

**Special Status Plant
Survey Report**

A

SPECIAL-STATUS PLANT SURVEY REPORT
LANTANA PLACE DEVELOPMENT SITE
(APN: 043-121-013)
SANTA ROSA, CA

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1.0 INTRODUCTION

The purpose of this report is to provide the result of special-status plant surveys conducted in 2018 on an approximately 4.15-acre site located at 2979 Dutton Meadow (Site) in Santa Rosa, Sonoma County, CA. The Site is located within the Santa Rosa Plain as defined in the Santa Rosa Plain Conservation Strategy.¹ This special-status survey report supplements and updates surveys conducted by Golden Bear Biostudies in 2003² that included the subject parcel.

1.1 SITE LOCATION

The Site is comprised of an approximately 3.79-acre parcel (APN: 043-121-013) and an approximately 0.36-acre section along the southern part of an adjoining parcel (APN: 043-121-012) to the north located along Dutton Meadow in southwest Santa Rosa. The Site is west of Highway 101 between Hearn Avenue to the north and Bellevue Avenue to the South (Figure 1). The Site is currently fallow and there are no structures on the Site. Surrounding lands to the north, west and south are also fallow, and residential development occurs to the east of the Site (Figure 2).

1.2 PHYSICAL AND HYDROLOGIC CONDITIONS

1.2.1 Topography and Drainage

The property is relatively flat, with about a two-foot drop in elevation from east to west. There is a roadside ditch along the eastern end of the Site adjacent to Dutton Meadow. There are several depressional features toward the western end of the site that pond water during late winter and spring months.

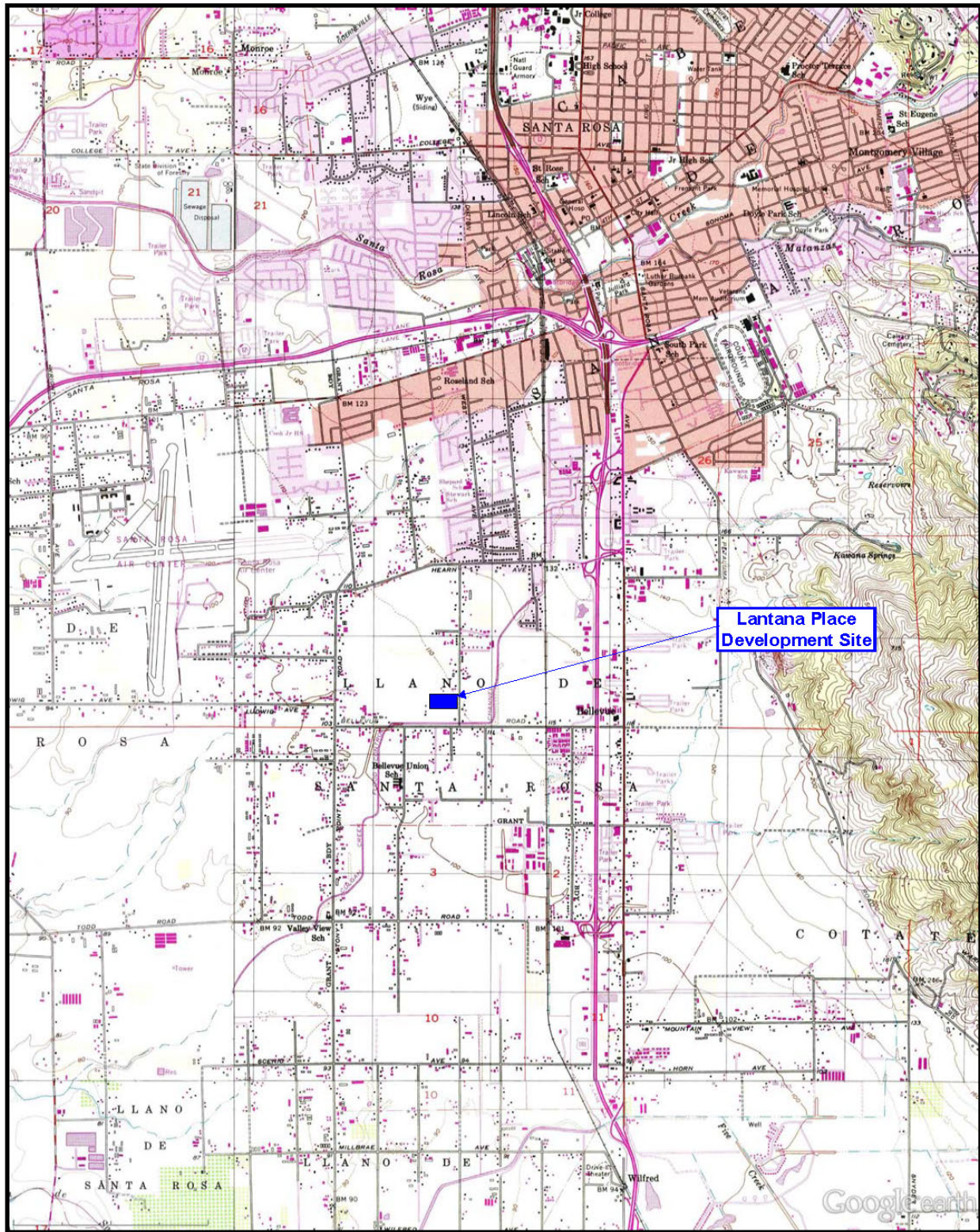
1.2.2 Soils

The primary soil type across most of the site is Clear Lake clay, ponded, 0 to 2 percent slopes.³ There is a small area of Wright loam, shallow, wet, 0 to 2 percent slopes along the eastern end of the Site. Clear Lake clay soils are clay soils that formed under poorly drained conditions. The Wright soil series consists of somewhat poorly drained and moderately well drained loamy soils with a clay subsoil and relatively level surface topography.

¹ Santa Rosa Plain Conservation Strategy. Final Report. December 1, 2005.

² Golden Bear Biostudies. 2003. Biological Assessment. 2975 Dutton Meadows, Santa Rosa (APN # 043-121-006). Prepared for Cobblestone Homes. Dated August 14, 2003.

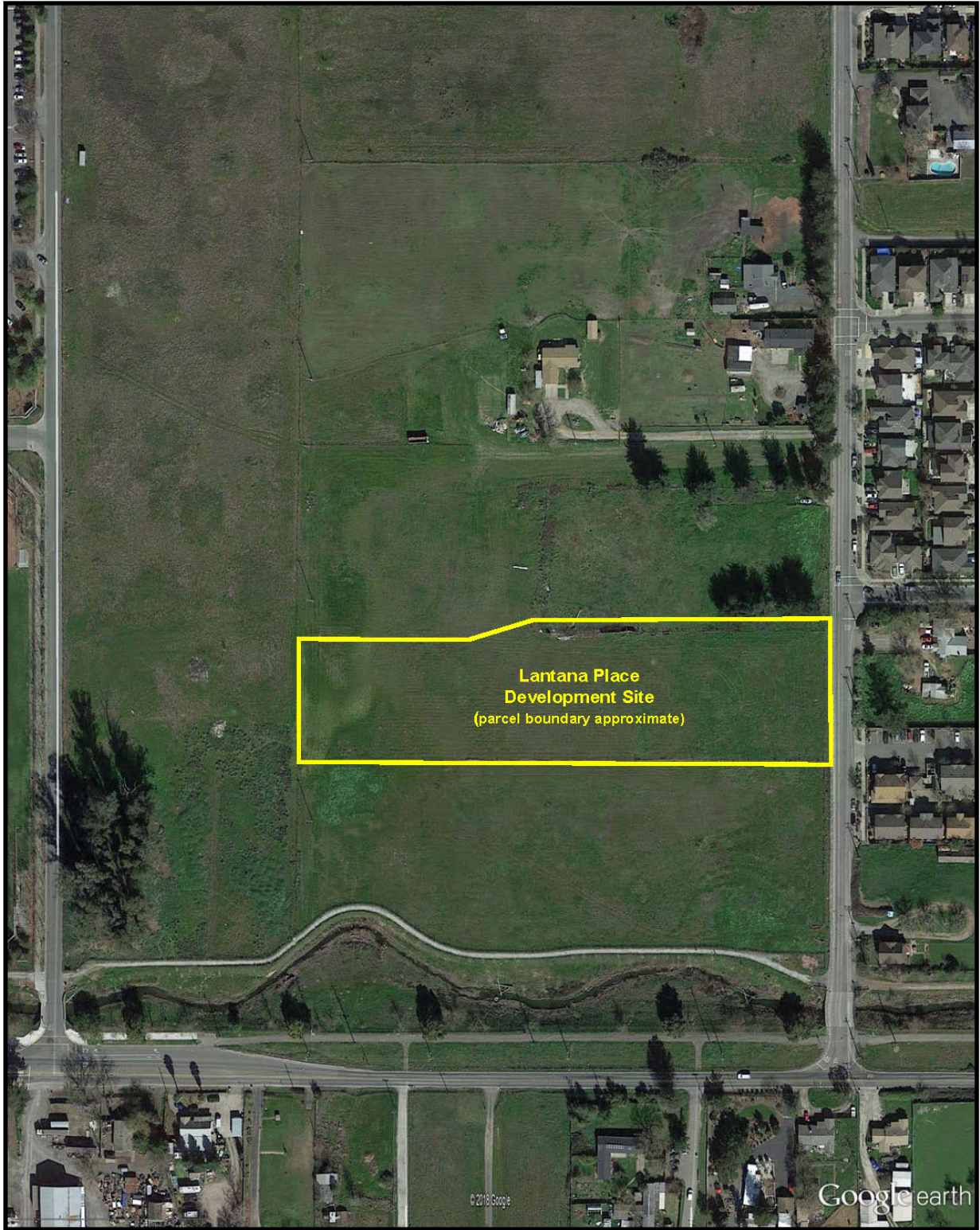
³ Natural Resources Conservation Service, National Cooperative Soil Survey. Web Soil Survey. April 4, 2016.



Google Earth Pro



Figure 1. Site location map.



Google Earth Pro
Figure 2. Site vicinity map.



2.0 SURVEY PROTOCOLS

The vegetation surveys were conducted on the following dates in 2018 by Dr. Ted P. Winfield: April 4, April 17 and May 7, 2018. The surveys were conducted following the U.S. Fish and Wildlife Service protocols⁴ and the California Department of Fish and Wildlife protocols⁵. The entire site was walked and plant species observed and identifiable during each survey noted in a field notebook. The seasonal wetlands were thoroughly searched for possible presence of the federally and State-listed endangered Burke's goldfields (*Lasthenia burkei*), Sonoma sunshine (*Blennosperma bakeri*) and Sebastopol meadowfoam (*Limnanthes vinculans*), and many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*).

Reference sites were visited multiple times during the survey period. Other botanists were also consulted about flowering of the target endangered plants at other sites on the Santa Rosa Plain to confirm that the target endangered plant species were also flowering at other sites throughout the Santa Rosa Plain.

Prior to conducting the field surveys, a list of special-status plant species reported to occur in the region was generated from the California Natural Diversity Database (CNDDDB), and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants for Santa Rosa, Sebastopol, Healdsburg, Two Rocks, and Cotati USGS Quadrangle maps, which defines the low-land areas of the Santa Rosa Plain.

⁴ Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed Plants on the Santa Rosa Plain. Modified from the September 23, 1996 Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants.

⁵ California Department of Fish and Wildlife (CDFW). Protocols for surveying and evaluating impacts to special status native plant populations and sensitive natural communities. March 20, 2018.

3.0 FINDINGS

3.1 INTRODUCTION

The Site supports two primary vegetation types, non-native annual grassland and seasonal wetlands, that are common in the region. Multiple surveys conducted on surrounding properties have documented the presence of similar vegetation types. A summary of the more common species observed in each of these vegetation types is presented below. Appendix A is a list of the plants observed during the surveys, and presents the dates that surveys were conducted at the reference sites.

3.1.1 Annual Grasslands

The non-native annual grassland was dominated by non-native annual grass species and forbs. Common non-native grass species included slender oats⁶ (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), and Harding grass (*Phalaris aquatica*). The more common forb species include chicory (*Cichorium intybus*), rough cat's-ear (*Hypochaeris radicata*), prickly lettuce (*Lactuca serriola*), purple salsify (*Tragopogon porrifolius*), black mustard (*Brassica nigra*), filaree (*Erodium botrys*), vetch (*Vicia sativa*), subterranean clover (*Trifolium subterraneum*), and bur clover (*Medicago polymorpha*). Several native species were also observed in the non-native annual grassland, including miniature lupine (*Lupinus bicolor*), dwarf sack clover (*Trifolium depauperatum*), and wild hyacinth (*Triteleia hyacinthina*).

3.1.2. Seasonal Wetlands

The seasonal wetlands occurred primarily in the western third of the Site, with the largest seasonal wetland occurring near the western end of the Site. The common species in the larger seasonal wetlands in the western third of the Site included a number of native species characteristic of vernal pool/seasonal wetland habitat such as semaphore grass (*Pleuropogon californicus*), meadow barley (*Hordeum brachyantherum*), Douglas meadowfoam (*Limnanthes douglasii*), spike rush (*Eleocharis macrostachya*), tall flatsedge (*Cyperus eragrostis*), coyote thistle (*Eryngium aristulatum*), bracted allocarya (*Plagiobothrys bracteatus*), marronspot calicoflower (*Downingia concolor*), curvepod yellow cress (*Rorippa curvipes*), smooth goldfields (*Lasthenia glaberrima*), variegated clover (*Trifolium variegatum*), and water starwort (*Callitriche* sp.). Several non-native species were also common, including pennyroyal (*Mentha pulegium*), hyssop loosestrife (*Lythrum hyssopifolium*), Mediterranean barley, and ryegrass.

⁶ Plant nomenclature follows The Jepson Manual (2012). Vascular Plants of California. Second Edition. University of California Press, Berkeley, CA.

The ditch along the eastern side of the Site adjacent to Dutton Meadow was dominated primarily by non-native species, including Mediterranean barley, soft chess, ryegrass, Harding grass, vetch, slender oats, with the native species tall flatsedge and meadow barley also present.

3.2 SPECIAL-STATUS PLANTS

Special-status plant species are defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*⁷ to include all plant species that meet one or more of the following criteria:

- Listed or proposed for listing as threatened or endangered under FESA or candidates for possible future listing as threatened or endangered under FESA (50 CFR §17.12).
- Listed or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 *et seq.*).
- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 *et seq.*). A plant is **rare** when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).
- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
 - ◆ Species considered by the California Native Plant Society (CNPS) to be “rare, threatened or endangered in California” (Lists 1A, 1B and 2);
 - ◆ Species that may warrant consideration on the basis of local significance or recent biological information;
 - ◆ Some species included on the California Natural Diversity Database’s (CNDDDB) *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008).
- Considered a **locally significant species**, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

The California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants database search resulted in a

⁷ California Department of Fish and Game (CDFG). *Protocols for surveying and evaluating impacts to special status native plant populations and natural communities*. November 24, 2009.

total of forty-nine special-status plant species as occurring in the region covered by the five USGS Quadrangle maps. Appendix B presents the list of special-status plant species reported to occur in the region and their regulatory status. Appendix C lists the habitat preference and potential for the special-status species reported to occur in the region to occur at the Site.

Marginally suitable habitat was present at the Site for several of the species that occur in grassland habitat and seasonal wetland/vernal pool habitat, including Burke's goldfields, Sonoma sunshine and Sebastopol meadowfoam. All three of the endangered wetland species were observed to be flowering at reference sites during each of the survey days in 2018 but none of these species were observed at the Site during the special-status plant surveys conducted in 2018 or in previous surveys conducted at the Site.

None of the other special-status species reported to occur in upland grassland habitat or in marshes, swamps or other wetland habitat types, including the pappose tarplant (*Centromadia parryi* ssp. *parryi*) and fragrant fritillary (*Fritillaria liliacea*) which were identified as having the potential to occur at the Site in the May 2018 Biological Resource Assessment prepared by Lucy McMillan, were observed during the special-status plant surveys.

APPENDIX A. LIST OF SPECIES OBSERVED DURING 2018 PLANT SURVEYS.

FAMILY	SCIENTIFIC NAME ⁸	COMMON NAME
	DICOTYLEDONS	
APIACEAE - Carrot Family		
	<i>Eryngium aristulatum</i>	coyote thistle
ASTERACEAE - Sunflower Family		
	<i>Cichorium intybus</i> *	chicory
	<i>Helminthotheca echioides</i> *	bristly ox-tongue
	<i>Hypochaeris radicata</i> *	hairy cat's-ear
	<i>Lactuca serriola</i> *	prickly lettuce
	<i>Lasthenia glaberrima</i>	smooth goldfields
	<i>Senecio vulgaris</i> *	common groundsel
	<i>Taraxacum officinale</i> *	dandelion
	<i>Tragopogon porrifolius</i> *	purple salsify
	<i>Xanthium strumarium</i>	cocklebur
BORAGINACEAE – Borage Family		
	<i>Plagiobothrys bracteatus</i>	bracted allocarya
BRASSICACEAE - Mustard Family		
	<i>Brassica nigra</i> *	black mustard
	<i>Lepidium nitidum</i>	shining peppergrass
	<i>Raphanus sativus</i> *	wild radish
	<i>Rorippa curvipes</i>	curvepod yellow cress
CAMPANULACEAE – Bellflower Family		
	<i>Downingia concolor</i>	marronspot calicoflower
CONVOLVULACEAE - Morning Glory Family		
	<i>Convolvulus arvensis</i> *	bindweed
FABACEAE - Legume Family		
	<i>Lupinus bicolor</i>	miniature lupine
	<i>Medicago polymorpha</i> *	common burclover
	<i>Trifolium depauperatum</i>	dwarf sack clover
	<i>Trifolium dubium</i> *	shamrock
	<i>Trifolium subterraneum</i> *	subterranean clover
	<i>Trifolium variegatus</i>	variegated clover
	<i>Vicia sativa</i> *	spring vetch
GERANIACEAE - Geranium Family		
	<i>Erodium botrys</i> *	broad leaf filaree
	<i>Erodium cicutarium</i> *	redstem filaree
	<i>Geranium dissectum</i> *	cut-leaved geranium
LAMIACEAE - Mint Family		
	<i>Mentha pulegium</i> *	pennyroyal
LIMNANTHACEAE – Meadowfoam family		
	<i>Limnanthes douglasii</i>	common meadowfoam
LYTHRACEAE - Loosestrife Family		
	<i>Lythrum hyssopifolium</i> *	hyssop loosestrife
PLANTAGINACEAE - Plantain Family		
	<i>Callitriche sp</i>	water starwort
	<i>Plantago lanceolata</i> *	English plantain
	<i>Veronica peregrina</i>	neckweed
POLYGONACEAE - Buckwheat Family		
	<i>Rumex acetosella</i> *	sheep sorrel
	<i>Rumex crispus</i> *	curly dock
	<i>Rumex pulcher</i> *	fiddle dock

⁸ Plant nomenclature follows The Jepson Manual: Higher Plants of California. Second Edition. B.G. Baldwin (convening editor). University of California Press, Berkeley, CA.

MYRSINACEAE - Primrose Family		
	<i>Lysinachia arvensis</i> *	scarlet pimpernel
RANUNCULACEAE - Buttercup Family		
	<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup
	<i>Ranunculus muricatus</i> *	prickle-seeded buttercup
	<i>Ranunculus arvensis</i> *	field buttercup
ROSACEAE - Rose Family		
	<i>Rubus armeniacus</i> *	Himalayan blackberry
MONOCOTYLEDONS		
CYPERACEAE – Sedge Family		
	<i>Carex densa</i>	dense sedge
	<i>Carex sp.</i>	sedge
	<i>Cyperus eragrostis</i>	tall flatsedge
	<i>Eleocharis macrostachya</i>	spike rush
JUNCACEAE – Rush Family		
	<i>Juncus bufonius</i>	toad rush
	<i>Juncus tenuis</i>	slender rush
	<i>Triglochin scilloides</i>	flowering-quillwort
POACEAE - Grass Family		
	<i>Alopecurus ?pratensis</i>	meadow foxtail
	<i>Avena barbata</i> *	slender wild oat
	<i>Briza minor</i> *	little quaking grass
	<i>Bromus diandrus</i> *	ripgut brome
	<i>Bromus hordeaceus</i> *	soft chess
	<i>Festuca bromoides</i> *	six-weeks fescue
	<i>Festuca myuros</i> *	foxtail fescue
	<i>Festuca perennis</i> *	perennial ryegrass
	<i>Hordeum branchyantherum</i>	meadow barley
	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> *	Mediterranean barley
	<i>Phalaris aquatica</i> *	Harding grass
	<i>Pleuropogon californicus</i>	semaphore grass
	<i>Polypogon monspeliensis</i> *	rabbit's-foot grass
THEMIDACEAE – Brodiaea Family		
	<i>Triteleia hyacinthina</i>	wild hyacinth

Note: * indicates non-native species

Reference Sites, Observation Dates and Species in Flower at time of Reference Site Survey.

DATE	REFERENCE SITE	SPECIES
April 4, 2018	Carinalli-Todd Road Mitigation Bank	LIVI, BLBA
	Alton Lane Mitigation Site	BLBA
	Alton North Conservation Site	BLBA
April 12, 2018	Alton North Conservation Bank	BLBA, LABU
	Alton Lane Mitigation Site	BLBA, LABU
	Hazel Mitigation Bank	BLBA, LIVI
	Woodbridge Preserve	BLBA
April 24, 2018	Alton North Conservation Bank	LABU
	Alton Lane Mitigation Site	LABU, BLBA
April 25, 2018	Carinalli-Todd Road Mitigation Bank	LIVI, BLBA
May 8, 2018	Carinalli-Todd Road Mitigation Bank	LIVI, BLBA

Species: LIVI – *Limnanthes vinculins* (Sebastopol meadowfoam)
 BLBA – *Blennosperma bakeri* (Sonoma sunshine)
 LABU – *Lasthenia burkei* (Burke's goldfields)

APPENDIX B. SPECIAL-STATUS PLANT SPECIES REPORTED TO OCCUR IN THE REGION AND THEIR REGULATORY STATUS

Scientific Name	Common Name	FESA	CESA	CNPS
DICOTS				
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo			1B.2
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck			1B.2
<i>Arctostaphylos densiflora</i>	Vine Hill manzanita		E	1B.1
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	Rincon Ridge manzanita			1B.1
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	E	T	1B.1
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot			1B.2
<i>Blennosperma bakeri</i>	Sonoma sunshine	E	E	1B.1
<i>Campanula californica</i>	swamp harebell			1B.2
<i>Castilleja uliginosa</i>	Pitkin Marsh paintbrush		E	1A
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus			1B.1
<i>Ceanothus divergens</i>	Calistoga ceanothus			1B.2
<i>Ceanothus foliosus</i> var. <i>vineatus</i>	Vine Hill ceanothus			1B.1
<i>Ceanothus purpureus</i>	holly-leaved ceanothus			1B.2
<i>Ceanothus sonomensis</i>	Sonoma ceanothus			1B.2
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant			1B.2
<i>Chorizanthe valida</i>	Sonoma spineflower	E	E	1B.1
<i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>	Pennell's birds-beak	E	F	1B.2
<i>Clarkia imbricata</i>	Vine Hill clarkia	E	E	1B.1
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder			2B.2
<i>Delphinium luteum</i>	golden larkspur	E	R	1B.1
<i>Downingia pusilla</i>	dwarf downingia			2B.2
<i>Erigeron serpentinus</i>	serpentine daisy			1B.3
<i>Gilia capitata</i> ssp. <i>tomentosa</i>	woolly-headed gilia			1B.1
<i>Hemizonia congesta</i> ssp. <i>congesta</i>	congested-headed hayfield tarplant			1B.2
<i>Horkelia tenuiloba</i>	thin-lobed horkelia			1B.2
<i>Lasthenia burkei</i>	Burke's goldfields	E	E	1B.1
<i>Lasthenia californica</i> ssp. <i>bakeri</i>	Baker's goldfields			1B.2
<i>Layia septentrionalis</i>	Colusa layia			1B.2
<i>Legenere limosa</i>	legenere			1B.1
<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon			1B.2
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	E	E	1B.1
<i>Microseris paludosa</i>	marsh microseris			1B.2
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia			1B.1
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	many-flowered navarretia	E	E	1B.2
<i>Potentilla uliginosa</i>	Cunningham Marsh cinquefoil			1A
<i>Trifolium amoenum</i>	two-fork clover	E		1B.1
<i>Trifolium buckwestiorum</i>	Santa Cruz clover			1B.1
<i>Trifolium hydrophilum</i>	saline clover			1B.2
<i>Viburnum ellipticum</i>	oval-leaved viburnum			2B.3
MONOCOTS				
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	E		1B.1
<i>Brodiaea leptandra</i>	narrow-anthered brodiaea			1B.2
<i>Calamagrostis crassiglumis</i>	Thurber's reed grass			2B.1
<i>Fritillaria liliacea</i>	fragrant fritillary			1B.2
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	E	E	1B.1
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass		T	1B.1
<i>Rhynchospora alba</i>	white beaked-rush			2B.2
<i>Rhynchospora californica</i>	California beaked-rush			1B.1
<i>Rhynchospora capitellata</i>	brownish beaked-rush			2B.2
<i>Rhynchospora globularis</i>	round-headed beaked-rush			2B.1
FESA - Federal Endangered Species Act; CESA - California Endangered Species Act				
T - Threatened; E - Endangered; R - Rare (California only); CNPS Designations: List 1A - Species presumed extinct in California. List 1B - Species rare and endangered in California and elsewhere. List 2 - Species rare and endangered in California but more common elsewhere. List 3 - Species for which additional data are needed.				

APPENDIX C. HABITAT PREFERENCE, AND POTENTIAL FOR THE SPECIAL-STATUS SPECIES TO OCCUR AT THE SITE.

Scientific Name	Common Name	Habitat	Occurrence at Project Site
DICOTS			
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	Broadleaved upland forest, chaparral, cismontane woodland. Openings in forest or woodland or in chaparral	Unlikely. Habitat not present at project site.
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Coastal bluff scrub; cismontane woodland; valley and foothill grassland	Unlikely. Habitat not present at project site.
<i>Arctostaphylos densiflora</i>	Vine Hill manzanita	Dwarf chaparral "barren" on sandy acidic soil	Unlikely. Habitat not present at project site.
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	Rincon Ridge manzanita	Chaparral, cismontane woodland. Highly restricted endemic to red rhyolites in Sonoma County	Unlikely. Habitat not present at project site.
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	Chaparral (openings); cismontane woodland; valley and foothill grassland/serpentinite or volcanic, rocky, clay	Unlikely. Habitat not present at project site.
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Chaparral; cismontane woodland; valley and foothill grassland/ sometimes serpentinite	Unlikely. Habitat not present at project site.
<i>Blennosperma bakeri</i>	Sonoma sunshine	Vernal pools, valley and foothill grassland. Vernal pools and swales	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Campanula californica</i>	swamp harebell	Bogs and fens; closed-cone coniferous forest; coastal prairie; meadows and seeps; marshes and swamps (freshwater); north coast coniferous forest	Unlikely. Habitat not present at project site.
<i>Castilleja uliginosa</i>	Pitkin Marsh paintbrush	Marshes and swamps (freshwater)	Unlikely. Habitat not present at project site.
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	Closed-cone coniferous forest, chaparral, cismontane woodland. Known from volcanic or serpentine soils, dry shrubby slopes	Unlikely. Habitat not present at project site.
<i>Ceanothus divergens</i>	Calistoga ceanothus	Chaparral. Rocky, serpentine or volcanic sites	Unlikely. Habitat not present at project site.
<i>Ceanothus foliosus</i> var. <i>vineatus</i>	Vine Hill ceanothus	Sandy acidic soil	Unlikely. Habitat not present at project site.
<i>Ceanothus purpureus</i>	holly-leaved ceanothus	Chaparral; volcanic substrates, slopes	Unlikely. Habitat not present at project site.
<i>Ceanothus sonomensis</i>	Sonoma ceanothus	Chaparral; south slopes	Unlikely. Habitat not present at project site.

<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernal mesic, often alkaline sites	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Chorizanthe valida</i>	Sonoma spineflower	Coastal prairie (sandy)	Unlikely. Habitat not present at project site.
<i>Clarkia imbricata</i>	Vine Hill clarkia	Chaparral; valley and foothill grassland/acidic sandy loam)	Unlikely. Habitat not present at project site.
<i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>	Pennell's birds-beak	Closed-cone coniferous forest, Chaparral	Unlikely. Habitat not present at project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	Marshes and swamps (freshwater)	Unlikely. Habitat not present at project site.
<i>Delphinium luteum</i>	golden larkspur	Chaparral; coastal prairie; coastal scrub/rocky	Unlikely. Habitat not present at project site.
<i>Downingia pusilla</i>	dwarf downingia	Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Erigeron serpentinus</i>	serpentine daisy	Chaparral (serpentinite, seeps)	Unlikely. Habitat not present at project site.
<i>Gilia capitata</i> ssp. <i>tomentosa</i>	woolly-headed gilia	Coastal bluff scrub, valley and foothill grasslands/serpentinite; rocky outcrops	Unlikely. Habitat not present at project site.
<i>Hemizonia congesta</i> ssp. <i>congesta</i>	congested-headed hayfield tarplant	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides	Low. Not observed during previous survey and not reported in the vicinity from surveys on other nearby parcels.
<i>Horkelia tenuiloba</i>	thin-lobed horkelia	Broadleaved upland forest, chaparral, valley and foothill grassland. Sandy soils; mesic openings	Unlikely. Habitat not present at project site.
<i>Lasthenia burkei</i>	Burke's goldfields	meadows and seeps; vernal pools	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Lasthenia californica</i> ssp. <i>bakeri</i>	Baker's goldfields	Vernal pools, meadows and seeps. Most often in vernal pools and swales	Unlikely. Habitat not present at project site.
<i>Layia septentrionalis</i>	Colusa layia	Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil	Unlikely. Habitat not present at project site.
<i>Legenere limosa</i>	legenere	Vernal pools	Unlikely. Habitat not present at project site.

<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	Chaparral, cismontane woodland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates	Unlikely. Habitat not present at project site.
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	Meadows and seeps, vernal pools, valley and foothill grassland. Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Microseris paludosa</i>	marsh microseris	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland	Unlikely. Habitat not present at project site.
<i>Navarretia leucocephala ssp. bakeri</i>	Baker's navarretia	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Navarretia leucocephala ssp. plieantha</i>	many-flowered navarretia	Vernal pools. Volcanic ash flow vernal pools	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Potentilla uliginosa</i>	Cunningham Marsh cinquefoil	Marshes and swamps/freshwater, permanent oligotrophic wetlands	Unlikely. Habitat not present at project site.
<i>Trifolium amoenum</i>	two-fork clover	Coastal bluff scrub; valley and foothill grassland (sometimes serpentinite)	Unlikely. Habitat not present at project site; maintenance activity routinely disturbs area.
<i>Trifolium buckwestiorum</i>	Santa Cruz clover	Coastal prairie, mixed evergreen forest; grassy or disturbed areas	Unlikely. Habitat not present at project site.
<i>Trifolium hydrophilum</i>	saline clover	Marshes and swamps; valley and foothill grasslands (mesic, alkaline)	Unlikely. Habitat not present at project site.
<i>Viburnum ellipticum</i>	oval-leaved viburnum	Chaparral; cismontane woodland; lower montane coniferous forest	Unlikely. Habitat not present at project site.
MONOCOTS			
<i>Alopecurus aequalis var. sonomensis</i>	Sonoma alopecurus	Marshes and swamps (freshwater); riparian scrub	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Brodiaea leptandra</i>	narrow-anthered brodiaea	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic substrates	Unlikely. Habitat not present at project site.

<i>Calamagrostis crassiglumis</i>	Thurber's reed grass	Coastal scrub (mesic); marshes and swamps (freshwater)	Unlikely. Habitat not present at project site.
<i>Fritillaria liliacea</i>	fragrant fritillary	Cismontane woodland; coastal prairie; coastal scrub; valley and foothill grassland/often serpentinite	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Lilium pardalinum ssp. pitkinense</i>	Pitkin Marsh lily	Cismontane woodland; meadows and seeps, marshes and swamps (freshwater); mesic, sandy	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	Broadleafed upland forest; meadows and seeps; north coastal coniferous forest/open areas, mesic	Unlikely. Habitat not present at project site.
<i>Rhynchospora alba</i>	white beaked-rush	Bogs and fens; meadows and seeps; marshes and swamps (freshwater)	Unlikely. Habitat not present at project site.
<i>Rhynchospora californica</i>	California beaked-rush	Bogs and fens; lower mountain coniferous forest; meadows and seeps; marshes and swamps	Unlikely. Habitat not present at project site.
<i>Rhynchospora capitellata</i>	brownish beaked-rush	Wet meadows, fens, seeps, marshes	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.
<i>Rhynchospora globularis</i>	round-headed beaked-rush	Marshes and swamps (freshwater)	Unlikely. Not observed during plant surveys and prior surveys at the site; not observed during other surveys conducted in the vicinity of the Site.