. The drainage channel is located to the west of the property within an unaccepted city right of way. This delineation was conducted to provide additional information on the drainage channel, in response to California Coastal Commission letter dated July 2, 2019 regarding Coastal Development Permit (CDP) Application Number 2-19-0026 (construction of a mixed-use scheme, including three buildings, a skate park, and a parking lot in Pacifica.

The site is bordered by the Pedro Point Shopping Center to the East, San Pedro Avenue to the south, and residential properties to the north. The area is highly developed, and the property is surrounded by residential and commercial developments on all sides. The Pacific Ocean is located approximately 210 feet to the northwest. Topography on the project site is variable, as is located on an elevated berm-like feature. The top of the berm runs southwest-northeast through the approximate center of the property, and slopes downwards towards the drainage channel on the west side and the shopping center on the east side. Elevations at the study area range from approximately 14 to 23 feet. **Figure 1** shows the project boundaries and location. Photographs of the project site can be found in **Appendix B**.

The drainage channel was created most likely as an irrigation ditch for farming prior to the 1950's. The City of Pacifica constructed a sewer line below the channel, with sewer manholes in two locations within the channel, at some point later (in the 1960's possibly). The channel bed and banks are categorized as 'urban' soil type due the history of disturbance to the channel and its location adjacent to a 5-acre commercial shopping center and parking lot. Urban runoff from the local community of Pedro Point flows into the channel which then empties through a culvert and into San Pedro Creek on the north side of the 505 San Pedro Avenue property.

2.2 PROJECT DESCRIPTION

The property (APN 023-72-010) is located on San Pedro Avenue in Pacifica, California. The property is 0.86 acres in size (37,273 ft.^{2}) and is located on the west side of Highway 1 in the Pedro Point area. The site is located within the coastal zone and is subject to the City of

Pacifica's Local Coastal Land Use Plan. The property is zoned as commercial and is within the Pedro Point – Shelter Cove Land Use Plan Area, and is outside of any special areas delineated in the Local Coastal Land Use Plan (City of Pacifica, 1992). The site is a narrow, rectangular strip of land (755 feet long x 55 feet wide) and is bounded by San Pedro Road on the south, a drainage channel and open field on the west, a strip mall/shopping area to the east and a parking lot on the north. San Pedro Creek and the Pacific Ocean are located further to the north, and northwest of the parking lot. The surrounding area is single family residential homes and small businesses.

The project intends to develop a currently vacant lot into commercial and residential buildings. The development will consist of a 2-story surf shop building with storage basement (3,500 ft^2), a skatepark enclosed within chain-link fencing and a roof (4,730 ft^2), a 2-story storage building for the surf shop (1,540 ft^2), 2 parking lot areas (16,513 ft^2), a 2-story building with retail space at the lower level and 2 residential units above (2,516 ft^2), and various areas of landscaping (7,302 ft^2). The project would be constructed within an upland area that is behind an existing shopping center, and would include a public access easement (pedestrian trail) that would extend along the western boundary of the site, along the top of bank of an adjacent drainage channel. The project area and adjacent drainage channel have been heavily disturbed by grading activities in the past. The adjacent drainage channel would not be directly impacted by the proposed project.

This wetland delineation was conducted on the adjacent drainage channel, which is designated as an unaccepted right of way (identified as 'Chester Way') on the most current San Mateo County Assessor's parcel map.

Figure 1: Project Location for APN 023-72-010

2.3 VEGETATION

Vegetation at the study site (drainage channel) can be categorized into several different natural communities based upon plant species composition. The boundaries between communities can be distinct, or can change gradually over an area. Due to the semi-developed nature of the project site, vegetation types in this analysis are based upon, but do not strictly follow, species alliances described by the California Native Plant Society (CNPS) Manual of California Vegetation. Natural communities on the site include arroyo willow thicket, coastal brambles, eucalyptus grove, kikuyu grass sward, Monterey cypress stand, perennial rye grass fields, small-fruited bulrush marsh, smartweed patch, upland mustards/ruderal and ornamental.

2.3.1 Arroyo Willow Thicket

The arroyo willow thicket community is dominated by arroyo willow (*Salix lasiolepis*). This plant community is found within the drainage at the northeast terminus of the drainage. It is comprised of dense arroyo willow trees. Arroyo willows are a facultative wetland (FACW) plant, found more frequently in wetlands than outside of them.

2.3.2 Coastal Brambles

The coastal brambles plant community is characterized as being heavily dominated by brambles (*Rubus sp.*). Within the study area, this plant community is primarily made up of dense California blackberry (*Rubus ursinus*) vines, with the ornamental species multiflora rose (*Rosa multiflora*) and California privet (*Ligustrum ovalifolium*) occasionally present at lower densities. The coastal brambles plant community is found along the banks of the drainage channel, sometimes extending into the channel itself. California blackberry is a Facultative plant (FAC), found equally often in wetland and upland habitats. Multiflora rose and California privet are considered upland species (UPL). Due to the prevalence of dominant upland species within this habitat, it is not considered a wetland.

2.3.3 Eucalyptus Grove

Two groves of mature blue gum (*Eucalyptus globulus*) trees are present at the western and southwestern portions of the study area. Large blue gum trees make up the overstory of this community, while the understory is primarily composed of eucalyptus duff and English ivy (*Hedera helix*). Blue gum is an upland (UPL) species, and English ivy is considered a Facultative Upland (FACU) species more likely to be found in upland habitats.

2.3.4 Kikuyu Grass Sward

Swards of the invasive Kikuyu grass (*Pennisetum clandestinum*) are present within the bottom of the drainage channel. These areas are completely dominated by Kikuyu grass with no other vegetation present. This species is considered a Facultative Upland (FACU) plant, being found more often in upland habitats. The presence of Kikuyu grass indicates that there is unlikely to be significant soil inundation (and thus wetland habitat) in this portion of the drainage channel.

2.3.5 Monterey Cypress Stand

One stand of Monterey cypress (*Hesperocyperus macrocarpa*) is present within the study area along the western bank of the channel. Vegetative cover within this stand is entirely made up of Monterey cypress, as the density of the trees prevents any understory vegetation from growing beneath them. Monterey cypress is ranked UPL.

2.3.6 Ornamental

The ornamental vegetation community is made up of non-native ornamental plant species that are not widespread enough in natural areas to possess a community designation. Within the study site, areas of ornamental vegetation are dominated by garden nasturtium (*Tropaeolum majus*), English ivy (*Hedera helix*), or cape ivy (*Delairea odorata*). Where present, each species provides nearly 100 percent of the vegetative cover. These areas heavily dominated by non-native vegetation are primarily found along the eastern bank of the drainage channel. All of these plants are considered upland species.

2.3.7 Perennial Rye Grass Fields

This plant community is dominated by perennial rye grass (*Festuca perennis*). Individual curly and green dock (*Rumex crispus/Rumex conglomeratus*) plants are also present at lower densities. Perennial fescue is a Facultative wetland plant (FAC), equally likely to be found inside or outside of wetland habitats. Curly dock is also a FAC plant, while green dock is considered a FACW plant.

2.3.8 Small-fruited Bulrush Marsh

This plant community is dominated by small-fruited bulrush (*Scripus microcarpus*). One small patch of these plants is present within the drainage channel, where they make up 100 percent of the vegetative cover. Small-fruited bulrush is an Obligate wetland species (OBL), only being found within wetland habitats.

2.3.9 Smartweed Patch

This plant community is primarily dominated by smartweed (*Persicaria sp.*). Within the study area, this community is dominated by water smartweed (*Persicaria amphibia*), a wetland obligate species (OBL). Other plant species observed growing beneath and around the smartweed include silverweed cinquefoil (*Potentilla anserina*), dock (*Rumex sp.*), and California blackberry (*Rubus ursinus*). These plants are only found within the wetter portions of the drainage channel.

2.3.10 Upland Mustards and Ruderal Forbs

This plant community is dominated by non-native mustards and other invasive species. Within the study area, this habitat is heavily dominated by wild radish (*Raphanus sativus*), which dominates the vegetative cover along the eastern bank/berm and upland portions of the site. Small patches of fennel (*Foeniculum vulgare*) can also be found within this community. These plants are designated as upland (UPL) species.

2.4 SOILS

Only one soil type is present within the study area: Urban land. Urban land is defined by the USDA NRCS as areas where 85% or more of the ground surface is covered by asphalt, concrete, buildings, and other structures (USDA SCS 1991). **Appendix C** provides a soils map of the study area.

2.5 HYDROLOGY

The project site consists of a vacant lot and does not contain any watercourses or wetland habitats. Aquatic features within a 100-meter radius of the project site include the Pacific Ocean**,** San Pedro Creek **(**approximately 75 meters northeast of the site**)**, and an intermittent drainage channel on the west side of the project site

The drainage channel was created most likely as an irrigation ditch for farming prior to the 1950's. At some point later (in the 1960's possibly), the City of Pacifica constructed a sewer pipe that runs below the open channel for most of the channel's length. Two sewer manholes are located in the channel bottom. During rain events, urban stormwater runoff from the local community of Pedro Point flows into the channel which then empties through a culvert into San Pedro Creek to the north side of the property.

3. METHODOLOGY

This wetland delineation was conducted in accordance with the USACE 1987 *Corps of Engineers Wetlands Delineation Manual* along with the USACE 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*. A Level 3 Determination (*i.e.,* a combination of onsite inspection and aerial review) was conducted as defined in the *Wetland Delineation Manual*.

The location of the project site is within the boundary zone between the Arid West Region and the Western Mountains, Valleys, and Coast Region. The climatic conditions and vegetation in Pacifica overlaps with what is described in both supplements. Both regional supplements include coastal areas, and a reasonable justification could be made to support the use of either supplement. The Western Mountains regional supplement was chosen as the appropriate manual based on vegetation and climate; including the following:

Arid West: Generally hot and dry with long summer dry season. Average annual precipitation mostly <15", except along the coast. Most precipitation falls as rain.

Western Mountains, Valleys and Coast: Cooler and more humid with a shorter dry season. Average annual precipitation mostly >20" except near the coast. Much of the annual precipitation falls as snow, particularly at higher elevations.

Average annual precipitation in Pacifica is approximately 32"[1]. Due to heavy fog during the summertime especially, the amount of water available to vegetation is much greater due to fog drip.

3.1 DEFINITION OF TERMS

The following section provides key definitions of terms used in this report that are relevant to the delineation of wetlands and other waters of the US.

Waters of the United States: Title 33, Chapter II, Part 328.3 of the Code of Federal Regulations defines waters of the United States as:

(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;

[1] https://www.ncdc.noaa.gov/cdo-web/datatools/normals

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
    a. which are or could be used by interstate or foreign travelers for recreational or other purposes;
    b. or from which fish or shellfish are or could be taken and sold in interstate or foreign commerce;
    c. or which are used or could be used for industrial purposes by industries in interstate commerce;
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (1) through (4);
(6) Territorial seas; and
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).

Federal Definition of Wetlands: In Title 33, Chapter II, Part 328.4 of the Code of Federal Regulations, wetlands are defined as: "Those areas that are inundated or saturated by surface or ground water 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." For the purposes of a USACE wetland delineation, an area must meet three diagnostic environmental characteristics in order to be considered a wetland. These three characteristics include the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.

Hydrophytic Vegetation: The USACE 1987 *Wetland Delineation Manual* describes hydrophytic vegetation as "sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. The vegetation occurring in a wetland may consist of more than one plant community (species association). Emphasis is placed on the assemblage of plant species that exert a controlling influence on the character of the plant community, rather than on indicator species."

Hydric Soil: Defined by the USACE *Western Mountains Supplement* as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Most hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days…These processes result in distinctive characteristics that persist in the soil during both wet and dry periods."

> **Wetland Hydrology:** The USACE 1987 *Wetland Delineation Manual* describes wetland hydrology as "all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively."

Navigable Waters of the United States: Title 33, Chapter II, Part 329.4 of the Code of Federal Regulations defines navigable waters of the U.S. as "those waters subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for us to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity." For the purposes of a USACE jurisdictional determination, navigable waters of the United States are considered Traditionally Navigable Waters.

Ordinary High Water Mark (OHWM): Title 33, Chapter II, Part 328.3 of the Code of Federal Regulations defines the OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding area."

Mean High Water (MHW): Section 10 of the Rivers and Harbors Act (RHA), which regulates certain activities in navigable waters of the U.S., defines the landward limit of Section 10 jurisdiction as the Mean High Water (MHW) mark. The MHW mark, with respect to ocean and coastal waters, is defined as: "The line on the shore established by the average of all high tides. It is established by survey based on available tidal data (preferably averaged over a period of 18.6 years because of the variations in tide). In the absence of such data, less precise methods to determine the mean high water mark are used, such as physical markings, lines of vegetation or comparison of the area in question with an area having similar physical characteristics for which tidal data are readily available."

In the case of non-tidal waters regulated by the RHA, the MHW is defined as the OHWM.

State Definition of Wetlands: The State defines wetlands more broadly than the federal wetlands program by recognizing that wetlands may have evidence of only one of the three federal parameters. The State definition also conforms to the USFWS definition:

> "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 this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is

> predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (Cowardin, 1979).

Additionally, for the purposes of identifying Environmentally Sensitive Habitat Areas (ESHA) regulated by the California Coastal Commission, the California Coastal Act of 1976 further specifies that wetlands are:

> "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" (CCR Title 14, Section 13577).

Although the State definition may require only a single parameter to establish the presence of wetlands (and ESHA), in practice, such decisions are based on a case-by-case interpretation of data that either support or disprove the presumption of whether wetlands are indicated by a single parameter.

3.2 REGULATORY SETTING

3.2.1 U.S Army Corps of Engineers

The US Army Corps of Engineers (USACE) regulates activities that result in the discharge of dredged or fill materials into waters of the U.S. including wetlands, under Section 404 of the Clean Water Act. USACE also regulates dredging, filling, and construction activities in navigable waters under Section 10 of the Rivers and Harbors Act. Activities involving dredged or filled materials require a Section 404 permit, and/or a Section 10 permit, issued by the USACE. Section 404 projects may be authorized under general permits, also known as nationwide permits, or may require individual permits in the case of more complex projects that exceed the threshold for impacts under the nationwide permits.

3.2.2 California Coastal Commission

The California Coastal Commission (CCC) exercises jurisdiction over development activities within the coastal zone. In the city of Pacifica, construction projects within the coastal zone are regulated through the City's Local Coastal Land Use Plan (LCLUP). The City regulates construction projects through the LCLUP, to bring projects into conformance with the California Coastal Act of 1976.

The project site is within the Pedro Point/ Shelter Cove Land Use Plan area, and is not located within a designated environmentally sensitive wetland area (LCLUP 1992). However, in the Plan Conclusions section, under Development Near Wetlands and Creeks; the LCLUP states:

"*Riparian vegetation along all intermittent and year-round creeks shall be protected, enhanced and restored where feasible, and buffer zones required.";* And; *"As a general rule, a buffer of at least 100 feet measured from the outward edge of riparian vegetation would be appropriate unless such a width is determined to be unnecessary for protecting the resources of the habitat area"*

3.2.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) regulates projects that will:

(1) substantially divert or obstruct the natural flow of any river, stream or lake;
(2) substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. (Section 1602, California Fish and Game Code)

To complete projects which will affect these characteristics of any river, stream, or lake, within the state of California, projects must apply for a Lake or Streambed Alteration Agreement (Section 1600 Series Permit). The jurisdictional boundary of the CDFW typically follows the top-of-bank or the outermost edge of riparian vegetation adjacent to the regulated stream, river, or lake.

3.2.4 Regional Water Quality Control Board

The Regional Water Quality Control Board (RWQCB) has authority over projects that could result in negative impacts to waters of the State and wetlands. The RWQCB, defines "waters of the State" as any surface water or groundwater, including saline waters within the boundaries of the State of California (Cal. Water Quality Control, Division 7, January 2011). In addition, it defines "water quality control" as the regulation of any activity that may affect the quality of the waters of the State, and includes the prevention and correction of water pollution and nuisance.

Under the Porter-Cologne Water Quality Control Act, the RWQCB is authorized to regulate the discharge of waste that could affect the quality of State waters. Regulated discharges include any substances associated with human habitation that are harmful to the aquatic environment, including stormwater runoff associated with construction projects and other activities that could discharge soil, pollutants, or other materials into waters of the State. Projects that could produce pollutants or discharge into waters of the state must apply for a Section 401 Certification from

the California Regional Water Quality Control Board to ensure that any discharges will be in compliance with California's water quality standards.

3.3 DELINEATION METHODS

This wetland delineation was conducted through the analysis of aerial photography, historical records, and other relevant data sources, as well as an onsite survey to characterize vegetation, soils, and hydrology.

3.4 LITERATURE REVIEW

Prior to the field survey, aerial photographs were reviewed for current and historical data on lake levels and vegetation. Soil types were assessed using the online *USDA Natural Resource Conservation Science Web Soil Survey* (NRCS 2019). Historical and current land use data was accessed from various sources, including historical aerial photographs (UCSB 2019).

3.5 FIELD SURVEY

The field delineation for the study area was conducted by Patrick Kobernus of Coast Ridge Ecology on October 21, 2019. Wetland vegetation was mapped by P. Kobernus and CRE Biologist Greg Pfau on September 18, 2019. Weather conditions at the time of the field visits included clear skies, temperatures in the 70's (ºF), and no wind. The onsite inspection evaluated the three parameters that identify and delineate the boundaries of jurisdictional wetlands, including (1) the dominance of wetland vegetation; (2) the presence of hydric soils; and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding.

Survey methods follow the protocol outlined in the 1987 USACE *Wetland Delineation Manual for Areas Less Than Five Acres in Size*. GPS coordinates of each sample location were recorded in the field with a Trimble GeoExplorer 6000 series unit. Vegetation, soils and hydrology data were taken at each of these points. The completed *Wetland Determination Data Forms for the Western Mountains Region* are located in **Appendix A.**

3.5.1 Vegetation Data Collection

Vegetation data was collected at each sample point taken during the field survey. As per the 1987 *Wetland Delineation Manual* and the 2010 *Western Mountains, Valleys and Coast* Regional Supplement, plants in the tree stratum are defined as woody plants with a diameter three inches or more at breast height (DBH). Saplings/shrubs are defined as woody plants with a diameter of less than three inches DBH, and herbs are defined as non-woody plants regardless of size. Species type and percent dominance of each species was recording at each sample point. The USACE *National Wetland Plant List* was used to determine the wetland indicator status of

plants observed in the study area. Wetland indicator status refers to the probability that a plant will occur within a wetland or upland area. The indicator status categories are defined as follows:

- *Obligate (OBL)*: almost always occurs in wetlands
- *Facultative wetland (FACW)*: usually occurs in wetlands, sometimes may occur in uplands
- *Facultative (FAC)*: equally likely to occur in wetlands or nonwetlands
- *Facultative upland (FACU)*: usually occurs in uplands but may occasionally occur in wetlands
- *Obligate upland (UPL)*: almost never occurs in wetlands
- *No indicator (NI)/ No status (NS)*: no indicator or status assigned due to lack of information

The presence of hydrophytic vegetation data was then determined using the dominance test and prevalence index described in the USACE *Wetland Delineation Manual* and *Western Mountains* Regional Supplement.

3.5.2 Soils

Soil pits were taken at each of the eight sample point sites. Soil pits were excavated to the maximum depth possible and soil color and texture was assessed and recorded onto the Western Mountains data sheets. Soil color was determined by matching samples to Munsell Soils Color Charts (Munsell Colors 2000). Soils were then assessed for hydric features described in the *Western Mountains* Regional Supplement, such as the presence of redoxomorphic concentrations, mucky soils or hydrogen sulfide odor.

3.5.3 Hydrology

Hydrology at each of the sample points was assessed based upon the USACE *Western Mountains, Valleys, And Coast Region* hydrology guidelines. Positive hydrological indicators include the presence of a visible water table, saturation and/or muck, water marks or drift deposits.

3.6 FEDERAL WETLAND BOUNDARY DETERMINATION

A preliminary wetland boundary line, based on the 3-parameter wetland definition was determined based on data points and vegetation mapping. Based upon the location of wetland versus non-wetland sample points, the wetland boundary was determined to correspond to specific discrete locations within the channel bottom (**Figure 2**).

3.6.1 Acreage Calculations

The area for each individual vegetation polygon within the wetland boundary was calculated in ArcMAP 10.2. All vegetation areas were then added to obtain a total area for wetlands within the study area.

3.7 STATE WETLAND BOUNDARY DETERMINATION

The state definition of wetlands requires only a single parameter to be met in order to indicate the presence of wetlands. Hydrophytic vegetation, hydric soils, or wetland hydrology were used to determine the state upland wetland boundary.

Areas of wetland vegetation were identified and mapped using a Trimble GeoExplorer 6000 unit. Vegetation units were mapped based upon the dominant species.

Areas of hydric vegetation were defined using the dominance test, and by assessing the indicator status of the dominant species. Vegetation defined as obligate or facultative wetland by the USACE *National Plant List* was mapped as wetland vegetation.

Wetland acreage was determined using the methods described in Section **3.6.1 Acreage Calculation.**

4. RESULTS

4.1 FEDERAL WETLANDS

A total of 0.088 acres of potential federally jurisdictional wetlands occur within the delineation study area. **Table 1** provides the calculations for the total acreage for wetland areas within the study area. Jurisdictional areas lie within the vegetated central portions of the drainage channel. These areas are within the primary flow of the channel, where the soil remains saturated even after water is no longer visible at the surface. Wetland areas are represented by sample points A2 and A4 within the study area. **Figure 2** provides an illustration of potentially jurisdictional wetlands within the study area. **Appendix B** provides representative photographs of the sample points and study area.

TABLE 1: TOTAL ACREAGE OF WETLAND AREAS WITHIN STUDY AREA

Wetland Type	Federal		State	
	Area (acres)	Area (sq ft)	Area (acres)	Area (sq ft)
Arroyo Willow Wetland				
AW-1	0.025	1109.560	0.096	4193.311
Perennial Rye Grass Wetland				
PR-1	0.010	437.146	0.001	35.026
Small-fruited Bulrush Marsh				
BM-1	0.003	116.769	0.003	120.651
Smartweed Wetland				
SW-1	0.012	508.292	0.004	161.820
SW-2	0.019	833.803		
SW-3	0.019	844.048	0.022	963.699
subtotal	*0.050*	*2186.143*	*0.026*	*1125.519*
Ephemeral Channel				
FC-1			0.106	4605.914
Wetted Channel				
WC-1			0.017	722.949
Total	**0.088**	**3849.618**	**0.248**	**10803.370**

Figure 2: Federal and State Wetlands

505 San Pedro Avenue, Pacifica, CA

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Site Parcel Boundary
- Delineation Point

Waters of the State/State Wetland

- Wetted Channel

Federal Wetlands

- Arroyo Willow Thicket
- Perennial Rye Grass Fields
- Small-fruited Bulrush Marsh
- Smartweed Patch

State Wetlands

- Arroyo Willow Thicket
- Perennial Rye Grass Fields
- Small-fruited Bulrush Marsh
- Smartweed Patch
- Flow Channel

4.1.1 Vegetation

Freshwater wetlands on the study site are composed of a variety of plant species. Areas with the greatest water availability, at the northern end of the drainage, are dominated by arroyo willow and small-fruited bulrush. Wetlands within the primary flow of the channel are dominated by water smartweed and perennial rye grass, with curly and green dock also present at lower densities. Silver weed cinquefoil (*Potentilla anserina*) (OBL) can also be found here beneath the smartweed.

4.1.2 Soils

Within the wetland sample points, soils tended to be dark brown and homogenous with a color matrix of 10YR 3/1 at sample points A2 and A4; and 5YR 3/2 at sample point A1; and 5YR 3/3 at sample point A3. Soil texture ranged from sandy loam at sample points A1, A3, and A4 to sandy clay loam at sample point A2. Several unusual soil compositions were noted at the study site within the channel, due to the site being graded in the past, and the site used as an illegal dumping area. Within each of the sample point areas, concrete rubble, brick, plastic and metal refuse were present on the soil surface and/or within the soil. Soils determined to be wetland soils were based on one indicator (redox dark surface), likely due to a lack of ponding in the channel during most times of year. In addition, dark parent materials and the fact that the drainage feature has only been in existence for a few to several decades likely limits the formation of more hydric soil indicators.

4.1.3 Hydrology

Wetland hydrology indicators at sample points A2 and A4 included mud cracks at the surface of the channel bottom (**Photo 9** in **Appendix B**). No other hydrology indicators were present. No ordinary high water mark was visible in the channel, likely due to a lack of flow through the channel at most times of year.

4.2 STATE WETLANDS

A total of 0.248 acres of potential state jurisdictional wetlands occur within the delineation study area. The acreage of state wetlands exceeds that of the federal wetlands since determination state wetlands is based upon only one parameter (hydrophytic vegetation or hydric soils or wetland hydrology) rather than the presence of all three required by the federal wetland definition. **Table 1** provides the calculations for the total acreage for state and federal wetland areas within the study area.

The entire portion of the channel exhibiting hydrology features was mapped and designated as FC-1. This area qualifies as a state wetland due to hydrology and soil indicators, but vegetation is either lacking or composed of upland plant species in many places. Areas where the hydrophytic vegetation is dominant within the channel satisfy the criteria for federal wetlands.

4.3 ENVIRONMENTALLY SENSITIVE HABITAT AREAS (ESHA)

The CCC defines an ESHA as an 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." (California Coastal Act §30107.5). The CCC Guidelines contain definitions for specific types of ESHAs, including: wetlands, estuaries, streams and rivers, lakes, open coastal waters and coastal waters, riparian habitats, other resource areas, and special-status species and their habitats. For the purposes of this report, ESHAs include any areas that may meet the definition of any ESHA defined by the CCC guidelines or the City of Pacifica LCLUP. A "special-status natural community" is a natural habitat community that is unique in its constituent components, restricted in distribution, supported by distinctive soil conditions, considered locally rare, potentially supporting special-status plant or wildlife species, and/or that receives regulatory recognition from municipal, county, state, and/or federal entities such as the California Natural Diversity Database (CNDDB). Within the study area, the arroyo willow stand is consistent with the description of Arroyo willow thickets (61.201.01 – Salix lasiolepis), which is listed by CDFW as sensitive plant community. This species is common in coastal California and does not have a rarity ranking. However, based on this classification and that it is often associated with riparian habitat, the arroyo willow stand, would be considered an ESHA. Discrete portions of the drainage channel where one or more wetland parameters are present would also be considered an ESHA.

RECOMMENDATIONS

The proposed project would not result in direct or indirect, temporary or permanent impacts to wetlands, other waters, or any ESHA's. The drainage channel feature adjacent to the property at 505 San Pedro Avenue appears to be a man-made constructed feature, that is highly degraded due to construction and ongoing maintenance of a City of Pacifica sewer line that runs underneath the feature. The channel has been used as an illegal dumping area for decades and refuse such as gas cans, mattresses, appliances, plastic garbage, concrete rubble, bricks, and other refuse are present within the channel and buried within the soil.

The project as proposed would create a retaining wall and public access easement (pedestrian trail) along the western property boundary, and the following setbacks from the wetlands are shown in **Table 2**.

TABLE 2. STATE AND FEDERAL WETLANDS AND SETBACK DISTANCES FROM PROPOSED PROJECT AT 505 SAN PEDRO AVENUE, PACIFICA, CA

		From Retaining Wall/Trail		From Structures (approximate)	
Name	Wetland Type	Distance to closest point(ft)	Distance (ft) max to near edge	Distance to closest point (ft)	Distance (ft) max to near edge
AW-1	Federal Wetland	4.10	13.34	32.9	84.7
AW-1	State Wetlands	0.00	0	29.31	63
BM-1	Federal Wetland	12.47	13.7	26.9	33.67
BM-1	State Wetland	6.16	10.5	23.17	31.5
FC-1	State Wetland	6.35	18.45	19.4	26.3
PR-1	State Wetland	10.86	12.8	23.46	26.19
PR-1	Federal Wetland	12.79	15.7	26.36	28.18
SW-1	State Wetland	2.31	7	15.31	19.95
SW-1	Federal Wetland	5.52	10.4	17.85	25.59
SW-2	Federal Wetland	8.51	21.4	20.61	33.4
SW-3	State Wetlands	0.00	6.13	8.67	18.64
SW-3	Federal Wetland	7.66	12.3	20.9	24.5
WC-1	State Wetland	0.00	5.5	10.06	22

The LCLUP states that "As a general rule, a buffer of at least 100 feet measured from the outward edge of riparian vegetation would be appropriate *unless such a width is determined to be unnecessary for protecting the resources of the habitat area"*. The California Coastal Commission has required buffers of 100 feet from the edge of riparian vegetation in areas where such buffers are feasible. However, it is not unusual for the Commission to allow smaller buffers in urbanized areas where the existing land use patterns do not allow for increased riparian buffer areas.

Based on the existing condition of the drainage channel, and the setback distances, the proposed project would not present a source of physical, chemical or biological disturbance to the wetland habitats including the arroyo willow stand (AW-1). Additional measures to ensure the channel is not impacted by construction activities would include planting of native plant species suitable for the boundary area adjacent to the channel, and installation of appropriate erosion/ sediment controls such as silt fencing, fiber rolls, and erosion control blankets along the top of the bank. These measures would be suitable to protect the resource and improve the quality of this resource.

Any economic use of the subject property would result in a reduction of the recommended 100-foot buffer because of the proximity of any development on the property to wetland habitat. The CCC has permitted more intensive uses that resulted in direct impacts to sensitive coastal resources, consistent with the mandate of Coastal Act § 30010 that prevents taking of private property without compensation (see CCC Appeal Numbers A-2-SMC-11-040 & A-2-SMC-11-041)[2] concerning a controversial project near Half Moon Bay that was ultimately approved).

[2] https://documents.coastal.ca.gov/reports/2013/12/W18a-12-2013.pdf

5. REPORT PREPARATION AND REFERENCES

5.1 REPORT PREPARATION

Coast Ridge Ecology, LLC
1410 31st Ave
San Francisco, CA 94122
(415) 404-6757

Field work and report preparation were completed by Patrick Kobernus (Senior Biologist) and Greg Pfau (Associate Biologist).

5.2 REFERENCES

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APPENDIX A

Wetland determination data forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NorCal Surf Shop City/County: Pacifica, SMC Sampling Date: 10/21/2019
Applicant/Owner: Shawn Rhodes State: CA Sampling Point: A1
Investigator(s): Patrick Kobernus Section, Township, Range:
Landform (hillslope, terrace, etc.): Channel bank Local relief (concave, convex, none): Convex Slope (%): 50
Subregion (LRR): California Lat: 37.595406 Long: -122.506549 Datum: NAD83
Soil Map Unit Name: Urban NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ___ (If no, explain in Remarks.)
Are Vegetation ___ , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes x No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No x	**Is the Sampled Area within a Wetland?**	**Yes ___ No x**
Hydric Soil Present?	Yes ___	No x		
Wetland Hydrology Present?	Yes ___	No x		

Remarks:

Delineation is being done at request of CA Coastal Commission and potential wetland area is adjacent to, but not on, applicant's property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 2m r)			
1. Ligustrum ovilifolium	20	Y	-NS-
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 2m r)			
1. Delairea odorata	15	N	-NS-
2. Persicaria amphibia	10	N	OBL
3. Urtica dioica	5	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: 2m r)			
1. Rubus ursinus	50	Y	FACU
2.			
	50 = Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

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 =

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.

Hydrophytic Vegetation Present? Yes ___ No x

Remarks:

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SOIL

Sampling Point: A1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	5YR 3/2	100					Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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 Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** x

Remarks:
Uniform color to soil, combined with urban fill (concrete, brick, and other refuse)

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 x Depth (inches): _____

Water Table Present? Yes ___ No x Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No x Depth (inches): _____

Wetland Hydrology Present? **Yes** ___ **No** x

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

Remarks:
No hydrologic indicators present.

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Exhibit 5

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NorCal Surf Shop City/County: Pacifica, SMC Sampling Date: 10/21/2019
Applicant/Owner: Shawn Rhodes State: CA Sampling Point: A2
Investigator(s): Patrick Kobernus Section, Township, Range:
Landform (hillslope, terrace, etc.): Channel bed Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): California Lat: 37.595406 Long: -122.506549 Datum: NAD83
Soil Map Unit Name: Urban NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ___ (If no, explain in Remarks.)
Are Vegetation ___ , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes x No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	x	No	
Hydric Soil Present?	Yes	x	No	
Wetland Hydrology Present?	Yes	x	No	

Is the Sampled Area within a Wetland? Yes x No ___

Remarks:

Delineation is being done at request of CA Coastal Commission and potential wetland area is adjacent to, but not on, applicant's property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	___ = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 2m r)			
1. Persicaria amphibia	35	Y	OBL
2. Rubus crispus	55	Y	FAC
3. Scirpus microcarpus	5	N	OBL
4. Potentilla anserina	5	N	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

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 =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- x 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.

Hydrophytic Vegetation Present? Yes x No ___

Remarks:

SOIL

Sampling Point: A2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	10YR 3/1	100					Sandy clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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)
- x Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** x **No** ___

Remarks:

Uniform color to soil, combined with urban fill (concrete, brick, and other refuse)

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)
- x 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	x	No	___	Depth (inches): _____
Water Table Present?	Yes	x	No	___	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes	x	No	___	Depth (inches): _____

Wetland Hydrology Present? **Yes** x **No** ___

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

Remarks:

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Exhibit 5

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NorCal Surf Shop City/County: Pacifica, SMC Sampling Date: 10/21/2019
Applicant/Owner: Shawn Rhodes State: CA Sampling Point: A3
Investigator(s): Patrick Kobernus Section, Township, Range:
Landform (hillslope, terrace, etc.): Channel bank Local relief (concave, convex, none): Convex Slope (%): 100
Subregion (LRR): California Lat: 37.594600 Long: -122.507276 Datum: NAD83
Soil Map Unit Name: Urban NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ___ (If no, explain in Remarks.)
Are Vegetation ___ , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes x No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No x	**Is the Sampled Area within a Wetland?**	**Yes ___ No x**
Hydric Soil Present?	Yes ___	No x		
Wetland Hydrology Present?	Yes ___	No x		

Remarks:

Delineation is being done at request of CA Coastal Commission and potential wetland area is adjacent to, but not on, applicant's property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10 m r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Eucalyptus globulus	60	Y	-NS-
2.			
3.			
4.			
	60	= Total Cover	

Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	___	= Total Cover	

Herb Stratum (Plot size: 2m r)			
1. Tropaeolum majus	65	Y	UPL
2. Conium maculatum	5	N	FAC
3. Zantedeschia aethiopica	5	N	-NS-
4. Solanum nigrum	15	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 2m r)			
1. Rubus ursinus	10	N	FACU
2.			
	10	= Total Cover	

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

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 = ___

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.

Hydrophytic Vegetation Present? Yes ___ No x

Remarks:

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SOIL

Sampling Point: A3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	5YR 3/3	100					Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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 Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** x

Remarks:

Uniform color to soil, combined with urban fill (concrete, brick, and other refuse)

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 X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No x Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** x

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

Remarks:

No wetland hydrology indicators present

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Exhibit 5
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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: NorCal Surf Shop City/County: Pacifica, SMC Sampling Date: 10/21/2019
Applicant/Owner: Shawn Rhodes State: CA Sampling Point: A4
Investigator(s): Patrick Kobernus Section, Township, Range:
Landform (hillslope, terrace, etc.): Channel bed Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): California Lat: 37.594600 Long: -122.507276 Datum: NAD83
Soil Map Unit Name: Urban NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No ___ (If no, explain in Remarks.)
Are Vegetation ___ , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes x No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	X	No	
Hydric Soil Present?	Yes	X	No	
Wetland Hydrology Present?	Yes	x	No	

Is the Sampled Area within a Wetland? Yes x No ___

Remarks:

Delineation is being done at request of CA Coastal Commission and potential wetland area is adjacent to, but not on, applicant's property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	___ = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		
Herb Stratum (Plot size: 2m r)			
1. Persicaria amphibia	40	Y	OBL
2. Plantago major	5	N	FAC
3. Sonchus asper	5	N	FACU
4. Raphanus sativus	5	N	-NS-
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

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 =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- x 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.

Hydrophytic Vegetation Present? Yes x No ___

Remarks:

SOIL

Sampling Point: A4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	10YR 3/1	100					Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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)
- x Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** x **No** ___

Remarks:
Uniform color to soil, combined with urban fill (concrete, brick, and other refuse)

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)
- x 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	X	Depth (inches): ___
Water Table Present?	Yes	___	No	X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes	___	No	x	Depth (inches): ___

Wetland Hydrology Present? **Yes** x **No** ___

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

Remarks:

Electrical cable under channel, bricks, concrete rubble in soil.

APPENDIX B

Representative Photographs

Figure 1. Drainage channel, with Eucalyptus trees. Photo date: 09/18/2019.

Figure 2. Drainage channel with brambles, north end. Photo date: 09/18/2019.

Figure 3. Drainage channel and bank with Eucalyptus, Rumex, Kikuyu grass and Tropaeolum plants. Photo date: 09/18/2019.

Figure 4. Drainage channel with blackberry and grass vegetation. Photo date: 09/18/2019.

Figure 5. Top of berm, (505 San Pedro Ave. property) looking north. Photo date: 09/18/2019.

Figure 6. Top of berm, (505 San Pedro Ave. property) looking south. Photo date: 09/18/2019.

Figure 7. Wetted channel on south end. Photo date: 09/18/2019.

Figure 8. Drainage channel (data point A4 and sewer line manhole). Photo date: 10/21/2019.

Figure 9. Channel bottom near data point A2 showing mud cracks. Photo date: 10/21/2019.

Figure 10. Channel bottom. Data point A2. Photo date: 10/21/2109.

APPENDIX C

Soil Survey Map

Soil Map—San Mateo County, Eastern Part, and San Francisco County, California
(Drainage Channel adjacent to 505 San Pedro Avenue)

Map Scale: 1:1,530 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

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 1:24,000.

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 County, Eastern Part, and San Francisco County, California
Survey Area Data: Version 15, Sep 16, 2019

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
121	Orthents, cut and fill, 0 to 15 percent slopes	5.1	43.0%
124	Orthents, cut and fill-Urban land complex, 5 to 75 percent slopes	0.2	2.0%
131	Urban land	6.3	54.0%
138	Beaches	0.1	1.0%
Totals for Area of Interest		**11.7**	**100.0%**

Horrisberger, Christina

From: Renee Ananda [rananda@coastal.ca.gov]
Sent: Wednesday, May 19, 2010 1:14 PM
To: Horrisberger, Christina
Cc: sdeleon@dfg.ca.gov; ryan_olah@fws.gov; Donguines, Raymond
Subject: FW: APN 023-072-010 Study Session

Christina,

It appears you didn't receive my comments (originally sent on May 13th). Please see the forwarded message below. Sorry for any inconveniences. Thank you.

From: Renee Ananda
Sent: Thursday, May 13, 2010 2:49 PM
To: 'Horrisbergerc@ci.pacifica.ca.us'
Cc: Renee Ananda
Subject: APN 023-072-010 Study Session

Hello Christina,

This is a follow-up to our conversation (on Monday 5/10) re: the applicant's (Shawn Rhodes') preliminary proposal to construct a 2-story commercial-residential unit, a surf shop, and storage shop (a total of 3 structures) and a skate board park on a vacant lot west of San Pedro Point Shopping Center. The plans we received are preliminary and serve for early discussions of what would be required for the potential development project. Please note my preliminary comments below:

The site is located within the Coastal Zone. It appears that a majority of the site is in an area under the retained jurisdiction the Coastal Commission. The applicant will need to obtain a Coastal Development Permit from the Coastal Commission.

The Commission is concerned about the development's consistency with the Coastal Act (particularly Chapter 3, Article 6., Development), therefore potential impacts to biological resources, coastal views, public access to the coast (i.e., public beaches), and its visual compatibility with the character of the surrounding area. The applicant should include an analysis of traffic that would be generated by the development and associated impacts to vehicular public access to the coast.

The design of the proposed project should consider measures to avoid or reduce potential impacts to the adjacent wetlands and drainage area, as these most likely meet the definition of a wetlands under the Coastal Act. The applicant should provide an evaluation of the proposed/potential development's impact on biological resources located on and adjacent to the site.

These comments do not preclude additional comments Commission staff may have on the proposal, as planning and permitting processes progress.

Thank you for the opportunity to provide you with comments. RTA

Rexing, Stephanie@Coastal

From: farbsteink@ci.pacifica.ca.us
Sent: Thursday, October 30, 2014 12:05 PM
To: Rexing, Stephanie@Coastal
Subject: FW: Comments for 505 San Pedro Lot Behind Pedro Point Mall

Stephanie: We talked about this project yesterday for staff review and Lee asked me about the CCC's role. My thinking is that we process the local permits (CDP, PSD, UP, Sign and Parking Exception) and if the project is approved, then the applicant would get the CDP approved from the CCC. The CCC's additional permit jurisdiction just covers about a third of the lot, closest to the ocean and not the entire project site so it makes sense for the City to review it first. Also, there may be some wetland issues that need to be addressed with a better Biological Assessment than what the applicant provided (I emailed it to you from 2005 and it was a different project proposal) and those wetland issues may impact the design of the project.

Kathryn Farbstein
Assistant Planner
City of Pacifica
650-738-7341

From: Farbstein, Kathryn
Sent: Tuesday, October 28, 2014 3:58 PM
To: 'Rexing, Stephanie@Coastal'
Subject: Comments for 505 San Pedro Lot Behind Pedro Point Mall

Stephanie: I am working on putting comments together for this project and I'll be determining the project incomplete on November 6th of next week. Let me know if you want me to include your comments or it that's not possible, I can forward your comments separately.

Kathryn Farbstein
Assistant Planner
City of Pacifica
650-738-7341

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

May 8, 2015

Kathryn Farbstein
Assistant Planner
City of Pacifica
1800 Francisco Blvd.
Pacifica, CA
94044

Subject: ***Commission Staff Comments on Development Review Coordination for Proposed Project at 505 San Pedro Avenue, Pacifica, CA***

Dear Ms. Farbstein:

Thank you for the opportunity to comment on the Development Review Coordination materials for the proposed development of a 2 story retail building plus basement, covered skate park, 2 story storage building, parking lot and 2 story mixed use building with 2 residential units at 505 San Pedro Avenue, Pacifica, CA. The proposed development will cover approximately 13,000 square feet on the 37,000 square feet lot with the surf shop totaling 3,500 square feet, the storage building totaling 1,540 square feet and the retail/residential building totaling 2,516 square feet. The development also proposes a total of 26 parking spaces-24 uncovered spots and 2 covered spots.

Coastal Commission Staff has previously sent comments on this development proposal (see attached May 13, 2010 email from Renee Ananda and my email from October 30, 2014) citing concerns regarding the proposed development's potential impacts to biological resources, public views, access to the coast, compatibility with surrounding development, and to traffic. Specifically, our concerns consist of the proposed project's potential impacts to the sensitive biological resources present and associated with the intermittent stream that bounds the western edge of the subject parcel, potential flooding and geotechnical issues, hardscape protection concerns regardingform of the proposed installation of rip rap on the banks of the intermittent stream, the appropriateness of residential use on this parcel and finally, future parking and access conflicts with the adjacent shopping center use. In addition, Commission Staff raised jurisdictional issues in our previous comments because it appears the subject parcel is located within a split jurisdiction between the City and Coastal Commission coastal permit jurisdiction, either requiring the applicant to apply for two separate coastal development permits or a consolidated permit handled by the Commission (with permission from the applicant and the City).

With regard to biological resources, the 2005 biological report prepared for the subject property found that given the parcel's close proximity to San Pedro Creek, California red-legged frogs

(CRLF) are likely to be "present and breeding within the immediate area of the surrounding property," along the high quality habitat of the creek. The subject site is constrained by the presence of the drainage, on the western edge of the parcel that the 2005 biological report by Thomas Reid Associates determined was likely to provide a dispersal corridor for CRLF, especially given the drainage's proximity to San Pedro Creek. This drainage was deemed an "intermittent stream" in the biological report. Because of the presence of this drainage, it is also likely that the adjacent upland habitats may provide refugia for CRLF and upland areas to aestivate. Because of the parcel's constrained shape, it is unlikely the development could be adequately buffered from the drainage in order to avoid sensitive habitat impacts. LCP Policies protect intermittent streams, requiring that such streams shall be "protected, enhanced and restored where feasible"; also requiring that adequate buffer zones be identified to protect habitat areas associated with the stream. LCP Policy C-99 requires that in general, a buffer of at least 100 feet measured from the outward edge of the vegetation would be appropriate, unless such a buffer is deemed unnecessary. Because the proposed development will immediately abut the drainage edge, and the upland habitats are proposed to be removed for future development or paved over, this proposed project does not conform to the LCP policies protecting sensitive habitats.

With regard to geotechnical issues, plans dated October 7, 2014 proposed rip rap be installed along the bank of the drainage per the recommendation of the geotechnical engineer. The current plans appear to remove this aspect of the development but still propose to install a concrete curb wall with wood railing at the drainage edge. LCP Policies found on page C-105 state that since erosion is a problem in Pacifica, a report by the United States Army Corps of Engineers found that in many cases shoreline [protection] structures are not economically justified and would be allowable to protect only "major beach access or highly sensitive habitat." Further, if such protections are allowed as part of any development LCP Policy C-105 requires that a qualified expert should analyze and propose mitigation for such structures. Further, LCP Policy C-101 requires that development in habitat support areas, such as on the banks of this stream, cannot disrupt habitat and must minimize erosion. Given these limitations and the development's proximity to the drainage which provides flood storage capacity for the surrounding areas, it is unclear how the proposed development will be protected from flooding and erosion. Commission Staff has seen no analysis of flooding impacts to the proposed development including without the use of streambank alteration, but such an analysis would be required given the development's proximity to the drainage at the western edge of the parcel and its association with San Pedro Creek.

Finally, with regard to the development's, size, scope, intensity and type of use, Commission Staff has concerns that locating new residential and other mixed-use/retail development so close to the already existing shopping center may have traffic impacts on the already-impacted Highway 1 in this area, and subsequent impacts to public access to the coast. No traffic analysis has been shared with Coastal Commission staff. In addition, the parcel is zoned C-2 "Community Commercial District," which conditionally allows residential uses only when they are located entirely above the ground floor. Residential development in C-2 zones is further controlled by a minimum lot area per dwelling unit of 2,000 square feet. Further, development in the C-2 zones located in the Coastal Zone that propose a new use other than visitor-serving commercial use, require a Use Permit determination that demands "an analysis of the balance of visitor-serving commercial uses with other commercial uses, and consistency with the individual neighborhood narratives and the plan conclusions and other relevant policies of the…Land Use

Plan" (per Implementation Plan Sec. 9-4.1002). The proposed development, if allowable at all given the biological and potential flood resource concerns, would need to be designed to fit the individual narrative of the neighborhood and other requirements of the LUP that are specific to the Pedro Point neighborhood.

If you have any questions regarding these comments or wish to discuss the project further, please contact me at 415-597-5894.

Sincerely,

Stephanie Rexing, Coastal Planner

Encl. May 13, 2010 Email
October 30, 2014 Email

Letter 2

Murdock, Christian

From: Foster, Patrick@Coastal <Patrick.Foster@coastal.ca.gov>
Sent: Tuesday, May 01, 2018 4:36 PM
To: Murdock, Christian
Cc: Rexing, Stephanie@Coastal
Subject: RE: 505 San Pedro CEQA Document

RECEIVED
MAY 0 1 2018
City of Manhattan Beach

Hi Christian,

Thank you for forwarding the MND linked below for the proposed project at 505 San Pedro Ave including three new buildings, a skatepark, and parking area. The project site is mostly in the City's CDP jurisdiction, but partly in the Commission's retained jurisdiction which covers about a third of the lot closest to the ocean. It is our impression the City's intent is to process local permits, including a CDP, after which the applicant would seek another CDP from us if the project is approved locally – please let us know if this is inaccurate. Our primary concerns involve biological resources. Specifically, identification of wetlands and required development buffers, as well as the presence of sensitive species on site. **2-1**

The MND indicates the potential presence of CRLF, SFGS, Monarch butterfly, and protected raptors/nesting birds. Overall, our biologist concurs with the sensitive species identified as potentially occurring here, though also indicates that CRLF may be using the swale as a corridor and moving across the parcel. As for raptors and other birds, with the open field adjacent to the parcel, the trees and swale vegetation provide good habitat for nesting, so pre-construction surveys are critical. Additionally, It is unclear why no bat species are discussed other than the western red bat, as it is possible hoary bats (Lasiurus cinereus) are in the area as well. With regard to sensitive plant species, our biologist cites concern regarding the possible presence of SF spineflower (Chorizanthe cuspidata var. cuspidata) because it often turns up in disturbed areas. It appears the reconnaissance surveys were completed outside the bloom season for most of the sensitive plants flagged, making it more difficult to detect them. **2-2**

As for mitigation, additional measures are requested, including:
1) Coastal Commission to receive copies of all surveys.
2) Implement IV-1 (p40) limits on work following significant rain events (>0.25 in, with 24h wait period) when CRLF would be more mobile. **2-3**
3) In addition to exclusion fencing, conduct daily checks prior to the start of construction for sensitive wildlife that may have found a way in.
4) Cover any open trenches at the end of work each day or fitted with an exit ramp for any wildlife that may fall in.
5) Extend IV-3 (p41) raptor surveys to out to 500 ft (300 ft is fine for other birds) and if nesting observed, apply minimum buffer of 500ft (300ft for other birds) until young have fledged. **2-4**
6) Extend IV-4(a) (p41) pre-construction bat emergence surveys to all trees on the parcel and out 500ft since any bats there will also be sensitive receptors to construction noise. **2-5**
7) Apply CDFW-determined buffers to any such sensitive receptors (maternity roosts or hibernacula) **2-6**
8) Removal of invasive non-native species (in addition to omitting them from any planting on the property). **2-7**

In terms of wetlands, the MND acknowledges the general buffer rule of 100 feet from the outward edge of riparian vegetation and notes that "an intermittent drainage ditch on the west side of the project area contains some riparian vegetation (e.g., Arroyo Willow)." (p.42) It also notes that this drainage would meet the Coastal Commission's one-parameter wetland definition. However, indirect impacts concerning the swale seem to have been dismissed – while development may not physically disturb the swale on the adjacent parcel, noise and runoff are potentially going to affect any sensitive resources there, and sensitive species likely make use of the area as a wildlife corridor to at least a limited extent as such species will not necessarily be able to use the adjacent upland areas if they are dependent on the cover and moisture the swale provides. These indirect impacts reflect the purpose of establishing development buffers, and protection in this case is warranted. Thus, we request that the applicant complete a full 1-parameter delineation at **2-8**

2-8 Cont'd

Letter 2 Cont'd

this stage, rather than later on in the permitting process. While the bank/topography may appear to be a distinct boundary for hydro and soil parameters, vegetation may extend towards the parcel of interest, which will be important with respect to setting appropriate buffers. While a typical buffer is 100 ft and may be necessary here as at most locations, we recognize that less may be acceptable depending on the nature of the parcel, its place in the landscape, and the susceptibility of the wetland to various impacts. However, any deviation from typical buffers must be substantiated with clear evidence on these points.

2-9

Again, thank you for the chance to comment at this early stage. We look forward to further coordination on this project.

-Patrick

Patrick Foster
Coastal Planner
North Central Coast District
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105
(415) 904-5267
patrick.foster@coastal.ca.gov
www.coastal.ca.gov

CALIFORNIA COASTAL COMMISSION

From: murdockc@ci.pacifica.ca.us [mailto:murdockc@ci.pacifica.ca.us]
Sent: Thursday, April 05, 2018 10:24 AM
To: Foster, Patrick@Coastal
Cc: Rexing, Stephanie@Coastal
Subject: 505 San Pedro CEQA Document

Hi Patrick,

We wanted to make you aware that the public comment period on the CEQA document for the 505 San Pedro Avenue (Shawn Rhodes) project started on 4/4/4018. You can access the document at the link below We invite the Coastal Commission to offer comments on the CEQA document during this period.

http://www.cityofpacifica.org/depts/planning/environmental_documents/default.asp

Best regards,

Christian

Christian Murdock
Senior Planner
Planning Department
City of Pacifica
1800 Francisco Blvd.
Pacifica, CA 94044
www.cityofpacifica.org

Email: murdockc@ci.pacifica.ca.us

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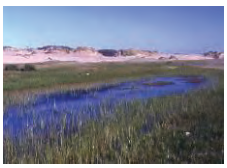
Coastal Plant Observatory
Plant Ecology Serving Conservation
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

MEMORANDUM

To: Jim Browning, U.S. Fish and Wildlife Service, SFWO, Sacramento
From: Peter Baye, Ph.D., coastal plant ecologist
Date: 4 May 2005
SUBJECT: Documentation of California red-legged frog occurrence at Pedro Point, Pacifica, San Mateo County

Jim, I am reporting to USFWS directly the attached documentation of a California red-legged frog population at Pedro Point. The site is a drainage ditch in an historic floodplain of Pedro Creek, recently proposed for residential development. The site is somewhat isolated from Pedro Creek by Highway 1, a road, buildings, and parking lots, but has drainage connections to the mouth of the creek.

LOCATION: Pedro Point Road opposite Grand Avenue, Pedro Point, Pacifica, San Mateo County. Southeast corner of Calson/"Archdiocese" Pedro Point Field.

SETTING: Drainage ditch through blue gum windbreak between commercial shopping plaza and mown grassy field with seasonal wetlands, approximately 0.25 mi from Pedro Creek. See photo attached.

HABITAT CONDITIONS: Road drainage ditch and culvert fed by seasonal to perennial seeps in hillslopes of developed residential area and historic blue gum/Monterey pine plantation. Blue gum-shaded pool less than 3 m diameter, up to 25 cm deep currently, minimal vegetation; mostly flood-deposited sand and silt; abundant non-native wetland vegetation downstream, but no perennial ponds or cattail/tule marsh.

OBSERVED OCCURRENCE: 3 Adult CRLF observed; one within culvert, one at pool edge of concrete culvert support, one submerged at depth of 10 cm. No tree frogs present in pool, but present in downstream portions of ditch system. Photos attached of two CRLF, one highly visible, one obscure (submerged silhouette). Visual observation and photos 5/3/05. Multiple aural detections of diving frogs April; no visual detections in turbid water. No egg masses observed within visible upper 10 cm of water column.

NEARBY OCCURRENCES: Other confirmed CRLF observations in last 2 years at mouth of Calera Creek (Quarry), with San Francisco garter snake, approx 1.5 mile north. Likely

ANNAPOLIS FIELD STATION
Coastal Plant Observatory
Plant Ecology Serving Conservation
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

occurrence in Pedro Creek floodplain wetlands, perennial freshwater marsh. Garter snakes (likely San Francisco ssp.) also present in residential area gardens, yards.

POTENTIAL THREATS: Residential development proposed for adjacent field; likely to require improved drainage. Drainage problems of adjacent Pedro Road may require repair work; some recently implemented.

(a)

(b)

Figure 1: (a) Culvert and scour pool with lobe of flood sediment. (b) Detail of pool and sack-concrete dam. Adult CRLF head emergent at edge of sack-concrete, next to woody debris (sticks) at extreme left. 5/3/05.

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Coastal Plant Observatory
Plant Ecology Serving Conservation
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Figure 2. Adult California red-legged frog at edge of sack-concrete dam of culvert. 5/3/05

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Coastal Plant Observatory
Plant Ecology Serving Conservation
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Figure 3. Submerged silhouette of second CRLF in pool.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

Lee Diaz
Associate Planner
City of Pacifica
Planning Department
1800 Francisco Boulevard
Pacifica, CA 94044
diazl@ci.pacifica.ca.us

July 7, 2014

SUBJECT: Draft Environmental Impact Report for The Pacifica General Plan Update Project – SCH No. No. #2012022046

Dear Mr. Diaz,

The comments below regarding the Draft Environmental Impact Report for the Pacifica General Plan Update Project (DEIR) are submitted on behalf of the Pedro Point Community Association, but represent my independent, best professional judgment.

I have reviewed the DEIR sections relevant to assessment of biological resources, land use policies, and selected relevant portions covering hydrology and geology for CEQA compliance and for LCP amendment compliance with the Coastal Act. I have also conducted site visits of the Pedro Point field (also "undeveloped San Pedro Ave site" and described as "vacant" in the DEIR, General Plan and Local Coastal Plan documents) in all seasons since 2000.

My qualifications to provide expert comments are based on nearly 35 years of professional work in coastal wetland and terrestrial ecology, with over 20 years in San Francisco Estuary wetlands, including long-term direct knowledge of the estuarine wetlands, special-status species, and diked baylands in the project area. A statement of my qualifications is attached hereto as Attachment A.

My comments focus on the potentially adverse environmental impacts of proposed changes in the land use designation of the Pedro Point neighborhood.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Summary of Comments

1. Environmental Baseline: The DEIR provides contradictory information about the vegetation of the Pedro Point field, asserting that it supports "northern coastal scrub", an upland vegetation type absent in the grassy field, and that it supports wetlands. The field supports seasonal wetlands. The DEIR fails to disclose the importance of these wetlands in terms of the environmental setting of San Pedro Creek mouth wetlands in the Coastal Zone (the field is the last remaining historical floodplain of the lower San Pedro Creek Valley that has not been developed in the Coastal Zone) and the local distribution of ESHA (Environmentally Sensitive Habitat Areas) supporting California red-legged frogs.

2. Biological Impacts to Wetlands and Special-status Species: The DEIR fails to analyze any biological impacts caused by conversion of the existing Pedro Point field to a land use designation of "Coastal Residential Mixed Use development". The DEIR fails to programmatically assess impacts at a neighborhood-specific level as it did in the 1980 General Plan, and it fails to consider general impacts of residential development on extensive seasonal wetlands and ESHA in and around the field. The proposed land use change for the field is likely to cause significant impacts to wetlands, wildlife, and special-status species for which no feasible mitigation has been identified, and for which no feasible mitigation probably exists.

3. **Land Use Impacts**. The DEIR fails to analyze land use impacts caused by changing the land use of the field from a general "Commercial" use (1980 General Plan) to a more specific and different "Coastal Residential Mixed Use" designation. This change for the field's designated land use causes significant impacts (conflicts with) to the City's own land use policies and numerous Coastal Commission land use policies that cannot be mitigated, and are not mitigated by the vague, programmatic mitigation measures cited in the DEIR.

4. **Conclusion**. The DEIR fails to disclose important biological resources, and their distribution and relationship to other biological resources and communities in the environmental setting of lower San Pedro Creek. This precludes meaningful public comment and DEIR analysis of significant impacts to biological resources and land use policies that are likely to occur. The DEIR should be recirculated to correct the flawed environmental baseline and defective impact analysis, and should identify reasonable alternatives that either lessen significant impacts, or are otherwise environmentally preferable.

1. Environmental Baseline

The DEIR presents inconsistent and erroneous biological baseline description of the existing conditions of the Pedro Point field and its vicinity. The errors, omissions, and contradictory environmental baseline description results in erroneous conclusions that the project (General Plan) will have no significant biological impacts. Neighborhood-specific assessments of proposed General Plan land use changes are lacking for Pedro Point, its field, and for the DEIR in general.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Assessment of biological and land use impacts to the Pedro Point neighborhood requires reference to existing *physical and biological* environmental conditions (2014; approximately the time of the EIR's notice of preparation), and the existing *land use* designations from the 1980 General Plan. The existing biological conditions of the Pedro Point field – the last undeveloped lowland open space within the historical floodplain of San Pedro Creek – is inaccurately and inconsistently represented in the DEIR's figures and text. These errors result in underestimation of significant biological impacts, as discussed below.

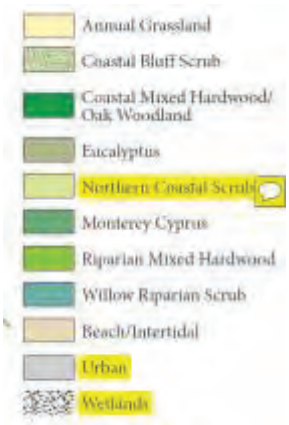
1.1 Mapped DEIR Wetlands, Vegetation and Habitats – physical and biological baseline

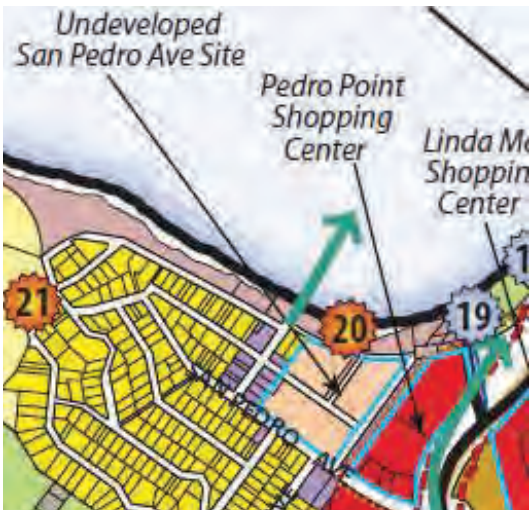
The DEIR provides contradictory and confused (and confusing) information about the existing biological conditions of the Pedro Point field. Figure 3.7-1 (Vegetation; DEIR p. 3.7-3) maps most of the field in the color-code (pale olive green) corresponding with "Northern Coastal Scrub" (an upland vegetation type associated with coastal hillslopes and bluffs), and part of the field color-coded gray as "urban" land use but overlapping with the "wetlands" symbol. This is contradictory and erroneous environmental baseline information. There are in fact *no stands of northern coastal scrub vegetation* at all within or around the Pedro Point field. The shrubs on the railroad berm are ornamental non-native plantings. No part of the field is "urban" cover type, as misrepresented in the figure; *no paved or developed areas with structures exist in the field*. Figure 3.1-1 shows the "Existing land use" color-coded gray as "Vacant/Undeveloped", which is also inconsistent with "urban" land use, but consistent with "wetlands". The map also misrepresents mixed ornamental, non-native, and native coastal bluff scrub vegetation northwest of the field as "beach/intertidal" habitat. The two major color-coded map units for the Pedro Point field, "urban" and "northern coastal scrub" are incorrect.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net





Excerpted section of Figure 3.7-1 of the DEIR "Vegetation" map (above) showing Pedro Point field with paper streets between Dannman and San Pedro Ave. The setting within the Draft Local Coastal Plan (2014) as represented as "Undeveloped San Pedro Ave Site", is shown in a portion of Figure 4.8 (left).

Only one map symbol (pattern) for the vacant/undeveloped Pedro Point field in Figure 3.7-1 is accurate: "wetlands" classified by the U.S. Fish and Wildlife Service National Wetlands Inventory at coarse scale, as shown also in DEIR figure 3.7-2. The Pedro Point field itself is dominated by non-native grasses and herbaceous broadleaf plants, including seasonal wetland and non-wetland vegetation. Both maps omit the distinct seasonal and perennial wetlands of the drainage swale at the east end of the field, which drain to San Pedro Creek through a series of culverts. The drainage swale wetlands, the wetland connectivity to San Pedro Creek mouth, and the extensive perennial wetlands (Freshwater Marsh) of San Pedro Creek are entirely missing from the vegetation map of Figure 3.7-1.

Other errors describing habitat and vegetation are evident in the DEIR's descriptions of existing conditions in the coastal zone. For example, the DEIR confuses coastal strand (beaches and dunes) with coastal bluff scrub, and states that the plant sea-rocket (*Cakile maritima*) is a dominant species of "coastal bluff scrub". Sea-rocket is a non-native species common on sand beaches and low foredunes (like those

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

of Pacifica State Beach), but does not occur at all in coastal bluff scrub in Pacifica or elsewhere, let alone as a dominant species. The description of coastal bluff scrub combines species that simply do not occur together in natural or disturbed environments of Pacifica.

1.2. Wetland classification of the Pedro Point field and vicinity: existing conditions

Based on my recent and past site visits, I know that the existing vegetation of the Pedro Point field consists of predominantly annual and perennial, herbaceous, non-native seasonal wetland and upland grassland vegetation. Seasonal wetland grassland occupies a mosaic of depressions, ditches, and swales. Mesic grassland (seasonally wet but lacking a prevalence of wetland indicator plants) occupies portions of the higher elevation zones of the site, primarily to the southwest corner. The wetland depressions are indicated by seasonally high density of toad rush (*Juncus bufonius,* FACW, facultative-wet indicator in arid west), co-occuring with European ryegrass (*Festuca perenne*; syn. *Lolium perenne;* FAC, facultative wetland indicator in arid west) and buck's-horn plaintain (*Plantago coronopus*; FACW, facultative-wet indicator in arid west). Some of the wettest depressions support populations of *Lilaea scilloides* (flowering quillwort). Flowering quillwort is evident only in the wettest years when pools stay flooded for many weeks or months. Accurate wetland plant identification and measurement of the seasonal wetland patches at this site are possible only during winter to spring months. Desiccation, disturbance (trampling, mowing, discing) eliminates or degrades wetland vegetation and precludes accurate identification in fall and summer. Similarly, accurate assessment of wetland hydrology is feasible only during the rainy season, during and within two weeks following major rainfall events.

The USFWS classification of Pedro Point Field wetlands shows wetlands distributed over approximately all of the site, as shown in DEIR Figures 3.7-1 and 3.7-2. Past and current National Wetland Inventory ("NWI") maps consistently apply wetland classifications to approximately all of the field. Two current classifications of the field's wetlands include the codes "PEMah" and "PUSCh", both "palustrine" (freshwater emergent, non-tidal) seasonal, and consistent with the seasonally flooded hydrology associated with surrounding berms. The "U" (unconsolidated shore) probably is associated with intermittent unvegetated (disced, vegetation disturbed) conditions. The NWI wetland mapping of the field broad-brush treatment of prevailing past wetland distribution, but the precision of the NWI wetland *type* boundaries is not precise enough for the DEIR to represent as "existing conditions" in 2014 CEQA assessment. In my professional opinion, "wetlands" meeting the jurisdictional criteria for Coastal Commission ("Commission") policies, and classification as "wetland" under the Cowardin (U.S. Fish and Wildlife Service, USFWS) system, are in fact present and widely distributed over the Pedro Point field today, despite past unauthorized ditching and drainage activities (see wetland history, below).

Despite DEIR's inclusion of NWI mapped wetlands in some figures, the DEIR fails to apply the NWI wetland mapping and classification (as well any current field reconnaissance observations to update or verify them) to any meaningful biological assessment of potential wetland impacts of land use

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

designation changes to the field, and assessment of alternatives. The DEIR fails to assess the extent and distribution of the field's seasonal wetlands (meeting Cowardin/California Coastal Commission wetland criteria) in relation to land use changes proposed. The DEIR does not consider the accuracy or distribution of the (old) NWI wetland maps based on existing field conditions. Specifically, the DEIR does not analyze whether the field's wetlands are localized or extensively distributed in the field, so it cannot analyze whether it is even feasible to designate a coastal residential mixed-use development without committing the City's General Plan to significant wetland impacts, in conflict with its own land use policies and Coastal Act policies.

Further, because of the DEIR's omissions about wetland impacts, comparison of alternatives will lack relevant information about feasible land use alternatives that may avoid or minimize wetland impacts, and which may be environmentally preferable. Examples of environmentally preferable alternatives consistent with City and Coastal Act policies include existing "Commercial" land use (with and without "Commercial-Recreation" zoning) compatible with low-intensity visitor-serving commercial recreation/tourism-promoting uses; or "Conservation" - all of which are consistent with City policies for tourism destination, avoidance of natural hazards, wetland conservation, and consistency with recreational, scenic values that Coastal Act policies give priority over residential development.

1.3. Wetland jurisdiction and CEQA

The DEIR cites multiple state and federal wetland jurisdictions. With respect to assessment of *biological* impacts to wetlands, USFWS (NWI, Cowardin wetland classification), California Coastal Act, and California Department of Fish and Wildlife wetland policy definitions are applicable because these are fundamentally based on habitat, hydrogeomorphic features, and ecological functions. In contrast the narrowest federal definition (U.S. Army Corps of Engineers and Environmental Protection Agency; USACE/EPA) under the Clean Water Act is specifically limited to *legal* wetland definition for jurisdiction over authorization of discharges of earthen fill regulated under Section 404 of the Clean Water Act. The USACE/EPA wetland definition contains federal exemptions and policy disclaimers that are not relevant to biological impact assessment under CEQA, and it is a narrower and more exclusive definition that is likely to underestimate the extent of habitat-based or hydrogeomorphic definitions appropriate for impact assessment.

The California Coastal Act Section 30231 defines a 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.*

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Similarly, the Cowardin (USFWS, NWI) wetland classification uses a general broad definition of wetlands:

> 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.

California Coastal Act jurisdictional wetlands criteria in the California Code of Regulations at 14 14 CCR Section 13577 establish a "one-parameter definition" that only requires evidence of a single wetland parameter to establish wetland conditions, in contrast with federal wetlands criteria under the Clean Water Act:

> 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…

The Commission's one-parameter definition is similar to the USFWS wetlands criteria, which state that wetlands must have one or more of the following three attributes:

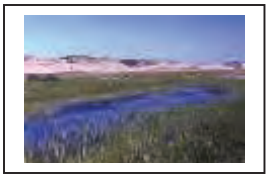
> (1) at least periodically the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

In contrast, the U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency use a three parameter definition for delineating wetlands under Clean Water Act jurisdiction, which is relevant *only in context of USACE permit authorization for discharges of fill in jurisdictional waters* of the United States. The USACE definition is narrower than those of the Coastal Commission (relevant to LCP) and USFWS (relevant to wetland impact assessment under CEQA, not limited to fill discharges and subject to federal exemptions irrelevant to CEQA).

The City's wetland policies (Land Use; DEIR p. 3.1-21) cite both USACE/EPA and Coastal Commission wetland definitions. CO-I-5, CO-I-6 cites both, and CO-I-8 cites State (CDFW/CCC) wetlands only. The narrower USACE/EPA definition is relevant only to those land use policy elements that specifically cite it in context of wetland fill permits. **The USACE/EPA jurisdictional wetlands are not the proper standard for determining consistency of GPU consistency with Coastal Act wetlands policies, or wetland impacts under CEQA**. This should be corrected in the EIR, or else the EIR will not provide accurate conclusions about Pedro Point field land use impacts regarding wetlands in context of CEQA or Coastal Act policies.

1.4. Special-status species and Environmentally Sensitive Habitat Areas (ESHA): California red-legged frogs (*Rana draytonii)* **environmental baseline**

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

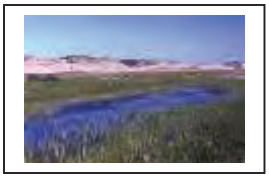
California red-legged frogs (*Rana draytonii;* CRLF) occur in the freshwater marsh drainage swale bordering the Pedro Point Field along its eastern edge. I reported their presence to the U.S. Fish and Wildlife Service Sacramento Fish and Wildlife Office, Endangered Species Program in 2005. If the DEIR preparers had consulted properly with state and federal wildlife agencies, or local residents, about the local distribution of special-status or other wildlife species, this information would have been available to include in the DEIR. The DEIR, however, failed to disclose the local sub-population of CRLF in the drainage swale bordering the field, and its relationship with the population of the lower San Pedro Creek wetland complex.

I have observed adult red-legged frogs are most often observable basking along muddy or prostrate grass banks near the culverts draining San Pedro Avenue at the southeast corner of the field. The perennial moisture in this swale provides year-round hydration habitat for CRLF, as well as foraging and potential breeding habitat. CRLF breeding is indicated by intermittent local population increases in red-legged frogs here, most notably in 2010. Foraging activities of CRLF likely extend to adjacent non-wetland flats (rich in invertebrate prey) in the field during moist, foggy nighttime and early morning conditions. I am not aware of protocol nighttime surveys for California red-legged frog conducted either in the freshwater marsh swale adjacent to the field, or in the field itself. The vicinity of the freshwater marsh swale and field are a complex of foraging, basking, dispersal, and breeding wetland and upland habitat for California red-legged frogs. It thus also meets criteria for Environmentally Sensitive Habitat Areas (ESHA) under California Coastal Commission regulations. The DEIR fails to include this information about CRLF at and in proximity to the field.

In addition, the DEIR fails to analyze the potential adverse, significant impacts to CRLF from the proposed land use changes. Land use designations that would foreseeably increase the intensity of land use, such as the proposed redesignation to allow residential development or other substantial increases in the built environment, may have significant direct and indirect impacts on CRLF. The proposed residential mixed-use development of the field would likely (a) substantially reduce available nocturnal foraging habitat for CRLF (food and prey base impacts to growth and survival; (b) increase contaminant loads in the drainage swale due to runoff from driveways, roads, and backyard sources of pesticides, petroleum hydrocarbons, solvents, and detergents (reproductive impacts); (c) increase peak flow velocities in the swale during major storm runoff events (juvenile mortality impacts).

Not only has the DEIR not assessed such impacts, it has not identified feasible programmatic mitigation measures. Feasible mitigation for ESHA/California red-legged frog habitat and frog populations must include measures to (a) avoid and minimize "take" of individual frogs, (b) avoid and minimize impacts to CRLF habitat; and (c) provide adequate buffer zones to minimize adverse effects of incompatible adjacent land uses. The spatial structure of CRLF mitigation aligned with the freshwater marsh swale bordering the field may substantially constrain the feasibility of some incompatible land use designations, especially any that increase runoff, contaminants or pesticides, predator pressure on CRLF,

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

or reduce the extent or quality of potential productive nighttime foraging habitat. The Bolsa Chica court decision [Bolsa Chica Land Trust *v.* Superior Court 71 Cal. Ap.4th 493, 507] confirmed that the Coastal Act requires that ESHA be avoided and buffered from development impacts and that providing compensatory mitigation alone is insufficient as ESHA mitigation.

Intermittent breeding habitat of California red-legged frogs in freshwater marsh swale bordering the southeast corner of the field, near roadside culverts. An adult CRLF is shown at the concrete base of foundation culvert on August 20, 2006, after the field ditch connections were breached to the swale north of this pool. CRLF frequently bask in the western muddy or grassy banks of this pool in wet (non-drought) years.

1.5. **Wetland context and cumulative impacts: environmental setting of Pedro Point**

The DEIR also omisrepresents the existing *environmental setting and context* of the wetlands of the Pedro Point field. The field's wetlands are represented as completely *isolated* from any other significant wetlands or potential wetland-dependent endangered species habitats. See Figures 3.1-1, 3.7-1, 3.7-2, and 3.7-3, all of which fail to show the San Pedro Creek mouth wetlands and their riparian wetland habitat, vegetation and hydrological connections with Pedro Point field and its wetlands. The San Pedro Creek stream mouth wetlands, however, are shown as red-legged frog habitat (marsh, creek, and riparian vegetation) in Figure 3.7-1, but *without* their wetland connections to the Pedro Point field and drainage swale wetlands. The omission of the San Pedro Creek mouth wetlands in the Coastal Zone is either arbitrarily selective or at least inconsistent in the DEIR: the riparian corridor and wetlands upstream of Highway 1, outside the coastal zone, are represented in Figure 3.7-1 and 3.7-4, but not in Figure 3.7-2.

This error of selective omission of wetlands in the project vicinity appears to be due to the DEIR's failure to critically interpret and update National Wetlands Inventory map with even cursory examination of readily available current aerial or satellite imagery of San Pedro Creek mouth (e.g., Google Earth), or field reconnaissance surveys of the conspicuous restored freshwater marsh there.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

Figure 3.7-2, "National Wetlands Inventory Wetlands", completely fails to represent the perennial freshwater emergent marsh and freshwater streams of San Pedro Creek mouth as they existed at the time of the DEIR's notice of preparation, and as they have existed for about a decade. The DEIR cannot uncritically transfer NWI map data without checking for errors of omission due to outdated data layers. The NWI wetland classification (Cowardin USFWS classification system) provides sufficient clear wetland criteria to identify the obvious wetlands (cattail and tule marsh vegetation 6 to over 10 feet tall with standing water) at the mouth of San Pedro Creek. This marsh is clearly known to the City of Pacifica, which was the local partner in the project that restored it.

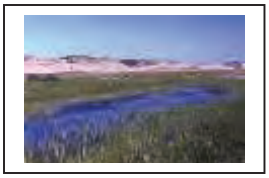
The adjacent San Pedro Creek mouth freshwater marsh is very significant as an environmental setting of the seasonal wetlands of the Pedro Point field. Ecological connectivity (wildlife corridors for wetland-dependent wildlife) exists between the creek mouth marsh and the field, provided by the drainage swale wetlands (not currently channelized; infilled with sediment and wetland vegetation) consisting of willow swamp (riparian scrub) and freshwater marsh dominated by broadleaf wetland forbs and grasses.

The environmental setting and potential Project and cumulative impacts to wetlands at the Pedro Point field are related to their hydrogeomorphic setting and historical origins and development. The pre-agricultural "natural" condition of the field was freshwater nontidal marsh within the floodplain of San Pedro Creek (San Pedro Valley lowlands). The modern field was part of complex of freshwater marsh and swamp (alder-willow) surrounding Lake Mathilda (the freshwater lagoon outlet of San Pedro Creek prior to channelization), behind the barrier beach (San Pedro Beach). The rich organic fine-grained alluvial soils were converted to agricultural cropland (artichoke fields) by draining and ditching in the late 19th century. The field apparently persisted with either low-intensity agricultural use (grazing, haying) into the 1950s or early 1960s when Linda Mar was extensively developed. Some fill was placed on at least portions of the field in recent decades, but differential subsidence in the flat to very gently sloping (<2%) field maintained depressional microtopography (shallow swales, pools) to the present day.

I have observed the Pedro Point field since the year 2000 in all seasons. Wet (saturated to seasonally flooded) depressions in the field persisted for weeks to months, supporting typical seasonal wetlands grasslands dominated by ryegrss, toad rush, buck's-horn plaintain in winter-spring months. In addition, a regionally rare vernal pool/pond plant, the flowering quillwort (*Lilaea scilloides*) occurred in local abundance in several pools. In January, 2006, the current landowner and assistants manually excavated diagonal ditches and side-cast fill (ditch spoils) across the field, apparently with the intent of draining the field. In August 2006, mechanical equipment breached wide gaps in the berm between the field and the adjacent drainage swale marsh. These drainage activities were apparently completed without benefit of a Coastal Development Permit or authorization from the U.S. Army Corps of Engineers.

Despite the 2006 drainage ditching and subsequent maintenance and repeated discing of the field, depressional wetlands have persisted and re-emerged (due in part to differential settlement and choking of

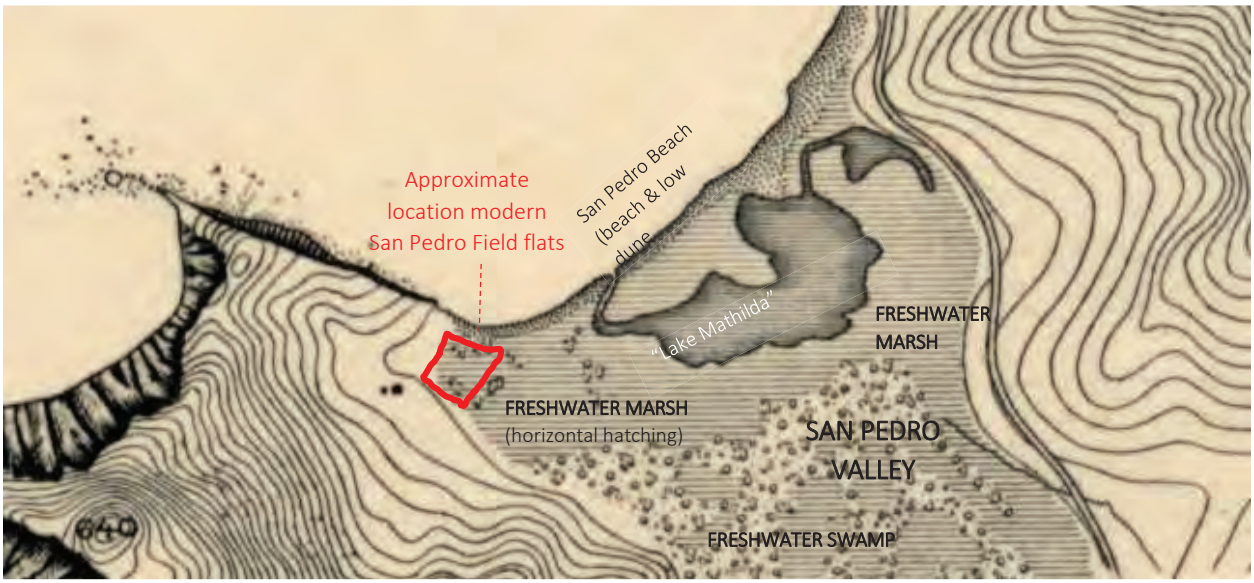
Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109

baye@earthlink.net

ditches) in the field. The ditching appears to have reduced the duration and extent of wetland hydrology, but significant wetland areas remain widely distributed across most of the field, including the original seasonal wetland plant community.



Excerpt of U.S. Coast Survey map of San Francisco Peninsula, 1869, based on 1850s topography: San Pedro Creek Valley and beach, now Linda Mar. Approximate location of San Pedro Field (Calson/former Archdiocese property) in red shows the relationship of the modern field wetlands to the historical valley floodplain wetland complex. Parallel horizontal hatched lines indicate freshwater marsh. Stippled shoreline area indicates sandy beach, dune, washover. Fine horizontal hatching is open freshwater (Lake Mathilda; historical Pedro Creek Lagoon, drained for agriculture 19th century). Irregular circles/dots within marsh = wooded freshwater swamp (alder, willow). No scale.

Extensive seasonal flooding of the Pedro Point Field during the transition between the historical agricultural era (derelict or low-intensity agricultural use) and suburban development of Linda Mar in San Pedro Valley lowlands (background), likely 1950s-early 1960s. View to E/SE. The eucalyptus and Monterey cypress trees at the fenceline correspond the mature trees present today along the drainage swale at the east end of

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

the field. The extensive seasonal pond likely represents flooding patterns prior to partial filling of the wetlands.

Flooding patterns delineate undrained depressions of shallow open water in a matrix of saturated soils in San Pedro Field following heavy rainfall. December 26, 2005. View to N.

Shorebirds (likely sanderlings) forage in the seasonally saturated and flooded field during high tide and storm wave conditions that restrict foraging habitat availability on the adjacent San Pedro (Pacifica State) Beach. December 27, 2005, prior to unauthorized ditching of the field. Red-necked phalaropes also forage in the saturated to flooded field during winter storms.

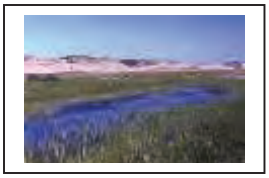
Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

January 19, 2006. Manual excavation of drainage ditches in flooded field at the east end of the field. Grass grows above water surface. Water in bare spots can be seen as reflected sunlight on the field; emergent unvegetated mud is dark brown.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109

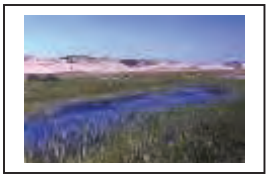
baye@earthlink.net

During discing of the field in summer, the berm along the east end of the field was mechanically breached at multiple locations to connect new drainage ditches (excavated in seasonal wetlands of the field) to the large drainage swale occupied by California red-legged frogs, draining to San Pedro Creek through culverts at the northwest end. August 20, 2006.

Despite new unauthorized ditching and drainage connections of the field, ditches merely reduce the extent and duration of soil saturation and flooding; they do not eliminate wetland conditions in the winter following ditching. December 27, 2006

Today, wildlife in the seasonal wetlands of the Pedro Point field includes shorebirds, meadowlarks, black-tail deer, tree frogs, small mammals, and raptors, all of which move between the field wetlands, the adjacent drainage swale wetlands, uplands, and the mouth of San Pedro Creek. Sanderlings and red-necked phalaropes occur intermittently in the flooded to saturated fields, particularly during high tides and storm wave conditions that flood the beach.. In summer, meadowlarks inhabit the field some years, particularly when grass and forb vegetation cover is thick. Small mammals, including mice, pocket gophers, and voles, occur frequently in the field (indicated by burrows, runs) and provide a prey base for raptors, including great horned owls (roosting in eucalyptus trees near the field), and red-tail hawks. Deer browse in the field at night, and at times in the morning as well. The marsh swale bordering the east end

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

of the field has supported a breeding population of tree frogs (*Pseudacris sierra*) and a population of federally listed threatened California red-legged frogs (*Rana draytonii*) most years at least since 2000 (see special-status species, below). The DEIR fails to disclose intermittent red-legged frog populations in the vicinity (and sometimes directly bordering) the field, and the existence of probably nocturnal foraging habitat (for this species spring-fall non-breeding adults) within in the field itself. The DEIR failed to identify these significant wildlife movement and habitat connections between the field and habitats in its wetland setting. The DEIR fails to analyze potentially significant impacts to red-legged frogs using the field that would be affected by proposed conversion to coastal residential mixed use development.

The DEIR's failure to correctly characterize the wetland environmental setting (the wetland complex comprising the San Pedro Creek mouth wetlands, the drainage swale wetlands, and the historical and existing condition of the Pedro Point field wetlands) prevents the DEIR from accurately analyzing potentially significant cumulative impacts caused by wetland habitat loss, degradation or fragmentation in the lower San Pedro Creek corridor, and the Pedro Point neighborhood.

Given the outstanding biological significance of the field as the *only open, level (flatland) space left in the Pedro Point neighborhood*, and despite years of being the focus of substantial public concern and comment in scoping and other public meetings, the DEIR's failure to provide even minimally accurate, consistent baseline environmental description of the field is a very serious defect in the DEIR. It precludes accurate assessment of potentially significant impacts that are not mitigated at the policy or site-specific level.

1.6. Biological Resource Impact Assessment and Mitigation in the DEIR

Despite identifying wetlands occurring potentially throughout the field, the DEIR fails to assess potential adverse, significant impacts to Coastal Act wetlands from the proposed land use designation changes at the Pedro Point Field. The DEIR provides no explanation why converting existing wetlands of the Pedro Point field to residential mixed use development would have no significant biological or land use policy impacts. The DEIR omits any specific reference at all to the Pedro Point field wetlands in discussion of biological impacts.

Further, the DEIR's cumulative impact analysis must consider that the extent of Coastal Act wetlands in the field was modified by ditching and drainage activities conducted by the landowner and assistants on January 19, 2006, during conditions of saturation and widespread flooding of the field. As far as I am aware, ditching and draining activities of these wetlands occurred without issuance of a Coastal Development Permit or analysis of environmental impacts. The apparently unauthorized drainage of the field probably results in underestimation of the actual extent of proper Coastal Commission jurisdictional wetlands in the field. See wetland history, below. The errors in the DEIR's environmental baseline, described above, contribute to basic errors in assessment of significant biological impacts and mitigation to wetlands and special-status species.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

The DEIR identifies only two potential *general* city-wide biological impacts, without area-specific reference to Pedro Point neighborhood and the specific land use changes proposed in the revised General Plan. Both of these impacts are incorrectly assessed with respect to Pedro Point biological resources, and their proposed programmatic (policy-level) mitigation is infeasible applied to Pedro Point field.

Figure 3.1-2 of the DEIR (p. 3.1-9; "Existing General Plan Land Use") shows the majority of the Pedro Point field mapped in red ("Commercial"), and apparently one small lot in the northwest corner of the field mapped in light yellow-orange ("low density residential"). The biological impacts of this proposed land use change must be assessed at a programmatic level, commensurate with *the level of detail of land use designation change in the programmatic EIR at neighborhood-scale*. The DEIR, however, fails to assess biological impacts at this geographic scale even at a programmatic level. It merely assesses biological impacts at a sweeping, vague, city-wide, policy level, omitting neighborhood-level biological impacts of specific land use changes proposed (DEIR p. 3.7-48 Impact 3.7-1; p. 3.7-57, Impact 3.7-3). The DEIR also provides only vague, policy-level "mitigation" (pseudo-mitigation; purely speculative policy without reference to physical or biological conditions) for land use change impacts in the aggregate, city-wide:

> **Impact 3.7-1 Implementation of the proposed General Plan would not have a substantial adverse effect, either directly or through habitat modifications, on candidate, sensitive, or special status species identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. *(Less than Significant)***
>
> **Impact 3.7-3 Implementation of the proposed General Plan would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (*Less than Significant*)**

The DEIR provides no substantial evidence and no arguments for either impact findings or their level of significance. It is inconsistent with proposed land use changes (coastal residiential mixed-use development) for the field, and the presence of extensive seasonal wetlands and adjacent special-status species populations.

Although the DEIR does not need to assess impacts of land use change at a project-specific level (*i.e.*, it cannot speculate about the design of specific project proposals or their impacts in site-specific detail), it must address biological impacts that are reasonably foreseeable for the type of land uses proposed in the environmental setting under existing conditions. There is only one major land use change proposed in Pedro Point, and the DEIR provides no biological impact or mitigation discussion about it at

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

all – not even the cursory programmatic wetland discussion presented in the Draft Land Use plan itself (LUI-30, p. 4-36, Pacifica Draft Land Use Plan, March 2014). The boilerplate, standard wetland permit discussion in the DEIR at p. 3.7-42 has no substantial bearing on impact or mitigation analysis for wetlands at Pedro Point.

Potentially significant biological impacts of proposed residential land use (development) at the Pedro Point Field and adjacent habitats are enumerated below. These are based on a more adequate characterization of the Pedro Point field wetlands, their relationship to San Pedro Creek wetlands, and their wildlife and hydrological attributes described above. None of these potentially significant biological impacts were analyzed in the DEIR.

Coastal Zone Wetland impacts

- Direct filling (loss) of the last coastal zone seasonal wetlands in Pedro Point watershed due to residential development. Lack of available off-site compensatory mitigation area within the coastal zone of the San Pedro Creek watershed (no feasible compensatory mitigation).
- Degradation of remaining coastal zone wetlands (wetland swale east of field) the San Pedro Creek watershed due to hydrological changes; increased impermeable surfaced area, decreased groundwater infiltration, increased storm runoff from drained residential lots within basin (historic floodplain).
- Degradation of remaining wetlands (wetland swale east of field) due to increased contaminant loading from adjacent residential development: pesticides (residential pesticide use and pesticide loading from runoff and drainage), increased petroleum hydrocarbon contaminant loads from street and driveway runoff; increased surfactant runoff to the drainage swale from residential car washing.

Wildlife and Special-status species impacts

- Loss of storm high tide refuge habitat for shorebirds
- Loss of meadowlark foraging habitat
- Loss of nocturnal deer browsing habitat
- Loss of raptor foraging habitat (Great Horned Owl, red-tail hawk, kestrel)
- Loss of terrestrial foraging habitat for California red-legged frogs
- Loss of flood refuge habitat for California red-legged frogs during peak flood events of San Pedro Creek.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

2.0 Land Use Impacts – Coastal Zone

The DEIR proposes to change the land use designation of the Pedro Point field from "Commercial" (Pacifica General Plan, pp. 86 and 90; DEIR Figure 3.1-2) to "Coastal Residential Mixed Use" (CRMU; DEIR Figure 2.2-1). The DEIR inaccurately states that the new proposed CRMU designation corresponds with an existing "Mixed Use" land use category (Table 3.1-3), but no such independent or category or subcategory of "mixed use" exists in the 1980 General Plan; "mixed use" is simply described as a contingent allowable use of "commercial" land use in the original General Plan (1980 General Plan p. 32-33). The project description is inconsistent, incorrect, and confusing in terms of existing and proposed land uses.

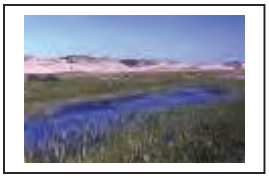
The 2014 Draft General Plan Land Use element states the following with regard to the CRMU designation on p. 4-24: "The Plan retains flexibility for any future development on the vacant site west of the shopping center, which could have residential and small-scale commercial and visitor-oriented uses. Future development should include a small park and access to the berm and the beach beyond". Table 4.1 of the Draft General Plan states that residential density with CRMU designation may range between 10-15 gross units per acre.

The DEIR, in contrast with the original 1980 General Plan, fails to assess even at a programmatic level the area-specific effects of proposed land use designations for the Pedro Point neighborhood, and specifically for the vacant Pedro Point field, in terms of land use impacts (*cf.* 1980 General Plan, pp. 84-89). The DEIR gives no reason why the level of specificity for impact assessment should be broader and more programmatic than the level of specificity for individual parcel land use designations like the Pedro Point field, or why the level of neighborhood-specific assessment should be significantly less than that of the 1980 General Plan's treatment of Pedro Point, especially in the Coastal Zone.

The existing land use designation of the field, "commercial" is compatible with low-intensity, visitor-serving commercial recreational land uses that support coastal-dependent (beach and coastal scenic) recreation and associated economic uses, which matches the existing zoning (commercial-recreation) of the field. Low-intensity commercial land uses that do not involve ditching, draining, filling, paving, or construction in the field (open-space and recreational uses, special events, coastal agriculture) are potentially compatible with conservation of wetlands, environmentally sensitive habitat areas, and special-status species, and relevant Coastal Act policies. Proposed Coastal Residential Mixed Use land uses, however, are likely to have significant impacts on **Coastal Act land use policies** (cited in Draft Pacifica Local Coastal Land Use Plan, March 2014, Appendix A) and Pacifica General Plan policies involving these elements, as discussed below.

The extensive distribution of Coastal Act jurisdictional wetlands in the Pedro Point field, and the presence of California red-legged frog habitat and population in the adjacent freshwater marsh swale,

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

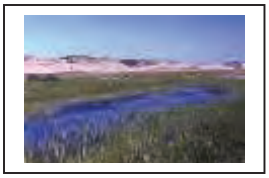
both indicate that land use designations for the field must be compatible with ESHA policies of the Coastal Commission. According to the Coastal Commission's LCP Update Guide: Sensitive Habitats and Natural Resources (April 3, 2007 update), the DEIR and LCP should clearly state that only "resource dependent" development, such as restoration or nature study, is allowed in ESHA, consistent with Coastal Act §30240. No ESHA assessment for the proposed changes in land use designation of the Pedro Point field has been provided in the DEIR, which is likely related to the DEIR's failure to accurately identify wetlands and special-status species at the site. The DEIR must be revised to include this analysis of potentially significant environmental impacts even at a programmatic level.

The 1980 Pacifica General Plan provided a programmatic analysis of consistency between proposed (commercial) land use designation of the Pedro Point Field and specific Coastal Act policies (1980 General Plan p. 86), including assessment of unimproved coastal access through foot trails (p. 88). The DEIR for the General Plan update has provided no such analysis for proposed changed land use designation of the field or coastal access impacts. It merely included the Coastal Act policies as an appendix, without analysis of proposed land use designation change impacts. The changed land use designation has potential significant land use policy conflicts (impacts) with Coastal Act land use policies, each of which affects ESHA (wetlands and special-status wetland-dependent wildlife). Some examples are provided below. The *DEIR should fully assess at a programmatic level all such potential significant land use impacts, and compare the compatibility (conflict) of existing, proposed and alternative land use designations for the field in terms of Coastal Act policies*.

> **Section 30212 New development projects**
>
> **(a) *Public access from the nearest public roadway to the shoreline* and along the coast *shall* be provided in *new development projects* except where:**
> **(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,**
> **(2) adequate access exists nearby, or,**
> **(3) agriculture would be adversely affected.**

Pedro Point field has three well-established and persistent foot trails that lead from San Pedro Avenue (the nearest public roadway to the shoreline) to a private beach with long-established open public access. The foot trails are visible in aerial photographs dating back to at least 1993 (Google Earth images) and re-emerge after being temporarily erased by discing, ditching, or mowing. The foot trails are formed by trampling patterns established between physical points of access from the roadway to a stairway from the beach to the historic railroad berm, and to a public path to the beach at the mouth of San Pedro Creek. Foot trails are frequently used by beach visitors and surfers seeking minimal travel distances to the beach. The foot trails evidently established long before the current ownership of the property. The foot trails are the most efficient short cuts from San Pedro Avenue to the public shore; alternative routes along public

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



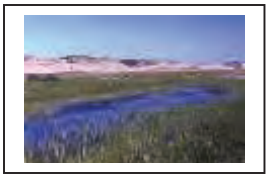
(415) 310-5109

baye@earthlink.net

roads would nearly double foot trail distance from the public roads to the shore from established access points.

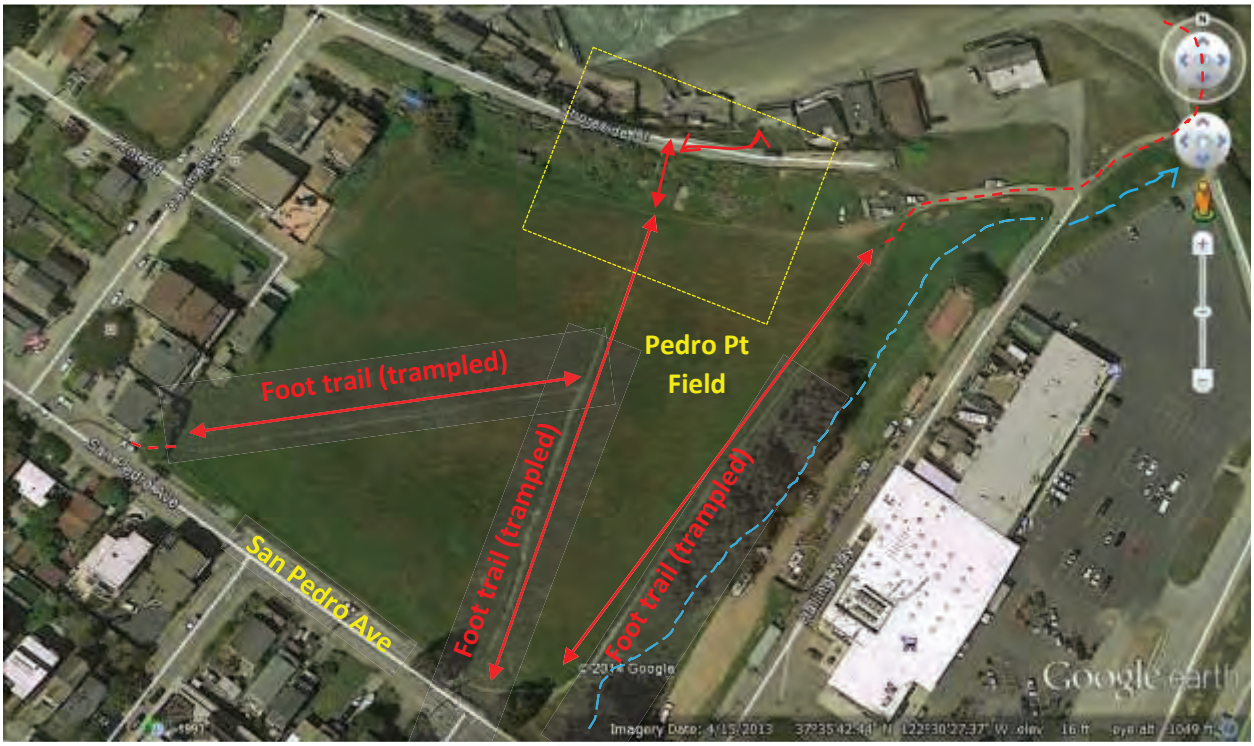
Pedro Point field in relation to public and private ocean shores, and freshwater marsh and stream habitat of San Pedro Creek mouth. 2013 Google Earth image.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109

baye@earthlink.net



Foot trail network (2013) of Pedro Point Field, showing connections to levee trail access to private shore with long-established public access. Freshwater wetland drainage swale connecting to San Pedro Creek mouth is shown in dashed blue line. 2013 Google Earth image.

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

Detail of Pedro Point field foot trail connection to the public access walkway to privately owned beach (with public access) across the historic railroad berm. 2013 Google Earth image.

Proposed coastal residential mixed-use development may potentially eliminate or significantly impair existing long-established public access from San Pedro Avenue to the public shore. This could be mitigated by requirements to provide public access easements along existing trails or equivalent efficient alignments (similar travel distance, slopes, road access points), but the DEIR proposed no mitigation or policy that would ensure such mitigation. The impact and mitigation for this Coastal Act policy were not assessed in the DEIR. There are no military needs, fragile coastal resources, or existing agriculture to provide exemptions for this policy.

> **Section 30221 Oceanfront land; protection for recreational use and Development**
>
> ***Oceanfront land suitable for recreational use shall be protected for recreational use and development* unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.**

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

The Pedro Point field is separated from the ocean only by the railroad berm, and in its original condition (backbarrier floodplain marsh) it was "oceanfront", with line of sight to the ocean over the low barrier beach. According to Pedro Point long-term residents, the field has been used for recreation for years prior to and during the current land ownership. Recent recreational uses include children's games, domestic animal feeding and observation (former llama and emu enclosure along the toe of the railroad berm), ball sports, playground activities extending from the adjacent Pedro Point firehouse playground, and dog walking. The field is suitable for these established recreational uses, and is suitable for other recreational uses as well.

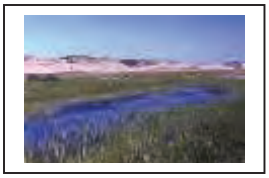
Proposed Coastal Mixed Use Residential land use changes could eliminate, reduce, or substantially interfere with long-established recreational uses of the oceanfront land. This impact is not assessed in the DEIR. The feasibility of mitigation for this impact is not assessed, and no mitigation is proposed. Recreational uses that depend on extensive area or open scenic views may not be feasible to mitigate with small parks enclosed by development.

> **Section 30222 Private lands; priority of development purposes**
>
> **The use of private lands suitable for *visitor-serving commercial recreational facilities* designed to enhance public opportunities for coastal recreation *shall have priority* over *private residential*, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.**

The proposed change in land use from an open field (compatible with public access, coastal views, and recreation) to a mixed-use *private* residential development would conflict with this coastal act policy. This would be a significant impact that, by definition, could not be mitigated. General industrial or commercial development of the field would also conflict with this policy. Commercial development by agriculture including public access and visitor-serving commerce (such as a coastal berry farm, pumpkin farm with visitor-serving amenities), in contrast, would not conflict with this policy. No mitigation is feasible for this conflict, by definition of "priority" of land uses cited in the policy.

> **Section 30240 Environmentally sensitive habitat areas (ESHA); adjacent developments**
>
> **(a) Environmentally sensitive habitat areas sh*all be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.***
>
> **(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*.**

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



(415) 310-5109 baye@earthlink.net

The field contains extensive seasonal wetlands (winter-saturated and temporarily flooded depressional wetlands and drainage swales, ditches). The perennial wetlands of the drainage swale at the east end of the field supports California red-legged frog habitat and is typically occupied by a population (see comments in this letter, above). The seasonal wetlands and the zone bordering the frog habitat of the swale meet the definition of ESHA. Residential and mixed use commercial development would likely eliminate, significantly reduce, or degrade existing wetlands and ESHA on the site. Since the field is the last undeveloped lowland floodplain of San Pedro Creek within the Coastal Zone that is available for wetland restoration and enhancement, it is infeasible to mitigate impacts to these wetlands off-site; compensatory mitigation is not available for the red-legged frog populations in lower San Pedro Creek in the coastal zone. The DEIR failed to assess impacts to this Coastal Act policy or propose any feasible mitigation for it. The only feasible mitigation for this policy impact would be avoidance of impacts by not applying the residential mixed use land use designation.

Section 30242. Lands suitable for agricultural use; conversion

> All other ***lands suitable for agricultural use*** shall not be converted to nonagricultural uses unless (l) continued ***or renewed*** agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands. (emphasis added)

The Pedro Point field was historically prime agricultural land, but was abandoned. Nonetheless, renewal of prime agricultural use of the field is potentially feasible (physically and economically) and could be integrated with visitor-serving recreational and economic development aligned with the new coastal trail to Devil's Slide. The original prime agricultural soils are present beneath shallow fill. The site is suitable for coastal commercial visitor-oriented berry farm or produce farm and related recreational or visitor-serving uses (viz. Half Moon Bay to Davenport). Renewed agricultural use combined with tourism, some recreational uses, or eco-tourism may be compatible with conservation of seasonal wetlands and special-status wildlife if properly designed. The DEIR failed to consider feasible alternatives compatible with this section.

Section 30243 Productivity of soils and timberlands; conversions

> **The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.**

The Pedro Point field is former prime agricultural land (historic artichoke farm) on rich alluvial soils (drained marshland). The soils have been degraded by placement of fill, but may be remediated by either

removal of fill or addition of soil amendments to restore agricultural productivity similar to farms on the marine terraces and valleys along the San Mateo Coast south of Pacifica. There are no other potential highly productive historic farmland soils left in the Coastal Zone of Pacifica. Residential development of the field would conflict with this policy that requires the protection of long-term soil productivity. This impact was not assessed or mitigated in the DEIR.

Section 30251 Scenic and visual qualities

The *scenic and visual qualities of coastal areas shall be considered and protected* as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to *minimize the alteration of natural land forms*, to be *visually compatible with the character of surrounding areas*, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The Pedro Point field is the last undeveloped lowland (floodplain) in the Coastal Zone of San Pedro Creek's watershed that retains the original overall floodplain topography and visual character of the historic farms that dominated the valley. All other valley lowlands have been developed in the Coastal Zone of Pacifica, including the Salada Valley (the historical Salada Valley farmland has been developed, drained and filled, with only the deepest lagoon bed remaining as a wetland). The visual character of the adjacent historic railroad berm is dependent on the contrast between the steep relief of the berm and the adjacent lowland flats of the field. Residential development (with or without "pocket parks") would not protect the scenic and visual qualities of the field and adjacent historic berm. Residential development of the field would fully fill the lowland open space visual character of Pedro Point. This would conflict with the policy.

Section 30253 Minimization of adverse impacts

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 or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. […]

Most of the Pedro Point field lies approximately 15-17 feet in elevation above Mean Sea Level (MSL), only about 3-5 feet above the marsh and high tide beach at the mouth of San Pedro Creek. In addition, the

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

alluvial soils (historical wetland) of the field have the same relative liquefaction (earthquake shaking) potential as diked bay muds and marshes in San Francisco Bay, like those that underlie filled San Francisco peninsula baylands. (Witter, Robert C., Keith L. Knudsen, Janet M. Sowers, Carl M. Wentworth, Richard D. Koehler, and Carolyn E. Randolph. 2006. Maps of Quaternary deposits and liquefaction susceptibility, nine-county San Francisco Bay Area. U.S. Geological Survey Open-File Report 2006-1037 Version 1.1; shown in Draft Pacifica Coastal Land Use Plan 2014, Figure 5.1). This condition contrasts with relatively low risk of liquefaction affecting residential and commercial development in adjacent lands built over bedrock. Structural (residential or commercial) development of the field may cause significant conflicts (impacts) with this section. In contrast, this section would be potentially compatible with recreational or other low-intensity commercial development or agricultural redevelopment of the field. The DEIR failed to analyze alternative land use designations compatible with this section.

Similarly, placing additional residential development in the last undeveloped floodplain area within the coastal zone of San Pedro Valley – currently able to function as a flood detention and storage basin when San Pedro Creek is at extreme high flood stage during extreme high tides – would conflict with this land use policy (Draft Pacifica Coastal Land Use Plan 2014 p. 5-19). The intensity, frequency, and significance of this land use policy conflict would likely increase as sea level rises, and as intense storm frequency increases with climate change. In addition, the field lies within a Tsunami evacuation area of the Coastal Zone (Draft Pacifica Coastal Land Use Plan 2014, Figure 5.3). Flooding, liquefaction, sea level rise impacts, increasing over time as indicated by the draft Pacifica Coastal Land Use plan (2014) demonstrate the conflict between this Coastal Act policy and the proposed land use change for Pedro Point field.

> **Section 30255 Priority of coastal-dependent developments**
>
> ***Coastal-dependent developments shall have priority over other developments on or near the shoreline*. Except as provided elsewhere in this division, *coastal-dependent developments shall not be sited in a wetland.* When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.**

Residential development itself is not fundamentally "coastal dependent", even if the land use designation nomenclature is "Coastal Residential Mixed Use". "Coastal" as a modifier does not denote any essential distinction in the nature of residential development, but merely describes its location in the coastal zone. Other types of commercial development based on recreational access to the shoreline or the distinctive coastal climate (*e.g.*, surfer recreational events, coastal agritourism like berry farm stands with berry farming) would have priority over residential development at this location. Residential development would conflict with this policy. In addition, development within wetlands as defined in the Coastal Act

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109 baye@earthlink.net

(whether or not they meet federal wetland criteria for fill authorization under the Clean Water Act) would conflict with this policy.

City of Pacifica Land Use Policy Impacts

The DEIR's proposed change in land use for the Pedro Point field also conflicts (and thus causes a significant land use policy impact) with the City's own policy on Wetlands Conservation**:**

> p. 3.1-22 CO-I-8 **Maintain Functional Capacity of Wetlands.** Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity. *Any alteration of coastal wetlands identified by the Department of Fish and Game must be limited to very minor incidental public facilities, restorative measures, or nature study, according to the California Coastal Act.*

The "functional capacity" of the existing wetlands at the Pedro Point field and adjacent to them are dependent on their geographic setting and landscape position – their relationship to San Pedro Creek (off-channel flood velocity refuge; population buffer for California red-legged frogs; infiltration and groundwater recharge potential; flood detention and flood peak attenuation) and other hydrogeomorphic and ecological functions (red-legged frog nocturnal foraging habitat potential; shorebird storm refuge and roost sites). There are no other undeveloped historic floodplain locations within the lower San Pedro Creek valley, let alone the Coastal Zone, where loss or degradation of these functions could be compensated by wetland restoration Residential development of the field would likely have a significant impact on existing wetlands of the site and its vicinity, and without any feasible mitigation identified.

This City policy is also vague and unenforceable as mitigation for wetland impacts because: (a) it does not cite or define the scope or meaning of the jargon of wetland "functional capacity"; (b) it does not identify any geographic setting within Pacifica for 'functional capacity" (on-site or off-site/within-watershed) and (c) it fails to cite or provide any meaningful criteria for what constitutes maintenance or enhancement of "functional capacity". Furthermore, the California Department of Fish and Wildlife does not delineate or identify coastal wetlands as a service to local governments. The Department and the Coastal Commission use approximately the same wetland indicator criteria for determination of wetlands, but the agencies themselves generally do not conduct wetland delineations. The policy is also misleading as proposed policy-level mitigation in the DEIR because potential wetland fill in context of proposed land use designation changes in the DEIR do not involve restoration, nature study, or public facilities. The DEIR identifies wetlands at the Pedro Point field exactly where it proposes private mixed use residential and commercial development as the new land use designation. This "alteration" does not meet the criteria cited in the policy, and does not involve "enhancement" of functional capacity if the wetlands must be filled or drained for residential or commercial development. The land use designation proposed basically conflicts with this policy, and appears to be an unmitigated significant impact, since no feasible

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

mitigation is identified. Furthermore, the DEIR alleges that no mitigation is even required because it wrongly asserts that there is no impact.

3.0 Conclusions

The DEIR fails to provide adequate analysis of potential impacts and feasible mitigation measures for the proposed land use changes at the Pedro Point field, compared with (a) existing conditions; (b) existing land use designations under the General Plan/LCP, and (c) alternatives that are environmentally superior and compatible with Coastal Act policies. Because the DEIR is fundamentally inadequate, after such revisions, the DEIR should be recirculated for further public review.

Thank you for considering these comments. Please contact me if you have any questions.

Peter Baye

Cc: Pedro Point Community Association

Law Offices of Brian Gaffney APC

Richard Grassetti

California Coastal Commission

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412

(415) 310-5109

baye@earthlink.net

ATTACHMENT A – STATEMENT OF QUALIFICATIONS - Peter R. Baye, Ph.D.

I am a coastal ecologist and botanist with over 30 years of professional and academic experience. My Ph.D. research in coastal ecology (University of Western Ontario, Canada, Department of Plant Sciences, 1990) was followed by a career in applied ecology in California. I worked for the U.S. Army Corps of Engineers, San Francisco District, where I served as a senior environmental scientist and regulatory project manager conducting endangered species consultation, wetland jurisdictional determinations, wetland assessments, preparing Environmental Assessments and managing joint NEPA/CEQA Environmental Impact Statements/Reports. My Corps regulatory projects included sites adjacent to Port Sonoma (Sonoma Baylands, Carl's Marsh). Subsequently I worked for the U.S. Fish and Wildlife Service, where I prepared endangered species recovery plans (including comprehensive plans covering all of Marin Baylands and tidal marshes) and endangered species biological opinions. I was a contributing author and participant in the Baylands Ecosystem Habitat Goals Report (Goals Project 1999), its companion volume on Bayland species and community profiles (2000), and its 2014 update (in preparation), for which I developed many Marin bayland recommendations. I have developed or substantially contributed to estuarine wetland restoration and management plans for many Marin coastal wetland sites, including some adjacent to the plan area: Corte Madera Baylands Conceptual Sea Level Rise Adaptation Strategy, prepared by The San Francisco Bay Conservation and Development Commission and ESA PWA (specific focal area: Corte Madera Ecological Reserve marshes); Aramburu Island, Richardson Bay (with Wetlands and Water Resources) and wetland restoration projects at Bahia, Novato (with ESA-PWA) and Bolinas Lagoon (Kent Island, with William Carmen & Associates).

California Red-legged Frog in drainage channel adjacent to Calson field – April 12, 2020
Photo by Jon Harman in presence of Jon, Sheila Harmon, and Michael Vasey

04 23 2020

Subject: Fw: Red-legged Frogs
Date: Sunday, December 20, 2020 at 9:35:48 AM Pacific Standard Time
From: Stan Zeavin
To: KoppmanNorton, Julia@Coastal
Attachments: 20200519_1669.jpg, 20200519_1687.jpg, 20200519_1683.2.jpg, 20200519_1675.2.jpg, 20200519_1697.2.jpg, 20190202_5736.4.jpg

Hi Julia,

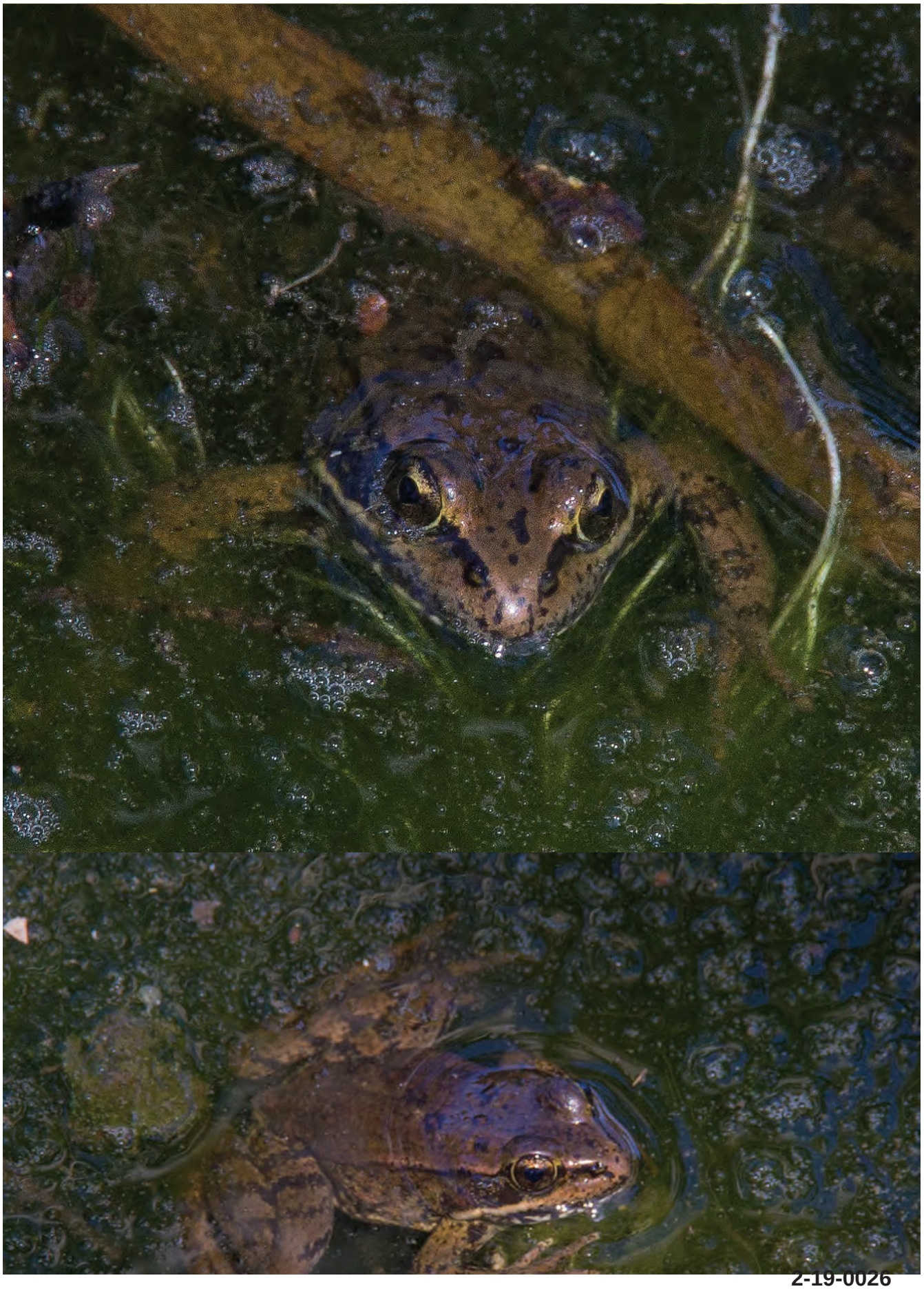
FYI, a naturalist friend took the pictures below over on Pedro Point last January after our USFWS winter plover survey at Linda Mar. The last photo with the cypress tree is on the small creek behind the strip mall that drains the entire area. The CRLFs forage west up onto the Calson property at night.

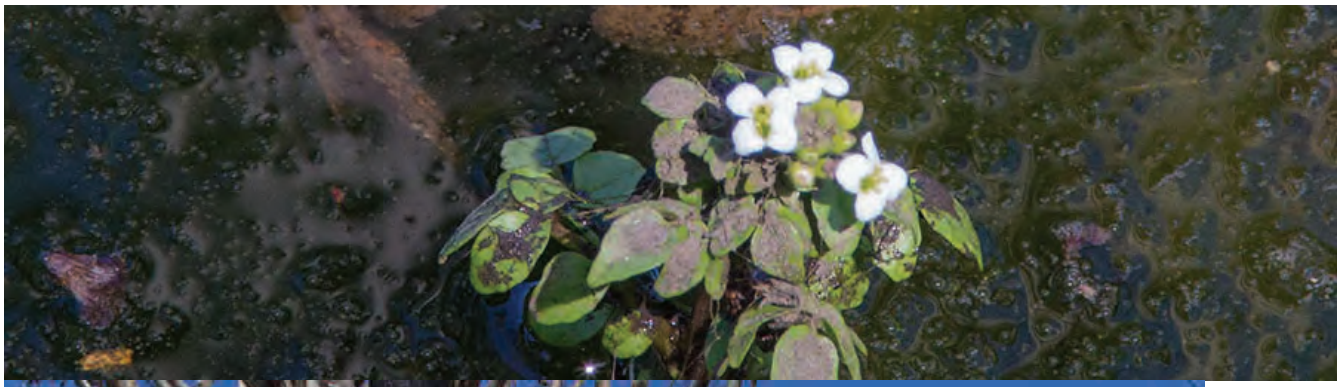
Hoping for some peace and relaxation for you over the holidays. And Happy solstice, too!

Margaret

----- Forwarded Message -----
Subject: Red-legged Frogs

May 19, 2020






SLOW
CHILDREN
AT PLAY

Paul K. Donahue
artist - naturalist - photographer
959 Anza Drive

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code VAS20F0001
Quad code 3712254
Occ. no. _____
EO index no. _____
Map index no. _____

Scientific name: *Rana draytonii*

Common name: California red-legged frog

Date of field work (mm-dd-yyyy): 04-12-2020

Comment about field work date(s): Field observation in a drainage channel along road near my home on San Pedro Road

OBSERVER INFORMATION

Observer: Michael C. Vasey

Affiliation: San Francisco State University

Address: 368 San Pedro Avenue , Pacifica, CA 94044

Email: mvasey@sfsu.edu

Phone: (650) 255-5763

Other observers: Sheila Harman and Jon Harman

DETERMINATION

Keyed in: Visually and from close up photograph

Compared w/ specimen at:

Compared w/ image in: https://www.nps.gov/rlc/pacificcoast/california-red-legged-frogs.htm

By another person:

Other:

Identification explanation: The individual frog was in drainage channel along road. Observation was about 3' away. Close-up photo taken by Jon Harman (my neighbor) is attached

Identification confidence: Confident

Species found: Yes **If not found, why not?**

Level of survey effort: Low. Drainage channel along road. Drainage known to harbor CRLF in the past (a few years ago) but they have not been present recently.

Total number of individuals: 1

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
	1			

Age class comment: Appears to be juvenile (relatively small) but I'm not an expert

2-19-0026
Exhibit 10
Page 1 of 4

Site use description: Drainage channel that drains water from Pedro Point down, across San Pedro Road, and then along east side of Calson field into a willow swale and then into San Pedro Creek near its entry into the ocean.

What was the observed behavior? Resting on floating vegetation half submerged.

Describe any evidence of reproduction: None observed.

SITE INFORMATION

Habitat description: Drainage channel along roadway

Slope: 0 Land owner/manager: City of Pacifica

Aspect: standing water

Site condition + population viability: Fair

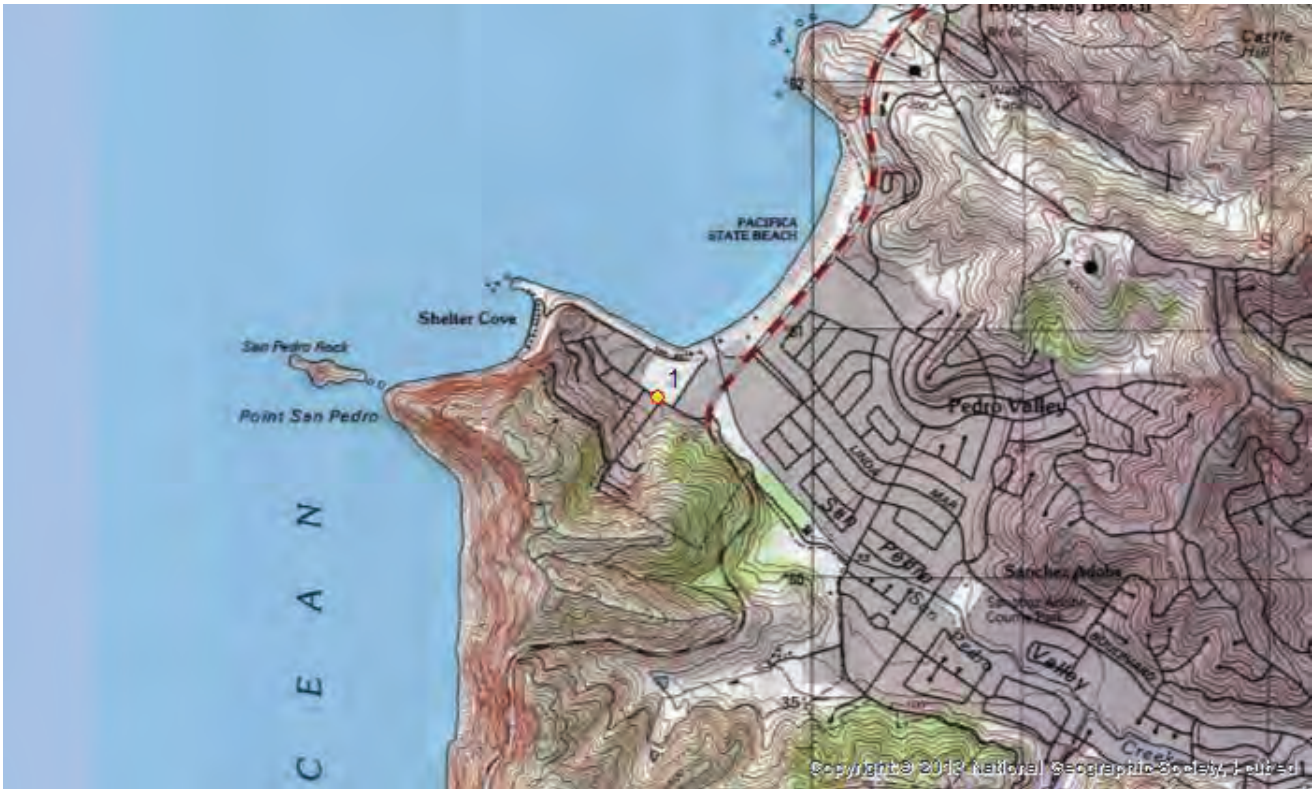
Immediate & surrounding land use: 5 acre vacant field known to have been filled during mid 1900's, drainage channel flows east down to 'dogleg' bend and then along eastern boundary of the field until going under some culverts and a swale before entering San Pedro Creek near ocean

Visible disturbances: Recent tree trimming near site but frog observed to persist after this activity. Human and dog traffic into the field but frog about 2-3 feet below banks of channel so reasonably well protected.

Threats: Water could dry up but persisting due to run-off from neighborhood. Non-point source run-off could be polluted. Possible disturbance by people and dogs passing by.

General comments: First sighting of CRLF in around five years. Used to be a larger population, apparently breeding, in the dogleg portion of the channel near the road. So far, only one individual observed.

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Mateo	Montara Mountain	18	37.59432	-122.50808	543426	4160920	10
1	**Public Land Survey**	**Feature Comment**						
	M T04S R06W 10	Drainage channel in 2 feet of standing water						

The mapped feature is accurate within: 5 m

Source of mapped feature: CNDDB Field survey form

Mapping notes: Drainage channel along north side of San Pedro Road near junction with Grand Ave in floating algae but clearly visible. Frog has been there persistently since first observed.

Location/directions comments: Take turn off from Hwy 1 and San Pedro Road, cross creek by shopping center, take big curve by Ace Hardware, just past Grand Ave is the drainage channel on north side of road.

Attachment(s): CRLF in drainage channel Pedro Point, Pacifica.pdf

Presumed California red-legged frog in drainage channel along San Pedro Road – Observed by Sheila Harman, Jon Harman, and Michael Vasey on April 12, 2020. Photo by Jon Harman.

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
VOICE (415) 904- 5200
FAX (415) 904-5400
WWW.COASTAL.CA.GOV

MEMORANDUM

FROM: Lauren Garske-Garcia, Ph.D. – Senior Ecologist

TO: Julia Koppman Norton – North Central Coast District Analyst
Jeannine Manna – North Central Coast District Manager
Dan Carl – North Central Coast District Deputy Director
Jessica Reed – North Central Coast Legal Counsel

SUBJECT: 505 San Pedro, Pacifica (APN 023-72-010): Ecological Resources

DATE: January 25, 2021

Documents Reviewed:

- California Natural Diversity Database (CNDDB), latest query: January 10, 2021.
- Coast Ridge Ecology. Biological Resources Assessment for APN 023-72-010. Prepared for Shawn Rhodes/NorCal Surf Shop, Pacifica, California 94044; March 2015.
- Coast Ridge Ecology. 505 San Pedro Avenue, Pacifica Wetland Delineation. Prepared for Shawn Rhodes/NorCal Surf Shop, Pacifica, California 94044; November 2019.
- Coast Ridge Ecology. Letter to Shawn Rhodes RE: Observed Change of Flow Conditions of Drainage Channel Adjacent to the Pedro Point Shopping Area and the Proposed NorCal Surf Shop Mixed-Use Development Project, San Mateo County, California. CDP Application 2-19-0026; June 13, 2020.
- Live Oak Associates, Inc. Letter to Nick Pappani RE: Biological Resources Assessment Peer Review for the Shawn Rhodes/NorCal Surf Shop project, located in the City of Pacifica, San Mateo County, California (PN 2110-01); January 19, 2017.
- Thomas Reid Associates. 2005a. Biological Assessment Report. APN (023-72-10) Pacifica, CA 94044. For Compliance with San Mateo County Local Coastal Program Policies. Prepared for Rick D Lee and Richard Lee. August 2005.
- Thomas Reid Associates. 2005b. Site Assessment for California Red-Legged Frog. APN (023-72-10) Pacifica, CA 94044. For US Fish and Wildlife Service, Sacramento Field Office. Prepared for Rick D Lee and Richard Lee. August 2005.

- Wood Biological Consulting. One-Parameter Wetland Delineation for the Proposed NorCal Surf Shop Mixed-Use Development, San Mateo County, California (CDP Application 2-19-0026). Prepared for Shawn Rhodes, 5460 Pacific Coast Highway, Pacifica, CA 94044; May 14, 2019.

The North Central Coast District has requested a technical analysis of the ecological resources that could be adversely impacted by proposed development at 505 San Pedro Avenue in Pacifica, California (APN 023-72-010). The project would almost entirely cover the approximately 600-ft long by less than 60 ft-wide parcel with several buildings, a skate park, parking, and pedestrian pathways. The parcel is bounded by Halling Way and a strip mall to the east, San Pedro Avenue to the south, a drainage and an open field to the west, and to the north, a footpath leading to the southern reach of Pacifica State Beach (**Figure 1**). The adjacent drainage intermittently conveys water, including from westward San Pedro Avenue to a culvert at the northern end of the subject parcel, which connects to the mouth of San Pedro Creek on the opposite side of a shopping center parking lot, approximately 270 feet to the east. Importantly, the parcel is divided between jurisdictions, with approximately one third nearest the sea occurring within the Commission's retained jurisdiction and the remainder nearest San Pedro Avenue within the City's jurisdiction – the applicant did not elect to pursue a consolidated permit and the City approved a permit for the portion of the project in its jurisdiction in 2018. The following analysis addresses the Coastal Development Permit (CDP) application submitted to the Commission and my **conclusion is summarized on page 12**.

History

Since May 2010, when the applicant preliminarily sought consultation with Commission staff, staff has consistently identified concerns regarding wetlands and other biological resources both on and adjacent to the project site. In a letter dated May 8, 2015 to the City of Pacifica concerning review coordination for the proposed project, staff cited a 2005 biological report that characterized the drainage as an intermittent stream, that California red-legged frogs (CRLF) were likely present and breeding in the area surrounding the property, and that the drainage likely served as a dispersal corridor from nearby San Pedro Creek. In the 2015 letter, staff concluded that the proposed project would not conform to Local Coastal Plan (LCP) policies protecting sensitive habitats. In May 2018, staff commented on the project's Initial Study/Minimum Negative Declaration (IS/MND)[1] and again reiterated concern for both wetlands and sensitive species that may be affected, specifically citing concern for CRLF use of the drainage as a corridor and its movement across adjacent areas including the subject parcel. The City's response largely dismissed these concerns[2] and since that time, staff has continued to reiterate them to the applicant.

Following review of several submitted documents, initial desktop research, and having made an informal roadside visit to the site in March 2019, I and several District staff met with the applicant and their representatives on-site on October 3, 2019. During this visit, ecological concerns were again discussed at length.

[1] Email from Patrick Foster, Coastal Commission Analyst, to Christian Murdock, Senior Planner at City of Pacifica RE: 505 San Pedro CEQA Document. May 1, 2018.

[2] City of Pacifica. 2018. Response to Comments: 505 San Pedro Avenue Project Initial Study/Mitigated Negative Declaration, Public Review Draft – Agency Comments. June 2018.

Wetlands

The 2005 biological report referenced in the Commission staff 2015 letter regarded the drainage adjacent to the subject parcel as an intermittent stream and the California Aquatic Resources Inventory (CARI) maps it as part of a natural fluvial drainage sourcing from across San Pedro Avenue and the forested area behind existing development (**Figure 2**). The drainage receives flows from the Pedro Point neighborhood, which primarily enter through a culvert directly east of the subject parcel and flow northward until meeting San Pedro Creek. A scour pool has formed at the mouth of the culvert, next to the roadside, and water generally ponds for some distance thereafter, even well after seasonal flows cease (**Figure 3**). During larger flows, surface water continues along the full length of the drainage paralleling the subject parcel and exits through a culvert largely obscured by the willow thickets at its north end, which daylights within a restoration area on City land for a short distance, enters another culvert, and then flows into San Pedro Creek on the other side of the San Pedro Shopping Center. Aerial imagery shows that throughout the year, the drainage remains largely green with vegetation even when surrounding areas dry out (**Figure 4**).

Despite suggestions that the drainage be characterized as a stream, I believe it is more accurately treated as wetlands for several reasons. First, while there may be intermittent seasonal surface flows along the length of the drainage between San Pedro Avenue and the northern willow thickets, the scour pool near San Pedro Ave appears to remain a largely wetted feature year-round, while mid-way ponding and flow beyond this is more seasonal, and in the area furthest north, limited to the largest flows. Second, apart from the planted windbreak along the western side of the drainage, which is above the banks and/or normal extent of flows, the drainage largely lacks the multi-strata structure of a typical riparian corridor; instead, the vegetation is primarily composed of an herbaceous layer with some vines and brambles along the eastern bank. Third, the presence of emergent vegetation typical of wetlands (e.g., willows and bulrush) has reportedly increased over time despite the drainage's relatively degraded state, suggesting the persistence of subsurface water.[3] Fourth, a previous biological assessment report references delineated three-parameter wetlands within the drainage totaling approximately 0.02 ac (Thomas Reid Associates 2005a). Fifth, as detailed in a 2014 comment letter provided by Dr. Peter Baye to the City regarding the Draft Environmental Impact Report for the Pacifica General Plan Update Project, this area was historically a complex of freshwater marsh and alder-willow swamp surrounding what was once Lake Mathilda, a freshwater lagoon outlet of San Pedro Creek prior to its channelization and infill to support the development observed today.[4] Finally, the project's 2018 IS/MND regarded the drainage as a man-made intermittently flowing swale that would be exempt from creek protections under the Local Coastal Land Use Plan (LCLUP) and asserted that the proposed project would have a less-than-significant impact on sensitive resources even though it acknowledged that the drainage would meet the Coastal Commission definition of a wetland (and despite the lack of a proper delineation at that time).[5]

Wetlands are protected under the Coastal Act by several policies including §30231, which emphasizes the importance of protecting and enhancing water quality and states:

> ***Biological productivity; water quality***
> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes*

[3] Baye, P. 2014. Letter to City of Pacifica RE: Draft Environmental Impact Report for the Pacifica General Plan Update Project – SCH #2012022046. 29pp

[4] Baye, P. 2014. *Ibid.*

[5] City of Pacifica. 2018. 505 San Pedro Avenue Project Initial Study/Mitigated Negative Declaration, Public Review Draft. April 2018.

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 waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Another key policy is §30233, which limits the allowance of direct impacts to wetlands to specified situations, requires that such action would constitute the least environmentally damaging feasible alternative, and that the impact is minimized and mitigated for:

Diking, filling or dredging; continued movement of sediment and nutrients
(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities…

Wetland Delineations

In May 2019, the applicant submitted a wetland delineation to inform the proposed project's potential to impose adverse impacts on wetland resources, both on the subject parcel and in the adjacent drainage. This delineation had several issues and shortly following our site visit in October 2019, a second delineation was completed; the delineation dated November 2019 has since been used as a basis for technical analysis. Despite having been completed outside of the wet season when wetlands are best detected and delineated, all three wetland parameters were present in at least some areas[6] and six different wetland types were identified within the drainage channel, characterized as: arroyo willow thicket, perennial rye grass, small-fruited bulrush marsh, smartweed, ephemeral channel, and wetted channel. Two of these have been mapped on the subject parcel itself (a small area of smartweed within the City's jurisdiction and a large portion of the arroyo willow wetlands at the

[6] United States Army Corp of Engineers jurisdictional wetlands, based upon the presence of all three parameters (hydrology, vegetation and soils), totaled 0.088 ac; Coastal Commission wetlands, based upon the presence of at least a single parameter, totaled 0.248 ac.

northern end, in the Commission's jurisdiction). Of note is that the increase in area delineated in 2019 relative to what was reported from 2005 (Thomas Reid Associates 2005a) supports observations also made by Dr. Baye that wetland areas have expanded at this location.[7]

According to estimates provided in the analysis of the November 2019 wetland delineation, the proposed development would occur inside the wetland boundary at the arroyo willow thickets where a retaining wall to support an existing earthen berm and proposed pedestrian pathway along the full length of the subject parcel would be constructed. **Figure 5** illustrates that the retaining wall would in fact encroach roughly 20 ft into the willows and directly remove wetland habitat; however, the project fails to qualify as an allowable use under Coastal Act §30233 and moreover, the willow stand also qualifies as ESHA (see next section). Elsewhere along the length of the drainage, the retaining wall would be sited no more than 11 ft from the delineated Commission wetlands while the buildings and other development features would sit between 9 and 30 ft of the wetland boundaries at their nearest points.

Wetland Buffers

Typically, staff recommends at minimum 100-ft buffers surrounding wetland habitats to adequately protect them from the many impacts that they may experience due to adjacent development. Such impacts can include altered drainage patterns and runoff, noise, debris, visual disturbance to wildlife, and inadvertent trampling. In some situations, reduced buffers have been recommended after taking into consideration wetland quality, the surrounding landscape, habitat functions, and the wetland's susceptibility to various impacts; however, buffers sufficient to provide meaningful protection are still generally required.[8] Here, based on the information available to us prior to April 2020, including a lack of records affirming concerns for sensitive species use, I have advised that **with the proposed BMPs and additional project modifications to avoid direct impacts to wetlands and to protect water quality, that wetland buffers might be reduced to no less than 25 ft along most of the drainage except where delineated by willow thickets and bulrush marsh. Around the willow thickets and bulrush marsh, which constitute arguably robust features providing relatively more habitat value and support for other species (e.g., complex shelter, refuge, foraging), my recommendation was a minimum 50-ft wetland buffer**. Further informing my recommendation is that the willow thickets and bulrush marsh are characterized by the California Department of Fish and Wildlife (CDFW) as sensitive natural communities that qualify as ESHA (see discussion below). These recommended wetland buffers are reflected in **Figure 5** except around a small patch of small-fruited bulrush marsh, which would extend further onto the subject parcel than as depicted.

Environmentally Sensitive Habitat Areas

Coastal Act §30107.5 defines environmentally sensitive [habitat] areas 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.*

Rarity determinations for habitats and species are made by CDFW, the United States Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS), and are used to support Coastal Commission ESHA

[7] Baye, P. 2014. *Ibid.*

[8] For example, see: Blackman and O'Connell (A-2-PAC-15-0046) where wetland buffers surrounding a willow stand were reduced to 50 ft, or Trask (A-1-DNC-07-036) where wetland buffers surrounding emergent vegetation were reduced to a minimum 68 ft.

determinations.[9] An ESHA determination may also be made on the basis of an area constituting 'especially valuable habitat' where it is of a special nature and/or serves a special role in the ecosystem, such as providing a pristine example of a habitat type or supporting important ecological linkages.

The key policies addressing ESHA follow under §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.*
>
> *(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.*

This is notably more restrictive than the preceding wetland policies, as it limits uses of ESHA to those dependent upon it and requires protection from not only direct impacts, but also indirect impacts that may result from adjacent development.

Sensitive Natural Communities

Arroyo Willow Thickets

The arroyo willow thickets located at the northern end of the subject parcel and continuing into the adjacent drainage are classified by CDFW as a natural vegetation community. Although the broader alliance Arroyo Willow as a whole is not considered rare, the more specific association characterized by stands exclusively composed of the namesake species, arroyo willow (*Salix lasiolepis*), is represented at this site and is considered sensitive.[10] While this association does not presently have a rarity ranking, CDFW guidance is to treat communities designated as sensitive, whether or not they are ranked, with comparable protections. Under the Coastal Act, the arroyo willow thickets delineate as a wetland on the basis of their facultative wetland indicator status and therefore, must be treated as wetlands under Coastal Act §30233 rather than as ESHA under §30240[11]; however, the sensitive natural community status gives weight to the ecological significance of the thickets and is reflected in my more protective buffer recommendation of 50 ft relative to that for other wetlands at this site (except small-fruited bulrush marsh), as detailed above. Though not documented at this location, sensitive species such as the saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*; CA Species of Special Concern) are known to use willow thickets as breeding habitat and many birds and smaller animals use them more generally.

Small-fruited Bulrush Marsh

Similar to the arroyo willow thickets, the small-fruited bulrush marsh identified in the wetland delineation is characterized by CDFW as a sensitive natural community. Specifically, the alliance Small-Fruited Bulrush has a state rarity ranking of S2 indicating that is considered imperiled within the state and at high risk of extirpation. The association characterized by stands exclusively composed of the namesake species, small-fruited bulrush

---

[9] CDFW defines natural communities, animals, and plants with a global or state ranking of 1, 2, or 3 as rare and the CCC typically finds these to be ESHA. CCC also typically considers plant and animal species listed by the federal and state endangered species acts (ESA and CESA, respectively) and/or identified under other special status categories (e.g., California Species of Special Concern), and/or identified by the California Native Plant Society (CNPS) as '1B' and '2' plant species as constituting ESHA.

[10] Explanation of alliance vs. association; see Arroyo Willow Thickets alliance (CaCode: 61.201.00) and *Salix lasiolepis* association (CaCode: 61.201.01) in California Sensitive Natural Communities list (version: September 9, 2020) – accessible online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

[11] *Bolsa Chica Land Trust v. Superior Court* (1999) 71 Cal.App.4th 493

(*Scirpus microcarpus*), is represented at this site and though unranked, is considered sensitive.[12] The species is an obligate wetland indicator and like the arroyo willow, is necessarily treated under wetland policies but warrants the protection of a 50-ft buffer due to its ecological significance. Species such as the California red-legged frog (see below) frequently use bulrush habitat for breeding.

Sensitive Wildlife

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*) is federally-listed as threatened and recognized by the state as a Species of Special Concern, is state-ranked as S3 indicating that it is considered vulnerable, and is the official state amphibian.[13] It is the largest native frog in the western United States and is frequently associated with freshwater emergent wetlands, marshes, and riparian corridors throughout the central California coast but can also inhabit lagoons, ephemeral water bodies, stock ponds, and man-made drainages as well as drier habitat types within the wetter and cooler coastal fogbelt. CRLF uses both aquatic and upland habitat, the former for refuge and breeding, and the latter for foraging, dispersal, and aestivation. Breeding habitat is often characterized by perennial bodies of water with emergent vegetation providing structural complexity such as cattails, bulrush (see above), or dense riparian cover; however, sub-optimal habitats with little to no emergent vegetation and/or that periodically dry out are also known to be used.[14] Dispersal habitat is generally considered to be areas within 1-2 miles of breeding areas, and can include forests, grasslands, coastal scrub, root masses formed by brambles or thickets, and oak woodlands in addition to those already named above.[15] CRLF movement across habitat tends to peak during rainy periods and can vary widely among individuals.

CRLF breeding occurs from November to April. Reproduction rates tend to be highly variable and responsive to climate conditions (e.g., drought vs. wet years). Individuals may remain at breeding sites year-round or disperse to neighboring areas. Along the central coast, the species is particularly mobile and has been documented traversing areas that would not otherwise be expected, especially during wet conditions.[16]

CRLF has a diverse diet, which changes throughout its life cycle. Early in its life, it is believed to primarily consume algae, diatoms and detritus.[17] As it matures, terrestrial and aquatic insects tend to make up the largest fraction of its diet, although larger frogs have been documented as consuming smaller invertebrates, including the smaller Pacific chorus frog (*Pseudacris sierra*), which is also common throughout this region.[18] CRLF are considered diurnal but primarily forage at night.

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[12] See Small-fruited Bulrush Marsh alliance (CaCode: 52.113.00) and *Scirpus microcarpus* association (CaCode: 52.113.01)

[13] California Assembly Bill 2364, approved June 28, 2014 - http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB2364

[14] USFWS. 2004. Federal Register: Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the California Red-legged Frog (*Rana aurora draytonii*); Proposed Rule. 50 CFR. Part 17. Vol 69. No. 71: 19620-19642.

[15] Fellers, G. 2005. *Rana draytonii* Baird and Girard, 1852b California red-legged frog. Pages 552-554 in M. Lannoo (editor). Amphibian declines: the conservation status of United States species. University of California Press. Berkeley, California; CWHA database

[16] Bulger, JB, NJ Scott Jr. & RB Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110(1): 85-95.

[17] Fellers, G. 2005. *Ibid.*

[18] Hayes, MP & MR Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). The Southwestern Naturalist 30(4): 601-605; Fellers, G. 2005. *Ibid.*

Key threats to CRLF are recognized as habitat loss, urban encroachment, and the introduction of non-native species such American bullfrogs that can compete with CRLF for habitat as well as prey upon them. Several introduced freshwater fish species are also known prey on CRLF. Herbicide and pesticide use as well as disease may be other significant threats to CRLF, as has been documented for many amphibians around the globe.[19]

Prior to April 2020, we were unaware of any records affirming the presence of California red-legged frogs (*Rana draytonii*) at the subject parcel or its immediate surroundings although it has been well-documented at nearby San Pedro Creek.[20] While I and the consulting reports I had initially reviewed for this project considered the species to have at least a moderate potential to occur given records from the nearby creek, there has also been recognition of the degraded state of the subject parcel and adjacent drainage as relatively unfavorable when compared to nearby habitat opportunities. No published record had appeared in the California Natural Diversity Database (CNDDB) beyond the creek's main channel, the project's IS/MND, or the other known reports for the location that staff generally relies upon. In addition, recent neighboring developments within the City's jurisdiction along San Pedro Avenue had truncated the drainage's corridor extension to more forested areas in the south and potential foraging, aestivation, and dispersal areas to the east (**Figure 2**). As such, my recommendations had focused on the wetlands and ensuring that appropriate measures would be taken during construction, in the off chance a frog was encountered.

On April 18, 2020, Commission staff received a report and accompanying photo from Pedro Point resident and San Francisco State University ecologist, Michael Vasey, documenting the presence of CRLF in ponded water at the drainage adjacent to the subject parcel six days prior.[21] I was able to validate that the animal in the photo (**Figure 6a**) was a CRLF based upon diagnostic markings that were clearly visible and advised Dr. Vasey to submit his documentation to CDFW for further validation and inclusion to the CNDDB; District staff informed the applicant of this new finding. On April 24, another Pedro Point resident, Sheila Harman, contacted staff on behalf of herself and Jon Harman, with additional reports of having observed as many as four CRLF at the same location at one time and provided both time-stamped photos and a video also showing the surrounding location in relation to San Pedro Avenue to confirm this (**Figure 6b-c**)[22]. She also commented that this was the first time in the past seven years that they had observed CRLF at the site, indicating previous but undocumented observations. On April 28, Dr. Vasey communicated with staff again, indicating that he and the Harman's had now seen as many as five CRLF at a time in the drainage ditch along San Pedro Avenue and the pool just past the culverts feeding into the drainage adjacent to the subject parcel at 505 San Pedro Avenue.[23] He also relayed a 2014 comment letter he had discovered through conversation with Peter Baye, another ecologist working along the central coast. This letter is referenced above in the discussion on wetlands.[24]

Dr. Baye's 2014 letter provides important insights specific to CRLF, the surrounding area, and the drainage itself.

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[19] Davidson, EW, M Parris, JP Collins, JE Longcore, AP Pessier, & J Brunner. 2003. Pathogenicity and transmission of chytridiomycosis in tiger salamanders (*Ambystoma tigrinum*). Copeia 2003(3): 601-607.

[20] CNDDB records for Occurrence Number 652 cover the lower half-mile of San Pedro Creek since 2002, when a total of 5 frogs were recorded from approximately 0.2 mi north of the subject parcel; reports since 2014 have more frequently detailed occurrences, including as many as 129 frogs caught in June-October in 2014 and notes that that adults were observed year-round in 2015. Egg masses were documented in 2014 and 2015.

[21] Vasey, M. (personal communication, April 18, 2020)

[22] Harman, S. (personal communication, April 24-29, 2020)

[23] Vasey, M. (personal communication, April 29, 2020)

[24] Baye, P. 2014. *Ibid*.

He presents information on CRLF not found in the research various parties had conducted, including reporting having observed CRLF at the drainage over different seasons since at least 2005 and having submitted an official report to USFWS in 2005.[25] Dr. Baye specifies that his observations have occurred regularly at the drainage and that CRLF have been most frequently found in the ponded, perennially wet area [scour pool] nearest San Pedro Avenue, the location neighborhood residents made reports from in April 2020. He hypothesizes that these animals may represent a local sub-population with a relationship to the lower San Pedro Creek wetland complex and that this perennially wet area may be breeding habitat given his observations of intermittent local population fluctuations and observation of other habitat requirements being immediately proximate, including the large field just west of the drainage. He also states that he believes this area would qualify as ESHA. Dr. Baye's report goes on to note that CRLF was apparently absent throughout the drought period beginning in 2012 through the time of his report in 2014. As the drought ended in the winter of 2017, it is not all the surprising that the applicant's consultants would not have observed CRLF at the site when conducting the biological assessments in 2015 (Coast Ridge Ecology) or January 2017 (Live Oak Associates) as the area was just coming out of drought status.[26]

I reached out to colleagues at CDFW and the USFWS in May 2020 to further investigate whether there was any other unpublished CRLF occurrence information, either from the drainage or otherwise nearby apart from San Pedro Creek. CDFW staff at the Biogeographic Branch were able to confirm that Dr. Vasey's April 2020 CNDDB submission appeared to be valid, including the species identification; since then, his record has been processed and officially incorporated to the state database (**Figure 2**). USFWS staff from the Bay-Delta Regional Office indicated that while they did not have the 2005 record submitted by Dr. Baye available digitally, it was likely that it has been held as a paper file that cannot be accessed readily due to constraints imposed by the current pandemic. Nonetheless, they were not surprised by the contemporaneous observations and were able to provide comments on recent observations from nearby San Pedro Creek[27] as well as advise that ESA Section 10 permitting may be necessary and that recommended habitat corridors for CRLF are typically 300 ft, which is consistent with Commission decisions elsewhere along this part of the coast.[28]

In response to the discovery of CRLF in April 2020 at the drainage channel, the applicant's consultant at Coast Ridge Ecology (2020) has observed that significantly more water appears to be flowing through the drainage now than during their initial assessment in 2015. Notably, 2015 would have been several years into a drought (stage 3: extreme drought) whereas conditions were less severe in 2020 (stage 1: moderate drought), so this might be reasonably expected.[29] The consultant speculates that the differences could be a result of supplemental water inputs from nearby residential properties but does not provide any evidence thereof or consider alternative explanations (including relative drought conditions). They also express doubt concerning CRLF's ability to have moved from San Pedro Creek into the drainage and suggest that they may have been "assisted by humans (i.e. planted in the drainage)". They consider the area "isolated" without acknowledging the dispersal range and known movement patterns of the species, particularly in the coastal fogbelt, where culverts connect the drainage channel directly to a City restoration area and ultimately, San Pedro Creek only 300 ft away from the north end of

[25] Baye, P. 2005. Letter to United States Fish and Wildlife Service RE: Documentation of California red-legged frog occurrence at Pedro Point, Pacifica, San Mateo County. May 4, 2005.

[26] https://www.drought.gov/historical-information for January 2017

[27] For example: United States Fish and Wildlife Service. Consultation Letter to United States Army Corps of Engineers RE: Formal Consultation on the San Pedro Terrace Project in San Mateo County, California. Reference #08ESMF00-2017-F-1370. April 5, 2018.

[28] UC Santa Cruz Marine Science Campus - Coastal Long Range Development Plan. January 2017. 344pp.

[29] https://www.drought.gov/historical-information for March 2015 and April 2020

the subject parcel. Though these avenues of dispersal are perhaps not the most idyllic, the species is capable of having used any variety of these. Finally, the consultant argues that the location is unlikely to provide "*consistent, stable long-term habitat for [CRLF] over time*" and that it would likely be considered a population sink. However, CRLF is known to use (and require) a mosaic of habitat types across the landscape and we cannot ignore that the species has been documented using this location intermittently for decades, even in the absence of focused study. Moreover, it is not necessary for CRLF to carry out its full life cycle in the drainage for the area to have ecological value for this sensitive species.

In August 2020, I reached out to Dr. Baye to inquire whether he had a copy of his 2005 report to the USFWS, which had been referenced in his 2014 letter. He was able to forward this report to staff, including photos of CRLF, thus providing additional information that had not been otherwise available through standard data searches or inquiries during the pandemic. On May 4, 2005, Dr. Baye reported to USFWS having observed three adult CRLF at the [scour] pool adjacent to San Pedro Avenue on the previous day, at the southern end of the drainage ditch directly adjacent to the subject parcel. He also states that he had observed "*multiple aural detections of diving frogs in April"* and indicates that water turbidity limited visual detections but *"no egg masses were observed within the visible upper 10 cm of water column."* **Figure 7** is excerpted from Dr. Baye's report and also appears in his 2014 letter to the City.

In the course of my research, I also sought out the biological assessment report from 2005, which had been referenced in the May 8, 2015 staff letter to the City regarding review coordination for the proposed project. Although such reports are generally considered outdated after five years for the purposes of evaluating current conditions at a site, they can be informative in the context of habitat change as well as documenting patterns of use (or likely use). Where data is limited and/or species may not be readily detected, historical reports can be especially helpful. In this situation, I located not only the biological assessment report (Thomas Reid Associates 2005a) but also discovered a site assessment specifically for CRLF (Thomas Reid Associates 2005b). Both 2005 reports had been intended to inform a different project at the same location, which would have restored habitat over approximately 60% of the subject parcel including the willow thickets and upland areas to be contiguous with the then-planned wetland restoration at San Pedro Creek. Concerning CRLF, while the species was not explicitly confirmed on-site by these two reports, it was regarded that "*there is a high potential for them to be present within proximal aquatic habitats… [including] the drainage ditch adjacent to the property as a traveling corridor or nearby upland areas for aestivation*" and the consultants recommended "*that this report be submitted to the [USFWS]*" for further consultation, though it remains unclear whether it ever was. The proposed restoration was apparently anticipated to benefit CRLF among other species.

The recent repeated daytime observations of multiple CRLF at the roadside end of the drainage indicates that even in the absence of formal surveys, the area has been functioning as habitat for more than an individual transient CRLF. Consideration of this, the multiple reported occurrences of CRLF at the drainage since at least 2005, and the concurrence of information from colleagues at partner resource agencies informs my revised opinion that CRLF occurrence here is not a moderately hypothetical possibility but in fact, a demonstrated pattern of use. Given the connection to San Pedro Creek, including by way of the underground culvert, the observations of CRLF near San Pedro Avenue, wetlands, and evidence of the drainage's role as a green corridor year-round, the full length of the drainage adjacent to the subject parcel should be considered habitat. In addition, because CRLF requires not only wetted areas but also makes use of upland habitats for foraging, dispersal, and estivation, this habitat is very likely extends to adjacent upland areas on either side of the drainage. Though we cannot presently delineate the full extent of CRLF use in these areas without protocol-level surveys, we can interpret that at a

minimum, the drainage itself constitutes ESHA and is likely functioning as a habitat corridor for this species between San Pedro Creek and upland areas.

Habitat Corridors

The drainage running adjacent to the subject parcel arguably constitutes a habitat corridor for CRLF but additionally, likely supports several other species moving across the landscape as well. As evident from the time-series of aerial imagery (**Figure 4**), the drainage remains relatively green throughout the seasons and as compared to adjacent parcels. It also connects to San Pedro Creek (through culverts), the shore, and the Pacific Ocean in the north; a large open space to the west; historically, to spaces in the east beyond the subject parcel (i.e. the parcel due east of Halling Way, along San Pedro Avenue); and to a major forested area to the south, which again connects to San Pedro Creek, though this connection was somewhat fragmented by recent development.

Despite the more recent encroachments of development, it remains that the drainage provides a connection across the landscape capable of supporting many species including birds and small mammals that may be less affected by some of these interruptions. For example, birds move primarily by line of sight rather than on-the-ground conditions and while raptor nests have not been observed in the trees immediately along the drainage, the forested area to the south is better-suited for such and the large open space just west of the drainage provides excellent conditions for foraging on fossorial rodents and small reptiles; raptors have been regularly observed using the area.[30] These same small animals (and others) are likely to find refuge within the drainage relative to sun, wind, and predator exposure where surrounding areas are paved, mowed, or otherwise devoid of vegetation. During my brief roadside visit in March 2019, I observed a duck resting among ponded waters of the drainage (**Figure 3e**) indicating that waterfowl also use the shaded and wetted area at least occasionally. Small mammals such as skunks, raccoons, and coyote would all be likely to make use of the drainage area as well.

In addition, the California Essential Habitat Connectivity Project identifies a major natural landscape block beginning in Pacifica and extending south through the San Mateo and Santa Cruz Counties coast and mountains (**Figure 8**).[31] It also recognizes "small" natural areas (defined as < 2000 ac), with one of approximately 140 ac occurring some 800 ft south of the project site, in the forested area that has already been discussed (**Figure 9**). All of this emphasizes the especially valuable role of the drainage in facilitating connections across a semi-developed landscape, from the shore and creek mouth to forested areas inland, as well as open spaces that can function as upland habitat and foraging grounds, and I recognize it as a habitat corridor rising to the level of ESHA.

ESHA Delineation & Buffers

The sensitive natural communities of **Arroyo Willow Thickets and Small-fruited Bulrush Marsh both constitute ESHA** in addition to wetlands, as delineated in the November 2019 wetland delineation report. As stated above in the wetlands section, **buffers of 50 ft should be applied to these two areas**.

As a federally-threatened and California Species of Special Concern, the California red-legged frog qualifies for Coastal Act protection under ESHA policies. Thus, the revelation that CRLF does, and has, in fact occurred at this location necessitates consideration of habitat beyond that of the wetlands. With the limited documentation available, it is not possible to precisely delineate boundaries for CRLF habitat but we can observe that there is no

[30] eBird records for the area include white-tailed kites, golden eagles, sharp-shinned hawks, red-shouldered hawks, and red-tailed hawks – www.ebird.org

[31] Spencer, WD, P Beier, K Penrod, K Winters, C Paulmann, H Rustigian-Romsos, J Strittholt, M Parisi and A Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation and California Department of Fish and Game, and Federal Highways Administration. 313 pp.

biological argument that would exclude CRLF from the subject parcel or limit its movement to the narrow drainage immediately adjacent. Provided the species ecology, including dispersal and foraging patterns along the central coast, I expect it will readily use nearby upland areas and move freely with little regard for topography or substrate. Given the USFWS recommendation of providing CRLF with at least a 300-ft dispersal corridor where it is known, we can conclude that even if this width was centered on the drainage, it would extend across and beyond the subject parcel well to the east (**Figure 5**); therefore, **I find that the entire subject parcel constitutes CRLF ESHA and that this extends some yet-to-be-defined distance beyond the parcel. No buffer recommendation is provided since it is irrelevant in the absence of an outer habitat limit from which to apply.**

Habitat corridors are increasingly critical to preserve as natural lands are converted and encroached upon by development; however, their delineation can be challenging since each species will use the space differently. Often, riparian areas are treated as corridors with the outermost extent of riparian vegetation being recognized as the edge, from which buffers are then applied to ensure that wildlife movement in and out of riparian cover is protected for some distance. In this case, it is clear that the drainage adjacent to the subject parcel is part of a larger network connecting different habitats but its boundaries are less well-defined by a canopy than riparian areas and it is likely somewhat more permeable within the landscape mosaic. Because we know that CRLF is almost certainly using the drainage as a corridor but cannot clearly define the bounds of such use with the data available, the same determination must transfer to the EVH-based ESHA – **I find that the subject parcel is part of a general habitat corridor ESHA, which extends some yet-to-be-defined distance beyond the parcel. No buffer recommendation is provided since it is irrelevant in the absence of an outer limit from which to apply.**

In conclusion, I find that the subject parcel includes wetlands, Arroyo Willow Thicket ESHA, California red-legged frog ESHA, and habitat corridor ESHA. These sensitive habitat resources are continuous with the immediately adjacent drainage, which additionally includes Small-fruited bulrush marsh ESHA. The boundaries of at least some of these sensitive resources extend beyond both the drainage and subject parcel, resulting in the entire subject parcel necessarily being recognized as ESHA in addition to the wetlands that have also been delineated there.

Figure 1a: 505 San Pedro Avenue parcel (approximated in yellow) as situated in the broader surrounding landscape, and **b:** relative to specific features including the adjacent drainage (approximated by dashed white arrow), scour pool (red asterisk), and willow thickets.

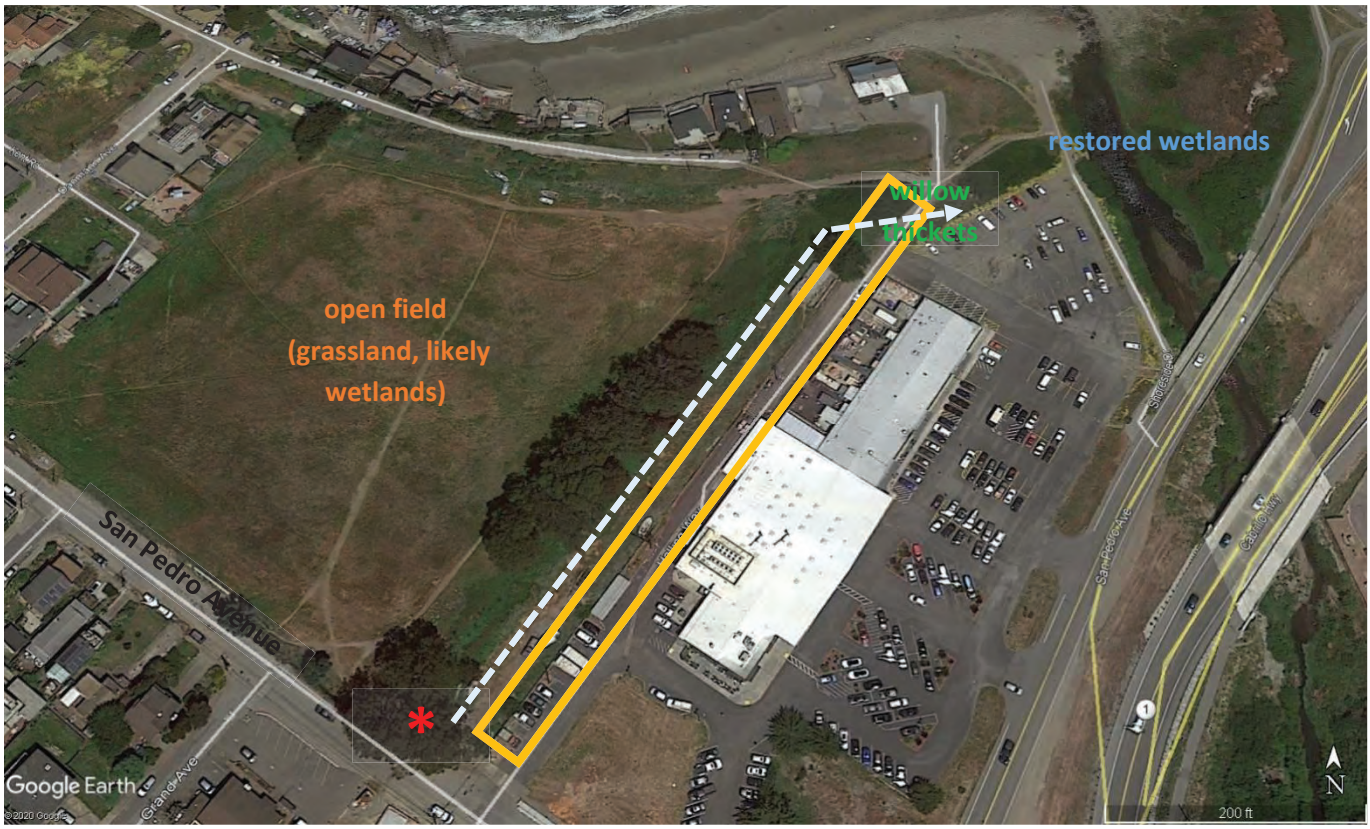

Figure 2: CDFW Biogeographic Information and Observation System (BIOS) Viewer display of the California Aquatic Resources Inventory (CARI) stream layer and California Natural Diversity Database (CNDDB) records surrounding the subject parcel (yellow box). CARI data shown as blue lines, including the drainage immediately west (left) of the parcel and San Pedro Creek (far right). Red thatching represents areas with known occurrences of California Red-Legged Frog.

Figure 3: Photos from site visits in March and October 2019, showing seasonal variation in drainage conditions – **a-b:** culvert running parallel to San Pedro Avenue, immediately west of the drainage and subject parcel; **c-d:** from San Pedro Avenue, facing north with scour pool in foreground; **e-f:** from San Pedro Avenue, facing north-northwest into drainage (note Eucalyptus wind break on left (west) before open field and subject parcel on right (east), and duck (white circle) using drainage as resting area in e); **g:** from western side of drainage, looking south towards San Pedro Avenue (note continuation of tree canopy into forested area south of San Pedro Avenue).


field
subject parcel
e


field
subject parcel
f

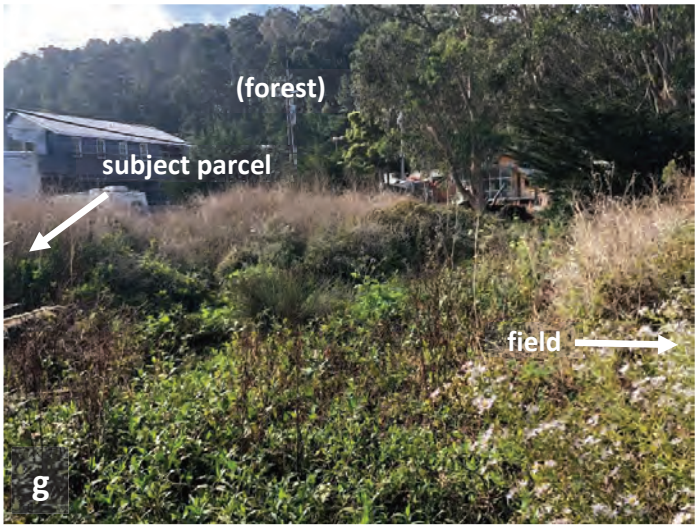
(forest)
subject parcel
field
g

Figure 4: Subset of larger aerial time series (2002-2020) of the subject parcel (yellow box) and the surrounding landscape, showing wet versus dry season patterns of vegetation. Note how the drainage immediately adjacent to the subject parcel consistently provides a green corridor and effectively links San Pedro Creek with the open field to the west while providing a valuable secondary connection to the forested habitat south of the site.


May 2010
Google Earth
300 ft
N


September 2003
Google Earth
300 ft
N


April 2020
recently developed parcels
& interrupted tree canopy
Google Earth
N


July 2020
recently developed parcels
& interrupted tree canopy
Google Earth
N

Figure 5: Delineated single-parameter wetlands (solid green lines) and approximate wetland buffers (dashed green lines) relative to proposed project. Note that 50-ft buffer was drawn around the willow ESHA but should also extend slightly further south around some small-fruited bulrush marsh ESHA, which would further overlap with the proposed footprint, even as potentially modified (red lines).

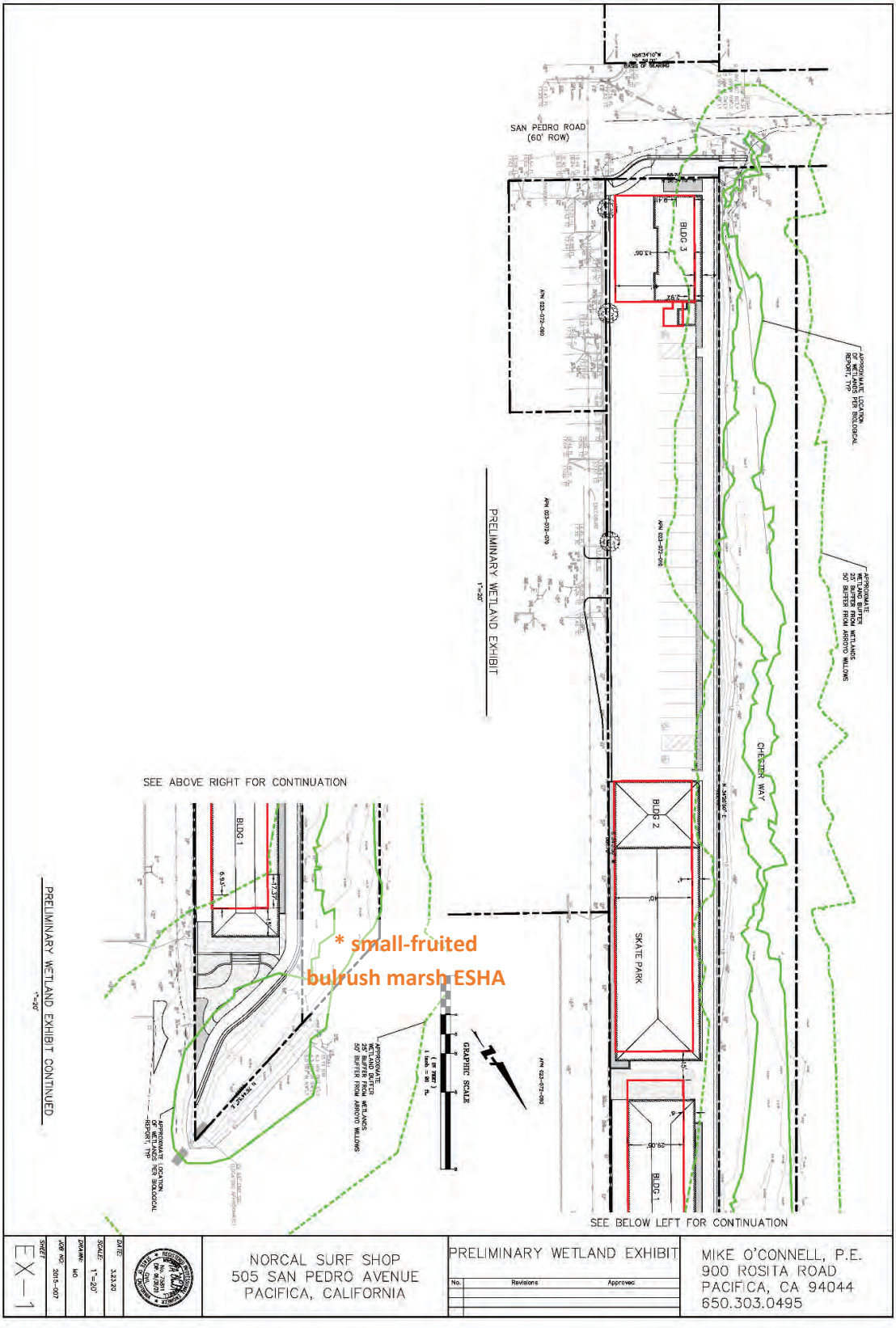

Figure 6a: CRLF as observed at San Pedro Avenue on April 12, 2020 by Michael Vasey, Sheila Harman and Jon Harman (photo credit: Jon Harman); **b-d:** CRLF as observed at San Pedro Avenue on April 23, 2020 by Sheila Harman. Individual CRLF circled in white for visibility.

Figure 7a: From San Pedro Avenue, looking northeast, view of scour pool in drainage with subject parcel as grassy area immediately behind the fence, and **b:** CRLF observed in scour pool by Peter Baye. Photos by Peter Baye, as submitted to USFWS in May 4, 2005 letter.

Figure 8: Excerpt from California Essential Habitat Connectivity Project displaying the San Mateo-Santa Cruz Counties coastal corridor (within red box). The project location in Pacifica is approximately located at the black arrow, near the northern edge of the extent. Areas in green represent connected stretches of habitat and the yellow-brown spectrum represents areas that would ideally be added to provide better linkages. The Pedro Point area is among those areas identified as valuable additions to improving connections through this corridor.

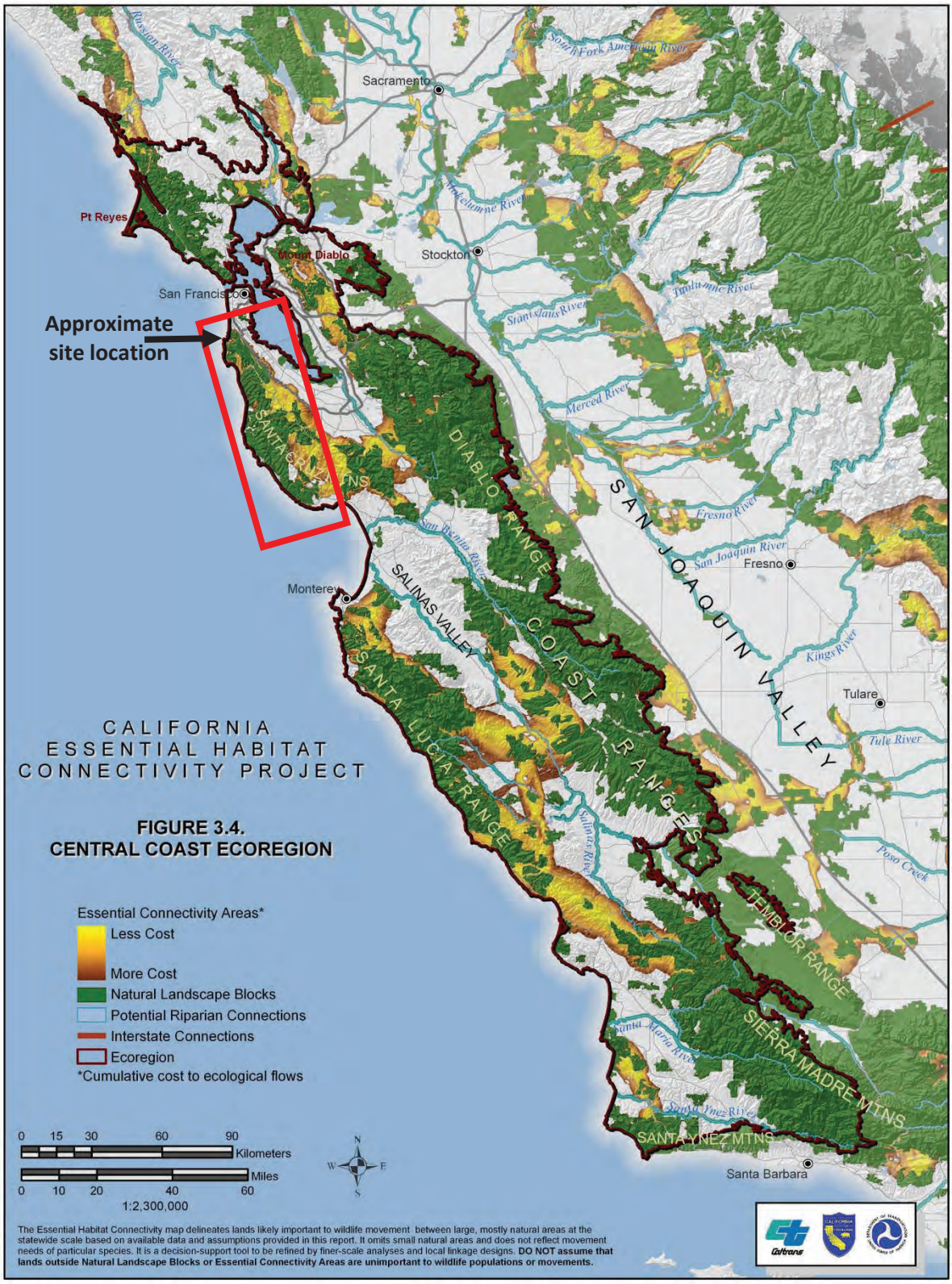

Figure 9: CNDDB display of the Pedro Point area in Pacifica, with CRLF occurrences observed in thatched red areas and finer-scale features identified as particularly valuable by the California Essential Habitat Connectivity Project in solid green. The proposed project site (yellow bar) is largely covered by the upper two CRLF occurrences and is situated to link multiple habitats across the landscape mosaic, including riparian, wetland, forest, and grassland.