



March 9, 2011

Los Angeles County Department of Regional Planning

Attn: Regional Planning Commission
Hall of Records – 13th Floor
320 West Temple Street
Los Angeles, CA. 90012

Re: 2nd Letter – Proposed Santa Clarita Valley One Valley One Vision Proposed Land Use Designation Affecting Vesting Tentative Map 52796

Mr. Chairman and other members of the Regional Planning Commission,

On December 23, 2010 we submitted for your consideration a request to modify the land use currently shown within the proposed One Valley One Vision for the property known as VTTM 52796 – Wickham Canyon. The property consists of multiple parcels: APN's: 2826-020-019 thru 024 and 2926-020-030 thru 033.

In our request we described how for the past decade SRC West has been master planning the various private land holdings in the Stevenson Ranch and Pico Canyon areas, of which VTTM 52796 is an integral part of this master planning. All infrastructures to serve 52796 are stubbed to the property. VTTM 52796 provides regional benefit by completing major arterial highway improvements as shown on the circulation element of the General Plan and major storm drain improvements which help protect existing downstream neighborhoods.

Given that this property is in essence an infill property that completes a larger overall vision for the Stevenson Ranch and Pico Canyon areas we are perplexed as to why this property is being subjected to a ninety six (96) percent reduction in allowable density from that of the current General Plan. The adjacent Southern Oaks Community represents a density one hundred (100) times greater than that proposed under OVOV for VTTM 52796 and both properties were originally master planned at the same time.

In discussion with Mr. Mitch Glaser at the Department of Regional Planning, we were told that staff considered a number of factors when proposing all of the various land uses

within OVOV. Part of the thought process in the Steven Ranch and Pico Canyon areas is that some distance south and west of these areas is the Santa Clarita Woodland Park and some distance west is Mentryville. Topography always plays some role and, in addition, staff is recommending an expansion of the existing significant ecological area (SEA) which is south and east of VTTM 52796.

For these reasons VTTM 52796 was given a proposed land use designation of RL5 on a small portion of the northwest corner of the property and RL20 on the major balance of the property. This results in a reduction in maximum allowable density of 269 dwelling units to 11 dwelling units. Other properties adjacent to the Santa Clarita Woodlands Park and encumbered with the proposed SEA expansion have been given H2 and H5 land use designations.

Topographically VTTM 52796 is similar to the rest of the existing developed areas in the Stevenson Ranch and Pico Canyon Areas. The vesting tentative tract map which is actively being processed not only protects the hillsides and ridgelines; it also protects the valley floor by locating homes onto the mid level areas of the property.

The only portion of VTTM 52796 which borders with the Santa Clarita Woodlands Park is along the projects westerly border. In this area VTTM 52796 its neighbor by providing an additional quarter mile wide buffer or proposed open space. The proposed developed areas of VTTM 52796 are naturally separate from the Santa Clarita Woodlands Park by being on the other side of the ridgeline from the park and then significantly setting back from that ridgeline.

Under the current General Plan the Lyon Canyon SEA is east by southeast of VTTM 52796. The nearest portion of the Lyon Canyon SEA is approximately two thirds of a mile away and separated by a ridgeline. These two areas are in completely different watershed areas with the existing SEA draining to the Lyons Canyon watershed area and VTTM 52796 draining to the already developed Pico Canyon watershed area.

Under OVOV the proposed SEA designation is being significantly increased in size and is now extending over watershed boundaries and ridgelines that were previously respected as natural barriers and borders. We realize that staff does not have the budget or resources to definitively study every individual property ownership within the OVO boundary relative to biological and ecological constraints. To that end we realize that there is are degrees of subjectivity and guess work that staff uses to propose new areas.

From our perspective good information helps facilitate good decision making. A wealth of site specific professional evaluation and analysis regarding VTTM 52796 has been acquired and has been available in the project files at Regional Planning since the early 2000's. These studies and analyses encompass an extensive range of topics such as:

- Biological Inventory
- Wetlands Delineation Report
- Oak Tree Report
- Paleontological Resources Assessment Report
- Cultural Resources

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Additional analysis and investigation has been performed for such topics as geotechnical, drainage and traffic. These topics are outside of the purview of SEA significance, but do have a direct bearing on showing that VTTM 52796 is in essence an infill property. We are surprised that this available data appears to have not had the relevance it deserved when staff recommended the new SEA boundaries. If it had been then staff most likely would have understood both the development proposal for VTTM 52796 and its environmental justification based on the level of resource analysis already provided.

Attached to this letter we have compiled copies of the reports that we believe will support our belief that the areas of VTTM 52796 proposed for development are justified in not being included in the proposed SEA boundary expansion. This is an important point to us because the two major concerns that staff had (proximity to existing open space and part of the SEA proposed expansion) do not apply to VTTM 52796. These two concerns affected staff's subjective decision to propose dropping the proposed OVOV land use to the lowest density allowable of RL20. It appears to us that given the level of study that is available through the active entitlement request for VTTM 52796 a proposed OVOV land use of at least H2 in our northeast one hundred and ten acres and RL5 for the balance of the property is justified.

Sincerely,
SRC West, Inc.



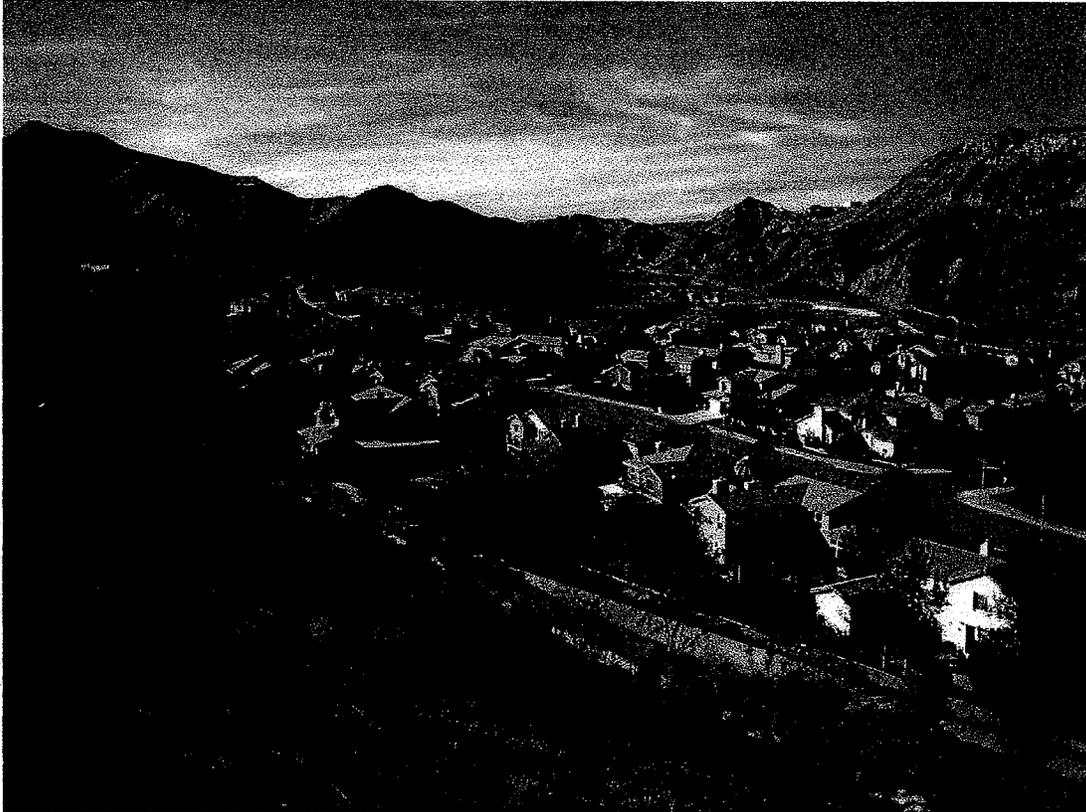
Ron Druschen
President

w/ Encl.

Email Cc: Mr. Richard Bruckner – LA County Dept. of Regional Planning
Mr. Mitch Glaser – LA County Dept. of Regional Planning
Mr. Nick Eftekhari – Oakridge Homes

VTTM 52796 – Wickham Canyon

Resource Analysis Reports



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THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY



PH.D. THESIS

Table of Contents

1. Biological Inventory

- Wickham Property Botanical Inventory Report 2005 – Envicom
- Initial Study Wildlife Assessment for Aidlin Property Tentative Tract 52796 – May 31, 2000 – Robert A. Hamilton
- Focuses Surveys for the Coastal California Gnatcatcher – September 10, 2003 – BioResource Consultants
- Focused Surveys for the California Gnatcatcher – May 7, 2002 – BioResource Consultants
- Focused Surveys for the Coastal California Gnatcatcher – July 15, 1999 – Jim Jennings

2. Wetlands Delineation Report – June 9, 2000 – Envicom

3. Oak Tree Report – Benshoof, Withers and Sandgren, Ltd.

4. Paleontological Resources Assessment Report – June, 2001 RMW Paleo Associates

5. Cultural Resources

- Cultural Resources Reconnaissance and Evaluation – May, 2000 – RMW Paleo Associates
- The Larinan Apiary Historic Resources Technical Report – May 12, 1999 – RMW Paleo Associates

Chapter 10

The first part of the chapter discusses the importance of understanding the underlying structure of the data. This is particularly true for time series data, where the temporal dependence between observations is a key feature. The second part of the chapter focuses on the estimation of the parameters of the model, and the third part discusses the prediction of future observations.

The chapter also covers the issue of model selection, which is a crucial step in the analysis of time series data. The final part of the chapter discusses the application of the theory to real-world data sets, and the importance of checking the assumptions of the model.

The chapter concludes with a summary of the key points and a list of references. The references include several books and articles on time series analysis, and the chapter is intended to provide a comprehensive overview of the subject.

SECTION 1

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WICKHAM PROPERTY BOTANICAL INVENTORY 2005

Prepared for:

HUMMER CONSTRUCTION
25876 The Old Ranch Road, #232
Stevenson Ranch, CA 91381
Attn: Mr. Nick Eftekhari

Prepared by:

Envicom Corporation
28328 Agoura Road
Agoura Hills, CA 91301
Contact: Mr. Primo Tapia

November, 2005

INTRODUCTION

This report presents the results of a 2005 botanical inventory of the Wickham project site, in Pico Canyon area of the Santa Susana Mountains of unincorporated Los Angeles County. The site has been surveyed extensively over recent years, particularly by Ms. Verna Jigour (1999, 2000, 2001, 2003), occasionally accompanied by the present investigator, and separately. Ms. Jigour surveyed the site most recently in late May, 2003, however, because the site was entirely involved in the extensive fire in these mountains in November 2003, a post-fire survey was warranted.

The project site occupies an area on the north slope of the Santa Susana Mountains, in the Pico Canyon drainage. An intermittent stream traverses the site that is tributary to Pico Canyon, and subsequently to the South Fork of the Santa Clara River. Also, a portion of Pico Canyon Creek crosses the northeast quadrant of the site. The map location occurs on both the Newhall and Oat Mountain USGS quadrangles, within Township 3N, Range 16W, Section 6. The site is generally northeast of the placename Sand Rock Peak shown on Figure 1. Elevations on the site range from approximately 1,400 to 2,200 feet msl.

METHODS

Mr. Carl Wishner, Principal Biologist of Envicom Corporation, conducted the surveys on foot, on May 17 and July 8, 2005. During the course of the survey, all major canyons and ridgelines were traversed, and all species, subspecies and varieties of vascular plants were recorded and compiled on a list, presented herein as Table 1. Records from previous years are not included in the present compilation.

The California Natural Diversity Database was also queried using the application Rarefind 3. An assessment of the potential for the occurrence of additional sensitive species that were not observed, but that are known to occur in the Santa Susana Mountains and surrounding ranges is provided in Appendix 1.

RESULTS

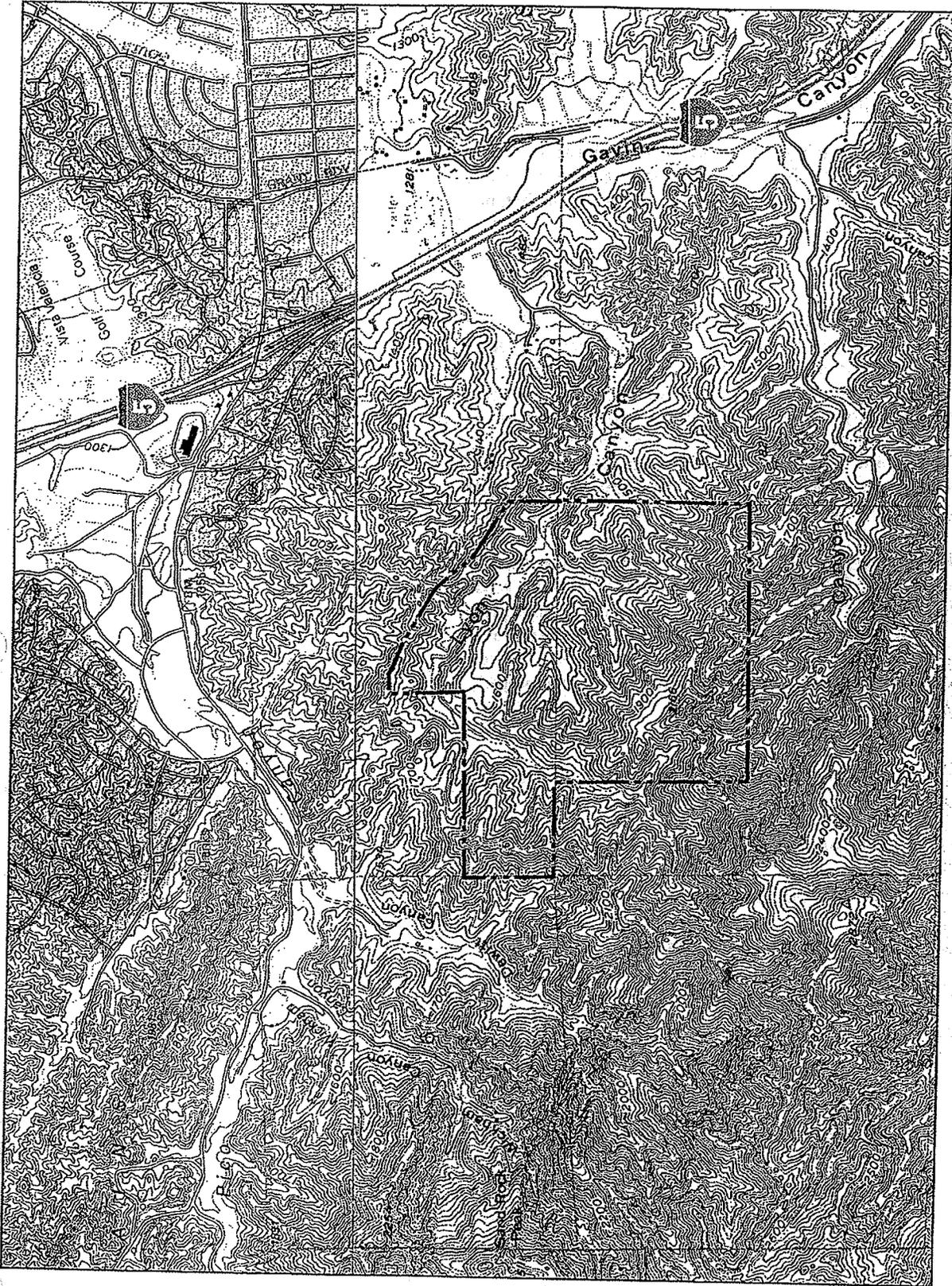
During the course of the surveys, a total of 169 vascular plant taxa were observed. This included two native ferns, 145 dicot flowering plants (22 alien), and 22 monocot flowering plants (13 alien). The complete compilation is presented in Table 1.

The composition of the flora of the site is primarily native species, with approximately 21 percent of alien species. The largest families represented are sunflowers (Asteraceae), peas (Fabaceae), figworts (Scrophulariaceae), and grasses (Poaceae). Most of the grasses are alien, whereas, most of the other largest families are comprised of native species. The overall botanical diversity of the site is judged to be moderately high, representing perhaps as much as 1/4 of the entire flora of these mountains.

Sensitive species, as enumerated by the California Department of Fish and Game's listing of Special Vascular Plants (July 2005), are present on the site as follows:

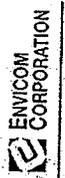
Slender mariposa lily (*Calochortus clavatus* ssp. *gracilis*) CNPS List 1B. The locations of occurrences of this species were mapped extensively by Verna Jigour in years prior to the fire. Several additional locations were noted during recent surveys.

Plummer's mariposa lily (*Calochortus plummerae*) CNPS List 1B. This species was not reported on the site previous to the fire. Two locations were noted in the recent survey, along a ridgeline at the southern boundary of the property. The species is evidently restricted to rocky habitats that are not prevalent except at these locations on the property, and they do not occur in areas that support slender mariposa lily.



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Project Location Map

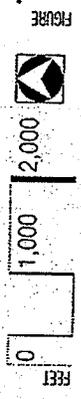


FIGURE 1

California walnut (*Juglans californica*) CNPS List 4. These walnuts were burned completely to the ground during the fire. However, they quickly recover from the basal crowns, and are presently found at the same locations as they have been previously mapped by Verna Jigour. They are generally located on slopes along Wickham Canyon in the southern quadrant of the property.

Peirson's morning glory (*Calystegia peirsonii*) CNPS List 4. These plants were mapped previous to the fire by Verna Jigour. Following the fire, they are common and abundant throughout the site. It is of interest that not all morning glories found on the site are Peirson's. Some are, in fact, purple morning glory (*C. purpurata purpurata*), discussed below.

Other noteworthy, however non-sensitive plants observed include:

Purple morning-glory (*Calystegia purpurata* ssp. *purpurata*). Despite the common and scientific name, this plant is *not* purple. This climbing perennial occurs widely in chaparral and coastal scrub below 300m elevation from the North Coast of California and Central Valley southward through the western Transverse and northern South Coastal ranges. In the local region, its occurrence has generally been overlooked, perhaps because of its gross similarity to chaparral morning glory (*Calystegia macrostegia* spp.). It was only recently discovered in the Santa Monica Mountains. Its occurrence here is previously unreported. It is easily distinguished from Peirson's morning glory by the color and shape of the leaves, and from chaparral morning glory by the position and shape of the bracts subtending the flowers. Voucher specimens have been collected by Mr. Wishner. A few occurrences were noted along the banks of Wickham Canyon Creek, in the central-eastern portion of the property.

Dyed clover (*Trifolium fucatum*). This annual is widespread in many habitats from Oregon through the North Coast and Cascade ranges of California, to the South Coast and Channel Islands. At the local level, it is reported only from historic collections in the Santa Monica Mountains (Munz 1935), and few other collections. Its occurrence here indicates that it may be more common in the region than previously thought. No voucher specimens were collected due to the poor condition of the material observed. It is distinguished in the field by its relatively large yellow flowers that conspicuously inflated in fruit. On the property, it was observed only on a ridgeline in the northwest quadrant.

Analysis of the potential for additional sensitive species to occur, but were not seen, as presented in Appendix 2 gave the following result:

Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) [Status: CNPS 2] Absent.

Malibu baccharis (*Baccharis malibuensis*) [CNPS 1B] Absent.

Greata's Aster (*Aster greatae*) [CNPS 1B] Absent.

Lyon's Pentachaeta (*Pentachaeta lyonii*) (FE, CE] Absent.

Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*) [CNPS 1A] Absent.

Santa Susana tarplant (*Deinandra minthornii*) [CR, CNPS 1B] Absent.

Rayless ragwort (*Senecio aphanactis*) [CNPS 2] Probably absent.

- Southern tarplant (*Centromadia parryi* ssp. *australis*) [CNPS 1B] Absent.
- Nevin's barberry (*Berberis nevini*) [FE, CE] Absent.
- Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) [CNPS 1B] Absent.
- Coulter's saltbush (*Atriplex coulteri*) [CNPS 1B] Absent.
- Blochman's Dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*) [CNPS 1B] Absent.
- Many-stemmed Dudleya (*Dudleya multicaulis*) [CNPS 1B] Absent.
- Marcescent Dudleya (*Dudleya cymosa* ssp. *marcescens*) [FT, CNPS 1B] Absent.
- Agoura Hills Dudleya (*Dudleya cymosa* ssp. *agourensis*) [FT, CNPS 1B] Absent.
- Santa Monica Mountains Dudleya (*Dudleya cymosa* ssp. *ovatifolia*) [FT, CNPS 1B] Absent.
- Conejo dudleya (*Dudleya parva*) [FT] Absent.
- Braunton's milkvetch (*Astragalus brauntonii*) [FE/CNPS 1B] Probably absent.
- Round-leaved filaree (*California macrophylla* \Leftarrow *Erodium macrophyllum*) [CNPS 2] Probably absent.
- Davidson's bush mallow (*Malacothamnus davidsonii*) [CNPS 1B] Absent.
- Salt spring checkerbloom (*Sidalcea neomexicana*) [CNPS 2] Absent.
- Spreading Navarretia (*Navarretia fossalis*) [FT, CNPS 1B] Absent.
- Conejo buckwheat (*Eriogonum crocatum*) [CR] Absent.
- Slender-horned spineflower (*Dodecahema leptoceras*) [FE, CE, CNPS 1B] Absent.
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) [CNPS 3] Probably absent.
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) [FC, CE, CNPS 1B] Probably absent.
- Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) [CNPS 1B] Probably absent.
- San Gabriel bedstraw (*Galium grande*) [CNPS 1B] Absent.
- Chaparral Nolina (*Nolina cismontana*) [CNPS 1B] Absent.
- California Orcutt grass (*Orcuttia californica*) [FE, CE] Absent.

Table 1
Vascular Plants Observed at Wickham Property, 2005

GROUP Family	Scientific Name	Common Name
FERNS AND ALLIES		
Pteridaceae		
	<i>Adiantum jordanii</i>	maiden-hair fern
	<i>Pellaea andromedifolia</i>	coffee fern
FLOWERING PLANTS-DICOTS		
Anacardiaceae		
	<i>Rhus ovata</i>	sugar bush
	<i>Rhus trilobata pilosissima</i>	squaw bush
	<i>Toxicodendron diversilobum</i>	poison-oak
Apiaceae		
	<i>Apiastrum angustifolium</i>	wild-celery
	<i>Sanicula crassicaulis</i>	Pacific sanicle
Apocynaceae		
	<i>Vinca major</i>	greater periwinkle
Asclepiadaceae		
	<i>Asclepias fascicularis</i>	narrow-leaf milkweed
Asteraceae		
	<i>Acourtia microcephala</i>	sacapellote
	<i>Ambrosia acanthicarpa</i>	sand-bur
	<i>Ambrosia psilostachya</i>	western ragweed
	<i>Artemisia californica</i>	California sagebrush
	<i>Artemisia douglasiana</i>	mugwort
	<i>Baccharis pilularis consanguinea</i>	coyote brush
	<i>Baccharis salicifolia</i>	mulefat
	<i>Brickellia californica</i>	California brickellbush
	<i>Brickellia nevinii</i>	Nevin's brickellbush
	<i>Centauria melitensis</i>	toçalote
	<i>Chaenactis artemisiifolia</i>	white pincushion
	<i>Chamomilla suaveolens</i>	pineapple weed
	<i>Cirsium californicum</i>	California thistle
	<i>Cirsium vulgare</i>	bull thistle
	<i>Conyza bonariensis</i>	Buenos Aires horseweed
	<i>Conyza canadensis</i>	horseweed
	<i>Corethrogyne filaginifolia filaginifolia</i>	California-aster
	<i>Deinandra fasciculata</i>	fascicled tarweed
	<i>Ericameria palmeri pachylepis</i>	Palmer's goldenbush
	<i>Erigeron foliosus stenophyllus</i>	fleabane-aster
	<i>Eriophyllum confertiflorum confertiflorum</i>	golden-yarrow
	<i>Filago gallica</i>	French filago
	<i>Gnaphalium californicum</i>	California everlasting
	<i>Helianthus gracilentus</i>	slender sunflower

GROUP Family	Scientific Name	Common Name
	<i>Heterotheca grandiflora</i>	telegraph weed
	<i>Isocoma menziesii vernonioides</i>	coastal isocoma
	<i>Lactuca serriola</i>	prickly lettuce
	<i>Madia gracile</i>	slender tarweed
	<i>Malacothrix saxatilis</i> --	cliff-aster
	<i>Micropus californicus</i>	California cottonweed
	<i>Rafinesquia californica</i>	California chicory
	<i>Senecio flaccidus douglasii</i>	bush senecio
	<i>Senecio vulgaris</i>	common groundsel
	<i>Silybum marianum</i>	milk thistle
	<i>Sonchus oleraceus</i>	common sow-thistle
	<i>Stephanomeria exigua</i>	chicory
	<i>Stephanomeria virgata</i>	wand chicory
	<i>Uropappus lindleyi</i>	silver-puffs
Brassicaceae		
	<i>Brassica nigra</i>	black mustard
	<i>Capsella bursa-pastoris</i>	shepherd's-purse
	<i>Hirschfeldia incana</i>	hoary mustard
	<i>Sisymbrium irio</i>	London rocket
	<i>Sisymbrium orientale</i>	Oriental mustard
Boraginaceae		
	<i>Amsinckia menziesii intermedia</i>	rancher's fireweed
	<i>Cryptantha clevelandii</i>	Cleveland's popcorn flower
	<i>Cryptantha intermedia</i>	intermediate popcorn flower
	<i>Cryptantha microstachys</i>	small-spiked popcorn flower
	<i>Cryptantha muricata</i>	muricate popcorn flower
	<i>Plagiobothrys nothofulvus</i>	valley popcorn flower
Caprifoliaceae		
	<i>Sambucus mexicana</i>	Mexican elderberry
Caryophyllaceae		
	<i>Stellaria media</i>	common chickweed
Chenopodiaceae		
	<i>Chenopodium berlandieri</i>	pitseed goosefoot
	<i>Chenopodium californicum</i>	soapplant
Convolvulaceae		
	<i>Calystegia peirsonii</i>	Peirson's morning-glow
	<i>Calystegia purpurata purpurata</i>	--
Cucurbitaceae		
	<i>Marah macrocarpus</i>	wild cucumber
Euphorbiaceae		
	<i>Chamaesyce albomarginata</i>	rattlesnake weed
	<i>Croton setigerus</i>	doveweed

GROUP	Family	Scientific Name	Common Name
	Fabaceae		
		<i>Astragalus trichopodus phoxus</i>	locoweed
		<i>Lathyrus vestitus</i>	chaparral pea
		<i>Lotus purshianus</i>	Pursh's lotus
		<i>Lotus salsuginosus</i>	succulent lotus
		<i>Lotus scoparius scoparius</i>	deerweed
		<i>Lotus strigosus</i>	strigose lotus
		<i>Lupinus bicolor</i>	miniature lupine
		<i>Lupinus hirsutissimus</i>	stinging lupine
		<i>Lupinus succulentus</i>	arroyo lupine
		<i>Lupinus sparsiflorus</i>	few-flowered lupine
		<i>Medicago polymorpha</i>	bur-clover
		<i>Melilotus indicus</i>	yellow sweet-clover
		<i>Trifolium fucatum</i>	-
		<i>Trifolium gracilentum</i>	slender clover
		<i>Trifolium hirtum</i>	rose clover
		<i>Trifolium willdenovii</i>	tomcat clover
	Fagaceae		
		<i>Quercus agrifolia agrifolia</i>	coast live oak
	Geraniaceae		
		<i>Erodium cicutarium</i>	red-stem filaree
	Hydrophyllaceae		
		<i>Emmenanthe penduliflora</i>	whispering-bells
		<i>Eriodictyon crassifolium</i>	thick-leaf yerba santa
		<i>Eucrypta chrysanthemifolia</i>	common eucrypta
		<i>chrysanthemifolia</i>	
		<i>Phacelia cicutaria</i>	caterpillar phacelia
		<i>Phacelia distans</i>	wild heliotrope
		<i>Phacelia ramosissima suffrutescens</i>	branching phacelia
		<i>Phacelia viscida</i>	sticky phacelia
	Juglandaceae		
		<i>Juglans californica</i>	California walnut
	Lamiaceae		
		<i>Marrubium vulgare</i>	horehound
		<i>Salvia apiana</i>	white sage
		<i>Salvia columbariae</i>	chia
		<i>Salvia mellifera</i>	black sage
		<i>Trichostema lanata</i>	woolly blue-curls
		<i>Trichostema lanceolata</i>	vinegar weed
	Loasaceae		

GROUP	Family	Scientific Name	Common Name
		<i>Mentzelia micrantha</i>	stickleaf
	Malvaceae		
		<i>Malacothamnus fasciculatus</i>	bush mallow
		<i>Malva parviflora</i>	cheeseweed
	Nyctaginaceae		
		<i>Mirabilis laevis crassifolius</i>	wishbone bush
	Oleaceae		
		<i>Fraxinus dipetala</i>	chaparral flowering ash
	Onagraceae		
		<i>Camissonia boothii decorticans</i>	shredding evening-primrose
		<i>Camissonia californica</i>	mustard evening-primrose
		<i>Camissonia intermedia/micrantha?</i>	small-flowered evening-primrose
		<i>Clarkia bottae</i>	deflexed clarkia
		<i>Clarkia purpurea quadrivulnera</i>	four-spotted godetia
		<i>Clarkia unguiculata</i>	elegant clarkia
		<i>Epilobium canum</i>	hoary California-Fuchsia
	Paeoniaceae		
		<i>Paeonia californica</i>	California peony
	Papaveraceae		
		<i>Dendromecon rigidus</i>	bush poppy
		<i>Eschscholzia californica</i>	California poppy
	Plantaginaceae		
		<i>Plantago lanceolata</i>	English plantain
	Polemoniaceae		
		<i>Allophyllum glutinosum</i>	skunk gilia
		<i>Gilia capitata abrotanifolia</i>	globe gilia
	Polygonaceae		
		<i>Chorizanthe staticoides</i>	Turkish-rugging
		<i>Eriogonum elongatum</i>	wand buckwheat
		<i>Eriogonum fasciculatum foliolosum</i>	California buckwheat
		<i>Pterostegia drymarioides</i>	thread-stem
	Portulacaceae		
		<i>Calandrinia ciliata menziesii</i>	red maids
		<i>Claytonia perfoliata perfoliata</i>	miner's-lettuce
	Ranunculaceae		
		<i>Clematis ligusticifolia</i>	virgin's-bower
		<i>Delphinium parryi parryi</i>	Parry's delphinium
	Rhamnaceae		
		<i>Ceanothus crassifolius</i>	hoary-leaf ceanothus
		<i>Rhamnus ilicifolia</i>	holly-leaf redberry
	Rosaceae		
		<i>Adenostoma fasciculatum</i>	chamise
		<i>Heteromeles arbutifolia</i>	toyon

GROUP Family	Scientific Name	Common Name
Rubiaceae		
	<i>Galium angustifolium angustifolium</i>	narrow-leaf bedstraw
	<i>Galium aparine</i>	annual bedstraw
	<i>Galium nuttallii</i>	climbing bedstraw
Salicaceae		
	<i>Salix exigua</i>	narrow-leaf willow
	<i>Salix laevigata</i>	red willow
	<i>Salix lasiolepis</i>	arroyo willow
Scrophulariaceae		
	<i>Antirrhinum coulterianum</i>	Coulter's snapdragon
	<i>Antirrhinum multiflorum</i>	many-flowered snapdragon
	<i>Castilleja affinis</i>	Indian paintbrush
	<i>Castilleja exserta</i>	red owl's-clover
	<i>Collinsia heterophylla</i>	Chinese-houses
	<i>Cordylanthus rigidus setigerus</i>	bird's-beak
	<i>Keckiella cordifolia</i>	heart-leaf penstemon
	<i>Mimulus aurantiacus</i>	orange bush monkeyflower
	<i>Mimulus cardinalis</i>	cardinal monkeyflower
Solanaceae		
	<i>Nicotiana glauca</i>	tree tobacco
	<i>Solanum xanti</i>	chaparral nightshade
Verbenaceae		
	<i>Verbena lasiostachys scabrida</i>	western verbena
FLOWERING PLANTS-MONOCOTS		
Liliaceae		
	<i>Bloomeria crocea</i>	golden-stars
	<i>Calochortus clavatus gracilis</i>	slender mariposa lily
	<i>Chlorogalum pomeridianum pomeridianum</i>	wavy-leaf soapplant
	<i>Dichelostemma capitata capitata</i>	blue dicks
	<i>Yucca whipplei intermedia</i>	Whipple's yucca
Poaceae		
	<i>Arundo donax</i>	giant reed
	<i>Avena barbata</i>	slender wild oat
	<i>Bromus diandrus</i>	ripgut grass
	<i>Bromus hordeaceus</i>	soft-chess
	<i>Bromus madritensis rubens</i>	red brome
	<i>Bromus tectorum</i>	cheat grass
	<i>Cynodon dactylon</i>	Bermuda grass
	<i>Gastridium ventricosum</i>	nit grass
	<i>Elymus glaucus glaucus</i>	blue wildrye
	<i>Hordeum murinum</i>	foxtail barley
	<i>Leymus condensatus</i>	giant wildrye
	<i>Lolium multiflorum</i>	Italian ryegrass

GROUP	
Family	
<i>Scientific Name</i>	Common Name
<i>Melica imperfecta</i>	coast melic
<i>Nassella lepida</i>	foothill needlegrass
<i>Phalaris aquatica</i>	Harding grass
<i>Schismus barbatus</i>	Mediterranean grass
<i>Vulpia myuros</i>	rattail fescue

Appendix 1

**Special Plants of the Santa Susana Mountains and Surrounding Region,
and Assessment of Potential to Occur at Wickham Parcel**

An evaluation of the potential for occurrence of sensitive species on the property was undertaken through research of the California Department of Fish and Game's Natural Diversity Data Base (CDFG 2005), using the Rarefind application for sensitive "elements" on the Newhall quadrangle, and eight others that surround it, namely, Whitaker Peak, Warm Springs Mountain, Green Valley, Mint Canyon, San Fernando, Val Verde, Santa Susana, and Oat Mountain. A number of elements not reported on these quadrangles are also anticipated to occur in the region and vicinity of the property, and these have been included in this analysis as well. All species considered are included on the list of Special Vascular Plants, Bryophytes and Lichens (CDFG 2005a).

Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) [CNPS 2] Meadows and seeps. Along streams, seepage areas. 50-550m. Nearest reported location: Santa Monica Mountains -- Encinal Canyon (two locations); Rustic Canyon (Carl Wishner, personal observation). **Absent.**

Malibu baccharis (*Baccharis malibuensis*) [CNPS 1B] Coastal scrub, cismontane woodland. In Conejo volcanic substrates, often in exposed roadcuts. Sometimes occupies oak woodland habitat. 150-260m. Nearest reported location: Santa Monica Mountains -- Malibu Creek, Salvation Army Camp; Soka University Campus; Stokes Canyon; north of Monte Nido; vic. Malibu Lake. **Absent.**

Greata's Aster (*Aster greatae*) [CNPS 1B] Chaparral, cismontane woodland, mesic canyons. 800-1500m. Nearest locations: San Gabriel Mountains -- Pacoima Canyon; Liebre Mountains -- Cienega Campground; Topatopa Mountains -- Hopper Mountain (CDFG 2005).

Lyon's Pentachaeta (*Pentachaeta lyonii*) (FE, CE) Chaparral, valley and foothill grassland. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges or firebreaks. 30-630m. Nearest reported locations: Stunt Ranch, Cold Creek Preserve (extirpated, Carl Wishner personal observation); Malibu Creek State Park; Saddle Rock Ranch; Westlake Blvd (south [several locations]); upper Carlisle Canyon; Eagle's Nest (Frank Lloyd Wright homesite); Rocky Oaks NPS unit; Simi Hills--Reagan library; SR 23 at Tierra Rejada Rd (Carlsberg development, and Clover Cast development); ese of SR 23 and New Los Angeles Ave. **Absent.**

Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*) [CNPS 1A] Marshes and swamps (coastal and freshwater). Historical from southern California. 5-1675m. Nearest reported location: Santa Clara River (CDFG 2005): **Absent.**

Santa Susana tarplant (*Deinandra minthornii*) [CR, CNPS 1B] Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760m. Nearest reported location: Santa Monica Mountains--Calabasas Peak; SW of Cornell Rd, NW of Latigo Canyon; Castro Crest (upper Corral Canyon); Santa Susana Mountains, south slopes (several locations) (CDFG 2005). **Absent.**

Rayless ragwort (*Senecio aphanactis*) [CNPS 2] Cismontane woodland, coastal scrub. Drying alkaline flats. 20-575m. Nearest reported location: Saugus (CDFG 2005); Montclef Ridge, Thousand Oaks (Wishner & Burgess, personal obs 2004). **Probably absent.**

Southern tarplant (*Centromadia parryi* ssp. *australis*) [CNPS 1B] Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast; also in alkaline soils, sometimes with saltgrass; also vernal pools. 0-425m. Nearest location: Santa Monica; Thousand Oaks. **Absent.**

- Nevin's barberry (*Berberis nevinii*) [FE, CE] Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, north-facing slopes or in low grade sandy washes. 290-1575m. Nearest reported location: San Francisquito Canyon, near confluence with Santa Clara River (CDFG 2005). Absent.
- Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) [CNPS 1B] Chaparral, Joshua tree woodland, Mohavean Desert scrub, Pinyon Juniper woodland, riparian woodland. Sandy soil or coarse, granitic loam. 425-1800m. Nearest reported location: Orofino and Quigley Canyons; Mint Canyon (CDFG 2005). Absent.
- Coulter's saltbush (*Atriplex coulteri*) [CNPS 1B] Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. 10-440m. Nearest reported locations: Point Dume; Malibu Bluffs (Carl Wishner, personal observation). Absent.
- Peirson's morning glory (*Calystegia peirsonii*) [CNPS 4] No records in database (CDFG 2005). Present.
- Blochman's Dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*) [CNPS 1B] Coastal scrub, coastal bluff scrub, valley and foothill grassland. Open rocky slopes, often in shallow clays over serpentine or in rocky areas with little soil. 5-450m. Nearest location: Near the Chatsworth Reservoir, western San Fernando Valley (CDFG 2005); Santa Monica Mountains, Mouth of Winter Canyon, Malibu Beach (extirpated, Carl Wishner, personal observation); Point Dume. Absent.
- Many-stemmed Dudleya (*Dudleya multicaulis*) [CNPS 1B] Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clay soils or grassy slopes. 0-790m. Nearest location: Chatsworth Reservoir, western San Fernando Valley, on rocky outcrop. Absent.
- Marcescent Dudleya (*Dudleya cymosa* ssp. *marcescens*) [FT, CNPS 1B] Chaparral. On sheer rock surfaces and rocky volcanic cliffs. 180-520m. Nearest reported location: Malibu Creek, Salvation Army Camp; Udell Gorge and Rock Pool, Malibu Creek State Park; Seminole Hot Springs. Absent.
- Agoura Hills Dudleya (*Dudleya cymosa* ssp. *agourensis*) [FT, CNPS 1B] Chaparral, cismontane woodland. Rocky volcanic breccia. 200-500m. Nearest reported location: Triunfo Canyon; Lake Eleanor (several locations); Westlake Village (Las Virgenes Reservoir vicinity); Decker Canyon Rd at Potrero Rd; Cornell Way and Ladyface Mountain, and Agoura Rd at Reyes Adobe Rd (Wishner, personal observation). Absent.
- Santa Monica Mountains Dudleya (*Dudleya cymosa* ssp. *ovatifolia*) [FT, CNPS 1B] Chaparral. In canyons on sedimentary conglomerates, primarily north-facing slopes. 210-500m. Nearest reported location: Malibu Canyon, 1.9mi north of PCH. Absent.
- Conejo dudleya (*Dudleya parva*) [FT] Coastal scrub, valley and foothill woodland. In clayey or volcanic soil on rocky slopes and grassy hillsides. 60-450m. Nearest reported locations: Simi Hills—Norwegian Grade; Montclef Ridge. Absent.
- Braunton's milkvetch (*Astragalus brauntonii*) [FE/CNPS 1B] Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas, in stiff gravelly clay soils overlying granite or limestone. 4-640m. Nearest reported location: Simi Hills—Palo Comado Canyon; ridge between upper Cheeseboro and Las Virgenes Canyons; Dayton Canyon; Silvernale Ranch [Burro Flats]; Laskey Mesa; ridge between Bus Canyon and Runkel Canyon; Oak Park (several locations); Lang Ranch (2 locations); Santa Monica Mountains—Topanga Canyon; Los Lions Canyon; Trailer Canyon; Temescal Canyon; Temescal Ridge; Malibu

Lagoon, in gravel by creek; north of Sunset Blvd, vic. Will Rogers SP.; Zuma Ridge; Zuma Canyon. Probably absent.

Round-leaved filaree (*California macrophylla* \leftarrow *Erodium macrophyllum*) [CNPS 2] Cismontane woodland, valley and foothill grassland. Clay soils, 15-1200m. Nearest location: Malibu Creek State Park; Simi Hills—vicinity of Reagan Library; south of Cal Lutheran College (Carl Wishner and Rick Burgess, personal observation). Probably absent.

California walnut (*Juglans californica*) [CNPS 4] No records in database, except for habitats (CDFG 2005). Present.

Davidson's bush mallow (*Malacothamnus davidsonii*) [CNPS 1B] Coastal scrub, riparian woodland, chaparral. Sandy washes. 180-885m. Nearest locations: Santa Susana Mountains - Limekiln Canyon; San Gabriel Mountains - Lopez Canyon; San Fernando. Absent.

Salt spring checkerbloom (*Sidalcea neomexicana*) [CNPS 2] Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 0-1500m. Absent.

Spreading Navarretia (*Navarretia fossalis*) [FT, CNPS 1B] Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools. 30-1300m. Absent.

Conejo buckwheat (*Eriogonum crocatum*) [CR] Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops, rocky sites. 50-580m. Nearest reported locations: Lake Eleanor; Lake Sherwood, ridge to southwest (Carl Wishner, personal observation). Absent.

Slender-horned spineflower (*Dodecahema leptoceras*) [FE, CE, CNPS 1B] Chaparral, coastal scrub (Alluvial fan sage scrub). Flood-deposited terraces and washes; associatiates include *Encelia*, *Dalea*, *Lepidospartum*, etc. 200-760m. Nearest reported location: Newhall (1893 collection by Davidson); Mint Canyon; Pacoima Canyon Wash (CDFG 2005). Absent.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) [CNPS 3] Coastal scrub, chaparral. Dry slopes and flats, sometimes at interface of two vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 40-1705m. Nearest reported location: Mouth of Latigo Canyon. Probably absent.

San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) [FC, CE, CNPS 1B] Coastal scrub. Sandy soils. 3-1035m. Nearest reported location: Simi Hills—Ahmanson Ranch, south side of Laskey Mesa; Airport Mesa, Newhall Ranch; Magic Mountain Amusement Park; Chatsworth Park; Valencia Commerce Center site; near Castaic (CDFG 2005). Probably absent.

Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) [CNPS 1B] Chaparral, coastal dunes (maritime). On rocky areas and dunes. 30-375m. Nearest location: Lake Eleanor ridge. Probably absent.

San Gabriel bedstraw (*Galium grande*) [CNPS 1B] Cismontane woodland, chaparral, broadleaved upland forest, lower montane coniferous forest. Open chaparral, and low, open oak forest, on rocky slopes, probably undercollected due to inaccessible habitat. 425-1200m. Nearest location: Liebre Mountains—south of Elizabeth Lake Guard Station. Absent.

Chaparral Nolina (*Nolina cismontana*) [CNPS 1B] Chaparral, coastal scrub. Primarily on sandstone and shale substrates, also known from gabbro. 140-1275m. Nearest reported location: Simi Hills—Palo Comado Canyon; North Ranch; Oak Park. Absent.

Slender mariposa lily (*Calochortus clavatus* var. *gracilis*) [CNPS 1B] Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m. Nearest reported location: Santa Susana Mountains-- Mouth of Pico Canyon; I5/SR14 junction; Sunshine Canyon; Deerlake Highlands (Carl Wishner, personal observation) (CDFG 2005). Present.

Plummer's mariposa lily (*Calochortus plummerae*) [CNPS 1B] Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rock and sandy sites, usually granitic or alluvial material. Can be very common after fire. 90-1610m. Nearest reported location: Santa Monica Mountains—Stokes Canyon; Mulholland Dr at Encino Hills Dr?; Topanga Canyon; Mandeville Canyon; Mulholland Hwy, 1.2 mi east of Kanan-Dume Rd.; Vicinity Lake Sherwood; Decker Canyon Rd/Los Alisos Canyon; Simi Hills—Ahmanson Ranch, south of Bell Canyon, along trail on top of ridge; Wood Ranch Reservoir; Santa Susana Pass and hills north of Chatsworth; Santa Susana Mountains—Simi Valley landfill; Newhall (CDFG 2005). Present.

California Orcutt grass (*Orcuttia californica*) [FE, CE] Vernal pools. 15-660m. Nearest reported location: Liebre Mountains - Cruzan Mesa; Simi Hills -- NW corner of SR 23 and Tierra Rejada Rd; Newhall (CDFG 2005). Absent.

NATURAL HABITATS

Mainland Cherry Forest [G1 S1.1] Nearest reported location: Castaic Valley (CDFG 2005). Absent.

California Walnut Woodland [G2 S2.1] Nearest reported location: Simi Hills--From slope just west of Las Virgenes Creek, west almost to Cheeseboro Road; Santa Monica Mountains—Woodland Hills, Natoma Ave at Mulholland Dr.; Topanga Canyon Blvd at Mulholland Dr.; Old Topanga Rd at Mulholland Dr.; Santa Susana Mountains-- Mouth of Towsley Canyon (2 locations); Leaming & East Canyons; Bee Canyon (2 locations) Limekiln/Aliso Canyon; west, north and east of Mission Point; upper Gavin Canyon; unnamed tributary to Lyon Canyon, east of Dewitt Canyon; Dewitt Canyon; Oat Mountain (2 locations) (CDFG 2005). Present.

Riversidean Alluvial Fan Sage Scrub [G1 S1.1] Nearest reported location: Castaic Valley (CDFG 2005). Absent.

Southern Coast Live Oak Riparian Forest [G4 S4] Nearest reported location: Simi Hills -- Cheeseboro Canyon; Bell Canyon; Laskey Mesa; Santa Monica Mountains—Liberty Canyon; Santa Susana Mountains—Alamos Canyon; near Moorpark College; Tripas Canyon; Wiley Canyon; Torrey Canyon; Happy Camp; Quigley and Orofino Canyon (CDFG 2005). Absent.

Southern Cottonwood Willow Riparian Forest [G3 S3.2] Nearest reported location: Castaic Valley; upper Ybarra Canyon, Santa Susana Mountains (CDFG 2005). Absent.

Southern Mixed Riparian Forest [G2 S2.1] Nearest reported location: Blind, Devil, and Ybarra Canyons, Santa Susana Mountains (CDFG 2005). Absent.

Southern Riparian Scrub [G3 S3.2] Nearest reported location: Santa Susana Mountains—Brea Canyon; Santa Clara River; Placerita Canyon (CDFG 2005). Absent.

Southern Willow Scrub [G3 S2.1] Nearest reported location: Santa Susana Mountains—Arroyo Simi/Oak Park Towsley Canyon; Santa Clara River, at Pico Canyon confluence (CDFG 2005). Absent.

Southern Sycamore Alder Riparian Woodland [G4 S4] Nearest reported location: Santa Monica Mountains--Tuna Canyon; Topanga Canyon; Santa Ynez Canyon; Rustic Canyon; Sullivan Canyon; Temescal Canyon; Garapito Cr (Topanga Canyon tributary); Triunfo Canyon; Carlisle Canyon; Haskell Canyon; Aliso Canyon, Santa Susana Mountains (CDFG 2005). Absent.

Valley Oak Woodland [G3 S2.1] Nearest reported location: Liberty Canyon, Malibu Creek State Park; Saugus; Oat Mountain; Oak Ridge west of Tapo Canyon (CDFG 2005). Absent.

Southern California Threespine Stickleback Stream [G? S?] Nearest reported location: Santa Clara River (CDFG 2005). Absent.

Southern California Steelhead Stream [G? S?] Nearest reported location: Malibu Creek; Santa Clara River (CDFG 2005). Absent.

Excluded:

Ventura Marsh milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*)

Coastal dunes milkvetch (*Astragalus tener* var. *titi*)

Parish's brittle scale (*Atriplex parishii*)

Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*)

Beach spectaclepod (*Dithyrea maritima*)

Mud nama (*Nama stenocarpum*)

INITIAL STUDY WILDLIFE ASSESSMENT

AIDLIN PROPERTY

TENTATIVE TRACT 52796

May 31, 2000

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- Appendix C - Jim Jennings's California Gnatcatcher report

INTRODUCTION

Benshoof, Withers, & Sandgren retained Robert A. Hamilton to provide professional biological consulting services associated with advanced planning of a 230-acre parcel of primarily undeveloped land known as the Aidlin Property (the "project site" or "site"). The site is located at the suburban/wildland interface on the north slope of the Santa Susana Mountains of northwest Los Angeles County, in the area known as Stevenson Ranch (Figures 1 and 2). The site is largely in its natural state except for a small working apiary and an occupied single-family home.

Elevations on the project site range from approximately 1,480 to 2,240 feet. The site's main drainage course is Pico Canyon, which passes through the northern portion of the site, transferring flows from the project site through Newhall to the south fork of the Santa Clara River. The site includes one other named drainage, Wickham Canyon, which conveys flows from south to north to Pico Canyon. The site is generally characterized by moderate to steep slopes vegetated with coastal sage scrub and chaparral; Pico and Wickham canyons support riparian scrub with scattered larger willows, cottonwoods and oaks, and limited pockets of oak and walnut woodlands occur on certain north-facing slopes and in other relatively moist, protected areas.

Mr. Hamilton has been retained to address each of the project's potential wildlife-related issues, working with botanist Verna Jigour, who has been retained to address plant-related issues. For the purposes of the Initial Study, Ms. Jigour is responsible for characterizing the site's plant communities, for mapping those communities, and for calculating their on-site extent (see Jigour 1999).

This report 1) discusses the wildlife species known and expected to occur within the project site's plant communities and other habitats (e.g., cliff and rock areas), and 2) identifies the relative potential for "biologically sensitive" wildlife species to occur on the site. As the CEQA lead agency with jurisdiction over the project site, the County of Los Angeles will ultimately identify the significance of biological impacts and the specific measures required to mitigate significant impacts to the "maximum extent feasible," as required under CEQA.

SETTING

Methods

Literature Review

The literature review for this report included (1) a report dated 8 April 1999¹ from the California Natural Diversity Data Base (Data Base) covering the Val Verde, Simi East, Newhall, and Oat Mountain 7.5' USGS topographic quadrangles, (2) a report dated September 1997 by EDAW, Inc. and Frank Hovore Associates entitled, "SEATAC Biota Report for Stevenson Ranch Phase 4 Development Project, Project 89-436, Tentative Tract 43896" (the Laing Homes tract located east of the project site); (3) Kent Beaman's amphibian habitat assessment of the project site (Beaman 1999; Appendix B); (4) Jim Jennings's California Gnatcatcher survey report for the site (Jennings 1999; Appendix C); and (5) Verna Jigour's vegetation assessment of the project site (Jigour 1999).

¹This report was provided by Envicom Corporation; the report indicated that its information "expired June 1998," but Carl Wishner of Envicom verified with the California Natural Diversity Data Base that new information had been subsequently added to the quadrangles covered in the report (Katherine Palett).

FIGURE 1 - REGIONAL LOCATION (TO BE PROVIDED BY SR OR ENVICOM)

FIGURE 2 - PROJECT VICINITY (TO BE PROVIDED BY SR OR ENVICOM)

Field Surveys

Table A lists the field surveys that Robert A. Hamilton completed for this project.

Table A - Survey Summary

Survey Date	Time	Start Conditions	End Conditions
19 April 1999	0800 - 1430	still; clear; 68°F	wind 1-2 mph; clear; 88°F
19 April 1999	1915 - 2055	still; clear; 67°F	still; clear; 58°F
19 April 1999	2200 - 2235	still; clear; 61°F	still; clear; 58°F
20 April 1999	0625 - 0840	still; clear; 52°F	still; clear; 70°F
11 May 1999	0740 - 0950	wind 2 mph; clear; 72°F	wind 4 mph; clear; 77°F
20 May 1999	0835 - 1010	still; 100% overcast; 59°F	still; 100% overcast; 61°F
27 May 1999	0525 - 0635	still; clear/hazy; 60°F	still; clear/hazy; 61°F
11 June 1999	0555 - 0735	still; hazy; 55°F	still; hazy; 62°F
22 June 1999	0725 - 0955	still; light fog; 65°F	still; clear; 74°F
29 June 1999	0555 - 0820	still; clear; 51°F	wind 2 mph; clear; 66°F
8 July 1999	0820 - 0945	wind 2 mph; 50% overcast; 68°F	wind 4 mph; 50% overcast; 68°F

The April surveys included review of nearly all of the project site, plus three other nearby parcels covering approximately 49, 40, and 40 acres; the four parcels are collectively referred to herein as the "study area." Emphasis was placed on inspecting all areas proposed for grading impacts. Each butterfly and vertebrate wildlife species detected in the study area during these surveys was recorded on field notes, and is listed in Appendix A to this report; habitat for native fish was deemed to be absent from the site due to (a) seasonal flow of water, (b) lack of pools, and (c) urban development downstream of project site. Scott Harris (pers. comm.), biologist for the California Department of Fish & Game who attended a meeting on the project site on 3 March 1999, agreed with this assessment.

Mr. Hamilton's final eight surveys, starting on 20 April, comprised directed presence/absence surveys for the potential presence of the federally endangered Least Bell's Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax traillii extimus*).

During the evening surveys on 19 and 20 April, Mr. Hamilton checked all riparian habitats in the study area for calling amphibians, particularly the federally endangered Arroyo Toad (*Bufo microscaphus californicus*). On 23 May 1999, herpetologist Kent Beaman reviewed the project site to assess the potential for the Arroyo Toad, California Red-legged Frog (*Rana aurora draytonii*) and Western Pond Turtle (*Clemmys marmorata*) to occur on the site.

In order to help determine its status on the site, Mr. Hamilton played taped vocalizations of the federally threatened Coastal California Gnatcatcher (*Poliophtila californica californica*) throughout coastal sage scrub habitat during each survey day in accordance with his federal 10(a)1(a) permit (No. PRT-799557). Then, from 25 May to 30 June, Jim Jennings conducted twelve directed surveys for California Gnatcatchers in the study area in compliance with his federal permit to survey for this species.

In April 1999, botanist Verna Jigour completed a directed survey of the study area for California Plantain (*Plantago erecta*), the required foodplant of the Quino Checkerspot (*Euphydryas editha quino*), a federally endangered butterfly whose current known range lies south of the project site. In addition, Ms. Jigour

completed all plant community mapping and characterization referenced herein during the course of field surveys in winter/spring 1999.

Results

This section discusses wildlife species observed in the study area during the spring 1999 field surveys, plus additional species expected to be present there; scientific names are provided for expected species, and scientific names of species detected during the field studies can be found in Appendix A. Biologically "sensitive" species observed in the project's area of potential effect, and those potentially present there, are discussed in a subsequent section of this report. Please refer to the botanical report (Jigour 1999) for plant community mapping and discussion of these plant communities as they occur on the site.

Butterflies

Nine butterfly species were observed in the study area: the Pale Swallowtail, Common White, Senna Sulphur, Chalcidon Checkerspot, Painted Lady, California Ringlet, Behr's Metalmark, Acmon Blue, and Rural Skipper. A variety of other species may be expected to occur there, including Sara Orangetip (*Anthocharis sara sara*), California Sister (*Adelpha bredowii californica*), Southern Buckthorn Hairstreak (*Satyrrium saepium chalcis*), Southern Blue (*Glaucopsyche lygdamus australis*), and Funereal Duskywing (*Erynnis zarucco funeralis*).

Amphibians

Although the study area lacks permanent water, two widespread amphibians, the Western Toad (*Bufo boreas*) and Pacific Treefrog (*Pseudacris regilla*), were detected there within and near seasonal streams. In addition, three salamander species potentially occur on the site, utilizing moist leaf litter and downed limbs beneath oak and walnut woodlands; these are the Ensatina (*Ensatina eschscholtzi*), Arboreal Salamander (*Aneides lugubris*) and Black-bellied Slender Salamander (*Batrachoseps nigriventris*). If seasonal pools are present on the site then another toad species, the Western Spadefoot (*Scaphiopus hammondi*), potentially occurs.

Reptiles

Western Fence and Side-blotched lizards were found commonly throughout the study area during the field surveys. A Common Kingsnake and three Western Rattlesnakes were also found; one of the rattlers, a recently road-killed juvenile, was collected and deposited at the Los Angeles County Museum of Natural History. Among the many other species of lizard and snake potentially occurring on the site are the Coast Horned Lizard (*Phrynosoma coronata*), Southern Alligator Lizard (*Gerrhonotus multicarinata*), Western Skink (*Eumeces skiltonianus*), Western Whiptail (*Cnemidophorus tigris*), Coachwhip (*Masticophis flagellum*), Striped Racer (*Masticophis lateralis*), and Gopher Snake (*Pituophis melanoleucus*).

Birds

Birds are the most conspicuous vertebrates in the study area, and a total of 64 species were observed during the spring 1999 field surveys; of these, 34 may be classified as permanent residents, 16 as summer residents (i.e., breeding on the site and migrating long distances to the south to winter), five as winter visitors, and nine as transients (i.e., moving through the site from southerly wintering areas to northerly breeding areas)¹. The following discussion is organized according to the site's major habitats: coastal sage scrub/chaparral, oak/walnut woodlands, and riparian scrub/woodlands.

In the study area, chaparral and coastal sage scrub habitats support such resident species as California Quail, Anna's Hummingbird, Wrentit, Western Scrub-Jay, Bewick's Wren, California Thrasher, and Spotted Towhee; Red-tailed Hawks routinely forage in these habitats. The resident Ashy Rufous-crowned Sparrow, a sensitive species, is found mainly on steep slopes vegetated with a mix of grasses and scrub. Costa's Hummingbird, Phainopepla and Lazuli Bunting are summer residents, while typical wintering species include the Hermit Thrush and White-crowned Sparrow.

In the study area, oak and walnut trees provide habitat for a variety of resident species, such as Nuttall's Woodpecker, Western Scrub-Jay, Oak Titmouse, and House Wren. Two adult Cooper's Hawks, a resident sensitive raptor species, were observed in the study area. Summer residents in these habitats include the Black-chinned Hummingbird, Pacific-slope Flycatcher, and Ash-throated Flycatcher, while wintering species include the Yellow-rumped Warbler and probably other widespread insectivores such as the Ruby-crowned Kinglet (*Regulus calendula*). Oaks and walnuts are sought out by a variety of species during migration; during the field surveys, these included Hammond's Flycatcher, Warbling Vireo, Nashville Warbler, Yellow Warbler, Townsend's Warbler, and Wilson's Warbler.

Riparian habitats typically support a great variety of bird species, and this is true of the project site. In addition to being used by many of the species indicated above, the riparian habitats in Pico and Wickham canyons support birds typically found near water and/or vegetation limited to moist areas. Resident birds include the Great Horned Owl, Black Phoebe, Bushtit, Common Yellowthroat, Song Sparrow, and Lawrence's Goldfinch; summer residents include Hooded and Bullock's orioles; wintering birds include Lincoln's and Golden-crowned sparrows; transients listed previously for oak/walnut woodlands also utilize riparian habitats, as do many other migratory species.

Mammals

Mammals detected in the study area include the Virginia Opossum, Audubon Cottontail, California Ground Squirrel, Western Gray Squirrel, Botta's Pocket Gopher, Coyote, skunk (tracks not identified to species), Bobcat, and Mule Deer; a bat loudly echo-locating over the site may have been a Western Mastiff Bat (*Eumops perotis*), a sensitive species. Other expected mammals include Yuma Myotis (*Myotis yumanensis*), Pallid Bat (*Antrozous pallidus*), Pacific Kangaroo Rat (*Dipodomys agilis*), California Mouse (*Peromyscus californicus*), Deer Mouse (*Peromyscus maniculatus*), California Pocket Mouse (*Chaetodipus californicus*), Dusky-footed Woodrat (*Neotoma fuscipes*), Gray Fox (*Urocyon cinereoargenteus*), Raccoon (*Procyon lotor*), and Mountain Lion (*Felis concolor*).

SENSITIVE SPECIES

These are general classifications that may not hold true for each species considered; for example, White-crowned Warblers occur year-round in the project vicinity and so are considered a "permanent resident" there, although it is possible that the summering population is largely (or entirely) distinct from the wintering population.

Sensitive species are plants and animals occurring or potentially occurring on the project site that are endangered or rare, as those terms are used in CEQA and its Guidelines, or that are of current local, regional or state concern. This section lists and briefly discusses the status of each sensitive species that may be present on the site. Legal protection for sensitive species varies widely, from the relatively comprehensive protection extended to listed threatened/endangered species to no legal status at present. The California Department of Fish & Game (CDFG), U.S. Fish & Wildlife Service (USFWS), local agencies, and special interest groups such as the California Native Plant Society (CNPS) publish watch lists of declining species; some of these lists describe the general nature and perceived severity of the decline. In addition, recently published findings and preliminary results of ongoing research provide a basis for consideration of species that are candidates for state and/or federal listing. Finally, species that are clearly not rare or threatened statewide or regionally, but whose local populations are sparse, rapidly dwindling or otherwise unstable, may be considered to be of "local interest."

Inclusion in the sensitive species analysis for this project is based on the following criteria: 1) detection of the species on the project site; 2) the project site lies within the species' known or potential distribution, and contains appropriate habitat; or 3) certain other species of particular interest to the resource agencies, even if believed absent from the site. Bird species are included only if nesting individuals may occupy or otherwise utilize the site during the nesting season. Table B summarizes the sensitive species considered in this report per the following classifications:

- Believed Absent** Species believed not to occur on the project site due to confirmed lack of one or more required habitat elements, for example, a butterfly's needed food plant. Such species are discussed to demonstrate to the reader that their potential occurrence was considered during preparation of this report (most species believed to be absent are not treated herein).
- Low** Species unlikely to occur since (a) the project site lies outside of the species' known range, (b) the site supports only marginally suitable habitat for the species, and/or (c) distribution of the species is very limited, making its presence unlikely even in appropriate habitat located within its general range. For purposes of the EIR, these species should be presumed absent unless found on the site.
- Moderate** Reasonable chance of occurrence, since the site lies within the species' known or expected range and contains appropriate habitat. This ranking is not typically assigned to species with very limited distributions (i.e., species whose occurrence is unlikely at any given location within their general range). For purposes of the EIR, these species should be presumed present unless directed surveys show them to be absent.
- High** Expected to occur, since the site lies within the species' known or expected range and contains prime habitat. This ranking is typically assigned to species with relatively wide distributions. For purposes of the EIR, these species should be presumed present unless directed surveys show them to be absent.
- Present** Detected on the project site during the current study.

For bird species, "potential for occurrence" refers to the potential for the species to nest on the project site, or to include the site within its breeding territory (excludes transients and winter visitors).

Table B - Sensitive Species

SPECIES	STATUS		POTENTIAL FOR OCCURRENCE
	FEDERAL	STATE	

SPECIES	STATUS		POTENTIAL FOR OCCURRENCE
	FEDERAL	STATE	
LISTED/PROPOSED SPECIES			
<i>Amphibians</i>			
Arroyo Toad <i>Bufo microscaphus californicus</i>	E	CSC	Believed Absent
California Red-legged Frog <i>Rana aurora draytonii</i>	E	CSC	Believed Absent
<i>Birds</i>			
Willow Flycatcher <i>Empidonax traillii</i>	E	E	Believed Absent
Coastal California Gnatcatcher <i>Poliophtila californica californica</i>	T	CSC	Believed Absent
Least Bell's Vireo <i>Vireo bellii pusillus</i>	E	E	Believed Absent
SPECIES NOT LISTED OR PROPOSED FOR LISTING			
<i>Amphibians</i>			
Western Spadefoot <i>Scaphiopus hammondi</i>	FSC	CSC	Low
<i>Reptiles</i>			
Western Pond Turtle <i>Clemmys marmorata</i>	FSC	CSC	Believed Absent
California Legless Lizard <i>Anniella pulchra</i>	FSC	CSC	High
Coast Horned Lizard <i>Phrynosoma coronatum</i>	FSC	CSC	High
Coastal Western Whiptail <i>Cnemidophorus tigris multiscutatus</i>	FSC	-	High
San Bernardino Ringneck Snake <i>Diadophis punctatus modestus</i>	FSC	-	Moderate
Coast Patch-nosed Snake <i>Salvadora hexalepis virgultea</i>	FSC	CSC	High
Two-striped Garter Snake <i>Thamnophis hammondi</i>	FSC	CSC	Low
<i>Birds</i>			
Golden Eagle	-	CSC	High

SPECIES	STATUS		POTENTIAL FOR OCCURRENCE
	FEDERAL	STATE	
<i>Aquila chrysaetos</i>			
Cooper's Hawk <i>Accipiter cooperii</i>	--	CSC	Present
Prairie Falcon <i>Falco mexicanus</i>		CSC	Present
Western Burrowing Owl <i>Athene cunicularia hypugea</i>	FSC	CSC	Low
Long-eared Owl <i>Asio otus</i>	--	CSC	Low
Loggerhead Shrike <i>Lanius ludovicianus</i>	FSC	CSC	Low
California Yellow Warbler <i>Dendroica petechia morcomi</i>	--	CSC	Believed Absent
Yellow-breasted Chat <i>Icteria virens</i>	--	CSC	Believed Absent
Ashy Rufous-crowned Sparrow <i>Aimophila ruficeps canescens</i>	FSC	CSC	Present
Bell's Sage Sparrow <i>Amphispiza belli belli</i>	FSC	CSC	High
Mammals			
Pallid Bat <i>Antrozous pallidus</i>	--	CSC	High
Townsend's Western Big-eared Bat <i>Corynorhinus townsendii townsendii</i>	FSC	CSC	Moderate
Spotted Bat <i>Euderma maculatum</i>	FSC	CSC	Moderate
Small-footed Myotis <i>Myotis ciliolabrum</i>	FSC	--	Moderate
Long-eared Myotis <i>Myotis evotis</i>	FSC	--	Moderate
Fringed Myotis <i>Myotis thysanodes</i>	FSC	--	Moderate
Yuma myotis <i>Myotis yumanensis</i>	FSC	CSC	Moderate
California Mastiff Bat <i>Eumops perotis californicus</i>	FSC	CSC	High
San Diego Black-tailed Jackrabbit <i>Lepus californicus bennettii</i>	FSC	CSC	Low
Los Angeles Pocket Mouse	FSC	CSC	Moderate

SPECIES	STATUS		POTENTIAL FOR OCCURRENCE
	FEDERAL	STATE	
<i>Perognathus longimembris brevinasus</i>			
San Diego Desert Woodrat <i>Neotoma lepida intermedia</i>	FSC	CSC	High
Southern Grasshopper Mouse <i>Onychomys torridus ramona</i>	FSC	CSC	Moderate

Legend - Table B

Federal Classifications

- E Taxa listed as Endangered.
- T Taxa listed as Threatened.
- PE Taxa proposed to be listed as Endangered.
- PT Taxa proposed to be listed as Threatened.
- FSC Federal Species of Concern. Further biological research and field study are needed to resolve the conservation status of these species.

State Classifications

- E Taxa State listed as Endangered.
- T Taxa State listed as Threatened.
- CSC California Species of Special Concern. An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats. Some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a threatened or endangered species.

Accounts of Listed/Proposed Species

The following species are listed as threatened or endangered by state and/or federal resource agencies.

Arroyo Toad (*Bufo microscaphus californicus*)

This toad is federally listed as endangered, and is a California Species of Special Concern (an administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats referring to taxa with populations declining seriously or that are otherwise highly vulnerable to human developments). The historic range extended along the coastal slope from San Luis Obispo County to northwestern Baja California, but this toad has disappeared from many formerly occupied areas. Arroyo toads are largely nocturnal, and have highly specialized habitat requirements. They frequent sandy washes and arroyos with shallow pools that lack predatory fish or crayfish, and that have damp, sandy or gravelly banks. The adults dig deep burrows in sandy stream terraces and remain underground from late summer through the winter.

The Arroyo Toad was not detected during field surveys, and herpetologist Kent Beaman concluded that potentially suitable habitat for this species is not present on the project site.

California Red-legged Frog (*Rana aurora draytonii*)

This large frog is federally listed as an endangered species, and is also a California Species of Special Concern. This insectivorous amphibian ranged historically from Shasta County in northern California to northern Baja California, with most records from the coastal slope. California Red-legged Frogs require dense, shrubby or emergent riparian vegetation associated with relatively deep, still or slow moving water. Ephemeral streams may be occupied if surface water remains available throughout the year somewhere in the stream system. Red-legged Frogs are wary and difficult to detect during most of their life cycle, and the adults are highly nocturnal.

California Red-legged frogs are estimated to have disappeared from approximately 99 percent of historical locations in inland and Southern California and approximately 75 percent of localities range-wide. The losses have resulted from over exploitation as a food source in the latter half of the last century, followed by habitat loss/fragmentation (due to water projects, cattle grazing, and urban and agricultural development) and predation by Bullfrogs (*Rana catesbeiana*) and other exotic aquatic animals (which feed on pre-metamorphic individuals). These pressures have increased in the last 30 years. The species had nearly disappeared from southern California south of Ventura County by 1975.

The Red-legged Frog was not detected during the field surveys, and herpetologist Kent Beaman concluded that potentially suitable habitat for this species is not present on the project site.

Willow Flycatcher (*Empidonax traillii*)

The Southwestern Willow Flycatcher (*E.t. extimus*) is federally listed as endangered, while the Little Willow Flycatcher (*E.t. brewsteri*) is a federal Species of Concern (further biological research and field study are needed to resolve the conservation status of these species). The entire species (including both subspecies mentioned above) has been placed on the state endangered species list. Declines in the dense, expansive riparian woodlands that Willow Flycatchers require for nesting, combined with brood parasitism by Brown-headed Cowbirds (*Molothrus ater*), have greatly reduced breeding numbers of Willow Flycatchers in California and the West. This flycatcher formerly nested in lowland riparian habitat throughout much of the State, but are not known to currently breed in the project vicinity. Willow Flycatchers are widespread during migration, and occur regularly throughout southern California, generally favoring riparian areas.

Riparian scrub and woodlands in the study area do not appear to comprise even marginally suitable habitat for Willow Flycatchers, and none were detected during Robert Hamilton's focused surveys for this species along Pico and Wickham canyons from May to July 1999; thus, the species is considered absent from the project site.

Coastal California Gnatcatcher (*Poliophtila californica californica*)

This small bird is federally listed as threatened; it is also a California Species of Special Concern. Coastal California Gnatcatchers occupy coastal sage scrub, coastal bluff scrub and, occasionally, chaparral communities from Ventura County south to northwestern Baja California, but are now absent from parts of the species' former range. In the general project vicinity, Coastal California Gnatcatchers have been reported from the vicinity of Santa Clarita in recent years.

Elevations on the project site (1,450-2,240 feet) are higher than Coastal California Gnatcatchers typically prefer, and none were detected during Jim Jennings's directed gnatcatcher surveys of the study area in spring 1999; thus, the species is considered absent from the project site.

Least Bell's Vireo (*Vireo bellii pusillus*)

This small, migratory songbird is listed as endangered by both federal and state resource agencies. This vireo once nested commonly throughout much of lowland California, but its breeding range is now largely limited to a small number of major riparian systems in southern California. This decline has been attributed to loss and degradation of riparian habitat, combined with brood parasitism by the Brown-Headed Cowbird. Least Bell's Vireos typically breed in dense willow-riparian habitat with dense understory and high structural diversity.

Riparian scrub and woodlands in the study area represent only marginally suitable habitat for Least Bell's Vireos, and none were detected during eight directed surveys for this species conducted along Pico and Wickham canyons from April to July 1999; thus, the species is considered absent from the project site.

Accounts of Species not Listed or Proposed for Listing

Western Spadefoot (*Scaphiopus hammondii*)

This small toad is a federal Species of Concern and a California Species of Special Concern. This toad formerly ranged throughout cismontane California south to northwestern Baja California, but has been eliminated from much of its range in southern California. Habitat loss and predation by introduced frog species appear to be primary causes of the spadefoot's regional decline. Grasslands and other open habitats with seasonal ponds or slow moving streams provide this toad's primary habitat, but it also ranges into scrub and chaparral of the foothills and mountains, so long as pools are available for breeding.

Western Spadefoots were not detected during the 1999 field surveys, and they are considered unlikely to occur on the project site due to an evident lack of pools.

Western Pond Turtle (*Clemmys marmorata*)

This turtle is a federal Species of Concern and California Species of Special Concern. The species occurs from near sea level to approximately 4,700 feet, and ranges from Washington to northern Baja California; it is now absent from many former localities and is particularly reduced in southern California. Western Pond Turtles occupy a wide range of permanent and intermittent aquatic habitats, though requiring some slack- or

slow-water aquatic habitat. They deposit their eggs in sandy banks or open fields, mostly within 50 to 600 feet of water sources.

Western Pond Turtles were not detected during the 1999 field surveys, and herpetologist Kent Beaman concluded that potentially suitable habitat for this species is not present on the project site.

California Legless Lizard (*Anniella pulchra*)

This reptile is a federal Species of Concern and California Species of Special Concern that ranges from the San Francisco Bay area to northern Baja California, except for the Monterey Bay area. California Legless Lizards occupy a variety of habitats in moist, loose, sandy soil suitable for burrowing, and are active at relatively cool temperatures (46-83°F). Hovore (1997) reported that, in the Santa Clarita Valley, this species "occurs in virtually all drainages supporting oak habitats and on north-facing slopes, and is also frequently encountered in alluvial terraces with fine, silty topsoils and shading overstory vegetation."

California Legless Lizard has a high chance of occurring in relatively moist portions of the project site. Since this lizard rarely comes out onto the surface, raking and/or pit traps are generally required to detect this species.

Coast Horned Lizard (*Phrynosoma coronatum*)

This lizard is a federal Species of Concern and California Species of Special Concern. Its northern subspecies, *P.c. frontale*, is found from Shasta County south through northern Los Angeles County, while the southern subspecies, *P.c. blainvillei*, occurs from western Santa Barbara County to northwest Baja California; the project site lies within the overlap zone between the two forms. The Coast Horned Lizard is most active from April through July, and its favored habitat consists of sandy washes and other open, sandy areas in coastal sage scrub and chaparral communities. Low bushes are required for cover, as well as open spaces for sunning, and relatively flat patches of fine, loose soil for burrowing. The primary food is harvester ants.

Coast Horned Lizards were found on the adjacent Phase 4 property (Hovore 1997) and are very likely to occur throughout the project site, where appropriate habitat is present.

Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*)

This active lizard is a federal Species of Concern that ranges from southwestern California to central Baja California. It usually occurs in openings in coastal sage scrub and chaparral where plants are sparse and there is room for running. In addition to invertebrates, it eats other lizards.

Coastal Western Whiptails were found on the adjacent Phase 4 property (Hovore 1997) and are very likely to occur in sparsely vegetated portions of the project site.

San Bernardino Ringneck Snake (*Diadophis punctatus modestus*)

This small snake is a federal Species of Concern that inhabits moist areas within a variety of habitats in southwestern California between Ventura and Orange counties.

Ringneck snakes are seldom seen in the open, and the moist and shady habitats favored by this species occur primarily in portions of Pico and Wickham canyons north and east of the study area; thus potential for this species to occur on the project site is judged to be moderate.

Coast Patch-nosed Snake (*Salvadora hexalepis virgulata*)

This medium-sized snake is a federal Species of Concern and California Species of Special Concern. Patch-nosed Snakes inhabit chaparral and other brushy habitats from San Luis Obispo County to northern Baja California, occurring from near sea level to approximately 7,000 feet. The species is primarily active during the late morning and late afternoon hours from March to October, and whiptail lizards are believed to be important prey items.

Coast Patch-nosed Snakes are seldom seen in the open, but there is high potential for this species to occur in coastal sage scrub, chaparral and other densely vegetated habitats on the site.

Two-striped Garter Snake (*Thamnophis hammondi*)

This federal Species of Concern and California Species of Special Concern is very similar to the Western Aquatic Garter Snake (*Thamnophis couchii*), and was formerly considered a race of that species. It ranges from Monterey County to northwestern Baja California, occurring from near sea level to approximately 8,000 feet. This snake is highly aquatic, and thus is only found in or near permanent sources of water; it is encountered only rarely during general biological surveys.

This snake is unlikely to occur on the project site due to the lack of perennial water on or near this area.

Golden Eagle (*Aquila chrysaetos*)

This large raptor is a California Species of Special Concern. Golden Eagles are year-round residents that nest in the San Gabriel and San Bernardino mountains, normally in areas well removed from human presence, and forage over a very wide area. The Los Angeles Breeding Bird Atlas project has not confirmed breeding of this species in the county, although Golden Eagles are observed flying around mountainous areas on a fairly regular basis (Kimball Garrett pers. comm.).

On 22 June 1999, biologist Jim Jennings observed two Golden Eagles of undetermined age flying approximately 0.5 mile west of the study area. The species may be expected to forage on the project site throughout the year, and cliffs in the local area appear to be suitable for nesting by this eagle.

Cooper's Hawk (*Accipiter cooperii*)

This medium-sized hawk is a California Species of Special Concern. Cooper's Hawk is an uncommon breeder in southern California, typically occupying well developed oak and willow woodlands.

Adult Cooper's Hawks, representing one or two pairs, were observed flying over the project site and an adjacent parcel during surveys in spring 1999; these birds presumably nest in oak or other woodlands on or adjacent to the project site, foraging throughout the local area.

Prairie Falcon (*Falco mexicanus*)

This large falcon is a California Species of Special Concern found in open country throughout southern California and the West. It is an increasingly rare species throughout the region, particularly as a breeder. The ongoing Los Angeles Breeding Bird Atlas project has not confirmed breeding of this species in the county, and nesting in the Santa Susana Mountains would be of particular interest, as Prairie Falcons would be more expected in the extreme northern part of the county, on the edges of the Antelope Valley (Kimball Garrett pers. comm.). Cliffs in and around the study area are potentially suitable for nesting.

On 3, 10, and 16 June 1999 biologist Jim Jennings observed an adult female Prairie Falcon accompanied by a male juvenile flying over the study area, to the west of the project site; he watched them land on low snags on the tallest peak in the southeast portion of the project site, evidence that Prairie Falcons nested in or near the project site's cliffs in 1999. This would be the only known nesting pair of this falcon in the Santa Susana Mountains.

Western Burrowing Owl (*Athene cunicularia hypugea*)

This small, ground-dwelling owl is a federal Species of Concern and California Species of Special Concern. Burrowing Owls live in grasslands, rangelands, and sparsely vegetated scrub lands, usually occupying ground squirrel burrows. Burrowing owls were widespread and fairly common in southern California during most of this century, prior to widespread losses of habitat and destruction of ground squirrel colonies associated with human developments. They are now quite rare in Los Angeles County and the region as a whole, with wintering birds greatly outnumbering breeders. The Data Base lists a sighting of this species by Carl Wishner on 27 March 1990 in Upper Dry Canyon, located approximately two miles north of Simi Valley, south of Big Mountain (approximately 12 miles from the study area); the habitat was described as "annual grassland with sparse coastal sage scrub; diverse topography. Abundant Ground Squirrel holes available."

The project site's limited grassland and grass/scrub habitats represent marginally suitable Burrowing Owl habitat, and the species is considered unlikely to occur there, particularly as a breeding species.

Long-eared Owl (*Asio otus*)

This owl is a California Species of Special Concern. The Long-eared Owl is a rare resident of dense oak and willow woodlands in coastal Southern California; it is an uncommon resident in desert areas. Although not truly migratory, pairs of Long-eared Owls may move considerable distances outside of the breeding season, presumably in response to prey availability. This species has declined greatly throughout much of its range due to habitat loss and degradation. They seldom nest within approximately 1 km of typical residential neighborhoods (Peter H. Bloom pers. comm.).

The project site's relatively limited woodlands represent only marginally suitable habitat for Long-eared Owls, and the species is considered unlikely to occur there.

Loggerhead Shrike (*Lanius ludovicianus*)

This small predatory bird is a federal Species of Concern and a California Species of Special Concern. Shrikes inhabit open country, where they feed primarily on large insects and occasionally small vertebrate prey. They are uncommon to fairly common, and declining, in coastal southern California, with more present during the winter than during the nesting season.

The project site lacks extensive open areas, and failure to detect Loggerhead Shrikes during the spring 1999 field surveys (including Jim Jennings's gnatcatcher surveys) suggests that the species' potential for occurrence on the project site is limited to wintering birds and/or occasional migrants.

California Yellow Warbler (*Dendroica petechia morcomi*)

This colorful songbird is a California Species of Special Concern that breeds in a variety of woodland habitats throughout non-desert portions of the state; it is fairly common and widespread in migration. In southern California, the breeding population has declined markedly due to habitat loss, habitat degradation,

and parasitism by Brown-headed Cowbirds.

Although the Yellow Warbler was detected as a transient, oak and riparian woodlands on the project site appear to be unsuitable for nesting, and no potentially nesting birds were detected during the Least Bell's Vireo and Southwestern Willow Flycatcher surveys in spring/summer 1999.

Yellow-breasted Chat (*Icteria virens*)

This large, flashy warbler nests primarily in well-developed riparian woodlands across western North America, and winters in Central America. The state's breeding population has declined significantly, especially in southern California, and this is now a California Species of Special Concern.

The site's riparian woodlands are not as extensive as this species generally requires for nesting, suggesting that chats are unlikely to occur there except as an occasional migrant. Chats were not detected during the Least Bell's Vireo and Southwestern Willow Flycatcher surveys conducted on the project site during spring/summer 1999.

Ashy Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)

This inconspicuous sparrow is a federal Species of Concern and California Species of Special Concern. Ashy Rufous-crowned Sparrows are resident from Santa Barbara County to northwestern Baja California, often occurring on steep, grassy hillsides, in coastal sage scrub, and in broken chaparral.

Several Ashy Rufous-crowned Sparrows were observed in the study area during the 1999 field surveys, mainly in mixed grass-scrub habitat within the Wickham Canyon watershed. These birds undoubtedly breed on the project site.

Bell's Sage Sparrow (*Amphispiza belli belli*)

Bell's Sage Sparrow is a federal Species of Concern and California Species of Special Concern. This is the dark subspecies of Sage Sparrow occurring locally in hilly terrain throughout much of coastal California and parts of the interior of the state west of the Sierra Nevada Range. The distribution of this essentially sedentary subspecies is patchy, with the birds occurring primarily in interior foothills and lower mountains in chamise-dominated chaparral and xeric coastal sage scrub areas. This inconspicuous bird is most readily detected in early spring, when males sing to claim territories.

Bell's Sage Sparrows were not observed during the field surveys, but were found on the adjacent Phase 4 site (Hovore 1997); they are likely resident in chaparral on the project site.

Pallid Bat (*Antrozous pallida*)

This bat is a California Species of Special Concern. Pallid Bats occupy a variety of habitats in western North America, from southern British Columbia to northwestern Mexico, but the species has declined greatly in many parts of its range, including southern California. This bat is often found in mixed oak and grassland habitats, roosting in rock crevices or under the bark of trees and foraging in a variety of habitats. Pallid Bat is unique among North American bats in foraging on the ground, where scorpions, grasshoppers, beetles and other insects make up the main prey base; this species also apparently forages for insects in shrubs and trees.

Pallid Bats are very likely to forage on the project site, and may potentially roost in cliffs or rock outcrops, or under the bark of large trees.

Townsend's Western Big-eared Bat (*Corynorhinus townsendii townsendii*)

This bat is a federal Species of Concern and California Species of Special Concern that occurs primarily on the west side of the Sierra Nevada Range. Roosting takes place in caves and other similar situations, including lava tubes and mine tunnels; buildings and other human-made structures are also utilized.

Townsend's Western Big-eared Bats have moderate potential to occur on the project site, possibly roosting in any abandoned mines or structures that may exist in the area.

Spotted Bat (*Euderma maculatum*)

This bat, a federal Species of Concern and California Species of Special Concern, is considered one of the rarest mammals in North America. It has been found in the West from southern British Columbia to the Mexican border, at widely scattered localities. Little is known of its habitat requirements, but Spotted Bats have been found from arid deserts and grasslands to mixed coniferous forests as high as 10,600 feet. They roost primarily in crevices in cliffs.

Remote cliffs on the project site and in adjacent areas appear to provide suitable roosting habitat for Spotted Bats; considering the species' general rarity, potential for this species to occur on the project site is judged to be low to moderate.

Small-footed Myotis (*Myotis ciliolabrum*)

This small bat is a federal Species of Concern that occurs throughout much of the state, often in arid upland habitats near reliable water sources; it roosts in buildings, caves and rock crevices. This bat is known to hibernate in caves during the winter months. It feeds low among trees or over brush, and uses streams, ponds, springs and stock ponds for drinking and foraging.

Due to a lack of perennial water, potential for this species to occur on the project site is judged to be low to moderate.

Long-eared Myotis (*Myotis evotis*)

This small bat is a federal Species of Concern that occurs throughout much of the state, occupying brush, woodland, and forest habitats as high as 9,000 feet; it roosts in buildings, caves, rock crevices, under bark, and in snags. It feeds low among trees or over brush, and is believed to require a reliable water source due to poor urine-concentrating ability.

Due to a lack of perennial water, potential for this species to occur on the project site is judged to be low to moderate.

Fringed Myotis (*Myotis thysanodes*)

This small bat is a federal Species of Concern that occurs throughout much of the state from sea level up to approximately 9,300 feet. Optimal habitats include pinyon-juniper woodland, oak woodlands and oak/conifer woodlands, generally between 4,000 and 7,000 feet. The Fringed Myotis roosts in caves, mines, buildings, and crevices, and is believed to require a reliable water source due to poor urine-concentrating ability.

Due to a lack of perennial water, potential for this species to occur on the project site is judged to be low to moderate.

Yuma Myotis (*Myotis yumanensis*)

This small bat is a federal Species of Concern and California Species of Special Concern. It occurs statewide from April to September, occupying a variety of habitats that are usually close to open water. It feeds late at night, skimming low over water to catch small insects. This bat winters primarily outside of California.

Due to a lack of perennial water, potential for this species to occur on the project site is judged to be low to moderate.

California Mastiff Bat (*Eumops perotis californicus*)

This free-tailed bat is a federal Species of Concern and California Species of Special Concern. The largest of all North American bats, California Mastiff Bats are known historically from north-central California south to northern Baja California, eastward across the southwestern United States and northwestern Mexico to west Texas and Coahuila. In California, most records are from rocky areas at low elevations, where roosting occurs primarily in crevices in cliffs and trees.

Audible echolocation clicks heard on the night of 19 April 1999 may have been made by California Mastiff Bats; the species is considered likely to forage high above the project site, and could potentially roost in cliffs, rock outcrops, or under the bark of large oaks or other trees.

San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)

This subspecies of the Black-tailed Jackrabbit is a federal Species of Concern and California Species of Special Concern. This subspecies is restricted to the Pacific slope from southern Santa Barbara County to northwestern Baja California. Jackrabbits inhabit a variety of habitats but are most common in relatively open situations; they are largely nocturnal.

Jackrabbits were not observed during the 1999 field surveys, or surveys conducted by Frank Hovore and Associates (1997). Due to a relative lack of open terrain this species is considered unlikely to occur on the project site.

Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*)

This pocket mouse is a federal Species of Concern and California Species of Special Concern found in sandy or gravelly soils in lower elevation grasslands and sage scrub associations. The historic range extended from the Los Angeles Basin east to San Bernardino and south, east of the Santa Ana Mountains, to northern central San Diego County, but much of the northwestern portion of its range is now unoccupied due to habitat loss.

There is a low to moderate chance that the Los Angeles Pocket Mouse occurs within the project site's coastal sage scrub or grass/scrub communities.

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

This small woodrat is a federal Species of Concern and California Species of Special Concern. San Diego Desert Woodrats are found along the coastal slope from about San Luis Obispo to northwestern Baja California; they frequent poorly vegetated, arid lands, and are especially associated with rock outcrops, cactus patches and other thorny vegetation.

It is likely that the San Diego Desert Woodrat occupies the site's coastal sage scrub and chaparral habitats.

Southern Grasshopper Mouse (*Onychomys torridus ramona*)

This territorial, predatory mouse is a federal Species of Concern and California Species of special Concern that inhabits a variety of arid scrub and chaparral habitats from northern Los Angeles County to northwestern Baja California. It feeds largely on scorpions and orthopteran insects.

There is a moderate chance that the Southern Grasshopper Mouse occurs on the projects site, where it might occupy any or all of the habitats present.

POTENTIAL WILDLIFE MOVEMENT ISSUES

The project site occupies a suburban edge moving westward from Interstate 5. This section addresses the proposed project's relationship to the expected regional and local wildlife movement patterns.

Overview of the Main Issues

Although scientific understanding of wildlife movement and habitat fragmentation issues has increased rapidly in recent years, these are complex topics that generally defy simple analysis. For example, a fire break that serves as a pathway for coyotes may comprise a barrier to movement for mice. This section is intended to 1) provide the reader with a generalized overview of wildlife movement and habitat connectivity issues in the region, 2) define the wildlife movement and habitat connectivity issues that are relevant to the proposed project.

General Effects of Habitat Fragmentation

The Santa Susana Mountains are vegetated primarily with coastal sage scrub, chaparral, and oak and walnut woodlands, and are laced with numerous riparian corridors in canyon bottoms. In such areas, habitat fragmentation potentially has different effects on three broad categories of animals:

- Large, wide ranging terrestrial animals;
- Turtles and terrestrial amphibians;
- Scrub requiring birds and smaller terrestrial animals.

Of the large, wide ranging terrestrial species, coyote, bobcat, and mountain lion are of greatest interest due to their key ecological roles as predators. Each of these species is wide ranging, regularly traversing sizable amounts of habitat to satisfy their requirements for food, water, and cover. Mountain lions are the most wide ranging of these three species, coyotes and bobcats least so. Coyotes regularly range into small habitat areas, and are thought to play a key role in limiting "mesopredators," which include native species such as the Virginia Opossum and Striped Skunk (*Mephitis mephitis*) as well as introduced species like domestic or feral cats and dogs. This natural control of mesopredator populations is believed to be important to maintaining biodiversity in natural areas, since mesopredators may otherwise over-exploit smaller prey species (Soulé et al. 1988). Habitat linkages must be passable to coyotes on a routine, day-to-day basis (allowing "movement") for them to effectively perform the ecological role of top predator.

Terrestrial amphibians, including various toads and salamanders, range widely through grasslands and other upland habitats as adults, but must be able to access seasonal or perennial ponds for breeding. Turtles, such as the Western Pond Turtle, must be able to move from wetlands where they live most of the year into adjacent grasslands where they lay their eggs. These species are dependent on habitat linkages that are passable seasonally and regularly traverse a wide variety of habitat types in making seasonal movements.

Birds resident in scrub and chaparral habitats, such as the California Thrasher and Wrentit, and smaller terrestrial animals, including various snakes, lizards, mice and kangaroo rats, have much smaller territory requirements than large terrestrial animals, and are often quite sedentary as adults. Their local populations are often patchily distributed and, when linked together, form "metapopulations." Dispersal of individuals within the metapopulation allows for genetic exchange, plays a key role in preventing stochastic and catastrophic extirpation, and allows for recolonization when local extirpation does occur. Habitat linkages for these species typically must be passable on a generational basis allowing dispersal, particularly by

juveniles. In contrast to the previous examples, the habitat linkages themselves may be occupied habitat suitable for residency and breeding. In such a situation, the relative length and width of the corridor are much less critical than in a case where an animal must completely transit the corridor if its function is to be satisfied. For that reason, corridors containing suitable breeding/residency habitat, even if separated by small gaps, are much more likely to be effective than a corridor of the same length without suitable breeding/residency habitat.

General Characteristics of Wildlife Movement

When moving on a day-to-day basis, large terrestrial mammals generally travel along paths of least resistance such as drainage courses, rocky ridges and fire breaks. Mule deer generally travel along side slopes and ridgelines (Environmental Science Associates, Inc. 1991). In general, large terrestrial species move through relatively wide "corridors" of undeveloped land; some larger mammals, particularly the Coyote, readily adapt to human presence and may utilize even the most marginal "corridors." Among larger mammals found in the Santa Susana Mountains, Coyotes would be expected to habituate to human activity most readily, followed by Mule Deer, with Bobcats and Mountain Lions habituating poorly. Very wide corridors are necessary to ensure passage of the latter species, but the more adaptable species will use rather minimal corridors.

The exact movement requirements of terrestrial amphibians are not well known, but a successful reserve design must ensure safe passage between breeding areas and areas used during the rest of the year. The most noteworthy characteristics of species engaged in migratory type movement are that 1) they must complete the entire movement between breeding and non-breeding habitat and 2) they may cross a variety of habitat types while migrating. Although these species may negotiate any number of barriers, one key to successful migration is conserving enough energy to breed and survive after migration.

In contrast to migratory movement, individual dispersing animals do not have to move from one end of a linkage to another. Like migrating animals, they will cross a wide variety of habitat types while dispersing, including many not suitable for residency and breeding. This ability is key in naturally patchy habitats, such as the mosaic of coastal scrub, grassland, woodland, and riparian habitats found in the Santa Susana Mountains. Scrub and chaparral requiring birds and smaller terrestrial species that are less wide ranging may benefit more from narrow corridors of high quality native vegetation than wider corridors of exotic vegetation or low quality native habitat. Dr. Paul Beier, a wildlife biologist and wildlife movement researcher, notes that corridors for these types of animals may be required to function over a longer time frame than corridors used by wide ranging species; he notes that, for many of these species, "moving across the landscape" requires several generations (Beier 1991).

Expected Regional Movement Patterns

In order to help frame the project's wildlife movement issues, Figure 3 shows the study area in relation to the surrounding landscape; the "expected wildlife movement patterns" depicted are limited to those discussed in the following paragraphs.

East-West Movement

Historically, wildlife would have been expected to use Pico Canyon as a movement conduit between the Santa Susana Mountains (the natural lands shown in Figure 3) and the wilderness expanses of the San Gabriel Mountains to the east. Due to destruction of natural habitat immediately east of the study area, however, this type of movement can no longer occur in a meaningful way along the canyon bottom. It should be expected, however, that wildlife dispersing down the canyon to the east will utilize side canyons like Wickham Canyon, and dirt roads, to circumvent human-occupied areas and cross Interstate 5 into the watersheds of the San Gabriel Mountains. Implementation of the proposed project would contribute to this cumulatively adverse effect on the movement of wildlife between the Santa Susana and San Gabriel mountains.

North-South Movement

Steep cliffs and existing development lying directly north of the study area greatly hinder wildlife movement in that direction, and this type of regional movement is not considered to be an important consideration for the proposed project.

Expected Local Movement Patterns

In a local sense, one potentially important wildlife movement issue relates to the ingress and egress of wildlife to and from the natural park established in the bottom of Pico Canyon northeast of the study area. Construction of the Laing Homes project adjacent to the Aidlin project site can be expected to constrain this movement to some degree, and future construction of the Aidlin project and other similar projects in the local area have the potential to constrain movement to the point where the park cannot maintain populations of the expected native wildlife species. In addition, the planned widening of Pico Canyon Road and associated increases in traffic volume and speed may be expected to substantially increase mortality of wildlife moving along and across the canyon bottom. Site planning should take these potential effects into consideration.

FIGURE 3 - EXPECTED WILDLIFE MOVEMENT PATTERNS

CEQA REVIEW PROCESS

Under CEQA and its Guidelines, impacts identified as being "significant" must be avoided, if feasible, or mitigation measures must be specified with the goal of reducing or offsetting each significant impact to the "maximum extent feasible." The CEQA lead agency for a given project must adopt "overriding considerations" for each significant impact that cannot be avoided or otherwise mitigated to "below a level of significance."

As the CEQA lead agency with jurisdiction over the project site, the County of Los Angeles will ultimately identify the significance of biological impacts and the specific measures required to mitigate significant impacts to the maximum extent feasible. This section provides an overview of the basic approach to the CEQA review process that may be anticipated with respect to wildlife issues.

Significance Criteria

Criteria for determining the significance of biological impacts may be based on considerations outlined under the following major headings. In all cases, the threshold for significance should be determined by scientific judgment, and consider the relative importance of the habitat and/or species affected by project implementation.

Geographic Context of Significance

Impacts to particularly important ecological areas (e.g., streambeds, oak and walnut trees) or globally threatened resources (e.g., endangered species) may be identified as significant without geographic qualifiers. However, many sensitive resources are of interest within more narrowly defined geographic areas. For example, impacts to a relatively widespread species that is known from only a handful of sites in Los Angeles County or the Santa Susana Mountains might be considered significant at the subregional level; restriction of wildlife movement within in a watershed could be considered a locally significant effect.

Project-Specific Significant Effects

Impacts may be considered significant at the project level if they meet one or more of the following criteria.

- Project implementation reduces the range or number of a species that is 1) listed as endangered or threatened by state or federal resource agencies; 2) proposed for state or federal listing; 3) of extremely limited distribution in a given geographic region (e.g., fewer than ten known occurrences in northern Los Angeles County); or 4) otherwise considered to be of high biological sensitivity (e.g., certain Species of Special Concern).

- **Project implementation results in loss of a sensitive biological resource that is subject to local, state and/or federal regulations (e.g., streambeds, oaks). Impacts to degraded resources that are subject to regulation may or may not be considered biologically significant, depending on circumstances.**

- Project implementation is likely to directly or indirectly cause substantial change in species composition or ecological function within the affected watershed. The biological importance of such change is proportional to the area of impact (i.e., degradation of a larger area is more important than degradation of a smaller area).

Contributions to Cumulatively Significant Effects

Many effects associated with implementing a project may not, by themselves, meet the criteria of significance, either because project implementation impacts a relatively small area or because the resources impacted are only moderately sensitive (e.g., many Species of Special Concern). When considered in the context of past and ongoing development of the region, however, such impacts may be reasonably viewed as a contribution to cumulatively significant effects.

Effects considered to be cumulatively significant require mitigation under CEQA, but the nature of mitigation may be more generalized than for most project-specific effects. For example, rather than attempting to replace habitats lost by conversion or enhancement of degraded areas on the project site, mitigation may be effected through permanent set-asides of lands that might otherwise be developed, since such an approach (uniformly applied to development projects throughout the region at adequate set-aside ratios) would offset each project's contribution to ongoing loss of native plant communities/wildlife habitat throughout the region.

PERSONS CONTACTED

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¹ This report was provided by Envicom Corporation; the report indicated that its information "expired June 1998," but Carl Wishner of Envicom verified with the California Natural Diversity Data Base that new information had been subsequently added to the quadrangles covered in the report (Katherine Palett).

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APPENDIX A

WILDLIFE SPECIES DETECTED

The following butterflies, amphibians, reptiles, birds and mammals were detected on the project site and in nearby portions of Pico Canyon during field surveys by Robert A. Hamilton and Jim Jennings in spring/summer 1999. Presence may be noted if a species is seen or heard, or identified by the presence of tracks, scat or other signs.

*Introduced species

LEPIDOPTERA

Papilionidae

Papilio eurymedon

Pieridae

Pieris sisymbrii sisymbrii

Phoebis sennae marcellina

Nymphalidae

Euphidryas chalcedona chalcedona

Coenonympha tullia californica

Vanessa cardui

Lycaenidae

Apodemia mormo virgulti

Plebejus acmon acmon

Hesperiidae

Ochlodes agricola agricola

AMPHIBIA

Bufo

Bufo boreas

Hylidae

Pseudacris regilla

REPTILIA

Iguanidae

Sceloporus occidentalis

Uta stansburiana

Colubridae

Lampropeltis getulus

Viperidae

Crotalus viridis

BUTTERFLIES

Swallowtails

Pale Swallowtail

Whites, Orangetips and Sulphurs

Common White

Senna Sulphur

Brush-footed Butterflies

Chalcedon Checkerspot

California Ringlet

Painted Lady

Metalmarks, Hairstreaks, Coppers and Blues

Behr's Metalmark

Acmon Blue

True Skippers

Rural Skipper

AMPHIBIANS

True Toads

Western Toad

Treefrogs

Pacific Treefrog

REPTILES

Iguanid Lizards

Western Fence Lizard

Side-blotched Lizard

Colubrid Snakes

Common Kingsnake

Vipers

Western Rattlesnake

31 MAY 2000

Robert A. Hamilton, Consulting Biologist

AVES

Cathartidae

Cathartes aura

Accipitridae

Accipiter cooperii

Buteo jamaicensis

Falconidae

Falco mexicanus

Odontophoridae

Callipepla californica

Columbidae

Zenaidura macroura

Tytonidae

Tyto alba

Strigidae

Bubo virginianus

Caprimulgidae

Phalaenoptilus nuttallii

Apodidae

Aeronautes saxatalis

Trochilidae

Archilochus alexandri

Calypte anna

Calypte costae

Picidae Woodpeckers

Picoides nuttallii

Colaptes auratus

Tyrannidae

Contopus sordidulus

Empidonax hammondi

Empidonax difficilis

Sayornis nigricans

Myiarchus cinerascens

Tyrannus verticalis

BIRDS

New World Vultures

Turkey Vulture

Hawks

Cooper's Hawk

Red-tailed Hawk

Falcons

Prairie Falcon

New World Quails

California Quail

Pigeons, Doves

Mourning Dove

Barn Owls

Barn Owl

Typical Owls

Great Horned Owl

Nightjars

Common Poorwill

Swifts

White-throated Swift

Hummingbirds

Black-chinned Hummingbird

Anna's Hummingbird

Costa's Hummingbird

Nuttall's Woodpecker

Northern Flicker

Tyrant Flycatchers

Western Wood-Pewee

Hammond's Flycatcher

Pacific-slope Flycatcher

Black Phoebe

Ash-throated Flycatcher

Western Kingbird

Hirundinidae

Tachycineta thalassina
Stelgidopteryx serripennis
Petrochelidon pyrrhonota
Petrochelidon rustica

Vireonidae

Vireo gilvus

Corvidae

Aphelocoma californica
Corvus corax

Monarchidae

Catharus guttatus

Paridae

Baeolophus inornatus

Aegithalidae

Psaltriparus minimus

Troglodytidae

Catherpes mexicanus
Thryomanes bewickii
Troglodytes aedon

Timaliidae

Chamaea fasciata

Mimidae

Toxostoma redivivum

Sturnidae

* *Sturnus vulgaris*

Ptilonotidae

Phainopepla nitens

Parulidae

Vermivora celata
Vermivora ruficapilla
Dendroica petechia
Dendroica coronata
Dendroica nigrescens
Dendroica townsendi
Geothlypis trichas
Wilsonia pusilla

Swallows

Violet-green Swallow
Northern Rough-winged Swallow
Cliff Swallow
Barn Swallow

Vireos

Warbling Vireo

Jays, Crows

Western Scrub-Jay
Common Raven

Monarch Flycatchers

Hermit Thrush

Titmice

Oak Titmouse

Bushtits

Bushtit

Wrens

Canyon Wren
Bewick's Wren
House Wren

Babblers

Wrentit

Thrashers

California Thrasher

Starlings

European Starling

Silky-Flycatchers

Phainopepla

Wood Warblers

Orange-crowned Warbler
Nashville Warbler
Yellow Warbler
Yellow-rumped Warbler
Black-throated Gray Warbler
Townsend's Warbler
Common Yellowthroat
Wilson's Warbler

Thraupidae

Piranga ludoviciana

Emberizidae

Pipilo maculatus

Pipilo crissalis

Aimophila ruficeps

Spizella passerina

Melospiza melodia

Melospiza lincolni

Zonotrichia leucophrys

Zonotrichia atricapilla

Cardinalidae

Pheucticus melanocephalus

Passerina amoena

Icteridae

Agelaius phoeniceus

Molothrus ater

Icterus cucullatus

Icterus bullockii

Fringillidae

Carpodacus mexicanus

Carduelis psaltria

Carduelis lawrencei

MAMMALIA

Didelphidae

* *Didelphis virginiana*

Leporidae

Sylvilagus audubonii

Sciuridae

Spermophilus beecheyi

Sciurus griseus

Geomyidae

Thomomys bottae

Canidae

Canis latrans

Mustelidae

Spilogale sp.

Tanagers

Western Tanager

Sparrows and Buntings

Spotted Towhee

California Towhee

Rufous-crowned Sparrow

Chipping Sparrow

Song Sparrow

Lincoln's Sparrow

White-crowned Sparrow

Golden-crowned Sparrow

Cardinals, Grosbeaks and Allies

Black-headed Grosbeak

Lazuli Bunting

Meadowlarks, Blackbirds and Orioles

Red-winged Blackbird

Brown-headed Cowbird

Hooded Oriole

Bullock's Oriole

Finches

House Finch

Lesser Goldfinch

Lawrence's Goldfinch

MAMMALS

New World Opossums

Virginia Opossum

Hares, Rabbits

Audubon Cottontail

Squirrels

California Ground Squirrel

Western Gray Squirrel

Pocket Gophers

Botta's Pocket Gopher

Wolves, Foxes

Coyote

Weasels, Skunks, Otters

skunk (tracks not identified to species)

31 MAY 2000

Robert A. Hamilton, Consulting Biologist

Felidae Cats

Felis rufus

Bobcat

Cervidae

Odocoileus hemionus

Deers

Mule Deer

Taxonomy and nomenclature follows Mattoni (1990) for butterflies, American Ornithologists' Union (1983) and supplements for birds, and Laudenslayer et al. (1991) for amphibians, reptiles and mammals.

APPENDIX B
AMPHIBIAN HABITAT ASSESSMENT
KENT BEAMAN

APPENDIX C
CALIFORNIA GNATCATCHER SURVEY REPORT
JIM JENNINGS

2000-2001
California Gnatcatcher Survey Report
Jim Jennings

For JOE
C. Baker, et al. msk

BIORESOURCE CONSULTANTS

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10 September 2003

TO: Gary Baker, Joseph W. Aidlin
FROM: Carl G. Thelander and John Konecny

Re: Results of 2003 Focused Surveys for the Coastal California Gnatcatcher at the Aidlin Blinn, Aidlin West, Casad, and Edson Parcels, Los Angeles County, California.

Dear Sirs:

This letter report presents the results of focused surveys for the coastal California gnatcatcher (*Poliophtila californica californica*)(gnatcatcher), at the Aidlin Blinn, Aidlin West, Casad, and Edson parcels in Los Angeles County, California. The gnatcatcher is listed as a threatened species by the United States Fish and Wildlife Service (USFWS). The California Department of Fish and Game (CDFG) considers the gnatcatcher to be a California Species of Special Concern.

Surveys for the gnatcatcher were conducted following protocol approved by the USFWS (USFWS 1997), for jurisdictions not participating in the Natural Communities Conservation Program (NCCP) and the Endangered Species Act section 4(d) process. The surveys were conducted by wildlife biologist John Konecny. This activity is authorized by USFWS section 10(a) permit number TE837308-3, and a CDFG Memorandum of Understanding. No gnatcatchers were detected during the surveys.

INTRODUCTION

The gnatcatcher is a small gray songbird that is an obligate resident of coastal sage scrub dominated plant communities. Its range occurs from approximately 30° N latitude in Baja California, Mexico, northward to southern Ventura County in southern California, and includes the Counties of San Diego, Riverside, Orange, Los Angeles and San Bernardino (Atwood 1992). United States populations of the gnatcatcher have undergone decline due to the loss and fragmentation of coastal sage scrub habitat resulting from urban development and agricultural activities.

Coastal sage scrub (CSS) is composed of relatively low growing, dry season deciduous, and succulent plants. Riversidean sage scrub (RSS) is the most xeric form of CSS in southern California south of Point Conception. RSS occurs from central Los Angeles County to Baja California (Holland 1986). Characteristic species of this plant community include California sagebrush (*Artemisia californica*), flat-topped buckwheat (*Eriogonum fasciculatum*), desert encelia (*Encelia farinosa*), and chaparral bush mallow (*Malacothamnus fasciculatus*). Other plant species that may be associated with RSS are black sage (*Salvia mellifera*), thick-leaved yerba santa (*Eriodictyon crassifolium*), hollyleaf redberry (*Rhamnus ilicifolia*), and toyon (*Heteromeles arbutifolia*).

Venturan CSS is a denser form of CSS, characterized by California sagebrush, flat-topped buckwheat, buff buckwheat (*Eriogonum parvifolium*), white sage (*Salvia apiana*), purple sage (*S. leucophylla*), lemonade berry (*Rhus integrifolia*), giant sea dahlia (*Coreopsis gigantea*), and rush-rose (*Helianthemum scoparium*). Venturan CSS occurs from the South Coast Range to cismontane southern California usually below 3,000-feet (1,000-meters), and extends eastward to the Cajon and San Gorgonio passes in San Bernardino and Riverside Counties (Holland 1986).

PROJECT LOCATION

The Aidlin Blinn, Aidlin West, Casad, and Edson parcels are located west of Interstate 5, and immediately south of Pico Canyon Road in the Santa Susana Mountains of northwestern Los Angeles County, California. The Aidlin West site is located north and east of Sand Rock Peak and immediately west of the Southern Oaks development project. The Casad parcel is located east of Dewitt Canyon (Southern Oaks), at the eastern terminus of Magnolia Avenue. The Aidlin Blinn parcel is located north of Lyon Canyon Significant Ecological Area, and immediately south of, and borders the Casad parcel. The Edson parcel is located between Aidlin West and Casad/Blinn, at the terminus of Old Stone Way. Specifically, the Aidlin Blinn, Aidlin West, Casad, and Edson parcels are located within Township 3 North, Range 16 West, and Sections 5 and 6 of the United States Geological Survey (USGS) Newhall and Oat Mountain 7.5-minute quadrangles.

PROJECT SITE DESCRIPTION

Aidlin Blinn Parcel

The 55-acre Aidlin Blinn parcel is a mosaic of predominantly two types of chaparral, the hoaryleaf ceanothus series and chamise-hoaryleaf ceanothus series (Sawyer 1995). The hoaryleaf ceanothus series, dominated by hoaryleaf ceanothus (*Ceanothus crassifolius*) is the most abundant and covers approximately 60% of the site. Imbedded in the hoaryleaf ceanothus are patches of chamise (*Adenostoma fasciculatum*) and flat-top buckwheat. RSS is present in narrow bands along the ridgelines, and representative species include, California sagebrush, flat-top buckwheat, and black sage. Chamise-hoaryleaf ceanothus series is present to a lesser extent on the site. The difference between the two types of ceanothus being a 60-30% mix of ceanothus to chamise present in the hoaryleaf ceanothus series, compared to a 60-30% chamise to ceanothus present in the chamise-hoaryleaf ceanothus series.

Several patches of foothill needlegrass (*Stipa lepida*) are present along the ridgeline road. Elevation of the Aidlin Blinn parcel ranges from 1,400-feet (467-meters) above Mean Sea Level (MSL) to 1,730-feet (577-meters) above MSL.

Aidlin West Parcel

The 230-acre Aidlin West parcel is primarily coastal sage scrub of the Venturan CSS and RSS types. Venturan CSS is the most extensive habitat type and covers approximately 50% of the project site. This type of sage scrub is dominated by purple sage, chaparral bush mallow, and California sagebrush. Riversidean sage scrub is present on the northernmost ridgelines.

southwestern corner, and along the southeastern border of the project site, and is dominated by black sage, California sagebrush, flat-topped buckwheat, hollyleaf redberry, and thick-leaved yerba santa.

Wickham Canyon runs south to north across the site and discharges into Pico Canyon. The primary habitat type of the Wickham Canyon drainage is mulefat scrub characterized by mulefat (*Baccharis salicifolia*), and southern willow scrub dominated by arroyo willow (*Salix lasiolepis*), red willow (*S. laevigata*), and fremont cottonwood (*Populus fremontii*), intermixed with California walnut (*Juglans californica*), Mexican elderberry (*Sambucus mexicana*), and an occasional coast live oak (*Quercus agrifolia*).

Existing dirt roads run the length of Wickham Canyon and around the existing structure near the confluence of the drainages from Wickham and Pico Canyons. The edges of these existing dirt roads are lined with non-native grasses including cheat grass (*Bromus tectorum*), wild oats (*Avena* sp.), and black mustard (*Brassica nigra*). Elevation of the site ranged from 1,480-feet (493-meters) above MSL to 2,240-feet (678-meters) above MSL.

Casad Parcel

Like the bordering Aidlin Blinn parcel, the 40-acre Casad parcel is a mosaic of hoaryleaf ceanothus and chamise-hoaryleaf ceanothus chaparrals. Scrub oak (*Quercus berberidifolia*), squawbush (*Rhus trilobata*) and Mexican elderberry are also scattered throughout the parcel. RSS is present in a band along the ridgeline of the parcel. There are three coast live oak (*Q. agrifolia*) individuals and a Fremont cottonwood on the canyon floor, as well as few patches of mulefat (*Baccharis salicifolia*). Elevation of the Casad parcel ranges from 1,420-feet (473-meters) above MSL to 1,600-feet (533-meters) above MSL.

Edson Parcel

The 40-acre Edson parcel is bowl shaped and surrounded on three sides by the Southern Oaks development. Approximately 40% of the site is RSS along the ridgelines and north-facing slopes characterized by California sagebrush and flat-top buckwheat. The RSS transitions into hoaryleaf ceanothus series chaparral at the lower elevations. Elevation of the Casad parcel ranges from 1,420-feet (473-meters) above MSL to 1,900-feet (633-meters) above MSL.

METHODS

Six focused survey events were conducted in 2003 to determine presence or absence of the gnatcatcher on the Aidlin Blinn, Aidlin West, Casad, and Edson parcels, pursuant to protocol for jurisdictions not participating in the NCCP and section 4(d) process. Each survey event consisted of three back-to-back-to-back morning surveys by one biologist. Surveys were conducted between May 20 and June 26, 2003.

Surveys were conducted in all CSS habitat on all four of the project sites. Surveys were conducted between the hours of 0600 and 1100, with the typical survey having a duration of approximately five hours. Environmental conditions for the six survey events are summarized in

Table 1. Field survey methods consisted of the surveyor walking slowly through the CSS and habitat and carefully recording all animal species observed or heard in the vicinity. Initial attempts to locate gnatcatchers were done visually and passively. Tape-recorded vocalizations of the gnatcatcher were played after initial attempts to locate gnatcatchers passively failed.

RESULTS

No gnatcatchers were detected on the Aidlin Blinn, Aidlin West, Casad, or Edson sites during any of six focused surveys in 2003. Suitable CSS habitat exists on all four of the sites, but is very limited on the Aidlin Blinn and Casad sites.

Eight species of mammals, 50 species of birds, and one reptile species were detected on the four parcels (Table 2). Two bird species detected on the Aidlin West, Casad, and Edson parcels, the rufous-crowned sparrow (*Aimophila ruficeps*) and the prairie falcon (*Falco mexicanus*) are considered to be a California Species of Special Concern by CDFG. The rufous-crowned sparrow likely nests in the CSS on the three sites. No other Federal or State endangered, threatened, or rare species were detected.

CONCLUSION

No gnatcatchers were detected on the Aidlin Blinn, Aidlin West, Casad, or the Edson parcels during the 2003 surveys. No gnatcatchers were heard or seen in offsite areas around the project site. Surveys conducted in previous years on the Aidlin West site by Jennings (Jennings 1999) and BioResource Consultants (2001)(2002) similarly found no gnatcatchers. No gnatcatchers were detected on the Casad parcel in 2002 (BioResource Consultants 2002).

The results of focused surveys for listed species are typically considered valid for one year by the USFWS and CDFG. This findings of this report will be forwarded to the USFWS, per their guidelines. If you have any questions or require additional information, please call me at (805) 646-3932.

Sincerely,



Carl G. Thelander
Principal Investigator

John K. Konecny
Wildlife Biologist
Permit No. TE837308-3

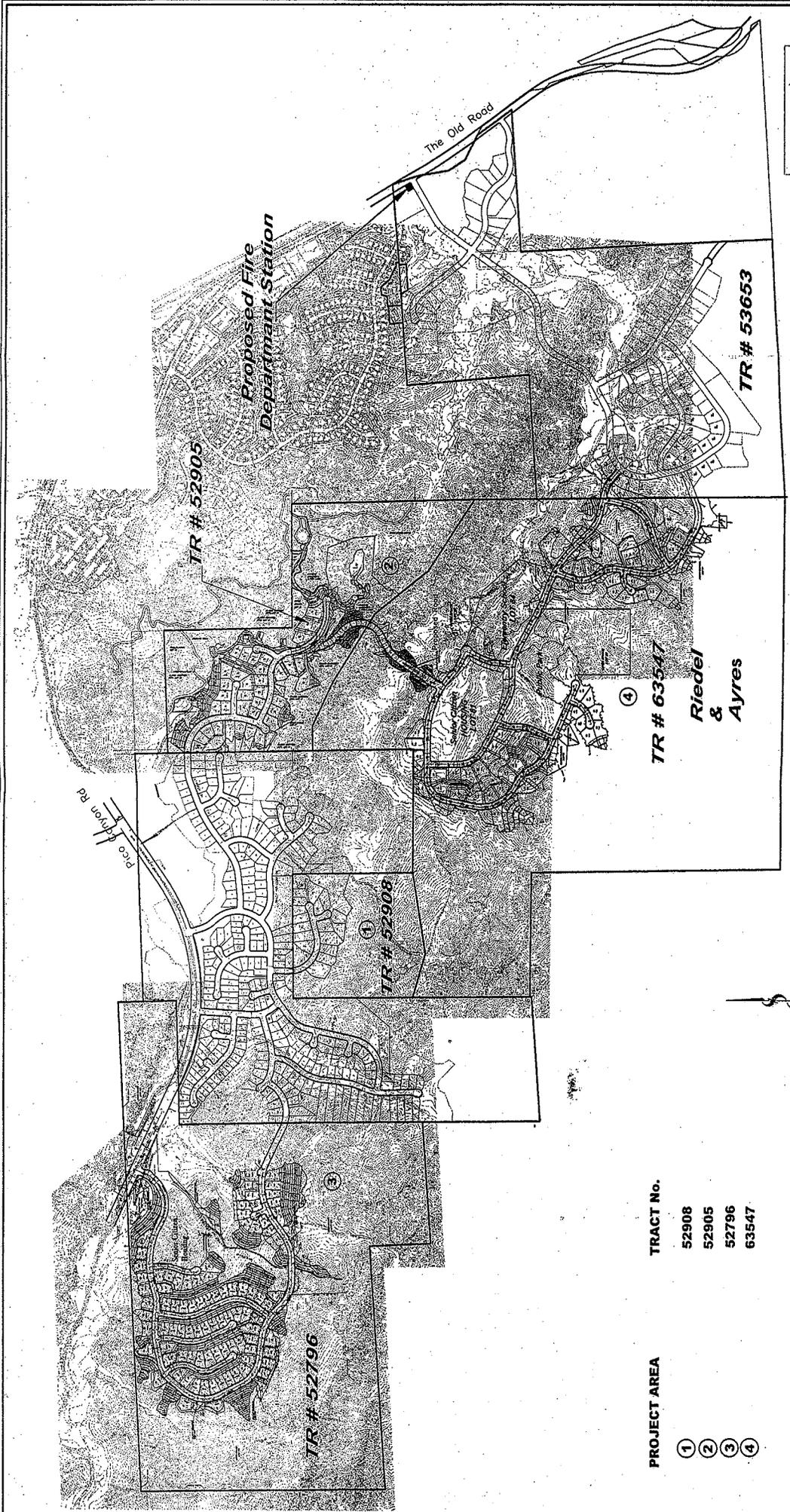
1900-1901
The first year of the century was marked by a period of general depression and stagnation. The war of 1898 had exhausted the country, and the economic crisis of 1893 had left a deep impression on the public mind. The country was in a state of general depression, and the people were looking for a new era of prosperity and progress.

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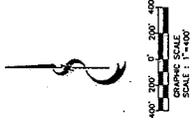
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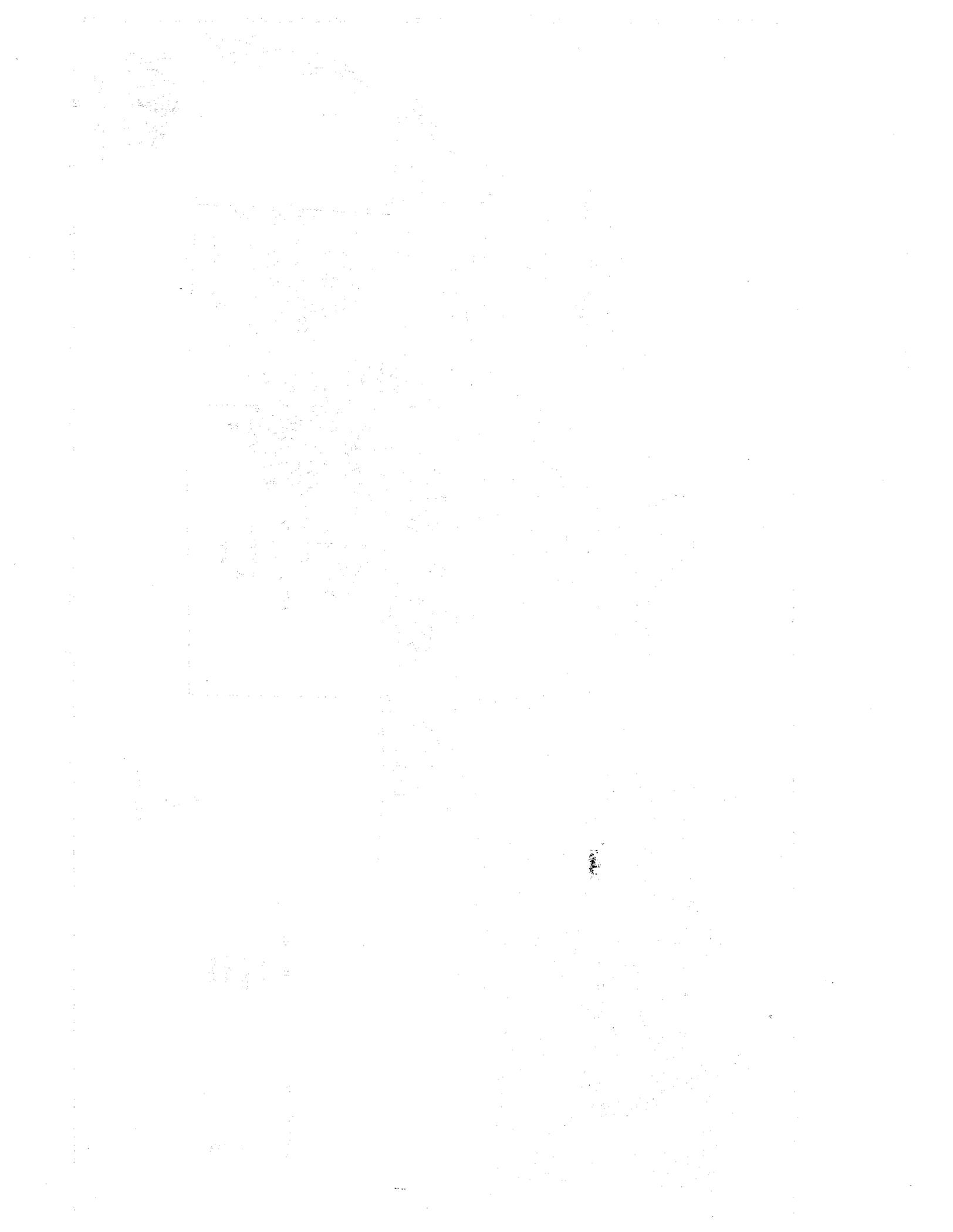


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TRACT No.
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PROJECT AREA
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- Atwood, J. L. 1992. A Maximum Estimate of the California Gnatcatcher's Population Size in the United States. *Western Birds* 23:1-9.
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- United States Department of the Interior, U.S. Fish and Wildlife Service. 1997. Coastal California Gnatcatcher (*Polioptila californica californica*), Presence/Absence Protocol. FWS Carlsbad Ecological Services Field Office Unpublished Report.

Table 1. Weather Conditions During Six Focused California Gnatcatcher Surveys at the Aidlin Blinn, Aidlin West, Casad, and Edson Parcels, 2003.

Survey #	Date	Personnel (Species)(Parcel)	Weather Conditions
1A	05/20/03	JK (CAGN)(AW)	0% overcast, 66-82F, wind 1-3mph
1B	05/21/03	JK (CAGN)(AW, C)	0% overcast, 68-88F, wind 1-3mph
1C	05/22/03	JK (CAGN)(AB, E)	0% overcast, 64-78F, wind 1-3mph
2A	05/27/03	JK (CAGN)(AW)	40% overcast, 62-84F, wind 3-5mph
2B	05/28/03	JK (CAGN)(AW, C)	10% overcast, 64-86F, wind 1-3mph
2C	05/29/03	JK (CAGN)(AB, E)	80% overcast, 60-76F, wind 3-5mph
3A	06/03/03	JK (CAGN)(AW)	100% overcast, 60-76F, wind 1-3mph
3B	06/04/03	JK (CAGN)(AW, C)	100% overcast, 60-76F, wind 3-5mph
3C	06/05/03	JK (CAGN)(AB, E)	100% overcast, 58-72F, wind 3-5mph
4A	06/09/03	JK (CAGN)(AW)	100% overcast, light mist, 58-68F, wind 3-5mph
4B	06/10/03	JK (CAGN)(AW, C)	100% overcast, light mist, 58-66F, wind 1-3mph
4C	06/11/03	JK (CAGN)(AB, E)	100% overcast, 58-68F, wind 1-3mph
5A	06/16/03	JK (CAGN)(AW)	100% overcast, haze, 60-76F, wind 3-5mph
5B	06/17/03	JK (CAGN)(AW, C)	100% overcast, haze, 60-74F, wind 3-5mph
5C	06/18/03	JK (CAGN)(AB, E)	100% overcast, haze, 62-76F, wind 5-10mph
6A	06/24/03	JK (CAGN)(AW)	100% overcast, 60-76F, wind 3-5mph
6B	06/25/03	JK (CAGN)(AW, C)	10% overcast, 58-78F, wind 1-3mph
6C	06/26/03	JK (CAGN)(AB, E)	10% overcast, 66-84F, wind 1-3mph

JK=John Konecny; CAGN=California Gnatcatcher; AB=Aidlin Blinn; AW=Aidlin West; C=Casad; E=Edson

Table 2. Animal Species Detected During Six Surveys of the Aidlin Blinn, Aidlin West, Casad, and Edson Parcels, 2003.

Class Mammalia		
Family Canidae		
Domestic Dog	<i>Canis domesticus</i>	css, dis
Coyote	<i>Canis latrans</i>	ch, css, dis, ms
Family Felidae		
Bobcat	<i>Lynx rufus</i>	ch, css, ms, sws
Family Cervidae		
Mule Deer	<i>Odocoileus hemionus</i>	ch, css, ms
Family Procyonidae		
Raccoon	<i>Procyon lotor</i>	ms
Family Mustelidae		
Striped Skunk	<i>Mephitis mephitis</i>	ch, ms
Family Sciuridae		
Beechy Ground Squirrel	<i>Spermophilus beecheyi</i>	ch, css, dis, ms
Family Leporidae		
Audubon's Cottontail	<i>Sylvilagus auduboni</i>	ch, css, dis
Class Aves		
Family Charadriidae		
Killdeer	<i>Charadrius vociferous</i>	dis
Family Cathartidae		
Turkey Vulture	<i>Cathartes aura</i>	fo
Family Accipitridae		
Red-shouldered Hawk	<i>Buteo lineatus</i>	sws, fo
Red-tailed Hawk	<i>Buteo jamaicensis</i>	fo
Family Falconidae		
American Kestrel	<i>Falco sparverius</i>	sws, fo
Prairie Falcon	<i>Falco mexicanus</i>	css, fo
Family Odontophoridae		
California Quail	<i>Callipepla californica</i>	ch, ms, css
Family Columbidae		
Rock Dove	<i>Colomba livia</i>	sws, fo

Mourning Dove	<i>Zenaida macroura</i>	ch, css, sws, fo
Family Tytonidae		
Great Horned Owl	<i>Bubo virginianus</i>	sws
Family Apodidae		
White-throated Swift	<i>Aeronautes saxatalis</i>	fo
Family Trochilidae		
Anna's Hummingbird	<i>Calypte anna</i>	ch, css, sws, dis
Costa's Hummingbird	<i>Calypte costae</i>	ch, css, ms
Family Cuculidae		
Greater Roadrunner	<i>Geococcyx californianus</i>	ch, css
Family Picidae		
Nuttall's Woodpecker	<i>Picoides nuttallii</i>	ch, css
Northern Flicker	<i>Colaptes auratus</i>	ms, sws
Family Tyrannidae		
Black Phoebe	<i>Sayornis nigricans</i>	dis, ms, sws
Pacific-slope Flycatcher	<i>Empidonax difficilis</i>	sws
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	ch, css, sws
Western Kingbird	<i>Tyrannus verticalis</i>	ch, css, dis
Family Alaudidae		
Horned Lark	<i>Eremophila alpestris</i>	dis
Family Hirundinidae		
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	fo
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	fo, sws
Barn Swallow	<i>Hirundo rustica</i>	dis, fo
Violet-green Swallow	<i>Tachycineta thalassina</i>	fo
Family Timaliidae		
Wrentit	<i>Chamaea fasciata</i>	ch, ms, css, rw
Family Troglodytidae		
Bewick's Wren	<i>Thryomanes bewickii</i>	ch, css, rw
House Wren	<i>Troglodytesaedon</i>	sws
Family Corvidae		
Western Scrub Jay	<i>Apelocoma coerulescens</i>	ch, css, rw
Common Raven	<i>Corvus corvax</i>	rw, fo

Family Aegithalidae Common Bushtit	<i>Psaltriparus minimus</i>	ch, ms, css, rw
Family Mimidae Northern Mockingbird California Thrasher	<i>Mimus polyglottus</i> <i>Toxostoma redivivum</i>	css, dis ch, ms, css
Family Sturnidae European Starling	<i>Sturnus vulgaris</i>	dis, sws
Family Bombycillidae Cedar Waxwing	<i>Bombycilla nitens</i>	fo
Family Sylviidae Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	ch, css
Family Ptilonotidae Phainopepla	<i>Phainopepla nitens</i>	ch, css, sws
Family Parulidae Orange-crowned Warbler Common Yellowthroat Wilson's Warbler	<i>Vermivora celata</i> <i>Geothlypis trichas</i> <i>Wilsonia pusilla</i>	ch, ms, sws dis, sws ms, sws
Family Emberizidae Spotted Towhee California Towhee Black-headed Grosbeak Song Sparrow Rufous-crowned Sparrow Lazuli Bunting	<i>Pipilo erythrophthalmus</i> <i>Pipilo fuscus</i> <i>Pheucticus melanocephalus</i> <i>Melospiza melodia</i> <i>Aimophila ruficeps</i> <i>Passerina amoena</i>	ch, ms, css, sws ch, css, dis, sws sws ms, sws css ch, ms
Family Icteridae Bullock's Oriole	<i>Icterus bullockii</i>	sws
Family Fringillidae Lesser Goldfinch American Goldfinch House Finch	<i>Carduelis psaltria</i> <i>Carduelis tristis</i> <i>Carpodacus mexicanus</i>	ch, css, dis, sws ms, sws ch, css, dis, sws

Habitat Key

css	coastal sage scrub	ms	mulefat scrub
ch	chaparral	sws	southern willow scrub
dis	disturbed		
fo	flying overhead		

BIORESOURCE CONSULTANTS

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7 May 2002

TO: Gary Baker
FROM: Carl G. Thelander and John Konecny

Re: Results of 2001 Focused Surveys for the California Gnatcatcher at the Aidlin West Parcel, Los Angeles County, California.

Dear Mr. Baker:

This letter report presents the results of focused surveys for the California gnatcatcher (*Polioptila californica californica*)(gnatcatcher), at the Aidlin West parcel in Los Angeles County, California. The gnatcatcher is listed as a threatened species by the United States Fish and Wildlife Service (USFWS). The California Department of Fish and Game (CDFG) considers the gnatcatcher to be a California Species of Special Concern (CSC).

Surveys for the gnatcatcher were conducted following protocol approved by the USFWS (USFWS 1997), for jurisdictions not participating in the Natural Communities Conservation Program (NCCP) and the Endangered Species Act section 4(d) process. The surveys were conducted by wildlife biologists John Konecny and Ian Swift. This activity is authorized by USFWS section 10(a) permit number TE837308-2, and a CDFG Memorandum of Understanding. No gnatcatchers were detected during the surveys.

INTRODUCTION

The gnatcatcher is a small gray songbird that is an obligate resident of coastal sage scrub dominated plant communities. Its range occurs from approximately 30 degrees north latitude in Baja California, Mexico, northward to southern Ventura County in southern California, and includes the Counties of San Diego, Riverside, Orange, Los Angeles and San Bernardino (Atwood 1992). United States populations of the gnatcatcher have undergone decline due to the loss and fragmentation of coastal sage scrub habitat resulting from urban development and agricultural activities.

Coastal sage scrub is composed of relatively low growing, dry season deciduous, and succulent plants. Riversidean sage scrub (RSS) is the most xeric form of coastal sage scrub in coastal southern California from Los Angeles into Baja California (Holland 1986). Characteristic species of this plant community include California sagebrush (*Artemisia californica*), flat-topped buckwheat (*Eriogonum fasciculatum*), desert encelia (*Encelia farinosa*), and chaparral bush mallow (*Malacothamnus fasciculatus*). Other plant species that may be associated with RSS are black sage (*Salvia mellifera*), thick-leaved yerba santa (*Eriodictyon crassifolium*), hollyleaf redberry (*Rhamnus ilicifolia*), and toyon (*Heteromeles arbutifolia*).

PROJECT LOCATION

The Aidlin West parcel is located west of Interstate 5, immediately south of Pico Canyon Road, and north of Sand Rock Peak in the Santa Susana Mountains of northwestern Los Angeles County, California. The site is bordered by wild land on the south, west, and north sides, and by the Dewitt development project on the east side. Specifically, the referenced parcel is located within Township 3 North, Range 16 West, Section 6 of the United States Geological Survey (USGS) Newhall and Oat Mountain 7.5-minute quadrangle (USGS 1988).

PROJECT SITE DESCRIPTION

The Aidlin West site is primarily coastal sage scrub (CSS) composed of Venturan and Riversidean coastal sage scrub. Venturan coastal scrub is the most extensive habitat type and covers approximately 50% of the project site. This type of sage scrub is dominated by purple sage (*Salvia leucophylla*), chaparral bush mallow, and California sagebrush. Riversidean sage scrub is present on the northernmost ridgelines, southwestern corner, and along the southeastern border of the project site, and is dominated by black sage, California sagebrush, flat-topped buckwheat, hollyleaf redberry, and thick-leaved yerba santa.

Wickham Canyon runs south to north across the site and discharges into Pico Canyon. The primary habitat type of the Wickham Canyon drainage is mulefat scrub characterized by mulefat (*Baccharis salicifolia*), and southern willow scrub dominated by arroyo willow (*Salix lasiolepis*), red willow (*S. laevigata*), and freemont cottonwood (*Populus fremontii*), intermixed with California walnut (*Juglans californica*), Mexican elderberry (*Sambucus mexicana*), and an occasional coast live oak (*Quercus agrifolia*).

Existing dirt roads run the length of Wickham Canyon and around the existing structure near the confluence of the drainages from Wickham and Pico Canyons. The edges of these existing dirt roads are lined with non-native grasses including cheat grass (*Bromus tectorum*), wild oats (*Avena* sp.), and black mustard (*Brassica nigra*). Elevation of the site ranged from 449-meters (1480-feet) above Mean Sea Level (MSL) to 678-meters (2240-feet) MSL.

METHODS

Six focused survey events were conducted in 2001 to determine presence or absence of the gnatcatcher on the Aidlin West parcel, pursuant to protocol for jurisdictions not participating in the NCCP and section 4(d) process. Each survey event consisted of two back-to-back morning surveys by one biologist, or one morning survey by two biologists. Surveys were conducted on May 17th and 18th, May 25th, June 1st and 2nd, June 8th and 9th, June 15th and 16th, and June 26th.

Surveys were conducted in all CSS habitat on the project site. Surveys were conducted between the hours of 0730 and 1030, with the typical survey having a duration of approximately three hours. Temperature ranged from 65 to 90 degrees Fahrenheit, winds from three to 10 miles per hour, and sky's were generally clear. Field survey methods consisted of the surveyor walking slowly through the DSS and habitat and carefully recording all animal species observed or heard in the vicinity. Initial attempts to locate gnatcatchers were done visually. Tape-recorded

vocalizations of the gnatcatcher were played after initial attempts to locate gnatcatchers visually failed.

RESULTS

No gnatcatchers were detected on the site during any of six focused surveys in 2001. Suitable CSS habitat exists on much of the site.

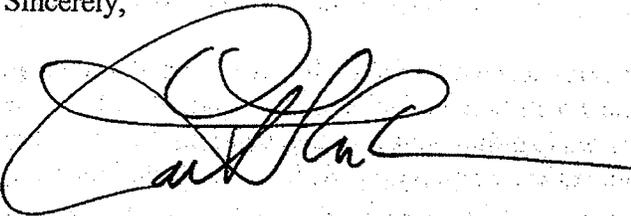
Six species of mammals, forty-six species of birds, and one reptile species were detected on the project site (Table 1). One bird species, the rufous-crowned sparrow (*Aimophila ruficeps*) is considered to be a California Species of Special Concern by CDFG. The rufous-crowned sparrow likely nests in the CSS onsite. No other Federal or State endangered, threatened, or rare species were detected.

CONCLUSION

No gnatcatchers were detected on the Aidlin West project site during the year 2001 surveys. No gnatcatchers were heard or seen in offsite areas around the project site. Surveys conducted in previous years by Jennings (Jennings 1999) similarly found no gnatcatchers on the project site.

The results of focused surveys for listed species are typically considered valid for one year by the USFWS and CDFG. If you have any questions or require additional information, please call me at (805) 64-3932.

Sincerely,



Carl G. Thelander
Principal Investigator

John K. Konecny
Wildlife Biologist
Permit No. TE837308-2

REFERENCES CITED

- Atwood, J. L. 1992. A Maximum Estimate of the California Gnatcatcher's Population Size in the United States. *Western Birds* 23:1-9.
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- United States Department of the Interior, U.S. Geological Survey. 1952, photorevised 1969. Oat Mountain, California 7.5 Minute Quadrangle Series.

Table 1. Animal Species Detected During Six Surveys of the Aidlin West Project Site, 2001

Class Mammalia		
Family Canidae		
Domestic Dog	<i>Canis domesticus</i>	css, dis
Family Felidae		
Bobcat	<i>Lynx rufus</i>	css, ms, sws
Family Cervidae		
Mule Deer	<i>Odocoileus hemionus</i>	css, ms
Family Procyonidae		
Raccoon	<i>Procyon lotor</i>	ms
Family Sciuridae		
Beechy Ground Squirrel	<i>Spermophilus beecheyi</i>	css, dis, ms
Family Leporidae		
Audubon's Cottontail	<i>Sylvilagus auduboni</i>	css, dis
Class Aves		
Family Anatidae		
Mallard	<i>Anas platyrrhynchos</i>	dis
Family Charadriidae		
Killdeer	<i>Charadrius vociferous</i>	dis
Family Cathartidae		
Turkey Vulture	<i>Cathartes aura</i>	fo
Family Accipitridae		
Red-shouldered Hawk	<i>Buteo lineatus</i>	sws, fo
Red-tailed Hawk	<i>Buteo jamaicensis</i>	fo
Family Falconidae		
American Kestrel	<i>Falco sparverius</i>	sws, fo
Family Odontophoridae		
California Quail	<i>Callipepla californica</i>	ms, css
Family Columbidae		
Rock Dove	<i>Colomba livia</i>	sws, fo
Mourning Dove	<i>Zenaida macroura</i>	css, sws, fo

Family Tytonidae			
Great Horned Owl	<i>Bubo virginianus</i>		sws
Family Apodidae			
White-throated Swift	<i>Aeronautes saxatalis</i>		fo
Family Trochilidae			
Anna's Hummingbird	<i>Calypte anna</i>		css, sws, dis
Costa's Hummingbird	<i>Calypte costae</i>		css, ms
Family Tyrannidae			
Black Phoebe	<i>Sayornis nigricans</i>		dis, ms, sws
Pacific-slope Flycatcher	<i>Empidonax difficilis</i>		sws
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>		css, sws
Western Kingbird	<i>Tyrannus verticalis</i>		css, dis
Family Alaudidae			
Horned Lark	<i>Eremophila alpestris</i>		dis
Family Hirundinidae			
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>		fo
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>		fo, sws
Barn Swallow	<i>Hirundo rustica</i>		dis, fo
Violet-green Swallow	<i>Tachycineta thalassina</i>		fo
Family Timaliidae			
Wrentit	<i>Chamaea fasciata</i>		ms, css, rw
Family Troglodytidae			
Bewick's Wren	<i>Thryomanes bewickii</i>		css, rw
House Wren	<i>Troglodytesaedon</i>		sws
Family Corvidae			
Western Scrub Jay	<i>Aphelocoma coerulescens</i>		css, rw
Common Raven	<i>Corvus corvax</i>		rw, fo
Family Aegithalidae			
Common Bushtit	<i>Psaltriparus minimus</i>		ms, css, rw
Family Mimidae			
Northern Mockingbird	<i>Mimus polyglottus</i>		css, dis
California Thrasher	<i>Toxostoma redivivum</i>		ms, css
Family Sturnidae			
European Starling	<i>Sturnus vulgaris</i>		dis, sws

Family Bombycillidae			
Cedar Waxwing	<i>Bombycilla nitens</i>	fo	
Family Ptilonotidae			
Phainopepla	<i>Phainopepla nitens</i>	css, sws	
Family Parulidae			
Orange-crowned Warbler	<i>Vermivora celata</i>	ms, sws	
Common Yellowthroat	<i>Geothlypis trichas</i>	dis, sws	
Family Emberizidae			
Spotted Towhee	<i>Pipilo erythrophthalmus</i>	ms, css, sws	
California Towhee	<i>Pipilo fuscus</i>	css, dis, sws	
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	sws	
Song Sparrow	<i>Melospiza melodia</i>	ms, sws	
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	css	
Lazuli Bunting	<i>Passerina amoena</i>	ms	
Family Icteridae			
Bullock's Oriole	<i>Icterus bullockii</i>	sws	
Family Fringillidae			
Lesser Goldfinch	<i>Carduelis psaltria</i>	css, dis, sws	
American Goldfinch	<i>Carduelis tristis</i>	ms, sws	
House Finch	<i>Carpodacus mexicanus</i>	css, dis, sws	
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	fo	
Class Reptilia			
Family Iguanidae			
Western Fence Lizard	<i>Sceloporus occidentalis</i>	css, dis, sws	

Habitat Key

Css	coastal sage scrub
dis	disturbed
fo	flying overhead
ms	mulefat scrub
sws	southern willow scrub

FAX COVER SHEET



LITIGATION GRAPHICS

An Affiliate of Envicom Corporation

Date July 15, 1999

To Gary Baker, Alan Fide, Jill Bushroff, Kim Grobner,

Company Verna, Dixon, Robb Hamilton

Fax Number _____

Number of Pages (Including Cover) 6 urgent

original to follow

From Kathy Patay

Comments Results of Grutatcher survey, FYI

at your request for your information

for your comments please call and discuss with me

28328 Agoura Road
Agoura Hills, California 91301

Tel. (818) 879-4710
Fax (818) 879-4711

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JIM JENNINGS
Independent Biological Consultant

PMB # 141
501 W. Glenoaks Blvd.
GLENDALE, CA 91202

Coastal California Gnatcatcher (*Polioptila californica californica*) Survey Report

Project: Aidlin Properties (Pico Canyon) California Gnatcatcher Study

Location: Los Angeles County, Pico Canyon (See Maps)

Surveyed For: Envicom Corporation

Surveyed By: Jim Jennings

Permit Number: PRT-832515

Methods

The survey was conducted by myself. The survey was conducted between 0600 and 1200. The area surveyed consisted of approximately 200 acres. Two days each week were needed to conduct the survey. The survey was conducted by slowly walking survey routes (see map) and playing taped coastal California gnatcatcher calls. Taped calls were played only by myself. Return calls were listened for and silent birds were looked for. Taped calls were played an average of approximately 20 times per hour.

Survey Details

The surveys began at approximately 0600 and ended shortly before 1200.

Surveys Dates	Temp. at Start of Survey	Temp. at End of Survey	Weather at Start of Survey	Weather at End of Survey
May 25	57°F	82°F	Clear	Clear
May 26	57°	76°	Clear	Clear
June 2	50°	58°	Overcast	Overcast
June 3	50°	56°	Overcast	Mostly Cloudy
June 8	42°	78°	Clear	Clear
June 9	52°	72°	Clear	Clear
June 15	51°	90°	Clear	Clear
June 16	50°	86°	Clear	Clear
June 22	54°	87°	Overcast	Clear
June 23	48°	85°	Clear	Clear
June 29	49°	88°	Clear	Clear
June 30	57°	84°	Clear	Clear

Plant Community Description

The dominant vegetation type in the project area is Venturan coastal sage scrub. The community is dominated by purple sage (*Salvia leucophylla*), chaparral bush mallow (*Malacothamnus fasciculatus*) and California sagebrush (*Artemisia californica*). Other shrubs present include blue elderberry (*Sambucus mexicana*), squawbush (*Rhus trilobata*), toyon (*Heteromeles arbutifolia*), poison-oak (*Toxicodendron diversilobum*), California peony (*Paeonia californica*), purple nightshade (*Solanum xanti*), hoaryleaf ceanothus (*Ceanothus crassifolius*), black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), and thick-leaved yerba santa (*Eriodictyon crassifolium*).

Elements of non-native grassland occur in disturbed areas near dirt roads and other areas possibly burned in the 1987 fire. The grasslands are dominated by introduced annual grasses (*Avena* sp., *Bromus* sp., *Hordeum* sp.), and introduced herbs such as black mustard (*Brassica nigra*), red-stemmed filaree (*Erodium cicutarium*), milk-thistle (*Silybum marianum*), common fiddleneck (*Amsinckia menziesii*), and Italian thistle (*Carduus pycnocephalus*). California aster (*Lessingia filaginifolia*) and Palmer's goldenbush (*Ericameria palmeri*) are also common in these grasslands.

Riparian plant communities are present in the bottom of the major drainages of the project area. The main branch of Pico Creek supports mule fat (*Baccharis salicifolia*) and coyote bush (*Baccharis pilularis*) scrub, with scattered willows (*Salix* spp.), an occasional Fremont cottonwood (*Populus fremontii*), and small woodland areas with coast live oak (*Quercus agrifolia*). The Wickham Canyon tributary extends the mule fat upstream, where it transitions to live oak woodland. Other un-named tributaries also support mule fat scrub and two associated seeps with Mexican rush (*Juncus mexicanus*) on the "Edson Parcel". The "Casad Parcel", which contains no coastal sage scrub, supports an alluvial scrub comprised of mule fat and golden currant (*Ribes aureum*), intergrading with chamise (*Adenostoma fasciculatum*) and hoaryleaf ceanothus chaparral.

Results

No coastal California gnatcatchers were found on or near the project site.

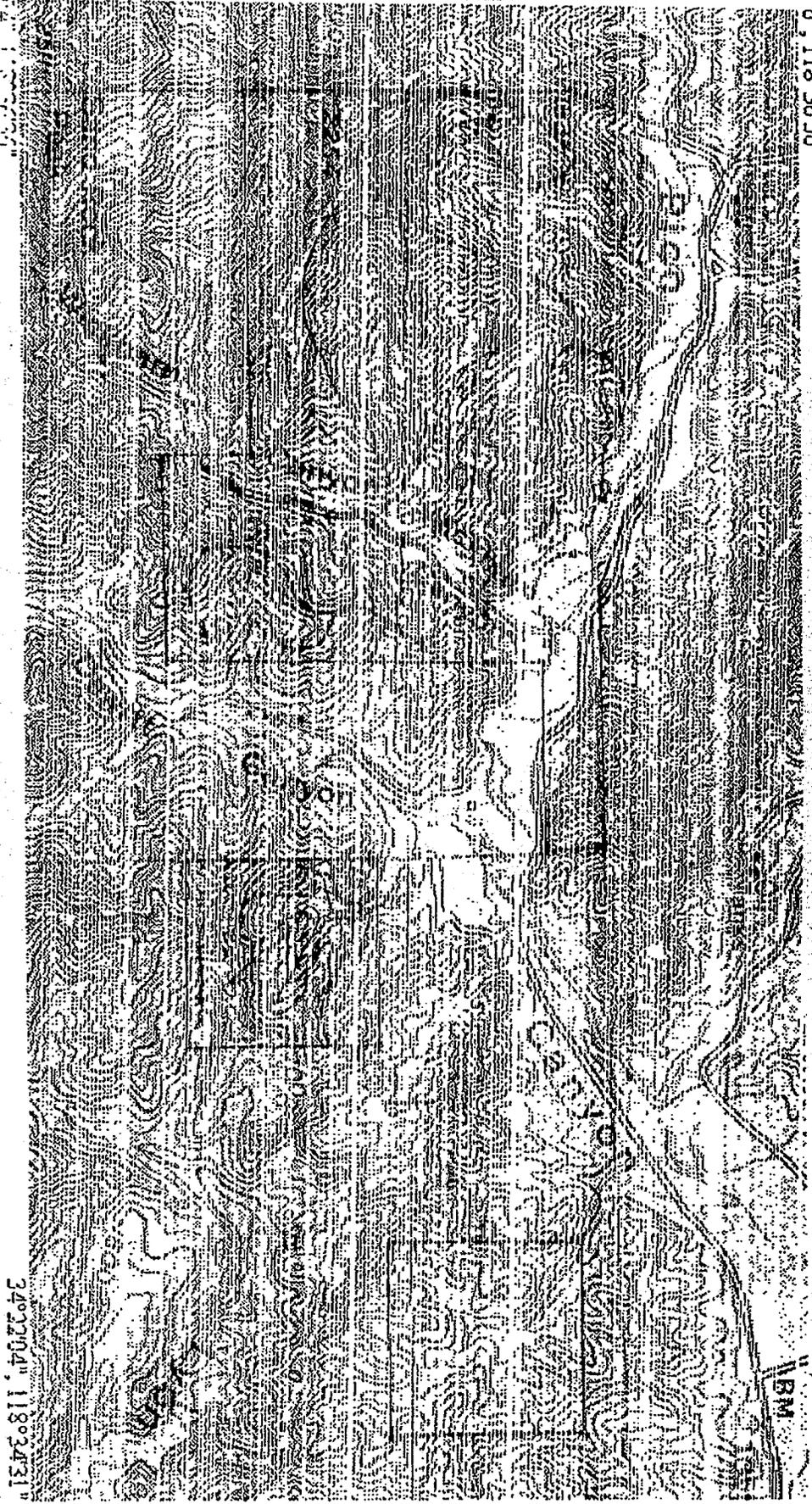
cc: Envicom Corp.

0° 11' 32.232"

Adlin Properties Coastal California Gnatcatcher Survey Area

34° 22' 56", 118° 34' 31"

BM



34° 22' 04", 118° 34' 31"



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Project Area



Coastal Sage Scrub Habitat



Survey Route



Report: Aidlin Properties California Gnatcatcher Survey for Envicom

5/25/99 to 6/30/99

Observer: Jim Jennings

Number of Species Observed: 36

FALCONIFORMES**Cathartidae**

Turkey Vulture

*Cathartes aura***Accipitridae**

Cooper's Hawk

Accipiter cooperii

Red-tailed Hawk

Buteo jamaicensis

Golden Eagle

*Aquila chrysaetos***Falconidae**

Prairie Falcon

*Falco mexicanus***GALLIFORMES****Dontophoridae**

California Quail

*Callipepla californica***COLUMBIFORMES****Columbidae**

Mourning Dove

*Zenaidura macroura***APODIFORMES****Apodidae**

White-throated Swift

*Aeronautes saxatalis***TROCHILIFORMES****Trochilidae**

Anna's Hummingbird

Calypte anna

Costa's Hummingbird

*Calypte costae***PICIFORMES****Picidae**

Nuttall's Woodpecker

Picoides nuttallii

Red-shafted Flicker

*Colaptes auratus***PASSERIFORMES****Tyrannidae**

Black Phoebe

Sayornis nigricans

Ash-throated Flycatcher

Myiarchus cinerascens

Western Kingbird

*Tyrannus verticalis***Corvidae**

Western Scrub-Jay

Aphelocoma californica

Common Raven

*Corvus corax***Bombycillidae**

Phainopepla

*Phainopepla nitens***Mimidae**

California Thrasher

*Toxostoma redivivum***Troglodytidae**

Canyon Wren

Catherpes mexicanus

Bewick's Wren

*Thryomanes bewickii***Aegithalidae**

Bushtit

*Psaltriparus minimus***Hirundinidae**

Violet-green Swallow

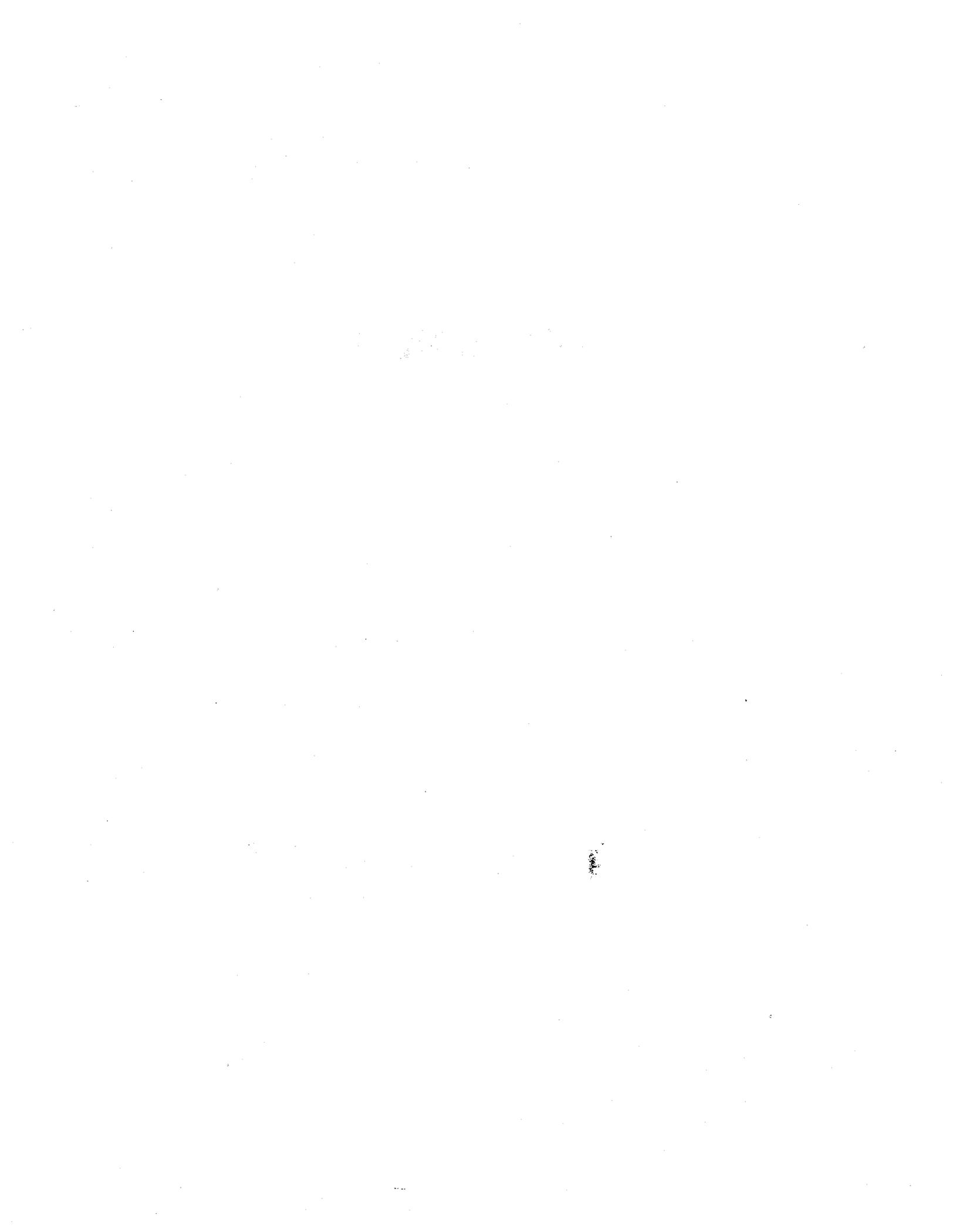
Tachycineta thalassina

Northern Rough-winged Swallow

Stelgidopteryx serripennis

Cliff Swallow	<i>Hirundo pyrrhonota</i>
Sylviidae	
Wrenit	<i>Chamaea fasciata</i>
Paridae	
Oak Titmouse	<i>Baeolophus inornatus</i>
Fringillidae	
Lesser Goldfinch	<i>Carduelis psaltria</i>
House Finch	<i>Carpodacus mexicanus</i>
Parulidae	
Common Yellowthroat	<i>Geothlypis trichas</i>
Emberizidae	
Song Sparrow	<i>Melospiza melodia</i>
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>
Spotted Towhee	<i>Pipilo maculatus</i>
California Towhee	<i>Pipilo crissalis</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Icteridae	
Bullock's Oriole	<i>Icterus bullockii</i>

SECTION 2



WETLAND DELINEATION REPORT

The Aidlin Project

Prepared for:

Mr. Gary M. Baker/Plan II
1180 Avenue 66
Pasadena, California 91105

Representative of:

Joseph W. Aidlin,
Trustee of Aidlin General Trust;
Mildred S. Blinn,
Trustee of Cecil and Mildred Blinn Trusts;
Stephanie J. Dausek and Dianne S. Morris, Owners

Prepared by:

Envicom Corporation
28328 Agoura Road
Agoura Hills, California 91301
818-879-4700

June 9, 2000

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1.0 INTRODUCTION

The purpose of this report is to document the extent of jurisdictional Waters of the US, wetlands, and riparian habitat located within The Aidlin Project site state, and federal. This technical report delineates existing onsite conditions; potential future project impacts and mitigation are not included herein. However, based on an initial review of the site plans, the project would result in the fill of jurisdictional habitats, therefore the applicant will be required to obtain the following permits and agreements:

- Section 404 Permit pursuant to the Clean Water Act of 1977 - US Army Corps of Engineers;
- Section 1603 Agreement pursuant to the California Fish and Game Code - California Department of Fish and Game; and
- Section 401 Water Quality Certification -Regional Water Quality Control Board.

1.1 Location

The project site is located west of the Golden State Freeway (I-5) and south of Pico Canyon Road in an unincorporated area of Los Angeles County within the Santa Clarita Valley (Figure 1). Pico Canyon Road provides site access (Figure 2). Past the I-5 Golden State Freeway, Pico Canyon Road continues east as Lyons Avenue.

1.2 Project Applicant

Mr. Gary M. Baker / Plan II
1180 Avenue 66
Pasadena, California 91105

Representative of:

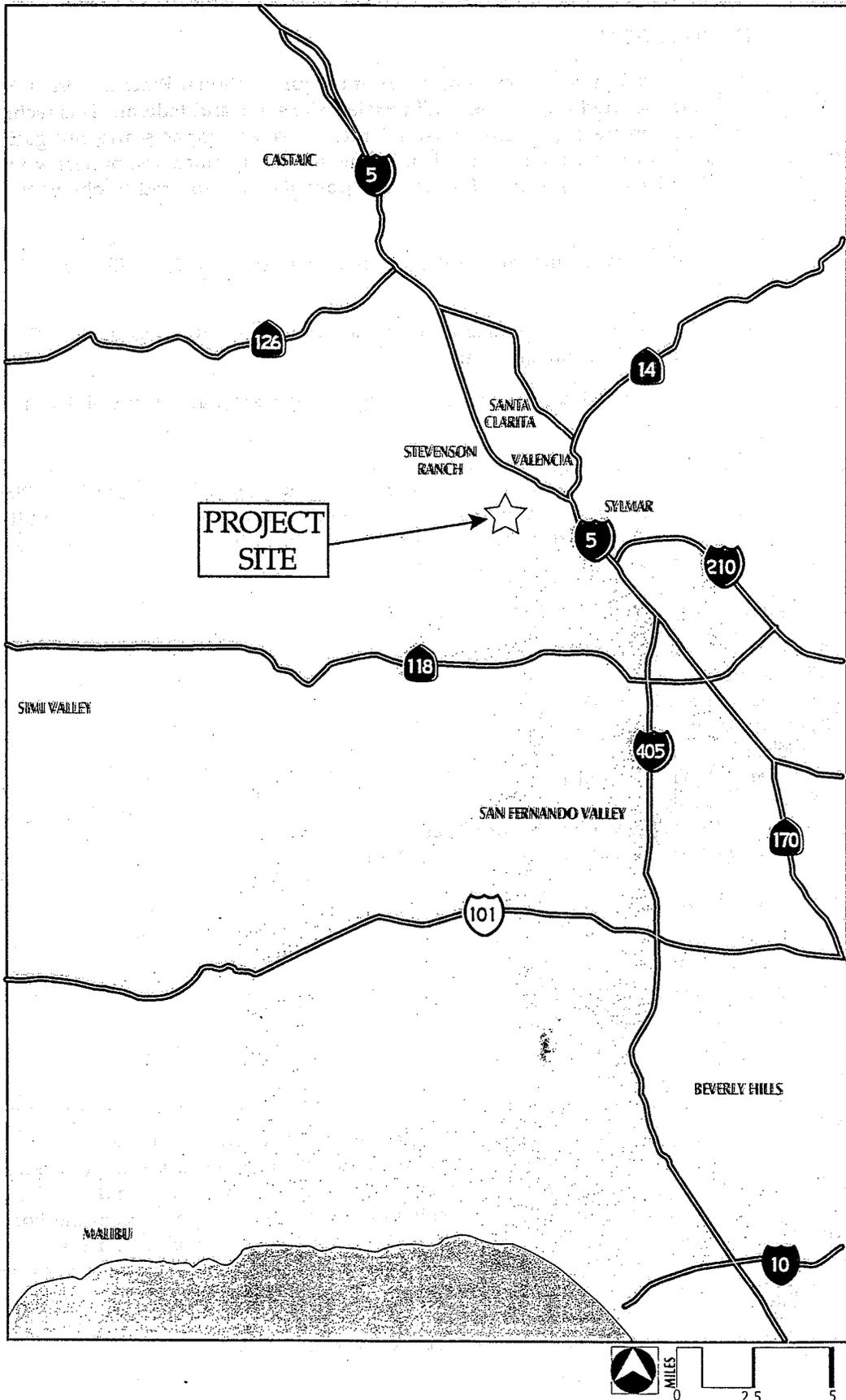
Joseph W. Aidlin,
Trustee of Aidlin General Trust;
Mildred S. Blinn,
Trustee of Cecil and Mildred S. Blinn Trusts;
Stephanie J. Dausek and Dianne L. Morris, Owners

1.3 Project Representative

Envicom Corporation
Attn: Katherine Patey
28328 Agoura Road
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(818) 879-4700

1.4 Setting

The site consists of approximately 230 acres of primarily vacant land. To the north and east of the site is the Stevenson Ranch residential development, to the west and south is undeveloped land. Existing structures on the project site include an unoccupied residence and associated ranch buildings, and a structure used for a bee-keeping operation. A segment of Pico Canyon Creek is located in the northeast portion of the site and Wickham Canyon Creek, a north-south trending drainage, is located in the eastern portion of the site. The project site sits among the sand- and siltstone foothills on the northern flanks of the Santa Susana Mountains near Sand Rock Peak (USGS Oat Mountain and Newhall quadrangles). Elevations within the property boundaries range from approximately 1,480 to 2,240 feet above sea level.



The Aidlin Project
 Regional Location



Source: USGS 7.5 Minute, Newhall, California 1988 and Oat Mountain, California 1969 Quadrangles

The Aidlin Project

Project Site Location

The local climate arises from both coastal and desert influences and is intermediate between these extremes. Wickham Canyon, along with two unnamed tributary canyons form the primary drainage for most of the property, discharging into Pico Canyon Creek. The northerly slopes, however drain directly into Pico Canyon Creek. While evidence of past oil development and cattle grazing exists on the site, the degree of vegetation disturbance is relatively limited. The most pronounced changes in native vegetation is seen near the on-site structures, along the unpaved ranch roads and Pico Canyon Road, and on the most exposed south-to-west-facing slopes.

2.0 PLANT COMMUNITIES AND SENSITIVE HABITATS

In describing vegetation, two systems prevail in California. The California Natural Diversity Database (CNDDDB) employs the plant community descriptions delineated by Holland (1986), while the California Native Plant Society (CNPS) is promoting a newer system that recognizes finer divisions of plant association series (Sawyer and Keeler-Wolf 1995). Plant community descriptions herein correlate the two systems respectively, as expressed by the existing vegetation. The data presented in this section is summarized from the following report: *Initial Study Assessment: Vegetation and Flora- Aidlin and Lennar Properties: Tentative Tract No. 52796, Los Angeles County* (Verna Jigour Associates July 3, 1999). Figure 3 illustrates the plant communities located on the project site.

2.1 Plant Communities

Riversidean Upland Sage Scrub: California Sagebrush-Black Sage Series

Much of the northern ridgeline on the site is covered with a mix dominated by black sage (*Salvia mellifera*). In addition, species are found such as with sugar bush (*Rhus ovata*), toyon (*Heteromeles arbutifolia*), hollyleaf redberry (*Rhamnus ilicifolia*), California sagebrush, California buckwheat (*Eriogonum fasciculatum* ssp. *foliosum*), and thick-leaved yerba santa (*Eriodictyon crassifolium*). These plants are typical of the California sagebrush-black sage series. Squawbush (*Rhus trilobata*) is also common along this ridge, but not mentioned in the series description.

Riversidean Upland Sage Scrub: California Sagebrush/California Buckwheat Series

At the northeastern "panhandle" of the property, as well as the south corner, steep sandstone cliffs ascend sharply from the canyons below, described under Sandstone Outcrops, following. At lower, more gentle inclines these south-facing xeric slopes become clothed with a mix dominated by California buckwheat, California sagebrush, chamise (*Adenostoma fasciculatum*), black sage and red brome (*Bromus madritensis rubens*).

Northern Mixed Chaparral (no applicable series equivalent)

On several ridgelines, the matrix of purple sage and bush mallow intermix with toyon, sugar bush, and hollyleaf redberry. Downslope on northern exposures this association is represented by denser patches where blue elderberry is a common dominant species. Foothill ash (*Faxinus dipetala*) joins the assemblage on the northernmost slopes on the property. While their closed-canopy structure while in leaf resembles a tall chaparral, the deciduous character of these latter two predominant species differs from the typical evergreen, sclerophyllous (thick, leathery or "hard-leaved") nature of true chaparral.

California Walnut Woodland: California Walnut Series

The California walnut woodland/series occupies the steeply incised slopes rising above Wickham Canyon at the southern end of the property. This association is characterized by dispersed specimens of California walnut (*Juglans californica*), mostly of large shrub stature, along with blue elderberry (*Sambucus mexicana*), sugar bush, toyon, hollyleaf redberry, and three coast live oak specimens (*Quercus agrifolia*) in Wickham Canyon. On the north-facing slopes, within the northern mixed chaparral are re-sprouted California walnuts.

Coast Live Oak Woodland: Coast Live Oak Series

Three coast live oak specimens are associated with the California walnut and mixed willow series in Wickham Canyon. Additional woodland is located in a steep canyon, framed by sandstone escarpments near the south boundary, and twelve coast live oaks, two of them saplings, occupy the slopes of a tributary drainage of Wickham Canyon. These oaks are closely associated with several blue elderberries on their side, helping to shelter the oaks from desiccation on hot summer afternoons. The understory is primarily deep, oak leaf duff with patches of wild cucumber (*Marah macrocarpus* var. *macrocarpus*), woodland star (*Lithophragma* sp.), *Bowlesia incana* (no common name), and goose grass (*Galium aparine*). With no California walnuts nearby, this cluster most closely represents the coast live oak woodland series. Of biological importance in this woodland is a melica grassland meadow located to the east.

Southern Willow Scrub: Mixed Willow Series

Specimens of red willow (*Salix laevigata*) and arroyo willow (*Salix lasiolepis*) line the southern portion of Wickham Canyon. The willows, along with blue elderberry, are interspersed with mulefat (*Baccharis salicifolia*), and form a transition zone between the coast live oak woodland/series lining the drainage off the property, and the mulefat scrub lining lower reaches of the drainage. A California thrasher (*Toxostoma redivivum*) was observed among the leafless branches of a Wickham Canyon willow during a February 1999 visit. Along with occasional clumps of arroyo willow and elderberry, discontinuous specimens of Fremont cottonwood (*Populus fremontii*) occur amid the mulefat scrub in lower portions of the Wickham Canyon drainage, as well as along Pico Canyon. Not dense enough to be considered representative of the Fremont cottonwood series, these trees may be considered part of the southern willow scrub community, but not well expressed in series descriptions to date. It may be that the historic density of cottonwoods on-site was thinned during the occupancy of the former landowners, which dates well back into the nineteenth century.

Mulefat Scrub: Mulefat Series

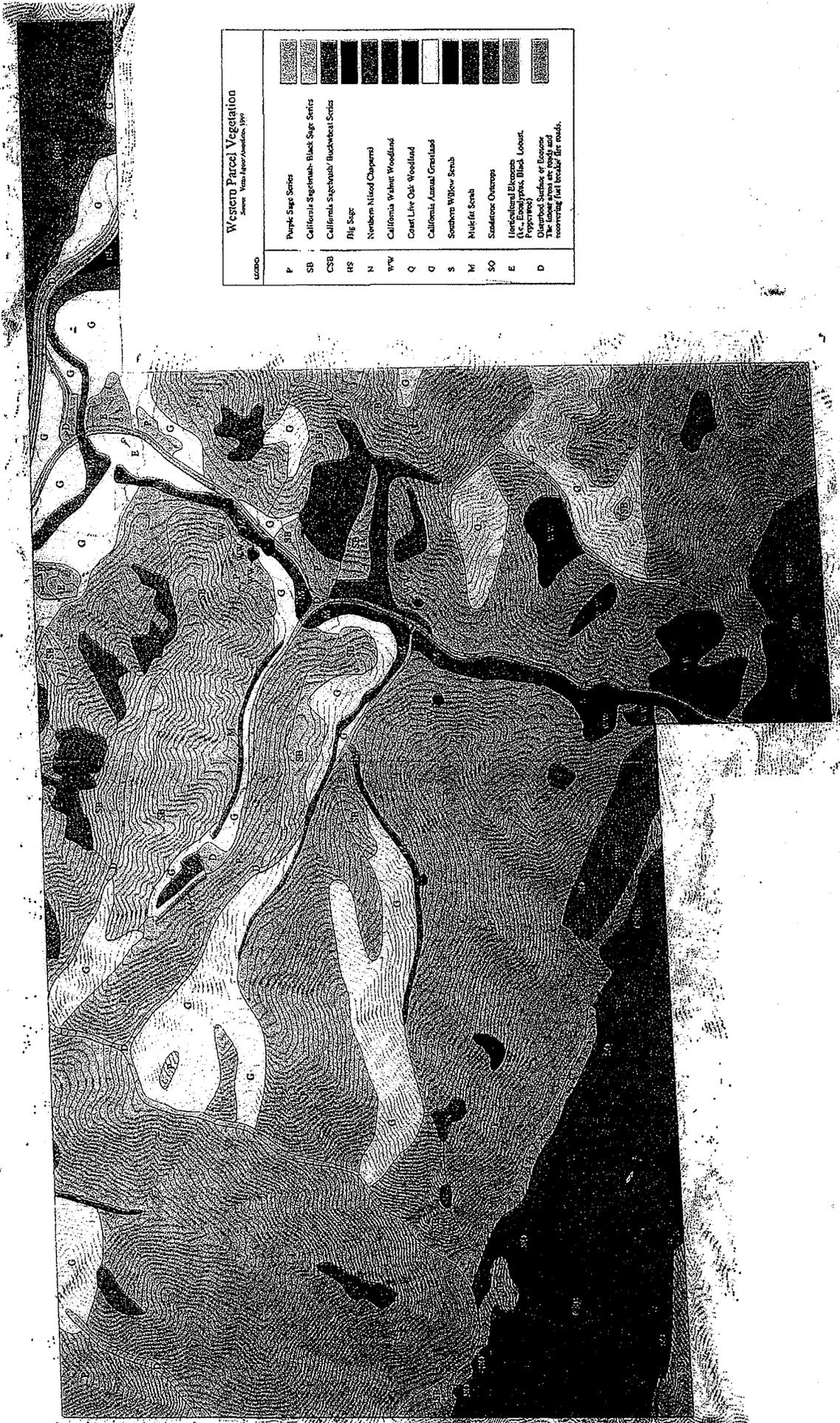
The majority of vegetation lining on-site drainages is the mulefat series. This is a riparian scrub association that consists primarily of its namesake species. In addition, there are occasional clumps of giant ryegrass, Douglas mugwort (*Artemisia douglasiana*), vervain (*Verbena lasiostachys* var. *scabrida*) and punctuated in some locations by elderberry, cottonwood, and along Pico Canyon, arroyo willow and hairy yerba santa. Giant reed (*Arundo donax*), an exotic pest plant that threatens riparian habitats around the state, occurs infrequently within the mulefat scrub, but precautions should be taken to prevent its spread during the land disturbance process. A rhizomatous species, it can resprout from very small pieces of stem and is well adapted to disturbance. Another exotic pest plant that is found in small numbers in the uppermost branch canyon off Wickham is tamarisk (*Tamarix* sp.). This pest plant threatens riparian and other seasonally moist areas from the California deserts to inland northern California, spreading by wind-blown seeds. Mulefat is considered a facultative wetland species – that is, it occurs in both wetland and non-wetland situations.

Needlegrass Grassland: Needlegrass Series

Isolated stands of native perennial bunchgrass exist in several locations across the property, typically occupying artificially created semi-compacted openings in the adjacent scrub series. Several of these locations have north or northeastern exposures. Melic grass (*Melica imperfecta*) was just beginning to bloom at the time of an April 1999 site reconnaissance.

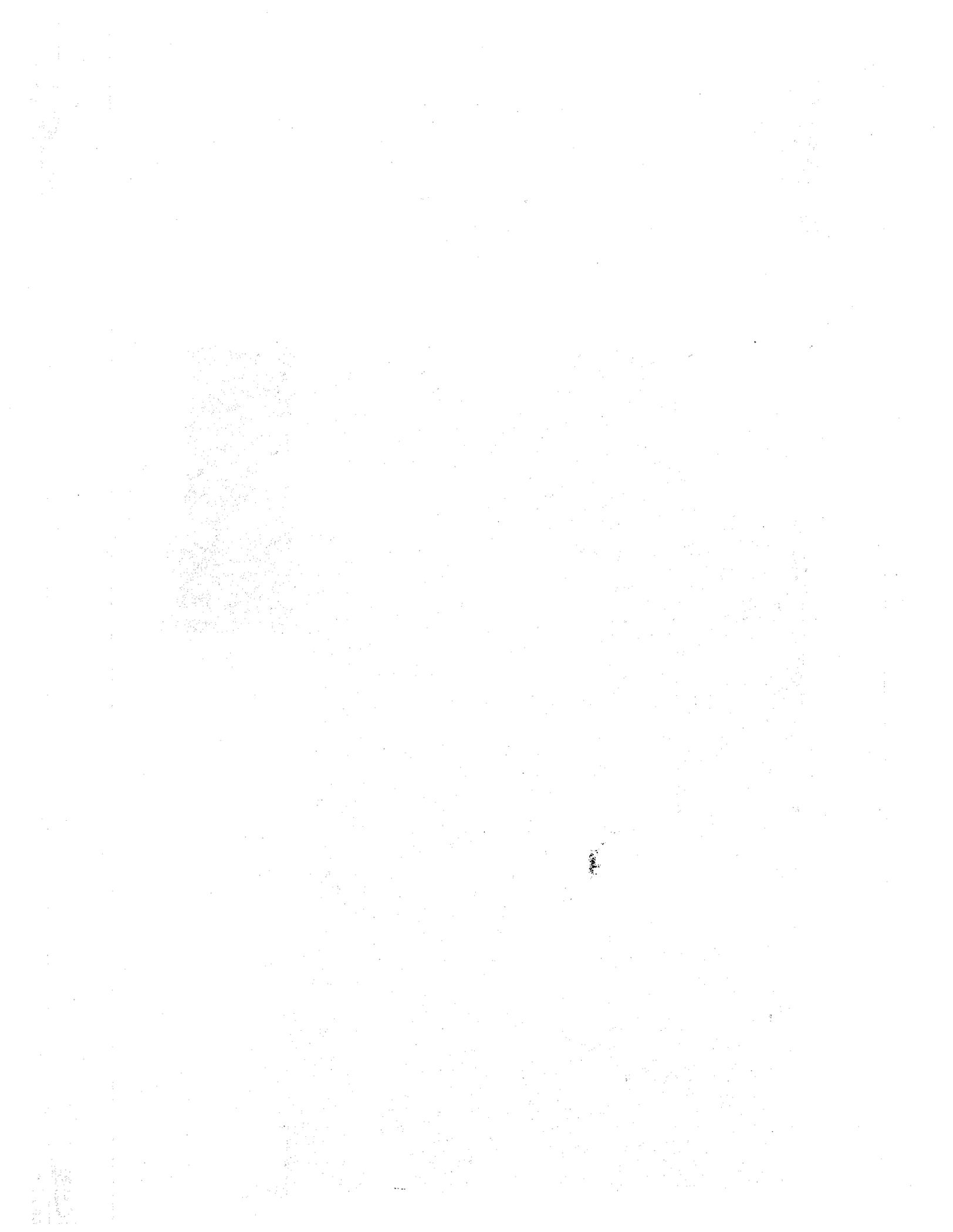
Non-native Grassland: California Annual Grassland Series

This association typified by Cheat Grass (*Bromus tectorum*), wild oats (*Avena* sp.), and black mustard (*Brassica nigra*) represents the vegetation type most altered from its native structure



Western Parcel Vegetation
 Source: VECO Aerial Photographs, 1979

Legend	Vegetation Series
P	Purple Sage Series
SB	California Sycamores - Black Sage Series
CSB	California Sycamores / Buckwheat Series
HS	Rip Sage
N	Northern Nisoid Chaparral
WP	California Walnut Woodland
Q	Coast Live Oak Woodland
G	California Annual Grassland
S	Southern Willow Scrub
M	Mulefat Scrub
SO	Sandstone Outcrops
E	Uncultivated Eucalyptus (Includes Eucalyptus, Black Peppercorn)
D	Disturbed Surface or Exposure The linear areas are roads and recovering fuel breaks for roads.



and composition. Occupying the most xeric south- to west-facing slopes, the placement suggests that this non-native grassland replaced a native coastal scrub association following disturbance, as opposed to replacing native grassland (Keeley 1993). This series also lines the roads and other surface disturbances on the property.

Sandstone Outcrops

Near the south property boundary are nearly vertical sandstone escarpments that rise from a tributary to Wickham Canyon. Formed of cemented sandstone and conglomerate, these "strike" ridges are more resistant to erosive forces than other substrates, such as the siltstone which, along with the other two bedrock types, comprise the Pico Formation (The J. Byer Group 1998).

The value of the canyon in offering niches for cliff-dwelling bird species was confirmed by the presence of cliff swallows (*Petrochelidon pyrrhonata*) swooping over the tributary canyon between the escarpments and Bush Poppy Peak. Turkey vultures (*Cathartes aura*), along with other bird species observed in the area, may also occupy niches in these rock faces. As an example, Bullock's oriole (*Icterus bullockii*) was among the species frequently observed flying between the escarpment north of the property and vegetation along Pico Canyon, within the northern property boundary. Refer to the report on vertebrate species (including butterflies) prepared by Robb Hamilton, Consulting Biologist, for further detail on animals species observed on the site.

Horticultural Elements

Since people have used the property from at least the mid-nineteenth century, vegetation surrounding the on-site structures, in particular, has been disturbed. The most obvious examples of introduced vegetation are the black locust trees (*Robinia pseudoacacia*) adjacent to the bee house. This species is considered an exotic pest plant that can invade riparian habitats. An expanding population of black locust exists in nearby Lyon Canyon. Cottonwoods sheltering the other on-site structures were probably planted, but could have been retained from a previous natural grove.

2.2 Sensitive Habitats

Table 1 lists sensitive plant species and elements that occur within one or more of the Oat Mountain, Newhall, and Simi Valley East USGS quads, and thus could potentially occur within The Aidlin Project site. The table indicates the likely presence or absence of each species listed. Among the plant species observed, none are threatened or endangered, although sensitive floral elements may be present.

TABLE 1
THE AIDLIN PROJECT
Sensitive Plant Species and Communities¹

Observed Presence (p)/ Scientific/Common Name	Federal/State/CNPS Status	Absence (a)
Berberis nevenii Nevin's Barberry	Proposed Endangered/ Endangered/ 1B	a
California Walnut Woodland	None/None	p
Calochortus clavatus var. gracilis Slender Mariposa Lily	Species of Concern/ None/ 1B	(p?)
Calochortus plummerae Plummer's Mariposa Lily	Species of Concern/ None/ 1B	(a?)
Calystegia peirsonii Peirson's Morning-Glory	Species of Concern/ None/ 4	(p?)
Cismontane Alkali Marsh	None/None	a
Hemizonia minthornii Santa Susana Tarplant	Species of Concern/ Rare/ 1B	(a?)
Mainland Cherry Forest	None/None	a
Opuntia basilaris var. brachyclada Short-joint Beavertail	Species of Concern/ None/ 1B	a
Riversidian Alluvial Fan Sage Scrub	None/None	a
Southern Coast Live Oak Riparian Forest	None/None	a
Southern Cottonwood Willow Riparian Forest	None/None	a
Southern Mixed Riparian Forest	None/None	a
Southern Riparian Scrub	None/None	p
Southern Sycamore Alder Riparian Woodland	None/None	a
Southern Willow Scrub	None/None	p
Valley Oak Woodland	None/None	a

¹ At the time of the April reconnaissance, one mariposa lily plant was observed on April 19 was in bud. It is likely the slender mariposa lily, as Plummer's mariposa lily (*Calochortus plummerae*) is more commonly associated with granitic substrates, in contrast to the apparent sand/siltstone-derived soils on the site. East of the property a population of slender mariposa lily (*Calochortus clavatus* var. *gracilis*) was identified. There is a slight potential that the Santa Susana tarplant (*Hemizonia minthornii*) could occur on the sandstone outcrops near the south property boundary. The typical chaparral habitat of Braunton's milkvetch does not occur on the site, and the species was neither observed, nor expected to occur here. Additionally of note is the absence of the plantain (*Plantago erecta*), host plant for the Quino checkerspot butterfly, which was neither observed nor expected to occur on the property.

3.0 JURISDICTIONAL DELINEATION

3.1 Department of the Army Permits

Regulatory authority for protection and utilization of the nation's water resources lies with the U.S. Army Corps of Engineers. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States without a permit from the Corps. The 404 permit generally covers activities which would disturb waters of the U.S. or their tributaries, streams, lakes, or wetland areas.

Strictly defined, waters of the United States include intermittent streams that are tributary to navigable waters or waters that could be used for interstate or foreign commerce. Wetlands are areas within the boundaries of jurisdictional waters that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions (U.S. Office of the Federal Register, 1987). The mandatory criteria for wetland identification include: 1) hydrophytic vegetation, 2) hydric soils, and 3) wetland hydrology. Areas must possess all three of these criteria to be considered wetland. Department of the Army authorizations for discharge of fill material into waters of the United States or wetlands may either be "general" or "individual." General permits are pre-existing authorizations for categories of activities which are similar in nature and cause only minimal individual or cumulative impacts. A "nationwide permit" is a form of general permit that may authorize specific and limited fill activities. Currently, in the State of California, Section 404 Nationwide permits are not valid without 401 Certification from the California Regional Water Quality Control Board.

3.2 California Department of Fish and Game Section 1603 Agreement

The proposed action requires a Streambed Alteration Agreement pursuant to Section 1603 of the California Fish and Game Code. The Department of Fish and Game (CDFG) mission is conserve fish and wildlife; therefore, an agreement is required on any project that...

"will divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefits."

Any person substantially diverting or obstructing the natural flow or using any material from a streambed must notify the CDFG and complete the proper environmental documents as required by the California Environmental Quality Act. The CDFG within 30 days of receipt of such notice, or within any other mutually agreed upon time, shall submit to the person proposals (i.e., mitigating measures) as to measures necessary to protect fish and wildlife. The CDFG will consult with a project applicant to obtain a mutually agreed upon development proposal, if agreement can not be met a panel of arbitrators shall be established to resolve outstanding issues.

3.3 Methodology

Drainages within The Aidlin Project site were investigated by Mr. Carl Wishner, Principal Biologist of Envicom Corporation on April 9, 14, 15, 22, 23, July 15, 1999, and in February 2000. Mr. Wishner was accompanied on April 15-16 by Dr. Garn Wallace; soil scientist and Principal of Wallace Laboratories, El Segundo, and on April 22-23 by Mr. Jeff Potts, a specialist in field mapping using Global Positioning Satellite (GPS) equipment. Pico Canyon Creek was mapped in the field with the aid of GPS equipment. Tributaries of Pico Canyon Creek and Wickham Canyon were measured in the field and mapped by interpretation of stereo-pair aerial photography, at a scale of 1:5520 (1 inch=460 feet), dated September 17, 1998. These data were transferred xerographically to a 1"=200' scale topographic map.

The delineation of areas subject to Army Corps of Engineers' jurisdiction pursuant to Section 404 of the Clean Water Act followed the procedures in the field specified in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. The combination of observed characteristics pertaining to the vegetation, hydrology, and soils were used to determine the extent of wetlands as a subset of "Waters of the United States."

For a wetland to be present, as defined by the California Department of Fish and Game, only one of the criteria of vegetation, hydrology, and soils is required. The area of CDFG jurisdiction was determined in the field on Pico Canyon Creek main drainage with the aid of GPS mapping. Points and walking lines were plotted along the outer perimeter of riparian vegetation associated with the stream. This included, at a minimum, the extent of the mule fat, willow, and cottonwood dominated active channel from bank-to-bank. This area frequently extends beyond the banks of the active channel onto the overflow terraces, hence, the areas of CDFG jurisdiction are typically in excess of those of Army Corps. Army Corps jurisdiction in the tributaries were calculated on the basis of length times average width of stream segments (based on field measurements), and CDFG areas were determined planimetrically on 1 inch=200 feet maps. The acreage of waters/wetlands under the jurisdiction Army Corps is included within the CDFG acreage.

3.4 Results

Figure 4 illustrates the location of onsite jurisdictional habitats. Table 2 indicates the location, jurisdictional type, and acreage of all onsite waters/wetlands. Plant species observed in jurisdictional habitats are listed in Table 3.

Pico Canyon Creek

Wetlands encompass all areas within the Ordinary High Water Mark (OHWM) of the mainstem of Pico Canyon Creek (exclusive of the Stevenson Ranch easement area) and riparian vegetation lines the slopes (Plate 1). The total Army Corps jurisdiction within Pico Canyon Creek is 0.71 acres of wetlands. Under CDFG jurisdiction, there is 1.48 acres of wetlands riparian habitat, which includes the Corps jurisdictional acreage. Flows in Pico Canyon Creek are substantial in winter, and frequently overtop the roadway that parallels the stream. Vegetation consists mainly of riparian scrub dominated mainly by mule fat (*Baccharis salicifolia*), and occasional individuals of arroyo willow (*Salix lasiolepis* and *S. laevigata*), and blue elderberry (*Sambucus mexicana*). In addition, there are scattered larger, tree-sized individuals of Fremont cottonwood (*Populus fremontii*), willow, and coast live oak (*Quercus agrifolia*).

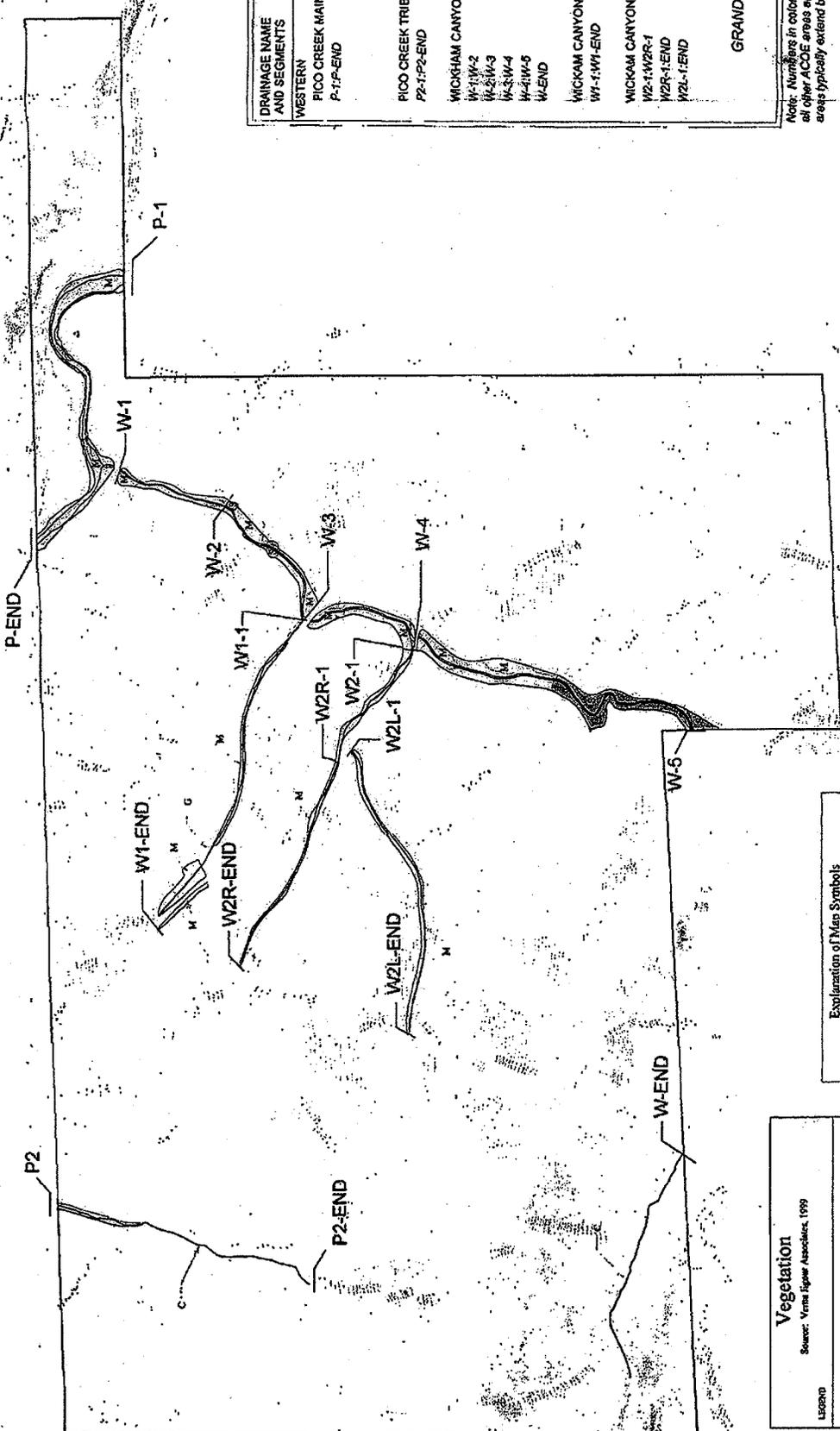
Wickham Canyon Creek

Wetlands exist along Wickham Canyon Creek, a named tributary of Pico Canyon Creek starting 550 feet south of its confluence with Pico Canyon Creek, and extending to the southern boundary of the property. Near the southern boundary of the parcel, riparian forest canopy of coast live oak dominates the Creek. The uppermost segment of Wickham Canyon Creek, however, did not meet wetland criteria, nor are any of the west-trending tributaries of the latter. Vegetation in non-wetland areas is mule fat, with an occasional willow, and a couple of cottonwood trees. The main stem then goes off the property, but another tributary upstream traverses the southwest corner of the parcel, and vegetation in that segment is chaparral. Mule fat scrub dominates two additional tributaries of Wickham Canyon. Army Corps jurisdiction is 0.54 acres within Wickham Canyon and its tributaries; CDFG is 4.93 acres.

SUMMARY

In total, the project site contains 1.25 acres of Army Corps and 6.41 acres of CDFG jurisdictional habitat. Of this amount, 0.28 acres of Army Corps and 0.47 acres of CDFG jurisdictional vegetation and habitat were removed to facilitate the Stevenson Ranch (Laing Homes) development (grading to construct Pico Canyon Creek Channel and Pico Canyon Road). This action was authorized under permits granted to Stevenson Ranch, which also obtained a construction easement from the owner of the Aidlin Project property.

AIDLIN PROPERTIES



DRAINAGE NAME AND SEGMENTS	EXISTING ACOE (sq. ft.)	EXISTING CDFG (sq. ft.)
WESTERN		
PICO CREEK MAIN	30,325	57,980
P2-1P2-END	30,325	57,980
PICO CREEK TRIB 2	520	6,310
P2-1P2-END	520	6,310
WICKHAM CANYON		
W1-W2	2,180	14,840
W1-W3	3,070	23,320
W1-W4	2,670	21,050
W1-W5	6,550	73,700
W1-END	1,800	1,800
WICKAM CANYON TRIB 1	16,250	134,710
W1-1W1-END	2,660	38,200
WICKAM CANYON TRIB 2	2,650	38,200
W2-1W2R-1	1,650	11,200
W2R-1END	1,010	10,170
W2L-1END	2,040	20,700
W2L-1	4,600	42,070
GRAND TOTAL	54,285	278,270
ACRES	1.25	6.41

Note: Numbers in color are areas that meet ACOE wetland definitions; all other ACOE areas are Wetlands of the United States. CDFG estimated areas typically extend beyond ACOE areas, and include the latter.

Explanation of Map Symbols

- CDFG Riparian
- ACOE within CDFG
- CDFG Riparian and COE (Coincident)
- Station Numbers

D-1-2
(Field Survey April 9-13, 1999)

Vegetation
Source: Verms Figure Associates, 1999

- Southern Willow Scrub and Woodland (includes Cottonwood trees)
- Coast Live Oak Woodland
- Muskiet Scrub
- Annual Grassland
- Chaparral (riparian)

THE AIDLIN GROUP
Jordichek & DeLoreau Inc.
ACOE & CDFG

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text notes that without clear documentation, it becomes difficult to track expenses and revenues, which can lead to misunderstandings and disputes.

2. The second section focuses on the role of technology in modern record-keeping. It highlights how digital tools and software solutions have revolutionized the way data is stored and accessed. These technologies not only streamline the process but also reduce the risk of human error and data loss. The document suggests that organizations should invest in reliable digital systems to ensure their records are secure and easily retrievable.

3. The third part of the document addresses the legal and regulatory requirements surrounding record-keeping. It explains that various industries and jurisdictions have specific rules regarding the retention and management of records. Compliance with these regulations is crucial to avoid legal penalties and ensure the integrity of the organization's data. The text provides a general overview of these requirements, encouraging organizations to consult with legal counsel for more detailed guidance.

4. The final section discusses the importance of regular audits and reviews of records. It states that periodic checks help identify any discrepancies or areas where records may be incomplete or outdated. This process is vital for maintaining the accuracy and reliability of the information. The document concludes by emphasizing that a proactive approach to record-keeping is key to long-term success and operational efficiency.

Table 2
The Aidlin Project
Existing ACOE and CDFG Jurisdictional Areas

DRAINAGE NAME AND SEGMENTS	EXISTING ACOE	EXISTING CDFG
PICO CREEK MAIN	30,325 sq. ft. (0.70 acres) ²	57,980 sq. ft. (1.33 acres)
PICO CREEK TRIBUTARY 2 P2-P2 end	520 sq. ft. (0.01 acres)	6,310 sq. ft. (0.15 acres)
<i>Pico Canyon Creek Subtotal</i>	0.71 acres	1.48 acres
WICKHAM CANYON		
W-1:W-2	2,180	14,840
W-2:W-3	3,070 ³	23,320
W-3:W-4	2,670 ⁴	21,050
W-4:W-5	6,530 ⁵	73,700
W-5:end	1,800	1,800
<i>Subtotal</i>	16,250 sq. ft.	134,710 sq. ft.
WICKHAM CANYON TRIB 1		
W1-1:W1-end	2,590	38,200
<i>Subtotal</i>	2,590 sq. ft.	38,200 sq. ft.
WICKHAM CANYON TRIB 2		
W2-1:W2R-1	1,550	11,200
W2R-1:end	1,010	10,170
W2L-1:end	2,040	20,700
<i>Subtotal</i>	4,600 sq. ft.	42,070 sq. ft.
<i>Wickham Canyon Subtotal</i>	23,440 sq. ft. (0.54 acres)	214,980 sq. ft. (4.93 acres)
GRAND TOTAL ACRES	1.25	6.41

² Meets the criteria of wetland as defined by the Army Corps of Engineers.

³ *ibid.*

⁴ *ibid.*

⁵ *ibid.*

TABLE 3

Plant Species Observed in Jurisdictional Areas
Aidlin Project Site

Name	Indicator Status ^b
<i>Artemisia douglasiana</i>	FACW
<i>Baccharis pilularis consanguinea</i>	---
<i>Baccharis salicifolia</i>	FACW
<i>Brassica nigra</i>	--
<i>Bromus spp.</i>	--
<i>Centaurea melitensis</i>	--
<i>Distichlis spicata</i>	FACW*
<i>Eriodictyon crassifolium</i>	--
<i>Eriogonum fasciculatum</i>	--
<i>Heteromeles arbutifolia</i>	--
<i>Leymus condensatus</i>	FACU
<i>Populus fremontii</i>	FACW
<i>Quercus agrifolia a.</i>	--
<i>Rhus trilobata</i>	NI
<i>Ribes aureum gracillimum</i>	FACW
<i>Rosa californica</i>	FAC+
<i>Salix laevigata</i>	--
<i>Salix lasiolepis</i>	FACW
<i>Salvia leucophylla</i>	--
<i>Sambucus mexicana</i>	FAC
<i>Tamarix sp.</i>	FACW
<i>Verbena lasiostachys scabrida</i>	FACW

^a As given in Reed (1988)..



Pico Canyon Creek

4.0 WATER QUALITY

4.1 Water Quality Objectives

The California Water Code (section 132411) defines water quality objectives as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." Therefore, water quality objectives are intended to protect public health and welfare and to maintain or enhance water quality in relation to the designated existing and potential beneficial uses of the water. In light of the state's mandate, it will be important to ensure designated beneficial uses are maintained or not degraded. The Antigradation Policy of the State Board (Resolution No. 68-16) restricts degradation of surface and ground waters. As described in the Regional Plan, there are a number of regional objectives for surface inland waters in terms of narrative and numerical water quality values including ammonia, chlorine, color, dissolved oxygen, oil and grease, nitrogen, pesticides, pH, suspended sediments, and exotic vegetation. This data is valuable in establishing a clear indication of the level of water quality to maintain. In addition to the more traditional water quality issues, the Plan also addresses objectives for wetlands. The prime focus is to protect wetland hydrology, such as natural temperature and other physical and chemical characteristics, and to maintain existing habitats with their full complement of flora and fauna, including food supplies, breeding area and wildlife corridors.

4.2 Strategic Planning and Implementation

The goal of the Regional Board is to protect all beneficial uses. As such, several strategies have been developed depending on the nature of the water quality problem. Strategies include control of point source pollutants, control of non-point source pollutants, and remediation of pollution. Many of the programs are implemented through permit review. In the case of the proposed project, the applicant is required to obtain 401 Water Quality Certification, and a Construction Storm Water Permit under the NPDES program, which includes the development of a Storm Water Pollution Prevention Plan.

4.3 Beneficial Uses

According to the Los Angeles Basin Water Quality Control Plan (February, 1995), the project site is located within the Santa Clara-Calleguas Hydrologic Unit (403.00) of the Upper Santa Clara River Hydrologic Areas (403.50), within the Eastern Hydrologic Subarea (403.51). While Pico Canyon Creek and Wickham Canyon Creek are not named in the Basin Plan, they are hydrologically connected to the Santa Clara River; therefore, the same beneficial uses apply. The Basin Plan describes Santa Clara-Calleguas Hydrologic Unit as follows:

The Santa Clara - Calleguas Hydrologic Unit covers most of Ventura County, part of northern Los Angeles County and small parts of Santa Barbara and Kern Counties. With a drainage area of 1,760 square miles, it is the largest hydrologic unit in the Region. Most of the upland area is within the Angeles and Los Padres National Forests. While land use in the lower portion of the drainage area - in particular the Oxnard Plain - is predominantly agricultural, urban (primarily residential) land uses are encroaching upon and rapidly replacing these agricultural lands. The Santa Clara River and Calleguas Creek are the major streams in this area, draining the San Gabriel Mountains, Santa Susana Mountains, Oak Ridge, South Mountain, Simi Hills, Sawmill, Liebre and Frazier Mountains. Large reserves of groundwater exist in alluvial aquifers underlying the Oxnard Plain and along the valleys of the Santa Clara River and its tributaries.

The Basin Plan has been developed to address problems such as these and others. The plan includes measures to preserve and enhance water quality and protect the beneficial uses of all

regional waters. The Basin Plan designates beneficial uses for surface and ground waters, sets objectives to protect beneficial water uses, and describes implementation programs. Applicable beneficial uses are listed below. The Basin Plan requires the protection of all beneficial uses. The beneficial uses associated with the waters of the Aidlin project site currently exist, or have the potential to exist in the future, as listed below (in no preferential order).

Municipal and Domestic Supply (MUN)

Uses of water for community, military or individual water supply systems including, but not limited to, drinking water supply. (Potential)

Agricultural Supply (AGR)

Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing. (Existing)

Industrial Process Supply (PROC)

Uses of water for industrial activities that depend primarily on water quality. (Existing)

Industrial Service Supply (IND)

Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization. (Existing)

Ground Water Recharge (GWR)

Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers. (Existing)

Freshwater Replenishment (FRSH)

Uses of water for a natural or artificial maintenance of surface water quantity or quality (e.g., salinity). (Existing)

Non-contact Water Recreation (REC-2)

Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities. (Existing)

Warm Freshwater Habitat (WARM)

Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates. (Existing)

Wetland Habitat (WET)

Uses of water that support wetland ecosystems, including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants. (Existing)

Wildlife Habitat (WILD)

Uses of water that supports terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, and invertebrates), or wildlife water and food sources. (Existing).

Rare, Threatened, or Endangered Species (RARE)

Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered. (Existing).

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support effective decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that data is used responsibly and ethically.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that data management practices remain effective and aligned with the organization's goals.

6. The sixth part of the document provides a detailed overview of the data collection process, including the identification of data sources, the design of data collection instruments, and the implementation of data collection procedures.

7. The seventh part of the document discusses the various methods used for data analysis, such as descriptive statistics, inferential statistics, and regression analysis. It explains how these methods can be used to interpret data and draw meaningful conclusions.

8. The eighth part of the document focuses on the importance of data visualization in presenting complex information in a clear and concise manner. It discusses various visualization techniques, such as bar charts, line graphs, and pie charts.

9. The ninth part of the document addresses the ethical considerations surrounding data management and analysis. It discusses the need to protect individual privacy and to use data responsibly, avoiding any potential for misuse or discrimination.

10. The tenth part of the document provides a final summary and concludes the report. It reiterates the key findings and emphasizes the need for continued attention to data management and analysis to ensure the organization's long-term success.

11. The eleventh part of the document discusses the importance of data security and the measures that should be taken to protect sensitive information. It highlights the need for robust security protocols and regular security audits.

12. The twelfth part of the document addresses the issue of data quality and the steps that should be taken to ensure that data is accurate and reliable. It discusses the importance of data validation and the use of quality control measures.

13. The thirteenth part of the document discusses the role of data in strategic planning and decision-making. It explains how data can be used to identify trends, opportunities, and risks, and to inform the development of strategic initiatives.

14. The fourteenth part of the document provides a final summary and concludes the report. It reiterates the key findings and emphasizes the need for continued attention to data management and analysis to ensure the organization's long-term success.

15. The fifteenth part of the document discusses the importance of data literacy and the need for training and education to ensure that all employees are able to effectively use and interpret data. It highlights the role of data in driving organizational performance and growth.

SECTION 3

1998

Benshoof, Withers & Sandgren, Ltd.
Landscape Architecture and Planning

OAK TREE REPORT
The Aidlin Project
Tract #52796

SUMMARY

This report is part of the first phase of studies being conducted on Aidlin Properties Tract #52796 in a concerted effort to identify important environmental resources on site, prior to finalizing a design layout which will help to satisfy the growing demand for housing in Santa Clarita. The overall goal of the proposed project is to develop a plan that achieves a balance between human and natural ecologies. The purpose of this assessment was to identify significant oak trees early in the design process so that a sensitive planning approach could be applied to preserve as many oaks and as much oak woodland habitat as possible.

A thorough inventory of existing oaks was conducted encompassing an area of approximately 230 acres. The parcel is located in the foothills of the northern spine of the Santa Susana Mountains, in an area that was originally part of the Stevenson Ranch site along Pico Canyon Road. The area was surveyed in the spring 1999, using Global Positioning Satellite equipment to determine the precise locations.

The property is predominantly characterized by a native coastal sage scrub community, with some sections of southern coast live oak riparian forest present. Chaparral and naturalized annual grassland habitats are also present on site, the latter being the result of decades of cattle grazing. There is also random evidence of previous disturbances to the site in the way of access roads, which are now partially hidden by vegetation and man-made debris.

All oak trees found on site are the Coast Live Oak species (*Quercus agrifolia*) and are located in a few scattered areas in the north-facing canyon draws of the southern portion of the parcel.

Introduction

Of California's 18 species of oaks, the oak trees found on site are the Coast Live Oak species. It is durable and long-lived, potentially 600 years or older, with a magnificently picturesque architectural form in maturity. Although considered one of the few oaks that can thrive in near-coastal conditions, inland it is found on steep north-face hillsides up to an elevation of 5,000 feet, in canyons and along streams and intermittent waterways. The aesthetic value is secondary to its intrinsic value to the wildlife community. The oak woodland habitat is of great ecological importance because it offers food and shelter to a rich diversity of plant and animal life.

The findings of this oak tree reconnaissance survey are reported here, for the purpose of aiding in the development of a planning strategy for community design that preserves the greatest assets of the natural area in which it lies. An assessment was made as to the physiological condition of each oak, so that a determination can be made as to the best way to preserve and protect the existing oaks to remain on site, or effectively replace those in decline, or whose removal cannot be avoided.

Under natural conditions, a wide range of impacts can be tolerated by oaks. Many trees which have sustained severe damage by lightning, fire, wind or insect infestation have, over time, recovered their glossy leaf canopies, although some effects may be apparent in scars or other deformities. Severe physical impacts may also weaken the structural integrity of the tree so that even though it may appear healthy in most respects, the shear weight of its limbs may prove to be more than the tree can support as it matures.

This assessment provides recommendations for preservation and transplantation where appropriate, or, for removal and replacement, based on the general health of each specific tree. It does not, however, give guidelines for these procedures. Recommendations for developing a complete management program for these trees during the CEQA process are made in the conclusion of this report.

It should be mentioned here that most of the oaks we surveyed had tree tags, evidence of previous oak tree inventories. Reference to an Oak tree Report done by Lee Newman and Associates in September 1991, was mentioned in a 1992 draft EIR on Stevenson Ranch Phase 4, Project No.89-436. This report was not available for reference for this oak tree report.

Survey Methods and Limitations

Field surveying was done by licensed landscape architects in collaboration with a certified arborist. Initial sitings of oaks were completed with the aid of aerial photography. Oaks were then located by car and close inspection was performed directly on foot. Several were also discovered in a difficult to access steep drainage to the southwest. Each individual oak tree was located using a hand held GPS unit and verified on site. (See Exhibit C – Map of Oak Tree Locations) A total of 14 trees were found. Field notations were made regarding overall health, size and visual quality of each. Trees evaluated had a caliper of at least 8” for a single trunk and a combined caliper of at least 12” for a multi-trunk specimen. Certain trees were noted to have trunk calipers of 36” or greater which meet the Heritage Oak standard for Los Angeles County. Not recorded in the log were two juvenile trees, which did not meet the minimum maturity requirements. However, the new growth is evidence of natural regeneration and a sign of health of the overall oak woodland community.

Health: The overall health status of each tree was assessed with particular attention being given to prevalent oak tree pests or diseases. (Exhibit D - Key To Important Pests and Diseases on Coast Live Oaks). Specific signs of disease or infestation were noted and are factored into the overall health rating of each tree. A health rating was given each tree based on the following criteria, for the purpose of aiding in planning decisions.

- Healthy (H) – showing no signs, or minimal signs of damage or disease.
- Sound (S) – damaged by wind, fire or disease but still growing strongly and likely to continue growing well.
- Unsound (U) – considerably affected by pest or disease.

Size: Size is gauged in two ways: the trunk caliper and canopy spread. The caliper of the trunk is recorded in inches measured at 4.5’ above the natural grade. Where the tree was situated on a steep bank the caliper was taken at the average 4.5’ height, half way up the slope. Multi-trunked specimens were handled in two ways. If the oak was bi-trunked, both trunk diameters are recorded. If there were more than two trunks, the lead trunk of the group was noted with the number of trunks listed separately.

The canopy measurement is straightforward for single specimens, but where oaks are found in groups, the individual canopy may not be recorded.

Visual Quality: Aesthetic character is given a rating that evaluates the visual health of the tree. It also includes other subjective criteria such as form, balance and size. A magnificent old specimen has more value than a juvenile tree. Context is taken into consideration in assessing the form of the tree. Individual trees, standing alone, will have a more balanced form than trees grown in close proximity to one another, often making up only a portion of the canopy. A tree within a major tree cluster is evaluated on two levels, its individual merit, which may be difficult to assess, and that of the tree cluster in which it resides. The habitat value of a cluster of trees which can support a diversity of wildlife adds to the visual quality of the site and will be taken into consideration in addition to the visual qualities of the cluster itself.

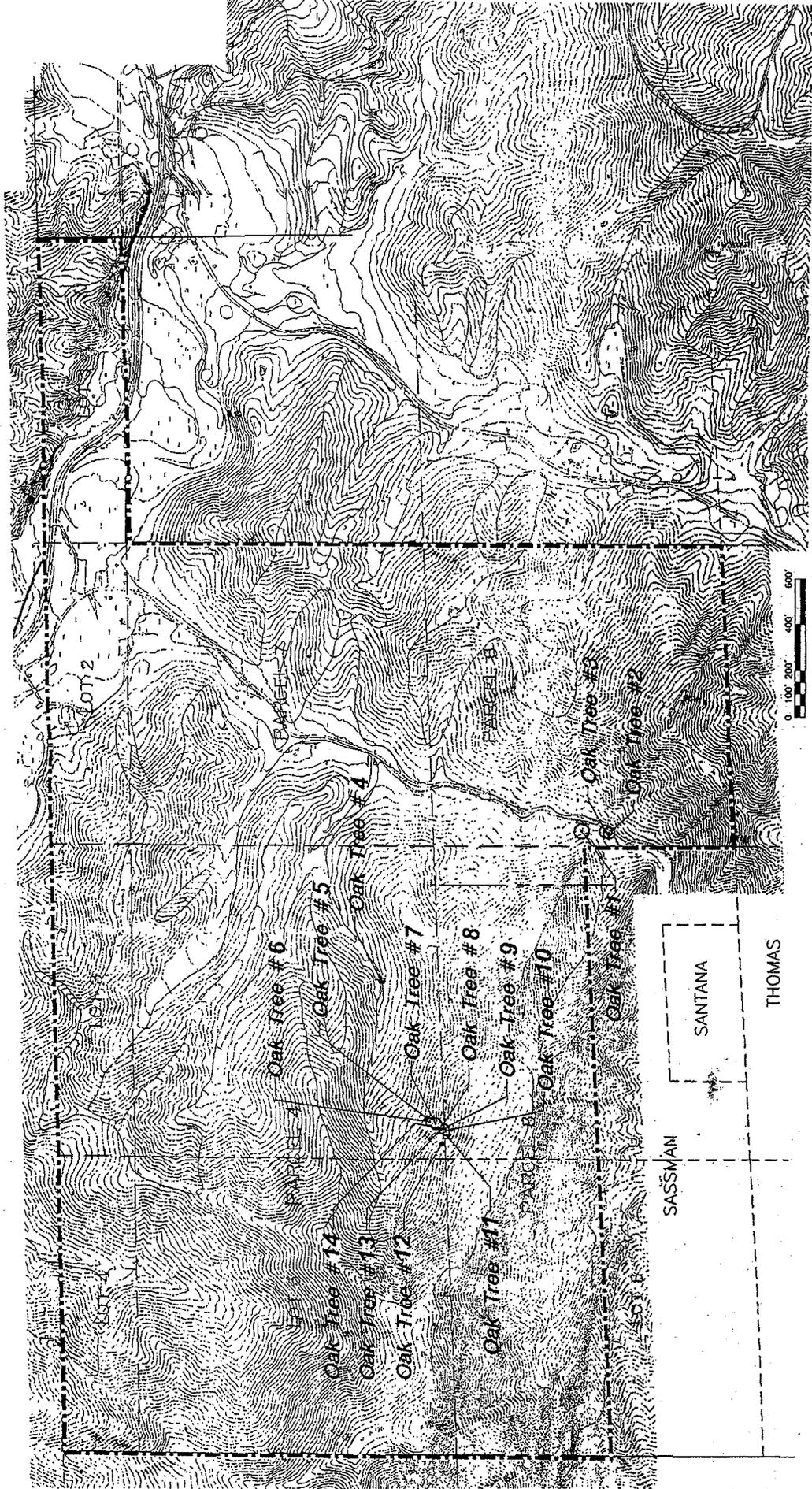
The visual rating is evaluated on a diminishing scale of excellent (E), good (G), fair (F) and poor (P).

- E (Excellent) – Outstanding, healthy appearance, mature, a major asset to be preserved if possible.
- G (Good) – Pleasing appearance, mature, healthy appearance, but perhaps with some visual flaws in the way of broken limbs or unbalanced form
- F (Fair) – Major visual defects, showing significant damage to trunk and branch structure, potentially unsound structure, or overall health of the leaf canopy waning.
- P (poor) – Dead or dying

Significant characteristics of each individual tree are charted below. (*See Table 1.0 – Oak Tree Survey Log*) Trees are numbered in the order that they were surveyed. Existing tag numbers are listed for identification on site. In a few cases, no tags were found on a tree. With one of these trees it is assumed that when the previous survey was done, the caliper may have been under the minimum dimension which is usually 6-8" in diameter.

Findings

A total of 14 oaks are described in the Survey Log. All but one were located in one of two groupings within the parcel. (*See attached Oak Tree Location Map*). The exception is a single tree found north of a large cluster of 10 trees located in a canyon draw below the ridge line along the southern edge of the property.



1"=400'



Project Adlin Project
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 Drawn By:
 Date:

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Oak Tree Location Map

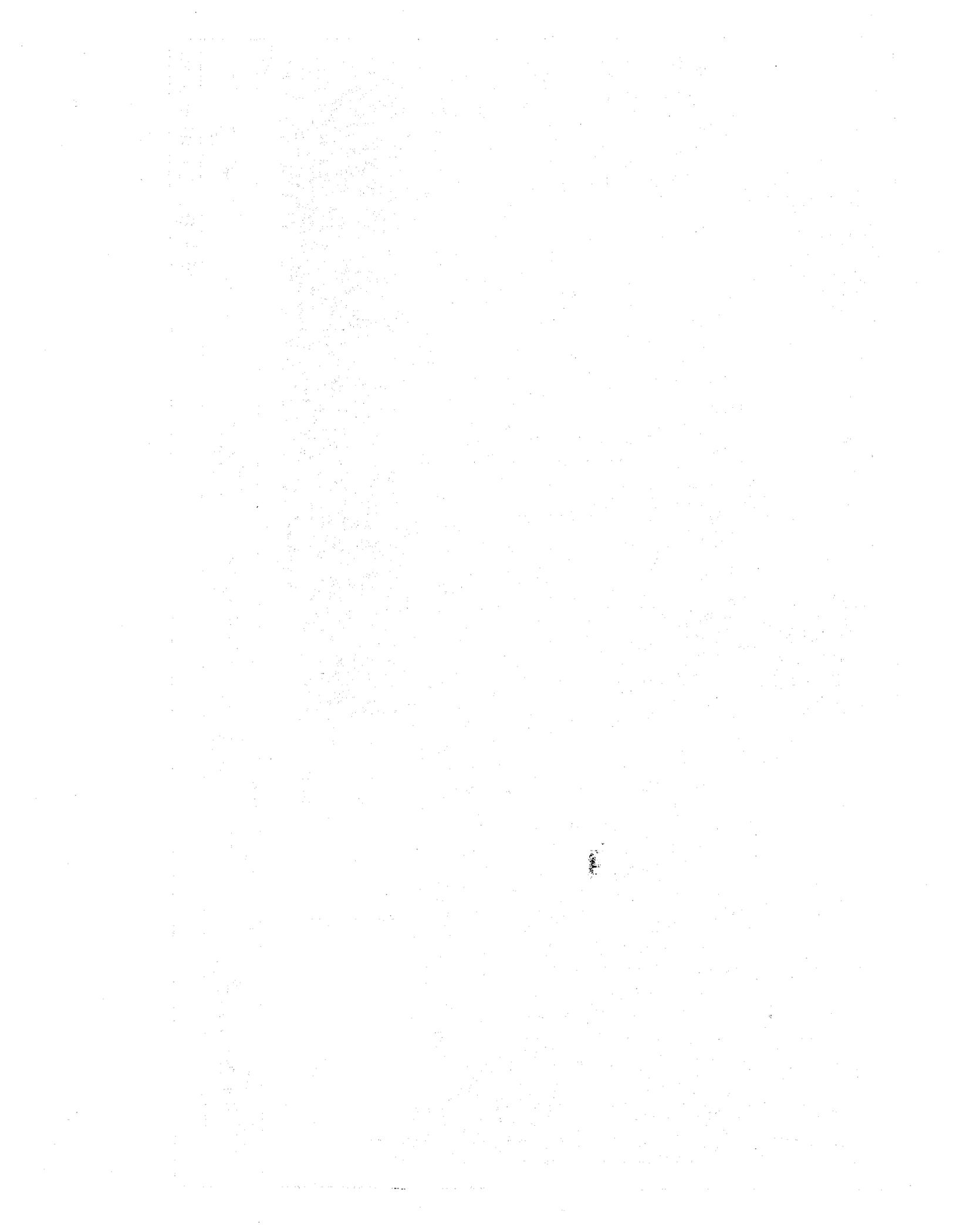


Table 1.0

OAK TREE SURVEY											Quercus agrifolia										
CHARACTERISTICS					HEALTH					LEGEND											
Tree No.	Existing Tag	Caliper	Multi-Trunk (Qty.)	Canopy	Heritage Tree	Aesthetic Rating	Insects, Disease, Parasites	Fire/Wind Damage	Cavity/Heart Rot	Structural Instability	Health Rating										
1	431	38"		50'x70'	✓	G			✓		S										
2		10"7"	2	40'x50'		E					H										
3	430	15"		40'x50'		E					H										
4		15"		21'		F					H										
5		5"	4	15'		E					H										
6		15"		25'		G			✓		S										
7		26"		40'		E					H										
8		10"		15'		G					H										
9		25"		35'		E	B				S										
10		13"	3	25'		G					H										
11		15"		20'		G					H										
COMMENTS AND NOTES																					
Major branch torn at base on south side with beehive in cavity.																					
Branching low to ground, shares canopy with #3.																					
Single trunked, healthy, shares canopy with #2.																					
Vertical growth, with two young suckers sprouting from damaged crown.																					
Young tree, unshaded, large canopy for its apparent age.																					
Lowest lateral branch has canker rot, may eventually weaken this limb.																					
Mature, beautiful specimen.																					
Past insect damage on lowest branching limb associated with rot; one crossed branch otherwise excellent form.																					
Tangle of dead twigs fanning out at base; Combined caliper of trunks approximately 28".																					
Low canopy, crowding out smaller (unrecorded) juvenile oak.																					

Aesthetic Rating
 E = Excellent
 G = Good
 F = Fair

Health Rating
 H = Healthy
 S = Sound
 U = Unsound

Insects, Disease, Parasites
 B = Borers (Ants, Sycamore Borers)
 M = Mistletoe
 A = Armillaria
 G = Oak Gall
 OF = Oak White Flies
 TB = Twig Blight

P = Pit Scale
C = Bleeding Canker
W = Carpenter Worm
SF = Slime Flux
OM = Oak Moth
OG = Oak Twig Girdler
OB = Oak Twig Border

Context

There are three trees in Wickham Canyon, inside the southern edge corner of the property, which mark the beginning of a distinctive Coast Live Oak Woodland habitat, which continues through the rest of the canyon off site. All trees in this vicinity are relatively healthy. One showed signs of having lost a major limb where a bee colony has since made a home. The trunks and bark were evaluated for signs of insects, fungus or seepage. Branches, leaf color, and tip growth appeared normal for the season. Twiggy dead wood represented under 15% of the leaf canopy and is considered within normal ranges. None of these trees fall within the grading limits of the proposed project. Together they should be considered a significant natural resource, important as an edge component to the existing woodland habitat that stretches beyond.

A second stand of oaks is clustered below the 2030 ft. peak in a steep, north-facing drainage ravine in the designated open space area to the south of the proposed development. Looking up from the nearest access road, there are 10 Coast Live Oaks nestled in the ravine and one about 200 feet downslope and considerably to the east. As a grouping, the stand is large enough to have particular habitat significance to the local wildlife community.

Conclusion and Recommendations

Natural oak tree regeneration has steadily fallen off since the introduction of exotic species in this continent in the late 1700s. Introduced annual grasses, it is now believed, do not provide an environment that is conducive to natural oak tree regeneration. Livestock grazing has also had a detrimental affect on saplings and their ability to transition into mature trees. An important part of California's biotic heritage is threatened. It is therefore all the more incumbent on planners to become proactive in promoting a process that insures the long term survival of these trees and the plant community they host.

This report provides a preliminary assessment of the oaks on this site - their appearance, condition and context. As entitlement process progresses, it will give planners background to draw on, in conjunction with other environmental surveys, when developing design alternatives that are responsive to CEQA mandates.

Tiering off of this report, a strategy for oak tree relocation or replacement can be defined for any trees, which will be directly impacted by proposed development. In addition, a framework for the protection and preservation of the existing oaks, which are to remain, can be established.

During the CEQA process, it is recommend that an Oak Tree Program be developed to:

1. guide the protection of existing oaks to remain on site
2. identify oaks that may be impacted by development and create a mitigation strategy
3. if oaks are to be relocated, establish guidelines for the transplantation of oaks on site including temporary on site storage
4. provide maintenance criteria for all oaks and a long term management program for all relocated oaks

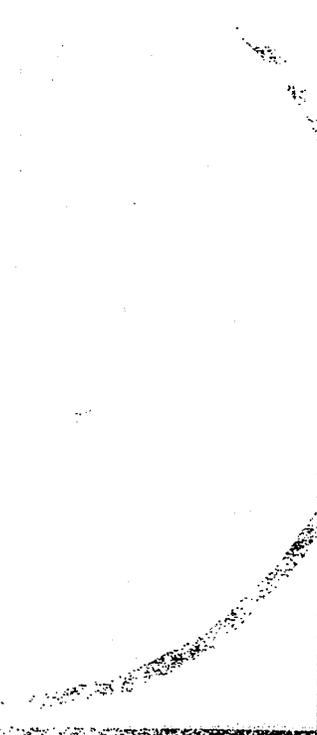
Thus far, in the preliminary design process for this project, every effort has been made by the planners to work around these "protected" trees. Ideally, this report and the recommendations herein, will serve to support current County of Los Angeles requirements that serve to protect this important part of California's biotic heritage.

KEY TO MAJOR PESTS AND DISEASES ON COAST LIVE OAKS

- (A) **Armillaria (Oak Root Fungus):**
Bark at base and below soil line is killed to wood and may show horizontal and vertical splits or is subject to chipping off. White felt-like filaments of fungus are found growing in and under bark.
- (C) **Bleeding Canker:**
Leaking of sap on the trunk or branches caused by Phytophthora
- (OM) **California Oak Moth:**
Sudden defoliation in the spring by a caterpillar. Tree usually recovers.
- (W) **Carpenter Worm:**
Wood boring insect, which mines through bark and wood causing physiological damage. Insect usually attacks already weakened or stressed trees.
- (P) **Pit Scale:**
Twigs show signs of sunken pits and appear somewhat swollen or flattened due to one of several species of sucking insect.
- (G) **Oak Leaf and Stem Galls:**
Harmless swellings caused by wasps.
- (OG) **Oak Twig Girdler:**
Tunnels found beneath twig surface
- (OB) **Oak Twig Border:**
Tunnel found in center of twig
- (OF) **Oak White Flies:**
Various species of Whitefly often feed on undersides of leaves. Sometimes cause minor defoliation.
- (SF) **Slime Flux:**
Unusually wet wood found on some trees, which leaks sap-like material.
- (B) **Western Sycamore Borer:**
Boring insect, which leaves signs of exit holes and reddish granular insect frass. Rarely bores deep enough to affect cambium layer.
- (WB) **Witches Broom:**
Dense clusters of twigs form along main branches following severe pruning often before death.
- (TB) **Twig Blight:**
Twig ends die without becoming densely branched. Caused by boring insects or several forms of fungus.

SECTION 4

140133



RMW

Palson Associates

Patentology
Arbitration
Litigation

RMW Project Number: 01-1797

Paleontological Resources Assessment Report

For

Aidlin West EIR

Stevenson Ranch area, Los Angeles County, California

Prepared for:

Gary Baker
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Prepared by:

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Author: Cara Corsetti
Paleontologist and Geologist

June 2001

Introduction

RMW Paleo Associates, Inc. was retained by Mr. Gary Baker to evaluate the paleontological resources for the Aidlin West EIR. The project site consists of approximately 230 acres of heavily vegetated rolling terrain located in the Stevenson Ranch area of the Santa Clarita Valley, Los Angeles County, California (Figure 1).

Methods and Personnel

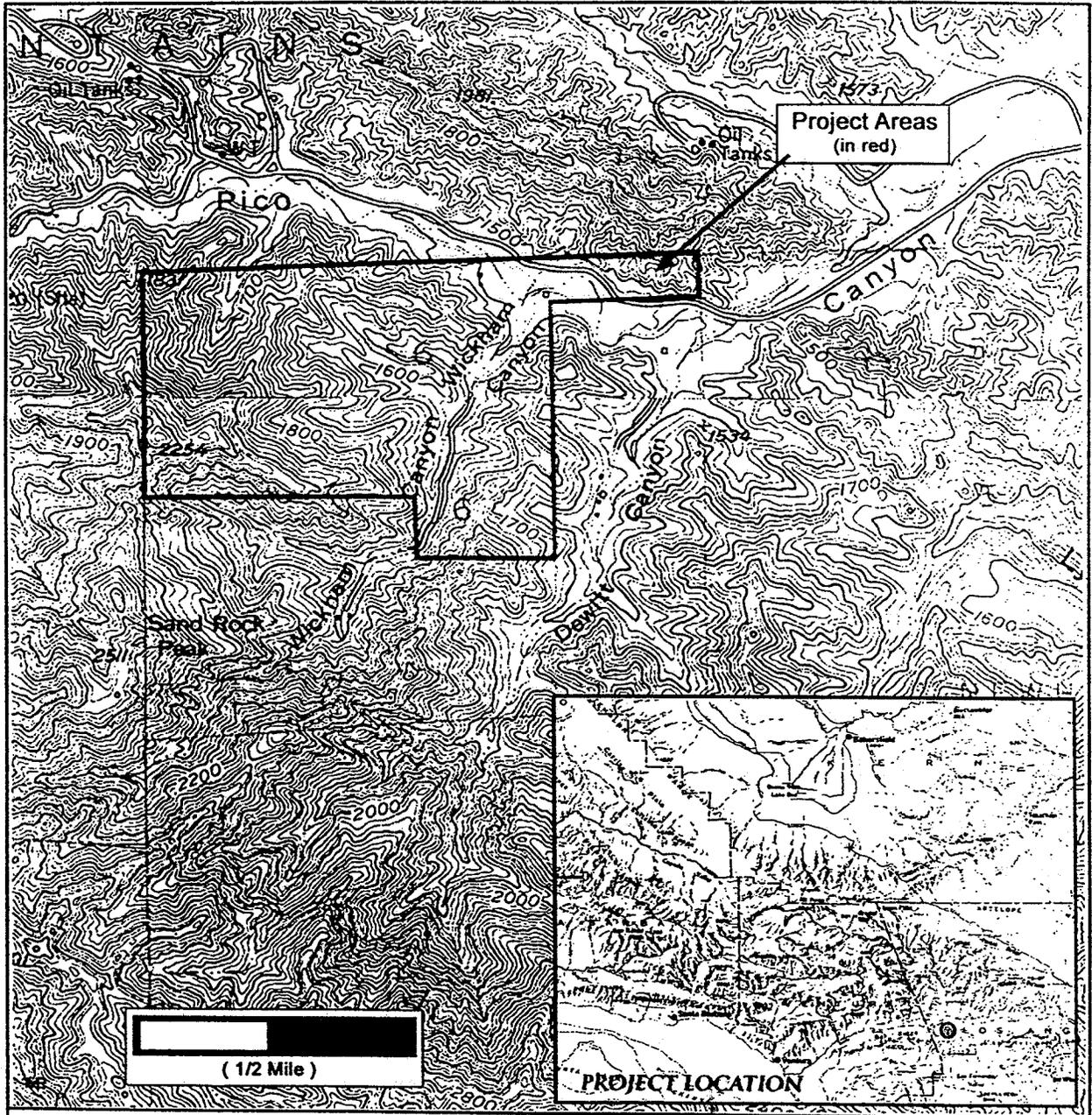
Cara Corsetti and Sherri Gust, Qualified Paleontologists, conducted a field survey of the proposed project area on May 14, 2001. Cara Corsetti reviewed the literature on the paleontology and geology of the Santa Clarita Valley area using both published and unpublished reports and papers. Fossils collected during the field survey were identified by Lindsey Groves, Collection Manager of Malacology and Invertebrate Paleontology, Natural History Museum of Los Angeles County. A literature review of all known fossil localities within a one-mile radius of the project site was conducted by Dr. Samuel McLeod, Collection Manager of Vertebrate Paleontology, Natural History Museum of Los Angeles County. All work was performed under the supervision of Cara Corsetti, Qualified Paleontologist.

Stratigraphy and Paleontology

Previous geologic mapping of the project area indicates that the proposed project will impact sediments mapped as Holocene alluvium, the Pliocene Pico Formation and the late Miocene to early Pliocene Towsley Formation (Winterer and Durham 1958; Dibblee 1992; Dibblee 1996).

Towsley Formation

The oldest unit that will be impacted at the project area is the late Miocene to early Pliocene (10 to 5 million years old) Towsley Formation. The unit is present only in the southwest corner of the Westerly property (Figure 2). Winterer and Durham (1958) named the Towsley Formation for type exposures in Towsley Canyon, located approximately one-mile southeast of the project site (Saul and Wooton 1983).



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Figure 1: Project Location

Portion of USGS 7.5 Minute
Quadrangles, Newhall, 1952;
Photorevised 1988
and Oat Mountain, 1952;
photorevised 1969

Area shown lies in Los Angeles County,
California



The Towsley Formation is composed of brown-weathering, marine siltstone and mudstone with extensive lenses of sandstone, conglomeratic sandstone and conglomerate. The unit, which ranges from a few meters to 1,200 meters thick, was deposited in a deep marine, quiet water paleo-environment, which allowed for the extensive deposition of fine-grained sediments (Saul and Wooton 1983). The Towsley Formation is known to contain significant marine mammal fossil remains and has thus been assigned a high paleontologic sensitivity level in Los Angeles County (see Figure 2).

Pico Formation

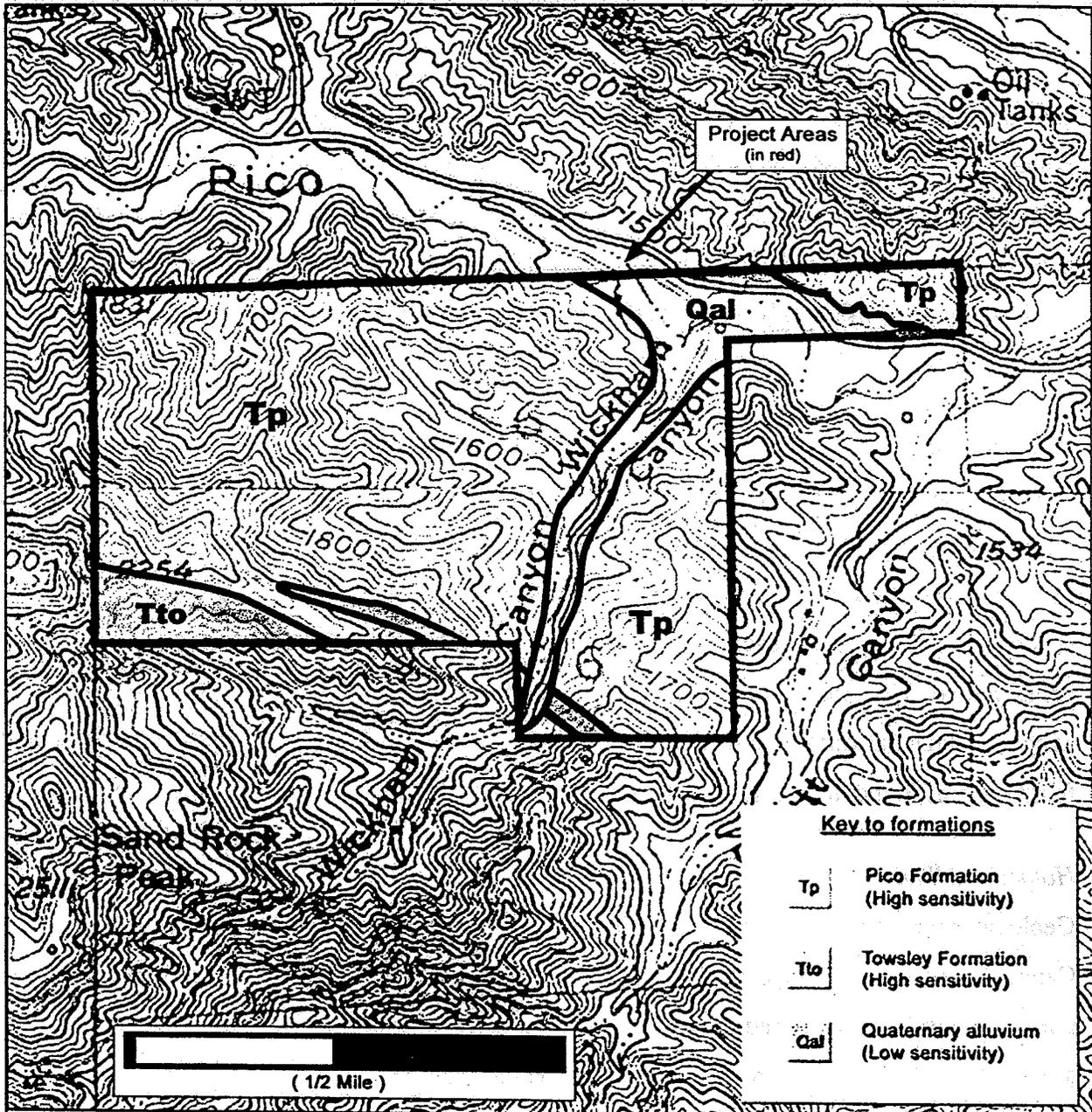
The Pliocene (5 to 1.5 million years old) Pico Formation, outcropping in over 90% of the project area, was originally named by Kew (1924) for exposures in nearby Pico Canyon. The marine Pico Formation is composed of light olive-gray and bluish-gray siltstone and fine-grained sandy siltstone containing small reddish-brown concretions, interbedded with sandstone and conglomerate (Winterer and Durham 1958). The Pliocene marine Pico Formation has been assigned a high paleontologic sensitivity level due to the significant invertebrate and vertebrate fossil remains found in Pico sediments throughout the Los Angeles Basin (see Figure 2).

Holocene Alluvium

Geologic mapping indicates that the surficial sediments outcropping in Pico and Wickham Canyons are Holocene (<10,000 years old) alluvial stream deposits which are composed of unconsolidated, poorly-sorted gray, light brown or reddish-brown silt, sand and gravel (Winterer and Durham 1958). Holocene deposits are too young (less than 10,000 years old) to contain fossils and are thus classified as low sensitivity sediments (see Figure 2).

Results

Several invertebrate fossils, consisting of partial shells and shell hash, were observed and collected from the Pliocene Pico Formation during the field survey. Unfortunately due to poor preservation, only two specimens could be identified, *Neverita reclusiana* (moon snail) and *Lucinoma annulata* (clam). Both species exist in the present day. *Neverita reclusiana* is a shallow water marine snail that ranges from California to Mexico, and *Lucinoma annulata* is a large, deep water marine clam that ranges from Alaska to Mexico (Morris 1966). The presence



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Figure 2: Paleo Sensitivity Map

Portion of USGS 7.5 Minute
Quadrangles, Newhall, 1952; pr.1988
and Oat Mountain, 1952; pr. 1969

Area shown lies in Los Angeles County,
California

Area showing geologic formations taken from
Geologic Map of the Newhall Quadrangle
by Thomas W. Dibblee jr., 1996



of both deep and shallow water species mixed within the fossil bed, along with the highly fragmented nature of the specimens indicate the samples were collected from a storm deposit. No fossils were discovered in the late Miocene to early Pliocene Towsley Formation or Quaternary Alluvium during the field survey.

A literature review of all known fossil localities within a one-mile radius of the project boundaries was conducted at the Natural History Museum of Los Angeles County. One fossil site, LACM 6365, lies in or within a one-mile radius of the project area. Unfortunately the locality, which contains the remains of a pinniped (seal, sea lion, or walrus), was not described accurately enough when it was collected to determine if it actually lies within the project area boundaries, or whether the fossils excavated from LACM 6365 were discovered in Pico or Towsley sediments.

Nearby fossil localities from the Pico Formation have produced sharks (*Carcharodon carcharias*, the Great White shark), and the remains of a right whale (Balaenidae) (Barnes et al., unpublished manuscript). Additionally, a fossil locality from the Towsley Formation, located in Humphreys, has produced the remains of three highly significant marine mammals: *Nannocetus eremus*, a primitive baleen whale, *Imagotaria downsi*, a primitive walrus relative that resembled modern day sea lions, and *Dusisiren jordani*, a sea cow (Barnes et al., unpublished manuscript).

Conclusions

Based on the geologic and paleontologic reports of the region, two of the three geologic units present on the Aidlin West project site have a high potential to contain nonrenewable scientific resources and should be monitored closely. The surficial Holocene alluvium present is too young to contain nonrenewable scientific resources and thus does not require close paleontological monitoring.

Recommended Mitigation Measures

All grading operations are likely to result in the destruction of fossils unless proper mitigation measures are implemented. Fossils are an important, nonrenewable scientific resource. The destruction of these fossils would represent a significant adverse impact on the region's paleontological resources.

Cumulative impacts on paleontological resources result when rock units become unavailable for study and observation by scientists. The destruction of fossils has a significant cumulative impact as it makes biological records of ancient life unavailable for study by scientists. While this project will have a relatively small cumulative impact on the region's paleontological resources, it is important to keep in mind the amount of local rock units/fossils already made unavailable for study.

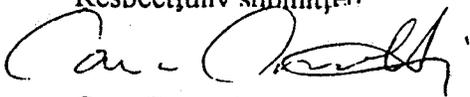
Implementation of proper mitigation measures can reduce the impacts to the paleontological resources. The following mitigation measures have been developed to reduce the adverse impacts of project construction on paleontological resources to a less than significant level. The measures are derived from the guidelines of the Society of Vertebrate Paleontologists and meet the requirements of Los Angeles County and CEQA. These mitigation measures have been used throughout southern California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

1. A qualified paleontologist will be retained to perform monitoring of construction excavations. Monitoring will include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor will have authority to divert or direct grading away from exposed fossils temporarily in order to recover the fossil specimens.
2. If microfossils are present, the monitor will collect matrix for processing. In order to expedite removal of fossiliferous matrix, the monitor may request heavy machinery assistance to move large quantities of matrix out of the path of construction to designated stockpile areas. Testing

of stockpiles will consist of screen washing small samples (200 pounds) to determine if significant fossils are present. Productive tests will result in screen washing of additional matrix from the stockpiles to a maximum of 6000 pounds per locality to ensure recovery of a scientifically significant sample.

3. All earth-moving of the Towsley Formation and Pico Formation will be monitored full-time initially. The high paleontological sensitivity of these formations requires a maximum effort to recover fossils. If the rock units do not produce the expected amounts of fossils, monitoring time may be reduced accordingly.
4. The qualified paleontologist will prepare monthly progress reports to be filed with the client and the lead agency.
5. At each fossil locality, field data forms will record the locality, stratigraphic columns will be measured and appropriate scientific samples submitted for analysis.
6. Fossils recovered will be prepared to the point of identification, stabilized, mapped on the USGS Topo map, and listed in a database to allow analysis.
7. All significant fossils collected will be donated to a public, non-profit institution with a research interest in the materials. The institution selected must be capable of curating the specimens, and field notes, geologic maps, and stratigraphic sections associated with the project, as well as allow for retrieval of specific specimens by researchers.
8. The qualified paleontologist will prepare a final mitigation report to be filed with the client, the lead agency, and the fossil repository upon completion of all field and laboratory work.

Respectfully submitted



Cara Corsetti

Los Angeles County Qualified Paleontologist

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AUTHOR: Patrick O. Maxon, Registered Professional Archaeologist

DATE: May 2000

<p style="text-align: center;">TITLE</p> <p>Cultural Resources Reconnaissance and Evaluation of TT 52796 (the Aidlin Project) near the City of Santa Clarita, Los Angeles County, California</p>	<p style="text-align: center;">SUBMITTED BY</p> <p style="text-align: center;">RMW Paleo Associates Archaeology Paleontology History</p> <p style="text-align: center;">23392 Madero, Suite L Mission Viejo, California 92691 (949) 770-8042 FAX (949) 458-9058</p>	 <p style="text-align: center;">Cottonwood Triangular Projectile Point, Rose Canyon Variant, collected by RMW Paleo, 1994</p>
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SUBMITTED TO: Ms. Lisa Ballin
Envicom Corporation
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Agoura Hills, CA 91301

PROJECT NUMBER: RMW Project Number 00-1659

USGS QUADRANGLES: USGS 7.5 Minute Quadrangles, Newhall, California, 1952;
Photorevised 1988 and Oat Mountain, California, 1952;
Photorevised 1969

ACREAGE: 230 Acres

KEYWORDS: Los Angeles County, Township 3N, Range 16W, San Bernardino Base and Meridian

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Appendix A: Personnel Qualifications

Confidential Appendices (Not for Public Review; Available on Request)

Confidential Appendix B: Literature Review Report

Confidential Appendix C: Historical Resources Report

MAPS

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MANAGEMENT SUMMARY/ABSTRACT

Purpose and Scope: Plans have been produced to develop portions of the 230 acre project site referred to as TT 52796, near the City of Santa Clarita, Los Angeles County, California. RMW Paleo Associates, Inc. was retained by Envicom Corporation to accomplish a cultural resources reconnaissance of the proposed development areas of TT 52796. This report details the results of the work accomplished.

Dates of Investigation: The field portion of the investigation was undertaken on 25 February 1999. The report was completed on 12 May 2000

Findings

1. Two structures and related outbuildings and debris were noted near the northern end of Tentative Tract 52796, south of the current Pico Canyon Road. Information given to the researcher is that they were constructed after 1918. A riveted iron standpipe, representing the remnants of exploratory oil well drilling, was observed immediately east of the main dirt road through Wickham Canyon, approximately 350 meters south of the beekeeping building near the northern end of the property. The researcher was informed that the well was exploratory in nature and crude oil was never extracted.
2. No prehistoric cultural resources were discovered on the parcel

Evaluation: The two structures and related out buildings and the exploratory oil well were evaluated by a professional architectural historian. Evaluation was accomplished by Timothy Gregory, the Building Biographer, on 8 May 1999. Mr. Gregory determined that the Larinan Apiary (the bee-keeping structure and related structures) is of minor local significance under criterion A (patterns of settlement) of the California Register of Historic Resources. An evaluation code of 5S3 (Not eligible for the National Register and not eligible for listing under a local ordinance, but eligible for special consideration in local planning) was assigned to the resource. Although a resource with a code of 5 may be nominated to the California Register, Mr. Gregory recommended that the resource not be nominated due to its lack of sufficient significance (Gregory 1999:10). See Confidential Appendix C for a copy of the report.

The project historian has recommended that Los Angeles County undertake an historic resources survey of the unincorporated area surrounding Santa Clarita to ascertain, in advance of construction, which rural properties are the most significant. The survey should also include historic viewsheds and scenic landscapes. Knowledge of such resources will facilitate planning and help protect sites that are the most significant.

While this is not a concern of the client, it is something the county should be made aware of; therefore, a copy of the historical resources report will be sent to the appropriate Los Angeles County agency with a cover letter pointing out this recommendation.

Undertaking Affects: Grading in preparation of home construction will destroy both structures, the oil well and any cultural resources lying undiscovered within the development area.

Investigation Constraints: Dense vegetation over a large portion of the study area prevented an adequate examination of the ground surface in those areas.

Recommendations: The architectural historian, Tim Gregory, recommended that the Larinan Apiary be assigned a mitigation measure designation of 2d (Gregory 1999:11). This designation requires complete photographic documentation of the resource and the production of a detailed historic report. The record should be made publicly accessible; therefore, Mr. Gregory recommended submitting the historic report to the Newhall branch of the Los Angeles County Public Library and the Santa Clarita Valley Historical Society. These measures were accomplished.

It is not necessary to monitor destruction of the historic structures on the property; however, it is recommended that a qualified archaeologist monitor the removal of the structures' foundations for the possibility of buried cultural resources. Additionally, a qualified archaeologist must monitor brushing/clearing of vegetation and the initial stages of grading on the parcel to determine if any historic and/or prehistoric cultural resources is present, but obscured by the dense brush.

Disposition of Data: This report will be filed with the South Central Coastal Information Center, University of California, Los Angeles, with Envicom Corporation and with RMW Paleo Associates, Mission Viejo. All field notes and other documentation related to the study are on file at RMW Paleo Associates.

CONTRACTING INFORMATION/INTRODUCTION

Contract Data: Plans have been produced to develop portions of the 230 acre project site referred to as TT 52796, near the City of Santa Clarita, Los Angeles County, California. RMW was subcontracted by Envicom Corporation to complete the required work. The schedule for completion of the project is unknown.

Purpose: This study was completed under the provisions of the *California Environmental Quality Act* (CEQA). Public Resources Code SS5024.1, Section 15064.5 of the Guidelines and Sections 21083.2 and 21084.1 of the Statutes of CEQA were used as basic guidelines for the cultural resources study (Governor's Office of Planning and Research 1998).

Public Resources Code SS5024.1 requires evaluation of historical resources for their eligibility to be listed on the *California Register of Historical Resources*. The purposes of the register are to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change (Office of Historic Preservation 1995a:1). The criteria for listing resources on the California Register were expressly developed to be in accordance with previously established criteria developed for listing on the *National Register of Historic Places* (NRHP).

According to Section 15064.5(a)(3)(A-D) in the revised CEQA guidelines (Governor's Office of Planning and Research 1998), a resource is considered *historically significant* if it meets at least one of the following criteria:

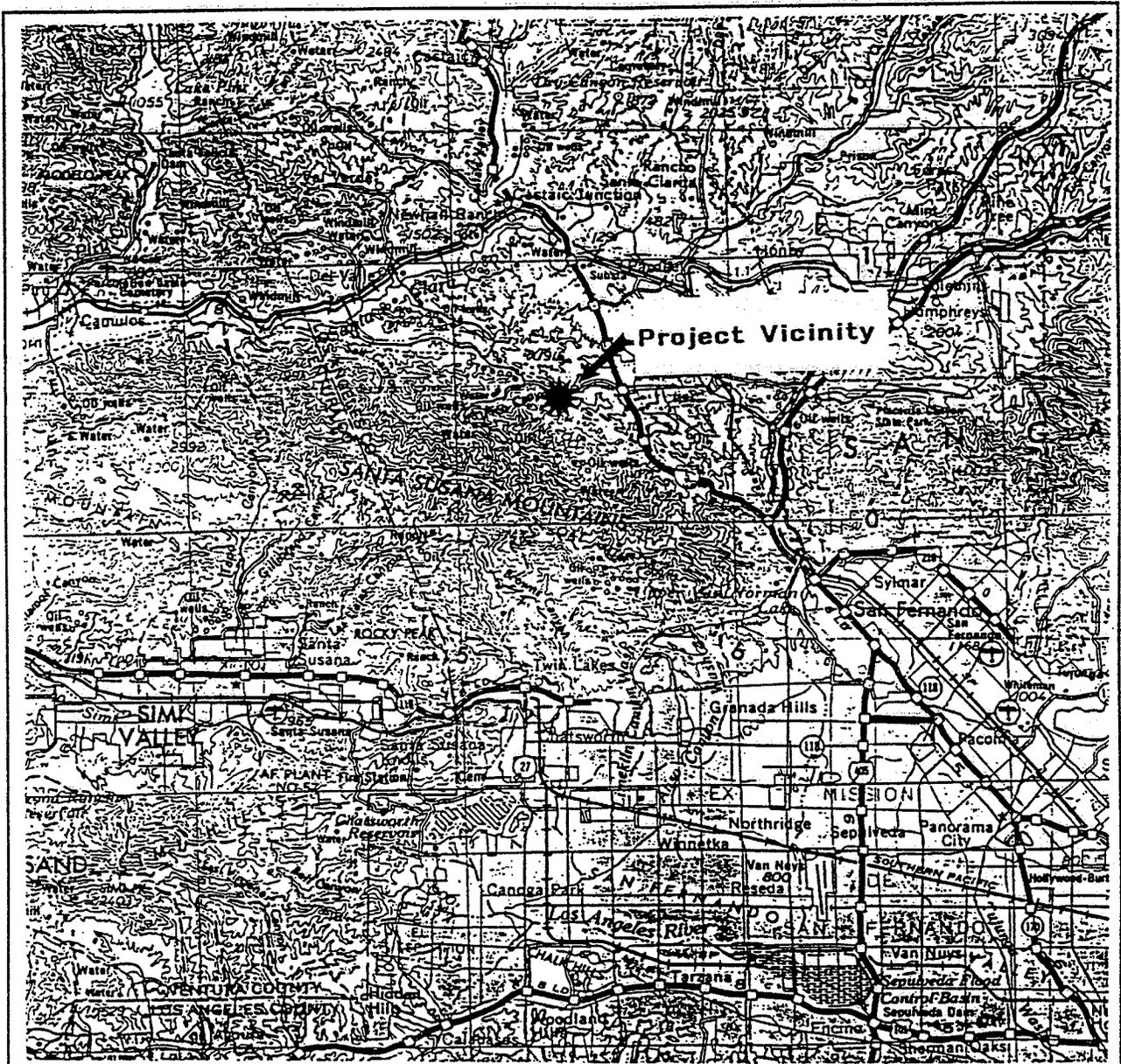
- A: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B: Is associated with the lives of persons important in our past;
- C: Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important, creative individual, or possesses high artistic values;
- D: Has yielded, or may likely yield, information important in prehistory or history.

Resources that are at least 50 years old are potentially eligible for listing on the *California Register* and must be evaluated. The Office of Historic Preservation recommends *recording* all cultural resources over 45 years old. The 45 year criteria recognizes there is often a five year lag between resource identification and the date when planning decisions are made (Office of Historic Preservation 1995b:2). The format of this report follows *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* (Office of Historic Preservation 1990).

Undertaking: The proposed project entails mass grading in preparation of the construction of an unknown number of single-family homes on the property. Approximately 200 acres of the property are slated for development at this time. The schedule for completion of the project is unknown.

Maps: Map 1 is a portion of USGS 1 by 2 degree map, Los Angeles, California, depicting the general vicinity of the study area. Map 2 is a portion of the USGS quadrangles Newhall and Oat Mountain, California depicting the specific location of the study area.

Personnel: The cultural resources reconnaissance was conducted by Patrick O. Maxon and Staff Archaeologist Marco Bonifacic. This report was produced by Patrick Maxon. Resumes for all individuals involved in the current study are contained in Appendix A.



Cottonwood Triangular
Projectile Point, Rose
Canyon Variant, collected
by RMW Paleo, 1994

**RMW Paleo Associates
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Paleontology
History**

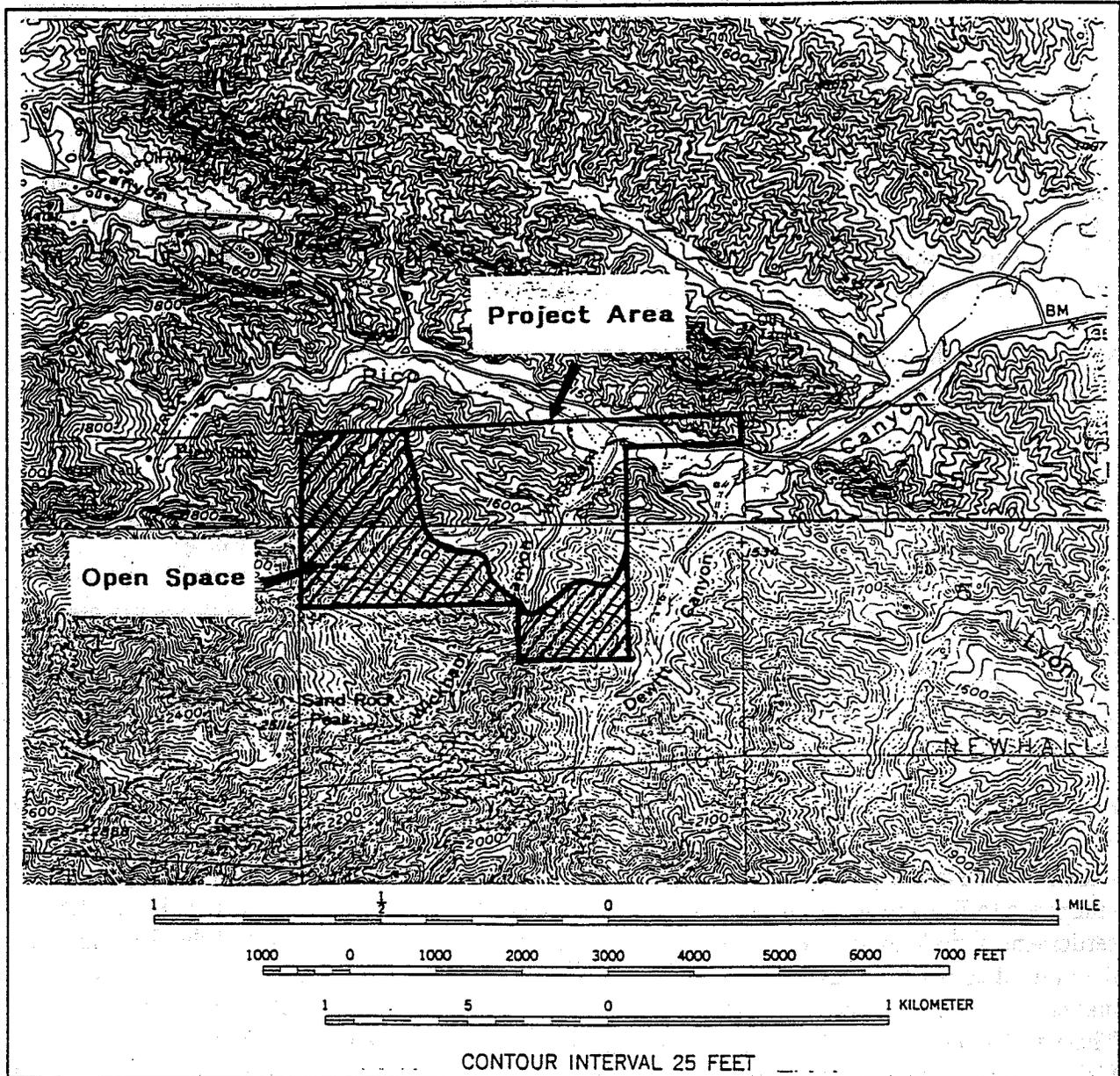
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(949) 770-8042
FAX (949) 458-9058

Map 1: PROJECT VICINITY

Portion of 1 by 2 Degree
USGS Los Angeles,
California Map, 1975

Scale = 1:250,000





 <p>Cottonwood Triangular Projectile Point, Rose Canyon Variant, collected by RMW Paleo, 1994</p>	<p>RMW Paleo Associates Archaeology Paleontology History</p> <p>23392 Madero, Suite L Mission Viejo, CA 92691 (949) 770-8042 FAX (949) 458-9058</p>	<p>Map 2: PROJECT AREA</p> <p>Portion of USGS 7.5 Minute Quadrangles, Newhall, 1952; Photorevised 1988 and Oat Mountain, 1952; Photorevised 1969</p> <p>Area shown lies in Township 3N Range 16W</p> <p>Scale = 1:24,000</p> 
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SETTING

Natural: Project site TT 52796 is dominated by high ridges (reaching a height of 2,250 feet above sea level in the western end of the portion), separated by east/west trending drainages. These lead into the major stream on the property (Wickham Creek), traversing roughly south to north through Wickham Canyon. Pico Canyon runs through the extreme eastern portion of TT 52796. The portion of the canyon within the parcel consists chiefly of the floodplain created by the east/west flowing creek alongside Pico Canyon Road.

Vegetation on the properties is, to a large degree, Sage Scrub dominated by purple sage. Some Riparian vegetation, with mulefat scrub, exists in the larger canyons. Walnut Woodland grows in discrete areas on the southern end of the westerly property.

The general climate of the study area vicinity is described as Mediterranean, with temperatures rarely exceeding 35 degrees Celsius or dropping below five degrees Celsius. Rainfall occurs primarily between November and April and averages ten to 15 centimeters per year.

Geologically, the properties' ridges and slopes are composed of sandstones and conglomerates of the *Pico Formation* with interfingers of the *Saugus Formation*: conglomerates composed of granites, gneisses, quartzites, etc. deposited in the Pleistocene Epoch by westward flowing streams. Sediments within drainages are composed of *Quaternary* alluvial gravels and sands (Dibblee 1992 and 1996).

Cultural: The archaeological heritage of California is quite rich, probably more so than any other North American region north of Mexico. However, the archaeology of California is not well known. The Native Californians were generally quite peaceful and did not often offer warlike resistance to European settlement. Consequently, they did not gain great notoriety during the settlement period. Also, the original Californians were first under the control of the Spanish and then the Mexican governments and only later, after much of their culture had been destroyed by disease and displacement, did they come under the control of the United States government. There was only a minor Native American presence remaining in California when it became a United States possession and massive development began. Consequently, very little interest in the natives and their prehistory was initially generated. It was many years later before the size, complexity and extent of archaeological deposits in the state became apparent.

Prehistoric: Humans have been present in the New World since at least 10,000 to 11,000 B.C.E. (before the common era). There is growing evidence, however, that humans were present long before that date (Dixon 1993). Linguistic and genetic studies suggest a date of 20,000 to 40,000 years ago as being more realistic (LA Times 1998). The evidence of earlier occupation is not yet conclusive, but it is beginning to be accepted by archaeologists. The few generally accepted remains suggest a very small, mobile population apparently dependant on hunting of large game

animals as the primary subsistence strategy. Other sources were certainly exploited, but the bulk of the traces remaining today are related to game hunting. (Chartkoff and Chartkoff 1984, Moratto 1984).

Chartkoff and Chartkoff (1984) identify the earliest portion of the archaeological sequence - to about 9,000 B.C.E. - as the Paleo-Indian Period. The surviving material culture of this period consists primarily of large, extremely well made projectile points and large but crude tools, such as scrapers and choppers. Such an assemblage was utilized to exploit the large game animals available to Pleistocene Epoch populations. Encampments were not permanent, but were probably sited near a major kill. Occupation would have persisted only until the resources of that kill were exhausted. It is probable that the Paleo-Indians lived in groups no larger than extended families and that contact with other such groups was infrequent. The Pleistocene came to an end sometime around 9,000 B.C.E., and the large game animals gradually became extinct. This major change in resource availability forced a major change in subsistence strategies.

A general chronology has been developed for the Southern California coastal region by Wallace (1955) for the time subsequent to the Paleo-Indian Period:

The *Millingstone Horizon* people (ca. 5,500-1,500 B.C.E.) practiced a mixed hunting and gathering food procurement strategy. Game hunting still played an important role in the economy, but by this time the Native Americans had learned to exploit the hard seed resources of the coastal sage scrub and chaparral ecological communities. The rapid extinction of the large mammals that the Paleo-Indian had previously been exploiting necessitated this shift in resource exploitation. Manos and metates, the principle implements used to process the seeds, appear in large numbers for the first time in this horizon, and are especially numerous near the end of the period. Other specialized tools were developed to process the increased resources utilized by Millingstone people. Bone tools and shell items are uncommon; probably having decomposed over time. Settlement size seems to have increased and an annual round of seasonal migrations may have been practiced as movements coincided with ripening vegetal resources. Some formal burials are also evident.

The *Intermediate Horizon* (ca. 1,500 B.C.E. to C.E. [common era] 1,000), is characterized by a shift away from primarily vegetable food exploitation to a hunting and maritime subsistence strategy. In general, the use of groundstone implements gives way to the production of small, chipped stone tools, such as projectile points, suitable for hunting. It was during this time that the mortar and pestle were introduced. The mano and metate continued to be used on a somewhat reduced scale, but the introduction of the mortar and pestle signaled a shift away from the processing and consuming of hard seed resources to that of the acorn. The acorn then became the staple of the California Native Americans and remained so until European contact.

In the *Late Prehistoric Horizon*, there was a greater use of food resources with more land and sea mammal hunting to complement collecting. The material culture in the Late Horizon was more complex. More classes of artifacts were being produced and they exhibited a more sophisticated

degree of workmanship. The recovery of a greater number of small, finely chipped projectile points suggests a greater utilization of the bow and arrow. Other items include steatite containers, shell fishhooks, perforated stones, bone tools, personal ornaments, asphalt adhesive and elaborate mortuary customs (Wallace 1955:195).

During the final centuries prior to Spanish contact, the archaeological record reveals great increases in population. Some villages contained as many as 1,500 persons. Apparently, many of these settlements were occupied throughout the year rather than seasonally.

During the Late Prehistoric, emigrants from the Great Basin appeared in the Los Angeles and Orange County area. Because it is difficult to separate the archaeological assemblages of the emigrants from those of the indigenous peoples on the basis of artifact typology alone, these peoples either were very quick to adopt most of the local traits, or brought a similar material culture with them.

Ethnographic: The current study area was inhabited by a Native American group ethnographically known as the Tataviam. The territory of the Tataviam extended from the Sawmill Mountains in the north to the Antelope Valley on the east. The west was bounded by Castac Lake and Sespe Creek. Beyond was Chumash territory. The majority of the Tataviam population, however, was concentrated in the upper reaches of the Santa Clara River east of Piru Creek.

Little is known of the Tataviam. The name "Tataviam" itself is derived from the Kitanemuk's designation for them (King and Blackburn 1978:535). Kroeber (1925:614) called them the "Alliklik." This was apparently the Chumash name for them. Bright (1975 in King and Blackburn 1978) concluded that their language may have been a remnant of an unknown language that was influenced by Takic, or more likely, that it was Takic, but not Serran or Cupan. They probably began to differentiate from other Southern California Takic speakers around 1000 B.C.E.

Archaeological data, the main source of information on the group, indicate broad similarities among the Tataviam, the Chumash and the Gabrielino. The Tataviam, more so than their neighbors, probably relied more heavily on yucca as a staple; however, other foodstuffs utilized were probably no different than their neighbors (King and Blackburn 1978:536).

Tataviam villages ranged from large centers of around 200 individuals to small settlements of ten to 15 souls. Larger villages, surrounded by smaller settlements, were dispersed evenly throughout their territory. King and Blackburn (1978:536) estimate the total Tataviam population at the time of historic contact at approximately 1,000 individuals.

Most of the Tataviam population had been baptized at the San Fernando Mission by 1810 and they quickly intermarried with other Native American groups. By 1916, the last Tataviam speaker had died (King and Blackburn 1978:536).

RESEARCH ISSUES

Regional research concerns such as social networking, settlement patterns, and refining chronological sequences cannot be properly addressed during a project that is reconnaissance in nature. The primary purpose of an archaeological reconnaissance is to locate sites and offer an appraisal of the condition of any sites located.

Available information indicates that early settlements were located near reliable sources of water, but in areas commanding a view of the surroundings. The area surrounding an encampment or village was used for hunting, resource collecting and initial processing of those resources. Such resources included lithic material for tool manufacture, animal and vegetable (roots, bulbs, seeds, berries, nuts, etc.) resources. Later period sites were also located near reliable water, but were generally situated in canyons and less frequently on ridges (King 1993).

Collecting and initial processing of material for chipped lithic tool production leaves evidence in the form of damaged surfaces where material was removed, chipping waste from initial reduction of that material, hammerstones used in the reduction and cores from which viable material was removed. Milling tool production probably relied on the collection of suitable cobbles and would leave no trace. Hunting of game animals was an activity probably pursued in the project area vicinity. Game animals were abundant in the Sage Scrub and Chaparral Communities and were certainly exploited by the prehistoric inhabitants. Evidence of hunting activities may include blinds, lost or broken projectile points and animal bones within the habitation areas.

Vegetable resource collecting and initial processing may have been performed in the project area. Evidence for such activities would be the recovery of manos, metates, mortars (including bedrock) and pestles, scrapers and choppers. These artifacts by themselves are evidence of vegetable resource collection and initial processing. Only with a wide range of other artifact varieties do they constitute evidence of substantial habitation.

It is thus assumed that archaeological sites in the general vicinity include the possibility of relatively large seasonal and/or permanently occupied encampments located near a reliable source of water, as well as smaller specialized use camps. Seed collecting and processing stations were located in more or less level areas in the vicinity of the desired vegetable resources. Chipped lithic tool manufacturing stations contain traces of chipping waste products and tools such as hammerstones and cores. They either occur as isolated sites or within larger site complexes.

Hypotheses: Because the project was reconnaissance in nature, the hypotheses were kept simple:

1. Special use sites are to be expected in areas containing essential or unique resources. Specialized use sites could include those that represent quarrying for lithic tool production, those used for the production and/or maintenance of lithic tools, those that would have been used for hunting birds or other animals or those used during the collection and processing of vegetable resources.

2. Sites should be recognizable due to physical changes that have occurred as a result of human use and/or habitation.
3. Historic debris should be encountered where recognized historic buildings or other structures occur.

LITERATURE REVIEW

A review of the records housed at the South Central Coastal Information Center, University of California, Los Angeles was completed by Phyllisa Eisentraut, Coordinator of the Center, on 1 March 1999 (See Confidential Appendix B). The record search area included the project area and its vicinity within a one-half mile radius. The search included a review of all recorded historic and prehistoric archaeological sites within the project area as well as a review of all known cultural resources survey and excavation reports. Information Center sources reviewed include:

- Information Center's historical resources files.
- *National Register of Historic Places* (NRHP) (Office of Archaeology and Historic Preservation 1997).
- *California State Historic Resources Inventory* (HRI).
- *California Points of Historical Interest* (California Department of Parks and Recreation 1992).
- *California Historical Landmarks* (California Department of Parks and Recreation 1990).
- USGS Quadrangles: 1:62,500 scale, Santa Susana, California Quadrangle, 1903 and 1903, reprinted 1948; 1:24,000 scale, Newhall, California Quadrangle, 1952, Photorevised 1988; and 1:24,000 scale, Oat Mountain, California Quadrangle, 1952, Photorevised 1969.

The listings of the California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation indicate two California Historical Landmarks within a one-half mile radius of the project area:

1. Located on West Pico Canyon Road, 3.3 miles (5.3 kilometers) west of Interstate 5 and 1.5 miles (2.4 kilometers) west of the current property, stands CSO-4 (Pico No.4), California's first commercially productive oil well. Drilling began in early 1876 under the supervision of Demetrius G. Scofield, the first president of Standard Oil of California. It was completed to a depth of 300 feet in September 1876. The well was later deepened to 600 feet. It then produced 150 barrels a day and continued in operation for 77 years. The Pacific Coast Oil Company of California was formed as a result of the success of the well. The well's success led to the construction of the state's first refinery nearby.

2. Located at 27201 W. Pico Canyon Road, 2.8 miles (4.5 kilometers) west of Interstate 5 and one mile (1.6 kilometers) west of the current property, is what remains of the town of Mentryville. The town was named after Charles Alexander Mentry, who in 1876 drilled the first successful oil well in California. It was here that Star Oil Company, one of the predecessors of Standard Oil of California, was formed. Mentry's restored home, barn and Felton School remain on the site.

One prehistoric archaeological site has been recorded within a one-half mile radius of the project area. It was recorded in 1979 by Banks, and is located some 600 meters northeast of the study area, north of Pico Canyon Road. Since its recording, the site area was examined by archaeologists at least twice, but no cultural resources were observed. It was surmised that the site had been destroyed or that the area never actually contained an archaeological site (Peak and Associates 1992). The site area was not visited during the current project.

Two cultural resources survey reports have been produced for the study area and its vicinity. One (Peak and Associates 1992) included a portion of the study area and a second (Van Horn 1979) included Portrero Canyon and lands to the north. The former report was produced after a reconnaissance of a proposed oil transportation pipeline route along Pico Canyon. A small portion of the reconnaissance included the northern boundary of the current project area. The latter report was a cultural resources overview of 3,000 acres bordering Portrero Canyon, north of the current study area. No significant cultural resources were discovered on the current study area during either project.

METHODS

A cultural resources reconnaissance of the subject property (Tentative Tract 52796) was accomplished on 25 February 1999 by archaeologists Patrick Maxon and Marco Bonifacic. Each portion of the property has unique physiographic characteristics; therefore, each portion was examined in a somewhat different manner according to differences in landform, vegetation and prior disturbance.

TT 52796: The western portion of the parcel, west of Wickham Canyon, is made up of four generally east/west trending ridges separated by drainages. For this part of the reconnaissance, researchers examined the spine and upper slopes of each ridge, as well as the bottom and lower slopes of each drainage. To the east of Wickham Canyon is one undulating, generally north/south trending ridge, with several finger ridges extending eastward and westward off the main ridge. The spine and upper slopes of these ridges were examined. The main north/south trending drainage of Wickham Canyon extends the length of the parcel. Although dense vegetation hindered adequate access, this drainage was examined wherever openings in the vegetation allowed entry and visibility. On the larger, flat areas on the northern end of the property, linear transects, spaced about five meters apart, were walked during examination. Those areas where structures existed were examined more closely.

Tim Gregory, who completed the evaluation of the historic structures within TT 52796, visited the project area on 8 May 1999 and accomplished a visual inspection and documentation of the resources. Mr. Gregory also undertook research at the archives of the Los Angeles County Assessor, the building files at the Chatsworth field office of the Assessor, the historical files at the central branch of the Los Angeles Public Library, the Newhall and Valencia branches of the Los Angeles County Public Library and the headquarters of the Santa Clarita Historical Society. This research was conducted to determine ages of the structures and whether any historically significant persons or events were connected to the history of the property.

FINDINGS

The most limiting factor during the course of the reconnaissance was the dense vegetation that dominated many portions of the study area. It greatly hindered access to certain areas and precluded an adequate examination of the ground surface in most areas of the parcel.

No prehistoric cultural resources were discovered within the current study area as a result of the cultural resources reconnaissance. Results of modern/historic activities, however, were in evidence on several portions of the study area:

TT 52796: On the northern end of the parcel, immediately south of Pico Canyon Road, at the northern end of the parcel's main dirt road, lies a small complex of structures identified as the *Larinan Apiary*. Immediately east of the dirt road is a building still functioning as a bee keeping operation or "honey house." About 175 meters due west are the remains of a ranch complex including the main home with an attached wooden shed, a large garage, a livestock corral, a second wooden enclosure and a scattering of debris (metal, wood, glass, etc.) dispersed in a wide band around the complex and extending north off the parcel. A brief discussion, based on the historical report by Tim Gregory, is provided below. See the Gregory report, included in Confidential Appendix C, for a detailed description of the resource.

Larinan Apiary

The resource consists of a house, a storage shed, a garage, a chicken coop, other minor features adjacent to the house, a plank bridge, a honey house (apiary), a corral, and a well head.

The residence, constructed in 1918, is located at the end of a gravel drive approximately 350 feet southwest of Pico Canyon Road. It is a one-story U-shaped building in an early "California ranch" style. The house has a wood-post foundation; the open space covered by horizontal timbers. The main roof, covering the original 1918 building, is a low-rise side-facing gable. The northerly leg of the "U", added to the structure in 1929, has a front-facing gable. The southerly leg of the "U", added in 1930, also has a front-facing gable on its southerly part, but has a shed roof on its northerly section. All the roof surfaces are covered with corrugated iron, except the shed roof, which is of composite material. Most of the windows are wood sash with the top and bottom members of the frame extending beyond the vertical members.

A well made, tongue-and-groove walled storage shed with a wood post foundation is immediately to the rear of the 1930 addition. Its steep side-facing gabled roof is covered in corrugated iron.

The "honey house", some 575 feet east of the residence, is a rectangular building with front-facing gabled roof. Its walls and roof are covered with corrugated iron. Square venting holes appear at each gabled end. A single wooden door exists on the northerly side of the building. The southerly side has a band of three narrow windows on its west end and a garage type delivery door on its east end. Bee keeping equipment encircles the building and numerous active bee hives are extant to the north of the building.

Other resources in the vicinity of the residence include a wood-framed garage with a concrete foundation some 50 feet southeast of the garage, a wooden chicken coop covered with wire mesh and a corrugated iron roof approximately 10 feet west of the garage, a metal and wood livestock corral some 300 feet southeast of the house and a plank bridge, crossing the creek, midway between the house and Pico Canyon Road.

Finally, some 1,000 feet south, immediately adjacent to the main dirt road on the property, is a riveted iron standpipe, approximately 1.5 meters in height and 75 centimeters in diameter. A single 15 centimeter diameter hole appears about mid-way up the pipe on its north side. The top of the pipe is very rough and may have had another structure attached to it at one time. Painted on the side of the pipe are the numbers "#1543." Information obtained indicates that this was an exploratory oil well dug on the property, but never exploited for oil. No information on this resource was obtained as a result of the historic research.

The project historian has recommended that Los Angeles County undertake an historic resources survey of the unincorporated area surrounding Santa Clarita to ascertain, in advance of construction, which rural properties are the most significant. The survey should also include historic viewsheds and scenic landscapes. Knowledge of such resources will facilitate planning and help protect sites that are the most significant.

While this is not a concern of the client, it is something the county needs to be made aware of; therefore, a copy of the historical resources report was sent to the appropriate Los Angeles County agency with a cover letter pointing out this recommendation.

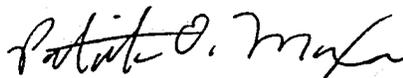
MANAGEMENT CONSIDERATIONS

1. Several historic resources were discovered on the westerly parcel (TT 52796) as a result of the cultural resources reconnaissance. According to the California Environmental Quality Act, resources older than 50 years are potentially eligible for listing on the *California Register of Historic Places* and must be evaluated. The resources (structures and ranch remnants) on the property were formally recorded and evaluated for their potential eligibility for listing on the *California Register*. They were determined to be *not eligible* for listing on the Register.

2. Just one mile (1.6 kilometers) west of the current property is the restored home, barn and school of the town of Mentryville; named after Charles Mentry, who drilled the first successful oil well in California in 1876. One-half mile (800 meters) west of Mentryville stands CSO-4 (Pico No.4), California's first commercially productive oil well. It has been determined that these resources are not related to the structures on the current property.
3. The remaining refuse deposits and scatters have been determined to be modern and not significant; thus, further study is not necessary.
4. It is possible that archaeological resources lie buried or obscured by the dense vegetation on the property.

RECOMMENDATIONS

1. The Larinan Apiary was assigned a mitigation measure designation of 2d (Gregory 1999:11). This designation requires complete photographic documentation of the resource and the production of a detailed historic report. The record should be made publicly accessible; therefore, it is recommended that the historic report be submitted to the Newhall branch of the Los Angeles County Public Library and the Santa Clarita Valley Historical Society. These measures were accomplished.
2. It is recommended that the removal of the foundations of the structures called the Larinan Apiary be monitored by a qualified archaeologist for the potential of buried resources. The archaeological monitor must be empowered to divert grading operations until such time that any exposed resources are evaluated and recovery operations are completed.
3. A qualified archaeologist must monitor brushing/clearing of vegetation and the initial stages of grading of the property to determine if any historic and/or prehistoric cultural resources exist on the property. The archaeological monitor must be empowered to divert grading operations until such time that any exposed resources are evaluated and recovery operations are completed.



Patrick O. Maxon, R.P.A.
Certified Archaeologist

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Appendix A
Personnel Qualifications

Appendix A

Personnel Qualifications

Patrick O. Maxon, M.A., R.P.A.
RMW Paleo Associates, Inc.
Certified Archaeologist

Professional Experience

- 1994 - present Staff Archaeologist, RMW Paleo Associates, Mission Viejo, California
Responsibilities include project management, development of project proposals,
conducting research, accomplishing field work (survey, excavation, monitoring),
mapping and production of technical reports.
- 1990 - 1994 Behavioral Specialist/Job Trainer, Vantage Foundation, Costa Mesa, California.
- 1989 - 1990 House Manager, Pearlmark Group Home, Anaheim, California.
- 1988 - 1989 Instructor, United Cerebral Palsy, Santa Ana, California.

Selected Technical Reports

- 1995 Archaeological Test Excavation of Cultural Resources Located Within the Saddleback Meadows
Planned Development, Orange County, California.
- 1996 Cultural Resources Reconnaissance and Impact Assessment of Proposed Development for the
California State University, San Bernardino Master Plan.
- 1997 Archaeological Test Excavation of a Prehistoric Cultural Deposit at Butterfield Ranch, Tract
14425, Chino Hills, San Bernardino County, California.
- 1998 Cultural Resources Mapping of the CA-VEN-630 Site Complex for the Long Canyon
Development Project on the Old Wood Ranch in Simi Valley, Ventura County, California.
- 1999 Archaeological Test and Data Recovery Excavations of CA-VEN-477 at Long Canyon, Wood
Ranch, Simi Valley, California
- 2000 Archaeological Investigations for the Long Canyon Development Project on the Old Wood Ranch in Simi
Valley, Ventura County, California.

Degrees

M.A. Anthropology: 1994, California State University, Fullerton. Concentration in Archaeology.
B.A. Sociology/Psychology: 1987, Towson State University, Towson, Maryland.
University of Maryland, Munich Campus, Munich, Germany

Credentials

Certified by the Register of Professional Archaeologists
Certified as an Archaeologist by the County of Orange Environmental Management Agency. Also
certified by the Counties of San Diego, Los Angeles, Ventura, San Bernardino and Riverside.

Memberships

Society for American Archaeology
Society for California Archaeology
Pacific Coast Archaeological Society

Marco Bonifacic
RMW Paleo Associates, Inc.

Experience:

- September 1998 to Present *Staff Archaeologist/Webmaster* for RMW Paleo Associates, Inc.
- February 1998 to September 1998 *Web Development Editor* for Harcourt Brace Professional Publishing
- December 1997 to February 1998 *Electronic Publishing Assistant* for Harcourt Brace Professional Publishing
- September 1997 to November 1997 *Volunteer Intern* at the San Diego Museum of Man.
- December 1996 to October 1997 *Assistant to the Head Curator* of the Archaeology Dept. of the Obihiro Centennial Museum, Obihiro, Japan.
- September 1996 to September 1997 *English Conversation Instructor/Editor* for JOY International, Obihiro, Japan.

Education

B.A., Anthropology and English, May 1995, University of California at Berkeley
Archaeological field school, August 1996, University of Alaska at Fairbanks

Memberships

American Anthropological Association
San Diego Museum of Man
San Diego Zoological Society

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SECTION 5

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**THE BUILDING
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TIM GREGORY**

- ◆ Building Histories
- ◆ Cultural Resource Studies
- ◆ Historic Resources Surveys
- ◆ Local, State, and National Landmarking
- ◆ Historic Preservation and Archival Consulting

HISTORIC RESOURCES TECHNICAL REPORT:

**THE LARINAN APIARY
(26300 PICO CANYON ROAD)**

SANTA CLARITA, CALIFORNIA

Prepared for:

**RMW Paleo Associates
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Mission Viejo, CA 92691**

May 12, 1999

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I. Project Description

This is a technical report on the historic resources found in the approximately 40-acre parcel currently known as the Aidlin Properties project site and historically known as the Larinan apiary. It is located at 26300 Pico Canyon Road about three miles west of the City of Santa Clarita in unincorporated Los Angeles County territory known historically as Newhall. The client has requested an evaluation of the historic resources discovered there and a summary of any alternatives which may be needed to reduce project impacts on these resources if they are found to be significant.

The purpose of this report is to assist the property owner, RMW Paleo Associates, and the County of Los Angeles in their determination of the historical significance of the resources. Also to be determined is, if any future changes to the resources will constitute a significant environmental impact as defined by the California Environmental Quality Act (CEQA) and subsequently adopted guidelines, what mitigation measures may be necessary.

The five steps necessary in such a study are: 1) identification of the resources; 2) identification of the resources' historic context; 3) evaluation of the historic significance of the resources; 4) determination (findings) of the proposed project's effect on any significant resources; and 5) recommendation of project alternatives or mitigation measures to minimize the project's possible negative effects.

(Please see Appendix 1 for a more detailed discussion of the requirements of CEQA and of the California Register of Historical Resources that govern this process.)

In summary, this technical report contains the synopsis of the consultant's cultural resources identification and evaluation investigation. Sections of this report discuss the Identification of the Resources, the Historic Context, Evaluation of Historic Resources, Findings of Effect and Recommended Mitigation Measures, and Sources. Background discussions of the various phases of the CEQA process are appended as are California Historic Resources Inventory (DPR 523) forms prepared as a result of the investigation.

II. Identification of the Resources

(Please see Appendix 2 for a background discussion on the identification and historic context phase of the CEQA process.)

A field visit to the project site was carried out on May 8, 1999. The buildings, structures and amenities were observed, described, and photographed.

Research was undertaken before and after the site visit in order to further identify the history of the resources and their context. The first step was an investigation of the site's chain of ownership through a records search at the archives of the Los Angeles County Assessor.

Further research was conducted in the building files at the Chatsworth field office of the Assessor in order to determine the age of the improvements on the property and to analyze how they had been altered over the years. Historical files were also consulted at the central branch of the Los Angeles Public Library (the oldest public library collection in Southern California), the Newhall and Valencia branches of the Los Angeles County Public Library, and at the headquarters of the Santa Clarita Historical Society. The focus of this research was to determine if the history of the site had any connection to a person or event of national, state-wide or local significance during its period of habitation. As many documentary resources as possible within realistic time and budget constraints were investigated and are listed under Sources (Section VI).

The research on the site is reported below and is also summarized on DPR 523 forms appended at the end of this report. In completing the forms, the consultant followed the "Instructions For Recording Historical Resources" issued by the California State Office of Historic Preservation (SHPO) in March 1995 and "Instructions For Nominating Historical Resources To the California Register Of Historical Resources" and supplements issued by SHPO in August 1997.

History:

The property is located in Section 6 just within the original southern border of the Rancho San Francisco on a narrow strip of four identically-sized parcels, running west and partly east of the Pico Canyon Road right-of-way. The property's dimensions are approximately 5,000 feet east-west by 350 feet north-south.

The earliest recorded owner of the property, as revealed by Assessor's records, was Joseph G. Hart who purchased Lots 1 through 4 from an "unknown owner" in 1911. (No documentation could be found as to whether Mr. Hart was any relation to cowboy star William S. Hart who settled in the Newhall area in the early 1920s.) The first improvements on the property appeared on Lot 2 in 1918 and were assessed at \$50. In 1920, George B. Larinan became the owner and, according to his obituary, soon set up a bee-keeping business on his land. Born on February 16, 1881, Mr. Larinan would have been about 39 years old at the time. The \$50 assessment for improvements remained unchanged until 1927 when it jumped to \$840. However, the Assessor estimated that the oldest structure on the property (probably the house) dated from 1920. It can be assumed that the original section of the house was built in 1918 by Mr. Hart and that the Assessor did not catch up with a re-assessment of the property, which by that time included the "honey house," until 1927.

A wing was added to the northwest corner of the original house in 1929. Another addition, on the west end of the south side of the house, was built in 1930. On a visit in April 1963, the Assessor described the "California-style" house as having 940 square feet which included a living room; dining room; two bedrooms; a kitchen with one plumbing fixture, a utility fixture, and minimum-grade counters; and a bathroom with four plumbing fixtures, including a tub and shower stall. The building had a wood foundation, board-and-batten walls over a wood frame, wood sash, and a gabled, low-pitched corrugated-iron roof with a one-foot overhang consisting of "unfinished" eaves. The interior was finished with plaster and pine woodwork, and there were six

linoleum floors. There was also a single stone fireplace and a wall air-conditioner. The Assessor rated physical condition, conformity, workmanship, architectural appeal, and quality as "average" and functional plan as "poor."

The "honey house" was originally built in 1926, according to the Assessor. Upon visiting the property on February 1, 1927, the Assessor described it as a 1,200-square-foot "shed" with a concrete foundation, high-gabled corrugated-iron roof, and corrugated-iron walls. Its interior consisted of three rooms with cement floors and tongue-and-groove walls. The building measured 60 feet east-west by 20 feet north-south. Construction quality was rated as "good."

The County issued building permit 7983 on November 5, 1962 for a garage. The Assessor described this building as made completely of corrugated-iron with dimensions of 30 feet long by 22 feet wide.

The Assessor also noted the existence of the 10-by-14-foot storage building at the rear of the house in 1963, but did not provide an estimated construction date.

The Assessor's records do not mention a livestock corral found on the property and a well-head that is thought to be a remnant of an unsuccessful exploratory oil well that may have been dug by an early owner in the hopes that oil would be found on the property, since it was so close to the historic Pico Canyon wells a few miles west on Pico Canyon Road.

Copies of the Assessor's records can be found in Appendix 7. These records contain dimensioned plot-plans of the house, garage, storage shed, and "honey house."

In his description of driving along "the old Pico Road," local historian Arthur B. Perkins mentions passing "Larinan's apiary" (Perkins 1962). George B. Larinan owned the property for 45 years, dying there at the age of 84 on June 19, 1965. A copy of his obituary, which describes him as a "bee keeper", is attached in Appendix 6. Mr. Larinan was survived by two sons and a daughter. One son, George B. Larinan, Jr. (1910-1975), succeeded his father in the business and lived on the property for a number of years. Upon his death, Dorothy M. Larinan became the conservator of his estate and, together with co-owners, maintained ownership of the property up to the present day. Thus, this property has remained in the hands of the same family for almost 80 years.

Physical Description:

The historical resources on the site consist of a house, a storage shed, a garage, a chicken coop, other minor features immediately adjacent to the house, a plank bridge, a honey house, a corral, and an object presumed to be a well-head.

House--The residence sits on a rise at the end of a gravel drive approximately 350 feet southwest of Pico Canyon Road, and is quite visible from the street. It is a one-story U-shaped building in an early "California ranch" style. The house has a wood-post foundation, the open space being skirted by horizontal timbers. The main roof (covering the original 1918 building) is a low-rise

side-facing gable. The northerly leg of the "U" (the 1929 addition) has a front-facing gable. The southerly leg of the "U" (the 1930 addition) also has a front-facing gable on its southerly part, but there is a shed roof on its northerly section. All the roof surfaces are covered with corrugated iron, except the shed roof which is of composition material. The eaves are shallow and open, exposing the beam-ends. The walls of the front (east-facing) and south-facing facades of the original house are covered with a plywood material, while all the other walls are board-and-batten. An obvious attempt was made to duplicate the original wall treatment on the two additions.

Most of the windows are wood sash with the top and bottom members of the frame extending beyond the vertical members. The ends of the horizontal members are tapered at an angle on the older part of the house. Some of the original wooden sashes have been replaced with aluminum ones. There is one sash window on each side of the front door on the south end of the front facade and a single window on the north end. On the east end of the north facade is a single sash, just easterly of a stationary window with fifteen small panes. Two more sashes are on each side of another stationary window with eight panes, on the west end of the north facade (the 1929 addition). The west facade of the 1929 addition has a single sash positioned at each end of the wall. The south side of this addition (facing the interior of the "U") has a sash at both ends with a very narrow glass door in the middle that has twelve panes. Continuing counter-clockwise around the building, the only visible part of the original section's west wall has a single sash window. The north side of the southerly (1930) addition (facing the opposite side of the interior of the "U") has a single eight-paned casement window centered in its wall. The west wall of this addition has a six-paned stationary window on its north end and two square windows, one with two panes, placed in a stair-step arrangement on its south end. The south wall of this addition has a horizontally-oriented two-paned window to the west of a screened solid door. There are two identical square windows on the addition's east wall where it juts out from the original house. The south side of the original house has one window opening to the west of the chimney that has been filled in with an air-conditioner.

The front porch of the house consists of a scored concrete slab that runs along the entire east facade. Above it, seven joists extend from the roof-line of the house which probably once supported a shading type structure. The joists are supported at their other end by a pipe that forms a horizontal "beam" and is itself supported by five "posts" also made out of piping material.

The chimney, centered on the south wall of the original house, is made of granite rocks roughly mortared together but showing some signs of skilled workmanship. The chimney is tapered and is surmounted by a spark arrester with a gabled metal cap.

Immediately to the rear of the 1930 addition at the southwest corner of the house is a storage shed with tongue-and-groove walls and a wood-post foundation. It is slightly rectangular and well-made, with finished corners and framed window openings. It has a steep side-facing gabled roof, also covered in corrugated iron. The eaves are open and the exposed beam-ends have been mitred at an angle. Small vertically-oriented attic window-vents appear in each gable-end. There are no windows on this building's north wall, and one square casement window on its west side.

The south wall has a pair of side-by-side casement windows, while on the east wall there is a paneled door on the south end and a square casement window on the north end.

Garage--Approximately 50 feet southeast of the house is a rectangular garage with a front-facing gable roof. It has a concrete foundation and a completely corrugated-iron exterior, including roof covering, walls, and overhead door. The eaves are open and expose beam-ends that reveal the building's wooden frame. There is a single wooden door on the south end of the east wall. There are no other openings in the building except for the vehicle entrance at the front.

Chicken coop--Approximately 50 feet south of the house and 10 feet west of the garage is a deteriorated chicken coop. It is a rectangular structure with walls of unfinished rough lumber in a board-and-batten configuration. The single gate-like door has a lower horizontal part that opens up independently (probably to let the fowl in and out easily). Two window openings on both sides of the door are covered with wire mesh. Below each of these openings are wooden storage boxes with hinged lids. The structure is covered with a corrugated-iron roof.

Other resources in the vicinity of the house--On the top of a small hill to the southwest of the house is a circular reservoir made out of corrugated iron. It has a conical roof. Two T-shaped metal clothesline supports appear opposite each other in the back yard to the southeast of the house. Just north of the chicken coop is a metal basin that was used as a water trough. Nine concrete-slab steps lead up to the front porch of the house westward from the gravel driveway. Metal pipe-like structures were built on both sides of the steps to create a railing. Railroad ties arranged in square patterns to the south of the steps provided planting areas. A poured-concrete path extends from the porch along the south and west sides of the house to the storage shed in the rear. The house site is bordered by a variety of fencing materials. The north end of the east side of the property has a barbed-wire fence with metal posts, while the south end has a chain-link, newer fence. The north side of the property is bordered by a barbed-wire fence with old wooden posts. A gate appears in the fence at the point where the steps reach the gravel drive. This gate is made of metal rods and has a red capital letter "L" centered within a circular frame. There are a number of mature trees, including cedars, on the property that were evidently planted to shade the house. A bed of iris has been planted just north of the steps.

Bridge--Midway between the house and Pico Canyon Road, the gravel drive crosses over a plank bridge which has been built above a small creek-bed. The lumber on the bridge is rough-hewn. Two beams run along both sides of the bridge to provide a slight barrier.

Honey house--This is a rectangular building with a front-facing gabled roof. It is covered completely with corrugated-iron, including walls and roof. Square venting holes appear in each gable-end. The northerly side of the building has a single wooden door, to the west of which is a band of windows. The southerly side has a band of three narrow, vertically-oriented windows on its west end and a garage-type delivery door on its east end. Much equipment having to do with honey extraction can be seen lying around on all sides of the building. A blue cylindrical reservoir-type structure, made of steel, is attached to the building's west side. A few yards from the northeast corner of the honey house is an old corrugated-iron circular reservoir with a conical

roof. A large area to the north of the honey house is filled with active bee hives.

Corral--Approximately 300 feet southeast of the house is an irregularly-shaped livestock corral. The fence on its western end is made of metal railings and posts. What is left of the eastern fence consists of barbed-wire and wooden posts. In the center is a tall metal-framed opening in the fence. A bathtub has been placed in the northeast corner of the corral to serve as a water trough.

Well-head--Approximately 5,000 feet southwesterly of the honey house along a dirt track that runs up-canyon from the honey house, a cylindrical object, thought to be an old oil-well head, protrudes about five feet above the ground on a rise about fifty feet east of the track. The pipe is two feet in diameter and consists of a smaller circular metal plate riveted to a larger plate that descends into the ground. A single six-inch diameter hole appears about mid-way up the pipe on its north side. The pipe is very rough on top and may have had another structure attached to it at one time.

Photographs of these historic resources can be found in Appendix 8 and on the DPR forms following Appendix 8.

III. The Historic Context

As discussed in Appendix 2, in order to assess previously recorded and as yet unevaluated cultural resources, a historic context must be developed, revolving around a theme, place, and time. Then, it is possible to evaluate and study the identified cultural resources within the research framework of the historic context.

The first Europeans to travel overland in California--a party led by Spanish General Gaspar de Portola in 1769--drove their horses and cattle over the towering slopes that formed the northern edge of what was later called the San Fernando Valley. They found villages of primitive, semi-nomadic people in the valley below. These people were Tataviam, probably of the Serrano Shoshones. Rough fences marking tribal territory were scattered around the valley. The priests in Portola's party said that the valley and its river should be called "Santa Clara" celebrating their arrival on St. Clare's Day.

Nineteen years after Portola's party first discovered the area, a mission was established over the hill at San Fernando. Soldiers from the mission rounded up the native inhabitants and converted them into agricultural laborers. Saint Clare's valley was part of the mission lands and was named Rancho San Francisco. An asistencia was constructed at nearby Castaic Junction in 1804.

After Mexico broke from Spain in 1823 the new government confiscated the great mission ranchos and announced that they would be made available to deserving citizens. A lieutenant by the name of Antonio del Valle had been assigned to supervise the breakup of mission lands. He filed a request for the 48,000-acre Rancho San Francisco. This request was approved by the Mexican government in 1839. Antonio died shortly thereafter, but when California became a

state in 1850, the new government honored the grant. The Rancho was particularly beautiful with its diverse landscape of canyons, hills, and oak trees. A wayfarer was said to have described it as follows: "There before us was a beautiful meadow of a thousand acres, green as a thick carpet of grass could make it, and shaded with oaks wide branching and symmetrical. Such a scene of abundance was like getting a glimpse of Paradise, and tears of joy ran down our faces" (Bruner).

The Newhall area was the site of the first gold discovery in California. Francisco Lopez, an in-law of the del Valle family, discovered gold in one of the park-like canyons in March 1842, six years before the famous Sutter's Mill discovery much further north. In November of that year, the first gold from Newhall was shipped to the U.S. Mint. Gold continued to be placer-mined in Placerita Canyon by Native-Americans, Chinese, and immigrant Mexicans for a number of years, their efforts extracting about five million dollars' worth of ore.

The del Valle family, like many other early ranch owners, was bankrupted by drought, falling cattle prices, and the great earthquake of 1857. William Wolfskill, a renowned orchard owner and vintner, purchased the acreage and then sold it to Thomas R. Bard in 1865. The rancho eventually was purchased at a sheriff's sale by San Francisco businessman and railroad executive Henry Mayo Newhall. He paid \$90,000 for it in 1875. By 1878, the community named after him had become the largest in the valley, thanks to its founder's success in luring the Southern Pacific Railroad to establish a station there. (The station had actually been constructed in 1876 at what is now Saugus, then called Newhall, but the community was moved three miles away to its present site two years later because of water shortages.) By 1880, Newhall was one of only 32 post offices recognized in Los Angeles County, and had both a school and a courthouse.

The Newhall Land and Farming Company was established in 1883 to care for Henry Newhall's vast domain which included the raising of corn, flax, honey, alfalfa, and "dry wheat" (about 6,000 tons of which were harvested annually in the 1880s). The warm summers also contributed to a prosperous fruit-drying industry. Herds of cattle and sheep populated the grasslands.

The Santa Clarita Valley had traditionally been the major migration route for Indian groups as they traveled between the coast and the interior valleys and the great eastern deserts. By the 19th-century Newhall was poised to become the funnel through which all highways were to pass on the inland route north from Los Angeles. In 1847, John C. Fremont gave his name to the pass when he traversed the Newhall area on his way from Santa Barbara. In 1859 General E. F. Beale and his men removed fifty feet of earth from the gap so that stages and wagons could make the crossing from Los Angeles. But even then the toll road was so steep that extra horses were kept in reserve to help wagons over the incline. The Newhall Tunnel eventually replaced the dangerous mountain crossing and, in time, the tunnel itself was replaced by a giant cut and a series of progressively modern highways. Another famous road associated with Newhall was the Ridge Route that crossed the Tehachapis to the north, connecting Los Angeles with the San Joaquin Valley. After a study of many possible routes, a more or less direct road was completed in 1916 from Newhall to Bakersfield along the top of the ridges. This road was eventually replaced in 1933.

When George Larinan purchased his property in 1920, Newhall was a bustling small town of about 2,000 people surrounded by thousands of acres of open agricultural and range land, owned and operated mostly by the Newhall Land and Farming Company, but also by smaller landholders, such as himself, on the fringes of the Company's property. The town was becoming more attractive to new residents, such as cowboy movie star William S. Hart who was to purchase his "Horseshoe Ranch" in 1921. In fact, Hollywood-based movie companies were discovering the Newhall Ranch as a perfect backdrop for shooting their western dramas. Newhall also began advertising itself as the ideal environment for family farming, with poultry, vineyards, and dairying as the main activities. Newhall also saw its first Edison electrical lines, telephone, and local bank in the early 1920s. Pico Canyon Road, before then a narrow dirt road, was oiled in 1928.

As both its transportation and agricultural hub, the town of Newhall was to remain the Santa Clarita Valley's main metropolis for sixty years, although its population did not exceed 4,000 until after 1940. The surrounding area remained largely agricultural until the post-World War II era when the burgeoning population of Los Angeles County looked beyond the San Fernando Valley for space for residential and commercial expansion. Newhall's population had increased to 7,500 by 1949, and successive improvements to the Interstate 5 freeway route made commuting easier and easier for new residents employed in Los Angeles. The founding of the new community of Valencia in the 1960s also stimulated a tremendous increase in the Valley's growth. In 1987, the communities of Newhall, Saugus, Valencia, and portions of Canyon Country and Bouquet Canyon incorporated as the City of Santa Clarita.

The Newhall area was also the site of the first oil discoveries in California. Historians have claimed that as early as 1855 oil from seepages and hand-dug pits in Pico Canyon had been used by General Andreas Pico--after whom the canyon was named--for experimental purposes and for some form of refining. This would have been the first recorded use of crude petroleum, other than the tar Native-Americans had used to waterproof their baskets. The presence of oil in the canyon was "re-discovered" in 1864 and the first well was dug in 1869. Although this first well never produced more than 70 to 75 barrels a day, it became famous for its longevity. But it was Well Number 4, dug in 1876, that held the record: it was still pumping in 1990 when it was finally shut down after 114 years of service--the oldest still-producing oil well in the world! Other successful wells were dug in the vicinity in the 1870s, and the community of Pico Springs was re-named Mentryville and expanded to house the field's workers. In 1876, the California Star Oil Company, the owner of the field, built California's first refinery alongside the railroad tracks in Newhall. A later owner, the Pacific Coast Oil Company, laid the first oil pipe-line in California across the Rancho San Francisco from Pico Canyon to the refinery. The original oil field is located at the end of Pico Canyon Road, about three miles west of Interstate 5. Considered to be the birthplace of the state's oil industry and of the Standard Oil Company of California, the field is now owned by the Santa Monica Mountains Conservancy and is a historical resource of great significance.

Bee-ranching, as it was called in earlier days, had become an important industry in Newhall as early as 1880. In fact, the first commercial honey producer in the Newhall district was T. F. Mitchell who settled in the Soledad Canyon area in 1863. He began beekeeping in about 1870

and produced an all-time high of fifty tons of honey in 1884. In 1880, it was estimated there were already 1,200 bee colonies scattered throughout the township in a number of apiaries. The Newhall vicinity became famous for its sage honey which was said to be of the highest quality (Bruner). By 1939, 250 tons of honey were being produced locally in the average season. About 80% of the production was marketed in Los Angeles, the rest going to other points, chiefly San Francisco.

Theme of the Historic Context: Agriculture, 1920- , Newhall

Resource Attribute: Farm/ranch

IV. Evaluation of the Historic Significance of the Resources

(Please see Appendix 3 for a background discussion on the evaluation phase of the CEQA process.)

Using the criteria of the California Register of Historical Resources, the consultant must determine the significance of identified resources on the project site.

Within the broad historic context of local Newhall history, the Larinan apiary is of no appreciable significance. However, when viewed in the context of the area's agricultural history, most particularly within the speciality of bee-keeping, the property does have minor significance. The Larinan apiary is a good example of the farm/ranch "resource attribute" that was devoted to this type of agricultural activity. However, other still-active apiaries exist in the area. Thus, this property does have minor significance under Criterion A as an example of the settlement patterns of bee-keepers in the area. The property has no significance under Criteria B (person) or C (construction).

Summary of Significance:

As a site: of minor local significance under criterion A (patterns of settlement).

Integrity: Good. The property has not been appreciably altered since 1962 and retains all of its significant buildings dating from its first habitation in 1918. Its viewshed to the east has been altered recently due to grading.

Evaluation code: 5S3 (Not eligible for the National Register and not eligible for listing under a local ordinance, but eligible for special consideration in local planning). Although a resource with a code of 5 may be nominated to the California Register, it is recommended that the resources on this site not be nominated due to their lack of sufficient significance.

V. Findings of Effect and Recommended Mitigation Measures

(Please see Appendix 4 for a background discussion on this phase of the CEQA process.)

If the consultant finds that a proposed project will have an adverse effect on any significant resource situated on the project site, he must assess the extent of the effect and recommend possible mitigation measures which could range from "No Project" to documentation before demolition.

Findings Of Effect: The proposed project will remove all the historic resources now on the site, and so will definitely have an adverse effect on them.

Recommended Mitigation Measures:

1) Although not appropriate in all circumstances, a mitigation level of 2d applies in the case of this property. As described in Appendix 4, this level of mitigation requires that an historic report, including photographic documentation, be prepared and be placed in a publicly accessible historical collection. This report will serve that purpose. The Newhall branch of the Los Angeles County Public Library, the closest repository to the site, and the Santa Clarita Valley Historical Society should both receive a copy of this report.

2) It is also highly recommended that Los Angeles County undertake an historic resources survey of the unincorporated area surrounding Santa Clarita in order to ascertain in advance of proposed projects which rural properties are the most significant. Historical consultants currently are working in a vacuum with no real knowledge of whether other, better examples of similar properties exist or where they are located. The survey should also include historic viewsheds and scenic landscapes which are rapidly disappearing under the onslaught of urbanization in this area of the County. Knowledge of such resources will facilitate planning and help protect those sites that are the most significant and that give the Newhall and Santa Clarita areas their "sense of place."

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Appendix 1

The California Register and CEQA Requirements (General Information)

In the CEQA Guidelines Revisions, adopted October 26, 1998, the statement is made that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment" [15064.5(b)].

The Guidelines define historical resources as any of the following: 1) listed, or determined to be eligible for listing, in the California Register of Historical Resources; 2) included in a local register of historical resources or identified as significant in a historical resources survey, as defined by the Public Resources Code [PRC §5020.1(k) and §5024.1(g)]; or 3) determined to be significant by a lead agency provided the determination is supported by substantial evidence and meets the criteria for listing on the Register [15064.5(a)(1-4)].

"The California Register is an authoritative guide in California used by state and local agencies, private groups, and citizens to identify the state's significant historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" [PRC §5024.1(a)]. Resources listed on the Register, or determined to be eligible for the Register, are to be considered when there is a discretionary action subject to CEQA. The lead agency on a project must determine not only if the resource is listed, but also if it is eligible for listing. Unlike the process for determining eligibility under Section 106 of the National Historic Preservation Act, the State Office of Historic Preservation has no authority to make consensus determinations for the California Register for purposes of CEQA. The evaluation of resources for eligibility is solely the responsibility of the lead agency. The agency may require the property owner to furnish this eligibility information during the process of a project's environmental review.

The Guidelines also provide processes for obtaining: a formal determination of eligibility for the California Register; clarification of eligibility and expedited review; and a non-binding informal opinion of eligibility. A formal determination of eligibility for the California Register requires a nomination for listing that will be granted when the property cannot be listed solely due to owner objection. An informal or non-binding opinion may be obtained from the State Historic Preservation Officer regarding whether or not a historical resource may be eligible for nomination or potentially eligible for listing on the California Register. Such informal opinions, however, will not be a substitute for a formal determination or listing and a formal nomination must be submitted within 90 days or the informal opinion expires.

The State Office of Historic Preservation requires that all historic resources be recorded on DPR 523 forms for the sake of consistency and completeness and to better evaluate their eligibility for the California Register.

The following appendices discuss this consultant's evaluative process in determining the eligibility of a historic resource for the California Register and in arriving at his conclusions regarding project impact and possible mitigation measures.

Appendix 2

Identification of Existing Resources and Their Historic Context (Background)

Both federal and state guidelines require that the first step in the review process should be the identification of cultural resources (i.e., historic properties). Various levels of preliminary archival research and on-site survey investigations for cultural resources can be applied during this step. This evaluator normally chooses a mid-range level of archival research in order to facilitate the preparation of the "historic context" and eligibility evaluations for the California Register, the next steps in the process.

A research methodology is developed to comply with federal and state mandates and guidelines for identifying cultural resources, be they in the form of buildings, sites, structures, objects, or contributors to historic districts. A thorough field visit, including the preparation of a written and photographic record, is the best foundation for identifying and later evaluating any cultural resources found on the project site.

Historic research based on a sound methodology is crucial at this stage of the investigation. Architectural history and analysis may be necessary for sites with extant buildings and structures. Physical characteristics such as site structure, content, and integrity are crucial variables in later evaluation of the resource's eligibility for the California Register.

Architectural components of extant or relic buildings, structures, and/or objects within the project area should be sufficiently preserved to contain data for research and interpretation. Ideally, the original design and subsequent alterations should be identifiable as discrete occupational episodes associated with a temporally defined occupation. Architecture should represent identifiable functional association. Archival materials should be available to reconstruct a partial or complete history of the project area.

The National Park Service (NPS) stipulates that the significance of any historic property should be made within the "historic context" developed for that area (Parker 1985; Interagency Resources Division, Bulletin 16A, 1991). "Historic context" is defined as the sum of information pertaining to an area, organized by theme, place, and time.

The National Register of Historic Places (NRHP) suggests that "a theme is the equivalent of a research problem, and an historic context is developed by placing the problem in an appropriate setting in both time and space" (Interagency Resources Division, Bulletin 16A, 1991). For instance, a broad historic context might be identified as "Western U.S. Expansion, Mid-19th Through 20th Centuries." A more focused historic context might be "Early to Mid 20th Century Agricultural Development of the (locality)."

A "historic context" is associated with identified cultural resources through the concept of "resource attributes" (called "property types" by the NRHP). These attributes allow geographically diverse historic properties that share physical and associative characteristics to be

linked together under a set of commonly agreed-upon descriptive terms and compared as to their relative significance within the historic context. As an example, an appropriate resource attribute for the sites associated with the contexts mentioned above, given the agricultural theme, might be "Farm/Ranch."

Major themes have evolved during the past two decades of cultural resources investigations at various 19th and 20th century sites in southern California. Possible research themes and their associated resource attributes, adapted from the "Areas of Significance" and "Functions and Uses" for eligibility evaluations for the NRHP, are listed on the following page:

EXAMPLES OF POTENTIAL RESEARCH (HISTORIC CONTEXT) THEMES

Agriculture	Exploration
Architecture	Funerary
Archaeology: Prehistoric	Government
Aboriginal	Health/Medicine
Non-aboriginal	Industry/Processing/ Extraction
Art	Irrigation
Chronology	Land Use
Commerce/Trade	Landscape Architecture
Communications	Law
Community Planning and Development	Literature
Conservation	Maritime History
Defense	Material Culture
Demography	Military
Economics	Performing Arts
Education	Philosophy
Engineering	Politics/Government
Entertainment/Recreation	Religion
Environmental Adaptation	Residential
Ethnic Heritage: Asian	Science
Afro-American	Settlement Patterns
European	Social History
Hispanic	Subsistence
Native-	Technology
American	Tourism
Pacific	Transportation
Islander	Other (e.g., Invention)

EXAMPLES OF POTENTIAL ASSOCIATED RESOURCE ATTRIBUTES

Amusement Park	Lake/River/Reservoir
Ancillary Building	Landscape Architecture
Bridge	Lighthouse
Canal/Aqueduct	Military Property
Cemetery	Mine
Civic Auditorium	Monument/Mural/Gravestone
Commercial Building, 1-3 stories	Multiple Family Property
Commercial Building, over 3 stories	New Deal Public Works Project
Community Center	Public Utility Building
Dam	Railroad Depot
Educational Building	Religious Building
Engineering Structure	Rural Open Space
Ethnic Minority Property	Ship
Farm/Ranch	Single Family Property
Folk Art	Stadium/Sports Arena
Government Building	Street Furniture
Highway/Trail	Theater
Hospital	Train
Hotel/Motel	Trees/Vegetation
Industrial Building	Urban Open Space
	Women's Property

More than one research theme might be applicable. Further research within and adjacent to the project area could build on these themes and develop them into a historic context that characterizes the cultural development of the entire community.

Many of the research themes are inter-related. The analysis of architectural, archival, and oral history data for one theme will simultaneously address several other themes. For instance, the study of historical material culture (i.e., artifacts) provides a wealth of information concerning subsistence patterns, household composition (e.g., gender, adults, children, infants), socioeconomic status, trade networks and commodity flows (local, regional, national, and international), historical site use and activity, spatial inter-relationships of features and buildings, site evolution, and other themes. The documentary record by itself may not contain sufficient data to provide answers for all the research questions arrived at. Other data generated through architectural, archaeological, oral history and specialized analysis may provide complementary information which will provide answers to these and other research questions.

Research questions pertaining to the themes are developed prior to and during the course of fieldwork. Other research questions arise during the subsequent analysis of the field and historic research data.

A multi-disciplinary approach is used during the identification and historic context phase of the cultural resource investigation project. Archival documents and cartographic sources, oral history interviews, as well as field surveys are all used to locate, define, and provide interpretations for the cultural resources within the project area. Furthermore, this data is combined to reconstruct the most accurate picture of the project area. In turn, the research data is useful in the construction of the historic context and in evaluating the significance of the sites identified within and adjacent to the project area.

Appendix 3

Evaluation of Historic Resources (Background)

Evaluation of sites is the second step in the review process. The first step, "Identification", has been accomplished through research, development of an historic context, and a field survey of cultural resources within the project area. In making an evaluation of a resource's significance, the consultant refers to the following sources: the implementing regulations for the California Register (California Public Resources Code, section 4852), CEQA and Historical Resources (a technical bulletin issued by the Governor's Office of Planning and Research) and National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation. (As mentioned below, the California Register criteria mirror those for the National Register and this publication thoroughly addresses the evaluation process.)

CEQA mandates that a cultural resource's significance must be established before project impacts to the resource can be assessed. All data gained from the field survey, architectural analysis, research, and historic context will be assembled and interpreted with respect to each site. In turn, the multi-disciplinary data will be used to evaluate the individual site's potential eligibility for the California Register.

In order to accomplish this, evaluative investigations must begin at the sites themselves. Field investigations should document cultural features, site boundaries, and the nature and association of site features within each lot or property of the project area. The integrity of the cultural resource (i.e., its state of intactness and the extent of alteration from its original appearance either deliberately made or the result of deterioration over time) must also be addressed. Such changes will then be documented by historic research and, where applicable, architectural research. (It should be noted that while interior modifications of a historic property may affect its integrity, in most cases exterior integrity is considered the foremost determinant of whether a property still retains enough of its original significance.)

During the evaluation phase of the investigations, the resources are assessed and evaluated for their potential to address and exemplify important historic themes. The intent of the evaluation is to assess the presence/absence of data that is needed to answer research questions. A site that has lost substantial integrity through deterioration or alteration may thereby have lost much of its significance. If similar, more intact, sites have been identified in close proximity to the subject site, the site may be considered of lesser value than if it is the only such site found locally, and therefore unique, even if of poor integrity.

"Criteria for listing historical resources on the California Register are consistent with those developed by the National Park Service for listing properties on the National Register of Historic Places (NRHP), but have been modified for state use in order to include a range of historical resources which better reflect the history of California" (Department of Parks and Recreation 1998).

Criteria for Evaluating the Significance of Historical Resources

An eligibility evaluation for each cultural resource within the project area should be made under the following criteria for the California Register of Historical Resources as established by the revised CEQA Guidelines [15064.5(a)(3)(A-D)]:

"A resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria...including the following:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important in our past;
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. Has yielded, or may be likely to yield, information important in prehistory or history."

Thus, Criterion A is usually associated with "events," Criterion B is associated with "persons," Criterion C is associated with "design/construction," and Criterion D is associated with "information potential." Some historical archaeological sites may be evaluated for eligibility under Criteria A, B, and/or C, but most are evaluated under Criterion D.

Criterion A. Events. Properties are considered important if they are associated with significant events. Association through the historic context has to be demonstrated. Providing evidence of direct association of the events with the historic property is necessary. Properties can also be considered important if they are the best examples of the result of historic settlement patterns ("event," in this case, being rather broadly defined).

Criterion B. Person. "Persons important in our past" refers to individuals whose activities are demonstrably important within a local or state context. Correlation of an individual within the framework of the historic context is crucial. Also, his/her ties with a specific property and/or an event is important.

Criterion C. Design/Construction. Resources represented by extant architecture are evaluated under this criterion. Elements that are important under Criterion C include distinctive characteristics of a type, period, or method of construction, or the work of a master, possessing high artistic value. Integrity of the property is an especially important factor under this criterion.

Criterion D. In order to qualify for eligibility for the California Register under this criterion, the archaeological site (i.e., historic property) has to meet two conditions: 1) the site must have yielded or be likely to yield information such as archaeological data or historic data that will have

potential to answer research questions; and 2) the yielded information must be important with respect to historical archaeology and other related historic preservation fields.

Related Criteria--Generally, a historic property, to be considered eligible, should be of a certain age, not be a reconstruction, and have never been moved from its original location. Federal guidelines have traditionally prescribed a 50-year age for cultural resources evaluated for eligibility for the NRHP (36 CFR 60.4); however, a 45-year age threshold is becoming increasingly acceptable due to delays in project implementation which can often stretch five years or more beyond the evaluation date. The California State Office of Historic Preservation has stated that, minimally, a site "must be at least 45 years of age" (1989:3). However, the National Park Service and the State Office of Historic Preservation do recognize special sites that have achieved significance even though they may be less than 45 years old, have been reconstructed, or have been relocated (Sherfey and Luce 1979; Interagency Resources Division 1987).

The NRHP has developed a chart of seven numerical evaluation codes for pinpointing the status of a historic resource. California Register regulations also recognize these codes and require that they be entered onto DPR 523 forms.

- 1 Listed in the NRHP
- 2 Determined eligible for the NRHP in a formal process involving federal or state agencies
- 3 Appears eligible for listing in the NRHP in the judgment of the professional evaluator
- 4 Might become eligible for listing in the NRHP when certain conditions are met
- 5 Not eligible for the NRHP but may be significant at the local level
- 6 None of the above
- 7 Undetermined

These numerical codes can be further sub-classified by adding a letter code. Among the most commonly used letter codes are:

- S Resource is separately listed in the NRHP
- D Resource is included as a contributor to a NHRP-listed district
- B Both S and D above
- M Resource may become eligible as a contributor to a NRHP-listed district when more documentation is found or restoration work performed

Refinements may be made to these alphanumeric codes by adding still more letters and/or digits to cover all categories of actual or potential National Register eligibility. These finer divisions are not listed here in view of space limitations.

Any historic resource given a NRHP code of 1 through 3 is eligible for listing on the California Register. A resource given a code of 4 or 5 may be eligible for listing on the California Register,

but only after undergoing a formal nomination process involving the agreement of the local jurisdiction and the State Historical Resources Commission. In any case, it is recommended that resources with a code of 4 or 5 be given special consideration in local planning.

Appendix 4

Findings of Effect and Recommended Mitigation Measures (Background)

Based on the eligibility evaluations for the California Register, a findings of effect (i.e., "no effect", "no adverse effect", or "adverse effect") will be prepared for any sites eligible for the California Register within the project area. This is the third step of the review process. Sites that will not be adversely affected by the proposed project will be preserved in place and "no effect" or "no adverse effect" will occur. Sites that cannot be preserved in-situ within the project area will suffer adverse effects by the proposed project and will require treatment or data recovery to mitigate the loss of that site data. Recommendations for treatment and data recovery are to be proposed for each project. A report containing all germane information relevant to the study is to be prepared and submitted to the lead agency. (In a case where a local historic preservation ordinance has not been enacted, the evaluation report is designed to be of sufficient comprehension, in terms of the identification, evaluation, and treatment of cultural resources, to be of value in the context of any future ordinance the locality may enact within its jurisdiction.)

The revised CEQA Guidelines include: 1) a definition of a significant impact as being that which eliminates the resource or alters the characteristics that made the property eligible for the California Register; 2) guidance on mitigating impacts by utilizing the Secretary of the Interior's Standards for Rehabilitation; and 3) a ban on using categorical exemptions when there is a possibility of adverse change.

A project area represents the Area of Potential Effect (APE). As a result of a proposed project, the APE will undergo direct and/or indirect changes with impact on cultural resources that may have been evaluated as eligible or potentially eligible for the California Register.

The evaluator must determine whether the demolition or alteration of existing architectural, landscape, and/or archaeological features constitute an effect on any significant cultural resources within the project area. If there is an effect, the evaluator must decide whether the effect is adverse or not adverse.

Federal, state, and local historic preservation procedures for assessing effects and mitigation of adverse effects from a proposed project on cultural resources eligible for the California Register call for prudent and feasible alternatives. Planned construction, usually an adverse effect, may not always permit in-situ preservation of the historic cultural resources within and directly adjacent to the project area. Therefore, project alternatives or mitigation measures must be proposed to preserve and/or document the significant cultural resources that will be destroyed by a project.

The revised CEQA Guidelines establish that "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" [15064.5(b)(1)]. Where there is no local protective ordinance or other regulation in place or where protective actions such as mitigation measures are insufficient to

avoid a "substantial adverse change" in the significant resource, the Lead Agency should conclude that an adverse change will occur (Governor's Office 1994). A full EIR will need to be prepared at this point if not already called for by other environmental impacts of the project.

Project Alternatives or Mitigation Measures

The revised CEQA Guidelines advise that "a lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures." The guidelines also state that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) "shall be considered as mitigated to a level less than a significant impact on the historical resource" [15064.5(b)(1)(C)(3-4)].

Among the alternatives or mitigation measures which can be considered for a significant site are:

1. No Project (no construction of the planned development); or
2. Mitigation of the Project's Effect on the Cultural Resources by:

2a. Adaptive reuse of the historic resource(s) within the project. Such reuse of building facades and architectural features has become an innovative and highly successful means of mitigating impacts on historic buildings in numerous cities with historic buildings. The facades should be restored in conformance with the Secretary of the Interior's Standards. Adaptive reuse may also involve the construction of new buildings, sometimes as in-fill between existing historic structures. Guidelines for the design of new buildings should include such concerns as architectural style, materials, height, setbacks, colors, textures, street-scape patterns, matching of the existing overall rhythm of new development to the surrounding area, structural detailing, signage, and exterior treatments.

Various incentives exist for the adoption of this mitigation measure, such as use of the State Historical Building Code (Health and Safety Section 18950, et seq.) instead of the Uniform Building Code; and financial incentives such as local property tax relief through the Mills Act (Revenue and Taxation Code Sections 439 et seq.), the Marks Historical Rehabilitation Act, and federal investment tax credits for the rehabilitation of income-producing property. Other incentives such as facade easements or low-interest construction loans may also be available through the local jurisdictions.

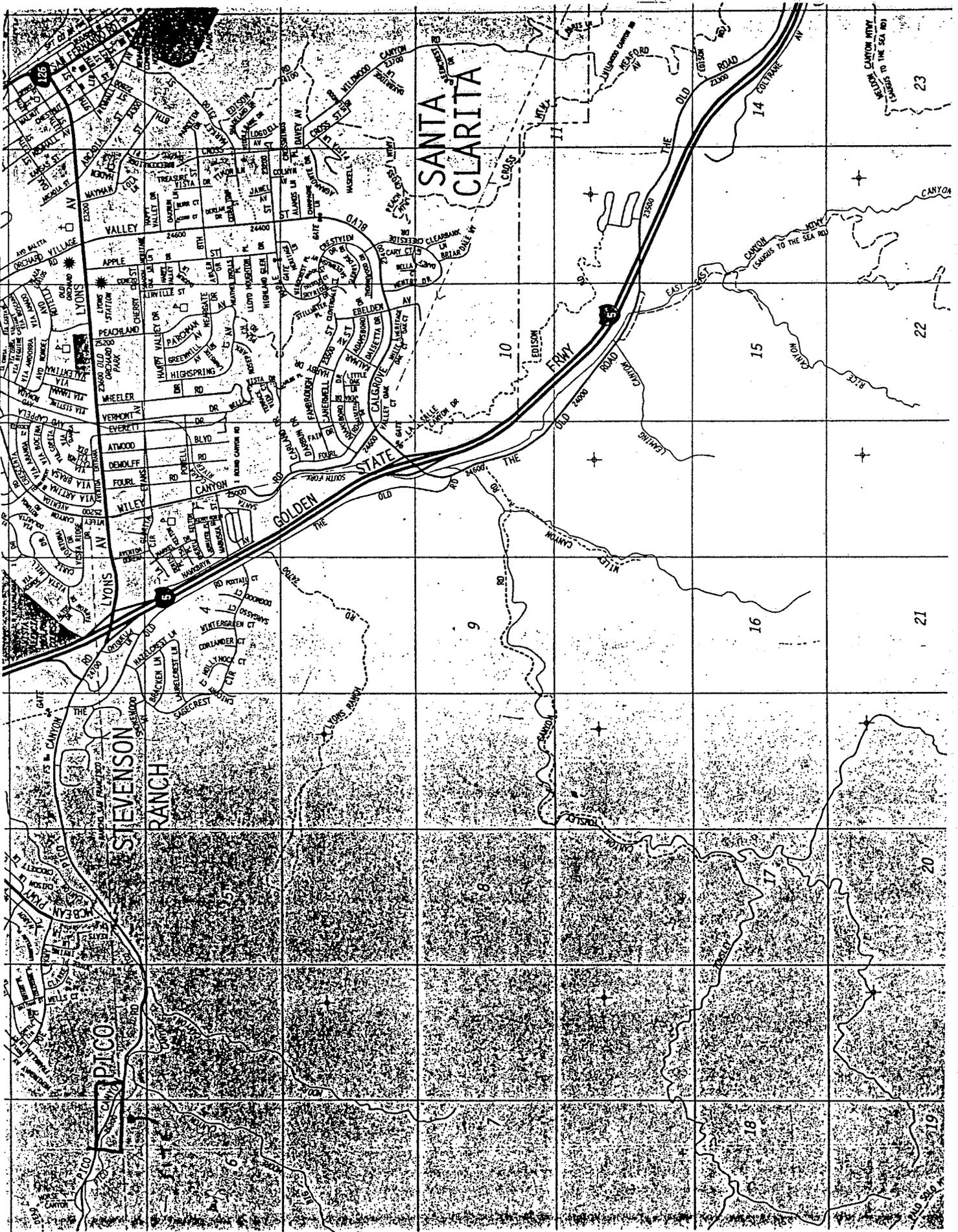
2b. Relocation of the resource(s). This mitigation is a problematical one. The majority of historic buildings will lose their significance when removed from their original setting or context. Relocation is usually preferable to demolition from the purely historic preservation standpoint, but the National Register will rarely

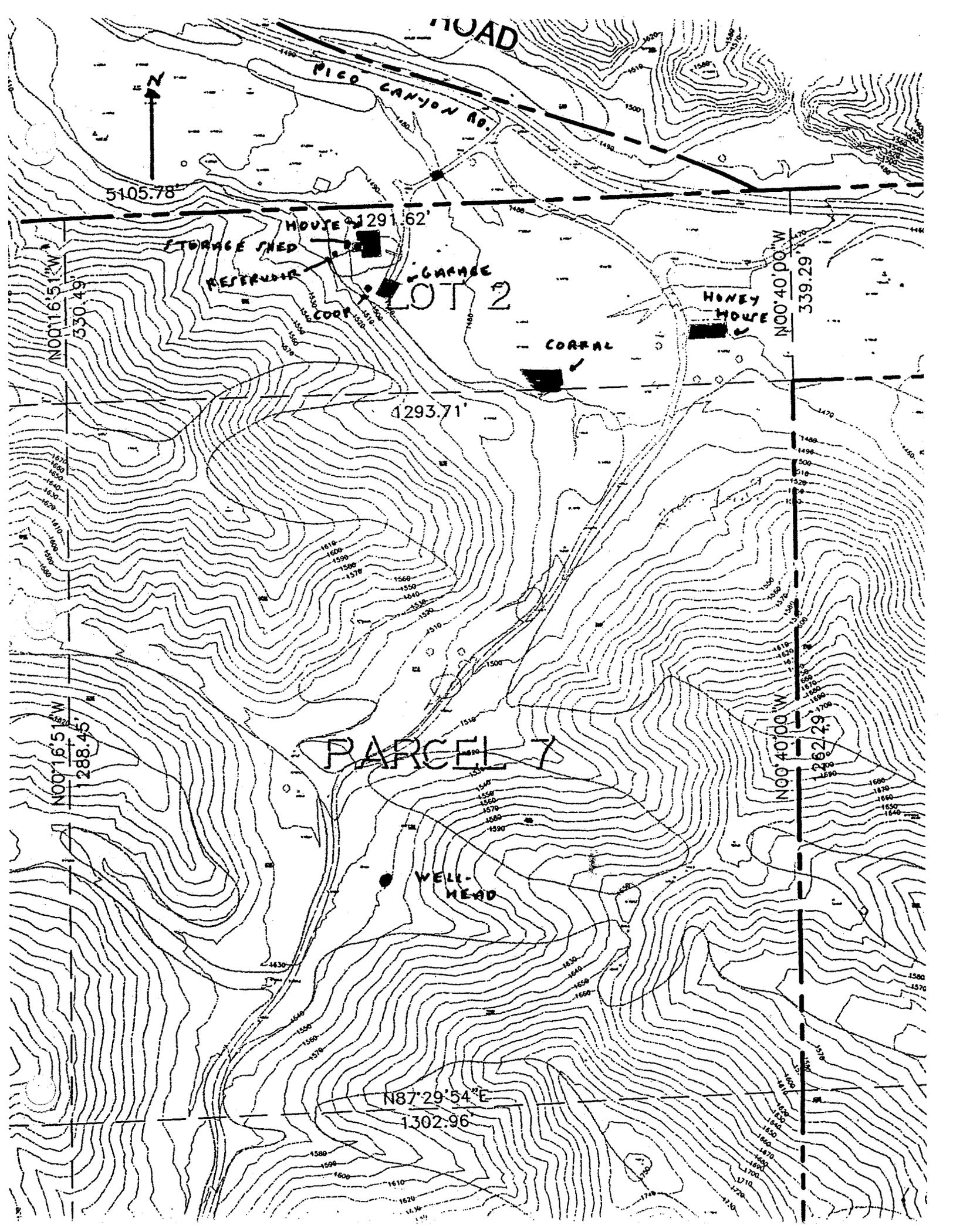
maintain a relocated structure's listing and then only if it meets rigid criteria, such as prior application, re-creation of the original setting at the new site, and the retention of the structure's original compass orientation. Buildings that are significant under Criterion C are the most likely to retain significance after moving.

2c. HABS-level architectural documentation. The Historic American Building Survey is a program of the National Park Service that documents historic resources in great detail. It requires measured drawings, intensive historical research, large format photographs, and prescribed procedures for transmission and archival preservation. Published guides to HABS are available from the National Park Service.

2d. Less thorough architectural documentation. This normally includes complete photographic documentation of the site and a detailed historical report. This permanent record shall include a history of the site, documentation of the building itself, adjacent structures, and street-scapes. The record should be made publicly accessible by placing it in the care of a local historical society, academic institution, or public library.

In regard to 2c and 2d above, the revised CEQA Guidelines warn that "in some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource, will not mitigate the effects to a point where clearly no significant effect on the environment would occur" [15126.4(b)(2)].





ROAD

PICO CANYON RD.

5105.78'

HOUSE 291.62'

STORAGE SHED

REFRIGERATOR

GARAGE

LOT 2

HONEY HOUSE

CORRAL

1293.71'

N00°40'00\"/>

339.29'

N00°16'51\"/>

330.49'

N00°16'51\"/>

1288.45'

N00°40'00\"/>

1262.29'

PARCEL 7

WELL-HEAD

N87°29'54\"/>

1302.96'

APPENDIX 6

Newsclippings

G. B. Larinan

Services Held

Services were held Tuesday for George B. Larinan, 84, of 26300 W. Pico Canyon Road, Newhall. He died June 19.

Mr. Larinan was a beekeeper in Newhall for the past 45 years. He is survived by his sons, George B. Larinan of Newhall, and James Larinan of Temple City; a daughter, Mrs. Dorothy Partidge of San Diego; and a sister and brother, Mrs. Lillian Carr of Rushville, Indiana, and Walter Larinan of Big Pine, Wyoming.

The Signal,
June 24, 1965, p. 5

THE PICO GHOST CAMP

By A. B. PERKINS

Ever driven out to the end of the old Pico Road? Sure, you're right—there's nothing out there.

Macaulay once wrote "A people that take no pride in the noble achievements of remote ancestors will never achieve anything worthy to be remembered never achieve anything worthy to be remembered with pride by remote descendants," meaning, maybe, that in this governed, planned (?), stable existence the past frequently gets lost to sight — including the he-men that opened up this Valley a century back, equipped chiefly with the intestinal fortitude (isn't that polite enough?) that made today possible.

Those men came before permits, subsidies. They stood on their own feet. In that day, if you flopped — that was your business.

You could have gone out the old Pico Road even then—but let's start at a beginning and re-hash the Story of Pico—a Ghost Camp.

Away back in 1865, County Records tell of the formation of the "San Fernando Petroleum Mining District," blanket-ing public lands, bounded by the Land Grants of Rancho San Francisco, Simi and Mission San Fernando. As of today, say westerly of Highway 99, including the canyon areas

of Lyon, Wiley, Rice, Gavin, Tousley, Leaming, Dewitt, More and Pico. Each of those names memorialized a local pioneer.

It is true, that today's maps substitute Wickham for Big More. Little More was once Dewitt. Try and find Lyon Canyon—although that family still owns and occupies it.

The Pico Road? My suffering salnts! It antedated Newhall. It is also true that Pico

camp was really named Mentryville, but that name didn't stick, and, as there was never a postoffice there you can't prove anything. And why should folks have to start with three blocks only called Tenth St. to Newhall Ave. The street name has become "Lyons" (and that particular pioneer never spelled his name with an "s" on the end of it) for a couple of miles to 99.

If you survive crossing 99, know what? You're on the Pico Road. Those other intrusive names were incidental, troublesome, and the end result of bureaucracy, for it was always the Pico road all the way from Newhall to Pico.

So you crossed 99. On your right is the ranch field Jake Swall used to lease, back in the 1890's. It ran from Newhall Ave. westerly to the Pico foothills. Back in the early twenties, the ranch sold quite a chunk of it mighty cheap. Reputedly the deal helped to hold down taxes.

South of the Pico road, Kenny Powell had a homestead. Ken was a son of Mike, nephew of old Judge John. The Powell brothers were running cattle here way back in Indian days—same as Civil War times. The Powell's had a homestead up in Dry Canyon, with orchards and everything, but when the City put in its reservoir, the rising water level drowned out the trees. Think of that—as of today.

At 1.65 miles from 99, you're passing Little More canyon on your left. The Navy is sup-

posed to have some kind of project there with No Welcome on the doormat for visitors. Just beyond, Larinan's apiary marks old Big More (now called Wickham) canyon. One of these "More's" was originally Dewitt.

At 2.4 from 99, Dead Cow canyon is on your right and at 2.55, still on right, is Spring Canyon, now called Dead Horse, and paved over to the potrero, once the Barnsdall Oil Company's pride and joy. It opened most successfully in 1937. Now it is a part of the Sun Ray Oil Mid Continent oil layout.

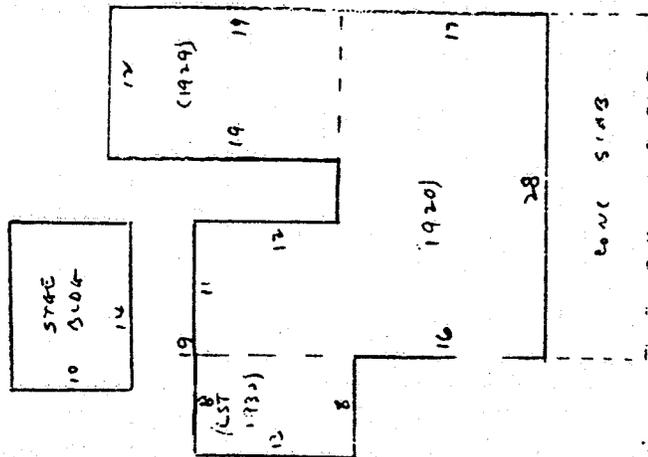
Only a short distance further, a big square comfortable house looms up. There's a slightly decrepit stable, just across the dirt road. There's a fence. There's a gate. If you haven't arranged an invitation from the Standard Oil Company of California, maybe you're through for the day.

From the gate, it's 1.6 miles to "the Works," once the center of petroleum activity in California. By the time you reached "the Works," you had come completely through the old Camp, although you might not believe that without pictures. You saw no buildings.

They aren't there any more. Look around closely from "the Works." That's quite a title for an open front sheet iron shed, slightly skew geed, and a decayed cabin across the dirt that hasn't fallen down yet, but it does have little further to sag.

Know what that wreck is? Believe it or not, 'twas the Field office of old Pico. The shed was an old storage shed. The Machine shop, wherein absolutely anything could be evolved, dreamed up, or otherwise fabricated—if it had to do with an oil field, used to stand above the field office, both at the base of the CSO hill. Across the road, a bridge carries over the Pico creek (named maybe by an unconscious humorist) by the gasoline plant—only the plant isn't there any more either.

Right by the field office, there's a modern pump, and a plaque which marks #4 (either CSO or PCO), probably the first commercially successful oil well in California. It "went on the pump" in 1876. It still produces oil—in gallons instead of barrels.



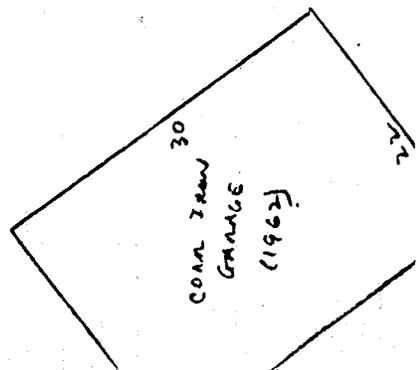
RES
 12 x 19 = 228
 17 x 28 = 476
 11 x 12 = 132
 8 x 13 = 104

 940.0

STAGE 0.06
 10 x 14 = 140.0 @ 1.40 = 196.

GRASS
 30 x 22 = 660.0 @ 2.20 = 1452.

75



APPENDIX 8

Additional Photographs

LIST OF PHOTOGRAPHS ON FOLLOWING PAGES:
(Also consult photographs attached to DPR 523 form)

- 1 Pico Canyon Road, opposite gates to Larinan Apiary, looking west.
- 2 Pico Canyon Road, opposite gates to Larinan Apiary, looking east.
- 3 Gates to Larinan Apiary, looking south.
- 4 East of gates to Larinan Apiary, looking southeast.
- 5 West of gates to Larinan Apiary, looking southwest.
- 6 Gravel drive leading to house, with bridge in foreground, looking south.
- 7 East and north sides of house, looking southwest.
- 8 East side (front) of house, looking northwest.
- 9 South side of house, looking northeast, showing detail of chimney.
- 10 North side of house and 1929 addition, looking southeast.
- 11 North and west sides of 1929 addition, looking southeast.
- 12 West and south sides of 1929 addition and west wall of original house, looking east.
- 13 South side of 1929 addition and north side of 1930 addition, looking south.
- 14 South side of 1929 addition and west side of 1930 addition, looking north.
- 15 South and west sides of 1930 addition, looking northeast.
- 16 East side of 1930 addition, looking northwest.
- 17 West and north sides of storage shed, looking southeast.
- 18 Clothesline support post, looking southwest.
- 19 Gate at front of house, looking southwest.
- 20 Typical landscape surrounding house, looking north.
- 21 Corral as seen from house, looking southeast.

22 Corral, looking southeast.

23 House and garage as seen from corral, looking west.

24 Bee-hives on north side of honey house, looking east.

25 Northerly and westerly sides of honey house, looking east.

26 Dirt track leading to well-head, looking south.

27 Well-head as seen from dirt track, looking southeast.

(C)

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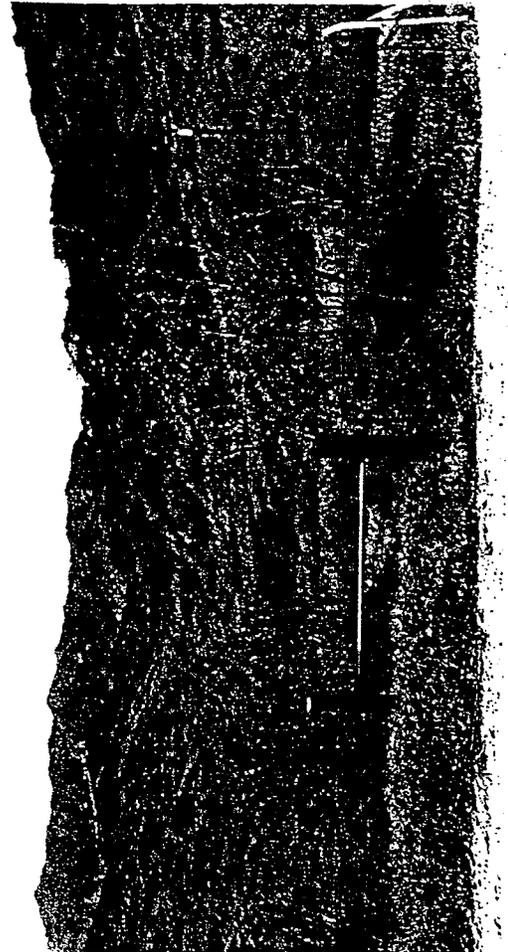
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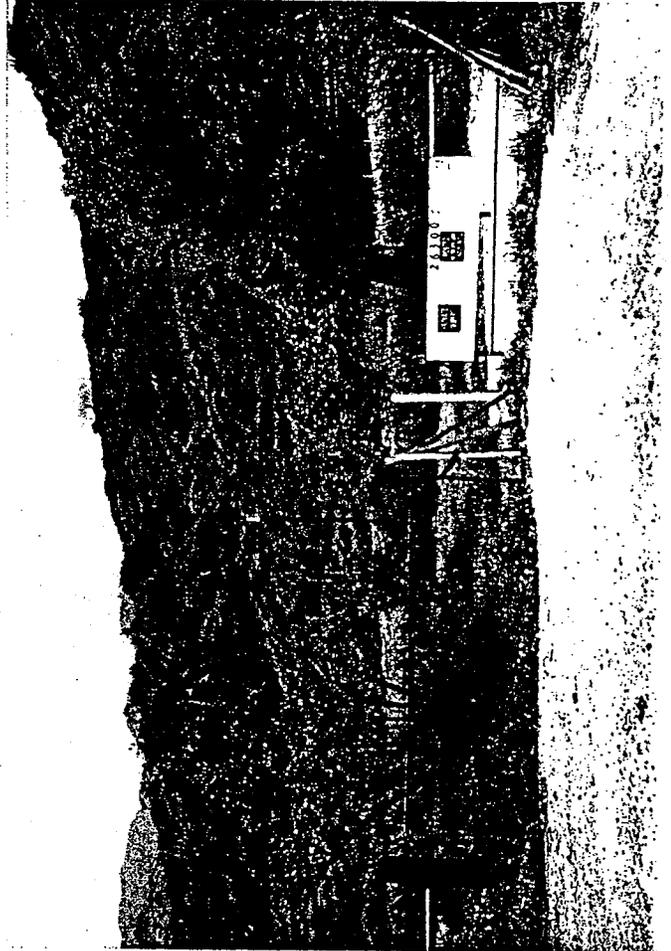


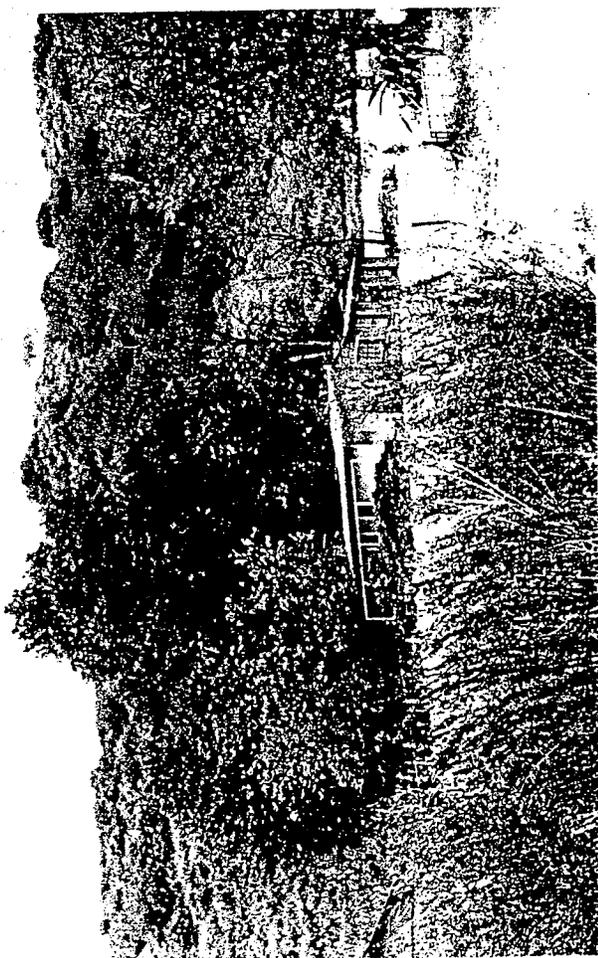
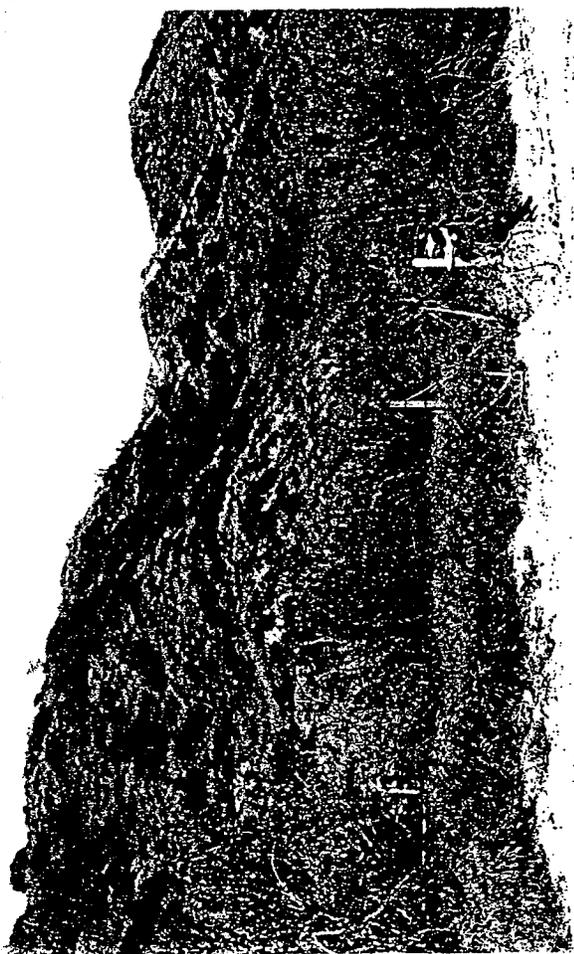
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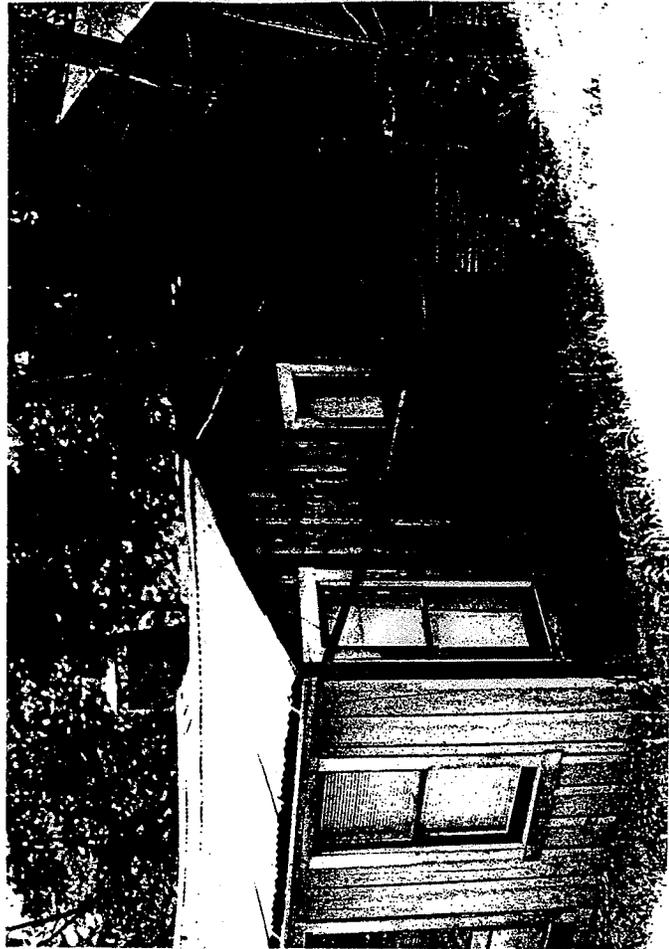




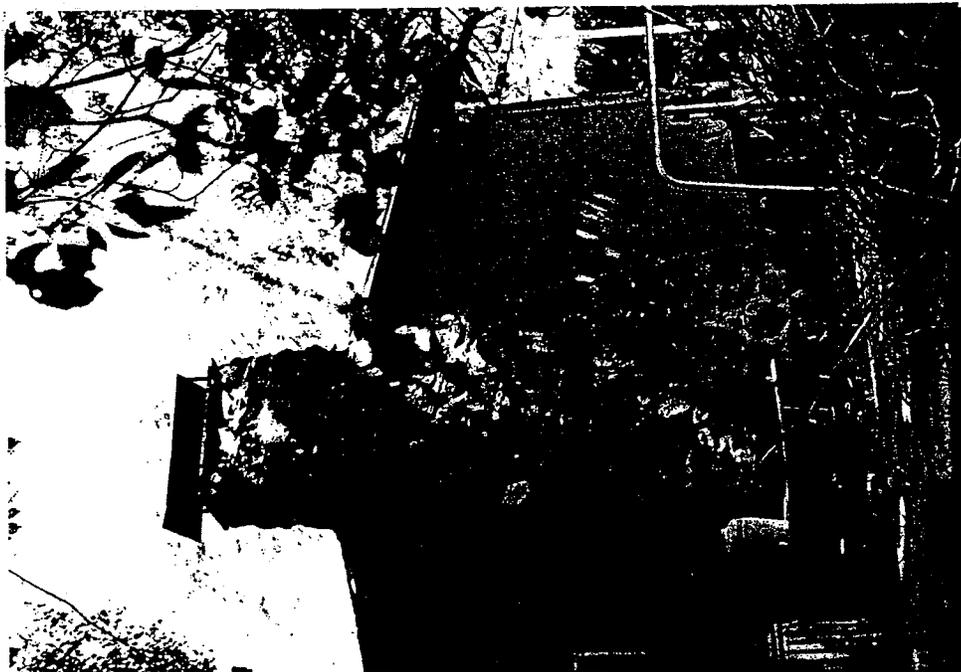
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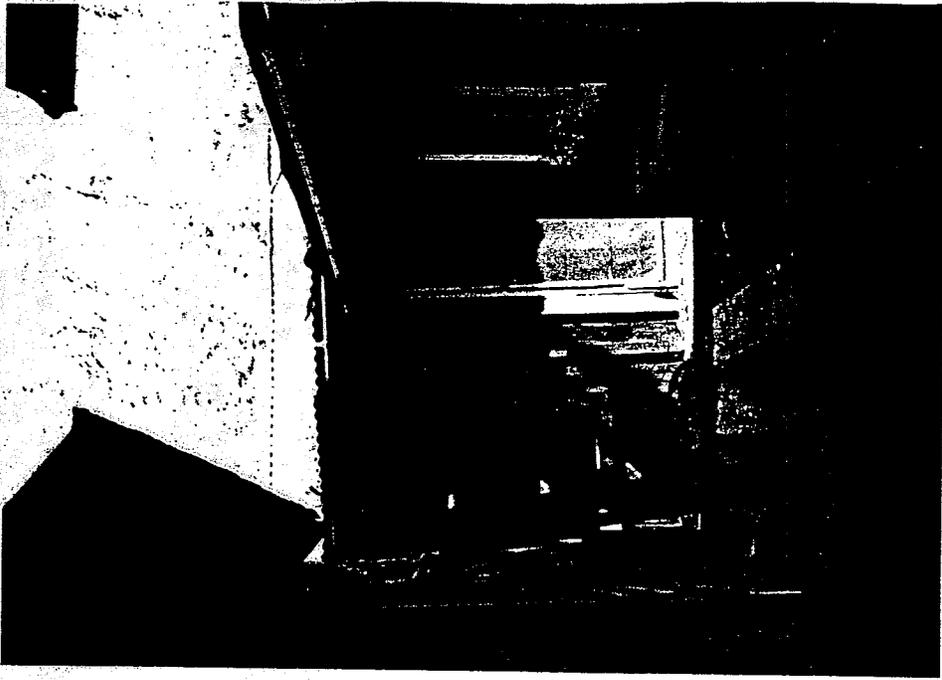


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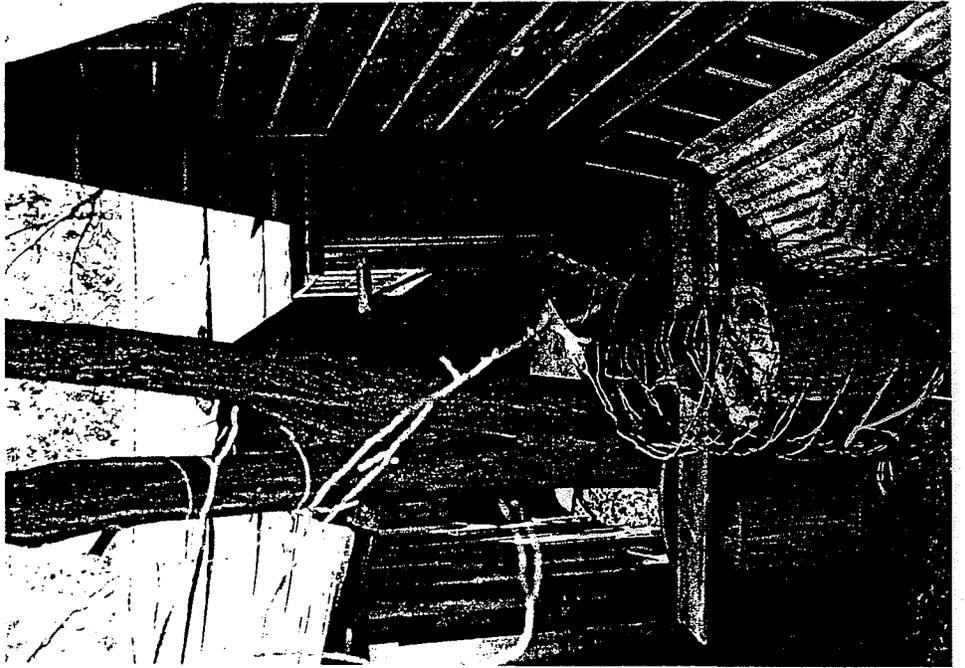


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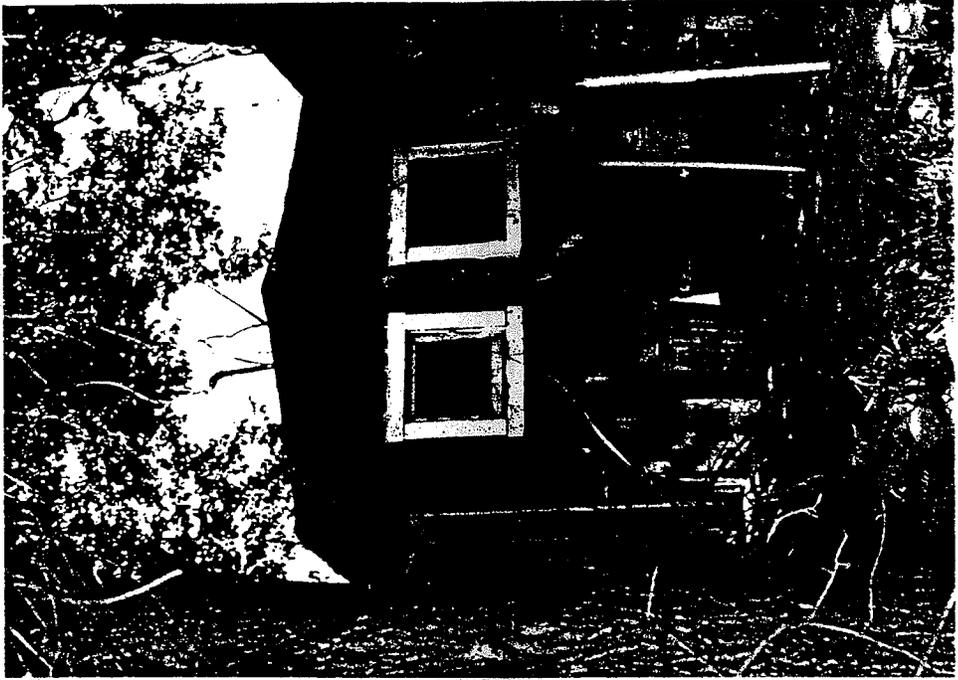
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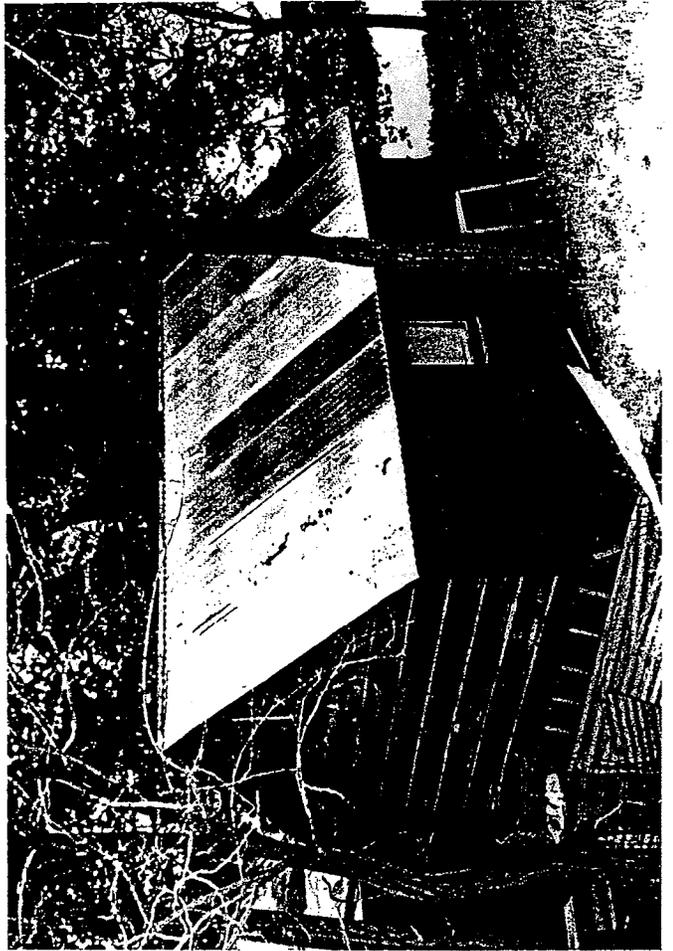
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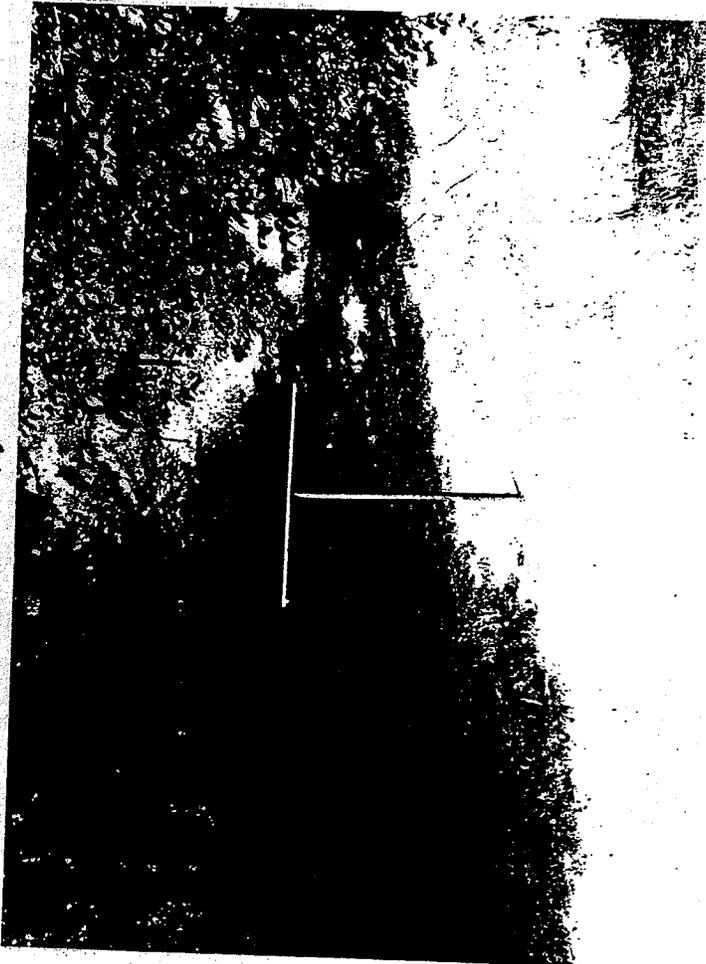
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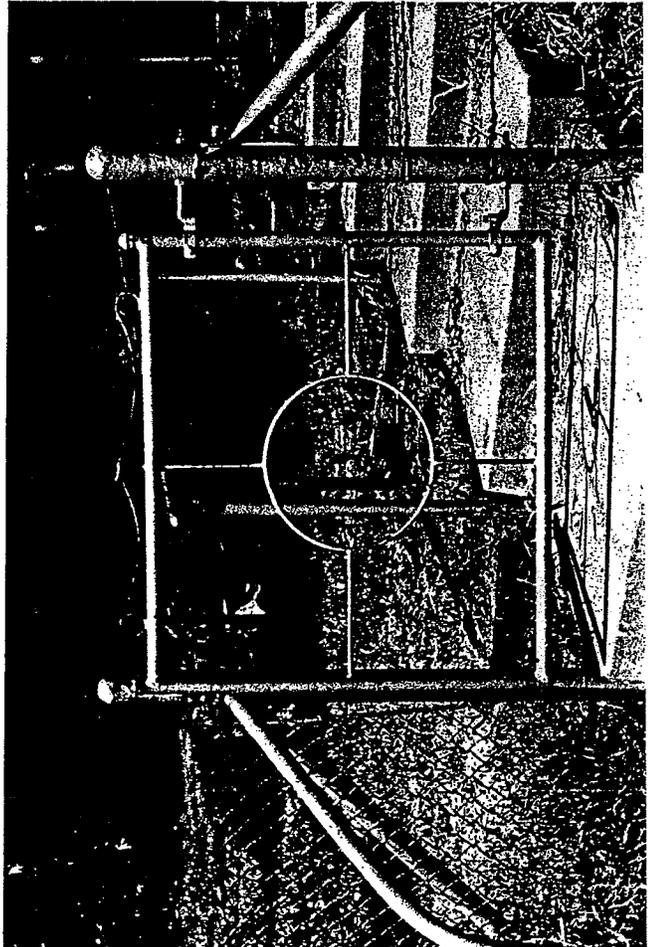
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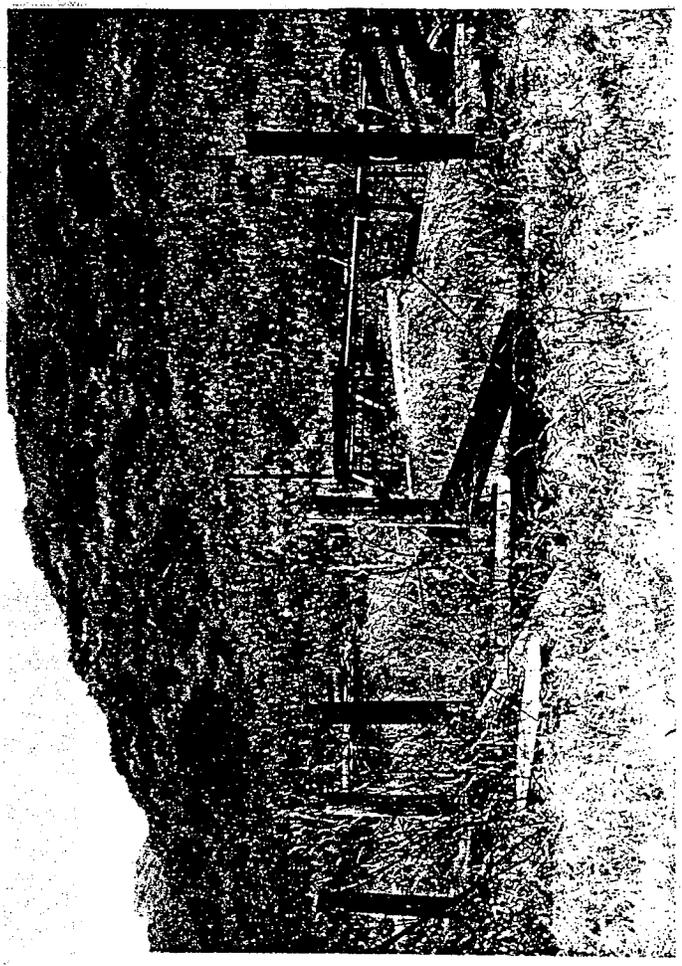
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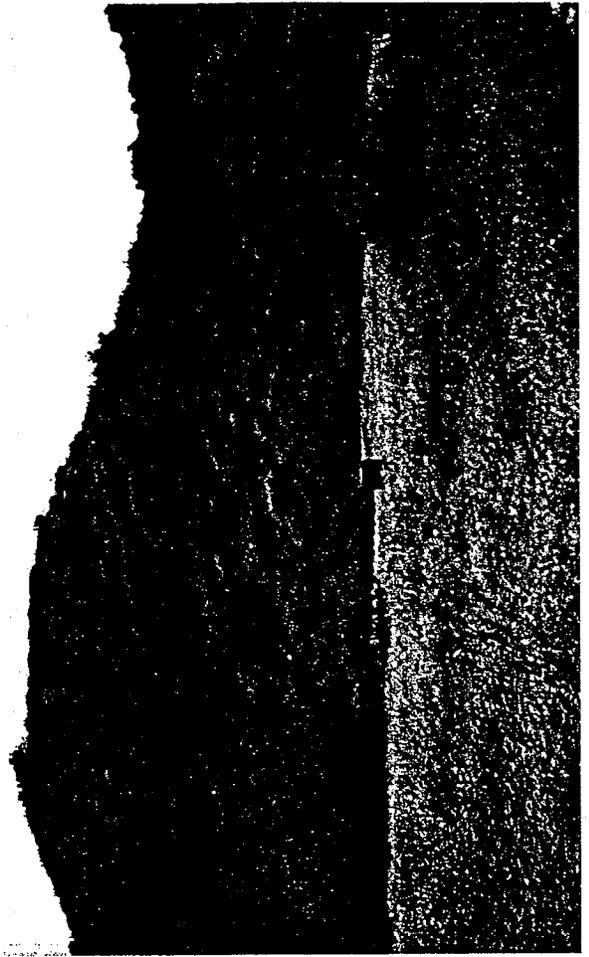
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DPR 523 FORMS



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Trinomial _____

NRHP Status Code _____

5S3

Other Listings _____

Review Code _____

Reviewer _____

Date _____

Page 1 of 9

Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

P1. Other Identifier: *Larinan Apiary*

P2. Location: Not for Publication Unrestricted

a. County *Los Angeles*

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad _____ Date _____ T *3N* ; R *16W* ; NE *1/4* of NE *1/4* of Sec *6* ; S.B. _____

c. Address: *26300 Pico Canyon Road* City *Newhall* Zip *91321*

d. UTM: (Give more than one for large and/linear resources) _____ ; _____ mE/ _____ mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Parcel No. *2826-020-020*

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The historical resources on the site consist of a house, a storage shed, a garage, a chicken coop, other minor features immediately adjacent to the house, a plank bridge, a honey house, a corral, and an object presumed to be a well-head.

House—The residence sits on a rise at the end of a gravel drive approximately 350 feet southwest of Pico Canyon Road, and is quite visible from the street. It is a one-story U-shaped building in an early "California sranch" style. The house has a wood-post foundation, the open space being skirted by horizontal timbers. The main roof (covering the original 1918 building) is a low-rise side-facing gable. The northerly leg of the "U" (the 1929 addition) has a front-facing gable. The southerly leg of the "U" (the 193C addition) also has a front-facing gable on its southerly part, but there is a shed roof on its northerly section. All the roof surfaces are covered with corrugated iron, except the shed roof which is of composition material. The eaves are shallow and ope exposing the beam-ends. (See continuation sheet)

P3b. Resource Attributes: (List attributes and codes) *HP33 - Farm/ranch*

P4. Resources Present Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)

P5b. Description of Photo: (View, date, accession #)



P6. Date Constructed/Age and Sources Prehistoric Historic Both

1918—Assessor's record

P7. Owner and Address

*Dorothy M. Larinan, conservator/Est. of G. Larin
 Joseph W. Aidlin
 5143 Sunset Blvd.
 Los Angeles, CA*

P8. Recorded by: (Name, affiliation, and address)

*Tim Gregory DBA The Building Biographer, 400
 California Blvd., #3, Pasadena, CA 91106*

P9. Date Recorded: *5/11/99*

P10. Survey Type: (Describe)

Project-oriented

- Attachments NONE Continuation Sheet District Record Rock Art Record Other: (List)
- Location Map Building, Structure, and Object Record Linear Feature Record Artifact Record
- Sketch Map Archaeological Record Milling Station Record Photograph Record

BUILDING, STRUCTURE, AND OBJECT RECORD

Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

B1. Historic Name: *Larinan Apiary*

B2. Common Name:

B3. Original Use: *Ranch*

B4. Present Use: *Ranch*

B5. Architectural Style: *California Ranch*

B6. Construction History: (Construction date, alterations, and date of alterations)

*1918—original house built; 1926—honey house built;
1929, 1930—additions to house; 1962—garage built*

B7. Moved? No Yes Unknown Date: Original Location:

B8. Related Features: *Garage, chicken coop, bridge, honey house, corral, well-head*

B9a. Architect: *Unknown*

b. Builder: *Unknown*

B10. Significance: Theme: *Agriculture*

Area: *Newhall*

Period of Significance: *1920*

Property Type: *Farm/ranch*

Applicable Criteria: *A*

(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

The property is located in Section 6 just within the original southern border of the Rancho San Francisco on a narrow strip of four parcels, running west and partly east of the Pico Canyon Road right-of-way. The property's dimensions are approximately 5,000 feet east-west by 350 feet north-south.

The earliest recorded owner of the property, as revealed by Assessor's records, was Joseph G. Hart who purchased Lots 1 through 4 from an "unknown owner" in 1911. (No documentation could be found as to whether Mr. Hart was any relation to cowboy star William S. Hart who settled in the Newhall area in the early 1920s.) The first improvements on the property appeared on Lot 2 in 1918 and were assessed at \$50. In 1920, George B. Larinan became the owner and, according to his obituary, soon set up a bee-keeping business on his land. Born on February 16, 1881, Mr. Larinan would have been about 39 years old at the time. The \$50 assessment for improvements remained unchanged until 1927 when it jumped to \$840. However, the Assessor estimated that the oldest structure on the property (probably the house) dated from 1920. It can be assumed that the original section of the house was built in 1918 by Mr. Hart and that the Assessor did not catch up with a re-assessment of the property which by that time included the "honey house," until 1927. (See continuation sheet)

B11. Additional Resource Attributes: (List attributes and codes) *HP33 - Farm/ranch*

B12. References:

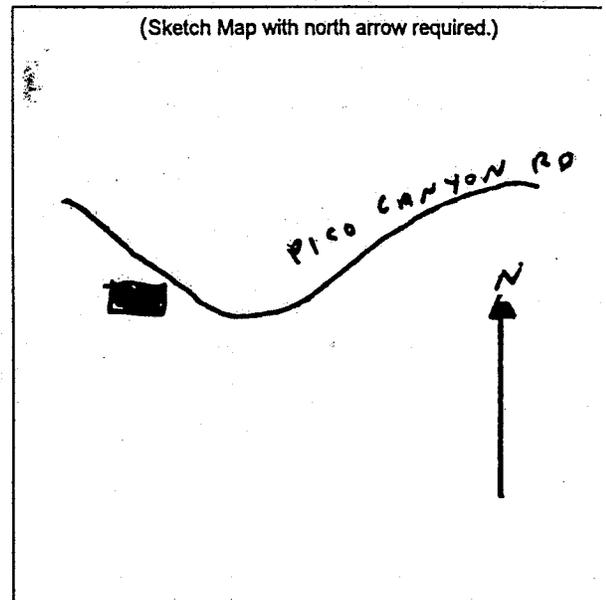
- Bruner, Mary F. Newhall: A History and Description Of Newhall, California. L.A. County Public Library, 1940*
- Newhall, Ruth. Newhall Ranch. Newhall Land and Farming Company, 1958*
- Reynolds, Gerald G. Santa Clarita: Valley Of the Golden Dream. Santa Clarita Valley Chamber of Commerce, 1992.*

B13. Remarks:

B14. Evaluator: *Tim Gregory*

Date of Evaluation: *5/11/99*

(This space reserved for official comments.)



CONTINUATION SHEET

Page 3 of 9

Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

Date 5/11/99

 Continuation Update**P3. Description**

The walls of the front (east-facing) and south-facing facades of the original house are covered with a plywood material, while all the other walls are board-and-batten. An obvious attempt was made to duplicate the original wall treatment on the two additions.

Most of the windows are wood sash with the top and bottom members of the frame extending beyond the vertical members. The ends of the horizontal members are tapered at an angle on the older part of the house. Some of the original wooden sashes have been replaced with aluminum ones. There is one sash window on each side of the front door on the south end of the front facade and a single window on the north end. On the east end of the north facade is a single sash, just easterly of a stationary window with fifteen small panes. Two more sashes are on each side of another stationary window with eight panes, on the west end of the north facade (the 1929 addition). The west facade of the 1929 addition has a single sash positioned at each end of the wall. The south side of this addition (facing the interior of the "U") has a sash at both ends with a very narrow glass door in the middle that has twelve panes. Continuing counter-clockwise around the building, the only visible part of the original section's west wall has a single sash window. The north side of the southerly (1930) addition (facing the opposite side of the interior of the "U") has a single eight-paned casement window centered in its wall. The west wall of this addition has a six-paned stationary window on its north end and two square windows, one with two panes placed in a stair-step arrangement on its south end. The south wall of this addition has a horizontally-oriented two-paned window to the west of a screened solid door. There are two identical square windows on the addition's east wall where it juts out from the original house. The south side of the original house has one window opening to the west of the chimney that has been filled in with an air-conditioner.

The front porch of the house consists of a scored concrete slab that runs along the entire east facade. Above it, seven joists extend from the roof-line of the house which probably once supported a shading type structure. The joists are supported at their other end by a pipe that forms a horizontal "beam" and is itself supported by five "posts" also made out of piping material.

The chimney, centered on the south wall of the original house, is made of granite rocks roughly mortared together but showing some signs of skilled workmanship. The chimney is tapered and is surmounted by a spark arrester with a gabled metal cap.

Immediately to the rear of the 1930 addition at the southwest corner of the house is a storage shed with tongue-and-groove walls and a wood-post foundation. It is slightly rectangular and well-made, with finished corners and framed window openings. It has a steep side-facing gabled roof, also covered in corrugated iron. The eaves are open and the exposed beam-ends have been mitred at an angle. Small vertically-oriented attic window-vents appear in each gable-end. There are no windows on this building's north wall, and one square casement window on its west side. The south wall has a pair of side-by-side casement windows, while on the east wall there is a paneled door on the south end and a square casement window on the north end.

Garage—Approximately 50 feet southeast of the house is a rectangular garage with a front-facing gable roof. It has a concrete foundation and a completely corrugated-iron exterior, including roof covering, walls, and overhead door. The eaves are open and expose beam-ends that reveal the building's wooden frame. There is a single wooden door on the south end of the east wall. There are no other openings in the building except for the vehicle entrance at the front.

Chicken coop—Approximately 50 feet south of the house and 10 feet west of the garage is a deteriorated chicken coop. It is a rectangular structure with walls of unfinished rough lumber in a board-and-batten configuration. The single gate-like door has a lower horizontal part that opens up independently (probably to let the fowl in and out easily). Two window openings on both sides of the door are covered with wire mesh. Below each of these openings are wooden storage boxes with hinged lids. The structure is covered with a corrugated-iron roof.

Other resources in the vicinity of the house—On the top of a small hill to the southwest of the house is a circular reservoir made out of corrugated iron. It has a conical roof. Two T-shaped metal clothesline supports appear opposite each other in the back yard to the southeast of the house. Just north of the chicken coop is a metal basin that was used as a water trough. Nine concrete-slab steps lead up to the front porch of the house westward from the gravel driveway. Metal pipe-like structures were built on both sides of the steps to create a railing. Railroad ties arranged in square patterns to the south of the steps provided planting areas. A poured-concrete path extends from the porch along the south and west sides of the house to the storage shed in the rear. The house site is bordered by a variety of fencing materials. The north end of the east side of the property has a barbed-wire fence with metal posts, while the south end has a chain-link, newer fence. The north side of the property is bordered by a barbed-wire fence with old wooden posts. A gate appears in the fence at the point where the steps reach the gravel drive. This gate is made of metal rods and has a red capital letter "L" centered within a circular frame. There are a number of mature trees, including cedars, on the property that were evidently planted to shade the house. A bed of iris has been planted just north of the steps. (See next continuation sheet)

Page 4 of 9 Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

Date 5/11/99

Continuation Update

P3. Description

Bridge—Midway between the house and Pico Canyon Road, the gravel drive crosses over a plank bridge which has been built above small creek-bed. The lumber on the bridge is rough-hewn. Two beams run along both sides of the bridge to provide a slight barrier.

Honey house—This is a rectangular building with a front-facing gabled roof. It is covered completely with corrugated-iron, including walls and roof. Square venting holes appear in each gable-end. The northerly side of the building has a single wooden door, to the west of which is a band of windows. The southerly side has a band of three narrow vertically-oriented windows on its west end and a garage-type delivery door on its east end. Much equipment having to do with honey extraction can be seen lying around on all sides of the building. A blue cylindrical reservoir-type structure, made of steel, is attached to the building's west side. A few yards from the northeast corner of the honey house is an old corrugated-iron circular reservoir with a conical roof. A large area to the north of the honey house is filled with active bee hives.

Corral—Approximately 300 feet southeast of the house is an irregularly-shaped livestock corral. The fence on its western end is made metal railings and posts. What is left of the eastern fence consists of barbed-wire and wooden posts. In the center is a tall metal-frame opening in the fence. A bathtub has been placed in the northeast corner of the corral to serve as a water trough.

Well-head—Approximately 5,000 feet southwesterly of the honey house along a dirt track that runs up-canyon from the honey house, a cylindrical object, thought to be an old oil-well head, protrudes about five feet above the ground on a rise about fifty feet east of the track. The pipe is two feet in diameter and consists of a smaller circular metal plate riveted to a larger plate that descends into the ground. A single six-inch diameter hole appears about mid-way up the pipe on its north side. The pipe is very rough on top and may have had another structure attached to it at one time.

Page 5 of 9 Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

Date 5/11/99

Continuation Update

D6. Significance

A wing was added to the northwest corner of the original house in 1929. Another addition, on the west end of the south side of the house was built in 1930. On a visit in April 1963, the Assessor described the "California-style" house as having 940 square feet which included: living room; dining room; two bedrooms; a kitchen with one plumbing fixture, a utility fixture, and minimum-grade counters; and a bathroom with four plumbing fixtures, including a tub and shower stall. The building had a wood foundation, board-and-batten walls over a wood frame, wood sash, and a gabled, low-pitched corrugated-iron roof with a one-foot overhang consisting of "unfinished" eaves. The interior was finished with plaster and pine woodwork, and there were six linoleum floors. There was also a single stone fireplace and a wall air-conditioner. The Assessor rated physical condition, conformity, workmanship, architectural appeal, and quality as "average" and functional plan as "poor."

The "honey house" was originally built in 1926, according to the Assessor. Upon visiting the property on February 1, 1927, the Assessor described it as a 1,200-square-foot "shed" with a concrete foundation, high-gabled corrugated-iron roof, and corrugated-iron walls. Its interior consisted of three rooms with cement floors and tongue-and-groove walls. The building measured 60 feet east-west by 20 feet north-south. Construction quality was rated as "good."

The County issued building permit 7983 on November 5, 1962 for a garage. The Assessor described this building as made completely of corrugated-iron with dimensions of 30 feet long by 22 feet wide.

The Assessor also noted the existence of the 10-by-14-foot storage building at the rear of the house in 1963, but did not provide an estimated construction date.

The Assessor's records do not mention a livestock corral found on the property and a well-head that is thought to be a remnant of an unsuccessful exploratory oil well that may have been dug by an early owner in the hopes that oil would be found on the property, since it was so close to the historic Pico Canyon wells a few miles west on Pico Canyon Road.

In his description of driving along "the old Pico Road," local historian Arthur B. Perkins mentions passing "Larinan's apiary" (Perkins 1962). George B. Larinan owned the property for 45 years, dying there at the age of 84 on June 19, 1965. Mr. Larinan was survived by two sons and a daughter. One son, George B. Larinan, Jr. (1910-1975), succeeded his father in the business and lived on the property for a number of years. Upon his death, Dorothy M. Larinan became the conservator of his estate and, together with co-owners, maintained ownership of the property up to the present day. Thus, this property has remained in the hands of the same family for almost 80 years.

Historic context—The first Europeans to travel overland in California—a party led by Spanish General Gaspar de Portola in 1769—drove their horses and cattle over the towering slopes that formed the northern edge of what was later called the San Fernando Valley. They found villages of primitive, semi-nomadic people in the valley below. These people were Tataviam, probably of the Serrano Shoshones. Rough fences marking tribal territory were scattered around the valley. The priests in Portola's party said that the valley and its river should be called "Santa Clara" celebrating their arrival on St. Clare's Day.

Nineteen years after Portola's party first discovered the area, a mission was established over the hill at San Fernando. Soldiers from the mission rounded up the native inhabitants and converted them into agricultural laborers. Saint Clare's valley was part of the mission land and was named Rancho San Francisco. An asistencia was constructed at nearby Castaic Junction in 1804.

After Mexico broke from Spain in 1823 the new government confiscated the great mission ranchos and announced that they would be made available to deserving citizens. A lieutenant by the name of Antonio del Valle had been assigned to supervise the breakup of mission lands. He filed a request for the 48,000-acre Rancho San Francisco. This request was approved by the Mexican government in 1839. Antonio died shortly thereafter, but when California became a state in 1850, the new government honored the grant. The Rancho was particularly beautiful with its diverse landscape of canyons, hills, and oak trees. A wayfarer was said to have described it as follows:

"There before us was a beautiful meadow of a thousand acres, green as a thick carpet of grass could make it, and shaded with oaks wide branching and symmetrical. Such a scene of abundance was like getting a glimpse of Paradise, and tears of joy ran down our faces" (Bruner)

(See next continuation sheet)

Page 6 of 9 Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

Date 5/11/99

Continuation Update

D6. Significance

The Newhall area was the site of the first gold discovery in California. Francisco Lopez, an in-law of the del Valle family, discovered gold in one of the park-like canyons in March 1842, six years before the famous Sutter's Mill discovery much further north. In November of that year, the first gold from Newhall was shipped to the U.S. Mint. Gold continued to be placer-mined in Placerita Canyon by Native-Americans, Chinese, and immigrant Mexicans for a number of years, their efforts extracting about five million dollars' worth of ore

The del Valle family, like many other early ranch owners, was bankrupted by drought, falling cattle prices, and the great earthquake of 1857. William Wolfskill, a renowned orchard owner and vintner, purchased the acreage and then sold it to Thomas R. Bard in 1865. The rancho eventually was purchased at a sheriff's sale by San Francisco businessman and railroad executive Henry Mayo Newhall. He paid \$90,000 for it in 1875. By 1878, the community named after him had become the largest in the valley, thanks to its founder's success in luring the Southern Pacific Railroad to establish a station there. (The station had actually been constructed in 1876 at what is now Saugus, then called Newhall, but the community was moved three miles away to its present site two years later because of water shortages.) By 1880, Newhall was one of only 32 post offices recognized in Los Angeles County, and had both a school and a courthouse.

The Newhall Land and Farming Company was established in 1883 to care for Henry Newhall's vast domain which included the raising of corn, flax, honey, alfalfa, and "dry wheat" (about 6,000 tons of which were harvested annually in the 1880s). The warm summers also contributed to a prosperous fruit-drying industry. Herds of cattle and sheep populated the grasslands.

The Santa Clarita Valley had traditionally been the major migration route for Indian groups as they traveled between the coast and the interior valleys and the great eastern deserts. By the 19th-century Newhall was poised to become the funnel through which all highways were to pass on the inland route north from Los Angeles. In 1847, John C. Fremont gave his name to the pass when he traversed the Newhall area on his way from Santa Barbara. In 1859 General E. F. Beale and his men removed fifty feet of earth from the gap so that stages and wagons could make the crossing from Los Angeles. But even then the toll road was so steep that extra horses were kept in reserve to help wagons over the incline. The Newhall Tunnel eventually replaced the dangerous mountain crossing and, in time, the tunnel itself was replaced by a giant cut and a series of progressively modern highways. Another famous road associated with Newhall was the Ridge Route that crossed the Tehachapis to the north, connecting Los Angeles with the San Joaquin Valley. After a study of many possible routes, a more or less direct road was completed in 1916 from Newhall to Bakersfield along the top of the ridges. This road was eventually replaced in 1933.

When George Larinan purchased his property in 1920, Newhall was a bustling small town of about 2,000 people surrounded by thousands of acres of open agricultural and range land, owned and operated mostly by the Newhall Land and Farming Company, but also by smaller landholders, such as himself, on the fringes of the Company's property. The town was becoming more attractive to new residents, such as cowboy movie star William S. Hart who was to purchase his "Horseshoe Ranch" in 1921. In fact, Hollywood-based movie companies were discovering the Newhall Ranch as a perfect backdrop for shooting their western dramas. Newhall also began advertising itself as the ideal environment for family farming, with poultry, vineyards, and dairying as the main activities. Newhall also saw its first Edison electrical lines, telephone, and local bank in the early 1920s. Pico Canyon Road, before then a narrow dirt road, was oiled in 1928.

As both its transportation and agricultural hub, the town of Newhall was to remain the Santa Clarita Valley's main metropolis for sixty years, although its population did not exceed 4,000 until after 1940. The surrounding area remained largely agricultural until the post-World War II era when the burgeoning population of Los Angeles County looked beyond the San Fernando Valley for space for residential and commercial expansion. Newhall's population had increased to 7,500 by 1949, and successive improvements to the Interstate 5 freeway route made commuting easier and easier for new residents employed in Los Angeles. The founding of the new community of Valencia in the 1960s also stimulated a tremendous increase in the Valley's growth. In 1987, the communities of Newhall, Saugus, Valencia, and portions of Canyon Country and Bouquet Canyon incorporated as the City of Santa Clarita.

(see next continuation sheet)

Page 7 of 9

Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

Date 5/11/99

Continuation Update

D6. Significance

The Newhall area was also the site of the first oil discoveries in California. Historians have claimed that as early as 1855 oil from seepages and hand-dug pits in Pico Canyon had been used by General Andreas Pico—after whom the canyon was named—for experimental purposes and for some form of refining. This would have been the first recorded use of crude petroleum, other than the ta. Native-Americans had used to waterproof their baskets. The presence of oil in the canyon was "re-discovered" in 1864 and the first well was dug in 1869. Although this first well never produced more than 70 to 75 barrels a day, it became famous for its longevity. But it was Well Number 4, dug in 1876, that held the record: it was still pumping in 1990 when it was finally shut down after 114 years of service—the oldest still-producing oil well in the world! Other successful wells were dug in the vicinity in the 1870s, and the community of Pico Springs was re-named Mentryville and expanded to house the field's workers. In 1876, the California Star Oil Company, the owner of the field, built California's first refinery alongside the railroad tracks in Newhall. A later owner, the Pacific Coast Oil Company, laid the first oil pipe-line in California across the Rancho San Francisco from Pico Canyon to the refinery. The original oil field is located at the end of Pico Canyon Road, about three miles west of Interstate 5. Considered to be the birthplace of the state's oil industry and of the Standard Oil Company of California, the field is now owned by the Santa Monica Mountains Conservancy and is a historical resource of great significance.

Bee-ranching, as it was called in earlier days, had become an important industry in Newhall as early as 1880. In fact, the first commercial honey producer in the Newhall district was T. F. Mitchell who settled in the Soledad Canyon area in 1863. He began beekeeping in about 1870 and produced an all-time high of fifty tons of honey in 1884. In 1880, it was estimated there were already 1,200 bee colonies scattered throughout the township in a number of apiaries. The Newhall vicinity became famous for its sage honey which was said to be of the highest quality (Bruner). By 1939, 250 tons of honey were being produced locally in the average season. About 80% of the production was marketed in Los Angeles, the rest going to other points, chiefly San Francisco.

Page 8 of 9 Resource Name or #: (Assigned by recorder)

26300 Pico Canyon Road

Recorded by: Tim Gregory

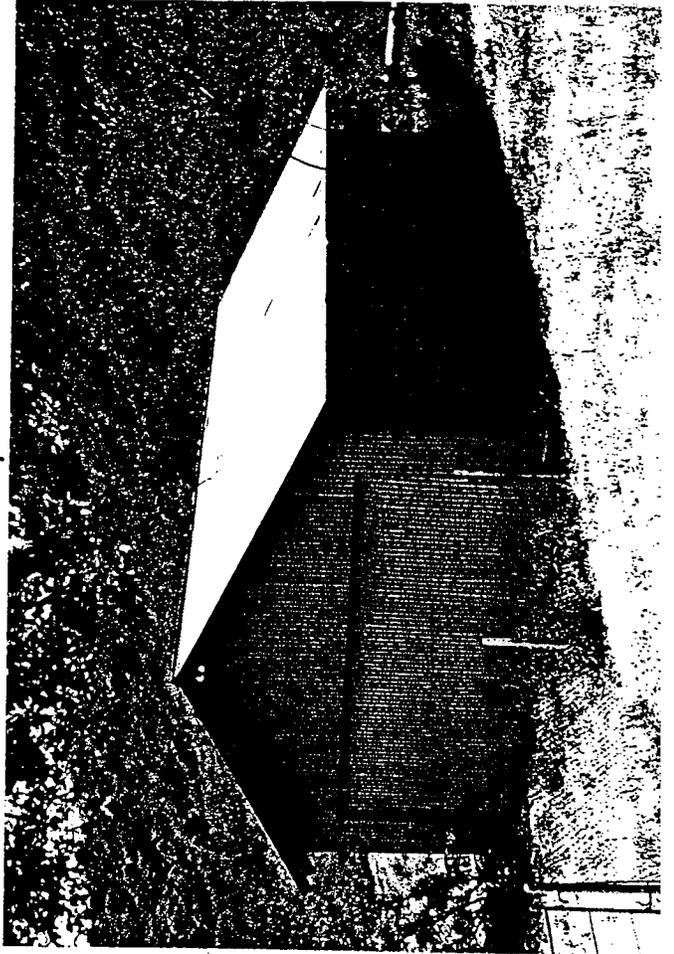
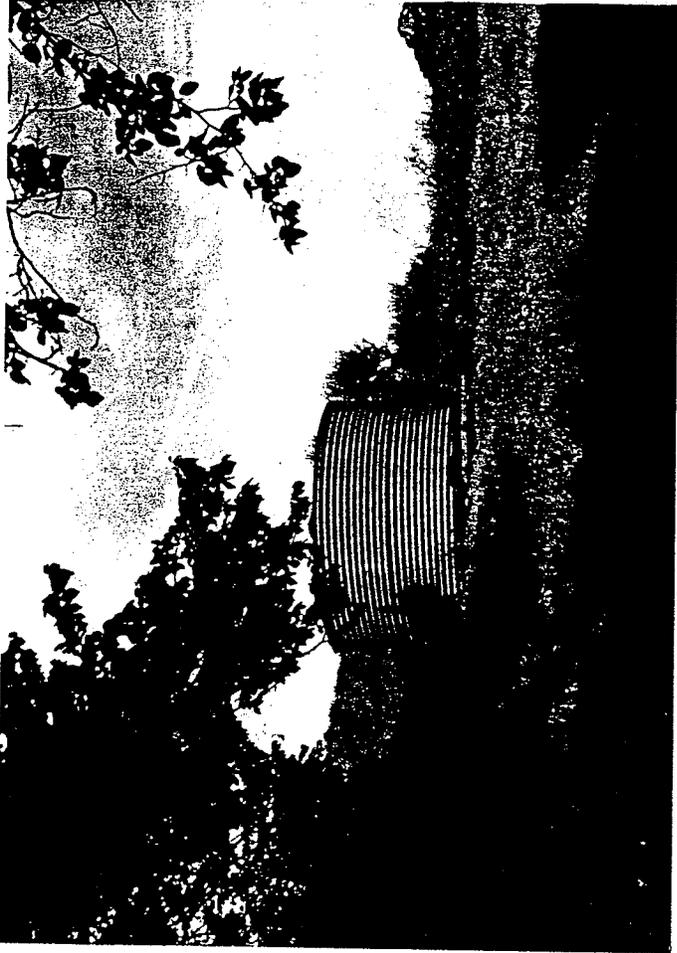
Date 5/11/99

Continuation Update

A16. Photographs

LIST OF PHOTOGRAPHS ON FOLLOWING CONTINUATION SHEETS:

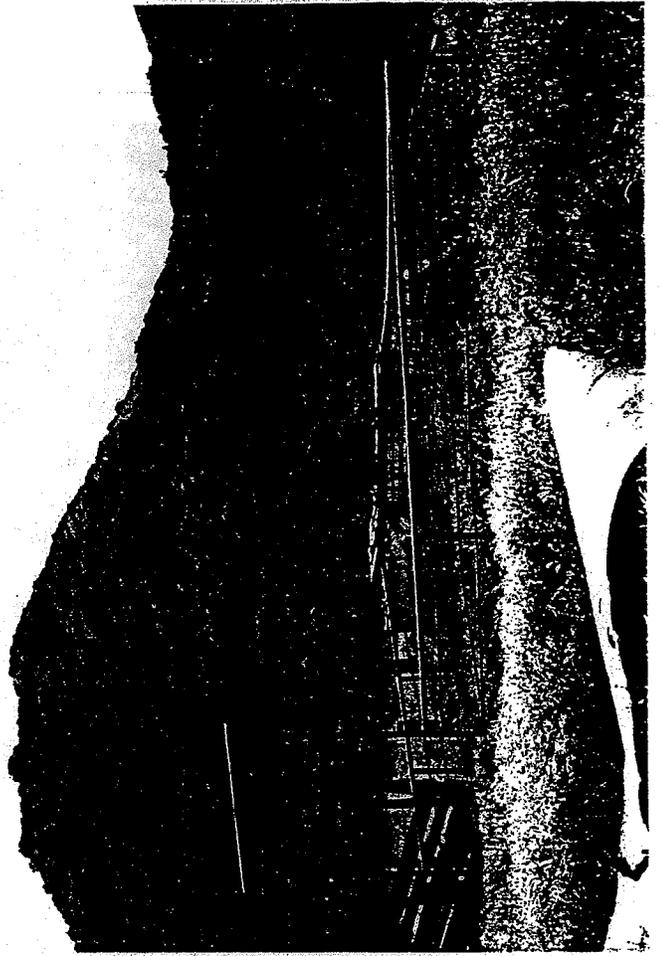
- 1 Storage shed, east and south sides, looking northwest
- 2 Reservoir, looking west
- 3 Chicken coop and water trough, looking south
- 4 Garage, north and west sides, looking southeast
- 5 Bridge, looking north
- 6 Corral, looking southeast
- 7 Honey house, south and west sides, looking northeast
- 8 Well-head, looking south



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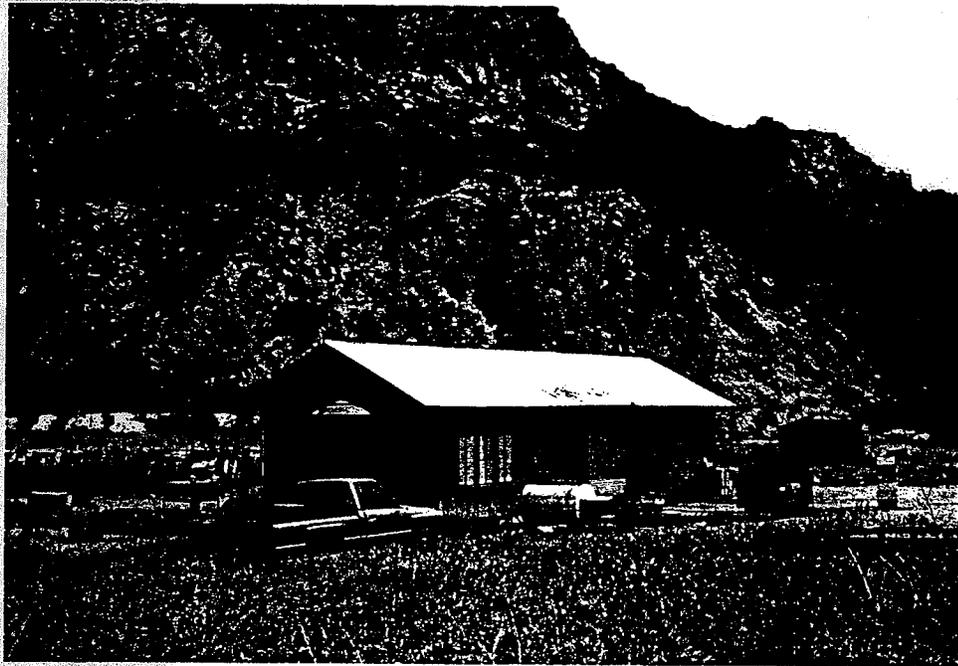


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NATURAL HISTORY MUSEUM

of Los Angeles County

Vertebrate Paleontology Section
Telephone: (213) 763-3325
FAX: (213) 746-7431
e-mail: smcleod @ rcf.usc.edu
900 Exposition Boulevard

Los Angeles, California 90007

3 June 1999

Gust Osteological Analysis
3936 ½ Mohawk St.
Pasadena, CA 91107-3909

Attn: Sherri M. Gust

re: Paleontological resources for the Aidlin Properties Western parcel project area

Dear Sherri:

I have searched our paleontology collection records for the locality and specimen data for the Aidlin Properties Western parcel project area as outlined on the Project Site Plan map that you sent me on 20 May 1999. We have one locality that may lie within the project vicinity, and we do have other localities within the same rock unit.

The one vertebrate fossil locality that might be from within the Western Parcel project boundaries is LACM 6365. This locality is not described precisely enough to determine whether it lies within the proposed project boundaries. LACM 6365 has produced a pinniped skull from the Pico Formation or the Towsley Formation. Both of those are marine units that outcrop along Pico Canyon, although the Western Parcel contains almost entirely Pico Formation exposures. The Pico Formation is a Pliocene rock unit that is represented in the LACM collections by sharks, including the great white shark *Carcharodon carcharias*, and a fossil right whale, family Balaenidae. The Towsley Formation is a Late Miocene rock unit that is represented in the LACM collections by a camel specimen and a dugongid sirenian, *Dusisiren*. Very few specimens in the LACM collections come from either the Pico Formation or the Towsley Formation. But the occurrence of uncommon to rare taxa such as the sirenian and the right whale provide evidence that these are important marine rocks units that are poorly represented in museum collections.

There is an excellent chance that subsurface excavation in the proposed project area will expose significant vertebrates fossils. Thus any substantial excavation in the project area that extends down to bedrock should be closely monitored to quickly and professionally collect any vertebrate fossil remains without impeding development.

Sincerely,



Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

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