

# **BOTANICAL SURVEY REPORT**

**LOGISTIC CENTER AT ENTERPRISE PROJECT  
HAYWARD, CALIFORNIA**



**LSA**

February 2022

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# **BOTANICAL SURVEY REPORT**

## **LOGISTICENTER AT ENTERPRISE PROJECT HAYWARD, CALIFORNIA**

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February 2022

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## LIST OF ABBREVIATIONS AND ACRONYMS

CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
ESA	Endangered Species Act
NCSS	National Cooperative Soil Survey Web Soil Survey
project	LogistiCenter at Enterprise Project
USDA	U.S. Department of Agriculture

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## INTRODUCTION

This Botanical Survey Report presents the results of LSA's special-status plant surveys and a sensitive natural community survey for the LogistiCenter at Enterprise Project (project) in Hayward, Alameda County, California.

### SITE DESCRIPTION

The approximately 10.87-acre project site is located along the southern side of Enterprise Avenue, west of its intersection with Whitesell Street, and approximately 0.6-miles northwest of the Eden Landing Road/Clawiter Road exit from State Highway 92, east of the San Mateo Bridge toll station. The project site is accessed by driving north on Clawiter Road and turning west onto Enterprise Avenue.

The project site comprises Alameda County Assessor's Parcel Numbers 439-99-35 and 439-99-36-2. The site is situated within Township 3 South, Range 3 West in the NE  $\frac{1}{4}$  of Section 36 and Range 2 West in the NW  $\frac{1}{4}$  of Section 31 on the San Leandro, California 7.5-minute U.S. Geological Survey quadrangle, and is centered at 37.6322° North Latitude and 122.1313° West Longitude.

The site has elevations between 7 and 13 feet above mean sea level, with most of the site relatively flat and below the elevation of 11 feet. The project site is annually mowed grassland and occupied by a small building and four radio broadcast towers. The site is surrounded by a chain-link fence, except for its western edge. Land uses surrounding the project site are filled vacant land to the east, a municipal wastewater treatment plant to the north, warehouse/trucking buildings to the west, and a railroad track, a drainage ditch, and a leveed former brackish marsh to the south.

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## METHODS

LSA senior botanist Tim Milliken conducted rare plant surveys at the project site on April 21 and August 23, 2021. The surveys were performed according to the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018).

### BACKGROUND RESEARCH

LSA prepared this report based on current information gathered during field surveys conducted in 2021 and prior surveys (Moore, 2020 and WRA, 2020). To identify special-status plant and sensitive natural communities known to occur or potentially occurring in the project site vicinity, LSA queried the California Natural Diversity Database (CNDDDB; CDFW, 2021a) for records, and locations of potential reference sites, within a 5-mile radius of the project site. LSA also queried the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CNPS, 2021) for records of special-status plant species in the San Leandro 7.5-minute U.S. Geological Survey quadrangle. LSA compiled the resulting list and analyzed the potential for special-status plant species and sensitive natural communities to occur within the context of the site (Table A and Table B). The analysis also aided in verifying conditions in which the targeted plant species grow and windows of time when their phenological development is optimal for identification in the field.

Special-status plant and sensitive natural communities are often associated with specific soil types (i.e., soils derived from serpentine or volcanic rock parent material). LSA gathered information on the general soil conditions potentially present on the project site using the National Cooperative Soil Survey (USDA Web Soil Survey 2021; Appendix A).

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**Table A: Special-Status Plant Species Potentially Occurring on the Project Site**

Species	Status (Federal/State/ CRPR/EB-CNPS)	Ecology/Habitats/Elevation/Blooming Period	Habitat Present/ Absent	Occurrence or Potential, Rationale for Exclusion, and/or Other Details
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--/--/1B.2/A2	<b>Ecology:</b> Alkaline flats, vernal moist meadows. <b>General Habitats:</b> Playas, valley and foothill grassland (adobe clay), vernal pools. <b>Microhabitat:</b> Alkaline. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. <b>Elevation:</b> 1-60 meters <b>Blooms:</b> March-June	Present	This species occurs in valley and foothill grassland, one of the general habitats present on the site. This species was not observed during protocol-level botanical surveys.
<i>Centromadia parryi</i> subsp. <i>congdonii</i> Congdon's tarplant	--/--/1B.1/A2	<b>Ecology:</b> Terraces, swales, floodplains, grassland, disturbed sites. <b>General Habitats:</b> Valley and foothill grassland (alkaline). <b>Microhabitat:</b> Alkaline soils, sometimes described as heavy white clay. <b>Elevation:</b> 0-300 meters <b>Blooms:</b> May-October (November)	Present	Grasslands on the site provide potentially suitable habitat. This species was not observed during protocol-level botanical surveys.
<i>Chloropyron maritimum</i> subsp. <i>palustre</i> Point Reyes salty bird's-beak	--/--/1B.2/A1x	<b>Ecology:</b> Coastal salt marsh. <b>General Habitats:</b> Marshes and swamps (coastal salt). <b>Microhabitat:</b> Usually in coastal salt marsh with <i>Salicornia</i> , <i>Distichlis</i> , <i>Jaumea</i> , <i>Spartina</i> , etc. <b>Elevation:</b> 0-10 meters <b>Blooms:</b> (May) June-October	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.
<i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower	FE/--/1B.1/A1x	<b>Ecology:</b> Sand or gravel. <b>General Habitats:</b> Chaparral (maritime), cismontane woodland (openings), coastal dunes, coastal scrub. <b>Microhabitat:</b> Sandy terraces and bluffs or in loose sand or gravel. <b>Elevation:</b> 10-300 meters <b>Blooms:</b> (April) May-September	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.

**Table A: Special-Status Plant Species Potentially Occurring on the Project Site**

Species	Status (Federal/State/ CRPR/EB-CNPS)	Ecology/Habitats/Elevation/Blooming Period	Habitat Present/ Absent	Occurrence or Potential, Rationale for Exclusion, and/or Other Details
<i>Gilia millefoliata</i> Dark-eyed gilia	--/--/1B.2/--	<b>Ecology:</b> Stabilized coastal dunes. <b>General Habitats:</b> Coastal dunes. <b>Microhabitat:</b> Same as CNPS Habitats. <b>Elevation:</b> 2-30 (<10) meters <b>Blooms:</b> (April) March-July	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level survey.
<i>Hoita strobilina</i> Loma Prieta hoita	--/--/1B.1/*A1x	<b>Ecology:</b> Chaparral, oak woodland. <b>General Habitats:</b> Chaparral, cismontane woodland, riparian woodland. <b>Microhabitats:</b> Serpentine soils in chaparral and woodland. Presumed extirpated in Alameda and Contra Costa Counties. <b>Elevation:</b> 30-860 meters <b>Blooms:</b> May-October	Absent	This species occurs in valley and foothill grassland, one of the general habitats present on the site. However, it has an affinity for serpentine soils, which are not present. This species was not considered as a target species. This species was not observed during protocol-level botanical surveys.
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	--/--/1B.1/A1x	<b>Ecology:</b> Old dunes, coastal sandhills. <b>General Habitats:</b> Closed-cone coniferous forest, chaparral (maritime), coastal dunes, coastal scrub. <b>Microhabitat:</b> Old dunes, coastal sandhills; openings. Sandy or gravelly soils. <b>Elevation:</b> 10-200 meters <b>Blooms:</b> April-August (September)	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/--/1B.1/*A1	<b>Ecology:</b> Vernal pools, wet meadows. <b>General Habitats:</b> Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. <b>Microhabitat:</b> Vernal pools, swales, low depressions, in open grassy areas. Mesic. <b>Elevation:</b> 0-470 meters <b>Blooms:</b> March-June	Present	This species occurs in valley and foothill grassland, one of the general habitats present on the site. This species was not observed during protocol-level botanical surveys.

**Table A: Special-Status Plant Species Potentially Occurring on the Project Site**

Species	Status (Federal/State/ CRPR/EB-CNPS)	Ecology/Habitats/Elevation/Blooming Period	Habitat Present/ Absent	Occurrence or Potential, Rationale for Exclusion, and/or Other Details
<i>Monolopia gracilens</i> Woodland woollythreads	--/--/1B.2/*A1	<b>Ecology:</b> Serpentine grassland, open chaparral, oak woodland. <b>General Habitats:</b> Broadleaved upland forest (openings), chaparral (openings), cismontane woodland, North Coast coniferous forest (openings), valley and foothill grassland. <b>Microhabitat:</b> Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. <b>Elevation:</b> 100-1,200 meters <b>Blooms:</b> (February) March-July	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.
<i>Polygonum marinense</i> Marin knotweed	--/--/3.1/--	<b>Ecology:</b> Coastal salt, brackish marshes, swamps. <b>General Habitats:</b> Salt marsh. <b>Microhabitat:</b> Coastal salt marsh. <b>Elevation:</b> 0-10 meters <b>Blooms:</b> May-August	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.
<i>Sanicula maritima</i> Adobe sanicle	--/CR/1B.1/A1x	<b>Ecology:</b> Coastal, grassy, open wet meadows, ravines. <b>General Habitats:</b> Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland. <b>Microhabitat:</b> Moist clay or ultramafic soils, clay, serpentinite. <b>Elevation:</b> 30-240 meters <b>Blooms:</b> February-May	Absent	Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.

**Table A: Special-Status Plant Species Potentially Occurring on the Project Site**

Species	Status (Federal/State/ CRPR/EB-CNPS)	Ecology/Habitats/Elevation/Blooming Period	Habitat Present/ Absent	Occurrence or Potential, Rationale for Exclusion, and/or Other Details
<p><i>Spergularia macrotheca</i> var. <i>longistyla</i> Long-styled sand-spurrey</p>	<p>--/--/1B.1/*A2</p>	<p><b>Ecology:</b> Alkaline marshes, mud flats, meadows, hot springs. <b>General Habitats:</b> Alkali areas, miscellaneous wetlands, vernal pools, marshes and swamps. <b>Microhabitat:</b> Alkaline habitats, wetland-riparian. <b>Elevation:</b> 0-255 meters <b>Blooms:</b> February-May</p>	<p>Absent</p>	<p>Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.</p>
<p><i>Streptanthus glandulosus</i> subsp. <i>glandulosus</i> Most beautiful jewelflower</p>	<p>--/--/1B.2/*A2</p>	<p><b>Ecology:</b> Serpentine or metamorphic soils (Franciscan formation), rocky, generally barren slopes, chaparral openings, steep woodland. <b>General Habitats:</b> Chaparral, cismontane woodland, valley and foothill grassland. <b>Microhabitat:</b> Serpentine outcrops, on ridges and slopes. <b>Elevation:</b> 95-1,000 meters <b>Blooms:</b> (March) April-September (October)</p>	<p>Absent</p>	<p>Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.</p>
<p><i>Suaeda californica</i> California seablite</p>	<p>FE/--/1B.1/A1x</p>	<p><b>Ecology:</b> Margins of coastal salt marshes. <b>General Habitats:</b> Marshes and swamps (coastal salt). <b>Microhabitat:</b> Margins of coastal salt marshes. <b>Elevation:</b> &lt; 5 meters <b>Blooms:</b> July-October</p>	<p>Absent</p>	<p>Suitable habitat conditions are not present on the project site. This species was not considered as a target species. This species was not observed during the protocol-level botanical surveys.</p>



**Table A: Special-Status Plant Species Potentially Occurring on the Project Site**

Species	Status (Federal/State/ CRPR/EB-CNPS)	Ecology/Habitats/Elevation/Blooming Period	Habitat Present/ Absent	Occurrence or Potential, Rationale for Exclusion, and/or Other Details
<i>Trifolium hydrophilum</i> Saline clover	--/--/1B.2/A1	<b>Ecology:</b> Salt marshes, open areas in alkaline soils. <b>General Habitats:</b> Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. <b>Microhabitat:</b> Mesic, alkaline sites. <b>Elevation:</b> 0-300 meters <b>Blooms:</b> April-June	Present	This species occurs in valley and foothill grassland, one of the general habitats present on the site, and it has an affinity for mesic, alkaline habitats, which are present. This species was not observed during protocol-level botanical surveys.

Source: California Natural Diversity Database (CDFW 2021a); Inventory of Rare and Endangered Plants (CNPS 2021).

CDFW = California Department of Fish and Wildlife; CNPS = California Native Plant Society; CRPR = California Rare Plant Rank; EB = East Bay

Status:

Federal/State

FE = federally listed as endangered

FT = federally listed as threatened

CE = State listed as endangered

CR = State listed as rare

CT = State listed as threatened

Rare Plant Rank

CRPR 1B.1 = Plant species rare, threatened, or endangered in California and elsewhere, seriously threatened in California.

CRPR 1B.2 = Plant species rare, threatened, or endangered in California and elsewhere, moderately threatened in California.

CRPR 2B = Plants presumed extirpated in California, but common elsewhere.

CRPR 2B.2 = Plant species rare, threatened, or endangered in California, but more common elsewhere, moderately threatened in California.

CRPR 3 = Plants about which more information is needed – a review list.

CRPR 4 = A watch list, plants of limited distribution.

Local

\*A = Species in Alameda and Contra Costa Counties listed as rare, threatened, or endangered statewide by federal or state agencies or by the CNPS (includes \*A1, \*A1x, and \*A2 species).

A1 = Species known from 2 or less botanical regions in Alameda or Contra Costa Counties, either currently or historically (includes \*A1 and A1 species).

A2 = Locally rare species currently known from 3 to 5 regions in Alameda or Contra Costa Counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc. (includes \*A2 and A2 species).

A1x = Species previously known from Alameda or Contra Costa Counties, but now believed to have been extirpated, and are no longer occurring here (includes \*A1x and A1x species).

B = High priority watch list: a locally rare species currently known from 6 to 9 regions in Alameda or Contra Costa Counties, or, if more, meeting other important criteria as described above in A2. Not protected by the California Environmental Quality Act.

**Table B: Sensitive Natural Communities Potentially Occurring on the Project Site**

Sensitive Natural Communities/Habitats	Status*	Presence Within Project Site	Discussion
Northern Coastal Salt Marsh	G3/S3.2	None within project site.	Habitat within search parameters, but not present on project site.

Source: California Sensitive Natural Community Vegetation Classification and Mapping Program (CDFW 2021b).

\* Sensitive Natural Communities

G1/S1.2 = Throughout its range, this natural community is critically imperiled and at a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors. Within California, this critically imperiled vegetation alliance is threatened and at very high risk of extirpation due to very restricted range, very few population occurrences, very steep declines, severe threats, or other factors.

G3/S3.2 = Throughout its range, this natural community is vulnerable and at a moderate rate of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors. Within California, this vulnerable vegetation alliance is threatened and at a moderate risk of extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors and is critically imperiled because of extreme rarity (often 5 or fewer populations) or because factor(s) such as very steep declines make it especially vulnerable to extirpation from the State.

## FIELD SURVEYS

The project area is delineated by the property line of the parcel. The botanical survey area encompassed the entire parcel.

The surveys were conducted by walking throughout the survey area and visually searching for blooming or otherwise identifiable plants. All plants observed during the survey were identified to the extent necessary to determine their rarity status. While searching the survey area for targeted special-status plant species and sensitive natural communities, Mr. Milliken recorded all plant species observed and made preliminary categories for the existing plant communities. A list of plants occurring on the project site is provided in Table C. Plant names follow the conventions presented in the latest edition and errata of The Jepson Manual and updates provided on the Jepson Flora Project website (Baldwin et al., 2012) (Jepson Flora Project, 2021).

**Table C: Plant Species Observed at the Project Site,  
April 21 and August 23, 2021**

GROUP/FAMILY NAME/ <i>Species Name</i>	Common Name	California Native or Alien Non-Native
<b>EUDICOTS</b>		
APIACEAE	CARROT FAMILY	
<i>Foeniculum vulgare</i>	Fennel	Alien MODERATELY INVASIVE
ASTERACEAE	SUNFLOWER FAMILY	
<i>Baccharis pilularis</i>	Coyote brush	Native
<i>Carduus pycnocephalus</i>	Italian thistle	Alien MODERATELY INVASIVE
<i>Centaurea solstitialis</i>	Yellow-star thistle	Alien HIGHLY INVASIVE
<i>Helminthotheca echioides</i>	Bristly ox-tongue	Alien
<i>Lactuca saligna</i>	Prickly lettuce	Alien
<i>Senecio vulgaris</i>	Common groundsel	Alien
<i>Sonchus asper</i> subsp. <i>Asper</i> .	Prickly sow thistle	Alien
BRASSICACEAE	MUSTARD FAMILY	
<i>Brassica nigra</i>	Black mustard	Alien MODERATELY INVASIVE
<i>Raphanus sativus</i>	Wild radish	Alien
FRANKENIACEA	FRANKENIA FAMILY	
<i>Frankenia salina</i>	Alkali heath	Native
FABACEAE	LEGUME FAMILY	
<i>Lotus corniculatus</i>	Bird's-foot trefoil	Alien
<i>Medicago polymorpha</i>	Bur-clover	Alien
GERANIACEAE	GERANIUM FAMILY	
<i>Geranium dissectum</i>	Cutleaf geranium	Alien
<i>Erodium cicutarium</i>	Fillaree	Alien LIMITED INVASIVE
MALVACEAE	MALLOW FAMILY	
<i>Malva neglecta</i>	Buttonweed	Alien
ONAGRACEAE	EVENING PRIMROSE FAMILY	
<i>Epilobium brachycarpum</i>	Panicled willowherb	Native

**Table C: Plant Species Observed at the Project Site,  
April 21 and August 23, 2021**

GROUP/FAMILY NAME/ <i>Species Name</i>	Common Name	California Native or Alien Non-Native
PAPAVERACEAE	POPPY FAMILY	
<i>Eschscholzia californica</i>	California poppy	Native
PLANTAGINACEAE	PLANTAIN FAMILY	
<i>Plantago coronopus</i>	Cutleaf plantain	Alien
<i>Plantago lanceolata</i>	English plantain	Alien
POLYGONACEAE	BUCKWHEAT FAMILY	
<i>Rumex crispus</i>	Curly dock	Alien
RHAMNACEAE	BUCKTHORN FAMILY	
<i>Rhamnus alaternus</i>	Italian buckthorn	Alien
<b>MONOCOTS</b>		
POACEAE	GRASS FAMILY	
<i>Avena barbata</i>	Slender wild oat	Alien MODERATELY INVASIVE
<i>Bromus diandrus</i>	Ripgut brome	Alien MODERATELY INVASIVE
<i>Bromus hordeaceus</i>	Soft chess	Alien
<i>Cortaderia selloana</i>	Pampas grass	Alien HIGHLY INVASIVE
<i>Distichlis spicata</i>	Salt grass	Native
<i>Elymus triticoides</i>	Creeping wild rye	Native
<i>Festuca myuros</i>	Rattail fescue	Alien
<i>Festuca perennis</i>	Italian ryegrass	Alien MODERATELY INVASIVE
<i>Hordeum brachyantherum</i>	Meadow barley	Native
<i>Hordeum marinum</i> subsp. <i>gussoneanum</i>	Mediterranean barley	Alien
<i>Hordeum murinum</i> subsp. <i>leporinum</i>	Hare barley	Alien MODERATELY INVASIVE

Source: Compiled by LSA (2021).

## SPECIAL-STATUS PLANT SPECIES

Descriptions of special-status plants, if found on the site, are recorded and their locations are mapped on the project's botanical survey area map. Although no special-status plant species were found on the project site, a Native Species Form indicating the absence of Congdon's tarplant was completed (Appendix B).

Special-status plant species are defined as follows:

- Plant species with a California Rare Plant Rank (CRPR) status of 1A, 1B, 2, and 3 as included in the CNPS Inventory of Rare and Endangered Vascular Plants of California and updated rankings in the Electronic Inventory of Rare and Endangered Plants of California (CNPS, 2021).
- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA).

- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA).
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the California Environmental Quality Act (CEQA) guidelines.
- Species that are considered a taxon of special concern by local agencies.

**California Rare Plant Ranks.** Special-status plants in California are assigned to one of six “California Rare Plant Ranks” by a collaborative group of over 300 botanists in government, academia, non-governmental organizations, and the private sector. This effort is jointly managed by the California Department of Fish and Wildlife (CDFW) and the CNPS. The CNDDDB currently includes the following California Rare Plant Ranks (CRPR): CRPR 1A – Plants presumed extirpated in California and are either rare or extinct elsewhere;

- CRPR 1B – Plants rare, threatened, or endangered in California and elsewhere;
- CRPR 2A – Plants presumed extirpated in California, but common elsewhere;
- CRPR 2B – Plants rare, threatened, or endangered in California, but more common elsewhere;
- CRPR 3 – Plants about which more information is needed – a review list; and
- CRPR 4 – Plants of limited distribution – a watch list.

Impacts to CRPR 1A, 1B, 2A, 2B, and 3 plant species or their habitat are analyzed during preparation of environmental documents as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380. Substantial impacts to these species are typically considered significant.

**East Bay Chapter of CNPS – Locally Rare Plant Species.** The East Bay Chapter of the California Native Plant Society (EB-CNPS) has compiled plant observations from many sources as well as field surveys (Lake, 2010). These observations informed an evaluation process to determine which plant species are rare or threatened at the local level, but possibly more common elsewhere. Locally rare or unusual plant species are protected by CEQA in Sections 15380 or 15125(a) which address species of local concern and place special emphasis on environmental resources that are rare or unique to a region. Thus, they may be considered in local land planning and management issues. The locally rare or unusual plant ranks under consideration are:

- EB-CNPS A – Species in Alameda and Contra Costa Counties listed as rare, threatened, or endangered statewide by federal or state agencies, or by the state CNPS. Protected by CEQA.
- EB-CNPS A1 – Species known from 2 or less botanical regions in Alameda and Contra Costa Counties, either currently or historically. Protected by CEQA.
- EB-CNPS A1X – Species that once occurred in Alameda and Contra Costa Counties but are now presumed to be extirpated in those counties. Protected by CEQA.
- EB-CNPS A2 – Species currently known from 3 to 5 regions in Alameda and Contra Costa Counties, or, if more, meeting other important criteria such as small populations, stressed or

declining populations, small geographical range, limited or threatened habitat, etc. Protected by CEQA.

### **SPECIAL-STATUS NATURAL COMMUNITIES**

The CDFW list of California Terrestrial Natural Communities indicates which natural communities are currently considered sensitive (CDFW, 2021b). The rarity ranks of special-status natural communities are calculated, reviewed, and published by VegCAMP and CNPS's Vegetation Program. The evaluation is done at both the Global (full natural range within and outside of California) and State (within California) levels resulting in a single G (Global) and S (State) rank ranging from 1 (very rare and threatened) to 5 (demonstrably secure).

Descriptions of sensitive natural communities, if found on the site, are recorded and their locations are mapped on the project's botanical survey area map. Descriptions of sensitive natural communities are based on the appropriate sections in *A Manual of California Vegetation* (Sawyer et. al., 2009).

Special-status natural communities are defined as follows:

1. Plant communities with ranks of S1 through S3 are considered special-status natural communities.

## RESULTS

### POTENTIAL SPECIAL-STATUS PLANTS AND SENSITIVE NATURAL COMMUNITIES

The database searches provided occurrence records for 15 species of special-status plants and 1 record of a sensitive natural community occurring in the region of the project site (Table A and Table B; CDFW, 2021a; CNPS, 2021). The project site has 2 predominant plant community types: grasslands and ornamental woodland. The plant communities present on the project site are described in the Plant Communities section below.

Grassland plant communities are known to support suitable habitat for four of the special-status plant species from the database query, including alkali milk-vetch (*Astragalus tener* var. *tener*), Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Contra Costa goldfields (*Lasthenia conjugens*), and saline clover (*Trifolium hydrophilum*). The potential for all targeted species to occur on the site is discussed in Table A.

The microhabitat conditions required by 11 of the 15 special-status species is not present, for example, chaparral, coastal scrub, cismontane woodland, and salt marsh.

### BIOLOGICAL SETTING

As mentioned in the Site Description section, the relatively flat site has been subjected to historical surface disturbances such as mowing. Although these disturbances favor invasion of non-native plant species, native plant communities persist on the site.

### SOILS

The results from the National Cooperative Soil Survey Web Soil Survey (NCSS) query indicate that the map units (soil types) present on project site consist of Reyes clay, 0 to 2 percent slopes (USDA Web Soil Survey, 2021). Reyes clay is listed as completely hydric. The site has been tilled in the past for agricultural purposes, and portions of the site appear to contain imported fill. There are indistinct low berms and apparent shallow fill areas in the western portion of the site. Much of the soil observed had a darker moist color of 10YR2/1 and 2/2 compared to the 10YR3/3 and 4/3 colors described for Reyes clay. These darker colors may indicate accumulation of additional organic matter since the termination of this soil's formative brackish marsh hydrology and anaerobic soil conditions.

### HYDROLOGY

The project site slopes very gently toward the southwest. A 2- to 3-foot-high fill slope at the adjacent warehouse prevents surface runoff from flowing westward. The elevated railroad bed prevents surface runoff from draining southward from that part of the site, and a low berm along the southern fence line somewhat restricts drainage to the south from that location. Four shallow topographic depressions are visible in the western portion of the site. Any surface drainage leaving the site would flow southwest to the adjacent leveed and ditched brackish marsh area. The areas southwest of the project site are leveed and appear cut off from full tidal action from the San

Francisco Bay located approximately 1 mile west of the site but may still have muted tidal influence. San Francisco Bay is a tidal Traditional Navigable Water of the United States.

## PLANT COMMUNITIES

This section describes the plant communities (and their constituent plant species) observed within the area surveyed, including grasslands and ornamental woodland. The composition of the grassland varies due to slight differences in soils and micro-elevation. Soils within the slightly lower elevation areas tend to be sandy and alkaline and support a greater density of salt grass and alkali heath, both native species. Soils within the slightly higher elevation areas are expressed with a mix of non-native annual grasses and native creeping rye grass.

### *Non-Native Grasslands*

The non-native grasslands are primarily dominated by Mediterranean barley. Other constituent plant species observed within the grassland include wild spear oracle, oat, coyote brush, black mustard, rip gut brome, soft chess, Italian thistle, yellow-star thistle, pampas grass, salt grass, creeping rye grass, willowherb, filaree, rattail fescue), Italian rye, fennel, alkali heath, cutleaf geranium, bristly ox-tongue, meadow barley, hare barley, prickly lettuce, bird's-foot trefoil, common mallow, burclover, cutleaf plantain, English plantain, prostrate knotweed, wild radish, curly dock, common groundsel, and prickly sow thistle.

### *Native Grasslands*

This site contains stands of native grasslands dominated in some locations by alkali heath and creeping ryegrass and in other locations solely by creeping ryegrass. These grassland areas may be considered to be CNDDDB sensitive vegetation types. Where alkali heath is co-dominant, the vegetation type may be classified as *Alkali Heath Marsh: Frankenia salina Herbaceous Alliance* which has a CNDDDB rarity ranking of G4 S3 (apparently secure at the Global scale; statewide the community is rare, uncommon, or threatened, but not immediately imperiled, but assigned rank is uncertain; CDFW, 2021b). Where creeping ryegrass is dominant, the vegetation type may be classified as *Creeping Rye Grass Turfs: Elymus triticoides Herbaceous Alliance* which has a CNDDDB rarity ranking of G3 S3 (globally and State rare, uncommon, or threatened, but not immediately imperiled, but assigned rank is uncertain; CDFW, 2021b).

### *Ornamental Woodland*

A row of shrubs is planted along the elevated western site boundary, screening the adjacent warehouse building. The plantings consist entirely of Italian buckthorn (*Rhamnus alaternus*).

## SPECIAL-STATUS PLANTS

Although no special-status plants were observed within the area surveyed, a discussion is provided for targeted plant species for which marginally suitable habitats exist on the project site.

Due to the historic California drought, botanical surveys may underrepresent the total abundance and distribution of special-status plants. The combination of higher-than-normal temperatures and below-average precipitation may have altered normal blooming periods, decreased the size of



populations, caused annual plant seeds to remain dormant, or caused failure of germinated seedlings. All these factors may lead to false negative results from botanical surveys for special-status plants. However, due to disturbed site characteristics, it is highly unlikely that special-status plant species would occur on the project site. The absence of special-status plant species was confirmed through the process of this botanical survey. Although marginally suitable habitats exist on the project site, no special-status plants were observed within the area surveyed.

### **Alkali Milk-Vetch**

Alkali milk-vetch is most identifiable when it begins to bloom in early spring. This species' blooming range is March through June, and botanical surveys targeting alkali milk-vetch were conducted during the blooming period. The botanical survey occurred on April 21, 2021, a time when this plant would have been identifiable by flower. This is a plant of alkaline grassland habitats, like those of the project site. The grasslands were searched for occurrence of alkali milk-vetch. This species was not observed during the appropriately timed survey.

### **Congdon's Tarplant**

Congdon's tarplant is most identifiable by the presence of 3 to 5 linear to awl-shaped scales (pappus). This species' blooming range is June through October, and timing of botanical surveys targeting Congdon's tarplant was conducted during that range. A record for Congdon's tarplant is located on the project site (CNDDDB Occurrence #12). Although the botanical field surveys were conducted during the blooming period, this species was not observed during the botanical surveys. It is unlikely that climatic factors would cause a false/negative for this species at this site. It is more likely that this species was inadvertently extirpated from the site due to routine mowing.

### **Contra Costa Goldfields**

Contra Costa goldfields is most identifiable by its spring bloom. This species' blooming range is March through June. The botanical survey occurred on April 21, 2021, a time when this plant would have been identifiable by flower. This is a plant that may occur in depressions within alkaline grassland habitats, like those of the project site. The grasslands were searched for occurrence of Contra Costa goldfields. This species was not observed during the appropriately timed survey.

### **Saline Clover**

Saline clover is most identifiable when it begins to bloom in the spring. This species' blooming range is April through June. The botanical survey occurred on April 21, 2021, a time when this plant would have been identifiable by flower. This is a plant that may occur in depressions within alkaline grassland habitats, like those of the project site. The grasslands were searched for occurrence of saline clover. This species was not observed during the appropriately timed survey.

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## CONCLUSIONS

### ASSESSMENT OF POTENTIAL PROJECT IMPACTS

Although special-status plants are not present within the surveyed area, one record for Congdon's tarplant is located on the project site (CNDDDB Occurrence #12). This occurrence was searched for during the appropriate time period and not located and assumed to be absent from the project site. A California Native Species Field Survey Form for Congdon's tarplant is attached.

The CNDDDB provided one record of Northern Coastal Salt Marsh within 5 miles of the project site (CNDDDB Occurrence #21). Although other undocumented instances of this community are likely nearby as well, these communities are isolated from the project site.

Although the CNDDDB did not show occurrences of alkali heath marsh or creeping rye grass turfs within the 5-mile search parameter, stands of grasslands dominated by one or both species were observed in the site.

There are no areas on the project site that could be considered unoccupied potential habitat for special-status plant species. The site is already highly disturbed, and development of the project site will have no impact on unoccupied potential habitat for special-status plant species.

Because special-status plants are not present on the project site, LSA does not recommend measures to avoid, minimize, or mitigate potential impacts specific to these resources.

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## **APPENDIX A**

### **SOIL SURVEY**

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## **APPENDIX B**

# **CALIFORNIA NATIVE SPECIES FIELD SURVEY FORMS**

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