RARE PLANT SURVEY AND ASSESSMENT FOR FOREST LAWN MEMORIAL-PARK, HOLLYWOOD HILLS

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and

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TABLE OF CONTENTS

1.0 INTRODUCTION 2.0 METHODS	
3.0 RESULTS.	
4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION MEASURES	31
5.0 CONCLUSIONS	33

LIST OF APPENDICES, EXHIBITS, AND TABLES

APPENDIX A - FLORAL SPECIES OBSERVED APPENDIX B - ALTERNATIVE TREE CANOPY REPLACEMENT PROGRAM APPENDIX C - REFERENCES	B - 1
EXHIBIT 1 - REGIONAL LOCATION MAP EXHIBIT 2 - USGS TOPOGRAPHIC MAP EXHIBIT 3 - GEOLOGIC MAP - UNDEVELOPED AREAS EXHIBIT 4 - SITE PHOTOGRAPHS EXHIBIT 5 - VEGETATION COMMUNITIES - 2008 AERIAL PHOTOGRAPH EXHIBIT 6 - CNPS-LISTED PLANT LOCATIONS EXHIBIT 7 - CNPS-LISTED PLANT IMPACTS - ALTERNATIVE 1	attached in order attached in order attached in order attached in order attached in order
TABLE 1 - METEOROLOGICAL DATATABLE 2 - RARE PLANT ASSESSMENT TABLETABLE 3 - CONTAINER STOCK COMMERCIAL TREES CANOPY COVER	



1.0 INTRODUCTION

PURPOSE

All vascular flora present on the Forest Lawn Memorial-Park, Hollywood Hills ("Forest Lawn Property") has been inventoried and listed in **TERACOR Resource Management's** ("TERACOR") general biological assessment entitled *GENERAL BIOLOGICAL ASSESSMENT FOR FOREST LAWN MEMORIAL-PARK*, HOLLYWOOD HILLS, dated 27 April 2010.

TERACOR was requested by **Forest Lawn Memorial-Park Association** ("Forest Lawn") to also perform a rare plant survey and assessment for the Forest Lawn Property. The purpose of this rare plant survey and assessment was to determine the following:

- 1) If any federally or state-designated rare, threatened, or endangered plants occur on the Forest Lawn Property;
- 2) If any California Native Plant Society ("CNPS")-designated rare plants occur on the Forest Lawn Property; and
- 3) If any locally-designated rare plants occur on the Forest Lawn Property.

This assessment inventories biotic resources on the Forest Lawn Property based on habitat conditions at the time of the survey and discusses those conditions present relative to habitat requirements for floral species listed above. Information contained herein is based on year-round field reconnaissance of the Forest Lawn Property, available scientific literature, and TERACOR field personnel knowledge of the floral species of Los Angeles County and Santa Monica Mountains and the biological conditions in the general vicinity.

FOREST LAWN PROPERTY LOCATION

The Forest Lawn Property is located at 6300 Forest Lawn Drive in the Hollywood Hills area of the City of Los Angeles ("City"). The Forest Lawn Property, which is comprised of approximately 444 acres, is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the 134 Freeway on the north, Griffith Park on the south and east, undeveloped adjacent property also owned by Forest Lawn to the west, and Mount Sinai Memorial Park and the Junior Achievement Foundation to the north and northeast. The Forest Lawn Property is buffered from residential and commercial uses, and many of the Forest Lawn Property uses are not visible from surrounding areas due to the topography of this area. *Exhibit 1 - Regional Location Map*, attached, depicts the Forest Lawn Property relative to local thoroughfares.

Geographically, the Forest Lawn Property is approximately 0.5 mile northeast of Cahuenga Peak in the Hollywood Hills. It is located within a non-sectioned area of Township 1 north, Range 14 west, of the *Burbank, California United States Geological Survey 7.5 minute Quadrangle. Exhibit 2 - USGS Topographic Map,* attached, illustrates the geographic location and topography of the Forest Lawn Property.



1

BACKGROUND

The Forest Lawn Property is located within the north-facing slopes of the Hollywood Hills within the Santa Monica Mountains. The Santa Monica Mountains contain a relatively high diversity of flora. Many rare or sensitive plants are known to occur within this locality.

TERACOR field personnel have conducted several floral surveys over many years at the Forest Lawn Property. Floral survey results included in this report are derived from fieldwork performed from 21 April 2004 to 17 July 2010, as depicted in *Table 1 - Meteorological and Field Survey Data* below. The plant species evaluated for potential presence on the Forest Lawn Property included a total of 98 species, subspecies and varieties. These 98 plants were obtained from a variety of sources as detailed in Section 2.0 Methods.

DESCRIPTION OF THE FOREST LAWN PROPERTY

The Forest Lawn Property contains both natural and human-affected open areas. Human-affected areas include developed interment areas comprised primarily of lawn and non-native trees, walled garden interment areas, asphalt and gravel access roads, infrastructure installations, maintenance areas, storage areas, open undeveloped areas with little or no natural vegetation (disturbed), and areas under preparation for use for interment. Natural areas comprise approximately 119.8 acres within the Forest Lawn Property. Habitat values remain largely intact in this approximately 119.8-acre area. Floral diversity is moderate in some areas and relatively high in undisturbed areas.

Currently, the approximate 444-acre Forest Lawn Property contains approximately 230 acres of developed memorial-park and associated support facilities, approximately 91 acres of disturbed areas, approximately three (3) acres of ornamental vegetation outside of the developed memorial-park, and approximately 119.8 acres of natural habitat. Coast live oak (*Quercus agrifolia*) woodland, California (western) sycamore (*Platanus racemosa*)-coast live oak, California walnut (*Juglans californica*) woodland, chaparral, and sage scrub are the dominant plant communities present across all of the relatively undisturbed north-facing slopes of the Hollywood Hills.

TOPOGRAPHY AND SOILS

The most recent U.S.G.S. mapping was produced in 1991 and photo-revised in 1994. TERACOR reviewed the existing conditions of the general area against this mapping to determine if there had been substantial topographic alteration on the Forest Lawn Property. Recent topographic mapping of the Forest Lawn Property indicates that approximately 324 acres of the Forest Lawn Property is relatively disturbed topographically, due to previous grading and development activities.

TERACOR, with the assistance of LSA Associates, reviewed historic U.S.G.S. topographic mapping dated back to 1926. Additionally, historic aerial photographs from the University of California, Los Angeles Spence Air Photo Collection ("Spence") dated back to 1945, the Whittier College Fairchild Collection ("Fairchild") dated back to 1928, and a 1938 aerial photograph from the United States Department of Agriculture – Aerial Photography Field Office ("USDA-APFO") from the archives of the Agricultural Stabilization and Conservation Service ("ASCS") were reviewed.



The United States Fish and Wildlife Service ("USFWS") *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*, dated January 2000, as well as the CDFG *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, dated 24 November 2009, ("Protocols") requires that all botanical field inventories must include a description of soils present on surveyed properties. TERACOR, therefore, based our soil survey analysis on the *Geologic Map-Undeveloped Areas* prepared by Geosoils Consultants, Inc., mapped on 12 April 2006. Soil types present on the Forest Lawn Property are presented below.

Topography

Elevation on the Forest Lawn Property ranges from approximately 625 feet above mean sea level ("msl") at the entrance to the Forest Lawn Property to approximately 875 feet above msl near the southern boundary of the Forest Lawn Property.

The Forest Lawn Property is located at the eastern tip of the Santa Monica Mountains. The Santa Monica Mountains are a sub-unit of the Transverse Ranges, which unlike other mountain ranges in California, are oriented on an east-west axis.

The Forest Lawn Property is located on a small portion of the north frontal boundary, or physiographic base of the north-face of the Santa Monica Mountains/Hollywood Hills topographic complex. The main peaks and intervening saddles which are south of the Forest Lawn Property define the range's north and south watershed boundary. The peaks surrounding the Forest Lawn Property include Cahuenga Peak, Mt. Lee, and Mt. Hollywood; together these features comprise a "primary" ridgeline. This primary ridgeline, discernable on the attached *Exhibit 2 - USGS Topographic Map*, previously referenced, is connected to a series of subordinate and tertiary ridgelines which extend down to the floor of the San Fernando Valley. Several of these subordinate ridgelines and intervening canyons and ravines comprise the remaining natural area associated with the Forest Lawn Property.

Soils

Soils on the Forest Lawn Property were analyzed in the field by Geosoils Consultants, Inc. in 2006. Geosoils Consultants, Inc. field personnel determined that soils within the potentially jurisdictional areas (i.e., areas potentially subject to the jurisdiction of the Army Corps of Engineers ["Corps"], CDFG and Regional Water Quality Control Board ["RWQCB"]) of the Forest Lawn Property, as depicted on *Exhibit 3 - Geologic Map - Undeveloped Areas*, are comprised of alluvium, artificial fill, sandy gravel, sandy silt, silty clay, gravelly sand, and silty sand associations (Geosoils Consultants, Inc., 2006). Additionally, many of the steeper tributaries are lined with granitic cobbles and boulders. Soils throughout the upland areas of the Forest Lawn Property are comprised of artificial fill, sandy gravel, gravelly sand, silty sand, and clayey sand associations, as well as bedrock soils comprised of the Topanga formation and conglomerate associations, and slopewash.

TERACOR considered these soil types relative to the edaphic requirements of each regulatory status plant species which could potentially occur on the Forest Lawn Property. An analysis of the suitability of these soils to support potentially-occurring rare plant species on the Forest Lawn Property is presented below.



Soil Suitability Analysis

Alluvium Soils

The following regulatory status plant species are generally associated with the alluvium soil type: Southern California black walnut (*Juglans californica*), Duran's rush (*Juncus duranii*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), lemon lily (*Lilium parryi*), Orcutt's linanthus (*Linanthus orcuttii*), California muhly (*Muhlenbergia californica*), mud nama (*Nama stenocarpum*), Gambel's watercress (*Nasturtium gambelii*), Ewan's cinquefoil (*Potentilla glandulosa* ssp. *ewanii*), Engelmann oak (*Quercus engelmannii*), Parish's gooseberry (*Ribes divaricatum* var. *parishii*), Greata's aster (*Symphyotrichum greatae*) and Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*). The alluvium soil type is present on the Forest Lawn Property.

Clayey or Conglomerate Soils

The following regulatory status plant species are generally associated with clayey or conglomerate soils: heart-leaved thorn-mint (*Acanthomintha obovata* ssp. *cordata*), California androsace (*Androsace elongata* ssp. *acuta*), Braunton's milk-vetch (*Astragalus brauntonii*), Coulter's saltbush (*Atriplex coulteri*), Parish's brittlescale (*Atriplex parishii*), thread-leaved brodiaea (*Brodiaea filifolia*), Catalina mariposa lily (*Calochortus catalinae*), Lewis' evening primrose (*Camissonia lewisii*), small-flowered morning-glory (*Convolvulus simulans*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), many-stemmed dudleya (*Dudleya multicaulis*), round-leaved filaree (*Erodium macrophyllum*), golden goodmania (*Goodmania luteola*), Palmer's grappling hook (*Harpagonella palmeri*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), small-flowered microseris (*Microseris douglasii* var. *platycarpha*), crowned muilla (*Muilla coronata*), California orcutt grass (*Orcuttia californica*) and Gairdner's yampah (*Perideridia gairdneri* ssp. *gairdneri*). The clayey or conglomerate soil types are present on the Forest Lawn Property.

Sandy, Gravelly, or Loamy Soils

The following regulatory status plant species are generally associated with sandy, gravelly or loamy soils: aphanisma (*Aphanisma blitoides*), marsh sandwort (*Arenaria paludicola*), coast dunes milkvetch (*Astragalus tener* var. *titi*), Nevin's barberry (*Berberis nevini*), Brewer's calandrinia (*Calandrinia brewer*), Lewis' evening primrose (*Camissonia lewisii*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), suffrutescent wallflower (*Erysimum insulare ssp. suffrutescens*), cuyama gila (*Gilia latiflora* ssp. *cuyamensis*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), Peirson's lupine (*Lupinus peirsonii*), Davidson's bush mallow (*Malacothamnus davidsonii*), California spineflower (*Mucronea californica*), slender nemacladus (*Nemacladus gracilis*), woolly mountain-parsley (*Oreonana vestita*), Lyon's pentacheata (*Pentacheata lyonii*), Transverse Range phacelia (*Phacelia exilis*), Mojave phacelia (*Phacelia mohavensis*), Brand's phacelia (*Phacelia stellaris*), white-rabbit tobacco (*Pseudognaphalium leucocephalum*), Coulter's matilija poppy (*Romneya coulter*), southern skullcap (*Scutellaria bolanderi* ssp. *austromontana*), chickweed oxytheca (*Sidotheca caryophylloides*) and Lemmon's syntrichopappus (*Syntrichopappus lemmonii*). Sandy, gravelly, or loamy soil types are present on the Forest Lawn Property.



Granitic Soils

The following regulatory status plant species are generally associated with granitic soils: San Gabriel manzanita (*Arctostaphylos gabrielensis*), Plummer's mariposa lily (*Calochortus plummerae*), San Gabriel River dudleya (*Dudleya cymosa* ssp. *crebrifolia*), San Gabriel Mountain dudleya (*Dudleya densiflora*), Jepson's bedstraw (*Galium jepsonii*), Johnston's bedstraw (*Galium johnstonii*), Abram's alumroot (*Heuchera abramsii*), urn-flowered alumroot (*Heuchera elegans*), San Gabriel linanthus (*Linanthus concinnus*), interior bush lupine (*Lupinus excubitus* var. *johnstonii*), Tehachapi ragwort (*Packera ionophylla*), bluish spike-moss (*Selaginella asprella*) and pine green-gentian (*Swertia neglecta*). The granitic soil type is present on the Forest Lawn Property.

Saline or Alkaline Soils

The following regulatory status plant species are generally associated with saline or alkaline soils: Davidson's saltscale (*Atriplex serenana* var. *davidsoni*), Parish's brittlescale (*Atriplex parishi*), southern tarplant (*Centromadia parryi* ssp. *australis*), golden goodmania (*Goodmania luteola*), Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishi*), vernal barley (*Hordeum intercedens*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulter*), prostrate navarretia (*Navarretia prostrata*), rayless ragwort (*Senecio aphanactis*) and salt spring checkerbloom (*Sidalcea neomexicana*). Saline or alkaline soil types are not present on the Forest Lawn Property.

Serpentine or Serpentinite Soils

The following regulatory status plant species are generally associated with serpentine or serpentinite soils: club-haired mariposa lily (*Calochortus clavatus* ssp. *clavatus*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), small-flowered morning-glory (*Convolvulus simulans*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), Mexican flannelbush (*Fremontodendron mexicanum*), rock monardella (*Monardella viridis* ssp. *saxicola*) and adobe yampah (*Perideridia pringlei*). Serpentine or serpentinite soil types are not present on the Forest Lawn Property.

Sandstone Soils

Santa Susana tarplant (*Deinandra minthornii*) is generally associated with sandstone soils. This soil type is present on the Forest Lawn Property.

Volcanic, Metavolcanic, or Sedimentary Soils

The following regulatory status plant species are generally associated with volcanic, metavolcanic or sedimentary soils: Agoura Hills dudleya (*Dudleya cymosa* ssp. *agourensis*), marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*), Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*), Mexican flannelbush (*Fremontodendron mexicanum*) or Santa Barbara bedstraw (*Galium cliftonsmithii*). These soil types are not present on the Forest Lawn Property.

The following regulatory status plant species exhibit broad edaphic requirements: Ventura marsh milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*), Malibu baccharis (*Baccharis malibuensis*), Plummer's

5



baccharis (*Baccharis plummerae*), Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*), island mountainmahogany (*Cercocarpus betuloides* var. *blancheae*), San Gabriel bedstraw (*Galium grande*), fragrant pitcher sage (*Lepechinia fragrans*), Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*), silky lupine (*Lupinus elatus*), gray monardella (*Monardella cinerea*), San Bernardino aster (*Symphyotrichum defoliatum*) and silvery false lupine (*Thermopsis californica* var. *argentata*).

Soils within the natural areas of the Forest Lawn Property are, therefore, considered structurally suitable to potentially support many of the rare and sensitive species known to occur, or historically occurred in the Los Angeles Basin. A detailed description of each regulatory status plant species and its respective soil requirement is presented below in Table 2 - Rare Plant Assessment Table.

PROPOSED PROJECT

Forest Lawn is a non-profit, mutual benefit corporation that has been providing cemetery services to the Los Angeles region for over 100 years. Forest Lawn seeks approval for a long-term, master plan development of the Forest Lawn Property in order to meet the demand for additional interment sites and related cemetery facilities in the Los Angeles region over the next 50 years. Forest Lawn is expected to complete the build out of spaces within the currently developed area of the memorial-park by 2016. In addition, the region is expected to have a deficit of interment spaces beginning in 2018.

The Forest Lawn Property Master Plan Project ("Project") proposes to expand current cemetery facilities in order to provide for additional interment spaces (ground spaces and built spaces such as mausoleums, columbaria, niches, and crypts) and related facilities to meet the regional demand for interment and funeral resources. Forest Lawn has operated a cemetery use at this location for approximately 60 years and seeks to continue its current range of cemetery-related uses. Existing structures on the Forest Lawn Property include administrative offices, chapels and church buildings, a mortuary and flower shop, wall crypts, columbaria, and maintenance buildings, as well as internal roadways and parking. The proposed Project will include preparation of new interment sites (ground sites, mausoleums and crypts), addition of cemetery-related structures, and the renovation/expansion of existing structures and reception-related uses.

The proposed Project seeks approval to construct approximately 22,500 square feet of occupiable floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. This will provide spaces to meet regional demand through 2050. These new interment areas will provide interment sites for a 50-year period. To meet demand, Forest Lawn proposes grading over a 15-year period to develop new interment areas. It is estimated that over a 15-year construction period, approximately 2.7 million cubic yards of earth would be graded. Net export during grading will be approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt will be exported in connection with individual gravesite preparation from 2010 to 2050. It is estimated that construction of the new structures within the Forest Lawn Property including the areas to be graded would occur over an approximately 40-year period from 2010 to 2050. The sale of interment sites is also expected to occur over an extended period of time, beyond 2050.



2.0 METHODS

GENERAL

The methodology used in this report generally follows CDFG's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). This protocol provides comprehensive guidelines for surveying and reporting CDFG "special status" plants and communities.

All plants identified from the course of these surveys are presented in *Appendix A - Floral Species Observed.* Plants were identified in the field by site investigators (S. Reed, J. Reed, F. Perez, T. Searl, W. McTeer, N. Bruennel, I. Swift, and T. Juhasz), with uncertain identifications confirmed by A. Sanders at the University of California, Riverside Herbarium.

LITERATURE REVIEW

Literature for the Forest Lawn Property was investigated through review of scientific publications, unpublished related environmental documents, reference books, and databases. Literature reviewed in determining vegetation community names and associations and descriptions for the project area were derived from: *The Jepson Manual, Higher Plants of California*, Hickman,1993, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, Holland, 1986, and the CDFG *List of Terrestrial Natural Communities*, September 2003 Ed. Literature review also included a query of the State of California *Natural Diversity Data Base* ("CNDDB"). Also, the Jepson Manual and the California Native Plant Society's ("CNPS") *Inventory of Rare and Endangered Plants* were utilized for background information for the rare plant species.

CNDDB Query

The CDFG maintains the CNDDB, a computerized inventory of information on the location of rare, threatened, endangered, and otherwise sensitive plants, animals, and natural communities in California. Updates to the CNDDB are issued every two months. Valuable information regarding the species occurrence, population numbers, observers, occurrence dates and potential threats to these species are included for each occurrence record. TERACOR queried the *Burbank*, *San Fernando*, *Sunland*, *Condor Peak*, *Van Nuys*, *Pasadena*, *Beverly Hills*, *Hollywood*, and *Los Angeles* quadrangles specifically for records of rare plant species. The results of that query are presented below in the *Results* section. Some plant species recovered from the CNDDB query were omitted from this report; these taxa were entirely coastal dune and/or salt marsh species, which would not occur on the Forest Lawn Property due to the lack of specialized habitat.

Soil Analysis

The CDFG protocol and United States Fish and Wildlife Service ("USFWS") *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*, dated January 2000, requires that all botanical field inventories must include a description of soils present on the Forest Lawn Property. TERACOR, therefore, based our soil survey analysis on the *Geologic Map-Undeveloped Areas* prepared by Geosoils Consultants, Inc., mapped on 12 April 2006. Soil types present on the Forest Lawn Property are presented above, and the suitability of these soils to support rare plant species is presented below in the *Results* section.



Mapping

Geographic data presented in the report including maps, locations of plants, and vegetation communities were produced and analyzed in ArcGIS. A handheld GPS unit (ca. 3m accuracy) was used to mark various point locations and to outline vegetation communities, with some correction using aerial photographs.

A CNDDB records search for the project site and adjacent eight topographic quadrangles was used to develop an initial list of potential special status plants for the Forest Lawn Property, along with maps. Field investigators used these lists as a starting point for focal plant surveys; however, all plants encountered in the field were identified, including those not on the CNDDB-generated list.

FIELD INVESTIGATIONS

The most recent field investigations for special status plants were conducted by TERACOR personnel on 08 January 2007, 12 March 2008, 22 and 25 August 2008, 23 and 24 March 2009, 14 April 2009 and 05 June 2009. Prior to these surveys, TERACOR personnel S. Reed, J. Reed, F. Perez, W. McTeer, T. Searl, conducted vegetation and rare plant surveys on the Forest Lawn Property on 21 April 2004, 16 December 2004, 11 and 25 August 2005, 02 May 2006, and 08 July 2006. Additionally, TERACOR has collected field botanical data during multi-disciplinary surveys annually within the Forest Lawn Property from 1997 to the present. Relevant field survey data have been incorporated herein (see Table 1 - Meteorological and Field *Survey Data*). On all survey dates, field personnel traversed the approximately 119.8 acres of natural lands on the Forest Lawn Property on foot at transects spaced to adequately identify habitat types and species present. Weather conditions during the field surveys were favorable for detection of the species and are presented in Table 1 - Meteorological and Field Survey Data, below. Precipitation on the site varied from year to year; however, it included several years of average to above average rainfall, thus making detection of some annuals better. Annual precipitation data was obtained from the National Weather Service website at: http://www.weather.gov/climate/local_data.php?wfo=lox; the data for downtown Los Angeles was used, as it is only 11 miles (19 km) from the site. Representative photographs of the Forest Lawn Property were taken in the field and have been presented in *Exhibit 4 - Site Photographs*, attached.

Date of Survey	Surveyors	Time of	Total Person-	Annual	Percent of season
		Survey	Hours	Precipitation*	total
				(inches)	
21 April 2004	S. Reed	0800 - 1100	9	5.96	39%
	F. Perez				
	W. McTeer				

Table 1 - Meteorological and Field Survey Data



Rare Plant Assessment

					Rale Flatti Assessment
Date of Survey	Surveyors	Time of	Total Person-	Annual	Percent of season
		Survey	Hours	Precipitation*	total
				(inches)	
16 December 2004	S. Reed	0845 - 1145	15	8.77	58%
	F. Perez				
	W. McTeer				
	B. McAlexander				
	T. Searl				
11 August 2005	S. Reed	0615 - 1215	30	0.00	0%
	F. Perez				
	W. McTeer				
	B. McAlexander				
	T. Searl				
25 August 2005	S. Reed	0715 - 1115	16	0.00	0%
	J. Reed				
	F. Perez				
	T. Searl				
02 May 2006	S. Reed	0700 - 1100	16	12.34	82%
	J. Reed				
	F. Perez				
	T. Searl				
08 July 2006	S. Reed	0630 - 1000	14	13.19	87%
	J. Reed				
	F. Perez				
	T. Searl				
08 January 2007	S. Reed	0730 - 1200	22.5	1.50	10%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
07 February 2008	S. Reed	0900 - 1200	15	11.73	78%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				



Rare Plant Assessment

					Rare Plant Assessment
Date of Survey	Surveyors	Time of	Total Person-	Annual	Percent of season
		Survey	Hours	Precipitation*	total
				(inches)	
12 March 2008	S. Reed	0800 - 1100	18	13.38	88%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
	T. Juhasz				
17 May 2008	S. Reed	0900 - 1200	15	13.53	89%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
27 May 2008	S. Reed	0800 - 1600	30	13.53	89%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
06 June 2008	S. Reed	0900 - 1200	15	13.53	89%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
22 August 2008	S. Reed	0730 - 1200	22.5	0.00	0%
	J. Reed				
	F. Perez				
	N. Bruennel				
	T. Searl				
25 August 2008	S. Reed	0700 - 0930	7.5	0.00	0%
	J. Reed				
	F. Perez				
23 March 2009	S. Reed	0800 - 1200	16	8.90	59%
	J. Reed				
	F. Perez				
	T. Searl				

10



Rare Plant Assessment

Date of Survey	Surveyors	Time of	Total Person-	Annual	Percent of season
		Survey	Hours	Precipitation*	total
				(inches)	
24 March 2009	S. Reed	0900 - 1100	12	8.90	59%
	J. Reed				
	F. Perez				
	T. Searl				
14 April 2009	S. Reed	0800 - 1100	12	8.93	60%
	J. Reed				
	F. Perez				
	T. Searl				
28 June 2010	J. Reed	1000 - 1500	15	16.36	108%
	I. Swift				
	F. Perez				
29 June 2010	J. Reed	1000 - 1430	13.5	16.36	108%
	I. Swift				
	F. Perez				
17 July 2010	F. Perez	1200 - 1500	6	16.36	108%
	I. Swift				
20 days		-	320 hours	-	-

Source: TERACOR field investigators

*Annual precipitation data was obtained from the National Weather Service and runs from July 1 to June 30.

3.0 RESULTS

VEGETATION

Geographically, the Forest Lawn Property is located within the California Floristic Province Southwestern California region. Specifically, the Forest Lawn Property is on the boundary of the South Coast and Western Transverse Ranges subregions. The South Coast subregion extends along the Pacific Coast from Point Conception to Mexico. According to the authoritative work on California native plants, the Jepson Manual, coastal sage scrub and chaparral communities with numerous endemic species are common; but most of the subregion from Santa Barbara to the Mexican border has been urbanized, with substantial loss of natural habitat (Hickman, 1993).

Classification of plant communities on the Forest Lawn Property generally follows the *CNDDB List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database.* References herein reflect the previously mentioned published materials.



TERACOR personnel recognized fifteen (15) distinct plant communities across the Forest Lawn Property. The vegetation assemblages within the approximate 119.8-acre natural areas are comprised generally of woodlands, chaparral, coastal scrub and riparian scrub communities. The balance of the Forest Lawn Property consists of developed memorial-park (approximately 230 acres), disturbed zones near to and sometimes within natural areas (approximately 91 acres), and stands of ornamental vegetation adjacent to and within natural areas (approximately 3 acres).

As shown in *Exhibit 5 - Vegetation Communities - 2008 Aerial Photograph*, attached, the majority of relatively natural, undeveloped areas of the Forest Lawn Property are concentrated in the southerly one-third of the Forest Lawn Property. Additionally, natural habitat is found along Sennett Creek, an intermittent stream which originates in Griffith Park within Royce's Canyon. Sennett Creek conveys flows through the Forest Lawn Property from southeast to northwest and is tributary to the Los Angeles River Flood Control Channel through a subgrade pipe under Forest Lawn Drive. Individual vegetation communities are described and quantified below.

SCRUB COMMUNITIES

Upland scrub communities occur most often on south-facing slopes and/or on shallow soils in cismontane southern California. Riparian scrub communities occur where water sources are intermittent in cismontane southern California.

Coastal sage scrub community types are becoming increasingly uncommon on a regional basis and are in decline due to historic agricultural conversions and urban development pressures. Sage scrub communities within the Los Angeles area have been geographically reduced in area and fragmented due to historical ranching practices, development, and urbanization.

Undifferentiated Chaparral Scrub (CNDDB Vegetation Code 37.000.00) - 33.75 Acres

This chaparral subtype is located throughout the natural areas of the Forest Lawn Property. The dominant species include: black sage (*Salvia mellifera*), chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), and greenbark ceanothus (*Ceanothus spinosus*). Undifferentiated chaparral scrub, which is the dominant vegetation community within the Forest Lawn Property, is well-adapted to frequent burns due to the ability of many dominant shrubs to stump sprout. Mature stands are dense and interwoven, reducing the understory component, and making physical access difficult. Undifferentiated chaparral scrub is often found on shallow, dry soils at low elevations on xeric slopes and ridges. As one of the most common vegetation types in the Transverse Ranges, chaparral is not included in the City CEQA Thresholds Guide list of "NDDB Highest Inventory Priority Plant Communities of Los Angeles City" ("Highest Inventory Community") and is not designated as a Special Community by CDFG. Undifferentiated chaparral scrub totals approximately 33.75 acres of the Forest Lawn Property.

Venturan Coastal Sage Scrub (CNDDB Vegetation Code 32.190.00) - 31.99 Acres

Venturan coastal sage scrub is the second-most dominant native vegetation community within the Forest Lawn Property. Dominant characteristic species for sage scrub assemblages on the Forest Lawn Property include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*),



black sage, laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), and deerweed (*Lotus scoparius*). Venturan coastal sage scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. Venturan coastal sage scrub, however, has been recognized by CDFG as a top priority rare natural community in Southern California that, according to February 1992 sensitivity rankings, occurs in 6 to 20 known locations and/or has 2,000 to 10,000 acres of habitat remaining with a "threatened" degree of threat. Venturan coastal sage scrub encompasses approximately 32 acres of the Forest Lawn Property.

Coastal Sage Chaparral Scrub (CNDDB Vegetation Code 32.300.00) - 8.75 Acres

Coastal sage chaparral scrub is considered an ecotonal community type between coastal sage scrub and chaparral because it contains elements of both community types. Coastal sage chaparral scrub is a mix of woody chaparral and coastal sage scrub species, and is most likely a post-fire successional community. It can also, however, occur when there are abrupt changes in soil depth and moisture due to geologic conditions below the soil profile. Species observed on the Forest Lawn Property within this community included chamise, California buckwheat, California sagebrush, toyon, greenbark ceanothus and black sage. Coastal sage chaparral scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. This community comprises approximately 8.75 acres of the Forest Lawn Property.

Disturbed Venturan Coastal Sage Scrub (CNDDB Vegetation Code 32.190.00) - 4.98 Acres

Disturbed Venturan coastal sage scrub is limited to the western portion of the Forest Lawn Property, and is comprised of the same vegetative species described above in the Venturan coastal sage scrub description. As noted above, Venturan coastal sage scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. Disturbed Venturan coastal sage scrub, which totals approximately 5.0 acres, is located in areas which are routinely maintained, mowed, or which have been historically impacted within the Forest Lawn Property.

Mulefat Scrub (CNDDB Vegetation Code 63.510.00) - 2.62 Acres

Mulefat scrub is dominated by the most common component of riparian scrub assemblages; mulefat (*Baccharis salicifolia*). This woody, evergreen plant is associated with seasonally wet soils and high energy or disturbed stream systems. This plant assemblage is characterized by having a continuous canopy comprised of shrubs less than 4 meters in height associated with sparse ground cover. Mulefat scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. It occurs in several of the basins and drainages on the Forest Lawn Property, and comprises approximately 2.62 acres of the Forest Lawn Property.

Southern Willow Scrub (CNDDB Vegetation Code 63.130.00) - 1.86 Acres

Southern willow scrub is designated as a Highest Inventory Community by the City and as a Special Community by CDFG. Southern willow scrub has additionally been recognized by CDFG as a top priority rare natural community in Southern California that, according to February 1992 sensitivity rankings, occurs in 6 to 20 known locations and/or has 2,000 to 10,000 acres of habitat remaining with a "threatened" degree of threat. Southern willow scrub is becoming increasingly uncommon on a regional basis and is in decline due to historic



agricultural conversions, urban development pressures, and arrested successional stages of vegetative development in managed riverine systems.

Southern willow scrub is restricted to the lower end of Sennett Creek within the restoration area and a basin located in the southwest portion of the Forest Lawn Property. The dominant species observed within these areas were red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*) and narrow-leaved willow (*Salix exigua*). Other species recorded within this community type were mulefat and Fremont cottonwood (*Populus fremontii*). This community comprises approximately 1.86 acres of the Forest Lawn Property.

Coyote Brush Scrub (CNDDB Vegetation Code 32.060.00) - 1.21 Acres

Coyote brush scrub consists of 1 primary species; coyote brush (*Baccharis pilularis*). This community is present in the northeastern and southern portions of the Forest Lawn Property, in 2 distinct cells associated with intermittent water availability. Coyote brush scrub is often found on moist slopes, disturbed areas, and terraces. Coyote brush scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. This community comprises approximately 1.21 acres of the Forest Lawn Property.

Disturbed Mulefat Scrub (CNDDB Vegetation Code 63.510.00) - 0.41 Acre

Disturbed mulefat scrub is dominated by mulefat and contains the same characteristics as described above; however, this community is located within 3 disturbed areas comprised of asphalt/gravel roads in the western portion of the Forest Lawn Property. As noted above, mulefat scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. Disturbed mulefat scrub comprises approximately 0.41 acre of the Forest Lawn Property.

Southern Willow Scrub/Mulefat Scrub (CNDDB Vegetation Codes 63.130.00/63.510.00) - 0.39 Acre

Southern willow scrub/mulefat scrub is not recognized as an official community type in CDFG's List of Native Plant Communities. TERACOR field personnel use this designation when willows (*Salix* spp.) and mulefat are equally represented (co-dominant). This community type is only associated with 1 basin in the western portion of the Forest Lawn Property. As noted above, southern willow scrub is designated by the City CEQA Thresholds Guide as a Highest Inventory Community and as a Special Community by CDFG. Southern willow scrub/mulefat scrub comprises approximately 0.39 acre of the Forest Lawn Property.

Poison Oak Scrub (CNDDB Vegetation Code 37.940.00) - 0.20 Acre

This sub-community type consists almost entirely of poison oak (*Toxicodendron diversilobum*). Although poison oak is present throughout the natural areas of the Forest Lawn Property, dense, monotypic stands of poison oak scrub are limited to 2 isolated cells in the southeastern portion of the Forest Lawn Property and 2 cells in the southwestern portion of the Forest Lawn Property. Poison oak scrub is not designated as a Highest Inventory Community by the City or a Special Community by CDFG. Poison oak scrub comprises approximately 0.20 acre of the Forest Lawn Property.



GRASSLAND COMMUNITIES

Non-native grassland is the only discernable grassland community on the Forest Lawn Property. Native grasses do occur, such as giant wild rye (*Leymus condensatus*) and purple needle grass (*Nassella pulchra*). However, the native grasses occur in patches too small to map. Giant wild rye is associated with seeps (highly localized surface areas where subsurface water saturates the ground seasonally and sometimes exudes minor surface flows or springs, usually very short in geographic extent and duration) at the base of slopes in the southern portion of the Forest Lawn Property. Purple needle grass occurs variously in both chaparral and upland scrub communities, but not in substantial densities or specific geographic locations. Non-native grassland, unlike some native grasslands, is not considered rare by CDFG.

Non-Native Grassland (CNDDB Vegetation Code 42.000.00) - 2.65 Acres

Non-native grassland on the Forest Lawn Property is primarily comprised of brome (*Bromus* spp.), barley (*Hordeum murinum*), Mediterranean schismus (*Schismus barbatus*), filaree (*Erodium* spp.), mustard (*Brassica* spp. and *Hirschfeldia* spp.), and Italian thistle (*Carduus pycnocephalus*). A number of native annual herbaceous species were also recorded during field surveys, such as fiddleneck (*Amsinckia* spp.), blue-eyed grass (*Sisyrinchium bellum*), cryptantha (*Cryptantha microstachys*), telegraph weed (*Heterotheca grandiflora*), and ragweed (*Ambrosia* spp.).

Non-native grassland functions at a diminished level of productivity or functionality compared to native grassland. Annual non-native grassland has several negative characteristics including: 1) it maintains an excessive demand for near-surface soil moisture thereby out-competing native annual plant species, 2) it inhibits passage and access to the soil surface for most smaller ground-dwelling invertebrates, reptiles and small mammals, and 3) over time it forms an impenetrable layer over the soil precluding establishment of annual plants, shrubs or trees. Non-native grassland does, however, have some positive attributes. It can support similar assemblages of plant and animal species as native grasslands, albeit at lower densities for undetermined lengths of time, particularly if it is grazed or burned periodically. This community comprises approximately 2.65 acres of the Forest Lawn Property.

WOODLAND AND FOREST COMMUNITIES

Woodland communities in cismontane Southern California occur where increased soil moisture allows trees and tree canopies to develop. On south-facing exposures, this phenomenon occurs most frequently in close proximity to streams and in canyons shaded from solar penetration. On north-facing slopes and exposures, such as found on the Forest Lawn Property, woodlands tend to exhibit their highest diversity in association with streams. Due primarily to aspect (solar angle) and sometimes other various edaphic (soil) conditions, north-slope woodlands are generally dominated by coast live oak trees not dependent directly on stream-associated moisture.

When mature, these woodlands establish a sustainable and complex microclimate. Numerous moisture-dependent shrubs, annual plant species and woodland-dependent wildlife thrive within the relatively moderate temperature regime as compared to adjacent scrub, grassland and chaparral communities. Deep forest soil and forest litter profiles can develop, fostered by microclimatic conditions and enhanced over time by the tree canopy and associated protective elements. The combination of the tree canopy, high amount of



overall biomass, deep heterogeneous organic soil layers, prevalence of shade, soil moisture and downed wood, provides a unique and stable habitat for larger mammals, amphibians, avian and invertebrate species.

Western Sycamore - Coast Live Oak (CNDDB Vegetation Code 61.312.01) - 18.86 Acres

The western sycamore¹ - coast live oak vegetation community is the dominant community within the upper reaches of Sennett Creek and 3 tributaries, Drainages D, F and H, on the Forest Lawn Property. This community is a matrix of western sycamore and coast live oak. Other species present within this community within Sennett Creek are arroyo willow, narrow-leaved willow, red willow, Southern California black walnut, and mulefat. Tributaries D, F, and H's understories were typically comprised of more upland species such as toyon and California buckwheat. This community is typically found in riparian areas, such as springs or river banks. It comprises approximately18.86 acres of the Forest Lawn Property.

Western sycamore and southern coast live oak riparian forest are designated as Special Communities by CDFG.

Coast Live Oak Woodland (CNDDB Vegetation Code 71.060.19) - 9.71 Acres

Coast live oak woodland is located throughout the natural areas of the Forest Lawn Property. This vegetation community type is dominated by 1 tree species, coast live oak, and is comprised mainly of mature trees. This community comprises approximately 9.71 acres of the Forest Lawn Property.

Coast live oak woodland is not considered a Special Community by CDFG.

Western Sycamore Woodland (CNDDB Vegetation Code 61.310.00)/Willow Riparian Forest (CNDDB Vegetation Code 61.200.00) - 1.75 Acres

Western sycamore is designated as a Special Community by CDFG. Western sycamore woodlands are becoming increasingly uncommon on a regional basis and are in decline due to past agricultural conversions, urbanization, and lowered water tables in most hydrologic units.

The western sycamore woodland/willow riparian forest vegetation community is the dominant community present within the Sennett Creek restoration zone between Memorial Drive and Magnolia Avenue. This mixed community is also located within the upper end of the Sennett Creek restoration area near Magnolia Avenue. The dominant species is western sycamore. The understory of this vegetation community includes species such as arroyo willow, red willow, and mulefat. This community is generally limited to riparian areas, such as springs or river banks. It comprises approximately 1.75 acres of the Forest Lawn Property.

California Walnut Woodland (CNDDB Vegetation Code 72.100.01) - 0.64 Acre

California walnut woodland is designated as a Highest Inventory Community by the City and as a Special Community by CDFG. California walnut woodland has additionally been recognized by CDFG as a top

¹ The City's Protected Tree Ordinance refers to "western sycamores," which are also known as "California sycamores." For purposes of this report, such trees will be referred to as western sycamores.



priority rare natural community in Southern California that, according to February 1992 sensitivity rankings, occurs in 6 to 20 known locations and/or has 2,000 to 10,000 acres of habitat remaining with a "threatened" degree of threat. California walnut woodland is becoming increasingly uncommon on a regional basis and in decline due to historic agricultural conversions, urban development pressures, and arrested successional stages of vegetative development in managed riverine systems.

California walnut woodland is generally found on relatively moist, fine-textured soils of valley slopes and bottoms. California walnut woodland is generally characterized by open tree canopies and a strong association with grassy understories. On the Forest Lawn Property, the majority of the understories are comprised of non-native grassland. The evidence on the Forest Lawn Property, as well as TERACOR personnel's long experience on the Forest Lawn Property, indicates that these California walnut woodland cells were a blended Southern California black walnut and coast live oak association. This community comprises approximately 0.64 acre of the Forest Lawn Property.

California walnut woodland does not occur on the Forest Lawn Property naturally. Rather, it is an "artifact" or "relic" of previous development-related activities on the Forest Lawn Property, including the loss of oak trees over time. Southern California black walnut is a recognized component of coast live oak woodland, that is, it occurs occasionally within oak woodland. Only when it is the dominant tree would it be recognized as a separate community. There are several mappable cells of this human-affected woodland community type.

DEVELOPED/DISTURBED AREAS

Developed (No Corresponding CNDDB Code) - 229.97 Acres

Developed (i.e., improved with concrete or asphalt, or covered with turf and being used for interment spaces) areas within the Forest Lawn Property were labeled as developed. The existing memorial-park and developed areas comprise approximately 230 acres of the Forest Lawn Property.

Disturbed Areas (No Corresponding CNDDB Code) - 90.97 Acres

Areas that have little to no vegetative cover, or were comprised of highly disturbed vegetation and not subsequently developed, were designated disturbed. Plant species noted in disturbed areas primarily consisted of mustards, Italian thistle, and bull thistle (*Cirsium vulgare*). These areas are generally confined to relatively recently graded areas, maintained areas, and unimproved roads. The Forest Lawn Property includes approximately 91 acres of disturbed areas.

Ornamental (No Corresponding CNDDB Code) - 2.93 Acres

Although the majority of the areas in the memorial-park that are classified as developed are comprised of ornamental vegetation (e.g., turf), areas in which ornamental species either bordered and/or encroached into the natural areas of the park were labeled as ornamental. Ornamental vegetative species comprise approximately 3 acres of the undeveloped areas of the Forest Lawn Property.



CNDDB QUERY RESULTS

According to the Burbank and surrounding quadrangle query, Parish's brittlescale (*Atriplex parishil*), Nevin's barberry (*Berberis nevinii*), slender mariposa-lily (*Calochortus clavatus* var. *gracilis*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), slender-horned spineflower (*Dodecahema leptoceras*), many-stemmed dudleya (*Dudleya multicaulis*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), Davidson's bush mallow (*Malacothamnus davidsonii*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*) have all been historically recorded in the vicinity of the Forest Lawn Property.

A description of these observations and their habitat types are provided below in *Table 2 – Rare Plant* Assessment *Table*.

SOIL ANALYSIS RESULTS

Soils within the natural areas of the Forest Lawn Property were considered suitable to potentially support several of the rare and sensitive species known to occur, or historically occurred in the Los Angeles Basin. A detailed description of each respective plant species is presented below in Table 2.

FEDERAL AND STATE PROTECTED SPECIES

Protected sensitive species are usually classified by both state and federal resource management agencies as threatened or endangered, under provisions of the State and federal Endangered Species Acts. Vulnerable or at risk species which have been proposed or are being considered for listing as threatened or endangered or species of special concern are categorized administratively by the USFWS. The CDFG uses various terminology and classifications to describe sensitive species. There are also other species classifications and categories used in this report; all are described below.

Federal Protection and Classifications

The federal Endangered Species Act of 1973 ("FESA") defines an endangered species as any species which is in danger of extinction throughout all or a significant portion of its range. Threatened species are defined as any species which is likely to become an endangered species in the foreseeable future throughout all or significant portions of its range.

Federal listing status is as follows:

Federally listed as Endangered Federally listed as Threatened Federally Proposed as Endangered Federally Proposed as Threatened Federal Candidate Species Federally Proposed for delisting Federally Delisted as Endangered or	= FE = FT = FPE = FPT = FC = FPD
Threatened	= FDL



State of California Protection and Classifications

California's Endangered Species Act ("CESA") defines an endangered species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The state defines a threatened species as "... a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

Candidate species are defined as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

State listing status for plant species is as follows:

State listed as Endangered	= SE
State listed as Threatened	= ST
State Candidate for Endangered	= SCE
State Candidate for Threatened	= SCT
State listed as Rare	= SR

In 1977, California passed the Native Plant Protection Act (Fish and Game Code Section 1900-1913) ("NPPA"). The NPPA directed CDFG to "...carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protected endangered and rare plants from take."

CALIFORNIA NATIVE PLANT SOCIETY

CNPS is a statewide, non-profit organization dedicated to the preservation of native flora. The *California Native Plant Society's Inventory of Rare and Endangered Plants of California* (2001) includes information regarding the distribution, ecology, rarity, and legal status of over 2,000 rare plants which occur in California. The inventory has been updated and is maintained on a regular basis on the CNPS *Inventory of Rare and Endangered Plants Online Database (v7-10b).*

California Native Plant Society = CNPS

The CNPS codes presented for sensitive flora below include the following:



List 1A:	Presumed Extinct in California
List 1B:	Rare, Threatened, or Endangered in CA and elsewhere;
List 2:	Rare, Threatened, or Endangered in CA but more common elsewhere;
List 3:	Plants about which more information is needed - a review list;
List 4:	Plants of Limited Distribution - a watch list.

The **Threat Code** is as follows:

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat).

.2 - Fairly endangered in California (20% - 80% occurrences threatened).

.3 - Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

When conducting rare plant surveys and assessments, CDFG recommends that:

"Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and the Department recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, the DFG recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4."

CITY OF LOS ANGELES CEQA THRESHOLDS GUIDE

The City CEQA Thresholds Guide defines a sensitive biological resource as follows:

- "A plant or animal that is currently listed by a state or federal agency(ies) as endangered, threatened, rare, protected, sensitive, or a Species of Special Concern or federally listed critical habitat;
- A plant or animal that is currently listed by a state or federal agency(ies) as a candidate species or proposed for state or federal listing; or
- A locally designated or recognized species or habitat."

The City CEQA Thresholds Guide identifies 89 plants which the City considers locally significant. A small portion of these organisms have the potential or are known to occur on the Forest Lawn Property.

RARE PLANT SPECIES OCCURENCE ON THE FOREST LAWN PROPERTY

The following table contains the rare plant species known throughout the area and whether they were detected on the Forest Lawn Property. Species occurrence has been designated as: 1) **Present** or 2) determined **Not Present**. Regulatory status herbaceous plants and individual southern California black walnut trees detected on the Forest Lawn Property are depicted on the attached, *Exhibit 6 – CNPS-Listed Plant Locations*, attached.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
heart-leaved thorn-mint (Acanthomintha obovata ssp. cordata)	CNPS List 4.2. This subspecies has no formal federal or state governmental listing status.	Not Present . This annual herb occurs at elevations between 785 to 1540 meters, and is threatened by vehicles and grazing. According to the CNPS, the species occurs in chaparral openings, cismontane woodlands, valley foothill grasslands, and clay soils. Jepson describes the plant as occurring from San Luis Obispo through Ventura County, but also notes the western and central Transverse as within its distribution. This subspecies blooms from April to July. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
California androsace (Androsace elongata ssp. acuta)	CNPS List 4.2. This subspecies has no formal federal or state governmental listing status.	Not Present . Rare in Southern California, this annual herb is found in chaparral, cismontane woodland, and coastal scrub. It is believed extirpated from Los Angeles County; Jepson reports a historic broad distribution, occurring from Oregon to Baja California, specifically in the South Coast region, on dry grassy slopes below 1200 meters. The CNPS specifically notes the Los Angeles County extirpation. Although suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.
aphanisma (Aphanisma blitoides)	CNPS List 1B.2. This species has no formal federal or state governmental listing status.	Not Present . This annual herb can blossom from March to June in coastal bluff scrub and coastal scrub. With a fairly wide historical distribution across more than one dozen coastal counties in California, aphanisma is in steep decline in the mainland as well as the Channel Islands. It currently is known from 3 occurrences on San Nicholas Island and it only occurs below 305 meters above sea level. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
San Gabriel manzanita (Arctostaphylos gabrielensis)	CNPS List 1B.2. This species has no formal federal or state governmental listing status.	Not Present . This species is only known to occur from the Mill Creek Summit divide in the San Gabriel Mountains. The CNPS states that this species occurs in rocky chaparral areas. This evergreen shrub blooms in March and occurs at approximately 1500 meters in elevation. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
marsh sandwort (Arenaria paludicola)	CNPS List 1B.1. FE, SE	Not Present . This species was listed as federally endangered on 03 August 1993 and as state endangered in February 1990. It is known to occur in marshes and swamps. Only 2 natural occurrences have been reported in Black Lake Canyon and Oso Flaco Lake. This species is threated by development, erosion, and non-native plants. Its blooming period occurs between May and August, and it occurs between 3 and 170 meters. This species is believed to be extirpated in Los Angeles County. Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.

Table 2 – Rare Plant Assessment Table



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Braunton's milk- vetch (Astragalus brauntonii)	CNPS List 1B.1 FE	Not Present . This species was listed as federally endangered 29 January 1997. It is known to occur in disturbed or burned areas of chaparral with gravelly clay soils, below 640 meters in elevation in the central south coast and the north Peninsular range (Los Angeles Basin). Although suitable habitat is present on ridgelines underlain by decomposing granite and/or conglomerate, this species was not detected on the Forest Lawn Property.
Ventura marsh milk-vetch (Astragalus pycnostachyus var. lanosissimus)	CNPS List 1B.1 FE, SE	Not Present. This variety was listed as federally endangered on 21 May 2001 and as state endangered in April 2000. It is known to occur in coastal dunes, coastal scrub, marshes, and swamps between 1 and 35 meters in elevation. It was rediscovered near Oxnard in 1997; now it is known from only 1 natural occurrence composed of 30-50 reproductive plants. This variety is threatened by development, herbivory, cucumber mosaic virus, and non-native plants. This variety's blooming period occurs between June and October. Suitable habitat is not present, and the Forest Lawn Property is outside of this variety's known geographic range. This variety was not detected on the Forest Lawn Property.
coast dunes milkvetch (<i>Astragalus tener</i> var. <i>titi</i>)	CNPS List 1B.1. This variety has no formal federal or state governmental listing status.	Not Present . This annual herb typically occurs on sandy soils and dunes along the immediate costal strand. Several old records for localities near what is now Downtown Los Angeles were recovered on the CNDDB for the adjacent <i>Los Angeles</i> quad. These probably represented plants occurring on inland extensions of coastal sand sheets. Sand dune habitats are not present on the Forest Lawn Property, and this species is not expected to be present. This variety was not detected on the Forest Lawn Property.
Coulter's saltbush (Atriplex coulteri)	CNPS List 1B.2 This species has no formal federal or state governmental listing status.	Not Present . This perennial herb blooms from March through October in coastal environments below 460 meters in elevation. It occurs in alkaline and clay conditions in a variety of habitat types, including coastal bluff scrub, coastal dunes, coastal scrub, and valley grasslands. Suitable habitat is not present on the Forest Lawn Property, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Parish's brittlescale (<i>Atriplex parishii</i>)	CNPS List 1B.1. This species has no formal federal or state governmental listing status.	Not Present. This annual herb usually occurs in haline and alkaline soils, generally with a large clay component. This species also grows and blooms late in the year, from July to October. Clay soils are present onsite, however, saline content is probably too low to assume that suitable habitat is present on-site. This species was not detected on the Forest Lawn Property.
Davidson's saltscale (Atriplex serenana var. davidsonii)	CNPS List 1B.2 This variety has no formal federal or state governmental listing status.	Not Present . An annual herb which blooms from April through October, it is believed extirpated from Los Angeles County. It occurs below 200 meters in alkaline conditions in coastal bluff scrub and coastal scrub. Suitable habitat is not present on the Forest Lawn Property, and the Forest Lawn Property is outside of this variety's known geographic range. This variety was not detected on the Forest Lawn Property.
Malibu baccharis (Baccharis malibuensis)	CNPS List 1B.1 This species has no formal federal or state governmental listing status.	Not Present . This species can be found in a variety of chaparral, sage scrub and woodland habitats, often adjacent to disturbance. This species is primarily known to occur near the City of Malibu. This species blooms in August. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.

22



Forest Lawn Memorial-Park, Hollywood Hills Los Angeles, California 31 August 2010

Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Plummer's baccharis (Baccharis plummerae) Nevin's barberry (Berberis nevinii)	CNPS List 4.3 This species has no formal federal or state governmental listing status. CNPS List 1B.1 FE, SE	Not Present. The habitat for this species is rocky chaparral, or coastal scrub, and cismontane woodland between 5 and 425 meters. It is known to occur on the central and south coast, the north Channel Islands, and the western Transverse Ranges. Although suitable habitat is present, this species was not detected on the Forest Lawn Property. Not Present. This evergreen shrub blooms from March through June. It occurs in sandy or gravelly conditions in coastal scrub, chaparral,
	TL, 3L	cismontane woodland, and riparian scrub from 274 to 825 meters. It was last observed in 2007 in Wildwood Canyon in Burbank. The closest sighting, however, occurred as recently as 2000 below water tower #113, in the Santa Monica Mountains at Griffith Park. The plants present on Griffith Park are believed to be (or have originated) from cultivars. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
thread-leaved brodiaea (<i>Brodiaea</i> filifolia)	CNPS List 1B.1 FT, SE	Not Present . This species was listed as federally threatened on 13 October 1998 and as state endangered in January 1982. This bulbiferous perennial herb is known to occur in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and most often in vernal pool complexes and clay soils between 25 and 1219 meters. It is now found primarily in San Diego and Riverside Counties, but its range formerly included Los Angeles County. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
Brewer's calandrinia (Calandrinia breweri)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Not Present . Brewer's calandrinia is an annual herb which flowers from March through June. It is found most often in sandy to loamy soil, disturbed sites, and burns. The plant has a broad known distribution throughout the western Transverse Ranges and along the California coast from San Francisco to Baja, but is considered uncommon where it still occurs. Although suitable habitat is present, this species was not detected within the Forest Lawn Property.
seaside calandrinia (Calandrinia maritima)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Not Present . Seaside calandrinia is an annual herb which flowers from March through June, and uncommonly from February through August. It is found most often in sandy soils within coastal bluff scrub, coastal scrub, and valley and foothill grasslands between 5 and 300 meters in elevation. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
round-leaved filaree (California macrophylla)	CNPS List 2.1 This species has no formal federal or state governmental listing status	Not Present . Round-leaved filaree occurs in cismontane woodlands and valley and foothill grasslands. It is found in clay soils between 15 and 1200 meters above sea level and blooms from March to May. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Catalina mariposa	CNPS List 4.2	Confirmed Present. This perennial bulbiferous herb is found in heavy
lily (Calochortus catalinae)	This species has no formal federal or state governmental listing status.	soils, coastal scrub, and open grasslands below 700 meters, and blooms from February through June. It is distributed in the south central coast and the west south coast, especially in the Channel Islands. This species was detected during field surveys in the extreme southeast corner of the Forest Lawn Property intermixed with purple needle grass in a small clearing in chaparral. <i>Exhibit 6 – CNPS-Listed Plant Locations</i> depicts the location and population size of the 2 adjacent detection areas. TERACOR personnel detected a total of 65 plants on the Forest Lawn Property.
club-haired mariposa lily (Calochortus clavatus ssp. clavatus)	CNPS List 4.3 This subspecies has no formal federal or state governmental listing status	Not Present . This perennial bulbiferous herb is found in chaparral, coastal scrub, cismontane woodlands, and open grasslands from 75 to 1300 meters and blooms from May through June. Los Angeles County appears to be the southern extent of this subspecies' range. Although suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.
slender mariposa lily (Calochortus clavatus var. gracilis)	CNPS List 1B.2 This variety has no formal federal or state governmental listing status	Not Present . This variety is only known from 20 occurrences, in shaded foothill canyons of the San Gabriel Mountains. It is found in chaparral, coastal scrub and grasslands. It blooms from March to June, and occurs from 320 to 1000 meters in elevation. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this variety's known geographic range. This variety was not detected on the Forest Lawn Property.
Palmer's mariposa lily (Calochortus palmeri var. palmeri)	CNPS List 1B.2. This variety has no formal federal or state governmental listing status	Not Present . This mariposa lily occurs in wet meadows and other mesic sites in chaparral and lower coniferous forest above 1000 meters up to 2390 meters in elevation. The variety's geographic distribution includes the San Jacinto Mountains, Tehachapi Mountains, the Transverse Ranges, and Central Western California. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this variety's known geographic range. This variety was not detected on the Forest Lawn Property.
Plummer's mariposa lily (Calochortus plummerae)	CNPS List 1B.2 This species has no formal federal or state governmental listing status	Not Present . This perennial herb is considered to be rare by the <i>Jepson Manual</i> . This plant is generally found on dry, rocky slopes within chaparral communities from the Santa Monica Mountains to the San Jacinto Mountains from 100 to 1700 meters. This species occurs nearby on Griffith Park. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
Lewis' evening primrose (Camissonia lewisii)	CNPS List 3 This species has no formal federal or state governmental listing status.	Not Present . This coastal species occurs in grasslands in sandy or clay soils between sea level and 300 meters in elevation on the south coast, west Peninsular Range, and northern Baja. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
southern tarplant (Centromadia parryi ssp. australis) Formerly known as Hemizonia parryi ssp. australis)	CNPS List 1B.1 This subspecies has no formal federal or state governmental listing status.	Not Present . This plant inhabits the margins of marshes and swamps, valley and foothill grasslands, and vernal pools. This subspecies blooms from May to November, and has an elevation range of sea level to 427 meters. Main threats include urbanization, habitat fragmentation, grazing, foot traffic and competition from non-native plants. Although marginally suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
island mountain- mahogany (<i>Cercocarpus</i> <i>betuloides</i> var. <i>blancheae</i>)	CNPS List 4.3 This variety has no formal federal or state governmental listing status	Not Present . This evergreen shrub occurs on the Channel Islands and the western Transverse Ranges from 30 to 600 meters. It occurs in chaparral and coniferous forest. Although somewhat suitable habitat is present, this variety was not detected on the Forest Lawn Property.
San Fernando Valley spineflower (Chorizanthe parryi var. fernandina)	CNPS List 1B.1 FC, SE	Not Present . This variety was believed to be extirpated from the Los Angeles area and was last observed locally in 1890 near the City of Burbank. It is found in coastal sage scrub habitats with sandy soils. It recently has been found in north Los Angeles County in Santa Clarita. Although suitable habitat is present, this variety was not detected on the Forest Lawn Property.
Parry's spineflower (Chorizanthe parryi var. parryi)	CNPS List 1B.1 This species has no formal federal or state governmental listing status	Not Present . This annual herb occurs in sandy or rocky openings of chaparral and coastal scrub, and may be extirpated from Los Angeles County. It is currently known from approximately 20 occurrences in Riverside County. Its elevation range is from 275 to 1220 meters. The plant flowers from April to June. Although suitable habitat is present, this variety was not detected on the Forest Lawn Properly.
small-flowered morning-glory (Convolvulus simulans)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present . This annual herb occurs on wet clay and serpentine ridges within chaparral, coastal scrub, and grasslands between 30 and 700 meters. Moist clay soils occur near drainages on the Forest Lawn Property; however, serpentine soils are not present. This species was not detected on the Forest Lawn Property.
Santa Susana tarplant (Deinandra minthornii) Formerly known as Hemizonia minthornii	CNPS List 1B.2 SR	Not Present . This species of tarplant grows from sandstone, rocky outcrops and ledges in open, exposed sites in chaparral and coastal scrub between 280 and 760 meters. The species is known to occur in the western Transverse Ranges (Santa Susana Mountains and Santa Monica Mountains). It proliferates in post-burn conditions and blooms in late Summer and Fall; however, it can be detected during other seasons by its distinctive foliage and strong, disagreeable odor. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
western dichondra (Dichondra occidentalis)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Not Present . This species' current range is believed to extend to Los Angeles County based on the best commercially-available information. It occurs primarily in the south coast region and the southern Channel Islands in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Although structurally suitable habitat is present, this species was not detected on the Forest Lawn Property.
slender-horned spineflower (Dodecahema leptoceras)	CNPS List 1B.1 FE, SE	Not Present. This species requires flood deposited terraces and washes in chaparral/coastal scrub and cismontane woodland between 200 and 760 meters. It was last observed in the area of La Crescenta in 1916, and is considered to be extirpated from much of the Los Angeles area. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Blochman's dudleya (Dudleya blochmaniae ssp. blochmaniae)	CNPS List 1B.1 This subspecies has no formal federal or state governmental listing status	Not Present . This subspecies grows in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grasslands; often in areas with shallow clay overlying serpentine or rocky areas with little or no soil. The plant occurs between 5 and 450 meters. It is known to occur throughout the south central coast, south coast, and northern Baja. The nearest localities for Blochman's dudleya occurs in Winter Canyon, above Pepperdine University and other locales in the Santa Monica Mountains. Although marginally suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.
Agoura Hills dudleya (Dudleya cymosa ssp. agourensis)	CNPS List 1B.2 FT	Not Present. This dudleya occurs in rocky, volcanic areas in chaparral and cismontane woodland between 200 and 500 meters. Its blooming period is between May and June. This species is only known to occur in the western Santa Monica Mountains in Los Angeles and Ventura Counties. No suitable habitat is present on the Forest Lawn Property. This subspecies was not detected on the Forest Lawn Property.
San Gabriel River dudleya (Dudleya cymosa ssp. crebrifolia)	CNPS List 1B.2 This subspecies has no formal federal or state governmental listing status	Not Present . This dudleya occurs in chaparral on granitic slopes between 275 and 457 meters above sea level. It is known from only Fish Canyon/San Gabriel River in Los Angeles County. Although suitable habitat is present, the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
marcescent dudleya (Dudleya cymosa ssp. marcescens)	CNPS List 1B.2 FT, SR	Not Present . This dudleya inhabits sheer rocky outcrops in chaparral of the Santa Monica Mountains between 150 and 520 meters. Santa Monica Mountain localities include Malibu Creek within Malibu Creek State Park. These types of outcrops and cliff faces do not occur on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
Santa Monica Mountains dudleya (Dudleya cymosa ssp. ovatifolia)	CNPS List 1B.2 FT	Not Present . Endemic to Los Angeles and Orange Counties, especially the Santa Monica Mountains, this species is most often found in rocky, shaded, north-facing slopes in chaparral and coastal scrub between 150 and 1675 meters. Although suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.
San Gabriel Mountain dudleya (Dudleya densiflora)	CNPS List 1B.1 This species has no formal federal or state governmental listing status	Not Present . This species occurs on granitic canyon walls and cliffs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodlands in the nearby San Gabriel Mountains between 244 and 610 meters. Its blooming period occurs between March and June. Although suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
many-stemmed dudleya (Dudleya multicaulis)	CNPS List 1B.2 This species has no formal federal or state governmental listing status	Not Present. This dudleya grows in heavy or clayey soils near the coastal plain, below 790 meters throughout the south coast (Los Angeles, Orange, San Bernardino, San Diego, and Riverside counties). Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
suffrutescent wallflower (Erysimum insulare ssp. suffrutescens)	CNPS List 4.2 This subspecies has no formal federal or state governmental listing status	Not Present. This subspecies occurs on coastal bluffs and coastal dunes below 150 meters along the central coast and the south coast. Suitable habitat is not present on the Forest Lawn Property. This subspecies was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Mexican flannelbush (Fremontodendron mexicanum)	CNPS List 1B.1 FE, SR	Not Present . This species only occurs naturally in San Diego County. It is a common and popular cultivar in Southern California. As of 1993, it was estimated that fewer than 100 naturally occurring plants remained. Naturally, it occurs within chaparral, cismontane woodlands, and coniferous forests from 10 to 716 meters. Although structurally suitable habitat is present, this species was not detected on the Forest Lawn Property.
Santa Barbara bedstraw (Galium cliftonsmithii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . The elevational range of this species is between 200 and 1220 meters with distribution throughout the western Transverse and South Coast Ranges. Habitat consists of cismontane woodland. This species' blooming period occurs from May to July. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
San Gabriel bedstraw (<i>Galium</i> grande)	CNPS List 1B.2 This species has no formal federal or state governmental listing status	Not Present . This deciduous shrub is found in broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest in the San Gabriel Mountains, and, to our knowledge, not the Santa Monica Mountains. Its elevation range is 425 to 1500 meters above sea level. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Jepson's bedstraw (Galium jepsonii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . Jepson's bedstraw is found in open woodlands and granitic, rocky areas within lower and upper montane coniferous forest of the Transverse Ranges at elevations between 1540 and 2500 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Johnston's bedstraw (Galium johnstonii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species is found in the San Gabriel and San Bernardino Mountains at an elevation range of 1220 to 2300 meters. Habitat consists of open mixed forests. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
cuyama gila (Gilia latiflora ssp. cuyamensis)	CNPS 4.3 This subspecies has no formal federal or state governmental listing status	Not Present . This subspecies occurs in sandy flats, lower river valleys, and pinyon juniper woodlands at elevations between 600 and 2000 meters. It is found in the south Coast Ranges and northwestern Transverse Ranges. Suitable habitat is not present, and the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
golden goodmania (Goodmania luteola)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present . This annual herb occurs in clay or alkaline conditions in grasslands, desert scrub, meadows and playas between 20 and 2200 meters. The organism is known from the southern San Joaquin Valley, the Owens Valley and western Mojave desert. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Palmer's grappling hook (Harpagonella palmeri)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present. This annual herb grows in dry sites in chaparral, coastal scrub, and grassland below 955 meters. This species has a broad distribution throughout the south coast, Peninsular Ranges, Arizona, and into Mexico. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.

27



Forest Lawn Memorial-Park, Hollywood Hills Los Angeles, California 31 August 2010

Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Los Angeles sunflower (Helianthus nuttallii ssp. parishii)	CNPS List 1A This subspecies has no formal federal or state governmental listing status	Not Present. This plant was last observed in 1937 and until recently was believed extinct. It occurred in marshes and swamps. A possible occurrence of this species was reported on Newhall Ranch in 2002; however, it has not been confirmed. Suitable habitat is not present on the Forest Lawn Property. This subspecies was not detected on the Forest Lawn Property.
Abram's alumroot (Heuchera abramsii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present. This plant species occurs at high elevations between 2800 and 3500 meters in the San Gabriel Mountains. Habitat for this species consists of upper montane coniferous forests. It blooms from July to August. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
urn-flowered alumroot (Heuchera elegans)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present. This plant species occurs at high elevations between 1155 and 2650 meters in the San Gabriel Mountains. This species occurs in high elevation woodland habitats, including riparian areas. It blooms from May to August. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
vernal barley (Hordeum intercedens)	CNPS List 3.2 This species has no formal federal or state governmental listing status	Not Present. This species occurs in vernal pools, alkali flats and ephemeral saline streams below 1000 meters throughout southwestern California. Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
mesa horkelia (Horkelia cuneata ssp. puberula)	CNPS List 1B.1 This subspecies has no formal federal or state governmental listing status	Not Present. This subspecies requires sandy or gravelly sites within chaparral, cismontane woodland, or coastal sage scrub. Mesa horkelia is presumed extirpated from the Los Angeles area due to development. The last recorded observation of this species was approximately 1.5 miles northwest of the Glendale Freeway and Highway 210 intersection in 1948. Although suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.
Southern California black walnut (Juglans californica)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Confirmed Present . This species occurs on slopes and in canyons between 50 and 900 meters along the south coast, south Transverse Ranges, and north Peninsular Ranges. Walnut forest is a much fragmented, declining natural community. California walnut woodlands are located on the Forest Lawn Property. 198 Southern California black walnut trees are present on the southeastern portion of the Forest Lawn Property, as depicted in <i>Exhibit 6 – CNPS-Listed Plant Locations</i> .
Duran's rush (Juncus duranii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present. This rhizomatous herb occurs at elevations between 1768 and 2804 meters in wet areas in montane coniferous forests. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Coulter's goldfields (Lasthenia glabrata ssp. coulteri)	CNPS List 1B.1 This subspecies has no formal federal or state governmental listing status	Not present . Although now quite rare, this subspecies was historically widely distributed across southwestern California and into the western Mojave desert. It occurs in moist saline areas, primarily vernal pools. This plant blossoms February through June. Suitable habitat is not present on the Forest Lawn Property. This subspecies was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
fragrant pitcher sage (Lepechinia fragrans)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Not present. This species is known to occur, but considered uncommon in the south coast area. It occurs in chaparral below 1310 meters in elevation, and blooms from March to October. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
Robinson's pepper-grass (Lepidium virginicum var. robinsonii)	CNPS List 1B.2 This variety has no formal federal or state governmental listing status.	Not present. This variety is found in dry shrublands throughout the southwest region below 885 meters. It is an annual herb that blooms from January through July. Although suitable habitat is present, this variety was not detected on the Forest Lawn Property.
ocellated Humboldt lily (<i>Lilium humboldtii</i> ssp. ocellatum)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Confirmed Present . This subspecies favors dense, shaded riparian habitats with abundant moisture and little disturbance. It often grows from canyon walls or in dense leaf litter and can be detected from March to August. This subspecies has been detected within the upper reaches of Sennett Creek, Drainage D, Drainage F, and Drainage H in the southern portion of the Forest Lawn Property. <i>Exhibit 6 – CNPS-Listed Plant Locations</i> depicts the population size of each of the 5 detection areas. TERACOR personnel have detected a total of 9 ocellated Humboldt lilies on the Forest Lawn Property.
lemon lily (Lilium parryi)	CNPS List 1B.2 This species has no formal federal or state governmental listing status.	Not Present . This species requires moist sites in the elevation range of 1220 to 2745 meters, usually in wet meadows or coniferous forests in the Transverse and Peninsula Ranges. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
San Gabriel linanthus (Linanthus concinnus)	CNPS List 1B.2 This species has no formal federal or state governmental listing status.	Not Present . This species occurs in rocky sites in chaparral and coniferous forest between elevations of 1520 and 2800 meters. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Orcutt's linanthus (Linanthus orcuttil)	CNPS List 1B.3 This species has no formal federal or state governmental listing status	Not Present . This species occurs in openings in chaparral and pine forests, with an elevation range of 915 to 2145 meters throughout the Peninsula Ranges. This species is believed to be extirpated from Los Angeles County. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
silky lupine (Lupinus elatus)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species occurs in dry areas within montane forests. The elevation range of the species is 1500 to 3000 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
interior bush lupine (Lupinus excubitus var. johnstonii)	CNPS List 4.3 This subspecies has no formal federal or state governmental listing status	Not Present . This variety occurs on dry slopes in chaparral and under pines in the nearby San Gabriel Mountains, and the elevation range of the species is 1500 to 2500 meters. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this veriety's known geographic range. This variety was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Peirson's lupine (Lupinus peirsonii)	CNPS List 1B.3 This species has no formal federal or state governmental listing status	Not Present. This species is known only to occur in the nearby San Gabriel Mountains within lower and upper montane forests. The elevation range of the species is 1000 to 2500 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Davidson's bush mallow (Malacothamnus davidsonii)	CNPS List 1B.2 This species has no formal federal or state governmental listing status	Not Present. This species requires sandy washes within coastal sage scrub, riparian woodlands, or chaparral. This species was last reported in 2003 along Stough Canyon Mountain Way in the Verdugo Mountains. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
small-flowered microseris (Microseris douglasii var. platycarpha)	CNPS List 4.2 This subspecies has no formal federal or state governmental listing status.	Not Present. Found in clayey soils associated with vernal pools, grasslands and similar habitats, this variety occurs below 1070 meters in the South Coast region, probably including coastal Los Angeles County. Suitable habitat is not present on the Forest Lawn Property. This variety was not detected on the Forest Lawn Property.
gray monardella (Monardella cinerea)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species occurs in subalpine environments at elevations greater than 1800 meters in coniferous forests. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
rock monardella (Monardella viridis ssp. saxicola)	CNPS List 4.2 This subspecies has no formal federal or state governmental listing status	Not Present . This species occurs in the San Gabriel Mountains at elevations between 500 and 1800 meters, in chaparral and coniferous forests. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
California spineflower (Mucronea californica)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present. The California spineflower occurs in a relatively broad distribution across California, which includes the central and southern coast and southern interior valleys and mountains. This species occurs in sandy conditions within coastal scrub and chaparral below 1400 meters. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
California muhly (Muhlenbergia californica)	CNPS List 4.3 This species has no formal federal or state government listing status	Not Present . This now uncommon species occurs in wet places, in chaparral, forests, scrub and meadows throughout the western Transverse Ranges and south coast regions. Its elevation range is between 100 and 2000 meters. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
crowned muilla (Muilla coronata)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present. This species occurs in an array of habitats which include desert scrub, Joshua tree woodland, chenopod scrub, and piñon-juniper woodlands. It occurs at high elevations ranging from 765 to 1960 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
mud nama (Nama stenocarpum)	CNPS List 2.2 This species has no formal federal or state government listing status	Not Present . This species occurs on marshes, swamps, lake margins and streambanks between 5 and 500 meters. This species is believed to be extirpated from Los Angeles County. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Gambel's watercress (<i>Nasturtium</i> gambelii)	CNPS list 1B.1 FE, SE	Not Present. This endangered species is nearly extinct in the United States. Only 5 occurrences are known in California. This species inhabits both freshwater and brackish marshes and swamps. Serious threats are erosion, habitat loss, and encroachment of the genus <i>Eucalyptus</i> which alters the hydrology of certain habitats. The elevation range of this species is 5 to 330 meters, and it blooms from April to October. Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
prostrate navarretia (Navarretia prostrata)	CNPS List 1B.1 This species has no formal federal or state government listing status	Not present . This species was found historically on alkali soils in vernal pools or grasslands. It is thought to be extirpated from the Los Angeles area. Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
slender nemacladus (Nemacladus gracilis)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This annual herb occurs in cismontane woodlands and grasslands with sandy substrates. It blooms from March to May and occurs at an elevation range of 120 to 1900 meters. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
California orcutt grass (Orcuttia californica)	CNPS List 1B.1. FE, CE	Not Present . This annual grass occurs primarily in vernal pool habitats. Occasionally, it is found in mudflats and tire ruts, however, it is usually in association with nearby vernal pools, heavy clay soils, or similar edaphic conditions. None of these features were present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
woolly mountain- parsley (Oreonana vestita)	CNPS List 1B.3 This species has no formal federal or state governmental listing status	Not Present . This species occurs in lower montane coniferous forests at an elevation range of 1615 to 3500 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Tehachapi ragwort (Packera ionophylla) Formerly known as Senecio ionophyllus	CNPS List 4.3 The species has no formal federal or state governmental listing status	Not Present . This perennial herb generally occurs within coniferous forests on dry, granitic substrates. Its elevation range is 1500 to 2700 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Lyon's pentacheata (Pentacheata lyonii)	CNPS List 1B.1 FE, SE	Not Present . This species is most often found on open, sandy or gravelly substrates in native grassland or around the margins of exposed granitic rocks. It occurs in chaparral, grassland, and coastal sage scrub. It has been detected along Malibu Creek in the vicinity of Tapia Park, and in other locations in the Santa Monica Mountains and Santa Susana Mountains. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
Gairdner's yampah (Perideridia gairdneri ssp. gairdneri)	CNPS List 4.2 This subspecies has no formal federal or state governmental listing status	Not Present . This subspecies occurs along the coast throughout California, and the interior valleys of the south coast floristic province. Thought to be extirpated from Los Angeles County, this perennial herb occurs in grasslands and coastal flats below 365 meters. Although marginally suitable habitat is present, this subspecies was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
adobe yampah (Perideridia pringlei)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species is known to occur in the Tehachapi Mountains, South Coast Ranges, and the western Transverse Ranges. Adobe yampah occurs on grassy slopes and serpentine outcrops at an elevation range of 300 to 1800 meters. This species blooms from April to June, and less commonly through July. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
Transverse Range phacelia (<i>Phacelia</i> <i>exilis</i>)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species is known to occur in the southern Sierra Nevada Mountains, western Transverse Ranges, San Bernardino Mountains, and San Gabriel Mountains. It occurs on sandy or rocky slopes, flats and meadows at an elevation range of 1100 to 2700 meters. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Mojave phacelia (Phacelia mohavensis)	CNPS List 4.3 This species has no formal federal or state governmental listing status.	Not Present . This species occurs on sandy or gravelly soils, often associated with dry streambeds, within coniferous forest. Its elevation range is 1400 to 2500 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Brand's phacelia (Phacelia stellaris)	CNPS List 1B.1 FC This species has no formal federal or state governmental listing status.	Not Present . This plant is probably extirpated from Los Angeles County according to the <i>CNPS Inventory</i> , as historical occurrences have been lost to development. It occurs in coastal dunes and coastal scrub, below 400 meters. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.
Fish's milkwort (Polygala cornuta var. fishiae)	CNPS List 4.3 This variety has no formal federal or state governmental listing status.	Not Present . This shrub often forms thickets, generally less than 2 meters in diameter. It is uncommon, but has a broad distribution in oak woodlands and chaparral throughout the outer south coast ranges, Transverse Ranges, Peninsular Ranges, and northern Baja. This species' elevation range is 100 to 1000 meters. Although structurally suitable habitat is present, this species was not detected on the Forest Lawn Property.
Ewan's cinquefoil (Potentilla glandulosa ssp. ewanii)	CNPS List 1B.3 This subspecies has no formal federal or state governmental listing status.	Not Present . This subspecies occurs in coniferous forests and meadows near seeps and springs, at elevations of 1900 to 2400 meters. The plant is known from only 4 occurrences in the Dawson Saddle area of the San Gabriel Mountains and from 1 occurrence in the San Bernardino Mountains. Suitable habitat is not present, and the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
white-rabbit tobacco (Pseudognaphalium leucocephalum)	CNPS List 2.2 This species has no formal federal or state governmental listing status	Not Present. White-rabbit tobacco occurs in dry, sandy creek bottoms. This species blooms from August to November though blooming can uncommonly occur as early as July and as late as December. A record of this species exists in the CNDDB from 1932 within La Tuna Canyon, which is approximately 5.6 miles north of the Forest Lawn Property. Although marginally suitable habitat is present, this species was not detected on the Forest Lawn Property.



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
Engelmann oak (Quercus engelmannii)	CNPS List 4.2 This species has no formal federal or state governmental listing status	Not Present . This once common Southern California oak occurs on slopes and foothills. Its elevation range is 50 to 1300 meters. This species is not known to occur in the Santa Monica Mountains. Although suitable habitat is present, the Forest Lawn Property is located outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Parish's gooseberry (Ribes divaricatum var. parishii)	CNPS List 1A This variety has no formal federal or state governmental listing status.	Not Present . The CNPS Inventory notes that this plant is possibly extinct and that the last known record for the variety is from 1980 at Whittier Narrows Nature Center. This variety occurs in moist woodlands between 65 and 300 meters in elevation. Although suitable habitat is present, this variety was not detected on the Forest Lawn Property.
Coulter's matilija poppy (<i>Romneya</i> <i>coulteri</i>)	CNPS List 4.2 This species has no formal federal or state governmental listing status.	Confirmed Present . This perennial herb is distinctive in that it has the largest flowers of any plant native to California. It blooms from March to July. It is found in chaparral and coastal scrub in the Peninsular Ranges, Transverse Ranges, and the west south coast area. This species was detected within the upstream portion of Sennett Creek adjacent to the unimproved road crossing in the southeastern portion of the Forest Lawn Property. This species does not occur in the Santa Monica Mountains naturally, and the 15 to 30 shoots present on the Forest Lawn Property are considered to be the result of its use as a cultivar planted by former property owners.
southern skullcap (Scutellaria bolanderi ssp. austromontana)	CNPS List 1B.2 This subspecies has no formal federal or state governmental listing status	Not Present . This subspecies occurs on gravelly soils in streambanks, oak, and pine woodlands. Its elevation range is 425 to 2000 meters. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this subspecies' known geographic range. This subspecies was not detected on the Forest Lawn Property.
bluish spike-moss (Selaginella asprella)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species generally occurs within coniferous forests on dry, rocky substrates. Its elevation range is 1600 to 2700 meters. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
rayless ragwort (Senecio aphanactis)	CNPS List 2.2 This species has no formal federal or state governmental listing status.	Not Present . The distribution of this species includes central western California, the south coast region, the Channel Islands, and Baja California; however, its habitat is limited to drying alkaline flats below 800 meters. Suitable habitat is not present on the Forest Lawn Property. This species was not detected on the Forest Lawn Property.
salt spring checkerbloom (<i>Sidalcea</i> <i>neomexicana</i>)	CNPS list 2.2 This species has no formal federal or state governmental listing status.	Not Present. This perennial herb is native to the western United States, and occurs in coastal scrub, chaparral, Mohavean desert scrub, lower montane coniferous forest habitats, and alkali playas. It blooms from March to June and its elevation range is 15 to 1530 meters. Although suitable habitat is present, this species was not detected on the Forest Lawn Property.
chickweed oxytheca (<i>Sidotheca</i> <i>caryophylloides</i>) Formerly known as <i>Oxytheca</i> <i>caryophylloides</i>	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present . This species occurs in montane environments at an elevation range of 1114 to 2600 meters in coniferous forests. Suitable habitat is not present, and the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.

33



Species	Designated Status/Rarity	Habitat Description/Status of Species on Forest Lawn Property
pine green-gentian (Swertia neglecta)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present. Pine green-gentian is a perennial herb that occurs at elevations of 1400 to 2500 meters. This species is generally found in dry, open woodlands. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Greata's aster (Symphyotrichum greatae) Formerly known as Aster greatae	CNPS List 1B.3 This species has no formal federal or state governmental listing status	Not Present. This rhizomatous herb occurs primarily in the San Gabriel Mountains at elevations ranging from 300 to 2010 meters. This species occurs in chaparral and woodland habitats, and is often associated with damp canyons. Greata's aster blooms from June to October. Although suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
San Bernardino aster (Symphyotrichum defoliatum)	CNPS List 1B.2. This species has no formal federal or state governmental listing status.	Not Present. This perennial herb is known to occur in a variety of habitats and elevations, including grassland, disturbed areas, cismontane woodlands and coastal scrub. In many of the low elevation, coastal localities this species is found in riparian areas, or wetland sites. It typically blooms late in the year, from August to November, and can easily be overlooked. Due to the presence of suitable habitat, several of the late-season field surveys on the Forest Lawn Property targeted species such as this. This species, however, was not detected on the Forest Lawn Property.
Lemmon's syntrichopappus (Syntrichopappus lemmonii)	CNPS List 4.3 This species has no formal federal or state governmental listing status	Not Present. This species occurs on open, sandy to gravelly areas often in chaparral. Its elevation range is 500 to 1830 meters. Although structurally suitable habitat is present, the Forest Lawn Property is outside of this species' known geographic range. This species was not detected on the Forest Lawn Property.
Sonoran maiden fern (Thelypteris puberula var. sonorensis)	CNPS List 2.2 This variety has no formal federal or state governmental listing status.	Not Present . This variety occurs in the western Transverse Ranges, San Gabriel Mountains, San Jacinto Mountains, and the south coast region. Found primarily along stream courses, seepage areas, stream banks, and meadows, this variety prefers undisturbed wetland habitats that are open and exposed. Although marginally suitable habitat is present, this variety was not detected on the Forest Lawn Property.
silvery false lupine (Thermopsis californica var. argentata)	CNPS List 4.3 This variety has no formal federal or state governmental listing status	Not Present. This variety occurs at elevations of 900 to 1595 meters. Habitats for this variety include coniferous forests and piñon-juniper woodlands. Suitable habitat is not present, and the Forest Lawn Property is outside of this variety's known geographic range. This variety was not detected on the Forest Lawn Property.

4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION MEASURES

This impact analysis is based on the proposed Project. CNPS-listed plant impacts associated with the Project are discussed below. Coulter's matilija poppy is not included below because it does not occur in the Santa Monica Mountains naturally (according to McAuley, 1996 and Raven, Thompson and Prigge, 1986), and because its presence on the Forest Lawn Property is believed to be a cultivar.



Catalina mariposa lily

As described above, a total of 65 individual Catalina mariposa lily plants were detected in a small clearing in chaparral within the southeastern portion of the Forest Lawn Property. The implementation of the Project will affect all 65 individual plants of this species.

Southern California black walnut

California walnut woodland and individual Southern California black walnut trees are located within the southeastern portion of the Forest Lawn Property. A total of 198 Southern California black walnuts were detected within the Forest Lawn Property. The implementation of the Project will affect 0.62 acre of California walnut woodland and 144 southern California black walnuts.

Ocellated Humboldt lily

As described above, ocellated Humboldt lily was detected within the upper reaches of Sennett Creek, Drainage D, Drainage F and Drainage H near the southern boundary of the Forest Lawn Property. A total of 9 individual plants were detected. The implementation of the Project will impact 7 individual plants of this species.

Mitigation Measures

In order to mitigate the effects to 65 Catalina mariposa lily plants, 144 Southern California black walnuts and 7 ocellated Humboldt lily plants from Project implementation, Forest Lawn proposes to implement the following mitigation measures:

- 1. Conserve 28 acres of natural habitat areas on the Forest Lawn Property;
- Create, plant, and conserve 23 acres of graded slopes on the Forest Lawn Property with native plant communities such as woodland, chaparral, and scrub in accordance with an upland habitat plan prepared by a qualified biologist/restoration ecologist. This mitigation area may include an up to 60foot wide buffer of native vegetation adjacent to developed cemetery property that may be irrigated and maintained for fire safety and aesthetic purposes;
- 3. Create, plant, and conserve 8 acres of graded slopes on-site with coast live oak and/or Southern California black walnut trees in accordance with a plan prepared by a qualified biologist/restoration ecologist (such trees may be replacement trees in satisfaction of the Project's tree mitigation requirements);
- 4. Create, plant, and conserve a 1-acre riparian habitat within the on-site Drainage L area. Western sycamore shall be utilized as a dominant element for planting within this mitigation area. The riparian habitat plan shall be prepared by a qualified biologist/restoration ecologist;
- 5. Restore and conserve 1 acre of riparian habitat in an area adjacent to Sennett Creek. Western sycamore shall be utilized as a dominant element for planting within this mitigation area. The riparian



habitat plan shall be prepared by a qualified biologist/restoration ecologist;

- 6. With respect to Mitigation Measures 1-5, Forest Lawn shall implement a 5-year habitat improvement and monitoring program for the conserved acreage on the Forest Lawn Property, which may include, but not be limited to, the following components within conserved areas, as applicable, in accordance with a plan prepared by a qualified biologist/restoration ecologist:
 - a. Removal of non-native shrubs, trees and other invasive exotics such as *Arundo*, *Brassica* and *Cirsium* within conserved areas during the monitoring period; and
 - b. Selective revegetation of areas with the appropriate native plant species;
- 7. Forest Lawn shall use reasonable efforts to salvage seeds and bulbs from Catalina mariposa lily, Southern California black walnut, and ocellated Humboldt lily to be utilized in a propagation program and utilized in the selective revegetation program as provided for in the plan prepared by a qualified biologist/restoration ecologist. Collected plant material which cannot be utilized on-site shall be dedicated to a native plant nursery or conservation entity skilled and actively engaged in the propagation of plant material to be utilized as deemed appropriate by that entity.
- 8. Prior to the removal of any Southern California black walnut tree(s) greater than or equal to 4 inches at diameter-at-breast height ("DBH"), Forest Lawn shall prepare a map indicating the specific tree(s) and its tag number, to be removed, and the removal of such trees shall be mitigated for as follows:
 - a. The replacement ratios for riparian-associated trees in CDFG jurisdictional areas to be removed are as follows: trees between 4 to 5 inches DBH shall be replaced at 2:1; trees from 5 to 12 inches DBH shall be replaced at 3:1; trees from 12 to 24 inches DBH shall be replaced at 5:1; trees from 24 to 36 inches DBH shall be replaced at 10:1; and trees greater than 36 inches DBH shall be replaced at 15:1. Replacement trees shall be saplings, and shall be of the same species as that removed. Replacement trees may be planted either on the Forest Lawn Property or off-site, and may be planted in connection with the creation, restoration, and/or enhancement of habitat required pursuant to other Project mitigation measures.
 - b. CDFG jurisdictional replacement trees may be used to satisfy the City required replacement of non-jurisdictional trees. If CDFG jurisdictional replacement trees are not used to satisfy City required replacement of non-jurisdictional trees, the replacement ratios for upland trees not within CDFG jurisdictional areas to be removed are as follows: each tree shall be replaced with a Southern California black walnut at a 2:1 ratio at an on-site or other City-approved location. Southern California black walnuts shall be replaced by 1-gallon trees.
 - c. Prior to planting of replacement trees, a qualified biologist/restoration ecologist shall review landscaping and irrigation systems which are adjacent to the replacement trees to determine that such landscaping and irrigation systems are compatible for the survival of the replacement trees.
 - d. Exemptions from Replacement Tree Requirements.



- i. The routine maintenance of a non-jurisdictional Southern California black walnut tree under the direction of a registered arborist or qualified biologist retained by Forest Lawn shall not require any mitigation.
- e. Tree mitigation shall be implemented on a phased basis in accordance with Project implementation, subject to approval of the City, CDFG, and the U.S. Army Corps of Engineers, as applicable.
- f. A tree canopy replacement program may be implemented as an alternative to the tree replacement ratios described above, subject to the approval of the applicable agencies. This tree canopy replacement method is further described in *Appendix B Alternative Tree Canopy Replacement Program*.

5.0 CONCLUSIONS

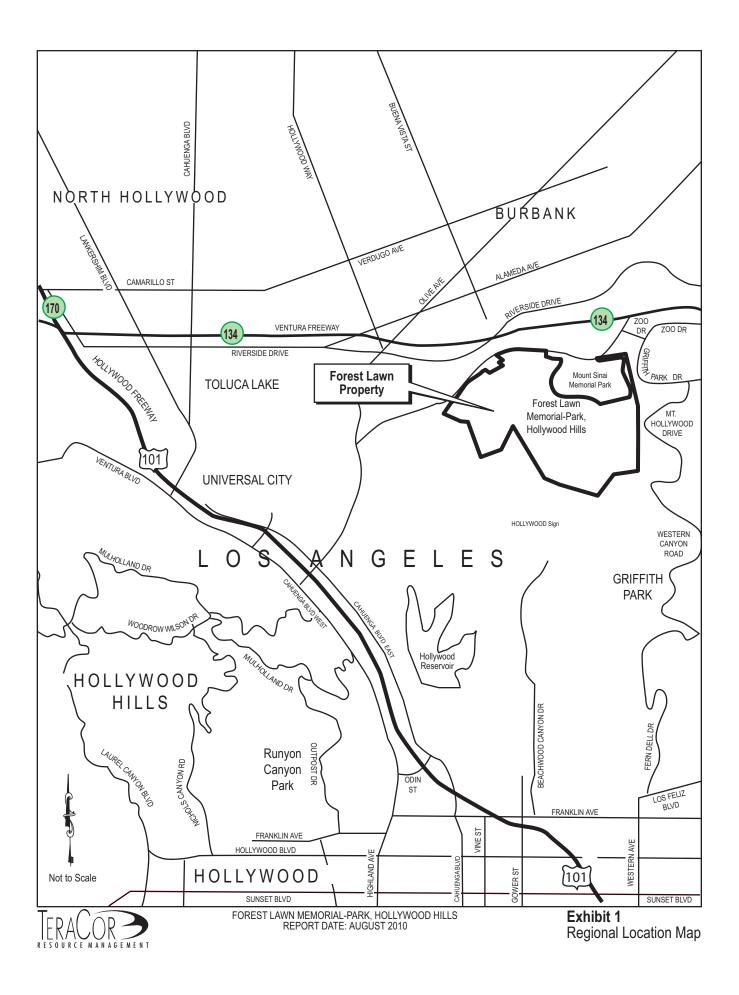
TERACOR field personnel detected Catalina mariposa lily, Southern California black walnut, ocellated Humboldt lily, and Coulter's matilija poppy (a cultivar) on the Forest Lawn Property. A total of 65 Catalina mariposa lily plants, 144 Southern California black walnuts and 7 ocellated Humboldt lily plants will be impacted by proposed Project implementation. The loss of the single location of Coulter's matilija poppy does not require mitigation as it is considered a cultivar and does not appear to be a natural occurrence. No further surveys are recommended.

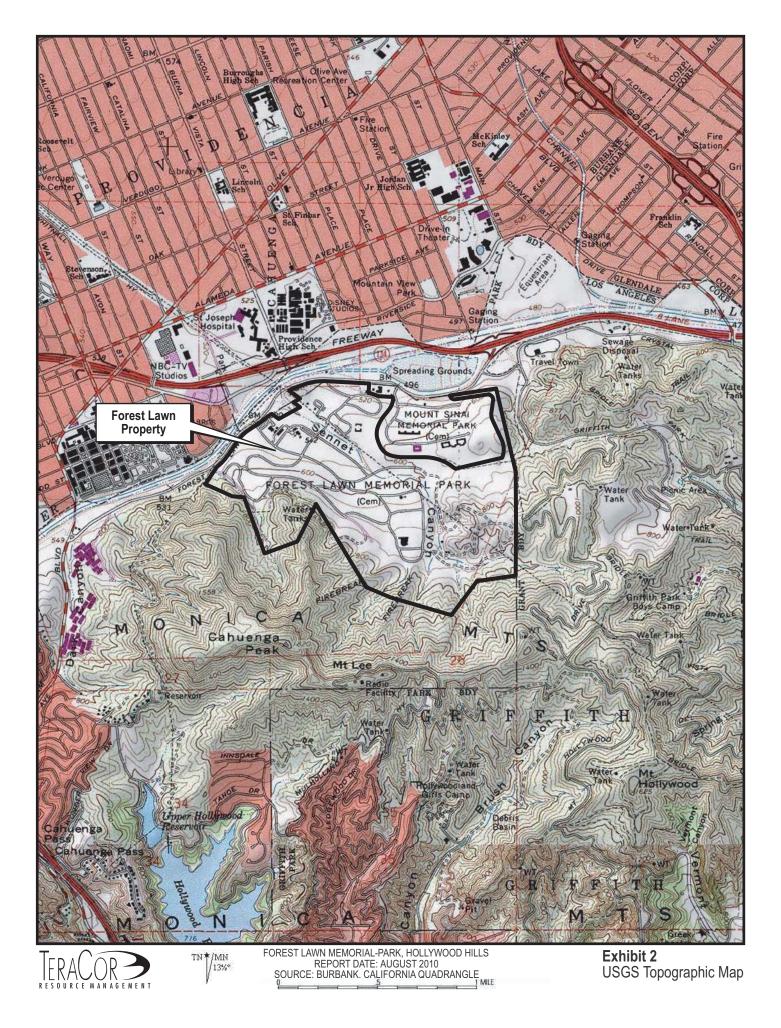
CERTIFICATION: I hereby certify that the statements and exhibits contained in this report present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge.

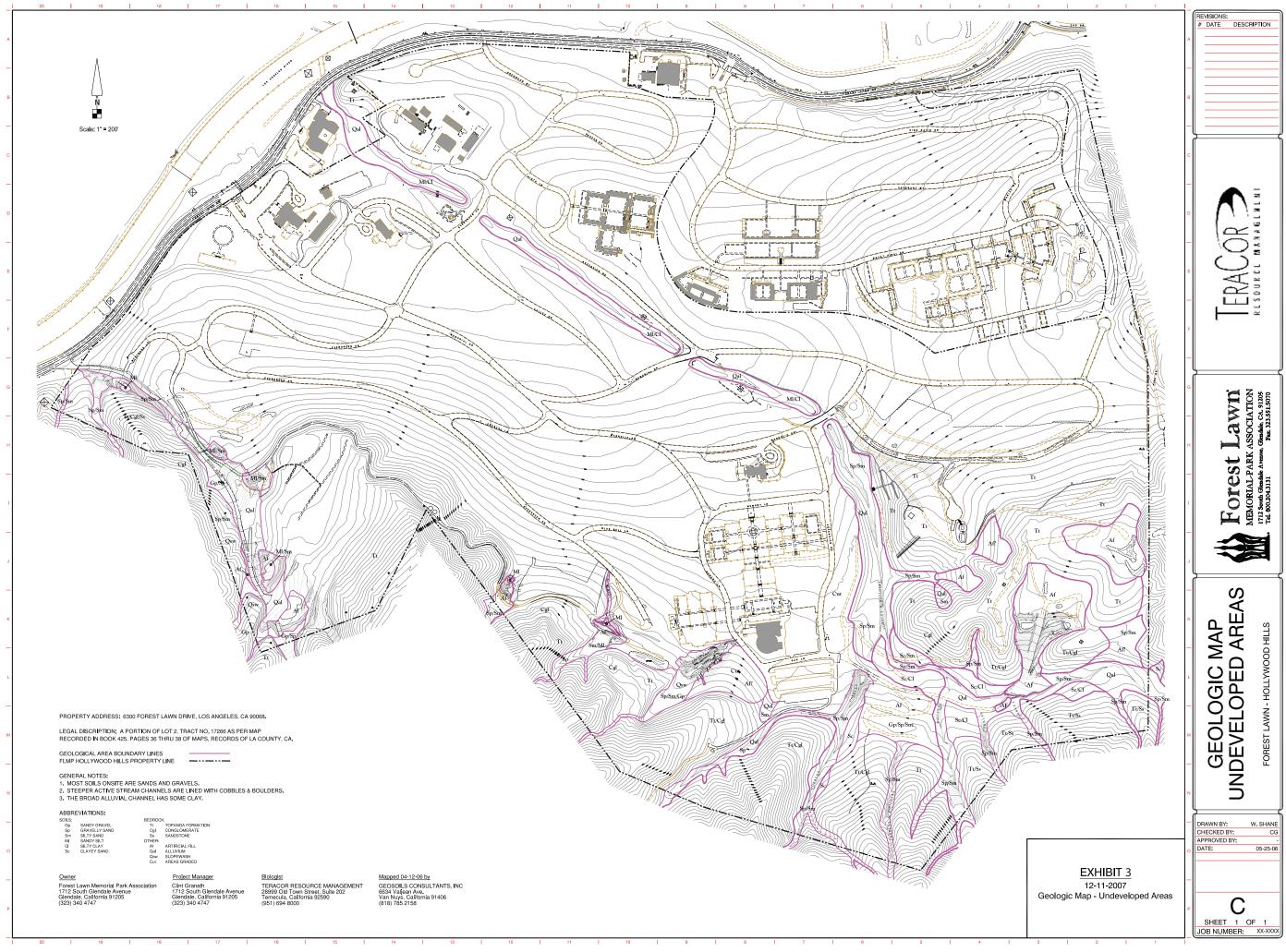
Samuel Reed, Principal, Recovery Permit No. TE-839896-4

31 August 2010 Date









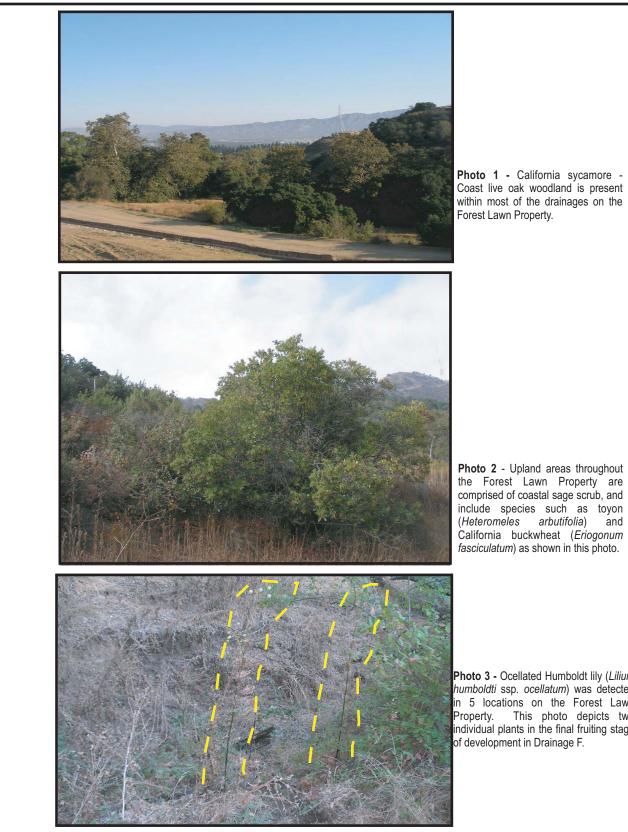


Photo 1 - California sycamore -Coast live oak woodland is present within most of the drainages on the Forest Lawn Property.



Photo 4 - Coast live oak woodland with an understory of southern California black walnut (Juglans californica) and poison oak is prevalent within Drainage F.



Photo 3 - Ocellated Humboldt lily (*Lilium humboldti* ssp. ocellatum) was detected humboldti ssp. ocellatum) was detected in 5 locations on the Forest Lawn Property. This photo depicts two individual plants in the final fruiting stage of development in Drainage F.

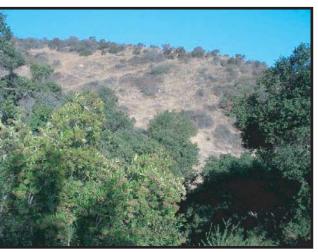


Photo 6 - Many areas throughout the Forest Lawn Property are comprised of coast live oak woodland in the drainage areas and coastal sage scrub in the upland areas and exposed ridgelines.

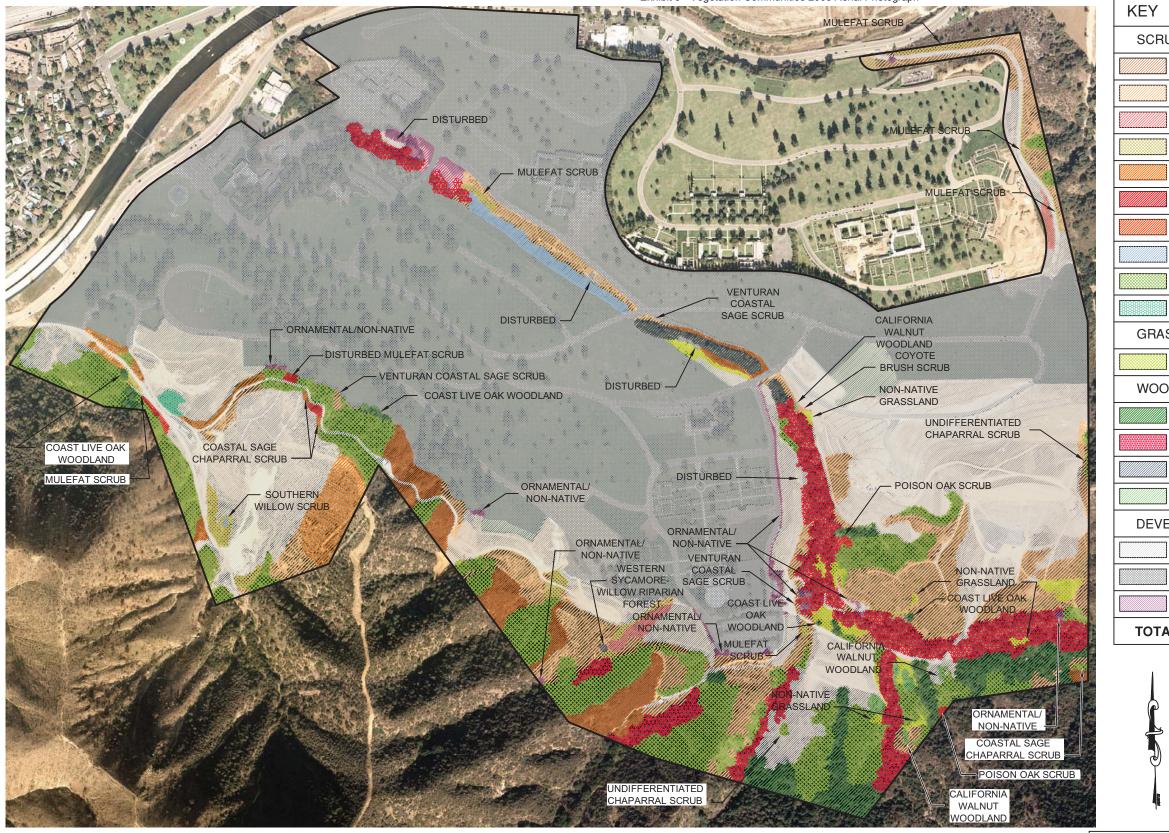




Photo 5 - The most recent rare plant survey was conducted in late August 2008. During the survey Humboldt lily was in the late stage of development as depicted in this August 2008 photograph.



FOREST LAWN MEMORIAL - PARK, HOLLYWOOD HILLS Exhibit 5 - Vegetation Communities 2008 Aerial Photograph







 PINC
 PROGRESSIVE MAPPING CONSULTANTS, INC. MAPPING/SURVEYING SERVICES

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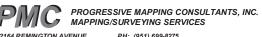
KEY	VEGE			Y	ACREAGE
SCRL	JB COMMUI	NITIES			
	COASTAL SAGE CHAPARRAL SCRUB				8.75
	VENTURAN	COASTAL	SAGE SCRUB		31.99
	COYOTE BR	USH SCR	UB		1.21
	MULEFAT S	CRUB			2.62
	DISTURBED	VENTURA	N COASTAL SAGE	SCRUB	4.98
	DISTURBED	MULEFAT	SCRUB		0.41
	POISON OA	K SCRUB			0.20
	SOUTHERN	WILLOW	SCRUB		1.86
	UNDIFFERE	NTIATED (CHAPARRAL SCRUE	3	33.75
	SOUTHERN WILLOW SCRUB/MULEFAT SCRUB			0.39	
GRAS	SLAND CO	MMUNIT	TIES		
	NON-NATIVE	E GRASSL	AND		2.65
WOO	DLAND/FOF	REST CC	OMMUNITIES		
	COAST LIVE	OAK WOO	ODLAND		9.71
	WESTERN S	YCAMORI	E-COAST LIVE OAK		18.86
	WESTERN SYCAMORE-WILLOW RIPARIAN FOREST			1.75	
	CALIFORNIA WALNUT WOODLAND				0.64
DEVE	LOPED/DIS	TURBED	D AREAS		
	DISTURBED				90.97
	EXISTING M	EMORIAL	PARK/FACILTIES		229.97
	ORNAMENT	AL/NON-N	ATIVE		2.93
ΤΟΤΑ	L AREA FO	REST L	AWN MEMORIA	L PARK	443.64
		600	GRAPHIC SC (IN FEET 1 inch = 60	INE ALE 300 60	
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TS					
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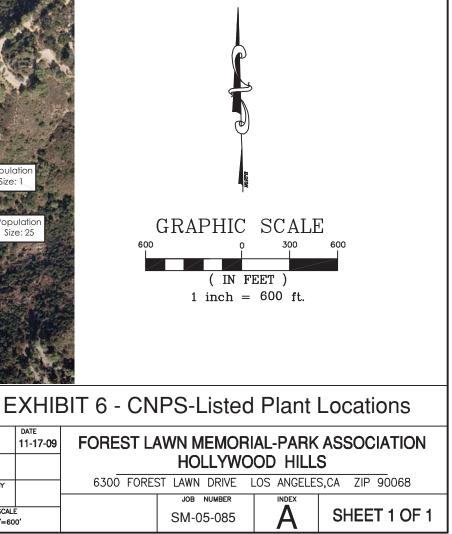
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DR. BY RVB сн. вү JR APP'D BY SCALE 1"=600'

LEGEND

- FOREST LAWN MEMORIAL PARK PROPERTY LINE

KEY	SPECIES	TOTAL
★	OCELLATED HUMBOLDT LILY	9
★	CATALINA MARIPOSA LILY	65
•	JUGLANS CALIFORNICA "BLACK WALNUT"	198









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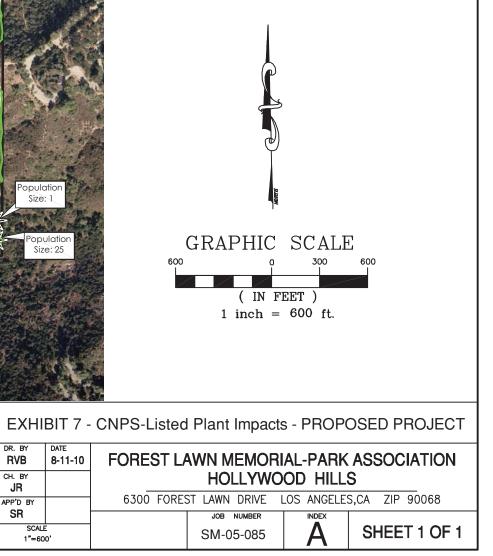
DR. BY DATE 8-11-10 RVB сн. вү JR APP'D BY SCALE 1"=600'

LEGEND

- FOREST LAWN MEMORIAL PARK PROPERTY LINE

- PROPOSED PROJECT BOUNDARY

KEY	SPECIES	TOTAL IMPACTED
★	OCELLATED HUMBOLDT LILY	7
★	CATALINA MARIPOSA LILY	65
0	JUGLANS CALIFORNICA "BLACK WALNUT"	144



APPENDIX A FLORAL SPECIES OBSERVED

Vegetation List

Floral species were identified in the field by S. Reed, I. Swift, J. Reed, F. Perez, W.E. McTeer, and T. Searl. Questionable identifications were made by A. Sanders, UCR Herbarium. Scientific names follow *The Jepson Online Interchange - California Floristics*. Non-native species present within the Forest Lawn Property were generally identified to genus, and have been noted below with an asterisk (*) following the scientific name.

Scientific Name	Common Name
Adoxaceae	Muskroot Family
Sambucus nigra ssp. canadensis	blue elderberry
Agavaceae	Agave Family
Agave americana*	agave
Yucca gloriosa*	Spanish dagger
Yucca whipplei	foothill yucca
Aizoaceae	Fig-Marigold Family
Mesembryanthemum edulis*	iceplant
Amaryllidaceae	Amaryllis Family
Amaryllis belladonna*	naked ladies
Amaranthaceae	Amaranth Family
Amaranthus albus*	tumbleweed
Chenopodium album*	lamb's-quarters
Chenopodium berlandieri	pitseed goosefoot
Salsola tragus*	Russian thistle
Anacardiaceae	Sumac Family
Malosma laurina	laurel sumac
Rhus integrifolia	lemonadeberry
Rhus ovata	sugar bush
Schinus molle*	Peruvian pepper tree
Toxicodendron diversilobum	poison oak
Apiaceae	Carrot Family
Anthriscus caucalis*	bur-chervil
Foeniculum vulgare*	fennel

Lomatium dasycarpum² Sanicula arguta Sanicula crassicaulis

Apocynaceae Nerium oleander* Vinca major*

Aquifoliaceae Ilex altaclarensis*

Araliaceae Hedera helix*

Asclepiadaceae Asclepias fascicularis

Asteraceae

Acourtia microcephala Ageratina adenophora* Ambrosia psilostachya Artemisia californica Artemisia douglasiana Baccharis pilularis Baccharis salicifolia Bidens pilosa* Brickellia californica Carduus pycnocephalus* Centaurea melitensis* Cirsium occidentale Cirsium vulgare* Conyza canadensis Cotula australis* Cynara scolymus* Deinandra fasciculata Ericameria linearifolia Ericameria palmeri Eriophyllum confertiflorum Filago californica Filago gallica* Gnaphalium bicolor

Common Name wooly lomatium sharptooth blacksnakeroot Pacific sanicle

Dogbane Family oleander greater perwinkle

Ilex Family golden king holly

Ginseng Family English ivy

Milkweed Family narrow-leaf milkweed

Sunflower Family

sacapellote sticky snakeroot western ragweed California sagebrush mugwort coyote brush mulefat common beggar-ticks California brickelbush Italian thistle tocalote cobwebby thistle bull thistle horseweed southern brass buttons artichoke clustered tarweed interior goldenbush Palmer's goldenbush golden-yarrow California cottonrose narrowleaf cottonrose cudweed

2 This species lies well east of Raven, Thompson, and Prigge's known distribution in their 1986 second edition of Flora of the Santa Monica Mountains, California.



Scientific Name	Common Name	
Gnaphalium californicum	California cudweed	
Gnaphalium canescens	cudweed	
Gnaphalium luteo-album*	weedy cudweed	
Hazardia squarrosa	saw-toothed goldenbush	
Helianthus annuus	common sunflower	
Heterotheca grandiflora	telegraph weed	
Hypochaeris glabra*	smooth cat's-ear	
Isocoma menziesii	Menzies' goldenbush	
Lactuca serriola*	prickly lettuce	
Lessingia filaginifolia	California aster	
Madia gracilis	slender tarweed	
Malacothrix saxitilis	cliff desert dandelion	
Picris echioides*	bristly ox-tongue	
Rafinesquia californica	California chicory	
Senecio flaccidus	shrubby butterweed	
Senecio mikanioides*	German-ivy	
Senecio vulgaris*	common groundsel	
Sonchus oleraceus*	common sow thistle	
Stephanomeria virgata	rod wirelettuce	
Stylocline gnaphaloides	everlasting nest straw	
Taraxacum officinale*	common dandelion	
Uropappus lindleyi	Lindley's silverpuffs	
Venegasia carpesioides	canyon-sunflower	
Xanthium strumarium	cocklebur	
Bignoniaceae	Bignonia Family	
Tecomaria capensis*	cape honeysuckle	
Boraginaceae	Borage Family	
Amsinckia menziesii	rancher's fireweed	
Cryptantha microstachys	Tejon cryptantha	
Eucrypta chrysanthemifolia	spotted hideseed	
Phacelia cicutaria	caterpillar scorpionweed	
Phacelia distans	distant phacelia	
Brassicaceae	Mustard Family	
Brassica nigra*	black mustard	
Brassica rapa*	field mustard	
Capsella bursa-pastoris*	shepherd's purse	
Cardaria pubescens*	white-top	
Coronopus didymus*	lesser swinecress	
Hirschfeldia incana*	short-pod mustard	
Raphanus sativus*	wild radish	
Rorippa nasturtium-aquaticum	water cress	
	A - 3 Forest Lawn Memorial-Park, Hollywood Hills Los Angeles, California	



st Lawn Memorial-Park, Hollywood Hills Los Angeles, California 31 August 2010

Sisymbrium irio* Sisymbrium orientale*

Cactaceae Opuntia littoralis Opuntia parryi

Caprifoliaceae Lonicera subspicata Symphoricarpos mollis

Caryophyllaceae Herniaria hirsuta cinerea* Polycarpon tetraphyllum* Silene gallica* Spergularia marina Stellaria media*

Cistaceae Helianthemum scoparium

Convolvulaceae Calystegia macrostegia

Cucurbitaceae Cucurbita foetidissima Marah macrocarpa

Cuscutaceae Cuscuta californica

Cyperaceae Cyperus eragrostis Scirpus spp.

Dryopteridaceae Dryopteris arguta Polystichum imbricans

Euphorbiaceae Chamaesyce albomarginata Chamaesyce maculata* Croton setigerus Euphorbia tirucallt*



Common Name

London rocket Oriental mustard

Cactus Family western prickly-pear cane cholla

Honeysuckle Family southern honeysuckle creeping snowberry

Pink Family hairy rupturewort four-leaved allseed campion sand-spurrey common chickweed

Rock-rose Family peak rush-rose

Morning-Glory Family Island false bindweed

Gourd Family calabazilla wild cucumber

Dodder Family California dodder

Sedge Family umbrella sedge bulrush

Wood Fern Family coastal wood fern narrowleaf swordfern

Spurge Family rattlesnake weed spotted spurge doveweed milkbush

A - 4

Common Name

Scientific Name

Ricinus communis*

Fabaceae

Acacia spp.* Amorpha fruticosa Lathyrus vestitus Lotus purshianus Lotus salsuginosus Lotus scoparius Lupinus bicolor Lupinus succulentus Medicago polymorpha* Melilotus indicus* Trifolium hirtum* Vicia villosa*

Fagaceae Quercus agrifolia

Quercus berberidifolia

Geraniaceae Erodium botrys* Erodium cicutarium* Geranium carolinianum

Grossulariaceae

Ribes aureum Ribes malvaceum Ribes speciosum

Iridaceae Sisyrinchium bellum

Juglandaceae Juglans californica

Juncaceae Juncus textilis

Lamiaceae Marrubium vulgare* Lamium amplexicaule* Salvia apiana



castor bean

Legume Family

acacia desert false indigo Pacific pea Spanish clover Coastal bird's-foot trefoil California broom miniature lupine arroyo lupine California burclover sourclover rose clover hairy vetch

Oak Family

coast live oak scrub oak

Geranium Family

big heron bill redstem stork's bill Carolina geramium

Gooseberry Family

golden current chaparral current fuchsia-flowered gooseberry

Iris Family blue-eyed-grass

Walnut Family Southern California black walnut

Rush Family basket rush

Mint Family horehound henbit deadnettle white sage

Salvia leucophylla Salvia mellifera Stachys bullata

Lauraceae Cinnamomum camphora*

Liliaceae

Bloomeria crocea Brodiaea terrestris kernensis Calochortus catalinae Chlorogulum pomeridianum Dichelostemma capitatum Lilium humboldtii ocellatum Zigadenus fremontii

Malvaceae Malacothamnus fasciculatus Malva parviflora*

Moraceae Ficus spp.

Myrtaceae Eucalytus globulus*

Nyctaginaceae Mirabilis californica

Oleaceae Fraxinus velutina

Onagraceae Camissonia californica Camissonia micrantha Clarkia purpurea Clarkia unguiculata

Oxalidaceae Oxalis pes-caprae

Papaveraceae Eschscholzia californica Papaver californicum



Common Name

purple sage black sage California hedge nettle

Laurel Family camphor tree

Lily Family common goldenstar Kern brodiaea Catalina mariposa lily soap plant blue dicks occelated Humboldt lily Fremont's death camas

Mallow Family bush mallow cheese weed

Mulberry Family fig

Myrtle Family blue gum

Four O'Clock Family wishbone bush

Olive Family velvet ash

Evening Primrose Family California sun cup miniature sun cup winecup fairyfan elegant clarkia

Oxalis Family Bermuda buttercup

Poppy Family California poppy fire poppy

Romneya coulteri

Passifloraceae Passiflora spp.

Pinaceae Pinus pinea*

Plantaginaceae Plantago erecta Plantago major*

Platanaceae Platanus racemosa

Poaceae

Arundo donax* Avena barbata* Bromus carinatus Bromus diandrus* Bromus hordeaceus* Bromus madritensis* Bromus tectorum* Cynodon dactylon* Digitaria spp.* Ehrharta erecta* Elymus glaucus Eriochloa spp.* Hordeum murinum* Leymus condensatus Lolium perenne* Melica imperfecta Melica torreyana Nassella lepida Nassella pulchra Panicum spp.* Poa annua* Polypogon monspeliensis* Schismus barbatus* Vulpia myuros*

Polemoniaceae

Eriastrum sapphirinum Gilia angelensis



Common Name Coulter's matilija poppy

Passion-flower Family passion vine

Pine Family Italian stone pine

Plantain Family dwarf plantain common plantain

Sycamore Family western sycamore

Grass Family

giant reed slender wild oat California brome ripgut grass soft brome foxtail chess cheat grass Bermuda grass crabgrass panic veldtgrass blue wildrye hairy cupgrass barley giant rye grass perennial ryegrass imperfect mellic Torrey's melica foothill needlegrass purple needlegrass millet annual bluegrass annual beard grass Mediterranean schismus fescue

Phlox Family

sapphire eriastrum chaparral gilia

Polygonaceae Eriogonum fasciculatum Eriogonum gracile Polygonum arenastrum* Rumex crispus* Rumex salicifolius

Portulacaceae Claytonia parviflora Portulaca oleracea

Primulaceae Anagallis arvensis* Dodecatheon clevelandii

Pteridaceae Pellaea andromedifolia

Ranunculaceae Delphinium cardinale

Rhamnaceae Ceanothus crassifolius Ceanothus cuneatus Ceanothus megacarpus Ceanothus oliganthus Ceanothus spinosus Rhamnus ilicifolia

Rosaceae Adenostoma fasciculatum Cercocarpus betuloides Heteromeles arbutifolia Potentilla glandulosa Prunus ilicifolia Rosa californica Rubus discolor* Rubus ursinus

Rubiaceae Galium angustifolium Galium aparine



Common Name

Buckwheat Family

California buckwheat slender buckwheat knotweed curly dock willow dock

Purslane Family streambank springbeauty common purslane

Primrose Family scarlet pimpernel Padre's shootingstar

Brake Family coffee fern

Buttercup Family scarlet larkspur

Buckthorn Family hoaryleaf ceanothus wedgeleaf ceanothus big-pod ceanothus hairy ceanothus greenbark ceanothus

holly-leaf redberry

Rose Family

chamise California mountain mahogany toyon cinquefoil hollyleaf cherry California rose Himalayan blackberry California blackberry

Madder Family narrow-leaved bedstraw goose grass

Salicaceae Populus balsamifera trichocarpa Populus fremontii Salix exigua Salix gooddingii Salix laevigata Salix lasiolepis

Saururaceae Anemopsis californica

Scrophulariaceae

Keckiella cordifolia Mimulus aurantiacus Mimulus cardinalis Mimulus guttatus

Simaroubaceae Ailanthis altissima*

Solanaceae

Datura wrightii Nicotiana glauca* Solanum douglasii Solanum elaeagnifolium* Solanum xanti

Typhaceae *Typha domingensis Typha latifolia*

Ulmaceae Ulmus parvifolia*

Urticaceae Urtica dioica gracilis

Zygophyllaceae Tribulus terrestris*



Common Name

Willow Family

black cottonwood Fremont cottonwood narrow-leaved willow Goodding's black willow red willow arroyo willow

Lizard's-Tail Family yerba mansa

Figwort Family

beardstongue sticky monkeyflower scarlet monkeyflower seep monkeyflower

Quassia Family

tree of heaven

Nightshade Family jimson weed tree tobacco white nightshade white horse-nettle chaparral nightshade

Cattail Family

southern cattail broad-leaved cattail

Elm Family Chinese elm

Nettle Family American stinging nettle

Caltrop Family puncture vine

APPENDIX B ALTERNATIVE TREE CANOPY REPLACEMENT PROGRAM

As an alternative to the tree replacement ratios described above in *Section 4.0*, Forest Lawn may choose to implement a tree canopy replacement program. In adherence to the alternative tree canopy replacement program, Forest Lawn shall:

- a. Calculate the amount of tree canopy area being removed; and
- b. Provide an equivalent amount of replacement canopy area based on the tree sizes and canopies areas set forth in *Table 3* below. The replacement canopy may be provided by a mix of tree sizes, as long as the total square footage of canopy area of the replacement trees are the same as or greater than the total square footage of the canopy area of the trees being removed. The total area of impacted tree canopy is used as a target for the replacement container stock growth after 20 years.

30000	Height	Canopy Spread	Canopy Area
Stock Size	(feet)	(feet)	(square feet)
Southern California Black Waln	nut		
Seedlings	18	22	380
1 gallon	18	22	380
5 gallon	19	23	415
15 gallon	19	25	491
24-inch box	20	25	491
36-inch box	21	28	616
48-inch box	24	30	707
60-inch box	25	33	855

Table 3 – Container Stock Commercial Trees Canopy Cover (20 year growth projections for container
stock)

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