

Mission Village VTTM 61105 Project
Oak Tree Report
Los Angeles County, California

Prepared for:

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1.0 EXECUTIVE SUMMARY

<i>Total Number of Oak Trees Surveyed</i>	<i>511 (100%)</i>
<i>Total Number of Dead Trees Surveyed.....</i>	<i>16 (3%)</i>
<i>Total Number of Oak Trees Planned for Removal (147 non-heritage + 13 heritage)</i>	<i>160 (31%)</i>
<i>Total Number of Oak Trees That May be Encroached During Grading Activities (50 non-heritage + 3 heritage)</i>	<i>53 (10%)</i>
<i>Total Number of Oak Trees That Occur within 200 Feet From Grading Limit Line and Would <u>Not</u> be Removed or Encroached.....</i>	<i>282 (55%)</i>
<i>Total Number of Oak Trees that Would Require a County of Los Angeles Oak Tree Permit (Removed+Encroached).....</i>	<i>213 (42%)</i>

2.0 INTRODUCTION

Pursuant to the Los Angeles County Oak Tree Ordinance, removal or damage of any tree of the oak genus (*Quercus*) that is 25 inches in circumference (8 inches in diameter), or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [DBH]), is unlawful without a permit (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating (i.e., encroached) within the protective zone (the area within the dripline of an oak tree and extending to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of a tree, whichever distance is greater) of an oak tree.

An oak tree that has a trunk DBH equal to, or greater than, 36 inches is considered a heritage tree, as defined in the Los Angeles County Oak Tree Ordinance.

2.1 Purpose

As required by the County of Los Angeles and pursuant to Section 22.56.2090 of the Los Angeles County Code, the purpose of this oak tree report is to provide information to the County on oak trees that may be removed or damaged/encroached by the development of the Mission Village VTTM 61105 project. The parameters used to evaluate each tree that was surveyed are described on the following pages under heading **3.0, METHODS**. A spreadsheet showing data collected for each oak tree surveyed is provided in **Appendix A**.

2.2 Site Location and Project Description

The project site is located in an unincorporated portion of northwestern Los Angeles County, approximately 30 miles northwest of downtown Los Angeles, in the Santa Clarita Valley. The project site is part of the approved Newhall Ranch Specific Plan, which was adopted by the Los Angeles County Board of Supervisors on May 27, 2003. The Specific Plan will guide the long-term development of the 11,963-acre Newhall Ranch community, including the goals, policies, and objectives of the County of Los Angeles General Plan and Santa Clarita Valley Area-wide Plan. The Specific Plan is regulatory in nature and serves as the zoning for Newhall Ranch.

The project grading is consistent with, and implements the Specific Plan's approved Conceptual Grading Plan, and the applicable Specific Plan Design Guidelines (Specific Plan Chapter 4, Section 4.8) for grading and hillside management. In Addition, the environmental efforts of grading the entire Specific Plan site were evaluated as part of the certified Newhall Ranch Specific Plan Program EIR.

The project boundary comprises 1,252.2 acres, of which approximately 868 acres would be disturbed by proposed development. The project site is bounded to the north by California State Highway 126 and the Travel Village RV Park; to the west by the remaining undeveloped portions of Newhall Ranch planned for future residential and commercial uses; to the south and southwest by vacant property proposed for residential and commercial uses [i.e., the proposed Legacy Village (Stevenson Ranch Phase V)]; and to the east by the Six Flags Magic Mountain theme park, beyond which is Interstate 5. A regional location map (**Figure 1, Regional Location**) and a site vicinity map (**Figure 2, Vicinity Map**) illustrate the project site in a regional and local context, respectively. Currently, oak woodland, coastal sage scrub, chaparral, and grassland dominate the vegetation cover on the project site.

The project proposes to convert the approximately 868 acres of land into 5,331 residential units, approximately 1,299,000 square feet of non-residential/mixed-use space, elementary school site, library private recreation centers, and a network of landscaped trails, walkways and open space. The project boundary is shown on **Figure 3, Mission Village VTTM 61105 Project Boundary and Grading Limit Line**. The project also includes introduced oak woodlands to serve as mitigation for impacted and/or removed oak trees.

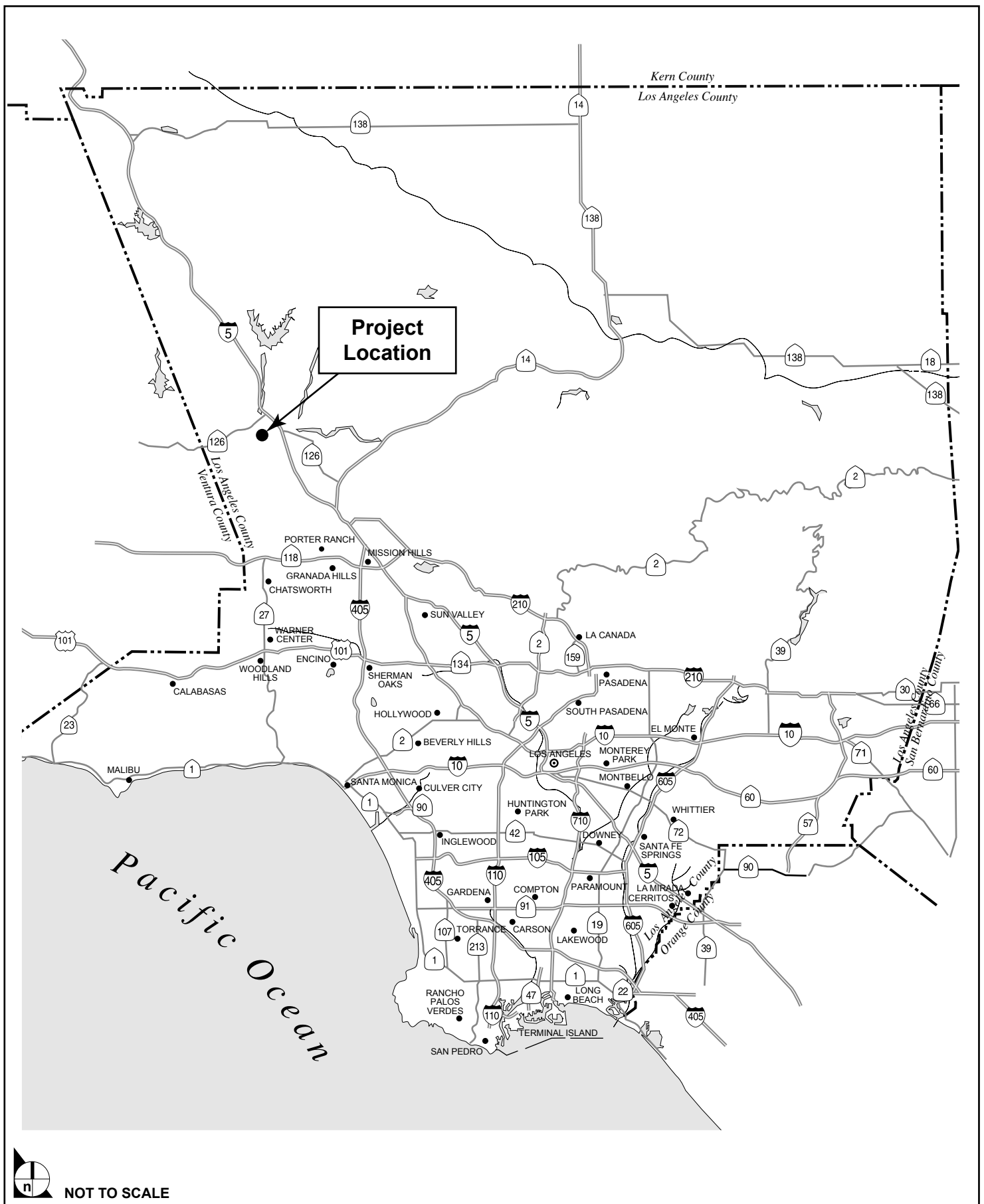
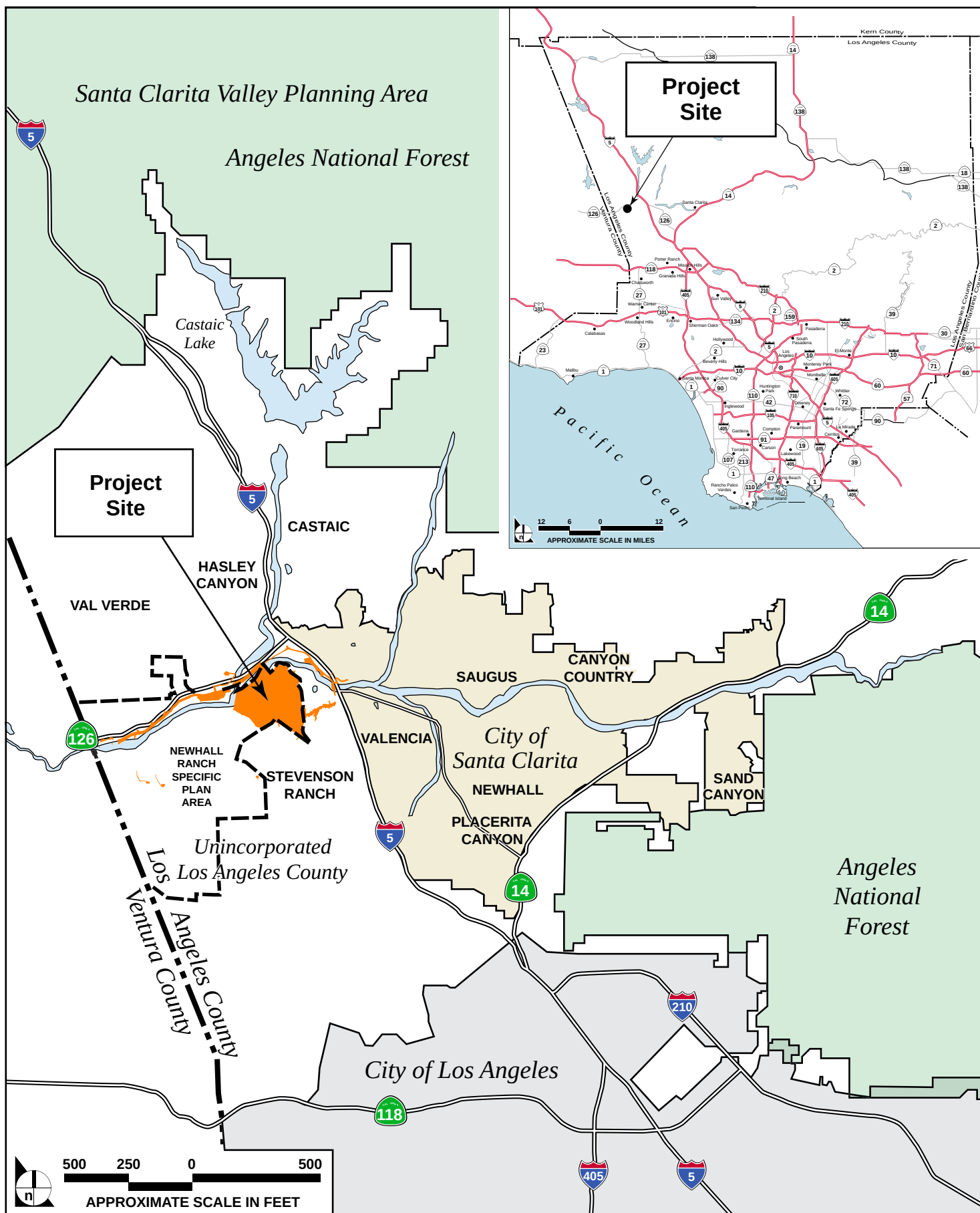


FIGURE 1

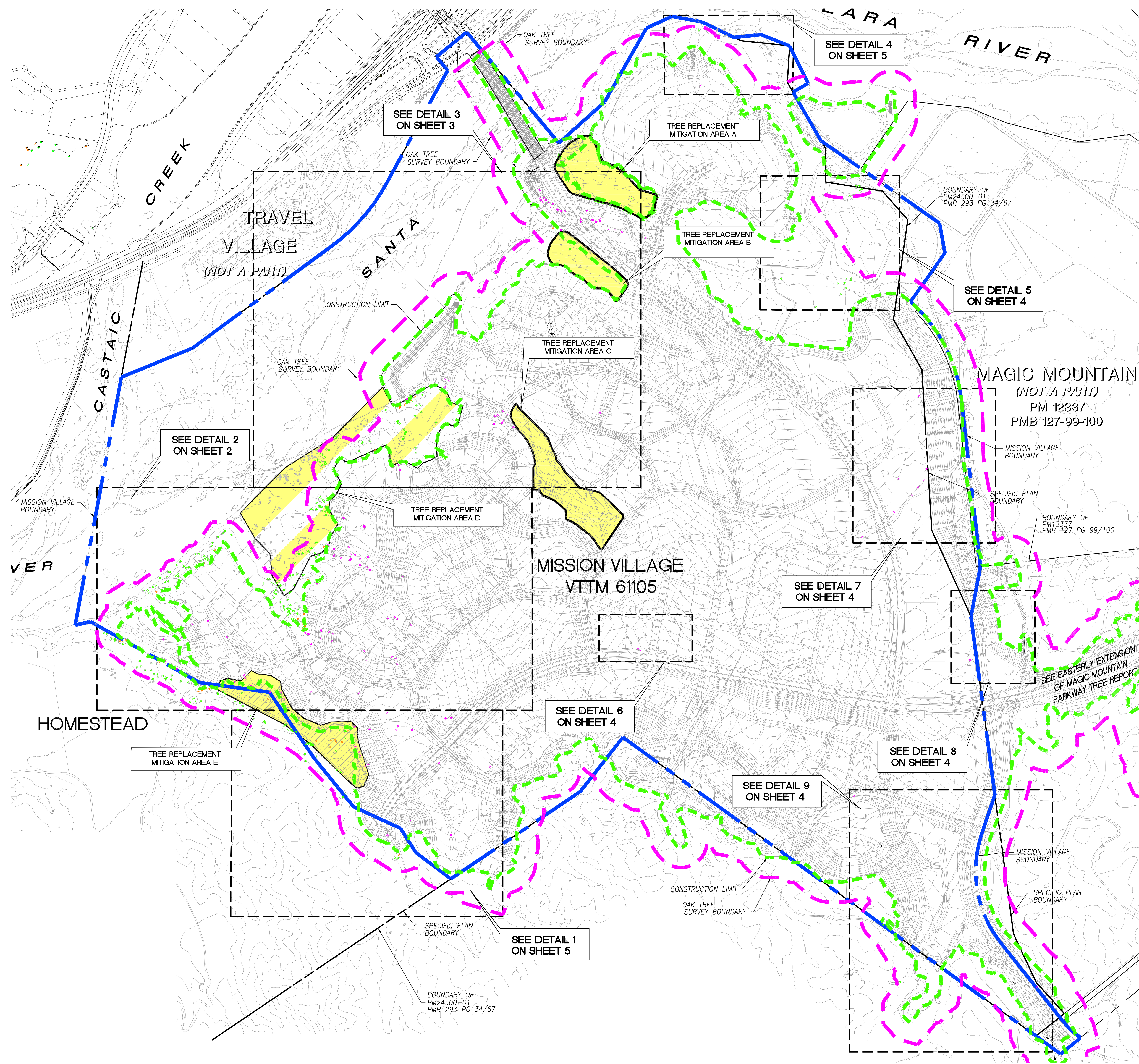
Regional Location



SOURCE: Impact Sciences, Inc. – April 2005

FIGURE 2

Site Vicinity



LEGEND:

- SPECIFIC PLAN BOUNDARY
PM24500-01 BOUNDARY
- EXISTING LOT LINE
PER PM24500-01
- CONSTRUCTION LIMIT
- 200' FROM CONSTRUCTION
LIMIT LINE
- MISSION VILLAGE BOUNDARY

OAK TREE LEGEND:

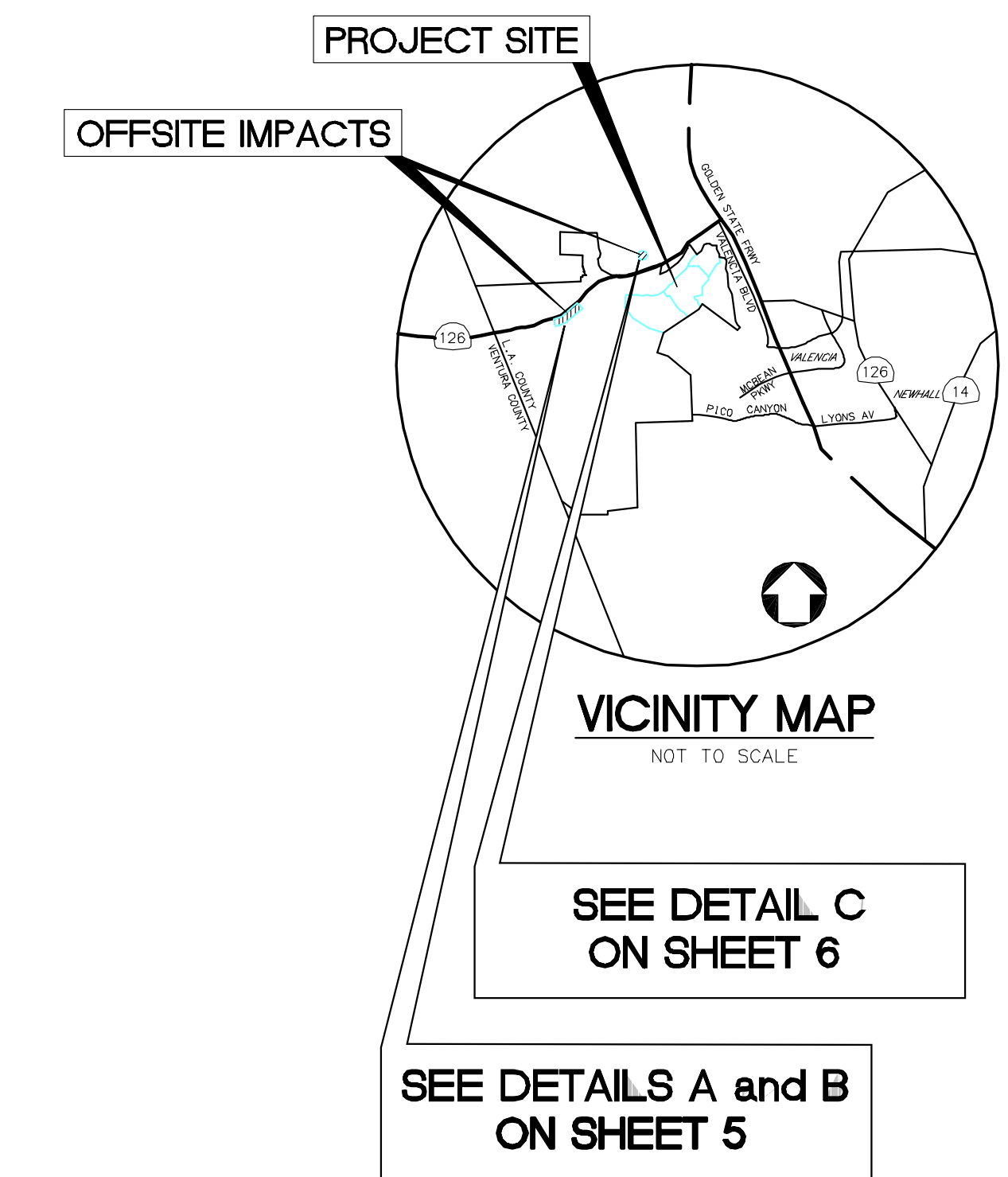
- OAK TREE - NO IMPACT
- OAK TREE - ENCROACHED
- OAK TREE - REMOVAL
- OAK TREE - GREATER
THAN 200 FT FROM
GRADING LIMITS
- TREE REPLACEMENT
MITIGATION AREA

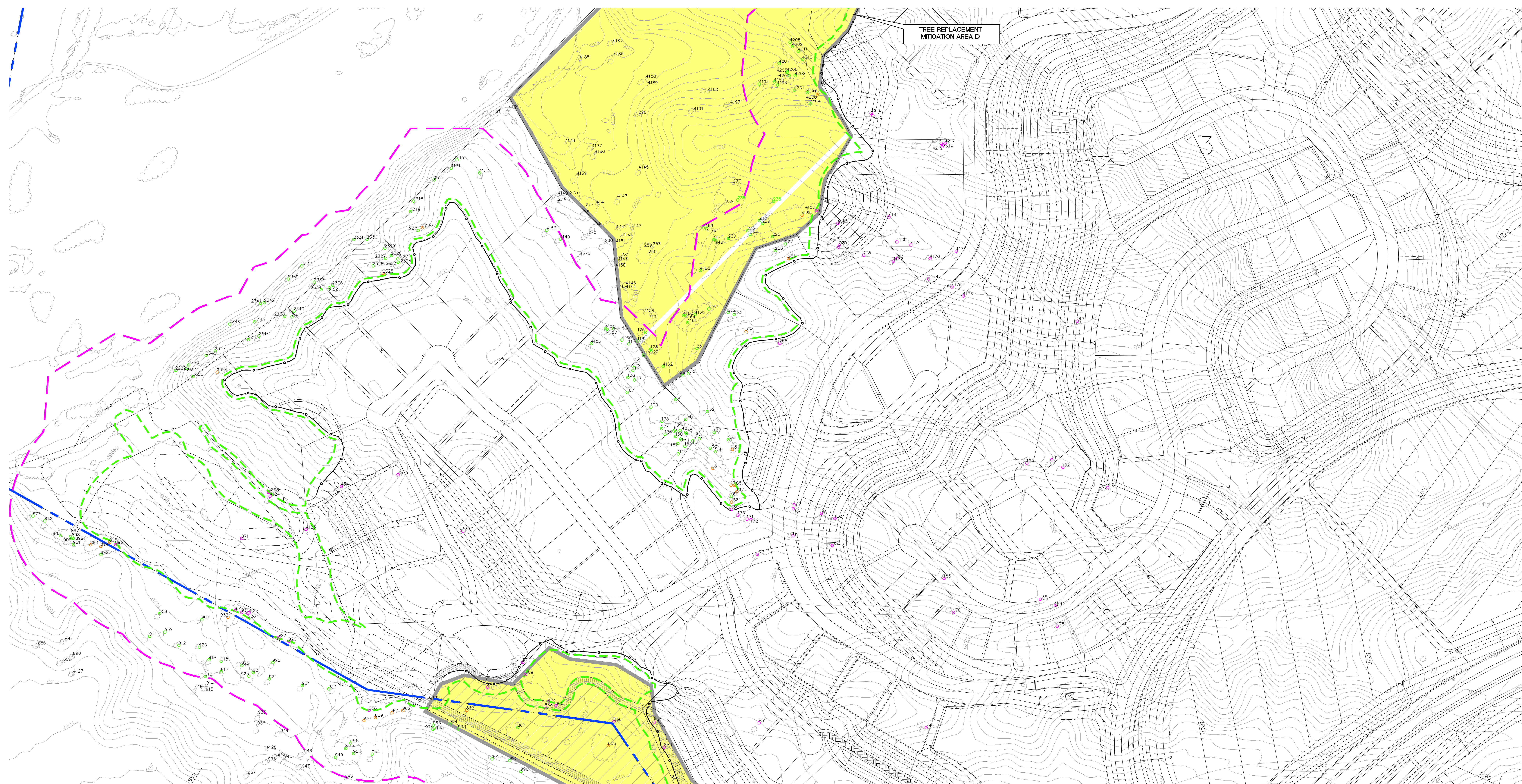
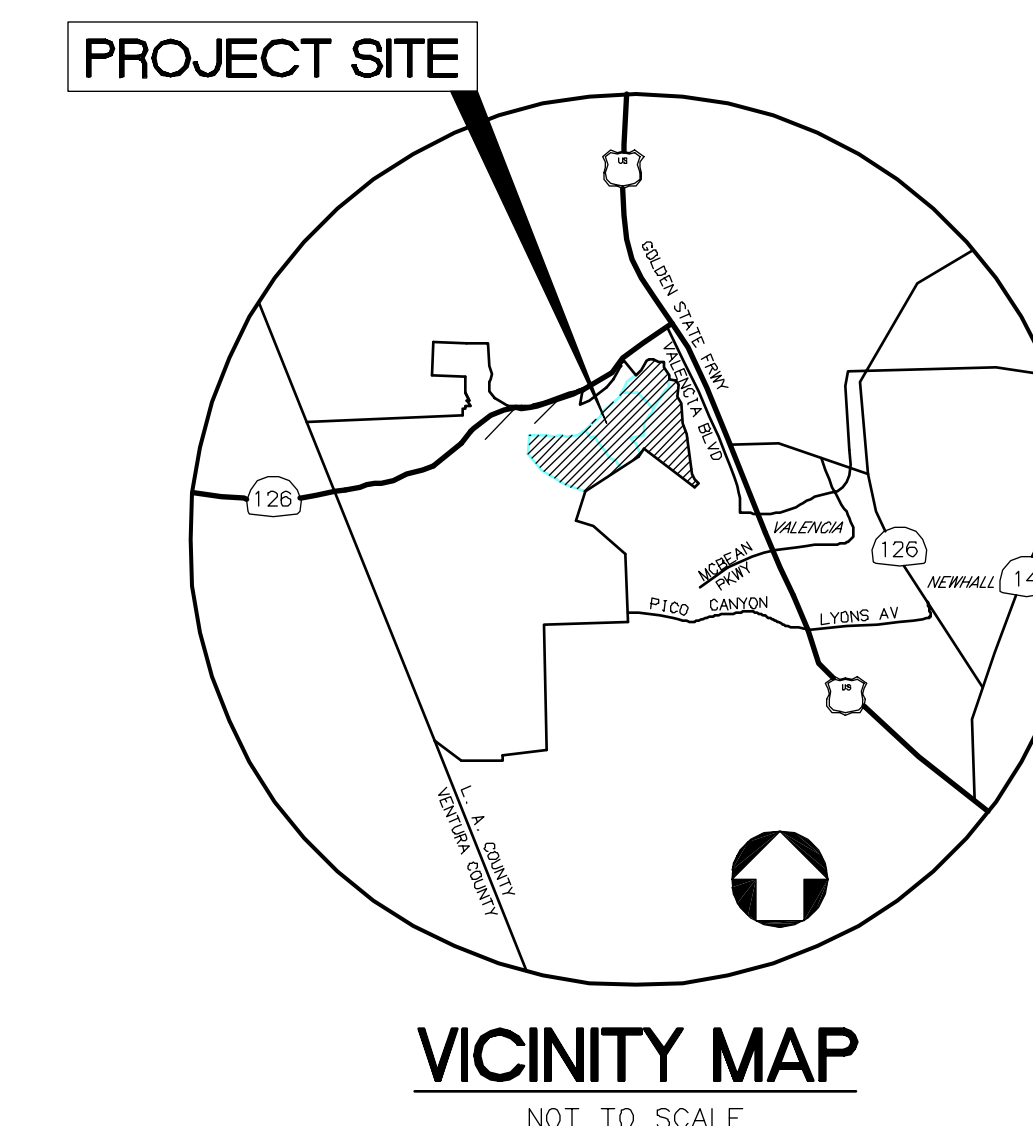
LEGAL DESCRIPTION:

PARCELS 11, 12, 13, 14, 15, 21, 22 OF
PARCEL MAP NO. 24500-01
PMB 293 PG 34 / 67, RECORDS OF LOS ANGELES COUNTY.

SURVEY NOTE:

TREE SURVEY DATA COLLECTION
PERFORMED BY IMPACT SCIENCES
APRIL 2006





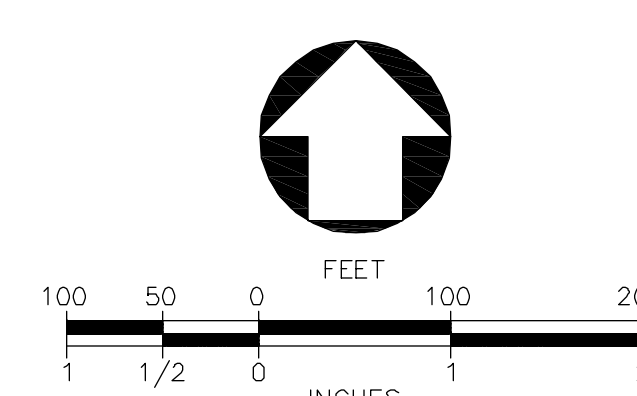
DETAIL 2

LEGAL DESCRIPTION:

PARCELS 11, 12, 13, 14, 15, 21, 22 OF
PARCEL MAP NO. 24500-01
PMB 293 PG 34 / 67, RECORDS OF LOS ANGELES COUNTY.

SURVEY NOTE:

TREE SURVEY DATA COLLECTION
PERFORMED BY IMPACT SCIENCES
MARCH, 2004

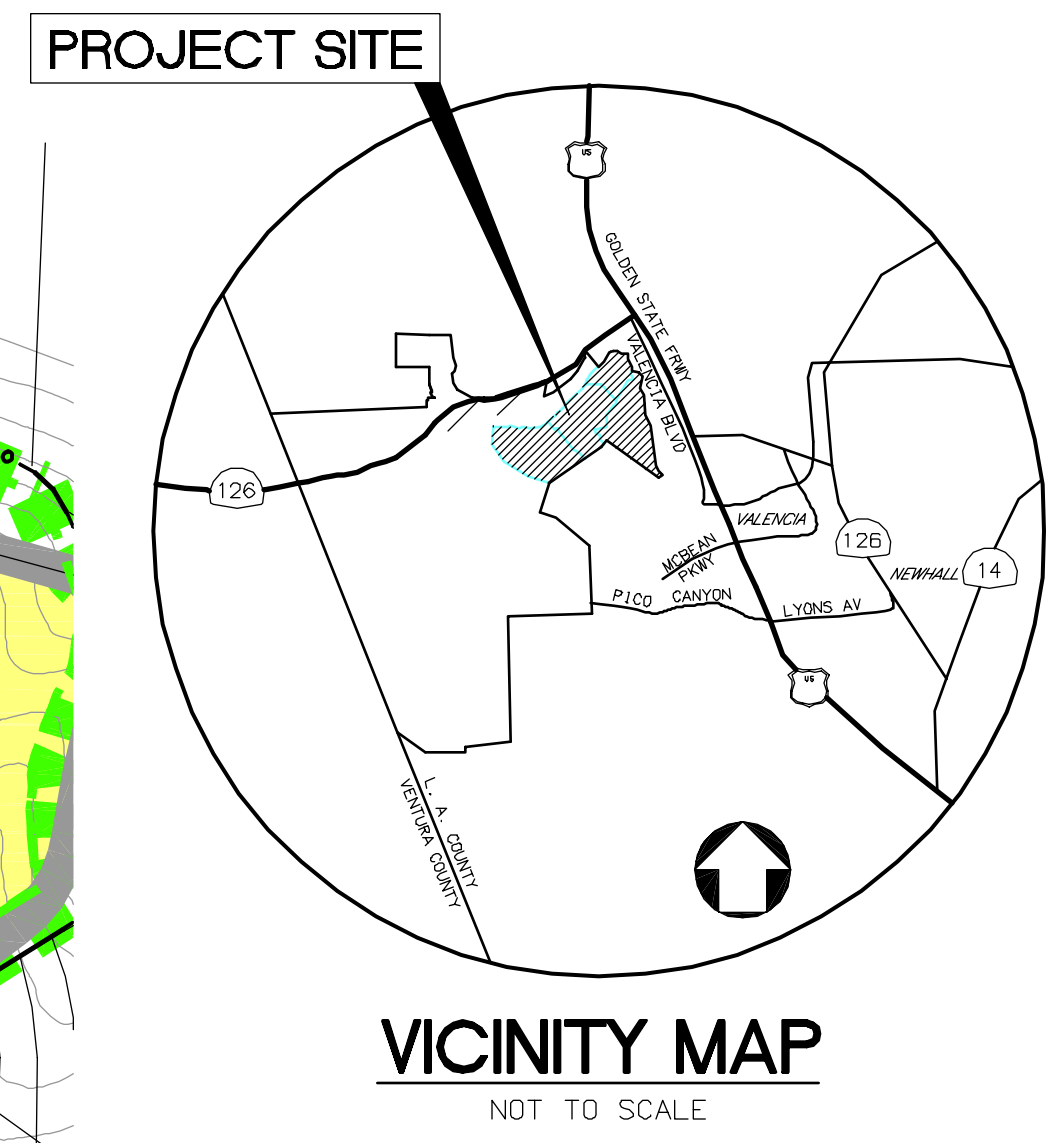
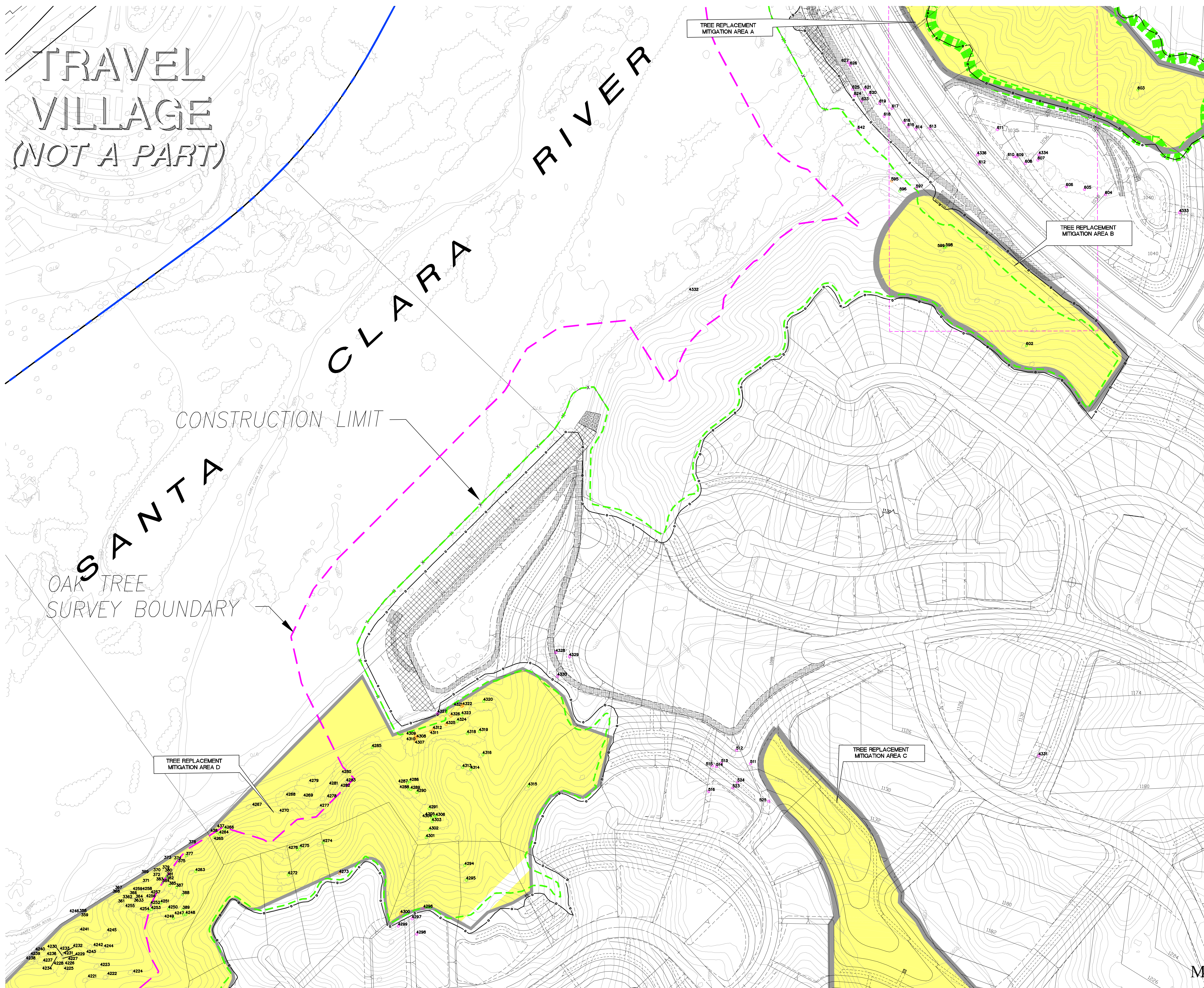


OAK TREE LEGEND:

- OAK TREE - NO IMPACT
- OAK TREE - ENCROACHED
- OAK TREE - REMOVAL
- OAK TREE - GREATER THAN 200 FT FROM GRADING LIMITS

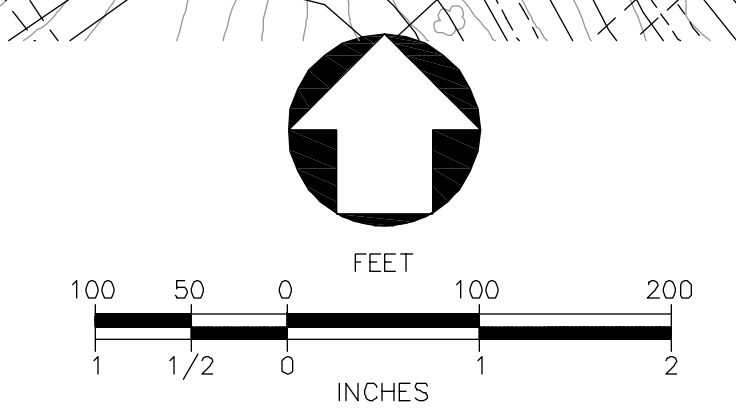
LEGEND:

- SPECIFIC PLAN BOUNDARY
PM24500-01 BOUNDARY
- EXISTING LOT LINE
PER PM24500-01
- CONSTRUCTION LIMIT
- 200' FROM CONSTRUCTION
LIMIT LINE
- MISSION VILLAGE BOUNDARY
- TREE REPLACEMENT
MITIGATION AREA



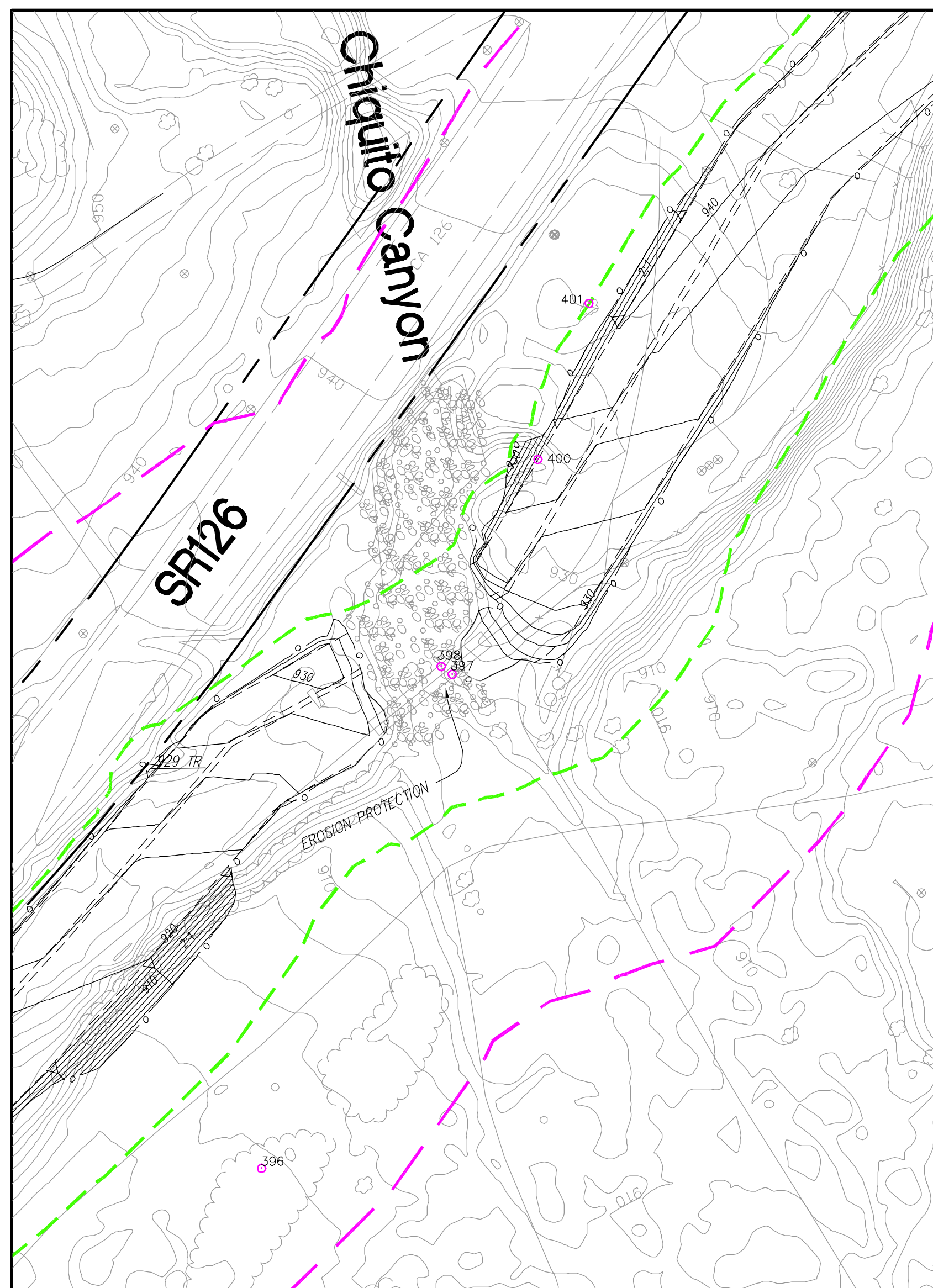
- LEGEND:**
- SPECIFIC PLAN BOUNDARY
 - EXISTING LOT LINE PER PM24500-01
 - CONSTRUCTION LIMIT
 - 200' FROM CONSTRUCTION LIMIT LINE
 - MISSION VILLAGE BOUNDARY
 - TREE REPLACEMENT MITIGATION AREA

- OAK TREE LEGEND:**
- OAK TREE - NO IMPACT
 - OAK TREE - ENCLOSED
 - OAK TREE - REMOVAL
 - OAK TREE - GREATER THAN 200 FT FROM GRADING LIMITS

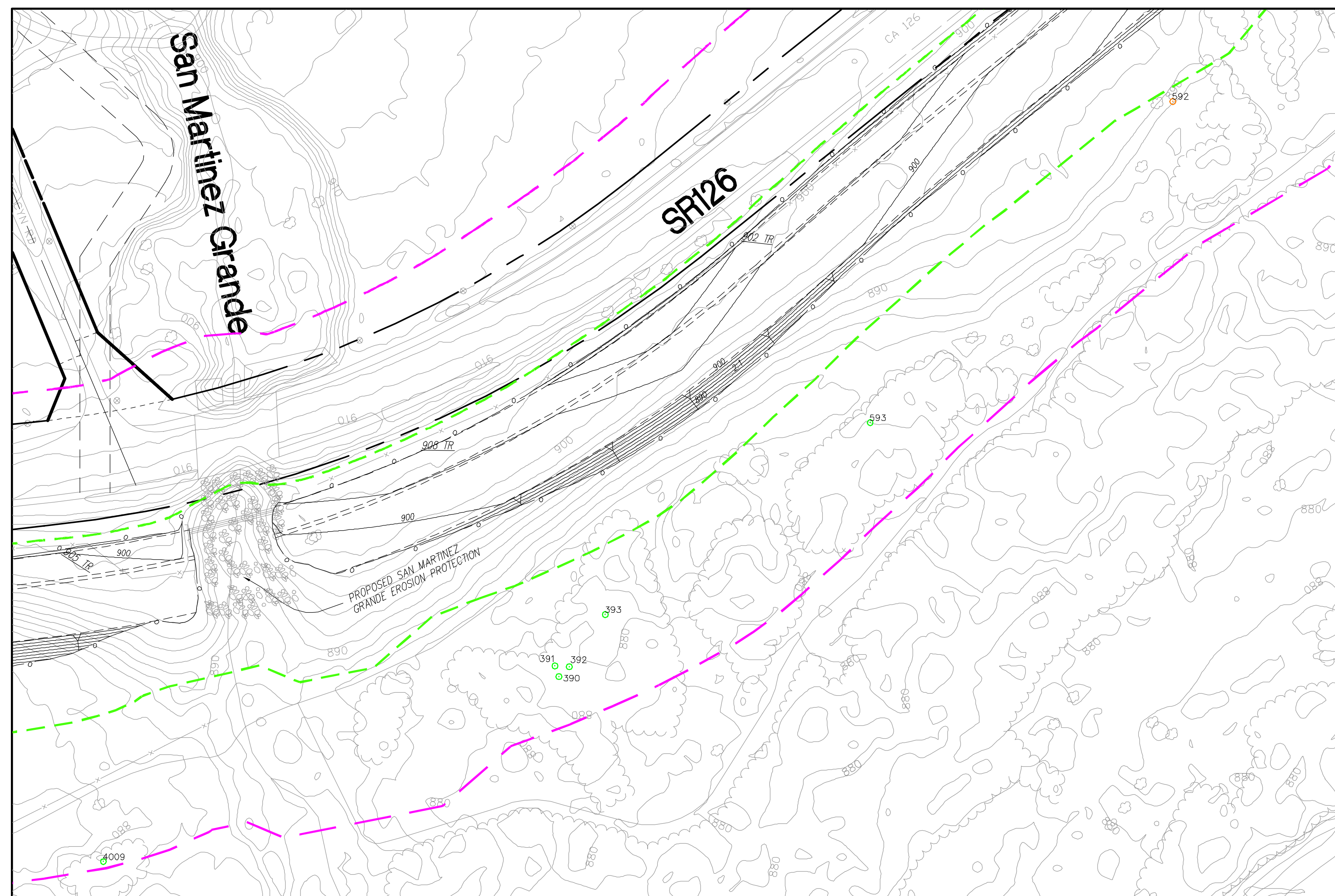


LEGAL DESCRIPTION:
PARCELS 11, 12, 13, 14, 15, 21, 22 OF
PARCEL MAP NO. 24500-01
PMB 293 PG 34 / 67, RECORDS OF LOS ANGELES COUNTY.

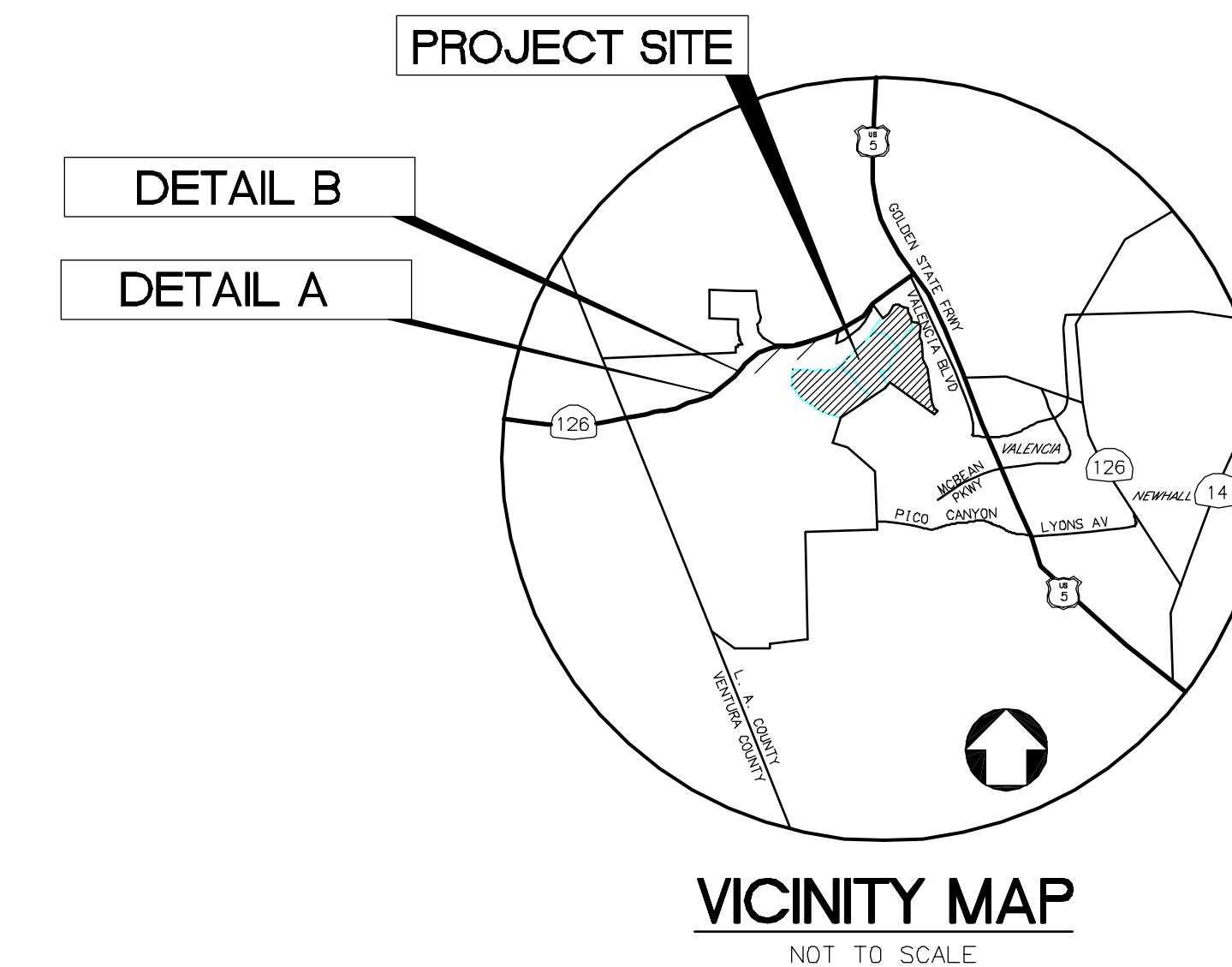
SURVEY NOTE:
TREE SURVEY DATA COLLECTION
PERFORMED BY IMPACT SCIENCES
March, 2004



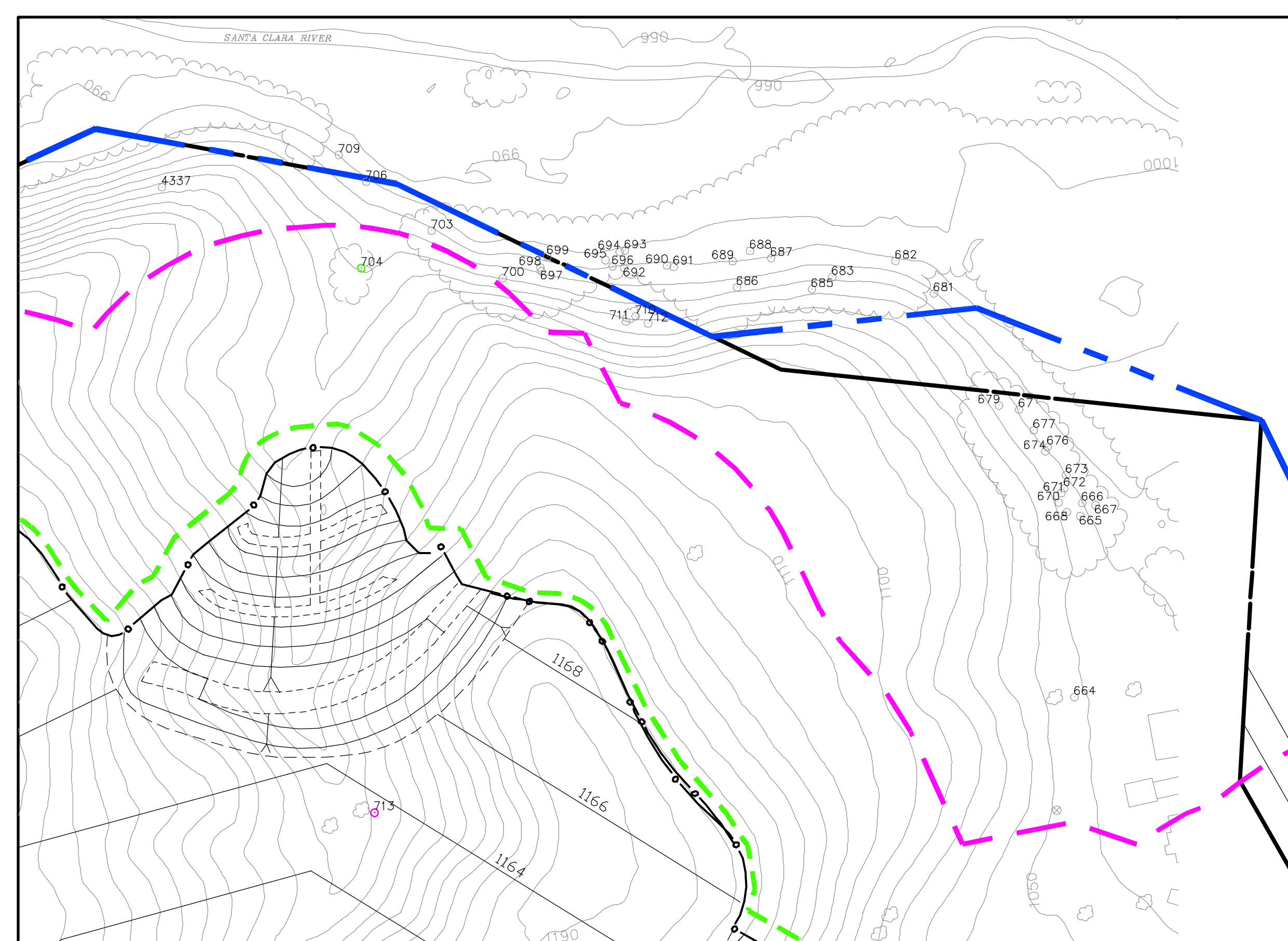
DETAIL B



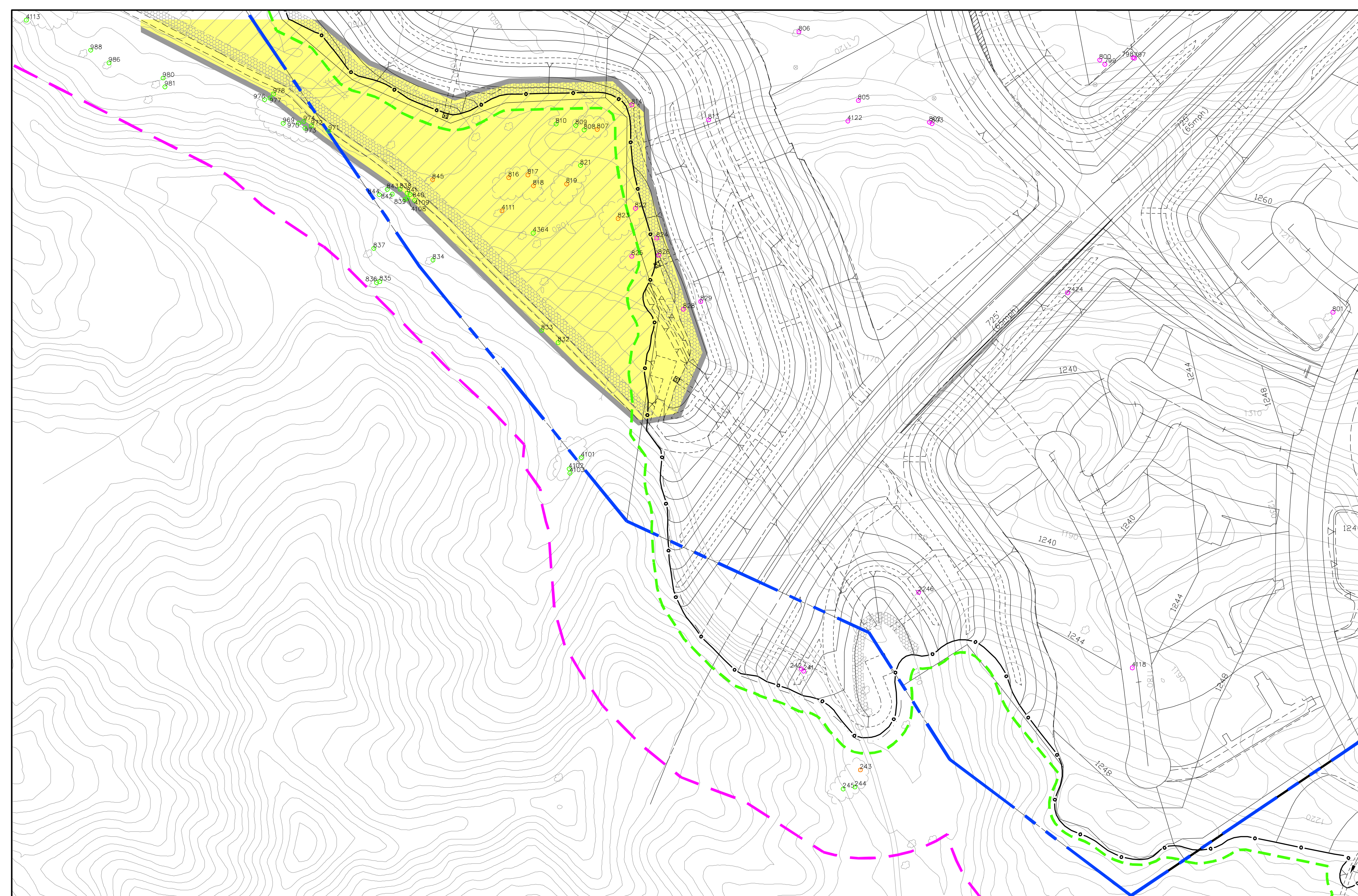
DETAIL A



VICINITY MAP
NOT TO SCALE



DETAIL 4



DETAIL 1

LEGEND:

- SPECIFIC PLAN BOUNDARY
- EXISTING LOT LINE
- CONSTRUCTION LIMIT
- 200' FROM CONSTRUCTION LIMIT LINE
- MISSION VILLAGE BOUNDARY
- TREE REPLACEMENT MITIGATION AREA

OAK TREE LEGEND:

- OAK TREE - NO IMPACT
- OAK TREE - ENCROACHED
- OAK TREE - REMOVAL
- OAK TREE - GREATER THAN 200 FT FROM GRADING LIMITS

LEGAL DESCRIPTION:

PARCELS 11, 12, 13, 14, 15, 21, 22 OF
PARCEL MAP NO. 24500-01
PMB 293 PG 34 / 67, RECORDS OF LOS ANGELES COUNTY.

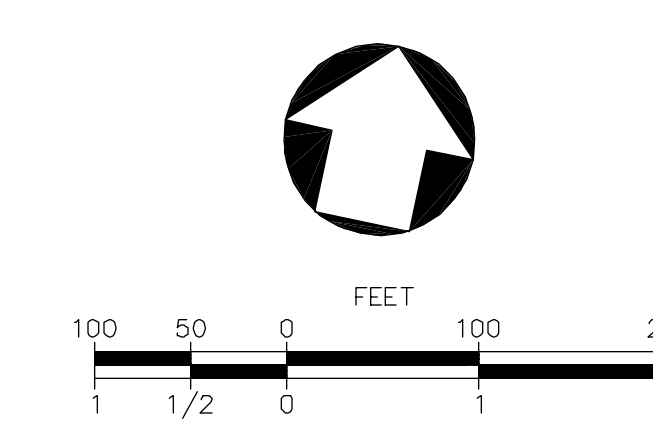
SURVEY NOTE:

TREE SURVEY DATA COLLECTION
PERFORMED BY IMPACT SCIENCES
MARCH, 2004

VTTM 61105
MISSION VILLAGE
OAK TREE REPORT

DATE: 12/06/2006 REVISED ON:
JOB No: 1NRC0120.02 SHEET 5 OF 6

PSOMAS



OAK TREE LEGEND:

- OAK TREE - NO IMPACT
- OAK TREE - ENCROACHED
- OAK TREE - REMOVAL
- OAK TREE - GREATER THAN 200 FT FROM GRADING LIMITS

VTTM 61105
MISSION VILLAGE
OAK TREE REPORT

P S O M A S

DATE: 11/29/2006 REVISED ON:
JOB No: 1NRC0120.02 SHEET 6 OF 6

3.0 METHODS

Impact Sciences biologists conducted on-site surveys and evaluations of the oak trees during 2005 and 2006. Only oak trees protected under the Los Angeles County Oak Tree Ordinance were surveyed. The project site was traversed on foot through areas where oak trees occur. Oak tree locations and attribute data were collected from the base of each tree with a Trimble Global Positioning System (GPS) mapping grade system. The GPS stores the spatial data with the evaluation criteria and attribute information required per the County's Oak Tree Ordinance. The locations of trees that occur on or immediately adjacent to the grading limit line were surveyed by Psomas Engineering with "professional survey grade equipment" to map trees to a sub-centimeter level of accuracy.

In addition, while conducting tree surveys, biologists identified all oak trees that have the potential to be successfully relocated to undisturbed open space areas within the Newhall Ranch Specific Plan boundary. Trees identified as candidates for relocation based on the current assessments (e.g., health, vigor, aesthetics, balance) are identified in **Table 2** under heading **4.0, RESULTS**.

Field evaluations of all oak trees surveyed included the following:

Tree Characteristics

- Measuring the diameter of the trunk of each (ordinance size) oak tree using a forester's steel diameter-equivalent tape measure. Trees with multiple trunks were measured at breast height and measurements for up to five trunks were inputted in the field. The total number of trunks of trees with more than five trunks were noted in the comment section of the data spreadsheet (**Appendix A**);
- Measuring height and crown radius for each tree in all directions (north, south, east, and west);
- Characterizing the balance or symmetry of each oak tree based on the crown radius measurements and whether or not the tree was leaning or unstable; and
- Identification of trees that are classified as heritage oak trees.

Physical Condition

- Identification of damage caused by pathogens or insect pests, by natural causes such as lightning, or from human activity;
- Evaluation of vigor based on such parameters as amount of new growth, leaf color, abnormal bark, dead wood, evidence of wilt, excessive necrosis or leaf necrosis, thinning of crown, etc.; and
- Assessment of overall health based on the evaluation of vigor, presence of damage, and comparison of typical archetype tree of same species.

Recommended Measures

- Identification of whether the tree requires safety pruning, such as the removal of dead or weak branches, and if a cable or brace should be installed if the tree is a save and would not be impacted by proposed development.

Grade

- A subjective alphabetical ranking (“A” being best and “F” being worst) was assigned for vigor, overall health, aesthetic value, and balance for each tree based on the criteria described below. Photographic examples of the alphabetical rankings for each of the four aforementioned survey parameters are shown below in **Figures 4** through **9**.

“A” = Excellent: A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease, or pest infestation.

“B” = Good: A healthy and vigorous tree with minor visible signs of stress, disease, and/or pest infestation. Some maintenance measures may need to be implemented such as, pruning of dead wood or broken branches.

“C” = Fair: Although healthy in overall appearance, there is abnormal amount of stress or disease/insect infestation, and a substantial amount of maintenance may be needed.

“D” = Poor: A tree that may be exhibiting a substantial amount of stress, disease, or insect damage than what the amount that is expected for the species. The tree may be in a state of rapid decline, which may vary greatly in sings of dieback, necrosis, or other symptoms caused by pathogens or insect pests.

“F” = Nearly Dead: An unhealthy tree in which mortality is inevitable. Examples of such trees include those that may show signs of disease and/or pest infestation, have a substantial amount of defoliation, and appear to be a safety hazard.

“E” = Dead: This tree has no foliage and exhibits no sign of life or vigor.

All oak trees surveyed within the Mission Village Planning Area are displayed on attached engineering plans prepared by Psomas Engineering (Sheets 1-5). All exhibits show oak trees occurring within the proposed grading limits and within 200 feet of the grading limit line, as well as proposed on-site oak tree mitigation areas.



Figure 4 – Photo of Oak Tree with an “A” (Excellent) Letter Grade



Figure 5 – Photo of Oak Tree with an “B” (Good) Letter Grade

SOURCE: Impact Sciences, Inc. – December 2006

FIGURES **4 & 5**

Site Photos



Figure 6 – Photo of Oak Tree with an “C” (Fair) Letter Grade



Figure 7 – Photo of Oak Tree with an “D” (Poor) Letter Grade

SOURCE: Impact Sciences, Inc. – December 2006

FIGURES **6 & 7**

Site Photos



Figure 8 – Photo of Oak Tree with an “E” (Almost Dead) Letter Grade



Figure 9 – Photo of Oak Tree with an “F” (Dead) Letter Grade

SOURCE: Impact Sciences, Inc. – December 2006

FIGURES **8 & 9**

Site Photos

4.0 RESULTS

A total of 511 oak trees subject to the Los Angeles County Oak Tree Ordinance were surveyed within the Mission Village Project Site, which includes the VTTM 61105 boundary, the proposed grading limit line, and all areas within 200 feet of the grading limit line (see attached maps). Of the 511 oak trees surveyed, a total of 160 oak trees (31% of all trees surveyed) are planned for permanent removal, 28 of which were identified as candidates for relocation to undisturbed open space areas or other areas within the Specific Plan boundary (see **Table 3**). Of the oak trees planned for removal, 144 are coast live oaks (*Quercus agrifolia*); 11 are valley oaks (*Q. lobata*); four are scrub oaks (*Q. berberidifolia*); and one is a MacDonald's oak [*Q. macdonaldii*], a hybrid of a valley oak and a scrub oak. A total of 12 coast live oaks and one valley oak that are planned for removal/relocation are considered heritage trees under Los Angeles County Oak Tree Ordinance.

Furthermore, a total of 52 coast live oak (three of which are heritage trees) and one scrub oak may be encroached/damaged by proposed grading and construction activities. There are 282 oak trees (55% of all trees surveyed) that occur within 200 feet from the grading limit line, none of which would be removed or encroached upon by construction-related activities. A total of 16 dead trees were surveyed on the project site, none of which would require a Los Angeles Oak Tree Permit if removed or encroached.

A summary of the field data collected from the 2005/2006 oak tree survey is shown in **Table 1, Summary of Mission Village Project Area Oak Tree Survey Data**. Furthermore, **Table 2, Type of Project-Related Impact Proposed on Each Oak Tree Planned for Removal**, describes the type of project-related impact proposed on each oak tree planned for removal or that would be encroached during grading activities.

Table 1
Summary of Mission Village Project Area Oak Tree Survey Data

	Coast Live Oak (<i>Q. agrifolia</i>)	Valley Oak (<i>Q. lobata</i>)	Scrub Oak (<i>Q. berberidifolia</i>)	Valley Oak Hybrid (<i>Q. Macdonaldii</i>)	Total (% of trees surveyed)
Total Number of Trees Surveyed	472	32	7	1	511
Total Number of Dead Trees	16	--	--	--	16 (3%)
Total Number of Heritage Trees (≥ 36" DBH)	Removals	1	--	--	13 (2.5%)
	Encroached	--	--	--	3 (.5%)
	Within 200'	6	--	--	12 (2%)
Total Number of Oak Trees Planned for Removal (includes heritage trees)	144	11	4	1	160 (31%)
Total Number of Oak Trees That May be Encroached During Grading Activities (includes heritage trees)	52	--	1	--	53 (10%)
Total Number of Oak Trees that Occur within 200 Feet from Grading Limit Line and Would <u>Not</u> be Removed or Encroached (includes heritage trees)	260	20	2	--	282 (55%)
Total Number of Oak Trees that Would Require a Los Angeles County Oak Tree Permit (removal + encroached)					213 (42%)

Note: Dead trees are included in the total trees surveyed (511); are displayed on all exhibits, and are included in Appendix A, but are not considered in the total counts for trees that would require a permit for proposed impacts (removal + encroached).

Table 2
Type of Project-Related Impact Proposed on Each Oak Tree Planned for Removal

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
7	Removal	Road	Sheet 4 of 5
139	Encroached	Road	Sheet 2 of 5
161	Encroached	Road	Sheet 2 of 5
164	Encroached	Road	Sheet 2 of 5
165	Encroached	Road	Sheet 2 of 5
167	Encroached	Road	Sheet 2 of 5
168	Encroached	Road	Sheet 2 of 5
169	Removal	Building Pad	Sheet 2 of 5
170	Removal	Building Pad	Sheet 2 of 5
171	Removal	Building Pad	Sheet 2 of 5
172	Removal	Building Pad	Sheet 2 of 5
173	Removal	Road	Sheet 2 of 5
175	Removal	Building Pad	Sheet 2 of 5
176	Removal	Building Pad	Sheet 2 of 5
179	Removal	Road	Sheet 2 of 5
180	Removal	Road	Sheet 2 of 5
181	Removal	Road	Sheet 2 of 5
182	Removal	Road	Sheet 2 of 5
183	Removal	Road	Sheet 2 of 5
184	Removal	Road	Sheet 2 of 5
*185	Removal	Road	Sheet 2 of 5
186	Removal	Building Pad	Sheet 2 of 5
189	Removal	Road	Sheet 2 of 5
190	Removal	Road	Sheet 2 of 5
191	Removal	Building Pad	Sheet 2 of 5
192	Removal	Building Pad	Sheet 2 of 5
197	Removal	Building Pad	Sheet 2 of 5
214	Removal	Building Pad	Sheet 2 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
218	Removal	Building Pad	Sheet 2 of 5
219	Removal	Building Pad	Sheet 2 of 5
220	Removal	Building Pad	Sheet 2 of 5
225	Encroached	Building Pad	Sheet 2 of 5
241	Removal	Road	Sheet 5 of 5
242	Removal	Road	Sheet 5 of 5
243	Encroached	Road	Sheet 5 of 5
254	Encroached	Building Pad	Sheet 2 of 5
*255	Removal	Building Pad	Sheet 2 of 5
396	Removal	Utility Corridor	Sheet 5 of 5
397	Removal	Chiquito Canyon Culvert Outlet	Sheet 5 of 5
398	Removal	Chiquito Canyon Culvert Outlet	Sheet 5 of 5
400	Removal	Road	Sheet 5 of 5
401	Removal	Road	Sheet 5 of 5
434	Removal	Building Pad	Sheet 2 of 5
511	Removal	Road	Sheet 3 of 5
512	Removal	Building Pad	Sheet 3 of 5
513	Removal	Building Pad	Sheet 3 of 5
514	Removal	Building Pad	Sheet 3 of 5
515	Removal	Building Pad	Sheet 3 of 5
516	Removal	Building Pad	Sheet 3 of 5
523	Removal	Building Pad	Sheet 3 of 5
524	Removal	Building Pad	Sheet 3 of 5
525	Removal	Road	Sheet 3 of 5
592	Encroached	Utility Corridor	Sheet 5 of 5
*595	Encroached	Basin	Sheet 3 of 5
*597	Removal	Road	Sheet 3 of 5
604	Removal	Basin	Sheet 3 of 5
605	Removal	Basin	Sheet 3 of 5
606	Removal	Basin	Sheet 3 of 5
607	Removal	Basin	Sheet 3 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
608	Removal	Basin	Sheet 3 of 5
609	Removal	Basin	Sheet 3 of 5
610	Removal	Basin	Sheet 3 of 5
*611	Removal	Basin	Sheet 3 of 5
612	Removal	Road	Sheet 3 of 5
613	Removal	Road	Sheet 3 of 5
614	Removal	Road	Sheet 3 of 5
615	Removal	Road	Sheet 3 of 5
*616	Removal	Road	Sheet 3 of 5
617	Removal	Road	Sheet 3 of 5
618	Removal	Road	Sheet 3 of 5
619	Removal	Road	Sheet 3 of 5
620	Removal	Road	Sheet 3 of 5
*621	Removal	Road	Sheet 3 of 5
623	Removal	Road	Sheet 3 of 5
*624	Removal	Road	Sheet 3 of 5
625	Removal	Road	Sheet 3 of 5
626	Removal	Road	Sheet 3 of 5
627	Removal	Road	Sheet 3 of 5
*642	Removal	Road	Sheet 3 of 5
659	Encroached	Road	Sheet 2 of 5
713	Removal	Building Pad	Sheet 4 of 5
*714	Removal	Building Pad	Sheet 4 of 5
716	Removal	Park	Sheet 4 of 5
717	Removal	Park	Sheet 4 of 5
718	Removal	Park	Sheet 4 of 5
719	Removal	Park	Sheet 4 of 5
761	Removal	Road	Sheet 4 of 5
762	Removal	Road	Sheet 4 of 5
796	Removal	Building Pad	Sheet 2 of 5
797	Removal	Building Pad	Sheet 5 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
798	Removal	Building Pad	Sheet 5 of 5
799	Removal	Building Pad	Sheet 5 of 5
800	Removal	Building Pad	Sheet 5 of 5
801	Removal	Building Pad	Sheet 5 of 5
802	Removal	Building Pad	Sheet 5 of 5
803	Removal	Building Pad	Sheet 5 of 5
805	Removal	Building Pad	Sheet 5 of 5
806	Removal	Building Pad	Sheet 5 of 5
807	Encroached	Road	Sheet 5 of 5
813	Removal	Road	Sheet 5 of 5
814	Removal	Road	Sheet 5 of 5
816	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
817	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
*818	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
819	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
822	Removal	Road	Sheet 5 of 5
*823	Encroached	Road	Sheet 5 of 5
824	Removal	Road	Sheet 5 of 5
825	Encroached	Road	Sheet 5 of 5
826	Removal	Road	Sheet 5 of 5
828	Removal	Road	Sheet 5 of 5
829	Removal	Road	Sheet 5 of 5
845	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
851	Removal	Building Pad	Sheet 2 of 5
853	Removal	Building Pad	Sheet 2 of 5
854	Removal	Building Pad	Sheet 2 of 5
855	Encroached	Lion Canyon Stream Restoration	Sheet 2 of 5
*856	Removal	Lion Canyon Stream Restoration	Sheet 2 of 5
862	Encroached	Lion Canyon Stream Restoration	Sheet 2 of 5
863	Removal	Building Pad	Sheet 2 of 5
*865	Removal	Slope Protection	Sheet 2 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
867	Removal	Slope Protection	Sheet 2 of 5
868	Removal	Slope Protection	Sheet 2 of 5
869	Removal	Building Pad	Sheet 2 of 5
870	Removal	Building Pad	Sheet 2 of 5
871	Removal	Basin	Sheet 2 of 5
893	Encroached	Basin	Sheet 2 of 5
894	Encroached	Basin	Sheet 2 of 5
895	Encroached	Basin	Sheet 2 of 5
896	Removal	Basin	Sheet 2 of 5
926	Removal	Basin	Sheet 2 of 5
927	Removal	Basin	Sheet 2 of 5
928	Removal	Basin	Sheet 2 of 5
929	Removal	Basin	Sheet 2 of 5
930	Removal	Basin	Sheet 2 of 5
931	Removal	Basin	Sheet 2 of 5
932	Encroached	Basin	Sheet 2 of 5
957	Encroached	Road	Sheet 2 of 5
958	Removal	Road	Sheet 2 of 5
961	Encroached	Road	Sheet 2 of 5
962	Encroached	Road	Sheet 2 of 5
2246	Removal	Road	Sheet 5 of 5
2320	Encroached	Building Pad	Sheet 2 of 5
2325	Encroached	Building Pad	Sheet 2 of 5
2354	Encroached	Building Pad	Sheet 2 of 5
2424	Removal	Road/ Building Pad	Sheet 5 of 5
2461	Removal	Road	Sheet 4 of 5
4111	Encroached	Lion Canyon Stream Restoration	Sheet 5 of 5
4118	Removal	Road	Sheet 5 of 5
4122	Removal	Building Pad	Sheet 5 of 5
4123	Removal	Lion Canyon Stream Restoration	Sheet 2 of 5
4124	Removal	Slope Protection	Sheet 2 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
4161	Removal	Building Pad	Sheet 2 of 5
4172	Removal	Building Pad	Sheet 2 of 5
4174	Removal	Road	Sheet 2 of 5
4175	Removal	Road	Sheet 2 of 5
4176	Removal	Building Pad	Sheet 2 of 5
4177	Removal	Road	Sheet 2 of 5
4178	Removal	Building Pad	Sheet 2 of 5
4179	Removal	Building Pad	Sheet 2 of 5
4180	Removal	Building Pad	Sheet 2 of 5
4181	Removal	Building Pad	Sheet 2 of 5
4182	Removal	Building Pad	Sheet 2 of 5
4183	Removal	Building Pad	Sheet 2 of 5
4184	Encroached	Building Pad	Sheet 2 of 5
4200	Encroached	Building Pad	Sheet 2 of 5
4214	Removal	Building Pad	Sheet 2 of 5
4215	Removal	Building Pad	Sheet 2 of 5
4216	Removal	Building Pad	Sheet 2 of 5
4217	Removal	Building Pad	Sheet 2 of 5
4218	Removal	Building Pad	Sheet 2 of 5
4219	Removal	Building Pad	Sheet 2 of 5
4273	Encroached	Building Pad	Sheet 3 of 5
4296	Removal	Building Pad	Sheet 3 of 5
4297	Removal	Building Pad	Sheet 3 of 5
4298	Removal	Building Pad	Sheet 3 of 5
4299	Removal	Building Pad	Sheet 3 of 5
4300	Encroached	Building Pad	Sheet 3 of 5
4307	Encroached	Basin	Sheet 3 of 5
4308	Encroached	Basin	Sheet 3 of 5
4309	Encroached	Basin	Sheet 3 of 5
4310	Encroached	Basin	Sheet 3 of 5
4311	Encroached	Basin	Sheet 3 of 5

Tree Number	Type of Impact	Type of Project-Related Impact	Map Location
4312	Encroached	Basin	Sheet 3 of 5
4321	Encroached	Basin	Sheet 3 of 5
4322	Encroached	Basin	Sheet 3 of 5
4325	Encroached	Basin	Sheet 3 of 5
4326	Encroached	Basin	Sheet 3 of 5
4327	Removal	Basin	Sheet 3 of 5
*4328	Removal	Park	Sheet 3 of 5
4329	Removal	Park	Sheet 3 of 5
4330	Removal	Park	Sheet 3 of 5
*4331	Removal	Building Pad	Sheet 3 of 5
4333	Removal	Basin	Sheet 3 of 5
4334	Removal	Basin	Sheet 3 of 5
4336	Removal	Road	Sheet 3 of 5
4351	Removal	Park	Sheet 4 of 5
4352	Removal	Park	Sheet 4 of 5
4353	Removal	Park	Sheet 4 of 5
4361	Removal	Road	Sheet 4 of 5
4363	Removal	Slope Protection	Sheet 2 of 5
4366	Removal	Building Pad	Sheet 4 of 5
4368	Removal	Road	Sheet 4 of 5
4376	Removal	Building Pad	Sheet 2 of 5
4377	Removal	Building Pad	Sheet 2 of 5

* Heritage Tree

To reduce the permanent loss of mature oak trees and the habitat they provide to indigenous plant and animal species, as well as migrating birds, Newhall Land and Farming has retained Richard Johnson and Associates to develop boxing, planting, and maintenance procedures for candidate trees for relocation within the Newhall Ranch Specific Plan boundary. As shown in **Table 3, Oak Trees Located on the Mission Village Project Site that are Proposed for Relocation within the Specific Plan Boundary Based on Recent Assessments**, 28 of the oak trees that are proposed for removal have been identified as candidates for relocation. Attached to this report as **Appendix B**, is the Richard Johnson and Associates'

Boxing Specifications and Recommendations for transplanting and maintaining trees selected for relocation.

Table 3
Oak Trees Located on the Mission Village Project Site that are Proposed for Relocation within the Specific Plan Boundary Based on Recent Assessments

Oak Species	Tree Tag Identification Number
Coast live oak (<i>Quercus agrifolia</i>)	170, 171, 173, 179, 183, 218, 511, 523, 524, 525, 611, 796, 801, 802, 806, 824, 851, 853, 4118, 4172, 4175, 4215, 4351, 4352, 4361
Valley oak (<i>Quercus lobata</i>)	716, 718, 761

5.0 CONCLUSION

As indicated above, 160 oak trees will be removed and 53 will be encroached, thus, 213 oak trees (42% of all trees surveyed) will require an oak tree permit from the County of Los Angeles.

6.0 SUGGESTED MITIGATION MEASURES

Pursuant to Section 22.56.2090 of the Los Angeles County Oak Tree Ordinance, the following mitigation measures are proposed to preserve and protect the oak trees addressed in this report. These mitigation and maintenance measures are suggested to mitigate the loss or impacts to 213 oak trees proposed to be removed or encroached, and to preserve and protect the remaining oak trees on the site.

MM-1 Replacement Trees

- *Consistent with the Newhall Ranch Specific Plan, oak trees removed or damaged shall be replaced by a tree of the same species at a ratio of 2:1.*
- *All replacement trees shall be at least a 15-gallon specimen in size and measure 1 inch or more in diameter, as measured from 1 foot above the base. Free-form trees with multiple stems are permissible; the combined diameter of the two largest stems of such trees shall measure a minimum of 1 inch in diameter, as measured 1 foot above the base. Replacement trees shall consist exclusively of indigenous oak trees and be certified as being grown from a seed source collected in Los Angeles or Ventura Counties.*

MM-2 Protective Fencing

A plan shall be developed for protecting oak trees on the subject property during and after development. This plan shall be approved by the Forestry Division of the County of Los Angeles.

- *Equipment damage to limbs, trunks, and roots of all remaining trees shall be avoided during project construction and development. Even slight trunk injuries can result in susceptibility to long-term pathogenic maladies.*
- *Protective fencing not less than four feet in height shall be placed at the limits of the protective zone of any individual oak tree or dense stand of oak trees within 200 feet of the grading limits, and shall be inspected by the forester and/or fire warden prior to commencement of any activity on the subject property, and shall remain in place until construction is completed.*

MM-3 Grading Restrictions Near Protective Zones

Care must be taken to limit grade changes near the protective zone of an oak tree. Grade changes can lead to plant stress from oxygen deprivation or oak root fungus at the root collar of oaks. Minor grade changes further from the trunk are not as critical but can negatively affect the health of the tree if not carefully monitored by a County-approved certified arborist.

- *The grade shall not be lowered or raised around the trunks (i.e., within the protective zone) of any oak tree without the approval of the Los Angeles County forester or a County-certified arborist. A certified arborist shall supervise all excavation or grading proposed within the protective zone of a tree.*
- *Trenching, excavation, or clearance of vegetation within the protective zone of an oak tree shall be accomplished by the use of hand tools or small hand-held power tools. Any major roots encountered shall be conserved to the greatest extent possible and treated as recommended by the certified arborist.*
- *No utility trenches shall be routed within the protective zone of an oak tree unless no feasible alternative locations are available, and shall be approved by the County forester.*

MM-4 Equipment Storage

- *No storage of equipment, supplies, vehicles, or debris shall be permitted within the protective zone of an oak tree.*
- *No dumping of construction wastewater, paint, stucco, concrete, or any other clean-up waste shall occur within the protective zone of an oak tree.*
- *No temporary structures shall be placed within the protective zone of any remaining oak tree.*

MM-5 Maintenance

Healthy trees, if not maintained, often grow beyond their ability to support themselves and fail at their most naturally occurring weak point. This is typically at a branch union at or near the main crotch of the tree. Weight-reduction pruning and/or cabling is important in any tree preservation program. Pruning of oak trees within residential neighborhoods is recommended every four to six years, based on a County-certified arborist's determination.

- *Pruning of replacement oak trees and preserved oak trees shall include the removal of dead wood, stubs, and medium pruning of branches 2 inches in diameter or less.*
- *Pruning of replacement oak trees and preserved oak trees shall be in accordance with the guidelines published by the National Arborist Association. In no case shall more than 20 percent of the tree canopy of any oak tree be removed. Cuts over 2 inches in diameter shall require a pruning permit from the County. After pruning, installation of support cables to prevent future main crotch failures may be necessary based on a County-certified arborist's determination.*
- *All replacement oak trees shall be maintained in accordance with the principles set forth in the publication, Oak Trees: Care and Maintenance prepared by the Forestry Division of the County of Los Angeles.*
- *A two-year maintenance period shall begin upon the start of planting the replacement trees. All replacement trees failing to survive within this period shall be replaced. A new two-year maintenance period shall start for each tree that failed to survive and required a replacement tree to be planted.*

MM-6 Frequency of Watering

Care should be taken to avoid placing any irrigation devices within watering distance of the protected zone of oak trees. Too much moisture near the base of an oak tree is generally believed to be the leading cause of death of oak trees in residential settings, and oak root fungus can occur as a result of over watering. Oak trees survive and thrive on annual rainfall alone and generally do not require supplemental irrigation except during periods of extreme drought or for establishment of newly planted trees (i.e., replacement trees).

- *Irrigation water shall not reach within 15 feet of any oak trunk.*
- *Neither grass nor ground covers shall be planted under the canopy of oak trees.*

MM-7 Control of Diseases and Pests

Oak trees generally have an acceptable level of common insect pests. During the visual inspection of the trees assessed, no evidence of sudden oak death (*Phytophthora ramorum*) or bleeding canker (*Phytophthora cactorum*) was observed. However, oak wilt fungus (*Ceratocystis fagacearum*) was observed on two trees on the project site. The parasite, mistletoe (*Phoradendron villosum* ssp. *villosum*), is a common threat to oak

trees; however, despite the negative effect mistletoe has on its tree hosts, both mistletoe and oaks are native to California and have co-existed and co-evolved for hundreds of years. Mistletoe was observed on several of the oak trees surveyed.

- *A County-certified arborist shall evaluate the effects of mistletoe, pathogens, and insect pests on the remaining preserved and planted oak trees periodically (about every five to seven years), in addition to the overall health and structural integrity of the trees, to ensure longevity of remaining oak trees.*

MM-8 Construction Monitoring

Damage to remaining trees must be avoided by workers and equipment during construction activities.

- *A qualified biologist or County-certified arborist shall monitor on-site construction and grading activities occurring near all identified oak tree protection zones to ensure that damage to oak trees does not occur.*
- *Prior to initiation of construction activities, the qualified biologist or County-certified arborist shall schedule a field meeting to inform personnel (involved in construction) where all protective zones are located and the importance of avoiding encroachment within the protective zones.*

APPENDIX A

Oak Tree Survey Data

Appendix A - Mission Village Project Oak Tree Survey Data

Tree Number	7	81	87	90	91	92	93	96	97	98	99	100	101	102	103	105	106	107	108	110	111	112	115	116	117	126	127
Species																											
Coast Live Oak	X			X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Valley Oak		X																									
Scrub Oak																											
Valley Oak Hybrid																											
Heritage Oak		X	X						X																		
Trunk Diameter	8.5,6.5, 5.5,5	52,14	51	27	15,13,7.7	18,10	17	8,6,6.5	39	23,22	15	19,13,8,6	14,10,5	13,4	17,14,14,4	20,16	0	10,8,5	11,5	8,9	11,11,1,1	11	15,14,6	12,11,5,9	15,13,1	2,5,4	19,7,5,4
Tree Height	17	20	50	28	40	32	32	30	55	42	22	41	32	37	40	38	20	25	17	16	21	22	42	32	20	35	20
Canopy North	15	0	30	19	22	20	15	12	41	30	15	26	25	25	25	21	0	17	17	6	18	16	11	14	10	18	12
Canopy West	12	0	29	16	23	18	17	15	40	27	10	26	22	26	29	22	0	16	8	5	18	6	22	18	13	11	12
Canopy South	15	0	31	16	21	20	20	14	40	18	11	29	21	27	25	22	0	5	4	10	25	1	20	12	15	20	19
Canopy East	14	0	29	18	22	17	21	15	36	21	11	28	20	24	27	19	0	17	5	9	22	12	12	11	15	25	18
Tree Declining			X	X																X							
Broken/Dead Limbs										X					X				X	X	X	X					
Sparse Foliage			X							X						X			X	X	X						
Excessive Chlorosis/Necrosis			X	X												X											
Mainstem Dieback																					X						
Poor tip Growth			X	X						X																	
Cavity				X					X	X					X												
Weak Crotch																											
Hollow Trunk																											
Trunk Exudation																											
Regrown Stump																											
Exfoliating Bark																											
Insect Damage				X															X								
Diseased																											
Mistletoe																											
Leaning										X									X								
Excessive Water Shoots																											
Surface Roots																											
Fire Scar				X					X	X				X	X				X	X	X		X				
Safety Hazard																											
Safety Prune			X	X						X									X		X		X				
Remove Deadwood										X									X	X	X		X				
Cable/Brace	X									X											X		X				
Vigor	A	F	D	D	B	B	A	A	C	C	B	A	B	B	B	C	F	B	D	B	C	B	B	B	B	A	
Health	A	F	D	D	B	B	A	B	B	C	B	A	B	B	B	B	F	B	D	C	D	B	B	A	B	A	
Aesthetics	A	F	C	C	B	B	B	B	B	B	B	A	B	B	B	B	F	B	D	C	C	C	B	B	C	B	
Balance	A	F	B	C	B	B	B	A	A	C	B	A	A	C	B	A	F	C	C	C	C	D	B	B	A	B	
Removal	X	Dead																									
Encroached						X	X			X	X																
200ft from Grading			X	X	X			X	X			X	X	X	X	X	Dead	X	X	X	X	X	X	X	X	X	
Comments	10 trunks total										NT, BH																

Appendix A - Mission Village Project Oak Tree Survey Data

[illegible]

Appendix A - Mission Village Project Oak Tree Survey Data

[illegible]

Appendix A - Mission Village Project Oak Tree Survey Data

[illegible]

Appendix A - Mission Village Project Oak Tree Survey Data

Tree Number		613	614	615	616	617	618	619	620	621	623	624	625	626	627	642	651	652	653	654	655	656	657	658	659	660	663	704	
Species																													
Tree Characteristics	Coast Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Valley Oak																												
	Scrub Oak																												
	Valley Oak Hybrid									X		X				X													
	Heritage Oak				X							X																	
	Trunk Diameter	17,13	31	8	49	30	30	24,20,1					30,13,1												6,5,5,5,5,4,5	16	17	24	
	Tree Height	30	43	12	45	40	32	43	45	18	43	22	41	1,5	29	22	48	18	18	12	24	17,5,5	15	14	23	20	24	32	34
	Canopy North	23	27	5	40	30	0	20	14	38	8	38	26	23	25	30	15	12	17	6	10	17	14	16	8	15	16	21	
	Canopy West	13	17	8	25	22	28	28	9	18	0	35	25	4	8	28	4	15	12	7	13	13	14	12	16	14	14	21	
	Canopy South	17	25	21	31	7	36	27	13	0	31	27	32	32	10	34	8	15	17	13	14	12	16	15	10	15	17	21	
Canopy East	19	17	13	30	21	20	30	16	14	27	23	14	37	28	34	17	13	16	15	10	15	15	15	15	16	16	19		
Tree Declining						X			X															X					
Broken/Dead Limbs										X										X									
Sparse Foliage																					X			X					
Excessive Chlorosis/Necrosis						X			X	X					X									X					
Mainstem Dieback																													
Poor tip Growth																													
Cavity																	X												
Weak Crotch																					X								
Hollow Trunk																													
Trunk Exudation																													
Regrown Stump																													
Exfoliating Bark																													
Insect Damage																					X								
Diseased																													
Mistletoe																													
Leaning						X	X			X	X			X															
Excessive Water Shoots										X																			
Surface Roots			X							X																			
Fire Scar																													
Safety Hazard																													
Safety Prune																													
Remove Deadwood																													
Cable/Brace								X											X										
Vigor		B	B	B	A	B	A	A	C	B	A	B	B	A	C	B	C	B	A	B	B	A	A	B	C	B	B	B	
Health		B	A	B	A	B	C	A	C	D	B	A	B	A	C	B	A	C	B	A	D	B	A	B	C	A	A	B	
Aesthetics		B	A	C	A	B	D	A	C	D	C	A	A	A	B	A	C	A	A	C	D	B	B	A	C	B	A	B	
Balance		B	B	D	A	C	E	B	B	E	D	C	B	D	C	A	B	B	A	C	D	B	B	B	C	B	B	B	
Removal		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X													
Encroached																									X				
200ft from Grading																	X	X	X	X	X	X	X		X	X	X	X	
Comments																													

Tree Number		713	714	716	717	718	719	761	762	796	797	798	799	800	801	802	803	805	806	807	808	809	810	813	814	816	817	818	
Species										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Coast Live Oak																													
Valley Oak		X	X	X	X	X	X																						
Scrub Oak									X																				
Valley Oak Hybrid								X																					
Heritage Oak			X																									X	
Trunk Diameter		19	36	30	12.5	16	27	18,14	10,9.5	22	22	21	26	25	24	8.8	11,9,9.9	28,14	18,17	15,11,7	14	21,19	16	19	17,9,8.7	22,20.1	8,17,17	21,16,9	37
Tree Height		35	40	42	25	23	22	26	18	35	30	28	40	40	37	22	30	44	33	37	30	38	26	33	22	41	41	37	
Canopy North		18	23	21	11	18	21	23	15	18	23	19	27	29	30	17	10	22	22	24	0	6	23	17	14	25	25	17	
Canopy West		15	18	23	14	15	15	20	12	15	25	5	27	25	22	16	23	25	23	26	14	11	17	21	16	26	16	22	
Canopy South		19	15	28	12	13	23	22	11	16	24	10	29	15	21	7	25	27	25	26	36	33	15	18	18	36	18	31	
Canopy East		14	13	29	15	16	17	23	17	18	18	22	27	27	29	12	18	24	23	30	17	31	13	18	16	32	20	27	
Tree Declining					X																								
Broken/Dead Limbs					X																	X	X						
Sparse Foliage					X																								
Excessive Chlorosis/Necrosis					X						X																		
Mainstem Dieback																													
Poor tip Growth																													
Cavity			X							X			X	X				X				X						X	
Weak Crotch																													
Hollow Trunk																													
Trunk Exudation														X															
Regrown Stump																													
Exfoliating Bark			X		X							X	X	X															
Insect Damage					X																								
Diseased																													
Mistletoe																													
Leaning																					X							X	
Excessive Water Shoots																													
Surface Roots																													
Fire Scar										X		X	X	X				X						X					
Safety Hazard																													
Safety Prune																													
Remove Deadwood																					X								
Cable/Brace																		X	X									X	
Vigor		B	A	A	E	B	A	A	A	A	B	B	B	B	A	A	A	B	A	A	C	C	A	A	A	A	A	A	A
Health		B	B	A	E	A	B	A	B	A	C	B	B	B	A	A	A	C	A	A	C	C	B	B	A	A	A	A	A
Aesthetics		B	B	A	E	A	B	A	B	A	B	C	B	B	A	A	A	B	A	A	C	C	B	B	A	A	A	A	A
Balance		A	C	B	E	B	B	A	B	A	B	C	B	B	B	B	B	C	A	A	D	D	C	A	A	A	A	C	C
Removal		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X	X				
Encroached																				X						X	X	X	
200ft from Grading																					X	X	X						
Comments																													
												9										7					trunks total		

Appendix A - Mission Village Project Oak Tree Survey Data

	Tree Characteristics																									Physical Conditions											Measures											Comments
Tree Number	819	821	822	823	824	825	826	828	829	832	833	834	835	836	837	838	839	840	841	842	843	844	845	851	853	854	855																					
Species																																																
Coast Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																					
Valley Oak																																																
Scrub Oak																																																
Valley Oak Hybrid																																																
Heritage Oak				X																																												
Trunk Diameter	19,19,1 6,16	17,12,1 1,9,9	20,20,1 8,17,12	49,16,1 3	14,12,1 0,5		25,21,1 8,14	20,15,1 4,14	21,20,1 6,15	13,14	8,5	15,14,1 2,11,10	14	30,20	19	8,6	12	14	11	14,14,1 0,9	8,5,8	9,5,3	15,14,1 2,12,11	28,12,1 0,8	11,11,1 0,10	12,11,8 8	22,20,1 9,19																					
Tree Height	40	50	48	47	27	35	40	42	40	28	18	37	38	30	27	25	50	40	40	45	33	25	41	44	30	26	38																					
Canopy North	28	21	21	30	27	15	27	26	30	13	6	24	20	28	16	17	2	27	16	22	21	19	22	20	25	22	34																					
Canopy West	33	25	28	42	18	20	31	19	32	15	8	23	8	40	23	18	22	3	10	32	22	18	23	27	26	5	32																					
Canopy South	32	23	31	39	28	14	26	24	33	22	10	24	28	22	28	10	30	5	3	30	8	15	25	27	24	10	28																					
Canopy East	36	21	33	25	21	15	27	19	26	17	9	25	21	18	25	3	3	26	7	21	17	17	24	18	25	17	30																					
Tree Declining											X															X																						
Broken/Dead Limbs																										X	X																					
Sparse Foliage											X															X																						
Excessive Chlorosis/Necrosis											X																																					
Mainstem Dieback																																																
Poor tip Growth																																																
Cavity														X						X						X	X																					
Weak Crotch																																																
Hollow Trunk														X																																		
Trunk Exudation																																																
Regrown Stump																																																
Exfoliating Bark				X											X																																	
Insect Damage																																																
Diseased										X	X								X							X																						
Mistletoe																																																
Leaning																	X																															
Excessive Water Shoots															X																																	
Surface Roots																																																
Fire Scar														X	X						X					X																						
Safety Hazard																																																
Safety Prune				X													X																															
Remove Deadwood																										X																						
Cable/Brace								X								X	X																															
Vigor	A	A	B	A	A	A	A	A	A	C	B	A	B	B	B	B	A	B	B	A	B	A	A	B	A	D	B																					
Health	A	A	B	B	B	A	B	A	A	C	D	A	A	A	B	B	B	B	B	A	B	A	A	B	A	D	B																					
Aesthetics	A	A	A	B	A	A	A	A	A	C	D	A	B	B	C	B	B	B	B	A	B	B	A	A	A	D	B																					
Balance	A	A	A	B	A	A	B	A	A	C	C	A	C	C	B	D	D	D	D	B	B	B	A	A	A	D	B																					
Removal			X		X	X	X	X	X															X	X	X																						
Encroached	X			X																			X				X																					
200ft from Grading		X								X	X	X	X	X	X	X	X	X	X	X	X	X																										
Comments	12 trunks total			LHB			12 trunks total	8 trunks total	8 trunks total		7 trunks total								Oak wilt fungus					12 trunks total		11 trunks total																						

Appendix A - Mission Village Project Oak Tree Survey Data

[illegible]

Appendix A - Mission Village Project Oak Tree Survey Data

Tree Number	958	961	962	963	964	965	969	970	971	972	973	974	976	977	978	980	981	986	988	990	991	993	994	995	2222	2246	2317
Species																											
Coast Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Valley Oak																											
Scrub Oak																											
Valley Oak Hybrid																											
Heritage Oak				X	X															X							
Trunk Diameter	19,18,1 5,14	21,20,9, 4	25,23	51	36,14	22,14,1 1,5,4	18,16,1 5,14	8	19,17,1 2,10	13	19,4,5	18,8,5	13,12	22	8,6,5,4	17,14,1 4,12	17,15,1 4,14	15	21,16,1 5,14	39	15,12,1 1,8	28,22,1 2	21,11,6, 5,5	21,19,1 7,12	15	16	25,17,1 2,10,2
Tree Height	41	44	45	40	39	34	45	20	43	37	52	49	27	35	11	35	37	28	45	50	25	44	45	50	28	35	27
Canopy North	30	21	30	27	17	24	32	12	28	34	20	27	14	25	15	34	12	15	30	37	13	24	25	26	12	14	19
Canopy West	29	30	31	26	16	23	37	12	15	2	30	30	1	26	2	36	27	22	35	32	25	31	24	34	15	15	20
Canopy South	27	20	32	18	37	29	32	18	26	3	33	10	30	30	0	15	32	21	27	31	20	33	24	33	7	16	14
Canopy East	30	27	29	27	31	17	30	6	33	22	21	11	28	20	25	31	32	25	26	31	18	30	17	24	14	15	15
Tree Declining																											
Broken/Dead Limbs		X					X													X							
Sparse Foliage																					X						
Excessive Chlorosis\Necrosis																					X						
Mainstem Dieback																											
Poor tip Growth																											
Cavity		X		X		X	X												X		X	X		X			
Weak Crotch																											
Hollow Trunk		X																			X						
Trunk Exudation																											
Regrown Stump																											
Exfoliating Bark																					X						
Insect Damage																											
Diseased																											
Mistletoe																											
Leaning								X		X	X	X	X		X												
Excessive Water Shoots																											
Surface Roots																											
Fire Scar		X			X	X	X														X	X					
Safety Hazard																					X						
Measures																							X				
Safety Prune																											
Remove Deadwood																											
Cable/Brace		X					X								X				X	X	X						
Rating		A	A	B	A	A	A	B	A	A	A	A	B	A	A	A	A	B	B	A	C	A	A	A	C	A	C
Vigor		A	A	B	A	A	A	B	A	A	A	A	B	A	B	A	A	B	A	A	C	A	A	A	C	A	C
Health		A	A	B	A	A	A	B	A	A	A	A	B	A	B	A	A	B	A	A	C	A	A	A	C	A	C
Aesthetics		A	A	B	A	A	A	C	A	B	B	B	C	B	B	A	A	A	A	A	C	A	A	A	C	A	C
Balance		B	B	B	B	C	B	C	B	D	D	C	D	C	D	B	C	A	B	B	C	B	B	B	D	A	C
Removal	X																								X		
Encroached		X	X																								
200ft from Grading				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Impact																											
Comments	9 trunks total						Soil build up at base.									SBB	Total of 9 trunks, SBB		Total of 6 trunks,	Total of 5 trunks,				LHB			Ntg. NA, DE, 6 trunks

Appendix A - Mission Village Project Oak Tree Survey Data

Tree Number	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344
Species																											
Coast Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Valley Oak																											
Scrub Oak																											
Valley Oak Hybrid																											
Heritage Oak																											
Trunk Diameter	12,3,3,2 2	13,12,1 2	25	14,11,1 0	11,4	9	15	34	27	14	8	14	20,14,1 1,5,10	12,9	20	15,8	11	13,10	19	15,13	19	12,8,6	8,8,4	18,12,7	10	13,13,1 1	14,10,1 2
Tree Height	22	28	40	30	24	23	25	26	18	27	19	20	30	22	28	16	18	25	33	28	31	15	20	30	23	41	26
Canopy North	8	35	15	25	21	6	18	20	12	14	12	0	23	11	18	15	10	17	23	16	17	15	12	17	10	24	17
Canopy West	13	22	21	18	16	21	20	19	10	16	8	8	24	10	15	12	10	17	17	21	21	12	10	18	6	23	16
Canopy South	12	12	22	8	3	0	20	20	14	12	6	36	23	11	15	8	11	28	15	20	18	9	10	22	14	21	17
Canopy East	21	17	25	25	22	2	17	18	15	17	12	10	20	12	18	10	8	10	15	20	6	10	9	17	19	24	15
Tree Declining												X															
Broken/Dead Limbs									X			X		X					X								
Sparse Foliage									X																		
Excessive Chlorosis/Necrosis																											
Mainstem Dieback																											
Poor tip Growth														X			X						X				
Cavity								X				X	X	X					X	X					X	X	X
Weak Crotch																											
Hollow Trunk								X																			
Trunk Exudation																										X	
Regrown Stump																			X								
Exfoliating Bark														X													
Insect Damage												X	X	X													
Diseased																											
Mistletoe																											
Leaning												X															
Excessive Water Shoots												X															
Surface Roots																				X							
Fire Scar								X						X				X	X								
Safety Hazard																											
Safety Prune									X																		
Remove Deadwood									X										X								
Cable/Brace													X														
Vigor	C	B	B	C	B	B	A	C	C	B	B	B	B	B	B	B	B	B	B	B	B	D	C	B	B	B	B
Health	C	B	B	C	B	B	B	C	C	B	A	C	B	B	B	B	B	B	B	B	B	D	C	B	B	B	B
Aesthetics	D	C	B	C	B	C	A	B	C	B	B	D	B	C	B	C	B	B	B	B	B	D	C	C	C	C	C
Balance	D	C	B	C	B	D	B	C	C	B	C	D	B	C	C	C	B	B	C	C	C	D	C	C	C	B	B
Removal																											
Encroached			X					X																			
200ft from Grading	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Comments	Nig. NA. DE.	Nig. NA. DE.	Nig. NA. DE.	Nig. NA. DE.	Nig. NA. DE.										Nig. NA. DE.	Nig. NA. DE.						NT. Nig. NA. DE.		NT. Nig. NA. DE.	NT. Nig. NA. DE.		

Appendix A - Mission Village Project Oak Tree Survey Data

[illegible]

Appendix A - Mission Village Project Oak Tree Survey Data

Tree Number		4007	4009	4018	4022	4101	4108	4109	4110	4111	4113	4114	4118	4122	4123	4124	4125	4131	4132	4133	4149	4152	4155	4156	4157	4158
Species																										
Coastal Live Oak		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Valley Oak																										
Scrub Oak																										
Valley Oak Hybrid																										
Heritage Oak																										
Trunk Diameter		6,6,5,5,4	13	8	7,6,4	19,17,1 2,11	13	14,9	10	28,13	11	15,11,1 0	11	16,6,4,5	23,10	32	26,16,1 6	17,11	15	32	15,5,4,3 ,3	18,16,1 3,13	0	17,13	12,11,9, 8,7	41
Tree Height		23	25	23	25	37	25	40	18	40	15	25	23	24	30	32	28	22	22	41	21	37	20	35	28	41
Canopy North		12	16	20	17	31	16	25	0	15	11	18	15	21	21	22	0	15	14	21	16	16	0	17	7	14
Canopy West		12	16	13	11	33	16	10	0	21	12	16	17	17	23	27	0	17	13	20	17	23	0	23	20	18
Canopy South		13	17	8	11	30	17	16	0	27	12	2	12	23	23	26	0	14	15	30	16	24	0	26	18	6
Canopy East		11	17	13	17	30	17	14	0	27	9	14	11	12	22	25	0	13	11	30	16	20	0	19	20	21
Tree Declining																										
Broken/Dead Limbs																	X									
Sparse Foliage										X						X										
Excessive Chlorosis/Necrosis																X										
Mainstem Dieback																										
Poor tip Growth																										
Cavity						X				X	X	X		X				X								
Weak Crotch																										
Hollow Trunk																										
Trunk Exudation														X												
Regrown Stump																										
Exfoliating Bark											X				X											
Insect Damage		X				X					X	X														
Diseased																										
Mistletoe															X											
Leaning																										
Excessive Water Shoots																										
Surface Roots																X										
Fire Scar						X					X	X		X				X								
Safety Hazard																										
Safety Prune																										
Remove Deadwood																										
Cable/Brace								X		X																
Vigor		B	B	B	B	B	B	B	F	B	B	B	A	C	C	C	F	B	B	A	B	A	F	A	B	B
Health		C	A	B	B	A	A	B	F	B	B	B	A	C	C	B	F	B	B	A	B	A	F	A	B	B
Aesthetics		B	B	B	B	B	B	B	F	C	C	C	A	C	C	C	F	B	B	A	B	A	F	A	B	B
Balance		B	B	B	B	B	B	C	F	B	C	C	B	C	C	C	F	B	B	A	B	B	F	B	C	C
Removal				X	X								X	X	X	X										
Encroached		X								X																
200ft from Grading			X			X	X	X	Dead		X	X					Dead	X	X	X	X	Dead	X	X	X	X
Comments		Multiple trunks.		Soil build up at base.																					Soil build up at base.	

Appendix A - Mission Village Project Oak Tree Survey Data

	Tree Number	4159	4160	4161	4162	4163	4164	4165	4166	4167	4168	4169	4170	4171	4172	4174	4175	4176	4177	4178	4179	4180	4181	4182	4183	4184
Tree Characteristics	Species																									
	Coastal Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Valley Oak																									
	Scrub Oak																									
	Valley Oak Hybrid																									
	Heritage Oak																									
	Trunk Diameter	33	13,12	34,12,5	21	15,11	13,5,11	19,11,6	15,12,1 2,11	25	21,15	19,13	24,20	16,10	24	19,12,1 2,11,9	17,11,5, 10	13,5,6,5	22,16	15,12,1 2,6,5	15,11,5	21,21,2 0,12,5	24	13,7,7,6 ,5,5	32	18,18,1 7,9,5
	Tree Height	32	18	30	40	30	35	35	31	43	40	38	45	28	43	35	31	25	35	34	30	29	42	28	36	43
	Canopy North	13	10	27	22	12	15	15	17	25	15	19	25	15	27	25	17	15	25	21	10	30	24	25	26	27
	Canopy West	14	15	29	23	21	14	21	20	21	8	19	16	16	14	25	20	10	27	21	21	32	26	17	25	22
	Canopy South	18	17	28	20	17	16	20	21	22	17	14	30	10	28	29	23	9	29	24	15	40	24	20	23	31
	Canopy East	19	13	31	18	3	11	18	24	22	15	10	20	28	25	28	27	16	18	20	17	30	25	24	26	32
Physical Conditions	Tree Declining																									
	Broken/Dead Limbs						X				X															
	Sparse Foliage											X														
	Excessive Chlorosis/Necrosis						X							X												
	Mainstem Dieback													X												
	Poor tip Growth										X			X							X	X				
	Cavity			X			X			X	X									X		X				
	Weak Crotch						X																			
	Hollow Trunk						X																			
	Trunk Exudation																									
Measures	Regrown Stump								X		X															
	Exfoliating Bark			X							X							X								
	Insect Damage						X				X							X								
	Diseased																									
	Mistletoe																									
	Leaning																									
	Excessive Water Shoots																				X					
	Surface Roots																					X				
	Fire Scar						X	X														X				
	Safety Hazard																									
Rating	Safety Prune																		X					X		
	Remove Deadwood																									
Impact	Cable/Brace						X													X						
	Vigor	B	C	A	B	C	C	B	C	B	D	C	A	C	B	A	B	C	B	B	B	A	A	B	A	A
Comments	Health	B	B	B	B	C	C	B	C	B	C	C	A	D	A	B	A	B	A	B	B	A	A	A	A	A
	Aesthetics	B	B	A	B	C	D	B	B	A	D	C	A	C	B	A	B	C	A	B	C	A	A	B	A	A
	Balance	B	B	B	B	D	D	B	B	A	C	C	B	C	B	B	B	B	B	B	C	A	A	B	B	B
	Removal			X											X	X	X	X	X	X	X	X	X	X	X	X
	Encroached																									X
	200ft from Grading	X	X		X	X	X	X	X	X	X	X	X	X												
																				Soil build up at base.					LHB	

Appendix A - Mission Village Project Oak Tree Survey Data

	Tree Number	4298	4299	4300	4301	4302	4303	4304	4305	4306	4307	4308	4309	4310	4311	4312	4313	4314	4315	4316	4318	4319	4320	4321	4322	4323	
Tree Characteristics	Species																										
	Coastal Live Oak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Valley Oak																										
	Scrubs Oak																										
	Valley-Oak Hybrid																					X					
	Heritage Oak																										
	Trunk Diameter	14	11.8	17.13	10	13.9,8	10,6,4	10,3	9,2,5	10,10	23,22,2 1,19	22,14	34,28,2 7	20	34,14,1 2,9,7,5	32,29,2 5,22	18,16,1 5,13,10	11,10,1 0,8	23,10,3, 5	31,16	17,16,1 6,15,5	27	83	22,19,1 0,7,7,5	9	15	
Physical Conditions	Tree Height	8	23	32	23	28	18	25	27	22	40	55	47	33	44	50	38	21	41	37	38	21	57	39	14	35	
	Canopy North	3	16	20	13	12	7	9	12	17	24	25	34	5	25	30	27	22	10	28	25	10	30	28	12	20	
	Canopy West	6	14	17	10	19	15	21	15	8	36	30	40	35	27	30	30	11	12	14	28	11	27	24	13	15	
	Canopy South	7	18	17	8	18	14	15	9	4	40	32	37	22	38	14	33	19	27	17	24	12	40	25	1	16	
	Canopy East	4	12	32	11	16	16	16	10	22	41	40	0	0	7	33	29	23	31	18	30	30	29	27	3	15	
	Tree Declining																										
	Broken/Dead Limbs	X				X												X	X			X					
	Sparse Foliage							X		X									X								
	Excessive Chlorosis/Necrosis				X			X		X																	
	Mainstem Dieback																										
	Poor tip Growth																										
	Cavity	X								X								X									
	Weak Crotch																										
	Hollow Trunk									X																	
	Trunk Exudation																										
	Regrown Stump	X																									
	Exfoliating Bark	X																	X				X				
	Insect Damage	X				X				X																	
	Diseased																										
	Mistletoe																										
Leaning											X		X	X								X		X	X		
Excessive Water Shoots						X																X					
Surface Roots			X			X								X	X												
Fire Scar																	X										
Safety Hazard																											
Measures	Safety Prune																										
	Remove Deadwood										X							X				X					
	Cable/Brace									X	X							X			X						
Rating	Vigor	C	B	A	B	B	C	C	B	C	A	A	B	B	C	A	B	B	B	A	B	A	A	A	C	A	
	Health	D	A	B	C	C	B	C	B	C	A	B	B	B	C	A	B	C	C	A	B	B	A	B	C	B	
	Aesthetics	D	B	B	C	D	B	C	B	D	B	B	C	C	B	A	C	C	C	B	A	D	A	A	D	C	
	Balance	D	B	B	B	D	C	D	C	D	C	C	C	C	D	C	C	D	C	B	C	D	B	B	D	C	
Impact	Removal	X	X																								
	Encroached			X							X	X	X	X	X	X							X	X			
Comments	200ft from Grading				X	X	X	X	X	X								X	X	X	X	X	X			X	
															6 trunks total												

Appendix A - Mission Village Project Oak Tree Survey Data

	Tree Number	4368	4376	4377
Tree Characteristics	Species			
	Coastal Live Oak		X	X
	Valley Oak			
	Scrub Oak	X		
	Valley Oak Hybrid			
Physical Conditions	Heritage Oak			
	Trunk Diameter	6.5,6	8	12,7.9,8
	Tree Height	10	8	15
	Canopy North	5	7	10
	Canopy West	4	7	10
	Canopy South	12	7	10
	Canopy East	6	7	10
	Tree Declining			
	Broken/Dead Limbs			
	Sparse Foliage	X		
	Excessive Chlorosis/Necrosis			
	Mainstem Dieback			
	Poor tip Growth			
	Cavity			
	Weak Crotch			
Measures	Hollow Trunk			
	Trunk Exudation			
	Regrown Stump			
	Exfoliating Bark			
	Insect Damage			
	Diseased			
	Mistletoe			
	Leaning			
	Excessive Water Shoots			
	Surface Roots			
	Fire Scar			
	Safety Hazard			
	Safety Prune			
	Remove Deadwood			
	Cable/Brace			
Rating	Vigor	C	B	B
	Health	C	B	B
	Aesthetics	C	C	B
	Balance	C	D	D
	Removal	X	X	X
Impact	Encroached			
	200ft from Grading			
Comments				NT. Nig. NA. DE.

APPENDIX B

Richard Johnson and Associates' Boxing Specifications and Recommendations



Richard Johnson & Associates
Environmental Horticulture

801 Glenneyre Street, Suite D, Laguna Beach, CA 92651
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August 18, 2006

Mr. Glenn Adamick
NEWHALL LAND
23823 Valencia Blvd.
Valencia, CA 91355

RE: Mission Village Selection of Oak Tree Relocation Candidates Update

Dear Mr. Adamick:

This document serves as an update to the oak tree relocation candidate list for the Mission Village Project submitted April 18, 2006. A number of trees have been removed from the list and the results are as follows. Richard Johnson & Associates, Inc. (RJA) has completed multiple site visits to the Mission Village site with Valley Crest Tree Company to formulate the oak tree relocation candidate list. It is our professional opinion that the trees listed in this report are of a high enough quality, based on overall vigor and structure, that they can be successfully relocated. RJA utilized the updated oak tree data and oak tree location maps supplied by Impact Sciences Inc. It should be noted that the trees listed below will need to be re-inspected prior to relocation to assure that conditions such as health, vigor, and structure remain favorable for the relocation process.

This report includes the following:

Number of relocation candidates.

List of relocation candidates by tag number and species.

Results:

Quercus lobata	3
Quercus agrifolia	25
Total oak tree relocation candidates	28

<u>Tree#</u>	<u>Species</u>
170	Quercus agrifolia
171	"
173	"
179	"
183	"
218	"
511	"
523	"
524	"
525	"
611	"
716	Quercus lobata
718	"
761	"
796	Quercus agrifolia
801	"
802	"
806	"
824	"
851	"
853	"
4118	"
4172	"
4175	"
4215	"
4351	"
4352	"
4361	"

Respectfully submitted by,

RICHARD JOHNSON & ASSOCIATES, INC.

INTENTIONALLY LEFT BLANK