Appendix A

PHOTO DOCUMENTATION

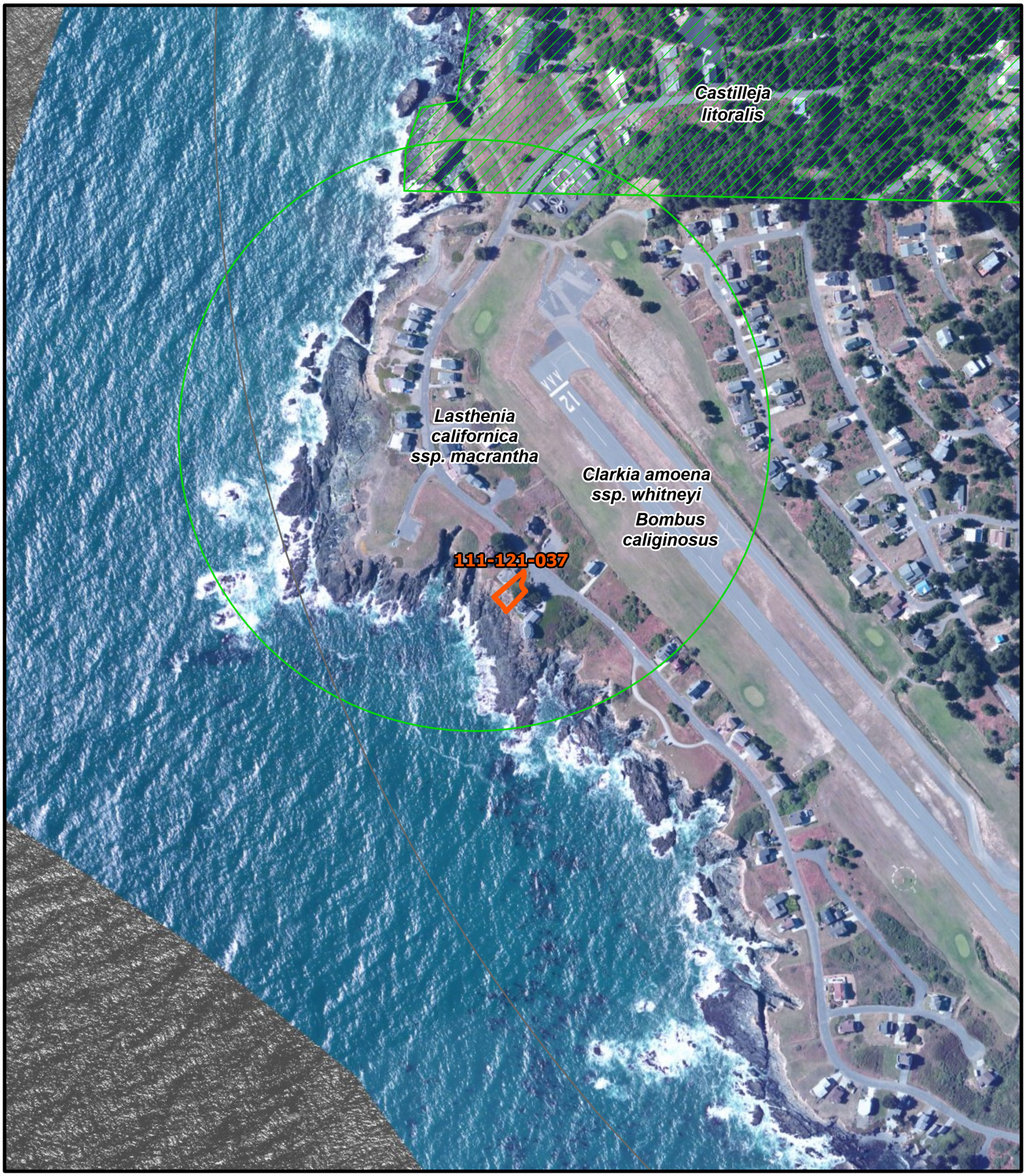
BIOLOGICAL RECONNAISSANCE AND PROJECT FEASIBILITY ASSESSMENT REPORT

Thomas Bond & Assoc.
5432 Cummings Rd.
Eureka, CA 95503

Shelter Cove, Humboldt County, California
Assessor Parcel Number (APN):
111 – 121 – 037

June 2023

Naiad
Biological
Consulting



Map 6: CNDDB Special Status Species

Scale: 1:5,000

0 240 480 960 Feet

Source: Shelter Cove 7.5-Minute USGS Quadrangle

Study Area

CNDDB Symbology

Plant (non-specific)

Plant (circular)

Multiple (circular)

Naiad Biological Consulting

Map 7: Spotted Owl Observations

Scale: 1:30,959

0 1,250 2,500 5,000 Feet

Source: Shelter Cove 7.5-Minute USGS Quadrangle

Study Area
Spotted Owl Spider Diagram

Spotted Owl Observations
- Nest
- Young
- Pair
- Other Positive Observation
- Negative Observation
- Activity Center

Naiad Biological Consulting

Appendix D

SPECIAL-STATUS SPECIES OCCURRENCE REPORTS

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Naiad Biological Consulting

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Species IS (Clarkia amoena ssp. whitneyi)

Map Index Number:	56001	**EO Index:**	56017
Key Quad:	Shelter Cove (4012411)	**Element Code:**	PDONA05025
Occurrence Number:	7	**Occurrence Last Updated:**	2020-11-23

Scientific Name: *Clarkia amoena ssp. whitneyi*

Common Name: Whitney's farewell-to-spring

Listing Status: **Federal:** None; **State:** None

CNDDB Element Ranks: **Global:** G5T1; **State:** S1

Rare Plant Rank: 1B.1

Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
SB_UCBG-UC Botanical Garden at Berkeley

General Habitat:

COASTAL BLUFF SCRUB, COASTAL SCRUB.

Micro Habitat:

5-125 M.

Last Date Observed:	1939-07-14	**Occurrence Type:**	Natural/Native occurrence
Last Survey Date:	2016-XX-XX	**Occurrence Rank:**	None
Owner/Manager:	UNKNOWN	**Trend:**	Unknown
Presence:	Possibly Extirpated		

Location:

SHELTER COVE AND 1 MILE EAST OF SHELTER COVE.

Detailed Location:

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB, IN THE VICINITY OF SHELTER COVE. LEWIS (1955) NOTES THAT "CAPSULES RATHER SLENDER" ON 1939 HITCHCOCK COLLECTION; POSSIBLY DEPAUPERATE FORM.

Ecological:

ROAD BANK.

Threats:

AGRICULTURE.

General:

TYPE LOCALITY. BASED ON 1866 BOLANDER COLLECTION FROM SHELTER COVE AND 1939 HITCHCOCK COLLECTION FROM "ROAD BANK, 1 MI E OF SHELTER COVE." 80 ACRE AREA AT SHELTER COVE USED FOR AG FOR 60 YEARS; MAY BE EXTINCT. NOT SEEN IN 2015 & 2016.

PLSS:	T05S, R01E, Sec. 10 (H)	**Accuracy:**	1 mile	**Area (acres):**	0
UTM:	Zone-10 N4432116 E409271	**Latitude/Longitude:**	40.03439 / -124.06341	**Elevation (feet):**	380

County Summary:	**Quad Summary:**
Humboldt	Shelter Cove (4012411)

Sources:

BOL66S0015	BOLANDER, H. - BOLANDER #6534 UC #20317 & #20318 1866-XX-XX
HIT39S0012	HITCHCOCK, C. & J. MARTIN - HITCHCOCK #5432 RSA #0059979 1939-07-14
JEP36B0001	JEPSON, W. - A FLORA OF CALIFORNIA - VOLUME 2 1936-XX-XX
LAY18U0001	LAYMON, S. - EMAIL REGARDING NEGATIVE SIGHTINGS OF CLARKIA AMOENA SSP. WHITNEYI 2018-07-10
LEW55A0001	LEWIS, M. & H. LEWIS - THE GENUS CLARKIA. UNIVERSITY OF CALIFORNIA PUBLICATIONS IN BOTANY, VOLUME 20, NO. 4. 1955-XX-XX
TRANDS0006	TRACY - TRACY #4998 HERBARIUM UNKNOWN (CITED IN LEW55A0001) XXXX-XX-XX

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Species IS (Lasthenia californica ssp. macrantha)

Map Index Number:	A1511	**EO Index:**	103094
Key Quad:	Shelter Cove (4012411)	**Element Code:**	PDAST5L0C5
Occurrence Number:	59	**Occurrence Last Updated:**	2016-08-16

Scientific Name: *Lasthenia californica ssp. macrantha*

Common Name: perennial goldfields

Listing Status: **Federal:** None
State: None

CNDDB Element Ranks: **Global:** G3T2
State: S2

Rare Plant Rank: 1B.2

Other Lists: BLM_S-Sensitive
SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

General Habitat:

COASTAL BLUFF SCRUB, COASTAL DUNES, COASTAL SCRUB.

Micro Habitat:

5-185 M.

Last Date Observed:	1981-05-24	**Occurrence Type:**	Natural/Native occurrence
Last Survey Date:	1981-05-24	**Occurrence Rank:**	Unknown
Owner/Manager:	UNKNOWN	**Trend:**	Unknown
Presence:	Presumed Extant		

Location:

ABALONE POINT.

Detailed Location:

EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AROUND ABALONE POINT ("EAST" BENCHMARK ON TOPO MAP) WITHIN GIVEN TRS: T05S R01E SECTION 16.

Ecological:

COASTAL MARINE TERRACE AND COASTAL BLUFF.

Threats:

General:

SITE IS BASED ON A 1981 CLARK COLLECTION.

PLSS:	T05S, R01E, Sec. 16, NW (H)	**Accuracy:**	1/5 mile	**Area (acres):**	70
UTM:	Zone-10 N4431759 E407935	**Latitude/Longitude:**	40.03103 / -124.07903	**Elevation (feet):**	50

County Summary:	**Quad Summary:**
Humboldt	Shelter Cove (4012411)

Sources:

CLA81S0002 CLARK, K. - CLARK #1394 HSC #79382 1981-05-24

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Species IS (Bombus caliginosus)

Map Index Number:	56001	**EO Index:**	97366
Key Quad:	Shelter Cove (4012411)	**Element Code:**	IIHYM24380
Occurrence Number:	42	**Occurrence Last Updated:**	2015-06-09

Scientific Name: *Bombus caliginosus*

Common Name: obscure bumble bee

Listing Status: **Federal:** None

State: None

Rare Plant Rank:

Other Lists: IUCN_VU-Vulnerable

CNDDB Element Ranks: **Global:** G2G3

State: S1S2

General Habitat:

COASTAL AREAS FROM SANTA BARBARA COUNTY NORTH TO WASHINGTON STATE.

Micro Habitat:

FOOD PLANT GENERA INCLUDE BACCHARIS, CIRSIUM, LUPINUS, LOTUS, GRINDELIA AND PHACELIA.

Last Date Observed:	1976-05-22	**Occurrence Type:**	Natural/Native occurrence
Last Survey Date:	1976-05-22	**Occurrence Rank:**	Unknown
Owner/Manager:	BLM	**Trend:**	Unknown
Presence:	Presumed Extant		

Location:

SHELTER COVE.

Detailed Location:

EXACT LOCATION UNKNOWN. MAPPED BY CNDDB NON-SPECIFICALLY TO THE VICINITY OF THE TOWN OF SHELTER COVE.

Ecological:

Threats:

General:

1 COLLECTED 20 MAY 1976 (EMEC #552851).

PLSS:	T05S, R01E, Sec. 10 (H)	**Accuracy:**	1 mile	**Area (acres):**	0
UTM:	Zone-10 N4432116 E409271	**Latitude/Longitude:**	40.03439 / -124.06341	**Elevation (feet):**	125

County Summary:	**Quad Summary:**
Humboldt	Shelter Cove (4012411)

Sources:

COV76S0002 COVILLE, R. & J. HAFERNIK - EMEC #552851 COLLECTED FROM SHELTER COVE 1976-05-20

Data Version Date:
04/27/2023

Report Generation Date:
6/2/2023

Report #2 - Observations Reported

List of observations reported by site.

Meridian, Township, Range, Section (MTRS) searched:

H_05S_01E Sections(11);

Type	*Date*	*Time*	*#Adults*	*Age/Sex*	*Pair*	*Nest*	*#Young*	*Latitude DD NAD83*	*Longitude DD NAD83*	*MTRS*	*Coordinate Source*
Masterowl: HUM0889 Subspecies: NORTHERN											
AC	1997-07-10	0645	1	UU				40.041700	-124.032666	H 05S 01E 11	Contributor

Appendix E

WEB SOIL SURVEY REPORTS

BIOLOGICAL RECONNAISSANCE AND PROJECT FEASIBILITY ASSESSMENT REPORT

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Shelter Cove, Humboldt County, California
Assessor Parcel Number (APN):
111 – 121 – 037

June 2023

Naiad Biological Consulting

Humboldt County, South Part, California

202—Conklin-Urban land-Parkland complex, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2mhfy
Elevation: 20 to 130 feet
Mean annual precipitation: 59 to 62 inches
Mean annual air temperature: 54 to 56 degrees F
Frost-free period: 275 to 330 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Conklin, cool, and similar soils: 60 percent
Urban land: 25 percent
Parkland, cool, and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Conklin, Cool

Setting

Landform: Fluviomarine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Parent material: Fluviomarine deposits derived from sedimentary rock

Typical profile

A1 - 0 to 11 inches: gravelly loam
A2 - 11 to 24 inches: gravelly loam
A3 - 24 to 51 inches: gravelly clay loam
AB - 51 to 79 inches: gravelly clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: R004BI200CA - Riparian
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Fluviomarine terraces

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Parkland, Cool

Setting

Landform: Fluviomarine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Fluviomarine deposits derived from sedimentary rock

Typical profile

A1 - 0 to 9 inches: loam
A2 - 9 to 24 inches: loam
AB - 24 to 37 inches: silty clay loam
Bt - 37 to 59 inches: clay loam
C - 59 to 79 inches: gravelly clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: R004BI202CA - Loamy Uplands

Hydric soil rating: No

Data Source Information

Soil Survey Area: Humboldt County, South Part, California
Survey Area Data: Version 12, Sep 2, 2022