This project is the renovation of an existing 6200 s.f. animal shelter and the development of a new 1566 s.f. training building. The existing building was built by the State of California for a CHP headquarters sometime in the 1960s. Further additions were made by the County as the facility was converted into the County Animal Shelter in 1981. Sequoia Humane Society took over the facility in 2005, when the County Animal Shelter was completed in McKinleyville.

Existing Building:

The project entails improvements to animal containment and animal health areas and the creation of new visitor serving areas including a remodeled lobby, new accessible toilet rooms and accessibility improvements. Through the removal of existing kennels and development of new state of the art kennels, on site conditions and potential impacts to sensitive receptors are mitigated. The new kennels are individually framed walls with tempered glass panels that abate sound, provide better indoor air quality and enhance health and behavioral conditions for animals that are cared for at the facility. New air source heat pumps and energy recovery ventilators will provide excellent indoor air quality with high energy efficiency.

New building:

A 1566 s.f. training building will be built on a portion of the existing parking lot. This building will be used for animal wellness seminars and trainings for animals and their caregivers. This building will also be used for wet weather trainings and meet and greets while under the supervision of Humane Society staff.

Site Improvements:

The site improvements are characterized by relocation of 927 s.f. of existing landscaping and 1582 s.f. of impervious surfaces to become new landscaping with native plants, integrated with new stormwater management systems. Lastly, new accessibility improvements, including one new van accessible parking space and new flatwork will be developed.

Wetlands and Waters Delineation for Sequoia Humane Society and Adjacent Lands

6073 Loma Avenue Eureka, CA

SPRING 2024/WINTER 2025

Project Background

This wetland survey was conducted on behalf of the Sequoia Humane Society, who is developing a project to renovate its existing facility and grounds and building a new animal training facility on a portion of its existing parking area.

Existing Facility and Site

The existing facility is a 6,800 s.f. building that was built on Assessor's Parcel # 306-391-013-000, a roughly 1+/- acre site. The facility was originally constructed in the 1960s by the State of California as a California Highway Patrol facility. The facility was later purchased by the County of Humboldt for use as the County Animal Shelter under contract with a non-profit organization that preceded the Sequoia Humane Society, which was established in 1981.

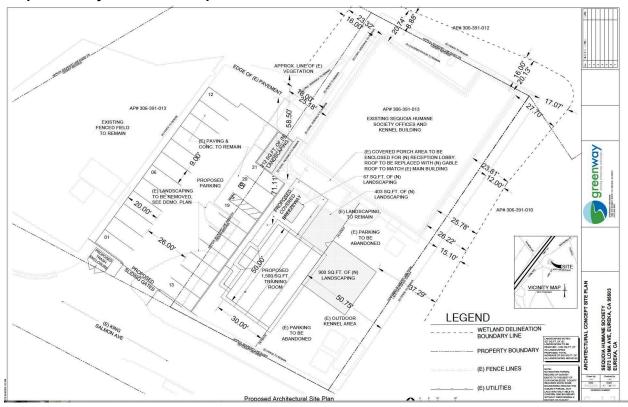


To assist with the development of the proposed project, Sequoia Humane Society has recently acquired a 2.2 acre parcel on its northern boundary. This parcel, AP# 306-391-012-000, is a

largely degraded and overgrazed 2.2 acre parcel with some wetland characteristics. It is the Humane Society's objective to engage in a wetland enhancement project to create a robust wetland area on this parcel and to protect and enhance its site. The property is shown below.



Proposed Project and Site Improvements



This project is the renovation of an existing 6200 s.f. animal shelter and the development of a new 1566 s.f. training building. The existing building was built by the State of California for a CHP headquarters sometime in the 1960s. Further additions were made by the County as the facility was converted into the County Animal Shelter in 1981. Sequoia Humane Society took over the facility in 2005, when the County Animal Shelter was completed in McKinleyville.

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Site Improvements

The site improvements are characterized by relocation of 927 s.f. of existing landscaping and 1582 s.f. of impervious surfaces to become new landscaping with native plants, integrated with new stormwater management systems. New accessibility improvements, including one new van accessible parking space and new flatwork will be developed.

Lastly, Sequoia Humane Society has recently acquired a degraded parcel of land on its northern boundary for the purposes of protecting and enhancing its latent wetland characteristics as part of this project.

Surrounding Lands

To the east of the parcel, there is a walking path and wetland education study area on lands owned by the South Bay School District. In addition to the site proposed for development as outlined by the site plan above, neighboring properties were delineated to establish wetland criteria adjacency setbacks to the proposed project.

The western boundary of the property is State property (the 101 Highway North on-ramp) and South Broadway Avenue, owned by the County of Humboldt. South of the property is a remnant State highway easement and property owned by the South Bay School District.

Study

The Principal Investigator was Todd Siefke, who has degrees in Botany and Landscape Architecture and experience in wetland delineation.

The study area was assessed and surveyed for the presence of jurisdictional waters of both the State of California and of the United States of America as required by the federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act; methodologies used are described in full below.

Field work was completed in Winter and Spring of 2025, to ensure that periods of plant growth and seed production were visible as well as significant periods of rain which may lead to soil inundation and hydrological impacts to potential wetland areas.

Coastal Commission Jurisdictional Wetland Survey

The site lies within the Coastal Zone of California, which by definition, means that the Coastal Commission has jurisdiction over any wetlands or potential wetlands. Coastal Act Section 30107.5 labels ESHA, including wetlands 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."

Coastal Act Section 30121 identifies wetlands, which often qualify as ESHA, 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."

Under the Coastal Commission's definition of wetlands (see California Code of Regulations Section 13577(b)), a wetland need only display one of the parameters typically used to define wetland areas, in contrast to the U.S. Army Corps of Engineers, which uses a three-parameter definition under its federal authority as designated in the Clean Water Act. The diking, filling or dredging of wetlands is generally permitted only for specific purposes listed in Coastal Act Section 30233, regardless of whether the wetland also meets the definition of ESHA.

This study used the methodology developed by the USACE, to identify those wetlands within the Coastal Commission's jurisdiction. Wetland surveys were conducted in accordance with the US Army Corps of Engineers Wetland Delineation Manual (1987) and the U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (2010) and the 2022 US Army Corps of Engineers Wetland Plant List.

Using the wetland delineation methodology developed by USACE, the project area and adjacent areas were analyzed for hydric soils, hydrophytic vegetation and hydrology. The Coastal Commission's jurisdiction finds that only one of these parameters (soils, vegetation and hydrology) need to be present to make a determination of a Coastal wetland. Pedestrian and ocular surveys, vegetation surveys and soil studies were conducted to define the potential wetland boundaries and the setback to those wetland areas not on the project site.

Findings

Within the project area, there are **NO** wetland indicators; hydrophytic vegetation, hydric soils and hydrology are not present on the project site area or within 50 feet of any building improvements.

The existing building will have work completed **only** on the interior within the 50 foot setback to wetlands and the new proposed training building is 66 feet at its closest point to Coastal wetlands as delineated.

Site improvements are outside of the 50 foot setback from Coastal wetlands, with two exceptions; 1) removal of impervious surface areas for the purposes of improving on and off site water quality through improved stormwater capture and 2) the removal of impervious surface areas for the purposes of implementing new native plant landscaped areas.

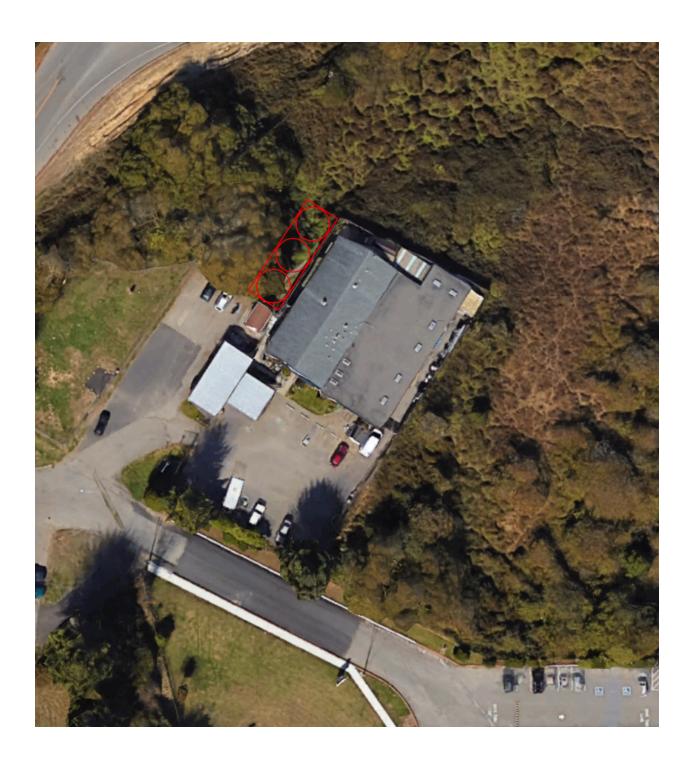
Study

While there are NO wetlands on the proposed project site or within the project area, there are areas adjacent to the site (within 100 feet) that have some possible wetland indicator criteria (potential hydric soils, hydrology, and hydrophytic vegetation) and as such, this study also includes these areas. As indicated in the botanical survey list, in this area within 100 feet of the project site alone, there are several individual species present that are positive indicators of potential hydric vegetation (wetland indicator status of FAC, FACW, or OBL). These species include OBL, FACW, FAC and FACU plant types. NONE of the species on site

This additional area was surveyed to identify the setback distance between the project area and potential wetland areas. The wetland setback distances to the parcel boundary are shown in the map below.

Soils

3 Soil pits were excavated on the project site, during this investigation and are included on the attached Wetland Plot Map. Soils on the project area are completely developed and are remnant soils from Hookton Formation, which largely comprises the project area and the lands to the South. The on-site soils are non-hydric in nature.



Soils were excavated to a depth of 24 inches at ten different locations (shown on map in Exhibit A) and evaluated for the primary hydric soils inclusion (Developed by the US Army Corps of Engineers Manual, 1987) criteria: 1) Thick organic layers over mineral layers; 2) Histic epipedons, with high inundation potential due to hydrology conditions; 3) Sulfidic material is present as all minerals have been converted to Hydrogen Sulfide; 4) Aquic or peraquic moisture regime; 5) Reducing soil conditions; 6) Soil color looking for gleyed or soil indicating prior or

current anaerobic conditions; 7) Soils on the Hydric soils databases of local, state and national agencies and 8)Presence of iron or manganese staining (rust colored) in the upper layers of the soil horizon.

Project site soils did **NOT** show indication of hydric conditions and are non-hydric Hookton Formation soils characterized by deep levels of compaction and urbanized characteristics. These may have been imported to the site during construction in the 1960s from adjacent areas or are native to the site at higher elevations, which were preserved during construction. All soils on the project parcel and on adjacent parcels have been disturbed either through construction (project parcel) or through excavation and dry season grazing (Parcels East and North of the project area).

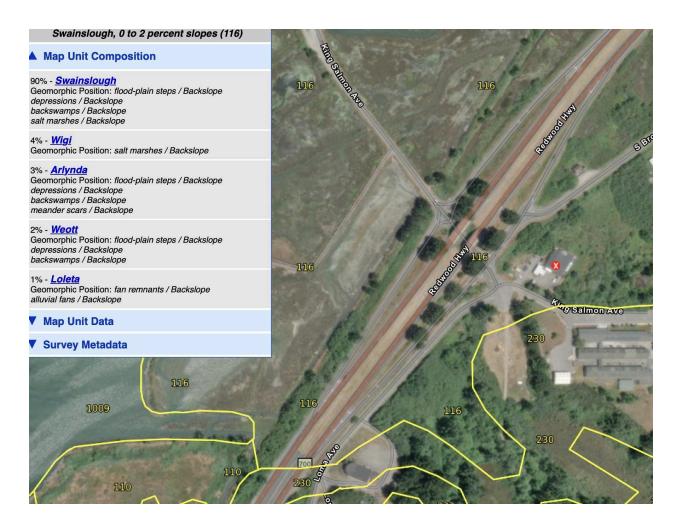
The image below shows the soil series boundary of Swainslough and Hookton Formation, right at the project site.





East and North Parcels Adjacent to the Project Parcel

The lands immediately north and east of the project site are Swainslough soils and have all of the characteristics outlined below. These soils were briefly assessed and confirmed to have hydric characteristics. All new project construction activity will occur outside of the 50 foot setback to these areas.



NRCS Soils Series Descriptions of East and North Parcel Survey Areas

The Swainslough series consists of very deep, very poorly drained soils in depressions, backswamps, low flood-plain steps, and reclaimed salt marshes on alluvial plains. These soils formed in alluvium derived from mixed sources. Slopes range from 0 to 2 percent. Mean annual precipitation is about 1015 millimeters (40 inches). Mean annual temperature is about 11 degrees C (51 degrees F).

TAXONOMIC CLASS: Fine, mixed, superactive, nonacid, isomesic Fluvaquentic Endoaquepts

TYPICAL PEDON: Swainslough peat on a less than 1 percent slope under silverweed cinquefoil, spike bentgrass and pasture grasses at an elevation of 2 meters (7 feet). (Colors are for moist soil unless otherwise noted. When described on August 11, 1988 the soil was moist throughout, with a water table at 157 centimeters.)

Oi--0 to 8 centimeters (0 to 3 inches); very dark grayish brown (10YR 3/2) peat, dark grayish brown (2.5Y 4/2) dry, dark yellowish brown (10YR 3/4) rubbed; 80 percent fibers, 40 percent, rubbed; neutral (pH 6.8); abrupt wavy boundary. (0 to 8 centimeters thick)

A--8 to 30 centimeters (3 to 12 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine to coarse roots; many very fine tubular pores; common fine prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; neutral (pH 7.0); gradual wavy boundary. (10 to 30 centimeters thick)

Bg1--30 to 51 centimeters (12 to 20 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; moderate very fine and fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; many very fine to medium roots; common very fine tubular pores; common fine prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; neutral (pH 7.0); gradual wavy boundary. (20 to 50 centimeters thick)

Bg2--51 to 74 centimeters (20 to 29 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; weak very fine and fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine to medium roots; common very fine tubular pores; many fine distinct gray (5Y 5/1) iron depletions and prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; very few prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; neutral (pH 7.0); abrupt wavy boundary. (0 to 76 centimeters thick)

Bg3--74 to 97 centimeters (29 to 38 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; massive; hard, firm, moderately sticky and moderately plastic; common very fine and fine roots; common very fine tubular pores; many fine distinct gray (5Y 5/1) iron depletions and prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; very few prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; slightly acid (pH 6.5); abrupt wavy boundary. (0 to 92 centimeters thick)

Bg4--97 to 165 centimeters (38 to 65 inches); dark gray (N 4/) silty clay loam, gray (10YR 5/1) dry; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; very few medium prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; moderately acid (pH 6.0). (0 to 76 centimeters thick)

RANGE IN CHARACTERISTICS:

Soil Moisture: The soil is usually moist in all parts of the soil moisture control section between the depths of 5 to 40 centimeters (2 to 16 inches) in most years, and is saturated in some parts during the months of January through March. The soils have an aquic soil moisture regime.

Soil Temperature: The mean annual soil temperature at 50 centimeters (20 inches)is 12 to 14 degrees C (54 to 59 degrees F). The average summer soil temperature is about 16 degrees C and the average winter soil temperature is about 10 degrees C. The difference between average summer and winter soil temperatures is 6 or less degrees C.

Particle size control section (weighted average):

Clay content: 35 to 45, by weight.

Depth to redoximorphic features: 0 to 10 centimeters (0 to 4 inches)

Endosaturation: The water table is at a depth of 0 to 10 centimeters (0 to 4 inches) from about January through March, between 15 to 60 centimeters (6 to 24 inches) in April, 30 to 90 centimeters (12 to 35 inches) from May through June, 90 to greater than 183 centimeters (35 to greater than 72 inches) from July through November, and rises to between 10 and 60 centimeters (4 to 24 inches)in December.

Some pedons have an O horizon

O horizon

Hue: 10YR

Value: 3, 4 dry

Reaction: neutral

A horizon

Hue: 10YR, 2.5Y, or 5Y

Value: 3 to 5 moist, and 5 to 7 dry

Chroma: 1 or 2 moist, and 2 dry

Texture of fine earth: silty clay loam

Clay content: 27 to 37 percent, by weight

Reaction: moderately acid to neutral

Redoximorphic features: fine and medium iron-manganese masses

Quantity: few or common

Hue: 7.5YR or 10YR

Value: 4 to 6

Chroma: 4 to 8

Bg horizon

Hue: 10YR, 2.5Y, 5Y, or N

Value: 4 or 5 moist, 5 to 7 dry

Chroma: / to 2, moist or dry

Texture of fine earth: silty clay loam or silty clay

Clay content: 30 to 45 percent, by weight

Reaction: moderately acid to slightly alkaline

Redoximorphic features: fine and medium iron-manganese masses in the matrix and iron stains lining root channels and/or pores

Quantity: few, common, or many

Hue: 7.5YR or 10YR

Value: 4 to 6

Chroma: 4 to 8

Redoximorphic features: medium iron depletions

Quantity: common or many

Hue: 5Y, 2.5Y

Value: 4 or 5

Chroma: / to 2

Soils outside the project area were also assessed for their hydric condition to define the distance from wetlands to the project site. Two soil pits were dug on the suspected wetlands that are located more than 65 feet from the project construction activities. The soil pits located more than 65 feet from the project site often had a deeper layer of gleying, wet margins and other indications of soil saturation and hydric conditions.

Images below:

Soil pits dug more than 65 away from project area





Soil Pit Spring 2025 NOT on the Project Site, but more than 65 feet away.

Vegetation

The ACOE Manual (1987) describes that a handful of hydrophytic species is not indicative of a wetland as a community of hydrophytic vegetation is present only if 50% of the species indicator status of OBL, FACW or FAC.

- Obligate (OBL)—usually occurs within a wetland (estimated probability 99%)
- Facultative-wet (FACW)—usually occurs in wetlands (estimated probability 67-99%)
- Facultative (FAC)—equally likely to occur in wetlands or non-wetlands (estimated probability 33-67%)
- Facultative-upland (FACU)—usually occurs in non-wetlands (estimated probability 1-33%)
- Upland (UPL)—occurs almost always in non-wetlands (estimated probability 99%)
- Non-Indicator (NI)-scored as an upland plant and calculated as such on wetland determination forms

Dominant species are determined by estimating those having the greatest percentage of cover using the "50/20" rule. The "50/20" rule entails that for each sample point and associated plant community, dominant species are the most abundant species, when ranked in descending order of abundance and cumulatively totaled, that immediately exceed 50% of the total dominance

measure for the stratum, plus any additional species comprising 20% or more of the total dominance measure for each stratum.

Absolute cover contribution was estimated for each sample plot, due to layering of species and strata percent cover values may exceed 100%. For marginal sites the FAC neutral test and the Prevalence Index were also utilized. These calculations (shown on attached forms) further analyze the vegetation community using all species in the plot, not just the dominant species.

Plants on the project site are exclusively non-native, characterized by a mix of grasses, a handful of specimen rhododendrons and no wetland species. A list of species present on the project site is listed in Table 1.

This table shows the species present and their respective wetland indicator status, in vegetation plots the grasses were treated as a group (unless otherwise noted) and given a FACU rating based on the number of species with upland characteristics verses the species with hydric ratings. No dominant vegetation on site had a status of FACW or OBL, and few FAC species were dominant in plots, these were outweighed by the other dominant plants with upland or non-indicator status at each sample point. On the project site, upland grasses and plants are found exclusively as denoted by UPL.

Table 1. Species Present on Project Site

Species	Common Name	Wetland Indicator	Notes
•		Status	
Rubus armeniacus	Himalaya blackberry	UPL	Non-native
Rumex salicifolius	Willow Dock	FACW	Small area on west
Salix scouleriana	Willow	FAC	Small area on west
Picea sitchensis	Sitka spruce	FAC	Single trees south boundary
Equisetum temateia	Giant horsetail	FACW	Small patch on slab drainage area
Conium maculatum	Poison hemlock	UPL	Large area adjacent to building
Ranunculus repens	Buttercup	FAC	Small areas on west
Graminoid Species		Wetland Indicator Status	Notes
Agrostis capillaris	colonial bentgrass	UPL	Non-native
Anthoxanthum odoratum	sweet vernal grass	UPL	Cal-IPC*: Limited
Avena barbata	slender oat	UPL	Cal-IPC: Moderate
Avena sativa	cultivated oat	UPL	Non-native

Bromus catharticus	rescue grass	UPL	Non-native
Cynodon dactylon	Bermuda grass	UPL	Cal IPC: Moderate
Dactylis glomerata	orchard grass	UPL	Cal IPC: Limited
Festuca arundinacea	tall fescue	UPL	Cal IPC: Moderate
Festuca myuros	rattail six weeks	UPL	Cal-IPC: Moderate
	grass		
Holcus lanatus	velvet grass	FAC	Cal-IPC: Moderate
Poa annua	annual bluegrass	FAC	Non-native
Poa pratensis	Kentucky blue grass	FAC	Cal-IPC: Limited

Adjacent Lands East and North Parcel Species Present

There are wetland indicator species found on adjacent parcels, as shown on the table below, but the prevalence and dominance test as shown on Wetland Determination Data sheets (attached) indicates there isn't sufficient reason to classify these transects as hydrophytic vegetation.

Species		Wetland Indicator Status	Notes
Rubus armeniacus	Himalaya blackberry	UPL	Non-native
Rumex salicifolius	Willow Dock	FACW	Small area on north
Salix scouleriana	Willow	FAC	Small area on North west
Sambucus nigra	Black elderberry	FAC	East parcel
Picea sitchensis	Sitka spruce	FAC	East parcel
Rhamnus pershiana	Cascara buckthorn	UPL	East parcel
Polysticum munitum	Western swordfern	FAC	East parcel
Baccarus pilularis	Coyote brush	UPL	East parcel
Athyrium filix-femina	Western ladyfern	FAC	East parcel
Carex Obnupta	Slough sedge	OBL	6-8 individuals east
Trifolium repens	White clover	FAC	parcel
Juncus effusus	Common rush	FAC	
Equisetum telmateia	Giant horsetail	FACW	
Ranunculus repens	Buttercup	FACV	Non-native
Agrostis capillaris	·	UPL	Non-native
<u> </u>	colonial bentgrass	UPL	ļ
	sweet vernal grass	_	Non-native
Avena barbata	slender oat	UPL	Non-native
Avena sativa	cultivated oat	UPL	Non-native
Bromus catharticus	rescue grass	UPL	Non-native

Cynodon dactylon	Bermuda grass	UPL	Non-native
Dactylis glomerata	orchard grass	UPL	Non-native
Festuca arundinacea	tall fescue	UPL	Non-native
Festuca myuros	rattail six weeks	UPL	Non-native
	grass		
Holcus lanatus	velvet grass	FAC	Non-native
Poa annua	annual bluegrass	FAC	Non-native
Poa pratensis	Kentucky blue grass	FAC	Non-native

^{*} California Invasive Plant Council ranking (an invasive species)

Table 2. Wetland Soils Plot Characteristics Summary

Plot Number	Vegetation	Hydrology	Soils	Notes
1	Negative	Negative	Negative	Previously excavated and compacted areas
2	Negative	Negative	Negative	Previously excavated and compacted areas
3	Negative	Negative	Negative	Previously excavated and compacted areas
4	Negative	Negative	Positive	Previously excavated and compacted areas
5	Negative	Negative	Positive	Previously excavated and compacted areas

In addition to the vegetation survey completed on the project site, an off-Site (within 30 feet radius on adjacent parcels) survey was completed. The tables below indicate the general locations, which were established using EAST, NORTH and WEST transects as shown in the image below.

These transects were chosen as they are the most natural landform and consistent elevation. As the survey map shows below, there are steep slopes running east and north of the project area. These areas receive drainage from the impervious surfaces of the building roofs and exterior slab areas and some wet soils have formed as a result along the property/fence boundary.

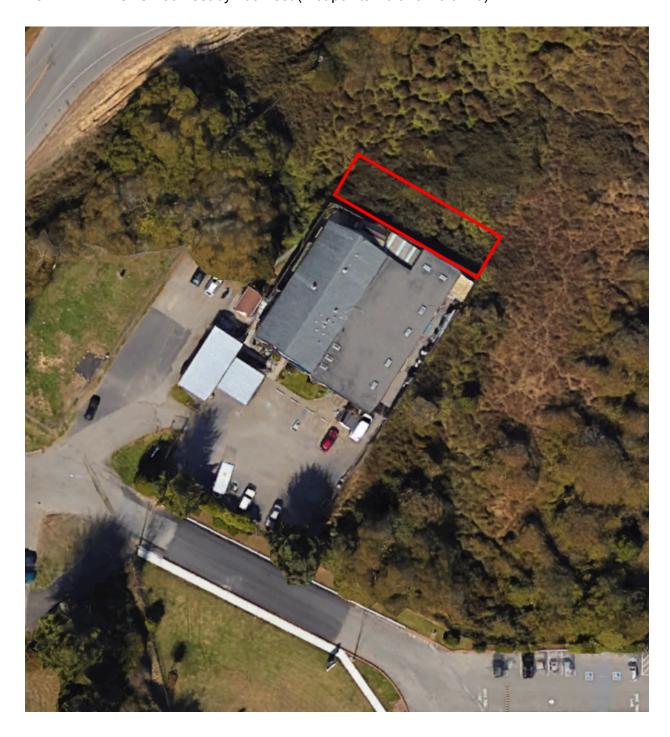
^{**}NI - Non Indicator treated as an upland (UPL) species



EAST TRANSECT 30 Feet by 210 Feet (Plots East 1-East 7)



NORTH TRANSECT 30 Feet by 105 Feet (Plot points North 8-North 10)





Off Site Vegetation Survey Summary

Property Survey Plot (30 ft. radius from property line)	G ,	Wetland Criteria		Potential wetland plant setback from exterior of existing building (no exterior work occurring)	Setback to proposed new building
East 1	Cascara buckthorn (Rhamnus pershiana)	UPL	3%	N/A	N/A
East 1	Sword fern (Polysticum munitum)	UPL	8%	N/A	N/A
East 1	Himalaya blackberry (Rubus armeniacus)	UPL Non-native	35%	N/A	N/A
East 1	Non-native grass mix	UPL Non-native		N/A	N/A
East 2	Slough sedge (Carex obnupta)	OBL	1%	42 feet	66 feet
East 2	Sitka spruce	FAC	1%	N/A	

East 2	Willow (Salix	FAC	2%	51 feet	97 feet
East 2	' '	FAC	15%	18 feet	75 feet
East 2	repens) Coyote brush (Baccarus pilularis)	UPL	1%	N/A	N/A
East 2	Non-native grass mix	UPL Non-native	80%	N/A	N/A
East 2	White clover (trifolium repens)	FAC	8%		
East 2	Common rush (juncus effusus)	FACW	3%	20 feet	
East 2	Himalaya blackberry	UPL Non-native	35%	N/A	N/A
East 3	Sword fern	FAC	5%		
EAst 3	Common lady fern (Athyrium filix-femina)	FAC			
East 3	Willow (Salix scouleriana)	FACW	2%		
East 3	Buttercup (Ranunculus repens)	FAC	6%		
East 3	Non-native grass mix • sweet vernal grass	UPL Non-native	55%		

	(Antoxanthum odoratum) annual bluegrass (Poa annua) slender oat (Avena barbata) cultivated oat (Avena sativa) rescue grass (Bromus catharticus) Tall fescue (Lolium arundinaceum)				
East 4	Giant horsetail (Equisetum telmateia)	FACW	15%		
	' '	FAC	5%		
	repens)	UPL	55%		
	Non-native grass mix	Non-native			
East 4	Himalaya blackberry	UPL	35%	N/A	N/A
East 5	Giant horsetail (Equisetum telmateia)	Non-native FACW	15%	16 feet	66 feet

East 5	Non-native grass mix	UPL			
asi 3	sweet vernal	Non-native			
		Non-nauve			
	grass				
	(Antoxanthum				
	odoratum)				
	annual				
	bluegrass (Poa				
	annua)				
	 slender oat 				
	(Avena barbata)				
	 cultivated oat 				
	(Avena sativa)				
	rescue grass				
	- Toocao graco				
	(Bromus				
	catharticus)				
	 Tall fescue 				
	(Lolium				
	arundinaceum)				
East 5		FAC	5%		
	nigra)				
East 5	Himalaya blackberry	UPL	35%	N/A	N/A
		Non-native			
East 6	Non-native grass mix	UPL	70%		
	sweet vernal	Non-native			
	grass	l ton nauve			
	(Antoxanthum				
	odoratum)				
	• annual				
	bluegrass (Poa				
	annua)				
	slender oat				
	(Avena barbata)				
	 cultivated oat 				
	(Avena sativa)				
	 rescue grass 				
	(Bromus				
	catharticus)				
	Tall fescue				
	(Lolium				
	1				
Fact 0	arundinaceum)	EA CIA/	200/		
East 6	Giant horsetail	FACW	20%		
1	(Equisetum telmateia)	1	1	I	

East 6	Buttercup (Ranunculus repens)	FAC	10%	
East 7		FAC	10%	
East 7	Giant horsetail (Equisetum telmateia)	FACW	10%	
East 7	Non-native grass mix Velvet grass sweet vernal grass (Antoxanthum odoratum) annual bluegrass (Poa annua) slender oat (Avena barbata) cultivated oat (Avena sativa) rescue grass (Bromus catharticus) Tall fescue (Lolium arundinaceum)		65%	
North 8	Buttercup (Ranunculus repens)	FAC	15%	
North 8	Non-native grass mix	UPL Non-native	65%	

North 8	Tall fescue (Lolium arundinaceum) Giant horsetail (Equisetum telmateia) White clover (trifolium repens) Common rush (Juncus effusus)	FACW FAC	8% 6% 5%	
North 9		FAC	15%	
North 9	Common rush (juncus effusus)	FACW	3%	
	Non-native grass mix Velvet grass sweet vernal grass (Antoxanthum odoratum) annual bluegrass (Poa annua) slender oat (Avena barbata) cultivated oat (Avena sativa) rescue grass (Bromus catharticus) Tall fescue (Lolium arundinaceum)	UPL Non-native	48%	
North 9				
North 9	Willow (Salix scouleriana)	FAC	15%	
	Buttercup (Ranunculus repens)	FAC	15%	
	Poison hemlock (Conium maculatum)	UPL	10%	
North 10	Willow (Salix scouleriana)	FACW	15%	

Hydrology

NO positive primary indicators of wetland hydrology were encountered within the project site. Using the United States Department of Agriculture (USDA) Agricultural Applied Climate Information System (AgCIS) and the Woodley Island weather station data, the average accumulation of rainfall for this area during the wet season (October 15 to May 15th) is 38 inches. 2025 totals for this time period was more than 48 inches, which is 128% above average.

At an area more than 75 feet away from the project site, several wetland hydrology indicators were present including standing water.

Recommendations

This wetland study did NOT reveal any areas with positive indicators of wetland vegetation, soils, or hydrology on the project site. Coastal wetlands are located at an area no closer than 65 feet of the project activities with the exception of two project activities, both of which are protective of wetland areas off site. The removal of some impervious surface area for stormwater management areas and the removal of some impervious surface area for native plant landscaped areas will occur within a 50 foot setback to Coastal wetlands.

Lastly, Sequoia Humane Society has acquired a degraded parcel on its northern boundary and wishes to enhance this area by planting wetland vegetation throughout upon consent of the County of Humboldt and the Coastal Commission. Vegetation planting plans will be developed for this purpose following pre-application review.

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Attachment A

USACE Field Data Forms

EAST 1	MINCHE	
WETLAND U.S. Am	WACENT	PROPERTY 60 FROM ACT
WETLAND DETERMINATION DATA SHEET - Wer See ERDC/EL TR-10-3, the proper	of Engineers	OM8 Control # 6710-6624, Exp. 69/36/2017
See ERDC/EL TR-10-3: the property of the Prope	stern Mountains, Valleys,	and Coast Region Requirement Control Symbol EXEMPT: -COR (Authority: Alt 325-15, paragraph 5-24)
JEW-FLOWN WWO. SOCIETY		HUMBOLOT Sampling Date APRIL!
TOWNER: SE JUNIA LI LI CONTROLS Z	00187	State CA Sampling Point BAST O
vestigatorisk IDDO SIETVENVION	1111	
androrm (hillside, terrace, etc.) INTES OF FAST	OF Westernament concer	
Compton (LRHMMLRA):	** HILL DA"N	one 124"17"27" W Dates MALD 80
of Map Unit Name SWANSCOVER HO	Famal	NWI dassification: NIP
re climatic / hydrologic conditions on the site typical for it	nis time of year? Yes	X No (If no, explain in Remarks.)
re Vegetation 🗡 , Soll 🗶 , or Hydrology 🔀 sign	infrarety disturbed? Are 'h	Rormal Circumstances" present? Yes X No
re Vegetation Soil jeds , or Hydrological res	urally problematic? (If nee	eded, explain any answers in Remarks.)
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	snowing sampling po	ont rocations, transects, important reatures, etc.
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fydric Soil Present? Yes No Y	within a V	Vetland? Yes No X
Notand Hydrology Present? Yes No. Nomanis THE DUEA SHOWPLED IS	A WILL AND	4 25/ 10/00/
+ XISTING RULLOING THIS SLOPE	TO ALL A DECEM	ES WATER FROM THE SOURCES
IMPERVIOUS SHEP DOOF + IMPE	KU10US CONCRETE	SLAS DEAWATER TO THE SITE
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	Project Control of the Control of th	cator
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Enhants fershera	- NO V	Total Number of Dominant Species 2 (8)
22	=Total Cover	
soling/Strup Stratum (Plot size: 6,675 SC		Percent of Dominant Species That And OBL, FACW, or FAC: (ASI
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RUBIS ARMENIACUS	15 45 U	Prevalence Index worksheet:
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n Stretum Piot size 6,6755 -	=Total Cover	FAC species TW27 x3 - DW 3
Eaver observe	1 NO DE	BL UPL species 40 (10 x5= 348 300
hingus ethisus	5 NO F	C Column Tolans AM 9Q(A) 475 40(6)
faminentine repens	5 NO E	The state of the s
-A Code		ACW (A.L.)
Rumex SPP	2 NO \$1	Hydrophytic Vegetation Indicators:
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THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAME	O NO U	
	D NO U	
Tiblum repens	NO E	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
		S - Wedard Non-Vascular Parts 1
1.105 -	=Total Cover	Problematic Hydrophytic Vegetation* (Explain)
Se Vine Stratum (Pict size: 6/675		*Indicators of hydric soil and wetland hydrology must
		be present unless disturbed or problematic.
	-	- Hydrophytic
0 -	=Total Cover	Vegetation Present? Yes No

pth	option: (Describe Matrix			x Features			
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ydric Soil Histosol Histo E Black H Hydrog 1 cm M Deplete Thick D Iron Mo	ioncentration, D=D Indicators: (Appl (A1) pipedon (A2) listic (A3) en Sutfide (A4) luck (A9) (LRR D, 6 et Below Dark Surficer (A12) consulfide (A18) Mucky Mineral (S1	ocable to all 3) ace (A11)	LRRs, unless oth Sandy Ge Sandy Re Stripped I Loamy M Loamy G Depleted Redax De	erwise noted.) oyed Matrix (S4) idox (S5) Matrix (S6) iucky Mineral (F1) ieyed Matrix (F2)	except MLRA	1)	ocation: PL=Pore Lining, M=Matrix, toers for Problematic Hydric Solls ² : om Muck (A10) (LRR A, E) on-Manganese Masses (F12) (LRR D) od Parent Material (F21) ery Shallow Derk Surface (F22) ther (Explain in Remarks) stors of hydrophytic vegetation and estand hydrology must be present, ness dishurbed or problematic.
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Z.5 cm Restrictive Type: Depth i Remarks: H7	Nucky Peut or Peu Leyer (If observe (inches) SWAINS 00K-TON / I	H (SZ) (LAR d): COUGH DEVEL	- 3- 3	T FENCE	Hydr E CING UCHOUT	PLOJE	SCT PREM
2.5 cm Restrictive Type Depth (Remarks , HO Remarks , HO Remarks , HO Remarks , HO Remarks , Surface High W Satura Vivaser Sedim Drift D Algai M Iron D Surface Inundo	Nucky Peut or Peu Leyer (If observe (inches): SWAINS 00K-TON/	of (S2) (LRR d): COUGH DEVELO re: of one is req	TO EAST OPER SO/A OPER SO/A Water-Si MLR Salt Cru Aquate Hydroge Oxidited Presence Recent Sturted (B7) Other (6	(.agg8y) tained Leaves (89 A 1, 2, 4A, and 48	(CA) (CA) (CA) (CA) (CA) (CA) (CA) (CA)	Second Pres	secrit? Yes X No

ADDREST PROPERTY NOW GMB Control 9: 0710-0024, Exp. 09/30/2027 U.S. Army Corps of Engineers Requirement Control Symbol EXEMPT: WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region (Authority: AR 335-15, paragraph 5-2s) See ERDC/EL TR-10-3; the proponent agency is CECW-COR APRIL 1500 Projection SEQUELA HUMANG SOCIETY CHICAMY YUMBOLDY Sampling Date: Sampling Point ADDICATIONNER SECUDIA HUMANO SICIETY Investigator(s): TIPO 5/6FF6 Section, Township, Range: Local retel (concave, convex, none): CONVEX Landform (hillside, terrace, etc.): VILLS 106 LIE 40°44 64"N Subregion (LRR/MLRA) NVII classification: SOIL MAD UNIT NAME SWAIN SCOKE-11 (If no, explain in Remarks.) Yes 'X Are climatic / hydrologic conditions on the she hydical for this time of year? Are Vegetation . Soil . . or Hydrology . significantly disturbed? Are "Normal Circumstances" present? Yes 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. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wedand Hydrology Present? Yes ROOF AND CONGRETE SCAB, PHOPETY BOUNDARY ROMANDERTH TRANSCOT VEGETATION - Use scientific names of plants. Indicator (Piot size 2500 5.5.) Absolute Dominant Dominance Test worksheet Status Socoles? No Number of Dominant Species That (A) Are OBL. FACW, or FAC. 2 Khampus purples Total Number of Dominant Species dBi Acrona At Strata: +Total Cove Percent of Dominant Species That (O INB Are OBL. FACW, or FAC Prevalence Index worksheet: Total % Cover of: Multiply by OBL species FACW species *Total Cover FAC species PRINCE TO DE S. FACU species Horb Stretum UPL species Column Totals: | | Q Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0" 4 - Morphological Adaptations (Provide supporting ĸ data in Remarks or on a separate sheet) я 10 5 - Westland Non-Vascular Plants' 11 Problematic Hydrophysic Vegetation (Explain)

*Total Cover

=Total Cover

% Bare Ground in Herb Stratum

Woody Vine Stratum

Remerks

(Plot size:

10%

Indicators of hydric soil and welland hydrology must.

be present, unless disturbed or problematic

Hydrophytic

Vegetation

Present?

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

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WEST + RANSELT

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region

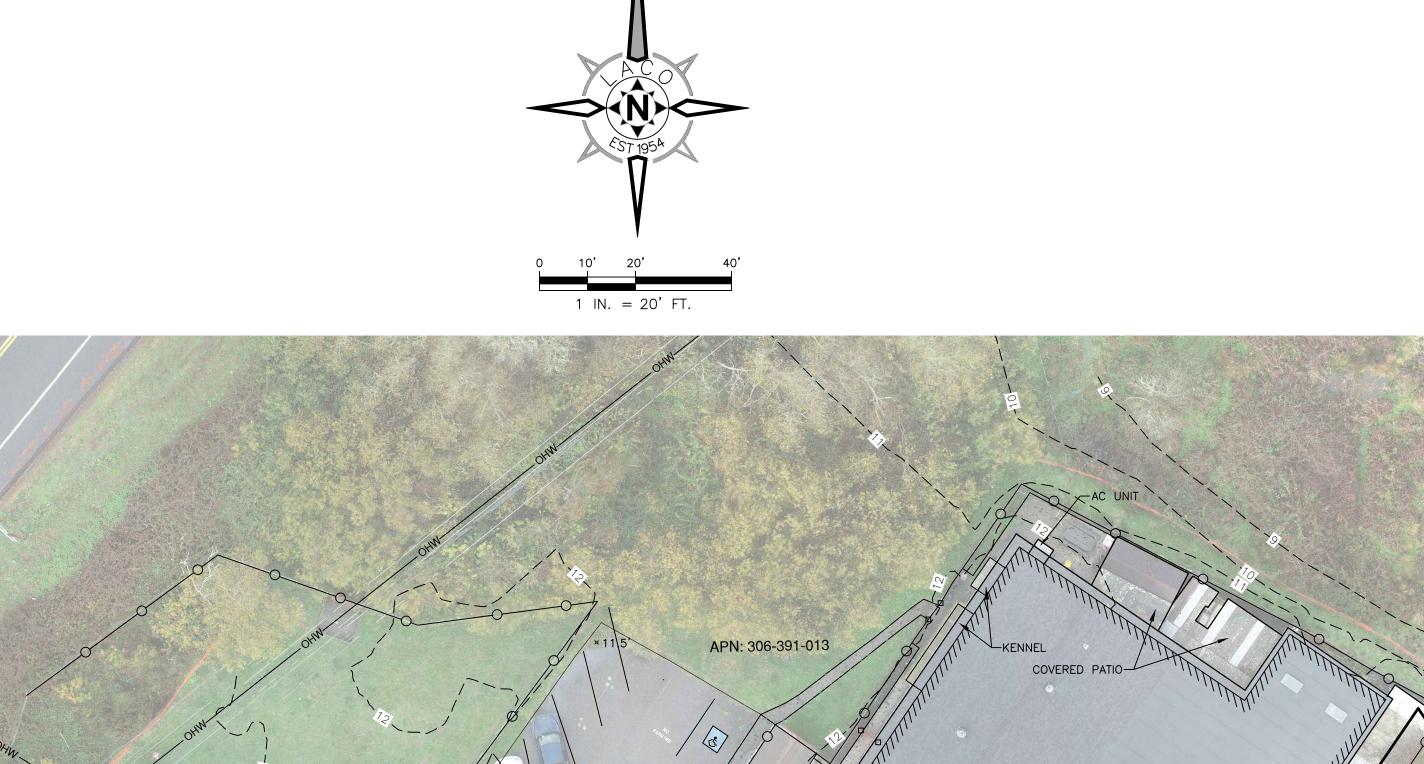
OMB Control & 0710-0024, Exp. 08/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, peragraph 5-3s)

See ERDC/EL TR-10-3; the proportion of the Public State of the Pub	Cay/County 1/U	MAGICOT Sampling Date: APUL'S
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ANT 110 Xest Kin Odvating	25 455 VI	Hydrophytic Vegetation Indicators: † - Rapid Test for Hydrophytic Vegetation
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		4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
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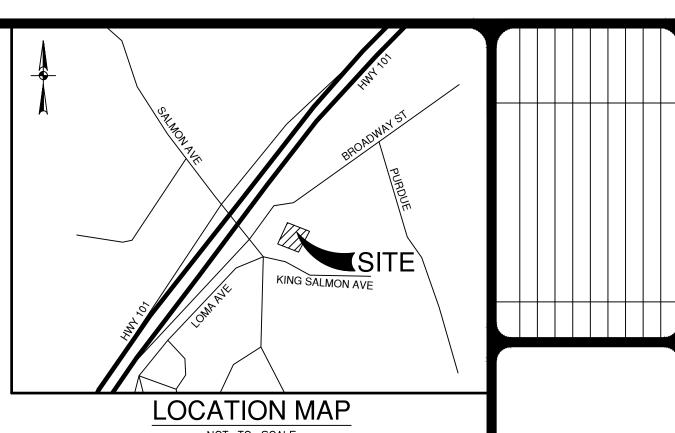
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offile Description: (Describe to the depth	needed to document the indicator or	confirm the absence of indicators
		and address of indicators.)
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10 18		
		SOTUDOCKY SOFT, LOTINY SIL
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Histic Epipedon (A2)	Sandy Redox (S5)	fron-Manganese Masses (F12) (LRR D)
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_ 1 cm Muck (ASI) (LRR D, G)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
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Depth (inches) omarks Sol L /S SWAINX Populary OKATINEP, CKO POROLOGY Vettand Hydrology Indicators: Impary Indicators (iminimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sectiment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soli Cracks (B6)	Salt Crust (811) Aquatic Invertebrates (813) Hydrogen Suited Odor (C1) Oxidized Rhizospheres on Living F Presence of Reduced inon (C4) Recent iron Reduction in Titled So Sturted or Stressed Plants (D1) (L	MISI N HTI ON SWAINLOUGH HUPRIC POTENTIAL BOUNDARY AND ON DEUELOP E PARCEL Secondary Indicators I2 or more required: Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Dranage Patterns (810) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C8 books (C3) Geomorphic Position (D2) Shallow Aquitant (D3) Is (O6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRRA)
Depth (inches) Omarks Sol L /S SWAJNX Poplating OKATINEP, CKD POROLOGY Vettand Hydrology Indicators: Immary Indicators (iminimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visitate on Aerial Imagery (B7)	IS THE GHOUT WE Show THE GRAPH TO THE STATE OF THE SHOUT WE Scheck all that apply! Water-Stained Leaves (B9) (excess MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydroges Sutfide Odor (C1) Oxidized Rhizospheres on Living F Presence of Reduced inon (C4) Recent Iron Reduction in Titled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	HUBRIC POTENTIAL BOUNDARY AND ON DEUELOP B T PARCEL Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Dranage Patterns (810) Dry-Season Water Table (C2) Saturation Viable on Aerial Imagery (Citoots (C3)) Books (C6) FAC-Neutral Test (C5)
Depth (nches) Depth	IS THE GHOUT WE Show THE GRAPH TO THE STATE OF THE SHOUT WE Scheck all that apply! Water-Stained Leaves (B9) (excess MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydroges Sutfide Odor (C1) Oxidized Rhizospheres on Living F Presence of Reduced inon (C4) Recent Iron Reduction in Titled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	MISI N HTI ON SWAINLOUGH HUPRIC POTENTIAL BOUNDARY AND ON DEUELOP E PARCEL Secondary Indicators I2 or more required: Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Dranage Patterns (810) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C8 books (C3) Geomorphic Position (D2) Shallow Aquitant (D3) Is (O6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRRA)
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Depth (nches) Depth	STELLIFOGHOUT WE PAKE THE CHOUT WE PAKE THE CHOUT WE PAKE THE CHOUT WE PAKE THE CHOICE OF THE CHOICE	MISI N HTI ON SWAINLOUGH HUPRIC POTENTIAL BOUNDARY AND ON DEUELOP E PARCEL Secondary Indicators I2 or more required: Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Dranage Patterns (810) Dry-Season Water Table (C2) Saturation Visible on Asnai Imagery (CS tooks (C3) Geomorphic Position (D2) Shallow Aquitant (D3) Is (O6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRRA)
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Depth (nches) tomarks: Soll IS SWAINX Brown Wall ORATINED, CKO PORTUN TO PRIMATION YDROLOGY Vettand Hydrology Indicators: Inmary Indicators (iminimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visitie on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (Bit leid Observations: urface Water Present? Yes Ves	STELLIFOGHOUT WE PAKE THE CHOUT WE PAKE THE CHOUT WE PAKE THE CHOUT WE PAKE THE CHOICE OF THE CHOICE	Secondary Indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B) Dranage Patterns (810) Dry-Season Water Table (C2) Saturation Visible on Asnat Imagery (C8 Geomorphic Position (D2) Shallow Aquitard (D3) Is (O6) RR A) Resend Ant Mounds (D6) (LRR A)

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× 12.3'



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	MAJOR CONTOUR
	MINOR CONTOUR
-00	CYCLONE FENCE
7//////////////////////////////////////	BUILDING LINE
	BUILDING ROOF LINE
SD	STORM DRAIN PIPE
	EDGE ASPHALT SURFACE
	CONCRETE SURFACE
	GRAVEL SURFACE
-0-	UTILITY POLE
- o-	SIGN
	STORM DRAIN CATCH BASIN/INL
S	SANITARY SEWER MANHOLE
Cos	SANITARY SEWER CLEANOUT
	GAS METER
Q	FIRE HYDRANT
W	WATER METER
\bowtie	WATER VALVE
% C	WATER SPIGOT
	SURVEY CONTROL POINT
•	FOUND MONUMENT AS NOTED

BOUNDARY LINE

	SURVEY CONTROL TABLE					
POI	NT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	
	1	2158995.82	5949419.52	11.48	SET 3/8" REBAR/CAP	
	3	2158875.63	5949602.28	16.13	SET MAG NAIL	
	4	2158993.90	5949390.23	10.86	SET MAG NAIL	
	5	2159015.14	5949591.99	12.30	SET MAG NAIL	
	6	2159088.61	5949712.25	8.16	SET MAG NAIL	

NOTES:

BOUNDARY LINES SHOWN ON THIS MAP DERIVED FROM FOUND MONUMENTS AND RECORD DATA PER _____AND DOES NOT REFLECT A RECORD OF SURVEY.

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988(NAVD88), GEOID 18, DERIVED FROM STATIC GPS OCCUPATION PROCESSED USING TRIMBLE BUSINESS CENTER.

CONTOUR INTERVAL IS ONE FOOT

BASIS OF BEARINGS: GRID NORTH

UNDERGROUND UTILITIES AND SUBSURFACE CONDITIONS NOT SURVEYED.

THE CONTENT OF THIS MAP WAS DEFINED BY CONTRACT AT THE REQUEST OF HUMANE SOCIETY. LACO ASSOCIATES ACCEPTS NO LIABILITY FOR USE OF THIS MAP BY ANYONE OTHER THAN THE AUTHORIZED REPRESENTATIVE THEREOF.

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FIELD SURVEY BY LACO ASSOCIATES ON NOVEMBER 18, 2024. ONLY CONDITIONS EXISTING AT THAT TIME ARE REFLECTED ON THIS MAP.

JOB NO. 10676 12/2/24 DESIGNER

CHECKED XXX DRAWN RTT