

TABLE 4 Soil Sample Results									
Sample ID	Depth (inches bgs)	Date Sampled	EPA 6010B		EPA 8081A				
			Arsenic	Lead	Dieldrin	DDE	DDD	DDT	All Other Constituents
			Reported in mg/kg		Reported in µg/kg				
Composite #1	6	7-5-2012	ND	NA	<5	6.7	<5	<5	<5-200
Composite #2	6	7-5-2012	ND	NA	<5	13	<5	<5	<5-200
Composite #3	6	7-5-2012	ND	NA	<5	8.9	<5	<5	<5-200
Composite #4	6	7-5-2012	ND	NA	<5	46	11	<5	<5-200
Residential CHHSLs			0.07	150	35	1,600	2,300	1,600	NA
bgs = below ground surface; CHHSL = California Human Health Screening Levels; EPA = Environmental Protection Agency; mg/kg = milligrams per kilogram; ND= Non-Detect; NA = Not Applicable/Analyzed; µg/kg = micrograms per kilogram.									

5.3 Discussion of Testing Results

No concentrations of arsenic were detected above the laboratory reporting limit (i.e., “non-detect”) in the samples analyzed during this investigation. Lead was detected above the laboratory detection limit in samples HA-1 through HA-4, HA-7, HA-9, HA-12 through HA, 14, HA-16, and HA-25 through HA-27. Concentrations of lead ranged from 7.1 milligrams per kilogram (mg/kg) (HA-25) to 160 mg/kg (HA-2). No other samples analyzed detected lead above the laboratory reporting limit (i.e., “non-detect”).

DDE (organochlorine pesticides) was detected in Composite Samples #1 through #4 at 6.7 micrograms per kilogram (µg/kg), 13 µg/kg, 8.9 µg/kg, and 46 µg/kg, respectively. DDD (organochlorine pesticides) was detected in Composite Sample #4 at 11 µg/kg. No other samples analyzed detected DDE, DDD, or any other organochlorine pesticide included in EPA Test Method 8081A above the laboratory reporting limit (i.e., “non-detect”).

EEI compared the reported lead, DDE and DDD values to the California Human Health Screening Levels (CHHSL) residential land use scenario values. The CHHSLs are concentrations of select hazardous chemicals that are used to estimate and compare reported values in soil to risk to human health. The following bulleted items summarize the reported values:

- The detected lead concentrations ranging from 7.1 mg/kg to 160 mg/kg, the maximum concentration is slightly above the CHHSL residential screening level of 150 mg/kg in one sample.
- The detected DDE concentrations of at 6.7 µg/kg, 13 µg/kg, 8.9 µg/kg, and 46 µg/kg, is less than the CHHSL residential screening level of 1,600 µg/kg.
- The detected DDD concentrations of 11 µg/kg are less than the CHHSL residential screening level of 2,300 µg/kg.

Although arsenic was not detected above the laboratory reporting limit of 5 milligrams per kilogram (mg/kg) in any of the samples analyzed during this investigation, it should be noted that the residential CHHSL value for arsenic is 0.07 mg/kg, which is less than the laboratory reporting limit. Arsenic is a natural occurring element that is present in soil. Acceptable background levels for naturally occurring arsenic vary. The DTSC evaluated arsenic soil concentration data collected from various school sites and determined that 12 mg/kg is an acceptable background screening level (DTSC, 2008). If concentrations of arsenic are detected above 12 mg/kg, the DTSC suggests further evaluation.

6.0 FINDINGS AND OPINIONS

Based on the information obtained in this ESA, EEI has the following findings and opinions:

- Known or suspected RECs – No known or suspected RECs have been identified during the preparation of this ESA. However, based on the future planned widening and improvements to the roadways, off ramps and intersections, and historical agricultural use of the adjacent property, additional investigation efforts (i.e., soil sampling and analysis) were performed by EEI to further evaluate the subject property soils for aerially-deposited lead from historical automotive fuel combustion, and the presence of restricted agricultural chemicals. Therefore, EEI performed a limited soil investigation at the subject property.

Based on the results of our limited soil investigation (see Section 5.0 – Results of Limited Soil Investigation), no concentrations of arsenic were detected above the laboratory reporting limit (i.e., non-detect). Low levels of organochlorine pesticides DDE and DDD were detected in site soils. The concentrations were less than applicable residential screening levels, and no further investigation regarding these constituents appears to be warranted. Concentrations of lead in soil sample (HA-2) collected from the subject property were slightly above the applicable residential screening value of 150 mg/kg; however, the concentrations are within acceptable levels for reuse per Caltrans (Caltrans, 2012) and DTSC guidance; therefore, further investigation does not appear to be warranted at this time. According to the Client, the soils from the subject property will not be relocated or reused (i.e. placed beneath a residential use area), during construction of the proposed Lilac Hills Ranch Development. However, EEI recommends that the Caltrans guidance should be considered during future construction activities and that if the soils containing elevated concentrations of lead are moved or relocated at any time, additional testing and/or mitigation may be required.

- Historical REC's – No historical REC's have been revealed during the preparation of this ESA.
- *De Minimis* Conditions – No de minimis conditions have been revealed during the preparation of this ESA.

7.0 DATA GAPS AND DEVIATIONS FROM ASTM PRACTICES

Section 3.2.20 (ASTM 1527-05) defines a data gap as “a lack or inability to obtain information required by the practice despite good faith efforts of the environmental professional to gather such information.”

7.1 Historical Data Gaps

Based on the information obtained during the course of this investigation, the following historical data gaps were encountered.

Specific Gaps

Information regarding the current and past owners of the subject property was not readily available; therefore, this historical source was not researched.

Resolution Efforts

EEI researched historic topographic maps, historic aerial photographs, and internet research to supplement historical information.

Opinions on Data Gap Significance

Based on the information gathered from readily available sources, EEI does not consider the absence of this interview to effect the validity of this Phase I ESA.

7.2 Regulatory Data Gaps

No regulatory data gaps were identified during our research efforts.

7.3 On-site Data Gaps

No on-site data gaps were identified during our research efforts.

7.4 Deviations from ASTM Practices

Section 12.10 (ASTM 1527-05), states that all deletions and deviations from this practice shall be listed individually and in detail, including Client imposed constraints, and all additions should be listed.

EEI believes that there are no exceptions to, or deletions from, the ASTM Designation E1527-05 Guidelines.

8.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Designation E1527-05 for the subject property including portions of West Lilac Road, located west and east of Interstate 15, and the intersection of West Lilac Road and Old Highway 395, situated west of I-15, Escondido, California. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This Phase I ESA has revealed no evidence of *recognized environmental conditions* in connection with the property.

However, EEI has the following comment:

- Based on the results of our limited soil investigation (see Section 5.0 – Results of Limited Soil Investigation), no concentrations of arsenic were detected above the laboratory reporting limit (i.e., non-detect). Low levels of organochlorine pesticides DDE and DDD were detected in site soils. The concentrations were less than applicable residential screening levels, and no further investigation regarding these constituents appears to be warranted. Concentrations of lead in soil sample (HA-2) collected from the subject property were above the applicable residential screening value of 150 mg/kg; however, the concentrations are within acceptable levels for reuse per Caltrans (Caltrans, 2012) and DTSC guidance; therefore, further investigation does not appear to be warranted at this time. According to the Client, the soils from the subject property will not be relocated or reused (i.e. placed beneath a residential use area), during construction of the proposed Lilac Hills Ranch Development. However, EEI recommends that the Caltrans guidance should be considered during future construction activities and that if the soils containing elevated concentrations of lead are moved or relocated at any time, additional testing and/or mitigation may be required.

9.0 REFERENCES

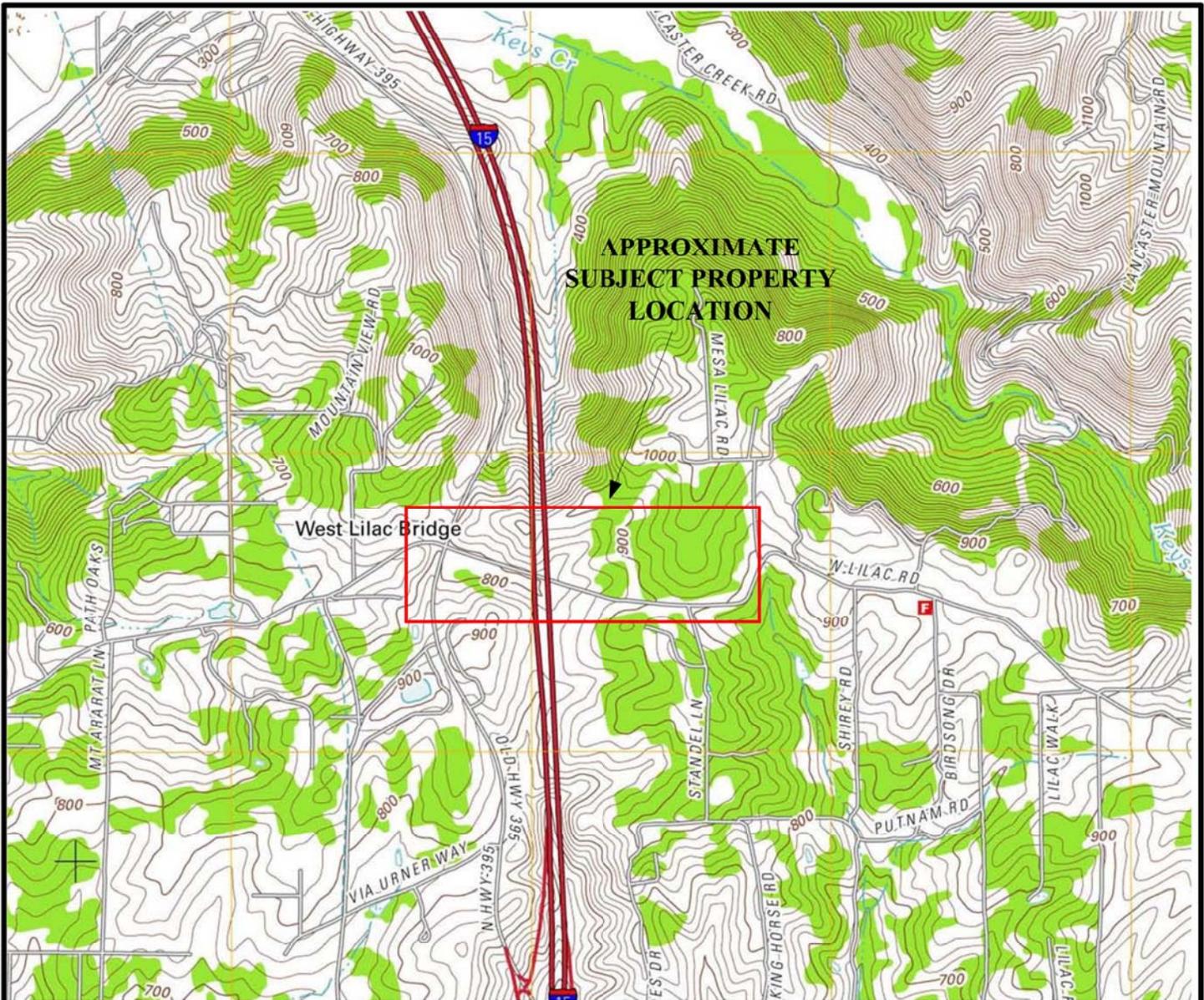
- California Department of Water Resources, Water Data Library (WDL), Website (<http://www.water.ca.gov/waterdatalibrary>), accessed July 2012.
- California Division of Oil, Gas, and Geothermal Resources (CDOGGR) Website (<http://maps.conservation.ca.gov/doms/index.html>), accessed July 2012.
- California Environmental Protection Agency (CalEPA), 2005, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties."
- California Geological Survey (CGS), 2002, "California Geomorphic Provinces, Note 36."
- County of San Diego Land Use and Environmental Group (LUEG), KIVA, Website (<http://landinfo.sdcountry.ca.gov/permit/index.cfm>), accessed July 2012.
- Department of Toxic Substances (DTSC), Website (<http://www.envirostor.dtsc.ca.gov/public/>), EnviroStor database, accessed July 2012.
- Department of Toxic Substances Control (DTSC), 2008, "Interim Guidance for Sampling Agricultural Properties (Third Revision)."
- Federal Emergency Management Act (FEMA), Flood Insurance Rate Map (FIRM), Website <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1> accessed February 2012.
- Los Angeles County Public Library (LAPL), Sanborn Maps 1867-1970, Website <http://databases.lapl.org/#s>, accessed July 2012.
- National Pipeline Mapping System (NPMS), Public Map Viewer Website, (<https://www.npms.phmsa.dot.gov/PublicViewer/>), accessed July 2012.
- San Diego Geographic Information Source, (SanGIS), Website, (<http://files.sangis.org/interactive/viewer/viewer.asp>), accessed July 2012.
- San Diego Regional Water Quality Control Board (SDRWQCB), 1994, "Water Quality Control Plan for the San Diego Basin (9)," dated September 8.
- San Francisco Bay, Regional Water Quality Control Board, Environmental Screening Levels (ESLs) (2008).
- State Water Resources Control Board, Website, GeoTracker database, (<http://www.geotracker.swrcb.ca.gov/>), accessed July 2012.
- Tan, Siang S., 2000, Geologic Map of the Bonsall 7.5' Quadrangle, San Diego County, California, A Digital Database, (1:24,000), California Division of Mines and Geology (CDMG) in cooperation with the United States Geological Survey (USGS).

United Nations Environmental Programme, 1999, Guidelines for the Identification of PCBs and Materials Containing PCBs.

United States Department of Agriculture (USDA), Natural Resources Conservation Service, Website (<http://websoilsurvey.nrcs.usda.gov/app/>) Web Soil Survey, accessed July 2012.

United States Geological Survey (USGS, 1975, photograph inspected 2012, Bonsall, 7.5-Minute Quadrangle.

FIGURES



Map Source: USGS, Bonsall, California 7.5 Minute Quadrangle map (USGS, 2012)

SITE LOCATION MAP
 ACCRETIVE INVESTMENTS, INC.
 Lilac Hills Ranch
 Roadway Expansion Property
 Portions of West Lilac Road, located west and east of I-15, and the
 intersection of West Lilac Road and Old Highway 395
 Escondido, California 92026
 EEI Project Number ACR-71497.2b
 Created July 2012



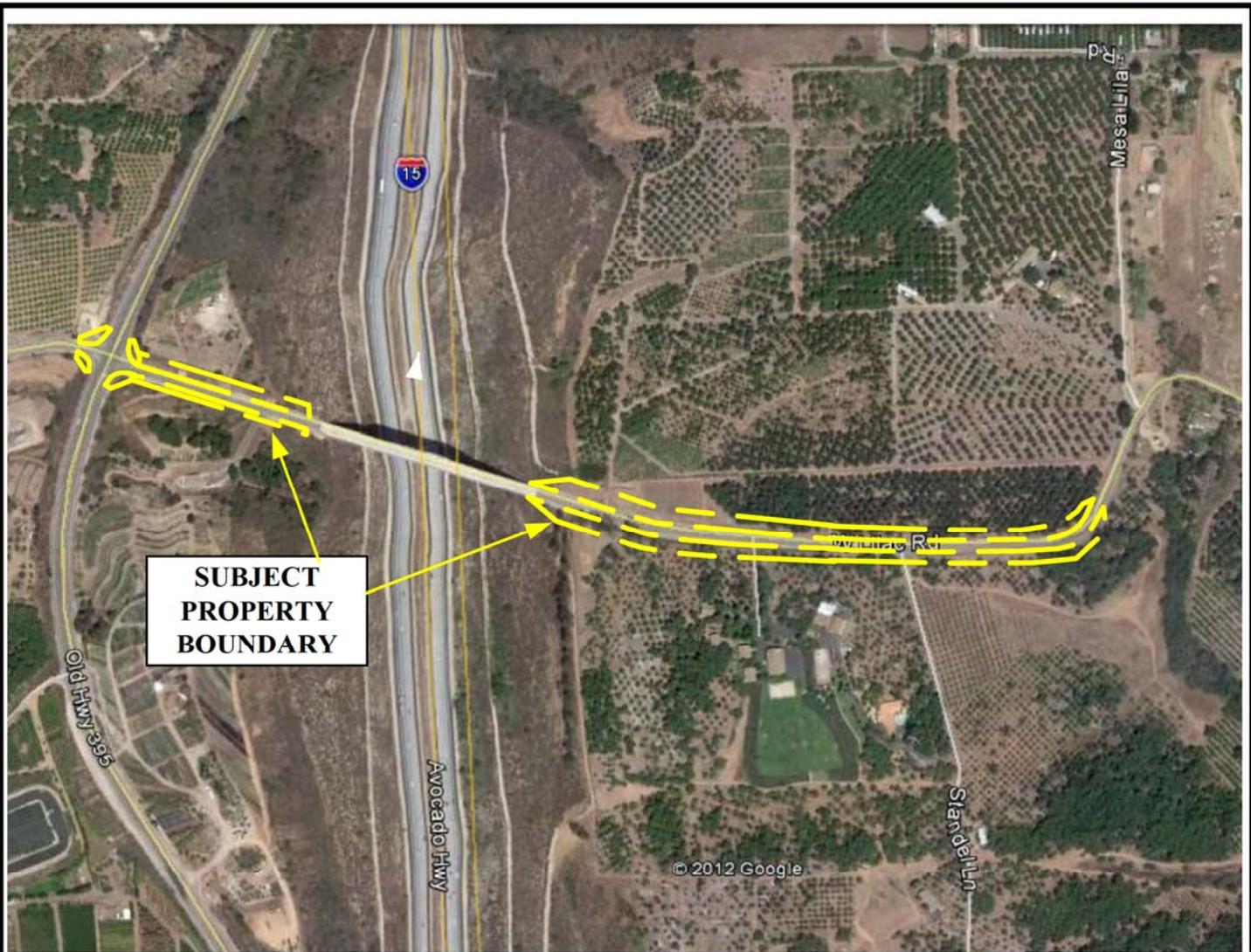
Scale: 1" = 1,600'



Note All Locations Are Approximate



FIGURE 1



Map Source: Google Earth®, August 23, 2010

AERIAL SITE MAP
 ACCRETIVE INVESTMENTS, INC.
 Lilac Hills Ranch
 Roadway Expansion Property
 Portions of West Lilac Road, located west and east of I-15, and the
 intersection of West Lilac Road and Old Highway 395
 Escondido, California 92026
 EEI Project Number ACR-71497.2b
 Created July 2012



Scale: 1" = 360'



Note All Locations Are Approximate



FIGURE 2



Map Source: Google Earth®, August 23, 2010

LEGEND

○ EEI Soil Boring Location
HA-1



Scale: 1" = 360'



Note All Locations Are Approximate

SOIL BORING MAP
 ACCRETIVE INVESTMENTS, INC.
 Lilac Hills Ranch
 Roadway Expansion Property
 Portions of West Lilac Road, located west and east of I-15, and the
 intersection of West Lilac Road and Old Highway 395
 Escondido, California 92026
 EEI Project Number ACR-71497.2b
 Created July 2012



FIGURE 3

APPENDIX A
RESUME OF ENVIRONMENTAL PROFESSIONAL



Polly Ivers

Project Scientist

HIGHLIGHTS OF QUALIFICATIONS

- Experienced in project management duties for conducting field research, data collection, inventory, analyses and report development in the Environmental Science industry.
- Knowledgeable of environmental compliance and regulations and technical writing specifications for environmental documentation and regulatory reporting.
- Excellent communication and interpersonal skills. Diplomatic and experienced in working with diverse populations including the public, colleagues, clients and agency representatives.
- Strong analytical, detail-oriented, organizational, and verbal/written communication skills.
- Proficient in MS Office, MS Visio, CADD, ArcGIS 9.1, Adobe Acrobat and internet research.

EDUCATION

UNIVERSITY OF COLORADO, Boulder, CO B.S. Biology 1987
WETLANDS TRAINING INSTITUTE, San Diego, CA 2004
UNIVERSITY OF UTAH, Salt Lake City, UT GIS/Environmental Science Coursework 2002 - 2010

PROFESSIONAL EXPERIENCE

EEI, INC., (*Geotechnical and Environmental Solutions*), Carlsbad, CA 2004 - Present

Environmental Project Scientist (4/05 - Present)

- Oversee the execution and management of Phase I Environmental Site Assessments (ESA) for over 200+ sites in California, Nevada, and Arizona.
- Direct Phase II limited site investigations, including Soil and Agricultural Chemical Surveys (drilling, sampling, and monitoring). Supervised small field crews on key client projects.
- Assisted with Biological Assessment reports and Wetland Delineation Surveys.
- Manage budgets ensuring fiscal responsibility on each project.
- Supervise and mentor two staff members in daily duties and perform yearly peer reviews.
- Write ESA reports based on researched technical data. Edit and review co-worker reports.
- Contributed compliance documents for Environmental Impact Reports (under NEPA and CEQA regulation) and Storm Water Pollution Prevention Plans (SWPPP).

Environmental Staff Scientist (3/04 - 3/05)

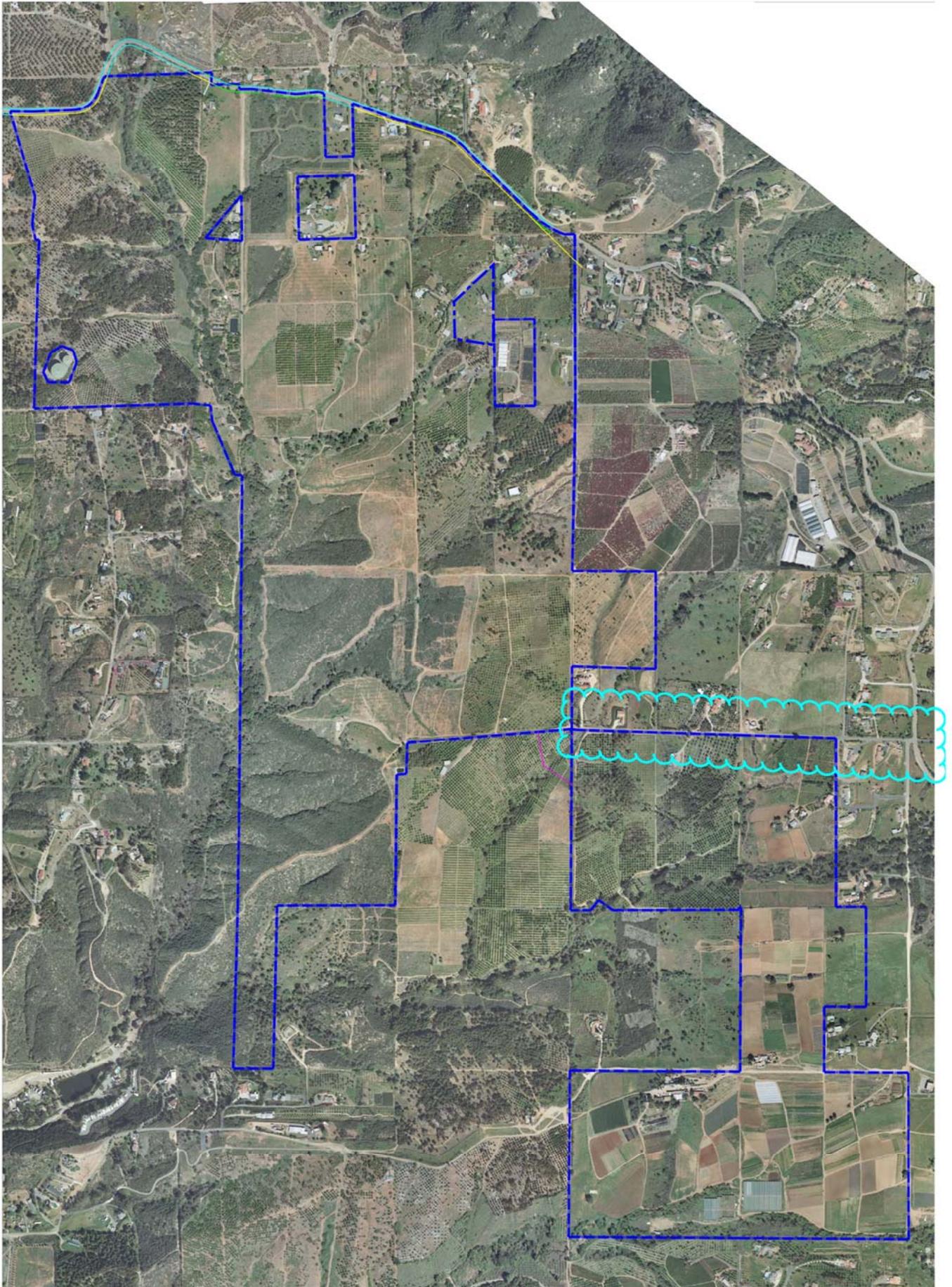
- Worked closely with Project Managers: conducted field visits to project sites for evaluation; used topographic maps, aerial photographs, GPS units, and scientific tools and equipment; attended meetings; and managed project files and database.

CERTIFICATIONS

40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPPER)

APPENDIX B
ROADWAY EXPANSION FIGURES/FIRM

LILAC HILLS RANCH AERIAL



Program at 1-800-638-6620.



MAP SCALE 1" = 1000'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0515G

FIRM
 FLOOD INSURANCE RATE MAP
 SAN DIEGO COUNTY,
 CALIFORNIA
 AND INCORPORATED AREAS

PANEL 515 OF 2375
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
 COMMUNITY NUMBER 05284
 SAN DIEGO COUNTY
 PANEL SUFIX 0515
 G

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
 06073C0515G
MAP REVISED
 MAY 16, 2012

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX C
HISTORICAL AERIAL PHOTOGRAPHS/TOPOGRAPHIC MAPS



Historical Aerial Photo
2002

**West Lilac Rd
Escondido, CA 92026**



FIRSTSEARCH

Target Site: 33.300347, -117.148090 Job Number: ACR-71497

1 inch equals 685 feet



Historical Aerial Photo
1994

**West Lilac Rd
Escondido, CA 92026**



FIRSTSEARCH

Target Site: 33.300347, -117.148090 Job Number: ACR-71497

1 inch equals 685 feet



Historical Aerial Photo
1980

**West Lilac Rd
Escondido, CA 92026**



FIRSTSEARCH

Target Site: 33.300347, -117.148090 Job Number: ACR-71497

1 inch equals 685 feet



Historical Aerial Photo
1974

**West Lilac Rd
Escondido, CA 92026**



FIRSTSEARCH

Target Site: 33.300347, -117.148090 Job Number: ACR-71497

1 inch equals 685 feet