Appendix C-b

Biological Report

OAK CREEK PARK DEVELOPMENT
City of Scotts Valley, CA

Biotic Report

Biotic Resources Group

Biotic Assessments • Resource Management • Permitting

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Biotic Report

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1.0 INTRODUCTION

Biotic Resources Group, with Dana Bland & Associates, documented and evaluated the biotic resources of a proposed mixed-use development project in the City of Scotts Valley in Santa Cruz County.

Specific tasks conducted for this study include:

- Characterize and map the major plant communities within the proposed project area.
- Identify sensitive biotic resources, including habitats, plant or wildlife species of concern. (Note: Issues relating to Mt. Hermon June beetle, a federally listed species was subject to separate review by Dr. Richard Arnold through a separate agreement with the landowner).
- Evaluate the potential effects of the proposed project activities on sensitive biotic resources and recommend measures to avoid or reduce such impacts.

1.1 PROPOSED PROJECT

The project is located north of the intersection of Mt. Hermon Road and Glen Canyon Road in the City of Scotts Valley, west of Highway 17, as shown on Figure 1. The site address is 3640 Glen Canyon Road. The is currently undeveloped and encompasses approximately 3.6 acres.

The proposed project, as per a site plan prepared by Thatcher & Thompson Architects, dated October 2016, and the civil engineering plans (C2G, 12-16-16) depicts the construction of a commercial building, a mixed-use building, two apartment buildings, and associated parking. Road way access would be from Mt. Hermon Road and from Glen Canyon Road. The majority of the property will be graded to accommodate the proposed development. All existing vegetation (i.e., annual grassland, landscape trees, oak tree groves, coastal prairie, poison oak thicket, and grass-lined man-made detention basin) will be removed to accommodate the proposed development. The civil engineering plans show that the existing runoff detention basin will be removed and covered by a portion of a commercial building, but the plans do not clearly show how or where runoff will be detained; presumably it will be via an underground holding tank(s).

1.2 INTENDED USE OF THIS REPORT

The findings presented in this biological report are intended for the sole use of Granum Partners, Eadie Consultants and the City of Scotts Valley in evaluating the proposed project. The findings presented in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or City law or ordinance pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

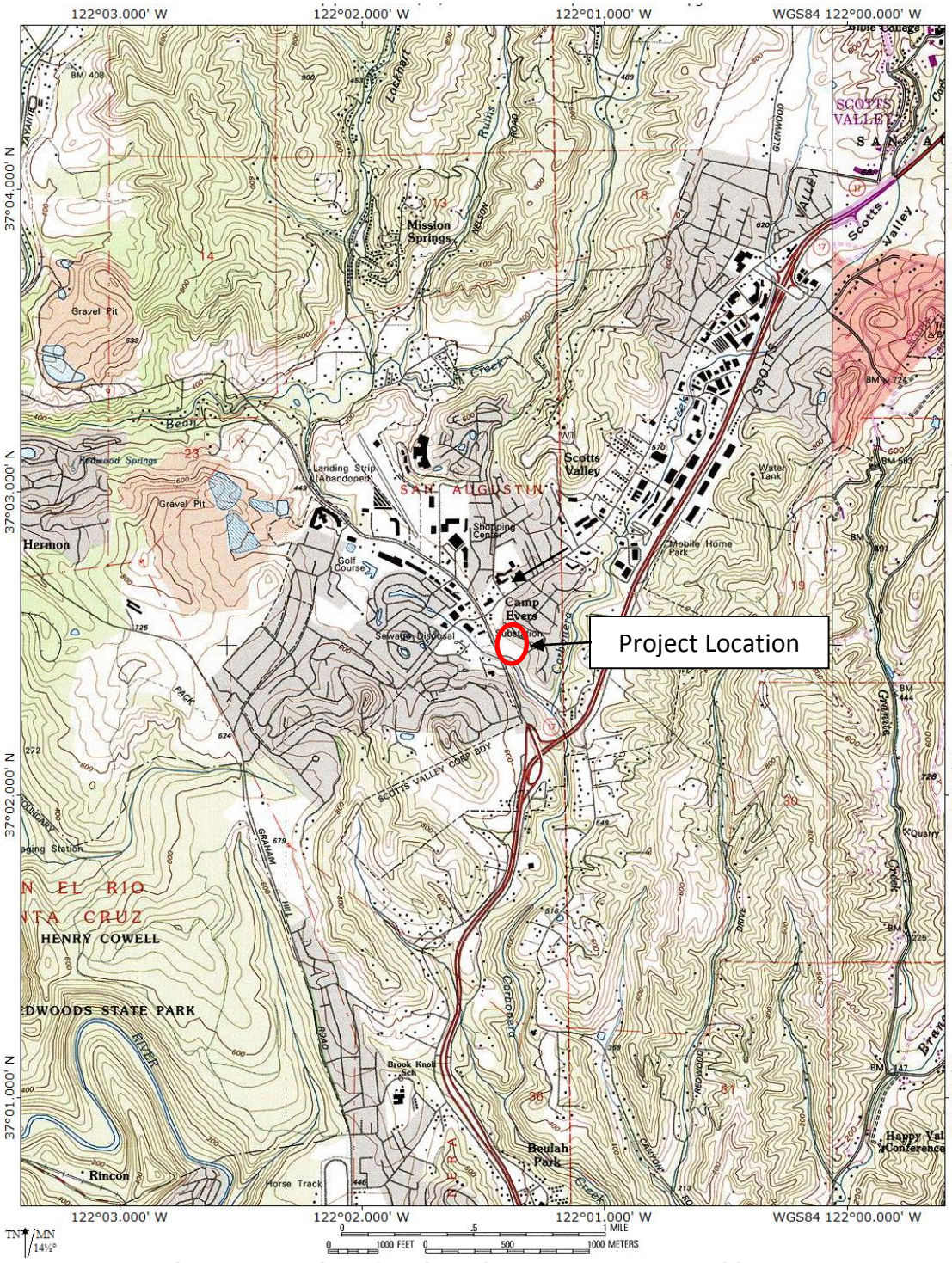

Figure 1. Location of Project Site on USGS Topographic Map
(USGS Felton Quadrangle)

2.0 EXISTING BIOTIC RESOURCES

2.1 METHODOLOGY

The biotic resources of the project site were assessed through literature review and field observations. Site observations were made on November 30, 2017 by Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist).

Vegetation mapping of the property was conducted from review of aerial photos and field observations. The major plant communities, based on the classification system developed by *California Terrestrial Natural Communities (*California Department of Fish and Game, 2003 and 2010) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) and as amended to reflect site conditions, were identified during the field surveys. Modifications to the classification system's nomenclature were made, as necessary, to accurately describe the site's resources. The plant communities were mapped onto a Google aerial image. All plant species observed were recorded and identified to a level sufficient to determine their rarity; species observed are listed in the narrative section of this report. Plant nomenclature follows The *Jepson Manual Vascular Plants of California* (2012); the *An Annotated Checklist of the Vascular Plants of Santa Cruz County, California* (CNPS, 2013) was also reviewed.

To assess the potential occurrence of special status biotic resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) Electronic Inventory (2017) and California Department of Fish & Wildlife (CDFW) RareFind database (CDFW, 2017) for the Felton USGS quadrangle and eight surrounding quadrangles.

This report summarizes the findings of the biotic assessment for the proposed project. The potential impacts of the proposed project on sensitive biological resources are discussed below. Measures to reduce significant impacts to a level of less-than-significant are recommended, as applicable.

2.2 ENVIRONMENTAL SETTING

2.2.1 Geographic Setting

The project is located on the Felton USGS quadrangle (see Figure 1). The project is located adjacent to Mt. Hermon Road, a commercial office building on Glen Canyon Road and single-family residences. A currently undeveloped parcel is located to the northwest of the site; however, this site has been approved for residential development. There are no watercourses on the property; however, the site supports a man-made detention basin. This basin collects runoff from the site and directs it to the City's storm drainage system and ultimately into Carbonera Creek. The Santa Cruz County Soil Survey (USDA, 1980) identifies one soil type on the property: Danville loam, 2-9% slopes (125). The project site supports annual grassland, a small patch of coastal prairie, coast live oak tree groves, a poison oak thicket, and non-native tree groves (acacias and other landscape trees). The distribution of vegetation types is depicted on Figure 2. Each vegetation type, its California vegetation code, and state ranking (rarity), is listed in Table 1.

Figure 2. Distribution of Vegetation Types, November 2017

Table 1. Vegetation Types at Oak Creek Park Property, November 2017

CaCode[1]	Vegetation Type	Plant Association	State Ranking[2]
71.060.02	Coast Live Oak Tree Grove	Coast Live Oak/Acacia- California Blackberry	S4
None	Non-native Tree Groves	Acacia – London Plane	None
44.150.00	Annual Grassland	Wild oat/ Fescue/ Filaree – English Plantain	None
41.050.05	Coastal Prairie	California Oatgrass/Purple Needlegrass – English Plantain	S3
37.940.07	Poison Oak Thicket	Poison Oak/California Aster	S4

[1] – California vegetation code as per CDFG/CNDDB (2010); [2]- Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. * Ponderosa pine on inland sandhills is high priority in CNDDB

2.2.2 Vegetation and Wildlife Habitats

Coast Live Oak Tree Groves

The property supports a small grove of coast live oak (*Quercus agrifolia)* trees. The grove is located within the acacia-dominated vegetation that parallels Mt. Hermon Road and extends outward into the annual grassland.

Non-native Tree Groves

The property supports a dense stand of non-native acacia (*Acacia sp.)* along the property border with Mt. Hermon Road. One native ponderosa pine (*Pinus ponderosa)* was observed in the grove. The grove supports little understory due to the dense shade and leaf litter; however, California blackberry (*Rubus ursinus)* occurs in some areas. Scattered other landscape trees occur elsewhere on site, including London plane trees (*Platanus acerifolia)* along the southeastern edge of the site. The character of these tree groves is depicted in Figure 3.

Figure 3. Non-native tree groves adjacent to Mt. Hermon Road, looking northward.

Annual Grassland

The majority of the property supports annual grassland. The grassland abuts the oak tree groves and non-native tree grove. Plant cover is co-dominated by annual grasses, such as wild oat (*Avena fatua)*, soft chess (*Bromus hordeaceus)*, farmers foxtail (*Hordeum murinum ssp. leporinum)*, and rattlesnake grass (*Briza maxima)*. Other herbaceous species include English plantain (*Plantago lanceolata)*, filaree (*Erodium sp.)*, cut leaf geranium (*Geranium dissectum)*, dandelion (*Taraxacum officinale)*, cat's ear (*Hypochaeris spp.)*, bristly ox-tongue (*Picris echioides)*, vetch (*Vicia sp.)*, Mediterranean clover (*Trifolium angustifolium)*, scarlet pimpernel (*Anagallis arvensis)*, wild lettuce (*Lactuca sp.)*, and wild radish (*Raphanus sativa)*. At the November site visit, native herbaceous species were limited to scattered California poppy (*Eschscholzia californica)*. Some shrubs are scattered in the grassland, such as coyote brush (*Baccharis pilularis)* and pyracantha (*Pyracantha sp.)*. Stands of non-native jubata grass (*Cortederia jubata)*, are also present. The character of the annual grassland is depicted in Figure 4.

Figure 4. Annual grassland, looking southward to Glen Canyon Road

The man-made detention basin supports annual grassland. The central low area was found to support plants typical of seasonally wet areas, such as spreading rush (*Juncus patens)*, and curly dock (*Rumex crispus)*.

Coastal Prairie

A small patch of coastal prairie (approximately 1,000 square feet) was observed on site. Located in the west-central portion of the site, the prairie is characterized by the presence of California oatgrass (*Danthonia californica)*, a native perennial bunchgrass. The small prairie patch was also observed to support lesser amounts of purple needlegrass (*Stipa pulchra)*, another native perennial bunchgrass. Other plant species similar to the surrounding annual grassland were also observed and include non-native English plantain, Mediterranean clover, cat's ear, and bird's foot trefoil (*Lotus corniculatus)*.

Poison Oak Thicket

A thicket of poison oak (*Toxicodendron diversilobum)* was observed near the northern property line. This thicket supports a dense patch of poison oak, a native shrub. California aster (*Symphyotrichum chilense)* was also observed in this area.

Wildlife Resources

The vegetative communities on this property are surrounded by urbanized areas supporting residential and retail development and busy roadways. The vast majority of the site is dominated by non-native vegetation, both grasslands and tree groves, which are of lesser value to native wildlife species. Thus, the value of each vegetative type to wildlife is moderated, and rather the whole site functions as a non-native forest of acacia trees with adjacent non-native grasslands. Common native wildlife expected to inhabit this site includes those that are able to forage in relatively small, fragmented habitat areas not connected to other native habitat areas, and those which can tolerate high human presence in the surrounding developed areas. Native wildlife that may occasionally utilize this site include western fence lizard (*Sceloporus occidentalis*), rock dove (*Columba livia*), Anna's hummingbird (*Calypte anna*), Pacific-slope flycatcher (*Empidonax difficilis*), western scrub-jay (*Aphelocoma californica*), American robin (*Turdus migratorius*), and Botta's pocket gopher (*Thomomys bottae*).

2.3 SENSITIVE BIOTIC RESOURCES

2.3.1 Regulated Habitats

California Department of Fish and Wildlife (CDFW) is a trustee agency that has jurisdiction under Section 1600 et seq. of the CDFW Code. Under Sections 1600-1603 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. CDFW also regulates alterations to ponds and impoundments; CDFW jurisdictional limits typically extend to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. There are no jurisdictional water features on the property.

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into account the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. Should there be no Section 404 nexus (i.e., isolated feature not subject to USACE jurisdiction); a report of waste discharge (ROWD) is filed with the RWQCB. The RWQCB interprets waste to include fill placed into water bodies. The property is not located within the RWQCB's jurisdiction, because there are no creeks or watercourses or other wetland features. The detention basin was considered a man-made feature and not subject to regulation.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High-Water mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). The property has no watercourses within the USACE's jurisdiction. The detention basin was considered a man-made feature and not subject to regulation.

2.3.2 Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity.

CDFW classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is

ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFG, 2007 and 2010). The property supports a small area of coastal prairie, a plant community considered sensitive, with imperiled status.

The property is not mapped as supporting Zayante sandhill substrate in the Santa Cruz County Soil Survey, and no evidence of sandhills vegetation was observed, except for one ponderosa pine growing amid the acacia grove (paralleling Mt. Hermon Road). Dr. Richard Arnold, entomologist, has determined the site does not provide habitat for the federally endangered Mt. Hermon June beetle (Dr. Richard Arnold, letter dated 2017 (Note: Issues relating to Mt. Hermon June beetle, a federally listed species is subject to separate review by Dr. Richard Arnold through a separate agreement with the applicant).

The City has requirements for the protection of tree resources. The grading plan indicates that all/most trees on the property will be removed. An arborist report was not available to review at the time of this biotic report, however, the tree removal will include numerous non-native trees as well as several native coast live oak trees and one native Ponderosa pine.

2.3.3 Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare by CNPS (List 1B). The search of the CNPS and CNDDB inventories for the Felton and eight surrounding quadrangles identified the special status plant species with potential to occur in the project area. Species evaluated for potential occurrence within the proposed project area as per CNDDB and CNPS records are listed on Table 2. This evaluation included a review of the habitat requirements for each species, the presence of specialized microhabitats required for such species within the project site, and field observations. The early winter 2017 field survey was sufficient in determining presence or absence of special status woody, perennial species and the presence or absence of specialized microhabitats required by several special status species (i.e., Zayante sandhills, coastal prairie/grassland, limestone outcrops, pine forest, rocky outcrops, or serpentine substrate); however, spring blooming species were not detectable. A small patch of coastal prairie was found on site. Although there are no records of any special status species occurring on site or in the immediate vicinity, the prairie area and the bottom of the detention basin could provide potential habitat for special status plant species.

Table 2. Special Status Plant Species Evaluated for Potential Presence at Oak Creek Park Property

Scientific Name	Common Name	Lifeform	CNPS Rare Plant Rank	CESA	FESA	Nearest Record Potential to Occur on Site
Agrostis blasdalei	Blasdale's bent grass	Perennial herb	1B.2	None	None	Habitat along the immediate coastline, dunes and bluffs. No suitable habitat; presumed absent
Amsinckia lunaris	bent-flowered fiddleneck	annual herb	1B.2	None	None	Polo Ranch, Scotts Valley; rich soils in grassland Marginal habitat
Arctostaphylos andersonii	Anderson's manzanita	perennial evergreen shrub	1B.2	None	None	Nisene Marks SP, N end of Redwood Drive, Aptos No suitable habitat; not observed
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	perennial evergreen shrub	1B.2	None	None	Mar Monte Road area, Aptos No suitable habitat; not observed
Arctostaphylos glutinosa	Schreiber's manzanita	perennial evergreen shrub	1B.2	None	None	Chaparral, Closed-cone Pine Forest Potential habitat; not observed
Arctostaphylos ohloneana	Ohlone manzanita	perennial evergreen shrub	1B.1	None	None	Knobcone pine chaparral, siliceous shale ridges No suitable habitat; not observed
Arctostaphylos pajaroensis	Pajaro manzanita	perennial evergreen shrub	1B.1	None	None	Monterey County No suitable habitat; not observed
Arctostaphylos regismontana	Kings Mountain manzanita	perennial evergreen shrub	1B.2	None	None	Chaparral and broadleaf and coniferous forest on granite and sandstone soils. No suitable habitat; not observed
Arctostaphylos silvicola	Bonny Doon manzanita	perennial evergreen shrub	1B.2	None	None	N of Redwood Glen Camp in Zayante sandhills No suitable habitat; not observed
Arenaria paludicola	marsh sandwort	perennial stoloniferous herb	1B.1	CE	FE	Rich marsh area; historic record from Camp Evers, Scotts Valley No suitable habitat; presumed absent
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	annual herb	1B.1	None	None	Zayante sandhills No suitable habitat; presumed absent
Campanula californica	swamp harebell	perennial rhizomatous herb	1B.2	None	None	Rich seasonally marshy area; historic record from Camp Evers, Scotts Valley No suitable habitat; presumed absent

Table 2. Special Status Plant Species Evaluated for Potential Presence at Oak Creek Park Property

Scientific Name	Common Name	Lifeform	CNPS Rare Plant Rank	CESA	FESA	Nearest Record Potential to Occur on Site
Carex saliniformis	deceiving sedge	perennial rhizomatous herb	1B.2	None	None	Historic record from Camp Evers, Scotts Valley; Forested area in UCSC No suitable habitat; not observed
Ceanothus ferrisiae	Coyote ceanothus	perennial evergreen shrub	1B.1	None	FE	Serpentine chaparral, Santa Clara Co. No suitable habitat; not observed
Centromadia parryi ssp. congdonii	Congdon's tarplant	annual herb	1B.1	None	None	Mesic grassland, Watsonville region Marginal habitat in detention basin
Chorizanthe pungens var. hartwegiana	Ben Lomond spineflower	annual herb	1B.1	None	FE	Zayante sandhills No suitable habitat; presumed absent
Chorizanthe pungens var. pungens	Monterey spineflower	annual herb	1B.2	None	FT	Mar Monte area, Aptos Sandy soils on oak woodland, scrub, maritime chaparral; no suitable habitat presumed absent
Chorizanthe robusta var. hartwegii	Scotts Valley spineflower	annual herb	1B.1	None	FE	Scotts valley grassland/sandstone outcrops Marginal habitat
Chorizanthe robusta var. robusta	robust spineflower	annual herb	1B.1	None	FE	Freedom Blvd area, Aptos, sandy soils No suitable habitat; presumed absent
Cirsium fontinale var. campylon	Mt. Hamilton thistle	perennial herb	1B.2	None	FE	Serpentine seeps, Sierra Azul No suitable habitat; not observed
Collinsia multicolor	San Francisco collinsia	annual herb	1B.2	None	None	Moist, shady slopes; found in north coast /Swanton and Scotts creek No suitable habitat; presumed absent
Dacryophyllum falcifolium	tear drop moss	perennial herb	1B.3	None	None	Moist bedrock outcrops No suitable habitat; presumed absent
Dudleya abramsii ssp. setchellii	Santa Clara Valley dudleyi	perennial herb	1B.2	None	None	Serpentine chaparral No suitable habitat; not observed
Eriogonum nudum var. decurrens	Ben Lomond buckwheat	perennial herb	1B.1	None	None	Zayante sandhills No suitable habitat; not observed
Erysimum teretifolium	Santa Cruz wallflower	perennial herb	1B.1	CE	FE	Zayante sands No suitable habitat; presumed absent
Fissidens pauperculus	minute pocket moss	moss	1B.2	None	None	Nisene Marks SP, redwood forest No suitable; presumed absent
Fritillaria liliacea	Fragrant fritillary	perennial herb	1B.2	None	None	Moist areas serpentine grassland

Table 2. Special Status Plant Species Evaluated for Potential Presence at Oak Creek Park Property

Scientific Name	Common Name	Lifeform	CNPS Rare Plant Rank	CESA	FESA	Nearest Record Potential to Occur on Site
						No suitable habitat; presumed absent
Grimmia torenii	Toren's grimmia	moss	1B.3	None	None	Openings, rocky, boulder and rock walls, carbonate, volcanic. Chaparral, woodland No suitable habitat; presumed absent
Grimmia vaginulata	vaginulate grimmia	moss	1B.1	None	None	Openings, rocky, boulder and rock walls, carbonate. Chaparral. No suitable habitat; presumed absent
Hesperevax sparsiflora var. brevifolia	Short-leaved evax	annual herb	1B.2	None	None	Coastal bluff scrub (sandy), coastal dunes, coastal prairie Marginal habitat
Hesperocyparis abramsiana var. abramsiana	Santa Cruz cypress	perennial evergreen tree	1B.2	CE	FE	Pine forest on sandstone outcrops, sandy soils; Majors Creek, Boulder Creek No suitable habitat; not observed
Hoita strobilina	Loma Prieta hoita	perennial herb	1B.1	None	None	Serpentine chaparral, Loma Prieta No suitable habitat; not observed
Holocarpha macradenia	Santa Cruz tarplant	annual herb	1B.1	CE	FT	Coastal terrace grassland; Soquel area, Twin Lakes, Arana Gulch, Watsonville Marginal habitat
Horkelia cuneata var. sericea	Kellogg's horkelia	perennial herb	1B.1	None	None	Sandy soil, UCSC, grassland No suitable habitat; not observed
Horkelia marinensis	Point Reyes horkelia	perennial herb	1B.2	None	None	Coastal prairie, UCSC grassland Marginal habitat
Lasthenia californica ssp. micrantha	Perennial goldfields	perennial herb	1B.2	None	None	Northern coastal scrub No suitable habitat; presumed absent
Lessingia micradenia var. glabrata	smooth lessingia	annual herb	1B.2	None	None	Serpentine chaparral, Loma Prieta No suitable habitat; presumed absent
Malacothamnus arcuatus	arcuate bush-mallow	perennial evergreen shrub	1B.2	None	None	Mt. Bache Road area, chaparral No suitable habitat; not observed
Microseris paludosa	marsh microseris	perennial herb	1B.2	None	None	Moist areas in coastal prairie, Graham Hill Road area No suitable habitat; too dry; presumed absent
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	annual herb	1B.2	None	None	Zayante sandhills No suitable habitat; presumed absent
Monolopia gracilens	woodland woolythreads	annual herb	1B.2	None	None	Sandy openings in chaparral, Quail Hollow County

Table 2. Special Status Plant Species Evaluated for Potential Presence at Oak Creek Park Property

Scientific Name	Common Name	Lifeform	CNPS Rare Plant Rank	CESA	FESA	Nearest Record Potential to Occur on Site
						park No suitable habitat; presumed absent
Orthotrichum kellmanii	Kellman's brittle moss	moss	1B.2	None	None	Sandstone, carbonate; chaparral. cismontane woodland No suitable habitat; presumed absent
Pedicularis dudleyi	Dudley's lousewort	perennial herb	1B.2	CR	None	Redwood forest; extirpated from County; historic record from headwaters of Aptos Creek No suitable habitat; presumed absent
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	perennial herb	1B.2	None	None	Burned or disturbed areas in chaparral and woodland; historic record from Empire Grade area No suitable habitat; presumed absent
Pentachaeta bellidiflora	white-rayed pentachaeta	annual herb	1B.1	CE	FE	Beach cliffs, mesic grassland near Santa Cruz (historic) Marginal habitat
Pinus radiata	Monterey pine cypress	perennial evergreen tree	1B.1	None	None	Native pine forest at Ano Nuevo and Monterey County No suitable habitat; not observed
Piperia candida	White-flowered rein orchid	perennial herb	1B.2	None	None	Open to shady site in coniferous forests Hillside unsuitable due to dry conditions and dense acacia; presumed absent
Plagiobothrys chorisianus var. chorisianus	Choris' popcorn-flower	annual herb	1B.2	None	None	Moist depressions in grassland; Polo Ranch Scotts Valley, Watsonville area Marginal habitat; likely too dry
Plagiobothrys diffusus	San Francisco popcorn-flower	annual herb	1B.1	CE	None	Seasonally moist grassland on coastal terrace, Moore Creek area, Fairway Drive area, Polo Ranch Scotts Valley, Pogonip Marginal habitat; likely too dry
Plagiobothrys glaber	Hairless popcorn-flower	annual herb	1A	CE	None	Seasonally moist alkaline soils in marshes, meadows, swamps No suitable habitat; presumed absent
Polygonum hickmanii	Scotts Valley polygonum	annual herb	1B.1	CE	FE	Grasslands with sandstone outcrops, Scotts Valley Marginal habitat
Silene verecunda ssp. verecunda	San Francisco campion	perennial herb	1B.2	None	None	Exposed mudstone in north part of County No suitable habitat; presumed absent

Table 2. Special Status Plant Species Evaluated for Potential Presence at Oak Creek Park Property

Scientific Name	Common Name	Lifeform	CNPS Rare Plant Rank	CESA	FESA	Nearest Record Potential to Occur on Site
Stebbinoseris decipiens	Santa Cruz microseris	annual herb	1B.2	None	None	Openings in broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, Marginally suitable habitat
Strepthanthus albidus ssp. albidus	Metcalf Canyon jewel flower	annual herb	1B.2	None	FE	Serpentine chaparral and grassland No suitable habitat; presumed absent
Strepthanthus albidus ssp. peramoenus	most beautiful jewel flower	annual herb	1B.2	None	None	Serpentine chaparral and grassland, No suitable habitat; presumed absent
Trifolium buckwestiorum	Santa Cruz clover	annual herb	1B.1	None	None	Moist depressions in grassland; Soquel area, UCSC Marginal habitat; likely too dry

CNPS Status: List 1B: These plants (predominately endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFW Code.

2.3.4 Special Status Wildlife Species

Special status wildlife species include those listed, proposed or candidate species by either the Federal or the State resource agencies as well as those identified as State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act. Special status wildlife species were evaluated for their potential presence in the project area as described in Table 3 below.

There are no special status wildlife species that are known to occur or may occur within the project area. Dr. Richard Arnold surveyed the site for Mt. Hermon June beetle, which is known to occur on an adjacent property to the north, but was found absent on this proposed project site (Arnold, letter dated Sept 15, 2017). Although there is a small, but degraded area of native coastal prairie grasses, this area does not provide suitable habitat for Ohlone tiger beetle. The native grass area is invaded by non-native grasses which form dense thatch, the soils are not the type in which this tiger beetle are known to inhabit, and there are no bare areas within the native grass area that would provide habitat associated with Ohlone tiger beetle. The area is also outside the known range of this species.

Nesting birds may occur in the acacia – oak woodland areas. Measures are given below to avoid or minimize potential impacts to native nesting birds during vegetation removal. There is no suitable habitat for the remaining special status wildlife species listed in Table 3.

Table 3. Special status wildlife species and their predicted occurrence at Oak Creek Park Property, Felton Quad, December 21, 2017 (CDFW 2017).

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
Invertebrates			
Ohlone tiger beetle *Cicindela ohlone*	FE	Coastal terrace prairie with sparse vegetation and openings, Watsonville loam soils	None, no suitable habitat on site.
Mt. Hermon June beetle *Polyphylla barbata*	FE	Chaparral and ponderosa pine with Zayante sandy soils	Surveys by Dr. R. Arnold found this species is absent, as is their required habitat.
Zayante band-winged grasshopper *Trimerotropis infantilis*	FE	Openings in sand hills parkland habitat with Zayante sandy soils	No suitable habitat on site.
Smith's blue butterfly *Euphilotes enoptes smithi*	FE	Coastal dunes and coastal sage scrub with buckwheat plants	No suitable habitat on site.
Fish			
Coho salmon *Oncorhynchus kisutch*	FE, SE	Perennial creeks and rivers with gravels for spawning	No suitable habitat in project area.
Steelhead *Oncorhynchus mykiss*	FT	Perennial creeks and rivers with gravels for spawning	No suitable habitat in project area.
Amphibians			
Santa Cruz black salamander *Aenides flavipunctatus niger*	CSC	Mesic forests of fog belt; terrestrial, lives under logs, rocks,	No suitable habitat on site; closest known location is > 5 miles away..

Table 3. Special status wildlife species and their predicted occurrence at Oak Creek Park Property, Felton Quad, December 21, 2017 (CDFW 2017).

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
		etc.	
California giant salamander *Dicamptodon ensatus*	CSC	Wet coastal forests near streams and seeps; breed in streams	No suitable habitat on site, no perennial waterways; closest known sites are > 5 miles.
California red-legged frog *Rana aurora draytonii*	FT, CSC	Riparian, marshes, estuaries and ponds with still water at least into June.	No suitable habitat in project area; closest known occurrence is > 5 miles.
Foothill yellow-legged frog *Rana boylii*	CSC	Creeks and rivers with cobble substrate	No suitable habitat on site; no known observations of this species in > 10 miles.
Reptiles			
Western pond turtle *Actinemys marmorata*	CSC	Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.	No suitable habitat in project area.
Birds			
Osprey *Pandion haliaetus*	None	Nests in tall trees adjacent to reservoirs and rivers	None, no suitable habitat on site.
White-tailed kite *Elanus leucurus*	FP	Nests in tall riparian trees adjacent to open lands for foraging	None, no suitable habitat on site.
Mammals			
Pallid bat *Antrozous pallidus*	CSC	Roosts in caves, hollow trees, mines, buildings, bridges, rock outcroppings	No suitable tree hollows in oaks on site were observed; no suitable habitat on site.
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	None	Manzanita chaparral with sandy soils	None. No suitable habitat on site.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	CSC	Woodlands including oaks, willow riparian, Eucalyptus	None observed within acacia woodland; unlikely to occur due to lack of suitable foraging.
American badger *Taxidea taxus*	CSC	Grasslands with friable soils	None, no suitable habitat on site; grasslands on site too small in area and isolated to support this medium sized mammal; soils not friable

[1] Key to status: FE=Federally listed as endangered species; FT=Federally listed as threatened species; SE=State listed endangered; FP=Fully protected species by State; CSC=California species of special concern

3.0 IMPACT AND MITIGATION DISCUSSION

3.1 IMPACT CRITERIA

3.1 Thresholds of Significance

The thresholds of significance presented in Appendix G of the CEQA Guidelines were used to evaluate project impacts and to determine if implementation of the proposed project would pose significant impacts to botanical resources. For this analysis, significant impacts are those that substantially affect, either directly or through habitat modifications:

- A species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS or NMFS;
- Riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.2 ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND SIGNIFICANCE DETERMINATION FOR THE PROPOSED PROJECT

The proposed development project was evaluated for its potential direct and indirect impacts to biotic resources. Impacts to sensitive habitats/resources were considered potentially significant. Sensitive resources found on site include oak tree groves and coastal prairie. Impacts to the annual grassland and non-native tree groves were not considered to be significant.

An arborist report was not available at the time of this review; however, all trees on the property are expected to be removed. This will include several native coast live oaks, a native ponderosa pine and several non-native landscape trees. Some of the trees may meet the City's protected tree criteria, pending an arborist report. An arborist report will be required to identify specific measures to avoid, minimize and compensate for the expected tree removal.

The project will remove a small patch of coastal prairie. Although this habitat is considered sensitive and imperiled by CDFW, the small patch on the subject property is a small, remnant patch surrounded by non-native grassland. Regardless, the prairie may provide habitat for special status plant species, pending the results of a spring season plant survey. The mesic conditions in the bottom on the detention basin may provide suitable habitat for Congdon's tarplant, a special status species.

Nesting birds may occur in the tree groves on the project site. Because most nesting birds are protected by the Migratory Bird Treaty Act, measures are listed below to avoid potentially significant impacts if any active bird nests are present during construction.

There is no suitable habitat for roosting bats (e.g., no crevices in the few oak trees) and no woodrat houses or signs of any were observed during the November 2017 survey. It is unlikely that there is enough forage for woodrats to colonize this non-native tree grove. It is also unlikely that bats would roost in the acacia trees, which provide no cover for bats, even for foliage roosting bats. Also, the site has limited forage for bats. This report finds that no bats or woodrats would be impacted for this project.

Impacts to Sensitive Vegetative Resources. The project will remove mature oak trees some of which may meet the City's protected tree criteria. The project will remove approximately 1,000 square feet of coastal prairie. The prairie and the bottom of the detention basin may support special status plant species.

> **Mitigation Measure BIO-1.** The applicant shall have an arborist prepare a tree report for the property and an evaluation of trees to be removed. The applicant shall implement all measures contained within the arborist report for the avoidance and mitigation for tree removal. Measures include implementing a tree protection plan, maintenance of trees to remain, and implementing a tree replacement program that is subject to review and approval by the City of Scotts Valley.

> **Mitigation Measure BIO-2.** The applicant shall have a qualified biologist conduct a spring season plant survey, with a focus on the coastal prairie and the bottom of the detention basin. The survey shall ascertain whether the site supports any special status plant species. The survey findings shall be subject to review and approval by the City of Scotts Valley. If no special status species are found, no additional actions are required. If special status species are found on site, the applicant shall confer with regulating agencies (i.e., City, CDFW, and/or USFWS) on measures to avoid, minimize, or compensate for the impact. A mitigation plan shall be prepared and implemented that outlines provides preservation, salvage, or presents other compensation for the impact, such that impacts are reduced to a less than significant level.

> **Mitigation Measure BIO-3.** The applicant shall provide compensation for impacts to the coastal prairie. In conjunction with measures outlined in MM BIO-2, above, the applicant shall confer with regulating agencies (i.e., City and CDFW) on measures to avoid, minimize, or compensate for the impact to the prairie. A mitigation plan shall be prepared and implemented that outlines either preservation of the prairie through site redesign, salvage and transplanting of native grasses to a suitable protected site, revegetation of a comparable area of native grassland on site (i.e., in a landscaped area), or other compensation, such that impacts are reduced to a less than significant level.

Impacts to Nesting Birds. The removal of trees and other vegetation has the potential to injure or kill nesting native bird eggs or chicks, if any native birds are actively nesting at the time of vegetation removal.

> **Mitigation Measure BIO-4.** To avoid impacting nesting birds, if present, schedule tree removal to occur between September 1 and March 1 of any given year, which is outside the bird nesting season for Central California Coast. Because this tree grove is adjacent to very busy roadways, it would be difficult to detect nesting birds by listening for their vocalizations; the dense acacia

vegetation also makes it difficult to ascertain visually if any small bird nests such as hummingbirds are present. Therefore, this measure to avoid impacts to nesting birds, is the only practical method to avoid disturbance or destruction of active bird nests, if any are present.

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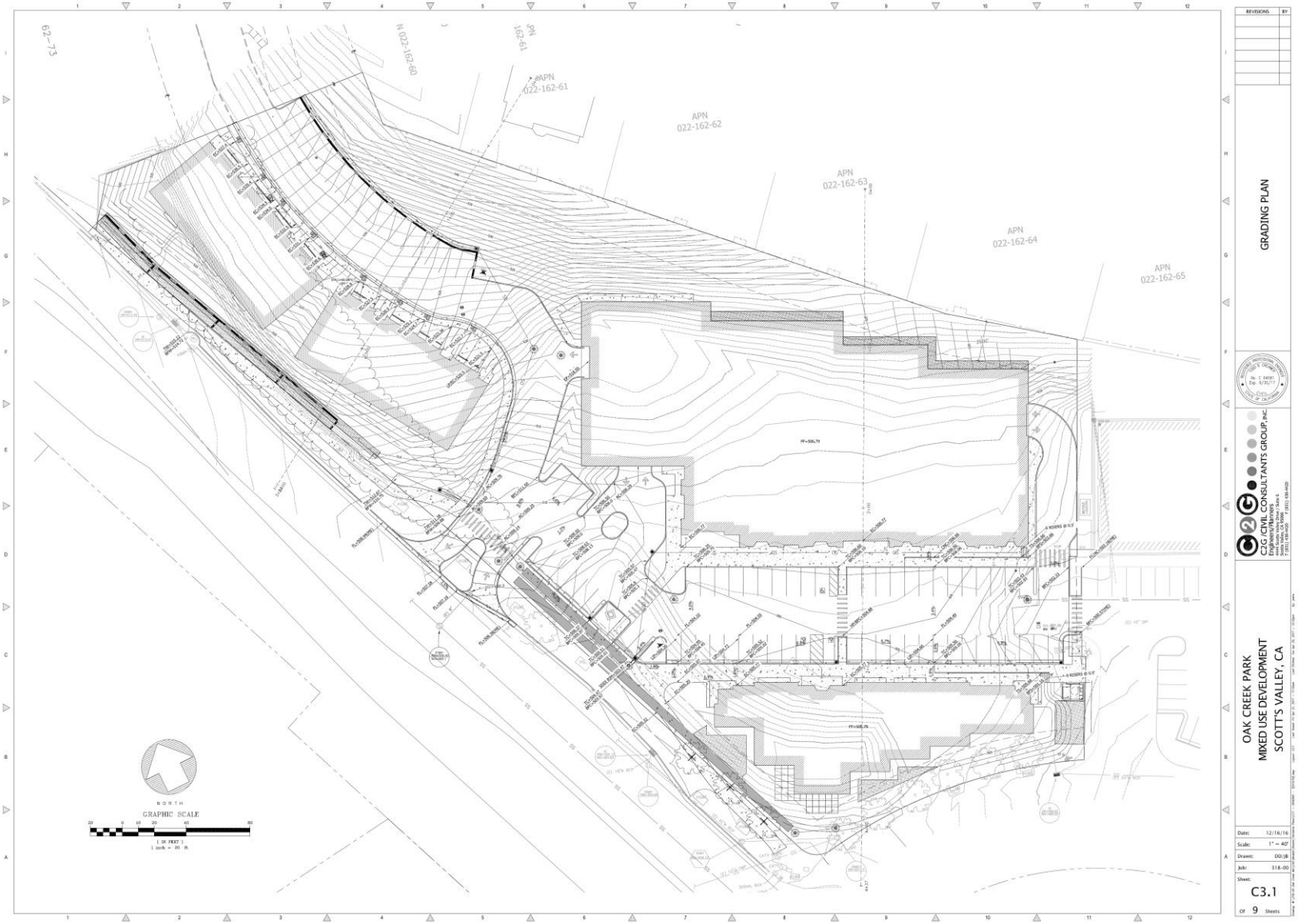
Appendix A

Proposed Grading Plan
(Source: C2G Civil Consultants Group, Inc.)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APN 162-61
62-73
NORTH
GRAPHIC SCALE
REVISIONS
BY
GRADING PLAN
C2G CIVIL CONSULTANTS GROUP, INC
OAK CREEK PARK
MIXED USE DEVELOPMENT
SCOTT'S VALLEY, CA
Date: 12/16/16
Scale: 1" = 40'
Drawn: DD/JB
Job: 318-00
Sheet:
C3.1
OF 9 Sheets

Appendix C-b

Biotic Resources Group

Biotic Assessments ♦ Resource Management ♦ Permitting

May 29, 2018

Greg Egers, Granum Partners
c/o Charlie Eadie
EADIE CONSULTANTS
P.O. Box 1647, Santa Cruz, CA 95061-1647
877 Cedar Street, Suite 248, Santa Cruz, CA

RE: Oak Creek/Glen Canyon Road Development: Results of Supplemental Plant Survey

Dear Mr. Egers,

The Biotic Resources Group has conducted a botanical survey of the approximately 3.6 acres parcel on Glen Canyon Road to supplement information in the Oak Creek Development Biotic Report (Biotic Resources Group, December 21, 2017). The results of this supplemental plant survey are described herein.

ASSESSMENT METHODOLOGY

The survey methodology included a review of the California Department of Fish & Wildlife (CDFW) RareFind database (CNDDB) and seasonal field visits. Site visits were conducted in March, April, and May 2018 to capture spring and early summer blooming plant species. The grassy areas identified in the Biotic Report as having potential to support special status plant species were walked at each site visit. All plant species observed were identified as to their rarity. Special status plant species are those identified by State or Federal agencies or those designated on List 1, as maintained by the California Native Plant Society.

ASSESSMENT RESULTS

No special status plant species were documented on the property during the spring/early summer 2018 plant surveys. Plant species observed on the property consist of common native and non-native plant species.

Thank you for the opportunity to assist you in your project planning. Please give me a call if you have any questions on this report.

Sincerely,

Kathleen Lyons
Plant Ecologist

Appendix C-c

Biotic Resources Group

Biotic Assessments ♦ Resource Management ♦ Permitting

May 30, 2019

Greg Egers, Granum Partners
c/o Charlie Eadie
EADIE CONSULTANTS
P.O. Box 1647, Santa Cruz, CA 95061-1647

RE: Oak Creek/Glen Canyon Road Development: Results of 2019 Supplemental Plant Survey

Dear Mr. Egers,

The Biotic Resources Group has conducted a botanical survey of the approximately 3.6 acres parcel on Glen Canyon Road to supplement information in the Oak Creek Development Biotic Report (Biotic Resources Group, December 21, 2017) and the plant survey conducted in 2018 (Biotic Resources Group, May 29, 2018). The results of this supplemental plant survey are described herein.

ASSESSMENT METHODOLOGY

A site visit was conducted on May 27, 2019 to assess the vegetation and to determine is there were any changes in site conditions from the 2017 and 2018 surveys. The grassy areas were walked. All plant species observed were identified as to their rarity. Special status plant species are those identified by State or Federal agencies or those designated on List 1, as maintained by the California Native Plant Society.

ASSESSMENT RESULTS

No special status plant species were documented on the property during the May 2019 survey. Plant species observed on the property consist of common native and non-native plant species and conditions are similar to that found in survey conducted in 2017 and 2018.

Thank you for the opportunity to assist you in your project planning. Please give me a call if you have any questions on this report.

Sincerely,

Kathleen Lyons

Kathleen Lyons
Plant Ecologist

Appendix C-d

Maureen Hamb-WCISA Certified Arborist #WE2280
Professional Consulting Services

TREE RESOURCE EVALUATION
PROJECT IMPACT ANALYSIS

OAK CREEK PARK
3640 GLEN CANYON ROAD, SCOTTS VALLEY
APN 022-162-76

FOREST MANAGEMENT PLAN
TEHAMA LOT 73
PROPERTIES OF ROBERT AND MARA PERKINS

Prepared for
Eadie Consultants

July 2018

APRIL 11, 2014

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INTRODUCTION

This arboricultural resource assessment/project impact analysis includes an evaluation of trees growing on undeveloped property located at 3640 Glen Canyon Road in the City of Scotts Valley.

A proposal for mixed use development has been prepared that will utilize the bulk of the site. This report includes an inventory of the trees on the site, review of the proposed plans and recommendations regarding the future disposition of the trees.

PROJECT DESCRIPTION AND LOCATION

A mixed-use project is proposed for an undeveloped property located at the corner of Glen Canyon Road and Mount Hermon Road (3640 Glen Canyon Road APN 022-162-76). The proposal includes two apartment buildings, one mixed use building and one commercial building with associated parking and landscaping.

ASSIGNMENT/SCOPE OF SERVICES

In May of 2018 I met with Charlie Eadie from Eadie Consultants on the Glen Canyon property. As the developers representative he provided the proposed plans for the site (C2G Civil Consultant Group). I was retained to inspect and evaluate the trees within the property boundaries in preparation for development. The following services have been completed to prepare the inventory and report.

- Inventory, number and map all trees growing adjacent to proposed development project.
- Identify tree species and measure trunk diameter at a point 54 inches above grade (DBH).
- Visually inspect each tree to determine health status, structural integrity and suitability for incorporation into the development project.
- Provide the “Critical Root Zone” dimensions
- Review development plans to assess potential construction impacts to trees.
- Provide recommendations for tree removal/retention based on overall tree condition and construction related impacts.

TREE INVENTORY OVERVIEW

The attached inventory includes the following information on trees growing adjacent to proposed development:

Tree Species
The inventory indicates the "common" name for each protected tree. The botanical names of the trees are listed here:

Coast live oak (*Quercus agrifolia*)
Acacia (*Acacia baileyana*)
Ponderosa pine (*Pinus ponderosa*)
Ash (*Fraxinus sp*)
Sycamore (*Platanus acerifolia*)

Trunk Diameter
The diameter of each trunk/trunks was measured at a point 54 inches above natural grade (DBH) using a diameter tape.

Tree Health
Tree health and tree structure are evaluated separately. A "healthy" tree can be weakly structured and represent a risk, a well-structured tree can be "unhealthy" or in poor vigor.

The determination of tree health is made during a Visual Tree Inspection. This analysis includes an evaluation of the biology of each tree using procedures developed by Claus Mattheck and published in The Body Language of Trees. The health of the tree is then rated as "good", "fair", or "poor" in the inventory.

The biological assessment determines health status and includes an evaluation of the following:

- Vitality of the leaves, bark and twigs
- Presence of fungi or decay
- Percentage and size of dead branching
- Status of old wounds or cavities.

Healthy trees rated as "good" display dense full canopies with dark green foliage. Dead branching is limited to small twigs and branches less than one inch in diameter. No evidence of disease, significant decay or inspect activity is visible. Vigorous, health trees are much better able to tolerate site alteration and invasive construction impacts than less vigorous trees of the same species.

Trees in "fair" health have 10-30% foliar dieback, small areas of dead branching greater than one inch in diameter and minor evidence of disease, decay, or insect activity.

Trees in "poor" health display greater than 30% foliar dieback, dead branches greater than two inches in diameter and/or areas of decay, disease or insect activity.

Tree Structure
As with tree health, the structural integrity of each tree is determined using the Visual Tree Inspection methods. This mechanical assessment includes an evaluation of the following:

- Integrity of the framework of the tree (supporting trunk and major branches)
- External symptoms (bulges, ribs or cracks) that can indicate internal defects
- Lean of main trunk and canopy configuration
- Development of root buttress

Trees with "good" structure are well rooted with visible taper in the lower trunk leading to buttress root development. These qualities indicate that the tree is solidly rooted in its growing site. No significant structural defects such as codominant stems (two stems of similar size that emerge from the same point on the trunk), weakly attached branches, cavities or decay are present.

Trees with "fair" structural integrity may have defects such as poor taper in the trunk, inadequate root development or growing site limitations. They may have multiple trunks, included bark (where bark turns inward at an attachment point), or suppressed canopies. Small areas of decay or evidence of small limb loss may be present in these trees. The condition of these trees can be improved using common maintenance procedures.

Poorly structured trees display one or more serious structural defects that may lead to the failure of branches, trunk or the whole tree due to uprooting. Trees in this condition may have had root loss due to decay or site conditions. The supporting trunk or large stems could be compromised by decay or structural defect (large codominant stems with included bark). Trees in this condition represent a risk. In some situations, maintenance including cable support systems, props or severe pruning can reduce, but not eliminate the potential hazard.

Critical Root Zone (CRZ)
The **"Critical Root Zone"** is the optimum rooting area around a single tree or group of trees in which no grading or construction activity should occur. The zone should be large enough to retain sufficient root and crown area to maintain tree health and stability. The size of this zone depends on a number of factors (Matheny, Clark & Harris 1999)

This optimum area is based on the British Standards Institute (BS5837:1991 and BS 5837:2005). This method is based on ranges in tree diameter, tree age and vigor.

The CRZ does not always represent a radius around the tree. When necessary the area can be offset or shaped in a manner that accepts tree canopy constraints or existing conditions.

Comments
This provides a short summary of tree condition, location, impacts and recommendations.

Protected Status
The highlighted cells within the spreadsheet indicate "protected" status and require permit approvals from the City of Scotts Valley. Section 17.44.080 of the Tree Protection Regulations outline the specifics of protected trees that include trunk diameter sizes of oaks and other species and trees growing within five feet of a public right of way.

The ash trees growing along the back of the sidewalk are more than five feet from the sidewalk. Two of the sycamore trees growing at the back of the sidewalk are four feet from the right of way and are therefore protected and require a permit.

All oaks (six trees) and one pine on the site are protected based on trunk diameters. The group of acacia are not protected by Scotts Valley ordinances.

OBSERVATIONS

Site Description
The site is generally an open grassland with gentle to steep slopes. The western portion of the property is dense acacia tree growth with several coast live oaks and one Ponderosa pine growing within the grove.

The southeastern side of the site is an existing commercial building. The streetscape is an intersection of multiple traffic lanes where traffic is controlled with lights.

To the north a residential development is under construction, to the east is the back side of an existing residential development.

Tree Description
The attached inventory contains information on 17 individual trees and one large group of acacia. This group of trees range from less than one inch to 12 inches in trunk diameter (pictured at right).

In general, these trees are in fair health with structural defects that include whole tree failure due to uprooting, areas of decay and weak branch/stem attachments.

Acacia as a species is a non-native and has been identified as "invasive" by the Invasive Plant Council. The negative species characteristics have been documented as the following:

- Copious seed spread
- Displacement of native plants
- Increased fuel loads

Six small diameter ash trees are growing along the Granite Creek Road frontage. Four sycamore trees are growing along Mount Hermon Road behind the sidewalk (pictured below).

The ash trees are young with trunk diameters that range from five to 10 inches in trunk diameter. They are in an unmaintained condition. The wood support stakes have been left on the trees causing damage and girdling to trunks. They display structural defects that include weak stem branch attachments and crowded branch structures.

The sycamore trees are well structured and in good health. Trunk diameters range from nine to 11 inches.

Six coast live oaks and one Ponderosa pine are growing within the dense acacia growth at the northern portion of the grove.

The coast live oaks are a mix of both immature and mature trees. They are growing amongst the dense acacia growth and have been suppressed by the surrounding vegetation.

The pine is growing on a slope within the acacia growth. It is a young tree in fair condition.

PROJECT IMPACTS/RECOMMENDATIONS

The project as proposed utilizes the entire property. The trees (acacia, coast live oak and pine) within the central portion of the property cannot be incorporated into the development and removal is required.

The ash and sycamore trees growing at the perimeter may be in conflict with the sidewalk and landscaping proposed for the development. If possible, the sycamore should be considered for preservation and incorporation into the project. They are healthy and young with canopies the currently provide a level of screening from the public roadway. The ash are in fair to poor condition and may not be suitable for incorporation into the landscape plan for the site.

CONCLUSION

The mixed-use development proposed for this site will require the removal of all trees growing within the central portions of the property. This includes six coast live oaks, one Ponderosa pine and a group of acacia trees.

In addition, six immature ash trees and four sycamore trees growing behind the existing sidewalk may also require removal.

Please call my office with any questions regarding the trees on this development site.

Respectfully submitted,

Maureen Hamb-Certified Arborist WE2280

Oak Creek Park
Tree Inventory
July 2018

Tree #	Species	Trunk Diameter @ 54" (DBH)	Health	Structure	Impacts: High Moderate Low	CRZ Radius in feet	Comments/Recommendations
1	ash	10.4	good	fair	Moderate	5	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan
2	ash	6.6	fair	fair	moderate	3	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan
3	ash	5.1	fair	fair	moderate	3	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan
4	ash	6.2	good	fair	moderate	3	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan
5	ash	6.8	good	fair	moderate	3	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan
6	ash	10.1	good	fair	moderate	5	young tree growing along the Granite Creek public sidewalk/May be in conflict with landscape plan

Highlighted Cells Indicate Protected Trees

Oak Creek Park
Tree Inventory
July 2018

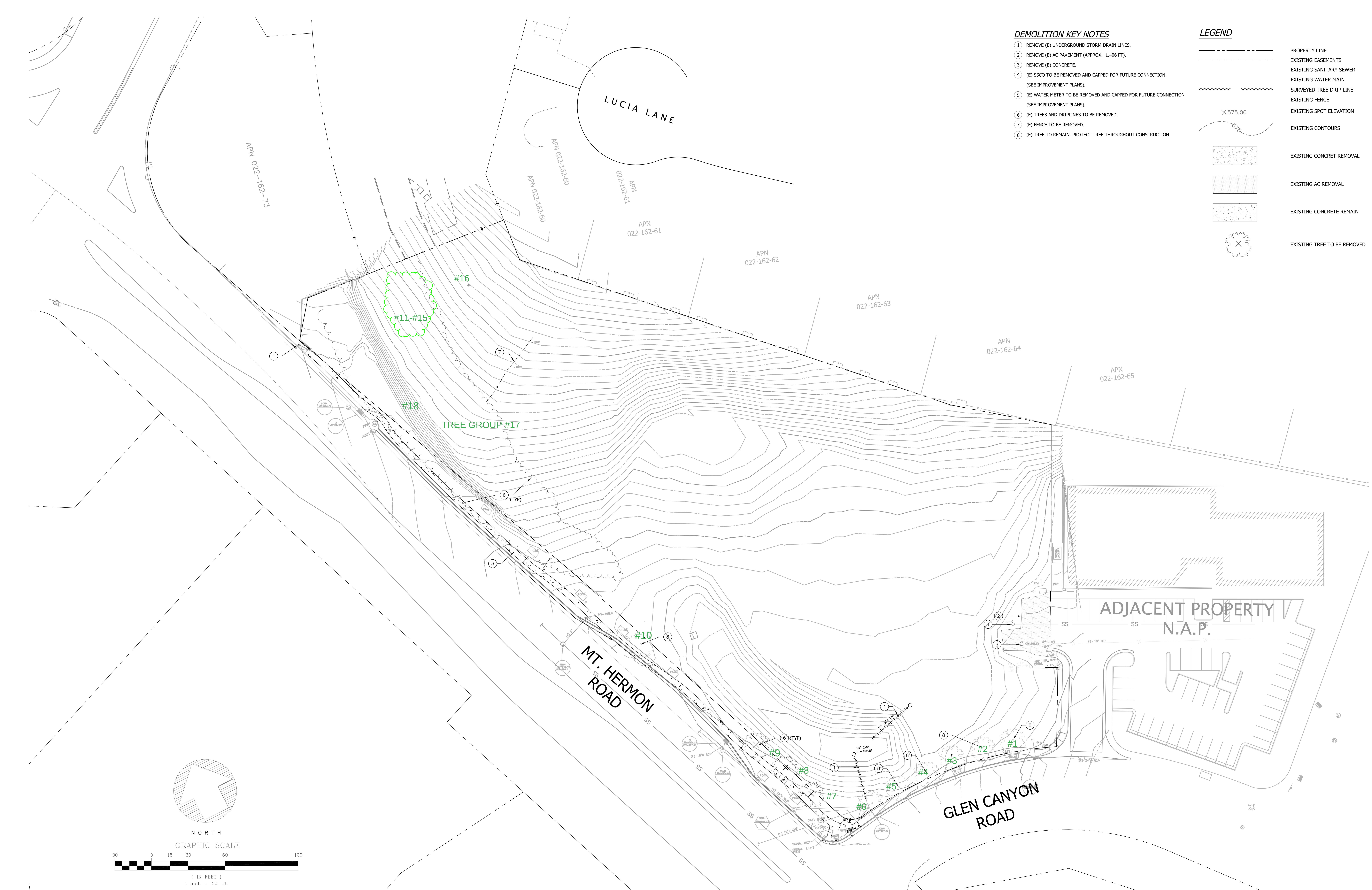
Tree #	Species	Trunk Diameter @ 54" (DBH)	Health	Structure	Impacts: High Moderate Low	CRZ Radius in feet	Comments/Recommendations
7	sycamore	11.5	good	good	moderate	5	Healthy, well structured street tree/Attempt to incorporate into project
8	sycamore	9	good	good	moderate	5	Healthy, well structured street tree/Attempt to incorporate into project
9	sycamore	9.6	good	good	moderate	5	Healthy, well structured street tree/Attempt to incorporate into project
10	sycamore	10.1	good	good	moderate	5	Healthy, well structured street tree/Attempt to incorporate into project
11	coast live oak	9.3 to 13.3	fair	fair	high	8	Growing amongst dense acacia growth, multiple stems suppressed foliar canopy/Within proposed development envelope removal required
12	coast live oak	12 & 14.1	fair	fair	high	8	Thinning lower medium dead branching/Within development envelope. Removal required

Highlighted Cells Indicate Protected Trees

Oak Creek Park
Tree Inventory
July 2018

Tree #	Species	Trunk Diameter @ 54" (DBH)	Health	Structure	Impacts: High Moderate Low	CRZ Radius in feet	Comments/Recommendations
13	coast live oak	19.9 & 18.5	fair	fair	high	15	Mature tree with two main stems, canopy is suppressed by dense acacia growth/Within development envelope removal required
14	coast live oak	12.3	fair	fair	high	6	Growing amongst dense acacia, young tree with suppressed lower canopy/Within development envelope removal required
15	coast live oak	10.7	fair	fair	high	5	Younger tree within acacia grove/Within development envelope removal required
16	coast live oak	4.6 & 4.2	good	fair	high	5	Young tree with short structure growing in open area/Within development envelope removal required
17	group of acacia	1 to 12	fair/poor	fair/poor	high		Large dense grove of (at least 200 small trees) growing behind existing sidewalk. Several uproots, areas decay and thin canopies/Within development envelope removal required
18	Ponderosa pine	13.5	fair	fair	high	7	Growing within dense acacia growth/Within building envelope removal required

Highlighted Cells Indicate Protected Trees



DEMOLITION KEY NOTES

1. REMOVE (E) UNDERGROUND STORM DRAIN LINES.
2. REMOVE (E) AC PAVEMENT (APPROX. 1,406 FT).
3. REMOVE (E) CONCRETE.
4. (E) SSCO TO BE REMOVED AND CAPPED FOR FUTURE CONNECTION. (SEE IMPROVEMENT PLANS).
5. (E) WATER METER TO BE REMOVED AND CAPPED FOR FUTURE CONNECTION (SEE IMPROVEMENT PLANS).
6. (E) TREES AND DRIPLINES TO BE REMOVED.
7. (E) FENCE TO BE REMOVED.
8. (E) TREE TO REMAIN. PROTECT TREE THROUGHOUT CONSTRUCTION

LEGEND

PROPERTY LINE
EXISTING EASEMENTS
EXISTING SANITARY SEWER
EXISTING WATER MAIN
SURVEYED TREE DRIP LINE
EXISTING FENCE
575.00 EXISTING SPOT ELEVATION
575 EXISTING CONTOURS
EXISTING CONCRET REMOVAL
EXISTING AC REMOVAL
EXISTING CONCRETE REMAIN
EXISTING TREE TO BE REMOVED

Call Two Working Days Before You Dig!
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REVISIONS	BY

EXISTING SITE AND DEMOLITION PLAN

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 64561
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

OAK CREEK PARK
MIXED USE DEVELOPMENT
SCOTT'S VALLEY, CA

Date:	12/16/16
Scale:	1" = 30'
Drawn:	DD/JB
Job:	318-00
Sheet:	C1.1
Of 9 Sheets	