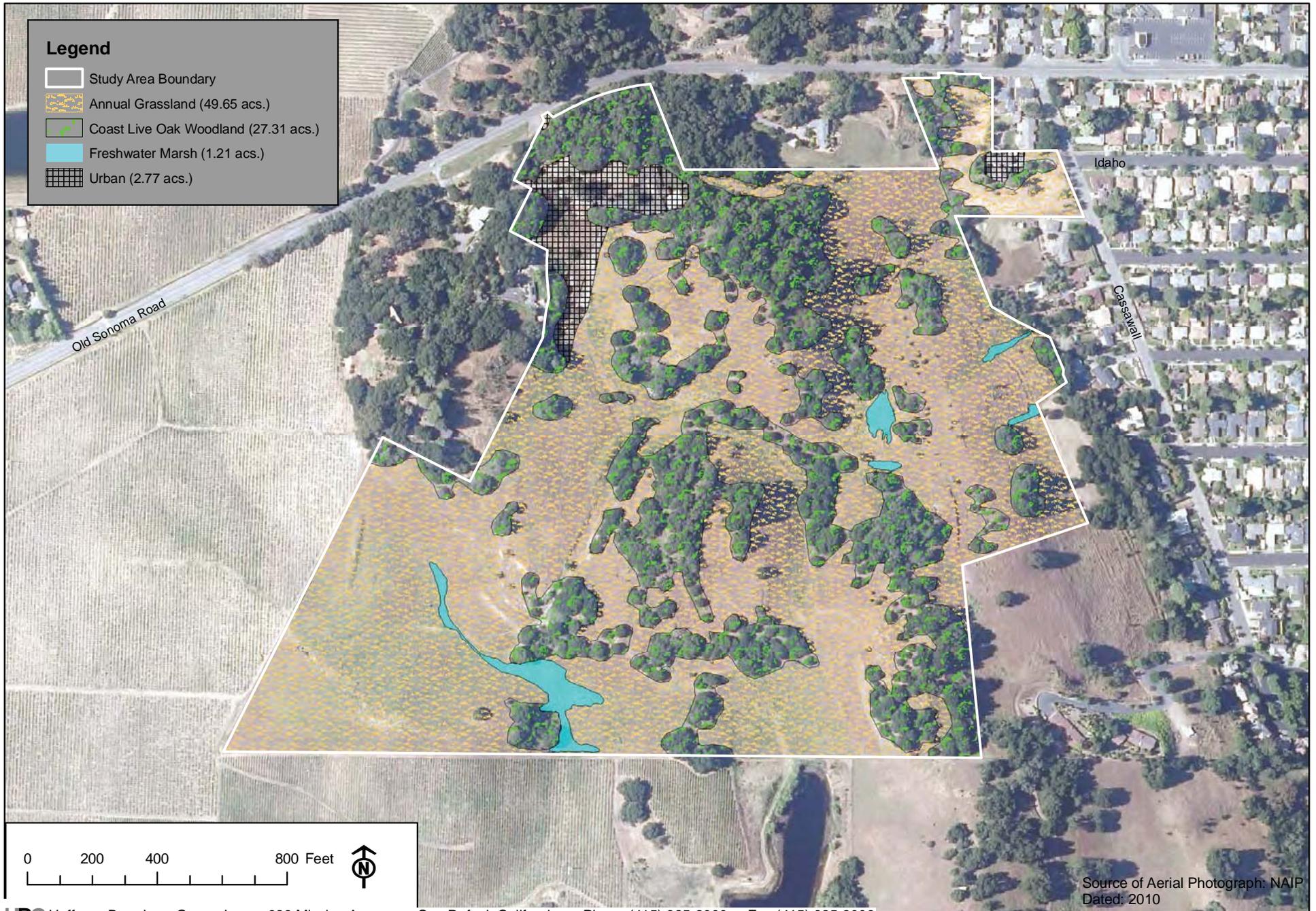




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Figure 8. Soil Map of the Project Area

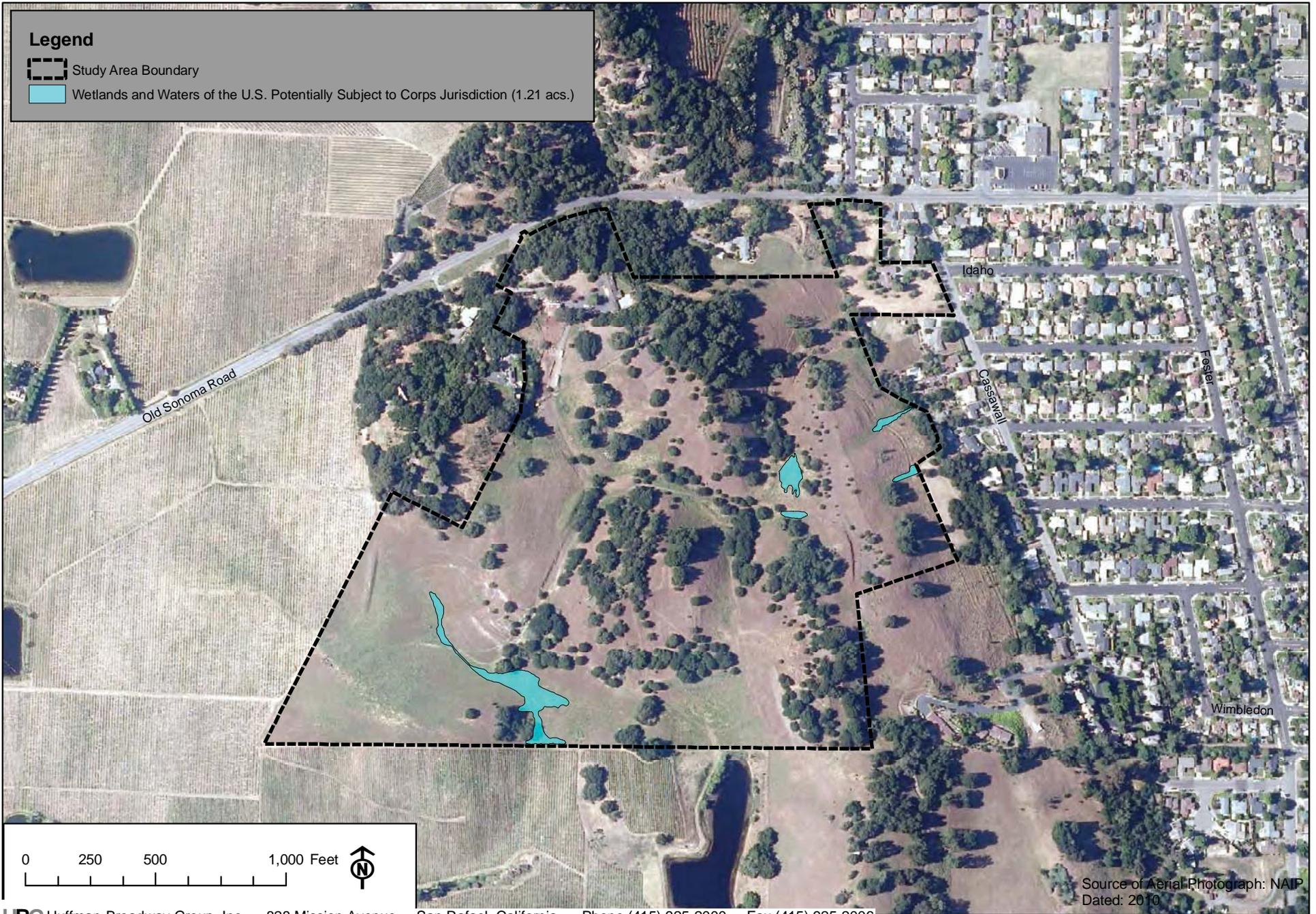
Napa Oaks Project
 City of Napa, Napa County, California



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Figure 9. Map of Plant Communities at the Project Site

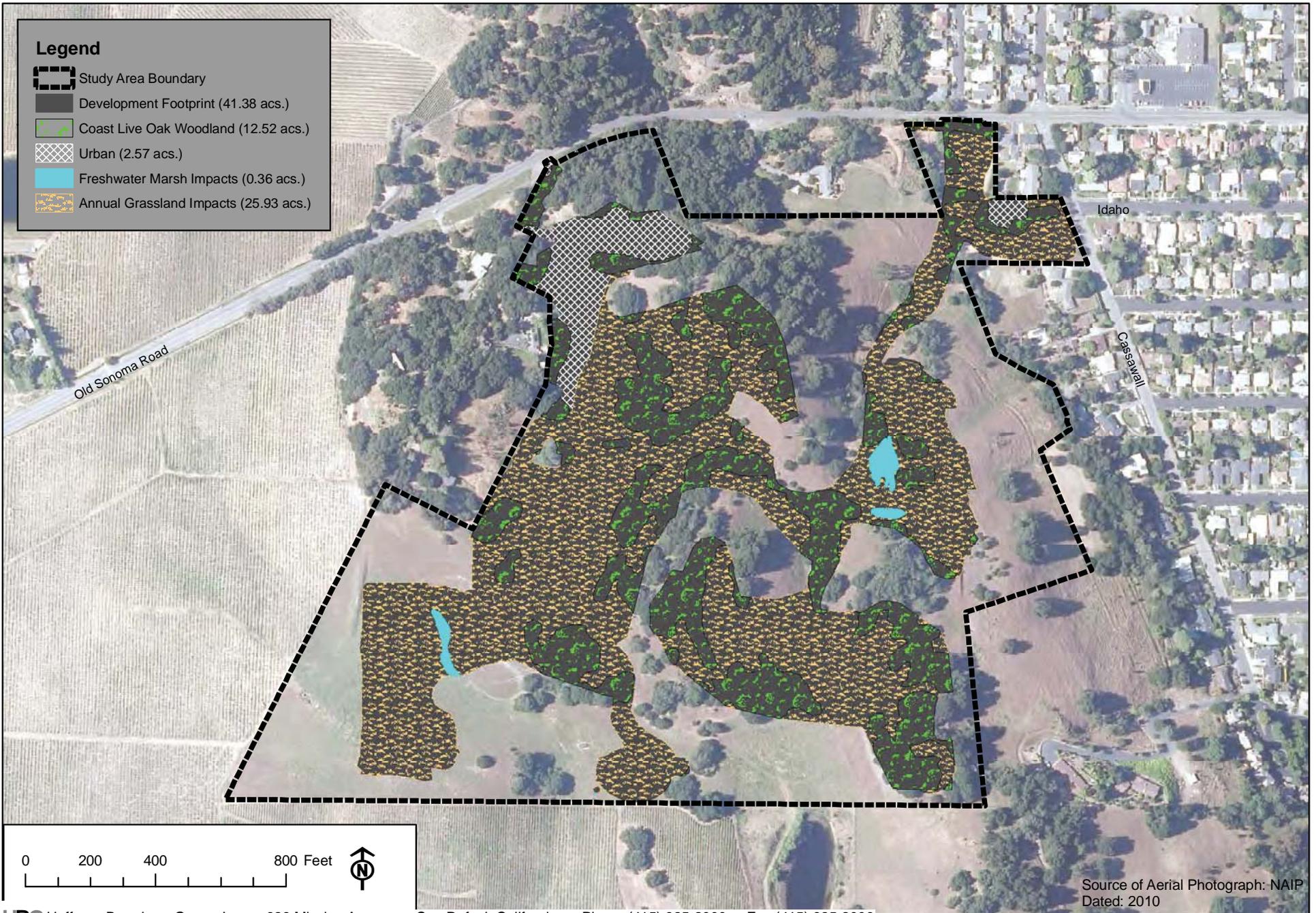
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Figure 10. Wetlands and Waters of the U.S. Potentially Subject to Corps Jurisdiction

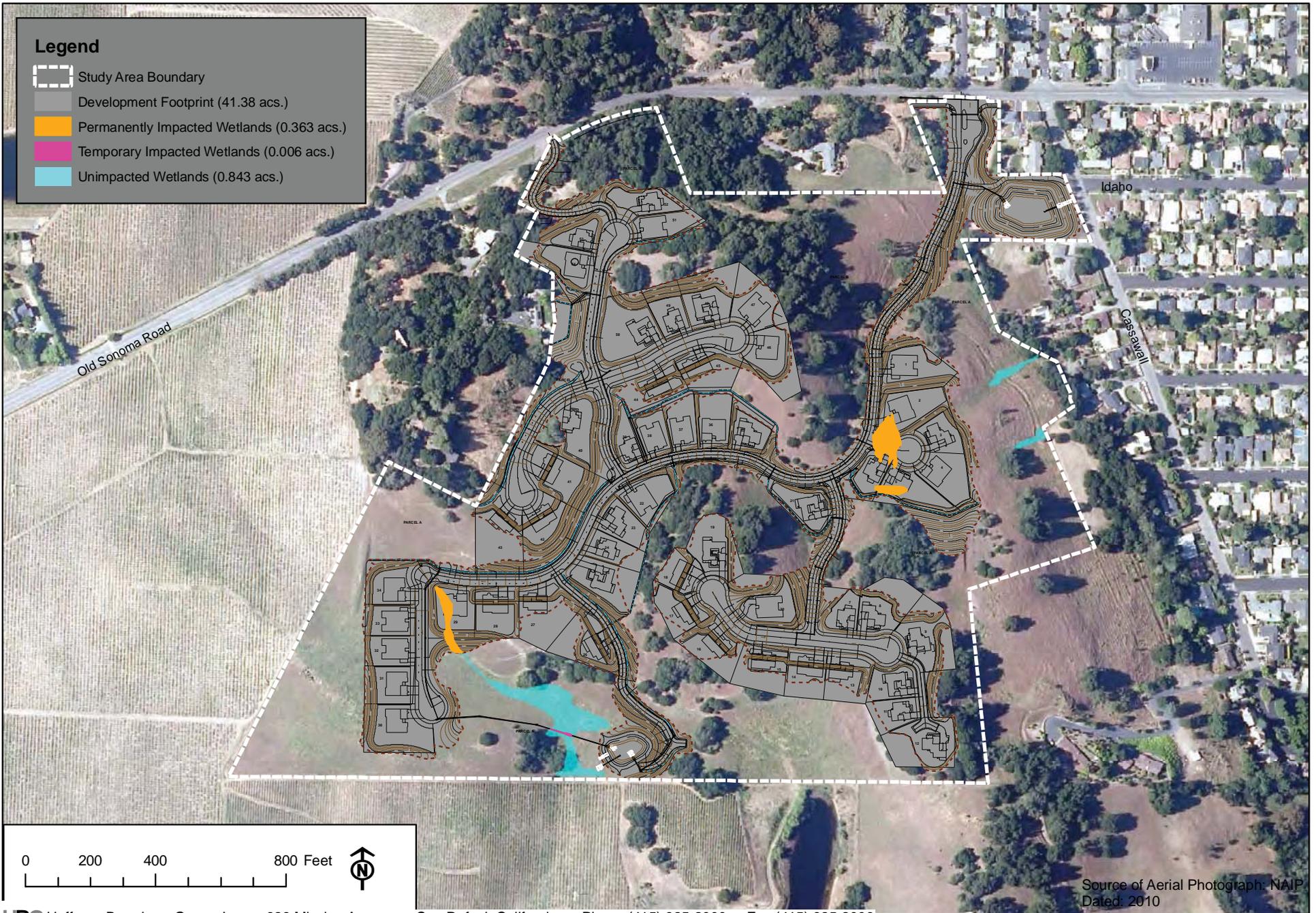
Napa Oaks Project
City of Napa, Napa County, California



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Figure 11. Impacts to Vegetation Communities Occuring on the Project Site

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Figure 12. Impacts to Wetlands and Waters of the U.S. Potentially Subject to Corps Jurisdiction

Napa Oaks Project
City of Napa, Napa County, California

ATTACHMENT 2.

SUPPLEMENTAL BIOLOGICAL INFORMATION

Table 1. Status, Distribution, and Habitat of Special-Status Plants with Potential to Occur in the Vicinity of the Napa Oaks Project Plan Area, Napa, California

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Franciscan onion (<i>Allium peninsulare</i> var. <i>franciscanum</i>)	--/--/1B	On clay soils on dry hillsides, often on serpentine, in cismontane woodland and valley and foothill grassland. 100-300m. Nearest location is a half mile north of Sonoma, over 8 miles from the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Napa false indigo (<i>Amorpha californica</i> var. <i>napensis</i>)	--/--/1B	Broad-leafed upland forest, chaparral, cismontane woodland; openings in forest or woodland or in chaparral (150-2000m). Nearest location is at Patrick Road about 5 miles northwest of the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Clara Hunt's milk-vetch (<i>Astragalus clarianus</i>)	FE/CT/1B	Inhabits open grassy hillsides in thin, volcanic clay soils in cismontane woodland, valley and foothill grassland and chaparral. Not known to occur within 10 miles of the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
San Joaquin spearscale (<i>Atriplex joaquiniana</i>)	--/--/1B	Chenopod scrub, alkali meadow in valley and foothill grassland. Alkali scrub and mesic grasslands in the Delta and Central Valley basin. 1-250m. Known from within Napa about a mile from the site.	Not present. Appropriate habitat is not present on site.
Big-scale (California) balsamroot (<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>)	SLC/--/1B	Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentine; 90-1400m. Nearest location is over 8 miles east of the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Sonoma sunshine (<i>Blennosperma bakeri</i>)	FE/CE/1B	Vernal pools and swales in valley and foothill grassland. 10-100m. Nearest location is north of Sonoma over 8 miles from the site.	Not present. Appropriate habitat is not present on site.
Narrow-anthered California brodiaea (<i>Brodiaea californica</i> var. <i>leptandra</i>)	--/--/1B	Broadleaved upland forest, chaparral, lower montane coniferous forest. 110-915m. Nearest location is at Arrowhead Mountain about 5 miles west of the site.	Not present. Appropriate habitat is not present on site.
Tiburon Indian paintbrush (<i>Castilleja affinis</i> ssp. <i>neglecta</i>)	FE/CT/1B	Rocky serpentine sites in valley and foothill grasslands. 75-400 m. Nearest location is in American Canyon nearly 10 miles from the site.	Not present. Appropriate habitat is not present on site.
Holly-leaved ceanothus (<i>Ceanothus purpureus</i>)	SLC/--/--	Rocky volcanic slopes in chaparral. 120-640m. Nearest location is near Sugarloaf Summit about 4 miles east of the site.	Not present.. Appropriate habitat is not present on site.
Sonoma Ceanothus (<i>Ceanothus sonomensis</i>)	--/--/1B	On sandy, serpentine or volcanic soils in chaparral. 210-800m. Nearest location is along the Sonoma/Napa County line about 6 miles west of the site.	Not present. Appropriate habitat is not present on site
Pappose tarplant (<i>Centromadia parryi</i> ssp. <i>parryi</i>)	SLC/--/1B	Vernally mesic, often alkaline sites in coastal prairie, meadows and seeps, coastal salt marsh and valley and foothill grassland. Nearest location is near Highway 121 about 8.5 miles from the site.	Not present. Appropriate habitat is not present on site.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Soft bird's-beak (<i>Cordylanthus mollis</i> ssp. <i>mollis</i>)	FE/CR/1B	Inhabits brackish tidal marsh and seasonal alkali marsh. 0-3m. Known from fewer than 20 populations in Contra Costa, Napa, and Solano Counties. Nearest location is southwest of Cuttings Wharf over 5 miles from the site.	Not present. Appropriate habitat is not present on site.
Dwarf downingia (<i>Downingia pusilla</i>)	--/--/2	Margins of vernal pools; mesic sites in valley and foothill grassland. 1-485m. Nearest location is near Highway 12/121 about 5 miles south of the site.	Not present. Appropriate habitat is not present on site.
Greene's narrow-leaved daisy (<i>Erigeron greenei</i>)	--/--/1B	Serpentine and volcanic substrates in chaparral. 75-1060m. Nearest location is at Soda Creek Canyon between Napa and Yountville about 7 miles north of the site.	Not present. Appropriate habitat is not present on site.
Seaside tarplant (<i>Hemizonia congesta</i> ssp. <i>congesta</i>)	--/--/1B	Grassy valleys and hills, often in fallow fields, in coastal scrub and valley and foothill grassland. Nearest location is south of Sonoma, over 8 miles from the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Northern California black walnut (<i>Juglans hindsii</i>)	--/--/1B	In deep alluvial soils associated with a stream or creek; in riparian forest and riparian woodland. 0-395m. Known from a Napa City Park just over a mile from the site.	Not present. Appropriate habitat is not present on site.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Contra Costa Goldfields (<i>Lasthenia conjugens</i>)	FE/--/1B	Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Extirpated from most of its range. Most remaining occurrences restricted to the Fairfield region. Occurs near Highway 121 near the Napa River.	Not present. Appropriate habitat is not present on site.
Delta Tule Pea (<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>)	--/--/1B	Inhabits the banks of sloughs and bays in the Suisun Bay and Delta. Found in freshwater and brackish marshes. Nearest location is along the Napa River near the Maxwell Bridge.	Not present. Appropriate habitat is not present on site.
Legenere (<i>Legenere limosa</i>)	--/--/1B	Inhabits vernal pools, 1-880m. Known from scattered occurrences in the Delta, north Central Valley, and north SF Bay. Many occurrences are extirpated. Nearest location is about 4 miles south of the site.	Not present. Appropriate habitat is not present on site.
Mason's lilaepsis (<i>Lilaeopsis masonii</i>)	--/CR/1B	Inhabits the edges of mudflats in brackish marsh and riparian scrub in the Delta. 0-10m. Known along the Napa River just over a mile from the site.	Not present. Appropriate habitat is not present on site.
Sebastopol meadowfoam (<i>Limnanthes vinculans</i>)	FE/CE/1B	Grows in poorly drained clay and sandy loam soils in swales, wet meadows, and marshy areas. Occurs in mesic meadows and vernal pools in valley and foothill grasslands. 15-115m. Nearest known location is about 10 miles from the site at the Laguna Vista Project.	Not present. Appropriate habitat is not present on site.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Cobb mountain lupine (<i>Lupinus sericatus</i>)	--/--/1B	Chaparral, cismontane woodland, lower montane coniferous forest; in stands of knob cone pine-oak woodland; on open woodland slopes in gravelly soils; sometimes on serpentine (180-1500m). Nearest location is north of the summit of Hogback Mountain, about 7 miles northwest of the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Few-flowered Navarretia (<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>)	FE/CT/1B	Inhabits volcanic ash flows and volcanic substrates in vernal pools. 400-855m. Not known to occur within 10 miles of the site.	Not present. Appropriate habitat is not present on site.
Marin knotweed (<i>Polygonum marinense</i>)	SLC/--/3	Coastal salt marshes and brackish marshes. 0-10m. Nearest location is at Cuttings Wharf over 4 miles south of the site.	Not present. Appropriate habitat is not present on site.
Marin checkerbloom (<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>)	--/--/1B	Chaparral. Serpentine or volcanic soils; sometimes appears after burns. 0-430m. Nearest location is at the base of Mt. George about 6 miles northeast of the site.	Not present.. Appropriate habitat is not present on site.
Suisun Marsh aster (<i>Symphotrichum lentum</i>)	--/--/1B	Both brackish and freshwater marshes and swamps. 0-3m. Occurs near the Napa Municipal Golf Course a couple miles from the site.	Not present. Appropriate habitat is not present on site.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE
Napa bluecurls (<i>Trichostema ruygtii</i>)	--/--/1B	Open sunny areas in cismontane woodland, chaparral, valley and foothill grassland, vernal pools and lower montane coniferous forest. 30-590m. Nearest location is northeast of Napa about 6 miles from the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Showy Indian clover (<i>Trifolium amoenum</i>)	FE/--/1B	Inhabits moist clay grassland soils; known from one extant occurrence in Marin County. 5-560m. Known from a 1951 sighting near Napa.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Saline clover (<i>Trifolium. hydrophilum</i>)	--/--/1B	Marshes and swamps, valley and foothill grassland, vernal pools. Found in mesic, alkaline sites. 0-300m. Nearest location is south of Napa about 3 miles from the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.
Oval-leaved viburnum (<i>Viburnum ellipticum</i>)	--/--/1B	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400m. Nearest location is at Skyline Park over 5 miles from the site.	Not present. Potential habitats were surveyed in spring and summer of 2011 with negative results.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Game for the Napa 7.5 Minute Quadrangle Map and surrounding areas, information dated January 2011

2. Status Codes:

FE Federally Endangered
 FT Federally Threatened
 FPE Federally Proposed Endangered
 FPT Federally Proposed Threatened
 FSC Federal Species of Concern (most are former C2 Candidates and some former C1)
 CE California Endangered
 CT California Threatened
 CR California Rare

CFP California Fully Protected
CSC California Species of Special Concern
CNPS 1A Plants Presumed Extinct in California
CNPS 1B Plants Rare, Threatened or Endangered in California or elsewhere
CNPS LIST 2 Plants Rare, Threatened or Endangered in California, but more common elsewhere

Table 2. Vascular Plant Species Observed at the Napa Oaks Project Plan Area, Napa, California (list compiled during the spring and summer botanical surveys conducted by Virginia Dains in 2011)

Family	Scientific Name	Common Name
<i>Anacardiaceae</i>		
	Toxicodendron diversilobum	poison oak
<i>Apiaceae</i>		
	Conium maculatum	poison hemlock
	Foeniculum vulgare	fennel
	Sanicula bipinnatifida	purple sanicle
	Sanicula crassicaulis	Pacific sanicle
	Torilis arvensis	field hedge-parsley
<i>Asteraceae</i>		
	Achyrachaena mollis	blow-wives
	Baccharis pilularis	coyote brush
	Carduus pycnocephalus	Italian thistle
	Centaurea calcitrapa	red star-thistle
	Centaurea solstitialis	yellow star-thistle
	Filago californica	California herba impia
	Hedypnois cretica	Cretan hedypnois
	Hypochaeris glabra	smooth cat's ear
	Hypochaeris radicata	rough cat's ear
	Lactuca serriola	prickly lettuce
	Leontodon taraxacoides	hawkbit
	Micropus californicus	slender cottonweed
	Picris echioides	bristly ox-tongue
	Psilocarphus oregonus	Oregon woolly marbles
	Senecio vulgaris	common groundsel
	Silybum marianum	milk thistle
	Soliva sessilis	common soliva
	Sonchus arvensis	perennial sow thistle
	Sonchus asper ssp. asper	prickly sow thistle
	Taraxacum officinale	common dandelion
<i>Boraginaceae</i>		
	Amsinckia menziesii var. intermedia	orange-flowered Menzies' fiddleneck
	Plagiobothrys nothofulvus	rusty-haired popcorn flower
<i>Brassicaceae</i>		

Family	Scientific Name	Common Name
	<i>Brassica nigra</i>	black mustard
	<i>Brassica rapa</i>	field mustard
	<i>Cardamine oligosperma</i>	Idaho bittercress
	<i>Lepidium nitidum</i>	shining pepper-grass
	<i>Raphanus sativus</i>	wild radish
<i>Caprifoliaceae</i>		
	<i>Symphoricarpos mollis</i>	creeping snowberry
	<i>Viburnum tinus</i>	spring bouquet viburnum
<i>Caryophyllaceae</i>		
	<i>Cerastium glomeratum</i>	mouse-ear chickweed
	<i>Stellaria media</i>	common chickweed
<i>Crassulaceae</i>		
	<i>Crassula tillaea</i>	Mediterranean pygmy-weed
<i>Cyperaceae</i>		
	<i>Eleocharis macrostachya</i>	common spikerush
<i>Ericaceae</i>		
	<i>Arbutus menziesii</i>	madrono
<i>Fabaceae</i>		
	<i>Lotus humistratus</i>	short-podded lotus
	<i>Lotus wrangelianus</i>	Chilean lotus
	<i>Lupinus bicolor</i>	miniature lupine
	<i>Lupinus nanus</i>	sky lupine
	<i>Medicago polymorpha</i>	California burclover
	<i>Trifolium campestre</i>	hop clover
	<i>Trifolium dubium</i>	shamrock
	<i>Trifolium glomeratum</i>	clustered clover
	<i>Trifolium hirtum</i>	rose clover
	<i>Trifolium subterraneum</i>	subterranean clover
	<i>Trifolium willdenovii</i>	tomcat clover
<i>Fagaceae</i>		
	<i>Quercus agrifolia</i>	coast live oak
	<i>Quercus lobata</i>	Valley oak
<i>Gentianaceae</i>		
	<i>Centaurium muehlenbergii</i>	Muhlenberg's centaury
	<i>Cicendia quadrangularis</i>	common microcalis
<i>Geraniaceae</i>		
	<i>Erodium botrys</i>	long-beaked filaree
	<i>Erodium cicutarium</i>	red-stemmed filaree

Family	Scientific Name	Common Name
	Geranium dissectum	cut-leaved geranium
	Geranium robertianum	Robert's geranium
<i>Hippocastanaceae</i>		
	Aesculus californica	California buckeye
<i>Iridaceae</i>		
	Sisyrinchium bellum	blue-eyed grass
<i>Juglandaceae</i>		
	Juglans regia	English walnut
<i>Juncaceae</i>		
	Juncus bufonius	toad rush
	Juncus tenuis	poverty rush
	Juncus xiphioides	iris-leaved rush
<i>Juncaginaceae</i>		
	Lilaea scilloides	flowering quillwort
<i>Lamiaceae</i>		
	Marrubium vulgare	horehound
	Mentha pulegium	pennyroyal
	Stachys bullata	southern hedge-nettle
<i>Liliaceae</i>		
	Calochortus luteus	yellow mariposa
	Chlorogalum pomeridianum	soaproot
<i>Lythraceae</i>		
	Lythrum hyssopifolium	hyssop loosestrife
<i>Malvaceae</i>		
	Malva parviflora	cheeseweed
<i>Moraceae</i>		
	Ficus carica	common fig
<i>Oleaceae</i>		
	Olea europaea	olive
<i>Onagraceae</i>		
	Camissonia ovata	sun-cup
	Clarkia unguiculata	woodland clarkia
	Epilobium brachycarpum	autumn willowweed
<i>Oxalidaceae</i>		
	Oxalis pes-caprae	Bermuda buttercup
<i>Papaveraceae</i>		
	Eschscholzia californica	California poppy
<i>Pinaceae</i>		

Family	Scientific Name	Common Name
	<i>Pinus radiata</i>	Monterey pine
<i>Plantaginaceae</i>		
	<i>Plantago erecta</i>	California plantain
	<i>Plantago lanceolata</i>	English plantain
<i>Poaceae</i>		
	<i>Aira caryophyllea</i>	silver hairgrass
	<i>Avena barbata</i>	slender wild oats
	<i>Brachypodium distachyon</i>	purple false-brome
	<i>Briza maxima</i>	big quaking grass
	<i>Briza minor</i>	little quaking grass
	<i>Bromus diandrus</i>	riggut brome
	<i>Bromus hordeaceus</i>	soft chess
	<i>Cynosurus echinatus</i>	hedgehog dogtail-grass
	<i>Dactylis glomerata</i>	orchard-grass
	<i>Elymus elymoides</i>	squirreltail
	<i>Gastridium ventricosum</i>	nit grass
	<i>Hordeum brachyantherum</i>	meadow barley
	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	foxtail barley
	<i>Lolium multiflorum</i>	Italian rye-grass
	<i>Melica californica</i>	California melic
	<i>Nassella pulchra</i>	purple needlegrass
	<i>Pleuropogon californicus</i>	semaphore grass
	<i>Poa annua</i>	annual blue grass
	<i>Vulpia bromoides</i>	brome fescue
	<i>Vulpia myuros</i>	rattail fescue
<i>Polygonaceae</i>		
	<i>Rumex acetosella</i>	common sheep sorrel
	<i>Rumex crispus</i>	curly dock
	<i>Rumex occidentalis</i>	western dock
	<i>Rumex pulcher</i>	fiddle dock
<i>Portulacaceae</i>		
	<i>Claytonia perfoliata</i>	miner's lettuce
<i>Primulaceae</i>		
	<i>Anagallis arvensis</i>	scarlet pimpernel
<i>Ranunculaceae</i>		
	<i>Ranunculus californicus</i>	California buttercup
	<i>Ranunculus muricatus</i>	spiny buttercup
<i>Rhamnaceae</i>		

Family	Scientific Name	Common Name
	Rhamnus californica	California coffeeberry
<i>Rosaceae</i>		
	Heteromeles arbutifolia	toyon
	Malus sylvestris	domestic apple
	Prunus cerasifera	cherry plum
	Prunus dulcis	almond
	Pyracantha angustifolia	firethorn
	Rubus discolor	Himalaya-berry
<i>Rubiaceae</i>		
	Galium aparine	common bedstraw
	Galium parisiense	wall bedstraw
	Sherardia arvensis	field madder
<i>Saxifragaceae</i>		
	Lithophragma affine	common woodland star
<i>Scrophulariaceae</i>		
	Castilleja exserta ssp. exserta	purple owl's clover
	Parentucellia viscosa	yellow parentucellia
	Triphysaria pusilla	little owl's clover
	Verbascum blattaria	moth mullein
<i>Solanaceae</i>		
	Solanum sisymbriifolium	sticky nightshade
<i>Urticaceae</i>		
	Urtica urens	dwarf nettle

Table 3. Animal Species Observed on the Project Site or Expected to Utilize the Project Site

MAMMALS

Virginia Opossum	<i>Didelphis virginiana</i>
Broad-footed Mole	<i>Scapanus latimanus</i>
California Myotis	<i>Myotis californicus</i>
Yuma Myotis	<i>Myotis yumanensis</i>
Western Pipistrelle	<i>Pipistrellus hesperus</i>
Big Brown Bat	<i>Eptesicus fuscus</i>
Red Bat	<i>Lasiurus borealis</i>
Pallid Bat	<i>Antrozous pallidus</i>
Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>
* Western Gray Squirrel	<i>Sciurus griseus</i>
* California Ground Squirrel	<i>Spermophilus beecheyi</i>
* Black-tailed Jackrabbit	<i>Lepus californicus</i>
Desert Cottontail	<i>Sylvilagus audubonii</i>
* Botta's Pocket Gopher	<i>Thomomys bottae</i>
California Pocket Mouse	<i>Chaetodipus californicus</i>
Western Harvest Mouse	<i>Reithrodontomys megalotis</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Dusky-footed Woodrat	<i>Neotoma fuscipes</i>
California Vole	<i>Microtus californicus</i>
Norway Rat	<i>Rattus norvegicus</i>
House Mouse	<i>Mus musculus</i>
* Coyote	<i>Canis latrans</i>
Red Fox	<i>Vulpes fulva</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Raccoon	<i>Procyon lotor</i>
Long-tailed Weasel	<i>Mustela frenata</i>
Striped Skunk	<i>Mephitis mephitis</i>
Bobcat	<i>Felis rufus</i>
Mule Deer	<i>Odocoileus hemionus</i>

REPTILES AND AMPHIBIANS

Ensatina	<i>Ensatina eschscholtzi</i>
California Slender Salamander	<i>Batrachoseps attenuatus</i>
* Arboreal Salamander	<i>Aneides lugubris</i>
Pacific Treefrog	<i>Hyla regilla</i>
**Western Toad	<i>Bufo boreas</i>
* Western Fence Lizard	<i>Sceloporus occidentalis</i>
Western Skink	<i>Eumeces skiltonianus</i>
Northern Alligator Lizard	<i>Gerrhonotus coeruleus</i>
Ringneck Snake	<i>Diadophis punctatus</i>
Sharp-tailed Snake	<i>Contia tenuis</i>
Racer	<i>Coluber constrictor</i>

Gopher Snake
Common Kingsnake
Common Garter Snake
Night Snake
Western Rattlesnake

Pituophis melanoleucus
Lampropeltis getulus
Thamnophis sirtalis elegans
Hypsiglena torquata
Crotalis viridus

BIRDS

* Turkey Vulture
White-tailed Kite
Northern Harrier
* Sharp-shinned Hawk
* Cooper's Hawk
* Red-shouldered Hawk
* Red-tailed Hawk
**Golden Eagle
* American Kestrel
Prairie Falcon
Peregrine Falcon
Merlin
* Wild Turkey
* California Quail
* Killdeer
Wilson's Snipe
Ring-billed Gull
California Gull
* Rock Pigeon
* Mourning Dove
* Band-tailed Pigeon
Barn Owl
Great Horned Owl
Western Screech-owl
* White-throated Swift
* Anna's Hummingbird
Lewis' Woodpecker
* Acorn Woodpecker
Red-breasted Sapsucker
* Northern Flicker
* Nuttall's Woodpecker
* Hairy Woodpecker
* Downy Woodpecker
* Black Phoebe
* Say's Phoebe
Olive-sided Flycatcher
Western Wood-pewee
Pacific-slope Flycatcher

Cathartes aura
Elanus caeruleus
Circus cyaneus
Accipiter striatus
Accipiter cooperi
Buteo lineatus
Buteo jamaicensis
Aquila chrysaetos
Falco sparverius
Falco mexicanus
Falco peregrinus
Falco columbarius
Meleagris gallopavo
Callipepla californica
Charadrius vociferus
Gallinago delicata
Larus delawarensis
Larus californicus
Columba livia
Zenaida macroura
Columba fasciata
Tyto alba
Bubo virginianus
Otus kennicottii
Aeronautes saxatalis
Calypte annas
Malanerpes lewis
Melanerpes formicivorus
Sphyrapicus ruber
Colaptes auratus
Picoides nuttallii
Picoides villosus
Dendrocopos pubescens
Sayornis nigricans
Sayornis saya
Contopus borealis
Contopus sordidulus
Empidonax difficilis

* Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
* Western Kingbird	<i>Tyrannus verticalis</i>
California Horned Lark	<i>Eremophila alpestris</i>
* Barn Swallow	<i>Hirundo rustica</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
* Tree Swallow	<i>Tachycineta bicolor</i>
* Violet-green Swallow	<i>Tachycineta thalassina</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
* Western Scrub-jay	<i>Aphelocoma californica</i>
* Stellar's Jay	<i>Cyanocitta stellari</i>
* Common Raven	<i>Corvus corax</i>
* American Crow	<i>Corvus brachyrhynchos</i>
Chestnut-backed Chickadee	<i>Parus rufescens</i>
* Oak Titmouse	<i>Baeolophus inornatus</i>
* Common Bushtit	<i>Psaltriparus minimus</i>
* White-breasted Nuthatch	<i>Sitta carolinensis</i>
* Bewick's Wren	<i>Thryomanes bewickii</i>
House Wren	<i>Troglodytes aedon</i>
Winter Wren	<i>Troglodytes troglodytes</i>
* American Robin	<i>Turdus migratorius</i>
Hermit Thrush	<i>Hylocichla guttata</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
* Western Bluebird	<i>Sialia mexicana</i>
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>
* Ruby-crowned Kinglet	<i>Regulus calendula</i>
* Northern Mockingbird	<i>Mimus polyglottos</i>
American Pipit	<i>Anthus rubescens</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
* European Starling	<i>Sturnus vulgaris</i>
* Hutton's Vireo	<i>Vireo huttoni</i>
* Orange-crowned Warbler	<i>Vermivora celata</i>
Nashville Warbler	<i>Vermivora ruficapilla</i>
Yellow Warbler	<i>Dendroica petechia</i>
* Yellow-rumped Warbler	<i>Dendroica coronata</i>
Townsend's Warbler	<i>Dendroica townsendi</i>
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
Western Tanager	<i>Piranga ludoviciana</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Lazuli Bunting	<i>Passerina amoena</i>
* Spotted Towhee	<i>Pipilo maculatus</i>
* California Towhee	<i>Pipilo crissalis</i>
Chipping Sparrow	<i>Spizella passerina</i>
* Savannah Sparrow	<i>Passerculus sandwichensis</i>

- * Lark Sparrow
- * White-crowned Sparrow
- * Golden-crowned Sparrow
- Fox Sparrow
- * Song Sparrow
- Lincoln's Sparrow
- * Dark-eyed Junco
- * Western Meadowlark
- * Red-winged Blackbird
- * Brewer's Blackbird
- Brown-headed Cowbird
- * Bullock's Oriole
- * Purple Finch
- * House Finch
- Pine Siskin
- * American Goldfinch
- * Lesser Goldfinch
- * Evening Grosbeak
- * House Sparrow

Chondestes grammacus
Zonotrichia leucophrys
Zonotrichia atricapilla
Passerella iliaca
Melospiza melodia
Melospiza lincolnii
Junco hyemalis
Sturnella neglecta
Agelaius phoeniceus
Euphagus cyanocephalus
Molothrus ater
Icterus bullockii
Carpodacus purpureus
Carpodacus mexicanus
Carduelis pinus
Spinus tristis
Spinus psaltria
Coccothraustes vespertinus
Passer domesticus

*Observed at the project site by HBG biologists during a field reviews conducted on January 10 and May 9, 2011.

**Additional species observed by Zander Associates in 1998.

Mayer and Laudenslayer (1988)
 National Geographic Society (2006)
 Reid (2006)
 Sibley (2000)
 Stebbins (2003)
 Zeiner et al. (1990a, 1990b, 1990c)

Table 4. Special Status Animal Species that Have Been Reported in the Vicinity of the Napa Oaks Project Plan Area, Napa, California

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Invertebrates			
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	FT/--	Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains in astatic rain-filled pools. Has occurred in inundated depressions at the south end of the Napa Airport, about 6 miles southeast of the site.	Unlikely. Suitable habitat is not present at the site.
Conservancy Fairy Shrimp (<i>Branchinecta conservatio</i>)	FE/--	Inhabits large vernal pools, often with turbid water; known from fewer than 15 occurrences in the Delta (Jepson Prairie) and Central Valley. Not known to occur within 10 miles of the site	Unlikely. Suitable habitat is not present at the site.
Valley Elderberry Longhorn Beetle (<i>Desmocerus californicus dimorphus</i>)	FT/--	Inhabits blue elderberry bushes (host plant); restricted to the Central Valley and adjacent foothills.	Unlikely. Suitable habitat is not present at the site.
Callippe Silverspot Butterfly (<i>Speyeria callippe callippe</i>)	FE/--	Habitat for this species is grassland, often with a significant component of native grasses including the host plant (<i>Viola pedunculata</i>) and characterized by shallow rocky soils and numerous rock outcrops.	Unlikely. Site is outside of the range of the endangered subspecies of Callippe silverspot butterfly.
Myrtle's Silverspot Butterfly (<i>Speyeria zerene myrtleae</i>)	FE/--	Coastal hills; larvae feed on <i>viola adunca</i> .	Unlikely. Site is outside of the range of the species.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
California freshwater shrimp (<i>Syncaris pacifica</i>)	FE/CE	Found in shallow pools away from the main streamflow in low elevation, low gradient streams where riparian cover is moderate to heavy. Endemic to Marin, Napa and Sonoma Counties. In winter prefer undercut banks with exposed roots; in summer prefer areas where leafy branches touch water surface. Found in Huichica Creek, 3 miles southwest of the site.	Unlikely. Suitable habitat is not present at the site.
Fish			
Green Sturgeon (<i>Acipenser medirostris</i>)	FPT/CSC	Found in streams, rivers, and estuarine habitat as well as marine waters during their lifecycle. Spawn in lower reaches of large rivers with swift currents and large cobble. Found spawning in the Sacramento, Klamath and Rogue Rivers.	Unlikely. Suitable habitat is not present onsite; no large river systems.
Tidewater Goby (<i>Eucyclogobius newberryi</i>)	FE/CSC	Brackish water habitats along the Calif. Coast from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Unlikely. Suitable habitat is not present on the site. Not known from the project vicinity.
Delta Smelt (<i>Hypomesus transpacificus</i>)	FT/CT	During spawning they migrate upstream into shallow fresh or slightly brackish tidally-influenced backwater sloughs and channel edges.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.
Coho Salmon-Central California Coast ESU (<i>Oncorhynchus kisutch</i>)	CE ³ /FE ⁴	Coho Salmon spawn in streams that are narrow, shallow, clear, and cold with a strong upwelling of water through the gravel. This ESU encompasses the area from Punta Gorda in northern California south to and including tributaries to San Francisco Bay, excluding the Sacramento-San Joaquin river system.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
Steelhead-Central California Coastal ESU (<i>Oncorhynchus mykiss</i>)	FT ⁵ /--	Steelhead spawn in streams that are shallow, clear, and cold with a strong upwelling of water through the gravel. The ESU encompasses the San Pablo Bay/Napa River watersheds. Found in Huichica Creek southwest of the project site.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.
Steelhead-Central Valley ESU (<i>Oncorhynchus mykiss</i>).	FT ⁶ /--	Steelhead spawn in streams that are shallow, clear, and cold with a strong upwelling of water through the gravel. The ESU encompasses the Suisun Bay/Sacramento River Delta watersheds.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.
Chinook Salmon Central Valley spring-run (<i>Oncorhynchus tshawytscha</i>).	FT ⁷ /CT	Chinook salmon choose to spawn in streams that are shallow, clear, and cold with a strong upwelling of water through the gravel. The ESU encompasses the Sacramento River and its tributaries.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.
Chinook Salmon Winter-Run Sacramento River (<i>Oncorhynchus tshawytscha</i>)	FE/CE	Chinook Salmon spawn in streams that are shallow, clear, and cold with a strong upwelling of water through the gravel. The ESU includes populations of winter-run Chinook Salmon in the Sacramento River and its tributaries.	Unlikely. Suitable habitat is not present onsite; no large river systems or suitable spawning streams.
Amphibians			
California Tiger Salamander (<i>Ambystoma californiense</i>)	FT/CSC	Found in annual grasslands and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water source for breeding. No records within 10 miles of the site.	Unlikely. A Phase 1 Habitat Assessment concluded that the site is outside the normal range of the species. Also would not be present in local farm ponds due to the presence of bullfrogs and predatory fish. The species is not present in the project area.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
California Red-legged Frog (<i>Rana aurora draytonii</i>)	FT/CSC	Mostly found in lowlands and foothills in/near permanent sources of deep water but will disperse far during and after rain. Prefers shorelines with extensive vegetation. Requires 11-20 weeks of permanent water for larval development and requires access to estivation habitat. Nearest location is approximately 8 miles to the south-southeast of the site in the hills in the vicinity of Napa Junction.	Unlikely. A Phase 1 Habitat Assessment concluded that the species is not present in the project area due to climatic conditions that have resulted in extirpation of the species from the Napa vicinity and the presence of bullfrogs and predatory fish in local farm ponds.
Foothill Yellow-legged Frog (<i>Rana boylei</i>)	--/CSC	Partly shaded shallow streams with riffles, with a rocky substrate in a variety of habitats; needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Frogs are usually found on stream banks, especially near riffles. They do not leave the immediate vicinity of their stream or pool. The nearest known sighting of this species is along Redwood Creek about 5 miles northwest of the site.	Unlikely. No suitable habitat on site. Wetlands at the site are not considered suitable habitat for Foothill Yellow-legged Frog.
Reptiles			
Western Pond Turtle (<i>Actinemys marmorata</i>)	FSC/CSC	Aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat for egg-laying (sandy banks or grassy open fields). The nearest location noted in the CNDDDB is at a duck pond at the south end of Napa about 2 miles southeast of the site.	Possible. Suitable breeding habitat is not present on site due to the absence of wetlands with sufficient inundation, but individuals were observed within irrigation ponds on adjacent properties. Setbacks and use of silt fencing would prevent movement of individuals onto the site during construction of the project.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
Giant Garter Snake (<i>Thamnophis gigas</i>)	FT/CT	Utilizes marshes, sloughs, small lakes, low gradient streams, ponds, agricultural wetlands (irrigation and drainage canals) and adjacent uplands. Not known to occur within 10 miles of the site.	Unlikely. Suitable habitat not present at the site. Not known to occur in project area.
Birds			
California Brown Pelican (<i>Pelecanus occidentalis californicus</i>) (nesting colony and communal roosts)	FE/CE (CFP)	Found in estuarine, marine, subtidal, and marine pelagic waters along California coast. Nest is a small mound of sticks or debris on rocky or low brushy slopes of undisturbed islands, usually on ground, less often bushes.	Unlikely. Suitable habitat for a nesting colony or communal roost is not present on site.
California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	--/CT (CFP)	Inhabits tidal salt and brackish marsh bordering sloughs and large bays. Nearest known location is about 5 miles from the site west of the Napa County Airport at Bull Island.	Unlikely. Suitable habitat not present at the site.
California Clapper Rail (<i>Rallus longirostris obsoletus</i>)	FE/CE (CFP)	Inhabits tidal salt marsh along larger sloughs and bays in the SF Bay and lower Delta. Nearest known location is about 5 miles from the site west of the Napa County Airport at Bull Island	Unlikely. Suitable habitat is not present at the site.
Western Snowy Plover (<i>Charadrius alexandrinus nivosus</i>) (nesting) (coastal population)	FT/CSC	In the San Francisco Estuary, salt pond levees and exposed salt pond beds (playa-like habitat), San Francisco Bay; rare in San Pablo Bay. Typical coastal habitat is on wide, sandy beaches with scattered debris. Nearest known sighting between Huichica Creek and Coon Island about 6 miles south of the site.	Unlikely. Appropriate nesting habitat is not present on the study site.
California Least Tern (<i>Sterna antillarum browni</i>) (nesting colony)	FE/CE (CFP)	Nests on coastal, sandy, open areas usually around bays, estuaries, and creek and river mouths. Forages in shallow estuaries and lagoons, diving head first into the water after a wide variety of small fish.	Unlikely. Suitable habitat for a nesting colony is not present on site.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
Northern Harrier (<i>Circus cyaneus</i>) [Nesting]	--/CSC	Coastal salt marsh and freshwater marsh; nests and forages in grasslands; nests on ground in shrubby vegetation, usually at marsh edge.	Nesting unlikely. Appropriate nesting habitat is present in the project area and the species would be expected to forage on or near the site.
White-tailed Kite (<i>Elanus caeruleus</i>) [Nesting]	--/CFP	Open grassland and agricultural areas throughout Central California.	Nesting unlikely. Appropriate nesting habitat is present in the project area and the species would be expected to forage on or near the site, at any time of year.
Sharp-shinned Hawk (<i>Accipiter striatus</i>) [Nesting]	--/CSC	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. Northfacing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter.	Nesting unlikely. Appropriate nesting habitat not present on site. Species likely forages on or near the site, especially in winter. One observed by Rana Resources in February 2011.
Cooper's Hawk (<i>Accipiter cooperii</i>) [Nesting]	--/CSC	Nests primarily in deciduous riparian forests; forages in open woodlands.	Nesting unlikely. Appropriate nesting habitat not present on site. Species likely forages on or near the site, especially in winter. Observed by HBG in January 2011.
Ferruginous Hawk (<i>Bufo regalis</i>) [Wintering]	FSC/CSC	Inhabits open country. Winters in small number along California coast and inland valleys. Has been recorded as a wintering species in south Napa in the area south of Soscol Creek.	Wintering possible. The species may utilize the site as a winter foraging habitat.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
Swainson's Hawk (nesting) <i>(Buteo swainsoni)</i>	--/CT	Nests in trees and riparian stands; summer migrant to Central Valley. Suitable foraging areas include grasslands, pastures, alfalfa and other hay crops, and certain grain and row croplands. Nested in 2005 along Suscol Creek in south Napa just over 4 miles from the site.	Nesting unlikely. Nests unlikely on the property due to a lack of suitable trees. The site provides suitable foraging habitat for this species.
Golden Eagle <i>(Aquila chrysaetos)</i> [Nesting and wintering]	--/CSC	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	Wintering possible. The species likely utilizes the site as a winter foraging habitat.
Merlin <i>(Falco columbarius)</i> [Wintering]	--/CSC	Breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	Wintering possible. The species may utilize the site as a winter foraging habitat.
Burrowing Owl <i>(Athene cunicularia)</i>	FSC/CSC	Found in open dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. This species is a subterranean nester, dependent upon the burrows of burrowing mammals, most notably the California ground squirrel. Nearest occurrence documented in the CNDDDB is at Skaggs Island over 8 miles from the site.	Possible. No burrowing owls were observed during site surveys. Pre-construction surveys in areas of existing ground squirrel burrows should be conducted.
Northern spotted owl <i>(Strix occidentalis caurina)</i>	FT/--	Northern spotted owls are typically found in mature coniferous forests. This owl species does not construct a nest so existing nest structures or cavities must be available.	Unlikely. Suitable habitat not present on the site.
California Horned Lark <i>(Eremophila alpestris actia)</i>	--/CSC	Resident in a variety of open habitats, including grasslands, less common in mountain regions.	Possible. Suitable nesting habitat occurs, though not observed during nesting season surveys. Preconstruction surveys are warranted.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	FSC/CSC	Habitat includes open areas such as desert, grasslands and savannah. Nests in thickly foliated trees or tall shrubs. Forages in open habitats, which contain trees, fence posts, utility poles, and other perches.	Possible. Suitable nesting habitat occurs, though not observed during nesting season surveys. Preconstruction surveys are warranted.
Yellow Warbler (<i>Dendroica petechia</i>) [Nesting]	--/CSC	Breeds in deciduous riparian woodlands, widespread during fall mitigation.	Nesting unlikely. No breeding habitat on site, migrants expected on site, especially in fall.
Saltmarsh Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	FSC/CSC	Forages and nests in dense fresh and saltwater marsh habitat in the San Francisco Bay and lower Delta. Requires thick continuous cover down to the water surface for foraging; tall grasses, tule patches or willows for nesting. Has nested along the Napa River north of Imola Avenue just over about a mile from the site.	Unlikely. Suitable habitat is not present at the site.
San Pablo Song Sparrow (<i>Melospiza melodia samuelis</i>)	--/CSC	Tidal, brackish or salt marshes, San Pablo Bay. Has occurred near Hudeman Slough about 6 miles south of the site.	Unlikely. Site is outside the limited range of this species.
Tri-colored Blackbird (<i>Agelaius tricolor</i>) [Nesting colony]	FSC/CSC	Breeds near freshwater, usually in tall emergent vegetation. Requires open water with protected nesting substrate. Colonies prefer heavy growth of cattails and tules. Uses grasslands and agricultural lands for foraging. Approximately 100 individuals nested in 1993 in a freshwater marsh just north of the Highway 29 bridge on the south end of Napa about 3 miles southeast of the site.	Nesting unlikely. Appropriate nesting habitat not present on site.
Mammals			
Salt Marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	FE/CE (CFP)	Inhabits pickleweed salt marsh flats in the SF Bay and lower Delta. Surveys for construction of the Highway 12 bridge over the Napa River found to individuals.	Unlikely. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE/CNPS 2	HABITAT	OCCURRENCE ON THE PROJECT SITE
American badger (<i>Taxidea taxus</i>)	--/CSC	Drier open stages of most shrub, forest, and herbaceous habitats; needs sufficient food, friable soils and open, uncultivated ground. Publications from 1937 indicate the presence of the species in Napa.	Unlikely. Suitable habitat is not present at the site.
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Found in deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in rocky areas primarily in oak woodland and ponderosa pine habitats; forages in open areas. Present at a former roost site in a rural residential area on Sheveland Lane just over a mile from the site.	Possible. Relocated bats from an extirpated roost site in the vicinity could be present in the unoccupied house and ranch buildings present at the site. Bat surveys are necessary prior to construction and mitigation may be warranted.

Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Game for the Napa 7.5 Minute Quadrangle Map and surrounding areas, information dated January 2011.

2. Status Codes:

FE Federally Endangered
 FT Federally Threatened
 FPE Federally Proposed Endangered
 FPT Federally Proposed Threatened
 FSC Federal Species of Concern (most are former C2 Candidates and some former C1)
 CE California Endangered
 CT California Threatened
 CR California Rare
 CFP California Fully Protected
 CSC California Species of Special Concern
 CNPS 1A Plants Presumed Extinct in California
 CNPS 1B Plants Rare, Threatened or Endangered in California or elsewhere
 CNPS LIST 2 Plants Rare, Threatened or Endangered in California, but more common elsewhere

² Status Codes:

FE Federally Endangered
 FT Federally Threatened
 FPE Federally Proposed Endangered
 FPT Federally Proposed Threatened
 FSC Federal Species of Concern (most are former C2 Candidates and some former C1)
 CE California Endangered

CT California Threatened
CR California Rare
CFP California Fully Protected
CSC California Species of Special Concern
SLC Species of Local Concern – other species of concern to the Sacramento Fish and Wildlife office

³ The state listing is limited to Coho south of San Francisco Bay.

⁴ The Federal listing is limited to naturally spawning populations in streams between Punta Gorda, Humboldt County and the San Lorenzo River, Santa Cruz County.

⁵ Federal listing includes all runs in coastal basins from the Russian River in Sonoma County, south to Soquel Creek in Santa Cruz County, inclusive. Includes the San Francisco and San Pablo Bay basins, but excludes Sacramento-San Joaquin River basins.

⁶ Federal listing includes all runs in the Sacramento and San Joaquin Rivers and their tributaries.

⁷ Federal listing refers to Central Valley Spring-run ESU. It includes population spawning in the Sacramento River and its tributaries.

ATTACHMENT 3

**2011 Botanical Survey, Napa Oaks Project, Napa, California. Prepared by Virginia Dains.
July 2011.**

2011 Botanical Survey

NAPA OAKS PROJECT

NAPA, CALIFORNIA

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July 2011

INTRODUCTION

At the request of Huffman-Broadway Group, Inc. (HBA) of San Rafael, Ca., I have conducted a floristic survey of the 80 acre Napa Oaks property on the west side of Napa, California (Assessor's parcels #043-040-008, 043-040-010, 043-040-13 and 043-040-025). A development project is planned for the property that includes the construction of 54 single family residential units. This report describes botanical survey methods, findings, and recommendations pertaining to special status plant species for the Napa Oaks project site. A statement of my qualifications to perform this work is attached.

Special-status plant species addressed in this survey and report include:

- species listed as Threatened or Endangered under provisions of the federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et. seq., as amended) (U.S. Fish and Wildlife Service [USFWS] 2007a)
- species listed as Rare, Threatened, or Endangered by the state of California under provisions of the 1984 California Endangered Species Act (CESA) and the 1977 Native Plant Protection Act (NPPA) (California Department of Fish and Game [CDFG] 2007).
- Plant species formally proposed for federal listing by the U.S. Fish and Wildlife Service (taxa for which a proposed rule has been published in the Federal Register; USFWS 2007b) are afforded limited legal protection under ESA, and federal Candidate species (USFWS 2007c)
- Plants found on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001; CNPS 2007).
- Plants included on List 3 (Plants About Which We Need More Information—A Review List) and List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*.

METHODS

Prior to field surveys, I consulted background material from the California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) to determine what rare, threatened or endangered plant species are known currently or historically from the project vicinity. I reviewed the results of a prior floristic study conducted by Zander Associates between January and April, 1998. A true color aerial photograph (approximately 1"=250') showing the project boundary was provided by HBA to use during field surveys.

Special status plants found historically or currently in the vicinity of the Napa Oaks property are listed on table 1. Species known from plant communities that are present on the property have some potential to occur at Napa Oaks. Plant communities found on the Napa Oaks property as described by HBA include annual grassland (49.73 acres), valley foothill hardwood (Coast live oak woodland, 26.97 acres), fresh emergent marsh (1.21 acres) and Urban (2.73 acres).

Annual grassland and oak woodland communities in the Napa area are known to support nine special status plants including:

- Early spring flowering species:
 - Franciscan onion (*Allium peninsulare* var. *franciscanum*)—March -June
 - Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) – March-June
- Spring flowering species:
 - Cobb mountain lupine (*Lupinus sericatus*) -- April-May
 - Clara Hunt’s milk-vetch (*Astragalus clarianus*) – April-May
 - showy Indian clover (*Trifolium amoenum*) – April -June
- Summer flowering species:
 - Napa blue curls (*Trichostemma ruygtii*) –June-October
 - seaside tarplant (*Hemizonia congesta* ssp. *congesta*) – May-October
 - Napa false indigo (*Amorpha californica* var. *napensis*) – May-July
 - oval-leaved viburnum (*Viburnum ellipticum*) – May-June

The field surveys were timed in order to observe these plants during their flowering periods. Surveys were conducted on the Napa Oaks property on March 29, April 28, and June 15, 2011. The entire site was observed during field surveys by walking meandering transects through individual patches of habitat. Plant species encountered were identified and included on a general list of plants observed over the course of the spring. This list is attached at the end of this report. No herbarium collections were made.

FINDINGS

No special status plant species were observed on the Napa Oaks property during floristic surveys conducted from March to June, 2011. No known or historic collections or observations of special status plants have been described from the site. Several factors can help explain the lack of special status plants in what might appear to be appropriate habitat.

The plant communities present on the Napa Oaks property are unprotected from grazing animals. Annual grasslands cover most of the site, but it is comprised mostly of introduced forage species. Much of the open rolling hills are dominated by sub-clover, rose clover, and soft chess. Sub-clover is a low dense crop that persists in heavily grazed areas. Later in the spring, the annual grassland supports thick patches of unpalatable exotics notably yellow bartsia (*Parentucellia viscosa*) and purple star thistle (*Centaurea calcytrapa*). Neither of these invasive species were observed in the 1998 plant survey suggesting that the habitat value of the annual grasslands on the site have degraded over the past 10 years.

The annual grassland does support some native plant spring wildflowers such as sun-cups (*Camissonia ovata*) and purple owl’s clover (*Castilleja exserta* ssp. *exserta*) as well as patches of native perennial needlegrass (*Nasella pulchra*). These species are either unpalatable to cattle or flourish later in the year when grazing animals have been removed.

The impact of grazing and shading of cattle under the oak canopy has left an understory largely dominated by the noxious and invasive Italian thistle (*Carduus pycnocephalus*) or milk thistle (*Silybum marianum*). Wooded areas with dense canopy cover on shaded north slopes are largely un-vegetated but with soil churned by cattle. Open dry areas in the oak woodlands are covered with dogtail (*Cynosurus echinatus*). The vegetation of wetland seeps has also been impacted by cattle. Pennyroyal (*Mentha pulegium*), a strong scented perennial herb, is a dominant plant in hillside seeps and drainages.

Earthwork and loss of natural soils have also affected the habitat suitability for special status plants. Portions of the property have been altered in the past by earth moving that has left broken rocky substrates that now support sapling live oaks. These young trees are pruned by grazing animals and form "clumps". The dense canopy of some young oak trees provide protected sites for locally occurring and common chaparral shrubs such as toyon (*Heteromeles arbutifolia*), and some horticultural escapes including plum (*Prunus cerasifera*) and viburnum (*Viburnum tinus*). These areas also support some common native plants such as purple needle grass (*Nasella pulchra*) and California poppy (*Eschscholzia californica*).

Because the surveys were floristic in nature, special status plants were sought in all habitats (plant communities) but special attention was given to those few areas such as protected rocky outcrops, thin soils or steeper slopes, or areas supporting groups of native plants where grazing pressure was reduced or special habitats existed. In some cases common relatives of special status plants were present on the property such as members of the genera *Castilleja*, *Lupinus*, *Trifolium* and, *Viburnum*. The list of all species observed over the survey is attached.

RECOMMENDATIONS

No avoidance or mitigation for special status plants is required for the Napa Oaks development project. No further botanical surveys are recommended.

Table 1 Special Status Plant Known To Occur In The Vicinity Of The Napa Oaks Project Site

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE ON THE NAPA OAKS PROPERTY
Franciscan onion (<i>Allium peninsulare</i> var. <i>franciscanum</i>)	--/--/1B	On clay soils on dry hillsides, often on serpentine, in cismontane woodland and valley and foothill grassland. 100-300m. Nearest location is a half mile north of Sonoma, over 8 miles from the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Napa false indigo (<i>Amorpha californica</i> var. <i>napensis</i>)	--/--/1B	Broad-leaved upland forest, chaparral, cismontane woodland; openings in forest or woodland or in chaparral (150-2000m). Nearest location is at Patrick Road about 5 miles northwest of the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Clara Hunt's milk-vetch (<i>Astragalus clarianus</i>)	FE/CT/1B	Inhabits open grassy hillsides in thin, volcanic clay soils in cismontane woodland, valley and foothill grassland and chaparral. Not known to occur within 10 miles of the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
San Joaquin sparscale (<i>Atriplex joaquiniana</i>)	--/--/1B	Chenopod scrub, alkali meadow in valley and foothill grassland. Alkali scrub and mesic grasslands in the Delta and Central Valley basin. 1-250m. Known from within Napa about a mile from the site.	Not present. Potential habitat is absent.
Big-scale (California) balsamroot (<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>)	SLC/--/1B	Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentinite; 90-1400m. Nearest location is over 8 miles east of the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Sonoma sunshine (<i>Blennosperma bakeri</i>)	FE/CE/1B	Vernal pools and swales in valley and foothill grassland. 10-100m. Nearest location is north of Sonoma over 8 miles from the site.	Not present. Potential habitat is absent.
Narrow-anthered California brodiaea (<i>Brodiaea californica</i> var. <i>leptandra</i>)	--/--/1B	Broadleaved upland forest, chaparral, lower montane coniferous forest. 110-915m. Nearest location is at Arrowhead Mountain about 5 miles west of the site.	Not present. Potential habitat is absent.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE ON THE NAPA OAKS PROPERTY
Tiburon Indian paintbrush (<i>Castilleja affinis</i> ssp. <i>neglecta</i>)	FE/CT/1B	Rocky serpentine sites in valley and foothill grasslands. 75-400 m. Nearest location is in American Canyon nearly 10 miles from the site.	Not present. Potential habitat is absent.
Holly-leaved ceanothus (<i>Ceanothus purpureus</i>)	SLC/--/--	Rocky volcanic slopes in chaparral. 120-640m. Nearest location is near Sugarloaf Summit about 4 miles east of the site.	Not present. Potential habitat is absent.
Sonoma Ceanothus (<i>Ceanothus sonomensis</i>)	--/--/1B	On sandy, serpentine or volcanic soils in chaparral. 210-800m. Nearest location is along the Sonoma/Napa County line about 6 miles west of the site.	Not present. Potential habitat is absent.
Pappose tarplant (<i>Centromadia parryi</i> ssp. <i>parryi</i>)	SLC/--/1B	Vernally mesic, often alkaline sites in coastal prairie, meadows and seeps, coastal salt marsh and valley and foothill grassland. Nearest location is near Highway 121 about 8.5 miles from the site.	Not present. Potential habitat is absent.
Soft bird's-beak (<i>Cordylanthus mollis</i> ssp. <i>mollis</i>)	FE/CR/1B	Inhabits brackish tidal marsh and seasonal alkali marsh. 0-3m. Known from fewer than 20 populations in Contra Costa, Napa, and Solano Counties. Nearest location is southwest of Cuttings Wharf over 5 miles from the site.	Not present. Potential habitat is absent.
Dwarf downingia (<i>Downingia pusilla</i>)	--/--/2	Margins of vernal pools; mesic sites in valley and foothill grassland. 1-485m. Nearest location is near Highway 12/121 about 5 miles south of the site.	Not present. Potential habitat is absent.
Greene's narrow-leaved daisy (<i>Erigeron greenei</i>)	--/--/1B	Serpentine and volcanic substrates in chaparral. 75-1060m. Nearest location is at Soda Creek Canyon between Napa and Yountville about 7 miles north of the site.	Not present. Potential habitat is absent.
Seaside tarplant (<i>Hemizonia congesta</i> ssp. <i>congesta</i>)	--/--/1B	Grassy valleys and hills, often in fallow fields, in coastal scrub and valley and foothill grassland. Nearest location is south of Sonoma, over 8 miles from the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Northern California black walnut (<i>Juglans hindsii</i>)	--/--/1B	In deep alluvial soils associated with a stream or creek; in riparian forest and riparian woodland. 0-395m. Known from a Napa City Park just over a mile from the site.	Not present. Potential habitat is absent.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE ON THE NAPA OAKS PROPERTY
Contra Costa Goldfields (<i>Lasthenia conjugens</i>)	FE/--/1B	Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Extirpated from most of its range. Most remaining occurrences restricted to the Fairfield region. Occurs near Highway 121 near the Napa River.	Not present. Potential habitat is absent.
Delta Tule Pea (<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>)	--/--/1B	Inhabits the banks of sloughs and bays in the Suisun Bay and Delta. Found in freshwater and brackish marshes. Nearest location is along the Napa River near the Maxwell Bridge.	Not present. Potential habitat is absent.
Legenere (<i>Legenere limosa</i>)	--/--/1B	Inhabits vernal pools, 1-880m. Known from scattered occurrences in the Delta, north Central Valley, and north SF Bay. Many occurrences are extirpated. Nearest location is about 4 miles south of the site.	Not present. Potential habitat is absent.
Mason's lilaepsis (<i>Lilaepsis masonii</i>)	--/CR/1B	Inhabits the edges of mudflats in brackish marsh and riparian scrub in the Delta. 0-10m. Known along the Napa River just over a mile from the site.	Not present. Potential habitat is absent.
Sebastopol meadowfoam (<i>Limnanthes vinculans</i>)	FE/CE/1B	Grows in poorly drained clay and sandy loam soils in swales, wet meadows, and marshy areas. Occurs in mesic meadows and vernal pools in valley and foothill grasslands. 15-115m. Nearest known location is about 10 miles from the site at the Laguna Vista Project.	Not present. Potential habitat is absent.
Cobb mountain lupine (<i>Lupinus sericatus</i>)	--/--/1B	Chaparral, cismontane woodland, lower montane coniferous forest; in stands of knob cone pine-oak woodland; on open woodland slopes in gravelly soils; sometimes on serpentine (180-1500m). Nearest location is north of the summit of Hogback Mountain, about 7 miles northwest of the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Few-flowered Navarretia (<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>)	FE/CT/1B	Inhabits volcanic ash flows and volcanic substrates in vernal pools. 400-855m. Not known to occur within 10 miles of the site.	Not present. Potential habitat is absent.
Marin knotweed (<i>Polygonum marinense</i>)	SLC/--/3	Coastal salt marshes and brackish marshes. 0-10m. Nearest location is at Cuttings Wharf over 4 miles south of the site.	Not present. Potential habitat is absent.

SCIENTIFIC NAME	STATUS ²	HABITAT/RANGE	OCCURRENCE ON THE NAPA OAKS PROPERTY
Marin checkerbloom (<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>)	--/--/1B	Chaparral. Serpentine or volcanic soils; sometimes appears after burns. 0-430m. Nearest location is at the base of Mt. George about 6 miles northeast of the site.	Not present. Potential habitat is absent.
Suisun Marsh aster (<i>Symphotrichum lentum</i>)	--/--/1B	Both brackish and freshwater marshes and swamps. 0-3m. Occurs near the Napa Municipal Golf Course a couple miles from the site.	Not present. Potential habitat is absent.
Napa bluecurls (<i>Trichostema ruygtii</i>)	--/--/1B	Open sunny areas in cismontane woodland, chaparral, valley and foothill grassland, vernal pools and lower montane coniferous forest. 30-590m. Nearest location is northeast of Napa about 6 miles from the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Showy Indian clover (<i>Trifolium amoenum</i>)	FE/--/1B	Inhabits moist clay grassland soils; known from one extant occurrence in Marin County. 5-560m. Known from a 1951 sighting near Napa.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Saline clover (<i>Trifolium. hydrophilum</i>)	--/--/1B	Marshes and swamps, valley and foothill grassland, vernal pools. Found in mesic, alkaline sites. 0-300m. Nearest location is south of Napa about 3 miles from the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.
Oval-leaved viburnum (<i>Viburnum ellipticum</i>)	--/--/1B	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400m. Nearest location is at Skyline Park over 5 miles from the site.	Not Present. Potential habitat was surveyed in spring and summer 2011.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Game for the Napa 7.5 Minute Quadrangle Map and surrounding areas, information dated January 2011

2. Status Codes:

FE Federally Endangered
 FT Federally Threatened
 FPE Federally Proposed Endangered
 FPT Federally Proposed Threatened
 FSC Federal Species of Concern (most are former C2 Candidates and some former C1)
 CE California Endangered
 CT California Threatened
 CR California Rare

CFP California Fully Protected
CSC California Species of Special Concern
CNPS 1A Plants Presumed Extinct in California
CNPS 1B Plants Rare, Threatened or Endangered in California or elsewhere
CNPS LIST 2 Plants Rare, Threatened or Endangered in California, but more common elsewhere

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Plant species observed at the Napa Oaks project site March-June 2011

Family	Scientific Name	Common Name
<i>Anacardiaceae</i>		
	Toxicodendron diversilobum	poison oak
<i>Apiaceae</i>		
	Conium maculatum	poison hemlock
	Foeniculum vulgare	fennel
	Sanicula bipinnatifida	purple sanicle
	Sanicula crassicaulis	Pacific sanicle
	Torilis arvensis	field hedge-parsley
<i>Asteraceae</i>		
	Achyrrachaena mollis	blow-wives
	Baccharis pilularis	coyote brush
	Carduus pycnocephalus	Italian thistle
	Centaurea calcitrapa	red star-thistle
	Centaurea solstitialis	yellow star-thistle
	Filago californica	California herba impia
	Hedypnois cretica	Cretan hedypnois
	Hypochaeris glabra	smooth cat's ear
	Hypochaeris radicata	rough cat's ear
	Lactuca serriola	prickly lettuce
	Leontodon taraxacoides	hawkbit
	Micropus californicus	slender cottonweed
	Picris echioides	bristly ox-tongue
	Psilocarphus oregonus	Oregon woolly marbles
	Senecio vulgaris	common groundsel
	Silybum marianum	milk thistle
	Soliva sessilis	common soliva
	Sonchus arvensis	perennial sow thistle
	Sonchus asper ssp. asper	prickly sow thistle
	Taraxacum officinale	common dandelion
<i>Boraginaceae</i>		
	Amsinckia menziesii var. intermedia	orange-flowered Menzies' fiddleneck
	Plagiobothrys nothofulvus	rusty-haired popcorn flower
<i>Brassicaceae</i>		
	Brassica nigra	black mustard
	Brassica rapa	field mustard
	Cardamine oligosperma	Idaho bittercress
	Lepidium nitidum	shining pepper-grass
	Raphanus sativus	wild radish
<i>Caprifoliaceae</i>		
	Symphoricarpos mollis	creeping snowberry

Family	Scientific Name	Common Name
	Viburnum tinus	spring bouquet viburnum
<i>Caryophyllaceae</i>		
	Cerastium glomeratum	mouse-ear chickweed
	Stellaria media	common chickweed
<i>Crassulaceae</i>		
	Crassula tillaea	Mediterranean pygmy-weed
<i>Cyperaceae</i>		
	Eleocharis macrostachya	common spikerush
<i>Ericaceae</i>		
	Arbutus menziesii	madrono
<i>Fabaceae</i>		
	Lotus humistratus	short-podded lotus
	Lotus wrangelianus	Chilean lotus
	Lupinus bicolor	miniature lupine
	Lupinus nanus	sky lupine
	Medicago polymorpha	California burclover
	Trifolium campestre	hop clover
	Trifolium dubium	shamrock
	Trifolium glomeratum	clustered clover
	Trifolium hirtum	rose clover
	Trifolium subterraneum	subterranean clover
	Trifolium willdenovii	tomcat clover
<i>Fagaceae</i>		
	Quercus agrifolia	coast live oak
	Quercus lobata	Valley oak
<i>Gentianaceae</i>		
	Centaurium muehlenbergii	Muhlenberg's centaury
	Cicendia quadrangularis	common microcalis
<i>Geraniaceae</i>		
	Erodium botrys	long-beaked filaree
	Erodium cicutarium	red-stemmed filaree
	Geranium dissectum	cut-leaved geranium
	Geranium robertianum	Robert's geranium
<i>Hippocastanaceae</i>		
	Aesculus californica	California buckeye
<i>Iridaceae</i>		
	Sisyrinchium bellum	blue-eyed grass
<i>Juglandaceae</i>		
	Juglans regia	English walnut
<i>Juncaceae</i>		
	Juncus bufonius	toad rush
	Juncus tenuis	poverty rush

Family	Scientific Name	Common Name
	Juncus xiphioides	iris-leaved rush
<i>Juncaginaceae</i>		
	Lilaea scilloides	flowering quillwort
<i>Lamiaceae</i>		
	Marrubium vulgare	horehound
	Mentha pulegium	pennyroyal
	Stachys bullata	southern hedge-nettle
<i>Liliaceae</i>		
	Calochortus luteus	yellow mariposa
	Chlorogalum pomeridianum	soaproot
<i>Lythraceae</i>		
	Lythrum hyssopifolium	hyssop loosestrife
<i>Malvaceae</i>		
	Malva parviflora	cheeseweed
<i>Moraceae</i>		
	Ficus carica	common fig
<i>Oleaceae</i>		
	Olea europaea	olive
<i>Onagraceae</i>		
	Camissonia ovata	sun-cup
	Clarkia unguiculata	woodland clarkia
	Epilobium brachycarpum	autumn willowweed
<i>Oxalidaceae</i>		
	Oxalis pes-caprae	Bermuda buttercup
<i>Papaveraceae</i>		
	Eschscholzia californica	California poppy
<i>Pinaceae</i>		
	Pinus radiata	Monterey pine
<i>Plantaginaceae</i>		
	Plantago erecta	California plantain
	Plantago lanceolata	English plantain
<i>Poaceae</i>		
	Aira caryophyllea	silver hairgrass
	Avena barbata	slender wild oats
	Brachypodium distachyon	purple false-brome
	Briza maxima	big quaking grass
	Briza minor	little quaking grass
	Bromus diandrus	ripgut brome
	Bromus hordeaceus	soft chess
	Cynosurus echinatus	hedgehog dogtail-grass
	Dactylis glomerata	orchard-grass
	Elymus elymoides	squirreltail

Family	Scientific Name	Common Name
	Gastridium ventricosum	nit grass
	Hordeum brachyantherum	meadow barley
	Hordeum murinum ssp. leporinum	foxtail barley
	Lolium multiflorum	Italian rye-grass
	Melica californica	California melic
	Nassella pulchra	purple needlegrass
	Pleuropogon californicus	semaphore grass
	Poa annua	annual blue grass
	Vulpia bromoides	brome fescue
	Vulpia myuros	rattail fescue
<i>Polygonaceae</i>		
	Rumex acetosella	common sheep sorrel
	Rumex crispus	curly dock
	Rumex occidentalis	western dock
	Rumex pulcher	fiddle dock
<i>Portulacaceae</i>		
	Claytonia perfoliata	miner's lettuce
<i>Primulaceae</i>		
	Anagallis arvensis	scarlet pimpernel
<i>Ranunculaceae</i>		
	Ranunculus californicus	California buttercup
	Ranunculus muricatus	spiny buttercup
<i>Rhamnaceae</i>		
	Rhamnus californica	California coffeeberry
<i>Rosaceae</i>		
	Heteromeles arbutifolia	toyon
	Malus sylvestris	domestic apple
	Prunus cerasifera	cherry plum
	Prunus dulcis	almond
	Pyracantha angustifolia	firethorn
	Rubus discolor	Himalaya-berry
<i>Rubiaceae</i>		
	Galium aparine	common bedstraw
	Galium parisiense	wall bedstraw
	Sherardia arvensis	field madder
<i>Saxifragaceae</i>		
	Lithophragma affine	common woodland star
<i>Scrophulariaceae</i>		
	Castilleja exserta ssp. exserta	purple owl's clover
	Parentucellia viscosa	yellow parentucellia
	Triphysaria pusilla	little owl's clover
	Verbascum blattaria	moth mullein

Family	Scientific Name	Common Name
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Solanaceae

Solanum sisymbriifolium sticky nightshade

Urticaceae

Urtica urens dwarf nettle

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EDUCATION

M.S. Biology (Plant Ecology), 1992, California State University, Sacramento, Thesis Topic: "The Water Relations of *Alnus rhombifolia*"

B.S. Biology (Field Biology), 1978, California Polytechnic State University, San Luis Obispo

EXPERIENCE Biological Consulting contracts since 1979 include:

Special-status plant surveys in California and western Nevada. Projects were conducted for state, federal, or private concerns and include field survey, GPS field mapping, mitigation measures, and conservation guidelines.

Vegetation mapping, quantitative sampling, and interpretation, Mt. St. Helens vegetation recovery researcher **Wetlands** delineation, mitigation design, construction and monitoring **Forage Inventory, Plant Identification Instructor, Vegetation Workshop Leader, Backcountry Naturalist**

ATTACHMENT 4

Revised Tree Report, Napa Oaks, Napa, California. Prepared by HortScience, Inc. July 2011

Revised Tree Report

Napa Oaks
Napa, CA

Prepared for:
Davidon Homes
1600 S. Main St., Suite 150
Walnut Creek, CA 94596-5394

Prepared by:
HortScience, Inc.
325 Ray Street
Pleasanton, CA 94566

July 2011



REVISED TREE REPORT
Napa Oaks
Napa, CA

Table of Contents

	Page
Introduction and Overview	1
Background	1
Survey Methods	1
Description of Trees	2
Suitability for Preservation	5
Evaluation of Impacts and Recommendations for Action	6
Tree Preservation Guidelines	19

List of Tables

Table 1. Condition ratings and frequency of occurrence for trees	4
Table 2. Suitability for preservation	6
Table 3. Trees recommended for removal	7

Attachments

Tree Survey Forms

Tree Survey Map (prepared by dK Consulting)

Introduction and Overview

Davidon Homes is planning to develop the Napa Oaks site in Napa, California. Currently, the site is open grazing land, with tight groups of trees spread across the site. The proposed development would construct 54 residential lots, with two access points onto Old Sonoma Road. A considerable amount of the site would remain as open space. HortScience, Inc. was asked to prepare a **Tree Report** for the site for review by the City of Napa.

This report provides the following information:

1. A survey of all trees with a trunk diameter of 6" or greater (measured 54" above grade) within the proposed project area.
2. An evaluation of the health of the tree on a 0-5 scale, where 0=dead, 1=poor, and 5 = excellent condition.
3. An assessment of the impacts of constructing the proposed project on the trees.
4. Guidelines for tree preservation during the design and construction phases of development.

Background

Hortscience, Inc. prepared a **Tree Survey Report** for the Napa Oaks site in 1997. A total of 591 trees were surveyed at that time. This number reflects the City's requirement that only trees with diameters of 8" or greater, and within 30' of the proposed development, be included. Currently, we assessed all trees at the site with diameters of 6" or greater (per Chapter 12.45, Ordinance #02003-4).

In 1997, over a third of the trees were young, with diameters in the 8" to 11" range, and almost 90% were in moderate to excellent condition (rated 3, 4, or 5). Currently, over half of the trees (native and exotics) were young (diameters between 6" and 11"), and just over 90% were in moderate to excellent condition. The increase in the number of young trees reflects both the change in the requirements for the size and location of trees included in the survey, as well as the growth of trees to the minimum diameter threshold for inclusion in the survey.

Survey Methods

Trees were surveyed in October and November, 2010. The survey included trees 6" and greater in diameter. The survey procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition using a scale of 0 – 5:
 - 5** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
 - 4** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
 - 3** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
 - 2** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
 - 1** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
 - 0** – Dead.

5. Rating the suitability for preservation as "good", "moderate" or "poor". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

- Good:** Trees with good health and structural stability that have the potential for longevity at the site.
- Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.
- Poor:** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

One thousand three hundred and seventy five (1,375) trees, represented by 33 species, were evaluated. Descriptions of each tree are found in the **Tree Survey Forms**, and locations are plotted on the **Tree Survey Map** (see attachments). Included in the survey were seven (7) off-site trees (#291 and 1187-1192), with portions of their crowns extending onto the project site and one (1) standing dead tree (#722).

The site was a native oak woodland with groupings of trees separated by open grasslands, where cattle grazed (photo 1). Cattle grazing can have a direct impact on vegetation, through feeding (especially on young plants), rubbing on tree trunks and compacting soil beneath trees, where they gather for shade. Evidence of these impacts was present at the Napa Oaks site.



Photo 1: Cattle grazing beneath the shade of a group of coast live oaks (#909-914). Grazing, soil compaction and direct injury can lead to a variety of tree impacts. Typically, grazing leads to a lack of young trees, as they are browsed on. However, this was not the case at the Napa Oaks site, where there were many young coast live oaks.

Many of the tree groupings were dominated by young trees, with diameters below 12". This is unusual for areas where grazing is common, as they are often browsed before they get large enough to tolerate the damage. The close spacing of trees in groupings also affected tree structure. Typically, there were one or more dominant trees, characterized by upright, spreading crowns, surrounded by intermediate and suppressed trees with leaning, asymmetric, or one-sided crowns.

Eight (8) of the 33 species surveyed were native to the site and the balance were planted exotics. The native species constituted 1,298 of the trees, or 94% of the population. Of these, 654, or 50% were young, with diameters less than 12”.

There were 33 species represented at the site (Table 1, page 4). The most frequently occurring species was coast live oak, with 1,186 trees, or 86% of the population. The species was adapted to the site and had performed well, with 641 (54%) in good or excellent condition, 469 in fair (40%), and 75 in poor (6%). In addition to the groupings of young trees, there were several large diameter coast live oaks, including 92 trees with diameters of 30” or larger. For the most part, these had large, spreading crowns with branches extending to the ground. Coast live oak #1080 was one of the largest diameter coast live oaks at 50” and was in excellent health, with heavy lateral limbs (Photo 2, following page).

Photo 2: Coast live oak #1080 was in excellent condition, with a spreading crown and branches to the ground. Inset shows branching structure comprised of several heavy lateral limbs.



The second most common species was valley oak, with 56 trees (4%). Calif. buckeye, with 27 trees (2%) and Calif. black oak, with 14 trees (1%) were the next most common species. The remaining 29 species were represented by 10 or fewer individuals.

Average tree condition was good (723 trees or 53% of the population). Five hundred thirty-four (534) were in fair condition (39%), and 117 trees were in poor (9%). The good condition of the trees is a reflection of the number of native trees and their adaptation to site conditions.

For young trees of all species, low condition ratings were due to poor structure, primarily where crowns leaned or were bowed to horizontal as a result of competition for light. Extensive decay in trunks and scaffold branches was the primary reason for low condition ratings in mature trees. Decay was manifested in many ways, including thin or sparse foliage, branch failures and cavities.

The city of Napa defines certain native species with at least one trunk 12" or greater in diameter, as "Protected Native" trees (Chapter 12.45, Ordinance #02003-4). By this definition, 622 trees qualified as "Protected Native" trees, including 102 with trunk diameters of 30" or greater and 222 multi-stemmed trees, with at least one stem measuring 12" or greater (see **Tree Survey Forms**, attachments).

**Table 1: Condition ratings and frequency of occurrence of trees.
Napa Oaks site, Napa**

Common Name	Scientific Name	Condition Rating				No. of Trees
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
*Calif. buckeye	<i>Aesculus californica</i>	-	1	17	9	27
Mimosa	<i>Albizia julibrissin</i>	-	3	2	-	5
*Madrone	<i>Arbutus menziesii</i>	-	5	2	3	10
Incense cedar	<i>Calocedrus decurrens</i>	-	-	-	1	1
Deodar cedar	<i>Cedrus deodara</i>	-	-	-	1	1
Arizona cypress	<i>Cupressus arizonica</i>	-	-	-	1	1
Evergreen ash	<i>Fraxinus uhdei</i>	-	1	2	-	3
Silk oak	<i>Grevillea robusta</i>	-	-	1	-	1
*Toyon	<i>Heteromeles arbutifolia</i>	-	1	1	-	2
*Calif. black walnut	<i>Juglans hindsii</i>	-	-	1	2	3
Paradox walnut	<i>Juglans 'Paradox'</i>	-	-	-	1	1
English walnut	<i>Juglans regia</i>	-	3	5	2	10
Privet	<i>Ligustrum japonicum</i>	-	-	2	-	2
Apple	<i>Malus domestica</i>	-	1	2	-	3
Myoporum	<i>Myoporum laetum</i>	-	-	-	1	1
Olive	<i>Olea europaea</i>	-	-	1	3	4
Blue spruce	<i>Picea pungens 'Glauca'</i>	-	-	-	1	1
Aleppo pine	<i>Pinus halepensis</i>	-	1	-	3	4
Pinyon pine	<i>Pinus monophylla</i>	-	-	-	1	1
Italian stone pine	<i>Pinus pinea</i>	-	-	1	-	1
Monterey pine	<i>Pinus radiata</i>	-	7	1	-	8
Scot's pine	<i>Pinus sylvestris</i>	-	1	-	-	1
Japanese black pine	<i>Pinus thunbergiana</i>	-	-	1	2	3
Chinese pistache	<i>Pistacia chinensis</i>	-	-	-	1	1
Purple leaf plum	<i>Prunus cerasifera</i> 'Atropurpurea'	-	3	1	-	4
Plum	<i>Prunus domestica</i>	-	2	4	3	9
Almond	<i>Prunus dulcis</i>	-	6	1	-	7
*Coast live oak	<i>Quercus agrifolia</i>	1	75	469	641	1186
*Valley oak	<i>Quercus lobata</i>	-	4	17	35	56
*Calif. black oak	<i>Quercus douglasii</i>	-	3	1	10	14
Burr oak	<i>Quercus macrocarpa</i>	-	-	-	1	1
*Coffeeberry	<i>Rhamnus californica</i>	-	-	1	-	1
*Coast redwood	<i>Sequoia sempervirens</i>	-	-	1	1	2
Total		1	117	534	723	1,375
		≤1%	9%	39%	53%	100%

*Indicates species native to the site

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in creeks, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, coast live oak and coast redwood are more adaptable and tolerate injury better than valley oak or madrone.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Invasiveness**
Trees with the potential to invade native habitats, reproduce rapidly, and grow in sub-optimal environments are considered invasive. Species with these qualities may alter the functional and aesthetic qualities of the habitats they invade. None of the species surveyed at the Napa Oaks site are considered invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, following page).

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

**Table 2: Tree Suitability for preservation
Napa Oaks site, Napa**

Good These are trees with good health and structural stability that have the potential for longevity at the site. Four hundred forty-six (446) trees were rated as having good suitability for preservation. This group included 398 coast live oaks, 21 valley oaks, eight (8) Calif. black oaks, six (6) Calif. buckeyes, three (3) madrones, and one (1) each of Arizona cypress, blue spruce, burr oak, Chinese pistache, coast redwood, deodar cedar, incense cedar, olive, pinyon pine and plum.

Moderate Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the “good” category. Six hundred and fifty-five (655) trees were rated as having moderate suitability for preservation, including: 580 coast live oaks, 28 valley oaks, three (3) each of Aleppo pine, Calif. black walnut, Japanese black pine, olive and plum, two (2) each of apple, Calif. black oak, English walnut and madrone, and one (1) each of coast redwood, paradox walnut, privet, and toyon.

Poor Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Two hundred and seventy-four (274) trees were rated as having poor suitability for preservation, including: 208 coast live oaks, eight (8) Monterey pines, eight (8) English walnuts, seven (7) valley oaks, seven (7) almonds, five (5) each of madrone, mimosa and plum, four (4) purple-leaf plums, four (4) Calif. black oak, three (3) evergreen ash, two (2) Calif. buckeyes, and one (1) each of apple, Aleppo pine, coffeeberry, Italian stone pine, privet, Scot’s pine, silk oak, and toyon.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Survey** was the reference point for tree health and condition. Potential impacts from construction were evaluated using the Preliminary Grading and Drainage Plan, prepared by dK Consulting (received March 1, 2011).

The plan proposes to construct 54 custom residential homes on the site, leaving extensive areas undeveloped. The Preliminary Plan shows the grading for the roads, lots, building footprints, retaining wall locations, and detention ponds. Accurate trunk locations were shown for most trees but not for all the trees, as many will remain in undisturbed areas of Parcels A, B and C. Utilities and drainage were also shown on the plans.

Potential impacts from construction were estimated for each tree. Based on our evaluation of the plans, the proposed project would allow for the preservation of 765 trees, including 429 “Native Protected” trees. Five hundred and ninety-one (591) would be outside the development impacts and 174 would be within 45’ of grading.

A total of 620 trees would require removal, including 200 “Native Protected” trees. A total of 392 trees would be impacted by lot grading, 158 impacted by road grading, 60 impacted by slope and swale grading, 26 impacted by the detention pond, eight (8) by the new entry onto Old Sonoma Rd. and four (4) by retaining walls. Of these, 112 were of poor suitability for preservation.

Pruning, cabling and monitoring is recommended for 158 trees. Pruning is recommended to provide clearance for construction activities (154 trees), to reduce end-weight (five trees), and to correct structural defects (three trees). Monitoring changes in lean, health and decay advancement is recommended for two (2) trees and cabling to reduce the likelihood of future stem or branch failure is recommended for four (4) trees. Tree #179 is recommended for an aerial inspection to identify any defects in structure not seen from the ground inspection and pruning, cabling and monitoring may be required for this tree based on the results of the aerial inspection. Any pruning of off-site trees must be done with the property owner’s consent.

Davidon Homes has made a concerted effort at tree preservation. After several revisions to the site plan an additional 127 trees have been identified for preservation. Preservation of these trees is predicated on establishing a **Tree Protection Zone** and other measures recommended in the **Tree Preservation Guidelines** that follow (see page 19). Again, in the interest of space specific **Tree Protection Zones** have been reviewed with and provided to Davidon Homes, but are not included as part of this document.

In summary, implementation of the proposed plan would allow for preservation of 755 trees, including 422 “Native Protected” trees. Removal would be required for the remaining 620 trees, 200 of which are “Protected Native” trees. A description of trees recommended for removal, and the associated impacts, are listed in **Table 3**.

**Table 3: Trees recommended for removal
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
101	Coast live oak	29	Yes	Within road grading
102	Privet	9,7,6,5,5	No	Within entry
103	Mimosa	11	No	Within entry
104	Italian stone pine	10	No	Within entry
105	Mimosa	15,12	No	Within entry
106	English walnut	13	No	Impacted by road grading
108	Mimosa	13	No	Within road grading
111	Privet	6,5,4,3	No	Within entry
112	Almond	8	No	Within entry
131	English walnut	11	No	Within road grading
132	English walnut	6,6	No	Within road grading
133	Coast live oak	15,15,8	Yes	Within road grading
134	Coast live oak	9,7,6,4,3	No	Within road grading
135	Valley oak	8	No	Within det. pond grading
137	Calif. black walnut	10,8,7	No	Within road grading
138	Calif. black walnut	9,8,8,8	No	Within entry
139	English walnut	13	No	Within entry
140	Coast live oak	10	No	Within road grading
141	Mimosa	14	No	Within road grading
142	Aleppo pine	17	No	Within road grading
143	Mimosa	10	No	Within road grading
144	Aleppo pine	22,15	No	Within road grading
145	Coast redwood	22	No	Within road grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
146	Apple	8,7,5	No	Within road grading
147	Valley oak	21	Yes	Within road grading
148	Pinyon pine	10	No	Within det. pond grading
149	Calif. black oak	7	No	Within det. pond grading
150	Calif. black oak	9	No	Within det. pond grading
151	Myoporum	8,7	No	Within det. pond grading
152	Japanese black pine	8	No	Within det. pond grading
153	Calif. black oak	8	No	Within det. pond grading
154	Chinese pistache	8	No	Within det. pond grading
155	Calif. black oak	6	No	Within det. pond grading
156	Incense cedar	36	No	Within det. pond grading
157	Japanese black pine	6,4	No	Within det. pond grading
158	Japanese black pine	7	No	Within det. pond grading
159	Calif. black oak	8	No	Within det. pond grading
160	Calif. black oak	11	No	Within det. pond grading
161	Valley oak	13	Yes	Impacted by det. pond grading
162	Evergreen ash	13	No	Within det. pond grading
163	Evergreen ash	17	No	Within det. pond grading
164	Aleppo pine	15	No	Within det. pond grading
166	Arizona cypress	16,9	No	Within road grading
167	Almond	9	No	Within road grading
169	Coast live oak	9	No	Within road grading
170	Coast live oak	12	Yes	Within road grading
171	Coast live oak	10	No	Within road grading
174	Coast live oak	6	No	Within road grading
175	English walnut	11	No	Within road grading
176	Coast live oak	11,8	No	Within road grading
177	Coast live oak	8	No	Within road grading
178	Coast live oak	7	No	Within road grading
181	Coast live oak	10,7	No	Impacted by road grading
182	Valley oak	8	No	Impacted by road grading
183	Valley oak	7	No	Within road grading
184	Coast live oak	12	Yes	Within road grading
185	Coast live oak	10,8	No	Within road grading
197	Coast live oak	7,7,6,5,4	No	Within lot grading
204	Coast live oak	12	Yes	Impacted by road grading
217	Coast live oak	10,6,6	No	Within road grading
219	Coast live oak	10,10,7	No	Impacted by road grading
230	Coast live oak	7	No	Impacted by road grading
231	Valley oak	8	No	Within road grading
232	Coast live oak	9,6	No	Within road grading
233	Coast live oak	7	No	Within road grading
234	Coast live oak	16,5	Yes	Within road grading
235	Coast live oak	12	Yes	Within road grading
236	Coast live oak	7	No	Within road grading
237	Coast live oak	15,8	Yes	Within lot grading
238	Coast live oak	15	Yes	Within road grading
239	Coast live oak	13,7	Yes	Within lot grading
240	Coast live oak	10,7	No	Within lot grading
241	Coast live oak	9,9,6	No	Within road grading
242	Coast live oak	10	No	Within road grading
243	Coast live oak	28	Yes	Impacted by road grading
249	Coast live oak	8	No	Within road grading
250	Madrone	14,9,6	No	Within lot grading
251	Coast live oak	8	No	Within lot grading
252	Coast live oak	9,8,7	No	Within lot grading

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**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
253	Coast live oak	9,7,6	No	Within lot grading
254	Coast live oak	8	No	Within lot grading
255	Coast live oak	9,5	No	Within lot grading
256	Coast live oak	10,9,8,5,5	No	Within lot grading
257	Coast live oak	9	No	Within lot grading
258	Coast live oak	6,4,4	No	Within lot grading
259	Coast live oak	9,8,7,6,6	No	Within road grading
260	Coast live oak	13	Yes	Within road grading
261	Coast live oak	7,7,6,5,5	No	Within road grading
262	Coast live oak	18,7,6	Yes	Within road grading
263	Coast live oak	6,6,5,5	No	Within road grading
264	Coast live oak	9	No	Within road grading
265	Coast live oak	8	No	Within lot grading
269	Coast live oak	18	Yes	Within lot grading
275	Coast live oak	10	No	Impacted by road grading
276	Coast live oak	8,5,3	No	Within road grading
277	Coast live oak	10,10	No	Within road grading
278	Coast live oak	10	No	Within road grading
279	Coast live oak	13	Yes	Within road grading
280	Coast live oak	14,11,11	Yes	Impacted by lot grading
284	Coast live oak	11,7,6,5,5	No	Within road grading
285	Coast live oak	14	Yes	Within road grading
286	Blue spruce	10	No	Within det. pond grading
287	Burr oak	7	No	Within det. pond grading
288	Calif. black oak	11	No	Within det. pond grading
289	Coast live oak	14	Yes	Within det. pond grading
290	Evergreen ash	20	No	Within det. pond grading
292	Scot's pine	6	No	Within det. pond grading
293	English walnut	17	No	Impacted by det. pond grading
294	Coast redwood	22,18	No	Within det. pond grading
295	Coast live oak	8	No	Within road grading
296	Coast live oak	10	No	Within road grading
297	Coast live oak	12,11	Yes	Within road grading
298	Coast live oak	9,4	No	Within road grading
299	Coast live oak	6	No	Within road grading
300	Coast live oak	13,6,6	Yes	Within road grading
301	Coast live oak	6	No	Within road grading
302	Coast live oak	14,7	Yes	Within lot grading
303	Coast live oak	6	No	Within lot grading
304	Coast live oak	10,7,7	No	Within lot grading
305	Coast live oak	11,6	No	Within lot grading
306	Coast live oak	10,6	No	Within lot grading
307	Coast live oak	9,8,6,6	No	Within lot grading
308	Coast live oak	7,6,5,5	No	Within lot grading
309	Coast live oak	7	No	Within lot grading
310	Coast live oak	9,7,6,5	No	Within lot grading
311	Coast live oak	7	No	Within lot grading
312	Coast live oak	12,10,8	Yes	Within lot grading
313	Coast live oak	11	No	Within lot grading
314	Coast live oak	10	No	Within lot grading
315	Coast live oak	6	No	Within lot grading
316	Coast live oak	7	No	Within lot grading
317	Coast live oak	11,8	No	Within lot grading
318	Coast live oak	14,9	Yes	Within road grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
319	Coast live oak	9,8	No	Within lot grading
320	Coast live oak	8,6	No	Within lot grading
321	Coast live oak	6	No	Within lot grading
322	Coast live oak	10,9,8	No	Within lot grading
323	Coast live oak	8,7	No	Within lot grading
324	Coast live oak	6	No	Within lot grading
325	Coast live oak	8,7	No	Within lot grading
326	Coast live oak	10,9,8,6	No	Within lot grading
327	Coast live oak	15,7,6	Yes	Within lot grading
328	Coast live oak	7	No	Within road grading
329	Coast live oak	11	No	Within road grading
330	Coast live oak	6	No	Within road grading
331	Coast live oak	8	No	Within road grading
332	Coast live oak	12	Yes	Within road grading
333	Coast live oak	6	No	Within road grading
334	Coast live oak	10	No	Within road grading
335	Coast live oak	7,6,5	No	Within road grading
336	Coast live oak	11	No	Within road grading
337	Coast live oak	6	No	Within road grading
338	Coast live oak	11	No	Within road grading
339	Coast live oak	12	Yes	Within road grading
340	Coast live oak	7,6,3	No	Within road grading
341	Coast live oak	6,6,6	No	Within road grading
342	Coast live oak	6	No	Within road grading
343	Coast live oak	7	No	Within road grading
344	Valley oak	6,4	No	Within road grading
345	Coast live oak	7,6,4	No	Within road grading
346	Coast live oak	11	No	Within road grading
347	Coast live oak	7	No	Within road grading
348	Coast live oak	8,6,5,4	No	Within road grading
349	Coast live oak	7	No	Within road grading
350	Coast live oak	9	No	Within road grading
351	Coast live oak	7,6,4	No	Within road grading
352	Coast live oak	8	No	Within road grading
353	Coast live oak	6,6	No	Within road grading
354	Coast live oak	9	No	Within road grading
355	Coast live oak	12	Yes	Within road grading
357	Coast live oak	61	Yes	Impacted by road grading
358	Coast live oak	20	Yes	Within road grading
359	Coast live oak	12,8	Yes	Impacted by grading
360	Coast live oak	7	No	Within road grading
361	Coast live oak	10	No	Within road grading
362	Coast live oak	13	Yes	Within road grading
363	Coast live oak	14,7	Yes	Within road grading
364	Coast live oak	11,6,5	No	Within road grading
365	Coast live oak	12,11	Yes	Within lot grading
366	Coast live oak	7,6	No	Within lot grading
367	Coast live oak	13	Yes	Within lot grading
368	Coast live oak	8	No	Within lot grading
369	Coast live oak	11	No	Within lot grading
370	Coast live oak	14,12,6	Yes	Within lot grading
376	Coast live oak	10,8,8,5	No	Within lot grading
377	Coast live oak	8,7,5	No	Within lot grading
378	Coast live oak	6	No	Within lot grading

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**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
379	Coast live oak	8,7,6	No	Within lot grading
380	Coast live oak	6,5,5,5	No	Within lot grading
397	Coast live oak	9,9,8	No	Within lot grading
398	Coast live oak	11,9,8	No	Impacted by lot grading
401	Coast live oak	6,4	No	Within lot grading
402	Coast live oak	8,6,6	No	Within lot grading
403	Madrone	27	No	Within lot grading
404	Coast live oak	9,7,6,4	No	Within lot grading
405	Coast live oak	7,5,5,4	No	Within lot grading
406	Coast live oak	8,7,5,5,4,4	No	Within lot grading
407	Coast live oak	8,5	No	Within lot grading
408	Coast live oak	9,8,7,6,6	No	Within lot grading
409	Coast live oak	7,6,3,3	No	Within lot grading
410	Coast live oak	8	No	Within lot grading
411	Coast live oak	12,11,10	Yes	Within road grading
412	Coast live oak	7,6,6,5,5,5	No	Within lot grading
413	Coast live oak	6,5,4,4	No	Within lot grading
414	Coast live oak	7,7,6	No	Within lot grading
415	Coast live oak	12,6	Yes	Within lot grading
416	Coast live oak	7,6	No	Within lot grading
417	Coast live oak	9,8,6	No	Within lot grading
418	Coast live oak	6,5	No	Within lot grading
419	Coast live oak	13	Yes	Within lot grading
420	Coast live oak	29,9	Yes	Within lot grading
423	Coast live oak	9,8	No	Within lot grading
424	Coast live oak	8	No	Within lot grading
425	Coast live oak	10	No	Within lot grading
426	Coast live oak	10	No	Within lot grading
427	Coast live oak	9,7	No	Within lot grading
428	Coast live oak	10	No	Within lot grading
429	Coast live oak	6,5,5	No	Within lot grading
430	Coast live oak	6,4,4	No	Within lot grading
431	Coast live oak	6	No	Within lot grading
432	Coast live oak	9,5	No	Within lot grading
434	Coast live oak	10,5,4	No	Within lot grading
435	Coast live oak	8	No	Within lot grading
440	Coast live oak	6,4,3	No	Within grading
441	Coast live oak	7,4,3,3	No	Within grading
442	Coast live oak	15,7	Yes	Within grading
443	Coast live oak	9,8,4	No	Within grading
444	Coast live oak	7,6,5,5	No	Within lot grading
445	Coast live oak	14,14,8,7	Yes	Within grading
446	Coast live oak	9,9,8	No	Within grading
447	Coast live oak	11,7,6	No	Within grading
449	Coast live oak	8	No	Within grading
450	Madrone	15,14	No	Within grading
451	Coast live oak	7,6	No	Within lot grading
452	Coast live oak	8,7,6,6,5	No	Within lot grading
453	Coast live oak	6,4	No	Within lot grading
454	Coast live oak	9	No	Within lot grading
455	Coast live oak	6,5,5,	No	Within lot grading
456	Coast live oak	7,6	No	Within lot grading
457	Coast live oak	9,7,6,6	No	Within lot grading
458	Coast live oak	9	No	Within lot grading

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**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
459	Coast live oak	10,9,5,5	No	Within lot grading
460	Coast live oak	11,6	No	Within lot grading
461	Coast live oak	12	Yes	Within lot grading
462	Coast live oak	6,5	No	Within lot grading
463	Coast live oak	12	Yes	Within lot grading
464	Coast live oak	15,8,8	Yes	Within lot grading
465	Coast live oak	8,3	No	Within lot grading
489	Coast live oak	11	No	Within lot grading
490	Coast live oak	9,9,9	No	Within lot grading
491	Coast live oak	15,13	Yes	Within lot grading
492	Coast live oak	8,4	No	Within lot grading
493	Coast live oak	11	No	Within lot grading
494	Coast live oak	16	Yes	Within lot grading
495	Coast live oak	13	Yes	Within lot grading
496	Coast live oak	9,9,7	No	Within road grading
497	Coast live oak	8,6	No	Within road grading
508	Coast live oak	9	No	Within lot grading
509	Coast live oak	17,16	Yes	Within lot grading
510	Coast live oak	12,10,5	Yes	Within lot grading
514	Coast live oak	14,8,5	Yes	Impacted by grading
515	Coast live oak	13,8,6	Yes	Within lot grading
516	Coast live oak	7	No	Within lot grading
517	Coast live oak	12	Yes	Within lot grading
518	Coast live oak	15	Yes	Within lot grading
519	Coast live oak	15,15	Yes	Within lot grading
520	Coast live oak	10	No	Within lot grading
521	Coast live oak	12,11,10	Yes	Within lot grading
522	Coast live oak	18	Yes	Within lot grading
523	Coast live oak	34,12,10	Yes	Within lot grading
524	Coast live oak	29	Yes	Within lot grading
525	Coast live oak	14	Yes	Within lot grading
526	Coast live oak	15,11	Yes	Within lot grading
527	Coast live oak	11,9,9,8	No	Within lot grading
528	Coast live oak	18	Yes	Within lot grading
529	Coast live oak	16,9	Yes	Within lot grading
530	Coast live oak	12	Yes	Within lot grading
531	Coast live oak	25,12	Yes	Within lot grading
537	Plum	10,7,6,4	No	Within lot grading
538	Coast live oak	12,11	Yes	Within lot grading
539	Coast live oak	12,11	Yes	Within lot grading
540	Coast live oak	13,11	Yes	Within lot grading
541	Coast live oak	12,12	Yes	Within lot grading
561	Coast live oak	8,8,7,7,4	No	Within lot grading
562	Coast live oak	16,10	Yes	Within lot grading
563	Coast live oak	9,9,7	No	Within road grading
564	Coast live oak	16,11,10	Yes	Within lot grading
565	Coast live oak	19,19,15	Yes	Within lot grading
566	Coast live oak	9	No	Within lot grading
567	Coast live oak	11,5	No	Within lot grading
568	Coast live oak	9,7,6	No	Within lot grading
569	Coast live oak	10	No	Within lot grading
570	Coast live oak	14,9,9	Yes	Within lot grading
571	Coast live oak	12,11,9	Yes	Within lot grading
572	Coast live oak	9,8,7,7	No	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
573	Coast live oak	7	No	Within lot grading
574	Coast live oak	8,5	No	Within lot grading
575	Coast live oak	11	No	Within road grading
576	Coast live oak	6	No	Within road grading
577	Coast live oak	9	No	Within road grading
578	Madrone	14,12,12	No	Within road grading
579	Madrone	18,17,14,12,10	No	Within road grading
580	Coast live oak	8,7	No	Within lot grading
581	Coast live oak	6	No	Within lot grading
582	Coast live oak	8	No	Within road grading
583	Coast live oak	7	No	Within lot grading
584	Coast live oak	17	Yes	Within lot grading
585	Coast live oak	6,5,5	No	Within lot grading
586	Coast live oak	7,5,5	No	Within lot grading
587	Coast live oak	8	No	Within lot grading
588	Coast live oak	14	Yes	Within lot grading
589	Coast live oak	9,9	No	Within lot grading
590	Coast live oak	28	Yes	Within lot grading
591	Coast live oak	31	Yes	Within lot grading
592	Coast live oak	42	Yes	Within lot grading
593	Coast live oak	47	Yes	Within lot grading
594	Coast live oak	7	No	Within lot grading
595	Coast live oak	30	Yes	Within lot grading
596	Coast live oak	8,8	No	Within lot grading
597	Coast live oak	6	No	Within lot grading
598	Coast live oak	6,4	No	Within lot grading
599	Coast live oak	7,5	No	Within lot grading
600	Coast live oak	34	Yes	Within lot grading
604	Coast live oak	39	Yes	Impacted by lot grading
612	Coast live oak	10	No	Within lot grading
613	Coast live oak	11	No	Within lot grading
614	Coast live oak	9,6	No	Within lot grading
623	Coast live oak	31	Yes	Impacted by lot grading
643	Coast live oak	15	Yes	Impacted by lot grading
648	Coast live oak	9,6,4	No	Within grading
649	Coast live oak	13	Yes	Within lot grading
650	Coast live oak	6,4	No	Impacted by grading
651	Coast live oak	17	Yes	Impacted by grading
652	Coast live oak	13,9	Yes	Within grading
653	Coast live oak	7,6,4,3	No	Within grading
654	Coast live oak	8,7,5	No	Within grading
655	Coast live oak	7	No	Within grading
656	Coast live oak	8	No	Within grading
658	Coast live oak	12,11,10	Yes	Impacted by grading
665	Coast live oak	41	Yes	Impacted by grading
666	Coast live oak	27	Yes	Within grading
667	Coast live oak	18	Yes	Within road grading
668	Coast live oak	8,4	No	Within road grading
669	Coast live oak	11	No	Within road grading
670	Coast live oak	15	Yes	Within road grading
671	Coast live oak	12,12	Yes	Within grading
672	Coast live oak	16	Yes	Within grading
675	Coast live oak	11,6	No	Within road grading
676	Coast live oak	14	Yes	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
677	Coast live oak	7	No	Within lot grading
678	Coast live oak	6,6,5,5	No	Impacted by grading
679	Coast live oak	6	No	Impacted by grading
680	Coast live oak	10,9,8,7,6	No	Within lot grading
681	Coast live oak	16	Yes	Within lot grading
682	Coast live oak	6	No	Within lot grading
683	Coast live oak	12	Yes	Within lot grading
684	Coast live oak	15,6	Yes	Within lot grading
685	Coast live oak	11	No	Within lot grading
686	Coast live oak	19,11	Yes	Within lot grading
687	Coast live oak	14	Yes	Within lot grading
688	Coast live oak	12,12,11,9,7	Yes	Within lot grading
689	Coast live oak	12,11,8,8	Yes	Within lot grading
690	Coast live oak	13,12,8	Yes	Within lot grading
691	Coast live oak	7,6,5	No	Within lot grading
692	Coast live oak	7,4	No	Within lot grading
701	Coast live oak	12,7,3,2	Yes	Impacted by lot grading
709	Coast live oak	21	Yes	Within lot grading
710	Coast live oak	23	Yes	Impacted by lot grading
711	Coast live oak	25,15	Yes	Impacted by lot grading
712	Coast live oak	21	Yes	Impacted by lot grading
713	Plum	7	No	Within lot grading
714	Coast live oak	11	No	Within lot grading
716	Coast live oak	53	Yes	Impacted by lot grading
718	Coast live oak	28	Yes	Within lot grading
719	Coast live oak	13,11,7	Yes	Within road grading
720	Coast live oak	10,7,7	No	Within road grading
721	Coast live oak	45,35	Yes	Within lot grading
722	Coast live oak	13	Yes	Within lot grading
724	Coast live oak	24	Yes	Within lot grading
725	Coast live oak	10,8,6,5	No	Within lot grading
726	Coast live oak	10,7	No	Within lot grading
727	Coast live oak	11	No	Within road grading
728	Coast live oak	11,10	No	Within lot grading
729	Coast live oak	9,9,6	No	Within lot grading
730	Plum	7,6,6,5,5	No	Within lot grading
731	Coast live oak	7,7,6	No	Within lot grading
732	Coast live oak	9,8	No	Within lot grading
733	Coast live oak	13,10,9	Yes	Within lot grading
734	Coast live oak	12,7	Yes	Within lot grading
735	Coast live oak	8	No	Within lot grading
736	Coast live oak	7	No	Within lot grading
737	Coast live oak	10,7	No	Within road grading
738	Coast live oak	11,7	No	Within road grading
739	Plum	6,4	No	Within road grading
740	Coast live oak	8,6	No	Within road grading
741	Coast live oak	13	Yes	Within road grading
742	Coast live oak	17	Yes	Within lot grading
743	Coast live oak	14,13,8	Yes	Within lot grading
744	Coast live oak	13	Yes	Within lot grading
745	Coast live oak	12,11,10	Yes	Within lot grading
746	Coast live oak	11,6,4	No	Within lot grading
747	Coast live oak	10	No	Within lot grading
748	Coast live oak	16,12	Yes	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
749	Coast live oak	9	No	Within lot grading
750	Coast live oak	8	No	Within lot grading
751	Coast live oak	10	No	Within lot grading
752	Coast live oak	9	No	Within lot grading
753	Coast live oak	14,11	Yes	Within lot grading
754	Coast live oak	7,3	No	Within lot grading
755	Coast live oak	11,9,9,8	No	Within lot grading
756	Coast live oak	12,9	Yes	Within lot grading
757	Coast live oak	19	Yes	Within lot grading
758	Coast live oak	17	Yes	Within lot grading
759	Coast live oak	9	No	Within lot grading
760	Coast live oak	15	Yes	Within lot grading
761	Coast live oak	11,10,9,8,5	No	Within lot grading
762	Valley oak	6	No	Within lot grading
763	Coast live oak	18	Yes	Within lot grading
764	Coast live oak	12,12	Yes	Within lot grading
765	Coast live oak	8,8,7,4	No	Within lot grading
766	Coast live oak	9,9,7,4	No	Within lot grading
767	Coast live oak	10	No	Within lot grading
768	Coast live oak	15,13,6	Yes	Within lot grading
769	Coast live oak	8	No	Within lot grading
770	Coast live oak	9,8,7	No	Within lot grading
771	Coast live oak	8,6	No	Within lot grading
772	Coast live oak	10	No	Within lot grading
773	Coast live oak	11,7	No	Within lot grading
774	Coast live oak	13,8,7	Yes	Within lot grading
775	Coast live oak	13,12,12,12,10,10	Yes	Within lot grading
776	Coast live oak	7	No	Within lot grading
777	Coast live oak	9	No	Within lot grading
778	Coast live oak	12,11	Yes	Within lot grading
794	Coast live oak	23	Yes	Impacted by grading
795	Coast live oak	25	Yes	Impacted by grading
796	Coast live oak	15	Yes	Within lot grading
797	Coast live oak	29	Yes	Within lot grading
798	Coast live oak	29	Yes	Within lot grading
800	Coast live oak	23	Yes	Impacted by grading
801	Coast live oak	39	Yes	Within lot grading
810	Coast live oak	46	Yes	Impacted by lot grading
818	Coast live oak	15,14,13,12,9	Yes	Within road grading
819	Coast live oak	19,11	Yes	Within road grading
820	Coast live oak	14	Yes	Within lot grading
840	Coast live oak	8	No	Impacted by lot grading
841	Coast live oak	21	Yes	Within lot grading
842	Madrone	12,11	No	Within lot grading
843	Coast live oak	10,9,9,9,8,7	No	Within lot grading
844	Coast live oak	23	Yes	Within lot grading
845	Coast live oak	17	Yes	Within lot grading
846	Coast live oak	11	No	Within lot grading
847	Coast live oak	14	Yes	Within lot grading
848	Coast live oak	12,8	Yes	Within lot grading
849	Coast live oak	14,13	Yes	Within lot grading
867	Coast live oak	16	Yes	Impacted by lot grading
868	Coast live oak	6	No	Impacted by lot grading
869	Coast live oak	15,10	Yes	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
870	Coast live oak	18,13	Yes	Within lot grading
871	Coast live oak	8,6	No	Within lot grading
877	Coast live oak	13,5,3	Yes	Within lot grading
878	Coast live oak	6,6	No	Within lot grading
879	Coast live oak	11,10,9	No	Within lot grading
880	Coast live oak	12,11,8,8,5	Yes	Within lot grading
881	Coast live oak	11,8	No	Within lot grading
882	Coast live oak	7,6,6	No	Within road grading
884	Coast live oak	45	Yes	Within lot grading
885	Coast live oak	26	Yes	Impacted by lot grading
886	Coast live oak	29,22	Yes	Within lot grading
887	Coast live oak	26	Yes	Within lot grading
888	Coast live oak	35	Yes	Within lot grading
891	Coast live oak	56,54	Yes	Impacted by road grading
892	Coast live oak	11,10,9	No	Within road grading
893	Coast live oak	22,14,12	Yes	Within road grading
894	Coast live oak	18,15,8	Yes	Within lot grading
895	Coast live oak	11	No	Within lot grading
896	Valley oak	28	Yes	Within lot grading
897	Coast live oak	36,18,11,11	Yes	Within lot grading
898	Coast live oak	25	Yes	Within lot grading
899	Coast live oak	7	No	Within lot grading
900	Coast live oak	27	Yes	Within lot grading
901	Coast live oak	7	No	Within lot grading
902	Coast live oak	14	Yes	Within lot grading
903	Coast live oak	9	No	Within lot grading
904	Coast live oak	15,11,7	Yes	Within lot grading
905	Coast live oak	7,6	No	Within lot grading
906	Coast live oak	10,9,9,5	No	Within lot grading
907	Coast live oak	6,5	No	Within lot grading
908	Coast live oak	13,12,11,10	Yes	Within lot grading
909	Coast live oak	12	Yes	Within lot grading
910	Coast live oak	13,12,12	Yes	Within lot grading
911	Coast live oak	6	No	Within lot grading
912	Coast live oak	7,4	No	Within lot grading
913	Coast live oak	12,10	Yes	Within lot grading
914	Coast live oak	8,6	No	Within lot grading
915	Coast live oak	7,7,6	No	Within lot grading
916	Coast live oak	10,9,8	No	Within lot grading
917	Coast live oak	11	No	Within road grading
918	Coast live oak	8,7	No	Within road grading
919	Coast live oak	6	No	Within road grading
920	Coast live oak	26,17	Yes	Within road grading
921	Coast live oak	16,12,6,5	Yes	Within lot grading
922	Coast live oak	7,6,4	No	Within lot grading
923	Coast live oak	9,8,8,5	No	Within lot grading
924	Coast live oak	7,5	No	Within lot grading
925	Coast live oak	11,5	No	Within lot grading
926	Coast live oak	7,6,5,4	No	Within lot grading
927	Coast live oak	8,8	No	Within lot grading
928	Madrone	21,12,12	No	Within lot grading
929	Coast live oak	10	No	Within lot grading
931	Coast live oak	8,6,5	No	Within lot grading
956	Coast live oak	10,9,5	No	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
957	Coast live oak	10,9,4	No	Within lot grading
958	Coast live oak	15,13	Yes	Within lot grading
959	Coast live oak	17	Yes	Within lot grading
960	Coast live oak	13	Yes	Within lot grading
961	Coast live oak	39	Yes	Impacted by lot grading
962	Coast live oak	9,8,7	No	Within lot grading
963	Coast live oak	18	Yes	Within lot grading
964	Coast live oak	8,8,6	No	Within lot grading
965	Coast live oak	11	No	Within lot grading
966	Coast live oak	18,15,11	Yes	Within lot grading
972	Coast live oak	13	Yes	Within lot grading
976	Coast live oak	9,9,8	No	Within lot grading
977	Coast live oak	6	No	Within lot grading
978	Coast live oak	10,9	No	Within lot grading
979	Coast live oak	8,7,5	No	Within lot grading
980	Coast live oak	8,8	No	Within lot grading
981	Coast live oak	6,6,5,4	No	Within lot grading
982	Coast live oak	7	No	Within lot grading
983	Coast live oak	9,9,8,6	No	Within lot grading
984	Coast live oak	14	Yes	Within lot grading
985	Coast live oak	8	No	Within lot grading
986	Coast live oak	6	No	Within lot grading
987	Coast live oak	8,7,6	No	Within lot grading
988	Coast live oak	8,4	No	Within lot grading
989	Coast live oak	7,4	No	Within lot grading
990	Coast live oak	8	No	Within lot grading
992	Coast live oak	9,8	No	Within lot grading
993	Coast live oak	12,10,8,6	Yes	Within lot grading
994	Coast live oak	9,9,5	No	Within lot grading
995	Coast live oak	6,3	No	Within lot grading
996	Coast live oak	8,8	No	Within lot grading
997	Coast live oak	7	No	Within lot grading
1075	Monterey pine	31	No	Within lot grading
1076	Monterey pine	25	No	Within road grading
1077	Monterey pine	31	No	Within road grading
1078	Monterey pine	27	No	Within road grading
1079	Monterey pine	36	No	Within road grading
1081	Coast live oak	6,5	No	Within road grading
1084	Coast live oak	14,7	Yes	Within grading
1086	Coast live oak	32	Yes	Impacted by lot grading
1089	Coast live oak	7	No	Within lot grading
1108	Calif. black oak	36	Yes	Within lot grading
1109	Coast live oak	6	No	Within lot grading
1110	Coast live oak	49	Yes	Impacted by lot grading
1132	Coast live oak	6	No	Within swale grading
1142	Coast live oak	7,6	No	Within swale grading
1145	Coast live oak	6	No	Within swale grading
1146	Coast live oak	7	No	Within swale grading
1147	Coast live oak	8,5,3	No	Within road grading
1148	Coast live oak	6,5	No	Within road grading
1149	Coast live oak	6	No	Within road grading
1150	Coast live oak	9	No	Within grading
1151	Coast live oak	8,7,7,6	No	Within grading
1152	Coast live oak	7,5	No	Within grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
1153	Coast live oak	9,5,5	No	Within grading
1154	Coast live oak	8,7,7,6	No	Within grading
1155	Coast live oak	6	No	Within grading
1156	Coast live oak	6	No	Within grading
1157	Coast live oak	7	No	Within grading
1158	Coast live oak	11	No	Within grading
1159	Coast live oak	9	No	Within grading
1160	Mimosa	8,8,7	No	Within grading
1161	Coast live oak	8	No	Within grading
1162	Coast live oak	8,7,5	No	Within grading
1163	Coast live oak	10,8,8,7	No	Within grading
1164	Apple	7,6,6	No	Within lot grading
1165	Apple	13,6	No	Within lot grading
1166	Deodar cedar	25	No	Within lot grading
1167	Purple leaf plum	8,8	No	Within lot grading
1168	Purple leaf plum	9,6,6,4	No	Within road grading
1169	Purple leaf plum	8	No	Within road grading
1170	Monterey pine	28	No	Within road grading
1171	Monterey pine	38	No	Within road grading
1172	Coast live oak	31,20	Yes	9' from grading
1181	Coast live oak	28,12	Yes	2' from retaining wall
1183	Coast live oak	8,5	No	Within road grading
1184	Coast live oak	10	No	Within road grading
1185	Coast live oak	6,5,2	No	1' from road grading
1186	Coast live oak	7,6	No	Within road grading
1190	Coast live oak	13,9	Yes	3' from road grading
1193	Coast live oak	27	Yes	Within road grading
1194	Coast live oak	23	Yes	Within road grading
1195	Coast live oak	19	Yes	1' from retaining wall
1196	Coast live oak	46,22	Yes	4' from retaining wall
1270	Coast live oak	14,12	Yes	Within lot grading
1271	Coast live oak	11	No	Within grading
1272	Coast live oak	8	No	Within grading
1273	Coast live oak	9	No	Within grading
1274	Coast live oak	7	No	Within grading
1275	Coast live oak	7	No	Impacted by grading
1277	Coast live oak	9	No	Impacted by grading
1278	Coast live oak	7	No	Impacted by grading
1279	Coast live oak	10	No	Impacted by grading
1281	Coast live oak	6,4	No	Within swale grading
1282	Coast live oak	7,4	No	Within road grading
1283	Coast live oak	6	No	Within road grading
1284	Purple leaf plum	6,5	No	Within road grading
1310	Monterey pine	25	No	Within lot grading
1311	Coast live oak	23,22	Yes	6' from grading
1317	Coast live oak	10,8	No	Within lot grading
1318	Coast live oak	10	No	Within lot grading
1319	Coast live oak	7	No	Within lot grading
1320	Coast live oak	7,6	No	Within lot grading
1321	Coast live oak	10,8,7	No	Within lot grading
1441	Coast live oak	6	No	Within grading
1442	Coast live oak	6,5,5,4	No	Within lot grading
1473	Coast live oak	10,7	No	Within road grading
1474	Coast live oak	5,5,4,3	Yes	Within lot grading
1475	Coast live oak	8,8,7,6	No	Within lot grading

Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **Tree Protection Zone** can minimize these impacts.

Specific **TREE PROTECTION ZONES** have been reviewed with Davidon Homes for each tree and will be provided prior to construction. No grading, excavation, construction or storage of materials shall occur within the **TREE PROTECTION ZONES**.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Design recommendations

1. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.
2. Evaluate the possibility of adjusting the locations of the V-ditch adjacent to trees #706, 707, and 790-793 to provide a minimum of 5' between the V-ditch and tree trunks.
3. A **TREE PROTECTION ZONE** shall be established around each tree per our recommendations. Trees shall be protected at the specific distance in the direction specified, and at the dripline in all other directions. No grading, excavation, construction or storage of materials shall occur within that zone. For trees where no **TREE PROTECTION ZONE** was specified, fencing and protection are not required, as they are away from the proposed improvements.
4. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**, without the review and written approval of the Consulting Arborist.
5. **Tree Preservation Notes**, prepared by the Consulting Arborist, should be included on all plans.

Pre-construction treatments and recommendations

1. The construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by consulting arborist. Fences are to remain until all grading and construction is completed.
3. Preliminary pruning recommendations for trees in proximity to the proposed development have been reviewed with Davidon Homes and will be provided prior to construction.

4. Prune trees to be preserved to clean the crown, correct for any defects in structure, and to provide clearance. Any pruning of off-site trees must be performed with the property owner's permission. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE**.

Recommendations for tree protection during construction

1. No grading, construction, demolition or other work shall occur within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.
2. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.
3. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
4. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
5. Trees to be removed that have canopies touching trees to remain shall be removed by a Certified Arborist in a manner to avoid damage to remaining trees.
6. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.
7. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.

Maintenance of impacted trees

Trees preserved at the Napa Oaks site will experience physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for hazard potential is recommended.

HortScience, Inc.

Sincerely,



John Leffingwell
Board Certified Master Arborist #WE-3966B
Registered Consulting Arborist #442

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
101	Coast live oak	29	Yes	4	Good	Codominant trunks at 6'; crossing branches; pruned on north for overhead utilities.
102	Privet	9,7,6,5,5	No	3	Moderate	Multiple attachments at base; growing around old curb.
103	Mimosa	11	No	3	Poor	Leans south; thin crown.
104	Italian stone pine	10	No	3	Poor	Crook in upper crown; fire damage.
105	Mimosa	15,12	No	1	Poor	Stems splitting at attachment; hazardous tree.
106	English walnut	13	No	2	Poor	Poor form and structure; topped at 15'.
107	Paradox walnut	15	No	4	Moderate	Codominant trunks at 5'; branch failure west; dieback in upper crown.
108	Mimosa	13	No	3	Poor	One-sided east; old topping points; basal wound.
109	Aleppo pine	22	No	4	Moderate	Codominant trunks at 10'; upright form.
110	English walnut	12,4	No	2	Poor	Topped for overhead utilities; dieback; black walnut sprouts from base.
111	Privet	6,5,4,3	No	3	Poor	Multiple attachments at base; topped for overhead utilities.
112	Almond	8	No	1	Poor	All but dead.
113	Almond	7,6,5,4,4	No	2	Poor	Thin crown; declining.
114	English walnut	7	No	3	Poor	Suppressed form; black walnut sprouts from base.
115	Calif. black oak	13	Yes	4	Moderate	Multiple attachment at 4'; privet stem embedded in trunk.
116	Valley oak	8	No	3	Moderate	Suppressed; one-sided north.
117	Coast live oak	12	Yes	4	Moderate	Crowded; asymmetric crown.
118	Coast live oak	6	No	2	Poor	Suppressed form; lost top; embedded barbed wire.
119	English walnut	10	No	3	Poor	Suppressed form; engulfed in ivy; black walnut sprouts from base.
120	Coast live oak	18	Yes	4	Moderate	Off-site; one-sided west; trunk wound east.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
121	Valley oak	36	Yes	4	Moderate	Multiple attachments at 18'; heavy lateral limbs; history of branch failure; engulfed in poison oak.
122	Almond	12	No	2	Poor	Suppressed; topped at 15'.
123	Olive	7,6	No	4	Good	Codominant trunks at base; suppressed.
124	Olive	7	No	3	Moderate	Off-site; leans west.
125	Coast live oak	30,26	Yes	5	Good	Codominant trunks at base; spreading form; good form and structure; rope girdling branch northeast.
126	Coast live oak	10	No	2	Poor	Suppressed form; topped at 8'.
127	Coast live oak	9	No	3	Moderate	Suppressed form; trunk wound in upper crown.
128	Coast live oak	7	No	2	Poor	Basal wounds; thin crown.
129	English walnut	8	No	3	Poor	Suppressed form; black walnut sprouts from base.
130	Coast live oak	15	Yes	5	Good	Good form and structure; western stem removed.
131	English walnut	11	No	3	Poor	Basal swelling; topped at 10'.
132	English walnut	6,6	No	4	Moderate	Codominant trunks at 2'; included bark.
133	Coast live oak	15,15,8	Yes	5	Good	Good form and structure; beneath overhead utilities.
134	Coast live oak	9,7,6,4,3	No	4	Moderate	One-sided east; seam in attachment; beneath overhead utilities.
135	Valley oak	8	No	5	Good	Good young tree.
136	Valley oak	13	Yes	4	Good	Multiple attachments at 10'; twig dieback; engulfed in vines.
137	Calif. black walnut	10,8,7	No	4	Moderate	Multiple attachments at base; minor dieback.
138	Calif. black walnut	9,8,8,8	No	4	Moderate	Stump sprout; multiple attachments at base.
139	English walnut	13	No	3	Poor	Basal cavity; topped.
140	Coast live oak	10	No	4	Moderate	Multiple attachments at 7'; good young tree; growth crack south.
141	Mimosa	14	No	2	Poor	Declining; thin crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
142	Aleppo pine	17	No	4	Moderate	Codominant trunks at 10'; upright form; basal fire damage.
143	Mimosa	10	No	1	Poor	All but dead.
144	Aleppo pine	22,15	No	4	Moderate	Multiple attachments at 5'; upright form; basal fire damage.
145	Coast redwood	22	No	5	Good	Good form and structure; fire damage on lower trunk & branches.
146	Apple	8,7,5	No	2	Poor	Topped; cavities filled with concrete.
147	Valley oak	21	Yes	4	Moderate	Fair structure; thinning crown.
148	Pinyon pine	10	No	5	Good	Good form and structure.
149	Calif. black oak	7	No	5	Good	Good young tree.
150	Calif. black oak	9	No	5	Good	Good young tree.
151	Myoporum	8,7	No	4	Moderate	Codominant trunks at base; low lateral west.
152	Japanese black pine	8	No	3	Moderate	Leans south.
153	Calif. black oak	8	No	5	Good	Good young tree.
154	Chinese pistache	8	No	5	Good	Good form and structure.
155	Calif. black oak	6	No	5	Good	Good young tree.
156	Incense cedar	36	No	4	Good	Upright form; heavy lateral limbs.
157	Japanese black pine	6,4	No	4	Moderate	Upright form; lower limbs pruned.
158	Japanese black pine	7	No	4	Moderate	Upright form; lower limbs pruned.
159	Calif. black oak	8	No	5	Good	Good young tree; small basal wound.
160	Calif. black oak	11	No	5	Good	Good form and structure; branch wounds.
161	Valley oak	13	Yes	4	Good	Multiple attachments at 6'; pruned east for overhead utilities.
162	Evergreen ash	13	No	2	Poor	Extensive mistletoe; trunk decay; little live material remains.
163	Evergreen ash	17	No	3	Poor	Extensive mistletoe; trunk decay; pruned east for overhead utilities.
164	Aleppo pine	15	No	2	Poor	Very thin crown; sequoia pitch moth.
165	Coast live oak	9	No	5	Good	Good form and structure; beneath overhead utilities.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
166	Arizona cypress	16,9	No	4	Good	Open form; twig and branch dieback.
167	Almond	9	No	2	Poor	Very thin crown; sapsucker damage.
168	Valley oak	41	Yes	4	Moderate	Multiple attachments at 12'; dead wood; epicormic shoots.
169	Coast live oak	9	No	4	Moderate	Crowded; one-sided east.
170	Coast live oak	12	Yes	4	Moderate	Crowded; one-sided west.
171	Coast live oak	10	No	3	Moderate	Crowded; leans northwest.
172	Almond	10,9	No	2	Poor	One-sided east; extensive dieback west.
173	Coast live oak	18	Yes	4	Good	Leans west; low lateral south.
174	Coast live oak	6	No	4	Moderate	Heavy lean west.
175	English walnut	11	No	4	Moderate	One sided south; dieback.
176	Coast live oak	11,8	No	4	Moderate	Codominant trunks at 3'; seam in attachment; basal swelling.
177	Coast live oak	8	No	4	Good	Slight lean north.
178	Coast live oak	7	No	4	Good	Crowded; slight lean west.
179	Coast live oak	50	Yes	4	Moderate	Multiple attachments at 15'; heavy lateral limb/low branching east.
180	Valley oak	26	Yes	2	Poor	Very thin crown; eastern stem failed at 5'.
181	Coast live oak	10,7	No	5	Good	Codominant at base with #182; one-sided west.
182	Valley oak	8	No	5	Good	Codominant at base with #183; upright form.
183	Valley oak	7	No	3	Moderate	Thin crown; growing at top of channel.
184	Coast live oak	12	Yes	4	Good	Multiple attachments at 5'; slightly thin crown.
185	Coast live oak	10,8	No	4	Moderate	Growing at top of channel; roots exposed west.
186	Valley oak	28	Yes	4	Moderate	One-sided north; twig and branch dieback.
187	Calif. black oak	28,18	Yes	4	Moderate	Codominant trunks at 4'; one-sided south; history of branch failure; trunk wounds.
188	Valley oak	23	Yes	3	Moderate	Codominant trunks at 10'; very one-sided west.
189	Valley oak	21	Yes	4	Moderate	Multiple attachments at 8'; upright form; dead wood.
190	Coast live oak	27	Yes	4	Moderate	Multiple attachments at 8'; low laterals; trunk wounds/cavities.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
191	Valley oak	16	Yes	4	Moderate	Upright form; slightly thin crown.
192	Valley oak	17	Yes	3	Moderate	Thin, high crown.
193	Valley oak	16	Yes	3	Poor	Thin, asymmetric crown; low lateral north.
194	Valley oak	18	Yes	3	Poor	Thin, asymmetric crown; basal swelling.
195	Valley oak	17	Yes	4	Moderate	Good form; fair structure.
196	Valley oak	22,15	Yes	4	Moderate	Codominant trunks at 3'; low branching south; dead wood.
197	Coast live oak	7,7,6,5,4	No	5	Good	Multiple attachments at base; good young tree.
198	Coast live oak	6	No	5	Good	Good young tree.
199	Valley oak	7	No	3	Moderate	Twig and branch dieback; epicormic shoots.
200	Coast live oak	6,5	No	5	Good	Good young tree.
201	Coast live oak	6	No	4	Good	One-sided west.
202	Coast live oak	7,6,5	No	5	Good	Multiple attachments at base; crowded by #188.
203	Coast live oak	10,8,8,7,6	No	5	Good	Multiple attachments at base; low branching.
204	Coast live oak	12	Yes	5	Good	Slight lean north; low branch south.
205	Calif. buckeye	9,6,5	No	4	Moderate	Multiple attachments at base; one-sided north.
206	Valley oak	33	Yes	4	Moderate	Sweeps from base; opening in crown.
207	Almond	15,9	No	3	Poor	Dieback of eastern branches.
208	Coast live oak	8,5,5	No	5	Good	Good young tree; low branching.
209	Valley oak	6	No	5	Good	Good young tree.
210	Calif. buckeye	16,15	No	4	Moderate	Codominant trunks at base; one-sided northeast.
211	Coast live oak	48	Yes	3	Moderate	Leans southeast; roots exposed and lifting on tension side.
212	Coast live oak	12	Yes	3	Moderate	Suppressed form; bowed east to horizontal.
213	Coast live oak	19	Yes	3	Moderate	Suppressed form; one-sided south; heavy lateral limbs.
214	Coast live oak	7,7	No	3	Moderate	Codominant trunks at 1'; narrow crown.
215	Coast live oak	6,5,5	No	3	Moderate	Crushed beneath old #110 that failed at base.
216	Coast live oak	8,7,6,5,5	No	5	Good	Multiple attachments at base; upright form.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
217	Coast live oak	10,6,6	No	5	Good	Multiple attachments at base; upright form.
218	Coast live oak	12	Yes	4	Moderate	Part of grove; crowded; one-sided north.
219	Coast live oak	10,10,7	No	4	Moderate	Part of grove; crowded; upright form.
220	Coast live oak	8	No	2	Poor	Part of grove; extensive dieback.
221	Coast live oak	8,8,6	No	4	Moderate	Part of grove; crowded; upright form.
222	Coast live oak	10,7,5	No	3	Moderate	Part of grove; crowded; one-sided west.
223	Coast live oak	9	No	3	Poor	Part of grove; crowded; small crown.
224	Coast live oak	9,5	No	3	Moderate	Part of grove; crowded; narrow crown.
225	Coast live oak	10,7	No	3	Poor	Part of grove; crowded; small crown.
226	Coast live oak	9	No	3	Moderate	Part of grove; crowded; one-sided west.
227	Coast live oak	10	No	4	Moderate	Part of grove; crowded; upright form.
228	Coast live oak	6	No	3	Moderate	Part of grove; crowded; small crown.
229	Coast live oak	8	No	3	Moderate	Part of grove; crowded; small crown.
230	Coast live oak	7	No	3	Moderate	Part of grove; crowded; narrow crown.
231	Valley oak	8	No	3	Moderate	Part of grove; crowded; crown bowed east.
232	Coast live oak	9,6	No	3	Moderate	Part of grove; crowded; crown bowed east.
233	Coast live oak	7	No	3	Poor	Part of grove; crowded; small crown.
234	Coast live oak	16,5	Yes	4	Good	Part of grove; dominant tree.
235	Coast live oak	12	Yes	3	Moderate	Part of grove; crowded; narrow, asymmetric crown.
236	Coast live oak	7	No	3	Poor	Part of grove; crowded; small crown.
237	Coast live oak	15,8	Yes	5	Good	Codominant trunks at base; good form and structure.
238	Coast live oak	15	Yes	4	Good	Edge of grove; multiple attachments at 6'.
239	Coast live oak	13,7	Yes	5	Good	Codominant trunks at base; low branching south.
240	Coast live oak	10,7	No	5	Good	Codominant trunks at 2'; good form and structure.
241	Coast live oak	9,9,6	No	5	Good	Codominant trunks at base; good form and structure.
242	Coast live oak	10	No	4	Moderate	One-sided south; basal sprouts.
243	Coast live oak	28	Yes	4	Good	Slight lean east; roots exposed; dead wood.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
244	Coast live oak	9	No	3	Moderate	One-sided southwest.
245	Coast live oak	7	No	3	Poor	Suppressed form.
246	Coast live oak	12	Yes	5	Good	No tag; good young tree; engulfed in blackberry.
247	Coast live oak	8	No	4	Good	Good young tree; one-sided west.
248	Coast live oak	9	No	4	Good	Good young tree; one-sided east.
249	Coast live oak	8	No	5	Good	Good young tree; crown lifted by cattle.
250	Madrone	14,9,6	No	2	Poor	Extensive trunk wounds/decay; thin crown.
251	Coast live oak	8	No	5	Good	Good young tree; branches to the ground.
252	Coast live oak	9,8,7	No	5	Good	Multiple attachments at base; good young tree.
253	Coast live oak	9,7,6	No	4	Moderate	Multiple attachments at base; thin crown.
254	Coast live oak	8	No	4	Moderate	Crook at 6'; crown bowed west.
255	Coast live oak	9,5	No	4	Moderate	Codominant trunks at base; thin crown.
256	Coast live oak	10,9,8,5,5	No	5	Good	Multiple attachments at 3'; low branching.
257	Coast live oak	9	No	3	Moderate	Suppressed form; crown bowed northeast.
258	Coast live oak	6,4,4	No	3	Poor	Low branching; twig and branch dieback
259	Coast live oak	9,8,7,6,6	No	5	Good	Multiple attachments at base.
260	Coast live oak	13	Yes	4	Moderate	Crowded; asymmetric crown.
261	Coast live oak	7,7,6,5,5	No	4	Moderate	Multiple attachments at 1'; one-sided east.
262	Coast live oak	18,7,6	Yes	5	Good	Dominant tree; dead wood.
263	Coast live oak	6,6,5,5	No	4	Moderate	Multiple attachments at 1'; one-sided west.
264	Coast live oak	9	No	3	Moderate	One sided north; twig dieback.
265	Coast live oak	8	No	3	Moderate	Small crown; basal wounds.
266	Coast live oak	36	Yes	4	Good	Multiple attachments at 7'; good form and structure; low branching south.
267	Calif. buckeye	23,18,13	No	4	Moderate	Multiple attachments at 3'; slight lean east; cavities/decay.
268	Calif. buckeye	15	No	3	Poor	One-sided west; basal cavity; decayed roots.
269	Coast live oak	18	Yes	5	Good	Good form and structure.
270	Coast live oak	36	Yes	4	Good	Codominant trunks at 1'; cavity in attachment; low branching east.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
271	Coast live oak	17,15,13,11	Yes	5	Good	Multiple attachments at base; good form and structure; low branching south.
272	Coast live oak	13,10	Yes	4	Good	Codominant trunks at base; narrow crown.
273	Coast live oak	16	Yes	4	Good	One-sided east.
274	Coast live oak	8,6	No	5	Good	Good young tree; branches to the ground.
275	Coast live oak	10	No	5	Good	Multiple attachments at 5'; good form and structure; pruned south.
276	Coast live oak	8,5,3	No	4	Good	Multiple attachments at 2'; seam in attachment.
277	Coast live oak	10,10	No	4	Good	Codominant trunks at 4'; twig dieback.
278	Coast live oak	10	No	4	Moderate	Crowded; one-sided west
279	Coast live oak	13	Yes	5	Good	Codominant trunks at 5'; seam in attachment.
280	Coast live oak	14,11,11	Yes	4	Good	Multiple attachments at 2'; good form and structure.
281	Valley oak	11	No	4	Good	Crowded; upright form.
282	Coast live oak	12,11,6	Yes	3	Good	Crowded; one-sided southwest.
283	Coast live oak	14	Yes	4	Moderate	Crowded; one-sided south.
284	Coast live oak	11,7,6,5,5	No	4	Good	Multiple attachments at 9'; pruned south.
285	Coast live oak	14	Yes	4	Moderate	Multiple attachments at 5'; basal swelling; crown lifted over road east.
286	Blue spruce	10	No	5	Good	Good form and structure.
287	Burr oak	7	No	4	Good	Good form and structure; chlorotic.
288	Calif. black oak	11	No	5	Good	Good form and structure; pruning wounds.
289	Coast live oak	14	Yes	3	Moderate	Trunk wounds; lateral north.
290	Evergreen ash	20	No	3	Poor	Topped for overhead utilities; extensive mistletoe.
291	Coast live oak	24	Yes	4	Moderate	Off-site, no tag; pruned south for overhead utilities.
292	Scot's pine	6	No	2	Poor	Suppressed form; leans south.
293	English walnut	17	No	2	Poor	Topped for overhead utilities; dieback in upper crown.
294	Coast redwood	22,18	No	3	Moderate	Codominant trunks at base; topped for overhead utilities.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
295	Coast live oak	8	No	3	Moderate	Edge of grove; suppressed form.
296	Coast live oak	10	No	3	Moderate	Edge of grove; one-sided northeast.
297	Coast live oak	12,11	Yes	4	Good	Part of grove; codominant trunks at 3'.
298	Coast live oak	9,4	No	4	Moderate	Edge of grove; one-sided east.
299	Coast live oak	6	No	3	Moderate	Edge of grove; fair structure.
300	Coast live oak	13,6,6	Yes	4	Good	Part of grove; multiple attachments at 3'; included bark.
301	Coast live oak	6	No	3	Moderate	Part of grove; crowded.
302	Coast live oak	14,7	Yes	3	Poor	Part of grove; trunk wounds.
303	Coast live oak	6	No	3	Poor	Part of grove; crowded; poor form and structure.
304	Coast live oak	10,7,7	No	3	Moderate	Part of grove; crowded; asymmetric crown.
305	Coast live oak	11,6	No	3	Moderate	Edge of grove; one-sided northwest.
306	Coast live oak	10,6	No	3	Moderate	Edge of grove; one-sided west.
307	Coast live oak	9,8,6,6	No	3	Moderate	Part of grove; multiple attachments at base; thin crown; engulfed in poison oak.
308	Coast live oak	7,6,5,5	No	3	Poor	Part of grove; multiple attachments at base; thin crown; engulfed in poison oak.
309	Coast live oak	7	No	4	Moderate	Part of grove; crowded; narrow crown.
310	Coast live oak	9,7,6,5	No	3	Moderate	Part of grove; multiple attachments at base; asymmetric crown.
311	Coast live oak	7	No	3	Moderate	Part of grove; crowded; small crown.
312	Coast live oak	12,10,8	Yes	4	Good	Edge of grove; multiple attachments at 4'; one-sided east.
313	Coast live oak	11	No	3	Moderate	Edge of grove; trunk wounds; one-sided east.
314	Coast live oak	10	No	3	Poor	Part of grove; crowded; dead top.
315	Coast live oak	6	No	3	Moderate	Part of grove; thin top.
316	Coast live oak	7	No	3	Moderate	Part of grove; crowded.
317	Coast live oak	11,8	No	4	Moderate	Part of grove; codominant trunks at 1'; narrow crown.
318	Coast live oak	14,9	Yes	4	Good	Edge of grove; one-sided east.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
319	Coast live oak	9,8	No	3	Moderate	Part of grove; codominant trunks at 1'; asymmetric crown.
320	Coast live oak	8,6	No	3	Moderate	Part of grove; codominant trunks at 3'.
321	Coast live oak	6	No	3	Poor	Part of grove; crowded; very small crown.
322	Coast live oak	10,9,8	No	3	Moderate	Part of grove; codominant trunks at 4'; asymmetric crown.
323	Coast live oak	8,7	No	3	Moderate	Edge of grove; crowded; one-sided west.
324	Coast live oak	6	No	3	Poor	Part of grove; crowded; suppressed form.
325	Coast live oak	8,7	No	3	Moderate	Edge of grove; one-sided east.
326	Coast live oak	10,9,8,6	No	4	Good	Part of grove; multiple attachments at 4'; good form and structure.
327	Coast live oak	15,7,6	Yes	4	Good	Edge of grove; upright form.
328	Coast live oak	7	No	3	Poor	Part of grove; crowded; small crown.
329	Coast live oak	11	No	3	Moderate	Part of grove; crowded; asymmetric crown.
330	Coast live oak	6	No	3	Poor	Edge of grove; crowded; suppressed form.
331	Coast live oak	8	No	3	Poor	Edge of grove; crowded; one-sided southwest.
332	Coast live oak	12	Yes	3	Moderate	Part of grove; crowded; asymmetric crown.
333	Coast live oak	6	No	2	Poor	Edge of grove; crowded; small crown.
334	Coast live oak	10	No	3	Moderate	Part of grove; crowded; upright form.
335	Coast live oak	7,6,5	No	4	Moderate	Edge of grove; one-sided east.
336	Coast live oak	11	No	4	Moderate	Edge of grove; one-sided east.
337	Coast live oak	6	No	3	Poor	Part of grove; small crown.
338	Coast live oak	11	No	3	Poor	Part of grove; codominant trunks at 4'; narrow attachment; seam in attachment.
339	Coast live oak	12	Yes	4	Moderate	Edge of grove; one-sided west
340	Coast live oak	7,6,3	No	3	Moderate	Part of grove; narrow crown.
341	Coast live oak	6,6,6	No	3	Poor	Part of grove; poor form and structure.
342	Coast live oak	6	No	4	Moderate	Edge of grove; one-sided southeast.
343	Coast live oak	7	No	3	Moderate	Part of grove; high, small crown.
344	Valley oak	6,4	No	3	Moderate	Part of grove; codominant trunks at 3'; narrow crown.
345	Coast live oak	7,6,4	No	3	Moderate	Part of grove; narrow crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
346	Coast live oak	11	No	3	Moderate	Edge of grove; one-sided west.
347	Coast live oak	7	No	4	Moderate	Part of grove; upright form.
348	Coast live oak	8,6,5,4	No	4	Moderate	Edge of grove; multiple attachments at base; one-sided west.
349	Coast live oak	7	No	3	Moderate	Part of grove; small crown; upright form.
350	Coast live oak	9	No	3	Moderate	Part of grove; crown bowed west.
351	Coast live oak	7,6,4	No	4	Moderate	Edge of grove; one-sided west.
352	Coast live oak	8	No	3	Moderate	Part of grove; leans north; small crown.
353	Coast live oak	6,6	No	3	Moderate	Edge of grove; upright form.
354	Coast live oak	9	No	4	Moderate	Part of grove; upright form.
355	Coast live oak	12	Yes	3	Moderate	Edge of grove; one-sided south.
356	Calif. buckeye	20	No	3	Moderate	Suppressed form; crown broke a 8' dnd is now propping the tree.
357	Coast live oak	61	Yes	4	Moderate	Multiple attachments at 7'; 30" stem failed on north side.
358	Coast live oak	20	Yes	5	Good	Multiple attachments at 4'; seam in attachments.
359	Coast live oak	12,8	Yes	4	Moderate	Edge of grove; one-sided south.
360	Coast live oak	7	No	3	Moderate	Edge of grove; upright form.
361	Coast live oak	10	No	3	Poor	Part of grove; suppressed form.
362	Coast live oak	13	Yes	4	Moderate	Part of grove; upright form.
363	Coast live oak	14,7	Yes	3	Moderate	Edge of grove; leanig & one-sided west.
364	Coast live oak	11,6,5	No	4	Moderate	Part of grove; upright form.
365	Coast live oak	12,11	Yes	4	Moderate	Part of grove; multiple attachments at 3'.
366	Coast live oak	7,6	No	3	Poor	Edge of grove; one-sided east.
367	Coast live oak	13	Yes	3	Moderate	Part of grove; fair structure.
368	Coast live oak	8	No	3	Moderate	Edge of grove; upright form.
369	Coast live oak	11	No	3	Moderate	Edge of grove; one-sided east.
370	Coast live oak	14,12,6	Yes	4	Good	Edge of grove; multiple attachments at base; low lateral north.
371	Coast live oak	20	Yes	3	Poor	Lage trunk wound north; failed south and laying on ground.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
372	Coast live oak	20	Yes	3	Poor	Suppressed form; asymmetric crown.
373	Coast live oak	14	Yes	3	Poor	Leans south; basal wound.
374	Coast live oak	35	Yes	4	Moderate	Codominant trunks at 7'; one-sided south; branches to the ground south.
375	Coast live oak	22	Yes	3	Poor	Basal cavity east; asymmetric crown; dead wood.
376	Coast live oak	10,8,8,5	No	4	Good	Multiple attachments at base; one-sided southwest.
377	Coast live oak	8,7,5	No	4	Moderate	Multiple attachments at base; narrow crown.
378	Coast live oak	6	No	3	Poor	Suppressed form; leans east.
379	Coast live oak	8,7,6	No	4	Moderate	Multiple attachments at base; good form and structure.
380	Coast live oak	6,5,5,5	No	3	Moderate	Multiple attachments at 1'; leans east.
381	Coast live oak	31,16	Yes	3	Poor	Codominant trunks at 6'; dieback in upper crown; 16" stem laying on ground south.
382	Coast live oak	29	Yes	2	Poor	Multiple attachments at 10'; cavities; extensive dieback in upper crown.
383	Coast live oak	12,6,6	Yes	4	Good	Codominant trunks at 2'; squirrel damage/dieback.
384	Coast live oak	11,9	No	3	Moderate	Multiple attachments at 1'; one-sided east.
385	Coast live oak	7,3	No	3	Poor	Suppressed form; one-sided east.
386	Coast live oak	8,7,6	No	3	Moderate	Multiple attachments at base; upright form; twig dieback.
387	Coast live oak	6	No	3	Poor	Suppressed; small crown.
388	Coast live oak	8,7,7,6,6,5	No	4	Moderate	Multiple attachments at base; one-sided west; low branching south.
389	Coast live oak	8,6	No	3	Moderate	Codominant trunks at 2'; asymmetric crown.
390	Coast live oak	12,5	Yes	5	Good	Good form and structure.
391	Coast live oak	8,5	No	3	Poor	Suppressed form; low growing south.
392	Coast live oak	8	No	4	Moderate	Upright form.
393	Coast live oak	6	No	3	Moderate	Good young tree; upright form
394	Coast live oak	8,6	No	3	Moderate	Codominant trunks at 1'; asymmetric crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
395	Coast live oak	6,6	No	3	Moderate	Codominant trunks at base; upright form.
396	Coast live oak	11,10,8,5,5	No	4	Moderate	Multiple attachments at base; asymmetric crown.
397	Coast live oak	9,9,8	No	4	Moderate	Multiple attachments at base; upright form.
398	Coast live oak	11,9,8	No	4	Moderate	Multiple attachments at base; crowded; asymmetric crown.
399	Coast live oak	12,11,9	Yes	4	Moderate	Multiple attachments at 1'; good form and structure.
400	Coast live oak	19,10,9	Yes	2	Poor	Multiple attachments at base; stems split apart at ground.
401	Coast live oak	6,4	No	3	Moderate	Codominant trunks at at base; crowded with asymmetric crown.
402	Coast live oak	8,6,6	No	4	Good	Multiple attachments at base; low branching.
403	Madrone	27	No	4	Good	Multiple attachments at 7'; good form and structure.
404	Coast live oak	9,7,6,4	No	5	Good	Multiple attachments at 2'; one-sided west.
405	Coast live oak	7,5,5,4	No	4	Moderate	Multiple attachments at base; small leaves; thin crown.
406	Coast live oak	8,7,5,5,4,4	No	4	Moderate	Multiple attachments at base; low branching south.
407	Coast live oak	8,5	No	4	Good	Codominant trunks at 3'; twisted at base.
408	Coast live oak	9,8,7,6,6	No	5	Good	Multiple attachments at 2'; good form and structure.
409	Coast live oak	7,6,3,3	No	5	Good	Multiple attachments at base; low canopy.
410	Coast live oak	8	No	3	Moderate	Poor color; thin crown.
411	Coast live oak	12,11,10	Yes	3	Moderate	Multiple attachments at 4'; seams in attachment; thin crown.
412	Coast live oak	7,6,6,5,5,5	No	4	Moderate	Multiple attachments at base; part of a dense grove.
413	Coast live oak	6,5,4,4	No	3	Moderate	Multiple attachments at base; part of a dense grove.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
414	Coast live oak	7,7,6	No	3	Moderate	Multiple attachments at base; one-sided west; part of a dense grove.
415	Coast live oak	12,6	Yes	4	Moderate	Codominant trunks at base; asymmetric crown; part of a dense grove.
416	Coast live oak	7,6	No	3	Moderate	Codominant trunks at base; part of a dense grove.
417	Coast live oak	9,8,6	No	3	Moderate	Multiple attachments at base; 6" stem laying on ground south; part of a dense grove.
418	Coast live oak	6,5	No	3	Poor	Small crown; part of a dense grove.
419	Coast live oak	13	Yes	4	Moderate	Asymmetric crown; part of a dense grove.
420	Coast live oak	29,9	Yes	2	Poor	Huge cavity extends to upper crown; one-sided southeast.
421	Coast live oak	28	Yes	4	Moderate	Multiple attachments at 8'; twig and branch dieback; low laterals north.
422	Coast live oak	34	Yes	3	Poor	Dieback to 6"; one-sided east.
423	Coast live oak	9,8	No	3	Moderate	Codominant trunks at 3'; part of a dense grove.
424	Coast live oak	8	No	3	Moderate	Small crown; part of a dense grove.
425	Coast live oak	10	No	3	Poor	Bleeding at base; dieback; part of a dense grove.
426	Coast live oak	10	No	3	Poor	Dieback; part of a dense grove.
427	Coast live oak	9,7	No	3	Moderate	Crown bowed west; part of a dense grove.
428	Coast live oak	10	No	3	Moderate	Crown bowed west; part of a dense grove.
429	Coast live oak	6,5,5	No	3	Poor	Small, asymmetric crown; part of a dense grove.
430	Coast live oak	6,4,4	No	3	Moderate	Part of a dense grove.
431	Coast live oak	6	No	3	Poor	Small crown; part of a dense grove.
432	Coast live oak	9,5	No	4	Moderate	Edge of a dense grove; one-sided north.
433	Coast live oak	22	Yes	2	Poor	Very thin crown; epicormic shoots; dieback.
434	Coast live oak	10,5,4	No	5	Good	Multiple attachments at base; low branching.
435	Coast live oak	8	No	4	Moderate	Crowded; asymmetric crown.
436	Coast live oak	23,13	Yes	1	Poor	Very thin crown; extensive dieback.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
437	Coast live oak	22	Yes	5	Good	Multiple attachments at 7'; good form and structure.
438	Coast live oak	32	Yes	4	Moderate	Spreading form; low laterals south; crown a little thin.
439	Coast live oak	8	No	3	Poor	Partial failure at base.
440	Coast live oak	6,4,3	No	3	Moderate	Multiple attachments at base; part of dense grove.
441	Coast live oak	7,4,3,3	No	3	Moderate	Multiple attachments at base; asymmetric crown; part of dense grove.
442	Coast live oak	15,7	Yes	4	Moderate	One-sided west; edge of dense grove.
443	Coast live oak	9,8,4	No	2	Poor	Multiple attachments at base; very thin crown.
444	Coast live oak	7,6,5,5	No	4	Good	Multiple attachments at 1'; good form and structure.
445	Coast live oak	14,14,8,7	Yes	4	Good	Codominant trunks at 2'; seam in attachment.
446	Coast live oak	9,9,8	No	3	Moderate	Multiple attachments at base; asymmetric crown; part of dense grove.
447	Coast live oak	11,7,6	No	3	Moderate	Multiple attachments at base; leans north; part of dense grove.
448	Coast live oak	9,8,7,6,4	No	4	Moderate	Multiple attachments at base; upright form; part of dense grove.
449	Coast live oak	8	No	2	Poor	Small, thin crown.
450	Madrone	15,14	No	2	Poor	Codominant trunks at 2'; extensive trunk wounds very thin crown.
451	Coast live oak	7,6	No	3	Moderate	Edge of dense grove.
452	Coast live oak	8,7,6,6,5	No	4	Good	Multiple attachments at base; low branching.
453	Coast live oak	6,4	No	3	Moderate	Codominant trunks at base; shrubby.
454	Coast live oak	9	No	4	Good	Low branching; small leaves.
455	Coast live oak	6,5,5,	No	4	Good	Multiple attachments at base; good young tree.
456	Coast live oak	7,6	No	4	Good	Codominant trunks at base; pruned north.
457	Coast live oak	9,7,6,6	No	3	Moderate	Multiple attachments at base; thin crown; large leaves.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
458	Coast live oak	9	No	4	Moderate	Multiple attachments at base; part of dense grove.
459	Coast live oak	10,9,5,5	No	4	Moderate	Multiple attachments at base; good form and structure; part of dense grove.
460	Coast live oak	11,6	No	3	Moderate	Multiple attachments at base; asymmetric crown; edge of dense grove.
461	Coast live oak	12	Yes	3	Moderate	Trunk wounds/canker; part of dense grove.
462	Coast live oak	6,5	No	3	Moderate	One-sided south; thin crown; part of dense grove.
463	Coast live oak	12	Yes	4	Moderate	Part of dense grove.
464	Coast live oak	15,8,8	Yes	4	Moderate	Thin crown; twig and branch dieback.
465	Coast live oak	8,3	No	3	Moderate	One-sided west.
466	Coast live oak	15,13,9	Yes	4	Moderate	Multiple attachments at 2'; edge of dense grove.
467	Coast live oak	14,13,10,8,7	Yes	4	Good	Multiple attachments at 2'; one-sided west; edge of dense grove.
468	Coast live oak	12,6	Yes	3	Moderate	Asymmetric crown; part of dense grove.
469	Coast live oak	16	Yes	4	Good	One-sided west; edge of dense grove.
470	Coast live oak	14,13,8	Yes	4	Moderate	Multiple attachments at base; narrow crown; edge of dense grove.
471	Coast live oak	15,12,4,4	Yes	4	Good	Multiple attachments at base; one-sided west; edge of dense grove.
472	Coast live oak	12	Yes	3	Moderate	Slight lean north; edge of dense grove.
473	Coast live oak	15	Yes	3	Moderate	Upright form; narrow crown; part of dense grove.
474	Coast live oak	10	No	3	Poor	Crown bowed west to horizontal; cracks forming in trunk.
475	Coast live oak	19	Yes	4	Good	Upright form; narrow crown; part of dense grove.
476	Coast live oak	14	Yes	3	Poor	Crown bowed east; edge of dense grove.
477	Coast live oak	20,9	Yes	4	Moderate	One-sided west; edge of dense grove.
478	Coast live oak	13	Yes	3	Moderate	Crown bowed west; edge of dense grove.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
479	Coast live oak	15,12,11	Yes	3	Moderate	Multiple attachments at 1'; asymmetric crown; part of dense grove.
480	Coast live oak	20	Yes	4	Moderate	One-sided southwest; edge of dense grove.
481	Coast live oak	15	Yes	2	Poor	Was codominant; eastern stem failed.
482	Coast live oak	17,6	Yes	4	Good	Upright form; edge of dense grove.
483	Coast live oak	18	Yes	4	Good	One-sided west; edge of dense grove.
484	Coast live oak	9,8,8,7,6,6	No	4	Good	Multiple attachments at base; trunk wounds; part of dense grove.
485	Coast live oak	11,8,8	No	4	Good	Multiple attachments at 2'; one-sided north; edge of dense grove.
486	Coast live oak	8	No	5	Good	Good young tree; edge of dense grove.
487	Coast live oak	16	Yes	5	Good	Good young tree.
488	Coast live oak	10,8,6	No	3	Poor	Extensive twig dieback.
489	Coast live oak	11	No	5	Good	Good young tree.
490	Coast live oak	9,9,9	No	4	Good	Multiple attachments at base; two stem upright; one stem bowed west.
491	Coast live oak	15,13	Yes	3	Poor	Codominant trunks at base; southern stem failed and laying on ground.
492	Coast live oak	8,4	No	4	Moderate	Codominant trunks at base; narrow crown.
493	Coast live oak	11	No	5	Good	Good young tree.
494	Coast live oak	16	Yes	4	Good	Crowded; asymmetric crown.
495	Coast live oak	13	Yes	3	Moderate	Crowded; very asymmetric crown.
496	Coast live oak	9,9,7	No	4	Good	Multiple attachments at base.
497	Coast live oak	8,6	No	3	Moderate	Crowded; one-sided east.
498	Coast live oak	12	Yes	3	Moderate	Crowded; one-sided southeast.
499	Coast live oak	17,17,15,12	Yes	5	Good	Multiple attachments at 1'; low branching; good form and structure.
500	Coast live oak	6	No	3	Moderate	Suppressed form.
501	Coast live oak	9,9	No	2	Poor	Very thin crown; one-sided west.
502	Coast live oak	11,7,6	No	3	Moderate	Multiple attachments at base; crowded.
503	Coast live oak	14,9,7	Yes	4	Moderate	Multiple attachments at base; one-sided north.
504	Coast live oak	13	Yes	3	Moderate	Crowded; crown bowed south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
505	Coast live oak	17	Yes	4	Good	One-sided southwest.
506	Coast live oak	21,19,14,13	Yes	4	Good	Multiple attachments at 3'; spreading form; low crown east; bark checking at base.
507	Coast live oak	22,21,7	Yes	4	Good	Multiple attachments at base; bark checking at base.
508	Coast live oak	9	No	3	Moderate	Crowded; crown bowed north.
509	Coast live oak	17,16	Yes	4	Good	Codominant trunks at base; seam in attachment.
510	Coast live oak	12,10,5	Yes	4	Moderate	Multiple attachments at 1'; one-sided west.
511	Coast live oak	22	Yes	3	Poor	Multiple attachments at 7'; borer holes along trunk.
512	Coast live oak	15,15	Yes	4	Moderate	Growing down-slope; one-sided west
513	Coast live oak	16,15	Yes	4	Moderate	Growing down-slope; one-sided west
514	Coast live oak	14,8,5	Yes	4	Good	Growing down-slope; low branching west
515	Coast live oak	13,8,6	Yes	4	Good	Multiple attachments at base; low branching/northern stem on ground.
516	Coast live oak	7	No	5	Good	Good young tree; branches to the ground.
517	Coast live oak	12	Yes	4	Good	Multiple attachments at 6'; one-sided west.
518	Coast live oak	15	Yes	5	Good	Good form and structure.
519	Coast live oak	15,15	Yes	5	Good	Codominant trunks at base; good form and structure.
520	Coast live oak	10	No	5	Good	Good young tree.
521	Coast live oak	12,11,10	Yes	4	Moderate	Multiple attachments at base; one-sided east.
522	Coast live oak	18	Yes	4	Good	Multiple attachments at 6'; heavy lateral limb north; trunk wounds.
523	Coast live oak	34,12,10	Yes	5	Good	Multiple attachments at 6'; heavy lateral limbs; bleeding from trunk wounds.
524	Coast live oak	29	Yes	4	Good	Multiple attachments at 4'; one-sided north; trunk wounds.
525	Coast live oak	14	Yes	3	Moderate	Crowded; one-sided west.
526	Coast live oak	15,11	Yes	5	Good	Growing down-slope; low branching.
527	Coast live oak	11,9,9,8	No	5	Good	Multiple attachments at 3'; good young tree.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
528	Coast live oak	18	Yes	4	Moderate	Multiple attachments at 6'; bark checking at base/fill at base.
529	Coast live oak	16,9	Yes	5	Good	Low lateral west at 3'; good form and structure.
530	Coast live oak	12	Yes	3	Poor	Suppressed form; leans east.
531	Coast live oak	25,12	Yes	3	Moderate	Multiple attachments at 6'; thinning crown; low branching.
532	Coast live oak	26,10,8	Yes	4	Moderate	Multiple attachments at 6'; twig and branch dieback; low branching.
533	Coast live oak	16	Yes	4	Good	Codominant trunks at 6'; one-sided west.
534	Coast live oak	29,25,16,14,10	Yes	5	Good	Multiple attachments at base; spreading form; low branching north.
535	Coffeeberry	10	No	3	Poor	Suppressed form; bowed west; ganoderma conk at base.
536	Coast live oak	21,19,19,15,12,7	Yes	5	Good	Multiple attachments at base; spreading form; low branching.
537	Plum	10,7,6,4	No	4	Moderate	Multiple attachments at 2'; aphids/sooty mildew.
538	Coast live oak	12,11	Yes	4	Good	Codominant trunks at 4'; seam in attachment; bark checking.
539	Coast live oak	12,11	Yes	4	Moderate	Codominant trunks at 1'; seam/bleeding at attachment.
540	Coast live oak	13,11	Yes	4	Moderate	Codominant trunks at 3'; weak attachment.
541	Coast live oak	12,12	Yes	4	Moderate	Codominant trunks at base; asymmetric crown.
542	Coast live oak	9,8	No	3	Poor	Suppressed form; bowed north to horizontal.
543	Madrone	18	No	1	Poor	Extensive trunk decay; little live material remains.
544	Coast live oak	18,17,17	Yes	4	Good	Multiple attachments at 3'; one-sided west.
545	Coast live oak	10,5,5	No	3	Moderate	Crowded; asymmetric crown.
546	Coast live oak	12	Yes	4	Good	Codominant trunks at 7'; seam in attachment; upright form.
547	Coast live oak	14	Yes	4	Good	Multiple attachments at 5'; crowded; upright form.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
548	Coast live oak	7	No	3	Poor	Suppressed form; crown bowed north to horizontal.
549	Coast live oak	19,17,17,17	Yes	3	Moderate	Multiple attachments at base; spreading form; thinning in upper crown.
550	Coast live oak	6	No	3	Poor	Suppressed form; crown bowed west.
551	Coast live oak	11	No	4	Moderate	Crowded; asymmetric crown.
552	Coast live oak	19	Yes	5	Good	Good form and structure; one-sided west.
553	Plum	8,6,5,4,4	No	3	Moderate	Multiple attachments at 2'; twig dieback; aphids/sooty mildew.
554	Coast live oak	8	No	3	Moderate	Crowded; narrow crown.
555	Coast live oak	6	No	3	Poor	Suppressed form; one-sided east.
556	Coast live oak	15,8	Yes	4	Moderate	One-sided west; seam in attachment.
557	Coast live oak	52	Yes	4	Good	Very one-sided east; branches to the ground east are propping tree.
558	Coast live oak	31	Yes	2	Poor	Declining; dieback throughout.
559	Coast live oak	31	Yes	1	Poor	Extensive trunk decay; all but dead.
560	Coast live oak	36	Yes	1	Poor	All but dead.
561	Coast live oak	8,8,7,7,4	No	4	Good	Multiple attachments at 3'; seams in attachments.
562	Coast live oak	16,10	Yes	4	Good	Codominant trunks at 1'; seam in attachment.
563	Coast live oak	9,9,7	No	4	Moderate	Good young tree; twig dieback.
564	Coast live oak	16,11,10	Yes	4	Moderate	Good form and structure; twig dieback.
565	Coast live oak	19,19,15	Yes	5	Good	Codominant trunks at base; spreading form; twig dieback.
566	Coast live oak	9	No	3	Moderate	Suppressed form; one-sided south.
567	Coast live oak	11,5	No	4	Moderate	Crowded; one-sided west.
568	Coast live oak	9,7,6	No	3	Moderate	Thin in upper crown; bleeding along trunk.
569	Coast live oak	10	No	3	Moderate	Crowded; one-sided south.
570	Coast live oak	14,9,9	Yes	4	Good	Codominant trunks at base; engulfed in poison oak.
571	Coast live oak	12,11,9	Yes	4	Good	Multiple attachments at 2'; low lateral east; bleeding along trunk.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
572	Coast live oak	9,8,7,7	No	3	Moderate	Multiple attachments at 1'; asymmetric crown; twig dieback.
573	Coast live oak	7	No	3	Moderate	Twig and branch dieback.; edge of dense grove.
574	Coast live oak	8,5	No	3	Moderate	One-sided west; edge of dense grove.
575	Coast live oak	11	No	4	Moderate	Upright form; part of dense grove.
576	Coast live oak	6	No	4	Moderate	Upright form; part of dense grove.
577	Coast live oak	9	No	3	Moderate	Crowded; crook in upper crown; part of dense grove.
578	Madrone	14,12,12	No	2	Poor	Extensive dieback.
579	Madrone	18,17,14,12,10	No	3	Moderate	Multiple attachments at 3'; dieback in upper crown; heavy lateral limbs.
580	Coast live oak	8,7	No	3	Moderate	Crowded; twig dieback; part of dense grove.
581	Coast live oak	6	No	4	Good	Edge of dense grove; good young tree.
582	Coast live oak	8	No	4	Good	One-sided south; edge of dense grove.
583	Coast live oak	7	No	4	Good	One-sided south; edge of dense grove.
584	Coast live oak	17	Yes	5	Good	Upright form; part of dense grove.
585	Coast live oak	6,5,5	No	4	Good	One-sided north; edge of dense grove.
586	Coast live oak	7,5,5	No	3	Moderate	Narrow attachments; thin crown; edge of dense grove.
587	Coast live oak	8	No	3	Poor	Suppressed form ; part of dense grove.
588	Coast live oak	14	Yes	4	Good	Upright form; part of dense grove.
589	Coast live oak	9,9	No	5	Good	Codominant trunks at 1'; good young tree; edge of dense grove.
590	Coast live oak	28	Yes	2	Poor	Extensive trunk decay; leans north.
591	Coast live oak	31	Yes	4	Good	Multiple attachments at 10'; good form and structure.
592	Coast live oak	42	Yes	4	Good	Codominant trunks at 6'; western stem failed; one-sided east.
593	Coast live oak	47	Yes	4	Moderate	Multiple attachments at 10'; adding wood on northern stem; twig dieback.
594	Coast live oak	7	No	4	Good	Leans east; good young tree.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
595	Coast live oak	30	Yes	2	Poor	Extensive trunk decay; epicormic shoots.
596	Coast live oak	8,8	No	4	Good	Codominant trunks at 2'; seam in attachment.
597	Coast live oak	6	No	3	Moderate	Crowded; suppressed form.
598	Coast live oak	6,4	No	3	Moderate	Crowded; suppressed form.
599	Coast live oak	7,5	No	5	Good	Good young tree.
600	Coast live oak	34	Yes	3	Poor	Trunk decay/active bee hive; dieback throughout crown.
601	Coast live oak	29	Yes	3	Moderate	Multiple attachments at 8'; heavy lateral limbs; history of branch failure.
602	Coast live oak	7,7,6,4,4	No	4	Moderate	Growing against slope; leaf scorch.
603	Coast live oak	40	Yes	3	Poor	History of branch failure; ganoderma conk on western branch; trunk decay.
604	Coast live oak	39	Yes	4	Moderate	Multiple attachments at 7'; one-sided southwest.
605	Coast live oak	36	Yes	4	Moderate	Multiple attachments at 5'; damaged by adjacent failure.
606	Coast live oak	32	Yes	4	Moderate	Multiple attachments at 7'; epicormic shoots; dead wood.
607	Coast live oak	40	Yes	4	Good	Multiple attachments at 7'; one-sided and low branching north.
608	Coast live oak	26,24	Yes	4	Moderate	Codominant trunks at 3'; epicormic shoots; asymmetric crown.
609	Coast live oak	22,19	Yes	3	Moderate	Codominant trunks at 4'; cavity on upper side of northern stem; crown bowed west to horizontal.
610	Coast live oak	10	No	5	Good	Good young tree; sl west.
611	Coast live oak	9,7	No	5	Good	Good young tree; one-sided south.
612	Coast live oak	10	No	5	Good	Good young tree.
613	Coast live oak	11	No	4	Good	Slight lean north; twig dieback in lower canopy.
614	Coast live oak	9,6	No	4	Moderate	Crowded; one-sided west; included bark.
615	Coast live oak	12,5	Yes	3	Poor	Small, asymmetric crown; dieback.
616	Coast live oak	15	Yes	4	Moderate	Good form and structure.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
617	Coast live oak	16	Yes	5	Good	Slight lean south; minor twig dieback.
618	Coast live oak	7,4	No	3	Poor	Suppressed; crown bowed west.
619	Coast live oak	15	Yes	4	Moderate	Crowded; asymmetric crown.
620	Coast live oak	11,10,9,9,6	No	4	Moderate	Crowded; one-sided north.
621	Coast live oak	22	Yes	3	Moderate	Crowded; leans south; trunk wounds.
622	Coast live oak	16,15	Yes	3	Poor	Codominant trunks at 2'; thin crown.
623	Coast live oak	31	Yes	4	Good	Heavy lateral limb west at 5'; one-sided west.
624	Coast live oak	18	Yes	3	Poor	Suppressed form; crown bowed south to horizontal.
625	Coast live oak	21	Yes	3	Moderate	Crowded; asymmetric crown; trunk wound.
626	Coast live oak	28	Yes	4	Moderate	Good form and structure; epicormic shoots.
627	Coast live oak	34	Yes	4	Moderate	Upright form; trunk wounds north; laterals west.
628	Coast live oak	14	Yes	2	Poor	Failed at base and turned up.
629	Coast live oak	15	Yes	3	Poor	Suppressed form; small crown.
630	Coast live oak	10	No	3	Moderate	Crowded; one-sided east.
631	Coast live oak	10,7	No	4	Good	Codominant trunks at 1'; upright form.
632	Coast live oak	12	Yes	3	Moderate	Crowded; asymmetric crown.
633	Coast live oak	33	Yes	2	Poor	Basal wounds; heavy lateral limb west; adding wood all over.
634	Coast live oak	24,19	Yes	4	Moderate	Codominant trunks at 4'; one-sided north; branches to the ground.
635	Coast live oak	15	Yes	5	Moderate	One-sided north; heavy lateral limb.
636	Coast live oak	12,3	Yes	2	Poor	Failed at base and turned up.
637	Coast live oak	38	Yes	4	Good	One sided west; heavy lateral limbs.
638	Coast live oak	10	No	3	Moderate	Crowded; narrow crown.
639	Coast live oak	8,7,4	No	3	Moderate	Codominant trunks at base; narrow crown.
640	Coast live oak	15	Yes	3	Moderate	Crowded; twig dieback.
641	Coast live oak	19	Yes	4	Moderate	One-sided southwest; heavy lateral limbs.
642	Coast live oak	33	Yes	3	Moderate	Multiple attachments at 7'; thin in upper crown.
643	Coast live oak	15	Yes	5	Good	One-sided west; good young tree.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
644	Coast live oak	7,5	No	4	Moderate	One-sided west; suppressed..
645	Coast live oak	14	Yes	4	Moderate	One-sided west; suppressed.
646	Coast live oak	9	No	3	Moderate	Crowded; small crown.
647	Coast live oak	32	Yes	4	Moderate	Multiple attachments at 7'; wide, spreading form.
648	Coast live oak	9,6,4	No	4	Moderate	Crowded; part of dense grove.
649	Coast live oak	13	Yes	4	Good	Upright form; part of dense grove.
650	Coast live oak	6,4	No	3	Moderate	Crowded; asymmetric crown; part of dense grove.
651	Coast live oak	17	Yes	4	Good	Good form and structure; part of dense grove.
652	Coast live oak	13,9	Yes	4	Good	Good form and structure; part of dense grove.
653	Coast live oak	7,6,4,3	No	3	Moderate	Crowded; one-sided west; edge of dense grove.
654	Coast live oak	8,7,5	No	3	Moderate	Crowded; one-sided west; edge of dense grove.
655	Coast live oak	7	No	4	Moderate	Crowded; part of dense grove.
656	Coast live oak	8	No	5	Good	Upright form; edge of dense grove.
657	Coast live oak	13	Yes	5	Good	Good young tree.
658	Coast live oak	12,11,10	Yes	4	Good	Codominant trunks at 2'; one-sided west.
659	Coast live oak	7	No	3	Moderate	Crowded; one-sided south; part of dense grove.
660	Coast live oak	8,8,5,4	No	4	Moderate	Multiple attachments at base; upright form; part of dense grove.
661	Coast live oak	7,5,4,4	No	3	Moderate	One-sided south; part of dense grove.
662	Coast live oak	8,7	No	3	Moderate	Asymmetric crown; part of dense grove.
663	Coast live oak	8	No	3	Moderate	Small crown; part of dense grove.
664	Coast live oak	18,17	Yes	4	Moderate	Multiple attachments at 3'; leans east uphill; edge of dense grove.
665	Coast live oak	41	Yes	4	Moderate	Multiple attachments at 7'; spreading form; 18" heavy lateral limb east.
666	Coast live oak	27	Yes	4	Moderate	Multiple attachments at 7'; one-sided and leaning west.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
667	Coast live oak	18	Yes	5	Good	Codominant trunks at 6'; good form and structure.
668	Coast live oak	8,4	No	4	Moderate	Good form, fair branch structure.
669	Coast live oak	11	No	5	Good	Slight lean south; good tree.
670	Coast live oak	15	Yes	4	Good	Codominant trunks at 5'; seam in attachment.
671	Coast live oak	12,12	Yes	5	Good	Codominant trunks at 3'; good form and structure.
672	Coast live oak	16	Yes	4	Good	Codominant trunks at 5'; one-sided west.
673	Coast live oak	17,11,7	Yes	4	Good	Multiple attachments at base; seam in attachment.
674	Coast live oak	11	No	4	Good	Codominant trunks at 5'; one-sided east.
675	Coast live oak	11,6	No	4	Good	Codominant trunks at 3'; one-sided south.
676	Coast live oak	14	Yes	4	Good	Codominant trunks at 5'; upright form; seam in attachment.
677	Coast live oak	7	No	3	Moderate	Suppressed form.
678	Coast live oak	6,6,5,5	No	4	Moderate	Multiple attachments at base; shrub form.
679	Coast live oak	6	No	3	Poor	Suppressed form; thin crown.
680	Coast live oak	10,9,8,7,6	No	3	Moderate	Multiple attachments at 3'; seams in attachments; thin crown.
681	Coast live oak	16	Yes	5	Good	Good young tree.
682	Coast live oak	6	No	3	Poor	Suppressed form.
683	Coast live oak	12	Yes	3	Moderate	Codominant trunks at 5'; thin crown.
684	Coast live oak	15,6	Yes	5	Good	Codominant trunks at base; good form and structure.
685	Coast live oak	11	No	5	Good	Codominant trunks at 5'; seam in attachment.
686	Coast live oak	19,11	Yes	4	Good	Multiple attachments at 3'; one-sided north.
687	Coast live oak	14	Yes	4	Moderate	Crowded; one-sided south.
688	Coast live oak	12,12,11,9,7	Yes	4	Moderate	Multiple attachments at 2'; crowded and one-sided northeast.
689	Coast live oak	12,11,8,8	Yes	3	Moderate	Multiple attachments at 2'; crowded and one-sided southwest.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
690	Coast live oak	13,12,8	Yes	5	Good	Multiple attachments at 2'; seams in attachments; good tree.
691	Coast live oak	7,6,5	No	4	Good	Multiple attachments at 3'; good young tree.
692	Coast live oak	7,4	No	3	Moderate	Crowded; one-sided north.
693	Coast live oak	8,5,5	No	5	Good	Good young tree.
694	Coast live oak	6,6,5,54	No	5	Good	Multiple attachments at 1'; good young tree.
695	Coast live oak	14	Yes	5	Good	Multiple attachments at 5'; good young tree.
696	Coast live oak	13,7	Yes	3	Moderate	Codominant trunks at 3'; leans north; part of dense grove.
697	Coast live oak	7	No	3	Poor	Suppressed form; part of dense grove.
698	Coast live oak	9,8,6,5	No	3	Moderate	Codominant trunks at 1'; narrow attachment; one-sided southeast.
699	Coast live oak	11,9	No	3	Moderate	Codominant trunks at 1'; one-sided south.
700	Coast live oak	11,11,4,4	No	3	Moderate	Codominant trunks at 1'; asymmetric crown.
701	Coast live oak	12,7,3,2	Yes	3	Moderate	Multiple attachments at 1'; one-sided north.
702	Coast live oak	11	No	3	Moderate	Crowded; one-sided north; part of dense grove.
703	Coast live oak	22	Yes	4	Good	Codominant trunks at 6'; seam in attachment; part of dense grove.
704	Coast live oak	15	Yes	3	Moderate	Crowded; asymmetric crown; part of dense grove.
705	Coast live oak	12,11,8	Yes	4	Moderate	Multiple attachments at 1'; one-sided south; part of dense grove.
706	Coast live oak	9	No	3	Poor	Crowded; leans east; part of dense grove.
707	Coast live oak	24,11	Yes	4	Moderate	Multiple attachments at 5'; narrow attachment; 14" stem bowed south to horizontal.
708	Coast live oak	18,6,5	Yes	3	Poor	Thin crown; lateral south.
709	Coast live oak	21	Yes	3	Poor	Basal cavity north; thin crown.
710	Coast live oak	23	Yes	3	Moderate	Multiple attachments at 6'; crowded and one-sided southwest.
711	Coast live oak	25,15	Yes	4	Good	22" stem upright; 15" stem lateral southwest.
712	Coast live oak	21	Yes	3	Moderate	Bowed east to horizontal.
713	Plum	7	No	3	Poor	Suppressed form.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
714	Coast live oak	11	No	3	Poor	Leans east; large stem failure east; roots exposed west; owl nest in cavity
715	Valley oak	23	Yes	3	Poor	Leans east with heavy lateral limbs; epicormic shoots.
716	Coast live oak	53	Yes	3	Poor	Basal cavities; upright form; dead wood to 15"; ganoderma conks on lower trunk north.
717	Valley oak	31	Yes	3	Moderate	One-sided west.
718	Coast live oak	28	Yes	1	Poor	All but dead.
719	Coast live oak	13,11,7	Yes	4	Moderate	Multiple attachments at 3'; slightly thin crown.
720	Coast live oak	10,7,7	No	3	Moderate	Supressed; one-sided west.
721	Coast live oak	45,35	Yes	3	Poor	Extensive trunk decay; stems splitting at attachment.
722	Coast live oak	13	Yes	0	Poor	Dead.
723	Coast live oak	17	Yes	4	Good	Codominant trunks at 5'; wide attachment; trunk wound.
724	Coast live oak	24	Yes	3	Moderate	Multiple attachments at 5'; several heavy lateral limbs; stem failure east.
725	Coast live oak	10,8,6,5	No	4	Moderate	Multiple attachments at base; dieback north.
726	Coast live oak	10,7	No	4	Good	Good form and structure; slightly thin crown.
727	Coast live oak	11	No	5	Good	Good form and structure.
728	Coast live oak	11,10	No	4	Good	Codominant trunks at 4'; one-sided east.
729	Coast live oak	9,9,6	No	4	Good	Multiple attachments at 3'; one-sided west.
730	Plum	7,6,6,5.5	No	3	Poor	Dieback in lower crown.
731	Coast live oak	7,7,6	No	4	Moderate	Multiple attachments at 3'; slight lean east.
732	Coast live oak	9,8	No	3	Moderate	Codominant trunks at 2'; suppressed form.
733	Coast live oak	13,10,9	Yes	4	Moderate	Multiple attachments at base; one-sided east.
734	Coast live oak	12,7	Yes	4	Moderate	Crowded; asymmetric crown.
735	Coast live oak	8	No	3	Moderate	Suppressed form.
736	Coast live oak	7	No	3	Poor	Suppressed form; crown bowed west.
737	Coast live oak	10,7	No	4	Moderate	Crowded; one-sided west.
738	Coast live oak	11,7	No	4	Moderate	Crowded; asymmetric crown.
739	Plum	6,4	No	2	Poor	Extensive dieback.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
740	Coast live oak	8,6	No	3	Poor	Crowded; suppressed form.
741	Coast live oak	13	Yes	4	Good	Upright form.
742	Coast live oak	17	Yes	5	Good	Multiple attachments at 8'; twig dieback.
743	Coast live oak	14,13,8	Yes	4	Good	Multiple attachments at 4'; seams in attachments; one-sided west.
744	Coast live oak	13	Yes	4	Good	Upright form.
745	Coast live oak	12,11,10	Yes	4	Good	Multiple attachments at 2'; dieback in lower crown.
746	Coast live oak	11,6,4	No	4	Moderate	Crowded; narrow crown.
747	Coast live oak	10	No	3	Poor	Crowded; narrow crown.
748	Coast live oak	16,12	Yes	3	Moderate	Codominant trunks at base; dieback in upper crown.
749	Coast live oak	9	No	3	Poor	Crowded; suppressed form.
750	Coast live oak	8	No	2	Poor	Suppressed form; bowed north to horizontal.
751	Coast live oak	10	No	3	Moderate	Crowded; upright form.
752	Coast live oak	9	No	3	Poor	Crowded; leans north.
753	Coast live oak	14,11	Yes	4	Moderate	Multiple attachments at 5'; asymmetric crown.
754	Coast live oak	7,3	No	3	Moderate	Crowded; narrow crown.
755	Coast live oak	11,9,9,8	No	4	Good	Multiple attachments at 3'; fair branch structure.
756	Coast live oak	12,9	Yes	4	Good	Crowded; upright form.
757	Coast live oak	19	Yes	5	Good	Multiple attachments at 6'; good structure.
758	Coast live oak	17	Yes	4	Moderate	Crowded; asymmetric crown.
759	Coast live oak	9	No	3	Moderate	Crowded; high crown.
760	Coast live oak	15	Yes	4	Moderate	Crowded; one-sided west.
761	Coast live oak	11,10,9,8,5	No	4	Moderate	Crowded; one-sided east.
762	Valley oak	6	No	3	Moderate	Suppressed form; crown bowed southwest to horizontal.
763	Coast live oak	18	Yes	4	Good	Multiple attachments at 5'; dieback north.
764	Coast live oak	12,12	Yes	4	Moderate	Upright form; one-sided north.
765	Coast live oak	8,8,7,4	No	4	Moderate	Crowded; narrow crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
766	Coast live oak	9,9,7,4	No	3	Moderate	Crowded; asymmetric crown; dieback of lower branches.
767	Coast live oak	10	No	4	Good	Crowded; upright form.
768	Coast live oak	15,13,6	Yes	4	Moderate	Multiple attachments at 2'; one-sided east.
769	Coast live oak	8	No	3	Moderate	Crowded; one-sided west.
770	Coast live oak	9,8,7	No	5	Good	Multiple attachments at 3'; good young tree.
771	Coast live oak	8,6	No	5	Good	Good young tree.
772	Coast live oak	10	No	3	Moderate	Crowded; one-sided southwest.
773	Coast live oak	11,7	No	4	Good	Good young tree; low branching.
774	Coast live oak	13,8,7	Yes	3	Moderate	Codominant trunks at base; growing in rock; seam in attachment; thin crown.
775	Coast live oak	13,12,12,12,10,10	Yes	4	Moderate	Multiple attachments at 2'; growing in rock; narrow attachments.
776	Coast live oak	7	No	1	Poor	Extensive dieback.
777	Coast live oak	9	No	5	Good	Good young tree; minor bleeding from trunk.
778	Coast live oak	12,11	Yes	4	Good	Codominant trunks at 2'; dieback of lower branches north.
779	Coast live oak	29,22	Yes	5	Good	Multiple attachments at 4'; small crack in attachment of northern stem; good form and structure
780	Coast live oak	42	Yes	4	Moderate	Multiple attachments at 7'; spreading form; heavy lateral limbs to ground south; thinning crown.
781	Coast live oak	15	Yes	3	Moderate	Crowded; one-sided north; trunk wounds.
782	Coast live oak	7	No	3	Moderate	Crowded; small crown.
783	Coast live oak	15	Yes	5	Good	Codominant trunks at 4'; seam in attachment; good young tree.
784	Coast live oak	8,5	No	3	Poor	Suppressed form; crown bowed southwest.
785	Coast live oak	7	No	4	Moderate	Crowded; slight lean north.
786	Coast live oak	12,10	Yes	4	Moderate	Crowded; slight lean north.
787	Coast live oak	17,10	Yes	5	Good	Multiple attachments at 4'; good form and structure.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
788	Coast live oak	13,12	Yes	3	Moderate	Crowded; asymmetric crown.
789	Coast live oak	15,10	Yes	4	Moderate	Crowded; one-sided south.
790	Coast live oak	50	Yes	3	Moderate	Multiple attachments at 7'; cavity at attachment south; dieback throughout crown.
791	Coast live oak	42	Yes	4	Good	Codominant trunks at 7'; good form and structure.
792	Coast live oak	6	No	4	Good	One-sided south.
793	Coast live oak	11	No	4	Good	One-sided south.
794	Coast live oak	23	Yes	2	Poor	Extensive dieback.
795	Coast live oak	25	Yes	3	Moderate	Multiple attachments at 10'; poor branch structure; thinning crown.
796	Coast live oak	15	Yes	3	Poor	Suppressed form; dieback in upper crown.
797	Coast live oak	29	Yes	4	Moderate	Multiple attachments at 8'; trunk wounds; dead wood.
798	Coast live oak	29	Yes	1	Poor	All but dead; engulfed in lichens.
799	Coast live oak	14	Yes	4	Good	Slight lean east; good form and structure.
800	Coast live oak	23	Yes	2	Poor	Very thin crown.
801	Coast live oak	39	Yes	3	Poor	Small crown; cavity west.
802	Coast live oak	42	Yes	3	Poor	Multiple attachments at 8'; dieback; epicormic shoots; heavy lateral stems south.
803	Coast live oak	35	Yes	4	Moderate	Codominant trunks at 5'; spreading form; branches to the ground.
804	Coast live oak	31	Yes	3	Moderate	Multiple attachments at 6'; dieback; trunk wound from stem failure.
805	Coast live oak	47	Yes	4	Good	Multiple attachments at 6'; narrow attachment north; branches to the ground.
806	Coast live oak	28,22	Yes	3	Moderate	Codominant trunks at 3'; suppressed form; all weight south.
807	Coast live oak	58	Yes	1	Poor	Failed at 8'; crown formed by 4" regrowth; extensive trunk decay.
808	Coast live oak	13	Yes	5	Good	Multiple attachments at 3'; narrow attachments; nice form.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



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809	Coast live oak	17	Yes	5	Good	Multiple attachments at 5'; one-sided southeast.
810	Coast live oak	46	Yes	3	Poor	Multiple attachments at 5'; cavities with trunk decay; heavy lateral stem east.
811	Coast live oak	16	Yes	5	Good	Multiple attachments at 5'; narrow attachments; one-sided west.
812	Coast live oak	9,8,7,7	No	5	Good	Multiple attachments at 2'; good form and structure.
813	Coast live oak	6	No	3	Moderate	Suppressed form; one-sided east.
814	Coast live oak	14,10,8,6	Yes	5	Good	Multiple attachments at 2'; pruned north over road.
815	Coast live oak	9,8	No	4	Moderate	Codominant trunks at 1'; seam in attachment; one-sided south.
816	Coast live oak	7	No	3	Moderate	Suppressed form; crown bowed south.
817	Coast live oak	11	No	4	Good	Part of dense grove; one-sided southeast.
818	Coast live oak	15,14,13,12,9	Yes	5	Good	Multiple attachments at 1'; good form and structure.
819	Coast live oak	19,11	Yes	5	Good	Codominant trunks at 3'; good form and structure.
820	Coast live oak	14	Yes	5	Good	Multiple attachments at 6'; narrow attachments; nice form.
821	Coast live oak	25,20	Yes	4	Good	Codominant trunks at 3'; included bark and old canker attachment; spreading form.
822	Coast live oak	7,6,6,5,5	No	3	Moderate	Multiple attachments at 2'; one-sided south.
823	Coast live oak	7	No	3	Moderate	Edge of dense grove; one-sided south.
824	Coast live oak	6,4	No	3	Poor	Suppressed form.
825	Coast live oak	7,6,5	No	3	Moderate	Edge of dense grove; one-sided south.
826	Coast live oak	6	No	3	Moderate	Part of dense grove; upright form.
827	Coast live oak	11	No	4	Moderate	Part of dense grove; asymmetric crown.
828	Coast live oak	14	Yes	3	Moderate	Part of dense grove; slight lean south.
829	Coast live oak	13	Yes	3	Poor	Part of dense grove; poor form and structure.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
830	Coast live oak	18	Yes	4	Moderate	Part of dense grove; multiple attachments at 8'; asymmetric crown.
831	Coast live oak	10,10	No	3	Moderate	Edge of dense grove; leans northwest.
832	Coast live oak	17	Yes	4	Moderate	Part of dense grove; one-sided west.
833	Coast live oak	20	Yes	4	Good	Edge of dense grove; multiple attachments at 8'; one-sided south.
834	Coast live oak	14,10	Yes	4	Good	Edge of dense grove; slight lean south.
835	Coast live oak	11,8	No	3	Poor	Suppressed form.
836	Coast live oak	14	Yes	4	Moderate	Good form and structure; thin crown.
837	Coast live oak	8	No	5	Good	Good young tree; engulfed in berries.
838	Coast live oak	8,4	No	5	Good	No tag; good young tree; engulfed in berries.
839	Coast live oak	32	Yes	5	Good	Multiple attachments at 6'; nice, upright form.
840	Coast live oak	8	No	3	Moderate	Suppressed form; thin in upper crown.
841	Coast live oak	21	Yes	5	Good	Multiple attachments at 5'; good form and structure; basal swelling.
842	Madrone	12,11	No	4	Good	Codominant trunks at 2'; trunk wound with decay on southern stem; nice form.
843	Coast live oak	10,9,9,9,8,7	No	4	Good	Multiple attachments at 3'; one-sided east.
844	Coast live oak	23	Yes	5	Good	Codominant trunks at 6'; wide attachment.
845	Coast live oak	17	Yes	5	Good	Good form and structure; one-sided north.
846	Coast live oak	11	No	4	Moderate	Part of dense grove; upright form.
847	Coast live oak	14	Yes	3	Moderate	Crowded; asymmetric crown.
848	Coast live oak	12,8	Yes	3	Moderate	Crowded; one-sided west.
849	Coast live oak	14,13	Yes	4	Good	Part of dense grove; upright form.
850	Coast live oak	13,10	Yes	3	Moderate	Part of dense grove; narrow crown.
851	Coast live oak	8	No	2	Poor	Part of dense grove; suppressed form.
852	Coast live oak	18	Yes	4	Moderate	Part of dense grove; one-sided southeast.
853	Coast live oak	11,10	No	3	Moderate	Part of dense grove; bleeding along trunk; asymmetric crown.
854	Coast live oak	11,10,9	No	3	Moderate	Part of dense grove; stems twisted around one another; one-sided south.
855	Coast live oak	10,5	No	3	Poor	Part of dense grove; suppressed form.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
856	Valley oak	9	No	3	Moderate	Part of dense grove; narrow crown.
857	Coast live oak	11	No	3	Poor	Part of dense grove; narrow crown; bark checking.
858	Coast live oak	10,5,4	No	3	Poor	Part of dense grove; asymmetric crown; dead wood..
859	Coast live oak	8	No	2	Poor	Part of dense grove; small crown.
860	Coast live oak	8	No	3	Moderate	Part of dense grove; upright form.
861	Coast live oak	12,10,10,8	Yes	3	Moderate	Edge of dense grove; multiple attachments at 1'; one-sided west.
862	Coast live oak	6,5,4,4	No	3	Moderate	Multiple attachments at base; stem failures north.
863	Coast live oak	13,12,11	Yes	4	Moderate	Edge of dense grove; multiple attachments at 2'.
864	Coast live oak	13,11	Yes	3	Moderate	Part of dense grove; asymmetric; thin crown.
865	Coast live oak	7	No	2	Poor	Part of dense grove; suppressed form.
866	Coast live oak	15,9	Yes	4	Good	Part of dense grove; asymmetric crown.
867	Coast live oak	16	Yes	4	Good	Part of dense grove; upright form.
868	Coast live oak	6	No	3	Poor	Part of dense grove; suppressed form.
869	Coast live oak	15,10	Yes	3	Moderate	Edge of dense grove; multiple attachments at 4'; one-sided west.
870	Coast live oak	18,13	Yes	4	Moderate	Edge of dense grove; slightly leaning and one-sided north.
871	Coast live oak	8,6	No	3	Moderate	Part of dense grove; poor form and structure; engulfed in poison oak.
872	Coast live oak	10,9,7,5,5	No	5	Good	Multiple attachments at base; good young tree.
873	Coast live oak	7,5	No	3	Poor	Crowded; one-sided south; thin crown.
874	Coast live oak	9,9,6,4	No	5	Good	Multiple attachments at 1'; good young tree.
875	Coast live oak	6,3	No	5	Good	No tag; good young tree; engulfed in berries.
876	Coast live oak	11	No	4	Moderate	Good young tree; erosion south expsed roots.
877	Coast live oak	13,5,3	Yes	5	Good	Multiple attachments at 1'; good young tree.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
878	Coast live oak	6,6	No	4	Moderate	Codominant trunks at 3'; crowded and one-sided east.
879	Coast live oak	11,10,9	No	4	Moderate	Multiple attachments at 2'; crowded and one-sided south.
880	Coast live oak	12,11,8,8,5	Yes	4	Good	Multiple attachments at 2'; low growing; bleeding along trunk...
881	Coast live oak	11,8	No	4	Moderate	Codominant trunks at 2'; dieback east.
882	Coast live oak	7,6,6	No	3	Moderate	Multiple attachments at 1'; thin crown.
883	Coast live oak	48	Yes	3	Poor	Multiple attachments at 8'; very thin crown; branches to the ground.
884	Coast live oak	45	Yes	2	Poor	Extensive trunk decay; cavities throughout; small crown.
885	Coast live oak	26	Yes	2	Poor	Extensive trunk decay; cavities throughout; small crown.
886	Coast live oak	29,22	Yes	3	Moderate	Codominant trunks at base; good structure; thin crown.
887	Coast live oak	26	Yes	3	Moderate	Multiple attachments at 8'; one-sided east.
888	Coast live oak	35	Yes	1	Poor	Very thin crown; all but dead.
889	Coast live oak	21	Yes	5	Good	On fence line; multiple attachments at 5'; fair branch structure; extends 20' east over fence.
890	Valley oak	40	Yes	5	Good	Multiple attachments at 10'; heavy lateral limbs south; branches to the ground.
891	Coast live oak	56,54	Yes	3	Poor	Codominant trunks at 3'; multiple large stem failures; northern stem thinning in upper crown.
892	Coast live oak	11,10,9	No	5	Good	Multiple attachments at 4'; good young tree.
893	Coast live oak	22,14,12	Yes	5	Good	Multiple attachments at 3'; one-sided south.
894	Coast live oak	18,15,8	Yes	5	Good	Multiple attachments at 3'; one-sided north.
895	Coast live oak	11	No	5	Good	Multiple attachments at 5'; one-sided south.
896	Valley oak	28	Yes	5	Good	Slight lean and one-sided east; cankers along branches.
897	Coast live oak	36,18,11,11	Yes	3	Moderate	Failed at base and turned up; dieback in upper crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
898	Coast live oak	25	Yes	4	Good	Multiple attachments at 8'; one-sided northwest.
899	Coast live oak	7	No	3	Moderate	Suppressed form; bowed west to horizontal.
900	Coast live oak	27	Yes	5	Good	Multiple attachments at 6'; good form and structure.
901	Coast live oak	7	No	3	Moderate	Part of dense grove; leans northwest.
902	Coast live oak	14	Yes	4	Moderate	Part of dense grove; one-sided south.
903	Coast live oak	9	No	3	Moderate	Part of dense grove; leans northwest.
904	Coast live oak	15,11,7	Yes	4	Moderate	Part of dense grove; multiple attachments at base; asymmetric crown.
905	Coast live oak	7,6	No	3	Poor	Part of dense grove; crown bowed northwest to horizontal.
906	Coast live oak	10,9,9,5	No	3	Moderate	Multiple attachments at 3'; thin crown.
907	Coast live oak	6,5	No	4	Good	Codominant trunks at base; good young tree.
908	Coast live oak	13,12,11,10	Yes	5	Good	Multiple attachments at 3'; growing up-slope; good form and structure.
909	Coast live oak	12	Yes	3	Moderate	Dieback throughout crown.
910	Coast live oak	13,12,12	Yes	5	Good	Multiple attachments at 2'; good form and structure.
911	Coast live oak	6	No	3	Moderate	Suppressed form; leans north.
912	Coast live oak	7,4	No	4	Moderate	Codominant trunks at 1'; good young tree.
913	Coast live oak	12,10	Yes	4	Good	Codominant trunks at 3'; one-sided east.
914	Coast live oak	8,6	No	3	Moderate	.Multiple attachments at 1'; dieback of lower branches.
915	Coast live oak	7,7,6	No	5	Good	.Multiple attachments at 1'; seam in attachment.
916	Coast live oak	10,9,8	No	5	Good	Multiple attachments at 2'; good form and structure.
917	Coast live oak	11	No	5	Good	Slight lean north; good form and structure.
918	Coast live oak	8,7	No	2	Poor	Codominant trunks at 1'; very thin crown.
919	Coast live oak	6	No	5	Good	Good young tree; browse damage of low branches.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
920	Coast live oak	26,17	Yes	5	Good	Codominant trunks at 4'; good form and structure.
921	Coast live oak	16,12,6,5	Yes	4	Good	Multiple attachments at base'; one-sided south.
922	Coast live oak	7,6,4	No	5	Good	Multiple attachments at 2'; good young tree; branches to the ground.
923	Coast live oak	9,8,8,5	No	3	Moderate	Multiple attachments at base; twig dieback.
924	Coast live oak	7,5	No	5	Good	Good young tree; light colored leaves.
925	Coast live oak	11,5	No	4	Moderate	Codominant trunks at base; twig dieback.
926	Coast live oak	7,6,5,4	No	4	Moderate	Multiple attachments at base; fair structure.
927	Coast live oak	8,8	No	5	Good	Codominant trunks at 1'; good young tree.
928	Madrone	21,12,12	No	2	Poor	Extensive trunk wounds; decay; dieback.
929	Coast live oak	10	No	5	Good	Edge of dense grove; good form and structure.
930	Coast live oak	15	Yes	5	Good	Part of dense grove; one-sided south.
931	Coast live oak	8,6,5	No	4	Moderate	Edge of dense grove; dieback.
932	Coast live oak	9	No	3	Poor	Part of dense grove; suppressed form.
933	Coast live oak	9,7	No	3	Poor	Part of dense grove; suppressed form.
934	Coast live oak	10	No	3	Moderate	Part of dense grove; asymmetric crown.
935	Coast live oak	12,5	Yes	3	Moderate	Part of dense grove; crown bowed south.
936	Coast live oak	11,10	No	4	Moderate	Part of dense grove; asymmetric crown.
937	Coast live oak	10,9,9,7,6	No	4	Good	Edge of dense grove; one-sided south.
938	Coast live oak	14	Yes	4	Good	Part of dense grove; slightly one-sided south.
939	Coast live oak	7	No	3	Moderate	Part of dense grove; one-sided west.
940	Coast live oak	11,7,4	No	4	Moderate	Part of dense grove; upright form.
941	Coast live oak	8	No	2	Poor	Part of dense grove; leans west; thin crown.
942	Coast live oak	6,5	No	3	Poor	Part of dense grove; leans west.
943	Coast live oak	8	No	2	Poor	Part of dense grove; suppressed form.
944	Coast live oak	7	No	3	Moderate	Part of dense grove; leans north.
945	Coast live oak	6,4	No	2	Poor	Part of dense grove; suppressed form.
946	Coast live oak	10	No	4	Moderate	Part of dense grove; wide attachment; upright form.
947	Coast live oak	8	No	3	Poor	Part of dense grove; suppressed form.
948	Coast live oak	8,7	No	3	Moderate	Part of dense grove; leans north.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
949	Coast live oak	7	No	2	Poor	Part of dense grove; small crown.
950	Coast live oak	12	Yes	4	Moderate	Part of dense grove; upright form.
951	Coast live oak	44	Yes	3	Moderate	Multiple attachments at 10'; heavy lateral limbs northeast; epicormic shoots/dieback.
952	Coast live oak	20	Yes	4	Moderate	Part of dense grove; upright form; twig dieback.
953	Coast live oak	13	Yes	4	Moderate	Part of dense grove; one-sided east.
954	Coast live oak	10,3	No	3	Moderate	Part of dense grove; suppressed form .
955	Coast live oak	10,10,8,7	No	4	Moderate	Part of dense grove; seam in attachment; one-sided east.
956	Coast live oak	10,9,5	No	3	Moderate	Part of dense grove; asymmetric crown.
957	Coast live oak	10,9,4	No	3	Moderate	Part of dense grove; asymmetric crown; dieback.
958	Coast live oak	15,13	Yes	5	Good	Codominant trunks at 3'; seam in attachment.
959	Coast live oak	17	Yes	4	Moderate	Part of dense grove; multiple attachments at 5'.
960	Coast live oak	13	Yes	4	Moderate	Edge of dense grove; wide attachment.
961	Coast live oak	39	Yes	3	Poor	Codominant trunks at 6'; dieback throughout crown.
962	Coast live oak	9,8,7	No	3	Moderate	Edge of dense grove; multiple attachments at 3'; seam in attachment.
963	Coast live oak	18	Yes	4	Moderate	Multiple attachments at 5'; twig and branch dieback.
964	Coast live oak	8,8,6	No	3	Moderate	Edge of dense grove; one-sided west.
965	Coast live oak	11	No	4	Moderate	Part of dense grove; upright form.
966	Coast live oak	18,15,11	Yes	4	Good	Part of dense grove; multiple attachments at 2'.
967	Coast live oak	25,12	Yes	3	Moderate	Growing down-slope; heavy lateral limb south; engulfed in poison oak.
968	Coast live oak	18	Yes	3	Moderate	Growing down-slope; one-sided east; engulfed in poison oak.
969	Coast live oak	15	Yes	4	Moderate	Growing down-slope; one-sided west; engulfed in poison oak.
970	Coast live oak	20	Yes	2	Poor	Growing down-slope; dieback in upper crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
971	Coast live oak	13	Yes	4	Good	Part of dense grove; low lateral south.
972	Coast live oak	13	Yes	4	Moderate	Edge of dense grove; slightly thin crown.
973	Coast live oak	12,11,10	Yes	3	Moderate	Multiple attachments at 2'; narrow attachments; thin crown.
974	Coast live oak	39	Yes	4	Good	Slight lean east; trunk wounds; branches to the ground east.
975	Coast live oak	25	Yes	4	Moderate	Leans east; dieback; very narrow attachment.
976	Coast live oak	9,9,8	No	5	Good	Multiple attachments at base; good young tree.
977	Coast live oak	6	No	3	Poor	Part of dense grove; asymmetric crown.
978	Coast live oak	10,9	No	3	Poor	Edge of dense grove; thin crown.
979	Coast live oak	8,7,5	No	4	Moderate	Part of dense grove; one-sided south.
980	Coast live oak	8,8	No	4	Moderate	Part of dense grove; asymmetric crown.
981	Coast live oak	6,6,5,4	No	3	Poor	Part of dense grove; suppressed form.
982	Coast live oak	7	No	4	Moderate	Part of dense grove; upright form.
983	Coast live oak	9,9,8,6	No	5	Good	Multiple attachments at 2'; good form and structure.
984	Coast live oak	14	Yes	5	Good	Good young tree.
985	Coast live oak	8	No	3	Moderate	Part of dense grove; leans east.
986	Coast live oak	6	No	3	Moderate	Part of dense grove; leans south; small crown.
987	Coast live oak	8,7,6	No	4	Moderate	Part of dense grove; multiple attachments at 4'; upright form.
988	Coast live oak	8,4	No	3	Moderate	Part of dense grove; narrow crown.
989	Coast live oak	7,4	No	3	Moderate	Part of dense grove; asymmetric crown.
990	Coast live oak	8	No	3	Poor	Part of dense grove; thin crown.
991	Coast live oak	30,16	Yes	2	Poor	Extensive dieback; trunk wounds/decay.
992	Coast live oak	9,8	No	4	Moderate	Codominant trunks at 2'; good young tree.
993	Coast live oak	12,10,8,6	Yes	3	Moderate	Multiple attachments at 2'; twig dieback.
994	Coast live oak	9,9,5	No	3	Moderate	Multiple attachments at base; asymmetric crown.
995	Coast live oak	6,3	No	3	Moderate	Small crown; leaf scorch.
996	Coast live oak	8,8	No	3	Moderate	Codominant trunks at base; thin crown.
997	Coast live oak	7	No	2	Poor	Windswept; thin crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
998	Coast live oak	8	No	2	Poor	Dieback; minor trunk wound.
999	Coast live oak	9	No	3	Moderate	Crowded; asymmetric crown.
1000	Coast live oak	14	Yes	4	Good	Multiple attachments at 4'; good young tree.
1001	Coast live oak	6,5,5	No	4	Good	Multiple attachments at 1'; shrubby at base.
1002	Coast live oak	7,6	No	4	Moderate	Codominant trunks at base; one-sided east.
1003	Coast live oak	10,7	No	4	Good	Codominant trunks at base; minor twig dieback.
1004	Coast live oak	15	Yes	3	Moderate	Multiple attachments at 6'; one-sided north.
1005	Coast live oak	13,10,8	Yes	4	Moderate	Multiple attachments at base; one-sided south.
1006	Coast live oak	25	Yes	1	Poor	Extensive dieback.
1007	Coast live oak	31	Yes	4	Moderate	Multiple attachments at 4'; good young tree.
1008	Coast live oak	28,25	Yes	4	Good	Codominant trunks at 3'; wide attachment; low laterals east.
1009	Coast live oak	7,6	No	5	Good	Good young tree.
1010	Coast live oak	15	Yes	5	Good	Multiple attachments at 6'; good young tree.
1011	Coast live oak	6,6,6,4	No	4	Moderate	Multiple attachments at 2'; large leaves; light color.
1012	Coast live oak	36	Yes	4	Good	Large laterals southwest to ground; forms closed canopy with neighbors.
1013	Coast live oak	28,26,20	Yes	4	Moderate	Multiple attachments at 3'; spreading form with branches to the ground; adding wood.
1014	Valley oak	27	Yes	4	Moderate	Codominant trunks at 6'; one-sided east.
1015	Coast live oak	16	Yes	2	Poor	Crown bowed south to horizontal; very thin crown.
1016	Calif. buckeye	17,16,11	No	2	Poor	Basal decay; multiple branch failures.
1017	Coast live oak	27	Yes	3	Poor	Codominant trunks at 7'; dieback and epicormic shoots throughout canopy.
1018	Coast live oak	46	Yes	4	Good	Codominant trunks at 5'; cavity at attachment; very nice form.
1019	Coast live oak	36	Yes	4	Good	Multiple attachments at 6'; one-sided south; good form.
1020	Coast live oak	7	No	4	Moderate	Good young tree; basal wound.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



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1021	Valley oak	11	No	4	Good	Slight lean southwest; minor dieback.
1022	Coast live oak	18	Yes	5	Good	Good young tree.
1023	Coast live oak	22	Yes	3	Poor	Suppressed form; mostly epicormic shoots.
1024	Coast live oak	23	Yes	4	Moderate	One-sided north; small leaves.
1025	Coast live oak	10	No	2	Poor	Suppressed form; bowed north to horizontal.
1026	Coast live oak	41	Yes	4	Good	Multiple attachments at 7'; adding wood at attachment.
1027	Coast live oak	16	Yes	3	Moderate	Suppressed an leaning south; small crown.
1028	Coast live oak	16	Yes	2	Poor	Extensive trunk decay; top failed and resprouted.
1029	Toyon	6	No	3	Moderate	Suppressed form.
1030	Coast live oak	28	Yes	4	Moderate	Multiple attachments at 10'; thinning crown; epicormic shoots.
1031	Coast live oak	12	Yes	3	Moderate	Suppressed form; high crown.
1032	Coast live oak	27,17	Yes	3	Moderate	Multiple attachments at 6'; one-sided south.
1033	Coast live oak	13	Yes	3	Moderate	Suppressed form; one-sided southeast.
1034	Olive	10,3	No	4	Moderate	Suppressed form; good young tree.
1035	Valley oak	21	Yes	4	Moderate	Codominant trunks at 6'; engulfed in poison oak.
1036	Coast live oak	22	Yes	5	Good	Multiple attachments at 4'; low lateral east; good form and structure.
1037	Valley oak	25	Yes	4	Good	Good form and structure; canker on branch north; engulfed in poison oak.
1038	Coast live oak	30	Yes	5	Good	Multiple attachments at 10'; one-sided east.
1039	Coast live oak	17	Yes	3	Moderate	Crowded; high, asymmetric crown.
1040	Coast live oak	19	Yes	3	Moderate	Leans and one-sided east.
1041	Coast live oak	24	Yes	4	Moderate	Multiple attachments at 10'; narrow attachment; upright form.
1042	Coast live oak	19	Yes	5	Good	Good young tree.
1043	Coast live oak	9,9,9	No	3	Moderate	Crowded with asymmetric crown.
1044	Valley oak	10	No	5	Good	Good young tree.
1045	Valley oak	7	No	4	Good	Crowded; asymmetric crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1046	Valley oak	14	Yes	5	Good	Good young tree.
1047	Coast live oak	6,4	No	5	Good	Codominant trunks at 2'; good young tree.
1048	Valley oak	7	No	5	Good	Good young tree.
1049	Valley oak	16	Yes	5	Good	Multiple attachment at 25'; upright form.
1050	Coast live oak	19	Yes	4	Moderate	Codominant trunks at 5'; one-sided north.
1051	Coast live oak	8	No	5	Good	Good young tree.
1052	Coast live oak	6,6,4	No	5	Good	Good young tree; branches to the ground.
1053	Coast live oak	6	No	5	Good	Good young tree; crowded.
1054	Coast live oak	19	Yes	4	Moderate	Good form and structure; pruned heavy at fence line north.
1055	Coast live oak	14,13,12	Yes	4	Moderate	Multiple attachments at base; pruned heavy at fence line north.
1056	Coast live oak	6,4	No	5	Good	Codominant trunks at 4'; crowded.
1057	Coast live oak	8	No	5	Good	Good young tree; one-sided south.
1058	Coast live oak	6	No	5	Good	Good young tree; one-sided south.
1059	Coast live oak	47	Yes	4	Moderate	Multiple attachments at 5'; history of branch failure.
1060	Coast live oak	28	Yes	4	Moderate	Multiple attachments at 12'; dieback and history of branch failure.
1061	Coast live oak	39,28	Yes	4	Moderate	Crowded; asymmetric crown; heavy lateral limb east.
1062	Coast live oak	11,8,7	No	3	Moderate	Crown bowed northeast; trunk & branch wounds.
1063	Coast live oak	38	Yes	5	Good	Multiple attachments at 8'; heavy lateral limb west.
1064	Olive	6	No	4	Moderate	Crowded; crown bowed east.
1065	Coast live oak	37	Yes	4	Moderate	Multiple attachments at 8'; twig dieback; heavy lateral limbs east.
1066	Coast live oak	14	Yes	5	Good	Codominant trunks at 10'; good young tree.
1067	Coast live oak	17	Yes	4	Good	Good form and structure; thin crown.
1068	Valley oak	24	Yes	4	Moderate	Tag on fence; multiple attachments at 20'; high crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1069	Coast live oak	30,19	Yes	4	Good	Codominant trunks at base; 19" stem bowed west.
1070	Coast live oak	14	Yes	3	Moderate	Suppressed form; leans east.
1071	Coast live oak	8	No	3	Poor	Suppressed form; bowed south to horizontal.
1072	Coast live oak	28	Yes	5	Good	Upright form.
1073	Coast live oak	14	Yes	3	Moderate	Suppressed form; leans south.
1074	Toyon	8	No	2	Poor	Western half dead.
1075	Monterey pine	31	No	1	Poor	Extensive pine pitch canker; dead top.
1076	Monterey pine	25	No	2	Poor	Pine pitch canker; poor form and structure.
1077	Monterey pine	31	No	2	Poor	Codominant trunks at 7'; pine pitch canker.
1078	Monterey pine	27	No	2	Poor	Laterals south; pine pitch canker.
1079	Monterey pine	36	No	3	Poor	Multiple attachments at 10'; pine pitch canker.
1080	Coast live oak	50	Yes	5	Good	Big tree; multiple attachments at 10'; several heavy lateral limbs to 36".
1081	Coast live oak	6,5	No	4	Good	Codominant trunks at 2'; seam in attachment.
1082	Coast live oak	11,9,8	No	3	Moderate	Multiple attachments at 2'; one-sided south.
1083	Coast live oak	10	No	3	Moderate	Suppressed form; leans south.
1084	Coast live oak	14,7	Yes	4	Good	One sided south; low lateral.
1085	Coast live oak	39	Yes	2	Poor	Extensive dieback; history of branch failure; declining.
1086	Coast live oak	32	Yes	2	Poor	Multiple stem failures; large ganoderma conk south; declining.
1087	Coast live oak	27	Yes	3	Poor	Codominant trunks at 6'; trunk wound; decay.
1088	Calif. black oak	32	Yes	3	Poor	Basal cavity south; dieback throughout crown; trunk wound.
1089	Coast live oak	7	No	3	Poor	Windswept north; twig and branch dieback.
1090	Coast live oak	8,7	No	3	Moderate	Codominant trunks at 3'; thin crown.
1091	Coast live oak	28	Yes	4	Moderate	Multiple attachments at 8'; spreading form; branch wound.
1092	Valley oak	17	Yes	4	Moderate	Upright form; high crown.
1093	Coast live oak	16	Yes	3	Moderate	Codominant trunks at 7'; lateral west.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1094	Coast live oak	32	Yes	3	Moderate	Codominant trunks at 8'; cavity in attachment; thinning crown.
1095	Coast live oak	17	Yes	2	Poor	Large trunk wound with decay; crown bowed south.
1096	Coast live oak	16	Yes	3	Moderate	Suppressed form; leans south; trunk wound.
1097	Coast live oak	8,7	No	3	Moderate	Multiple attachments at 10'; heavy lateral limb northeast; cavity west.
1098	Coast live oak	6	No	5	Good	Good young tree.
1099	Coast live oak	9	No	5	Good	Perched on cliff; good young tree.
1100	Coast live oak	7	No	5	Good	Good young tree.
1101	Coast live oak	28	Yes	2	Poor	Extensive trunk decay; declining.
1102	Coast live oak	14	Yes	3	Poor	Crown bowed east; basal cavity.
1103	Coast live oak	23	Yes	3	Moderate	Basal wound; decay; nice form.
1104	Coast live oak	23	Yes	3	Moderate	Perched on cliff; twig and branch dieback.
1105	Coast live oak	24	Yes	3	Poor	Basal cavity north; trunk wound; twig dieback.
1106	Coast live oak	12	Yes	5	Good	Upright form; good young tree.
1107	Coast live oak	12	Yes	5	Good	Upright form; good young tree.
1108	Calif. black oak	36	Yes	2	Poor	No tag; extensive trunk decay; small crown.
1109	Coast live oak	6	No	5	Good	No tag; good young tree.
1110	Coast live oak	49	Yes	3	Poor	Multiple attachments at 10'; adding wood; cavities with trunk decay east.
1111	Coast live oak	11	No	5	Good	Upright form; good young tree.
1112	Coast live oak	12	Yes	3	Moderate	Suppressed form; leans east.
1113	Coast live oak	13,11,6	Yes	3	Moderate	Crowded; asymmetric crown.
1114	Coast live oak	14,14,10,9,9.7	Yes	5	Good	Multiple attachments at base; part of dense grove.
1115	Coast live oak	9,9	No	4	Moderate	Codominant trunks at base; part of dense grove.
1116	Coast live oak	11,8,6	No	3	Moderate	Multiple attachments at base; dead branches from rodent damage; part of dense grove.
1117	Coast live oak	6,3	No	3	Moderate	Suppressed form; part of dense grove.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1118	Coast live oak	9,8,7,7,6,6,6	No	4	Good	Multiple attachments at base; narrow form; part of dense grove.
1119	Coast live oak	8	No	3	Moderate	Suppressed form; leans west; part of dense grove.
1120	Coast live oak	10,7	No	4	Good	Codominant trunks at base; asymmetric crown; part of dense grove.
1121	Coast live oak	10,7	No	5	Good	Upright form; part of dense grove.
1122	Coast live oak	10,7,6	No	5	Good	Seam in attachment; part of dense grove.
1123	Coast live oak	6	No	3	Poor	Small crown; part of dense grove.
1124	Coast live oak	6,6	No	4	Good	Asymmetric crown; part of dense grove.
1125	Coast live oak	10,8	No	5	Good	Upright form; part of dense grove.
1126	Coast live oak	8	No	4	Moderate	One-sided south; twig dieback; part of dense grove.
1127	Coast live oak	11,10,7,7,7	No	5	Good	Multiple attachments at base; upright form; part of dense grove.
1128	Coast live oak	9	No	5	Good	Upright form; part of dense grove.
1129	Coast live oak	20	Yes	3	Moderate	Codominant trunks at 5'; seam in attachment; twig and branch dieback.
1130	Coast live oak	7	No	3	Moderate	Suppressed form; one-sided northwest.
1131	Coast live oak	6	No	4	Moderate	Upright form; part of dense grove.
1132	Coast live oak	6	No	5	Good	Good young tree; growing against fence.
1133	Coast live oak	7	No	4	Good	Codominant trunks at base; included bark.
1134	Coast live oak	6	No	3	Moderate	Suppressed form; leans north.
1135	Coast live oak	12,12,9	Yes	4	Good	Multiple attachments at base; one-sided south; edge of dense grove.
1136	Coast live oak	13,8	Yes	3	Moderate	Codominant trunks at 1'; asymmetric crown.
1137	Coast live oak	8,7,5,5,5,5	No	4	Good	Multiple attachments at base; part of dense grove.
1138	Coast live oak	8	No	5	Good	Good young tree; edge of dense grove.
1139	Coast live oak	8	No	5	Good	Upright form; part of dense grove.
1140	Coast live oak	12,9	Yes	4	Moderate	Asymmetric crown; part of dense grove.
1141	Coast live oak	6	No	3	Poor	Suppressed form; part of dense grove.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1142	Coast live oak	7,6	No	4	Good	One-sided north; part of dense grove.
1143	Coast live oak	12,12,7,5,5,5	Yes	5	Good	Multiple attachments at base; upright form; part of dense grove.
1144	Coast live oak	13,13,12,9,8,5	Yes	4	Good	Multiple attachments at 1'; edge of dense grove.
1145	Coast live oak	6	No	5	Good	Good young tree; fence nailed to trunk.
1146	Coast live oak	7	No	5	Good	Good young tree.
1147	Coast live oak	8,5,3	No	4	Good	Pruned north; good young tree.
1148	Coast live oak	6,5	No	4	Moderate	Trunk wounds; branch wound from horse.
1149	Coast live oak	6	No	5	Good	Good young tree.
1150	Coast live oak	9	No	3	Moderate	Inside cattle coral; leans east; trunk rubbed smooth.
1151	Coast live oak	8,7,7,6	No	4	Moderate	Multiple attachments at base; bark checking.
1152	Coast live oak	7,5	No	5	Good	Good young tree.
1153	Coast live oak	9,5,5	No	5	Good	Multiple attachments at base; good young tree.
1154	Coast live oak	8,7,7,6	No	3	Moderate	Crowded; one-sided east.
1155	Coast live oak	6	No	4	Good	Crowded; upright form.
1156	Coast live oak	6	No	4	Good	Crowded; upright form.
1157	Coast live oak	7	No	4	Moderate	Crowded; crown bowed west.
1158	Coast live oak	11	No	5	Good	Crowded; good form and structure.
1159	Coast live oak	9	No	4	Good	Crowded; upright form.
1160	Mimosa	8,8,7	No	3	Poor	Multiple attachments at 3'; poor form and structure.
1161	Coast live oak	8	No	3	Moderate	Crowded; leans north.
1162	Coast live oak	8,7,5	No	4	Good	Multiple attachments at 2'; rodent damage dieback.
1163	Coast live oak	10,8,8,7	No	4	Moderate	Multiple attachments at 1'; half of canopy within coral.
1164	Apple	7,6,6	No	3	Moderate	Inside cattle coral; leans north; trunk rubbed smooth.
1165	Apple	13,6	No	3	Moderate	Inside cattle coral; leans north; trunk rubbed smooth.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1166	Deodar cedar	25	No	5	Good	Good form; lateral south.
1167	Purple leaf plum	8,8	No	2	Poor	Inside coral; extensive dieback; trunk rubbed smooth.
1168	Purple leaf plum	9,6,6,4	No	2	Poor	Inside coral; extensive dieback; trunk rubbed smooth.
1169	Purple leaf plum	8	No	1	Poor	Inside coral; extensive dieback and trunk decay.
1170	Monterey pine	28	No	2	Poor	Extensive pine pitch canker; poor form and structure.
1171	Monterey pine	38	No	2	Poor	Pine pitch canker; poor form and structure.
1172	Coast live oak	31,20	Yes	3	Moderate	Inside coral; roots exposed west; trunk wounds.
1173	Coast live oak	26	Yes	3	Poor	Inside coral; multiple branch failures; trunk decay.
1174	Coast live oak	32	Yes	4	Moderate	Inside coral; multiple attachments at 6'; laterals east.
1175	Coast live oak	23	Yes	3	Moderate	Inside coral; leans northwest.
1176	Coast live oak	14,12	Yes	3	Poor	Inside coral; one-sided north; cavity.
1177	Coast live oak	25,24,23	Yes	4	Moderate	Inside coral; multiple attachments at 2'; cavity in attachment; one-sided west.
1178	Coast live oak	18	Yes	3	Moderate	Inside coral; leaning and one-sided northwest.
1179	Plum	6	No	4	Good	Inside coral; upright form.
1180	Coast live oak	10	No	3	Moderate	Inside coral; upright form; thin crown.
1181	Coast live oak	28,12	Yes	3	Moderate	Inside coral; asymmetric crown; epicormic shoots; dieback.
1182	Coast live oak	29	Yes	4	Good	Inside coral; multiple attachments at 6'; good form and structure.
1183	Coast live oak	8,5	No	5	Good	Inside coral; good young tree.
1184	Coast live oak	10	No	5	Good	Inside coral; good young tree.
1185	Coast live oak	6,5,2	No	4	Good	Inside coral; basal wounds.
1186	Coast live oak	7,6	No	4	Good	Inside coral; codominant trunks at 3'; wide attachment.
1187	Coast live oak	6,4	No	3	Moderate	Off-site; suppressed; leans south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1188	Coast live oak	19	Yes	3	Moderate	Off-site; slight lean east; cavity west.
1189	Coast live oak	19,18,10	Yes	5	Good	Off-site; multiple attachments at 3'; good form and structure.
1190	Coast live oak	13,9	Yes	4	Good	One stem off-site; codominant trunks at base.
1191	Coast live oak	23	Yes	3	Poor	Off-site; pruned for overhead utilities.
1192	Coast live oak	9	No	4	Good	Off-site; one-sided west.
1193	Coast live oak	27	Yes	4	Moderate	Codominant trunks at 8'; one-sided northwest over road; embedded barbed wire.
1194	Coast live oak	23	Yes	3	Moderate	Heavy lean north.
1195	Coast live oak	19	Yes	1	Poor	Suppressed form; little live material remains.
1196	Coast live oak	46,22	Yes	4	Good	Multiple attachments at 4'; upright form; pruned north for overhead utilities.
1197	Coast live oak	14	Yes	3	Moderate	Suppressed form; leans west.
1198	Valley oak	25	Yes	4	Good	Multiple attachments at 6'; upright form; twig dieback.
1199	Coast live oak	18	Yes	3	Moderate	Heavy lean west.
1200	Coast live oak	13	Yes	3	Poor	Small, high crown.
1201	Coast live oak	22	Yes	2	Poor	Large trunk wound; active bee hive; leans west.
1202	Coast live oak	11,10	No	3	Poor	Suppressed form.
1203	Coast live oak	24	Yes	3	Moderate	Multiple attachments at 6'; topped for overhead utilities.
1204	Coast live oak	11	No	1	Poor	Lost top.
1205	Coast live oak	25	Yes	4	Moderate	Codominant trunks at 12'; upright form; pruned for overhead utilities.
1206	Coast live oak	16	Yes	3	Moderate	Suppressed form; crown bowed east.
1207	Coast live oak	16,7	Yes	3	Poor	Leans west; pruned for overhead utilities.
1208	Coast live oak	17,16,12	Yes	3	Moderate	Multiple attachments at 2'; crown bowed north; pruned for overhead utilities.
1209	Calif. black walnut	6	No	3	Moderate	Suppressed form.
1210	Coast live oak	12	Yes	3	Poor	Bowed west to horizontal.
1211	Coast live oak	16	Yes	3	Poor	Bowed west to horizontal.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1212	Coast live oak	24,12	Yes	4	Moderate	Multiple attachments at 4'; pruned west for overhead utilities.
1213	Calif. buckeye	9,7,6,5	No	3	Moderate	Part of dense grove; trunk wounds.
1214	Calif. buckeye	7	No	3	Moderate	Part of dense grove; leans west.
1215	Calif. buckeye	7,7,6,5	No	4	Good	Part of dense grove; upright form.
1216	Calif. buckeye	9,8,5	No	3	Moderate	Part of dense grove; leaning across creek.
1217	Calif. buckeye	10,9,9,7,4	No	3	Moderate	Part of dense grove; topped for overhead utilities; trunk wounds/rodent damage.
1218	Coast live oak	7	No	3	Poor	Suppressed form.
1219	Calif. buckeye	16,9,8	No	3	Moderate	Part of dense grove; topped for overhead utilities; trunk wounds.
1220	Calif. buckeye	7,6,5,4	No	3	Moderate	Part of dense grove; topped for overhead utilities.
1221	Coast live oak	8	No	3	Moderate	Beneath overhead utilities.
1222	Coast live oak	13	Yes	3	Moderate	Topped for overhead utilities; leans west.
1223	Coast live oak	20	Yes	3	Moderate	Beneath overhead utilities.
1224	Calif. buckeye	9,6,6,4	No	3	Moderate	Topped for overhead utilities.
1225	Calif. buckeye	9,6	No	3	Moderate	Suppressed form; bowed west.
1226	Coast live oak	20	Yes	3	Moderate	Leans west; topped for overhead utilities.
1227	Calif. buckeye	7,7,6,6,5	No	3	Moderate	Multiple attachments at base; beneath overhead utilities.
1228	Calif. buckeye	10	No	3	Moderate	Suppressed form; leans north.
1229	Calif. buckeye	9,8	No	3	Moderate	Growing in creek; roots exposed.
1230	Coast live oak	14,13	Yes	3	Poor	Codominant trunks at 2'; topped for overhead utilities.
1231	Coast live oak	18	Yes	3	Moderate	Leans east.
1232	Coast live oak	8	No	1	Poor	Crushed by failed neighbor.
1233	Coast live oak	9	No	3	Moderate	No tag; growing on steep slope; engulfed in poison oak.
1234	Coast live oak	12	Yes	3	Moderate	No tag; growing on steep slope; engulfed in poison oak.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1235	Coast live oak	16	Yes	3	Moderate	No tag; growing on steep slope; topped for overhead utilities.
1236	Calif. buckeye	9,8,7,5	No	3	Moderate	Growing on steep slope; dead stem; rodent damage.
1237	Coast live oak	15	Yes	3	Poor	Upright form; topped for overhead utilities.
1238	Coast live oak	15,7,5	Yes	3	Poor	Topped for overhead utilities.
1239	Coast live oak	20	Yes	3	Poor	Cavities; topped for overhead utilities.
1240	Coast live oak	17	Yes	3	Poor	Bowed west to horizontal.
1241	Coast live oak	20	Yes	4	Moderate	Codominant trunks at 6'; pruned for overhead utilities.
1242	Coast live oak	14	Yes	3	Poor	Cavities; pruned for overhead utilities.
1243	Valley oak	11	No	2	Poor	Little live material remains.
1244	Calif. buckeye	9,6	No	3	Moderate	Trunk wounds from rodent damage.
1245	Coast live oak	12	Yes	3	Poor	Topped for overhead utilities.
1246	Coast live oak	9	No	3	Poor	Topped for overhead utilities.
1247	Coast live oak	18	Yes	3	Moderate	Multiple attachments at 8'; leans north.
1248	Coast live oak	6	No	3	Moderate	Crowded; small crown.
1249	Coast live oak	8	No	4	Moderate	Good young tree; engulfed in berries.
1250	Coast live oak	9	No	3	Poor	No tag; topped for overhead utilities; engulfed in berries.
1251	Coast live oak	10,6	No	3	Poor	Upright form; pruned for overhead utilities.
1252	Coast live oak	10,6	No	3	Poor	Topped for overhead utilities.
1253	Coast live oak	6	No	3	Poor	Topped for overhead utilities.
1254	Coast live oak	6	No	3	Poor	Suppressed form; beneath overhead utilities.
1255	Coast live oak	6	No	5	Moderate	Good young tree; next to overhead utilities.
1256	Coast live oak	8,5,4	No	4	Good	Crowded; good young tree.
1257	Coast live oak	26	Yes	3	Poor	Thin crown; engulfed in poison oak.
1258	Coast live oak	34	Yes	4	Moderate	Multiple attachments at 8'; cavity; epicormic shoots.
1259	Plum	6,5,4	No	3	Poor	Leans west; topped for overhead utilities.
1260	Coast live oak	15	Yes	4	Moderate	Twig dieback; pruned for overhead utilities.
1261	Coast live oak	9,4	No	3	Moderate	Suppressed form; crown bowed south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1262	Coast live oak	29	Yes	5	Good	Multiple attachments at 7'; good form and structure.
1263	Coast live oak	6	No	5	Good	Good young tree.
1264	Coast live oak	14	Yes	4	Moderate	One-sided south; good form and structure.
1265	Coast live oak	23,22	Yes	5	Good	Group of three trees form unit; good form and structure; one-sided west.
1266	Coast live oak	19,12	Yes	5	Good	Group of three trees form unit; good form and structure; one-sided south.
1267	Coast live oak	18	Yes	4	Good	Group of three trees form unit; leans east.
1268	Coast live oak	42	Yes	4	Moderate	Multiple attachments at 15'; spreading form; cavities.
1269	Coast live oak	43,26	Yes	4	Good	Multiple attachments at 5'; spreading form; twig and branch dieback.
1270	Coast live oak	14,12	Yes	5	Good	Codominant trunks at 3'; good form and structure; in horse coral.
1271	Coast live oak	11	No	5	Good	Codominant trunks at 5'; good form and structure; in horse coral.
1272	Coast live oak	8	No	4	Good	Crowded; slight lean south.
1273	Coast live oak	9	No	5	Good	Good young tree.
1274	Coast live oak	7	No	3	Moderate	Crowded; leans south; in horse coral.
1275	Coast live oak	7	No	4	Moderate	Upright form; flush cuts; wired to fence.
1276	Coast live oak	9	No	3	Moderate	Leans south.
1277	Coast live oak	9	No	4	Moderate	Crowded; asymmetric crown.
1278	Coast live oak	7	No	4	Good	Crowded; one-sided north.
1279	Coast live oak	10	No	4	Good	Crowded; one-sided south.
1280	Coast live oak	7	No	4	Moderate	Crowded; perched on steep slope.
1281	Coast live oak	6,4	No	3	Moderate	Small crown; exposed roots.
1282	Coast live oak	7,4	No	4	Moderate	Good young tree; in horse coral.
1283	Coast live oak	6	No	4	Moderate	One-sided north; in horse coral.
1284	Purple leaf plum	6,5	No	3	Poor	Large trunk wound; in horse coral.
1285	Coast live oak	44,22	Yes	4	Moderate	Multiple attachments at 6'; 21" stem is low lateral east; cavities.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1286	Coast live oak	21	Yes	5	Good	Upright form; one-sided north.
1287	Coast live oak	24,18	Yes	4	Good	Codominant trunks at 4'; crown bowed north.
1288	Plum	9	No	4	Moderate	Upright form.
1289	Coast live oak	24	Yes	4	Moderate	One-sided east; trunk wounds from branch failures.
1290	Coast live oak	29	Yes	4	Good	Multiple attachments at 6'; upright form.
1291	Coast live oak	25	Yes	4	Moderate	One-sided west; adding wood to southern stem.
1292	Coast live oak	11	No	2	Poor	Half of tree failed; poor form and structure.
1293	Coast live oak	21	Yes	1	Poor	Little live material remains.
1294	Coast live oak	6	No	5	Good	Good young tree; vines in canopy.
1295	Coast live oak	6	No	3	Poor	Small crown; bowed north.
1296	Coast live oak	9	No	3	Moderate	Slight lean north.
1297	Valley oak	13	Yes	4	Moderate	Crowded; high, narrow crown.
1298	Coast live oak	15	Yes	4	Moderate	One-sided west.
1299	Coast live oak	25	Yes	3	Moderate	Codominant trunks at 8'; one stem upright, one stem west.
1300	Coast live oak	24	Yes	3	Moderate	Corrected lean; epicormic shoots; trunk wound south.
1301	Coast live oak	20,19,13	Yes	4	Good	Multiple attachments at base; twig and branch dieback.
1302	Coast live oak	19	Yes	4	Moderate	Asymmetric crown; trunk wound north.
1303	Coast live oak	15	Yes	4	Moderate	Crowded; dead wood.
1304	Coast live oak	15,13	Yes	4	Moderate	Codominant trunks at 4'; one-sided north.
1305	Coast live oak	8	No	3	Poor	Suppressed form; leans northwest.
1306	Coast live oak	9	No	3	Poor	Suppressed form; crown bowed west to horizontal.
1307	Coast live oak	13	Yes	3	Poor	Suppressed form; crown bowed north to horizontal.
1308	Coast live oak	24,16,12	Yes	4	Good	Multiple attachments at 4'; spreading form.
1309	Coast live oak	28	Yes	4	Moderate	Upright form; twig dieback; in bull coral.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1310	Monterey pine	25	No	2	Poor	No tag; poor form and structure; pine pitch canker; in bull coral.
1311	Coast live oak	23,22	Yes	3	Moderate	No tag; one-sided north; twig and branch dieback; in bull coral.
1312	Coast live oak	36	Yes	4	Moderate	Northern stem failed; small cavities; in bull coral.
1313	Coast live oak	30	Yes	4	Moderate	Codominant trunks at 15'; slight lean north; in bull coral.
1314	Coast live oak	20	Yes	3	Moderate	Multiple attachments at 6'; asymmetric crown; in bull coral.
1315	Coast live oak	48,13	Yes	3	Moderate	Multiple attachments at 10'; twig and branch dieback; in horse coral.
1316	Coast live oak	20	Yes	3	Moderate	Suppressed form; crown bowed east; in horse coral.
1317	Coast live oak	10,8	No	4	Good	Codominant trunks at 4'; good form and structure; in horse coral.
1318	Coast live oak	10	No	3	Moderate	One-sided east; in horse coral.
1319	Coast live oak	7	No	3	Moderate	Crowded; in horse coral.
1320	Coast live oak	7,6	No	4	Good	Crook at 6'; in horse coral.
1321	Coast live oak	10,8,7	No	4	Good	Multiple attachments at 1'; good young tree; in horse coral.
1322	Coast live oak	38	Yes	2	Poor	Extensive trunk decay; small crown.
1323	Coast live oak	12,12	Yes	4	Moderate	Part of dense grove; crown bowed south.
1324	Coast live oak	8	No	3	Moderate	Part of dense grove; narrow crown.
1325	Coast live oak	18	Yes	4	Good	Part of dense grove; asymmetric crown.
1326	Coast live oak	14	Yes	4	Moderate	Part of dense grove; crown bowed east.
1327	Coast live oak	18	Yes	4	Good	Part of dense grove; asymmetric crown.
1328	Coast live oak	9	No	3	Poor	Part of dense grove; poor form and structure.
1329	Coast live oak	8,7,6,5	No	3	Poor	Part of dense grove; multiple attachments at base; dieback; leans south.
1330	Coast live oak	19	Yes	3	Moderate	Part of dense grove; thin, asymmetric crown.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1331	Coast live oak	11,8	No	4	Moderate	Part of dense grove; codominant trunks at base.
1332	Coast live oak	13,9,8,6,5	Yes	4	Moderate	Multiple attachments at 2'; one-sided south.
1333	Coast live oak	24	Yes	3	Moderate	Thin crown; history of branch failure.
1334	Coast live oak	14,9	Yes	4	Moderate	Codominant trunks at base; leans west.
1335	Coast live oak	13,6	Yes	3	Moderate	Thin crown; one-sided south.
1336	Coast live oak	26	Yes	3	Moderate	One-sided east; bark checking; dead wood.
1337	Coast live oak	48,20	Yes	2	Poor	Extensive bark checking; borer damage south; 20" stem is low lateral south; dieback.
1338	Coast live oak	23	Yes	3	Moderate	One-sided west; bark checking; embedded barbed wire.
1339	Coast live oak	13,10	Yes	4	Good	Part of dense grove; upright form; one-sided north.
1340	Coast live oak	11,7	No	4	Moderate	Part of dense grove; leans northeast.
1341	Coast live oak	12	Yes	3	Moderate	Part of dense grove; one-sided northwest.
1342	Coast live oak	15,14,7,5	Yes	4	Moderate	Part of dense grove; upright form; narrow attachments.
1343	Coast live oak	8	No	3	Moderate	Part of dense grove; leans east.
1344	Coast live oak	17,11,9	Yes	4	Moderate	Part of dense grove; one-sided south; twig dieback.
1345	Coast live oak	40	Yes	4	Good	Multiple attachments at 6'; good form and structure; thin in upper crown.
1346	Coast live oak	13,8	Yes	3	Moderate	One-sided south.
1347	Coast live oak	14	Yes	4	Moderate	One-sided east.
1348	Coast live oak	12,12,10	Yes	4	Moderate	Multiple attachments at 3'; little thin crown.
1349	Coast live oak	19,15,15	Yes	5	Good	Multiple attachments at 4'; good form and structure.
1350	Coast live oak	27,16	Yes	4	Moderate	Multiple attachments at 6'; low lateral south; bleeding along trunk.
1351	Coast live oak	7	No	3	Moderate	Part of dense grove; one-sided south.
1352	Coast live oak	7,7,6	No	4	Moderate	Part of dense grove; one stem upright; other stems one-sided south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1353	Coast live oak	18,15,14	Yes	2	Poor	Multiple attachments at 3'; extensive dieback.
1354	Coast live oak	6,6,4,4	No	5	Good	Multiple attachments at base; good young tree.
1355	Coast live oak	8,7,6	No	5	Good	Part of dense grove; multiple attachments at base; good young tree.
1356	Coast live oak	6	No	4	Good	Part of dense grove; narrow crown.
1357	Coast live oak	6,4,4	No	5	Good	Part of dense grove; multiple attachments at base; good young tree.
1358	Coast live oak	24,17	Yes	3	Moderate	Good form and structure; thin in upper crown.
1359	Coast live oak	26	Yes	5	Good	Multiple attachments at 5'; seam in attachment; nice form.
1360	Coast live oak	7	No	3	Moderate	At edge of road; codominant at 6' with narrow attachment.
1361	Coast live oak	7	No	3	Moderate	At edge of road; codominant at 5' with narrow attachment.
1362	Coast live oak	6	No	3	Moderate	Trunk wound from recent car accident.
1363	Coast live oak	10,8	No	4	Good	Codominant at 3'.
1364	Coast live oak	18,17	Yes	4	Good	Neighboring tree failed into its crown; codominant at 3'.
1365	Coast live oak	9,8	No	3	Moderate	Codominant at base; stem to west could be removed.
1366	Coast live oak	16	Yes	3	Moderate	Codominant at 4'; one-sided to north.
1367	Coast live oak	17	Yes	4	Good	Corrected lean to east.
1368	Coast live oak	8	No	3	Moderate	Suppressed form north.
1369	Coast live oak	40	Yes	3	Moderate	Tree failed at base and is propped on ground; crown is upright, full and healthy
1370	Coast live oak	50	Yes	4	Good	Bottle butt; multiple attachments at 7'; full wide spreading crown.
1371	Coast live oak	28	Yes	3	Moderate	History of branch failures; leans southeast; thin crown
1372	Coast live oak	7,4,3	No	4	Good	Part of dense grove; codominant at 1'.
1373	Coast live oak	14,8	Yes	4	Good	Part of dense grove; codominant at 2'; crown to north.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1374	Coast live oak	6	No	3	Moderate	Part of dense grove; crown to north.
1375	Coast live oak	7	No	3	Moderate	Part of dense grove; high narrow crown.
1376	Coast live oak	10	No	3	Moderate	Part of dense grove; high narrow crown.
1377	Coast live oak	6	No	3	Moderate	Part of dense grove; high narrow crown.
1378	Coast live oak	7,4	No	3	Moderate	Part of dense grove; stems from base; suppressed form.
1379	Coast live oak	12,4	Yes	5	Good	Next to tree #471; top of bank; good tree.
1380	Coast live oak	7	No	2	Poor	Very thin crown; suppressed to south.
1381	Coast live oak	8	No	2	Poor	Very thin crown; large failure from neighboring tree left it highly exposed.
1382	Coast live oak	10,8	No	3	Moderate	Next to tree #470; codominant at base; crown to east.
1383	Coast live oak	9	No	3	Moderate	Part of dense grove; high narrow crown.
1384	Coast live oak	6,4	No	1	Poor	Part of dense grove; all but dead.
1385	Coast live oak	9	No	1	Poor	Very thin crown; large failure from neighboring tree left it highly exposed.
1386	Coast live oak	10	No	2	Poor	Very thin crown; large failure from neighboring tree left it highly exposed.
1387	Coast live oak	11,10	No	3	Moderate	Codominant at 3' with included bark; leans to northeast.
1388	Coast live oak	7	No	2	Poor	Part of dense grove; high narrow crown.
1389	Coast live oak	9	No	3	Moderate	Crown to east; engulfed in poison oak.
1390	Coast live oak	12	Yes	3	Moderate	Crown suppressed to east.
1391	Coast live oak	18	Yes	4	Good	Codominant at 5'; full healthy crown.
1392	Coast live oak	10	No	3	Moderate	Crown suppressed to north.
1393	Coast live oak	6,4	No	3	Moderate	Codominant at base; crown suppressed to north.
1394	Coast live oak	10,8,5	No	3	Moderate	Multiple attachments at 1' and 3'; crown suppressed to east.
1395	Coast live oak	9	No	3	Moderate	Codominant at 4'; crown suppressed to east.
1396	Coast live oak	7	No	2	Poor	Poor form; heavily suppressed to south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1397	Coast live oak	11	No	3	Moderate	Edge of canopy; crown to south; codominant at 5'.
1398	Coast live oak	8,7	No	4	Good	Good young tree; codominant at 3'; low crown.
1399	Coast live oak	25	Yes	4	Good	Good form; crown a bit thin.
1400	Coast live oak	9,9,8,7,5	No	4	Moderate	Tree failed years ago; branches have turned upright to create nice crown.
1401	Valley oak	35	Yes	4	Good	Codominant at 8'; branch dieback; history of branch failures.
1402	Calif. buckeye	13,6	No	3	Moderate	Codominant at 2'; overtopped by neighbor.
1403	Coast live oak	34,31	Yes	3	Moderate	Codominant at 1'; 31" stem had large failure; 34" stem has cavity on south.
1404	Valley oak	16	Yes	2	Poor	High thin crown; twig and branch dieback.
1405	Coast live oak	38	Yes	3	Moderate	Large basal cavity; heavy lateral limb to north.
1406	Valley oak	20	Yes	3	Moderate	Crown and trunk bows to east.
1407	Coast live oak	13	Yes	3	Moderate	Trunk has crook at 10'
1408	Coast live oak	20	Yes	1	Poor	All but dead.
1409	Coast live oak	41	Yes	4	Good	Multiple attachments at 7'; a bit one-sided to west; heavy lateral limb to south has a possible hazard beam forming.
1410	Coast live oak	28,25	Yes	5	Good	Codominant at 2'; excellent form.
1411	Coast live oak	19,13	Yes	3	Moderate	Codominant at base; 13" has severely twisted form; possibly beginning to fail; crack at point of attachment.
1412	Calif. buckeye	10,6	No	4	Good	Good form; overtopped by neighbors.
1413	Coast live oak	23	Yes	2	Poor	Large area of decay at 15' from previous failure.
1414	Valley oak	9	No	2	Poor	Top of tree dead; small coast live oak at base.
1415	Coast live oak	25,24	Yes	3	Moderate	Codominant at 2'; history of branch failures; twig and branch dieback; decay in some failed stems; needs pruning.
1416	Valley oak	27	Yes	4	Good	High crown; somewhat thin.
1417	Coast live oak	20	Yes	4	Good	Under canopy of #1416; crown to south.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1418	Calif. buckeye	18,17,14,13	No	4	Good	3 separate stems at base leaning to the outside of center; nice little group; some decay.
1419	Valley oak	19,15	Yes	4	Good	Codominant at base; full crown.
1420	Coast live oak	11	No	4	Good	A bit crooked.
1421	Coast live oak	23	Yes	3	Moderate	Twig and brach dieback.
1422	Coast live oak	11	No	3	Moderate	Trunk has crook at 4'.
1423	Calif. buckeye	11,7	No	3	Moderate	Wounds in trunk and center stem.
1424	Coast live oak	16,13	Yes	2	Poor	Codominant at 1'; extensive twig and branch dieback.
1425	Coast live oak	22,17,14	Yes	3	Moderate	Multiple attachments at 1'; twig and branch dieback; 22" stem bows heavily to north.
1426	Valley oak	17	Yes	4	Good	Codominant at 6'; minor dieback.
1427	Coast live oak	17,15	Yes	1	Poor	Failed at base; laying on ground; green crown.
1428	Valley oak	15	Yes	3	Moderate	Trunk bows to east.
1429	Valley oak	17	Yes	3	Moderate	High small crown; low branch is dead.
1430	Coast live oak	24	Yes	4	Good	Slight bow in trunk.
1431	Coast live oak	18	Yes	4	Good	Good form; base fused to #1432.
1432	Valley oak	16	Yes	4	Good	High crown; base fused to #1431.
1433	Coast live oak	22,19	Yes	4	Good	Codominant at 2'; nice full crown.
1434	Coast live oak	13	Yes	3	Moderate	Twig and branch dieback; trunk cavity on west; suppressed form.
1435	Coast live oak	12,10,9,8	Yes	4	Good	One stem from base is separating from main stem; remaining tree is a very good young tree.
1436	Coast live oak	8,7,6	No	4	Good	Multiple attachments at 2'; good young tree.
1437	Coast live oak	13,9,6	Yes	5	Good	Multiple attachments at 1'; low branching; good young tree.
1438	Coast live oak	8,6,5,4,3	No	2	Poor	Very thin; poor color.
1439	Madrone	7,6	No	5	Good	Good young tree; low branching.
1440	Madrone	16,13	No	3	Moderate	Codominant at 1' cracking apart; center stem is dead.
1441	Coast live oak	6	No	5	Good	Good young tree; low braching.
1442	Coast live oak	6,5,5,4	No	2	Poor	Declining; leaves browning.

Tree Survey

Napa Oaks site
Napa, California
October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1443	Coast live oak	36	Yes	4	Good	Heavy laterals extend uphill and rest on ground; beautiful form.
1444	Coast live oak	32	Yes	4	Good	Codominant at 4'; branching to ground; small branch failures.
1445	Coast live oak	34	Yes	5	Good	Excellent form and structure; multiple attachments at 7'.
1446	Calif. black oak	35	Yes	5	Good	Excellent form and structure; nice specimen.
1447	Calif. black oak	17	Yes	2	Poor	Only center stem is alive; extensive decay in upper trunk.
1448	Valley oak	22	Yes	3	Moderate	Crown bows downhill to north; otherwise nice crown.
1449	Coast live oak	22,22,21	Yes	3	Moderate	Multiple attachments at 3'; thin crown; center of tree bowing uphill.
1450	Coast live oak	34	Yes	4	Good	Multiple attachments at 7'; twig and branch dieback.
1451	Calif. buckeye	9,9,8,8,6	No	5	Good	Stems from base and 1'; nice form; overtopped by #150.
1452	Calif. black oak	18	Yes	1	Poor	Half of tree failed; bees in base.
1453	Calif. buckeye	20	No	5	Good	Excellent form and structure; a couple of small cavities.
1454	Coast live oak	18	Yes	3	Moderate	Trunk has corrected form to east.
1455	Coast live oak	23	Yes	3	Moderate	Trunk bows to west.
1456	Coast live oak	6	No	2	Poor	Poor form.
1457	Coast live oak	15	Yes	3	Moderate	Suppressed form to east.
1458	Coast live oak	12,10	Yes	3	Moderate	Codominant at 2'; suppressed form to southeast.
1459	Coast live oak	33,10,17	Yes	5	Good	Multiple attachments at 4'; beautiful full crown extends to ground.
1460	Coast live oak	17,11,7	Yes	4	Moderate	Multiple attachments at 1'; thin crown.
1461	Plum	11	No	1	Poor	All but dead.
1462	Coast live oak	9,8,8,6	No	4	Good	Staddles property line; multiple attachments at base; low crown.

Tree Survey

Napa Oaks site
 Napa, California
 October & November 2010



TREE No.	SPECIES	SIZE DIAMETER (in inches)	NATIVE PROTECTED?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1463	Coast live oak	15	Yes	4	Good	Slight lean to north.
1464	Calif. buckeye	7,6,6	No	4	Good	Good form; engulfed in poison oak.
1465	Almond	15	No	2	Poor	Half of tree failed; trunk decay.
1466	Coast live oak	13,11	Yes	5	Good	Codominant at 3'; excellent form and structure.
1467	Coast live oak	8,8	No	4	Good	Part of dense grove; codominant at 1'.
1468	Coast live oak	8	No	4	Good	Part of dense grove; one-sided.
1469	Coast live oak	7	No	4	Good	Part of dense grove; narrow upright form.
1470	Coast live oak	7	No	3	Moderate	Part of dense grove; suppressed form to south.
1471	Coast live oak	7	No	4	Good	Part of dense grove; crown to east.
1472	Coast live oak	10,10	No	4	Good	Part of dense grove; codominant at 3'.
1473	Coast live oak	10,7	No	4	Good	Just south of tree #733; codominant at 2'; bark checking at base; part of dense grove.
1474	Coast live oak	5,5,4,3	Yes	4	Good	East of tree #209; codominant at 1' and 3': low crown.
1475	Coast live oak	8,8,7,6	No	4	Good	Near tree #910; codominant at 3'; top of cut slope; good form.

ATTACHMENT 5

**U.S. Fish and Wildlife Service, California Natural Diversity Data Base and
California Native Plant Society Special Status
Species Lists for the Project Area**



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825



January 28, 2011

Document Number: 110128052418

Gary Deghi
Huffman-Broadway Group, Inc.
828 Mission Avenue
San Rafael, CA 94901

Subject: Species List for Napa Oaks Project

Dear: Mr. Deghi

We are sending this official species list in response to your January 28, 2011 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

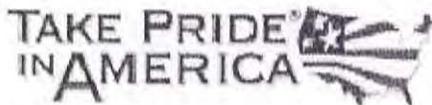
Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be April 28, 2011.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 110128052418

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

- Branchinecta conservatio*
Conservancy fairy shrimp (E)
- Branchinecta lynchi*
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)
- Desmocerus californicus dimorphus*
valley elderberry longhorn beetle (T)
- Speyeria callippe callippe*
callippe silverspot butterfly (E)
- Speyeria zerene myrtleae*
Myrtle's silverspot butterfly (E)
- Syncaris pacifica*
California freshwater shrimp (E)

Fish

- Acipenser medirostris*
green sturgeon (T) (NMFS)
- Eucyclogobius newberryi*
tidewater goby (E)
- Hypomesus transpacificus*
Critical habitat, delta smelt (X)
delta smelt (T)
- Oncorhynchus kisutch*
coho salmon - central CA coast (E) (NMFS)
- Oncorhynchus mykiss*
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)
- Oncorhynchus tshawytscha*
Central Valley spring-run chinook salmon (T) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense*
California tiger salamander, central population (T)
- Rana draytonii*
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Thamnophis gigas
giant garter snake (T)

Birds

Charadrius alexandrinus nivosus
western snowy plover (T)

Pelecanus occidentalis californicus
California brown pelican (E)

Rallus longirostris obsoletus
California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

Strix occidentalis caurina
northern spotted owl (T)

Mammals

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Plants

Astragalus clarianus
Clara Hunt's milk-vetch (E)

Blennosperma bakeri
Baker's stickyseed [=Sonoma Sunshine] (E)

Castilleja affinis ssp. neglecta
Tiburon paintbrush (E)

Cordylanthus mollis ssp. mollis
soft bird's-beak (E)

Lasthenia conjugens
Contra Costa goldfields (E)
Critical habitat, Contra Costa goldfields (X)

Navarretia leucocephala ssp. pauciflora
few-flowered navarretia (E)

Proposed Species**Amphibians**

Rana draytonii
Critical habitat, California red-legged frog (PX)

Plants

Cordylanthus mollis ssp. mollis
Critical habitat, soft bird's-beak (PX)

Quads Containing Listed, Proposed or Candidate Species:

CORDELIA (482B)
CUTTINGS WHARF (483A)
SEARS POINT (483B)
CAPELL VALLEY (499B)
MT. GEORGE (499C)
YOUNTVILLE (500A)
RUTHERFORD (500B)
SONOMA (500C)
NAPA (500D)

County Lists

No county species lists requested.

Key:

- (E) *Endangered* - Listed as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or

injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service. During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you

will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be April 28, 2011.

Plant List

51 matches found. [Click on scientific name for details](#)

Search Criteria

Found in 9 Quads around 38122C3,
Community is one of [Broadleaved upland forest, Cismontane woodland, Meadows and seeps, Marshes and swamps, Valley and foothill grassland, Vernal pool]

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium peninsulare var. franciscanum	Franciscan onion	Liliaceae	perennial bulbiferous herb	1B.2	S2.2	G5T2
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	1B.2	S2.2	G4T2
Arctostaphylos bakeri ssp. bakeri	Baker's manzanita	Ericaceae	perennial evergreen shrub	1B.1	S2	G2T2
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	annual herb	1B.1	S1.1	G1
Astragalus clevelandii	Cleveland's milk-vetch	Fabaceae	perennial herb	4.3	S3.3?	G3
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	1B.2	S1.1	G1T1
Atriplex joaquiniana	San Joaquin spearscale	Chenopodiaceae	annual herb	1B.2	S2	G2
Balsamorhiza macrolepis var. macrolepis	big-scale balsamroot	Asteraceae	perennial herb	1B.2	S2	G3G4T2
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	1B.1	S1.2	G1
Brodiaea californica var. leptandra	narrow-anthered California brodiaea	Liliaceae	perennial bulbiferous herb	1B.2	S2S3.2	G4?T2T3
Calochortus pulchellus	Mt. Diablo fairy-lantern	Liliaceae	perennial bulbiferous herb	1B.2	S2.1	G2
Calycaenia micrantha	small-flowered calycadenia	Asteraceae	annual herb	1B.2	S2S3.2	G2G3
Castilleja affinis ssp. neglecta	Tiburon paintbrush	Scrophulariaceae	perennial herb (hemiparasitic)	1B.2	S1.2	G4G5T1
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	S2.2	G2
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	1B.2	S2.2	G2
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	1B.2	S2.2	G4T2
Cordylanthus mollis ssp. mollis	soft bird's-beak	Scrophulariaceae	annual herb (hemiparasitic)	1B.2	S1.1	G2T1
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2.2	S2	G2
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	3	S3?	G3?
Eriogonum luteolum var. caninum	Tiburon buckwheat	Polygonaceae	annual herb	1B.2	S2	G5T2
Gilia capitata ssp. tomentosa	woolly-headed gilia	Polemoniaceae	annual herb	1B.1	S1.1	G5T1
Harmonia nutans	nodding harmonia	Asteraceae	annual herb	4.3	S3.3	G3
Hemizonia congesta ssp. congesta	pale yellow hayfield tarplant	Asteraceae	annual herb	1B.2	S2S3	G5T2T3
Hesperolinon breweri	Brewer's western flax	Linaceae	annual herb	1B.2	S2.2	G2
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	1B.2	S2.2	G2
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	4.2	S3.2	G3
Lasthenia coniugens	Contra Costa goldfields	Asteraceae	annual herb	1B.1	S1.1	G1
Lathyrus jepsonii var. jepsonii	Delta tule pea	Fabaceae	perennial herb	1B.2	S2.2	G5T2
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	S2.2	G2
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	4.2	S3.2	G3
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	1B.2	S2.2	G2
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	3	S3	G3
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	1B.1	S2	G2
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G3
Limnanthes vinculans	Sebastopol meadowfoam	Limnathaceae	annual herb	1B.1	S2.1	G2
Lomatium repostum	Napa lomatium	Apiaceae	perennial herb	4.3	S3.3	G3
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	1B.2	S2.2	G2
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	3.2	S3.2?	G3
Monardella villosa ssp. globosa	robust monardella	Lamiaceae	perennial rhizomatous herb	1B.2	S2.2	G5T2
Monardella viridis ssp. viridis	green monardella	Lamiaceae	perennial rhizomatous herb	4.3	S3.3	G3T3
Navarretia leucoccephala ssp. pauciflora	few-flowered navarretia	Polemoniaceae	annual herb	1B.1	S1.1	G4T1
Polygonum marinense	Marin knotweed	Polygonaceae	annual herb	3.1	S1.1	G1Q
Rhynchospora californica	California beaked-rush	Cyperaceae	perennial rhizomatous herb	1B.1	S1.1	G1
Streptanthus breweri var. hesperidis	green jewel-flower	Brassicaceae	annual herb	1B.2	S2.2	G5T2
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2
Trichostema rubisepalum	Hernandez bluecurls	Lamiaceae	annual herb	4.3	S3.3	G3
Trichostema ruygtii	Napa bluecurls	Lamiaceae	annual herb	1B.2	S2	G2
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	1B.1	S1.1	G1

Trifolium hydrophilum	saline clover	Fabaceae	annual herb	1B.2	S2.2?	G2?
Triteleia lugens	dark-mouthed triteleia	Liliaceae	perennial bulbiferous herb	4.3	S3.3	G3
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2.3	S2.3	G5

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ATTACHMENT 6

**Habitat Assessment for the California Tiger Salamander
on the Napa Oaks Project Site, Napa County, California.
Prepared by Mark Jennings of Rana Resources
February 10, 2011**

ATTACHMENT 7

**Habitat Assessment for the California Red-legged Frog
on the Napa Oaks Project Site, Napa County, California
Prepared by Mark Jennings of Rana Resources
February 11, 2011**

**HABITAT ASSESSMENT FOR THE
CALIFORNIA TIGER SALAMANDER (*Ambystoma californiense*),
ON THE NAPA OAKS PROJECT SITE,
NAPA COUNTY, CALIFORNIA**

Prepared by:

Mark R. Jennings
Rana Resources
P.O. Box 2185
Davis, CA 95617-2185

For
Gary Deghi
The Huffman-Broadway Group, Inc.
828 Mission Avenue
San Rafael, CA 94901

February 10, 2011

EXECUTIVE SUMMARY

A habitat assessment was conducted for the California tiger salamander (*Ambystoma californiense*; CTS) during 01 February 2011 on the 80.64-acre Napa Oaks Project site (at 3095 Old Sonoma Road) in Napa, Napa County, California. Results showed that the site is outside of the known native range for CTS, it is not within any of the U.S. Fish and Wildlife Service critical habitat areas designated for the species, and it lacks suitable breeding habitat for CTS. The closest known historic populations are located approximately 18 miles to the southeast of the site in the vicinity of Fairfield (near Travis Air Force Base) in Solano County, and 19 miles to the northwest at the southern edge of the Santa Rosa Plain (near Cotati and Rohnert Park) in Sonoma County. In-between the project site and the closest known populations are extensive areas of natural waterways (including rivers), mountain ranges, urbanization, freeways, and agricultural areas. It is my professional opinion that CTS do not occur on the site or within at least 15 miles of the project location.

INTRODUCTION

The Napa Oaks Project is a proposed development on 80.64 acres in the low hills just west of the current city of Napa at 3095 Old Sonoma Road in Napa County (Figure 1). The project boundary lies just within the current city limits. Because this project site is located near the historic native range of the California tiger salamander (*Ambystoma californiense*; CTS) [Jennings and Hayes 1994], the following habitat assessment was conducted to see if this salamander could potentially occur on site. The common and scientific names utilized in this report follow Jennings (2004), as per recent taxonomic revisions.

STUDY AREA

The Napa Oaks Project is located at 3095 Old Sonoma Road within the City of Napa, Napa County (Figure 1). The 80.64-acre site lies within the western edge of the city limits of Napa in the low hills of a partly-wooded oak (*Quercus* spp.) area. The site is bounded on the east by the City of Napa, to the north by Old Sonoma Road, and to the south and west by extensive vineyards. The site contains a house, barn, corrals, and other

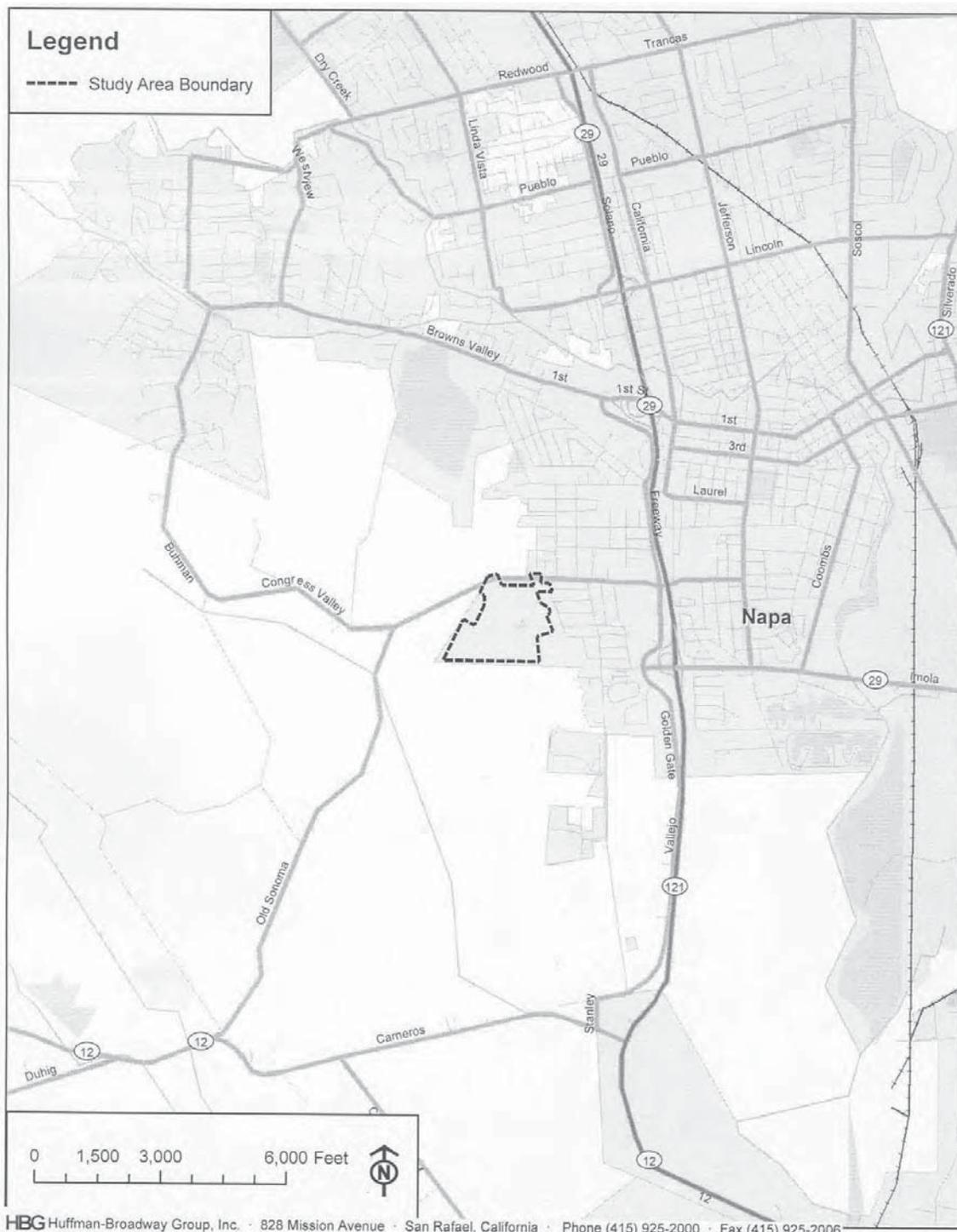


Figure 1. Location of the Project within the City of Napa.

associated structures, and a mixed grassland-oak woodland area that is used for grazing. There are piped watering troughs for livestock on the property. However, all drainages and wetland areas on the site are intermittent and only hold water for up to several weeks after periods of rainfall.

The vineyards to the west and south are largely cleared of natural vegetation and contain numerous large irrigation ponds. I counted 4 such irrigation ponds (including 1 immediately south of the project site) within 0.25 miles of the project boundary. There are many other vineyard irrigation ponds that lie further away from the four ponds alluded to above. These ponds provide suitable aquatic and riparian habitat for a number of wildlife which forage on the adjacent project site (e.g., Pacific treefrogs (*Hyla regilla*), raccoons (*Procyon lotor*), mule deer (*Odocoileus hemionus*), great egrets (*Ardea alba*), etc.).

MATERIALS AND METHODS

The site was examined by myself on 01 February 2011. I looked at the overall area of the proposed development, as well as the adjacent areas by the use of public roads and the views (via binoculars) from the heights of the project site. All areas were assessed for potential habitat of CTS by following the guidance provided by the U.S. Fish and Wildlife Service (2003). Additionally, I examined pertinent locality information for CTS via the California Natural Diversity Data Base (California Department of Fish and Game 2011) and recently published information in the Federal Register by the U.S. Fish and Wildlife Service.

RESULTS AND DISCUSSION

There are no wetlands or water bodies located on the project site that are suitable for CTS breeding. All of the areas that naturally hold water for any period of time are very shallow (only 1-3 inches deep) and completely dry after only a few weeks when rainfall ceases. The numerous irrigation ponds within the vineyards adjacent to the site are potentially suitable for CTS breeding. However, I observed introduced western mosquitofish (*Gambusia affinis*) in the pond closest to the property and introduced bullfrogs (*Rana catesbeiana*) are known to be abundant in aquatic habitats within the

Napa area (e.g., see Jennings and Padgett-Flohr 2004). These negative factors, coupled with the lack of records for CTS within any part of Napa County (California Department of Fish and Game 2011) suggest that CTS do not inhabit the area. Further, Napa County is not within any of the U.S. Fish and Wildlife Service critical habitat areas designated for CTS (U.S. Fish and Wildlife Service 2005, 2011). The closest known historic CTS populations are located approximately 18 miles to the southeast of the site in the vicinity of Fairfield (near Travis Air Force Base) in Solano County and 19 miles to the northwest at the southern edge of the Santa Rosa Plain (near Cotati and Rohnert Park) in Sonoma County (Jennings and Hayes 1994, California Department of Fish and Game 2011). In-between the project site and the closest known populations are extensive areas of natural waterways (including rivers), mountain ranges, urbanization, freeways, and agricultural areas. Thus, it is my professional opinion that CTS do not occur on the site or within at least 15 miles of the project location.

In summary, it appears that the Napa Oaks Project site lacks suitable aquatic habitat for CTS, and is outside the known native range of the species. It is my professional opinion that the project will have no negative effects on these species within the City of Napa.

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- marmorata*), California freshwater shrimp (*Synacris pacifica*), and steelhead (*Oncorhynchus mykiss irideus*). Final report prepared for The Environmental Collaborative, Emeryville, California. 15 p.
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- U.S. Fish and Wildlife Service. 2011. Endangered and threatened wildlife and plants; designation of critical habitat for the Sonoma County distinct population segment of the California tiger salamander (*Ambystoma californiense*). Federal Register, 76(11):2863-2871. [Tuesday, January 18, 2011].

ATTACHMENT 8

**Letter Report on Western Pond Turtle
Napa Oaks Project Site, Napa County, California
Prepared by Mark Jennings of Rana Resources
February 12, 2011**

RANA RESOURCES
P.O. Box 2185
Davis, CA 95617-2185

(530) 753-2727
RanaResources@aol.com

#15,291
February 12, 2011

Mr. Gary Deghi
Huffman and Associates, Inc.
828 Mission Avenue
San Rafael, CA 94901-3209

Dear Gary:

This letter is in regards to my observation of western pond turtles (*Actinemys marmorata*; WPT) in vineyard irrigation ponds adjacent to the Napa Oaks Project site within the City of Napa. During my site survey on 01 February 2011, I was able to observe (with binoculars) basking or swimming adult WPTs in every irrigation pond adjacent to the property within a distance of about a quarter of a mile. Although the project site is totally unsuitable for WPT nesting and estivation due to the rocky nature of the soil, the very close proximity of one of these irrigation ponds to the southern boundary of the site makes it likely that WPT might move across a small part of the property. In order to avoid any potential negative effects to WPT with this project, it is suggested that the client conduct the following avoidance measures: 1) create at least a 200-foot buffer between the project development boundary and the high water edge of the irrigation pond; and 2) that black silt fencing be installed at the southern edge of the development area to prevent WPT from potentially entering the construction area (and being crushed by vehicles, etc). The fence could be examined by a qualified biologist on a regular basis during the construction period to make sure that it is functioning properly.

Thanks for allowing me to be involved with this project. Please let me know if you have any questions on the above.

Sincerely,



Mark R. Jennings
President and
Herpetologist/Fisheries Biologist

RECEIVED

NOV - 1 2011

COMMUNITY DEVELOPMENT
DEPARTMENT

Revised Tree Report

Napa Oaks
Napa, CA

Prepared for:
Davidon Homes
1600 S. Main St., Suite 150
Walnut Creek, CA 94596-5394

Prepared by:
HortScience, Inc.
325 Ray Street
Pleasanton, CA 94566

July 2011



REVISED TREE REPORT
Napa Oaks
Napa, CA

Table of Contents

	Page
Introduction and Overview	1
Background	1
Survey Methods	1
Description of Trees	2
Suitability for Preservation	5
Evaluation of Impacts and Recommendations for Action	6
Tree Preservation Guidelines	19

List of Tables

Table 1. Condition ratings and frequency of occurrence for trees	4
Table 2. Suitability for preservation	6
Table 3. Trees recommended for removal	7

Attachments

Tree Survey Forms

Tree Survey Map (prepared by dK Consulting)

Introduction and Overview

Davidon Homes is planning to develop the Napa Oaks site in Napa, California. Currently, the site is open grazing land, with tight groups of trees spread across the site. The proposed development would construct 54 residential lots, with two access points onto Old Sonoma Road. A considerable amount of the site would remain as open space. HortScience, Inc. was asked to prepare a **Tree Report** for the site for review by the City of Napa.

This report provides the following information:

1. A survey of all trees with a trunk diameter of 6" or greater (measured 54" above grade) within the proposed project area.
2. An evaluation of the health of the tree on a 0-5 scale, where 0=dead, 1= poor, and 5 = excellent condition.
3. An assessment of the impacts of constructing the proposed project on the trees.
4. Guidelines for tree preservation during the design and construction phases of development.

Background

Hortscience, Inc. prepared a **Tree Survey Report** for the Napa Oaks site in 1997. A total of 591 trees were surveyed at that time. This number reflects the City's requirement that only trees with diameters of 8" or greater, and within 30' of the proposed development, be included. Currently, we assessed all trees at the site with diameters of 6" or greater (per Chapter 12.45, Ordinance #02003-4).

In 1997, over a third of the trees were young, with diameters in the 8" to 11" range, and almost 90% were in moderate to excellent condition (rated 3, 4, or 5). Currently, over half of the trees (native and exotics) were young (diameters between 6" and 11"), and just over 90% were in moderate to excellent condition. The increase in the number of young trees reflects both the change in the requirements for the size and location of trees included in the survey, as well as the growth of trees to the minimum diameter threshold for inclusion in the survey.

Survey Methods

Trees were surveyed in October and November, 2010. The survey included trees 6" and greater in diameter. The survey procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition using a scale of 0 – 5:
 - 5 - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
 - 4 - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
 - 3 - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
 - 2 - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
 - 1 - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
 - 0 – Dead.

5. Rating the suitability for preservation as "good", "moderate" or "poor". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

- Good:** Trees with good health and structural stability that have the potential for longevity at the site.
- Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.
- Poor:** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

One thousand three hundred and seventy five (1,375) trees, represented by 33 species, were evaluated. Descriptions of each tree are found in the **Tree Survey Forms**, and locations are plotted on the **Tree Survey Map** (see attachments). Included in the survey were seven (7) off-site trees (#291 and 1187-1192), with portions of their crowns extending onto the project site and one (1) standing dead tree (#722).

The site was a native oak woodland with groupings of trees separated by open grasslands, where cattle grazed (photo 1). Cattle grazing can have a direct impact on vegetation, through feeding (especially on young plants), rubbing on tree trunks and compacting soil beneath trees, where they gather for shade. Evidence of these impacts was present at the Napa Oaks site.

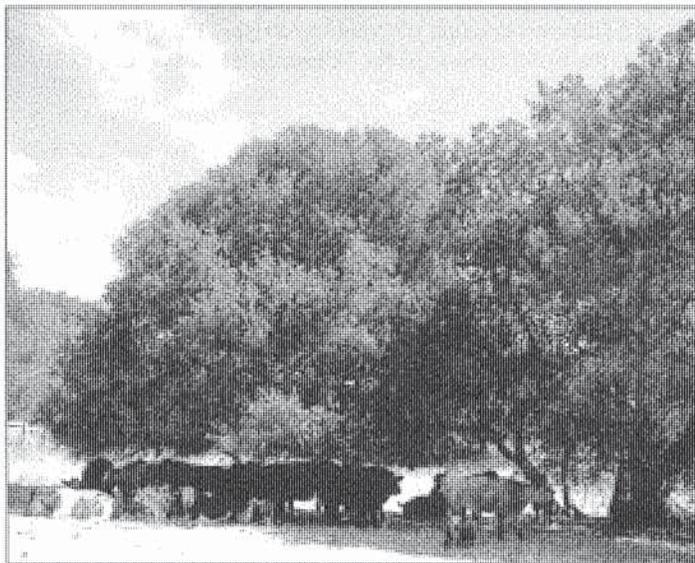


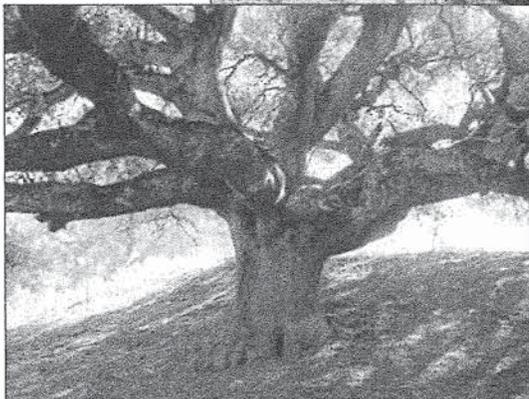
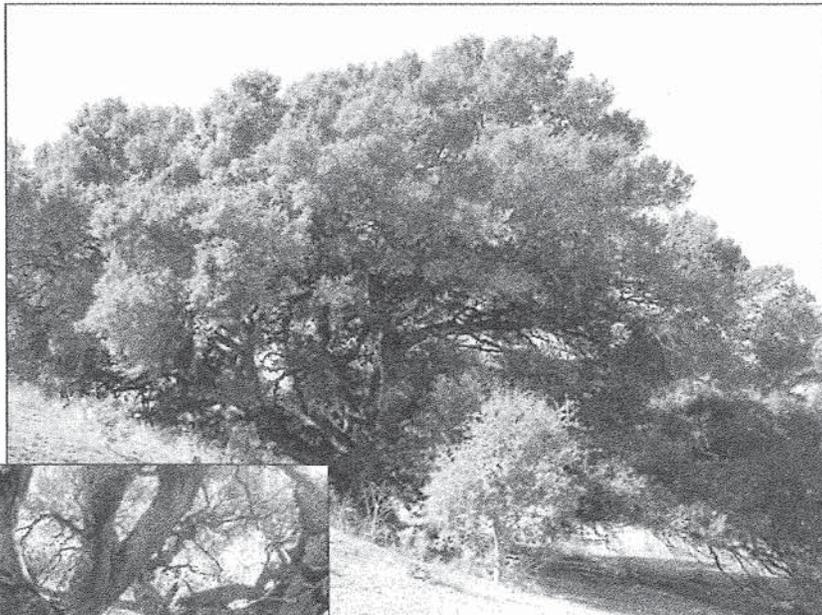
Photo 1: Cattle grazing beneath the shade of a group of coast live oaks (#909-914). Grazing, soil compaction and direct injury can lead to a variety of tree impacts. Typically, grazing leads to a lack of young trees, as they are browsed on. However, this was not the case at the Napa Oaks site, where there were many young coast live oaks.

Many of the tree groupings were dominated by young trees, with diameters below 12". This is unusual for areas where grazing is common, as they are often browsed before they get large enough to tolerate the damage. The close spacing of trees in groupings also affected tree structure. Typically, there were one or more dominant trees, characterized by upright, spreading crowns, surrounded by intermediate and suppressed trees with leaning, asymmetric, or one-sided crowns.

Eight (8) of the 33 species surveyed were native to the site and the balance were planted exotics. The native species constituted 1,298 of the trees, or 94% of the population. Of these, 654, or 50% were young, with diameters less than 12".

There were 33 species represented at the site (Table 1, page 4). The most frequently occurring species was coast live oak, with 1,186 trees, or 86% of the population. The species was adapted to the site and had performed well, with 641 (54%) in good or excellent condition, 469 in fair (40%), and 75 in poor (6%). In addition to the groupings of young trees, there were several large diameter coast live oaks, including 92 trees with diameters of 30" or larger. For the most part, these had large, spreading crowns with branches extending to the ground. Coast live oak #1080 was one of the largest diameter coast live oaks at 50" and was in excellent health, with heavy lateral limbs (Photo 2, following page).

Photo 2: Coast live oak #1080 was in excellent condition, with a spreading crown and branches to the ground. Inset shows branching structure comprised of several heavy lateral limbs.



The second most common species was valley oak, with 56 trees (4%). Calif. buckeye, with 27 trees (2%) and Calif. black oak, with 14 trees (1%) were the next most common species. The remaining 29 species were represented by 10 or fewer individuals.

Average tree condition was good (723 trees or 53% of the population). Five hundred thirty-four (534) were in fair condition (39%), and 117 trees were in poor (9%). The good condition of the trees is a reflection of the number of native trees and their adaptation to site conditions.

For young trees of all species, low condition ratings were due to poor structure, primarily where crowns leaned or were bowed to horizontal as a result of competition for light. Extensive decay in trunks and scaffold branches was the primary reason for low condition ratings in mature trees. Decay was manifested in many ways, including thin or sparse foliage, branch failures and cavities.

The city of Napa defines certain native species with at least one trunk 12" or greater in diameter, as "Protected Native" trees (Chapter 12.45, Ordinance #02003-4). By this definition, 622 trees qualified as "Protected Native" trees, including 102 with trunk diameters of 30" or greater and 222 multi-stemmed trees, with at least one stem measuring 12" or greater (see **Tree Survey Forms**, attachments).

**Table 1: Condition ratings and frequency of occurrence of trees.
Napa Oaks site, Napa**

Common Name	Scientific Name	Condition Rating				No. of Trees
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
*Calif. buckeye	<i>Aesculus californica</i>	-	1	17	9	27
Mimosa	<i>Albizia julibrissin</i>	-	3	2	-	5
*Madrone	<i>Arbutus menziesii</i>	-	5	2	3	10
Incense cedar	<i>Calocedrus decurrens</i>	-	-	-	1	1
Deodar cedar	<i>Cedrus deodara</i>	-	-	-	1	1
Arizona cypress	<i>Cupressus arizonica</i>	-	-	-	1	1
Evergreen ash	<i>Fraxinus uhdei</i>	-	1	2	-	3
Silk oak	<i>Grevillea robusta</i>	-	-	1	-	1
*Toyon	<i>Heteromeles arbutifolia</i>	-	1	1	-	2
*Calif. black walnut	<i>Juglans hindsii</i>	-	-	1	2	3
Paradox walnut	<i>Juglans 'Paradox'</i>	-	-	-	1	1
English walnut	<i>Juglans regia</i>	-	3	5	2	10
Privet	<i>Ligustrum japonicum</i>	-	-	2	-	2
Apple	<i>Malus domestica</i>	-	1	2	-	3
Myoporum	<i>Myoporum laetum</i>	-	-	-	1	1
Olive	<i>Olea europaea</i>	-	-	1	3	4
Blue spruce	<i>Picea pungens 'Glauca'</i>	-	-	-	1	1
Aleppo pine	<i>Pinus halepensis</i>	-	1	-	3	4
Pinyon pine	<i>Pinus monophylla</i>	-	-	-	1	1
Italian stone pine	<i>Pinus pinea</i>	-	-	1	-	1
Monterey pine	<i>Pinus radiata</i>	-	7	1	-	8
Scot's pine	<i>Pinus sylvestris</i>	-	1	-	-	1
Japanese black pine	<i>Pinus thunbergiana</i>	-	-	1	2	3
Chinese pistache	<i>Pistacia chinensis</i>	-	-	-	1	1
Purple leaf plum	<i>Prunus cerasifera</i> 'Atropurpurea'	-	3	1	-	4
Plum	<i>Prunus domestica</i>	-	2	4	3	9
Almond	<i>Prunus dulcis</i>	-	6	1	-	7
*Coast live oak	<i>Quercus agrifolia</i>	1	75	469	641	1186
*Valley oak	<i>Quercus lobata</i>	-	4	17	35	56
*Calif. black oak	<i>Quercus douglasii</i>	-	3	1	10	14
Burr oak	<i>Quercus macrocarpa</i>	-	-	-	1	1
*Coffeeberry	<i>Rhamnus californica</i>	-	-	1	-	1
*Coast redwood	<i>Sequoia sempervirens</i>	-	-	1	1	2
Total		1	117	534	723	1,375
		≤1%	9%	39%	53%	100%

*Indicates species native to the site

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in creeks, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, coast live oak and coast redwood are more adaptable and tolerate injury better than valley oak or madrone.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Invasiveness**
Trees with the potential to invade native habitats, reproduce rapidly, and grow in sub-optimal environments are considered invasive. Species with these qualities may alter the functional and aesthetic qualities of the habitats they invade. None of the species surveyed at the Napa Oaks site are considered invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, following page).

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

**Table 2: Tree Suitability for preservation
Napa Oaks site, Napa**

Good These are trees with good health and structural stability that have the potential for longevity at the site. Four hundred forty-six (446) trees were rated as having good suitability for preservation. This group included 398 coast live oaks, 21 valley oaks, eight (8) Calif. black oaks, six (6) Calif. buckeyes, three (3) madrones, and one (1) each of Arizona cypress, blue spruce, burr oak, Chinese pistache, coast redwood, deodar cedar, incense cedar, olive, pinyon pine and plum.

Moderate Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "good" category. Six hundred and fifty-five (655) trees were rated as having moderate suitability for preservation, including: 580 coast live oaks, 28 valley oaks, three (3) each of Aleppo pine, Calif. black walnut, Japanese black pine, olive and plum, two (2) each of apple, Calif. black oak, English walnut and madrone, and one (1) each of coast redwood, paradox walnut, privet, and toyon.

Poor Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Two hundred and seventy-four (274) trees were rated as having poor suitability for preservation, including: 208 coast live oaks, eight (8) Monterey pines, eight (8) English walnuts, seven (7) valley oaks, seven (7) almonds, five (5) each of madrone, mimosa and plum, four (4) purple-leaf plums, four (4) Calif. black oak, three (3) evergreen ash, two (2) Calif. buckeyes, and one (1) each of apple, Aleppo pine, coffeeberry, Italian stone pine, privet, Scot's pine, silk oak, and toyon.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Survey** was the reference point for tree health and condition. Potential impacts from construction were evaluated using the Preliminary Grading and Drainage Plan, prepared by dK Consulting (received March 1, 2011).

The plan proposes to construct 54 custom residential homes on the site, leaving extensive areas undeveloped. The Preliminary Plan shows the grading for the roads, lots, building footprints, retaining wall locations, and detention ponds. Accurate trunk locations were shown for most trees but not for all the trees, as many will remain in undisturbed areas of Parcels A, B and C. Utilities and drainage were also shown on the plans.

Potential impacts from construction were estimated for each tree. Based on our evaluation of the plans, the proposed project would allow for the preservation of 765 trees, including 429 "Native Protected" trees. Five hundred and ninety-one (591) would be outside the development impacts and 174 would be within 45' of grading.

A total of 620 trees would require removal, including 200 "Native Protected" trees. A total of 392 trees would be impacted by lot grading, 158 impacted by road grading, 60 impacted by slope and swale grading, 26 impacted by the detention pond, eight (8) by the new entry onto Old Sonoma Rd. and four (4) by retaining walls. Of these, 112 were of poor suitability for preservation.

Pruning, cabling and monitoring is recommended for 158 trees. Pruning is recommended to provide clearance for construction activities (154 trees), to reduce end-weight (five trees), and to correct structural defects (three trees). Monitoring changes in lean, health and decay advancement is recommended for two (2) trees and cabling to reduce the likelihood of future stem or branch failure is recommended for four (4) trees. Tree #179 is recommended for an aerial inspection to identify any defects in structure not seen from the ground inspection and pruning, cabling and monitoring may be required for this tree based on the results of the aerial inspection. Any pruning of off-site trees must be done with the property owner's consent.

Davidon Homes has made a concerted effort at tree preservation. After several revisions to the site plan an additional 127 trees have been identified for preservation. Preservation of these trees is predicated on establishing a **Tree Protection Zone** and other measures recommended in the **Tree Preservation Guidelines** that follow (see page 19). Again, in the interest of space specific **Tree Protection Zones** have been reviewed with and provided to Davidon Homes, but are not included as part of this document.

In summary, implementation of the proposed plan would allow for preservation of 755 trees, including 422 "Native Protected" trees. Removal would be required for the remaining 620 trees, 200 of which are "Protected Native" trees. A description of trees recommended for removal, and the associated impacts, are listed in **Table 3**.

**Table 3: Trees recommended for removal
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
101	Coast live oak	29	Yes	Within road grading
102	Privet	9,7,6,5,5	No	Within entry
103	Mimosa	11	No	Within entry
104	Italian stone pine	10	No	Within entry
105	Mimosa	15,12	No	Within entry
106	English walnut	13	No	Impacted by road grading
108	Mimosa	13	No	Within road grading
111	Privet	6,5,4,3	No	Within entry
112	Almond	8	No	Within entry
131	English walnut	11	No	Within road grading
132	English walnut	6,6	No	Within road grading
133	Coast live oak	15,15,8	Yes	Within road grading
134	Coast live oak	9,7,6,4,3	No	Within road grading
135	Valley oak	8	No	Within det. pond grading
137	Calif. black walnut	10,8,7	No	Within road grading
138	Calif. black walnut	9,8,8,8	No	Within entry
139	English walnut	13	No	Within entry
140	Coast live oak	10	No	Within road grading
141	Mimosa	14	No	Within road grading
142	Aleppo pine	17	No	Within road grading
143	Mimosa	10	No	Within road grading
144	Aleppo pine	22,15	No	Within road grading
145	Coast redwood	22	No	Within road grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
146	Apple	8,7,5	No	Within road grading
147	Valley oak	21	Yes	Within road grading
148	Pinyon pine	10	No	Within det. pond grading
149	Calif. black oak	7	No	Within det. pond grading
150	Calif. black oak	9	No	Within det. pond grading
151	Myoporum	8,7	No	Within det. pond grading
152	Japanese black pine	8	No	Within det. pond grading
153	Calif. black oak	8	No	Within det. pond grading
154	Chinese pistache	8	No	Within det. pond grading
155	Calif. black oak	6	No	Within det. pond grading
156	Incense cedar	36	No	Within det. pond grading
157	Japanese black pine	6,4	No	Within det. pond grading
158	Japanese black pine	7	No	Within det. pond grading
159	Calif. black oak	8	No	Within det. pond grading
160	Calif. black oak	11	No	Within det. pond grading
161	Valley oak	13	Yes	Impacted by det. pond grading
162	Evergreen ash	13	No	Within det. pond grading
163	Evergreen ash	17	No	Within det. pond grading
164	Aleppo pine	15	No	Within det. pond grading
166	Arizona cypress	16,9	No	Within road grading
167	Almond	9	No	Within road grading
169	Coast live oak	9	No	Within road grading
170	Coast live oak	12	Yes	Within road grading
171	Coast live oak	10	No	Within road grading
174	Coast live oak	6	No	Within road grading
175	English walnut	11	No	Within road grading
176	Coast live oak	11,8	No	Within road grading
177	Coast live oak	8	No	Within road grading
178	Coast live oak	7	No	Within road grading
181	Coast live oak	10,7	No	Impacted by road grading
182	Valley oak	8	No	Impacted by road grading
183	Valley oak	7	No	Within road grading
184	Coast live oak	12	Yes	Within road grading
185	Coast live oak	10,8	No	Within road grading
197	Coast live oak	7,7,6,5,4	No	Within lot grading
204	Coast live oak	12	Yes	Impacted by road grading
217	Coast live oak	10,6,6	No	Within road grading
219	Coast live oak	10,10,7	No	Impacted by road grading
230	Coast live oak	7	No	Impacted by road grading
231	Valley oak	8	No	Within road grading
232	Coast live oak	9,6	No	Within road grading
233	Coast live oak	7	No	Within road grading
234	Coast live oak	16,5	Yes	Within road grading
235	Coast live oak	12	Yes	Within road grading
236	Coast live oak	7	No	Within road grading
237	Coast live oak	15,8	Yes	Within lot grading
238	Coast live oak	15	Yes	Within road grading
239	Coast live oak	13,7	Yes	Within lot grading
240	Coast live oak	10,7	No	Within lot grading
241	Coast live oak	9,9,6	No	Within road grading
242	Coast live oak	10	No	Within road grading
243	Coast live oak	28	Yes	Impacted by road grading
249	Coast live oak	8	No	Within road grading
250	Madrone	14,9,6	No	Within lot grading
251	Coast live oak	8	No	Within lot grading
252	Coast live oak	9,8,7	No	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
253	Coast live oak	9,7,6	No	Within lot grading
254	Coast live oak	8	No	Within lot grading
255	Coast live oak	9,5	No	Within lot grading
256	Coast live oak	10,9,8,5,5	No	Within lot grading
257	Coast live oak	9	No	Within lot grading
258	Coast live oak	6,4,4	No	Within lot grading
259	Coast live oak	9,8,7,6,6	No	Within road grading
260	Coast live oak	13	Yes	Within road grading
261	Coast live oak	7,7,6,5,5	No	Within road grading
262	Coast live oak	18,7,6	Yes	Within road grading
263	Coast live oak	6,6,5,5	No	Within road grading
264	Coast live oak	9	No	Within road grading
265	Coast live oak	8	No	Within lot grading
269	Coast live oak	18	Yes	Within lot grading
275	Coast live oak	10	No	Impacted by road grading
276	Coast live oak	8,5,3	No	Within road grading
277	Coast live oak	10,10	No	Within road grading
278	Coast live oak	10	No	Within road grading
279	Coast live oak	13	Yes	Within road grading
280	Coast live oak	14,11,11	Yes	Impacted by lot grading
284	Coast live oak	11,7,6,5,5	No	Within road grading
285	Coast live oak	14	Yes	Within road grading
286	Blue spruce	10	No	Within det. pond grading
287	Burr oak	7	No	Within det. pond grading
288	Calif. black oak	11	No	Within det. pond grading
289	Coast live oak	14	Yes	Within det. pond grading
290	Evergreen ash	20	No	Within det. pond grading
292	Scot's pine	6	No	Within det. pond grading
293	English walnut	17	No	Impacted by det. pond grading
294	Coast redwood	22,18	No	Within det. pond grading
295	Coast live oak	8	No	Within road grading
296	Coast live oak	10	No	Within road grading
297	Coast live oak	12,11	Yes	Within road grading
298	Coast live oak	9,4	No	Within road grading
299	Coast live oak	6	No	Within road grading
300	Coast live oak	13,6,6	Yes	Within road grading
301	Coast live oak	6	No	Within road grading
302	Coast live oak	14,7	Yes	Within lot grading
303	Coast live oak	6	No	Within lot grading
304	Coast live oak	10,7,7	No	Within lot grading
305	Coast live oak	11,6	No	Within lot grading
306	Coast live oak	10,6	No	Within lot grading
307	Coast live oak	9,8,6,6	No	Within lot grading
308	Coast live oak	7,6,5,5	No	Within lot grading
309	Coast live oak	7	No	Within lot grading
310	Coast live oak	9,7,6,5	No	Within lot grading
311	Coast live oak	7	No	Within lot grading
312	Coast live oak	12,10,8	Yes	Within lot grading
313	Coast live oak	11	No	Within lot grading
314	Coast live oak	10	No	Within lot grading
315	Coast live oak	6	No	Within lot grading
316	Coast live oak	7	No	Within lot grading
317	Coast live oak	11,8	No	Within lot grading
318	Coast live oak	14,9	Yes	Within road grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
319	Coast live oak	9,8	No	Within lot grading
320	Coast live oak	8,6	No	Within lot grading
321	Coast live oak	6	No	Within lot grading
322	Coast live oak	10,9,8	No	Within lot grading
323	Coast live oak	8,7	No	Within lot grading
324	Coast live oak	6	No	Within lot grading
325	Coast live oak	8,7	No	Within lot grading
326	Coast live oak	10,9,8,6	No	Within lot grading
327	Coast live oak	15,7,6	Yes	Within lot grading
328	Coast live oak	7	No	Within road grading
329	Coast live oak	11	No	Within road grading
330	Coast live oak	6	No	Within road grading
331	Coast live oak	8	No	Within road grading
332	Coast live oak	12	Yes	Within road grading
333	Coast live oak	6	No	Within road grading
334	Coast live oak	10	No	Within road grading
335	Coast live oak	7,6,5	No	Within road grading
336	Coast live oak	11	No	Within road grading
337	Coast live oak	6	No	Within road grading
338	Coast live oak	11	No	Within road grading
339	Coast live oak	12	Yes	Within road grading
340	Coast live oak	7,6,3	No	Within road grading
341	Coast live oak	6,6,6	No	Within road grading
342	Coast live oak	6	No	Within road grading
343	Coast live oak	7	No	Within road grading
344	Valley oak	6,4	No	Within road grading
345	Coast live oak	7,6,4	No	Within road grading
346	Coast live oak	11	No	Within road grading
347	Coast live oak	7	No	Within road grading
348	Coast live oak	8,6,5,4	No	Within road grading
349	Coast live oak	7	No	Within road grading
350	Coast live oak	9	No	Within road grading
351	Coast live oak	7,6,4	No	Within road grading
352	Coast live oak	8	No	Within road grading
353	Coast live oak	6,6	No	Within road grading
354	Coast live oak	9	No	Within road grading
355	Coast live oak	12	Yes	Within road grading
357	Coast live oak	61	Yes	Impacted by road grading
358	Coast live oak	20	Yes	Within road grading
359	Coast live oak	12,8	Yes	Impacted by grading
360	Coast live oak	7	No	Within road grading
361	Coast live oak	10	No	Within road grading
362	Coast live oak	13	Yes	Within road grading
363	Coast live oak	14,7	Yes	Within road grading
364	Coast live oak	11,6,5	No	Within road grading
365	Coast live oak	12,11	Yes	Within lot grading
366	Coast live oak	7,6	No	Within lot grading
367	Coast live oak	13	Yes	Within lot grading
368	Coast live oak	8	No	Within lot grading
369	Coast live oak	11	No	Within lot grading
370	Coast live oak	14,12,6	Yes	Within lot grading
376	Coast live oak	10,8,8,5	No	Within lot grading
377	Coast live oak	8,7,5	No	Within lot grading
378	Coast live oak	6	No	Within lot grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
379	Coast live oak	8,7,6	No	Within lot grading
380	Coast live oak	6,5,5,5	No	Within lot grading
397	Coast live oak	9,9,8	No	Within lot grading
398	Coast live oak	11,9,8	No	Impacted by lot grading
401	Coast live oak	6,4	No	Within lot grading
402	Coast live oak	8,6,6	No	Within lot grading
403	Madrone	27	No	Within lot grading
404	Coast live oak	9,7,6,4	No	Within lot grading
405	Coast live oak	7,5,5,4	No	Within lot grading
406	Coast live oak	8,7,5,5,4,4	No	Within lot grading
407	Coast live oak	8,5	No	Within lot grading
408	Coast live oak	9,8,7,6,6	No	Within lot grading
409	Coast live oak	7,6,3,3	No	Within lot grading
410	Coast live oak	8	No	Within lot grading
411	Coast live oak	12,11,10	Yes	Within road grading
412	Coast live oak	7,6,6,5,5,5	No	Within lot grading
413	Coast live oak	6,5,4,4	No	Within lot grading
414	Coast live oak	7,7,6	No	Within lot grading
415	Coast live oak	12,6	Yes	Within lot grading
416	Coast live oak	7,6	No	Within lot grading
417	Coast live oak	9,8,6	No	Within lot grading
418	Coast live oak	6,5	No	Within lot grading
419	Coast live oak	13	Yes	Within lot grading
420	Coast live oak	29,9	Yes	Within lot grading
423	Coast live oak	9,8	No	Within lot grading
424	Coast live oak	8	No	Within lot grading
425	Coast live oak	10	No	Within lot grading
426	Coast live oak	10	No	Within lot grading
427	Coast live oak	9,7	No	Within lot grading
428	Coast live oak	10	No	Within lot grading
429	Coast live oak	6,5,5	No	Within lot grading
430	Coast live oak	6,4,4	No	Within lot grading
431	Coast live oak	6	No	Within lot grading
432	Coast live oak	9,5	No	Within lot grading
434	Coast live oak	10,5,4	No	Within lot grading
435	Coast live oak	8	No	Within lot grading
440	Coast live oak	6,4,3	No	Within grading
441	Coast live oak	7,4,3,3	No	Within grading
442	Coast live oak	15,7	Yes	Within grading
443	Coast live oak	9,8,4	No	Within grading
444	Coast live oak	7,6,5,5	No	Within lot grading
445	Coast live oak	14,14,8,7	Yes	Within grading
446	Coast live oak	9,9,8	No	Within grading
447	Coast live oak	11,7,6	No	Within grading
449	Coast live oak	8	No	Within grading
450	Madrone	15,14	No	Within grading
451	Coast live oak	7,6	No	Within lot grading
452	Coast live oak	8,7,6,6,5	No	Within lot grading
453	Coast live oak	6,4	No	Within lot grading
454	Coast live oak	9	No	Within lot grading
455	Coast live oak	6,5,5,	No	Within lot grading
456	Coast live oak	7,6	No	Within lot grading
457	Coast live oak	9,7,6,6	No	Within lot grading
458	Coast live oak	9	No	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
459	Coast live oak	10,9,5,5	No	Within lot grading
460	Coast live oak	11,6	No	Within lot grading
461	Coast live oak	12	Yes	Within lot grading
462	Coast live oak	6,5	No	Within lot grading
463	Coast live oak	12	Yes	Within lot grading
464	Coast live oak	15,8,8	Yes	Within lot grading
465	Coast live oak	8,3	No	Within lot grading
489	Coast live oak	11	No	Within lot grading
490	Coast live oak	9,9,9	No	Within lot grading
491	Coast live oak	15,13	Yes	Within lot grading
492	Coast live oak	8,4	No	Within lot grading
493	Coast live oak	11	No	Within lot grading
494	Coast live oak	16	Yes	Within lot grading
495	Coast live oak	13	Yes	Within lot grading
496	Coast live oak	9,9,7	No	Within road grading
497	Coast live oak	8,6	No	Within road grading
508	Coast live oak	9	No	Within lot grading
509	Coast live oak	17,16	Yes	Within lot grading
510	Coast live oak	12,10,5	Yes	Within lot grading
514	Coast live oak	14,8,5	Yes	Impacted by grading
515	Coast live oak	13,8,6	Yes	Within lot grading
516	Coast live oak	7	No	Within lot grading
517	Coast live oak	12	Yes	Within lot grading
518	Coast live oak	15	Yes	Within lot grading
519	Coast live oak	15,15	Yes	Within lot grading
520	Coast live oak	10	No	Within lot grading
521	Coast live oak	12,11,10	Yes	Within lot grading
522	Coast live oak	18	Yes	Within lot grading
523	Coast live oak	34,12,10	Yes	Within lot grading
524	Coast live oak	29	Yes	Within lot grading
525	Coast live oak	14	Yes	Within lot grading
526	Coast live oak	15,11	Yes	Within lot grading
527	Coast live oak	11,9,9,8	No	Within lot grading
528	Coast live oak	18	Yes	Within lot grading
529	Coast live oak	16,9	Yes	Within lot grading
530	Coast live oak	12	Yes	Within lot grading
531	Coast live oak	25,12	Yes	Within lot grading
537	Plum	10,7,6,4	No	Within lot grading
538	Coast live oak	12,11	Yes	Within lot grading
539	Coast live oak	12,11	Yes	Within lot grading
540	Coast live oak	13,11	Yes	Within lot grading
541	Coast live oak	12,12	Yes	Within lot grading
561	Coast live oak	8,8,7,7,4	No	Within lot grading
562	Coast live oak	16,10	Yes	Within lot grading
563	Coast live oak	9,9,7	No	Within road grading
564	Coast live oak	16,11,10	Yes	Within lot grading
565	Coast live oak	19,19,15	Yes	Within lot grading
566	Coast live oak	9	No	Within lot grading
567	Coast live oak	11,5	No	Within lot grading
568	Coast live oak	9,7,6	No	Within lot grading
569	Coast live oak	10	No	Within lot grading
570	Coast live oak	14,9,9	Yes	Within lot grading
571	Coast live oak	12,11,9	Yes	Within lot grading
572	Coast live oak	9,8,7,7	No	Within lot grading

(continued, following page)

Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
573	Coast live oak	7	No	Within lot grading
574	Coast live oak	8,5	No	Within lot grading
575	Coast live oak	11	No	Within road grading
576	Coast live oak	6	No	Within road grading
577	Coast live oak	9	No	Within road grading
578	Madrone	14,12,12	No	Within road grading
579	Madrone	18,17,14,12,10	No	Within road grading
580	Coast live oak	8,7	No	Within lot grading
581	Coast live oak	6	No	Within lot grading
582	Coast live oak	8	No	Within road grading
583	Coast live oak	7	No	Within lot grading
584	Coast live oak	17	Yes	Within lot grading
585	Coast live oak	6,5,5	No	Within lot grading
586	Coast live oak	7,5,5	No	Within lot grading
587	Coast live oak	8	No	Within lot grading
588	Coast live oak	14	Yes	Within lot grading
589	Coast live oak	9,9	No	Within lot grading
590	Coast live oak	28	Yes	Within lot grading
591	Coast live oak	31	Yes	Within lot grading
592	Coast live oak	42	Yes	Within lot grading
593	Coast live oak	47	Yes	Within lot grading
594	Coast live oak	7	No	Within lot grading
595	Coast live oak	30	Yes	Within lot grading
596	Coast live oak	8,8	No	Within lot grading
597	Coast live oak	6	No	Within lot grading
598	Coast live oak	6,4	No	Within lot grading
599	Coast live oak	7,5	No	Within lot grading
600	Coast live oak	34	Yes	Within lot grading
604	Coast live oak	39	Yes	Impacted by lot grading
612	Coast live oak	10	No	Within lot grading
613	Coast live oak	11	No	Within lot grading
614	Coast live oak	9,6	No	Within lot grading
623	Coast live oak	31	Yes	Impacted by lot grading
643	Coast live oak	15	Yes	Impacted by lot grading
648	Coast live oak	9,6,4	No	Within grading
649	Coast live oak	13	Yes	Within lot grading
650	Coast live oak	6,4	No	Impacted by grading
651	Coast live oak	17	Yes	Impacted by grading
652	Coast live oak	13,9	Yes	Within grading
653	Coast live oak	7,6,4,3	No	Within grading
654	Coast live oak	8,7,5	No	Within grading
655	Coast live oak	7	No	Within grading
656	Coast live oak	8	No	Within grading
658	Coast live oak	12,11,10	Yes	Impacted by grading
665	Coast live oak	41	Yes	Impacted by grading
666	Coast live oak	27	Yes	Within grading
667	Coast live oak	18	Yes	Within road grading
668	Coast live oak	8,4	No	Within road grading
669	Coast live oak	11	No	Within road grading
670	Coast live oak	15	Yes	Within road grading
671	Coast live oak	12,12	Yes	Within grading
672	Coast live oak	16	Yes	Within grading
675	Coast live oak	11,6	No	Within road grading
676	Coast live oak	14	Yes	Within lot grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
677	Coast live oak	7	No	Within lot grading
678	Coast live oak	6,6,5,5	No	Impacted by grading
679	Coast live oak	6	No	Impacted by grading
680	Coast live oak	10,9,8,7,6	No	Within lot grading
681	Coast live oak	16	Yes	Within lot grading
682	Coast live oak	6	No	Within lot grading
683	Coast live oak	12	Yes	Within lot grading
684	Coast live oak	15,6	Yes	Within lot grading
685	Coast live oak	11	No	Within lot grading
686	Coast live oak	19,11	Yes	Within lot grading
687	Coast live oak	14	Yes	Within lot grading
688	Coast live oak	12,12,11,9,7	Yes	Within lot grading
689	Coast live oak	12,11,8,8	Yes	Within lot grading
690	Coast live oak	13,12,8	Yes	Within lot grading
691	Coast live oak	7,6,5	No	Within lot grading
692	Coast live oak	7,4	No	Within lot grading
701	Coast live oak	12,7,3,2	Yes	Impacted by lot grading
709	Coast live oak	21	Yes	Within lot grading
710	Coast live oak	23	Yes	Impacted by lot grading
711	Coast live oak	25,15	Yes	Impacted by lot grading
712	Coast live oak	21	Yes	Impacted by lot grading
713	Plum	7	No	Within lot grading
714	Coast live oak	11	No	Within lot grading
716	Coast live oak	53	Yes	Impacted by lot grading
718	Coast live oak	28	Yes	Within lot grading
719	Coast live oak	13,11,7	Yes	Within road grading
720	Coast live oak	10,7,7	No	Within road grading
721	Coast live oak	45,35	Yes	Within lot grading
722	Coast live oak	13	Yes	Within lot grading
724	Coast live oak	24	Yes	Within lot grading
725	Coast live oak	10,8,6,5	No	Within lot grading
726	Coast live oak	10,7	No	Within lot grading
727	Coast live oak	11	No	Within road grading
728	Coast live oak	11,10	No	Within lot grading
729	Coast live oak	9,9,6	No	Within lot grading
730	Plum	7,6,6,5,5	No	Within lot grading
731	Coast live oak	7,7,6	No	Within lot grading
732	Coast live oak	9,8	No	Within lot grading
733	Coast live oak	13,10,9	Yes	Within lot grading
734	Coast live oak	12,7	Yes	Within lot grading
735	Coast live oak	8	No	Within lot grading
736	Coast live oak	7	No	Within lot grading
737	Coast live oak	10,7	No	Within road grading
738	Coast live oak	11,7	No	Within road grading
739	Plum	6,4	No	Within road grading
740	Coast live oak	8,6	No	Within road grading
741	Coast live oak	13	Yes	Within road grading
742	Coast live oak	17	Yes	Within lot grading
743	Coast live oak	14,13,8	Yes	Within lot grading
744	Coast live oak	13	Yes	Within lot grading
745	Coast live oak	12,11,10	Yes	Within lot grading
746	Coast live oak	11,6,4	No	Within lot grading
747	Coast live oak	10	No	Within lot grading
748	Coast live oak	16,12	Yes	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
749	Coast live oak	9	No	Within lot grading
750	Coast live oak	8	No	Within lot grading
751	Coast live oak	10	No	Within lot grading
752	Coast live oak	9	No	Within lot grading
753	Coast live oak	14,11	Yes	Within lot grading
754	Coast live oak	7,3	No	Within lot grading
755	Coast live oak	11,9,9,8	No	Within lot grading
756	Coast live oak	12,9	Yes	Within lot grading
757	Coast live oak	19	Yes	Within lot grading
758	Coast live oak	17	Yes	Within lot grading
759	Coast live oak	9	No	Within lot grading
760	Coast live oak	15	Yes	Within lot grading
761	Coast live oak	11,10,9,8,5	No	Within lot grading
762	Valley oak	6	No	Within lot grading
763	Coast live oak	18	Yes	Within lot grading
764	Coast live oak	12,12	Yes	Within lot grading
765	Coast live oak	8,8,7,4	No	Within lot grading
766	Coast live oak	9,9,7,4	No	Within lot grading
767	Coast live oak	10	No	Within lot grading
768	Coast live oak	15,13,6	Yes	Within lot grading
769	Coast live oak	8	No	Within lot grading
770	Coast live oak	9,8,7	No	Within lot grading
771	Coast live oak	8,6	No	Within lot grading
772	Coast live oak	10	No	Within lot grading
773	Coast live oak	11,7	No	Within lot grading
774	Coast live oak	13,8,7	Yes	Within lot grading
775	Coast live oak	13,12,12,12,10,10	Yes	Within lot grading
776	Coast live oak	7	No	Within lot grading
777	Coast live oak	9	No	Within lot grading
778	Coast live oak	12,11	Yes	Within lot grading
794	Coast live oak	23	Yes	Impacted by grading
795	Coast live oak	25	Yes	Impacted by grading
796	Coast live oak	15	Yes	Within lot grading
797	Coast live oak	29	Yes	Within lot grading
798	Coast live oak	29	Yes	Within lot grading
800	Coast live oak	23	Yes	Impacted by grading
801	Coast live oak	39	Yes	Within lot grading
810	Coast live oak	46	Yes	Impacted by lot grading
818	Coast live oak	15,14,13,12,9	Yes	Within road grading
819	Coast live oak	19,11	Yes	Within road grading
820	Coast live oak	14	Yes	Within lot grading
840	Coast live oak	8	No	Impacted by lot grading
841	Coast live oak	21	Yes	Within lot grading
842	Madrone	12,11	No	Within lot grading
843	Coast live oak	10,9,9,9,8,7	No	Within lot grading
844	Coast live oak	23	Yes	Within lot grading
845	Coast live oak	17	Yes	Within lot grading
846	Coast live oak	11	No	Within lot grading
847	Coast live oak	14	Yes	Within lot grading
848	Coast live oak	12,8	Yes	Within lot grading
849	Coast live oak	14,13	Yes	Within lot grading
867	Coast live oak	16	Yes	Impacted by lot grading
868	Coast live oak	6	No	Impacted by lot grading
869	Coast live oak	15,10	Yes	Within lot grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
870	Coast live oak	18,13	Yes	Within lot grading
871	Coast live oak	8,6	No	Within lot grading
877	Coast live oak	13,5,3	Yes	Within lot grading
878	Coast live oak	6,6	No	Within lot grading
879	Coast live oak	11,10,9	No	Within lot grading
880	Coast live oak	12,11,8,8,5	Yes	Within lot grading
881	Coast live oak	11,8	No	Within lot grading
882	Coast live oak	7,6,6	No	Within road grading
884	Coast live oak	45	Yes	Within lot grading
885	Coast live oak	26	Yes	Impacted by lot grading
886	Coast live oak	29,22	Yes	Within lot grading
887	Coast live oak	26	Yes	Within lot grading
888	Coast live oak	35	Yes	Within lot grading
891	Coast live oak	56,54	Yes	Impacted by road grading
892	Coast live oak	11,10,9	No	Within road grading
893	Coast live oak	22,14,12	Yes	Within road grading
894	Coast live oak	18,15,8	Yes	Within lot grading
895	Coast live oak	11	No	Within lot grading
896	Valley oak	28	Yes	Within lot grading
897	Coast live oak	36,18,11,11	Yes	Within lot grading
898	Coast live oak	25	Yes	Within lot grading
899	Coast live oak	7	No	Within lot grading
900	Coast live oak	27	Yes	Within lot grading
901	Coast live oak	7	No	Within lot grading
902	Coast live oak	14	Yes	Within lot grading
903	Coast live oak	9	No	Within lot grading
904	Coast live oak	15,11,7	Yes	Within lot grading
905	Coast live oak	7,6	No	Within lot grading
906	Coast live oak	10,9,9,5	No	Within lot grading
907	Coast live oak	6,5	No	Within lot grading
908	Coast live oak	13,12,11,10	Yes	Within lot grading
909	Coast live oak	12	Yes	Within lot grading
910	Coast live oak	13,12,12	Yes	Within lot grading
911	Coast live oak	6	No	Within lot grading
912	Coast live oak	7,4	No	Within lot grading
913	Coast live oak	12,10	Yes	Within lot grading
914	Coast live oak	8,6	No	Within lot grading
915	Coast live oak	7,7,6	No	Within lot grading
916	Coast live oak	10,9,8	No	Within lot grading
917	Coast live oak	11	No	Within road grading
918	Coast live oak	8,7	No	Within road grading
919	Coast live oak	6	No	Within road grading
920	Coast live oak	26,17	Yes	Within road grading
921	Coast live oak	16,12,6,5	Yes	Within lot grading
922	Coast live oak	7,6,4	No	Within lot grading
923	Coast live oak	9,8,8,5	No	Within lot grading
924	Coast live oak	7,5	No	Within lot grading
925	Coast live oak	11,5	No	Within lot grading
926	Coast live oak	7,6,5,4	No	Within lot grading
927	Coast live oak	8,8	No	Within lot grading
928	Madrone	21,12,12	No	Within lot grading
929	Coast live oak	10	No	Within lot grading
931	Coast live oak	8,6,5	No	Within lot grading
956	Coast live oak	10,9,5	No	Within lot grading

(continued, following page)

**Table 3: Trees recommended for removal, continued
 Napa Oaks site, Napa**

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
957	Coast live oak	10,9,4	No	Within lot grading
958	Coast live oak	15,13	Yes	Within lot grading
959	Coast live oak	17	Yes	Within lot grading
960	Coast live oak	13	Yes	Within lot grading
961	Coast live oak	39	Yes	Impacted by lot grading
962	Coast live oak	9,8,7	No	Within lot grading
963	Coast live oak	18	Yes	Within lot grading
964	Coast live oak	8,8,6	No	Within lot grading
965	Coast live oak	11	No	Within lot grading
966	Coast live oak	18,15,11	Yes	Within lot grading
972	Coast live oak	13	Yes	Within lot grading
976	Coast live oak	9,9,8	No	Within lot grading
977	Coast live oak	6	No	Within lot grading
978	Coast live oak	10,9	No	Within lot grading
979	Coast live oak	8,7,5	No	Within lot grading
980	Coast live oak	8,8	No	Within lot grading
981	Coast live oak	6,6,5,4	No	Within lot grading
982	Coast live oak	7	No	Within lot grading
983	Coast live oak	9,9,8,6	No	Within lot grading
984	Coast live oak	14	Yes	Within lot grading
985	Coast live oak	8	No	Within lot grading
986	Coast live oak	6	No	Within lot grading
987	Coast live oak	8,7,6	No	Within lot grading
988	Coast live oak	8,4	No	Within lot grading
989	Coast live oak	7,4	No	Within lot grading
990	Coast live oak	8	No	Within lot grading
992	Coast live oak	9,8	No	Within lot grading
993	Coast live oak	12,10,8,6	Yes	Within lot grading
994	Coast live oak	9,9,5	No	Within lot grading
995	Coast live oak	6,3	No	Within lot grading
996	Coast live oak	8,8	No	Within lot grading
997	Coast live oak	7	No	Within lot grading
1075	Monterey pine	31	No	Within lot grading
1076	Monterey pine	25	No	Within road grading
1077	Monterey pine	31	No	Within road grading
1078	Monterey pine	27	No	Within road grading
1079	Monterey pine	36	No	Within road grading
1081	Coast live oak	6,5	No	Within road grading
1084	Coast live oak	14,7	Yes	Within grading
1086	Coast live oak	32	Yes	Impacted by lot grading
1089	Coast live oak	7	No	Within lot grading
1108	Calif. black oak	36	Yes	Within lot grading
1109	Coast live oak	6	No	Within lot grading
1110	Coast live oak	49	Yes	Impacted by lot grading
1132	Coast live oak	6	No	Within swale grading
1142	Coast live oak	7,6	No	Within swale grading
1145	Coast live oak	6	No	Within swale grading
1146	Coast live oak	7	No	Within swale grading
1147	Coast live oak	8,5,3	No	Within road grading
1148	Coast live oak	6,5	No	Within road grading
1149	Coast live oak	6	No	Within road grading
1150	Coast live oak	9	No	Within grading
1151	Coast live oak	8,7,7,6	No	Within grading
1152	Coast live oak	7,5	No	Within grading

(continued, following page)

Table 3: Trees recommended for removal, continued
Napa Oaks site, Napa

Tree #	Species	Trunk Diameter (in.)	Native Protected?	Impacts
1153	Coast live oak	9,5,5	No	Within grading
1154	Coast live oak	8,7,7,6	No	Within grading
1155	Coast live oak	6	No	Within grading
1156	Coast live oak	6	No	Within grading
1157	Coast live oak	7	No	Within grading
1158	Coast live oak	11	No	Within grading
1159	Coast live oak	9	No	Within grading
1160	Mimosa	8,8,7	No	Within grading
1161	Coast live oak	8	No	Within grading
1162	Coast live oak	8,7,5	No	Within grading
1163	Coast live oak	10,8,8,7	No	Within grading
1164	Apple	7,6,6	No	Within lot grading
1165	Apple	13,6	No	Within lot grading
1166	Deodar cedar	25	No	Within lot grading
1167	Purple leaf plum	8,8	No	Within lot grading
1168	Purple leaf plum	9,6,6,4	No	Within road grading
1169	Purple leaf plum	8	No	Within road grading
1170	Monterey pine	28	No	Within road grading
1171	Monterey pine	38	No	Within road grading
1172	Coast live oak	31,20	Yes	9' from grading
1181	Coast live oak	28,12	Yes	2' from retaining wall
1183	Coast live oak	8,5	No	Within road grading
1184	Coast live oak	10	No	Within road grading
1185	Coast live oak	6,5,2	No	1' from road grading
1186	Coast live oak	7,6	No	Within road grading
1190	Coast live oak	13,9	Yes	3' from road grading
1193	Coast live oak	27	Yes	Within road grading
1194	Coast live oak	23	Yes	Within road grading
1195	Coast live oak	19	Yes	1' from retaining wall
1196	Coast live oak	46,22	Yes	4' from retaining wall
1270	Coast live oak	14,12	Yes	Within lot grading
1271	Coast live oak	11	No	Within grading
1272	Coast live oak	8	No	Within grading
1273	Coast live oak	9	No	Within grading
1274	Coast live oak	7	No	Within grading
1275	Coast live oak	7	No	Impacted by grading
1277	Coast live oak	9	No	Impacted by grading
1278	Coast live oak	7	No	Impacted by grading
1279	Coast live oak	10	No	Impacted by grading
1281	Coast live oak	6,4	No	Within swale grading
1282	Coast live oak	7,4	No	Within road grading
1283	Coast live oak	6	No	Within road grading
1284	Purple leaf plum	6,5	No	Within road grading
1310	Monterey pine	25	No	Within lot grading
1311	Coast live oak	23,22	Yes	6' from grading
1317	Coast live oak	10,8	No	Within lot grading
1318	Coast live oak	10	No	Within lot grading
1319	Coast live oak	7	No	Within lot grading
1320	Coast live oak	7,6	No	Within lot grading
1321	Coast live oak	10,8,7	No	Within lot grading
1441	Coast live oak	6	No	Within grading
1442	Coast live oak	6,5,5,4	No	Within lot grading
1473	Coast live oak	10,7	No	Within road grading
1474	Coast live oak	5,5,4,3	Yes	Within lot grading
1475	Coast live oak	8,8,7,6	No	Within lot grading

Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **Tree Protection Zone** can minimize these impacts.

Specific **TREE PROTECTION ZONES** have been reviewed with Davidon Homes for each tree and will be provided prior to construction. No grading, excavation, construction or storage of materials shall occur within the **TREE PROTECTION ZONES**.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Design recommendations

1. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.
2. Evaluate the possibility of adjusting the locations of the V-ditch adjacent to trees #706, 707, and 790-793 to provide a minimum of 5' between the V-ditch and tree trunks.
3. A **TREE PROTECTION ZONE** shall be established around each tree per our recommendations. Trees shall be protected at the specific distance in the direction specified, and at the dripline in all other directions. No grading, excavation, construction or storage of materials shall occur within that zone. For trees where no **TREE PROTECTION ZONE** was specified, fencing and protection are not required, as they are away from the proposed improvements.
4. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**, without the review and written approval of the Consulting Arborist.
5. **Tree Preservation Notes**, prepared by the Consulting Arborist, should be included on all plans.

Pre-construction treatments and recommendations

1. The construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by consulting arborist. Fences are to remain until all grading and construction is completed.
3. Preliminary pruning recommendations for trees in proximity to the proposed development have been reviewed with Davidon Homes and will be provided prior to construction.

4. Prune trees to be preserved to clean the crown, correct for any defects in structure, and to provide clearance. Any pruning of off-site trees must be performed with the property owner's permission. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE**.

Recommendations for tree protection during construction

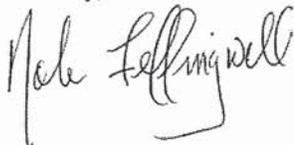
1. No grading, construction, demolition or other work shall occur within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.
2. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.
3. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
4. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
5. Trees to be removed that have canopies touching trees to remain shall be removed by a Certified Arborist in a manner to avoid damage to remaining trees.
6. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.
7. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.

Maintenance of impacted trees

Trees preserved at the Napa Oaks site will experience physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for hazard potential is recommended.

HortScience, Inc.

Sincerely,



John Leffingwell
Board Certified Master Arborist #WE-3966B
Registered Consulting Arborist #442