County of Los Angeles
CHIEF EXECUTIVE OFFICE
Kenneth Hahn Hall of Administration
500 West Temple Street, Room 713, Los Angeles, California 90012
(213) 974-1101
http://ceo.lacounty.gov

WILLIAM T FUJIOKA
Chief Executive Officer

April 20, 2010

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

17 April 20, 2010

SACHI A. HAMAI
EXECUTIVE OFFICER

SET: May 25, 2010 9:30 a.m.

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

APPROVE AND ORDER PUBLICATION OF NOTICE OF INTENTION TO PURCHASE REAL PROPERTY – PORTION OF APN 3217-021-031 UNINCORPORATED COMMUNITY OF ACTON (FIFTH DISTRICT) (4 VOTES AT HEARING)

SUBJECT

Approval of the recommended actions will allow the County of Los Angeles (County) on behalf of the Consolidated Fire Protection District of Los Angeles County (Fire District) to acquire title to an approximately 4.7 acre parcel of unimproved real property from the Brevidoro Family Partnership in the unincorporated community of Acton to construct a Fire Station and Helispot.

IT IS RECOMMENDED THAT YOUR BOARD ACTING AS THE GOVERNING BODY OF THE CONSOLIDATED FIRE PROTECTION DISTRICT:

1. After the public hearing on this matter, consider the Mitigated Negative Declaration for which no comments were received during the public review period; find on the basis of the whole record that there is no substantial evidence that the project will have a significant effect on the environment; find that the Mitigated Negative Declaration reflects the independent judgment and analysis of the Board; and adopt the Mitigated Negative Declaration.

2. Adopt the Mitigation Monitoring and Reporting Program to ensure compliance with the conditions adopted to mitigate or avoid significant effects on biological resources, cultural resources, geotechnical resources and noise.

3. Approve the Notice of Intention to purchase an approximately 4.7 acre parcel of unimproved real property located in the unincorporated community of Acton from the Brevidoro Family Partnership for a purchase price of $1,360,000, plus title and escrow fees of approximately $7,500.

4. Instruct the Executive Officer of the Board of Supervisors to publish the Notice of Intention in accordance with Section 25350 of the Government Code.

5. Set the date of May 25, 2010, for a Public Hearing to receive comment and consummate the proposed acquisition.

IT IS FURTHER RECOMMENDED THAT, AT THE TIME OF CONSUMMATION, YOUR BOARD:

6. Order the purchase consummated in accordance with Section 25350 of the Government Code.

7. Approve and instruct the Chair to sign the Agreement for Purchase and Sale of Real Property with the Seller, Brevidoro Family Partnership, to acquire the subject property.

8. Establish Capital Project No. 70959 for the Fire Station 142 land acquisition. The appropriation of $1,367,500 for this project is in the Fire Districts Accumulated Capital Outlay Fund Capital Project 70959 which is funded by the Fire District's Developer Fee Area 3.

9. Authorize the Chief Executive Officer to open and manage escrow and execute any required documentation necessary to complete the transfer of title and to accept the deed conveying title to the Consolidated Fire Protection District of Los Angeles County.

10. Authorize the Auditor-Controller to issue warrants as directed by the Chief Executive Officer for the purchase price and any other related escrow or transactional costs, which are estimated not to exceed $15,000 in the aggregate.

11. Request the Assessor to remove the subject property from the tax roll effective upon transfer of title.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended action is to acquire title to an approximately 4.7 acre parcel of unimproved real property (portion of APN 3217-021-031) located in the unincorporated community of Acton (Property) from the Brevidoro Family Partnership (Partnership). The parties have established an amount which they believe is just compensation for the Property. The negotiated fair market purchase price of $1,360,000 is based on an appraisal commissioned by the Fire District and supported by an internal appraisal conducted by CEO, Real Estate Division staff. Attachment A is the Agreement for Purchase and Sale of Real Property.

Approval of the proposed acquisition will ultimately result in the construction of a new 9,746 square foot two bay Fire Station and Helispot (proposed Fire Station 142). The project will be developed in two phases with Phase One including the site improvements and Helispot. Phase Two will include construction of the Fire Station. Phase One will be completed within four years of receiving all required Board approvals. The timing of Phase Two will be based on the progress of development in the surrounding areas to ensure that the construction of Fire Station 142 occurs when needed to address increased service levels within the Fire Station's jurisdictional area. This land purchase and the Phase One and Phase Two improvements are a key step in the Fire District's long range strategic planning.

Implementation of Strategic Plan Goals

The Countywide Strategic Plan directs the provision of Operational Effectiveness (Goal 1) by improving the efficiency, quality, and responsiveness of County services to all residents. It also directs that we ensure Children, Family and Adult Well-Being (Goal 2) by enhancing the ability of families to live in safe, stable, and supportive communities. We are also directed to improve Community and Municipal Services (Goal 3) by offering a wide range of services responsive to each community's specific needs. This project will help achieve these goals, as it is an investment in public infrastructure that will benefit the Acton community by improving the Fire District's ability to respond to local emergencies.

FISCAL IMPACT/FINANCING

The Fire District's Fiscal Year 2009-10 Accumulated Capital Outlay Fund Capital Project 70959 has sufficient appropriation for this project, which is funded by the District's Developer Fee Area 3. The purchase price for the subject property is $1,360,000, in addition to one-half of the related escrow and other transactional costs estimated to be approximately $15,000 in the aggregate.

There will be no impact to the County General Fund.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

Based on a demonstrated need to better serve the greater Acton community, the Fire District conducted a search for possible sites to construct a new Fire Station (proposed future Fire Station 142). The Fire District identified an approximately 4.7 acre portion of unimproved property located on the north side of Sierra Highway and just east of Crown Valley Road in Acton. The owner of the Property, the Brevidoro Family Partnership, had previously sold a contiguous parcel of land to the United States Forest Service and donated another parcel to the County for construction of the Acton-Agua Dulce Public Library. The proposed site was selected in order to meet an anticipated increase in service levels in the Acton area.

Initial Property development plans include construction of a two-bay Fire Station consisting of 9,746 square feet of space and a 110 foot diameter Helispot which will be utilized in cases of emergency operations (medical and fire responses) only. Other development plans include a new proposed street (future Clanfield Street) which will provide access to the Fire Station's ingress and egress driveways; a community horse trail which will be part of a proposed regional trail system to be located along the lot frontage of Sierra Highway; and for safety and aesthetic purposes, current overhead high power lines on Sierra Highway will be relocated and placed underground.

A preliminary title report has been issued and reveals no claims or encumbrances which would significantly affect or impair the Property's title. Additionally, as required by Government Code Section 65402, the proposed acquisition was submitted to the County of Los Angeles Department of Regional Planning. The Department of Regional Planning has determined that the proposed project is in compliance with its General Plan.

County Counsel has reviewed the Notice of Intention (Attachment B) in connection with this transaction and has approved it as to form.

ENVIRONMENTAL DOCUMENTATION

A Phase One environmental site assessment of the Property was conducted and concluded that no further environmental investigation was warranted. An Initial Study was prepared for this project in compliance with the California Environmental Quality Act (CEQA) and the environmental document reporting procedures and guidelines of the County of Los Angeles. As required by CEQA, a draft Mitigated Negative Declaration was prepared for this project and circulated for agency and public review on January 29, 2010. The review period ended on February 28, 2010. Proposed mitigation measures relative to air quality, archaeological resources, biological resources, hazardous materials, hydrology/water quality, noise, solid waste disposal, and traffic

have been included as part of the Mitigated Negative Declaration. The Mitigated Negative Declaration has concluded that the project, with the proposed mitigation measures, will not have a significant effect on the environment.

We recommend that your Board approve the Mitigated Negative Declaration (Attachment C) and the Mitigation Monitoring and Reporting Program (Attachment D) and find that by incorporating the mitigated measures described in the Mitigation Monitoring and Reporting Program, the project will not have a significant effect on the environment. Following approval of the Mitigated Negative Declaration by your Board, the Fire District will file a Notice of Determination with the County Clerk in accordance with State Law.

On August 7, 2009, the Fire District executed a contract with a Board approved vendor to process an Initial Study and subsequent environmental document for the proposed Fire Station and Helispot 142. The Initial Study and supporting documents were reviewed by County Counsel and approved on January 5, 2010.

The mitigation measures included in the CEQA environmental documents for this project specifically address biological resources, cultural resources, geotechnical resources, and noise (including construction and operational noise-including helicopter noise). Recommended measures to mitigate impacts on these resources include construction procedures that will be incorporated into the construction bid documents. The Initial Study concluded that the New Fire Station and Helispot 142 project with the applicable mitigation measures from the certified Environmental Impact Report will not have a significant effect on the environment.

Pursuant to applicable CEQA Statutes and Guidelines, the Fire District notified all property owners within 1000 feet of the project site, presented the project to the Acton Town Council, posted the required notices in the local newspaper, and posted the public notice on the proposed site. The 30-day public review period was completed on February 28, 2010, and no comments concerning the proposed project were received.

Therefore, we recommend that your Board adopt the Mitigated Negative Declaration and the applicable mitigation measures from the Mitigation Monitoring and Reporting Program included in the Mitigated Negative Declaration and find that by incorporating these mitigation measures the project will have no significant effect on the environment.

CONTRACTING PROCESS

The Fire District utilized a Board approved vendor to manage the due diligence and Initial Study/Mitigated Negative Declaration.

IMPACT ON CURRNET SERVICES (OR PROJECTS)

There will be no negative impact on current County Services or projects during the performance of the recommended actions.

CONCLUSION

It is requested that the Executive Officer, Board of Supervisors, return three original copies of the Agreement for Purchase and Sale of Real Property, two certified copies of the Minute Order and the adopted, stamped Board letter to the CEO, Real Estate Division at 222 South Hill Street, 3rd Floor, Los Angeles, CA 90012 for further processing. Additionally, please forward one adopted, stamped copy of the Board letter to the Fire Chief and to the Arts Commission.

Respectfully submitted,

WILLIAM T FUJIOKA
Chief Executive Officer

P. MICHAEL FREEMAN
Fire Chief

WTF:SK:WLD
CM:RL:kb

Attachments

c: Executive Office, Board of Supervisors
County Counsel
Auditor-Controller
Arts Commission
Assessor
Fire District

LIST OF ATTACHMENTS

A. AGREEMENT FOR PURCHASE AND SALE OF REAL PROPERTY

B. NOTICE OF INTENTION

C. MITIGATED NEGATIVE DECLARATION

D. MITIGATION MONITORING AND REPORTING PROGRAM

ATTACHMENT A

AGREEMENT FOR PURCHASE AND SALE OF REAL PROPERTY

AGREEMENT FOR PURCHASE AND SALE OF REAL PROPERTY

THIS AGREEMENT FOR PURCHASE AND SALE OF REAL PROPERTY ("Agreement"), is made and entered into as of this 25th day of May, 2010, by and between Seller, the BREVIDORO FAMILY PARTNERSHIP (hereinafter "PARTNERSHIP") and Buyer, the CONSOLIDATED FIRE PROTECTION DISTRICT OF LOS ANGELES COUNTY, (hereinafter "FIRE DISTRICT").

RECITALS

A. The PARTNERSHIP is the owner of certain real property consisting of approximately thirteen acres located at 3635 Sierra Highway, Acton, unincorporated Los Angeles County, State of California, designated as Assessor Parcel Number 3217-021-031, as legally described in Exhibit "A" and shown in Exhibit "A-1" attached hereto and incorporated herein by this reference (the Partnership's Property).

B. FIRE DISTRICT intends to purchase an approximately 4.7 acre portion of the Partnership's Property, together with all easements and interests appurtenant thereto, and all intangible property owned or held in connection therewith, including without limitation, development rights, governmental approvals and land entitlements; as legally described in Exhibit "B," attached hereto and incorporated herein by this reference (the "Property") for the purpose of constructing a Fire Station and Helispot. FIRE DISTRICT desires to purchase the Property from PARTNERSHIP, and PARTNERSHIP is willing to sell the Property to FIRE DISTRICT on the terms and conditions set forth in this Agreement.

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AGREEMENT

The terms and conditions of this Agreement are as follows:

1. Purchase and Sale. PARTNERSHIP agrees to sell to FIRE DISTRICT, and FIRE DISTRICT agrees to purchase from PARTNERSHIP, the Property upon the terms and conditions herein set forth.

2. Purchase Price. The "Purchase Price" for the Property shall be One Million Three Hundred Sixty Thousand Dollars ($1,360,000). PARTNERSHIP agrees that this amount encompasses payment and compensation for any and all claims connected with the acquisition of the Property by the FIRE DISTRICT. Accordingly, PARTNERSHIP hereby waives and releases FIRE DISTRICT from any and all claims for further compensation, expenses and/or damages, arising from or connected with the FIRE DISTRICT's acquisition of the Property, including without limitation, claims for compensation for real estate, improvements pertaining to the realty, fixtures and equipment, loss of business goodwill, benefits under the relocation assistance program, loss and/or damage to personal property and inventory, moving and/or relocation costs, damages to any business interest, and

any other costs and/or expenses related directly or indirectly to the acquisition of the Property by the FIRE DISTRICT.

3. Payment of Purchase Price. FIRE DISTRICT shall pay the Purchase Price for the Property by delivering such Purchase Price into Escrow (as defined in Section 7) in immediately available funds prior to the "Closing" (as defined in Section 8), and as provided for in this Agreement.

4. Form of Grant Deed. Fee simple absolute title to the Property shall be conveyed by PARTNERSHIP to FIRE DISTRICT as described in and by grant deed in the form attached hereto as Exhibit "C" ("Grant Deed"), duly executed and acknowledged by PARTNERSHIP, subject only to matters of record approved in writing by the FIRE DISTRICT pursuant to paragraph 5.02, below.

5. Contingencies. Completion of the transaction contemplated by this Agreement is contingent upon the following ("Contingencies"):

5.01 Approval of Purchase and Sale. With the Los Angeles County Board of Supervisors acting as the governing body of the FIRE DISTRICT:

Approval of this Agreement by the Board of Supervisors;

The Board of Supervisors adopting a Notice of Intention to Purchase the Property; and

The Board of Supervisors approving the purchase of the Property.

5.02 Condition of Title to Transfer Property. PARTNERSHIP shall cause the conveyance of title to the Property to FIRE DISTRICT as evidenced by a C.L.T.A. Standard Policy of Title Insurance ("Title Policy") issued by Chicago Title Company (the "Title Company") insuring good and marketable title to the Property in FIRE DISTRICT in an amount equal to the value of the Purchase Price and subject only to matters approved in writing by FIRE DISTRICT ("Approved Exceptions"). FIRE DISTRICT may, at its own cost, obtain extended title insurance coverage. The Title Policy shall show as exceptions only the Approved Exceptions. The exceptions to title shown on Schedule B of the issued Title Report and Title Company's standard printed exceptions shall be deemed to be the Approved Exceptions.

6. Non-Satisfaction of Contingencies. Upon non-satisfaction of any one of the above Contingencies, FIRE DISTRICT may either allow PARTNERSHIP a thirty (30) day opportunity to cure or terminate the transaction by notice to PARTNERSHIP of such termination. By mutual written agreement the parties may extend the period within which PARTNERSHIP is required to cure a non-satisfaction. If the Agreement is terminated as set forth herein, neither of the parties thereafter shall have any liability to the other except as expressly provided for in this Agreement.

7. Escrow.

7.01 Opening of Escrow. Within fourteen (14) days after the execution of this Agreement by all parties, the parties shall open an escrow (the "Escrow") with Chicago Title Company, 700 South Flower Street, Suite 800, Los Angeles, California 90017, Attention: Cheryl A. Yanez, (the "Escrow Holder") selected by PARTNERSHIP and FIRE DISTRICT for the purpose of consummating the purchase and sale of the Property. The parties shall execute and deliver to Escrow Holder, within ten (10) business days of receipt, such escrow instructions prepared by Escrow Holder as may be required to consummate the transaction contemplated by this Agreement. Any such instructions shall not conflict with, amend, or supersede any provisions of this Agreement. If there is any inconsistency between such instructions and this Agreement, this Agreement shall control unless the parties expressly agree, in writing, otherwise.

7.02 Escrow Authorization. Escrow Holder is authorized to:

7.02.01 Pay, and charge PARTNERSHIP, for any delinquent taxes, and penalties and interest thereon, and for any delinquent assessments or bonds against the Property,

7.02.02 FIRE DISTRICT shall be responsible for title insurance costs, documentary transfer tax, and recording fees;

7.02.03 Pay, and charge both FIRE DISTRICT and PARTNERSHIP for one–half the amount of all escrow fees;

7.02.04 Prorate all real property taxes, if any, which are a lien and/or unpaid as of the close of Escrow according to the formula adopted by the Los Angeles County Assessor's Office and deduct PARTNERSHIP's portion from PARTNERSHIP's proceeds. The tax amount withheld will be made payable to the County Auditor-Controller's Office following the Closing. Any taxes which have been prepaid by PARTNERSHIP shall not be prorated, but PARTNERSHIP shall have the sole right, after Closing, to apply to the Los Angeles County Treasurer for refund of the taxes attributable to the period after acquisition pursuant to the Revenue and Taxation Code Section 5096.7;

7.02.05 When conditions of Escrow have been fulfilled by FIRE DISTRICT and PARTNERSHIP: (1) record documents of conveyance; (2) disburse the Purchase Price to PARTNERSHIP, less proration and PARTNERSHIP's expenses; (3) deliver to FIRE DISTRICT and PARTNERSHIP copies of the Escrow closing statements; and (4) deliver to

FIRE DISTRICT and PARTNERSHIP any items or documents given to Escrow Holder to hold for FIRE DISTRICT and/or PARTNERSHIP.

8. Conditions to Closing.

8.01 FIRE DISTRICT's Conditions. FIRE DISTRICT's obligation to consummate the transaction contemplated by this Agreement is conditioned upon: (i) PARTNERSHIP's delivery of the Grant Deed to Escrow Holder and the recordation thereof in the Official Records of Los Angeles County ("Official Records"); (ii) PARTNERSHIP's representations, warranties and covenants shall be true and correct as of Closing; and (iii) Title Company's irrevocable commitment to issue the Title Policy. Upon non-satisfaction of any one of the above conditions, FIRE DISTRICT may either allow PARTNERSHIP an opportunity to cure or terminate the transaction by written notice to PARTNERSHIP of such termination. If this transaction is terminated as set forth herein, neither of the parties thereafter shall have any liability to the other except as expressly provided for in this Agreement. If FIRE DISTRICT does not object to PARTNERSHIP's non-satisfaction of said conditions, they shall be deemed satisfied as of the Closing.

8.02 PARTNERSHIP's Conditions. PARTNERSHIP's obligation to consummate the transaction contemplated by this Agreement is conditioned upon: (i) FIRE DISTRICT's deposit of the Purchase Price into Escrow no later than ten (10) business days after the opening of Escrow; (ii) that the Closing shall occur as set forth in Section 9. After non-satisfaction by FIRE DISTRICT of one of the above conditions PARTNERSHIP may either waive the time limitation set forth therein or terminate the transaction by written notice to FIRE DISTRICT of such termination. If this transaction is terminated as set forth herein, neither of the parties thereafter shall have any liability to the other except as expressly provided for in this Agreement. If PARTNERSHIP does not object to FIRE DISTRICT's non-satisfaction of said conditions, they shall be deemed satisfied as of the Closing.

Closing. For the purposes of this Agreement, the "Closing" or "Closing Date" shall be defined as the date on which the recordation of the Grant Deed in the Official Records occurs. The Closing shall occur no later than ten (10) business days after the date of the Board of Supervisors' order consummating the purchase contemplated hereby as provided in Section 8.02 hereof. If the Closing does not occur as indicated above, neither of the parties thereafter shall have any liability to the other except as expressly provided for in this Agreement.

9. Possession and PARTNERSHIP's Rights Concerning Existing Vegetation and Waterline. FIRE DISTRICT shall be entitled to the exclusive right of occupancy to the Property as of the Closing Date. On or before the Closing Date, PARTNERSHIP shall provide keys or other means to operate all locks and alarms on the Property.

The parties hereto acknowledge that the Property has been used by PARTNERSHIP for the growing of marketable vegetation, specifically lilac bushes, which is sustained by an existing private waterline, generally described as a two-inch metal line buried below ground (collectively the "Vegetation/Waterline"). The PARTNERSHIP desires to retain the Vegetation/Waterline as its personal property, notwithstanding the sale of the Property to FIRE DISTRICT. Unless otherwise agreed in writing by the parties hereto, PARTNERSHIP shall have the right to remove and relocate all Vegetation/Waterline on the Property until the date of Closing. In the event that such relocation cannot be completed prior to the date of Closing, FIRE DISTRICT shall grant the PARTNERSHIP access to the Property by issuing a temporary permit (in a form selected by FIRE DISTRICT) (the "Permit") to PARTNERSHIP for a term not to exceed six months from the Closing so as to allow the PARTNERSHIP to complete the relocation of all the Vegetation/Waterline.

The Permit shall provide, among other terms that may be imposed by FIRE DISTRICT, that during PARTNERSHIP's access to the Property for relocation of Vegetation/Waterline purposes, FIRE DISTRICT shall not be liable for any damage to, destruction of, or theft of PARTNERSHIP's possessions in the Property and that PARTNERSHIP shall assume all risk and responsibility for accident, injury or damage to persons and/or property arising from PARTNERSHIP's use and control of the Property and any improvements located thereon.

10. Loss by Fire or Other Casualty. PARTNERSHIP shall maintain fire and casualty insurance on the Property in full force until the Closing Date. In the event that, prior to Closing, the Property or any part thereof, is destroyed or damaged, and the cost of repair or cure is $10,000 or less, as reasonably determined by PARTNERSHIP, PARTNERSHIP shall repair or cure the loss to the reasonable satisfaction of FIRE DISTRICT prior to Closing. If the cost of repair or cure is more than $10,000, FIRE DISTRICT shall have the right, exercisable by giving notice of such decision to PARTNERSHIP within fifteen (15) days after receiving written notice of such damage or destruction, to terminate this Agreement. If FIRE DISTRICT elects to move forward with the sales transaction, said sales transaction shall close and any proceeds of insurance paid or payable to PARTNERSHIP by reason of such damage or destruction shall be paid or assigned to FIRE DISTRICT.

11. Maintenance of the Property. Between the PARTNERSHIP execution of this Agreement and the Closing, PARTNERSHIP shall maintain the Property as presently maintained.

12. Notices. All notices or other communications required or permitted hereunder shall be in writing, and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested or by Express Mail or Federal Express to

the following address:

To FIRE DISTRICT:

County of Los Angeles
Chief Executive Office, Real Estate Division
222 South Hill Street, 3rd Floor
Los Angeles, California 90012
Attention: Chris Montana, Manager
Property Management

With Copies to:

Office of County Counsel
Room 653Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012
Attention: Amy M. Caves
Scott Kuhn

To PARTNERSHIP:

Brevidoro Family Partnership
P.O. Box 38
Acton, California 93510
Attn: Mr. John Brevidoro, General Partner

Notice shall be deemed given on the day delivered by a carrier as specified above. Notice of change of address shall be given by written notice in the manner detailed in this Section.

13. Brokers. PARTNERSHIP represents and warrants to FIRE DISTRICT and FIRE DISTRICT represents and warrants to PARTNERSHIP that no broker or finder has been engaged by it in connection with the transaction contemplated by this Agreement. In the event of any claims for brokers' or finders' fees or commissions in connection with the negotiation, execution or consummation of this Agreement, FIRE DISTRICT shall indemnify, hold harmless and defend PARTNERSHIP, from and against such claims if they are based upon or are alleged to be based upon any statement, representation or agreement by FIRE DISTRICT, and PARTNERSHIP shall indemnify, hold harmless and defend FIRE DISTRICT from and against such claims if they are based upon or are alleged to be based upon any statement, representation or agreement by PARTNERSHIP.

14. PARTNERSHIP's Representations and Warranties. In consideration of FIRE DISTRICT entering into this Agreement and as an inducement to FIRE DISTRICT to purchase the Property, PARTNERSHIP makes the following representations and warranties, each of which is material and is being relied upon by FIRE DISTRICT and the truth and accuracy of which shall constitute a condition precedent to FIRE DISTRICT's obligations hereunder. Each of the following representations and warranties shall be deemed to have been remade as of the Closing.

14.01 Power. PARTNERSHIP has the legal power, right and authority to enter into this Agreement and the instruments referenced herein, and to consummate the transaction contemplated hereby.

14.02 Requisite Action. All requisite action has been taken by PARTNERSHIP in connection with entering into this Agreement and the instruments referenced herein, and, by the Closing, all such necessary action will have been taken to authorize the consummation of this transaction. By the Closing, no additional consent of any person or entity, judicial or administrative body, governmental authority or other party shall be required for PARTNERSHIP to consummate this transaction.

14.03 Individual Authority. The individuals executing this Agreement and the instruments referenced herein on behalf of PARTNERSHIP have the legal power, right and actual authority to bind PARTNERSHIP to the terms and conditions hereof and thereof.

14.04 Validity. This Agreement and all documents required hereby to be executed by PARTNERSHIP are and shall be valid, legally binding obligations of and enforceable against PARTNERSHIP in accordance with their terms, subject only to applicable bankruptcy, insolvency, reorganization, moratorium laws or similar laws or equitable principles affecting or limiting the right of contracting parties generally.

14.05 Violations. PARTNERSHIP has no present actual knowledge of any outstanding and uncured, written notice or citation from applicable governmental authorities of violation of any applicable codes, environmental zoning and land use laws, subdivision laws, and other applicable federal, state and local laws, regulations and ordinances, including, but not limited to, those relating to environmental conditions, hazardous materials or wastes, toxic materials or wastes or other similar materials or wastes regarding the Property.

14.06 Litigation. PARTNERSHIP has no present actual knowledge of any litigation pending or threatened against PARTNERSHIP on any basis therefor that arises out of the ownership of the Property or that might detrimentally affect the Property or adversely affect the ability of PARTNERSHIP to perform its obligations under this Agreement.

15. FIRE DISTRICT's Representations and Warranties. In consideration of PARTNERSHIP entering into this Agreement and as an inducement to PARTNERSHIP to sell the Property, FIRE DISTRICT makes the following representations and warranties, each of which is material and is being relied upon by PARTNERSHIP and the truth and accuracy of which shall constitute a condition precedent to PARTNERSHIP's obligations hereunder. Each of the following representations and warranties shall be deemed to have been remade as of the Closing.

15.01 Power. FIRE DISTRICT has the legal power, right and authority to enter into this Agreement and the instruments referenced herein, and to consummate the transaction contemplated hereby.

15.02 Requisite Action. All requisite action has been taken by FIRE DISTRICT in connection with entering into this Agreement and the instruments referenced

herein, and, by the Closing, all such necessary action will have been taken to authorize the consummation of this transaction. By the Closing, no additional consent of any person or entity, judicial or administrative body, governmental authority or other party shall be required for FIRE DISTRICT to consummate this transaction.

15.03 Individual Authority. The individuals executing this Agreement and the instruments referenced herein on behalf of FIRE DISTRICT have the legal power, right and actual authority to bind FIRE DISTRICT to the terms and conditions hereof and thereof.

15.04 Validity. This Agreement and all documents required hereby to be executed by FIRE DISTRICT are and shall be valid, legally binding obligations of and enforceable against FIRE DISTRICT in accordance with their terms, subject only to applicable bankruptcy, insolvency, reorganization, moratorium laws or similar laws or equitable principles affecting or limiting the right of contracting parties generally.

16 Inspection of the Site.

16.01 Access. PARTNERSHIP agrees to provide FIRE DISTRICT and/or FIRE DISTRICT's employees, representatives and agents with access to the Property, upon reasonable notice, to conduct any inspections FIRE DISTRICT deems appropriate at any time prior to the Closing.

16.02 Testing. FIRE DISTRICT shall not engage in any destructive, intrusive, or invasive testing during any inspection of the Property, without the prior written consent of PARTNERSHIP, which consent shall not unreasonably be withheld.

16.03 Indemnification. FIRE DISTRICT hereby indemnifies and holds PARTNERSHIP and the Property harmless from and against any and all costs, losses, damages or expenses arising out of or resulting from such entry by FIRE DISTRICT pursuant to this Agreement.

17. Condition of Property. AS IS: (i) With the exception of Section 14 hereof, there are no representations or warranties of any kind whatsoever, express or implied, made by PARTNERSHIP in connection with this Agreement, the purchase of the Property by FIRE DISTRICT, the physical condition of the Property or whether the Property complies with applicable laws or is appropriate for FIRE DISTRICT's intended use; (ii) FIRE DISTRICT has (or has chosen not to have) fully investigated the Property and all matters pertaining thereto including without limitation, the environmental condition of the Property; (iii) FIRE DISTRICT is not relying on any statement or representation of PARTNERSHIP, its agents or its representatives except for the express representations and warranties set forth in Section 14 hereof; (iv) FIRE DISTRICT, in entering into this Agreement and in completing its purchase of the Property, is relying entirely on its own investigation of the Property (except for the express representations and warranties set forth in Section 14 hereof) and based on its extensive experience in and knowledge of real property in the areas where the Property is located; (v) FIRE DISTRICT is aware (or has chosen not to be aware) of all zoning regulations, other governmental requirements, site and physical conditions, and other matters affecting the use and condition of the Property; (vi)

FIRE DISTRICT's decision to purchase the Property on the terms and conditions hereof is made solely and exclusively in reliance on FIRE DISTRICT's own review, inspection and investigation of the Property except for the express representations and warranties set forth in Section 14 hereof; and (vii) FIRE DISTRICT shall purchase the Property in its "as is" condition as of the date of the Closing Date.

EXCEPT AS EXPRESSLY PROVIDED IN SECTION 14 OF THIS AGREEMENT, FIRE DISTRICT AND ANYONE CLAIMING BY, THROUGH OR UNDER FIRE DISTRICT HEREBY FULLY AND IRREVOCABLY RELEASES PARTNERSHIP, ITS PARTNERS, ITS EMPLOYEES, OFFICERS, DIRECTORS, MANAGERS, MEMBERS, REPRESENTATIVES, AGENTS, SERVANTS, ATTORNEYS, AFFILIATES, PARENT, SUBSIDIARIES, SUCCESSORS, AND ASSIGNS, AND ALL PERSONS, FIRMS, CORPORATIONS, AND ORGANIZATIONS IN ITS BEHALF FROM AND ANY AND ALL CLAIMS THAT IT MAY NOW HAVE OR HEREAFTER ACQUIRE AGAINST PARTNERSHIP, ITS EMPLOYEES, OFFICERS, DIRECTORS, REPRESENTATIVES, AGENTS, SERVANTS, ATTORNEYS, AFFILIATES, PARENT, SUBSIDIARIES, SUCCESSORS, AND ASSIGNS, AND ALL PERSONS, FIRMS, CORPORATIONS, AND ORGANIZATIONS IN ITS BEHALF FOR ANY COSTS, LOSS, LIABILITY, DAMAGE, EXPENSES, DEMAND, ACTION OR CAUSE OF ACTION ARISING FROM OR RELATED TO THE PHYSICAL (INCLUDING, WITHOUT LIMITATION, CONSTRUCTION DEFECTS AND LATENT AND PATENT DEFECTS IN THE IMPROVEMENTS) AND ENVIRONMENTAL CONDITION OF THE PROPERTY. THIS RELEASE INCLUDES CLAIMS OF WHICH FIRE DISTRICT IS PRESENTLY UNAWARE OR WHICH FIRE DISTRICT DOES NOT PRESENTLY SUSPECT TO EXIST WHICH, IF KNOWN BY FIRE DISTRICT, WOULD MATERIALLY AFFECT FIRE DISTRICT'S RELEASE TO PARTNERSHIP. IT IS UNDERSTOOD AND AGREED THAT THE PURCHASE PRICE HAS BEEN ADJUSTED BY PRIOR NEGOTIATION TO REFLECT THAT ALL OF THE PROPERTY IS SOLD BY PARTNERSHIP AND PURCHASED BY FIRE DISTRICT SUBJECT TO THE FOREGOING. FIRE DISTRICT HEREBY ACKNOWLEDGES THAT IT UNDERSTANDS THE SIGNIFICANCE AND CONSEQUENCES OF SUCH RELEASE AND FIRE DISTRICT HAS HAD AN OPPORTUNITY TO BE ADVISED BY INDEPENDENT COUNSEL REGARDING THE SAME.

FIRE DISTRICT acknowledges that it is familiar with section 1542 of the California Civil Code, which provides as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

FIRE DISTRICT hereby waives and relinquishes every right or benefit which it has or may have under section 1542 of the California Civil Code, to the full extent it may lawfully waive such right or benefit with regard to the foregoing release.

PARTNERSHIP's Initials _____ FIRE DISTRICT's Initials _____

18. Indemnity. PARTNERSHIP shall defend, indemnify, and hold FIRE DISTRICT and its elected and appointed officers, agents and employees free and harmless from and against any and all liabilities, damages, claims, costs and expenses (including without limitation, attorneys' fees, legal expenses and consultants' fees) related to or arising in whole or in part from the removal, eviction, vacation, or relocation of any occupant(s) of the Property, residing thereat at any time prior to the Closing.

19. Survival of Covenants. The covenants, indemnities, agreements, representations and warranties made herein are intended to survive the Closing and recordation and delivery of the Grant Deed conveying the Property to FIRE DISTRICT for a period of one year. Any claims for breach of PARTNERSHIP's representations, warranties, indemnities, and covenants herein must be filed against PARTNERSHIP within such one-year period or shall forever be barred.

20. Required Actions of FIRE DISTRICT and PARTNERSHIP. FIRE DISTRICT and PARTNERSHIP agree to execute all such instruments and documents and to take all actions pursuant to the provisions hereof in order to consummate this transaction and shall use their best efforts to effect the Closing in accordance with the provisions hereof.

21. Assignability. FIRE DISTRICT may assign, transfer or convey this Agreement to any person or entity without the prior written consent of PARTNERSHIP; and FIRE DISTRICT may designate a nominee to be vestee of the Property at the Closing by delivering to PARTNERSHIP and Escrow Holder at least five (5) days prior to the scheduled Closing a written notice of such designation. Any such designation shall not release FIRE DISTRICT from its obligations hereunder.

22. Entire Agreement. This Agreement contains the entire agreement between the parties hereto and no addition or modification of any term or provision shall be effective unless set forth in writing, signed by both PARTNERSHIP and FIRE DISTRICT.

23. California Law. This Agreement shall be construed in accordance with the internal laws of the State of California.

24. Waivers. No waiver by either party of any provision hereof shall be deemed a waiver of any other provision hereof or of any subsequent breach by either party of the same or any other provision.

25. Captions. The captions and the section and subsection numbers appearing in this Agreement are inserted only as a matter of convenience and in no way define, limit, construe or describe the scope or intent of such sections of this Agreement nor in any way affect this Agreement.

26. Interpretation. Unless the context of this Agreement clearly requires otherwise, (i) the plural and singular numbers shall be deemed to include the other; (ii) the masculine, feminine and neuter genders shall be deemed to include the others;(iii) "or" is not exclusive; and (iv) "includes" and "including" are not limiting.

27. Severability. This Agreement shall not be deemed severable. In the event any portion of this Agreement shall be declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, this Agreement shall be void and of no further effect.

28. Delegation of Authority. The Los Angeles County Board of Supervisors on behalf of the FIRE DISTRICT hereby delegates to its Chief Executive Officer or his designee, the authority to issue any and all approvals required by this Agreement and to execute any and all instruments necessary to consummate this transaction.

29. Binding Effect. The provisions of this Agreement shall be binding upon the parties hereto and their respective successors-in-interest.

30. No Presumption Re: Drafter. The parties acknowledge and agree that the terms and provisions of this Agreement have been negotiated and discussed between the parties and their attorneys, and this Agreement reflects their mutual agreement regarding the same. Because of the nature of such negotiations and discussions, it would be inappropriate to deem any party to be the drafter of this Agreement, and therefore, no presumption for or against validity or as to any interpretation hereof, based upon the identity of the drafter shall be applicable in interpreting or enforcing this Agreement.

31. Assistance of Counsel. Each party hereto either had the assistance of counsel or had counsel available to it, in the negotiation for, and the execution of, this Agreement, and all related documents.

32. Remedies. In the event of PARTNERSHIP's default hereunder, FIRE DISTRICT shall so advise PARTNERSHIP in writing of such default, and if such default is not cured within five (5) business days after PARTNERSHIP's receipt of such notice, FIRE DISTRICT's sole and exclusive remedies shall be to either: (i) terminate this Agreement by written notice of termination to PARTNERSHIP, whereupon PARTNERSHIP shall have no further obligations hereunder, or (ii) bring an action for specific performance of this Agreement, which action, if brought at all, must be brought (and PARTNERSHIP must be served with process) within ninety (90) days after the date of FIRE DISTRICT's notice. Notwithstanding the foregoing provisions to the contrary, in the event FIRE DISTRICT purchases the Property and it is determined by a court of competent jurisdiction that PARTNERSHIP has breached any representations, warranty described in Section 15 hereof, indemnity or covenant herein, FIRE DISTRICT may, subject to the time limitations in Section 20, recover actual damages from PARTNERSHIP in an amount not to exceed $25,000.

33. Within forty-five days after the date of Closing, PARTNERSHIP shall grant the FIRE DISTRICT a Temporary Grading Easement allowing access to a portion of the Partnership's Property in order to help implement FIRE DISTRICT's efforts in grading the Property.

/ / / / SIGNATURE PAGE FOLLOWS / / / /

IN WITNESS WHEREOF, PARTNERSHIP has executed this Agreement or caused it to be duly executed and this Agreement has been executed on behalf of the FIRE DISTRICT by the Chair of the Los Angeles County Board of Supervisors the day, month, and year first above written.

BREVIDORO FAMILY PARTNERSHIP

By: John A. Brevidoro
General Partner

I hereby certify that pursuant to Section 25103 of the Government Code, delivery of this document has been made.

SACHI A. HAMAI
Executive Officer
Clerk of the Board of Supervisors

By: LaChelle Smitherman
Deputy

ATTEST:

SACHI A. HAMAI
Executive Officer-Clerk of the
Board of Supervisors

By: LaChelle Smitherman
Deputy

CONSOLIDATED FIRE PROTECTION
DISTRICT OF LOS ANGELES COUNTY

By: Gloria Molina
Chair, Board of Supervisors
Los Angeles County

77280

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By:
Senior Deputy

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

1 MAY 25 2010

Sachi A. Hamai
SACHI A. HAMAI
EXECUTIVE OFFICER

HOA.677754.112

LIST OF EXHIBITS

A. LEGAL DESCRIPTION PARTNERSHIP PROPERTY

A-1 PARTNERSHIP PROPERTY APN PLAT MAP

B. LEGAL DESCRIPTION FEE PARCEL

C. GRANT DEED

EXHIBIT A

LEGAL DESCRIPTION

PARTNERSHIP PROPERTY
APN 3217-021-031

Real property in the unincorporated area of the County of Los Angeles, State of California, described as follows:

THE EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

EXCEPTING THEREFROM THE NORTHERLY 200 FEET OF THE WESTERLY 355 FEET, THEREOF.

ALSO EXCEPTING THEREFROM THAT PORTION LYING SOUTHERLY OF THE NORTHERLY LINE OF SIERRA HIGHWAY, 100 FEET WIDE, AS SHOWN ON C.S.B. 1081 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY.

ALSO EXCEPTING THAT PORTION INCLUDED WITHIN THE LINES OF CROWN VALLEY ROAD, AS DESCRIBED IN DEED, RECORDED AS INSTRUMENT NO. 671, IN BOOK 976, PAGE 164, OFFICIAL RECORDS, ON MARCH 28, 1922, IN THE OFFICE OF THE COUNTY RECORDER, AND AS INSTRUMENT NO. 979, BOOK 15164, PAGE 146, OFFICIAL RECORDS, ON AUGUST 3, 1937, RECORDS OF SAID COUNTY.

ALSO EXCEPTING THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE DEED RECORDED ON MAY 6, 1947 AS INSTRUMENT NO. 112, IN BOOK 24496, PAGE 407, OFFICIAL RECORDS OF SAID COUNTY.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE UNITED STATES OF AMERICA BY THAT CERTAIN GRANT DEED RECORDED SEPTEMBER 11, 2006 AS INSTRUMENT NO. 06-2014182 OF OFFICIAL RECORDS OF SAID COUNTY.

APN: 3217-021-031

EXHIBIT A-1

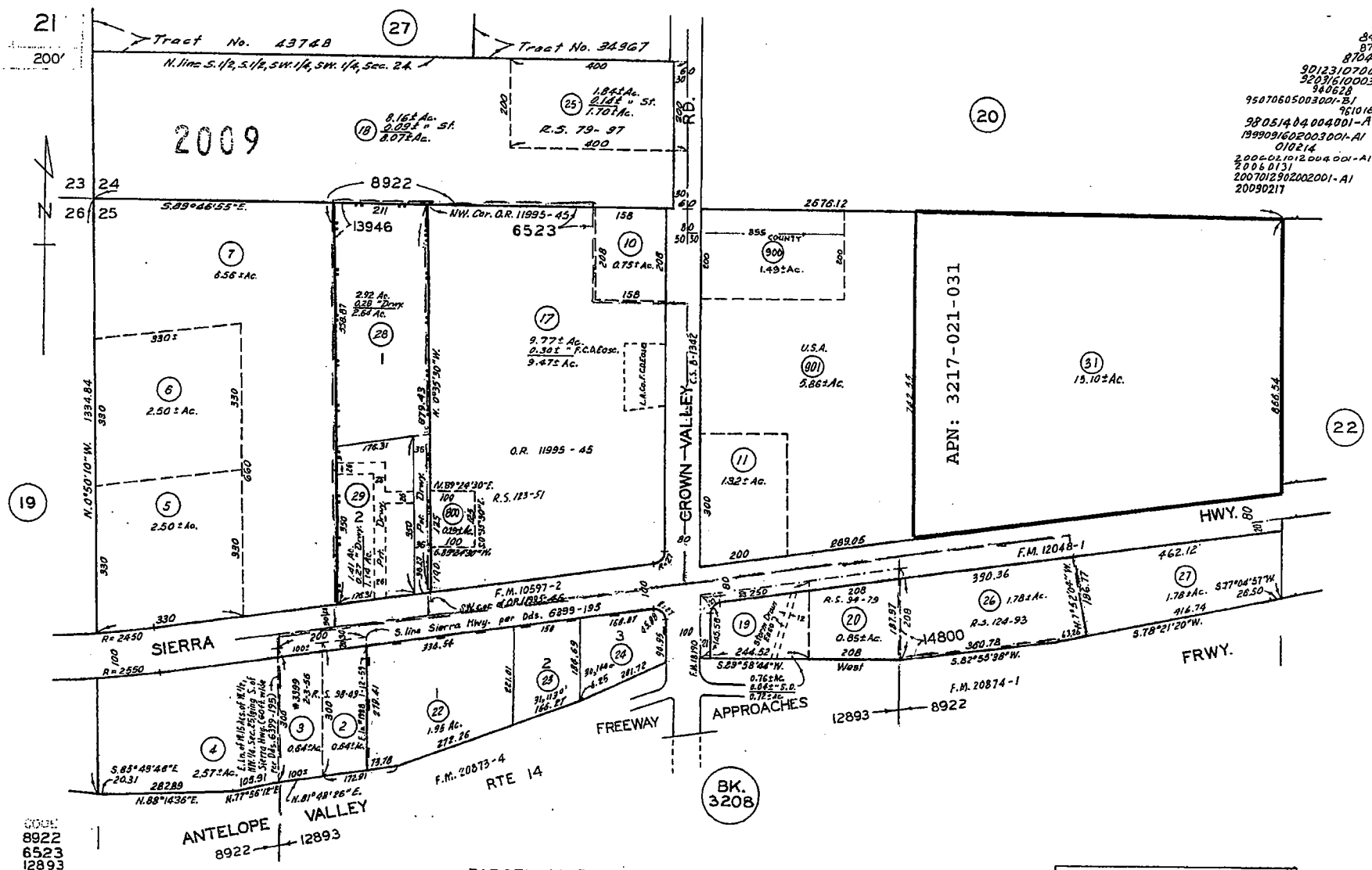

3217 21
Tract No. 43748
Tract No. 34967
N. line S. 1/2, S. 1/2, SW. 1/4, SW. 1/4, Sec. 24.
2009
8922
13946
6523
CROWN VALLEY
R.B.
APN: 3217-021-031
U.S.A.
COUNTY
HWY. 80
F.M. 12048-1
F.M. 10597-2
SIERRA
S. line Sierra Hwy. per Dds. 6399-195
R=2450
R=2550
FREEWAY
APPROACHES
14800
12893
8922
F.M. 20873-4
RTE 14
FRWY.
ANTELOPE VALLEY
BK. 3208
PARCEL MAP P.M. 289-36-37
T. 5 N., R. 13 W.
PARCEL MAP P.M. 249-27-28
SECTION LINES PER C.S. 8924
GOOGLE:
8922
6523
12893
13946
14800
3208 - 4
3217-27

EXHIBIT B

PROPOSED FS 142
LEGAL DESCRIPTION
FEE PARCEL

THAT PORTION OF THE EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED TERRITORY OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25;

THENCE WESTERLY ALONG THE NORTHERLY LINE OF SAID EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25 NORTH 89°40'47" WEST 315.03 FEET TO A POINT IN A LINE LYING 315.00 FEET WESTERLY OF, AND PARALLEL WITH, MEASURED AT RIGHT ANGLES TO, THE EASTERLY LINE OF SAID EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER;

THENCE LEAVING SAID NORTHERLY LINE AND SOUTHERLY ALONG SAID PARALLEL LINE SOUTH 00°25'40" EAST 671.68 FEET TO A POINT IN THE NORTHERLY LINE OF SIERRA HIGHWAY, 100 FEET WIDE, AS SHOWN ON C.S.B. 1081 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY;

THENCE EASTERLY ALONG LAST SAID NORTHERLY LINE NORTH 82°21'01" EAST 317.52 FEET TO A POINT IN SAID EASTERLY LINE OF THE EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25;

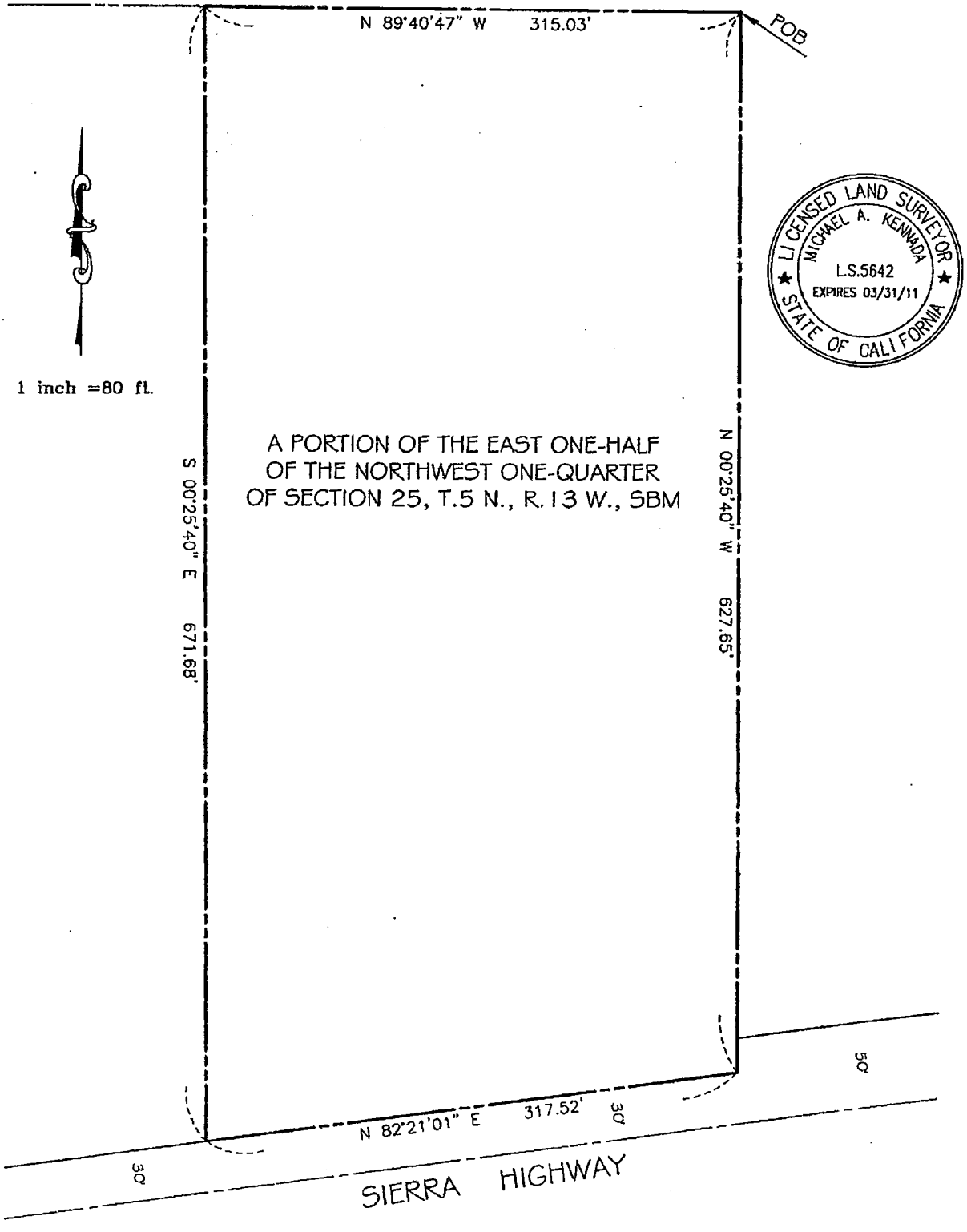
THENCE NORTHERLY ALONG SAID EASTERLY LINE NORTH 00°25'40" WEST 627.65 FEET TO THE **POINT OF BEGINNING.**

CONTAINING 4.70 ACRES, MORE OR LESS.

PLAT TO ACCOMPANY LEGAL DESCRIPTION

Sheet 1 of 1

EXHIBIT B



APN 3217-021-031

AREA: 204,645 sq. ft. or 4.70 acres

EXHIBIT C

GRANT DEED

GRANT DEED

RECORDING REQUESTED BY
COUNTY OF LOS ANGELES

WHEN RECORDED MAIL TO:

County of Los Angeles
222 South Hill Street, 3rd Floor
Los Angeles, CA 90012
Attention: Rowland Lee

Space above this tine for Recorders use

THIS DOCUMENT IS EXEMPT FROM DOCUMENTARY TRANSFER TAX PURSUANT TO SECTION 11922 OF THE REVENUE & TAXATION CODE

ASSESSOR'S IDENTIFICATION NUMBER PORTION OF 3217-021-031

THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO SECTION 27383 OF THE GOVERNMENT CODE

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, THE BREVIDORO FAMILY PARTNERSHIP, (hereinafter called "Grantor") does hereby grant to the CONSOLIDATED FIRE PROTECTION DISTRICT OF LOS ANGELES COUNTY, (hereinafter called "FIRE DISTRICT") a body corporate and politic, all of the Grantor's rights, title and interests to that certain real property in the unincorporated territory of the County of Los Angeles, State of California, legally described in Exhibit A, attached hereto and incorporated herein by this reference.

SUBJECT TO:

1. All taxes, penalties and assessments of record, if any.

2. Covenants, conditions, restrictions, reservations, easements, rights, and rights-of-way, if any.

Dated _____

BREVIDORO FAMILY PARTNERSHIP

By_____
General Partner

EXHIBIT A

PROPERTY (FEE PARCEL)
LEGAL DESCRIPTION

THAT PORTION OF THE EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED TERRITORY OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25;

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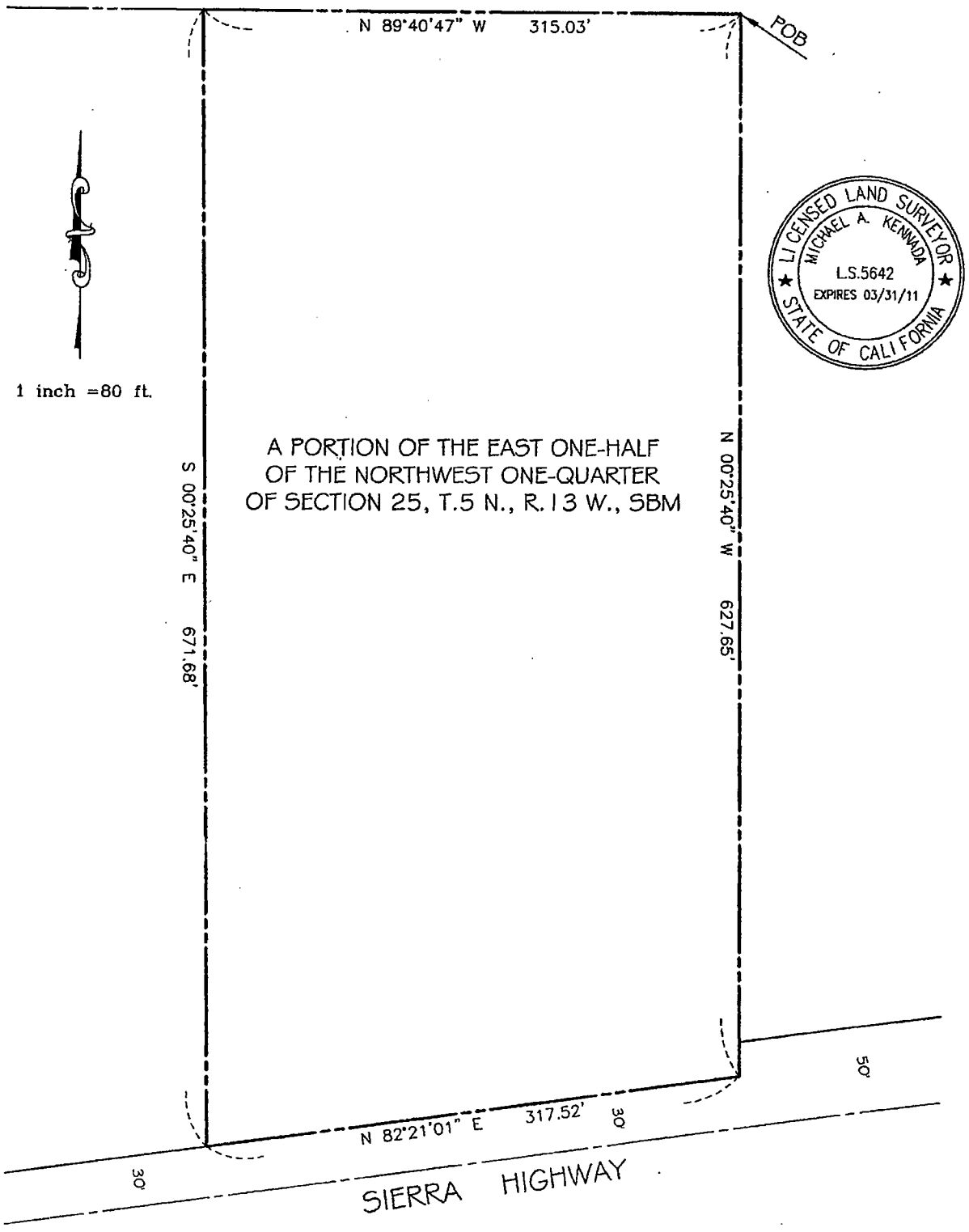
CONTAINING 4.70 ACRES, MORE OR LESS.

PLAT TO ACCOMPANY LEGAL DESCRIPTION

Sheet 1 of 1

EXHIBIT A



APN 3217-021-031

AREA: 204,645 sq. ft. or 4.70 acres

ATTACHMENT B

NOTICE OF INTENTION

NOTICE OF INTENTION
TO PURCHASE REAL PROPERTY

NOTICE IS HEREBY GIVEN that it is the intention of the Board of Supervisors of the County of Los Angeles, State of California to purchase a 4.7 acre parcel of unimproved real property (Portion of Assessor's Parcel Number 3217-021-031) located in the unincorporated community of Acton, County of Los Angeles, State of California, as legally described on the attached Exhibit A for the sum of One Million Three Hundred Sixty Thousand Dollars ($1,360,000) from the owner, the Brevidoro Family Partnership.

NOTICE IS HEREBY GIVEN that the purchase of real property will be consummated by the Board of Supervisors of the County of Los Angeles, State of California, on the 25th day of May, 2010, at 9:30 a.m. in the Hearing Room of the Board of Supervisors, Room 381, Kenneth Hahn Hall of Administration, 500 West Temple Street, Los Angeles, California 90012. No obligation will arise against the County and in favor of the Seller with respect to the purchase of the property described herein until the Board of Supervisors approves the purchase on the named consummation date.

SACHI A. HAMAI, Executive Officer
Board of Supervisors, County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By _____
Amy M. Caves, Senior Deputy

EXHIBIT A

PROPERTY (FEE PARCEL)
LEGAL DESCRIPTION

THAT PORTION OF THE EAST ONE-HALF OF THE NORTHWEST ONE-QUARTER OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED TERRITORY OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

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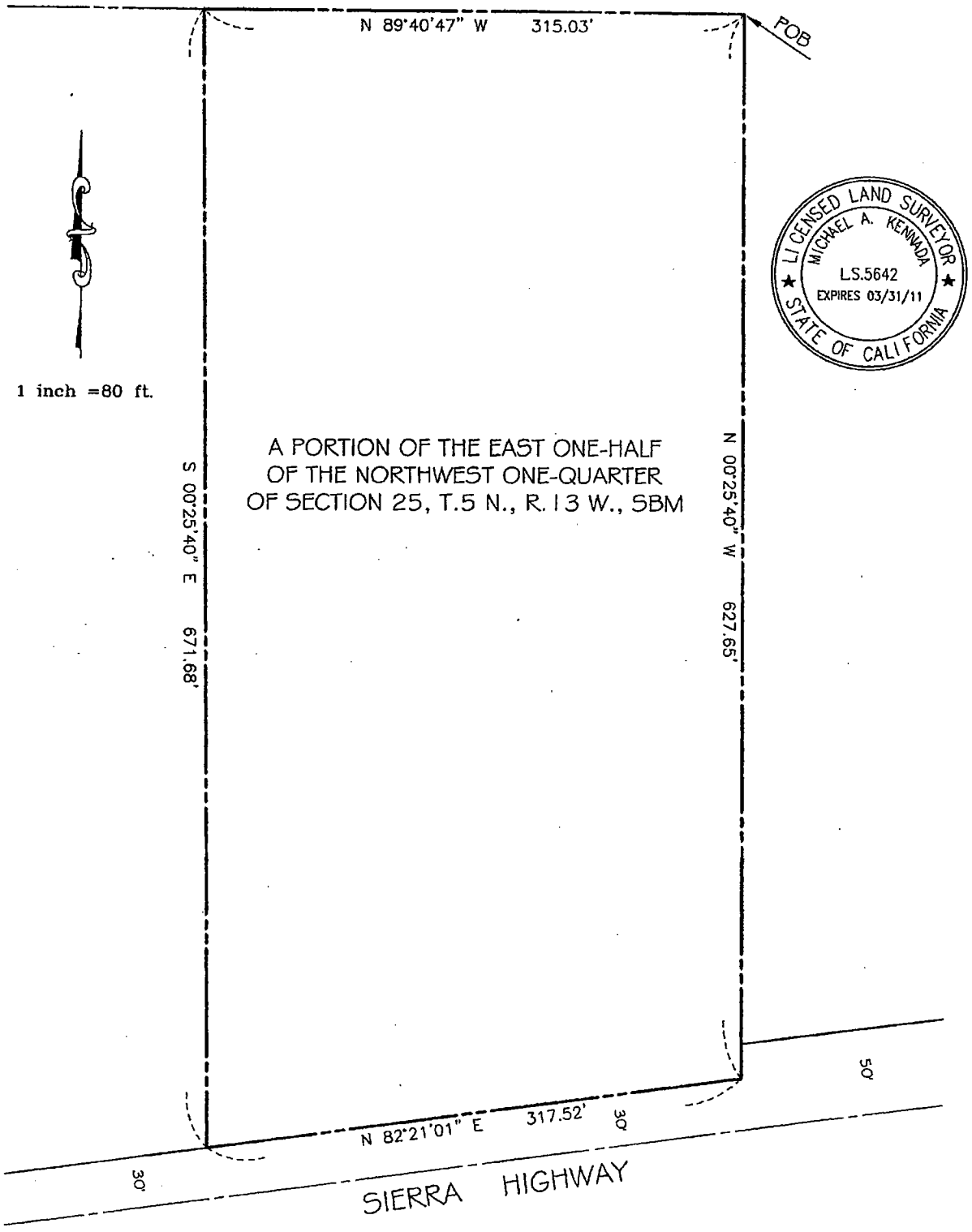
CONTAINING 4.70 ACRES, MORE OR LESS.

PLAT TO ACCOMPANY LEGAL DESCRIPTION

Sheet 1 of 1

EXHIBIT A



APN 3217-021-031

AREA: 204,645 sq. ft. or 4.70 acres

ATTACHMENT C

MITIGATED NEGATIVE DECLARATION

MITIGATED NEGATIVE DECLARATION

Fire Station and Helispot 142

1.	**Project Title:** Fire Station and Helispot 142
2.	**Lead Agency Name and Address:** Consolidated Fire Protection District of Los Angeles County (Los Angeles County Fire Department) 28101 Chiquito Canyon Road Castaic, California 91384
3.	**Contact Person and Phone Number:** Timothy J. Ottman Construction and Maintenance Division, Special Services Bureau Phone: (661) 257-5097
4.	**Project Location:** The project includes the construction of Fire Station 142. Fire Station 142 would be located on approximately 4.7-acres (204,732 square feet) and would consist of one single-story structure totaling 9,746 square feet with a maximum height of 25 feet. Presently, the Los Angeles County Fire Department has an option to secure the property. Upon approval of the project by the Los Angeles County Board of Supervisors, it is the intention of the Los Angeles County Fire Department to purchase the property. Please refer to Section 1.0, Project Description, for a detailed discussion of the project.
5.	**Project Description:** The general vicinity of the site is characterized by existing or planned development in an urbanizing environment. The project site is regionally located north of State Route 14 (SR-14) and north of Sierra Highway within the community of Acton in unincorporated Los Angeles County. The project site is located on Sierra Highway 1,000 feet east of Crown Valley Road. The project site is bounded by Sierra Highway to the south, Clanfield Street to the east, vacant undeveloped land to the north and west, and a single-family residence to the northwest. The project site has been disturbed during past agricultural operations and is currently vacant. Access to the project site will be available from Clanfield Street.
6.	**Findings:** On the basis of the attached Initial Study that has been prepared for the project, it has been determined that both short- and long-term impacts would be either be less than significant or reduced to a less than significant level through the implementation of mitigation measures. A copy of the Initial Study is attached. This document constitutes a Mitigated Negative Declaration as defined in Article 6 of the *California Environmental Quality Act (CEQA) Guidelines.*

Signature _____ Date: 3-18-10

Title: CHIEF

Department: CONSTRUCTION & MAINTENANCE

Organization: LOS ANGELES COUNTY FIRE DEPARTMENT

Fire Station and Helispot 142

January 2010

Prepared For:

Consolidated Fire Protection District of Los Angeles County
(Los Angeles County Fire Department)
28101 Chiquito Canyon Road
Castaic, California 91384
(661) 257-5097
Contact: Timothy J. Ottman

Prepared By:

Impact Sciences, Inc.
813 Camarillo Springs Road, Suite A
Camarillo, California 93012
(805) 437-1900
Contact: Susan Tebo, Associate Principal

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Appendices

LIST OF FIGURES

LIST OF TABLES

INITIAL STUDY CHECKLIST

1. **Project Title:** Fire Station and Helispot 142

2. **Lead agency name and address:** Consolidated Fire Protection District of Los Angeles County
   (Los Angeles County Fire Department)
   28101 Chiquito Canyon Road
   Castaic, California 91384

3. **Contact person and phone number**: Timothy J. Ottman
   Construction and Maintenance Division, Special Services Bureau
   Phone: (661) 257-5097

4. **Project Location:** The site consists of approximately 4.7 acres of vacant land located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road. The site is located in Acton, California 93510.

5. **Project sponsor's name and address:** Los Angeles County Fire Department

6. **General Plan designation:** Neighborhood Commercial (CN)

7. **Zoning:** Neighborhood Business (C-2-DP)

8. **Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The project includes the construction of Fire Station 142. Fire Station 142 would be located on approximately 4.7-acres (204,732 square feet) and would consist of one single-story structure totaling 9,746 square feet with a maximum height of 25 feet. Presently, the Los Angeles County Fire Department has an option to secure the property. Upon approval of the project by the Los Angeles County Board of Supervisors, it is the intention of the Los Angeles County Fire Department to purchase the property. Please refer to Section 1.0, Project Description, for a detailed discussion of the project.

9. **Surrounding land uses and setting:** Briefly describe the project's surroundings:

The general vicinity of the site is characterized by existing or planned development in an urbanizing environment. The project site is regionally located north of State Route 14 (SR-14) and north of Sierra Highway within the community of Acton in unincorporated Los Angeles County. The project site is located on Sierra Highway 1,000 feet east of Crown Valley Road. The project site is bounded by Sierra Highway to the south, Clanfield Street to the east, vacant undeveloped land to the north and west, and a single-family residence to the northwest. The project site has been disturbed from past agricultural operations and is currently vacant. Access to the project site will be available from Clanfield Street.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

The Fire Department would obtain all required approvals for construction of the station and site improvements from the following agencies including, but not limited to: Los Angeles County Building and Safety (plan check), Los Angeles County Regional Planning (site plan), Los Angeles County Fire Department Prevention Bureau (VHFHSZ), Regional Water Quality Control Board (NPDES, fueling station), South Coast Air Quality Management District (fueling station), Los Angeles County Health

Department, California Department of Transportation (Helispot) and the Los Angeles County Land Development Department.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors listed below were evaluated for the proposed project:

Aesthetics	Agricultural Resources
Air Quality	Biological Resources
Cultural Resources	Geology and Soils
Hazards	Hydrology and Water Quality
Land Use and Planning	Mineral Resources
Noise	Population and Housing
Public Services	Recreation
Transportation/Circulation	Utilities and Service Systems
Mandatory Findings of Significance	

EVALUATION OF ENVIRONMENTAL IMPACTS

This section includes an evaluation of impacts based on *State CEQA Guidelines* Appendix G, Environmental Checklist. Each issue and criterion from the checklist is explained in the discussion following the checklist and, if necessary, mitigation measures are provided to reduce impacts to less than significant. In accordance with CEQA, all answers take into account the whole of the action, including on- and off-site effects, cumulative and project level; direct and indirect effects, and effects from both construction and operation of any new development.

Each checklist criterion is noted as to whether there is an environmental impact.

- A "No Impact" response indicates that there is no impact.
- A "Less Than Significant Impact" response means that while there is some impact, the impact is below the threshold of significance defined by CLWA.
- A "Less Than Significant Impact with Mitigation" response indicates that a new impact has been identified in the course of this analysis and mitigation measures have been provided in this Initial Study to reduce a potentially significant impact to a less than significant level.
- A "Potentially Significant Impact" response indicates there is substantial evidence that an impact may be significant with the incorporation of mitigation measures. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the proposed proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT will be prepared.

Signature	Date
Printed Name	For

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and

    b. the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.1 AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
2.1.2 AGRICULTURE RESOURCES – Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
2.1.3 AIR QUALITY –Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
2.1.4 BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.5 CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
2.1.6 GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
2.1.7 HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.8 HYDROLOGY AND WATER QUALITY –				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alternation of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.9 LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
2.1.10 MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
2.1.11 NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
2.1.12 POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
2.1.13 PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Libraries?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.14 RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
2.1.15 TRANSPORTATION/TRAFFIC – Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.16 UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1.17 MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

1.0 PROJECT DESCRIPTION

1.1 Introduction

The Consolidated Fire Protection District of Los Angeles County (Los Angeles County Fire Department) has proposed to construct Fire Station No. 142 (the project) on approximately 4.7 acres in the community of Acton, located in unincorporated Los Angeles County. The site is readily served by the existing regional transportation corridor State Route 14 (SR-14) which is also known as Antelope Valley Freeway. Presently the Los Angeles County Fire Department has an option to secure the property. Upon approval of the project by the Los Angeles County Board of Supervisors, it is the intention of the Los Angeles County Fire Department to purchase the property. The proposed project, when completed, would provide for an ongoing improved level of fire protection, emergency medical, and other life safety services to the surrounding communities. In addition, it would add to the resources available for other requests for services throughout the Los Angeles County Fire Department's jurisdiction. The proposed fire station would be constructed on an as-needed basis.

This Initial Study has been prepared under the supervision of the Los Angeles County Fire Department, acting as lead agency in accordance with the requirements of the California Environmental Quality Act (CEQA).[1] The purpose of this document is to determine if the project may have potentially significant effects on the environment. Pursuant to Section 15063 of the *State CEQA Guidelines*, an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an EIR, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The *State CEQA Guidelines* require that an Initial Study contain a project description; a description of environmental setting; an identification of environmental effects by checklist or other similar form; an explanation of environmental effects; a discussion of mitigation for significant environmental effects; an evaluation of the project's consistency with existing, applicable land use controls; and the names of persons who prepared the study.

1.2 Project Location

The project site is located in the central portion of the Acton Community Service District (CSD) within unincorporated Los Angeles County (**Figure 1, Regional and Site Location Map**). The site consists of approximately 4.7 acres of vacant land located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road (**Figure 2, Aerial of Acton**). Access to the project site will be taken from Clanfield Street. The project site consists of the eastern third of Assessor Parcel Number (APN) 3217-021-031 which is approximately 13.1 acres in size

1 California *Public Resources Code*, Division 13, Section 21080.

according to assessor records. The northern portion of the project site currently contains an orchard and non-native trees (see **Figure 3, Project Site Photographs**).

To the immediate east and north of the proposed project is vacant, undeveloped land. Approximately 125 feet west of the project site is a single family residential land use. To the south across Sierra Highway are commercial uses.

1.3 Existing Site Conditions

The project site is located in the central portion of Acton in unincorporated Los Angeles County. Land uses surrounding the site include: vacant land to the north and east, a single family residence to the west, and commercial uses south of Sierra Highway. The zoning designation for the project site is designated as Neighborhood Business (C-2-DP). The General Plan land use designation for the project site is designated as Neighborhood Commercial (CN). The General Plan land use designations are: Light Agriculture (A-1) to the north and east, Unlimited Commercial (C-3) to the south, and Neighborhood Business (C-2) to the west[2] (see **Figure 2**).

The project site is relatively flat with a slight slope (about 5 percent) from north to south. A 10- to 15-foot-high 4:1 (horizontal: vertical) northeast-facing slope descends from the northeast corner of the site.

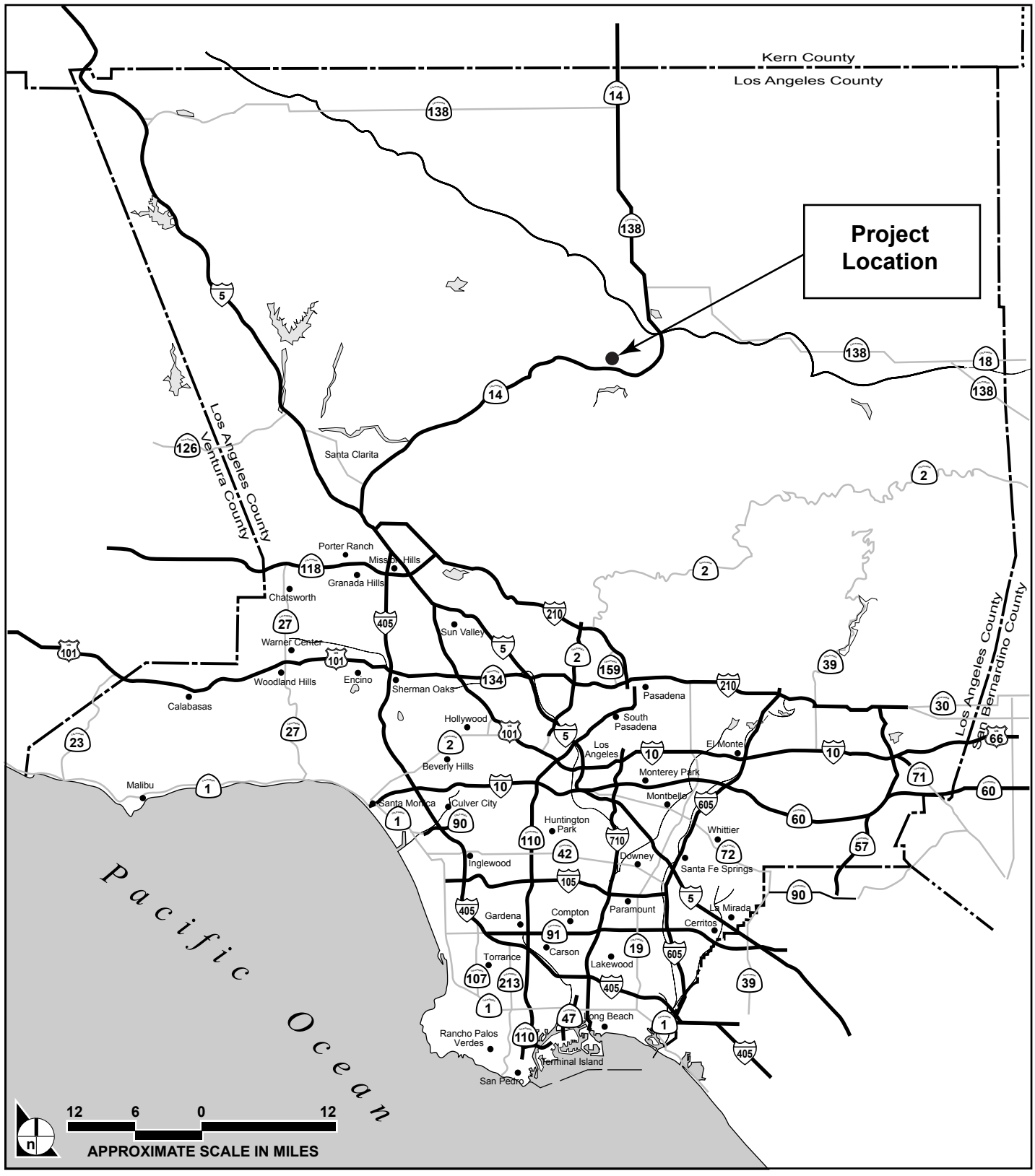
Existing Vegetation

The site is undeveloped and shows signs of prior and ongoing disturbances, including disking, unpaved roadways, agriculture, and associated surviving landscaping plants. Vegetation is a combination of ruderal and undisturbed vegetation types.

1.4 Project Characteristics

The proposed project would consist of a 9,746 square foot fire station and supporting structures on an approximately 4.7-acre site. The proposed project would be located on the northwest corner of Sierra Highway and Clanfield Street. The nearest fire station to the proposed project would be Fire Station 80 approximately 3 miles to the east. The proposed project would include housing for up to seven full time firefighters (implemented on an as-needed basis), two apparatus bays, an office, utility rooms, a hose tower, helispot, an emergency generator, a fuel tender, and above ground on-site storage for diesel and unleaded fuel, as seen in **Figure 4, Conceptual Site Plan**. The proposed fire station housing quarters would be approximately 6,373 square feet. A type I fire engine (apparatus) would be stored in two bays

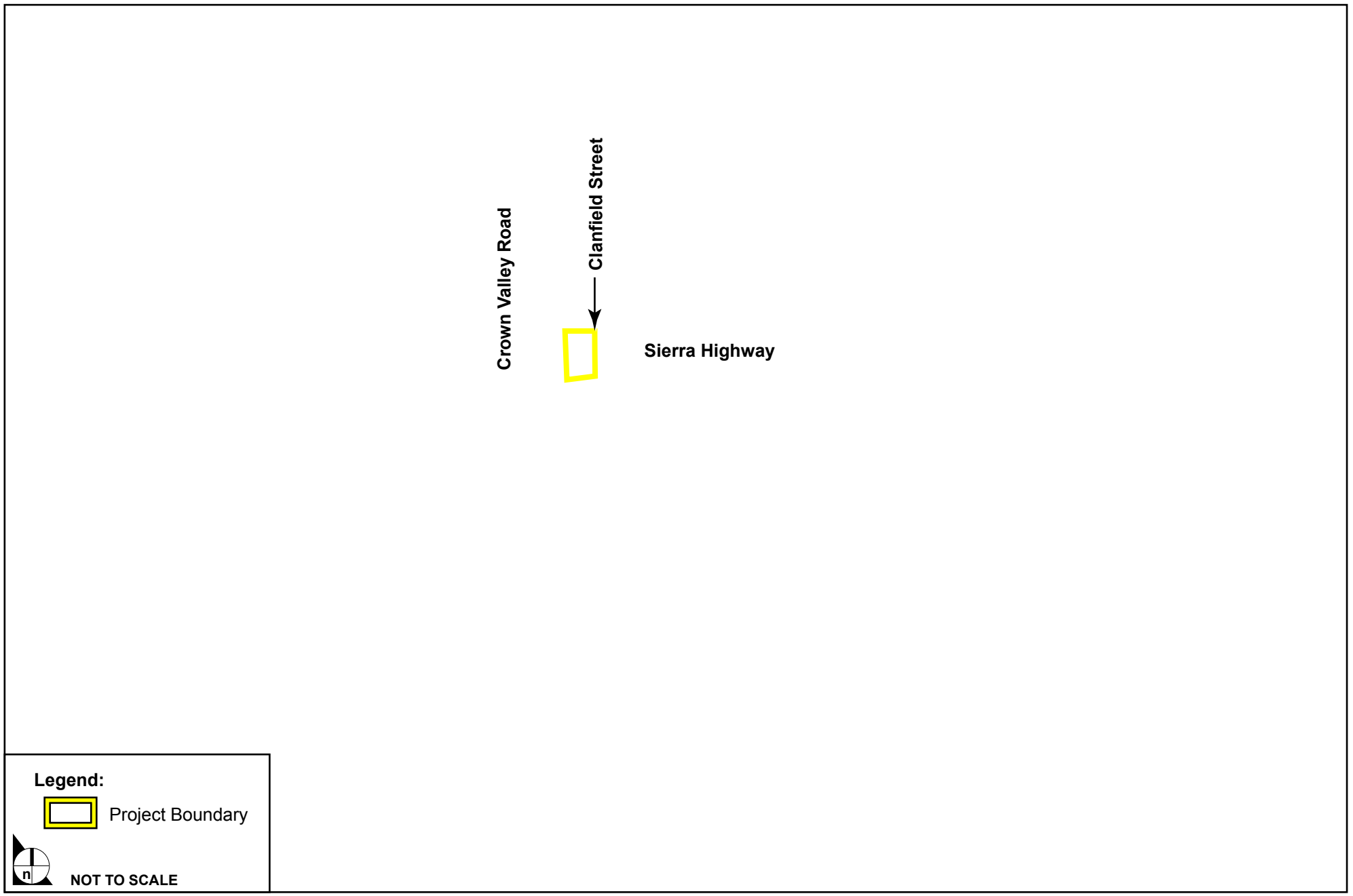
2 Los Angeles County Department of Regional Planning, *Antelope Valley Zoning (Sheet 3 of 3)*, 2005.



SOURCE: Impact Sciences, Inc. – September 2009

FIGURE **1**

Regional and Site Location Map



SOURCE: Google Earth - 2009; Impact Sciences, Inc. - September 2009

FIGURE **2**

Aerial of Acton

1041-001•09/09

North View

South View

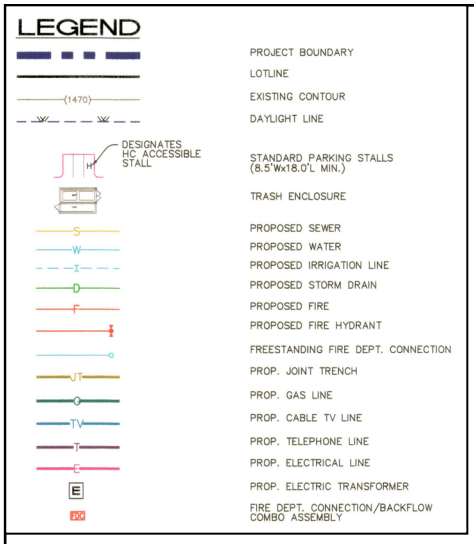
East View

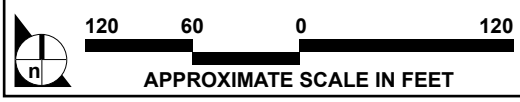
West View

SOURCE: Impact Sciences, Inc. – October 2009

FIGURE **3**

Project Site Photographs





SOURCE: Alliance Land Planning & Engineering, Inc. - June 2009

FIGURE **4**

Conceptual Site Plan

totaling approximately 3,373 square feet. Three, 10-foot-high antennas would extend beyond the high point of the station roof. The proposed project would have a building height of 25 feet. Also located on site within the gated area would be a 30-foot-high hose tower. The proposed helispot would be located in the northern portion of the project site and would be approximately 110 feet in diameter.

The fire station would include seven dorms, three bathrooms, an office, a day room, a kitchen, an exercise room, and utility rooms, as seen in **Figure 5, Fire Station Floor Plan**.

A helicopter would not be stored on site. Rather, it would be used for fire fighting operations and transporting of the sick and injured to receiving local hospitals. This helispot would be used only for Acton area medical and fire emergencies and as needed for fire responses within the surrounding communities. The project is being proposed in response to existing emergency situations, which occur on the average, twice a week.

The helispot would formalize a location where a fuel tender would be able to refuel the helicopter during fire and emergency events. The helispot would also formalize a safe location for ambulance and paramedic squads to transport the sick and injured. It is expected that the helispot would be used an average of two flights per week for medical responses. The helispot would include landing lights and a fire hydrant.

The Los Angeles County Fire Department would install a traffic signal at the intersection of Sierra Highway and Clanfield Street at such time that the signal is warranted and approved by the Los Angeles County Department of Public Works. The traffic signal would further enable access for emergency vehicles leaving the fire station. Clanfield Street would be improved up to the northerly boundary of the proposed fire stations emergency egress driveway, where it would then transition from pavement to the existing dirt road. The proposed project would construct two driveways along the eastern boundary that would connect to Clanfield Street. The southerly driveway would allow arrival and departure of staff vehicles and visitors and arrival of the apparatus. The northerly driveway would allow for emergency departure of the apparatus.

Fire Station 142 would operate 24 hours a day, seven days a week with shift change at 7:00 AM. Initial staffing would include three 24-hour fire fighters and six personnel on-site during a shift change. Full time staffing, on an as-needed basis, would include seven 24-hour fire fighters and 14 personnel on site during a shift change. A total of 37 parking spaces would be provided on site (31 parking spaces for employees, four visitor parking spaces, one employee handicap parking space, and one visitor handicap parking space).

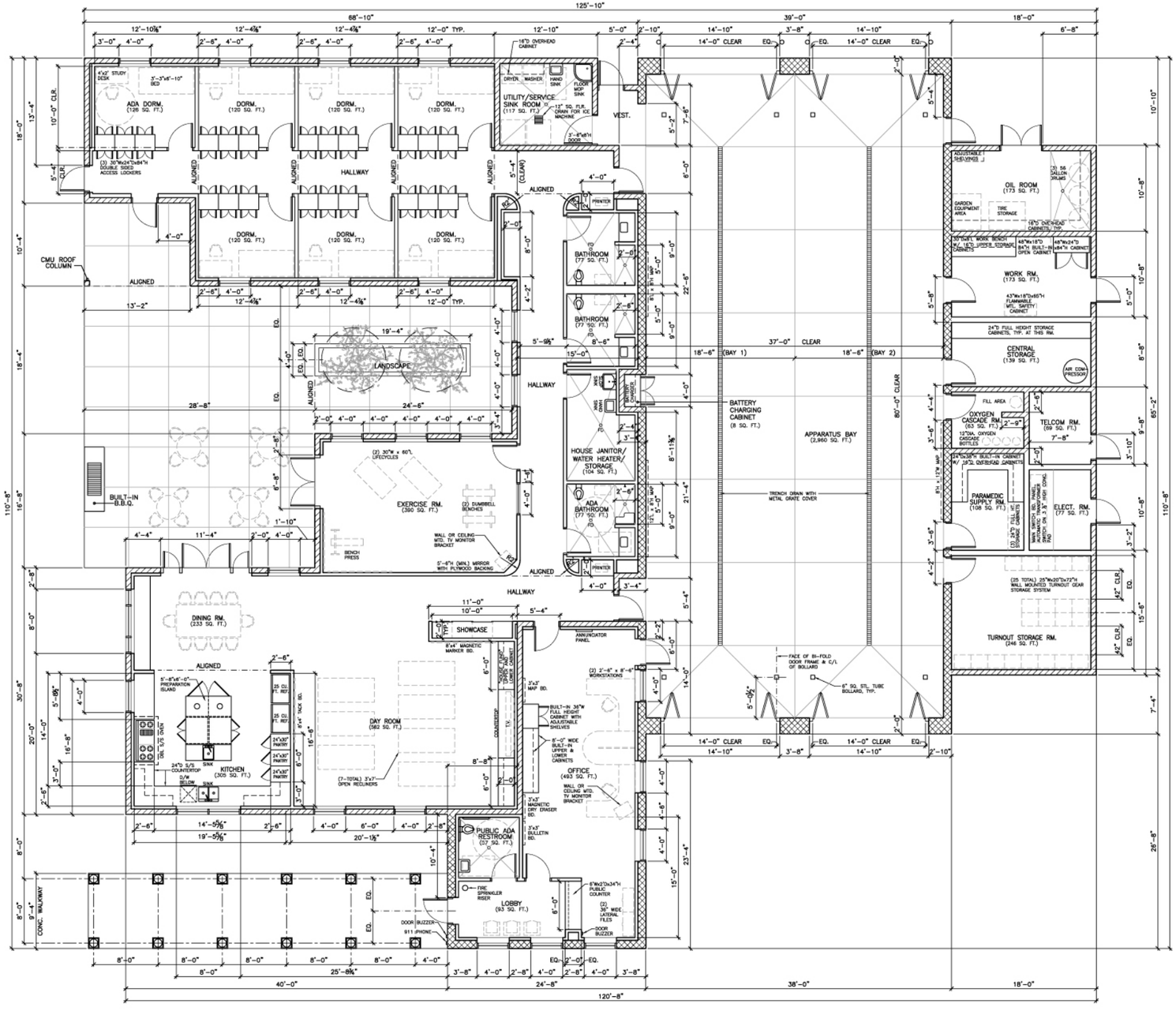
The Los Angeles County Fire Department would dedicate land along the northern side of Sierra Highway for use of a future horse trail. A trail easement would be dedicated and the trail would be constructed as part of the project with Phase 1. A 6-foot-high slump stone wall located along the southerly portion of the property line would enclose the proposed fire station building (see **Figure 4**). The solid slump stone wall surrounding the fire station must remain for safety, security and operational reasons. A proposed three-rail fence would traverse the southern side of the property line along Sierra Highway, designated for the horse trail. A 5-foot-high chain link fence and a four-rail fence would enclose the proposed helispot site.

An external public address system would be used during regular hours of operation from 8:00 AM to 5:00 PM. A 230 kilowatt generator would be on site located south of the proposed fire station building and would be used to provide emergency energy during power outages and tested on a weekly basis for 30 minutes.

Also located on site would be an above ground 600-gallon diesel fuel storage tank for the generator; an aboveground 2,500-gallon diesel fuel storage tank for the apparatus; an aboveground 500-gallon unleaded gasoline storage tank; and a 3,000- to 5,000-gallon mobile fuel tender. Yard maintenance gasoline fuel storage would consist of two 5 gallon containers that would be stored in the station's oil storage room.

On-site drainage would include a bioswale just south of the proposed helispot, and would be routed to an on-site first flush basin (a bio-detention basin located in the southeastern corner of the proposed project site). The apparatus floor drains would be routed into a clarifier before entering the first flush basin system. Based on physical testing, it has been determined that the site can support the use of a septic system for the treatment of waste water. Existing and future utilities would be placed underground at the southern boundary of the project site.

The existing response time within the proposed fire station's jurisdiction is greater than 8 minutes. The proposed project would reduce response times from 3 to 5 minutes within the fire station's jurisdiction. The nearest existing fire station (Fire Station No. 80) is located approximately 3 miles to the east. It is estimated that the number of emergency responses would be two to three per day. The estimated number of non-emergency responses would be two per day and the estimated number of business trips would be two to three per day.



16 8 0 16

APPROXIMATE SCALE IN FEET

SOURCE: Kajima Associates, Inc. – October 2009

FIGURE **5**

Fire Station Floor Plan

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Grading activities for the proposed project would require a cut of 19,300 cubic yards of earthwork during grading and would require 2,800 cubic yards of fill. A total of 16,500 cubic yards of earthwork would be transported off site within a 10-mile radius of the project site. During construction, the project site would be enclosed with construction perimeter fencing with controlled access. Construction would be completed in two separate phases.

Phase One

The first phase of construction would commence within 24 months of obtaining all required approvals from the Los Angeles County Board of Supervisors and would be completed within 24 months from start of construction.

The first phase would include

- Acquisition of the property.
- grading of the project site,
- construction of the helispot,
- construction of the first flush basins,
- Sierra Highway improvements fronting the project site,
- Clanfield Street improvements from Sierra Highway to the Fire Stations emergency egress driveway,
- undergrounding of the overhead power lines on Sierra Highway fronting the station site,
- extension of all utilities to the station site, construction of the Sierra Highway horse trail fronting the station site,
- construction of the perimeter walls,
- construction of the three and four rail fencing,
- construction of the chain link fence surrounding the Helispot, and
- perimeter landscaping. Construction activities of this phase would last up to 10 months.

Phase Two

The Fire Department's commitment to purchase the land and to complete the phase one improvements for the future fire station 142 will ensure that the fire station is optimally placed when the area develops. The progress of development in the surrounding areas will be monitored to ensure that the construction

of Fire Station 142 occurs when needed to address increased service levels necessitated by growth in the area. This land purchase and the phase one and phase two improvements are a key step in the Fire Department's long range strategic planning.

The second Phase would include construction of the fire station, the fuel station, hose storage room, generator room, hose tower, driveways, rear yard paving, site lighting, gates, septic system, and remaining landscaping. This phase would last up to 14 months.

1.5 Project Approvals

The Fire Department would obtain all required approvals for construction of the station and site improvements from the following agencies including, but not limited to:

- Los Angeles County Public Works Department: Building and Safety (plan check)
- Los Angeles County Department of Regional Planning (site plan)
- Los Angeles County Fire Department Prevention Bureau (very high fire hazard safety zone [VHFHSZ])
- Los Angeles Regional Water Quality Control Board (National Pollutant Discharge Elimination System [NPDES], fueling station)
- South Coast Air Quality Management District (fueling station)
- Los Angeles County Health Department (septic tank)
- Los Angeles County Land Development Department (building and grading permits)
- California Department of Transportation (Helispot)

2.0 ENVIRONMENTAL ANALYSIS

2.1 Environmental Checklist Discussion

2.1.1 Aesthetics

Environmental Impacts

Environmental impacts are analyzed using Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* (Environmental Checklist Form), which lists the following thresholds, under which a project may be deemed to have a significant impact on aesthetic resources if it would

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Discussion

Impact 2.1.1-1 Have a substantial adverse effect on a scenic vista.

During the construction of the proposed project, any construction equipment would remain on-site and would be short-term in nature. Therefore, impacts on a scenic vista would be less than significant.

The County of Los Angeles (County) recognizes that the mountain vistas, which would include hillsides and ridgelines, and other scenic features of the region are a significant resource for County residents and businesses.[1] The proposed project site is located within the valley between the San Gabriel Mountains and the Sierra Pelona Mountains in the community of Acton approximately 300 feet north of State Route 14 (SR-14) and adjacent to the north of Sierra Highway (see **Figure 2, Aerial of Acton**). As a result, the proposed project would not be developed within a scenic ridgeline or a near a scenic hillside vista.

Mitigation Measures

No mitigation is required.

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1 Los Angeles County Department of Regional Planning, *Draft General Plan*, (2008) 147.

Residual Impact

Impacts would be less than significant.

Impact 2.1.1-2 Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.

The proposed project would be constructed in the community of Acton in unincorporated Los Angeles County. The nearest major transportation routes are Sierra Highway and SR-14 located to the south. The County contains one state designated highway, which starts over 2 miles north of Interstate 210 and travels east/west until the San Bernardino County line, and two County designated highways, along Mulholland Drive and SR 1.[2] The nearest state scenic highway is located over 15 miles to the southeast of the project site. As a result there would be no impacts on scenic resources within a state scenic highway.

Mitigation Measures

No mitigation is required.

Residual Impact

No impact would occur.

Impact 2.1.1-3 Substantially degrade the existing visual character or quality of the site and its surroundings.

The proposed project would be located on the northwest corner of Sierra Highway and Clanfield Street. The site has previously been disturbed from agricultural operations and is currently vacant except for the northerly quarter of the project site which contains an orchard. The northerly quarter of the project site would contain the proposed helispot. The helispot would be enclosed by two fences, a 5-foot-high chain link fence and a four-rail fence. The architecture of the fire station and the perimeter fencing would conform to the Business Neighborhood (C-2) land use. As described in the **Project Description**, the proposed fire station would be 25 feet in height with three antennas that would rise 10 feet above the roof of the station. The County Municipal Code states that a building shall not exceed 35 feet in height, excluding signs, chimneys, and antennas.[3] As the proposed fire station would be 25 feet in height and the antennas would be 10 feet above the height of the roof, the proposed fire station would conform to the development standards established for the C-2 zone and land use designation. While ensuring the

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2 Los Angeles County Department of Regional Planning, *Draft General Plan, Conservation and Open Space Element*, (2008) 145.

3 *Los Angeles County Code*, Title 22 Planning and Zoning, Section 22.28.170, "Development Standards."

operational needs of the facility, every effort has been made to be consistent with the Acton Community Services District (CSD). Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impact

Impacts would be less than significant.

Impact 2.1.1-4 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The project site is currently vacant property. A single-family residence located to the immediate northwest of the project site generates low-level exterior building lighting for nighttime security purposes. This would be the only light generating source present adjacent to the site. In addition, off-site sources of light that contribute to ambient nighttime light levels in the area include commercial buildings to the south and southeast and headlights from vehicles traveling along Sierra Highway and SR-14.

The proposed project would construct a single story fire station that would house staff and equipment. The fire station is located on the south end of the project site and will be surrounded by a 6-foot-high security wall. The helispot will be located on the northern portion of the project site and will be surrounded by a 5-foot-high security fence. The nearest sensitive receptor to the proposed project is the single-family residence located approximately 125 feet west of the northwestern portion of the project site. The project would introduce low-level lighting on the site for signage, security, and night visibility at similar lighting levels to the existing commercial uses to the south and southeast. In addition to the lighting for the proposed fire station, there would be lighting for the helispot. Typical lights used for helispots would include green flush-mount lights around the perimeter of the touchdown and liftoff area (TLOF). Therefore, streetlights, entry lights, interior lights, parking lot lights, and security lights have the potential to degrade nighttime views of the area.

While the lighting on the project site would be visible from adjacent uses, including the residence west of the site, due to the distance between the site and the residences (approximately 125 feet) there would be no noticeable change in the lighting levels. Additionally, the project would not include the use of highly reflective materials which would result in substantial glare impacts. As described in the Los Angeles County Code, any lighting shall be arranged to prevent glare or direct illumination in any residential or agricultural zone. Consequently, the project would not create a new source of substantial light or glare.

Mitigation Measures

No mitigation is required.

Residual Impact

Impacts would be less than significant.

2.1.2 Agricultural Resources

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on agricultural resources if it would

- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use;
- conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Discussion

Impact 2.1.2-1 **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.**

The project site has been previously disturbed and contains an orchard on the northern portion of the project site. The designated land use for the proposed project is Commercial Neighborhood (C-2). According to the California Department of Conservation, the project site and the surrounding area is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[4] As a result, the proposed project would have no impact on the conversion of Farmland.

Mitigation Measures

No mitigation is required.

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4 California Department of Conservation, Division of Land Resource Protection, *2006 Los Angeles County Important Farmland Map*, 2007.

Residual Impact

No impact would occur.

Impact 2.1.2-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract

As described in the **Project Description**, the proposed project would be located on the northwestern corner of Sierra Highway and Clanfield Street in Acton. The current land use designation is Commercial Neighborhood (C-2) which is designated for use as neighborhood business. According to the California Department of Conservation, the project site and the surrounding area has not been designated as Williamson Act land.[5]

Mitigation Measures

No mitigation is required.

Residual Impact

No impact would occur.

Impact 2.1.2-3 Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use

The project site is located in the community of Acton in unincorporated Los Angeles County. The project site is currently designated for Commercial Neighborhood (C-2) land uses. The existing orchard in the northern portion of the project boundary would be partially disturbed. The surrounding uses contain nearby residences, some vacant land with native and non-native wildlife, and some commercial uses. There are no agricultural fields adjacent to the project site. Consequently, the proposed project would not result in the conversion of farmland to non-agricultural use.

Mitigation Measures

No mitigation is required.

Residual Impact

No impact would occur.

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5 California Department of Conservation, Division of Land Resource Protection, *2006 Williamson Act Contract Land Map*, 2008.

2.1.3 Air Quality

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on air quality if it would

- conflict with or obstruct implementation of the applicable air quality plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial pollutant concentrations; or
- create objectionable odors affecting a substantial number of people.

Discussion

Impact 2.1.3-1 Conflict with or obstruct implementation of the applicable air quality plan.

The proposed project is located within the 6,745-square-mile South Coast Air Basin (Basin) and, therefore, falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In conjunction with the Southern California Association of Governments (SCAG), the SCAQMD is responsible for formulating and implementing air pollution control strategies. The SCAQMD's Air Quality Management Plan (AQMP) was adopted in 2007 to establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the Basin, which is in non-attainment for ozone (O_3), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). The AQMP also addresses the requirements set forth in the state and federal Clean Air Acts.

Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SCAQMD thresholds as a result of the nature and small scale of the proposed project. Impacts from the proposed project would fall below the SCAQMD significance thresholds for both short-term construction and long-term operational emissions, as discussed below. Because construction and operation of the project would not exceed the SCAQMD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality violations, neither cause or contribute to new air quality violations, nor delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

Projects that are consistent with growth forecasts identified by SCAG are considered consistent with the AQMP growth projections. This is because the growth projections by SCAG form the basis of the land use and transportation control portions of the AQMP. As discussed under **Section 2.1.12, Population and Housing**, the proposed project is considered to be consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area. Therefore, the proposed project would not increase population figures over those that have been planned for the area; would be consistent with the AQMP forecasts for this area; would be considered consistent with the air quality-related regional plans, and should not jeopardize attainment of state and federal ambient air quality standards in the Basin. Therefore, the proposed project would be consistent with the AQMP.

Mitigation Measures

No mitigation is required.

Residual Impact

Impacts would be less than significant.

Impact 2.1.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Air quality within the project area is regulated by the SCAQMD. State and federal air quality standards are often exceeded in many parts of the Basin, including those monitoring stations nearest to the project location. The proposed project would contribute to local and regional air pollutant emissions during construction (short-term) and project operation (long-term).

Construction

Construction activities have the potential to cause short-term significant impacts with respect to air quality standards. According to the SCAQMD, a project's construction emissions are considered to cause a significant impact to air quality if they would exceed the SCAQMD thresholds of significance for volatile organic compounds (VOC), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur oxides (SO_X), PM_{10}, and $PM_{2.5}$.[6]

6 South Coast Air Quality Management District, *CEQA Air Quality Handbook,* 1993.

Regional Impacts

Regional construction emissions associated with the proposed project were estimated using the URBEMIS2007 Environmental Management Software. URBEMIS2007 is a program that calculates air emissions from land use sources and incorporates the California Air Resources Board's (CARB) EMFAC2007 model for on-road vehicle emissions and the OFFROAD2007 model for off-road vehicle emissions. The model also incorporates factors specific to the Basin and the SCAQMD, such as VOC content in architectural coating and vehicle fleet mixes. During project construction, the model can analyze emissions that occur during different phases, such as building construction and architectural coating.

Site-specific or project-specific data were used in the URBEMIS2007 model where available. As described in the **Project Description**, construction of the proposed project consists of two phases. Phase one, lasting approximately 10 months, would include grading of the project site, improvements on Sierra Highway and Clanfield Street, and construction of a 9,503-square-foot helispot. Phase two, lasting approximately 14 months, would include construction of a 9,712-square-foot fire station. Construction of phase one would begin in the fourth quarter of 2011, ending in the third quarter of 2012. Construction of Phase two would be on an as-needed basis; however, for purposes of estimating air emissions, Phase two would begin in the third quarter of 2012, ending in third quarter of 2013. Vendor trips (e.g., transport of building materials), and worker trips were based on default values provided in the URBEMIS2007 model. It was assumed the 4.7-acre project site would be graded entirely. According to the **Project Description**, construction of the proposed project would include a cut of 19,300 cubic yards of earth material during grading and 2,800 cubic yards of fill. A total of 16,500 cubic yards of earth material would be exported to an off-site location within a 10-mile radius of the project site.

In order to account for dust suppression in the URBEMIS2007 model, it was assumed that the project contractor would comply with SCAQMD Rule 403 (Fugitive Dust) by applying water a minimum of three times per day for dust suppression. The emission reduction percentage association with Rule 403 dust suppression was based on data from the SCAQMD. **Table 1, Estimated Unmitigated Construction Emissions**, shows the construction emissions that would occur from the proposed project. As shown in **Table 1**, construction emissions would not exceed SCAQMD's thresholds of significance. Therefore, construction-related impacts would be less than significant.

Table 1
Estimated Unmitigated Construction Emissions

Construction Year	Maximum Emissions in Pounds Per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase 1						
2011	8.64	75.16	38.85	0.01	9.90	4.60
2012	8.19	70.05	36.94	0.01	9.60	4.33
Maximum Daily Emissions	**8.64**	**75.16**	**38.85**	**0.01**	**9.90**	**4.60**
SCAQMD Threshold:	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	NO	NO	NO	NO	NO	NO
Phase 2						
2012	3.35	24.89	15.10	0.00	1.48	1.36
2013	9.42	33.44	23.30	0.00	2.22	2.03
Maximum Daily Emissions	**9.42**	**33.44**	**23.30**	**0.00**	**2.22**	**2.03**
SCAQMD Threshold:	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 2.1.3****.*
Totals in the table may not appear to add exactly due to rounding in the computer model calculations.

Operational Impacts

The SCAQMD has also established separate significance thresholds to evaluate potential impacts associated with the incremental increase in criteria air pollutants associated with long-term project operations. Operational emissions related to baseline and project conditions were calculated using the URBEMIS2007 emissions inventory model.

Regional Impacts

Operational emissions would be generated by both area sources and mobile sources as a result of normal day-to-day activities on the project site after occupation. Area source emissions would be generated by the consumption of natural gas for space and water heating devices (including residential and commercial use water heater and boilers), fuel combustion from landscaping equipment, and the application of architectural coatings. Mobile emissions would be generated by motor vehicles traveling to, from, and within the project site.

The proposed project would construct a fire station on a 4.7-acre undeveloped land containing 6,373 square feet of housing and utility rooms, 3,373 square feet of apparatus bays, and a 9,503 square feet

helispot. The proposed project would result in additional vehicle trips to and from the site. According to SCAQMD, a project's operational emissions are considered to cause a significant impact to air quality in the region if they would exceed the SCAQMD thresholds of significance for VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. The operational emissions associated with the proposed project were estimated using URBEMIS2007. URBEMIS2007 can estimate mobile and area source emissions associated with land uses specific to a given operational year and location. For the purposes of this analysis, the buildout year of 2013 was used to estimate operational emissions. Project-specific trip generation rates from the traffic analysis were used rather than the default trip generation rates from URBEMIS2007.[7]

In addition to the operational emissions caused by mobile and area sources, the proposed project would emit operational emissions from a 230-kilowatt emergency generator, a type-1 fire engine, and a helicopter. The emergency generator would operate 30 minutes per week for testing purposes and is estimated to be in use for 50 hours per year.[8] The operational emissions from the fire engine are based on the number of calls per day. Based on data from similar fire stations in the area, approximately three emergency calls, two non-emergency calls, and three business trips would occur per day. Vehicle miles traveled and idling time of the fire engine are based on conservative estimates of 5 miles (one-way) and 2 hours of idling time. A helicopter is estimated to operate at the site twice a week for medical emergencies. Helicopter emissions were estimated using the Federal Aviation Administration (FAA) Emissions and Dispersion Modeling System (EDMS).[9] The EDMS model was developed in the mid-1980s as a complex source microcomputer model designed to assess the air quality impacts of aviation sources of emissions. The EDMS model is the FAA required model for performing air quality analyses for aviation sources. The emissions were estimated using the Bell UH-1 model, which is the most similar to aircraft used by the Los Angeles Fire Department. As a conservative measure, it was assumed that a maximum of two landing and take off (LTO) circuits would occur in any day. **Table 2, Estimated Unmitigated Operational Emissions**, shows the pollutant emissions associated with operation of the proposed project.

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7 Kimley-Horn Associates, Inc., *Traffic Analysis for the Proposed 501 S. Vincent Ave Retail Project– City of West Covina*, (2009).

8 Typical for permitted emergency generators.

9 Federal Aviation Administration, Emissions and Dispersion Modeling System, Version 5.1.1. For additional information, see the following website: http://www.faa.gov/about/office_org/headquarters_offices/aep/models/edms_model/

Table 2
Estimated Unmitigated Operational Emissions

Emissions Source	Maximum Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summertime Emissions						
Operational (Mobile) Sources	0.59	0.82	7.17	0.01	1.55	0.30
Area Sources	0.18	0.08	1.60	0.00	0.01	0.01
Emergency Generator	0.03	0.89	0.88	0.00	0.05	0.05
Type-1 Fire Engine	0.11	1.23	0.53	0.00	0.05	-
Helicopter	0.01	0.25	0.04	0.06	N/A	N/A
Total Operational Emissions	**0.92**	**3.27**	**10.22**	**0.07**	**1.66**	**0.36**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions						
Operational (Mobile) Sources	0.63	0.99	6.87	0.01	1.55	0.30
Area Sources	0.06	0.06	0.05	0.00	0.00	0.00
Emergency Generator	0.03	0.89	0.88	0.00	0.05	0.05
Type-1 Fire Engine	0.11	1.27	0.60	0.00	0.05	-
Helicopter	0.01	0.25	0.04	0.06	N/A	N/A
Total Operational Emissions	**0.84**	**3.46**	**8.44**	**0.07**	**1.65**	**0.35**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 2.1.3****.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

The EDMS model (version 5.1.1) does not provide particulate matter emission factors for helicopters. According to the U.S. EPA:

> *very few measurements have been made of particulate emissions from aircraft engines. Attempts have been made to derive a correlation between smoke and particulates which could be used to create a particulate emission index based on smoke number. Thus far, these efforts do not match experimental results very closely. EPA will continue to investigate this area and may provide further information in the next update to AP-42.*[10]

Therefore, although particulate matter emissions associated with the helicopter are not included in the emission estimates above, the emissions associated with the helicopter only constitute a small percentage

10 U.S. Environmental Protection Agency, *Procedures for Emission Inventory Preparation*, Volume IV: Mobile Sources, (1992) 192.

of the overall emissions for the other criteria pollutants. Furthermore, the operational emissions are well under the SCAQMD thresholds of significance. For these reasons, it is not anticipated that the helicopter would result in substantial particulate matter emissions that would cause or contribute to an exceedance of the threshold.

As shown in **Table 2**, operational emissions associated with implementation of the proposed project would not exceed the SCAQMD thresholds for significance for any pollutant. Projects that generate emissions below the thresholds of significance would not be considered to contribute a substantial amount of air pollutant to regional air quality. Moreover, operation of the project would not result in an increase in the number of emergency trips; the Fire Station may result in a decrease in the vehicle miles traveled, as this station is closer to surrounding residences and businesses than existing stations. Therefore, operational-related impacts would be less than significant.

Localized Impacts

The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project site. The evaluation is based on SCAQMD's *Final Localized Significance Threshold Methodology*[11] (LST Methodology), which recommends that anticipated ambient air concentrations of CO, NO_2, PM_{10}, and $PM_{2.5}$, determined using a computer-based air quality dispersion model, be compared to the localized significance thresholds. The thresholds are based on the difference between the maximum monitored ambient pollutant concentrations and the California Ambient Air Quality Standards (CAAQS) or the National Ambient Air Quality Standards (NAAQS). Therefore, the thresholds depend upon the concentrations of pollutants monitored locally with respect to a project site. For pollutants that already exceed the CAAQS or NAAQS (e.g., PM_{10} and $PM_{2.5}$), the thresholds are based on standards established by the SCAQMD.

The significance threshold for PM_{10}, which is 10.4 micrograms per cubic meter ($\mu g/m^3$), represents compliance with SCAQMD Rule 403 (Fugitive Dust). The thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The significance threshold for $PM_{2.5}$, which is also 10.4 $\mu g/m^3$, is intended to constrain emissions to aid in progress toward attainment of the ambient air quality standards. The SCAQMD's LST Methodology includes screening tables that can be used for projects less than 5 acres in size to determine the maximum allowable daily emissions that would satisfy the LSTs (i.e., not cause an exceedance of the applicable concentration limits). The allowable emission rates depend on

1. the Source Receptor Area (SRA) in which the project is located,

11 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, (2008).

2. the size of the project site, and

3. the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals).

The project area is less than 5 acres; therefore, the screening tables were used to assess the localized ambient air quality impacts.

The project site is located in the community of Acton, which is in the area designated by the SCAQMD as Source Receptor Area (SRA) 15 (San Gabriel Mountains). The project site is surrounded by vacant land to the north and east, a single family residence to the west, and Sierra Highway to the south with commercial uses across Sierra Highway. Therefore, the nearest sensitive receptor is a single family residence approximately 125 feet west of the project. The LSTs for the proposed project are shown in **Table 3, Localized Significance Thresholds Analysis**, and are compared with the maximum daily on-site construction and operational emissions. The LSTs are not applicable to off-site mobile sources (e.g., on-road motor vehicles); therefore, off-site mobile source emissions are not included in the analysis.[12]

Table 3
Localized Significance Thresholds Analysis

Pollutant	Maximum On-Site Emissions (Pounds per day)	LST Thresholds[1] (Pounds per day)	Exceeds LST?
Project Construction			
Respirable Particulate Matter (PM_{10})	9.61	21.28	NO
Fine Particulate Matter ($PM_{2.5}$)	4.36	6.56	NO
Nitrogen Oxides (NO_X)	75.16	217.00	NO
Carbon Monoxide (CO)	38.85	1,744.82	NO
Project Operation			
Respirable Particulate Matter (PM_{10})	0.06	5.54	NO
Fine Particulate Matter ($PM_{2.5}$)	0.06	1.94	NO
Nitrogen Oxides (NO_X)	0.97	217.00	NO
Carbon Monoxide (CO)	2.48	1,744.82	NO

Source: Impact Sciences, Inc., (2009).

[1] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *(2008).*

12 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, (2008).

As indicated in **Table 3**, on-site construction and operational emissions would not exceed the LST screening thresholds at nearby sensitive receptors for PM_{10}, $PM_{2.5}$, NO_x, and CO. Therefore, localized impacts would be less than significant.

Motor vehicles are a primary source of pollutants within the project vicinity. Traffic congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed state and/or federal standards are termed CO "hotspots." Such hotspots are defined as locations where the ambient CO concentrations exceed the state or federal ambient air quality standards. CO is produced in greatest quantities from vehicle combustion and is usually concentrated at or near ground level because it does not readily disperse into the atmosphere. As a result, potential air quality impacts to sensitive receptors are also assessed through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create CO hotspots that exceed the state ambient air quality 1-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9.0 ppm. The federal levels are less stringent than the state standards and are based on 1- and 8-hour standards of 35 ppm and 9 ppm, respectively. Thus, an exceedance condition would occur based on the state standards prior to exceedance of the federal standard.

The proposed project was evaluated to determine if it would cause a CO hotspot utilizing a simplified CALINE4 screening model developed by the Bay Area Air Quality Management District (BAAQMD). The simplified model is intended as a screening analysis that identifies a potential CO hotspot. If a hotspot is identified, the complete CALINE4 model is then utilized to determine precisely the CO concentrations predicted at the intersections in question. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway and 90 degrees to the secondary road, wind speed of less than 1 meter per second, and extreme atmospheric stability) and provides a screening of maximum, worst-case, CO concentrations. This method is acceptable to the SCAQMD as long as it is used consistently with the BAAQMD Guidelines. This model is utilized to predict future CO concentrations zero and 25 feet from the intersections in the study area based on projected traffic volumes from intersections contained in the traffic study.[13]

The Traffic Impact Analysis of the proposed project analyzes the Clanfield Street and Sierra Highway intersection. This intersection was determined to operate at a level of service (LOS) A. LOS A is described as the optimal traffic condition where traffic flows at or above the posted speed limit and all motorists have complete mobility between lanes. Post-project future cumulative CO concentrations were calculated for peak hour traffic volumes at this intersection. The results of these CO concentration calculations are

13 Austin-Foust Associates, Inc., *Traffic Study for the Proposed Fire Station 142 – City of Acton*. (2009).

presented in **Table 4, Carbon Monoxide Concentrations – 2013 Cumulative With Project**, for representative receptors located zero and 25 feet from the intersection.

Table 4
Carbon Monoxide Concentrations – 2013 Cumulative With Project

Intersection	0 Feet		25 Feet	
	1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
Clanfield Street and Sierra Highway	2.6	1.7	2.3	1.5
Exceeds state 1-hour standard of 20 ppm?	NO	—	NO	—
Exceeds federal 1-hour standard of 35 ppm?	NO	—	NO	—
Exceeds state 8-hour standard of 9.0 ppm?	—	NO	—	NO
Exceeds federal 8-hour standard of 9 ppm?	—	NO	—	NO

*Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in **Appendix 2.1.3**.*
[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

As shown, the CO concentration will not exceed the 1-hour and 8-hour state and federal standards. Therefore, the proposed project will not expose sensitive receptors to substantial CO concentration and will not have a significant impact on air quality with respect to this criterion.

Mitigation Measures

No mitigation is required.

Residual Impact

Impacts would be less than significant.

Impact 2.1.3-3 **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)**

The SCAQMD's *CEQA Air Quality Handbook* identifies methodologies to determine the cumulative significance of land use projects. These methods differ from the methodology used in other environmental topic sections in which all foreseeable future development within a given service boundary or geographical area is predicted and its impacts measured. The SCAQMD has not identified thresholds to which the total emissions of all cumulative development can be compared. Instead, the

SCAQMD's methods are based on performance standards and emission reduction targets necessary to attain the federal and state air quality standards identified in the AQMP.

According to the SCAQMD's *CEQA Air Quality Handbook*, projects that are within the emission thresholds identified above for construction and operation should be considered less than significant on a cumulative basis.[14] As shown in **Table 1**, emissions associated with construction activities of the proposed project would not exceed any of the SCAQMD-recommended construction thresholds of significance and therefore would not cause an individually significant impact. Likewise, as shown in **Table 2**, emissions associated with the operation of the proposed project would not exceed any of the SCAQMD-recommended operational thresholds of significance and therefore would not cause an individually significant impact. Since both construction and operational emissions are below the thresholds of significance, the proposed project would not result in a cumulatively considerable impact.

Greenhouse Gas Emissions

Background

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).[15] Historical records indicate that global climate changes have occurred in the past due to natural phenomena. However some data indicate that the current global conditions differ from past climate changes in rate and magnitude; thus, the current changes in global climate have been attributed to anthropogenic activities.[16] There continues to be significant scientific uncertainty concerning the extent to which increased concentrations of greenhouse gases (GHGs) have caused or will cause climate change, and over the appropriate actions to limit and/or respond to climate change.

GHGs play a critical role in determining the temperature on the Earth's surface. The natural process through which heat is retained in the troposphere[17] is called the "greenhouse effect." The greenhouse effect traps heat in the troposphere through a threefold process:

1. short-wave radiation in the form of visible light emitted by the Sun is absorbed by the Earth as heat;

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14 South Coast Air Quality Management District, CEQA Air Quality Handbook, (1993) 9–12.

15 U.S. Environmental Protection Agency, "Glossary of Climate Change Terms," http://www.epa.gov /climatechange/glossary.html#Climate_change. 2008.

16 Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report*, The Physical Science Basis, Summary for Policy Makers, 2007.

17 The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

2. long-wave radiation re-emitted by the Earth; and

3. GHGs in the atmosphere absorbing or trapping the long-wave radiation and re-emitting it back towards the Earth and into space.

This third process is the focus of current climate change actions. Increased concentrations of GHGs in the Earth's atmosphere have been linked to such conditions as rising surface temperatures, melting icebergs and snow packs, rising sea levels, and the increased frequency and magnitude of severe weather conditions. Existing climate change models also show that the rise is atmospheric temperature indicates a variety of impacts on agriculture, including loss of microclimates that support specific crops, increased pressure from invasive weeds and diseases, and loss of productivity due to changes in water reliability and availability. In addition, rising temperatures and shifts in microclimates associated with global climate change are expected to increase the frequency and intensity of wildfires.

GHGs include carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor (H_2O), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). CO_2 is the most abundant GHG in the atmosphere, and represents 77 percent of total GHG emissions.[18]

GHGs are the result of both natural and anthropogenic activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. In the state of California, the transportation sector is the greatest source of GHG emissions, accounting for 38 percent of total GHG emissions in 2006, the latest year for which data are available.[19]

Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the equivalent mass of CO_2, denoted as CO_2e. CO_2e allows for comparability among GHGs with regard to the global warming potential (GWP). Mass emissions are calculated by converting pollutant specific emissions to CO_2e emissions by applying the proper GWP value.[20] These GWP ratios are available from the United States Environmental Protection Agency (U.S. EPA) and published in the California Climate Action Registry (CCAR) Protocol. By applying the GWP ratios, project related CO_2e emissions can be tabulated in metric tons per year. The CO_2e values are calculated for the entire construction period. Construction output values used in this analysis are adjusted to represent a CO_2e value representative of CO_2, CH_4, and N_2O emissions from project construction activities. Construction CH_4 and N_2O values are derived from factors published in the 2006 IPCC

18 IPCC, *Fourth Assessment Report*, Synthesis Report, 2007.

19 California Air Resources Board, *California Greenhouse Gas 2000-2006 Inventory by IPCC Category – Summary*, http://www.arb.ca.gov/cc/inventory/data/data.htm 2009.

20 CO_2e was developed by the IPCC, and published in its Second Assessment Report (SAR) 1996.

Guidelines for National Greenhouse Gas Inventories. These values are then converted to metric tons of CO_2e for consistency. HFCs, PFCs, and SF_6 are not byproducts of combustion, the primary source of construction-related GHG emissions, and therefore are not included in the analysis.

Regulatory Framework

Federal. On May 19, 2009, the Obama Administration announced a new national policy intended to reduce fuel consumption and GHG emissions. The proposed standards cover vehicle model years 2012 to 2016 and will require an average fuel economy standard of 35.5 miles per gallon (mpg) in 2016 (39 mpg for cars, 30 mpg for trucks), or approximately 250 grams of CO_2 per mile. This policy is in contrast to the Corporate Average Fuel Economy (CAFE) standards established under 2007 legislation, which specified a minimum of 35 mpg by 2020. Both the U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) issued a Notice of Upcoming Joint Rulemaking to Establish Vehicle GHG Emissions and CAFE Standards the same day as the announcement in order to establish a consistent national policy pursuant to the separate statutory frameworks under which US EPA and Department of Transportation (DOT) operate (NHTSA is a division of DOT).

State. In response to growing scientific and political concern regarding global climate change, California has recently adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities within the state.

In September 2002, Assembly Bill (AB) 1493 was signed, requiring the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the state. It should be noted that setting emission standards on automobiles is solely the responsibility of the U.S. EPA. The federal Clean Air Act allows states to set state-specific emission standards on automobiles if they first obtain a waiver from the U.S. EPA. The U.S. EPA denied California's request for a waiver, thus delaying the CARB's proposed implementation schedule for setting emission standards on automobiles to help reduce GHGs.

In June 2005, Governor Schwarzenegger signed Executive Order S-3-05, which established GHG emissions targets for the state, as well as a process to ensure the targets are met. The order directed the Secretary of the California EPA to report every two years on the state's progress toward meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team (CAT), led by the Secretary of the California EPA, was formed. The CAT is made up of representatives from a number of state agencies and was formed to implement global warming emission reduction programs and reporting on the progress made toward meeting statewide targets established

under the Executive Order. State agency members include the Business, Transportation and Housing Agency; Department of Food and Agriculture; Resources Agency; Air Resources Board; California Energy Commission; the Public Utilities Commission; and the Department of Water Resources. The CAT published its Climate Action Team Report to Governor Schwarzenegger and the Legislature in March 2006, in which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the executive order.

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 commits the state to achieving the following:

- A reduction of GHG emissions to 2000 levels by 2010 (which represents an approximately 11 percent reduction from business as usual).
- A reduction of GHG emissions to 1990 levels by 2020 (approximately 30 percent below business as usual).

To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. The following schedule outlines the CARB actions mandated by AB 32:

- By January 1, 2008, CARB adopts regulations for mandatory GHG emissions reporting, defines 1990 emissions baseline for California (including emissions from imported power), and adopts it as the 2020 statewide cap. CARB adopted 427 million metric tons of carbon dioxide equivalents ($MMTCO_2e$) as the total statewide greenhouse 1990 emissions level and the 2020 emissions limit in 2007.[21]
- By January 1, 2009, CARB adopts a plan to effect GHG reductions from significant sources of GHG via regulations, market mechanisms and other actions.[22] CARB approved the AB 32 Scoping Plan in December 2008.
- During 2009, CARB drafts rule language to implement its plan and holds a series of public workshops on each measure (including market mechanisms). CARB has adopted "early action" measures required by the Scoping Plan and has scheduled and is in the process of adopting more than 20 other Scoping Plan measures.
- By January 1, 2010, early action measures will take effect.
- During 2010, CARB, after workshops and public hearings, conducts series of rulemakings to adopt GHG regulations including rules governing market mechanisms.

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21 CARB Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, 2007.

22 CARB released the Climate Change Proposed Scoping Plan in October 2008, which details the strategies that the State will use to reduce GHG emissions. The Plan was approved at the Board hearing in December 2008.

- By January 1, 2011, CARB completes major rulemakings for reducing GHGs, including market mechanisms. CARB may revise and adopt new rules after January 1, 2011 to achieve the 2020 goal.
- By January 1, 2012, GHG rules and market mechanisms adopted by CARB take effect and become legally enforceable.
- December 31, 2020 is the deadline for achieving 2020 GHG emissions cap.

CARB's list of discrete early action measures that can be adopted and implemented before January 1, 2010, was approved on June 21, 2007, and focuses on major State-wide contributing sources and industries, not on individual development projects or practices. These early action measures are (1) a low-carbon fuel standard, (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance, and (3) increased methane capture from landfills. Recently, CARB released emissions inventory estimates for 1990 through 2006.

A companion bill to AB 32, Senate Bill (SB) 1368, requires the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) to establish GHG emission performance standards for the generation of electricity. These standards will also generally apply to power that is generated outside of California and imported into the State. SB 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting CARB to meet its mandate under AB 32. On January 25, 2007, the CPUC adopted an interim GHG Emissions Performance Standard (EPS), which is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have GHG emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour (MW/hr). Further, on May 23, 2007, the CEC adopted regulations that establish and implement an identical EPS of 1,100 pounds of CO_2 per MW/hr (see CEC order No. 07-523-7).

An additional bill related to AB 32, SB 97, requires the California Office of Planning and Research (OPR), by July 1, 2009, to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by CEQA, including but not limited to, effects associated with transportation or energy consumption. The Resources Agency will then be required to certify and adopt the guidelines by January 1, 2010, and to periodically update the guidelines to incorporate new information or criteria established by the CARB pursuant to AB 32.[23] The OPR released a technical advisory on addressing climate change through CEQA Review on June 19, 2008. This guidance document outlines suggested components to CEQA disclosure: quantification of GHG emissions from a project's construction and operation, determination of

[23] Senate Bill No. 97, Chapter 185, approved by Governor Schwarzenegger and filed with the Secretary of State, August 24, 2007.

significance of the project's impact to climate change, and if the project is found to be significant, the identification of suitable alternatives and mitigation measures.

There has also been California legislative activity acknowledging the relationship between land use planning and transportation sector GHG emissions. California SB 375 signed on September 30, 2008, links regional planning for housing and transportation with the greenhouse gas reduction goals outlined in AB 32. Reductions in GHG emissions would be achieved by, for example, locating housing closer to jobs, retail, and transit. Under the bill, each Metropolitan Planning Organization would be required to adopt a sustainable community strategy to encourage compact development so that the region will meet a target, created by CARB, for reducing GHG emissions.

Local. In January 2007, as part of the County's efforts to help conserve natural resources and protect the environment, the County of Los Angeles Board of Supervisors adopted a comprehensive Countywide Energy and Environmental Policy (Policy). The goal of the Policy is to provide guidelines for the development, implementation, and enhancement of energy conservation and environmental programs. The Policy established an Energy and Environmental Team to coordinate the efforts of various County departments, establish a program to integrate sustainable technologies into its Capital Project Program, reduce energy consumption in County facilities by 20 percent by the year 2015, and commit to joining the California Climate Action Registry to assist the County in establishing goals for the reduction of GHG emissions. The County joined the Climate Action Registry in 2007. The Policy consists of the following four program areas designed to promote "green" design and operation of County facilities and to reduce the County's "environmental footprint:"

- Energy and water efficiency,
- Environmental stewardship,
- Public outreach and education, and
- Sustainable design.

The energy and water efficiency program area's goal is to reduce energy consumption in County facilities by 2015 through decreasing energy and water waste, implementing energy- and water-efficiency projects, and educating employees on energy and water conservation.

The environmental stewardship program focuses on measuring and reducing the County's environmental footprint by becoming a member of the California Climate Action Registry and implementing strategies to "green" the County's basic operations. These strategies include looking into environmentally responsible purchasing standards, having recycling bins in County buildings,

investigating green cleaning products for custodial operations, and investigating the utilization of existing resources.

The public outreach and education program area will augment County communication and outreach to include energy and water conservation practices, utility rates and rate changes, rotating power outage information, emergency power outage information, and energy-efficiency incentives.

Finally, the sustainable design program area intends to incorporate sustainable and green features into the County's capital improvement and refurbishment projects with the intention of optimizing the performance and extending the useful life of County buildings.

Recognizing the overlap between land use and GHG emissions, the Los Angeles County Board of Supervisors adopted a set of green building program ordinances in November 2008 that cover low-impact development (LID) standards, drought-tolerant landscaping requirements, and green building development standards.

The LID ordinance states:

> *LID encourages site sustainability and smart growth in a manner that respects and preserves the characteristics of the County's watersheds, drainage paths, water supplies, and natural resources.*[24]

For developments consisting of four or fewer residential units, at least two LID best management practices (BMPs) must be implemented in the site design. BMPs are "designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint sources of discharges, including stormwater," and include such methods or practices as disconnecting impervious surfaces, using porous pavement, landscaping and irrigation requirements, and a green roof.

The drought-tolerant landscaping ordinance is designed to "help conserve water resources by requiring landscaping that is appropriate to the region's climate and to the nature of a project's use."[25] The ordinance applies to all projects regardless of size, and requires that 75 percent of projects' total landscaped areas contain drought-tolerant plants. The ordinance limits the amount of turf allowed on a project site to 25 percent of the total landscaped area, or 5,000 square feet. All turf within a landscaped area must be water-efficient. In addition, landscaped areas must be organized by "hydrozones in

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24 Los Angeles County Code, Title 12, Chapter 12.84, "Low Impact Development Standards." http://planning.lacounty.gov/assets/upl/project/green_20080507-green-building-program-ordinances.pdf

25 Los Angeles County Code, Title 21, Chapter 22.52, Part 21, "Drought Tolerant Landscaping.." http://planning.lacounty.gov/assets/upl/project/green_20080507-green-building-program-ordinances.pdf

accordance with their respective water, cultural (soil, climate, sun and light), and maintenance requirements."

The green building ordinance is intended to encourage building practices that conserve water, energy and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment.[26] Implementation of this ordinance will reduce energy demand in new buildings, and thus GHG emissions from new projects. For projects having a gross floor area more than 10,000 square feet and less than 25,000 square feet, the ordinance requires that structures be built to new building standards in addition to being designed to meet Leadership in Energy and Environmental Design (LEED) certification standards. The Green Building Standards are summarized below.

- **Energy Conservation:** Building must reduce energy demand by at least 15 percent below Title 24.
- **Outdoor Water Conservation:** A smart irrigation controller must be installed for any landscaped area of the project.
- **Resource Conservation:** At least 50 percent of construction waste (by weight) must be recycled.
- **Tree Planting:** A minimum of one 15-gallon tree must be planted and maintained for every 5,000 square feet of developed area. At least 50 percent of the trees must be listed on the drought-tolerant approved plant list.

Since the adoption of the Policy, the County has taken steps to ensure compliance with the goals of the Policy and ultimately, AB 32. In order to meet the 20 percent reduction of energy consumption goal, the County has implemented energy efficient projects in County facilities, specifically retrofitting or replacing building lighting systems and air conditioning equipment. Accordingly, annual electrical consumption in County facilities was reduced by 2.31 percent in 2007 and 3.09 percent in 2008; annual gas consumption was reduced by 1.17 percent in 2007 and 1.83 percent in 2008.[27] Additionally, the Los Angeles County Recycled Water Task Force accomplished the following milestones towards its goal of recommending and implementing the use of recycled water for non-potable purposes to meet the demands of an additional 1.3 million people:

- Established membership in the Water Reuse Association and the Los Angeles County Recycled Water Advisory Committee.
- Secured Adoption of an ordinance by the Board naming the Director of Public Works or his designee the lead County official on matters related to recycled water.

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26 Los Angeles County Code, Title 22, Chapter 22.52, Part 20, "Green Building." http://planning.lacounty.gov /assets/upl/project/green_20080507-green-building-program-ordinances.pdf

27 Los Angeles County Department of Public Works, 2008.

- Assisted County Waterworks Districts in drafting revised policies and procedures to require its customers to use recycled water for non-potable, outdoor use.

- Participated in efforts to develop recycled water supplies within the Antelope Valley area of Los Angeles County.

- Prepared a draft 5 signature letter from the Board to the Governor requesting that Caltrans be directed to prepare a master plan for converting its irrigation systems to recycled water.

- Established effective working relationships with all recycled water providers within Los Angeles County.

- Assisted the Department of Parks and Recreation in beginning the capital planning process for converting all of their facilities to recycled water for irrigation purposes by the year 2020.

- Facilitated discussions between the Department of Parks and Recreation (DPR) and West Basin Municipal Water District (WBMWD) to enable delivery of recycled water to DPR facilities in WBMWD service area.

- Initiated development of a County-wide strategic plan in cooperation with the Chief Executive Office for converting all County facilities to recycled water for irrigation.

- Facilitated an agreement between the City of Los Angeles Department of Water and Power, the West Basin MWD, the Water Replenishment District, and Public Works to conduct a study of the Department's Modified Fouling Index standard for water delivered to the seawater barriers to potentially increase the amount of recycled water used for barrier injection.

- Developed County positions on bills pending in the California Assembly or Senate, including AB 1481, SB 201, and AB 2270.

The County has also developed, adopted, and implemented tools and policies to support the reduction of GHG emissions, promote "green" development, and provide employees and the public with information and opportunities to reduce their energy consumption. These tools and policies include

- the Electronic Products Environmental Assessment Tool, which identifies and certifies environmentally preferable electronic equipment;

- the green building ordinance, which requires all new private development within the unincorporated areas of the County to incorporate green building elements and will lead to all projects over 10,000 square feet in size to be certified under LEED™ or equivalent standards, and the incorporation of Low Impact Design Standards and drought tolerant landscaping;[28]

28 Los Angeles County Code, Part 20, Section 20.52.2100, "Green Building."

- County-sponsored recycling programs, which have distributed 40,000 paper recycling bins to County employees and require that all County departments purchase paper with a minimum 30 percent recycled content;
- the Vehicle Purchasing Services Program which provides incentives for County employees, retirees, family members, and contractors/sub-contractors to purchase alternate fuel vehicles; and
- the Single Use Bag Reduction and Recycling Program which aims to reduce the consumption and disposal of plastic carryout bags in County unincorporated areas and partner cities.[29]

In addition to the achievements discussed above, the County has also committed to achieving several additional goals and standards moving forward. The County has pledged to be a "Cool County" by establishing a GHG footprint, developing a GHG mitigation plan, working with local entities to reduce regional GHG emissions by 80 percent by 2050, and supporting further legislation to raise CAFE standards. The County plans to install energy saving systems on all vending machines on its properties to reduce operating costs and GHG emissions. The County will also develop a program to allow employees to purchase public transportation passes through a "pre-tax" payroll plan and has created a Countywide "solar mapping" portal to provide an internet-based resource for residential and commercial building owners to receive information on the viability of installing rooftop solar projects.[30]

Regional. There is no regional agency responsible for the regulation of GHG emissions related to global climate change. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate factors leading to global climate change or GHG emission issues associated with plans and new development projects throughout the Basin.

In order to provide GHG emissions analysis guidance to the local jurisdictions within the Basin, the SCAQMD has organized a Working Group to develop GHG emission analysis guidance and thresholds.

SCAQMD released a draft guidance document regarding interim CEQA GHG significance thresholds in October 2008. SCAQMD proposed a tiered approach, whereby the level of detail and refinement needed to determine significance increases with a project's total GHG emissions. SCAQMD also proposed a screening level of 3,000 metric tons per year for commercial or residential projects, under which project impacts are considered "less than significant." The 3,000-metric-ton screening level was intended "to achieve the same policy objective of capturing 90 percent of the GHG emissions from new development

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29 Los Angeles County Department of Public Works, "www.888CleanLA.com," http://dpw.lacounty.gov/epd/, accessed in October 2009.

30 Ibid.

projects in the residential/commercial sectors."[31] For projects with GHG increases greater than 3,000 metric tons per year, the use of a percent emission reduction target (e.g., 30 percent) was proposed to determine significance. This emission reduction target is a reduction below what is considered "business as usual."

SCAQMD also recommends that construction GHG emissions be reduced through the project lifetime in order to include construction GHG emissions as part of the operational strategy to reduce GHG emissions. The SCAQMD defines a project lifetime as 30 years. In December 2008, SCAQMD adopted interim CEQA GHG significance thresholds for use only when SCAQMD is the lead agency on projects. These thresholds apply to stationary source (industrial) projects only, and include a 10,000 metric ton CO_2e screening level. SCAQMD has not recommended them for use by other lead agencies at this time. As of September 2009, SCAQMD and the Working Group are developing interim CEQA GHG significance thresholds for use in a broader context by other lead agencies.

Significance Thresholds

The *State CEQA Guidelines*[32] define a threshold of significance as "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." CEQA gives wide latitude to lead agencies in determining what impacts are significant and does not prescribe thresholds of significance, analytical methodologies, or specific mitigation measures. CEQA leaves the determination of significance to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects.

However, neither the County of Los Angeles nor the SCAQMD (for projects where SCAQMD is not the lead agency) have yet established specific quantitative significance thresholds for GHG emissions. The regulations required to meet the state goals under AB 32 are still under development. Furthermore, pursuant to SB 97, guidelines to be prepared by OPR for addressing greenhouse gas emissions under CEQA may not be adopted until January 1, 2010. Additionally, OPR released preliminary draft CEQA guideline amendments for GHG emissions in January 2009. OPR does not identify a threshold of significance for GHG emissions, nor has it prescribed assessment methodologies or specific mitigation measures. The preliminary draft amendments encourage lead agencies to consider many factors in

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31 SCAQMD, Board Meeting, December 5, 2008, Agenda No. 31, Interim GHG Significance Threshold Proposal – Key Issues/Comments Attachment D.

32 California Public Resources Code, Section 21083; *State CEQA Guidelines*, Section 15064.7(a), "Thresholds of Significance."

performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The draft guideline amendments augmented Appendix G of the *State CEQA Guidelines*, the environmental checklist form, to include a section on greenhouse gas emissions. The draft guideline amendments suggested the following questions:

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?

b) Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The preliminary draft amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. OPR is required to "prepare, develop, and transmit" the guidelines to the Resources Agency on or before July 1, 2009, for certification and adoption. The draft guidelines were transmitted on April 13, 2009, by OPR to the State Natural Resources Agency.

While the OPR has not yet adopted formal significance thresholds, OPR issued a guidance document on June 19, 2008, to provide interim advice to lead agencies regarding the analysis of GHG emissions in environmental documents. The technical advisory suggests three components for CEQA disclosure:

- quantification of GHG emissions from a project's construction and operation,
- determination of significance of the project's impact to climate change, and
- if the project is found to be significant, the identification of suitable alternatives and mitigation measures.

The analysis contained herein follows this guidance. The California Air Pollution Control Officers Association (CAPCOA) released a white paper, entitled CEQA and Climate Change, in January 2008. The white paper examines various threshold approaches available to air districts and lead agencies for determining whether GHG emissions are significant. One of CAPCOA's proposed approaches in the white paper is a "non-zero" threshold of 900 annual metric tons for residential and office projects. Although not directly applicable, the commercial or residential threshold is considered appropriate for this project, because the fire station serves as a residence for fire department employees during their shifts. In addition, "house side" square footage represents a larger portion of the station than the apparatus bays.

CAPCOA and the State of California's Attorney General recognize that potential GHG impacts are exclusively cumulative in nature. Therefore, CAPCOA recommends that lead agencies require some level of mitigation even for projects that result in GHG emissions that are less than a numeric threshold.

Because the County's Energy and Environmental Policy serves to reduce GHG emissions from new projects and existing operations, it is supportive of the goals of AB 32 and is consistent with the CAPCOA recommendations. Thus, if a project results in emissions less than the numeric thresholds and implements design strategies consistent with the County of Los Angeles Energy and Environmental Policy, it is considered consistent with the goals of AB 32, and is considered to have a less than significant impact with respect to its contribution to the cumulative impact of global climate change.

In October 2008, CARB released a draft guidance document regarding interim CEQA GHG significance thresholds, wherein CARB proposed a tiered approach. CARB also proposed separate performance standards for construction, operational energy efficiency, water use, waste, and transportation, as well as a quantitative significance threshold in metric tons of CO_2e per year. The draft guidance included neither specific performance standards nor numeric significance thresholds for residential or commercial projects. On April 27, 2009, CARB revealed that it had abandoned its development of the proposed interim CEQA GHG significance thresholds in a public meeting; however, as of September 2009 no formal announcement has been publicized on CARB's website or elsewhere.

While it is difficult to predict the specific impact of one project's incremental contribution to the global effects of GHG emissions due to a variety of factors, including the complex and long term nature of such effects and the global scale of climate change, it is possible to quantify a project's incremental increase in GHG emissions for comparison with the numeric threshold proposed in the CAPCOA white paper. The threshold of 900 annual metric tons proposed in the CAPCOA white paper will be utilized for determining significance on a project level, in accordance with Appendix G draft amendments discussed above.

Therefore, due to the incremental amount of GHG emissions estimated for this project, the lack of any evidence for concluding that the project's GHG emissions could cause any measurable increase in global GHG emissions necessary to force global climate change. The project incorporates design features to reduce potential GHG emissions that are consistent with the goals of AB 32 and therefore, the project is not considered to have a significant impact with respect to global climate change on a project-specific basis. Moreover, there is no complete method for assessing how the project's very small theoretical GHG emissions increase could cause a significant project-specific effect on global climate change.

CAPCOA, the State of California's Attorney General, and OPR recognize that potential GHG impacts are exclusively cumulative in nature. Therefore, CAPCOA recommends that lead agencies require some level of mitigation even for projects that result in GHG emissions that are less than a numeric threshold. Because the County's Energy and Environmental Policy serves to reduce GHG emissions from new projects and existing operations, it is supportive of the goals of AB 32 and is consistent with the CAPCOA

recommendations. Thus, if a project results in emissions less than the applicable numeric thresholds and implements design and operational strategies consistent with the an applicable GHG reduction policy (County of Los Angeles Energy and Environmental Policy), it is considered to have a less than significant impact with respect to its contribution to the cumulative impact of global climate change. These criteria are consistent with Appendix G draft amendments discussed above.

Methodology

Construction

Construction emissions are calculated using the URBEMIS2007 model, which is based on CARB's EMFAC2007 and OFFROAD2007 model outputs. EMFAC2007 is an emissions estimation model for on-road vehicles, and OFFROAD2007 is an emissions estimation model for off-road vehicle emissions. The output values used in this analysis were adjusted to be project-specific, based on usage rates of construction equipment, type of fuel, and construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate GHG emissions values for each construction year. The URBEMIS2007 model outputs CO_2 emissions only. Therefore, in order to account for emissions of these compounds, the following adjustments were made to the URBEMIS2007 emission calculations:

- *Construction diesel trucks and equipment*: The CO_2 emissions associated with off-road and on-road equipment were multiplied by a factor based on the assumption that CO_2 represents approximately 99.1 and 99.9 percent, respectively, of the CO_2e emissions. These assumptions were derived from information provided by the California Climate Action Registry[33] and the California Energy Commission.[34]

- *Motor vehicles*: The CO_2 emissions associated with project-generated trips were multiplied by a factor based on the assumption that CO_2 represents 95 percent of the CO_2e emissions associated with passenger vehicles, which account for most of the project-related trips. This assumption was based on data provided by the U.S. EPA.[35]

33 California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse as Emissions Version 3.1, (2009) 96, 100.

34 California Energy Commission, *Diesel Use in California*, Remarks by Commissioner James D. Boyd, (2002).

35 U.S. Environmental Protection Agency, Office of Transportation and Air Quality, *Greenhouse Gas Emissions from a Typical Passenger Vehicle (EPA420-F-05-004)*, (2005) 4.

Operation

Mobile source emission calculations associated with operation of the proposed project utilize a projection of trip rate, which is provided by the project's traffic study, and annual vehicle miles traveled (VMT), which is derived from URBEMIS2007 defaults. Mobile source emissions are generated from vehicle traffic traveling to and from the project site, specifically the emergency vehicle and employee trips. Fire engine emissions cannot be calculated by URBEMIS2007, therefore the EMFAC2007 model is used to generate emission factors for CO_2. It should be noted that greenhouse gas reduction factors from *Alternative Compliance Strategies*, contained in AB 1493, were not applied in the EMFAC2007 software. Therefore, such emissions are likely overstated as emission factors for fleet mixes containing post 2009 vehicles would not equal reductions that would otherwise go into effect as a result of AB 1493 (if the federal waiver is granted). Should the federal waiver be granted, the State of California will be able to tighten emissions standards for those vehicles sold in the state.

The proposed project would also result in indirect GHG emissions due to the electricity demands of the proposed project. Emission factors for GHGs due to electrical demand were obtained from CARB's *Local Government Operations Protocol for the Quantification and Reporting of Greenhouse Gas Emissions Inventories*, which contains GHG emission factors from utility providers in California.[36] The cited factors in the CARB report are based on data collected by the California Climate Action Registry. The emission factors take into account the current mix of energy sources used to generate electricity and the relative carbon intensities of these sources, and includes natural gas, coal, nuclear, large hydroelectric, and other renewable sources of energy. In addition to electrical demand, the project would also result in indirect GHG emissions due to water consumption, wastewater treatment, and solid waste generation. However, water consumption, and wastewater and solid waste generation from a single fire station housing seven full-time fire fighters would result in very small amounts of GHG emissions and are not quantified in the analysis.[37]

In addition, the proposed project would also result in GHG emissions due to the operation of an on-site emergency generator and the operation of a helicopter. The 230 kilowatt emergency generator would operate 30 minutes weekly for testing purposes and is estimated to be in use for 26 hours per year. CO_2 emissions from the emergency generator are calculated using factors from U.S. EPA's AP 42. The FAA EDMS model was used to estimate emissions of CO_2 using the same assumptions as described above for criteria pollutants.

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36 California Air Resources Board, Local Government Operations Protocol for the Quantification and Reporting of Greenhouse Gas Emissions Inventories, Version 1.0, (2008) 174.

37 The water demand associated with fire fighting would not be attributable to the fire station. The water demand for fire fighting purposes would only occur if the station were to respond to a fire.

As was done for the construction emissions, the direct operational emissions calculated using URBEMIS2007 and the EDMS models were adjusted to account for emissions of CH_4 and N_2O using the following methods:

- *Area sources (natural gas combustion from heating, water heaters, etc.; gasoline-fueled landscaping equipment)*: The CO_2 emissions from natural gas consumption and landscaping equipment were adjusted based on emission factors for CO_2, CH_4, and N_2O from URBEMIS2007 and the California Climate Action Registry.[38]

- *Motor vehicles*: The CO_2 emissions associated with project-generated trips were multiplied by a factor based on the assumption that CO_2 represents 95 percent of the CO_2e emissions associated with passenger vehicles, which account for most of the project-related trips. This assumption was based on data provided by the U.S. EPA.[39]

- *Aircraft:* It was assumed that the CO_2 emissions associated with the helicopter represents approximately 99 percent of the CO_2e emissions, which is similar to off-road diesel equipment, as described above.

GHG Emissions Impacts

Construction

The proposed project would result in short-term emissions of GHGs during construction, which would last approximately 24 months. These emissions, primarily CO_2, CH_4, and N_2O, are the result of fuel combustion by construction equipment and motor vehicles. Construction of the fire station is projected to emit a total of 850.48 metric tons of CO_2e per year during its two phases; phase one beginning in 2011 and ending in 2012 and phase two beginning in 2012 and ending in 2013.

Operation

The proposed project would be approximately 9,712 square feet in size. The fire station would house 7 fire fighters at full staffing and a total of 14 personnel would be on site during shift changes. The fire station design includes GHG-reduction measures that have been included in the quantitative analysis, such as improved energy efficiency and reduced water demand. As shown in **Table 5**, below, annual GHG emissions resulting from vehicle, electrical, and natural gas usage associated with operation of the proposed fire station was estimated to be a maximum of 290.98 metric tons CO_2e per year, including

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38 California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.1, (2009) 96, 100, 103.

39 US Environmental Protection Agency, Office of Transportation and Air Quality, *Greenhouse Gas Emissions from a Typical Passenger Vehicle (EPA420-F-05-004)*, (2005) 4.

construction emissions, which were reduced equally over 30 years. Implementation of the project design features, listed below, would decrease this amount.

The project's GHG emissions are substantially lower than the 900 annual metric ton threshold proposed by CAPCOA. Therefore, construction and operational emissions are not expected to result in a significant impact on global climate change.

Table 5, Estimated Unmitigated GHG Emissions, lists the estimated GHG emissions from the proposed project's construction and operational activities.

Table 5
Estimated Unmitigated GHG Emissions

GHG Emission Source	GHG Emissions (MTCO2e/Year)
Construction	
Construction (Total)	850.48
Construction (Amortized over Project Lifetime)	28.35
Operational	
Operational (Mobile)	156.02
Area Source	13.40
Type-1 Fire Engine	29.35
Emergency Generator	8.05
Helicopter	3.28
Electrical Consumption	52.53
Total Annual (Includes Amortized Construction Emissions)	**290.98**

Source: Impact Sciences, Inc. (2009). Emissions calculations are provided in ***Appendix 2.1.3****.*

The County provides general guidance on County-desired LEED credits to the designers and final LEED credit selection occurs during the design process. The selected designer may change the mix of LEED points from those anticipated by the County. This report is based on the County's experience on similar projects and the expected LEED measures which would be included in the project. The fire station would be constructed to achieve a "Silver" rating from the US Green Building Council's LEED green building program. "Silver" is one of LEED's four levels of certification, which also include "certified," "gold," and "platinum." Each level requires that projects pursue a minimum number of LEED credits beyond the LEED prerequisites. Projects have flexibility with regard to which LEED credits to pursue. The project features are listed below:

- Energy Conservation: The project will install roofing materials with a high Solar Reflectance Index. The project will also consider integrating non-roof strategies, such as providing shade to paved areas and using paving materials with a high Solar Reflectance Index. By mitigating the heat island effect around the project site, the project will lower its air conditioning demand, and thus its peak energy usage. The project would reduce its energy usage by at least 26 percent.[40]

- Outdoor Water Conservation: Landscape irrigation for the project will eliminate the use of potable water by incorporating drought resistant or low-water plants and water-efficient irrigation techniques in addition to the use of recycled water for irrigation, and will include a smart irrigation controller.

- Resource Conservation: At least 50 percent of construction waste (by weight) will be recycled.

- Tree Planting: The proposed project will plant at least four 15-gallon trees on the project site to comply with the Green Building Ordinance.

- In addition, the project will reduce its domestic water demand by at least 20 percent through the use of low-water or high-efficiency fixtures.

Furthermore, the California Office of the Attorney General released a Fact Sheet of various GHG mitigation measures that was updated in December 2008. The proposed project is consistent with the following applicable measures:

Energy Efficiency

- Design buildings to be energy efficient. The proposed project has committed to achieving LEED™ Silver Certification and is subject to the County of Los Angeles Green Building Ordinance. Accordingly, the project will achieve at least a 15 percent reduction in energy demand below Title 24, California's Energy Efficiency Standards.

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40 American Society of Heating, Refrigerating and Air-Conditioning Engineers, *ANSI/ASHRAE/IESNA Standard 90.1-2004*, 2004.

- Install light colored "cool" roofs and cool pavements. The project will install roofing materials with a high Solar Reflectance Index. The project will also consider integrating non-roof strategies, such as providing shade to paved areas and using paving materials with a high Solar Reflectance Index.

Water Conservation and Efficiency

- Create water-efficient landscaped. Landscaping for the proposed project will incorporating drought resistant or low-water plants, water-efficient irrigation techniques, a smart irrigation controller, and partial use of recycled water for irrigation.

- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. The proposed project will utilize water-efficient irrigation techniques and a smart irrigation controller.

- Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water. The proposed project will include the use reclaimed water for irrigation, thereby reducing the need for potable water.

- Design buildings to be water-efficient. Install water-efficient fixtures and appliances. The proposed project will install water-efficient and low-water fixtures, and reduce potable water demand by 20 percent.

Solid Waste Measures

- Reduce and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). The proposed project will divert 75 percent of construction waste from landfills.

Based upon the 2006 GHG inventory data (i.e., the latest year for which data are available) compiled by CARB, California emitted 483.87 million metric $MTCO_2e$ including emissions resulting from imported electrical power in 2006. Compared to the 483.87 $MMTCO_2e$ California emitted in 2006, the project's operational emissions contribute approximately 0.00006 percent of the annual GHG emissions emitted in California.

Project implementation would incorporate design features that would reduce GHG emissions from "business as usual" conditions, that is, GHG emissions that would occur using current technologies and in the absence of project design features and measures that are intended to reduce GHG emissions. These would include the implementation of a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) that would result in the project meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Furthermore, the project would install energy and water efficient appliance and fixtures in accordance with County ordinances and policies, as described above.

Therefore, because the proposed project, through incorporation of project design features that would reduce GHG emissions from "business as usual" conditions, would result in annual GHG emissions that are less than the CAPCOA, CARB, and SCAQMD proposed numerical thresholds. As a result, the construction and operation of the project would not result in a significant impact on global climate change and would not hinder or delay the County's ability to meet the state's climate change goals.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.3-4 Expose sensitive receptors to substantial pollutant concentrations

Certain population groups are especially sensitive to air pollution and should be given special consideration when evaluating potential air quality impacts. These population groups include children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise.

As defined in the SCAQMD *CEQA Air Quality Handbook*, a sensitive receptor to air quality is defined as any of the following land use categories:

1. Long-term healthcare facilities
2. Rehabilitation centers
3. Convalescent centers
4. Retirement homes
5. Residences
6. Schools
7. Parks and playgrounds
8. Child care centers
9. Athletic fields

The nearest sensitive receptors to the project site consist of a single-family residence approximately 125 feet west of the project site.

As described in **Impact 2.1.3-2** above, construction and operation of the project would not result in any substantial localized or regional air pollution impacts, and therefore would not expose nearby sensitive receptors to substantial pollutant concentrations. In addition, construction activities would comply with SCAQMD Rule 403 regarding the control of fugitive dust and other specified dust control measures. As such, impacts to off-site sensitive receptors from criteria pollutants would be less than significant and no mitigation measures would be necessary.

Due to the relatively short construction duration and low demand for heavy duty diesel construction equipment (e.g., limited earthmoving activities) needed to complete the project, toxic air contaminants (TAC) emissions from construction activities would not result in long-term health risks to existing off-site sensitive populations.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.3-5 Create objectionable odors affecting a substantial number of people

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. According to SCAQMD *CEQA Air Quality Handbook*, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed fire station would not involve elements related to these types of uses.

On-site trash receptacles used by the project would be covered and properly maintained to prevent adverse odors. With proper housekeeping practices, trash receptacles would be maintained in a manner that promotes odor control, no adverse odor impacts are anticipated from these types of land uses. In addition, because the amount of fuel stored on site would be low, no odor impacts are anticipated from the fuel tanks. While there is a potential for odors to occur, compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology (BACT) Guidelines would limit potential objectionable odor impacts to less than significant. Refuse associated with operation of the proposed project will be disposed of in accordance with applicable regulations. Consequently, no significant impacts from odors are anticipated from the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

2.1.4 Biological Resources

Environmental Impacts

Specifically, Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on biological resources if it would

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Discussion

Impact 2.1.4-1 **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

Prior to the September 2009 site visit,[41] searches of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were conducted to identify special-status plant or animal species known to occur in the area. The CNDDB lists historical and recently recorded occurrences of special-status plant and animal species, and the CNPS database lists historical and recent occurrences of special-status plant species. The database searches included the Acton U.S. Geological Survey (USGS) 7.5-minute quadrangle, in which the project site is located, as well as the seven surrounding quadrangles: Ritter Ridge, Palmdale, Agua Dulce, Sunland, Sleepy Valley, Pacifico Mountain, Condor Peak, and Chilao Flat.[42]

Based upon the review of the CNDDB and CNPS databases, 23 special-status plant and 27 special-status animal species have been reported from the nine-quad region containing the project site. Of these 50 species, none were observed on site; however, 5 special-status plant and 6 special-status animal species could potentially utilize the site, based on habitat characteristics. These 11 species include Peirson's morning-glory (*Calystegia peirsonii*), white pygmy-poppy (*Canbya candida*), Mason's neststraw (*Stylocline masonii*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), Plummer's mariposa lily (*Calochortus plummera*e), silvery legless lizard (*Anniella pulchra pulchra*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), burrowing owl (*Athene cunicularia*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and southern grasshopper mouse (*Onychomys torridus ramona*). Special-status species reported in the database results and the reasons for their potential to utilize or be absent from the project site are summarized in **Appendix 2.1.4**.

Impacts to Peirson's morning-glory, white pygmy-poppy, Mason's neststraw, slender mariposa lily, and Plummer's mariposa lily would require additional analysis, and are considered potentially significant. If any of the remaining species are found to occur on the project site, and if avoidance is not considered feasible, measures to mitigate potentially significant impacts can include, subject to approval by the

41 Site visit conducted by Impact Sciences, Inc., on September 3, 2009.

42 California Department of Fish and Game: Natural Diversity Data Base – Acton U.S. Geological Survey (USGS) 7.5-minute quadrangle, in which the project site is located, as well as the seven surrounding quadrangles: Ritter Ridge, Palmdale, Agua Dulce, Sunland, Sleepy Valley, Pacifico Mountain, Condor Peak, and Chilao Flat (2009).

appropriate resource agency, one or more of mitigation measures **MM 2.1.4-1**, **MM 2.1.4-2**, and **MM 2.1.4-3**. Impacts would be less than significant with mitigation.

Mitigation Measures

The following mitigation measures shall be implemented:

MM 2.1.4-1 The applicant shall retain a qualified biologist with a CDFG Scientific Collection Permit and Memorandum of Understanding (MOU) to conduct preconstruction surveys for silvery legless lizard, coastal western whiptail, coast horned lizard, San Diego black-tailed jackrabbit, and southern grasshopper mouse. All individuals of these species observed within the project site during the preconstruction surveys must be relocated, at the approval of the County and CDFG, to an approved site containing suitable habitat for these species. Surveys and relocation of potentially impacted animals may occur prior to construction to ensure that no special-status species are present within the project site during construction. Silt fencing or other means which would provide a physical barrier to animal movement shall be implemented at the edge of the construction areas and prior to animal relocation to prevent their reentry to the site. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where they will not be able to escape harm from construction equipment or other suburban hazards to wildlife. Survey methods and relocation areas must be reviewed and approved by the CDFG prior to commencement of grading.

MM 2.1.4-2 If activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 feet for raptors or federally listed Endangered or Threatened bird species) of the construction zone. Pre-construction nesting bird surveys shall be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Surveys shall include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. If ground-disturbing activities are

delayed, additional pre-construction surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities.

If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.

MM 2.1.4-3 Prior to grading activities, a qualified biologist shall perform a burrowing owl survey, pursuant to CDFG Guidelines (CDFG 1993). If active burrowing owl burrows are located, the burrows shall be avoided by 500 feet during all construction activities. If breeding, once owls have completed fledging their young and are no longer dependant upon the burrows (as determined by a qualified biologist), one-way doors shall be installed in the burrows, in accordance with CDFG protocols.

Residual Impact

Impacts would be less than significant.

Impact 2.1.4-2 **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.**

The site is undeveloped and shows signs of prior and ongoing disturbances, including disking, unpaved roadways, agriculture, and associated surviving landscaping plants. Vegetation is a combination of ruderal and undisturbed vegetation types.

The area of the proposed fire station and helispot is entirely disturbed in character and is dominated by ruderal vegetation and the remains of a windrow consisting of ornamental plantings. This area has been cleared in the past for agricultural purposes. Plants persisting in this area include native and non-native annual and short-lived perennial species, such as Russian-thistle (*Salsola tragus*), annual ragweed (*Ambrosia acanthicarpa*), California aster (*Corethrogyne filaginifolia*), Lemmon's lessingia (*Lessingia lemmonii*),

twiggy wreathplant (*Stephanomeria virgata*), rancher's fireweed (*Amsinckia menziesii* var. *intermedia*), short-pod mustard (*Hirschfeldia incana*), rattlesnake weed (*Chamaesyce albomarginata*), turkey mullien (*Croton setigerus*), red-stem filaree (*Erodium cicutarium*), horehound (*Marrubium vulgare*), California buckwheat (*Eriogonum fasciculatum*), red brome (*Bromus madritensis* ssp. *rubens*), cheat grass (*B. tectorum*), and Arabian and Mediterranean splitgrass (*Schismus arabicus* and *S. barbatus*).

The northeastern corner of the property is relatively undisturbed and retains much of its native character. A trail is present connecting Clanfeld Street to the neighboring property to the west, and an ephemeral wash is present. Vegetation in this area is California buckwheat-dominated scrub on the north-facing slope and California juniper (*Juniperus californica*) dominated open woodland along and adjacent to the drainage. No riparian vegetation is present. Species present in this portion of the site include Nevada ephedra (*Ephedra nevadensis*), four-wing saltbush (*Atriplex canescens*), annual ragweed, rubber rabbitbrush (*Chrysothamnus nauseosus* ssp. *mohavensis*), California aster, Cooper's goldenbush (*Ericameria cooperi* var. *cooperi*), Lemmon's lessingia, shrubby butterweed (*Senecio flaccidus* var. *douglasii*), twiggy wreathplant, rancher's fireweed, spiny fireweed (*Amsinckia tessellata* var. *tessellata*), short-pod mustard, golden cholla (*Cylindropuntia echinocarpa*), rattlesnake weed, red-stem filaree, sapphire woolystar (*Eriastrum cf. sapphirinum*), slender buckwheat (*Eriogonum cf. elongatum* var. *elongatum*), California buckwheat, wand buckwheat (*E. roseum*), ripgut brome (*Bromus diandrus*), red brome, cheat grass, and Arabian and Mediterranean splitgrass. As there are no sensitive habitats present on site, there would be no impacts to any riparian habitat.[43]

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

[43] Site visit conducted by Impact Sciences, Inc., on September 3, 2009.

Impact 2.1.4-3 **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

As indicated by the site visit,[44] there is an ephemeral (short period of time with no permanent trace) drainage in the northeastern portion of the site. This drainage is potentially subject to regulation by CDFG and RWQCB. The project site consists of two different soil types, Greenfield sandy loam (85 percent of project site) and Hanford coarse sandy loam (15 percent of the project site).[45] As described in the web soil survey, the soils were classified as not hydric. Hydric soils (very wet soils or soils that contain considerable amounts of water) are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Under natural conditions, these soils are either saturated or inundated (flooded) long enough during the growing season to support the growth and reproduction of hydrophytic vegetation (plants that grow in water). To determine if a soil is considered hydric specific information is required, such as the depth and duration of the water table. If soils are wet enough for a long enough period of time to be considered hydric, they are associated with wetlands. The depth to groundwater is greater than 51 feet below ground surface (bgs)[46] and was found to be an average 140 feet to 180 feet bgs.[47] As the soils located within the northeast portion of the project site are considered not hydric and the drainage is considered ephemeral, there would be no potential impacts to wetlands.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

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44 Ibid.

45 United States Department of Agriculture, Natural Resource Conservation Service, "Web Soil Survey," http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, Accessed October 2009; RP Development Services, *Phase I Environmental Site Assessment Proposed Fire Station 142*, (April 2009) Appendix A.

46 RP Development Services, Note 48 Geotechnical Investigation Proposed Fire Station 142, (April 2009) 8.

47 RP Development Services, Phase I Environmental Site Assessment Proposed Fire Station 142, (April 2009) Appendix C.

Impact 2.1.4-4 **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites**

As identified in site photos and a site visit, the northeastern portion of the project site contains pine trees.[48] The project site supports habitat suitable for nesting native bird species. To avoid impacts to nesting birds during construction, it is recommended that a qualified biologist be retained to conduct nesting bird surveys within suitable nesting habitat prior to initiation of construction or ground disturbing activities, as described in mitigation measure **MM 2.1.4-2**. As seen in aerial photos and the site visit the ephemeral drainage provides wildlife the opportunity for movement through the community of Acton in a north/south direction. As described in the **Project Description,** the northeast corner of the project site would construct retaining walls to minimize and support erosion from the helispot. As a result, there would be no impacts on the drainage area.

Mitigation Measures

Mitigation measure **MM 2.1.4-2** shall be implemented.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.4-5 **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance**

The site is located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road (see **Figure 2**). The County has adopted an oak tree permit ordinance[49] and addresses locations within the County designated as significant ecological areas (SEAs).[50] As there are no identified oak trees within the project boundary there would be no impacts to oak trees. As identified on Figure 6.3, L.A. County Significant Ecological Areas (SEAs), of the draft general plan update,[51] the nearest SEA is the Santa Clara River located 1.5 miles south of the project site. Therefore, no local ordinances would pertain to the proposed project.

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48 Jacob & Hefner Associates, Inc., Limited Phase II Environmental Site Assessment Proposed Los Angeles County Fire Station 142, (September 2009) 2.

49 Los Angeles County Code, Part 16, Section 22.56.2050, "Oak Tree Permits."

50 Los Angeles County Code, Part 1, Section 22.56.215(B), "Hillside Management and significant ecological areas."

51 Los Angeles County Department of Regional Planning, *Draft General Plan*, Chapter 6: Conservation and Open Space Element, Figure 6.3, 2008.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.4-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project site does not lie within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.5 Cultural Resources

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following items to be considered when determining whether a project may be deemed to have a significant impact on cultural resources if it would

- cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.6 of the *State CEQA Guidelines*,
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the *State CEQA Guidelines*,
- disturb or indirectly destroy a unique paleontological resource or site or unique geologic feature, or
- disturb any human remains, including those interred outside formal cemeteries.

Discussion

Impact 2.1.5-1 **Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.6 of the *State CEQA Guidelines***

The site is located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road (see **Figure 2**). There are no known California historic places registered, or that have been evaluated for historical significance and may be considered candidates for listing in the California Historic Register that is located within the project area or a 0.5-mile radius.[52]

The California Point of Historical Interest (2009) of the Office of Historic Preservation (OHP), Department of Parks and Recreation, lists no properties within a 0.5-mile radius of the project site. The California Historical Landmarks (2009) of the OHP lists no properties within a 0.5-mile radius of the project site. The California Register of Historical Resources lists no properties within a 0.5-mile radius of the project site. These are properties determined to have a National Register of Historic Places Status of 1 or 2, a California Historical Landmark numbering 770 and higher, or a Point of Historical Interest listed after January 1, 1998. The National Register of Historic Places lists no properties within 0.5-mile radius of the project site.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.5-2 **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the *State CEQA Guidelines*.**

The proposed project is located on previously disturbed, vacant land. The northern portion of the project site contains pine trees and an orchard. This land was used for dry farming operations prior to 1954.[53] An environmental site assessment (ESA) was completed to identify potential environmental hazards (see **Appendix 2.1.5**). The report included a summary of a search of regulatory databases that included a

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52 California Office of Historic Preservation, "California Historic Resources," http://ohp.parks.ca.gov/listed_resources/, accessed October 2009.

53 RP Development Services, Phase I Environmental Site Assessment Proposed Fire Station 142, (April 2009) 6.

search of state and tribal databases. The proposed project was not identified in this search.[54] Due to previous dry farming operations and a state and tribal database search that did not identify the project site the likelihood that the proposed project would uncover archaeological resources is very low. As a result, there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.5-3 Disturb or indirectly destroy a unique paleontological resource or site or unique geologic feature

The project site is located at the eastern end of the Soledad basin within the Transverse Ranges geomorphic province of Los Angeles County, California, see **Figure 1, Regional and Site Location Map**. The basin is bounded on the north, east, and south by ridges and mountain masses of relatively old crystalline rocks that have contributed large quantities of Cenozoic age sediments to the basin. The project site is covered by Pleistocene age older alluvium composed of weakly to moderately cemented and stream-deposited sand, gravel, and silt estimated to be at least 220 feet thick.[55] Holocene age alluvial deposits are located in the northeast corner of the project site.

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals previously not represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Most of the potential fossil-producing rock formations are located within hilly terrain in the valley.

The project site does not contain a unique geologic feature has been previously disturbed. As discussed above in **Impact 2.1.5-2**, the project site has been previously disturbed and would therefore, have low potential to uncover paleontological resources. However, older alluvium is known to yield many

54 Ibid., page 10.

55 RP Development Services, Note 48 Geotechnical Investigation Proposed Fire Station 142, (April 2009) 6.

fossilized animals and plants. As a result, older alluvium is considered to have a high paleontological sensitivity rating.[56] Therefore, there is the potential for significant impacts.

Mitigation Measures

The following mitigation shall be incorporated:

MM 2.1.5-1 During grading activities, in the unlikely event that paleontological resources are found during grading within the project site, a paleontologist will be notified to stabilize, recover, and evaluate such find.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.5-4 Disturb any human remains, including those interred outside formal cemeteries

The proposed project would develop a fire station with a helispot. The project site has been previously used for agricultural purposes. The project site did not show up on a search of the state and tribal databases. As the project site as been previously disturbed and used for dry farming agriculture, there would be no potential for unearthing human remains.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

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56 Eisentraut, P.J., and Cooper, J. D. *Development of a model curation program for Orange County's Archeological and Paleontological Collections – Final Report*, (2002)

2.1.6 Geology and Soils

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on geology and soils if it would

- expose people or structures to potential substantial adverse effects including risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist; strong seismic shaking; seismic-related ground failure, including liquefaction; landslides;
- result in substantial soil erosion or the loss of topsoil;
- be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- be located on expansive soils, as defined in Table 18-1-B of the UBC (1994); creating substantial risks to life or property; or
- have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater.

Discussion

Impact 2.1.6-1 **Expose people or structures to potential substantial adverse effects including risk of loss, injury, or death involving:**

a. rupture of a known earthquake fault, (as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist);

The project site is located at the eastern end of the Soledad basin within the Transverse Ranges geomorphic province of Los Angeles County, California, see **Figure 1**. The basin is bounded on the north, east, and south by ridges and mountain masses of relatively old crystalline rocks that have contributed large quantities of Cenozoic age sediments to the basin. The project site is covered by Pleistocene age older alluvium composed of weakly to moderately cemented and stream-deposited sand, gravel, and silt estimated to be at least 220 feet thick.[57] Holocene age alluvial deposits are located in the northeast corner of the project site.

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57 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (April 2009) 6.

A fault can be considered active if it has demonstrated movement within the Holocene epoch, or approximately the last 11,000 years. A potentially active fault is a fault that has demonstrated Quaternary movement within the last 1.6 million years, but lack strong evidence of Holocene movement. Earthquake fault zones are zones around surface rupture of active faults. The Alquist-Priolo Earthquake Fault Zoning Act prevents construction of habitable structures within an earthquake fault zone.[58] No known active or potentially active faults underlie the project site. There are no Alquist-Priolo Earthquake Fault Zones established within the area.

The closest known active fault to the project site is the Nadeau fault of the San Andreas fault zone located approximately 5 miles northeast of the project site. The nearest potentially active fault is the Soledad fault located approximately 3 miles southwest of the project site.[59] Therefore, there would be no impacts from surface rupture.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

b strong seismic shaking;

As described above in **Impact 2.1.6-1(a**), the closest active fault to the project site is the San Andreas fault zone which is California's most prominent geological feature, comprises all the subparrallel faults tectonically associated with the main trace of the San Andreas fault. As identified, the Nadeau fault is the nearest active fault located 5 miles to the northeast. The Soledad fault is the nearest potentially active fault located 3 miles to the southwest. Ground motion is usually determined by the distance of the site from the epicenter and the magnitude of the earthquake defined as peak horizontal ground acceleration. Peak horizontal ground acceleration is the determination of seismic risk with a probability of exceedence of 10 percent in 50 years. The calculated site-specific ground motion associated with the nearest earthquake event was 0.236 gravity ([g], which travels at 9.8 meters per second per squared).

In the event of a maximum probable or credible earthquake occurring on any of the nearby major faults, strong ground shaking would occur in the subject site's general area. Potential damage to any structure(s)

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58 California Public Resources Code, Division 2, Chapter 7.5, Section 2621, "Alquist-Priolo Earthquake Fault Zoning Act."

59 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (April 2009) 11.

would likely be greatest from the vibrations and impelling force caused by the inertia of a structure's mass. This potential would be no greater than that for other existing structures and improvements in the immediate vicinity.

The project would be designed and constructed in accordance with applicable seismic design standards for Region 4 in the California Building Code (CBC), and/or Los Angeles Uniform Building Code, which would ensure that the proposed building would withstand groundshaking associated with the maximum credible earthquake at the project site. In addition, a Geotechnical Report prepared for the project (see **Appendix 2.1.6**) includes site-specific design recommendations that address design features such as foundations, floor slab support, soil corrosivity, pavement design, and retaining walls.[60]

Mitigation Measures

The following mitigation measures shall be implemented:

MM 2.1.6-1 Prior to the issuance of building or grading permits, the County of Los Angeles Department of Public Works shall ensure that the site-specific design recommendations in the Final Geotechnical Report are incorporated into the final project plans/design.

Residual Impacts

Impacts would be less than significant.

c. seismic-related ground failure including liquefaction;

The proposed project is located approximately 3 miles southwest of the Nadeau fault. As described above, strong groundshaking could potentially occur on the project site. Liquefaction may occur when saturated, loose to medium dense, cohesionless soils are densified by ground vibrations. The densification results in increased pore water pressures if the soils are not sufficiently permeable to dissipate these pressures during, and immediately following, an earthquake. When the pore water pressure is equal to or exceeds the overburden pressure, liquefaction of the affect soil layers occurs. The groundwater level of the project area is, on average, 140 feet bgs to 180 bgs. As identified in the Geotechnical Investigation, the project site is located adjacent to the southwest of a potential liquefaction area. Therefore, potential impacts from earthquake induced liquefaction would be less than significant.

60 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, 2009.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

d. landslides

The proposed project is not directly downslope of any potential debris flows or rockfalls. The project site is not located in an earthquake induced landslide area.[61] The project site is relatively flat-lying ground that is not on or in the path of any landslides. A 10- to 15-foot-high 4:1 (horizontal:vertical), northeast-facing slope descends from the northeast corner of the project site. This would be the future area for the helispot. Construction of the proposed helispot would result in cut slopes surrounding the helispot, and a fill over cut slope along Sierra Highway. The helispot cut slopes would consist of a south to southwest facing 2:1 to 3:1 cut slope below the helispot, and an east to southeast facing 2:1 cut slope along the west side of the helispot access road, see **Figure 3, Conceptual Site Plan**. The slope below the helispot would have a maximum height of approximately 17 feet and would descend from the south side of the helispot to the fire station.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.6-2 Result in substantial soil erosion or the loss of topsoil

Construction activities have the potential to result in minor soil erosion during excavation, grading and soil stockpiling, subsequent siltation, and conveyance of other pollutants into municipal storm drains. According to the **Project Description**, the proposed project would include mass grading, exportation of soil, fine grading, and street improvements.

Rough grading of the site will generate 19,300 cubic yards of cut soil and 2,800 cubic yards of fill requiring the export of 16,500 cubic yards of soil from the site. This would include excavating the soils to

61 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) Figure 6.

a maximum depth of approximately 5 feet in the central portion of the site where the building pad is to be located. Outside of the building pad, excavation will occur at depths ranging from approximately 2 to 5 feet to prepare the site for development.

Project construction would comply with State Water Resources Control Boards' (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which requires development of and compliance with a Stormwater Pollution Prevention Plan (SWPPP) for projects of 1 acre or more in size. The SWPPP would include Best Management Practices (BMPs), which are activities, practices, procedures, or devices implemented to avoid, prevent or reduce pollution of the municipal storm drain system and receiving waters. Basic structural construction stormwater BMPs include: construction entrance/exit stabilization, temporary sediment traps/filters, storm drain inlet and outlet protection, and sediment barriers (typically silt fence). Additional BMPs will be designed and installed for the operational phase of the project to comply with the NPDES General Permit and the County of Los Angeles' Standard Urban Stormwater Mitigation Plan (SUSMP) to control runoff from the site. The final selection of BMPs will be completed through coordination with the County of Los Angeles.

Construction would result in potential sources of erosion and would be managed to the maximum extent possible with best management practices as required under the required NPDES permit.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.6-3 **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse**

As described above in **Impact 2.1.6-1(d)**, the proposed fire station is on relatively flat-lying ground except for the northeast corner. The northeast corner of the site has a northeast facing 10- to 15-foot-high 4:1 slope. The grading of the fire station pad would result in cut slopes surrounding the helispot, and a fill over cut slope along Sierra Highway. The cut slopes surrounding the helispot are described above. The slopes around the helispot would be located on older alluvial deposits that range from moderately to weakly cemented and are considered stable. However, due to the weakly cemented nature of the older alluvial deposits, there is the potential for erosion or surficial failures along the finished southern slope of

the helispot. The erosion would result in rilling or gullying extending upslope towards the helispot. There is the potential for erosion and debris accumulation at the toe of the northwest facing slope. This would not require a stability fill at the time of the report, but could require occasional maintenance.[62]

The fill over cut slope along Sierra Highway would consist of south-facing, 2:1 slope that would have a maximum height of approximately 10 feet. This slope would be reconstructed as a stability fill slope, with backdrains, to control potential seepage at the fill-cut contact area.

Mitigation Measures

MM 2.1.6-2 Prior to the issuance of grading permits the south facing slope of the helispot and the slope along Sierra Highway shall include a stability fill slope which would have a 15-foot-wide keyway and extend to the top of the proposed south facing slope. This stability slope shall be constructed with backdrains, located in the backcut, and should be keyed and benched into the soils on-site.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.6-4 Be located on expansive soils, as defined in Table 18-1-B of the UBC (1994); creating substantial risks to life or property

Samples of on-site soils that would be used for compacted fill were obtained to determine their expansion potential; the results of the tests performed indicate that the on-site materials generally have an expansion index that varies from zero to four.[63] The on-site soils can be classified as having a very low potential for expansion.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

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62 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) 14.

63 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) 30.

Impact 2.1.6-5 **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater.**

The proposed project would use a septic system to dispose of wastewater. In order to determine if the soils would be able to adequately handle the use of a septic system, the percolation testing procedure outlined by the County of Los Angeles Department of Public Health was used.[64] A total of six tests at depths of 3 to 4 feet were conducted on the project site. The soils underlying the entire site are similar in composition. The site is located above a broad terrace deposit consisting of older alluvial soils classified as silty sand. The soils were explored in the immediate vicinity of the leach field with two trenches excavated to 10 feet. Several more trenches and borings were conducted for the remainder of the project site. Based on the geological investigation conducted by R.T. Frankian and Associates, Inc., (RTF&A) the soils underlying the leach field area are of similar composition to a depth of at least 50 feet and are suitable for an on-site wastewater treatment system.[65] During the field investigations by RTF&A, no groundwater was encountered to a depth of 50 feet. Therefore, the proposed on-site sewage system would not be affected by shallow groundwater conditions. As the soils are suitable for an on-site wastewater treatment system, there would be no impacts from the use of septic systems.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.7 Hazards and Hazardous Materials

Environmental Impact

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on hazards and hazardous materials if it would

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

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64 County of Los Angeles Department of Public Health, *Application Procedures for Approval of an Onsite Wastewater Treatment System*, revised 2008.

65 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) Appendix F.

- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within 0.25 mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.6 and, as a result, would it create a significant hazard to the public or the environment;
- be located within an airport land use plan, or where such a plan has not be adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- be within the vicinity of a private airstrip, and would result in a safety hazard for people residing or working the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures to a significant risk loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Discussion

Impact 2.1.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

Construction of the proposed project would involve the use of potentially hazardous materials such as vehicle fuels, oils, paints, and transmission fluids.

Operation of the fire station would involve the use of small quantities of potentially hazardous materials typical of those used at fire stations (i.e., oil and gasoline, cleaning solvents, pesticides for landscaping, etc.) would be used and stored on site. Also located on site would be an aboveground 600-gallon diesel fuel storage tank for the generator; an aboveground 2,500-gallon diesel fuel storage tank for the apparatus; an aboveground 500-gallon unleaded gasoline storage tank; and a 3,000- to 5,000-gallon mobile fuel tender. Yard maintenance gasoline fuel storage would consist of two 5-gallon containers, which would be stored in the station's oil storage room.

All hazardous materials used during construction and operation would be contained, stored, and used in accordance with applicable local, state, and/or federal regulations and handled in accordance with manufacturer's specifications. In addition, permits to construct and operate the tanks would be obtained

from the South Coast Air Quality Management District (SCAQMD), as necessary. Therefore, risks associated with the use of these materials would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.7-2 **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment**

As discussed above in **Impact 2.1.7-1**, impacts' regarding the proposed project's potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant through compliance with the applicable regulatory requirements. The project site is currently vacant except for the orchard and pine trees located in the northern portion of the site. No buildings or structures exist on the project site that could contain hazardous materials.

The operation of the fire station would include an aboveground storage facility containing 600 gallons of diesel fuel for the emergency generator, 2,500 gallons of diesel fuel for the on-site apparatus, 500 gallons of unleaded gasoline, a 3,000- to 5,000-gallon fuel tender, and 10 gallons (two 5-gallon containers) of gasoline for yard maintenance equipment. The use and storage of such materials would comply with applicable standards and regulations, and would not pose significant hazards. Furthermore, it is not anticipated that the use of such hazardous materials would create a significant hazard associated with a risk of upset or accident conditions involving the release of hazardous materials during project operations. Therefore, impacts would be less than significant in regards to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.7-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within 0.25 mile of an existing or proposed school

The site is located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road. High Desert Middle School is located approximately 0.15 mile south of the project site. The project site is located within 0.25 mile of an existing school. However, the school is also located south of SR-14. While the proposed fire station would store diesel and unleaded gasoline on site, the storage and use of these hazardous materials would comply with state and federal regulations. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.7-4 Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.6 and, as a result, would it create a significant hazard to the public or the environment

The project site is currently a vacant lot that has previously been used for agricultural use. No hazardous materials exist on site, and the site is not included on the Cortese List,[66] which is updated annually by the California Environmental Protection Agency (Cal/EPA) pursuant to Government Code Section 65962.5.

However, as the project site was used previously for agricultural operations there is the potential for the soil to be contaminated with pesticides and herbicides. A limited Phase II environmental site assessment was conducted for the project site based on the potential residual organochlorine pesticides in the soil, see **Appendix 2.1.7**. These pesticides have a long residency time in soil that may have been used on the project site (such as DDT, Dieldrien, Heptachlor, and Toxaphene). Organochlorine pesticides do not generally migrate deep into the soil, but remain in the shallow soil within the plowed depth.

66 California Department of Toxic Substances, *Hazardous Waste and Substances List*, accessed October 2009.

Soil samples were collected from six different locations within the project site at a depth of 1 foot below ground surface (bgs). Two soil samples were collected at a depth of 3 bgs for vertical control. The samples were analyzed for organochlorine pesticides at a state certified laboratory in Los Angeles. The laboratory reported that none of the 21 organochlorine pesticides tested for were detected above the laboratory practical quantification limit. Therefore, the project site does not contain pesticides that would be hazardous to the public or the environment and potential impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.7-5 **Be located within an airport land use plan, or where such a plan has not be adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area**

The project site is not located within an airport land use plan or within 2 miles of a public airport. The closest airport is Agua Dulce Airpark located approximately 6.5 miles west of the project site. Thus, no safety hazards or impacts to people residing or working in the project area due to a public use airport would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact 2.1.7-6 **Be within the vicinity of a private airstrip, and would result in a safety hazard for people residing or working the project area**

The nearest private airstrip is the Agua Dulce Airpark located 6.5 miles west of the project site. As described above, the project site is not located within a designated airport land use plan. However, as described in the **Project Description**, the project would construct a helispot for emergency and fire use for the community of Acton. The helispot would be 110-feet in diameter, would be accessed by an

internal roadway, would have a minimum 30-foot-wide safety area, would include a 5-foot-high chain link fence and a four-rail fence would enclose the proposed helispot site.

Approach and Departure Paths – Incoming flights would generally approach from the east and northwest and departing flights would generally leave the helispot heading northwest and east. While individual flights could deviate from these flight paths due to wind conditions or other factors, they represent the planned flight path and final approach and takeoff flight standards for helicopter flights. These flight paths have been designed to avoid obstacles, such as tall buildings, trees and utility lines, and to consider predominant wind direction. Constraints on the site include the presence of existing pine trees and a single-family residence located to the west of the project site. The proposed approach and departure paths would be reviewed for their technical conformance with state and federal standards by the California Department of Transportation, Division of Aeronautics as part of the heliport and/or helispot permitting process. This process is in the early stages and has not been completed by the Fire Department.

The helispot would be elevated 10 feet above grade and designed to meet state and federal FAA standards for helispot markings and lighting. As a private use helispot, an object-free area for final approach and takeoff area (FATO) would be established. The FATO is a defined area over which the final phase of the approach to a hover, or a landing, is completed and from which the takeoff is initiated. In this case, the FATO would extend slightly beyond the raised helispot landing area. The FATO and an associated safety area surrounding the FATO would be kept free of objects such as buildings and fences which could be struck by the main or tail rotor or helicopter skids. The FATO and safety area would be located entirely within the northern portion of the project site (refer to **Figure 4**). The helispot would be required to operate under conditions of a Heliport Permit issued by the California Department of Transportation, Division of Aeronautics. Conformance with the permit and FAA regulations would avoid substantial safety hazards for people residing or working in the project area.

Construction and operation of the proposed helispot in accordance with FAA and Heliport Permit regulations would not create or result in substantial new safety hazards due to helicopter flights. The flight path of the helicopter would make the approach based on the prevailing winds. Pilots will be sensitive to the residents within the immediate area surrounding the helispot throughout the flight path and during takeoffs and landings. Helispot lights would only be used on an as needed basis, during take offs and landings. Therefore, aviation hazard impacts associated with the proposed expansion are less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.7-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

Development of the fire station would provide for an ongoing improved level of fire protection, emergency medical, and other life safety services to the community, and would add to the resources available for other requests for services throughout the department's jurisdiction. The Los Angeles County Fire Department's goal, when areas have transitioned from rural to urbanized areas, is to arrive on the scene of an emergency call within 5 minutes form the time of dispatch. Fire Station 142 is a strategic part of this goal. As such, Fire Station 142 would be a positive factor to an adopted emergency response plan or emergency evacuation plan. Thus, the project would not physically interfere with an adopted emergency response plan and no impacts would occur in this regard.

The helispot pad would also provide a formalized location for the transport of sick and injured for the community of Acton. The helispot and the fuel tender would provide a safe, formalized location for refueling of helicopters during fire events. Therefore, the helispot pad would be beneficial for residents residing in Acton.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.7-8 Expose people or structures to a significant risk loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

The site consists of approximately 4.7 acres of vacant land located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road. The project site area is designated as a very high fire hazard zone by the California Department of

Forestry and Fire Protection. Current response times in the area are greater than 8 minutes. The proposed project is a fire station, helispot, and associated buildings and structures. With construction of the fire station the response times in the area would decrease from 3 to 5 minutes. The fire station and the helispot would provide additional fire protection and emergency response for the community of Acton. Therefore, the proposed project would be beneficial and reduce the exposure people or structures during wildland fires.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be beneficial. No impacts.

2.1.8 Hydrology and Water Quality

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on hydrology and water quality if it would

- violate any water quality standards or waste discharge requirements;
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site;
- substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or a river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- otherwise substantially degrade water quality;

- placing housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map;
- place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- experience inundation by seiche, tsunami, or mudflow.

Discussion

Impact 2.1.8-1 Violate any water quality standards or waste discharge requirements

The project site is currently vacant, expect for the northern portion of the project site which contains pine trees and an orchard. The project would require 19,300 cubic yards of cut and 2,800 cubic yards of fill resulting in an export of 16,500 cubic yards that would be transported off site within a 10-mile radius. Grading activities for the project would not be expected to affect groundwater as the average groundwater level is 140 below ground service (bgs) to 180 bgs. As described in **Impact 2.1.6-2**, construction of the project would occur in accordance with the requirements of the NPDES General Construction permit, which requires the preparation and implementation of a SWPPP with BMPs designed to ensure that construction activities do not affect the quality of runoff.

In addition, the project will implement County grading permit regulations that include compliance with erosion control measures, including grading and dust control measures. Compliance with the applicable regulatory requirements and County erosion control regulations would ensure that project construction activities result in less than significant short-term construction impacts.

In accordance with NPDES General Permit and County requirements, a SUSMP with BMPs would be prepared for approval by the County and would be implemented throughout the operational life of the project to ensure that project operation would not adversely affect the quality of storm water runoff. On-site drainage would include a bioswale just south of the proposed helispot which would be routed to an on-site first flush basin (a bio-detention basin located in the southeastern corner of the proposed project site). The apparatus floor drains would be routed into a clarifier before entering the first flush basin system.

Therefore, the proposed project would not contribute substantial pollutants to the storm water conveyance system and/or downstream receiving water bodies during operation. Thus, less than significant water quality impacts during project operation would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-2 **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)**

The project would be developed on an existing undeveloped 4.7-acre site. The northern portion of the project site and the southern portion of the project site (which would contain the bio-detention basin) would not be paved. Subsequently, these open areas and the vacant lots surrounding the project site would not interfere substantially with groundwater recharge.

The project site is located within the water service area of Los Angeles County Water Works District No. 37 (LACWWD 37) which would include groundwater and State Water Project water supplies. While there would be an incremental increase for water utilized and provided by the water purveyor, the increase in water usage would not substantially deplete water supplies. Furthermore, no on-site water well installation or usage would occur with project implementation. As such, impacts to groundwater would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-3 **Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site**

The project site contains vacant, previously disturbed land, except for the pine trees and orchard in the northern portion of the site. There are no naturally occurring stream courses on-site. Surface water runoff

on-site sheetflows to the south and southeast to Sierra Highway. This drainage pattern would be retained with development of the project and appropriate drainage improvements would be made on site to contain and direct stormwater flows to the bio-detention basin. Since the site would be entirely developed, paved, or landscaped, the potential for erosion or siltation would be minimal. Additionally, project construction would comply with applicable NPDES and County requirements, as discussed above including those regarding preparation of a SWPPP and SUSMP. Therefore, less than significant impacts associated with alterations to existing drainage patterns would occur with project implementation.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-4 **Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or a river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site**

As described above in **Impact 2.1.8-3**, the project site is currently vacant and has previously been disturbed. Water runoff currently flows in a southerly direction towards Sierra Highway. The proposed project would construct a helispot and a fire station with associated structures, facilities, and landscaping. The northern portion of the site would contain the helispot and open space with a bioswale south of the pad. The bioswale would connect to the on-site drainage system, which would include a clarifier (accepts only drainage from the apparatus bays), which empties into the bio-detention basin in the southeast corner of the project site.

The on-site drainage system would retain surface water on site. Therefore, the proposed project would not substantially increase the amount of surface water runoff which would result in flooding on or off site.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-5 Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff

As discussed in **Impact 2.1.8-3** and **Impact 2.1.8-4** above, the drainage pattern of the site would be retained with development of the project and appropriate drainage improvements would be made on site to contain and direct stormwater flows to the bio-detention basin. Given the size of the site, the amount of impervious surfaces under the proposed conditions would not substantially increase the volume of runoff under the proposed conditions. The runoff water would be retained on site to allow percolation into the groundwater basin.

Therefore, the project would not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. The proposed project construction would comply with all applicable water regulations including implementation of SWPPP and a SUSMP to reduce water quality impacts, including minimizing the potential for erosion or siltation on or off site, during construction and operation of the project. The SUSMP would include BMPs that are not currently in place for the site and as such, it can be expected that water quality of runoff from the site would improve under the proposed conditions, resulting in a less than significant impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-6 Otherwise substantially degrade water quality

As previously indicated in **Impact 2.1.8-1** and **Impact 2.1.8-2**, the project would comply with applicable NPDES and County requirements, which include the implementation of BMPs during construction and operation of the project as stipulated within a SWPPP and SUSMP, respectively. Compliance with these regulatory requirements would ensure that the project would not otherwise substantially degrade water quality and no impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.8-7 Placing housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map

The project does not propose the development of housing within a 100-year flood plain as mapped on a Federal Emergency Management Agency (FEMA).[67] Therefore, no impacts associated with a 100-year flood plain would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact 2.1.8-8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows

The project site is located adjacent to the south of an ephemeral drainage. According to the FEMA flood insurance maps for Los Angeles County indicate that the majority of the site is located within a Zone D flood hazard area.[68] According to FEMA, Zone D refers to "areas in which flood hazards are undetermined, but possible." The northeast corner of the project site, just beyond the proposed helispot, is within a FEMA Zone A special flood hazard area. This is defined as an area subject to inundation by a 100-year flood, with no base elevations determined. The northeast corner is approximately 15 feet higher in elevation than the ephemeral drainage.

The construction of the helispot and the fire station would include improvements to control and direct on-site drainage to a bioswale and bio-detention basin. The proposed project would improve the slope

67 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) 14.

68 RP Development Services, *Note 48 Geotechnical Investigation Proposed Fire Station 142*, (2009) 14.

along the northeast corner to minimize slope instability and erosion. The northeast portion of the site is 15 feet above the existing elevation of the ephemeral drainage, therefore there would be no potential impact from the project site becoming inundated or redirecting flood flows.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.8-9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam

The Flood Maintenance Division of the Department of Public Works (DPW) is responsible for operating and maintaining flood control and water conservation facilities. These facilities include 15 major dams in the County of Los Angeles. The nearest large body of water would be Lake Palmdale approximately 5.5 miles northeast of the project site. The project site would not become inundated because it is 150 feet higher in elevation than Lake Palmdale. The site is not located within a dam inundation area as mapped by the California Department of Water Resources. Therefore, no potential for dam inundation exists on site and no impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no residual impacts.

Impact 2.1.8-10 Experience inundation by seiche, tsunami, or mudflow

A tsunami is a great sea wave produced by a significant undersea disturbance. Given that the project site is located approximately 65 miles east of the Pacific Ocean, the project site is not susceptible to inundation by a tsunami. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The relatively flat terrain in the immediate project vicinity is not conducive to sustaining mudflows. A seiche is an oscillation of an enclosed or semi-enclosed basin, such as a reservoir, lake, or

storage tank. No water bodies are present in the immediate vicinity that could result in the project site being affected by a seiche. No impacts would occur from inundation by a seiche, tsunami, or mudflow.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

2.1.9 Land Use and Planning

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on land use and planning if it would

- physically divide an established community;
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- conflict with any applicable habitat conservation plan or natural community conservation plan.

Discussion

Impact 2.1.9-1 Physically divide an established community

The site is located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road. The project site has been previously disturbed from past agricultural practices and is primarily vacant except for the pine trees and the orchard (lilacs) in the northern portion of the site. The parcel that the project site currently consists of is designated as neighborhood business. There is an existing single-family residence located 125 feet west of the northern portion of the project site which is also designated as neighborhood business. The surrounding land uses would include commercial buildings across Sierra Highway to the southwest and south. The land across Clanfield Street to the east is currently vacant land.

The proposed fire station would conform to the existing land use designation of the site (commercial neighborhood) and the Acton CSD architectural themes ("western" look).[69] As the surrounding uses include vacant land, commercial buildings, and a single family residence; the proposed project would not physically divide an established community.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.9-2 **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect**

The project site is currently zoned as neighborhood business. This zone allows the construction of a fire station.[70] The project would incorporate the architectural guidelines required by the Acton CSD which is defined by the Land Use Policy Map for the Antelope Valley Area Plan. The project would meet the objectives of the architectural guidelines by incorporating and promoting the communities Western Heritage architectural character.[71] Therefore, the project would conform to the applicable land use plan, policy, and zoning ordinance.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

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69 Los Angeles County Code, Title 22, Part 2, Section 22.44.126, "Acton Community Standards District."

70 Los Angeles County Code, Title 22, Part 4, Section 22.28.130, "Neighborhood Business Zone – Permitted Uses."

71 Ibid.

Impact 2.1.9-3 **Conflict with any applicable habitat conservation plan or natural community conservation plan**

As previously described in **Impact 2.1.4-6**, the project site does not lie within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.10 Mineral Resources

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on mineral resources if it would

- result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Discussion

Impact 2.1.10-1 **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.**

The project site is located in the community of Acton in unincorporated Los Angeles County. Areas of regional significance have been classified by the California Department of Conservation, Division of Mines and Geology, as Mineral Resource Zone 2 (MRZ-2). According to the *Los Angeles County Draft General Plan*,[72] the nearest areas within the County designated as MRZ-2 would be the Little Rock Creek Fan (over 10 miles to the east) and the Soledad Production Area in the Santa Clarita Valley (over 10 miles

72 Los Angeles County Department of Regional Planning, *Draft General Plan*, (2008), 143.

to the southwest). As no known mineral resources (i.e., oil, sand, gravel, rock) are known to exist on the project site and no mineral extraction activities occur on the site, there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.10-2 **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan**

The proposed project site is designated as commercial neighborhood. As described above, the Los Angeles County General Plan does not designate the site as a locally important mineral resource recovery site. The Antelope Valley Area Plan also does not identify the project site as a locally important mineral resource recovery site.[73]

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.11 Noise

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on noise if it would

- expose people to or generate of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- expose people to or generate excessive groundborne vibration of groundborne noise levels;

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73 Los Angeles County Department of Regional Planning, *Antelope Valley Area Plan Background Report*, Chapter 3: Physical Setting and Environmental Resources, (2009), 19.

- cause a permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, which would expose people residing or working in the project area to excessive noise levels; or
- be located within the vicinity of a private airstrip, which would expose people residing or working in the project area to excessive noise levels.

Discussion

Impact 2.1.11-1 Expose people to or generate of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The following analysis evaluates the potential noise impacts at noise-sensitive land uses resulting from construction and operation of the proposed project.

Applicable Noise Standards

County of Los Angeles Noise Ordinance

Operational Noise

Chapter 12.08 of the County of Los Angeles County Code provides exterior noise standards and specific noise restrictions and exemptions for noise sources within the unincorporated areas within the County.[74] According to Los Angeles County Code, exterior noise standards in a residential zone are 45 decibels (dB(A)) and 50 dB(A) for nighttime and daytime hours, respectively.[75] These noise limits are applied to noise sources which last a minimum of 30 minutes in an hour (L50). In the event that the actual measured ambient noise level exceeds the County's standard, the measured ambient noise level becomes the noise standard.[76] In addition, noise from fire engine sirens and the public address systems (used for emergency announcement) is exempt from the County's Exterior Noise Standard as it is necessary for the protection of public safety.[77]

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74 Los Angeles County Code, Title 12, Chapter 12.08, "Noise Control."

75 Ibid., Section 12.08.390, "Exterior noise standards."

76 Ibid.

77 Los Angeles County Code, Title 12, Chapter 12.00.570, "Activities exempt from chapter restrictions."

Construction Noise

As seen in **Table 6**, **Maximum Noise for Mobile Equipment**, maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment would be 85 dB(A) daily between 7:00 AM to 8:00 PM, except Sundays and holidays, and 70 dB(A) daily between 8:00 PM to 7:00 AM and all day Sunday and legal holidays for semi-residential/commercial land uses.

Table 6
Maximum Noise for Mobile Equipment

Period	Maximum Noise Level due to Construction Activities at Semiresidential/Commercial
Daily[1]	85 dB(A)
Daily[2]	70 dB(A)

[1] *Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM*
[2] *Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays*
Source: Los Angeles County Code, Title 12, Section 12.08.440, "Construction Noise."

As seen in **Table 7**, **Maximum Noise for Stationary Equipment**, maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment would be 70 dB(A) daily between 7:00 AM to 8:00 PM, except Sundays and holidays, and 60 dB(A) daily between 8:00 PM to 7:00 AM and all day Sunday and legal holidays for semi-residential/commercial land uses.

Table 7
Maximum Noise for Stationary Equipment

Period	Maximum Noise Level due to Construction Activities at Semiresidential/Commercial
Daily[1]	70 dB(A)
Daily[2]	60 dB(A)

[1] *Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM*
[2] *Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays*
Source: Los Angeles County Code, Title 12, Section 12.08.440, "Construction Noise."

Noise Sensitive Receptor Locations

Some land uses are considered more sensitive to intrusive noise than others due to the types of activities typically involved at the receptor location. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than commercial and industrial land uses. Based on site visit and the distances to the noise sensitive receptors measured, using Google Earth, the closest residential use to the project site is located approximately 125 feet west of the northern portion of the site, as seen in **Figure 2**.[78] The nearest school location is a High Desert Middle School Learning Center located approximately 800 feet south of SR-14. Due to its proximity to the site to SR-14, and the vehicular noise from this highway, the school would not be exposed to noise during construction activities or from mechanical equipment operating at the project site.

Existing Noise Levels

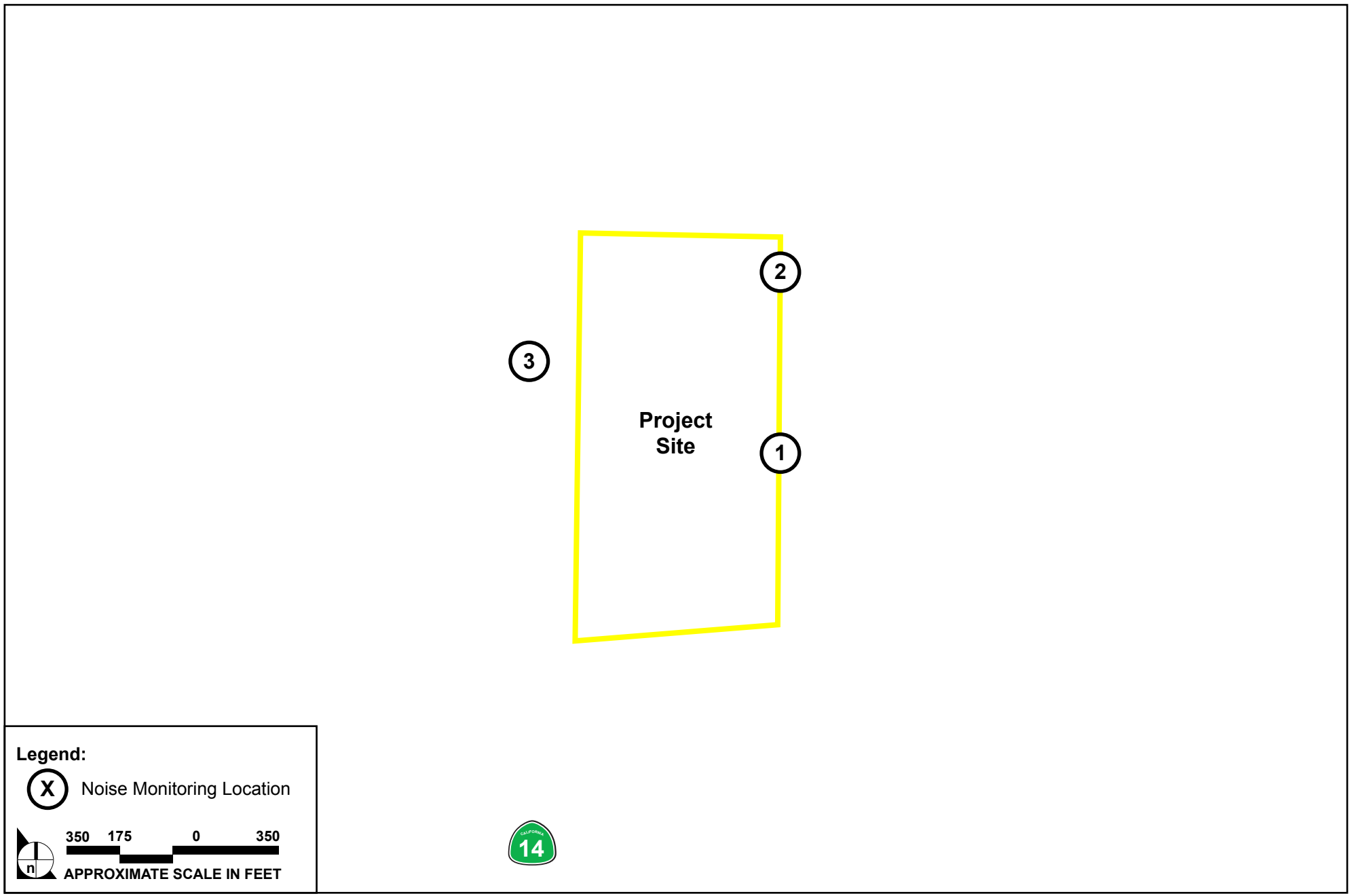
The existing ambient sound levels near the single family residence, west of the proposed Fire Station were measured on August 26, 2009, to determine if the daytime ambient noise level was higher than 50 dB(A), which is the County's daytime exterior noise standard.[79] Existing ambient sound levels in the vicinity of the project site are mostly controlled by the auto traffic on Sierra Highway and SR-14. The noise measurement was conducted using a Larson Davis Model 820, a Type 1 sound level meter. The location of the noise measurements can be seen in **Figure 6, Noise Monitor Locations**. The sound level meter was mounted on a tripod at a height of 5 feet above the local grade elevation and was set up to record sound level for a 15-minute interval. The measured sound level at the nearest monitor location to the residence was 52 dB(A) (L50), see **Appendix 2.1.11**.

The existing ambient sound level at the residential dwelling exceeds the County's exterior noise standard of 50 dB(A) for daytime hours. As such, per Los Angeles County Code, since the measured ambient noise level (52 dB(A)) exceeds the County's 50 dB(A) noise standard, the measured ambient noise level becomes the daytime noise standard for operation noise.[80] A nighttime noise measurement was not taken since construction and operational noise, other than emergency siren noise, would primarily be limited to daytime hours and as such, it is conservatively assumed that the ambient noise level is 45 dB(A).

78 Site visit by Impact Sciences, Inc., on August 26, 2009, and Google Earth, Inc.

79 Los Angeles County Code, Section 12.08.390, "Exterior noise standards."

80 Ibid., Section 12.08.390(B), "Exterior noise standards."



SOURCE: Impact Sciences, Inc. – October 2009

FIGURE 6

Noise Monitor Locations

Construction Impacts

Construction of the first phase of the proposed fire station is anticipated to begin in early 2012. The first phase would include mass grading, helispot pad, and lighting, undergrounding of utilities, installation of fencing and a slump stone wall, and Sierra Highway and Clanfield Street improvements and landscaping. It was assumed to require 10 months and utilize the following typical equipment: graders, rollers, water truck, etc.

The second phase would include construction of the fire station, the support buildings and systems for the station, and installation of on-site landscaping was estimated to require 14 months. This phase would utilize the following typical equipment: cement and mortar mixers, concrete/industrial saws, and tractors/loaders/backhoes.

The noisiest construction phase would be during phase one for grading of the site. The period would consist of mass grading/earthwork to further balance the site. As such, the following analyzes construction activities during the grading period to assess worst-case noise impacts.

As stated above, typical noise-generating equipment that would likely be used during grading/excavation for final site preparation would include equipment such as dozers, graders, rollers, water truck, etc. Maximum noise levels from these individual pieces of equipment range from approximately 79 to 85 dB(A) at a 50 foot distance, based on measured noise data conducted by the Federal Highway Administration (FHWA).[81] These maximum noise levels would occur when equipment is operating under full power conditions. To more accurately characterize construction noise levels, the average noise level is calculated based on the quantity, type, and usage factors for each type of equipment that would be used. The simultaneous operation of multiple pieces of construction equipment is anticipated to result in a noise level of 89 dB(A) at a 50 feet distance during the grading phase.[82]

Using the industry standard sound attenuation rate of 6 dB(A) per doubling of distance for point sources (e.g., construction equipment), the construction noise levels were estimated at the nearest residential receptor. The nearest residential receptor is located approximately 125 feet west of the northern portion of the project site. Based on this distance, it is estimated that noise levels at the residence during construction of the project would be up to approximately 81 dB(A), which would be below the County's noise limit of 85 dB(A) for mobile equipment uses during daytime hours. Thus, it is anticipated that noise generated during construction of the project would not result in a potentially significant noise impact at the nearest residential use.

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81 Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, 2006.

82 Los Angeles County, *CEQA Thresholds Guide*, (2005), Exhibit I, 1-2.

The estimated noise levels represent a worst case scenario because construction activities are analyzed as if they were occurring along the perimeter of the construction area, whereas construction would typically occur throughout the site and at a further distance. In addition, the noise sensitive receptors that are located further from the construction site would experience less construction noise, as sound diminishes away from the source and due to intervening buildings between the source and receiver. The project would comply with all applicable regulations in the County noise ordinance.

As such, noise would not exceed the 85 dB(A) threshold (per construction noise standards in the Los Angeles County Code, see **Table 6**) for mobile equipment. Thus, potentially significant construction noise impacts would be reduced to less than significant.

In addition, mitigation measures **MM 2.1.11-1** and **MM 2.1.11-2** have been prescribed to reduce construction noise levels to the maximum extent practicable. **MM 2.1.11-1** would avoid operating several pieces of heavy equipment simultaneously, which causes higher noise levels. **MM 2.1.11-2** would reduce the noise from engine idling.

There would be no construction noise impact during nighttime since construction activities would not occur during nighttime.

In addition to on-site construction noise, haul trucks, delivery trucks, and construction workers would require access to the project site throughout the construction period. Haul trucks, delivery trucks, and construction workers would generally access the site via Sierra Highway. Construction traffic would not occur during the noise-sensitive late evening and nighttime hours.

It is anticipated that there would be a maximum of approximately 12 haul truck trips per day during grading of the site. The trips per day is based on the average capacity of haul trucks in volume (14 cubic yards), the estimated number of total trips (1,179) to export 16,500 cubic yards of soil and the number of work days (4.5 months or 98 days). Based on a 9-hour operation and total number of haul truck trips per day, there would be a maximum of two haul truck trips on an hourly basis. It is estimated that the residential use located west by northwest of the project site would be exposed to haul truck noise level of 74 dB(A) from 100 feet. The estimated noise level due to truck movements would be below the maximum construction mobile noise levels of 85 dB(A) at the residential use. Therefore, significant noise impacts would not be expected from off-site construction traffic. Also, since the truck noise level of 74 dB(A) is well below the maximum on-site construction noise level of 85 dB(A) at the nearest residential use, off-site construction traffic would not increase the overall construction noise levels at the nearest residential use.

Operational Impacts

Traffic

Using the FHWA Highway Traffic Noise Prediction Model and the traffic data from the project traffic impact analysis, noise levels were calculated for the off-site noise-sensitive locations identified earlier. Traffic generated from the project site during future operation would be limited to emergency (an average of three responses per day) and non-emergency responses including staff and visitor trips (less than 22 trips per day). Based on the Traffic Noise Prediction Model and the main access to the project site (Sierra Highway) the following roadway sections were analyzed based on the traffic study: Sierra Highway between Crown Valley Road and Clanfield Street and Sierra Highway between Clanfield Street and Santiago Road. The existing noise levels along the two roadway segments were 62.9 dB(A) based on background traffic volumes of 5,200 ADTs, see **Appendix 2.1.11**. It is estimated that the change in existing noise level attributed to the project operational traffic would be less than 1 dB(A) (a negligible increase) based on a maximum of 30 trips per day. In an outdoor environment, a change of 1 dB(A) would not be noticeable. Therefore, project traffic would not create a significant noise impact.

Helicopter

To understand the expected noise levels produced by helicopters approaching and departing from the proposed helispot, these two events can be divided into distinct activities.

Fire Department helicopters utilizing the helispot would approach/depart from the east and northwest, thus avoiding the single-family residence to the west. On average, it is expected that there would be two helicopter landings each week. As described in the **Project Description**, emergencies and refueling already occur where needed in the Acton area. The helispot would formalize a location where a fuel tender would be able to refuel the helicopter during fire events. The helispot would also formalize a safe location for paramedics to transfer patients from the ambulance to the helicopter. It is expected that the helispot would be used an average of two flights per week for medical responses.

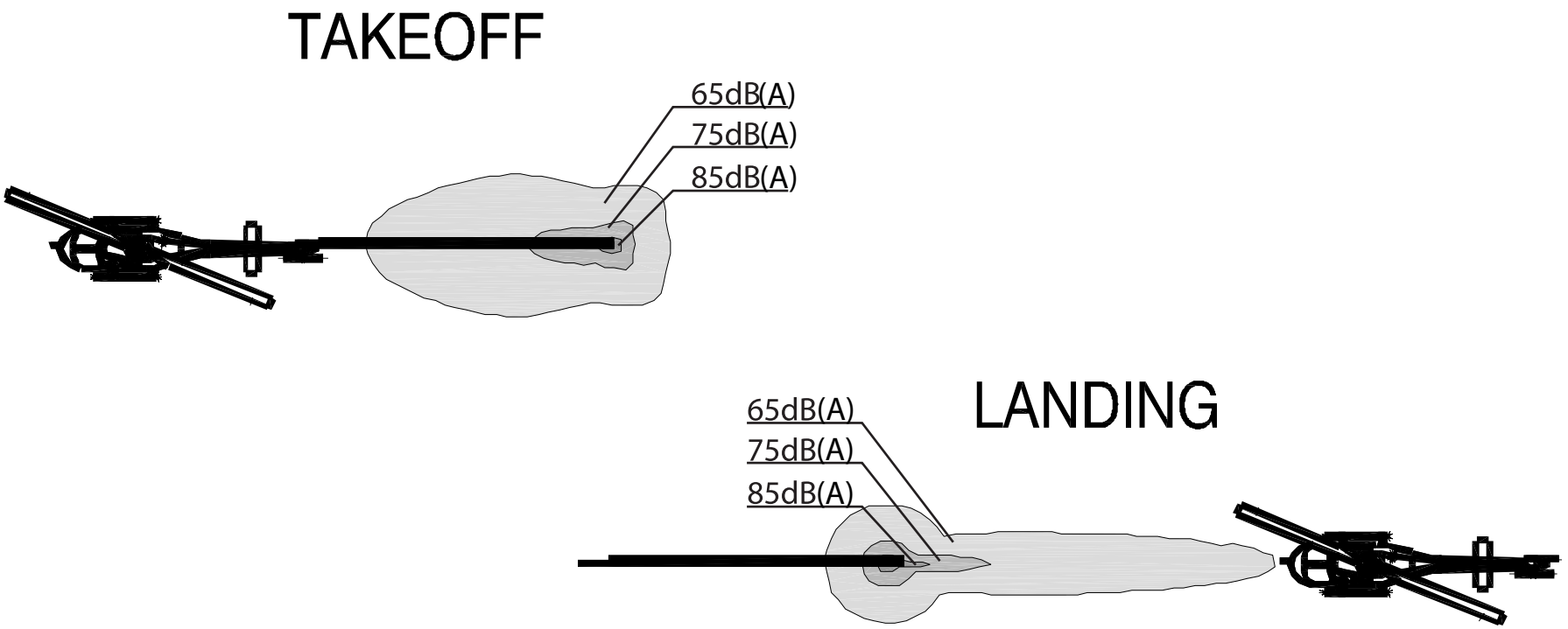
Helicopter noise has a distinctive character. Although a portion of the noise comes from the engines, the distinctiveness of helicopter noise is largely due to the modulation of the sound created by the relatively slow-turning main rotor. This sound modulation is referred to as blade slap. Blade slap is most pronounced during low-speed descents and high-speed cruise. To persons on the ground, helicopters are most audible as the aircraft approaches a landing area. **Figure 7, Noise Footprint of Helicopters**, shows 65 dB(A) and 75 dB(A) maximum instantaneous noise level ground contours for a typical small helicopter on takeoff and landing.

Helicopter Approaches

A helicopter approach to the pad begins with the craft traveling at a speed of 125 knots at a cruise elevation of 1,000 feet, producing maximum noise levels of between 70 to 71 dB(A) on the ground directly beneath its flight path. Between 1 mile and 0.5 mile from the helispot the craft decelerates from 125 knots to 70 knots, producing ground level maximum noise of between 73 and 74 dB(A). At about 0.5 mile from the helispot, the craft begins to descend to a height of 100 feet at a distance of 200 feet from the helispot. At this point the helicopter decelerates to 70 knots. This activity would take less than 30 seconds and can produce maximum noise levels of 75 to 83 dB(A) between the northern property line and on the ground plane directly beneath the flight path. During the final 200-foot approach to the helispot the helicopter descends an additional 20 feet to a height of 80 feet above the helispot and decelerates to a ground speed of zero. This activity would take less than five seconds and is expected to produce a maximum noise level of 84 dB(A) at the closest residential property line. Once a ground speed of zero is reached the helicopter begins a vertical descent to the landing pad. This phase typically takes about 10 seconds and is expected to produce a maximum noise level of 84 dB(A) at the closest residential property line. Once on the helispot surface the craft undergoes a 2-minute ground idle. As with the departure idle, this activity is expected to produce a maximum noise level of between 69 and 74 dB(A) at the closest residential property line. Following the idle period, the craft is either shut down or initiates its departure procedures. Overall, the main noise-producing portion of the helicopter approach would take under 3 minutes, with surrounding land uses exposed to maximum sound levels over 80 dB(A) during less than 2 minutes of this time. While noise from flights would occur for a relatively short period of time and would be infrequent, noise levels could exceed the Los Angeles County Code thresholds resulting in short term impacts to surrounding land uses during arrivals.

Helicopter Departures

For a helicopter departure, startup and flight checks are performed in a ground idle phase. This typically lasts for 3 minutes. Given the relationship between the proposed helispot and the closest residential land uses (approximately 275 feet west of the center of the helispot and approach and departure flight paths), this activity is expected to produce a maximum noise level of 69 to 74 dB(A) at the closest residential property line. Following the flight checks and start-up, the rotor blades begin turning at full power, a hover is initiated, and the craft ascends vertically to 100 feet above the pad. This phase typically takes about 10 seconds and is expected to produce a maximum noise level of 84 dB(A) at the closest residential property line. Once an altitude of 100 feet is achieved, the helicopter accelerates horizontally for 200 feet and reaches an air speed of 70 knots. This activity would take less than five seconds and is expected to produce a maximum noise level of 80 dB(A) at the closest residential property line. After accelerating to



Small Helicopter

Scale: 1" = ± .5 Miles
(aircraft not to scale)

Note: The outermost contour indicates a 65 dB(A) sound level.
Additional contours are at 10dB(A) increments (75 and 85 dB(A)).

SOURCE: California Airport Land Use Planning Handbook – January 2002

FIGURE 7

Noise Footprint of Helicopters

70 knots the craft begins to ascend to an altitude of 1,000 feet, which it achieves after covering just under 0.5 mile horizontally. This activity would take less than 30 seconds and can produce maximum noise levels of 72 to 80 dB(A) along an extension of the northern property line and on the ground plane directly beneath the flight path. At an elevation of 1,000 feet the helicopter accelerates to its cruising speed of 125 knots in level flight, producing maximum noise levels of between 70 to 71 dB(A) on the ground directly beneath its flight path.

Overall the main noise-producing portion of the departure to altitude and cruising speed from initial start up would take under 4 minutes, with surrounding land uses exposed to maximum sound levels over 80 dB(A) for less than 1 minute of this time. While noise from flights would occur for a relatively short period of time and would be infrequent, noise levels could exceed the Los Angeles County Code Noise Ordinance thresholds resulting in short term impacts to surrounding land uses during departures.

Operational Equipment

Noise generating equipment associated with the typical operation of the fire station would include heating, ventilating, and air conditioning (HVAC) equipment (i.e., outdoor condenser fans), an external public address system, an emergency power generator (maximum power of 230 KW) and emergency equipment (sirens). The following provides a discussion of impacts associated with operational equipment at the fire station.

Building HVAC Equipment

The operation of mechanical equipment such as air conditioning equipment and exhaust fans may generate audible noise levels. It is anticipated that roof-mounted equipment would be shielded from the public view. A typical outdoor condenser fan (air conditioning equipment) generates a noise level of approximately 75 dB(A) at 10 feet. The nearest residential use would be at least approximately 350 feet from the specific location of the HVAC equipment. It is estimated that the HVAC equipment noise level at the nearest residential use would be 45 dB(A), which would meet the County's limit of 45 dB(A) for nighttime hours and the 52 dB(A) daytime threshold. Further, it is acknowledged that the project's mechanical equipment would comply with the County's Noise Ordinance, which establishes maximum permitted noise levels from mechanical equipment.

Public Address System

The fire station would have an outdoor public address (PA) system that would only be used on an intermittent basis during the daytime hours, between 8:00 AM to 5:00 PM, to broadcast emergency calls. According to the fire department, it is estimated that the numbers of emergency calls would be a

maximum of approximately three calls per day (24 hours). As such, noise from the PA system would be intermittent and would only occur for a few minutes per day. Furthermore, the PA system volume would be limited to the extent necessary for fire personnel to hear emergency announcements, so as to minimize off-site noise from the PA system. While the use of the PA system would result in noise levels to adjacent sensitive receptors that are expected to be less than 45 dB(A) under normal operating conditions, as discussed above, the use of the PA system for emergency basis is excluded from the County's Noise Ordinance. Therefore, with compliance to the Fire District policies regarding use of the PA system and the exemption from the County's noise ordinance, noise impacts from PA system are concluded to be less than significant.

Generator

The generator would be located near the southern boundary of Fire Station 142 site. The generator would only be used during power outages; however, it would be tested for 30 minutes each week, during daytime hours, to ensure the operational readiness of the generator. The generator technical specification specifies a noise level of 82 dB(A) at a distance of 10 feet. The estimated generator noise level at the nearest residential use (350 feet north/northwest of the site) would be 51 dB(A), which is below the allowable 52 dB(A) noise limit for residential uses during daytime hours. The composite noise level from the generator (51 dB(A)) and the HVAC equipment (45 dB(A)) at the nearest residential use would be 51 dB(A), which is also below the daytime significance threshold of 52 dB(A). Therefore, the emergency generator noise level would not pose a significant noise impact.

Emergency Equipment

As part of the operation of the fire station and in compliance with the Los Angeles County Fire Department (LACoFD), Vehicle Operations Emergency Vehicle Response Policy (VD-C4-S5) as seen in **Appendix 2.1.11**, the Fire Department would use discretion when activating the fire engine siren when responding to calls within the surrounding community. Fire Department policy states that intermittent siren use during emergency responses is permissible provided it is operated within at least 300 feet of an intersection where traffic control devices (signal lights, stop signs, etc.) are present. These practices would be implemented when the station is in operation. Fire Station 142 is anticipated to receive a maximum of approximately three emergency calls per day. Sirens would be used as necessary to warn pedestrians and motorists of fire engine trucks. Based on manufacturer's noise data,[83] the siren would generate noise levels up to 123 dB(A) at a distance of 10 feet. When used, adjacent residences (400 feet to the north-northwest) to the outgoing fire engines from the fire station may temporarily experience noise

83 Federal Signal Corporation, *Q2B Electro-Mechanical Siren*, 2008.

levels up to 89 dB(A). Such noise conditions would be temporary and intermittent, but are unavoidable with regards to emergency response. However, siren noise used in emergency circumstances is exempt from the County noise ordinance, which was developed to protect the public.

Furthermore, the length of time the emergency siren would be in operation would depend on the distance required for the emergency vehicle to respond to emergency calls. As identified in the **Project Description**, the nearest fire station to the project site is Fire Station 80, located approximately 3 miles to the east. The use of the emergency siren would be used for the distance needed to travel to reach the project area or the emergency call. Consequently, with operation of Fire Station 142, the distance the emergency siren would be in operation, and the length of time in use, would be reduced by half. Therefore, with compliance to the Fire District policy regarding use of sirens and the exemption of emergency sirens from the County's noise ordinance, impacts from siren noise are concluded to be less than significant.

Mitigation Measures

The following mitigation measures shall be implemented:

MM 2.1.11-1 Construction activities shall be scheduled so as to avoid operating several pieces of heavy equipment simultaneously. In no cases shall more than four pieces of heavy equipment be operated simultaneously.

MM 2.1.11-2 Engine idling from construction equipment such as graders and water trucks shall be limited to no more than 5 minutes.

Residual Impacts

Impacts would be less than significant with mitigation.

Impact 2.1.11-2 Expose people to or generate excessive groundborne vibration of groundborne noise levels

Vibration is a unique form of noise because its energy is carried through structures and the earth, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise, e.g., the rattling of windows from passing trucks. This phenomenon is related to the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration, which spreads through the ground rapidly, diminishes in amplitude with distance from the source. The ground

motion caused by vibration is measured as particle velocity in inches per second and in the U.S. is referenced as vibration decibels (VdB).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typically background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The construction activities that typically generate the most severe vibrations are blasting and impact pile driving, which are not necessary for the proposed project. The proposed project would be constructed using typical construction techniques. Construction equipment used during grading/excavation for final site preparation such as graders, rollers, water truck, etc. would generate a limited amount of groundborne vibration during construction activities at short distances away (i.e., within 100 feet) from the source. The use of equipment would most likely be limited to a few hours spread over several days during demolition/grading activities. No excessive groundborne vibration or groundborne noise levels would occur during any phase of project construction to surrounding off-site uses, including adjacent residential uses. Post-construction on-site activities would be limited to on-site traffic and mechanical equipment (e.g., air handling unit and exhaust fans) that would not generate excessive groundborne vibration or groundborne noise. As such, project implementation would not expose any persons, including adjacent residential uses, to excessive groundborne vibration or noise levels associated with operation the proposed project and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.11-3 **Cause a permanent increase in ambient noise levels in the project vicinity above levels existing without the project**

The existing noise environment in the project area is dominated by traffic noise from SR 14 and local roadways, as well as commercial uses to the south and southwest. Long-term operation of the project would not have a significant effect on the community noise environment in proximity to the project site. Noise sources that would have potential noise impacts include: off-site auto traffic, on-site parking, and operational (i.e., air-conditioning, generator, PA system and sirens) equipment. As discussed above in **Impact 2.1.11-1**, the proposed project would not substantially increase off-site auto traffic volumes, which would not result in an increase of ambient noise levels. Noise levels associated with on-site operations (e.g., parking and operational equipment) are also considered less than significant. As such, long-term noise impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.11-4 **Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project**

The project would result in a temporary increase in ambient noise near the project site during the construction period. Construction noise impacts are discussed in **Impact 2.1.11-1**. As described therein, noise generated by on-site construction activities would temporary increase the existing ambient noise in the close vicinity of the project site, but would have a less than significant impact on surrounding sensitive uses with implementation of the prescribed mitigation measures. Noise from operational equipment would not exceed the allowable levels established in the County noise ordinance. However, as discussed in **Impact 2.1.11-1**, the proposed project would construct a helispot in the northern portion of the site. The helispot would be used only for medical emergencies and fire hazards. Thus, less than significant noise impacts would occur from construction and operation of the fire station.

As described in the **Project Description**, the area already contains use of emergency helicopter operations; however, they are not in a formalized location. The helispot would formalize a location and would be used on average two times a week. Furthermore, as described in **Impact 2.1.11-1**, the noise levels from the helicopter would exceed the noise levels for the adjacent single family residence. As a

result, there would be temporary increases in ambient noise levels in the project vicinity above levels existing without the project. However, as described in Los Angeles County Code section[84], the emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work is exempt for the noise ordinance.

Mitigation Measures

Mitigation measure **MM 2.1.11-1** shall be implemented.

Residual Impacts

Impacts would be less than significant with mitigation.

Impact 2.1.11-5 **Be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, which would expose people residing or working in the project area to excessive noise levels**

The project site is not located within an airport land use plan area or within 2 miles of a public airport or public use airport. Therefore, construction or operation of the project would not expose people to excessive airport related noise levels.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact 2.1.11-6 **Be located within the vicinity of a private airstrip, which would expose people residing or working in the project area to excessive noise levels**

As described in the **Project Description**, the project site would construct a helispot in the northern portion of the site. As described in **Impact 2.1.11-1** and **Impact 2.1.11-4**, the helicopters using the helispot would generate short-term noise levels that exceed standards. However, as described above and in the Los Angeles County Code, the use of the helispot would formalize a safe location for emergency transport. Therefore, under the Los Angeles County Code[85] the helispot would be exempt from the short-

84 Los Angeles County Code, Section 12.08.570(A), "Activities exempt from chapter revisions."

85 Los Angeles County Code, Section 12.08.570(A), "Activities exempt from chapter revisions."

term noise levels that exceed standards. Therefore, the proposed project would not expose people residing or working in the project area to long-term noise levels exceedances from such uses.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

2.1.12 Population and Housing

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on population and housing if it would

- induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Discussion

Impact 2.1.12-1 **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)**

The proposed project would develop a fire station on the northwest corner of Sierra Highway and Clanfield Street. The project site is primarily disturbed vacant land, except for the pine trees and orchard in the northern portion of the project site. The fire station would house three full-time fire fighters at initial staffing and seven full time fire fighters at full staffing.

As described in the **Project Description**, the grading and construction of the helistop, the improvements to Sierra Highway and Clanfield Street, the undergrounding of utilities, and the construction of the perimeter fencing would be completed in the first phase of construction. The construction of the fire station and the supporting facilities would not occur until there is need based on the growth of the

community of Acton and the surrounding area. Therefore, the construction and staffing of the fire station would not directly or indirectly induce substantial population growth in the area.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.12-2 Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere

The proposed project would construct a fire station and a helistop in the community of Acton. The project site is currently disturbed vacant land, expect for the orchard and existing pine trees located in the northwestern portion of the project site. The project would not displace existing housing and there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.12-3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

As described in **Impact 2.1.12-2**, the project site is currently disturbed vacant land. The construction of the fire station and helistop would not displace substantial numbers of people because the land is vacant. As a result, there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.13 Public Services

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on population and housing.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire Protection?
  - Police Protection?
  - Schools?
  - Other governmental services?

Discussion

Impact 2.1.13-1 **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

a. Fire Protection

The project would include the development of a fire station and a helistop to serve the surrounding community of Acton. The nearest fire station to the project site is Fire Station No. 80 approximately 3 miles to the east. The existing response times, in the proposed fire station's jurisdiction, is greater than 8 minutes. The LACoFD response time goal is an average 5 minutes. After the completion of phase two of construction, the response times in the area would decrease by 3 to 5 minutes. As described through this initial study, potential environmental impacts from the construction of the project would be less than significant. Therefore, the development of the fire station would be a beneficial impact to the community of Acton.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be beneficial.

b. Police Protection

The project would include the development of a fire station to serve the surrounding community. The project would not construct residential units or commercial uses that would generate substantial growth to the area. The proposed project is not anticipated to place any additional demands on the police protection services in the area.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

c. Schools

The proposed project would construct a fire station and a helistop. The project does not propose any residential units which would generate students. Therefore, there would be no new generation of students and would not have the capability to increase the demand on the local school system. Consequently, there would be no impacts to schools.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

d. Libraries

The proposed project would not generate new population in the Acton area. The project does not propose any residential units, which would increase the residential population and the need for library services. Consequently, there would be no impacts to library services.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

e. Parks

The proposed project would construct a fire station and helistop and would not generate new population. As no new residential units would be developed, there would be no increase in the residential population. As there would be no increase in the residential population, there would no increase in the need for parks. Consequently, there would be no impacts to parks.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

f. Other public facilities

The proposed project would construct a fire station and helistop and would not generate new population in the Acton area. The project does not propose any residential units, which would increase the residential population and the need for governmental facilities. Consequently, no impacts would occur to governmental facilities.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

2.1.14 Recreation

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on population and housing.

- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Discussion

Impact 2.1.14-1 Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project would not introduce any new population into the community of Acton. Full staffing of the fire station would include seven full-time fire fighters. The community of Acton has a projected 2008 population of 4,270.[86] The nearest park to the project site would be Acton Park approximately 1.5 miles south. Therefore, the increase in the on-site personnel at the fire station would equate to less than 1 percent of the population of the community of Acton. There is an exercise room in the fire station that would provide the opportunity for the full-time fire fighters to use for exercise. As a result, the use of existing neighborhood and regional parks would be very low and there would be no substantial physical deterioration of any recreational facility.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

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86 Los Angeles County Waterworks Districts, "About the Districts," http://dpw.lacounty.gov/WWD/Web/aboutus.cfm, Accessed on October 7, 2009.

Impact 2.1.14-2 **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.**

The full-time staffing of the fire station would include seven full-time fire fighters. As described in the **Project Description**, the fire station would include an exercise room and the dedication of the land for a trail.

The exercise room would provide the on-site personnel the opportunity for recreational use. As identified above, the project would not generate substantial population growth in the community of Acton and would not degrade the character of existing recreational facilities in the area.

The LACoFD would dedicate land for the Sierra Highway equestrian trail fronting the fire station site and sidewalks as directed by the Los Angeles County Department of Public Works. The future trail would be a part of the Vasquez Loop Trail, which will be operated by the County of Los Angeles Department of Parks and Recreation. Therefore, the project would not need to construct or expand recreational facilities and no potential impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

2.1.15 Transportation and Traffic

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on transportation and traffic if it would

- cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- exceed either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access;
- result in inadequate parking capacity; or
- conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Discussion

Impact 2.1.15-1 **Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)**

The site is located on the northwest corner of Sierra Highway and Clanfield Street intersection, which is approximately 1,000 feet east of Crown Valley Road (see **Figure 2**). The intersection of Crown Valley Road and Sierra Highway is under all way stop control. Local access to the project site is Sierra Highway a two-lane roadway. Regional access to the project site is via SR-14, which consists of two general purposes lanes and one high occupancy vehicle (HOV) lane in each direction. SR-14 generally parallels Sierra Highway.

As described in the **Project Description**, the project would construct a 9,746-square-foot fire station, which would house up to 7 full-time fire fighters and up to 14 personnel on site during a shift change. Trips to and from the project site would utilize Sierra Highway to access Clanfield Street, which provides direct access to the project driveways. The project would also construct a traffic signal at the Sierra Highway and Clanfield Street intersection when warranted and approved by the Los Angeles County Department of Public Works. Traffic counts collected in September 2005 indicate that Sierra Highway carries approximately 5,700 average daily traffic (ADTs) volume west of Crown Valley Road. Traffic counts collected in January 2006 indicate that Sierra Highway carries approximately 4,300 ADT east of Santiago Road. For purpose of this analysis, traffic volumes for the segment of Sierra Highway between Crown Valley Road and Santiago Road are estimated by averaging the traffic counts above, and applying a growth factor of 5 percent to estimate 2010 conditions. A summary of the traffic volumes is described below in **Table 8, Traffic Volume Summary**.

Table 8
Traffic Volume Summary

	AM Peak Hour		PM Peak Hour		
	EB	**WB**	**EB**	**WB**	**ADT**
Sierra Highway between Crown Valley Road and Clanfield Street					
Background Volumes	150	590	370	170	5,200
Project Volumes (80 %)	8	8	4	4	80
Total Volumes	**158**	**598**	**374**	**174**	**5,280**
Sierra Highway between Crown Valley Road and Santiago Road					
Background Volumes	150	590	370	170	5,200
Project Volumes (20 %)	2	2	1	1	20
Total Volumes	**152**	**592**	**371**	**171**	**5,220**

EB = Eastbound
WB = Westbound
ADT = Average Daily Traffic volume
*Source: See **Appendix 2.1.15**.*

The potential impact to Sierra Highway has been estimated based on the delay to Sierra Highway traffic due to the project traffic and the proposed traffic signal at the Sierra Highway and Clanfield Street intersection. Average vehicle delay during the critical AM peak hours can be seen in **Table 9, Intersection Delay Summary**.

Table 9
Intersection Delay Summary

Approach	Delay (seconds/vehicle)	LOS
Eastbound (Sierra Highway)	4.2	A
Westbound (Sierra Highway)	9.6	A
Southbound (Clanfield Street)	9.3	A
Intersection Average	8.5	A

LOS = level of service volumes
*Source: See **Appendix 2.1.15**.*

Intersection levels of service (LOS) are measured based on a scale of LOS A (best) to LOS F (worst). As seen in the **Table 9**, the level of service for the intersection during the critical AM peak hour was found to

be LOS A. As there would be no additional delay at the Clanfield Street and Sierra Highway intersection, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts are less than significant.

Impact 2.1.15-2 Exceed either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways

The project site is located in unincorporated Los Angeles County in the community of Acton. The Metropolitan Transportation Authority (Metro) is the congestion management program (CMP) agency for Los Angeles County. Metro has the responsibility to review compliance with the CMP by agencies under its jurisdiction. The CMP alone does not solve all the mobility issues within Los Angeles County. Many mobility issues are localized traffic concerns and are not addressed through the CMP.[87]

As described in **Impact 2.1.15-1**, the proposed fire station would have a LOS A for the intersection of Sierra Highway and Clanfield Street. Also indicated above, the traffic at 2010 conditions with the project would increase a total of 100 ADTs for the roadways in the immediate vicinity of the project site. As the LOS would not decrease and would remain at a LOS A, the traffic volumes would not exceed either individually or cumulatively a level of service established by the CMP. Consequently, as there is no decrease in the level of service to the project area, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts are less than significant.

87 Metropolitan Transportation Authority, *Congestion Management Program for Los Angeles County*, (2004), 1.

Impact 2.1.15-3 **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks**

As described in the **Project Description**, the proposed fire station would construct a 110-foot diameter helispot within the northern portion of the project site. A helicopter would not be stored on site. Rather, it would be used for transporting of the sick and injured to receiving hospitals and firefighting operations. This helispot would be used only for Acton area emergencies and as needed for fire responses. It is expected that the helispot would be used an average of two flights per week for medical responses. The helispot would include landing lights and a fire hydrant.

As identified in the **Hazards and Hazardous Materials** section, the nearest public or private airport to the project site is the Agua Dulce Airpark located approximately 6.5 miles to the west. Therefore, helicopter operations in the Acton area would not result in a change in air traffic patterns that would result in substantial safety risks.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts are less than significant.

Impact 2.1.15-4 **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)**

The local access to the project site is via Sierra Highway. As described in the **Project Description**, the LACoFD would install a future traffic signal at the intersection of Sierra Highway and Clanfield Street. The traffic signal would further enable emergency access for emergency vehicles leaving the fire station.

Clanfield Street would be improved up to the northerly boundary of the proposed fire station emergency egress driveway where it would then transition from pavement to the existing dirt road. The proposed project would construct two driveways along the eastern boundary, which would connect to Clanfield Street. The southerly driveway would allow arrival and departure of staff vehicles and visitors and arrival of the apparatus. The northerly driveway would allow for emergency departure of the apparatus.

The proposed project does not include any design features (i.e., sharp turns, dangerous intersections) or propose any uses (e.g., farming equipment) that would create hazardous traffic conditions. Site access and circulation (i.e., turning radii and internal road widths) would be constructed in accordance with

County code[88] and standards set forth by the L.A. County Fire Department to ensure that the project would not substantially increase hazards due to a design feature.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.15-5 Result in inadequate emergency access

The project site would have two driveways that allow for vehicles to exist and enter the proposed fire station site. Direct access to the project site would be Clanfield Street via Sierra Highway. The proposed project would pave Clanfield Street up to the northern boundary of the fire station emergency egress driveway, where it would transition from pavement to dirt. There would be a traffic signal installed at the intersection of Clanfield Street and Sierra Highway when warranted and approved by the Los Angeles County Department of Public Works.

The southern driveway would allow ingress for employees, visitors, and the apparatus and would allow egress for employees and visitors. The northern driveway would allow egress of the apparatus. An internal roadway would be constructed to encircle the helispot and connect to the southerly driveway to allow emergency access to the helispot site. As a result of the installation of the internal circulation, the two driveways that provide ingress/egress, the traffic signal, and the improved portion of Clanfield Street there would be adequate emergency access.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

88 Los Angeles County Code, Chapter 21.24, "Design Standards."

Impact 2.1.15-6 Result in inadequate parking capacity

Fire Station 142 would operate 24 hours a day, seven days a week with shift change at 7:00 AM. Initial staffing would include three 24-hour fire fighters and six personnel on site during a shift change. Full time staffing, on an as needed basis, would include seven 24-hour fire fighters and 14 personnel on site during a shift change.

The Los Angeles County Code specifies that an industrial land use designation shall provide one parking space for every 500 square feet of floor space.[89] The proposed fire station would be 9,746 square feet of which 6,373 square feet would consist of housing space and 3,373 square feet would consist of the apparatus bays. The analysis used for determining parking for the site is based on the 6,373 square feet of housing space. Therefore, the fire station, as required for industrial areas, would be required to provide 13 parking spaces. A total of 37 parking spaces would be provided on site (31 parking spaces for employees, four visitor parking spaces, one employee handicap parking space, and one visitor handicap parking space). There would be a surplus of 24 parking spaces proposed for the project. Furthermore, the proposed project would be a fire station and not a traditional industrial use. As a result, there would be no potential parking impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact 2.1.15-7 Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

The project site is not currently served by public transportation. In addition, project implementation would not result in an increased need for public transportation as the project is proposing the development of a new fire station. As such, construction and operation of the project would not impact any adopted policies, plans, or programs supporting alternative transportation.

Mitigation Measures

No mitigation is required.

89 Los Angeles County Code, Title 22, Part 11, Section 22.52.1140, "Industrial uses."

Residual Impacts

No impacts would occur.

2.1.16 Utilities and Service Systems

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on transportation and traffic if it would

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed;
- result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- comply with federal, state, and local statutes and regulations related to solid waste.

Discussion

Impact 2.1.16-1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board

The proposed fire station would be constructed in the community of Acton. The applicable Regional Water Quality Control Board would be the Los Angeles region. The project proposes the use of a septic system and associated leach fields, as described in **Impact 2.1.6-5**. Therefore, the project would not exceed wastewater treatment requirements because wastewater treatment needs would be handled by an approved septic system.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.16-2 **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects**

The project area is located in Acton, which is served by the Los Angeles County Waterworks District No. 37 (LACWWD 37). There is an existing 12-inch water line that is located below ground on the northern side of Sierra Highway. The proposed fire station would connect to the existing water line. The maximum number of people that would be on site would be 14 people. This amount of people is not large enough to generate the need for new water treatment facilities or the expansion of existing facilities.

The proposed project would be approved for use of a septic system. Therefore, the proposed fire station would not require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.16-3 **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects**

As described in the **Project Description**, the proposed fire station would construct a bioswale just south of the proposed helispot which would be routed to an on-site first flush basin. The on-site first flush basin is the bio-detention basin located in the southeastern corner of the project site. The apparatus floor drains would be routed into a clarifier before entering the first flush basin system. These on-site systems would drain to the bio-detention basin where the runoff and/or clarified water would be allowed to percolate.

As the on-site drainage system is incorporated into the project design, there would be no need for new storm water drainage facilities or the expansion of existing facilities.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.16-4 Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed

As described above in **Impact 2.1.16-2**, the project site would be served by LACWWD 37. As determined in December 2008, LACWWD 37 includes 1,370 water connections for the community of Acton and an estimated population of 4,270 people.[90] The local water is supplied by the 4 million gallon per day (mgd) Acton Water Treatment Plant. Water is pumped from the plant site near Barrell Springs Road, on Sierra Highway, to Vincent Hill Summit. From there it is pumped into the LACWWD 37 pipeline for transport to the Acton area.[91] The plant's capacity is sufficient to supply the needs of 17,000 consumers. As the project site would connect one new customer, there is no substantial impact on water supply.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

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90 Los Angeles County Waterworks Districts, "About the Districts," http://dpw.lacounty.gov/WWD/Web/aboutus.cfm, Accessed on October 7, 2009.

91 Antelope Valley East Kern Water Agency, "AVEK Facilities," http://www.avek.org/facilities.html, Accessed on October 7, 2009.

Impact 2.1.16-5 **Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments**

As described above in **Impact 2.1.16-1**, the proposed project can accommodate the use of a septic system on site. As a result, the project would not connect to an existing sewer line and would therefore, not increase the capacity of the local wastewater treatment provider.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact 2.1.16-6 **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs**

Like many areas in Southern California, the County is faced with the continual annual increase in the generation of solid waste and diminishing disposal capacities. Construction and demolition debris materials account for almost 22 percent of the state's waste stream.[92] Through a construction and demolition (C & D) material education and recycling program, it is feasible to divert at least 60 percent of all C & D material from construction, demolition, and renovation.[93]

The proposed project is located in unincorporated Los Angeles County in the community of Acton. The nearest landfill that would serve the project site would be the Antelope Valley Recycling and Disposal Facility Unit I (Unit I) and Unit II located approximately 5.5 miles to the northeast. For purposes of this analysis Unit I will be used for comparison. The estimated permitted capacity is 1,263,337 tons, or about 16 years remaining until capacity is full at an average disposal rate of 245 tons per day (tpd).[94] The proposed project would have a maximum of 14 people on site during the shift change. The disposal rate without meeting AB 939 requirements (a 50 percent diversion rate of disposed waste) the County disposed of an average 12.1 pounds per person per day. The average disposal rate per person, at a

92 California Integrated Waste Management Board, "Construction and Demolition Debris Recycling," http://www.ciwmb.ca.gov/ConDemo/. 2008.

93 Ibid.

94 County of Los Angeles Department of Public Works, *Los Angeles County Countywide Integrated Waste Management Plan Annual Report*, May 2009, Appendix E-1.

50 percent diversion rate for the County of Los Angeles, disposed of 6.1 pounds of trash per day.[95] Therefore, the proposed fire station would dispose of 86 pounds of trash per day, or 0.05 tpd. This would be approximately 0.02 percent of the average disposal rate at Unit I. The proposed project would contribute less than 1 percent to the average disposal rate at Unit I. Consequently, impacts to exceeding the capacity of the landfill would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.16-7 Comply with federal, state, and local statues and regulations related to solid waste

As identified above, the project site is located in unincorporated Los Angeles County in Acton. The proposed project would dispose of a small amount of waste (0.05 tpd), as identified above in **Impact 2.1.16-6**. The following regulations are applicable to the proposed fire station:

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to "reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible."

With the passage of SB 1016 (Solid Waste Disposal Measurement Act of 2008), jurisdictions of the state are still required to divert waste at a rate equal to or greater than 50 percent. But rather than calculate a straight percentage value, the diversion rate is now based on the amount of tons of waste disposed per person per day.

According to the Los Angeles County Countywide Integrated Waste Management Plan Annual Report, the percent diversion rate is assumed to meet the goals of AB 939 of 50 percent. Also according to the Annual Report, two scenarios would incorporate a 60 percent diversion rate for the County of Los Angeles by 2021. Therefore, the proposed fire station would comply with federal, state, and local statues and regulations related to solid waste.

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95 Ibid., 20.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

2.1.17 Mandatory Findings of Significance

Environmental Impacts

Appendix G of the *State CEQA Guidelines* (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact:

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion

Impact 2.1.17-1 **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory**

The preceding analysis in this Initial Study does not reveal any significant unmitigable impacts to the environment that would degrade the quality of the environment. As discussed in **Section 2.1.4, Biological Resources**, the existing site is a previously disturbed lot and does not support sensitive plant or animal species. No impacts to biological resources would occur with project implementation. In

addition, as discussed above in **Section 2.1.5, Cultural Resources**, the project site does not contain any historical structures as defined by the *State CEQA Guidelines* and no significant impacts to historic or archaeological resources would occur with project implementation. Further, as the site is an undeveloped, previously graded vacant lot, no examples of the major periods of California history or prehistory occur on the project site. Based on the analysis contained herein, the project would not substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.17-2 **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

The following discusses the cumulative impacts of the project when viewed in connection with the effects of other current projects and probable future projects (referred to as "related projects"). The list of related projects was obtained from the Los Angeles County Department of Regional Planning (DRP) Web site, Sub-Net GIS database.[96] The list of related projects was determined by assessing those projects that may be visible in conjunction with the project site from surrounding roadways or could create construction traffic that would utilize the same roadways during construction as the project (i.e., Sierra Highway and Crown Valley Road north of SR-14).

1. Pending subdivision application submitted by Alan and Jeanette Laslovich for three single-family residential lots on an approximately 21-acre site (Tract No. PM068736) generally located north of Sierra Highway and west of Burro Road. Submitted to DRP on December 18, 2007. Construction schedule to be determined.

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96 Los Angeles County Department of Regional Planning, "Sub-Net GIS database," http://planning.lacounty.gov /subnet. Accessed on October 15, 2009.

2. Pending subdivision application submitted by San Win Chan and Mying M. Yee for three single-family residential lots on an approximately 32-acre site (Tract No. PM068707) generally located north of Kalman Street and west of Burro Road. Submitted to DRP on June 19, 2007. Construction schedule to be determined.

3. Approved subdivision application submitted by Manuel O. Soriano, III for four single-family residential lots on an approximately 21-acre site (Tract No. PM062944) generally located north of Sierra Highway and east of Hypotenuse Road. Submitted to DRP on January 9, 2007. Construction schedule to be determined.

4. Approved subdivision application submitted by Highpointe Communities for 71 single-family residential lots on an approximately 40-acre site (Tract No. TR52883) generally located north of Bondell Street and west of Crown Valley Road and north of Westcoatt Street and west of Florencell Avenue. Submitted to DRP on June 19, 2006. Construction schedule to be determined.

5. Approved subdivision application submitted by James and Jean Wilson for four single-family residential lots on an approximately 20-acre site (Tract No. PM26478) generally located north of Bandell Street and east of Crossbow Road. Submitted to DRP on February 5, 2002. Construction schedule to be determined.

6. Pending subdivision application submitted by Rick and Sandy Koski for two single-family residential lots on an approximately 5-acre site (Tract No. PM069652) generally located south of Richter Lane and west of Crossbow Road. Submitted to DRP on August 17, 2008. Construction schedule to be determined.

7. Approved subdivision application submitted by County of Los Angeles Public Library for a library on an approximately 1.5-acre site (APN No. 3217-021-900) generally located north of Sierra Highway and east of Crown Valley Road. Construction is currently underway.

8. Pending subdivision application submitted by United States Forest Service for a facility on an approximately 5.9-acre site (APN No. 3217-021-901) generally located north of Sierra Highway and east of Crown Valley Road. Construction schedule to be determined.

Cumulative impacts are less than significant for those issues for which it has been determined that the project would have no impact, since there would be no potential for the project to create a cumulative impact. Environmental issues meeting this criterion include agricultural resources, mineral resources, population/housing, public services and recreation. Resource areas that would have less than significant impacts would include aesthetics, air quality, hazards and hazardous materials, hydrology and water quality, land use and planning, transportation and circulation, and utilities and infrastructure.

Resources areas that would be fully mitigated through compliance with existing regulations and implementation of site specific technical analysis or studies for each related project (including site specific mitigation for each related project) such that less than significant cumulative impacts would occur: air quality and global climate change, biological resources, cultural resources, geology and soils, and noise.

In other words, impacts according to these issue areas would be limited to the project site and would not be increased when viewed in conjunction with the related projects.

The resources areas described below have the potential for cumulative impacts to those project-level resources areas when all probable past, present and future projects within the community of Acton are taken into consideration. Those resource areas not described are project specific and have been reduced to less than significant project level impacts.

Traffic

Of the related projects listed above, only Nos. 3, 4, 5, and 7, which have been approved, could potentially have some overlap in construction with the proposed project. The remaining projects are pending and as such, are anticipated to be constructed after the proposed project. As noted in the analysis of traffic herein, the project would generate a nominal amount of construction-related traffic that would not cause a substantial increase to traffic in relation to the existing traffic load and capacity of the street system when viewed in conjunction with the Related Project Nos. 3, 4, 5, and 7. Traffic generated from the project site during future operation of the fire station would be limited to emergency (up to approximately three responses per day) and non-emergency responses including staff and visitor trips (less than 30 trips per day). The small number of trips would not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. The approved projects have already undergone environmental review. Therefore, the potential average daily trips were able to be included in the traffic analysis for the proposed project. As described in the proposed project analysis the approved projects traffic count in conjunction with the proposed project would introduce 100 ADTs within the vicinity of the project site. Given the existing traffic counts for the surrounding roadways, the increase in the proposed project and the approved projects, traffic would be minimal and would be able to accommodate the existing roadway system with no loss of the level of service. Consequently, there would be no significant cumulative impacts on traffic and circulation with project implementation.

Aesthetics

The project site is located within an existing vacant, previously disturbed lot. The nearest related project is Related Project No. 7 located approximately 0.15 miles west of the project site. However, due to intervening development and topography, the potential for simultaneous viewing of the project and Related Project No. 7 is negligible, if any. Nonetheless, even if the fire station were to be visible in conjunction with related project No. 7, due to the size of the site and its location within an existing developed area, no substantial adverse impacts to existing visual resources or views in the surrounding vicinity would occur. Therefore, less than significant cumulative aesthetic impacts would occur.

Land Use and Planning

Implementation of the project and any potential related project could have a cumulative impact relative to consistency with applicable land use plans, policies or regulations. Those related projects that are consistent with applicable land use plans, policies or regulations would not contribute to a cumulative impact. Similarly, those related projects that are dependent on modifications to adopted land use plans would not have cumulative consistency impacts with necessary amendments in place. Notwithstanding, each related project would be subject to discretionary review by the County of Los Angeles in order to address and resolve land use impacts on an individual and cumulative basis. As such, cumulative land use impacts are concluded to be less than significant.

Public Utilities

The project proposes a use on the site that is consistent with the land use designation for the site and as such, would not conflict with any applicable anticipated demand forecasts for the site by the serving utilities. Given the limited number of personnel on site (maximum of 14 staff per day and 7 fire fighters), the demand for utilities on the site would be minimal. Due to the shared urban infrastructure, the wastewater generation (wastewater would be clarified by use of a septic system and the associated leach fields and as such would only have site specific impacts), stormwater discharge and water consumption associated with the project and the related projects could have a cumulative impact. However, during the approval process for each related project, utility system capacity must be demonstrated. As the service providers conduct ongoing evaluations to ensure facilities are adequate to serve the forecasted growth of the community, cumulative impacts on utilities are concluded to be less than significant.

Air Quality

Since the fire station has no control over the timing or sequencing of the related projects, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be highly speculative. With respect to the project's construction-period air quality emissions and cumulative Basinwide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to CAA mandates. In accordance with those strategies, the project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects

mentioned above. As such, cumulative impacts to air quality during proposed project construction would less than significant.

As discussed in **Section 2.1.3, Air Quality**, the project would have a less than significant impact with respect to its contribution to the cumulative impact of global climate change. As noted therein, conventional cumulative air quality analyses consider related projects; however, this approach is not appropriate because proximity is irrelevant to the transport and accumulation of GHG in the Earth's atmosphere.

Noise

The nearest related project to the project site is Related Project No. 7 located approximately 0.15 miles west of the project site. Given the distance of this project to the proposed fire station site and the intervening land uses and topography, there would be no cumulative increase in construction noise levels to adjacent sensitive noise receptors. Given the nominal increase in traffic during construction and operation of the project, cumulative traffic noise would be a less than significant impact. No related projects are in proximity to the site that would create a cumulative increase regarding on-site noise sources. Overall, the project would result in less than significant cumulative noise impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 2.1.17-3 Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Based on the analysis provided above, implementation of the project would not cause environmental effects that cause substantial direct or indirect adverse effects on human beings. Also, the fire station would be beneficial to human beings as it would provide for increased safety. Thus, less than significant impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

2.2 Report Preparers

Consolidated Fire Protection District of Los Angeles County
(Los Angeles County Fire Department)
Construction and Maintenance Division
Special Services Bureau

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Ross Pistone, Project Manager

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APPENDIX 2.1.3

Emissions Calculations

Phase 1 Summer Construction Emissions

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\Alan Sako\1041.001 Fire Station 142\Emissions\Construction\URBEMIS - Fire Station 142 Phase 1.urb924

Project Name: Fire Station 142 - Construction Emissions - Phase 1

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2011 TOTALS (lbs/day unmitigated)	8.64	75.16	38.85	0.01	35.55	3.56	39.11	7.43	3.27	10.70
2011 TOTALS (lbs/day mitigated)	8.64	75.16	38.85	0.01	6.34	3.56	9.90	1.33	3.27	4.60
2012 TOTALS (lbs/day unmitigated)	8.19	70.05	36.94	0.01	35.55	3.26	38.81	7.43	3.00	10.43
2012 TOTALS (lbs/day mitigated)	8.19	70.05	36.94	0.01	6.34	3.26	9.60	1.33	3.00	4.33

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 10/3/2011-12/30/2011 Active Days: 65	**8.64**	**75.16**	**38.85**	**0.01**	**35.55**	**3.56**	**39.11**	**7.43**	**3.27**	**10.70**
Mass Grading 10/01/2011-02/29/2012	8.64	75.16	38.85	0.01	35.55	3.56	39.11	7.43	3.27	10.70
Mass Grading Dust	0.00	0.00	0.00	0.00	35.51	0.00	35.51	7.42	0.00	7.42
Mass Grading Off Road Diesel	8.10	68.97	34.32	0.00	0.00	3.31	3.31	0.00	3.04	3.04
Mass Grading On Road Diesel	0.48	6.06	2.33	0.01	0.03	0.24	0.27	0.01	0.22	0.23
Mass Grading Worker Trips	0.07	0.13	2.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Time Slice 1/2/2012-2/29/2012 Active Days: 43	8.19	70.05	36.94	**0.01**	**35.55**	3.26	38.81	**7.43**	3.00	10.43
Mass Grading 10/01/2011-02/29/2012	8.19	70.05	36.94	0.01	35.55	3.26	38.81	7.43	3.00	10.43
Mass Grading Dust	0.00	0.00	0.00	0.00	35.51	0.00	35.51	7.42	0.00	7.42
Mass Grading Off Road Diesel	7.69	64.54	32.81	0.00	0.00	3.04	3.04	0.00	2.79	2.79
Mass Grading On Road Diesel	0.43	5.40	2.08	0.01	0.03	0.21	0.24	0.01	0.20	0.21
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 3/1/2012-3/30/2012 Active Days: 22	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching 03/01/2012-03/31/2012	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Off Road Diesel	0.48	3.11	2.25	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Worker Trips	0.01	0.01	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 4/2/2012-6/29/2012 Active Days: 65	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Asphalt 04/01/2012-06/30/2012	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.33	14.65	9.42	0.00	0.00	1.23	1.23	0.00	1.13	1.13
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Phase Assumptions

Phase: Mass Grading 10/1/2011 - 2/29/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 4.87

Maximum Daily Acreage Disturbed: 1.18

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 200.91 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 216.25

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

2 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 3/1/2012 - 3/31/2012 - Default Trenching Description

Off-Road Equipment:

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Paving 4/1/2012 - 6/30/2012 - Default Paving Description

Acres to be Paved: 0.39

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 10/3/2011-12/30/2011 Active Days: 65	**8.64**	**75.16**	**38.85**	**0.01**	6.34	**3.56**	9.90	1.33	**3.27**	4.60
Mass Grading 10/01/2011-02/29/2012	8.64	75.16	38.85	0.01	6.34	3.56	9.90	1.33	3.27	4.60
Mass Grading Dust	0.00	0.00	0.00	0.00	6.30	0.00	6.30	1.32	0.00	1.32
Mass Grading Off Road Diesel	8.10	68.97	34.32	0.00	0.00	3.31	3.31	0.00	3.04	3.04
Mass Grading On Road Diesel	0.48	6.06	2.33	0.01	0.03	0.24	0.27	0.01	0.22	0.23
Mass Grading Worker Trips	0.07	0.13	2.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 1/2/2012-2/29/2012 Active Days: 43	8.19	70.05	36.94	**0.01**	6.34	3.26	9.60	1.33	3.00	4.33
Mass Grading 10/01/2011-02/29/2012	8.19	70.05	36.94	0.01	6.34	3.26	9.60	1.33	3.00	4.33
Mass Grading Dust	0.00	0.00	0.00	0.00	6.30	0.00	6.30	1.32	0.00	1.32
Mass Grading Off Road Diesel	7.69	64.54	32.81	0.00	0.00	3.04	3.04	0.00	2.79	2.79
Mass Grading On Road Diesel	0.43	5.40	2.08	0.01	0.03	0.21	0.24	0.01	0.20	0.21
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 3/1/2012-3/30/2012 Active Days: 22	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching 03/01/2012-03/31/2012	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Off Road Diesel	0.48	3.11	2.25	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Worker Trips	0.01	0.01	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 4/2/2012-6/29/2012 Active Days: 65	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Asphalt 04/01/2012-06/30/2012	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.33	14.65	9.42	0.00	0.00	1.23	1.23	0.00	1.13	1.13
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 10/1/2011 - 2/29/2012 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

Phase 1 Winter Construction Emissions

9/25/2009 03:07:13 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: Z:\Alan Sako\1041.001 Fire Station 142\Emissions\Construction\URBEMIS - Fire Station 142 Phase 1.urb924

Project Name: Fire Station 142 - Construction Emissions - Phase 1

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2011 TOTALS (lbs/day unmitigated)	8.64	75.16	38.85	0.01	35.55	3.56	39.11	7.43	3.27	10.70
2011 TOTALS (lbs/day mitigated)	8.64	75.16	38.85	0.01	6.34	3.56	9.90	1.33	3.27	4.60
2012 TOTALS (lbs/day unmitigated)	8.19	70.05	36.94	0.01	35.55	3.26	38.81	7.43	3.00	10.43
2012 TOTALS (lbs/day mitigated)	8.19	70.05	36.94	0.01	6.34	3.26	9.60	1.33	3.00	4.33

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 10/3/2011-12/30/2011 Active Days: 65	**8.64**	**75.16**	**38.85**	**0.01**	**35.55**	**3.56**	**39.11**	**7.43**	**3.27**	**10.70**
Mass Grading 10/01/2011-02/29/2012	8.64	75.16	38.85	0.01	35.55	3.56	39.11	7.43	3.27	10.70
Mass Grading Dust	0.00	0.00	0.00	0.00	35.51	0.00	35.51	7.42	0.00	7.42
Mass Grading Off Road Diesel	8.10	68.97	34.32	0.00	0.00	3.31	3.31	0.00	3.04	3.04
Mass Grading On Road Diesel	0.48	6.06	2.33	0.01	0.03	0.24	0.27	0.01	0.22	0.23
Mass Grading Worker Trips	0.07	0.13	2.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Time Slice 1/2/2012-2/29/2012 Active Days: 43	8.19	70.05	36.94	**0.01**	**35.55**	3.26	38.81	**7.43**	3.00	10.43
Mass Grading 10/01/2011-02/29/2012	8.19	70.05	36.94	0.01	35.55	3.26	38.81	7.43	3.00	10.43
Mass Grading Dust	0.00	0.00	0.00	0.00	35.51	0.00	35.51	7.42	0.00	7.42
Mass Grading Off Road Diesel	7.69	64.54	32.81	0.00	0.00	3.04	3.04	0.00	2.79	2.79
Mass Grading On Road Diesel	0.43	5.40	2.08	0.01	0.03	0.21	0.24	0.01	0.20	0.21
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 3/1/2012-3/30/2012 Active Days: 22	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching 03/01/2012-03/31/2012	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Off Road Diesel	0.48	3.11	2.25	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Worker Trips	0.01	0.01	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 4/2/2012-6/29/2012 Active Days: 65	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Asphalt 04/01/2012-06/30/2012	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.33	14.65	9.42	0.00	0.00	1.23	1.23	0.00	1.13	1.13
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Phase Assumptions

Phase: Mass Grading 10/1/2011 - 2/29/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 4.87

Maximum Daily Acreage Disturbed: 1.18

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 200.91 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 216.25

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

2 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 3/1/2012 - 3/31/2012 - Default Trenching Description

Off-Road Equipment:

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Paving 4/1/2012 - 6/30/2012 - Default Paving Description

Acres to be Paved: 0.39

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 10/3/2011-12/30/2011 Active Days: 65	**8.64**	**75.16**	**38.85**	**0.01**	6.34	**3.56**	9.90	1.33	**3.27**	4.60
Mass Grading 10/01/2011-02/29/2012	8.64	75.16	38.85	0.01	6.34	3.56	9.90	1.33	3.27	4.60
Mass Grading Dust	0.00	0.00	0.00	0.00	6.30	0.00	6.30	1.32	0.00	1.32
Mass Grading Off Road Diesel	8.10	68.97	34.32	0.00	0.00	3.31	3.31	0.00	3.04	3.04
Mass Grading On Road Diesel	0.48	6.06	2.33	0.01	0.03	0.24	0.27	0.01	0.22	0.23
Mass Grading Worker Trips	0.07	0.13	2.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 1/2/2012-2/29/2012 Active Days: 43	8.19	70.05	36.94	**0.01**	6.34	3.26	9.60	1.33	3.00	4.33
Mass Grading 10/01/2011-02/29/2012	8.19	70.05	36.94	0.01	6.34	3.26	9.60	1.33	3.00	4.33
Mass Grading Dust	0.00	0.00	0.00	0.00	6.30	0.00	6.30	1.32	0.00	1.32
Mass Grading Off Road Diesel	7.69	64.54	32.81	0.00	0.00	3.04	3.04	0.00	2.79	2.79
Mass Grading On Road Diesel	0.43	5.40	2.08	0.01	0.03	0.21	0.24	0.01	0.20	0.21
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Time Slice 3/1/2012-3/30/2012 Active Days: 22	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching 03/01/2012-03/31/2012	0.49	3.12	2.48	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Off Road Diesel	0.48	3.11	2.25	0.00	0.00	0.27	0.27	0.00	0.25	0.25
Trenching Worker Trips	0.01	0.01	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 4/2/2012-6/29/2012 Active Days: 65	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Asphalt 04/01/2012-06/30/2012	2.41	14.82	11.49	0.00	0.01	1.24	1.25	0.00	1.14	1.14
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.33	14.65	9.42	0.00	0.00	1.23	1.23	0.00	1.13	1.13
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01

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Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 10/1/2011 - 2/29/2012 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

Phase 2 Summer Construction Emissions

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\Alan Sako\1041.001 Fire Station 142\Emissions\Construction\URBEMIS - Fire Station 142 Phase 2.urb924

Project Name: Fire Station 142 - Construction Emissions - Phase 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2012 TOTALS (lbs/day unmitigated)	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
2013 TOTALS (lbs/day unmitigated)	9.42	33.44	23.30	0.00	0.02	2.21	2.22	0.01	2.03	2.03

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 7/2/2012-12/31/2012 Active Days: 131	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
Building 07/01/2012-08/31/2013	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
Building Off Road Diesel	3.33	24.78	14.46	0.00	0.00	1.47	1.47	0.00	1.36	1.36
Building Vendor Trips	0.01	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.57	0.00	0.00	0.00	0.01	0.00	0.00	0.00

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Time Slice 1/1/2013-6/28/2013 Active Days: 129	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Time Slice 7/1/2013-7/31/2013 Active Days: 23	7.75	23.24	15.02	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Coating 07/01/2013-08/31/2013	4.64	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 8/1/2013-8/30/2013 Active Days: 22	**9.42**	**33.44**	**23.30**	**0.00**	**0.02**	**2.21**	**2.22**	**0.01**	**2.03**	**2.03**
Asphalt 08/01/2013-08/31/2013	1.67	10.20	8.28	0.00	0.01	0.84	0.85	0.00	0.77	0.78
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.61	10.07	6.79	0.00	0.00	0.83	0.83	0.00	0.77	0.77
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.04	0.08	1.48	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Coating 07/01/2013-08/31/2013	4.64	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Phase Assumptions

Phase: Paving 8/1/2013 - 8/31/2013 - Type Your Description Here

Acres to be Paved: 0.11

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 7/1/2012 - 8/31/2013 - Default Building Construction Description

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 7/1/2013 - 8/31/2013 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Phase 2 Winter Construction Emissions

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: Z:\Alan Sako\1041.001 Fire Station 142\Emissions\Construction\URBEMIS - Fire Station 142 Phase 2.urb924

Project Name: Fire Station 142 - Construction Emissions - Phase 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2012 TOTALS (lbs/day unmitigated)	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
2013 TOTALS (lbs/day unmitigated)	9.42	33.44	23.30	0.00	0.02	2.21	2.22	0.01	2.03	2.03

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 7/2/2012-12/31/2012 Active Days: 131	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
Building 07/01/2012-08/31/2013	3.35	24.89	15.10	0.00	0.00	1.48	1.48	0.00	1.36	1.36
Building Off Road Diesel	3.33	24.78	14.46	0.00	0.00	1.47	1.47	0.00	1.36	1.36
Building Vendor Trips	0.01	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.57	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Time Slice 1/1/2013-6/28/2013 Active Days: 129	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00

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Time Slice 7/1/2013-7/31/2013 Active Days: 23	7.75	23.24	15.02	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Coating 07/01/2013-08/31/2013	4.64	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 8/1/2013-8/30/2013 Active Days: 22	**9.42**	**33.44**	**23.30**	**0.00**	**0.02**	**2.21**	**2.22**	**0.01**	**2.03**	**2.03**
Asphalt 08/01/2013-08/31/2013	1.67	10.20	8.28	0.00	0.01	0.84	0.85	0.00	0.77	0.78
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.61	10.07	6.79	0.00	0.00	0.83	0.83	0.00	0.77	0.77
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.04	0.08	1.48	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 07/01/2012-08/31/2013	3.11	23.24	14.98	0.00	0.00	1.36	1.37	0.00	1.25	1.26
Building Off Road Diesel	3.09	23.13	14.38	0.00	0.00	1.36	1.36	0.00	1.25	1.25
Building Vendor Trips	0.01	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.02	0.03	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Coating 07/01/2013-08/31/2013	4.64	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Phase Assumptions

Phase: Paving 8/1/2013 - 8/31/2013 - Type Your Description Here

Acres to be Paved: 0.11

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 7/1/2012 - 8/31/2013 - Default Building Construction Description

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 7/1/2013 - 8/31/2013 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Summer 2013 Operational Emissions

9/25/2009 03:55:41 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Fire Station 142 - Operational Emissions

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.18	0.08	1.60	0.00	0.01	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.59	0.82	7.17	0.01	1.55	0.30

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.77	0.90	8.77	0.01	1.56	0.31

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5
Natural Gas	0.00	0.06	0.05	0.00	0.00	0.00
Hearth - No Summer Emissions						
Landscape	0.12	0.02	1.55	0.00	0.01	0.01
Consumer Products	0.00					
Architectural Coatings	0.06					
TOTALS (lbs/day, unmitigated)	0.18	0.08	1.60	0.00	0.01	0.01

Area Source Changes to Defaults

Percent residential using natural gas changed from 78% to 100%

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25
Fire Station	0.59	0.82	7.17	0.01	1.55	0.30
TOTALS (lbs/day, unmitigated)	0.59	0.82	7.17	0.01	1.55	0.30

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

9/25/2009 03:55:41 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Fire Station		10.27	1000 sq ft	9.74	100.03	897.57
					100.03	897.57

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Fire Station				2.0	1.0	97.0

Winter 2013 Operational Emissions

9/25/2009 03:56:48 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name:

Project Name: Fire Station 142 - Operational Emissions

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.06	0.06	0.05	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.63	0.99	6.87	0.01	1.55	0.30

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5
TOTALS (lbs/day, unmitigated)	0.69	1.05	6.92	0.01	1.55	0.30

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5
Natural Gas	0.00	0.06	0.05	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions						
Consumer Products	0.00					
Architectural Coatings	0.06					
TOTALS (lbs/day, unmitigated)	0.06	0.06	0.05	0.00	0.00	0.00

Area Source Changes to Defaults

Percent residential using natural gas changed from 78% to 100%

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25
Fire Station	0.63	0.99	6.87	0.01	1.55	0.30
TOTALS (lbs/day, unmitigated)	0.63	0.99	6.87	0.01	1.55	0.30

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Fire Station		10.27	1000 sq ft	9.74	100.03	897.57
					100.03	897.57

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Fire Station				2.0	1.0	97.0

Fire Station 142
Evaluation of Global Climate Change Impacts

Table 1
On-Road HHDT Emissions

Source Type	Parameter	Factors	ROG	NOx	CO	SOx	PM10	PM2.5	CO2
Fire Trucks	Vehicle Type	HHDT							
	Trips (One-way)	8							
	VMT (One-way)	5.0							
	Idling time (hours)	2.0							
	Vehicles/Day	8.0							
	Running Emission Factor	grams/mile	0.99	10.79	5.12	0.02			1,816.38
	Idling Emissions Factors	grams/hr	0.67	7.80	2.19	0.00			458.52
	Daily Emissions	pounds/day	0.11	1.23	0.53	0.00	0.05	-	176.35
MAXIMUM DAILY BASIN EMISSIONS			**0.11**	**1.23**	**0.53**	**0.00**	**0.05**	**-**	**176.35**

Sources:
EMFAC2007 Motor Vehicle Emissions Factor Model, Year 2013.

Notes:
1. Trips are based on number of calls per day (3 emergency calls, 2 non-emergency call, 3 business trips per day).
2. VMT and idling times are based on conservative estimates.
3. Vehicles per day is based on the assumption that 1 HHDTs would be used per call (3 emergency calls, 2 non-emergency call, 3 business trips per day).

Fire Station 142
Evaluation of Global Climate Change Impacts

Table 1
On-Road HHDT Emissions

Source Type	Parameter	Factors	ROG	NOx	CO	SOx	PM10	PM2.5	CO2
Fire Trucks	Vehicle Type	HHDT							
	Trips (One-way)	8							
	VMT (One-way)	5.0							
	Idling time (hours)	2.0							
	Vehicles/Day	8.0							
	Running Emission Factor	grams/mile	0.99	11.53	5.10	0.02			1,816.38
	Idling Emissions Factors	grams/hr	0.77	7.16	4.17	0.00			399.19
	Daily Emissions	pounds/day	0.11	1.27	0.60	0.00	0.05	-	174.26
MAXIMUM DAILY BASIN EMISSIONS			**0.11**	**1.27**	**0.60**	**0.00**	**0.05**	**-**	**174.26**

Sources:
EMFAC2007 Motor Vehicle Emissions Factor Model, Year 2013.

Notes:
1. Trips are based on number of calls per day (3 emergency calls, 2 non-emergency call, 3 business trips per day).
2. VMT and idling times are based on conservative estimates.
3. Vehicles per day is based on the assumption that 1 HHDTs would be used per call (3 emergency calls, 2 non-emergency call, 3 business trips per day).

 # EDMS 5.1.1 Emissions Inventory Report
 # Aircraft Emissions by Mode
 # Study: Firestation 142
 # Scenario - Airport: Baseline - My Airport
 # Year: 2013
 # Units: Pounds per Year
 # Generated: 10/27/09 16:33:06

# Type	Engine	ID	Euro. Group	Mode	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Startup	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Taxi Out	34.71	0.01	0.00	0.00	0.00	0.00	0.06	0.01	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Takeoff	25.08	0.01	0.00	0.00	0.00	0.00	0.05	0.01	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Climb Out	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Approach	7,061.35	2.00	0.30	0.34	0.34	0.34	13.00	2.89	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	H2	Taxi In	32.03	0.01	0.00	0.00	0.00	0.00	0.06	0.01	N/A	N/A
Total (Pounds per Year)					7,153.17	2.02	0.30	0.35	0.34	0.35	13.17	2.93	-	-
		CO_2e (Pounds per Year)			7,225.43									
		CO_2e (Tons per Year)			3.61									
		CO_2e (Metric Tons per Year)			3.28									

Maximum pounds per day (assuming a maximum of 2 LTO circuits in any given day]

Type	Engine	ID	LTO/Year	Mode	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Bell UH-1 Iroquois	T400-CP-400	#1	104	Startup	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	104	Taxi Out	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	104	Takeoff	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	104	Climb Out	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	104	Approach	135.80	0.04	0.01	0.01	0.01	0.01	0.25	0.06	N/A	N/A
Bell UH-1 Iroquois	T400-CP-400	#1	104	Taxi In	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A
Total (Pounds per Day)					137.56	0.04	0.01	0.01	0.01	0.01	0.25	0.06	-	-

APPENDIX 2.1.4

Vegetation and Special-Status Species Report

APPENDIX 2.4.4

VEGETATION DESCRIPTION

The site is undeveloped and shows signs of prior and ongoing disturbances, including disking, unpaved roadways, agriculture, and associated surviving landscaping plants. Vegetation is a combination of ruderal and undisturbed vegetation types.

Proposed Project

The area of the proposed fire station and helipad is entirely disturbed in character and is dominated by ruderal vegetation and the remains of a windrow consisting of ornamental plantings. This area appears to have been cleared in the past, presumably for agricultural purposes. Plants persisting in this area include native and non-native annual and short-lived perennial species, such as Russian-thistle (*Salsola tragus*), annual ragweed (*Ambrosia acanthicarpa*), California aster (*Corethrogyne filaginifolia*), Lemmon's lessingia (*Lessingia lemmonii*), twiggy wreathplant (*Stephanomeria virgata*), rancher's fireweed (*Amsinckia menziesii* var. *intermedia*), short-pod mustard (*Hirschfeldia incana*), rattlesnake weed (*Chamaesyce albomarginata*), turkey mullien (*Croton setigerus*), red-stem filaree (*Erodium cicutarium*), horehound (*Marrubium vulgare*), California buckwheat (*Eriogonum fasciculatum*), red brome (*Bromus madritensis* ssp. *rubens*), cheat grass (*B. tectorum*), and Arabian and Mediterranean splitgrass (*Schismus arabicus* and *S, barbatus*).

Proposed undeveloped area

The northeastern corner of the property is relatively undisturbed and retains much of its native character. A trail is present connecting Clanfield Street to the neighboring property to the west, and an ephemeral wash is present. Vegetation in this area is California buckwheat-dominated scrub on the north-facing slope and California juniper (*Juniperus californica*) dominated open woodland along and adjacent to the drainage. No riparian vegetation is present. Species present in this portion of the site include Nevada ephedra (*Ephedra nevadensis*), four-wing saltbush (*Atriplex canescens*), annual ragweed, rubber rabbitbrush (*Chrysothamnus nauseosus* ssp. *mohavensis*), California aster, Cooper's goldenbush (*Ericameria cooperi* var. *cooperi*), Lemmon's lessingia, shrubby butterweed (*Senecio flaccidus* var. *douglasii*), twiggy wreathplant, rancher's fireweed, spiny fireweed (*Amsinckia tessellata* var. *tessellata*), short-pod mustard, golden cholla (*Cylindropuntia echinocarpa*), rattlesnake weed, red-stem filaree, sapphire woolystar (*Eriastrum cf. sapphirinum*), slender buckwheat (*Eriogonum cf. elongatum* var. *elongatum*), California buckwheat, wand buckwheat (*E. roseum*), ripgut brome (*Bromus diandrus*), red brome, cheat grass, and Arabian and Mediterranean splitgrass.

A list of plant species observed on site is included as an attachment.

SPECIAL-STATUS SPECIES

Prior to the September 2009 site visit, searches of the CDFG California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were conducted to identify special-status plant or animal species known to occur in the area. The CNDDB lists historical and recently recorded occurrences of special-status plant and animal species, and the CNPS database lists historical and recent occurrences of special-status plant species. The database searches included the Acton U.S. Geological Survey (USGS) 7.5-minute quadrangle, in which the project site is located, as well as the seven surrounding quadrangles: Ritter Ridge, Palmdale, Agua Dulce, Sunland, Sleepy Valley, Pacifico Mountain, Condor Peak, and Chilao Flat.

Based upon the review of the CNDDB and CNPS databases, 23 special-status plant and 27 special-status animal species have been reported from the nine-quad region containing the project site. Of these 50 species, none were observed on site; however 5 special-status plant and 6 special-status animal species could potentially utilize the site, based on habitat characteristics. These 11 species include Peirson's morning-glory (*Calystegia peirsonii*), white pygmy-poppy (*Canbya candida*), Mason's neststraw (*Stylocline masonii*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), Plummer's mariposa lily (*Calochortus plummerae*), silvery legless lizard (*Anniella pulchra pulchra*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), burrowing owl (*Athene cunicularia*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and southern grasshopper mouse (*Onychomys torridus ramona*). Special-status species reported in the database results and the reasons for their potential to utilize or be absent from the project site are summarized below.

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
Dicots								
San Gabriel manzanita *Arctostaphylos gabrielensis*	–	–	1B.2	Rocky outcrops in montane chaparral around 1500 m msl.	Evergreen shrub March	None – the site is outside the geographic range and below the elevational range of this species	None	N/A
Nevin's barberry *Berberis nevinii*	FE	SE	1B.1	Sandy or gravelly habitats on steep north-facing slopes and in low-grade washes in chaparral, cismontane woodland, and coastal and riparian scrub communities between 274 and 825 m msl. Plants in San Francisquito Canyon are introduced.	Perennial evergreen shrub March – June	None – the site is outside the geographic range of this species	None	N/A
Peirson's morning-glory *Calystegia peirsonii*	–	–	4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland communities between 30 and 1500 m msl.	Rhizomatous herb April – June	Low – suitable habitat is present within the undisturbed area of the site. This species was not detected during the course of the September 2009 survey.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible.
White pygmy-poppy *Canbya candida*	–	–	4.2	Gravelly and sandy soils in Joshua tree woodland, Mojavean	Annual herb March – June	Low – suitable habitat is present within the	The loss of individuals of this species from the	Follow-up surveys are recommended after sufficient winter

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
				desert scrub, and pinyon and juniper woodland communities between 600 and 1460 m msl.		undisturbed area of the site. This species was not detected during the course of the September 2009 survey.	subject property would be a potential violation of CEQA.	precipitation makes such surveys feasible.
Mount Gleason Indian paintbrush *Castilleja gleasonii* [See *C. pruinosa* in *The Jepson Manual*]	–	Rare	1B.2	Granitic habitats in open flats or slopes in granitic soil in chaparral, lower montane coniferous forest, pinyon and juniper woodland communities between 1160 and 2170 m msl; restricted to the San Gabriel Mountains	Perennial herb (hemiparasitic) May – June	None – the site is outside the geographic range and below the elevational range of this species	None	N/A
Southern tarplant *Centromadia parryi* ssp. *australis*	–	–	1B.1	Vernally mesic, often alkaline, habitats in marshes and swamp margins, valley and foothill grassland, and vernal pool communities between 0 and 427 m msl.	Annual herb May – November	None – the site is outside the geographic range of this species	None	N/A
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC	SE	1B.1	Sandy soils in coastal scrub and valley and foothill grassland communities between 150 and 1220 m msl.	Annual herb April – July	None – the site is outside the geographic range of this species	None	N/A
White-bracted	–	–	1B.2	Sandy or gravelly	Annual herb	None – the site is	None	N/A

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
spineflower *Chorizanthe xanti* var. *leucotheca*				substrates in Mojave Desert scrub and pinyon juniper woodland communities between 300 and 1200 m msl.	April – June	outside the geographic range of this species		
Slender-horned spineflower *Dodecahema leptoceras*	FE	SE	1B.1	Sandy soils in flood-deposited terraces and washes in alluvial scrub communities between 200 and 760 m msl	Annual herb April – June	None – suitable habitat is not present on site.	None	N/A
San Gabriel linanthus *Linanthus concinnus*	–	–	1B.2	Rocky soils and openings in chaparral, lower montane coniferous forest, and upper montane coniferous forest communities between 1520 and 2800 m msl.	Annual herb April – July	None – the site is outside the geographic range and below the elevational range of this species	None	N/A
Sagebrush loeflingia *Loeflingia squarrosa* var. *artemisiarum*	–	–	2.2	Sandy flats, dunes and sandy areas around clay slicks within Great Basin scrub, Sonoran desert scrub and desert dunes communities between 700 and 1615 m msl; associated with *Sarcobatus*, *Atriplex*, *Tetradymia*, etc.	Annual herb April – May	None – the site is outside the geographic range of this species	None	N/A
Pierson's lupine *Lupinus peirsonii*	–	–	1B.3	Decomposed granite slide and talus on slopes and ridges	Perennial herb April – June	None – the site is outside the geographic range	None	N/A

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
				within Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest communities between 1000 and 2000 m msl.		of this species		
Davidson's bushmallow *Malacothamnus davidsonii*	–	–	1B.2	Sandy washes within cismontane woodland, coastal scrub, riparian woodland and chaparral between 180 and 855 m msl.	Perennial Deciduous shrub June – January	None – the site is outside the geographic range of this species	None	N/A
Ojai navarretia *Navarretia ojaiensis* [Not in *The Jepson Manual*]	–	–	1B.1	Openings in chaparral, coastal scrub, and valley and foothill grassland communities between 275 and 620 m msl.	Annual herb May – July	None – the site is outside the geographic range of this species	None	N/A
Short joint beavertail *Opuntia basilaris* var. *brachyclada*	–	–	1B.2	Sandy soil or coarse granitic loam within chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon juniper woodland and riparian woodland communities between 425 and 1800 m msl.	Perennial stem succulent April – June	None – this conspicuous perennial species was not observed during the course of the September 2009 survey and would ave been easily recognized if present.	None	N/A
Mason's neststraw	–	–	1B.1	Sandy habitats within chenopod scrub and	Annual herb March – May	Low – suitable habitat is present	The loss of individuals of this	Follow-up surveys are recommended after

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
Stylocline masonii				pinyon juniper woodland communities between 100 and 1200 m msl.		within the undisturbed area of the site. This species was not detected during the course of the September 2009 survey.	species from the subject property would be a potential violation of CEQA.	sufficient winter precipitation makes such surveys feasible.
Greata's aster *Symphyotrichum greatae* [Treated as *Aster greatae* in *The Jepson Manual*]	–	–	1B.3	Mesic habitats in broadleaved upland forest, chaparral, cismontane woodland, riparian woodland and lower montane coniferous forest communities between 300 and 2010 m msl.	Perennial rhizomatous herb June – October	None – suitable abitat is not present on site.	None	N/A
Monocots								
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	–	–	1B.2	Shaded foothill canyons, often on grassy slopes within chaparral and coastal scrub communities between 360 and 1000 m msl.	Perennial bulbiferous herb March – June	Low – suitable habitat is present within the undisturbed area of the site. This species was not detected during the course of the September 2009 survey.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible.
Palmer's mariposa lily *Calochortus palmeri* var. *palmeri*	–	–	1B.2	Mesic habitats in chaparral, lower montane coniferous forest, meadow and seep communities	Perennial bulbiferous herb April – July	None – suitable habitat is not present on site.	None	N/A

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
				between 1000 and 2390 m msl.				
Plummer's mariposa lily *Calochortus plummerae*	–	–	1B.2	Rocky and sandy sites, usually of granitic or alluvial material in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest communities between 100 and 1700 m msl.	Perennial bulbiferous herb May – July	Low – suitable habitat is present within the undisturbed area of the site. This species was not detected during the course of the September 2009 survey.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible.
Alkali mariposa lily *Calochortus striatus*	–	–	1B.2	Alkaline meadows and ephemeral washes within chaparral, chenopod scrub, Mojavean desert scrub and meadows between 70 and 1595 m msl.	Perennial bulbiferous herb April – June	None – suitable habitat is not present on site.	None	N/A
California satintail *Imperata brevifolia*	–	–	2.1	Mesic, often alkaline, habitats within chaparral, coastal scrub, Mojavean desert scrub, meadow, seep, and riparian scrub communities between 0 and 500 m msl.	Perennial rhizomatous herb September – May	None – suitable habitat is not present on site.	None	N/A
Lemon lily *Lilium parryi* [CNPS listing includes *L. parryi* var. *kessleri*.]	–	–	1B.2	Wet, mountainous terrain, generally in forested areas, shady streamsides, and open, boggy meadows and	Perennial bulbiferous herb July – August	None – the site is outside the geographic range and below the elevational range	None	N/A

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to occur on site	Development constraints	Recommendations
				seeps between 1220 and 2745 m msl.		of this species		

Status abbreviations

Federal
FE: Federally listed as Endangered
FC: Federal candidate species (former category 1 candidates)
State
SE: State-listed as Endangered

CNPS lists
1B: Plants rare, threatened, or endangered in California and elsewhere
2: Plants rare, threatened, or endangered in California, but more common elsewhere
4: Plants of limited distribution – a watch list

CNPS threat rank extensions
0.1: Seriously threatened in California
0.2: Fairly threatened in California
0.3: Not very threatened in California

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
Fish							
Santa Ana sucker *Catostomus santaanae*	FT, FSS	SSC	–	Habitat generalist, but prefers sand, rubble, or boulder bottoms, in cool, clear water with algae to graze; native range is restricted to basins of the Los Angeles, San Gabriel and Santa Ana Rivers.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE, FSS	SE, CDFG Fully Protected	–	Cool, clear water with abundant vegetation in weedy pools, backwaters and among emergent vegetation at the stream edge in small southern California streams.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Arroyo chub *Gila orcuttii*	FSS	SSC	–	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates. Native populations are restricted to	None – aquatic habitats needed by this species are not present on site.	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
				the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita Rivers, and to Malibu and San Juan Creeks.			
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	FSS	SSC	–	Requires permanent flowing streams with summer water temperatures of 17 to 20 degrees C. Usually inhabits shallow cobble and gravel riffles. Occurs in the headwaters of the Santa Ana and San Gabriel Rivers.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Amphibians							
Arroyo toad *Anaxyrus californicus*	FE	SSC	–	Rivers, washes or intermittent streams with sandy banks, willows, cottonwoods and sycamores within valley-foothill, desert riparian and desert wash communities in semi-arid regions; loose gravelly areas of streams in drier parts of range.	None – aquatic habitats needed by this species are not present on site.	None	N/A
California red-legged frog *Rana draytonii*	FT	SSC	–	Requires 11 to 20 weeks of permanent water for larval development; must have access to aestivation habitat. Occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Sierra Madre yellow-legged	FE, FSS	SSC	–	Always encountered within a few ft. of water. Tadpoles may	None – aquatic habitats needed	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
frog *Rana muscosa*				require 2 to 4 years to complete their aquatic development. Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains only.	by this species are not present on site.		
Coast Range newt *Taricha torosa torosa*	–	SSC	–	Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types. Elevation range extends from near sea level to about 1830 m. Terrestrial individuals seek cover under surface objects such as rocks and logs, or in mammal burrows, rock fissures, or human-made structures such as wells. Aquatic larvae find cover beneath submerged rocks, logs, debris, and undercut banks. Breeding and egg-laying occur in intermittent streams, rivers, permanent and semi-permanent ponds, lakes and large reservoirs.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Reptiles							
Southwestern pond turtle *Actinemys*	BLMS, FSS	SSC	–	Requires basking sites such as partially submerged logs, vegetation mats or open mud	None – aquatic habitats needed by this species	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
marmorata pallida				banks and needs suitable nesting sites in permanent or near permanent bodies of water in many habitat types below 2000 m msl.	are not present on site.		
Silvery legless lizard *Anniella pulchra pulchra*	FSS	SSC	–	Leaf litter associates with sandy or loose loamy soil of high moisture content under sparse vegetation	Low – suitable habitat is present in areas associated with the drainage course in the northeastern corner of the site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Pre-construction special-status reptile surveys are recommended. If any of these animals are detected, they may be relocated to undeveloped areas prior to the commencement of construction. The placement of silt fencing or other means which would provide a physical barrier to reptile movement is recommended at the edge of the construction areas and prior to animal relocation to prevent their reentry to the site. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where they will not be able to escape harm from construction equipment or other suburban hazards to wildlife.
Orange-throated whiptail *Aspidoscelis*	–	SSC	–	Prefers washes and other sandy areas with patches of brush and rocks within low elevation coastal scrub,	None – the site is outside the geographic range of the	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
hyperythra				chaparral, and valley foothill hardwood habitats. Perennial plants are required to support its major prey, termites.	species.		
Coastal western whiptail *Aspidoscelis tigris stejnegeri*	–	–	CDFG Special Animals List	Various habitats in firm, sandy or rocky soils within sparse vegetation, open areas, woodlands and riparian communities of deserts and semi-arid areas.	High – suitable habitat is present throughout the site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Pre-construction special-status reptile surveys are recommended. If any of these animals are detected, they may be relocated to undeveloped areas prior to the commencement of construction. The placement of silt fencing or other means which would provide a physical barrier to reptile movement is recommended at the edge of the construction areas and prior to animal relocation to prevent their reentry to the site. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where they will not be able to escape harm from construction equipment or other suburban hazards to wildlife.
Coast horned lizard *Phrynosoma blainvillii*	BLMS, FSS	SSC	–	Prefers friable, rocky or shallow sandy soils in scrub and chaparral habitats in arid and semi-arid regions. Requires the presence of	High – suitable habitat is present in the northeastern corner of the	The loss of individuals of this species from the subject property would	Pre-construction special-status reptile surveys are recommended. If any of these animals are detected, they may be relocated to undeveloped

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
[CDFG uses the names *P. coronatum blainvillii* and *P. c. frontale*]				native ants for prey.	site.	be a potential violation of CEQA.	areas prior to the commencement of construction. The placement of silt fencing or other means which would provide a physical barrier to reptile movement is recommended at the edge of the construction areas and prior to animal relocation to prevent their reentry to the site. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where they will not be able to escape harm from construction equipment or other suburban hazards to wildlife.
Two-striped garter snake *Thamnophis hammondii*	BLMS, FSS	SSC	–	Associated with permanent or semi-permanent bodies of water in a variety of habitats from sea level to 2400 m (8000 ft). Take cover in mammal burrows, crevices, and surface objects. Basks on streamside rocks or on densely vegetated stream banks.	None – aquatic habitats needed by this species are not present on site.	None	N/A
Birds							
Cooper's hawk (nesting) *Accipiter*	–	CDFG Watch List	–	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the	None – suitable habitat is not present on site.	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
cooperii				edge of a field or water opening.			
Tricolored blackbird (nesting colony) *Agelaius tricolor*	BCC, BLMS	SSC	USBC, AWL, ABC	Highly colonial species, requiring open water, protected nesting substrate and foraging areas with insect prey within a few km of the colony.	None – suitable habitat is not present on site.	None	N/A
Burrowing owl (burrow sites) *Athene cunicularia*	BCC, BLMS	SSC	–	Open, dry grassland and desert habitats throughout California, or scrublands characterized by low-growing, widely spaced vegetation. Dependant upon burrowing mammals, especially California ground squirrel.	Moderate – suitable habitat, including rodent burrows, is present throughout the project site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Preconstruction nesting or wintering burrowing owl surveys and protection of burrows until nestlings have fledged or wintering birds have been safely excluded from the burrows.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	FE, FSS (full species)	SE (full species)	USBC, AWL, ABC (all include full species)	Dense willow thickets are required for nesting and roosting. Nesting site usually near languid stream, standing water, or seep. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters.	None – suitable habitat is not present on site.	None	N/A
Prairie falcon (nesting) *Falco mexicanus*	BCC	CDFG Watch List	–	Breeds on cliffs in dry, open terrain and forages far afield, even to marshlands and ocean shores.	None – suitable habitat is not present on site.	None	N/A
Coastal California gnatcatcher	FT	SSC	USBC, AWL, ABC	Obligate permanent resident of coastal sage and alluvial scrub habitats below 800 m	None – suitable habitat is not present on site.	None	N/A

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
Polioptila californica californica				msl in southern California.			
Le Conte's thrasher *Toxostoma lecontei*	BCC, BLMS	SSC	USBC, AWL, ABC	Desert wash, desert scrub, desert alkali scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2 to 8 ft. above the ground.	None – suitable habitat is not present on site.	None	N/A
Mammals							
Pallid bat *Antrozous pallidus*	FSS, BLMS	SSC	WBWG High	Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Roost must protect bats from high temperatures. Night roosts may be in more open sites, such as porches and open buildings. Needs water. Very sensitive to disturbance of roosting sites.	None – suitable habitat is not present on site.	None	N/A
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	–	SSC	–	Shrub habitats and intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	High – suitable habitat is present throughout the project site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Preconstruction focused surveys for denning sites and delay of construction activities until young are weaned and leave the den. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where

Common name *Scientific name*	**Federal status**	**State status**	**Other lists**	**Habitat**	**Potential to occur on site**	**Development constraints**	**Recommendations**
							they will not be able to escape harm from construction equipment or other suburban hazards to wildlife.
Yuma myotis *Myotis yumaensis*	BLMS	–	WBWG Low – Medium	Common and widespread in California outside the Mojave and Colorado Desert regions, except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 11000 ft, uncommon to rare above 8000 ft. Optimal habitats are open forests and woodlands with sources of water over which to feed. Roosts in buildings, mines, caves, or crevices, abandoned swallow nests and under bridges. Maternity colonies of several thousand females and young may be found in buildings, caves, mines, and under bridges. Warm, dark sites are preferred.	None – suitable habitat is not present on site.	None	N/A
Southern grasshopper mouse *Onychomys torridus ramona*	–	SSC	–	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropod prey, especially scorpions and orthopterans.	Moderate – suitable habitat is present throughout the project site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Preconstruction trapping surveys for small mammals followed by relocation of captured individuals to safe areas of suitable habitat outside of the project impact area.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site	Development constraints	Recommendations
San Joaquin pocket mouse *Perognathus inornatus inornatus*	BLMS	–	–	Friable soils, typically in grasslands and blue oak savannas.	None – suitable habitat is not present on site.	None	N/A
Mojave ground squirrel *Spermophilus mohavensis*	–	ST	–	Sandy to gravelly soils in open desert scrub, alkali scrub and Joshua tree woodland. Avoids rocky areas. Nests in burrows and uses burrows at the base of shrubs for cover. Also feeds in annual grassland. Restricted to the Mojave Desert.	None – the site is outside the geographic range of the species.	None	N/A

Status abbreviations

Federal
FE: Federally listed as Endangered
FT: Federally listed as Threatened
BLMS: Bureau of Land Management Sensitive Species
FSS: USDA Forest Service Sensitive
BCC: Fish and Wildlife Service Birds of Conservation Concern

State
SE: State-listed as Endangered
ST: State-listed as Threatened
SSC: CDFG Species of Special Concern

Other
AWL: Audubon Watchlist
ABC: American Bird Conservancy Green List
USBC: United States Bird Conservation Watch List
WBWG: Western Bat Working Group: High, Medium and Low priority

ATTACHMENT

Plant species observed on the Fire Station 142 site; survey date September 3, 2009

Arial font indicates non-native taxa
Underlined font indicates special-status taxa

GYMNOSPERMS

Cupressaceae (cypress family)

Juniperus californica (California juniper)

Ephedraceae (ephedra family)

Ephedra nevadensis (Nevada ephedra)

Pinaceae (pine family)

Pinus halepensis (Aleppo pine)

ANGIOSPERMS – DICOTS

Amaranthaceae (amaranth family)

Atriplex canescens (four-wing saltbus)
Salsola tragus (Russian-thistle)

Apocynaceae (dogbane family)

Nerium oleander (oleander)

Asteraceae (sunflower family)

Ambrosia acanthicarpa (annual ragweed)
Chrysothamnus nauseosus ssp. *mohavensis* (rubber rabbitbrush)
Corethrogyne filaginifolia (California aster)
Ericameria cooperi var. *cooperi* (Cooper's goldenbush)
Lessingia lemmonii (Lemmon's lessingia)
Senecio flaccidus var. *douglasii* (shrubby butterweed)
Stephanomeria virgata (twiggy wreathplant)

Boraginaceae (borage family)

Amsinckia menziesii var. *intermedia* (rancher's fireweed)
Amsinckia tessellata var. *tessellata* (spiny fireweed)

Brassicaceae (mustard family)

Hirschfeldia incana (short-pod mustard)

Cactaceae (cactus family)

Cylindropuntia echinocarpa (golden cholla)

Euphorbiaceae (spurge family)

Chamaesyce albomarginata (rattlesnake weed)
Croton setigerus (turkey mullien)

Geraniaceae (geranium family)

Erodium cicutarium (red-stem filaree)

Lamiaceae (mint family)

Marrubium vulgare (horehound)

Polemoniaceae (phlox family)

Eriastrum cf. sapphirinum (sapphire woolystar)

Polygonaceae (buckwheat family)

Eriogonum cf. elongatum var. *elongatum* (slender buckwheat)
Eriogonum fasciculatum (California buckwheat)
Eriogonum roseum (wand buckwheat)

Salicaceae (willow family)

Populus fremontii ssp. *fremontii* (Fremont cottonwood)

ANGIOSPERMS – MONOCOTS

Poaceae (grass family)

Bromus diandrus (ripgut brome)
Bromus madritensis ssp. *rubens* (red brome)
Bromus tectorum (cheat grass)
Cortaderia cf. selloana (pampas grass)
Schismus arabicus (Arabian splitgrass)
Schismus barbatus (Mediterranean splitgrass)

APPENDIX 2.1.5

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PROPOSED FIRE STATION 142

PORTION OF PARCEL NO. 3217-021-031

ADJACENT TO 3635 SIERRA HIGHWAY

ACTON, CALIFORNIA

FOR

RP DEVELOPMENT SERVICES

APRIL 15, 2009

JOB NO. 2009-002-51

RTE&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

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GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

April 15, 2009

RP Development Services
22570 Arriba Drive,
Saugus, California, 91350

Job No. 2009-002-51

Attention: Mr. Ross Pistone

Subject: Phase I Environmental Site Assessment
Proposed Fire Station 142
Portion of Parcel No. 3217-021-031
Adjacent to 3635 Sierra Highway
Acton, California

Dear Mr. Pistone:

Enclosed are three copies of our Phase I Environmental Site Assessment (ESA) of the subject site in Acton, California. This report is intended only for the use and benefit of RP Development Services.

The assessment was performed pursuant to proposal number P002-2009-01, 51, dated January 9, 2009. The site assessment included a review of historical topographic maps, aerial photographs, regulatory environmental databases, and a walk-through reconnaissance of the site and immediately adjacent area.

To perform this ESA, RTF&A relied on others, including the User/Client, to provide information. We assume that this information we rely on is accurate. However, if it is not, or if there are data gaps, there may be recognized environmental conditions (RECs) that go undetected by us. In such cases, we are not responsible for the data gaps or undetected RECs.

The subject site is an undeveloped portion of a larger parcel that is a large acreage rural residence. There is some evidence that the land was once used for agricultural purposes prior to 1954. The search of government records and historical sources did not, in our opinion, reveal evidence of RECs in connection with the subject site as discussed herein. As such, we do not recommend further investigation at the site at this time.

Thank you for allowing us to serve your environmental needs. If you have questions regarding this report, please do not hesitate to contact us.

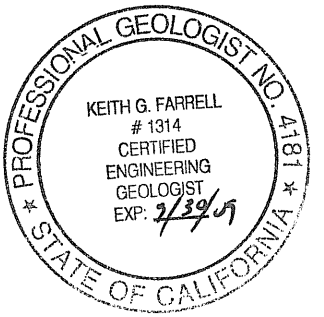
Yours very truly,

R. T. FRANKIAN & ASSOCIATES

Keith G. Farrell
Principal Engineering Geologist and
Environmental Professional

KFG/cma

Distribution: (3) RP Development
Attn: Mr. Ross Pistone
("wet-signed" copies)



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RP Development Services
April 15, 2009
2009-002-51

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

PROPOSED FIRE STATION 142

PORTION OF PARCEL NO. 3217-021-031

ADJACENT TO 3635 SIERRA HIGHWAY

ACTON, CALIFORNIA

FOR

RP DEVELOPMENT SERVICES

APRIL 15, 2009

JOB NO. 2009-002-51

INTRODUCTION

This report presents the results of our Phase I Environmental Site Assessment (ESA) of the subject site, located adjacent to 3635 Sierra Highway in Acton, California. The location of the site is shown on the attached Site Location Map (Figure 1).

We understand that this site assessment is required for a real estate transaction, and is performed only for the benefit of RP Development Services. The purpose of the assessment was to identify, to the extent feasible and within the scope of work described in proposal number P002-2009-01, 51, dated January 9, 2009, recognized environmental conditions (RECs) at the subject site. This assessment was based on a review of available pertinent information, as discussed herein.

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

To perform this ESA, we relied on others, including the User/Client, to provide information. We assume that this information we rely on is clear, true, and accurate. However, if it is not, or if there are data gaps, there may be RECs that go undetected by us. In such cases, we are not responsible for the data gaps or undetected RECs.

A title search was not conducted by R.T. Frankian and Associates (RTF&A) for the ESA. This ESA included a walk-through reconnaissance of the subject site to observe for obvious indications of current and past site use that could be indicative of environmental impairment. Immediately adjacent properties were observed from the subject site for conditions that might exert an adverse environmental impact to the subject site. The ESA also included a review of available historical maps; aerial photographs; and federal, state, and local regulatory agency databases that list and track occurrences of hazardous waste and toxic substances (see appendices). In general, the area within a radius of up to 0.5 to 1.0 miles from the site was reviewed (see Appendix A). The hyperlinks in any of the attached appendices, if any, are not reproduced for this report unless stated otherwise.

Not included in this review are evaluations of "business environmental risk", radon gas, asbestos, lead based paint, mold, methane, or wetlands. The environmental assessment did not include sampling or analyses for contaminants, nor did the assessment include any subsurface investigation.

SITE CONDITIONS

SITE DESCRIPTION

The site consists of an irregularly-shaped parcel, approximately 4.13 acres in area, bordered on the east by Clanfield Street and on the south by Sierra Highway. The site is part of a larger parcel and is undeveloped former agricultural land (although a small remnant orchard is present at the northern end of the site). A farmhouse, addressed as 3635 Sierra Highway, is present approximately 100 feet west of the subject site. The Assessor's Parcel Number for the larger property containing the farmhouse and the subject site is 3217-021-031.

TOPOGRAPHY

The subject site consists of gently-sloping terrain to the south. According to the United States Geological Survey (USGS) topographic map of the Acton, California Quadrangle (1959, photo revised 1974), the elevation of the subject site is approximately 2,980 feet above sea level.

GEOLOGY

The subject site is situated on Quaternary-aged younger alluvium reportedly consisting primarily of silty sands and gravelly, silty sands. The thickness of these sediments is unknown but reportedly exceeds 200 feet in monitoring well borings at a nearby leaking underground storage tank (LUST) site. The alluvium most likely rests non-conformably on basement rocks consisting of Jurassic-aged Syenite (USGS, 2005).

GROUNDWATER

According to information obtained from the State Water Resources Control Board (SWRCB) Geotracker website, http://geotracker.swrcb.ca.gov, the depth to groundwater in several monitoring wells located approximately 0.25 mile west of the subject site, ranged from 173.06 to 186.78 feet below ground surface in December of 2008. Based on local topography, the groundwater gradient at the subject site is anticipated to be toward the south.

SITE RECONNAISSANCE

GENERAL

Mr. Keith Farrell of RTF&A visited the site and conducted the site reconnaissance in February and March of 2009, while also conducting percolation testing. The purpose of the reconnaissance was to observe existing site conditions and to identify obvious indicators of RECs that could adversely affect the subject site. RTF&A met the owner briefly at the site during geotechnical testing that was being performed concurrently with this investigation. The owner has been familiar with the subject site for several decades and also agreed to answer the environmental questionnaire regarding the site. The questionnaire was conducted at a later date over the phone.

HAZARDOUS SUBSTANCES

No hazardous substances or petroleum products were observed during the site reconnaissance. No indications of dumping, stained soils, or vegetative stress suggestive of the past release of hazardous materials were observed on the subject site.

STORAGE TANKS

No evidence of current or former underground storage tanks (USTs) such as access plates, vents, or dispenser islands was observed on the subject site. No evidence of aboveground storage tanks (ASTs) was observed on the subject site. A search of the available Los Angeles County records did not find evidence of current or former tanks at the site.

POLYCHLORINATED BIPHENYLS (PCBS)

No suspect PCB-containing equipment was observed on the subject site.

WASTES

No wastes are currently being generated at the subject site.

WELLS

RTF&A did not observe evidence of water production or other types of wells on the subject site during the site reconnaissance.

ADJACENT PROPERTIES

Adjacent to the subject site to the north is undeveloped land. Adjacent to the subject site to the east is an unpaved road (Clanfield Street), beyond which is undeveloped land. Adjacent to the subject site to the south is Sierra Highway, across which is Crown Valley Building Supply (3536 Sierra Highway). Adjacent to the subject site to the west are a rural residence and undeveloped former agricultural land (3635 Sierra Highway). No obvious environmental concerns were observed on the adjacent properties.

SITE HISTORY

The historic land use of the site and its surrounding area has been reviewed from readily available information that includes historical maps, aerial photographs, and building department records. RTF&A's findings regarding former site uses by source are presented below.

AERIAL PHOTOGRAPHS

RTF&A reviewed aerial photographs provided by EDR (see Appendix F). A summary of the aerial photographs reviewed, and the scales, are presented in Table 1 at the end of this section.

The 1928 aerial photograph depicts most of the subject site (as part of a much larger area) being dry-farmed with grasses or grain except for the northeastern corner, which is undeveloped. The 1954 photo shows the site vacant and fallow. The adjacent

properties to the south, beyond Sierra Highway, and the west are under cultivation. No farmhouse is present to the west.

The 1968 and 1989 aerial photographs also indicate that the nearby residence was being used for minimal cultivation, but the subject site appears mostly fallow. The adjacent properties to the south, beyond Sierra Highway, and the west also appear to be vacant and unused for cultivation. Farther to the south, State Highway 14 has now been built.

The 1994, 2002, and 2005 aerial photographs depict the subject site and adjacent properties essentially as they are currently.

TABLE 1

AERIAL PHOTOS REVIEWED

Date	Approximate Scale	Photograph Flyer
2005	1" = 484'	EDR
2002	1" = 666'	USGS
1994	1" = 666'	USGS
1989	1" = 666'	USGS
1968	1" = 666'	Teledyne
1954	1" = 555'	Pacific Air
1928	1" = 500'	Fairchild

SANBORN FIRE INSURANCE MAPS

A search for Sanborn Maps depicting the subject site was conducted by EDR (see Appendix D). Sanborn Maps depict lots and streets, and often provide information about the nature of businesses present on a property at the time of the map's publication. EDR indicated that the area was unmapped.

HISTORICAL TOPOGRAPHIC MAPS

RTF&A reviewed historical topographic maps provided by EDR. Topographic maps were reviewed for the years 1947, 1959, 1974, 1994, and 1995 (see Appendix E). Each of the map editions shows the site as vacant land. The only item of note was a mine symbol on the 1947 map, which, if precisely located, is a short distance off-site to the north.

CITY DIRECTORIES

RTF&A reviewed a historical city directory abstract prepared by EDR. EDR searched city directories dated 1972, 1981, 1989, 2000, and 2007. The subject site was not listed in any of the city directories searched by EDR. One of the adjacent properties, Crown Valley Building Supplies, located at 3536 Sierra Highway, was listed in the 2007 directory only. A copy of the EDR City Directory Abstract is included in Appendix G.

ENVIRONMENTAL QUESTIONNAIRE

RTF&A interviewed Mr. John Brevidoro, the current owner of the site, for the purpose of completing an environmental questionnaire regarding current and

historical conditions of environmental concern at the subject site. Mr. Brevidoro did not report current or historical conditions of environmental concern at the subject site. A copy of the completed environmental questionnaire is included in Appendix B.

CALIFORNIA DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

No oil wells were observed on the site. According to California Division of Oil and Gas and Geothermal Resources (DOGGR) wildcat map W1-1, no oil and gas wells are located on the subject site. No exploratory wells are located within one mile of the subject site.

PROPERTY TAX RECORDS

RTF&A reviewed information regarding prior ownership of the subject site at the Los Angeles County Assessor's office. The current owner was identified as Brevidoro Family Partnership, which owned the subject site since at least 2005. No owners prior to 2005 were listed.

BUILDING DEPARTMENT RECORDS

Based on aerial photograph coverage, it appears that no structures have been located on the subject site since at least 1928. Accordingly, RTF&A did not attempt to review building permit records at the Los Angeles County Building Department.

PRIOR REPORTS

RTF&A was not provided with previous environmental reports pertaining to the subject site. RTF&A is not aware of the existence of such reports.

REGULATORY DATABASE RECORDS

RTF&A reviewed a regulatory database report prepared by EDR for information regarding properties with known or suspected releases of hazardous materials located on or near the subject site. A copy of the EDR regulatory database report is included in Appendix A.

FEDERAL RECORDS

The subject site was not listed on the federal databases searched by EDR for this assessment. None of the federal databases searched for this ESA had listed sites within their respective search radii as recommended by the American Society for Testing and Materials (ASTM) Standard E 1527-05.

STATE AND TRIBAL RECORDS

The subject site was not listed on any of the state or tribal databases searched for this assessment. EDR reported four leaking underground storage tank (LUST) sites (one of which may be a duplicated listing) within one-half mile of the subject site. None of the sites are adjacent or upgradient. Accordingly, none of the LUST sites are considered be an environmental concern to the subject site.

UNMAPPED SITES

EDR listed 11 sites as unmapped (as they did not appear on the map of the search) due to a lack of information and/or a lack of a complete address. The sites were listed in various databases. None of the unmapped sites were observed to be near the subject site nor considered to be on the site.

LOCAL RECORDS

Los Angeles County Department of Public Works (LACDPW): According to a case file listing reviewed by RTF&A, the LACDPW has no files for the subject site address.

California EPA, Department of Toxic Substances Control (DTSC): According to the DTSC website, http://www.envirostor.dtsc.ca.gov/public, the DTSC has no case file either for the subject site or nearby properties.

South Coast Air Quality Management District (SCAQMD): According to the SCAQMD website, http://www.aqmd.gov, the SCAQMD has no record of specially permitted equipment pertaining to the subject site.

Regional Water Quality Control Board (RWQCB): According to the SWRCB geotracker website, http://geotracker.swrcb.ca.gov, the SWRCB has no record of LUST or SLIC sites on the subject site or adjacent properties.

Public Health Investigation (PHI): RTF&A submitted a file review request regarding hazardous materials permitting, inspections, and reported incidents of dumping, if any. The PHI responded to RTF&A's request indicating that no records were found. Their response is in Appendix C, Miscellaneous Research Materials.

ENVIRONMENTAL LIENS

RTF&A was not contracted to conduct a search for environmental liens or activity and use limitations (AULs) at the subject site, nor was RTF&A provided with the results of such a search by the User of the report. Because the site is undergoing a property transfer, a title report is likely being conducted and should disclose any such liens. The absence of a lien and AUL search is considered to be a data gap; however, based on the current and historical agricultural uses, the data gap is not considered to be significant. The EDR database report did not report the subject site as being listed on any federal, state or tribal environmental lien databases.

SUMMARY OF FINDINGS

GENERAL

The subject site is undeveloped, and was formerly agricultural land. The gently-sloping topography is characterized by grasses, weeds, shrubs and trees. The subject site is a portion of a large residential lot containing a single-family residence. The house is located west-northwest of the subject property. No chemicals were observed being used or stored on the subject site. No stains or other indications of hazardous materials spills or dumping were observed. According to aerial photographs, the subject site was used for agriculture in the past. Based on aerial photographs, it appears that farming consisted of dry farming for grain/grasses. The current owner indicated he was not aware of any historical farming, and it is possible that the lot is covered with weeds, rather than grsses. The absence of an irrigation system indicate minimal farming (other than dry farming) likely occurred at the site.

Accordingly, although it is possible that pesticides and herbicides have been used on the subject site in the past, they were rarely used in conjunction with dry farming of grasses.

The subject site was not listed on any of the federal, state, or tribal databases searched for this assessment. The EDR report identified four LUST sites within one-half mile of the subject site. Based on distance, location with respect to the inferred groundwater gradient, medium affected, and/or regulatory status, none of the nearby sites are considered likely to have had an adverse environmental impact to the subject site.

DATA CONSIDERATIONS

SIGNIFICANT ASSUMPTIONS

None of the assumptions made for this assessment were considered to have a significant impact on the conclusions of this report.

SIGNIFICANT DATA GAPS

None of the data gaps identified during this ESA were considered to have a significant impact on the conclusions of this report.

CONCLUSIONS

The search of government records and historical items did not reveal evidence that hazardous materials related to current or former activity on, or near, the site

could have significantly impacted the soil or groundwater at the subject site. Therefore, it is our opinion that there are no RECs at the subject site.

RECOMMENDATIONS

Based on the information reviewed for this ESA, RTF&A does not recommend additional assessment of the subject site at this time.

LIMITATIONS

The purpose of this report was to meet one of the requirements for an innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This report did not evaluate "business environmental risk." The conclusions and recommendations presented in this report are based on the material presented herein, which are commonly known or reasonably ascertainable information about the property, and are intended only for the purpose stated.

This report is intended for the sole use of RP Development Services. Any other parties that wish to use this report to identify recognized environmental conditions in the process of making appropriate inquiry into the site or surrounding properties shall provide a written request to RTF&A for authorization to use the report. On the basis of the intended use of the report, RTF&A may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements will release RTF&A from any liability resulting from the use of this report by any unauthorized party.

To perform this ESA, RTF&A relied on others, including the User/Client, to provide information. RTF&A assumes that this information is accurate. However, if it is not, or if there are data gaps, there may be RECs that go undetected by us. In such cases, we are not responsible for the data gaps or undetected RECs.

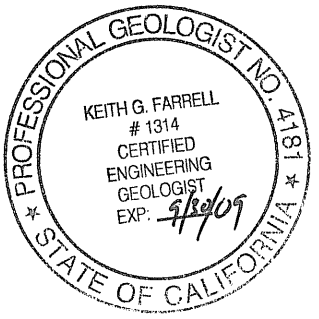
We make no warranties or guarantees as to the accuracy or completeness of information obtained, provided, or compiled by others. It is possible that information exists beyond the limited scope of this report. Additional information that was not found or available to us at the time of the writing of this report may result in a modification of the conclusions and recommendations presented. This report presents our opinion of the overall environmental conditions as of the date of this report and is not a legal opinion.

If you would like to discuss any aspect of this report or project, please do not hesitate to contact this office. The following are attached and complete this report:

- References
- Site Location Map - Figure 1
- Site Photographs - Figures 2.1 to 2.4
- Appendix A - Environmental Data Resources, Inc. Regulatory Database Report
- Appendix B - Environmental Site Assessment Questionnaire
- Appendix C - Miscellaneous Research Materials
- Appendix D - Environmental Data Resources, Inc., Sanborn® Map Report
- Appendix E - Environmental Data Resources, Inc. Historical Topographic Map Report
- Appendix F - Environmental Data Resources, Inc. Aerial Photo Decade Package Report
- Appendix G - Environmental Data Resources, Inc. City Directory Abstract

Respectfully submitted,

R. T. FRANKIAN & ASSOCIATES



Keith G. Farrell
Principal Engineering Geologist and
Environmental Professional

RT&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

REFERENCES

California, State of, Division of Oil and Gas, Wildcat Map w1-1.

California, State of, Environmental Protection Agency, Department of Toxic Substances Control, Envirostor website, http://www.envirostor.dtsc.ca.gov/public.

Environmental Data Resources, Inc., Radius Map with Geocheck Report, Inquiry No. 2430170.2s, February 26, 2009.

Environmental Data Resources, Inc., Aerial Photograph Decade Package, Inquiry No. 2430170.2s, February 26, 2009.

Environmental Data Resources, Inc., Sanborn Map, Inquiry No. 2430170.2s, February 26, 2009.

Environmental Data Resources, Inc., Historical Topographic Map Package, Inquiry No. 2430170.2s, February 26, 2009.

Environmental Data Resources, Inc., City Directory Abstract, Inquiry No. 2430170.2s, February 26, 2009.

Los Angeles, County Assessor, property tax records review.

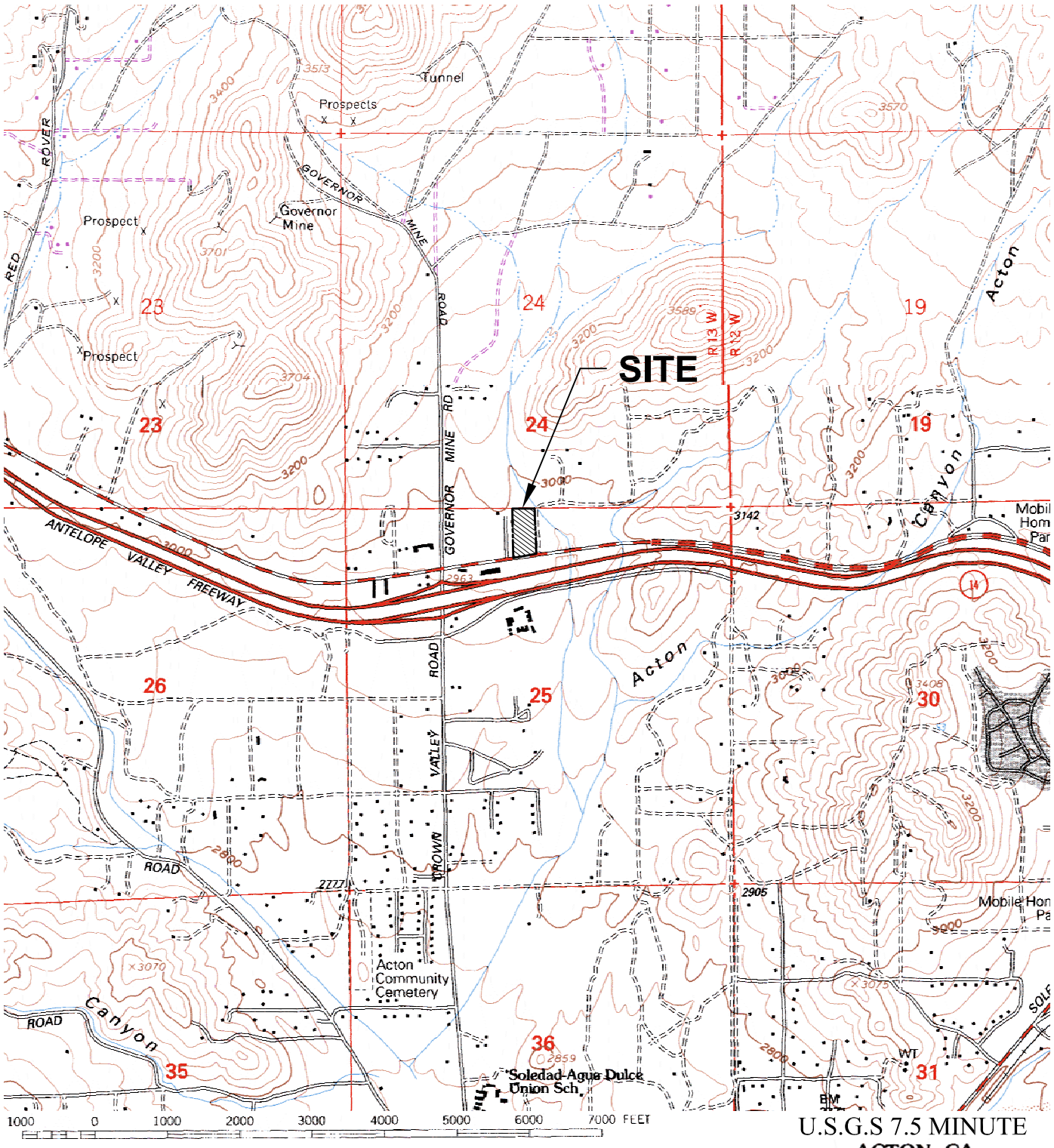
Los Angeles, County Department of Public Works, records review.

Los Angeles, County Public Health Investigation, facsimile communication (323) 728-0217.

Regional Water Quality Control Board, website, http://geotracker.swrcb.ca.gov.

South Coast Air Quality Management District, website, http://www.aqmd.gov.

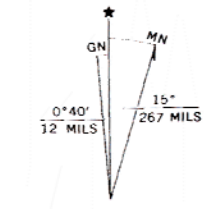
United States Geological Survey, Topographic Map, Acton, California Quadrangle, 1959, photorevised 1974.



Site Location Map

RP Development Services

Fire Station 142
Sierra Highway
Acton, California



UTM GRID AND 1974 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S.G.S 7.5 MINUTE
ACTON, CA
1995
NIMA 2352 I NW - SERIES V895

RITTER RIDGE, CALIF.
1958
PHOTOREVISED 1974
AMS 2353 II SW - SERIES V895

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C:\Documents and Settings\Mohammed\My Documents\DRAFTING\Jobs\2009\2009-002\04-15-09\location map.dwg, Letter

PHOTOS

Proposed Fire Station 142
Acton, California
Job No. 2009.002.051

Figure 2.1 – Overview of site looking north

Figure 2.2 - Eastern edge of parcel, looking north.

Figure 2.3 - Adjacent vacant land west of site and residence driveway (looking east-northeast at subject site in distance)

Figure 2.4 - Adjacent land looking south includes Sierra Highway and a Building Supply store south of Sierra Highway.

RP Development Services
April 15, 2009
2009-002-51

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC.

REGULATORY DATABASE REPORT

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

Proposed Fire Station 142
Sierra Highway at Clanfield Street
Acton, CA 93510

Inquiry Number: 2430170.2s
February 26, 2009

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SIERRA HIGHWAY AT CLANFIELD STREET
ACTON, CA 93510

COORDINATES

Latitude (North):	34.493700 - 34° 29' 37.3''
Longitude (West):	118.194100 - 118° 11' 38.8''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	390364.1
UTM Y (Meters):	3817349.8
Elevation:	2971 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34118-D2 ACTON, CA
Most Recent Revision:	1994
North Map:	34118-E2 RITTER RIDGE, CA
Most Recent Revision:	1974

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2005

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Transporters, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State- and tribal - equivalent CERCLIS

AOCONCERN ---------- San Gabriel Valley Areas of Concern
ENVIROSTOR ---------- EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

SLIC ---------- Statewide SLIC Cases
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST ---- Active UST Facilities
AST ---- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing
VCP ---- Voluntary Cleanup Program Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---- Clandestine Drug Labs
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
Toxic Pits ---- Toxic Pits Cleanup Act Sites
AOCONCERN ---- San Gabriel Valley Areas of Concern
CDL ---- Clandestine Drug Labs

Local Lists of Registered Storage Tanks

CA FID UST ---- Facility Inventory Database
HIST UST ---- Hazardous Substance Storage Container Database
SWEEPS UST ---- SWEEPS UST Listing

Local Land Records

LIENS 2 ---- CERCLA Lien Information
LUCIS ---- Land Use Control Information System
LIENS ---- Environmental Liens Listing
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing

MCS ---------- Military Cleanup Sites Listing

Other Ascertainable Records

RCRA-NonGen ---------- RCRA - Non Generators
DOT OPS ---------- Incident and Accident Data
DOD ---------- Department of Defense Sites
FUDS ---------- Formerly Used Defense Sites
CONSENT ---------- Superfund (CERCLA) Consent Decrees
ROD ---------- Records Of Decision
UMTRA ---------- Uranium Mill Tailings Sites
MINES ---------- Mines Master Index File
TRIS ---------- Toxic Chemical Release Inventory System
TSCA ---------- Toxic Substances Control Act
FTTS ---------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---------- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---------- Section 7 Tracking Systems
ICIS ---------- Integrated Compliance Information System
PADS ---------- PCB Activity Database System
MLTS ---------- Material Licensing Tracking System
RADINFO ---------- Radiation Information Database
FINDS ---------- Facility Index System/Facility Registry System
RAATS ---------- RCRA Administrative Action Tracking System
CA BOND EXP. PLAN ---------- Bond Expenditure Plan
CA WDS ---------- Waste Discharge System
Notify 65 ---------- Proposition 65 Records
LA Co. Site Mitigation ---------- Site Mitigation List
DRYCLEANERS ---------- Cleaner Facilities
LOS ANGELES CO. HMS ---------- HMS: Street Number List
WIP ---------- Well Investigation Program Case List
HAZNET ---------- Facility and Manifest Data
EMI ---------- Emissions Inventory Data
INDIAN RESERV ---------- Indian Reservations
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants ---------- EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations ---------- EDR Proprietary Historic Gas Stations
EDR Historical Cleaners ---------- EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/06/2009 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL	***3013 SIERRA HWY W***	***E 1/4 - 1/2 (0.495 mi.)***	***4***	***11***
Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BP WEST COAST PRODUCTS LLC 054	***33488 CROWN VALLEY PKWY***	***SW 1/4 - 1/2 (0.308 mi.)***	***A1***	***7***
Status: Open - Site Assessment				
ARCO #5495	33485 CROWN VALLEY PKWY	SW 1/4 - 1/2 (0.317 mi.)	A2	8
TOSCO S.S. #0781	***3807 SIERRA HWY W***	***W 1/4 - 1/2 (0.390 mi.)***	***3***	***10***
Status: Open - Site Assessment				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL	***3013 SIERRA HWY W***	***E 1/4 - 1/2 (0.495 mi.)***	***4***	***11***

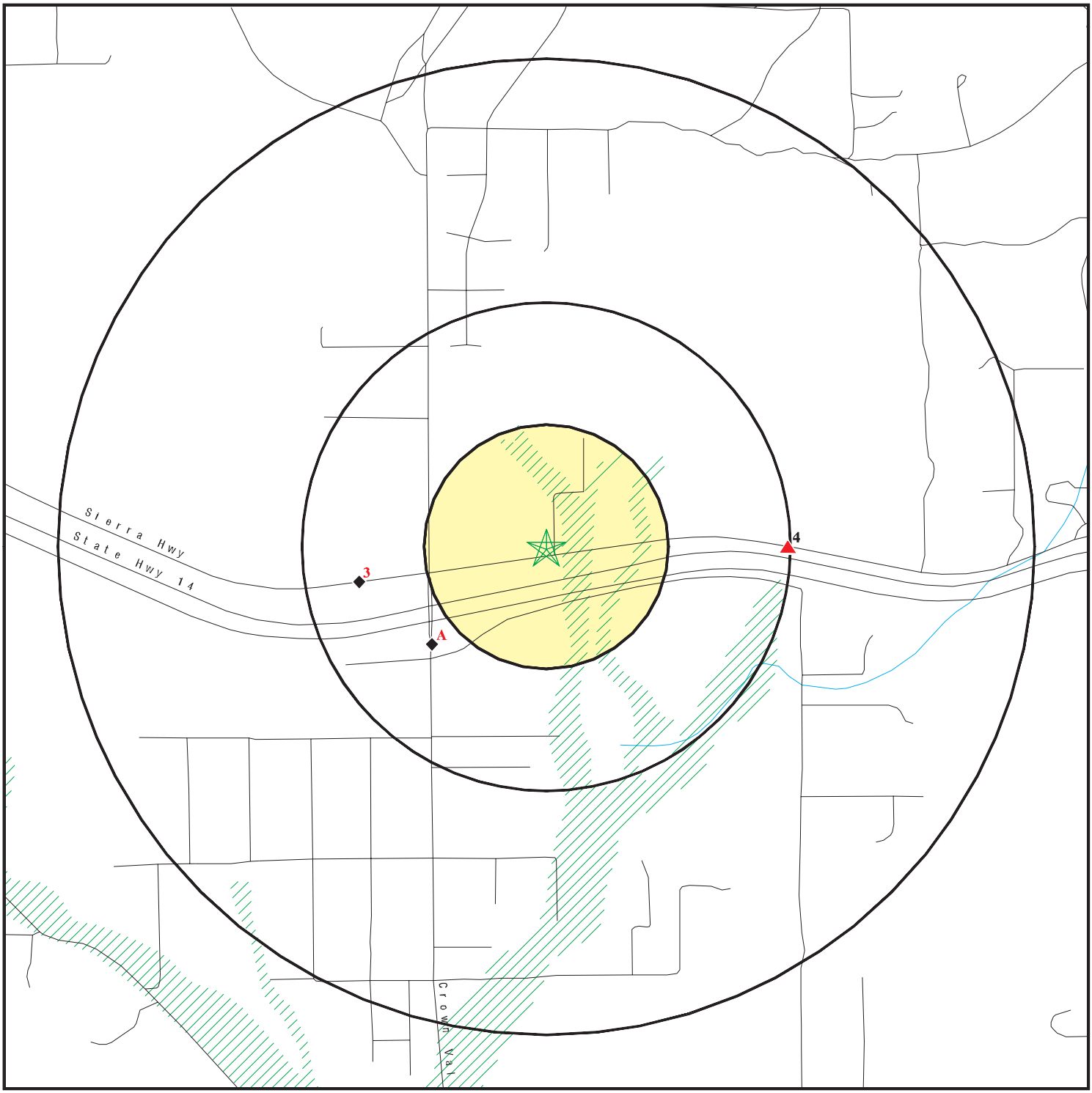
Lower Elevation	Address	Direction / Distance	Map ID	Page
TOSCO S.S. #0781	***3807 SIERRA HWY W***	***W 1/4 - 1/2 (0.390 mi.)***	***3***	***10***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
1X MCKESSON DRUG CO	HAZNET, LUST, CHMIRS
RON REITENBACH	HIST UST
CAMP ACTION	HIST UST
LA COUNTY FIRE DEPT STATION 80	AST
LOS ANGELES COUNTY FIRE DEPT	HAZNET
LOS ANGELES COUNTY FIRE DEPARTMENT	HAZNET
SHELL SERVICE STATION	RCRA-SQG, FINDS, HAZNET
LOS ANGELES COUNTY FIRE DEPARTMENT	HAZNET
LOS ANGELES COUNTY FIRE DEPT	HAZNET
AMER TELE & TELE COMPANY SANDY	FINDS, RCRA-NonGen
ANTELOPE VALLEY FREEWAY SPILL	SLIC

OVERVIEW MAP - 2430170.2s



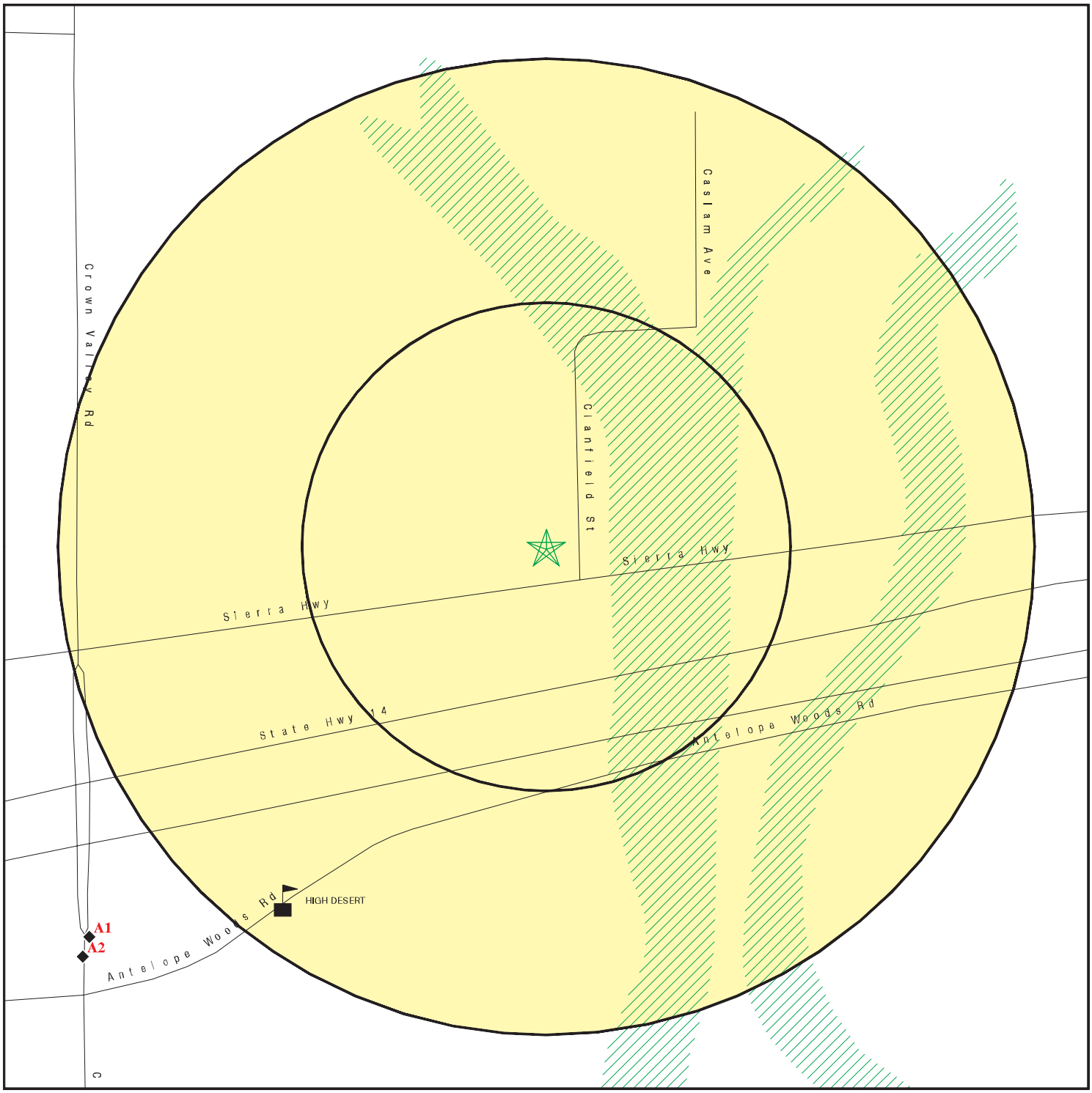
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Proposed Fire Station 142	CLIENT:	R. T. Frankian & Associates
ADDRESS:	Sierra Highway at Clanfield Street Acton CA 93510	CONTACT:	Keith Farrell
LAT/LONG:	34.4937 / 118.1941	INQUIRY #:	2430170.2s
		DATE:	February 26, 2009 4:15 pm

For use with report dated 04/15/2009; RTF job number 2009-002-51

DETAIL MAP - 2430170.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Proposed Fire Station 142	CLIENT:	R. T. Frankian & Associates
ADDRESS:	Sierra Highway at Clanfield Street Acton CA 93510	CONTACT:	Keith Farrell
LAT/LONG:	34.4937 / 118.1941	INQUIRY #:	2430170.2s
		DATE:	February 26, 2009 4:16 pm

For use with report dated 04/15/2009; RTF job number 2009-002-51

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	0	NR	NR	NR	0
RCRA-CESQG		0.250	0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE		1.000	0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
AOCONCERN		1.000	0	0	0	0	NR	0
ENVIROSTOR		1.000	0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	0	0	4	NR	NR	4
SLIC		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST		0.500	0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST		0.250	0	0	NR	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
HAULERS		TP	NR	NR	NR	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
HIST Cal-Sites		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
AOCONCERN		1.000	0	0	0	0	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
LIENS		TP	NR	NR	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
CHMIRS		TP	NR	NR	NR	NR	NR	0
LDS		TP	NR	NR	NR	NR	NR	0
MCS		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA-NonGen		0.250	0	0	NR	NR	NR	0
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN		1.000	0	0	0	0	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
Cortese		0.500	0	0	2	NR	NR	2
Notify 65		1.000	0	0	0	0	NR	0
LA Co. Site Mitigation		TP	NR	NR	NR	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
LOS ANGELES CO. HMS		TP	NR	NR	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
HAZNET		TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
SW
1/4-1/2
0.308 mi.
1626 ft.

BP WEST COAST PRODUCTS LLC 05495
33488 CROWN VALLEY PKWY
ACTON, CA 93510

Site 1 of 2 in cluster A

HAZNET
LUST

S105722769
N/A

Relative:
Lower

Actual:
2928 ft.

HAZNET:

Gepaid:	CAR000100701
Contact:	JACK OMAN WASTE SPECIALIST
Telephone:	7146703958
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 80249
Mailing City,St,Zip:	RCHO STA MARG, CA 926880000
Gen County:	Los Angeles
TSD EPA ID:	CAD008302903
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	0.31
Facility County:	Not reported

Gepaid:	CAL000082590
Contact:	CARLOS RODRIGUEZ
Telephone:	7146705402
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 6038
Mailing City,St,Zip:	ARTESIA, CA 907026038
Gen County:	Los Angeles
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	0.17
Facility County:	Not reported

Gepaid:	CAL000082590
Contact:	CARLOS RODRIGUEZ
Telephone:	7146705402
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 6038
Mailing City,St,Zip:	ARTESIA, CA 907026038
Gen County:	Los Angeles
TSD EPA ID:	Not reported
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Not reported
Tons:	0.17
Facility County:	Not reported

Gepaid:	CAR000100701
Contact:	JACK OMAN WASTE SPECIALIST
Telephone:	7146703958
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 80249
Mailing City,St,Zip:	RCHO STA MARG, CA 926880000

BP WEST COAST PRODUCTS LLC 05495 (Continued) **S105722769**

Gen County: Los Angeles
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: 0.06
Facility County: Los Angeles

Gepaid: CAL000225783
Contact: CARLOS RODRIGUEZ
Telephone: 7146705402
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 6038
Mailing City,St,Zip: ARTESIA, CA 907026038
Gen County: Los Angeles
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Tons: 0.20
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
3 additional CA_HAZNET: record(s) in the EDR Site Report.

LUST:
Region: STATE
Global Id: T0603792973
Latitude: 34.4916
Longitude: -118.1981
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 1999-09-02 00:00:00
Lead Agency: LOS ANGELES COUNTY
Case Worker: Not reported
Local Agency: LOS ANGELES COUNTY
RB Case Number: R-13969
LOC Case Number: 9202-13969
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminats of Concern: Gasoline
Site History: Not reported

A2 **ARCO #5495** **LUST** **S104539659**
SW **33485 CROWN VALLEY PKWY** **N/A**
1/4-1/2 **ACTON, CA 93510**
0.317 mi.
1674 ft. **Site 2 of 2 in cluster A**

Relative:
Lower

Actual:
2924 ft.

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
facid: R-13969
Status: Preliminary site assessment underway
Substance: Gasoline

ARCO #5495 (Continued) **S104539659**

Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		OT
Global ID:	T0603792973	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	HWY. 14	
Enforcement Type:	Not reported	
Date Leak Discovered:	8/24/1999	
Date Leak First Reported:		9/2/1999
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		9/2/1999
Date the Case was Closed:		Not reported
How Leak Discovered:	Nuisance Conditions	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	PRESTIGE STATIONS	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		6811.936051308144609960207435 8
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		9/2/1999
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	ARCO	
RP Address:	P.O. BOX 6038, ARTESIA, CA 90623	
Program:	LUST	
Lat/Long:	34.4916 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

3 **TOSCO S.S. #0781** **LUST** **S103282018**
West **3807 SIERRA HWY W** **Cortese** **N/A**
1/4-1/2 **ACTON, CA 93510**
0.390 mi.
2057 ft.

Relative:
Lower

Actual:
2956 ft.

LUST:

Region:	STATE
Global Id:	T0603704765
Latitude:	34.492921
Longitude:	-118.1981407
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	1997-09-26 00:00:00
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	Not reported
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	R-07741
LOC Case Number:	7381-24664
File Location:	Regional Board
Potential Media Affect:	Soil
Potential Contaminats of Concern:	Toluene
Site History:	Not reported

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
facid:	R-07741	
Status:	Leak being confirmed	
Substance:	Toluene	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603704765	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	CROWN VALLEY RD	
Enforcement Type:	Not reported	
Date Leak Discovered:	9/26/1997	
Date Leak First Reported:		9/26/1997
Date Leak Record Entered:	3/5/1998	
Date Confirmation Began:	9/26/1997	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		1/30/1998
Date the Case was Closed:		Not reported
How Leak Discovered:	Subsurface Monitoring	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7291.339206642520871788850706 3
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported

TOSCO S.S. #0781 (Continued) **S103282018**

Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: TOSCO MARKETING CO
RP Address: P.O. BOX 25376, SANTA ANA, CA 92799
Program: LUST
Lat/Long: 34.492921 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

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4 **PACIFIC BELL** **LUST** **S101295489**
East **3013 SIERRA HWY W** **Cortese** **N/A**
1/4-1/2 **ACTON, CA 93510**
0.495 mi.
2612 ft.

Relative:
Higher

Actual:
3030 ft.

LUST:
Region: STATE
Global Id: T0603704287
Latitude: 34.4934191
Longitude: -118.1829642
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1991-05-20 00:00:00
Lead Agency: LOS ANGELES COUNTY
Case Worker: Not reported
Local Agency: LOS ANGELES COUNTY
RB Case Number: I-15304
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminats of Concern: Diesel
Site History: Not reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
facid: I-15304
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported

PACIFIC BELL (Continued) **S101295489**

Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603704287	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	FREEWAY 14	
Enforcement Type:	Not reported	
Date Leak Discovered:	1/2/1990	
Date Leak First Reported:		11/2/1990
Date Leak Record Entered:	4/19/1990	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	1/2/1990	
Date Case Last Changed on Database:		4/20/1990
Date the Case was Closed:		5/20/1991
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	PETTIGREW, JACK	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		8292.844119671558549738141618
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	PACIFIC BELL	
RP Address:	177 COLORADO BLVD., E., PASADENA, 91107	
Program:	LUST	
Lat/Long:	34.4934191 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	OLD CASE #042090-07	

Cortese:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	I-15304

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
"	U001586290	RON REITENBACH	"	93510	HIST UST
ACTION	S103679987	LOS ANGELES COUNTY FIRE DEPT	STATION 090	93510	HAZNET
ACTON	U001562230	CAMP ACTION	29304 ARRASTRE ROAD	93510	HIST UST
ACTON	S106483747	ANTELOPE VALLEY FREEWAY SPILL	7600 BLOCK ESCONDIDO CANYON RD	93510	SLIC
ACTON	1000351968	AMER TELE & TELE COMPANY SANDY	10.5 MILES NW OF ACTON	93510	FINDS, RCRA-NonGen
ACTON	S107149747	LOS ANGELES COUNTY FIRE DEPARTMENT	1533 W SIERRA HWY-STATION 80	93510	HAZNET
ACTON	1006805314	SHELL SERVICE STATION	3820 W SIERRA	93510	RCRA-SQG, FINDS, HAZNET
ACTON	S107149734	LOS ANGELES COUNTY FIRE DEPARTMENT	8800 W SOLEDAD CYN RD-CAMP 11	93510	HAZNET
ACTON	S103674992	LOS ANGELES COUNTY FIRE DEPT	8800 W SOLEDAD CYN RDC-11	93510	HAZNET
ACTON	A100306955	LA COUNTY FIRE DEPT STATION 80	1533 W WIERRA HWY	93510	AST
LOS ANGELES COUNTY	S105642458	1X MCKESSON DRUG CO	2		HAZNET, LUST, CHMIRS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/29/2008
Date Data Arrived at EDR: 10/10/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 40

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/29/2008
Date Data Arrived at EDR: 10/10/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 40

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/29/2008
Date Data Arrived at EDR: 10/10/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 40

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/07/2008
Date Data Arrived at EDR: 10/16/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 53

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/03/2007
Date Data Arrived at EDR: 12/06/2007
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 76

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/11/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/06/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/06/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 01/23/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 54

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 62

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 62

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/01/2008
Date Data Arrived at EDR: 12/09/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 49

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 12/09/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 02/02/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 19

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 12/23/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 19

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2008
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/18/2008
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 12/02/2008
Date Data Arrived at EDR: 12/04/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 19

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2008
Date Data Arrived at EDR: 10/10/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 6

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/06/2008
Date Data Arrived at EDR: 10/09/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 41

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 27

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/03/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 20

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 11/01/2007
Date Data Arrived at EDR: 11/27/2007
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 03/12/2008
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 6

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/06/2008
Date Data Arrived at EDR: 10/09/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 41

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 27

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 06/01/2007
Date Data Arrived at EDR: 06/14/2007
Date Made Active in Reports: 07/05/2007
Number of Days to Update: 21

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 12/01/2008
Date Data Arrived at EDR: 12/04/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 19

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/18/2008
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/05/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 27

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 62

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2008
Date Data Arrived at EDR: 11/14/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 02/10/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 03/25/2008
Date Data Arrived at EDR: 04/17/2008
Date Made Active in Reports: 05/15/2008
Number of Days to Update: 28

Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 19

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 12/22/2008
Date Data Arrived at EDR: 12/22/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 36
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 10/31/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 53
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 10/31/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/25/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 09/30/2008
Date Data Arrived at EDR: 10/06/2008
Date Made Active in Reports: 10/13/2008
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/17/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/29/2008
Date Data Arrived at EDR: 12/29/2008
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 32

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Varies

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/19/2008
Date Data Arrived at EDR: 08/29/2008
Date Made Active in Reports: 09/09/2008
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 12/08/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/06/2008
Date Data Arrived at EDR: 11/07/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/02/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/30/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/30/2009
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/30/2008
Date Data Arrived at EDR: 10/16/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 34

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 05/09/2008
Date Made Active in Reports: 06/20/2008
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 19

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 19

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008
Date Data Arrived at EDR: 05/28/2008
Date Made Active in Reports: 08/08/2008
Number of Days to Update: 72

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/24/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 02/06/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/05/2008
Date Made Active in Reports: 09/23/2008
Number of Days to Update: 18

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/15/2008
Date Data Arrived at EDR: 10/22/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 62

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/21/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 55

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 07/13/2007
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/07/2008
Date Data Arrived at EDR: 09/23/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 23

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/23/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/19/2008
Next Scheduled EDR Contact: 12/15/2008
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 02/18/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/08/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 52

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 12/15/2008
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 10/08/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 52

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 12/15/2008
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 12/04/2008
Next Scheduled EDR Contact: 01/12/2009
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/31/2008
Date Data Arrived at EDR: 08/13/2008
Date Made Active in Reports: 09/09/2008
Number of Days to Update: 27
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/04/2007
Date Data Arrived at EDR: 02/07/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 39
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 02/02/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/03/2008
Date Data Arrived at EDR: 10/15/2008
Date Made Active in Reports: 11/19/2008
Number of Days to Update: 35
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/28/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 12/08/2008
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/30/2008
Date Data Arrived at EDR: 10/31/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 53

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/06/2007
Date Made Active in Reports: 04/13/2007
Number of Days to Update: 38

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/19/2009
Next Scheduled EDR Contact: 06/08/2009
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 12/15/2008
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 05/29/2001
Date Made Active in Reports: 07/26/2001
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/23/2008
Date Data Arrived at EDR: 09/24/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 5

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/11/2009
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/31/2008
Date Data Arrived at EDR: 11/03/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 23

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 01/23/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 10/04/2007
Date Made Active in Reports: 11/07/2007
Number of Days to Update: 34

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 02/17/2009
Next Scheduled EDR Contact: 05/04/2008
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 10/16/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 41

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 01/16/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 02/06/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 09/10/2008
Date Made Active in Reports: 09/23/2008
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 02/06/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: N/A

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/28/2008
Date Data Arrived at EDR: 10/30/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/28/2008
Date Data Arrived at EDR: 10/30/2008
Date Made Active in Reports: 12/05/2008
Number of Days to Update: 36

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/24/2008
Date Data Arrived at EDR: 11/25/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 63

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2009
Date Data Arrived at EDR: 01/15/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 12

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 02/02/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/06/2009
Date Data Arrived at EDR: 01/07/2009
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 23

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 12/15/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/31/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 40

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 11/10/2008
Date Data Arrived at EDR: 11/25/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 63

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 02/11/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/01/2008
Date Data Arrived at EDR: 03/20/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 25

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 12/08/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/14/2008
Date Data Arrived at EDR: 04/10/2008
Date Made Active in Reports: 05/06/2008
Number of Days to Update: 26

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 10/06/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 10

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 12/11/2008
Date Data Arrived at EDR: 12/11/2008
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 50

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/11/2009
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/04/2008
Date Data Arrived at EDR: 08/29/2008
Date Made Active in Reports: 09/15/2008
Number of Days to Update: 17

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 12/02/2008
Date Data Arrived at EDR: 12/16/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 42
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/02/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 12/02/2008
Date Data Arrived at EDR: 12/23/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 35
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/02/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 12/02/2008
Date Data Arrived at EDR: 12/23/2008
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 38
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/23/2007
Date Data Arrived at EDR: 07/23/2007
Date Made Active in Reports: 08/09/2007
Number of Days to Update: 17
Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 02/09/2009
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/06/2008
Date Data Arrived at EDR: 11/17/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 9
Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/25/2008
Date Made Active in Reports: 12/05/2008
Number of Days to Update: 10
Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Contaminated Sites

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 12/02/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 28

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/30/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 01/07/2009
Date Data Arrived at EDR: 01/09/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 18

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/31/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2008
Date Data Arrived at EDR: 12/23/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 11/17/2008
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 11/05/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 28

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 12/30/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/01/2008
Number of Days to Update: 12

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 11/07/2008
Date Data Arrived at EDR: 12/03/2008
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 58

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 11/19/2008
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 7

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 01/06/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 21

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 12/29/2008
Date Data Arrived at EDR: 12/29/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 29
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Varies

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 12/01/2008
Date Data Arrived at EDR: 12/04/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 54
Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 12/01/2008
Next Scheduled EDR Contact: 03/02/2009
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/22/2008
Date Data Arrived at EDR: 10/06/2008
Date Made Active in Reports: 10/13/2008
Number of Days to Update: 7
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/22/2008
Date Data Arrived at EDR: 10/17/2008
Date Made Active in Reports: 12/05/2008
Number of Days to Update: 49
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/22/2008
Next Scheduled EDR Contact: 03/23/2009
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/20/2009
Date Data Arrived at EDR: 01/21/2009
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: 04/19/2009
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 05/04/2007
Date Data Arrived at EDR: 05/04/2007
Date Made Active in Reports: 05/24/2007
Number of Days to Update: 20

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/29/2008
Next Scheduled EDR Contact: 03/30/2009
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/26/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 28

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/10/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2008
Date Data Arrived at EDR: 09/04/2008
Date Made Active in Reports: 09/18/2008
Number of Days to Update: 14

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/16/2009
Next Scheduled EDR Contact: 05/18/2009
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/09/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 12/29/2008
Date Data Arrived at EDR: 01/08/2009
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/08/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 11/13/2008
Date Data Arrived at EDR: 12/03/2008
Date Made Active in Reports: 01/30/2009
Number of Days to Update: 58

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 06/15/2007
Date Made Active in Reports: 08/20/2007
Number of Days to Update: 66

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 12/11/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 09/30/2007
Date Data Arrived at EDR: 12/04/2007
Date Made Active in Reports: 12/31/2007
Number of Days to Update: 27

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 02/20/2009
Next Scheduled EDR Contact: 05/04/2009
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/21/2008
Date Data Arrived at EDR: 11/26/2008
Date Made Active in Reports: 12/11/2008
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/25/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/11/2008
Date Made Active in Reports: 10/02/2008
Number of Days to Update: 21

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/08/2008
Next Scheduled EDR Contact: 03/09/2009
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 10/07/2008
Date Data Arrived at EDR: 10/10/2008
Date Made Active in Reports: 10/28/2008
Number of Days to Update: 18

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 12/15/2008
Next Scheduled EDR Contact: 03/16/2009
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/22/2008
Date Made Active in Reports: 09/08/2008
Number of Days to Update: 17

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 01/05/2009
Next Scheduled EDR Contact: 04/06/2009
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PROPOSED FIRE STATION 142
SIERRA HIGHWAY AT CLANFIELD STREET
ACTON, CA 93510

TARGET PROPERTY COORDINATES

Latitude (North):	34.49370 - 34° 29' 37.3''
Longitude (West):	118.1941 - 118° 11' 38.8''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	390364.1
UTM Y (Meters):	3817349.8
Elevation:	2971 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34118-D2 ACTON, CA
Most Recent Revision:	1994
North Map:	34118-E2 RITTER RIDGE, CA
Most Recent Revision:	1974

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

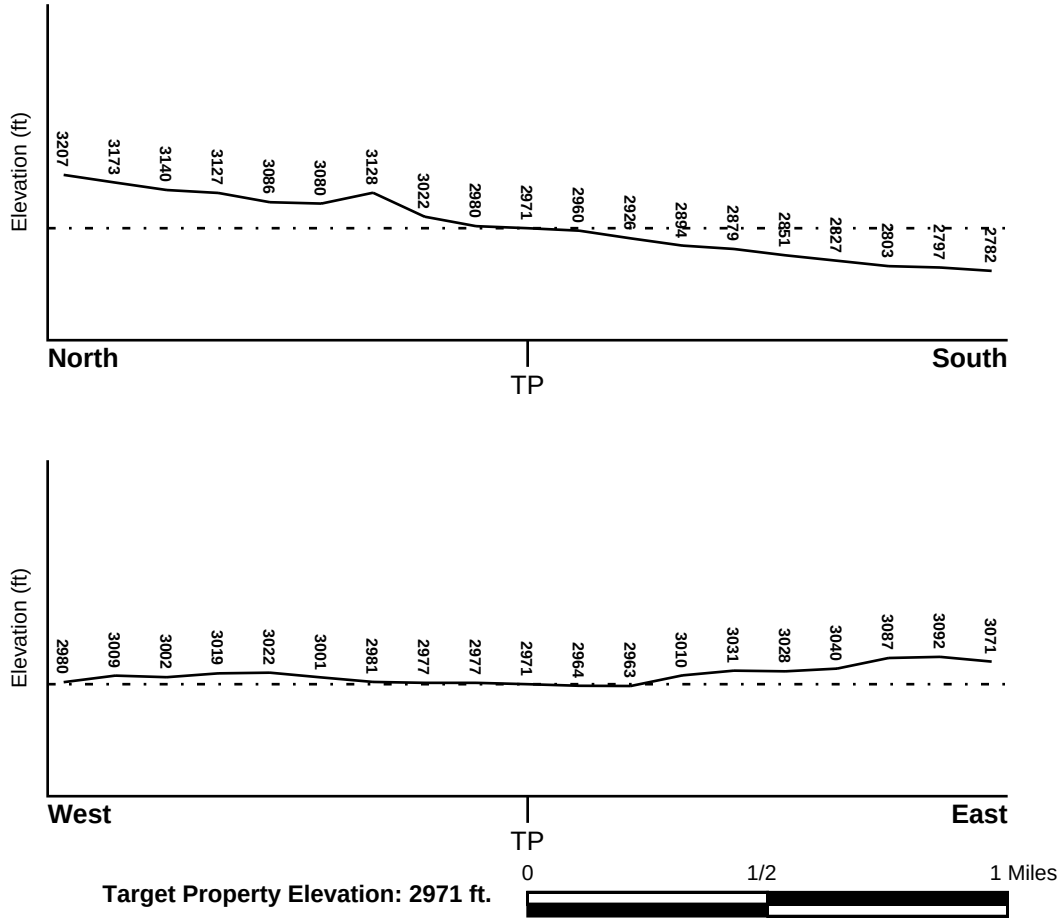
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	0650430380B
Additional Panels in search area:	0650430385B 0650430395B 0650430390B

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ACTON	Not Available

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

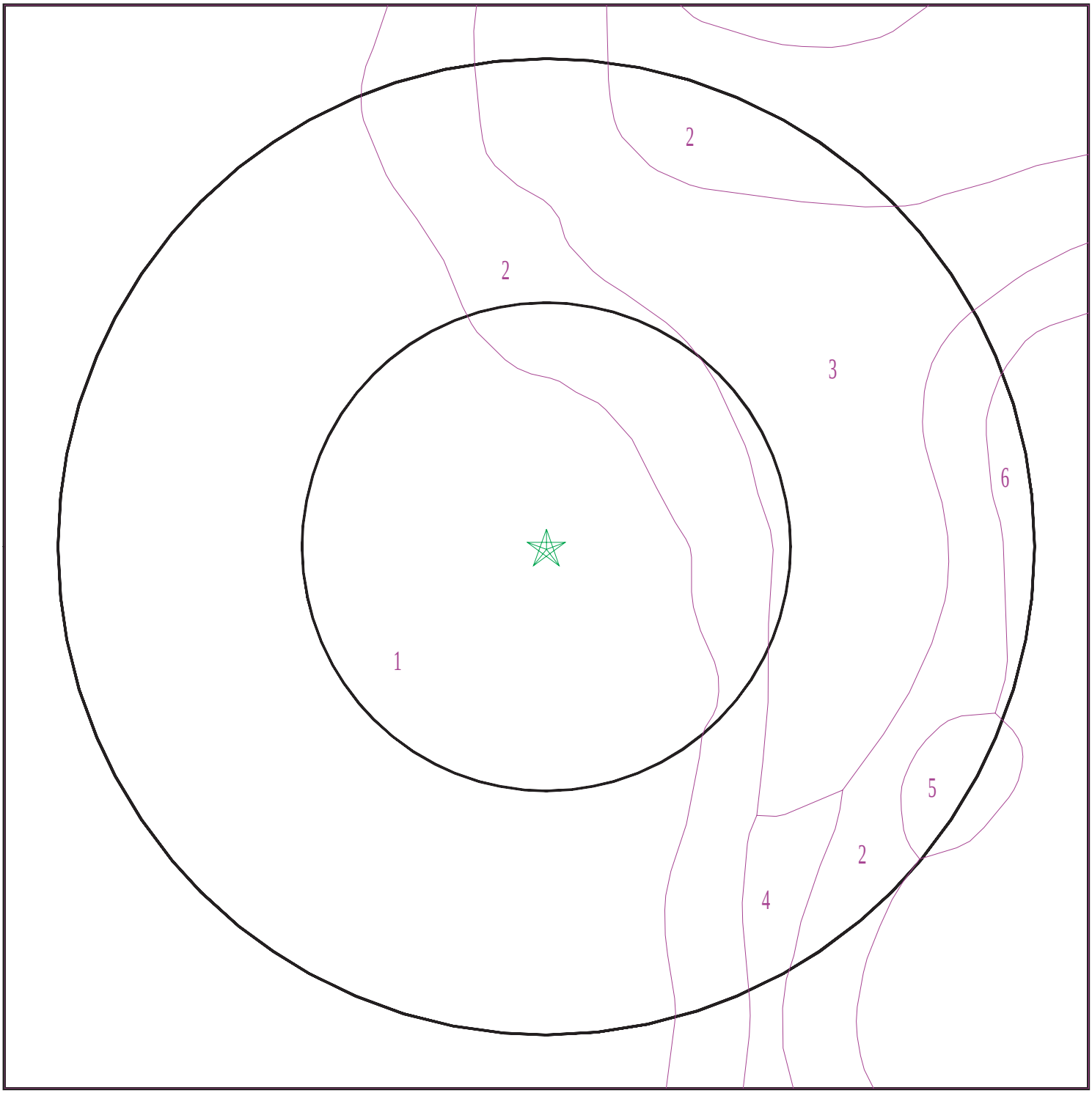
Era:	Paleozoic
System:	Pennsylvanian
Series:	Upper Paleozoic granitic rocks
Code:	Pzg3 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2430170.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Proposed Fire Station 142	CLIENT:	R. T. Frankian & Associates
ADDRESS:	Sierra Highway at Clanfield Street Acton CA 93510	CONTACT:	Keith Farrell
LAT/LONG:	34.4937 / 118.1941	INQUIRY #:	2430170.2s
		DATE:	February 26, 2009 4:16 pm

For use with report dated 04/15/2009; RTF job number 2009-002-51

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Greenfield

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.6
2	20 inches	59 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.6
3	59 inches	79 inches	stratified loamy sand to coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Hanford

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.6
2	7 inches	38 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.6
3	38 inches	70 inches	gravelly coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 3

Soil Component Name: Ramona

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
2	20 inches	31 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	31 inches	90 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1

Soil Map ID: 4

Soil Component Name: Wyman

Soil Surface Texture: gravelly loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	9 inches	55 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 6.6

Soil Map ID: 5

Soil Component Name: Castaic

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0.42	Max: Min:
2	9 inches	38 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0.42	Max: Min:
3	38 inches	42 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 1.4 Min: 0.42	Max: Min:

Soil Map ID: 6

Soil Component Name: Las Posas

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 43 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0 Min: 0	Max: Min:
2	3 inches	24 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0 Min: 0	Max: Min:
3	24 inches	27 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS3160471	1/8 - 1/4 Mile WSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

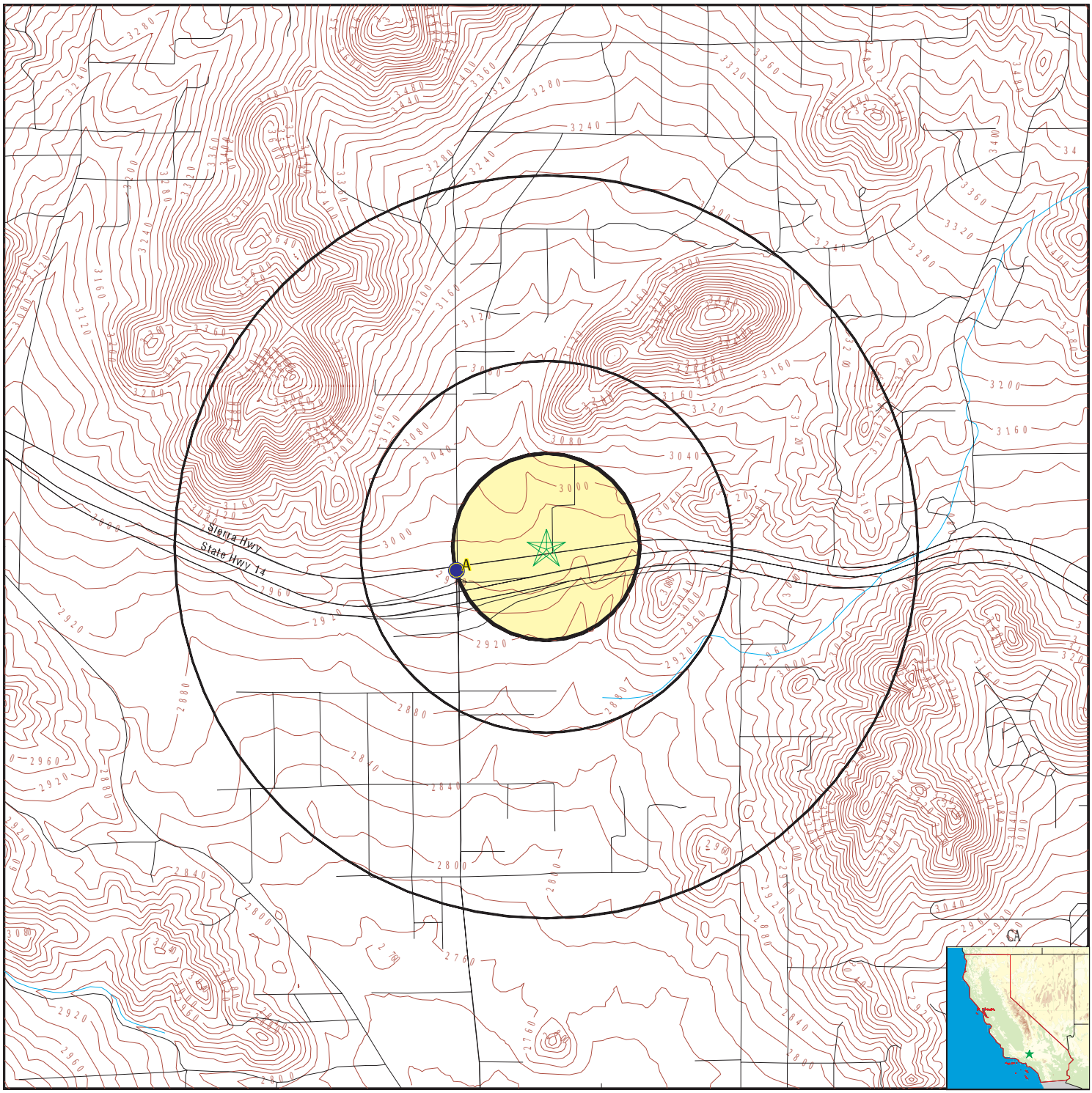
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CADW20000010445	1/4 - 1/2 Mile WSW

PHYSICAL SETTING SOURCE MAP - 2430170.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

N

SITE NAME:	Proposed Fire Station 142	CLIENT:	R. T. Frankian & Associates
ADDRESS:	Sierra Highway at Clanfield Street Acton CA 93510	CONTACT:	Keith Farrell
LAT/LONG:	34.4937 / 118.1941	INQUIRY #:	2430170.2s
		DATE:	February 26, 2009 4:16 pm

For use with report dated 04/15/2009; RTF job number 2009-002-51

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WSW
1/8 - 1/4 Mile
Lower | **FED USGS** | **USGS3160471**

Agency cd:	USGS	Site no:	342934118114901
Site name:	005N013W25C003S		
Latitude:	342934		
Longitude:	1181149	Dec lat:	34.49277081
Dec lon:	-118.19785312	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	037
Country:	US	Land net:	Not Reported
Location map:	ACTON	Map scale:	24000
Altitude:	2961.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Santa Clara. California. Area = 1610 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1965-11-01	Ground water data end date:	2004-03-30
Ground water data count:	31		

Ground-water levels, Number of Measurements: 31

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-03-30	182.78		2003-04-30	181.95	
2003-03-26					
Note: The site was being pumped.					
2002-03-25	180.86		2001-03-14	179.30	
2000-03-27	177.66		1999-03-15	177.18	
1998-03-19	176.62		1997-03-04	173.71	
1996-04-16	173.58		1994-04-15	189.39	
1993-04-24	192.29		1992-04-15	193.90	
1991-03-19	195.63				
Note: The site had been pumped recently.					
1989-03-20	191.66		1988-03-28	190.38	
1987-02-26	188.87		1985-03-27	189.15	
1984-03-06	202.08				
Note: The site had been pumped recently.					
1983-04-12	192.90		1982-02-09	194.95	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1981-04-15	198.19		1980-03-13	202.00	
1979-02-26	203.15		1978-03-28	215.09	
1977-03-07	215.78		1976-02-26	201.92	
1975-02-20	206.91		1974-03-19	202.37	
1965-11-20	202.14		1965-11-01	202.00	

A2
WSW **CA WELLS** **CADW20000010445**
1/4 - 1/2 Mile
Lower

Longitude:	118.1979
Latitude:	34.4928
Stwellno:	05N13W25C003S
Districtco:	3
Welluseco:	Z
Countycode:	19
Gwcode:	604400
Site id:	CADW20000010445

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
93510	3	0	0.00

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

RP Development Services
April 15, 2009
2009-002-51

APPENDIX B

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

RTF&A

GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

PHASE I

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

R. T. Frankian & Associates has been retained to perform a Phase I Environmental Site Assessment (ESA) for the property listed below. A standard part of an ESA is to interview persons with good knowledge of the uses and physical characteristics of the property. It is requested that you answer each of the questions in good faith and to the extent of your knowledge. *Please describe each of your responses with as much detail as possible*. If and when additional space is needed, please use additional pages to complete your answers. (White paper, lined or not, is preferred because it generally faxes better.) Please fax directly to R. T. Frankian & Associates or mail the completed questionnaire.

Note: Per ASTM E 1527-05, in order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user/client must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Job No. 2009 - 002 - 51

Property: portion of home site located at 3635 Sierra Highway Acton, CA

1. Current use of Property: Vacant - portion of home

2. Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25 – Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?: None known

3. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26) – Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?: None known

4. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28) – As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? (For example, are you or have you been involved in the same or related line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?): yes – parents / family owned site for decades

5. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29) – Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present in the property?: Yes – no contamination issues known

6. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30) – Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

a. Do you know the past uses of the property?: yes

b. Do you know specific chemicals that are present or once were present in the property?: generally know that none were used

c. Do you know of spills or other chemical releases that have taken place at the property?: none known

d. Do you know of any environmental cleanups that have taken place at the property?: none known

7. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31) – As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?: none known

8. Was property or adjoining property ever used for any of the following? (If yes to any, please specify and describe which, when, and give all known details.)
Junkyard or Landfill: no
Waste treatment, storage, disposal, or recycling facility: no
Drycleaners: no
Gasoline service station: no
Motor vehicle repair: no
Photo developing laboratory: no
Commercial printing facility: no
Other industrial use: none known

9. Current uses of adjoining properties to the north: vacant / residential

10. Current uses of adjoining properties to the west: vacant

11. Current uses of adjoining properties to the south: Sierra Highway

12. Current uses of adjoining properties to the east: vacant

13. Past use of the Subject Property (Include property ownership and dates if known): vacant / residential

14. Past use of adjoining properties to the north: vacant

15. Past use of adjoining properties to the west: vacant / residential

16. Past use of adjoining properties to the south: Sierra Highway

17. Past use of adjoining properties to the east: vacant

18. Are there currently, or were there previously, any above or underground storage tanks at the property? (If yes, please specify which, when, and give all known details.)
Currently: no
Previously: none known

19. Are there currently, or were there previously, any vent pipes, fill pipes, or access ways at the property that may indicate the presence of underground storage tanks? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

20. Are there currently, or have there previously been, any drums or containers larger than five gallons in volume used or stored at the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

21. Are there currently, or have there previously been, any containers identified as containing hazardous substances or petroleum products used, stored, or disposed at the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

22. Is there currently, or has there previously been, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or is of an unknown origin? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

23. Are there currently, or have there previously been, any transformers, capacitors, or hydraulic equipment at the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

24. Is there currently, or has there previously been, any electrical or hydraulic equipment know or likely to contain PCBs present at the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

25. Are there currently, or have there previously been, any pits, ponds, or lagoons on or adjacent to the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

26. Is there currently, or has there previously been, any stained soil, stained pavement, or stressed vegetation on the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

27. Is there currently, or has there previously been, any trash or solid waste disposal, or mound(s) or a depression(s) suggesting the likelihood of trash or other solid waste disposal on the subject property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

28. Is there currently, or has there previously been, any wastewater, storm water, or other liquid discharged into a drain, ditch, or stream on or adjacent to the property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

29. Are there currently, or have there previously been, any dry wells, irrigation wells, injection wells, or abandoned wells at the subject property? (If yes, please specify which, when, and give all known details.)
Currently: none known
Previously: none known

30. Are there currently, or have there previously been, any on-site septic systems or cesspools at the property? (If yes, please specify which, when, and give all known details.)
Currently: no
Previously: none known

31. Are there currently, or have there previously been, any structures at the property? (If yes, please specify which, when, and give all known details.)
Currently: none
Previously: none known

32. If structures or other improvements are present, please describe, including their approximate age. none

33. If structures are present, what is the heating and cooling system for the structure?
none

34. If structures are present, are there currently, or have there previously been, any stains or corrosion on floors, walls, or ceilings? (If yes, please specify which, when, and give all known details.)
Currently: none
Previously: none

35. Are there any flooring, drains, or walls located within structures that are stained or are emitting foul odors? no

36. Specify the potable water supply for the property. public supply to house

37. Identify sewage disposal system for the property. private / none existing for subject site

38. Are there any environmental site assessment or environmental audit reports for the property? If yes, please specify how copies be provided to R. T. Frankian & Associates for review. none known

39. Are there any environmental permits for the property (such as solid waste disposal permits, hazardous waste disposal permits, wastewater permits, or NPDES permits)? (If yes, please specify which, when, and give all known details.) none known

40. Are there currently, or have there previously been, any registered underground or above ground storage tanks at the property? (If yes, please specify which, when, and give all known details.) none known

41. Are there currently any material safety data sheets for the property? If yes, please specify how copies can be provided to R. T. Frankian & Associates for review. ____
none known

42. Are there any community right-to-know plans for the property? If yes, please specify how copies can be provided to R. T. Frankian & Associates for review.____
none known

43. Are there any safety plans; preparedness and prevention plans; spill prevention countermeasure, and control plans for the property? If yes, please specify which and how copies can be provided to R. T. Frankian & Associates for review.____
none known

44. Are there any notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property? If yes, please specify which and how copies can be provided to R. T. Frankian & Associates for review. __
none known

39. Are there any hazardous waste generator notices or reports for the property If yes, please specify which and how copies can be provided to R. T. Frankian & Associates for review. none known

40. Are there any geotechnical studies for the property? If yes, please specify what and how copies can be provided to R. T. Frankian & Associates for review. ____
none known

41. Is there any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on or from the property? (If yes, please specify which, when, and give all known details.) none known

43. Are there any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products for the property? (If yes, please specify which, when, and give all known details.) none known

This questionnaire was prepared by oral interview with John Brevidoro, owner on April 14, 2009 by

Name: Keith Farrell
Title: Engineering Geologist
Company: RT Frankian & Assoc.
Address: 1329 Scott Rd
City, State, Zip: Burbank
Phone: _____ Fax: _____
Relationship to property (e. g., site manager, property manager, owner, etc.) _____
John Brevidoro - 818 414 0650

My signature below represents that this questionnaire was completed in good faith to the extent of my actual knowledge of the property.

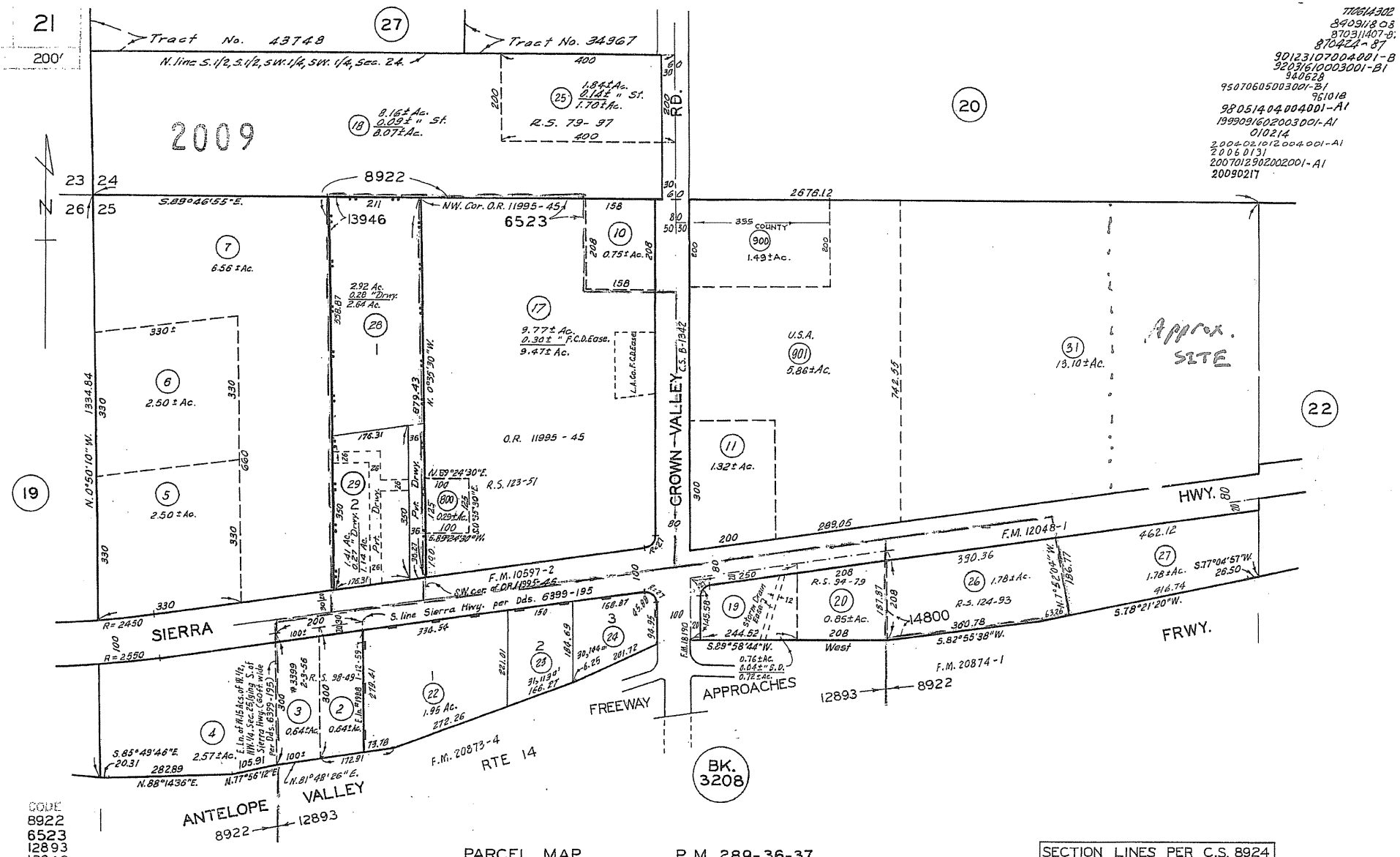
Signature by KCF Date 4/14/09

RP Development Services
April 15, 2009
2009-002-51

APPENDIX C

MISCELLANEOUS RESEARCH MATERIALS

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY



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FOR PREV. ASSN'T SEE:
3208 - 4
3217-27

PARCEL MAP .. .. P. M. 289-36-37
T. 5 N., R. 13 W.
PARCEL MAP _ _ P. M. 249-27-28

SECTION LINES PER C.S. 8924

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

July 11, 2008

Mr. Yue Rong
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

Subject: Workplan for Off-Site Assessment
76 Service Station No. 250781
3807 West Sierra Highway
Acton, California

DELTA

Dear Mr. Rong:

On behalf of ConocoPhillips, Delta Consultants (Delta) has prepared this *Workplan for Off-Site Assessment* for 76 Service Station No. 250781, located at 3807 West Sierra Highway in Acton, California (the Site). The *Site Location Map* is presented as Figure 1. The purpose of this workplan is to further assess the extent of subsurface impact by petroleum hydrocarbons at the Site per the findings of the subsurface investigation conducted in January 2008 (Appendix A). In the absence of a response from the Los Angeles Regional Water Quality Control Board (LARWQCB), Delta will implement the proposed work activities within 60 calendar days from the date of this submittal pursuant to the authority granted in California Code of Regulations, Title 23, Division 3, Chapter 16, Section 2722(e).

SITE DESCRIPTION

This Site is located on Sierra Highway, east of Crown valley Road in Acton, California (Figure 1). The Site is an active 76 Product Service Station and includes 3 12,000-gallon gasoline underground storage tanks (USTs), 2 12,000-gallon diesel USTs, and 16 product dispensers. Two additional product dispensers were previously abandoned and not upgraded. The fuel USTs are located in the central portion of the Site adjacent to the station building. Refer to the site plan as Figure 2.

BACKGROUND

In June 1989, Applied GeoSystems (AGS) conducted a subsurface environmental investigation that consisted of the completion of 11 soil borings to a maximum depth of 28 feet below ground surface (bgs).

Selected soil samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d), total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethyl-benzene, and xylenes (BTEX). Laboratory analytical results of the soil samples analyzed indicated that no concentrations of petroleum hydrocarbons were detected above laboratory method detection limits for all soil samples, with the exception of two soil samples (B-9 and B-10) which were reported with detectable concentrations of TPH-g only at 1.0 milligrams per kilogram (mg/kg) and 3.0 mg/kg, respectively.

a member of Inogen Environmental Alliance

911 South Primrose Suite K Monrovia, California 91016 USA
Phone: 626.256.6662 / 800.477.7411 Fax: 626.256.6263
www.deltaenv.com

In August 1995, Harding Lawson and Associates (HLA) conducted air monitoring and soil segregation in conjunction with the replacement of tank and line monitoring equipment at the Site. Approximately 121 tons of soil was segregated based upon field monitoring results and subsequently transported off-site for recycling.

In September 1999, Pacific Environmental Group, Inc. (PEG) conducted air monitoring and soil sampling in conjunction with product piping and dispenser upgrade activities at the Site. Soil samples were collected from beneath the former dispensers, product lines, and from soil stockpiles. Laboratory analytical results of the soil samples collected from beneath the dispensers revealed detectable TPH-g at concentrations ranging from non-detectable above laboratory method detection limits to 6.2 mg/kg; TPH-d concentrations ranging from 41 mg/kg to 27,000 mg/kg; and methyl tertiary butyl ether (MTBE) concentrations ranging from 0.021 mg/kg to 0.029 mg/kg. Confirmation of the highest detectable MTBE concentration was completed using Environmental Protection Agency (EPA) Method 8260 analysis and analytical results indicated that MTBE was non-detectable above laboratory method detection limits. Benzene was not detected above laboratory method detection limits in any of the soil samples analyzed. Laboratory analytical results of the soil samples collected from beneath the product lines indicated that TPH-d concentrations ranged from 190 mg/kg to 260 mg/kg. TPH-g, benzene, and MTBE were not detected above laboratory method detection limits. Approximately 17.5 tons of hydrocarbon-affected soil was transported off-site for recycling. *Summary of Station Upgrade Report* was submitted to the Los Angeles County Department of Public Works (LACDPW) on October 22, 1999. PEG concluded that additional site assessment may be needed to delineate the extent of soil-impact by petroleum hydrocarbons.

Between April 2000 and December 2004, SECOR International, Inc. and Miller Brooks Environmental, Inc. prepared and submitted quarterly status reports to the oversight agency. Beginning on January 1, 2005, Delta took over the consulting responsibility for the Site on behalf of ConocoPhillips.

On August 9, 2005, Delta submitted the *Summary of Station Upgrade Report* dated October 22, 1999, along with a review check to the LACDPW for evaluation and closure consideration. The review check was apparently misplaced at the LACDPW and the case was not reviewed. Subsequently, Delta furnished a replacement check for the review fee on June 12, 2006 in the amount of $475.00.

On behalf of ConocoPhillips, Delta submitted the *Workplan for Additional Assessment* on May 3, 2006, proposing to assess the extent of the adsorbed fuel hydrocarbon plume by advancing seven soil borings to characterize petroleum hydrocarbon concentrations detected during the 1999 soil sampling activities.

On July 3, 2006, a review letter was issued by the LACDPW, requiring ConocoPhillips to furnish current owner name and address and assessor parcel number. . On July 11, 2006, ConocoPhillips furnished the required data under separate cover. An amended workplan to increase the number of proposed soil borings was also requested. The addendum workplan was submitted to the LACDPW by Delta on July 31, 2006.

On October 25 through the 28, 2006, Cascade Drilling, Inc. (Cascade), observed by a Delta geologist, advanced 11 exploratory borings (SB-1 through SB-11) using a truck-mounted CME-75 drill rig equipped with hollow-stem augers. The soil borings were drilled to a maximum depth of 90 feet bgs. Maximum concentrations of the chemicals of concern in B-6 are all in the 85-foot sample as follows: TPH-d (42 mg/kg); TPH-g (210 mg/kg); benzene (2.2 mg/kg); toluene (5.6 mg/kg); ethyl-benzene (3.2 mg/kg); total xylenes (8.8 mg/kg); and MTBE (1.9 mg/kg). No detectable concentrations of TPH-d, TPH-g, BTEX, MTBE, tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and ethanol were found in the soil samples obtained from soil borings B-1 through B-5 and B-7 through B-11. Groundwater was not encountered to maximum depth of 110 feet bgs.

On February 13, 2007, Delta submitted a *Workplan for Additional Site Assessment* to the LACDPW. The workplan identified Delta's intention to advance five soil borings and two step-out borings in an attempt to delineate the lateral and vertical extent of the impacted area.

On April 23 through 26, 2007, Cascade, observed by a Delta geologist, advanced five exploratory borings (SB-12 through SB-16) using a truck-mounted CME-95 drill rig equipped with hollow-stem augers. The soil borings were drilled to a maximum depth of 140 feet bgs. Detectable concentrations of MTBE were found in SB-13 only with the highest concentration being in soil sample SB-13d110 (0.14 mg/kg). SB-12 and SB-13 both had detectable concentrations of TPH-g and BTEX. Maximum concentrations of TPH-g (8.4 mg/kg), ethyl-benzene (0.058 mg/kg), and total xylenes (0.33 mg/kg) were found in soil sample SB-12d55. SB-13d100 and SB-13d85 had maximum concentrations of benzene (0.13 mg/kg) and toluene (0.14 mg/kg), respectively.

Between January 14 and 24, 2008, Cascade, observed by a Delta geologist, drilled three groundwater monitoring wells (MW-1, MW-2, and MW-3). The soil borings were drilled to a maximum depth of 210 feet bgs. While advancing boring MW-1 groundwater was encountered at 120 feet bgs. However, during well development groundwater was observed at 140 feet bgs for MW-1, 175 feet bgs for MW-2, and 187 feet bgs for MW-3. The results of these activities are summarized in the *Additional Site Assessment and Request for Case Transfer* dated March 12, 2008. This report was sent to the LACDPW and the LARWQCB.

On April 10, 2008, the environmental case was transferred from the LACDPW to the LARWQCB in a letter issued by the LACDPW.

HYDROGEOLOGY SUMMARY

On March 3, 2008, TRC conducted the first quarter of 2008 groundwater monitoring and sampling activities at the Site. The *Quarterly Monitoring Report January through March 2008*, dated April 1, 2008, prepared by TRC is attached. TRC gauged and sampled 3 groundwater monitoring wells (Appendix B).

Depth to groundwater was between 140.96 and 185.36 feet bgs. The average elevation of groundwater at the Site was 2,803.23 feet above mean sea level. During this period, the groundwater flow direction was toward the southeast at a gradient of 0.4 feet per foot.

Detectable concentrations of benzene above the maximum contamination level of [1 microgram per liter (µg/L)] were found in two groundwater monitoring wells. TPH-g and MTBE were reported in all three wells. Monitoring well MW-1 was found to have the maximum concentrations of TPH-g (8,100 µg/L), TPH-d (1,800 µg/L), benzene (830 µg/L), toluene (1,100 µg/L), ethyl-benzene (86 µg/L), and total xylenes (1,100 µg/L). Groundwater monitoring well MW-3 contained the maximum concentration of MTBE (5,900 µg/L), TBA (13,000 µg/L), ETBE (0.29 µg/L), and TAME (2.6 µg/L). Ethanol and DIPE were not detected in the monitoring wells sampled this quarter.

PROPOSED SCOPE OF WORK

To further determine the lateral extent of the dissolved phase hydrocarbons plume, Delta proposes to advance five soil borings (MW-4 through MW-8, Figure 2) to characterize petroleum hydrocarbon concentrations detected during the 2008 site investigation. Each of the proposed borings will be completed as a groundwater monitoring well utilizing air rotary drilling technology. The locations of the proposed monitoring wells are based upon the goal of fully delineating the known dissolved phase plume.

The proposed scope of work will be conducted as follows:

The proposed scope of work includes the following tasks:

- Obtain all required encroachment, private property access, and well permits to drill and install the proposed groundwater monitoring wells (MW-4 and MW-8).

- Mark the proposed boring locations and contact Underground Service Alert at least 48 hours before fieldwork begins. Notify oversight agency and property owner.

- All fieldwork will be conducted in accordance with the site-specific health and safety plan prepared for this project. A copy of the site-specific health and safety plan is included in Appendix C.

- Clear the boring locations of underground obstructions to a depth of seven feet bgs prior to drilling.

- Air rotary drilling technology will be utilized to achieve the desired depth during this site investigation.

- Soil samples will be collected at 5-foot intervals for 10 feet bgs to the total depth. Samples will be transferred into Encore containers per the EPA Method 5035. During sampling operations, all soil samples will be field screened for the presence of volatile organic compounds by headspace analysis using a photo-ionization detector (PID) calibrated to 100 parts per million by volume of hexane. PID readings will be recorded on the boring logs.

- Each boring will be completed as a groundwater monitoring well. Monitoring wells will be constructed with 30 feet of 4-inch diameter, schedule (Sch) 80 polyvinyl chloride (PVC) slotted casing (0.020-inch slots) set from approximately 20 feet below to 10 feet above the first encountered groundwater. Blank Sch 80 PVC casing will be set from 10 feet above the groundwater level to finish grade. The total depth of each well and the final screen interval will be determined from field observations during drilling activities. The annular space of each monitoring well will be completed with # 3 Monterey sand to 2 feet above slotted screen topped with a minimum 3-foot thick bentonite seal. The remaining annular space will be filled with bentonite grout to within 1 foot of the surface. Each well will be completed with a locking well cap and a 12-inch diameter, traffic-rated well box, which will be cemented in place. A proposed well construction detail is included as Figure 3.

- Upon completion of the well installation, each well will be developed in accordance with appropriated state and local requirements. Each well will be purged and sampled. All groundwater samples will be placed on ice pending delivery to a state-approved laboratory. Strict chain-of-custody procedures will be followed and documented.

- Submit soil samples from the borings under chain-of-custody protocol to a ConocoPhillips-approved, state certified mobile laboratory. Selected soil samples will be analyzed for TPH-d using United States EPA Method 8015M, TPH-g-GC/MS, BTEX, MTBE, DIPE, ETBE, TAME, and TBA using EPA Method 8260B/5035.

- All down-hole sampling equipment will be washed between samples in a non-phosphate detergent and rinsed with water. In addition, all down-hole drilling equipment will be cleaned using a high pressure wash prior to drilling each boring location.

- Soil cuttings, rinseate water, and development/purge water will be temporarily stored on-site in properly sealed and labeled; Department of Transportation-approved drums pending analytical results. The drums and their contents will then be profiled and removed from the Site for proper disposal.

- The new wells will be surveyed and all data will be entered into the GeoTracker database and the added to the currently groundwater sampling program.

- Upon completion of the fieldwork, Delta will prepare a report describing field methods, results of investigation, and recommendation. Delta estimates that the fieldwork portion of this workplan can be implemented following workplan approval from ConocoPhillips and the LACDPW and approximately two weeks after the required notifications are given or obtained. It is further estimated that the final report will be ready for submittal approximately 45 days after receipt of the soil sample analytical results.

LIMITATIONS

The findings contained herein represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This workplan is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This workplan is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

This workplan has been prepared under the direct supervision of a California Registered/Certified Professional.

If you have any questions regarding this transmittal or need any additional information about this Site, please do not hesitate to contact Mr. Sean Hunt at (626) 256-6662 or Ms. Shari London of ConocoPhillips at (714) 428-7720.

Sincerely,

DELTA CONSULTANTS

Jay Badiei, P.G.
Senior Project Geologist

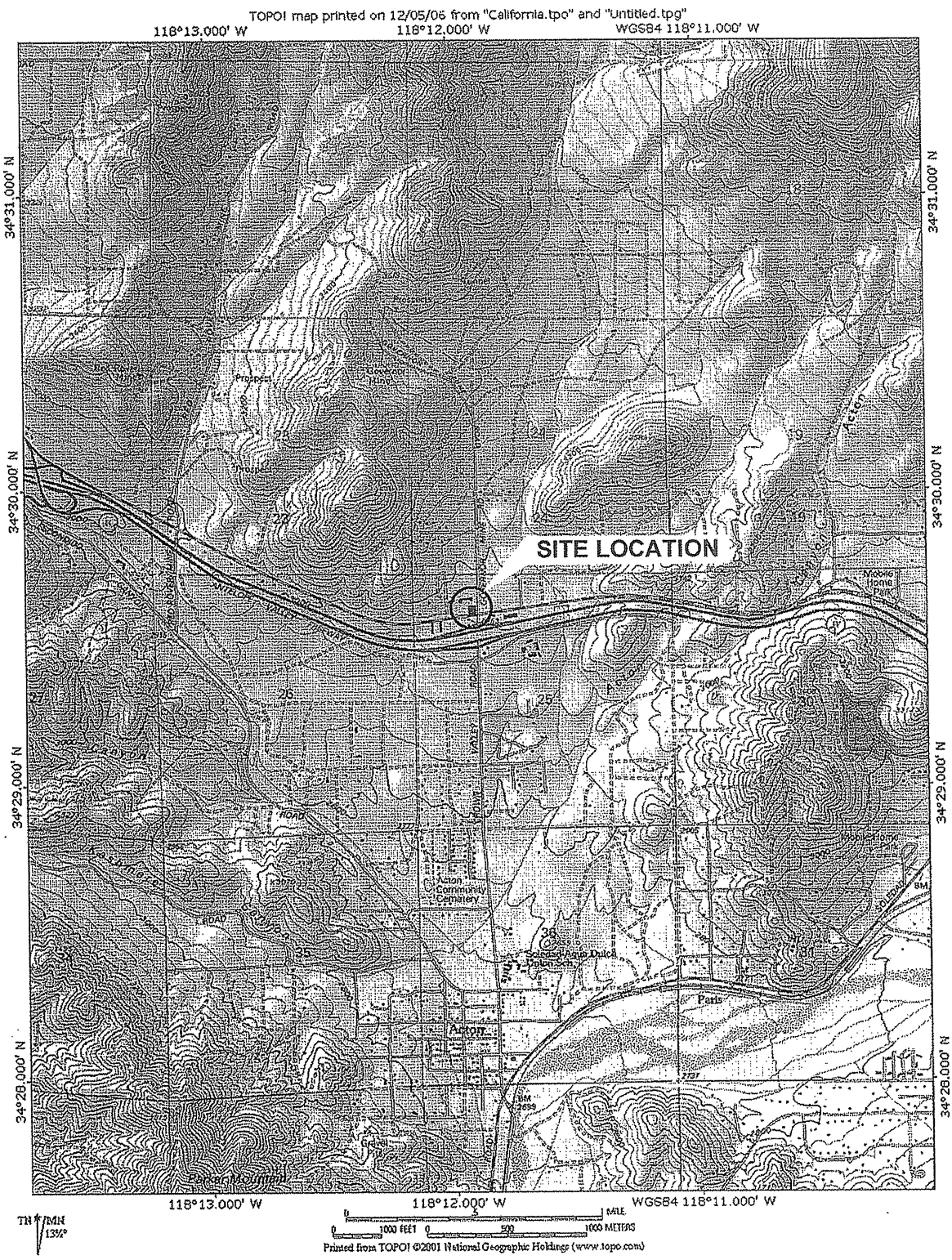
Attachments:

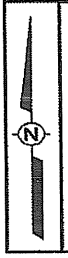
	Figure 1	Site Location Map
	Figure 2	Proposed Well Location Map
	Figure 3	Well Construction Diagram
	Appendix A	Additional Site Assessment Report and Request for Case Transfer dated March 12, 2008
	Appendix B	Historical Figures and Graphs
	Appendix C	Site-Specific Health and Safety Plan

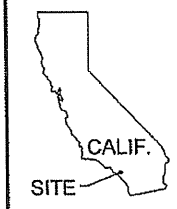
Cc: Ms. Shari London, ConocoPhillips, Santa Ana, California (electronic copy only)
Acton Plaza Partners, Los Angeles, California
Ms. Rani Iyer, LACDPW, Alhambra, California

JJB:ket(Clients\ConocoPhillips\0781\reports\2008-07-11_WP for Off-Site Assessment\2008-07-11_COP 250781_Workplan Off-Site Assessment.doc)

PROJECT NUMBER	APPROVED BY	CHECKED BY	DRAWN BY
C20078106-1			LUI 04/17/03





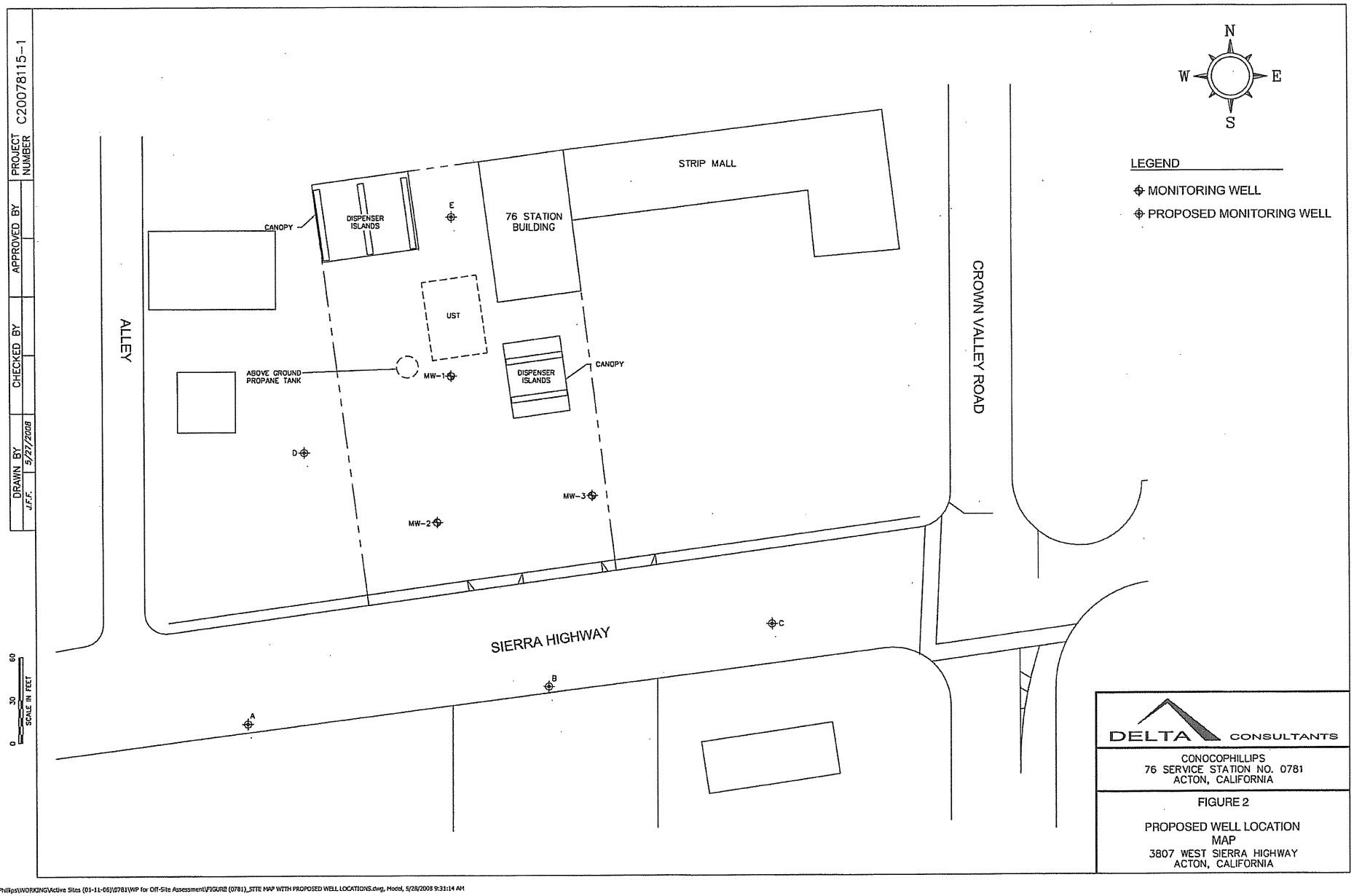


DELTA CONSULTANTS

CONOCOPHILLIPS

FIGURE 1
SITE LOCATION MAP

3807 WEST SIERRA HIGHWAY
ACTON, CALIFORNIA

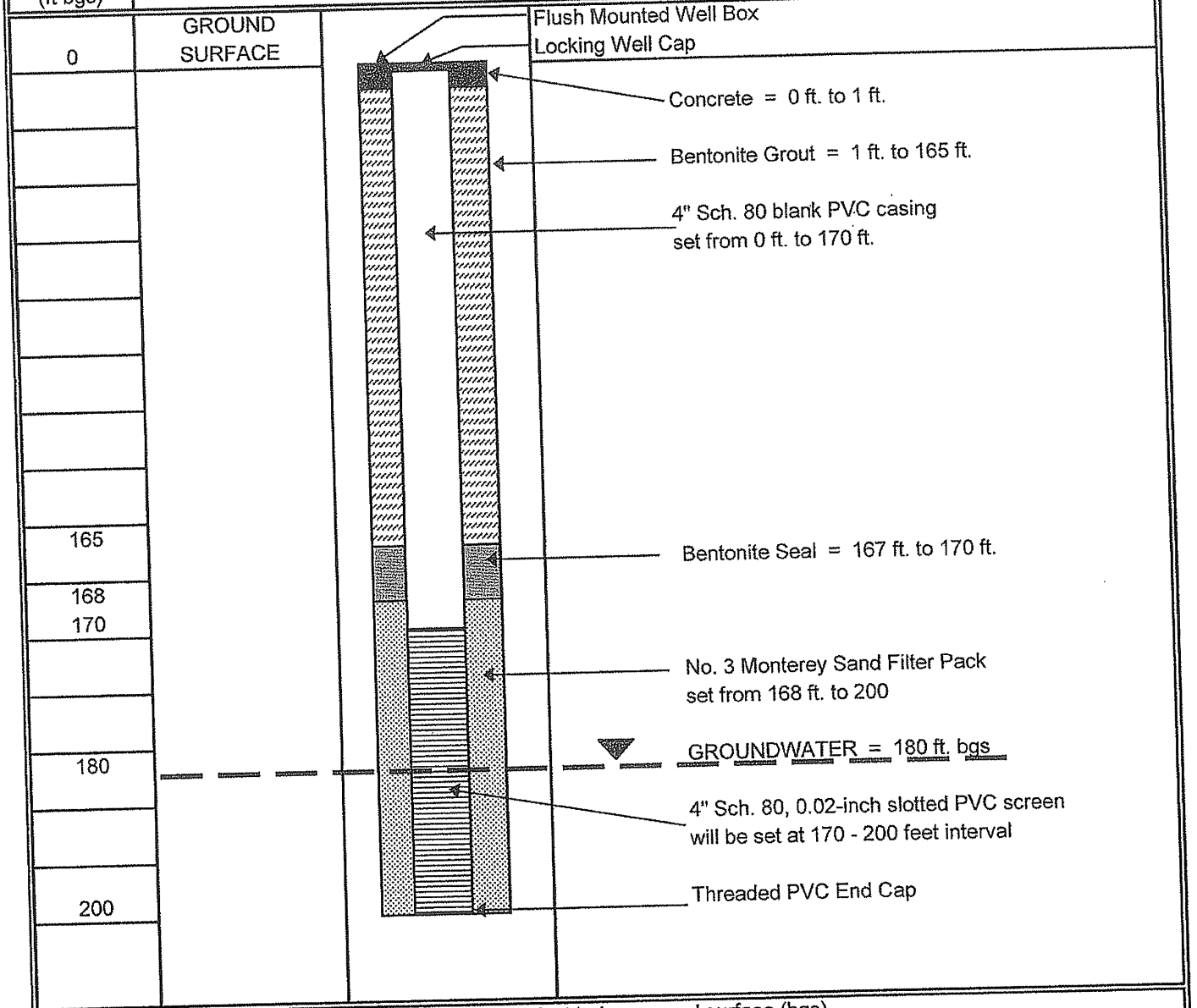


M:\Clients\ConocoPhillips\WORKING\Active Sites (01-11-06)\0781\WP for Off-Site Assessment\FIGURE (0781)_SITE MAP WITH PROPOSED WELL LOCATIONS.dwg, Model, 5/28/2008 9:31:14 AM

DELTA

Project Name and Location:
76 Service Station No. 250781
3807 West Sierra Highway
Acton, California
Figure 3
Well No.: Well Construction Diagram

DEPTH (ft bgs)	WELL CONSTRUCTION*



Maximum Total Depth of boring at approximately 200 feet below ground surface (bgs)

- Concrete
- Bentonite Grout
- Four inch diameter 0.02-inch Slotted PVC Screen
- Four inch diameter PVC well casing grouted in place
- #3 Monterey Sand Filter Pack
- Bentonite Chip Seal

**Note: Not to Scale; subject to field modifications*

RP Development Services
April 15, 2009
2009-002-51

APPENDIX D

ENVIRONMENTAL DATA RESOURCES, INC. SANBORN® MAP REPORT

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

Proposed Fire Station 142
Sierra Highway at Clanfield Street
Acton, CA 93510

Inquiry Number: 2430170.3
February 26, 2009

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/26/09

Site Name:
Proposed Fire Station 142
Sierra Highway at Clanfield
Acton, CA 93510

Client Name:
R. T. Frankian & Associates
1329 Scott Road
Burbank, CA 91504

EDR Inquiry # 2430170.3

Contact: Keith Farrell

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by R. T. Frankian & Associates were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Proposed Fire Station 142
Address: Sierra Highway at Clanfield Street
City, State, Zip: Acton, CA 93510
Cross Street:
P.O. # NA
Project: 2009-002-51
Certification # 2DDD-486A-9F65

Sanborn® Library search results
Certification # 2DDD-486A-9F65

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

Limited Permission To Make Copies

R. T. Frankian & Associates (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

RP Development Services
April 15, 2009
2009-002-51

APPENDIX E

ENVIRONMENTAL DATA RESOURCES, INC.

HISTORICAL TOPOGRAPHIC MAP REPORT

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

Proposed Fire Station 142
Sierra Highway at Clanfield Street
Acton, CA 93510

Inquiry Number: 2430170.4
February 27, 2009

The EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Historical Topographic Map

N			
	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 REVISED FROM:1902 SERIES: 60 SCALE: 1:250000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

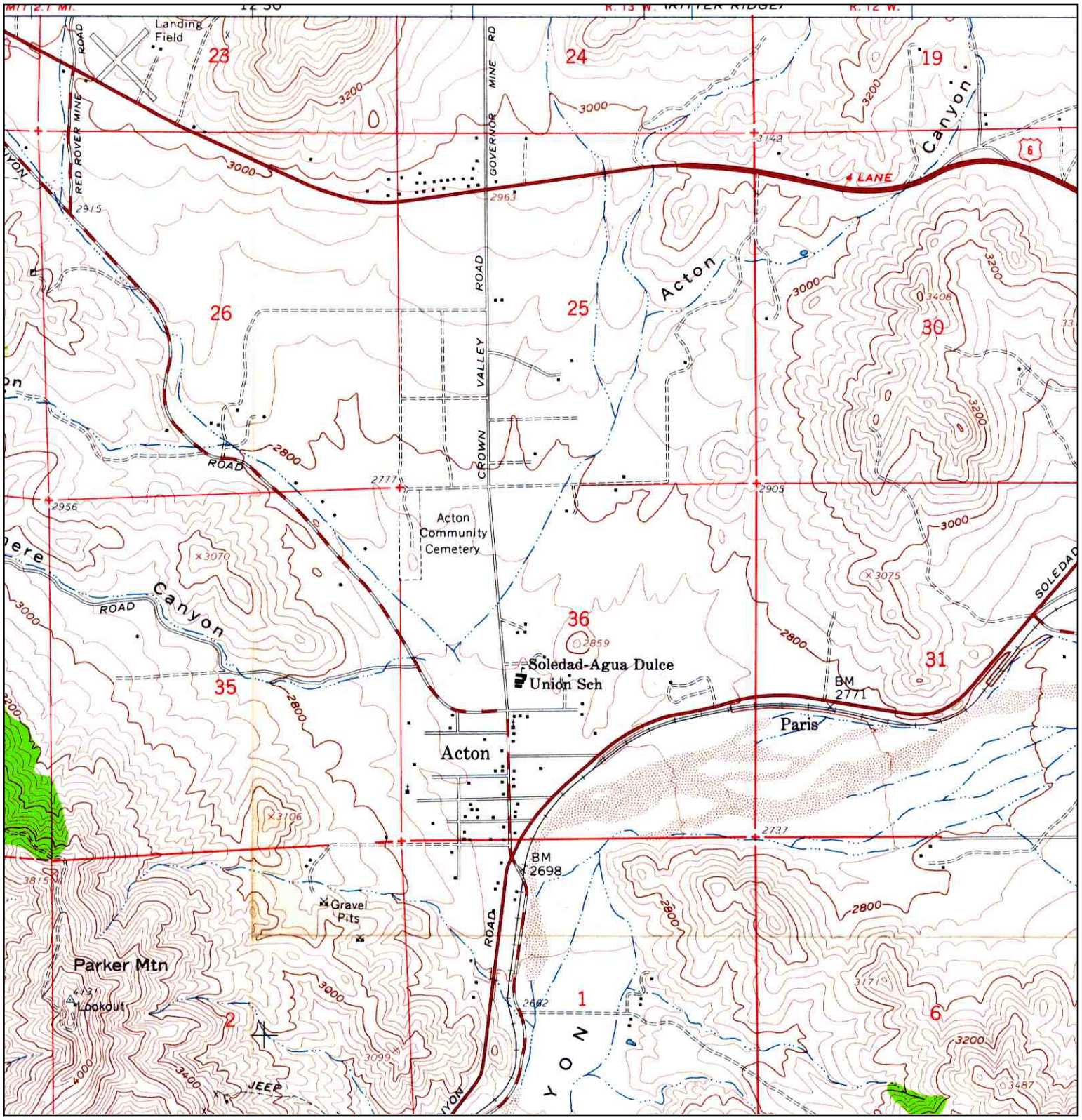
Historical Topographic Map

N	TARGET QUAD NAME: TUJUNGA MAP YEAR: 1947 SERIES: 15 SCALE: 1:50000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

Historical Topographic Map

N	TARGET QUAD NAME: ACTON MAP YEAR: 1959 SERIES: 15 SCALE: 1:62500	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

Historical Topographic Map



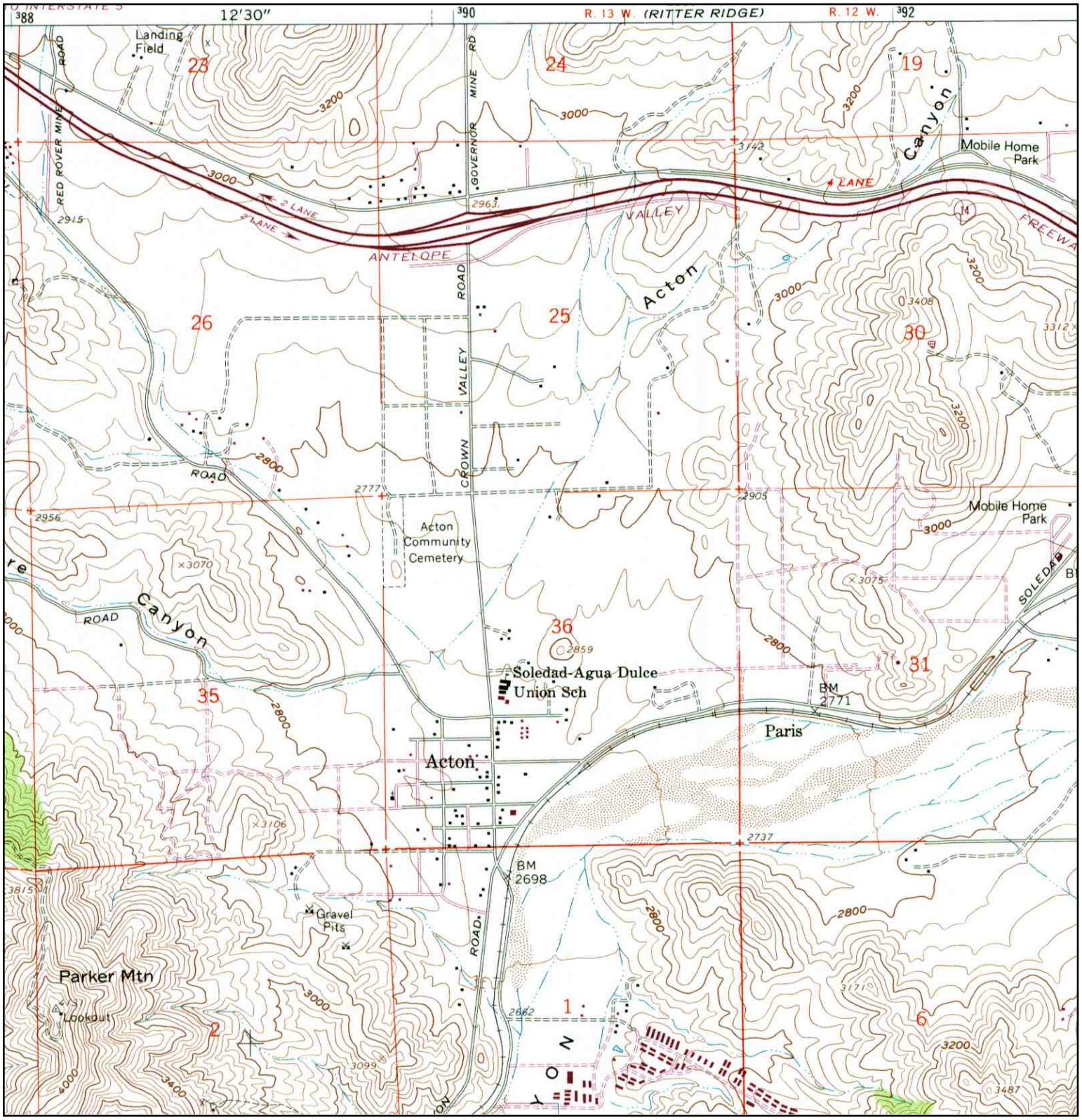
N	TARGET QUAD NAME: ACTON MAP YEAR: 1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

Historical Topographic Map

N	TARGET QUAD NAME: ACTON MAP YEAR: 1974 PHOTOREVISED FROM:1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

For use with report dated 04/15/2009; RTF job number 2009-002-51

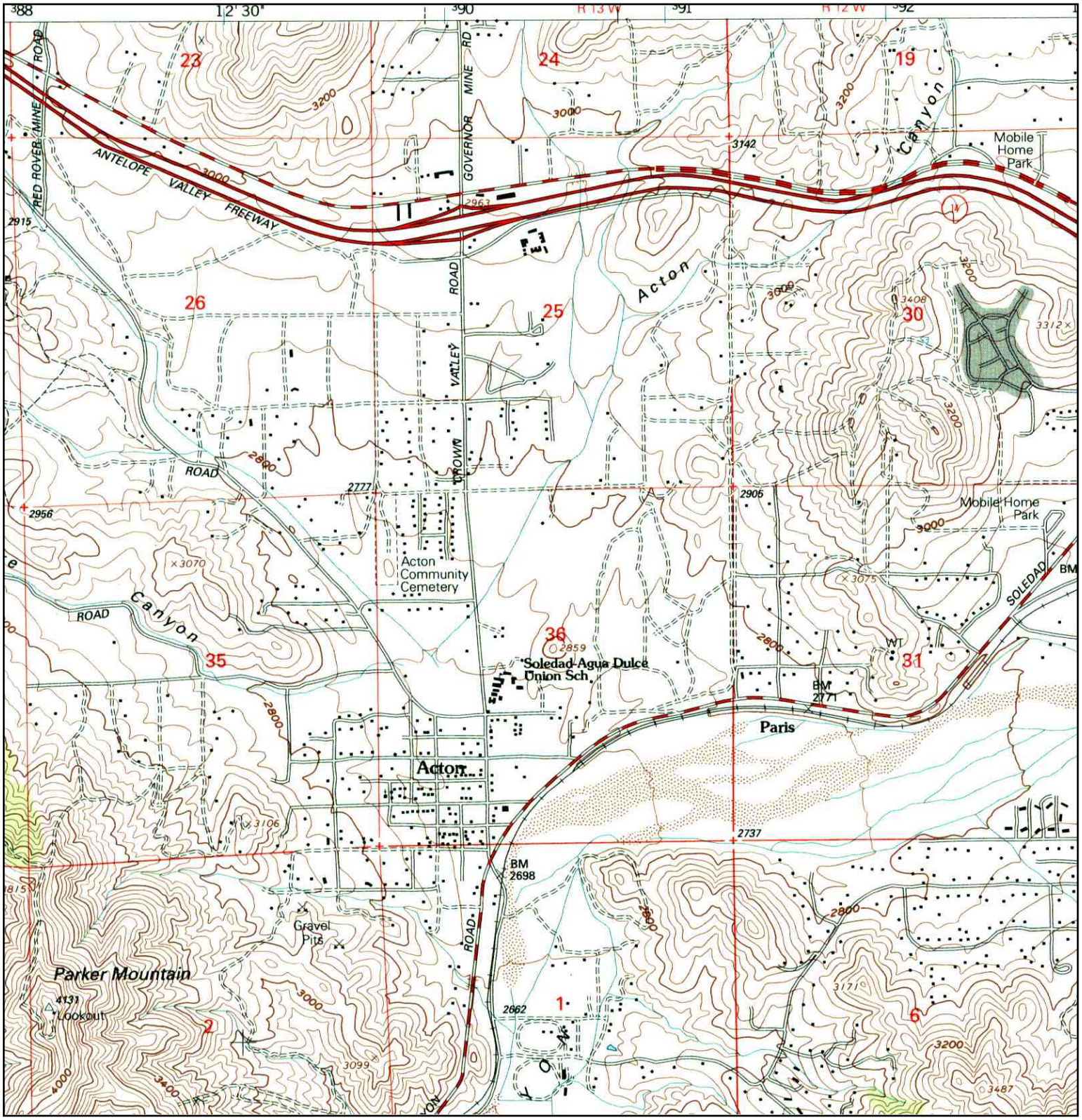
Historical Topographic Map



N	TARGET QUAD NAME: ACTON MAP YEAR: 1994 REVISED FROM:1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

For use with report dated 04/15/2009; RTF job number 2009-002-51

Historical Topographic Map



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	TARGET QUAD NAME: ACTON MAP YEAR: 1995 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Proposed Fire Station 142 ADDRESS: Sierra Highway at Clanfield Street Acton, CA 93510 LAT/LONG: 34.4937 / 118.194	CLIENT: R. T. Frankian & Associates CONTACT: Keith Farrell INQUIRY#: 2430170.4 RESEARCH DATE: 02/27/2009

RP Development Services
April 15, 2009
2009-002-51

APPENDIX F

ENVIRONMENTAL DATA RESOURCES, INC.

AERIAL PHOTO DECADE PACKAGE REPORT

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

Proposed Fire Station 142
Sierra Highway at Clanfield Street
Acton, CA 93510

Inquiry Number: 2430170.5
February 27, 2009

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

Aerial Photography February 27, 2009

Target Property:

Sierra Highway at Clanfield Street

Acton, CA 93510

Year	***Scale***	***Details***	***Source***
1928	Aerial Photograph. Scale: 1"=500'	Flight Year: 1928	Fairchild
1954	Aerial Photograph. Scale: 1"=555'	Flight Year: 1954	Pacific Air
1968	Aerial Photograph. Scale: 1"=666'	Flight Year: 1968 Best Copy Available from original source	Teledyne
1989	Aerial Photograph. Scale: 1"=666'	Flight Year: 1989	USGS
1994	Aerial Photograph. Scale: 1"=666'	Flight Year: 1994	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS
2005	Aerial Photograph. Scale: 1"=484'	Flight Year: 2005	EDR

For use with report dated 04/15/2009; RTF job number 2009-002-51

For use with report dated 04/15/2009; RTF job number 2009-002-51

INQUIRY #: 2430170.5

YEAR: 1968

= 666'

N

For use with report dated 04/15/2009; RTF job number 2009-002-51

For use with report dated 04/15/2009; RTF job number 2009-002-51


INQUIRY #: 2430170.5
YEAR: 1994
= 666'
N


INQUIRY #: 2430170.5
YEAR: 2002
= 666'
N

For use with report dated 04/15/2009; RTF job number 2009-002-51

RP Development Services
April 15, 2009
2009-002-51

APPENDIX G

ENVIRONMENTAL DATA RESOURCES, INC.

CITY DIRECTORY ABSTRACT

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

Proposed Fire Station 142
3525 Sierra Highway
Acton, CA 93510

Inquiry Number: 2430170.6
March 03, 2009

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening report designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1972 through 2007. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources: March 3, 2009

Target Property:
3525 Sierra Highway
Acton, CA 93510

Year	Uses	Source
1972	Street Not Listed in Research Source	Haines Criss-Cross Directory
1981	Street Not Listed in Research Source	Haines Criss-Cross Directory
1989	Street Not Listed in Research Source	Haines Criss-Cross Directory
2000	Street Not Listed in Research Source	Haines Criss-Cross Directory
2007	Address Not Listed in Research Source	Haines Criss-Cross Directory

Adjoining Properties

SURROUNDING

Multiple Addresses
Acton, CA 93510

Year	Uses	Source
1972	Street Not Listed in Research Source	Haines Criss-Cross Directory
1981	Street Not Listed in Research Source	Haines Criss-Cross Directory
1989	Street Not Listed in Research Source	Haines Criss-Cross Directory
2000	Street Not Listed in Research Source	Haines Criss-Cross Directory
2007	*Sierra Highway*	Haines Criss-Cross Directory
	Residence (3534)	Haines Criss-Cross Directory
	Crown Valley Building Supplies (3536)	Haines Criss-Cross Directory
	Residence (3635)	Haines Criss-Cross Directory
	No other addresses (3400 - 3699) block Sierra Hwy	Haines Criss-Cross Directory

APPENDIX 2.1.6

Revised Note 48 Geotechnical Investigation

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

TL✓

April 14, 2009

RP Development Services
22570 Arriba Drive
Saugus, California 91350

Job No. 2009-002-01

Attention: Mr. Ross Pistone

Subject: Revised Note 48 Geotechnical Investigation
Proposed Fire Station 142
Sierra Highway
Acton, California

References: See Attached References

Ladies/Gentlemen:

This revised report presents the results of R.T. Frankian & Associates' (RTF&A's) Note 48 Geotechnical Investigation, prepared for proposed Fire Station 142 in Acton, California. The purpose of the report is to provide a geotechnical and engineering geologic report for submittal to the reviewing agency. The work has been performed in general accordance with California Geological Survey (CGS) Note 48 (CGS, 2007). The location of the site is shown on the Site Location Map, Figure 1. The scope of our services was planned in consultation with Mr. Ross Pistone of RP Development Services, and was performed in accordance with our proposal dated January 9, 2009.

R. T. FRANKIAN & ASSOCIATES
1329 SCOTT ROAD BURBANK CALIFORNIA 91504
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Our findings and recommendations are based on the results of our subsurface investigation, a review of published data, and appropriate engineering and geologic analyses. Additionally, our office performed percolation testing for the proposed leach field and conducted a Phase I Environmental Site Assessment. The findings from the percolation testing are contained within Appendix F of this report. The results of the Phase I Environmental Site Assessment will be addressed under a separate report.

Our professional services have been performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for RP Development Services and their design consultants, to be used solely for planning and design of Fire Station 142, and associated grading.

SITE DESCRIPTION

Proposed Fire Station 142 (herein referred to as the site) is located at Latitude 34° 29' 38" North, Longitude 118° 11' 45 " West, within Section 25 of Township 5 North and Range 13 West of the Acton 7.5-Minute Quadrangle. Specifically, the site is situated along the north side of Sierra Highway, approximately 1,000 feet east of Crown Valley Road and 30 feet west of proposed Clanfield Street in Acton, California. The site consists of undeveloped agricultural land, with elevations ranging from approximately 2,975 feet above mean sea level (msl) along Sierra Highway, to

3,008 feet msl at the north property boundary. An existing orchard occupies the northerly one-fourth of the site. The fire station site limits are shown on the attached Geotechnical Map (1 inch = 40 feet scale), Figure 4

The site encompasses approximately 4.7 acres. Development of the acreage will include the fire station, including leach field; a Heli-Pad; widening of Sierra Highway; and widening half of future Clanfield Street. The fire station will occupy the southerly half of the site, with access provided off of Clanfield Street. The 110-foot diameter Heli-Pad is proposed for the north half of the site. Cut slopes will be graded for development of the site. The maximum proposed cut slope height will be approximately 17 feet along the south side of the Heli-Pad. A 12± -foot high fill over cut slope is planned along the south side of the site, along Sierra Highway. The plan for the fire station is attached as Figure 4.

We have not been provided with any structural details for the proposed fire station. For the purposes of preparing this submittal, it will be assumed that the fire station will be at-grade, and one or two stories in height. It is further assumed that the buildings will have interior loads of not more than 150 kips at column locations and have continuous footing loads that will not exceed two kips per lineal foot.

If the description of the proposed development presented above is inaccurate, or if significant revisions to the development are planned, we should be notified to determine if the recommendations presented in this submittal will remain applicable.

SUBSURFACE EXPLORATION

We recently explored the site by drilling three borings at the locations shown on the attached Geotechnical Map, Figure 4. The borings were drilled to depths of 31½ and 51½ feet below existing grade. We obtained undisturbed and Standard Penetration Test (SPT) samples from the borings for laboratory examination and testing. The borings were supplemented by 13 backhoe test pits excavated for the leach field and Heli-Pad. The boring and test pit logs are presented in Appendix A. A total of six percolation tests were also performed. The percolation tests were performed within test pits TP-1 through TP-6. The details regarding the percolation testing and results are presented in Appendix F.

SOIL CONDITIONS

The site is underlain by reddish brown, fine to coarse, silty sand (SM) to sandy silt (ML) deposits with sporadic lenses of gravelly sand (SW). The deposits range from moderately dense to very dense. The subsurface conditions are graphically illustrated on Geologic Section X-X', Figure 5. The boring logs are presented in Appendix A.

LABORATORY ANALYSES

We performed laboratory tests on selected samples obtained from the borings to aid in the classification of the soils, for use in liquefaction analyses, and to determine the pertinent engineering properties of the foundation soils. The results of

the tests are presented in Appendix B. The following tests were performed:

- moisture content and dry density determinations;
- direct shear tests;
- maximum density determination;
- consolidation tests;
- expansion tests;
- R-value tests;
- sieve analyses; and
- hydrometer analyses.

Tests to determine the corrosivity of the soils were performed by Schiff Associates (Schiff) on samples we submitted to them. The results of their tests are attached as Appendix C.

GEOLOGY

REGIONAL GEOLOGY

The site is located at the eastern end of the Soledad basin within the Transverse Ranges geomorphic province of California. The Soledad basin consists of an elongate, northeast-trending basin, measuring approximately 30 miles long and eight to 12 miles wide. The floor of the basin is irregular, with elevations ranging from 400 feet msl at its western end to as much as 2,500 feet near the eastern end.

The basin is bounded on the north, east, and south by ridges and mountain masses of relatively old crystalline rocks that, along with ancestral highland masses, have contributed large quantities of Cenozoic age sediments to the basin (Jahns and Muehlberger, 1954). More than 20,000 feet of stratified rocks were deposited into the elongate lowland area of the basin, with an additional 4,500± feet of volcanic rocks accumulated locally (Jahns and Muehlberger, 1954).

Structurally, the Soledad basin is a westerly-plunging open syncline with locally wrinkled flanks (Bailey and Jahns, 1954). The basin appears to have been defined as a trough of deposition mainly by faults, receiving its sedimentary fill in a manner that was very irregular in detail. Repeated episodes of primarily early Tertiary deformation, both within and along the margins of the basin, are indicated by numerous faults, folds, and unconformities, as well as by the distribution and lithology of the sedimentary rocks (Jahns and Muehlberger, 1954). The early Miocene and younger strata of the basin, although maintaining the broadly synclinal structure, have been considerably less deformed (Bailey and Jahns, 1954). These deposits blanket many of the older faults of the basin, but are themselves offset by other younger faults.

SITE GEOLOGY

The site is mantled by Pleistocene age older alluvium (map unit designation "Qoa") composed of weakly to moderately cemented and stream-deposited sand, gravel, and silt. The older alluvium is estimated to be at least 220 feet thick beneath the site, based on a boring drilled for a gas station one-fourth of a mile west of the

site. The base of the older alluvium was not penetrated by our exploratory borings, drilled to a maximum depth of 51½ feet below existing ground surface. Holocene age alluvial deposits are located within an incised southerly-draining stream channel in the northeast corner of the site.

Underlying the older alluvium are volcanic andesite and basalt flows of the Oligocene age Vasquez Formation, exposed in the hills east and southeast of the site. As observed in nearby roadcuts, the volcanic rocks of the Vasquez Formation exhibit an aphanitic texture (i.e., texture in which the crystalline constituents of the rock are too small to be visible to the unaided eye), are hard, and range in color from dark reddish brown (where weathered) to dark gray or black. The Vasquez Formation rocks rest upon plutonic igneous rocks, at depth. Within the site vicinity, the plutonic rocks consist of light brown to grayish brown syenite, which is exposed in the hills north of the site. The age of the syenite has not been definitively established, alternatively being classified as Mesozoic by Jahns and Muehlberger (1954) and Precambrian by Dibblee (1996).

The areal distribution of the various geologic units on-site, and in the site vicinity, is shown on the Regional Geologic Map, modified from Dibblee (1996 and 1997), and presented as Figure 2, and on the Geotechnical Map, presented as Figure 4. The subsurface conditions within the site are depicted on Geologic Section X-X' (Figure 5).

GROUNDWATER

The site is located in of Township 5 North, Range 13 West, Section 25, within the Acton Hydrologic Subarea of the Upper Santa Clara River watershed of Los Angeles County. The closest known water wells, designated by the Los Angeles County Department of Public Works (LACDPW) as Well Nos. 7403D and 7432E, are located approximately 1.9 miles south and 2 miles southeast of the site, respectively. The ground surface elevations for the wells are established at 2,698 feet msl for Well No. 7430D, and 2,830 feet msl for Well No. 7432E.

LACDPW water level measurement records for Well No. 7403D date back to November, 1970. The highest observed water level in the well was 8.5 feet below ground surface (corresponding to a water surface elevation of 2,689.5 feet msl), measured on October 3, 1983. The most recent recorded water level from Well No. 7403D was 19.5 feet (water surface elevation of 2,678.5 feet msl), measured on December 6, 2006.

Water level measurements from Well No. 7432E, dating from November, 1975 to November, 2006, indicate a high water level of 36.0 feet below ground surface (water surface elevation of 2,794.0 feet msl) noted on May 17, 1983. The well was observed to be dry at the time of the last measurement on November 14, 2006.

Review of Figure 3.4 within the Seismic Hazard Report for the Acton Quadrangle indicates that the historic high water level is greater than 40 feet.

Groundwater was not encountered in our exploratory borings, drilled to a maximum depth of 51½ feet, and is not anticipated during site grading.

ENGINEERING GEOLOGY

GENERAL

The geologic hazards at the site are essentially limited to those caused by earthquakes. The major cause of damage from earthquakes is due to the strong ground shaking from earthquake waves. Ground shaking could occur not only immediately adjacent to the earthquake epicenter, but within areas for many miles in all directions. Damage due to actual displacement or fault movement beneath a structure may also occur; however, fault surface displacement is much less common, and typically confined to areas along, or immediately adjacent to, the fault surface trace.

FAULTS

The numerous faults in California include both active and potentially active faults. In accordance with criteria established by the CGS, formerly known as the California Division of Mines and Geology (CDMG), for the Alquist-Priolo Earthquake Fault Zoning program (Hart and Bryant, 1997), a fault can be considered active if it has demonstrated movement within the Holocene epoch, or approximately the last 11,000 years. Faults that have demonstrated Quaternary movement (last 1.6 million years), but lack strong evidence of Holocene movement, are classified as potentially active. Faults that have not moved since the beginning of the Quaternary period are deemed inactive.

No known active or potentially active faults underlie the site. The site is located within the Acton Quadrangle; there are no Alquist-Priolo Earthquake Fault

Zones established within this quadrangle by CGS. The closest active (and zoned) fault to the site is the Nadeau fault of the San Andreas fault zone, located approximately five miles northeast of the site within the Ritter Ridge Quadrangle. In our opinion, there is little probability of surface rupture due to faulting occurring on-site.

A discussion of nearby active and potentially active faults is presented in the following sections. The location of the site, relative to nearby active and potentially active faults, is illustrated on the Regional Fault Map (Figure 3).

Active Faults: The San Andreas fault zone is the closest active fault to the site. The San Andreas fault zone, California's most prominent geological feature, trends generally northwest for almost the entire length of the state. The fault zone comprises all the subparrallel faults tectonically associated with the main trace of the San Andreas fault (Noble, 1926). The southern segment, closest to the site, is approximately 280 miles long and extends from the Mexican Border to the Transverse Ranges west of Tejon Pass.

Wallace (1968) estimated the recurrence interval for a magnitude 8.0 earthquake along the entire San Andreas fault zone to be between 50 and 200 years. Sieh (1984) estimated a recurrence interval of 140 to 200 years. The 1857 Fort Tejon earthquake was the last major earthquake along the fault zone in Southern California.

Within northern Los Angeles County, the San Andreas fault zone is defined by a conspicuous, narrow, slightly curving zone of troughs and linear ridges and includes the Nadeau, Cemetery, and Little Rock faults (Barrows et. al, 1985). Of these faults,

the Nadeau fault is the closest to the site at a distance of 5.1 miles to the northeast. The Nadeau fault varies from a single fault, or narrow belt of interlacing to subparallel faults along its western segment, diverging into two branches (referred to as the Northern and Southern Nadeau faults) to the east (Barrows et al, 1985). The Northern and Southern Nadeau faults are not known to offset Quaternary deposits and, therefore, are generally considered old and inactive. In contrast, the western segment of the Nadeau fault is extremely youthful; prominent scarps, closed depressions containing ponded alluvium, and linear troughs characterize the trace of the Nadeau fault (Barrows et al, 1985).

Other more distant, but significantly active faults include the San Gabriel fault and the San Fernando fault zone, located approximately 12 miles and 17 miles southwest of the site, respectively.

Potentially Active Faults: The closest potentially active fault to the site is the Soledad fault, located three miles south-southwest of the site. The Soledad fault is a north-dipping normal fault that extends along the north side, and generally parallels the trend of Soledad Canyon. The fault separates Tertiary rocks of the Soledad basin from Precambriam rocks of the San Gabriel Mountains (Oakeshott, 1958). The fault is marked almost everywhere by a fault scarp (CDMG, 1977a). Crowell (1968) suggested Pleistocene offset along the fault. CDMG (1977a) concluded that the "fault has not been active during at least part of late Pleistocene, or any of the Holocene."

Other nearby potentially active faults include the Mint Canyon and Pelona faults located approximately 9 and 13 miles west of the site, respectively.

Blind-Thrust Faults: A growing body of geologic and seismologic data, supplemented by regional structural interpretations, suggests Pliocene to modern deformation in the Los Angeles basin is partly accommodated by developing basement-involved fold and thrust belts (Davis et al., 1989; Hauksson, 1990; Shaw and Suppe, 1996). The fold and thrust belts are expressed at the ground surface by elongate, low-lying, anticlinal ridges. At the core of these anticlinal ridges are low-angle, blind-thrust faults rising off a basal detachment surface. Recognized blind-thrust faults in the Los Angeles and Ventura basins include the Elysian Park, Compton-Los Alamitos, Oakridge, and Northridge blind-thrust faults.

The closest known blind-thrust fault to the site is the Northridge blind-thrust fault. The site, however, is not underlain by any known blind-thrust fault.

Inactive Faults: The closest inactive fault is the northwest-trending Kashmere fault, located approximately two miles southwest of the site.

SLOPE STABILITY

The site of the proposed fire station building is on relatively flat-lying ground that is not on or in the path of any landslides. A 10- to 15-foot high 4:1 (horizontal:vertical), northeast-facing slope descends from the northeast corner of the site, in the area of the future Heli-Pad.

Development of the fire station pad will result in cut slopes surrounding the Heli-Pad, and a fill over cut slope along Sierra Highway. The Heli-Pad cut slopes will consist of a south- to southeast-facing 2:1 to 3:1 cut slope below the Heli-Pad, and an east- to southeast-facing 2:1 cut slope along the west side of the Heli-Pad access road.

The slope below the Heli-Pad, designated cut slope CS-1 on the Geotechnical Map (Figure 4), will attain a maximum height of approximately 17 feet and will descend from the south side of the Heli-Pad to the fire station. The cut slope along the Heli-Pad access road (designated CS-2) will ascend from the access road to a maximum height of approximately 10 feet.

The fill over cut slope along Sierra Highway will consist of a south-facing, 2:1 slope that will attain a maximum height of approximately 10 feet. The lower 5± feet of the slope will be a cut slope and is designated CS-3.

The cut slopes will expose older alluvial deposits that range from moderately to weakly cemented. The older alluvium consists of massive deposits that lack any bedding or well-defined planes of weakness that could be susceptible to translational failure. As such, the older alluvial deposits are considered grossly stable.

Due to the weakly cemented nature of the older alluvial deposits, there is a potential for erosion or surficial failures occurring along the finished slope face of CS-1. The erosion could result in rilling or gullying extending upslope towards the Heli-Pad, and minor debris accumulation along the toe of the slope. To control erosion, a stability fill slope is recommended for CS-1. The stability fill slope should have a 15-foot wide keyway and extend to the top of the proposed slope. The stability fill slope should be constructed with backdrains in accordance with the recommendations presented in the Summary of Geotechnical Recommendations section of this report.

A stability fill is not recommended for cut slope CS-2 at this time; however, there is a potential for erosion and resultant debris accumulation at the toe of the

slope that could require occasional maintenance. If the potential for erosion and debris accumulation is not acceptable, a stability fill could also be constructed for CS-2.

The fill over cut slope along Sierra Highway should be reconstructed as a stability fill slope, with backdrains, to control seepage at the fill-cut contact. The stability fill slope should have a 15-foot wide keyway and extend to the top of the proposed slope. The stability fill slope should be constructed with backdrains in accordance with the recommendations presented in the Summary of Geotechnical Recommendations section of this report.

DEBRIS FLOW AND ROCKFALL HAZARD

The site is not located directly downslope of any potential debris flows or rockfalls. Consequently, the site is considered safe from hazards associated with debris flows or rockfalls.

FLOODING

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Maps for Los Angeles County indicates that the majority of the site is located within a "Zone D" flood hazard area (FEMA, 2008). According to FEMA, "Zone D" are "areas in which flood hazards are undetermined, but possible." The northeast corner of the site, just beyond the proposed Heli-Pad, is within a FEMA "Zone A" Special Flood Hazard Area, which is defined as an area subject to

inundation by the one percent annual chance flood, with no base flood elevations determined.

Development of the fire station site includes improvements to control and direct site drainage to a storm drain/flood control system. Therefore, in our opinion, the potential for flooding to occur at the site is judged to be low.

TSUNAMIS AND SEICHES

The site is not in a coastal zone and, therefore, not susceptible to tsunamis (seismic sea waves).

The site is not located downslope of any large impounded bodies of water that would adversely impact the site as a result of seiches (oscillations in a body of water due to earthquake shaking). Therefore, the potential for tsunami and seiches adversely impacting the site is considered unlikely.

SUBSIDENCE

The site is not within an area of known subsidence associated with petroleum or groundwater withdrawal.

VOLCANIC HAZARD

The site is not in an area of active volcanism. Therefore, the site is considered safe from hazards associated with volcanic activity (volcanic eruptions, volcanic debris flows, volcanic ash, etc.).

OTHER EXCEPTIONAL GELOGIC HAZARDS

The site is not impacted by exceptional geologic hazards as defined by CGS Note 48.

GROUND MOTION

HISTORIC SEISMICITY

The historic occurrence of earthquakes within the region of the site was determined using the program EQSEARCH for Windows (Blake, 2000a). This program computes and prints the epicentral distance from a selected site to each of the earthquakes within a specified search radius (100 miles). From the computed distances, the program also estimates the peak horizontal ground acceleration that may have occurred at the site, due to each earthquake, utilizing the Boore et al (1997) attenuation relation. The EQSEARCH output is presented in Appendix D.

We used a combined earthquake catalog for magnitude 4.0 or larger events between the years 1800 and 2009. The earthquake catalog for events prior to about 1932 is limited to the higher magnitude events. Using this catalog for probabilistic calculations would skew the results. A listing of historic earthquakes within 100 miles of the site is presented in Appendix D.

The closest recorded earthquake epicenter was located 1.7 miles from the site. This earthquake event occurred on August 23, 1952 with a measured magnitude (M) of 5.0. The calculated site-specific ground motion associated with this event was 0.236g, which represents the largest ground motion occurring at the site. At least four other events of M5 or greater have occurred within 15 miles of the site during

the period of 1800 and 2009. These earthquakes included the February 9, 1971 M6.4 San Fernando earthquake and three aftershocks (M5. to M5.8). The San Fernando earthquake, with the epicenter 13 miles from the site, resulted in a calculated site-specific ground motion of 0.178g.

The epicenter of the M6.7 Northridge earthquake of January 17, 1994 was located 27.5 miles from the site. Ground motion at the site from the Northridge earthquake was 0.084g. The largest known earthquake event occurring within 100 miles of the site was the M7.7 Tehachapi-Arvin earthquake of July 21, 1952. The epicenter of this earthquake was approximately 58 miles from the site. The estimated site-specific ground motion from the Tehachapi-Arvin earthquake was 0.065g.

CALIFORNIA BUILDING CODE SEISMIC DESIGN

Under Section 1613 Earthquake Loads of the California Building Code (CBC), the following coefficients and factors apply to seismic force design at the subject site. The ground motion parameters were determined using the Ground Motion Parameter Calculator at the United States Geological Survey (USGS) website.

Latitude	34.494027
Longitude	-118.19587
Site Class	D
Ss	1.501
S1	0.703
SMs	1.501
SM1	1.054
SDs	1.000
SD1	0.703

SEISMIC SPECTRUM

The design response spectrum from the USGS website is presented in Figure 7. The MCE Spectrum from the USGS website is presented in Figure 8. The Uniform Hazard Spectrum from the USGS website for a two percent probability of exceedance in 50 years is presented in Figure 9.

SEISMIC HAZARD MAPS

Seismic Hazard Maps (SHM) were obtained from the USGS website for peak horizontal acceleration, and are presented in Figures 10.1 through 10.6. SHM with a two percent probability of exceedance in 50 years are presented in Figure 10.1; SHM with a 10 percent probability of exceedance in 50 years are presented in Figure 10.2; SHM with a 0.2 second horizontal acceleration with 10 percent probability of exceedance in 50 years are presented in Figure 10.3; SHM with a 1.0 second horizontal acceleration with 10 percent probability of exceedance in 50 years are presented in figure 10.4; SHM with a 0.2 second horizontal acceleration with two percent probability of exceedance in 50 years are presented in Figure 10.5; and SHM with a 1.0

second horizontal acceleration with two percent probability of exceedance in 50 years are presented in Figure 10.6.

DEAGGREGATED SEISMIC SOURCE PARAMETERS

The USGS website was used to determine the Probability Seismic Hazard Deaggregation for a 2,475-year return period for a site with Vs = 760 m/s. The graph from the USGS website is presented in Figure 11 and indicates a Modular distance of 9.0 km and modal magnitude of 7.79.

FRISK SITE-SPECIFIC GROUND MOTION ANALYSIS

The probabilistic MCE was determined in accordance with Section 21.2.1 of ASCE Standard 7-05 for five percent damped acceleration response spectrum having a two percent probability of exceedance within a 50-year period using the program FRISK using the Boore Et Al RND (1997) and Campbell (1997) H Qal attenuation relationships. In Addition, the Uniform Hazard Spectrum from the USGS site is presented in Figure 9. The factors from Boore Et Al (1997), Campbell (1997) and the Uniform Hazard Spectrum are summarized below.

Method	Boore Et. Al	Campbell	Uniform Hazard Spectrum
Sds	1.36	1.53	1.83
Sd1	0.83	0.99	0.98
Sms	2.04	2.30	2.75
Sm1	1.25	1.49	1.47

LIQUEFACTION

The State of California Seismic Hazard Map for the Acton Quadrangle indicates the subject site is located just southwest of a potential liquefaction area. The portion of the map showing the location of the subject site relative to liquefaction hazard areas is presented as Figure 6.

Liquefaction may occur when saturated, loose to medium dense, cohesionless soils are densified by ground vibrations. The densification results in increased pore water pressures if the soils are not sufficiently permeable to dissipate these pressures during, and immediately following, an earthquake. When the pore water pressure is equal to or exceeds the overburden pressure, liquefaction of the affected soil layers occurs. For liquefaction to occur, three conditions are required:

- ground shaking of sufficient magnitude and duration;
- soils that are susceptible to liquefaction; and
- a groundwater level at or above the level of the susceptible soils during the ground shaking.

For a site to be considered susceptible to liquefaction using the criteria and methodology initially developed by Seed and Idriss (1982), liquefaction of underlying soil layers must result in an observed surface effect such as sand boils, mud-spouts, surface water seepage, ground cracking, or quicksand-like conditions.

Lateral spreading can result in ground cracking and may occur when a site is sloped or is near a free-face and there is a sufficiently continuous liquefiable layer on which the overlying soils can move laterally.

Ground settlement may occur during seismic shaking of an area. The settlement can be caused by liquefaction of loose granular soils and by compaction of loose, but not necessarily liquefiable, soils.

The site is mantled by Pleistocene age or older alluvium. These materials are generally very dense and not susceptible to liquefaction. At depth, the site is underlain by volcanic rocks of the Vasquez Formation that are not subject to liquefaction. The site is considered to have a very low potential for liquefaction. The site is also not considered as being subject to lateral spreading.

SUMMARY OF GEOTECHNICAL RECOMMENDATIONS

This portion of the submittal has been prepared to summarize our geotechnical recommendations pertaining to grading of the site and construction of the proposed development.

The recommended bearing material for the proposed structures within the subject development is compacted fill soil, to be placed as part of site grading.

GRADING

General: The following sections present recommendations for treatment of cut and fill slopes and grading. The applicability of the preliminary recommendations given in the following sections for foundation and retaining wall design should be

confirmed at the completion of grading. Paving studies and additional soil corrosivity tests should be performed at the completion of rough grading to develop detailed recommendations for protection of utilities, structures, and for construction of the proposed roads.

Site Preparation: Prior to performing earthwork, the existing vegetation and any deleterious debris should be removed from the site. Existing utility lines should be relocated or properly protected in place. All unsuitable soils and uncertified fills in the areas of grading receiving new fill should be removed to competent earth materials and replaced with engineered fill. The depth of removal and recompaction of unsuitable soils is noted on the Geotechnical Map (Figure 4). Any fill required to raise the site grades should be properly compacted.

All existing uncertified fill soils should be removed and recompacted prior to placement of additional fill. Removal of the exposed natural soils should extend to at least the depths indicated on the Geotechnical Map (Figure 4). After excavation of the upper natural soils on hillsides and in canyons, further excavation should be performed, if necessary, to remove slope wash or other unsuitable soils.

Removal Depths: The required depth of removal and recompaction of the existing compacted fill or natural soils prior to the placement of compacted fill are indicated on the Geotechnical Map (Figure 4). Deeper removals will be required if disturbed or unsuitable soils are encountered. After excavation of the upper natural soils on hillsides and in canyons, further excavation should be performed, if necessary, to remove slope wash or other unsuitable soils. The Geotechnical Consultant of Record may require that additional shallow excavations be made

periodically in the exposed bottom to determine that sufficient removals have been made prior to recompacting the soil in place. Deeper removals may be recommended by RTF&A based on observed field conditions during grading. During grading operations, the removal depths should be observed by a representative of RTF&A and surveyed by the Project Civil Engineer for conformance with the recommended removal depths shown on the grading plan.

Material for Fill: The on-site soils, less any debris or organic matter, may be used in the required fills. Any expansive clays should be mixed with non-expansive soils to result in a mixture having an expansion index less than 30 if they are to be placed within the upper eight feet of the proposed rough grades.

Rocks or hard fragments larger than 12 inches may not be placed in the fill without special treatment. Rocks or hard fragments larger than four inches shall not be clustered or compose more than 25 percent by weight of any portion of the fill or a lift. Soils containing more than 25 percent rock, or hard fragments larger than four inches must be removed or crushed with successive passes (i.e., with a sheepsfoot roller) until rock or hard fragments larger than four inches constitute less than 25 percent of the fill or lift.

Oversized Material: Rocks or material greater than 12 inches in diameter, but not exceeding four feet in largest dimension, shall be considered oversized rock. The oversize rocks can be incorporated into deep fills where designated by the Geotechnical Consultant of Record. Rocks should be placed in the lower portions of the fill and should not be placed within the upper ten feet of compacted fill, or nearer than 15 feet to the surface of any fill slope. Windrows should be excluded from areas

of proposed utilities, pools, and other types of future underground improvements. Additional costs and construction difficulties should be anticipated if future improvements are located in areas where there will be conflicts with existing windrows. Rocks between 12 inches and four feet in diameter shall be placed in windrows or shallow trenches located so that equipment can build up and compact fill on both sides. The width of the windrows shall not exceed four feet. The windrows should be staggered vertically so that one windrow is not placed directly above the windrow immediately below. Rocks greater than one foot in diameter shall not exceed 30 percent of the volume of the windrows. Granular fill shall be placed on the windrow and enough water should be applied so that soil can be flooded into the voids. Fill should be placed along the sides of the windrows and compacted as thoroughly as possible. After the fill has been brought to the top of the rock windrow, additional granular fill should be placed and flooded into the voids. Flooding is not permitted in fill soils placed more than one foot above the top of the windrowed rocks.

Where utility lines or pipelines are to be located at depths greater than 15 feet, rock shall be excluded in that area. Excess rock that cannot be included in the fill, or that exceeds four feet in diameter, should be stockpiled for export or used for landscaping purposes.

Import Material: Import material should consist of relatively non-expansive soils with an expansion index less than 30. The imported materials should contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. The import material should be free of organic

materials, debris, and rocks larger than 12 inches. A bulk sample of potential import material, weighing at least 25 pounds, should be submitted to the Geotechnical Consultant of Record at least 48 hours in advance of fill operations. All proposed import materials should be approved by the Geotechnical Consultant of Record prior to being placed at the site.

Compaction: After the site is cleared and excavated as recommended, the exposed soils should be carefully observed for the removal of all unsuitable material. Next, the exposed subgrade soils should be scarified to a depth of at least six inches, brought to above optimum moisture content, and rolled with heavy compaction equipment. The upper six inches of exposed soils should be compacted to at least 90 percent of the maximum dry density obtainable by the ASTM D 1557-91 Method of Compaction.

After compacting the exposed subgrade soils, all required fills should be placed in loose lifts, not more than eight inches in thickness, and compacted to at least 90 percent of their maximum density. For fills placed at depths greater than 40 feet below proposed finish grade, a minimum compaction of 93 percent of the maximum dry density is required. The moisture content of the fill soils at the time of compaction should be above the optimum moisture content. Compacted fill should not be allowed to dry out before subsequent lifts are placed.

Rough grades should be sloped so as not to direct water flow over slope faces. Finished exterior grades should be sloped to drain away from building areas to prevent ponding of water adjacent to foundations.

Shrinkage and Bulking: A shrinkage value of about 8 to 12 percent is expected for materials generated from older alluvial deposit cut areas for use as compacted fill. Bulking is not expected to occur at the subject site.

Temporary Slopes: For purposes of construction, the soils encountered at the site should not be expected to stand vertically for any significant length of time in cuts four feet or higher. Where the necessary space is available, temporary unsurcharged embankments may be sloped back at a 1:1 gradient without shoring, up to a height of 100 feet in competent bedrock with favorable bedding. Where any cut slope exceeds a height of 50 feet within competent bedrock, a bench at least 10 feet wide should be located at mid-height. Within alluvial or compacted fill material, temporary excavations may be made at a 1¼:1 cut to a height of 25 feet. If the temporary construction embankments are to be maintained during the rainy season, berms are recommended along the tops of the slopes, where necessary, to prevent run-off water from entering the excavation and eroding the slope faces.

Where sloped embankments are used, the tops of the slopes should be barricaded to prevent vehicles and storage loads within five feet of the tops of the slopes. A greater setback may be necessary when considering heavy vehicles, such as concrete trucks and cranes; we should be advised of such heavy vehicle loads so that specific setback requirements can be established.

All applicable safety requirements and regulations, including OSHA regulations, should be met.

Permanent Slopes: Permanent cut and fill slopes may be inclined at 2:1, or flatter. The current rough grading plan indicates that the steepest slope to be constructed at the site during grading will be 2:1.

Proposed Cut Slopes: Cut slopes proposed for the rough grading of the site have been designated as shown on the Geotechnical Map (Figure 4). The cut slopes are discussed with specific recommendations presented in the Slope Stability section of this report. All grading should conform to the minimum recommendations presented in this report. If these slopes are modified from those that are discussed in this report, the modifications should be reviewed by RTF&A to ascertain the applicability of our recommendations.

Fill Slopes: Where the toe of a fill slope terminates on natural, fill, or cut, a keyway is required at the toe of the fill slope. The fill slope keyway should be a minimum width of 12 feet, be founded within competent material, and should extend a horizontal distance beyond the toe of the fill to the depth of the keyway. The keyway should be sloped back at a minimum gradient of two percent into the slope. The width of fill slopes shall be no less than eight feet and under no circumstances should the fill widths be less than what the compaction equipment being used can fully compact. Benches should be cut into the existing slope to bind the fill to the slope. Benches should be step-like in profile, with each bench not less than four feet in height and established in competent material. Compressible or other unsuitable soils should be removed from the slope prior to benching. Competent material is defined as being essentially free of loose soil, heavy fracturing, or erosion-prone material and is established by the Geotechnical Consultant of Record during grading.

Where the top or toe of a fill slope terminates on a natural or cut slope and the natural or cut slope is steeper than a gradient of 3:1, a drainage terrace with a width of at least six feet is recommended along the contact. As an alternative, the natural or cut portion of the slope can be excavated and replaced as a stability fill to provide an all-fill slope condition. Where the contact between the face of the fill slope and the face of a lower natural or cut slope is inclined at 45 degrees or steeper, a drainage terrace would not be required.

When constructing fill slopes, the grading contractor shall avoid spillage of loose material down the face of the slope during the dumping and rolling operations. Preferably, the incoming load shall be dumped behind the face of the slope and bladed into place. After a maximum of four feet of compacted fill has been placed, the contractor shall backroll the outer face of the slope by backing the tamping roller over the top of the slope, thoroughly covering the entire slope surface with overlapping passes of the roller. The foregoing should be repeated after the placement of each four-foot thickness of fill. As an alternative, the fill slope can be overbuilt and the slope cut back to expose a compacted core. If the required compaction is not obtained on the fill slope, additional rolling will be required prior to placement of additional fill, or the slope shall be overbuilt and cut back to expose the compacted core.

Stability Fills: A stability fill slope has been recommended at specific locations to mitigate erosion, drainage, or surficial stability problems. The stability fills should extend for the length and height of slope as recommended in the Slope Stability section of this report. The approximate locations of the recommended stability fill keyway are indicated on the Geotechnical Map (Figure 4). Additional

stability fills may be required during grading due to changed field conditions. The minimum stability fill keyway width should conform to those shown on the Stability Fill Details for Grossly Stable Slopes, Figure 12, but should not be less than 15 feet. The width of stability fill may taper uniformly to no less than eight feet at the top of the slope. Under no circumstances should the fill widths be less than what the compaction equipment being used can fully compact. Backdrains should be provided at the backcut as described in the following section and indicated in Figure 12. The stability fill slope should be keyed and benched into competent earth materials as recommended in this report or determined by the Geotechnical Consultant of Record during construction. The stability fill slope should be constructed in accordance with the recommendations for keyway, benching, and backdrain details shown in Figure 12.

Stability Fill Backdrains: Backdrains, consisting of four-inch diameter or larger perforated pipe, should be installed at the backcut of the stability fill. Non-perforated drain outlets should be provided at vertical intervals not exceeding 15 feet, and horizontal intervals not exceeding 100 feet, and under the direction of the Geotechnical Consultant of Record. The exact location of the subdrains should be determined in the field by the Geotechnical Consultant of Record after the back cut has been made so that they can be best positioned to intercept potential seepage.

EXPANSIVE SOILS

Samples of on-site soils that will be used for compacted fill were obtained to determine their expansion potential; the results of the tests performed indicate that

the on-site materials generally have an Expansion Index that varies from 0 to 4, as presented in Appendix B. The on-site soils can be classified as having a very low potential for expansion. Special precautions for potentially expansive soils are not required.

FOUNDATIONS

General: The proposed buildings may be supported on continuous or individual spread footings established in properly compacted fill soil. The provided design values are based on our investigation and laboratory test results. A formal review of future foundation plans should be performed prior to commencement of construction.

Footings should not be constructed any closer than five feet to the face of a descending slope, measured horizontally from the outer bottom edge of the proposed footing. In addition, footings should not be constructed any closer to the face of a descending slope than one-third the height of the slope, with a maximum setback distance of 40 feet. In case of constructing footings adjacent to the face of an ascending slope, the horizontal distance from the outer bottom edge of the proposed footing to the toe of the slope should not be any closer than one-half the height of the slope or 15 feet, whichever is less.

Bearing Capacity: It is assumed that the proposed fire station structures will be founded near final grade, have interior loads of not more than 200 kips at column locations and continuous footing loads that will not exceed three kips per lineal foot, and have normal floor loads with no special requirements. Individual column pads or

wall footings should have a width of at least 12 inches and be placed at a depth of at least 18 inches below the lowest final adjacent grade.

It is anticipated that structures may be supported on spread footings using a bearing value of 2,500 pounds per square foot (psf) when established within properly compacted fill soils. There should be at least three vertical feet of compacted fill below the bottom of proposed footings. The recommended bearing value is a net value and the weight of the concrete in the footings may be taken as 50 pounds per cubic foot (pcf). The weight of soil backfill may be neglected when determining the downward loads from the footings. A one-third increase in the bearing value may be used for temporary loads such as wind or seismic loads when allowed by the CBC.

Lateral Resistance: Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.4 may be used between the footings, floor slabs, and the supporting soils. The passive resistance of properly compacted fill soils may be assumed to be equal to the pressure developed by a fluid with a density of 250 pcf, increasing with depth and limited to a maximum pressure value of 3,000 psf. A one-third increase in the passive value may be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.

Settlement: Provided that the structures are founded in compacted fill soils as recommended, we estimate that the total static and seismic settlement will be about one inch. The static and seismic differential settlement within a horizontal distance of 30 feet is estimated to be 0.75 inches.

FLOOR SLABS

The recommendations presented in this section of the report have been prepared with the assumption that the floor slabs for the proposed buildings will be subjected to normal floor loads with no special requirements; the floor slabs may be supported on grade. Conventional slabs-on-grade should be designed in accordance with the requirements of the CBC. Perimeter grades around each building should be sloped in a manner allowing water to drain away from the structure and not pond next to the foundations. Roof downdrains should be connected to underground pipes carrying water away from the building areas, or have extenders so water does not drain and pond next to the buildings.

Floor slabs should have a minimum thickness of five inches and should contain a minimum of No. 4 bars spaced a maximum of 18 inches on center, in both directions. Thicker slabs and additional reinforcement may be required depending on the floor loads and the structural requirements. The actual slab thickness and reinforcement are referred to the Project Structural Engineer and can be increased and/or decreased at their discretion.

Construction activities and exposure to the environment may cause deterioration of the prepared subgrade. Therefore, the Geotechnical Consultant of Record should observe the condition of the final subgrade soils immediately prior to slab-on-grade construction and, if necessary, perform further density and moisture content tests to determine the suitability of the final prepared subgrade. The soil subgrade should be thoroughly moistened prior to casting.

If vinyl or other moisture-sensitive floor coverings are planned, the floor slabs in those areas should be constructed in a manner to decrease the potential of water vapor migration through the slabs. The floor slabs beneath areas of moisture-sensitive floor coverings should be underlain by a vapor barrier consisting of a ten-mil-thick impermeable membrane. Care should be taken to avoid damage to the membrane and to seal the membrane around utilities and other penetrations. A layer of compact sand may be used beneath the membrane to provide protection for the membrane from the subgrade soils. The sand should be moist but not saturated.

A two-inch-thick layer of moist, but not saturated, compact sand should be placed over the membrane to protect it while the floor slab is cast and to aid in curing of the floor slab. If the sand is saturated before placing concrete, the moisture in the sand can become a source of water vapor. Care should be taken during the placement of the concrete to prevent displacement of the sand.

Another factor affecting vapor transmission through floor slabs is the water-to-cement ratio in the concrete used for the floor slab. A high water-to-cement ratio increases the porosity of the concrete, thereby facilitating the transmission of water vapor through the slab. The Project Structural Engineer should provide recommendations for design of concrete for footings and floor slabs in accordance with the CBC.

CORROSION PROTECTION

Soil corrosivity tests were performed by Schiff, as presented in Appendix C. The corrosion test results indicate that the on-site soils are moderately corrosive to ferrous metals and that any type of concrete may be utilized. Review of the corrosion test results and implementation of corrosion protection recommendations for the site-specific improvements are referred to the Project Design Consultant. A Corrosion Consultant, such as Schiff, could be retained to provide corrosion design and construction recommendations for the site-specific proposed development.

PAVEMENT DESIGN

We obtained two samples of the near surface soils that were submitted to Labelle*Marvin for R-Value determination. The results of the tests varied from 64 to 67. The following pavement section recommendations are based on the on-site soils having an R-value of 60.

TRAFFIC INDEX	ASPHALT THICKNESS (INCHES)	BASE COURSE (CAB) THICKNESS (INCHES)	BASE COURSE (CMB) THICKNESS (INCHES)
4	3	4	4
6	4	4	4
8	5	4	4
10	7	4	4
12	8	6	6

Base course material should consist of crushed aggregate base (CAB) as defined by Section 200-2.2 of the Standard Specifications for Public Works Construction

(Greenbook). If crushed miscellaneous base (CMB) is used, it should meet the specifications outlined in Section 200-2.4 of the Greenbook. Base course should be compacted to at least 95 percent of the maximum dry density of that material.

Base course material should be purchased from a supplier who will certify the base course will meet or exceed the specifications in the Greenbook as indicated. We could, at your request, perform sieve analysis and sand equivalency tests on material delivered to the site which appears suspect. Additional tests could be performed, upon request, to determine if the material is in compliance with the specifications.

The pavement section recommendations presented above are based upon assumed Traffic Index values. RTF&A does not take responsibility for the numerical determination of the Traffic Index values or the areas where they apply within the site. We would be pleased to provide pavement section recommendations for alternative Traffic Index values upon request.

In order to increase pavement performance and extend the pavement life, concrete curbs and gutters could be deepened to extend below the base course material and be seated in the compacted fill or bedrock. The intent of deepening the curbs and gutters is to form a "cut-off" wall to reduce the amount of water flow through the base course material from adjacent landscaped areas. Subgrade soils which become saturated as a result of water flowing through base course material can reduce the life of the pavement. The curbs should be deepened to an elevation of at least six inches below the bottom level of the proposed base course section.

Portland Cement Concrete pavement (PCC pavement) can be placed directly on native subgrade soils compacted to a minimum of 95 percent of the maximum dry

density. The thickness of pavement should be in accordance with the following table. The water-to-cement ratio of the concrete should be no more than 0.5, with a minimum compressive strength of 3,000 pounds per square inch (psi).

TRAFFIC INDEX	PCC PAVEMENT THICKNESS (INCHES)
4	6.5
6	7.0
8	8.0
10	8.5
12	9.0

The layout of PCC paving joints should be determined by the Civil Engineer, preparing the site plan with consideration of the following joint spacing and reinforcement recommendations. These recommendations may be superseded by a Civil Engineer with pavement design expertise. The PCC pavement should include longitude and transverse joints at intervals not to exceed 15 feet on center. The joints should be saw cut within four hours of the concrete pour. Jointing should not allow any concrete areas to remain in which the length of the concrete rectangle exceeds 1.5 times the base. All joints should be reinforced with centered 30-inch long, #4 bars at 30 inches on center.

RETAINING WALLS

Lateral Earth Pressures: For design of cantilevered retaining walls that are independent of buildings, where the surface of the backfill is level and the retained height of soils is less than 12 feet, it may be assumed that drained soils will exert a

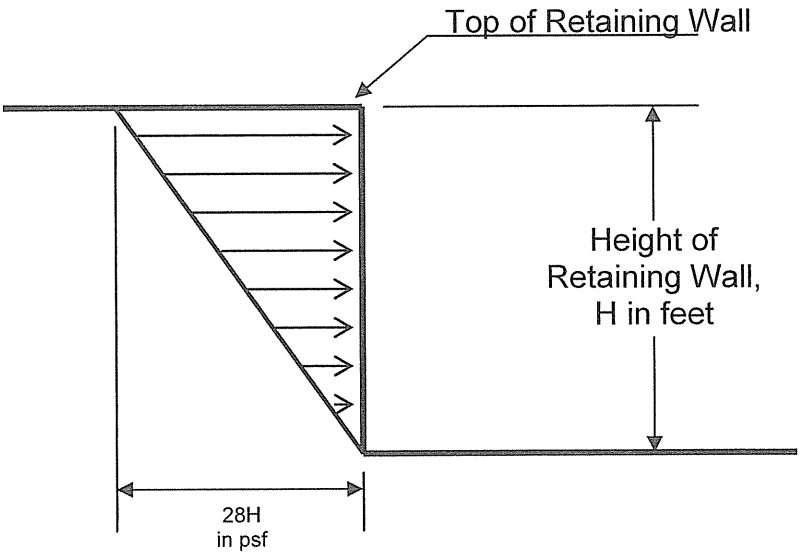
lateral pressure equal to that developed by a fluid with a density of 35 pcf. Where the surface of the backfill is inclined at 2:1, it may be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 50 pcf. The indicated pressures assume that normal deflections, being up to about one-half percent of the wall height, of the walls are acceptable. If it is desired to decrease the potential deflections of the walls, greater lateral pressures could be used in design of the wall. In addition to the recommended earth pressure, the walls should be designed to resist any lateral load due to nearby building, storage, or traffic loads. A drainage system, such as recommended in the "Wall Drainage" section of this report should be installed to reduce the potential for development of hydrostatic pressure.

If a drainage system is not installed, the walls should be designed to resist an additional hydrostatic pressure equal to that developed by a fluid with a density of 60 pcf for the full height of the wall.

In addition to the recommended pressures, the upper ten feet of walls adjacent to vehicular traffic areas should be designed to resist a uniform lateral pressure of 100 psf, acting as a result of an assumed 300 psf surcharge behind the walls due to normal traffic. If the traffic is kept at least ten feet from the backs of the walls, the traffic surcharge may be neglected.

Seismic Lateral Earth Pressure: In addition to the above-mentioned lateral earth pressures, tall retaining walls greater than 12 feet should be designed to support a seismic active pressure. A seismic active pressure should be utilized in accordance with the seismic-induced earth pressure distribution shown on the following diagram. As indicated, the maximum pressure is equal to 28H (psf) at the top of the wall

where H is the wall height in feet. This load should be combined with the previously described lateral static pressures.



Wall Drainage: A drainage system should be provided behind retaining walls or the walls should be designed to resist hydrostatic pressures. The drainage system could consist of a four-inch diameter perforated pipe placed six inches from the base of the wall, with the perforations down, and connected to an outlet device. The pipe should be sloped at least one inch per 50 feet and surrounded on all sides by at least six inches of clean gravel. The gravel should be "burrito-wrapped" with filter fabric, such as Mirafi 140N or equivalent. As an alternative to the gravel and filter fabric, filter material meeting the requirements of Los Angeles County Flood Control District Designated F-1 Filter Material, and slotted pipe, may be used. The backside of the wall should be waterproofed.

A vertical six-inch wide gravel chimney drain, or a drainage geocomposite such as Miradrain, should be placed against and behind retaining walls that are higher than three feet. The top of the back drain should be capped with 18 inches of on-site soils.

The installed drainage system should be observed by the Geotechnical Consultant of Record prior to backfilling the system. Inspection of the drainage system may also be required by the reviewing governmental agencies.

CONCLUSIONS

On the basis of our geologic-seismic evaluation, and in accordance with the CGS Note 48 Guidelines, we conclude that there are no potential geologic-seismic hazards that could adversely impact proposed Fire Station No. 142. Furthermore, there are no unfavorable geotechnical conditions that would preclude site development. In our opinion, the site is suitable for the proposed fire station and Heli-Pad.

LOS ANGELES COUNTY SECTION 111 STATEMENT

Based on the findings summarized in this submittal, it is our professional opinion that the proposed grading, and any proposed structures at the site, will be safe from hazards of settlement, slippage, or landslide, provided that the recommendations of this submittal, and those of the Los Angeles County Code, are incorporated into the proposed construction. Additionally, the proposed site grading

and any proposed structures will not adversely affect the geotechnical conditions on adjacent properties.

OBSERVATION AND TESTING

This report has been prepared assuming that RTF & A will perform all geotechnically-related field observations and testing. If the recommendations presented in this report are utilized, and observation of the geotechnical work is performed by others, the party performing the observations must review this report and assume responsibility for recommendations presented herein. That party would then assume the title "Geotechnical Consultant of Record."

A representative of the Geotechnical Consultant should be present to observe all grading operations, as well as all footing excavations. A report presenting the results of these observations and related testing should be issued upon completion of these operations.

-oOo-

Should you have any questions regarding this report, please contact our office.

The following are attached and complete this report.

- References
- Site Location Map - Figure 1
- Regional Geologic Map - Figure 2
- Regional Fault Map - Figure 3
- Geotechnical Map - Figure 4 (in pocket)
- Geologic Section X-X' - Figure 5
- Seismic Hazard Zones - Figure 6
- USGS Design Spectrum - Figure 7
- USGS MCE Spectrum - Figure 8
- USGS Uniform Hazard Spectrum - Figure 9
- Seismic Hazard Maps - Figures 10.1 through 10.6
- Probabilistic Seismic Hazard Deaggregation - Figure 11
- Stability Fill Details for Grossly Stable Slopes - Figure 12
- Appendix A - Explorations
  - Unified Soil Classification System
  - Log of Borings HS-1 through HS-3
  - Log of Test Pits TP-1 through TP-13

Appendix B - Laboratory Tests
- Direct Shear Test Data (2 pages)
- Consolidation Test Data (7 pages)
- Grain Size Distribution (5 pages)
- R-Value Data (5 pages)

- Appendix C - Soil Corrosivity Study
- Appendix D - Historic Earthquake Search Results
- Appendix E - Probabilistic Earthquake Hazard Analyses
- Appendix F - Percolation Testing

Respectfully submitted,

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TPL/AWR/cma

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APPENDIX A

EXPLORATIONS

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APPENDIX A

EXPLORATIONS

We recently explored the site by drilling three borings at the locations shown on the attached Geotechnical Map, Figure 4. The borings were drilled to depths ranging from 31.5 to 51.5 feet below the grade that existed at the time of our exploration. We obtained undisturbed and Standard Penetration Test (SPT) samples from the borings for laboratory examination and testing. In addition to the borings, we also excavated 13 test pits from 3 to 10 feet below the grade that existed at the time of our exploration. The soils encountered were classified in accordance with the Unified Soil Classification System. The boring and test pit logs are presented in this Appendix.

Our field technician obtained undisturbed and bulk samples for laboratory inspection and testing. The lined-barrel sampler used to take undisturbed samples has an external diameter of 3.25 inches and an internal diameter of 2.625 inches. The depths at which the undisturbed samples were obtained are indicated on the logs. The number of blows required to drive the sampler 12 inches, with the hammer weight are also shown on the boring logs.

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APPENDIX B

LABORATORY TESTS

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APPENDIX B

LABORATORY TESTS

Laboratory tests were performed on selected samples obtained from the borings to aid in the classification of the soils and to determine their engineering properties. Laboratory test results from the current exploration of the site are presented in this Appendix. Laboratory tests from the previous explorations of the site are presented in the referenced reports.

The field moisture content and dry density of the soils encountered were determined by performing tests on the undisturbed samples. The results of the tests are shown to the left of the boring logs in Appendix A.

Direct shear tests were performed on selected undisturbed samples to determine the strength of the soils. The tests were performed after soaking the samples to near-saturated moisture content and at various surcharge pressures. The strength values determined from the direct shear tests are presented on the Shear Test Data page.

Confined consolidation tests were performed on relatively undisturbed samples. Water was added during the tests to each of the samples to illustrate the effect of moisture on the compressibility. The results of the tests are presented on the Consolidation Test Data pages.

The gradation of selected samples was determined by performing sieve analyses. Hydrometer tests were performed on some of the sieve analyses samples. The results of the tests are presented on Gradation Test Data pages.

The expansion index of expansion samples was determined by CBC Standard 18.2. The results of the expansion index testing are presented in Table 1.

TABLE 1

LABORATORY EXPANSION INDEX TEST DATA

BORING LOCATION AND DEPTH (feet)	EXPANSION INDEX	EXPANSION POTENTIAL
HS-1 @ 0 – 6 feet	4	Very Low
HS-2 @ 0 – 6 feet	2	Very Low
HS-3 @ 0 – 5 feet	0	Very Low
TP-12 @ 3 – 5 feet	1	Very Low
TP-1 @ 1 – 3 feet	0	Very Low

The optimum moisture content and maximum dry density of the soils were determined by a compaction test on a sample obtained from the borings. The test was performed in accordance with the ASTM D 1557-02 Method of Compaction on the portion of the sample that passed the ¾-inch sieve. The test results are presented in the following table.

Boring No. and Sample Depth (feet)	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HS-1 @ 0 – 6'	136	7.0
HS-2 @ 0 – 6'	136	7.5
HS-3 @ 0 – 6'	137	7.5
TP-1 @ 1 – 3'	136	7.0
TP-12 @ 1 – 3'	135	7.0

RP Development Services
April 14, 2009
2009-002-01

APPENDIX C

SOIL CORROSIVITY STUDY

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

RP Development Services
April 14, 2009
2009-002-01

APPENDIX D

HISTORIC EARTHQUAKE SEARCH RESULTS

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

RP Development Services
April 14, 2009
2009-002-01

APPENDIX E

PROBALISTIC EARTHQUAKE HAZARD ANALYSES

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

RP Development Services
April 14, 2009
2009-002-01

APPENDIX F

PERCOLATION TESTING

RTF&A
GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

APPENDIX F

PERCOLATION TESTING

R.T. Frankian and Associates Inc. (RTF&A) conducted percolation testing at the subject site. The percolation testing was performed coincident with a geotechnical investigation of the site for a future Fire Station. The percolation testing was conducted in an area designated for a future leach field for the planned Fire Station. However, the site plan was revised after the field investigation was performed and the current location of the leach field is not identified on the attached Geotechnical Map, Figure 4.

PLANNING AND SCOPE

The percolation testing procedure followed the recommended procedures outlined in the January 1, 2000 (revised 4-23-08), Application Procedures for Approval of an Onsite Wastewater Treatment System (OWTS) prepared by County of Los Angeles Department of Public Health. Prior to beginning the testing, we contacted Mr. Winsor Kawamoto of Los Angeles County Public Health to discuss the site and anticipated testing procedures. Mr. Kawamoto emphasized that at least four tests would be required (two in the planned area and two in a future area), and suggested that any differing materials would have to be tested separately. He also recommended that the tests be performed at the planned trench depths. No specific site plans have been prepared to design the capacity required for the site. We conducted a total of six tests at depths of 3 to 4 feet.

SOIL CONDITIONS – GROUND WATER

The soils underlying the entire site are similar in composition. The site is located above a broad terrace deposit consisting of older alluvial soils classified as silty sand. The soils were explored in the immediate vicinity of the leach field with two trenches excavated to ten feet (which are attached to this report). In addition, we explored the remainder of the proposed fire station site with several more trenches and geotechnical borings to 50 feet deep. Based on the entire geotechnical investigation, we are confident that the soils

underlying the leach field area are of similar composition to a depth of at least 50 feet.

No groundwater was encountered in the borings to a depth of 50 feet. The seismic hazard report for the Acton Quadrangle indicates that the historic high groundwater is at least 40 feet below the existing site grade. As such, the proposed on-site sewage system will not be affected by shallow groundwater conditions.

FIELD WORK

Six test pits were dug to a depth of 3 to 4 feet on February 19, 2009. The test pits were approximately 4 by 4 feet square. In the center of each pit bottom, another excavation, approximately one foot by one foot and one foot deep (cube) was excavated for the percolation test. The interior percolation cube was filled with water on February 19 and allowed to drain into the soil overnight.

On February 20, 2009, the percolation pits were all observed to be empty. The pits were re-filled with water to a depth of 12 inches and allowed to re-percolate. The depth of the water was measured over time. The beginning and ending time of the sixth inch of percolated water, was recorded and is shown on the attached percolation test data table. Water in one of the test pits rapidly percolated into the ground anomalously fast and was discounted. All five of the other five percolation test pit results were extremely similar, ranging between 49 and 59 minutes and averaging 53 minutes as shown on the data table.

CONCLUSIONS

Based on the site geology, uniform soil conditions and percolation test results, the site is suitable for an onsite wastewater treatment system. The percolation test results indicate an acceptable percolation rate for on-site sewage disposal.

RECOMMENDATIONS

When the final design for the fire station is established, the number of plumbing fixtures will determine the size of the septic tank needed for the site. Once the capacity of the septic tank is determined, then the design civil engineer can calculate the needed length and layout of the required leach lines. For preliminary planning purposes, we have assumed the required septic tank capacity at 2,000 gallons and estimated the resultant length of the leach lines on Attachment 1, Percolation Test Data.

There are several options for leach field design, and depth and orientation will depend on finished floor elevations of the fire station, sewer outlet elevations, and finished ground surface. A series of trenches will be required in the leach field area, with appropriate distribution boxes from the fire station. Note that the leach lines should be established in the underlying, native, undisturbed soil.

In addition to a leach field, it would also be acceptable to use a seepage pit for on-site sewage disposal. The seepage pit design would be based on a different type of field percolation test. The advantage to the seepage pit design is that it could be contained within a smaller footprint. A seepage pit percolation test could be performed once the proposed on-site sewage disposal location is determined.

PERCOLATION TEST FIELD DATA

Test Pit # and Depth	Measurement of depth starting at initial 12 inches	Time	Minutes per Sixth Inch Drop
P-1 – 4 feet	7 inches	10:40	52 minutes
	6 inches	11:32	
P-2 – 4 feet	7 inches	11:35	53 minutes
	6 inches	12:28	
P-3 – 3 feet	7 inches	9:38	13 minutes
	6 inches	9:51	(anomalous)
P-4 – 3 feet	7 inches	11:56	59 minutes
	6 inches	12:55	
P-5 – 3 feet	7 inches	10:16	49 minutes
	6 inches	11:05	
P-6 – 4 feet	7 inches	10:38	50 minutes
	6 inches	11:28	
			Average of 5 tests: 53 minutes

Ryon Formula: A= (T + 6.24)/29 X C/2
A = Area (square feet of 3-foot wide leach trench)
T = time in minutes for percolation of 6th inch of water to drop (53 average)
C = Proposed septic tank capacity (to be determined, but assume 2,000 gallons)
Rough calculations:
A = 2 X 1,000 = 2,000 (best estimate)
A = 2.27 X 1,000 = 2, 275 (worst case)

LENGTH OF TRENCH REQUIRED FOR PERCOLATION
(based on assumed septic tank capacity of 2,000 gallons)

Case 1: three feet wide and three feet deep with one foot of gravel in bottom:
Length of trench = 2,000/3 feet = 667 feet of trench required for leach field percolation.
Length of trench = 2,275/3 feet = 758 feet of trench required for leach field percolation.

Case 2: three feet wide and four feet deep with 2 feet of gravel in bottom:
Length of trench = 2,000/5 feet = 400 feet of trench required for leach field percolation.
Length of trench = 2,275/5 feet = 450 feet of trench required for leach field percolation.

APPENDIX 2.1.7

Limited Phase II Environmental Site Assessment

JACOB & HEFNER ASSOCIATES, INC.
ENVIRONMENTAL REMEDIATION SERVICES

September 24, 2009
ImpSci-03A

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012

Attention: Ms. Susan Tebo
Associate Principal

Report
Limited Phase II Environmental Site Assessment
Proposed Los Angeles County Fire Station No. 142,
North Side of Sierra Highway 900 feet East of Crown Valley Road, Acton, CA 93510

Introduction

Jacob & Hefner Associates, Inc. (JHA) is pleased to present this report of a Limited Phase II Environmental Site Assessment (Phase II ESA) of an approximate 4.7-acre part of a an approximate 13.1-acre parcel of land at 3635 Sierra Highway, Acton, California (Site, Plate 1). The 4.7 -acre Site consists of the approximate eastern one-third of the entire property (Plate 2). The Assessor Parcel Number for the entire 13.1-acre property is 3217-021-031. The Site is located in the northeast quarter of the northwest quarter of Section 25, Township 5 North, Range 13 West, San Bernardino Base & Meridian, at an elevation of approximately 2,975 feet above mean sea level. The Site topography slopes down to the south at approximately 200 feet per mile (0.038 feet per foot).

The Site is approximately 900 feet east of the intersection of Sierra Highway and Crown Valley Road and is bound on the west by a driveway for a dwelling located northwest of the Site, on the south by Sierra Highway, on the east by Clanfield Street (a dirt road), and on the north by open land. Photographs of the Site are provided in Attachment A.

Review of Previous Report and Chemicals of Concern

JHA reviewed a Phase I Environmental Site Assessment (ESA) dated April 15, 2009 prepared for the Site by R. T. Frankian & Associates (RTFA). The Phase I ESA stated that there was evidence that the Site was used for agriculture prior to 1954, and that, "it is possible that pesticides and herbicides have been used on the subject site in the past". In addition, it was reported that an orchard may be currently present on the northern portion of the Site.

Based on the results of the Phase I ESA, there was a concern that organochlorine pesticides that have a long residency time in soil may have been used at the Site (such as DDT,

Dieldrin, Heptachlor, and Toxaphene, among others). Organochlorine pesticides do not generally migrate deep into the soil, but remain in the shallow soil within the plowed depth. In order to confirm or deny the presence of the chemicals of concern, JHA performed a limited Phase II ESA that consisted of the collection of representative shallow soil samples from the 4.7-acre Site for laboratory analyses of organochlorine pesticides.

Assessment Methods

On September 8, 2009, a California Professional Geologist from JHA visited the Site. The northern one-quarter of the Site was fenced and had eight rows of approximately 6-foot tall bushes identified by a person at the adjacent residence as lilac plants. A row of pine-trees was observed along the northern Site boundary (Attachment A, Photograph 1). A drip irrigation system was observed along the rows of lilac bushes. Several fenced pens containing various farm animals were observed along the west side of the northern one-quarter of the Site. The southern three-quarters of the Site was a vacant dirt lot with areas of dried low brush and grasses (Photograph 2).

JHA divided the Site into six sub-parcels for sampling, five sub-parcels were approximately 200 feet by 180 feet, and the sixth one, located in the northeast part of the Site, was triangular-shaped and approximately one-half the size of the others. Each of the five sub-parcels was approximately 0.83-acre in size with the sixth sub-parcel being 0.41-acre in size. In JHA's professional opinion, the six sub-parcels are of sufficient number and size to adequately screen the entire 4.7-acre Site of organochlorine pesticide residues in the shallow soil.

A soil sample was collected from the approximate center of each sub-parcel (six samples) at a depth of approximately 1-foot below ground surface (bgs). For vertical control, two soil samples were collected at a depth of approximately 3 feet bgs in the northwest and in the southeast sub-parcels (two samples). Three samples were collected in the fenced area planted with rows of lilac bushes (Samples S-1-1', S-1-3', and S-6-1'), and five samples were collected from the remainder of the Site (S-2-1', S-3-1', S-4-1', S-4-3', and S-5-1').

The samples were collected using hand sampling equipment and were placed in clean laboratory supplied 4-ounce glass jars, labeled with a unique identification number, placed in an ice chest containing ice, and transported to a state certified laboratory following Chain-of-Custody protocol.

The samples were analyzed for organochlorine pesticides using EPA Test Method 8081A at American Scientific Laboratories, a State certified laboratory in Los Angeles, California.

Assessment Results

The shallow soil at the Site was a reddish brown unconsolidated very dry, coarse to fine grained sand with silt, clay, and pebbles.

The laboratory reported that <u>none</u> of the 21 organochlorine pesticides on the Method 8081A list were detected above the laboratory practical quantitation limit (PQL) measured in

micrograms per kilogram (parts per billion) in any of the eight samples. A copy of the signed laboratory report with chain-of-custody documentation is provided in Attachment B.

Conclusion

Based on the results presented above, it is JHA's professional opinion that the Site has not been impacted with organochlorine pesticides, and mitigation measures for organochlorine pesticide residue in the shallow soil are not required.

Limitations

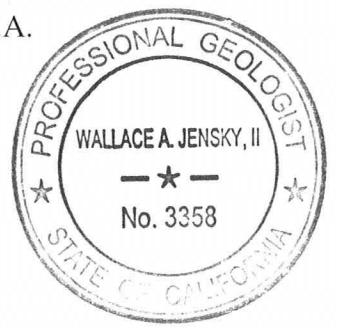
This report has been prepared for Impact Sciences and the Los Angeles County Fire Department as a Limited Subsurface Soil Assessment of an approximate 4.7-acre part of an approximate 13.1-acre parcel of land at 3635 Sierra Highway, Acton, California. Parties not designated by Impact Sciences or the Los Angeles County Fire Department should not rely on the information in this report without the written consent of JHA.

Inferences with respect to potential subsurface contamination are based on a limited number of soil samples. The findings and interpretations in this report have been developed based on the review of existing information pertaining to the subject Site. It should be recognized that subsurface contamination can vary laterally and with depth below a given Site.

Should you have any questions concerning this report, please call.

Yours very truly,
Jacob & Hefner Associates, Inc.

Wallace A. Jensky, II, P.G., R.E.A.
Professional Geologist

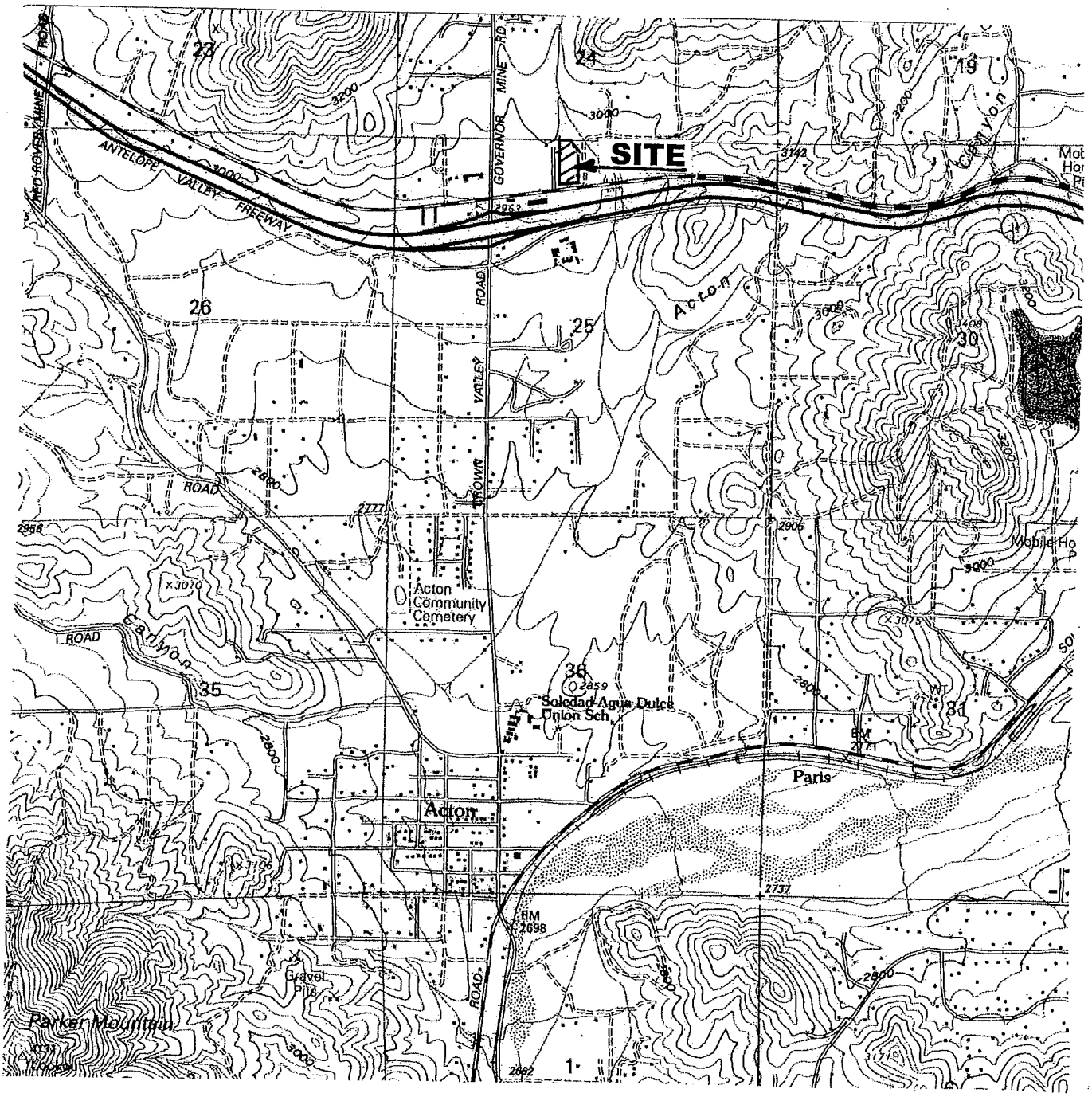


Attachments:

Plate 1 – Site Location Map
Plate 2 – Site Plan with Soil Sample Locations

A – Site Photographs
B – Laboratory Report and Chain of Custody Documentation

PLATES



N	TARGET QUAD
	NAME: ACTON
	MAP YEAR: 1995
	SERIES: 7.5
	SCALE: 1:24000

PLATE 1

SITE LOCATION MAP

Proposed Fire Station No. 142

Acton, California

JACOB & HEFNER ASSOCIATES, Inc.
ENVIRONMENTAL REMEDIATION SERVICES
4835 COLT STREET, UNIT C
VENTURA, CALIFORNIA 93003
(805)654-9611

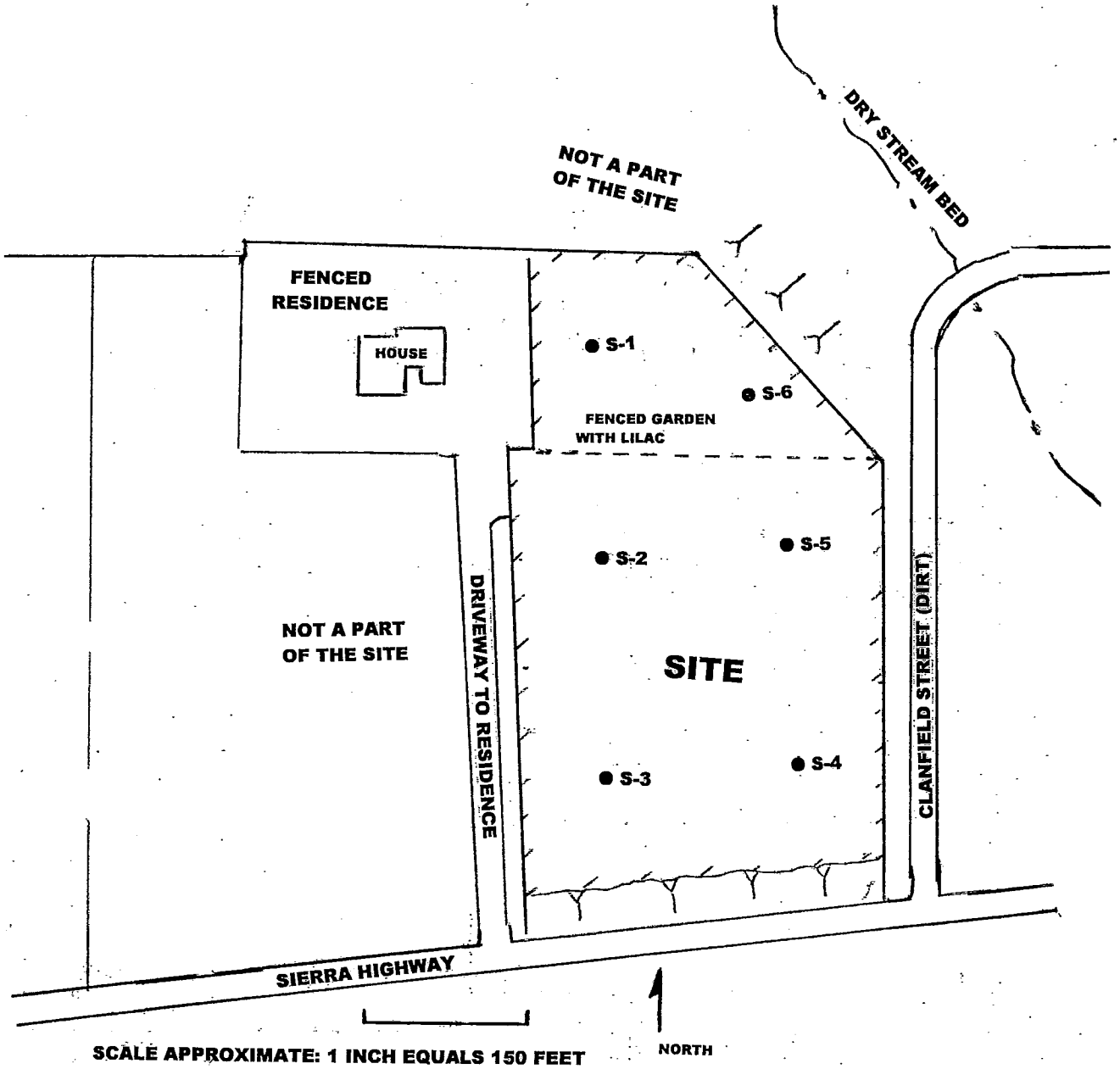


PLATE 2

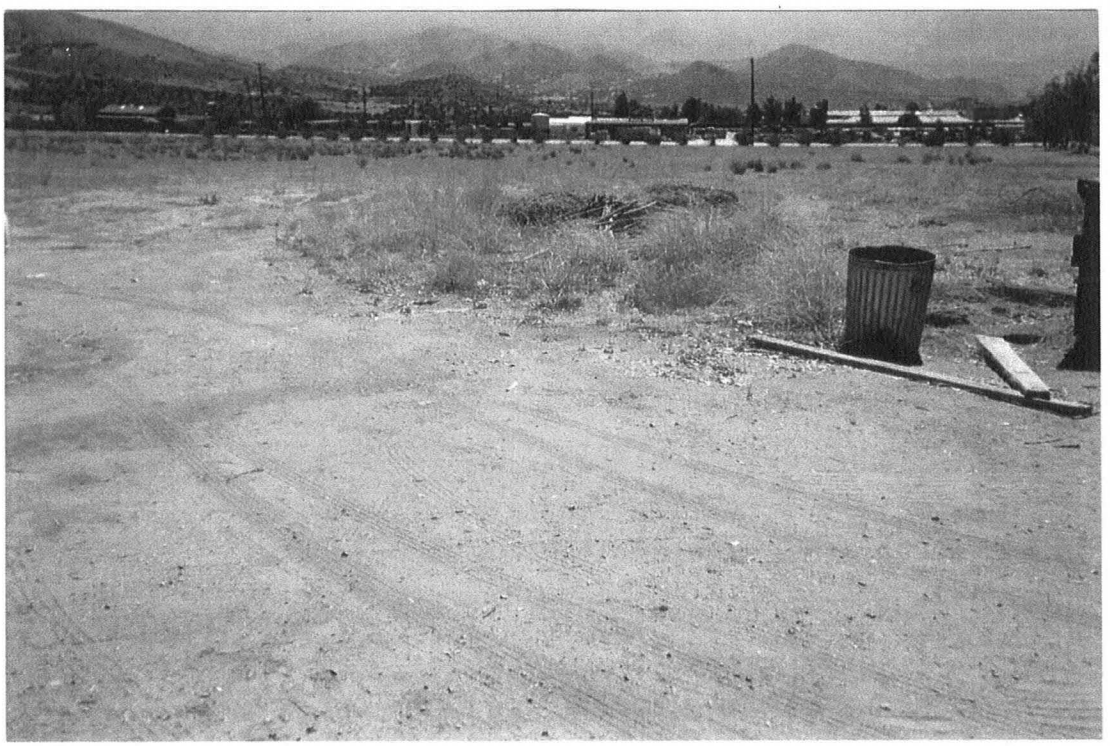
SITE PLAN WITH
SOIL SAMPLE LOCATIONS
Proposed Fire Station No. 142

JACOB & HEFNER ASSOCIATES, Inc.
ENVIRONMENTAL REMEDIATION SERVICES
4836 COLT STREET, UNIT C
VENTURA, CALIFORNIA 93003
(805)654-9611

ATTACHMENT A

Site Photographs

PHOTOGRAPH 1 – View looking northeast at the rows of lilac bushes inside the fenced northern one-quarter of the Site. The near pine trees are along the northern Site boundary. The bushes are watered by drip irrigation. Soil sample location S-1 was between the rows in the distance, and sample location S-6 was 200 feet to the east, beyond the view to the right.



PHOTOGRAPH 2 – View looking south at the vacant portion of the Site from the southeast corner of the residential property northwest of the Site. The fenced lilac garden is to the rear of the view. A trash dumpster is on the right. The row of trees in the distance on the right is along the adjacent driveway to the residence. Sierra Highway is down the slope beyond the row of oleander bushes along the south boundary of the Site. Commercial businesses are on the south side of the highway. Soil sample locations S-2 through S-5 were located on the southern three-quarters of the Site.

ATTACHMENT B

Laboratory Report and Chain-of-Custody Documentation

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

Ordered By

Jacob & Hefner
4835 Colt Street # C
Ventura, CA 93003-

Telephone (805) 654-6166
Attn Wally A. Jensky

Number of Pages 5
Date Received 09/09/2009
Date Reported 09/16/2009

Job Number	Ordered	Client
43041	09/09/2009	JACHEF

Project ID: E534
Project Name: Fire Station # 142
Site: Acton, CA

Enclosed are the results of analyses on 8 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

CHAIN OF CUSTODY RECORD

COC# Nº 51480 GLOBAL ID NONE E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 43041

Company: JACOB AND HEFNER ASSOCIATES, INC		Report To: WAJ@JACOB&HEFNER	ANALYSIS REQUESTED
Address: 4835 Colt St. Suite C	Project Name: FIRE STATION #142	Address: SAME	8081 Organochlorine Pesticides
Ventura, CA 93003	Site Address: ACTON, CA	Invoice To: SAME	
Telephone: 805-504-6166 Fax: 805-654-9613		Address: "	
Special Instruction: 8081-Pesticides	Project ID: E534	"	
E-mail: wjensky@jacobandhefner.com	Project Manager: WALLY JENSKY	P.O.#: E534	

FAX Results to WAJ

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Container(s) Type	Matrix	Preservation	8081 Organochlorine Pesticides	Remarks
	241497	S3-1'	9/8/09	11:40	1	Jar	Soil		X	
	241498	S2-1'		11:48					X	
	241499	S1-1'		12:00					X	
	241500	S1-3'		12:05					X	
	241501	S6-1'		12:30					X	
	241502	S5-1'		1:30					X	
	241503	S4-1'		1:40					X	
	241504	S4-3'		1:45					X	

Collected By: Wallace Jensky JR	Date 9/8/09	Time 2:00pm	Relinquished By: JNA	Date 9/9/09	Time [redacted]
Relinquished By: [redacted]	Date 9/9/09	Time 5:00pm	Received For Laboratory:	Date 9/9/09	Time 10:35
Received By: JNA	Date 9/8/09	Time 5:00pm	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Jacob & Hefner
4835 Colt Street # C
Ventura, CA 93003-

Telephone: (805)654-6166
Attn: Wally A. Jensky

Site

Acton, CA

Page: 2

Project ID: E534
Project Name: Fire Station # 142

ASL Job Number	Submitted	Client
43041	09/09/2009	JACHEF

Method: 8081A, Organochlorine Pesticides

QC Batch No: 091409-1

Our Lab I.D.		241497	241498	241499	241500	241501
Client Sample I.D.		S3-1'	S2-1'	S1-1'	S1-3'	S6-1'
Date Sampled		09/08/2009	09/08/2009	09/08/2009	09/08/2009	09/08/2009
Date Prepared		09/14/2009	09/14/2009	09/14/2009	09/14/2009	09/14/2009
Preparation Method						
Date Analyzed		09/14/2009	09/14/2009	09/14/2009	09/14/2009	09/14/2009
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND	ND	ND
Dieldrin	4.00	ND	ND	ND	ND	ND
Endosulfan 1	2.00	ND	ND	ND	ND	ND
Endosulfan 11	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	4.00	ND	ND	ND	ND	ND
Endrin	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	4.00	ND	ND	ND	ND	ND
Endrin ketone	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND	ND	ND
Heptachlor	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	2.00	ND	ND	ND	ND	ND
Methoxychlor	17.0	ND	ND	ND	ND	ND
Toxaphene	170	ND	ND	ND	ND	ND

Our Lab I.D.		241497	241498	241499	241500	241501
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	100	102	101	98	95

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Project ID: E534
Project Name: Fire Station # 142

ASL Job Number	Submitted	Client
43041	09/09/2009	JACHEF

Method: 8081A, Organochlorine Pesticides

QUALITY CONTROL REPORT

QC Batch No: 091409-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	113	106	6.4	42-122	<30					
4,4'-DDT (DDT)	123	127	3.2	25-160	<30					
Dieldrin	106	98	7.8	36-146	<30					
Endrin	132	127	3.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	108	104	3.8	32-127	<30					
Heptachlor	125	105	17.4	34-111	<30					

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Jacob & Hefner
4835 Colt Street # C
Ventura, CA 93003-

Telephone: (805)654-6166
Attn: Wally A. Jensky

Site

Acton, CA

Page: **4**

Project ID: E534
Project Name: Fire Station # 142

ASL Job Number	Submitted	Client
43041	09/09/2009	JACHEF

Method: 8081A, Organochlorine Pesticides

QC Batch No: 091409-1

Our Lab I.D.		241502	241503	241504		
Client Sample I.D.		S5-1'	S4-1'	S4-3'		
Date Sampled		09/08/2009	09/08/2009	09/08/2009		
Date Prepared		09/14/2009	09/14/2009	09/14/2009		
Preparation Method						
Date Analyzed		09/14/2009	09/14/2009	09/14/2009		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Aldrin	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND		
Gamma-Chlordane	2.00	ND	ND	ND		
alpha-Chlordane	2.00	ND	ND	ND		
4,4'-DDD (DDD)	4.00	ND	ND	ND		
4,4'-DDE (DDE)	4.00	ND	ND	ND		
4,4'-DDT (DDT)	4.00	ND	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND		
Dieldrin	4.00	ND	ND	ND		
Endosulfan 1	2.00	ND	ND	ND		
Endosulfan 11	4.00	ND	ND	ND		
Endosulfan sulfate	4.00	ND	ND	ND		
Endrin	4.00	ND	ND	ND		
Endrin aldehyde	4.00	ND	ND	ND		
Endrin ketone	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND		
Heptachlor	2.00	ND	ND	ND		
Heptachlor epoxide	2.00	ND	ND	ND		
Methoxychlor	17.0	ND	ND	ND		
Toxaphene	170	ND	ND	ND		

Our Lab I.D.		241502	241503	241504		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	100	86	109		

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Project ID: E534
Project Name: Fire Station # 142

ASL Job Number	Submitted	Client
43041	09/09/2009	JACHEF

Method: 8081A, Organochlorine Pesticides

QUALITY CONTROL REPORT

QC Batch No: 091409-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	113	106	6.4	42-122	<30					
4,4'-DDT (DDT)	123	127	3.2	25-160	<30					
Dieldrin	106	98	7.8	36-146	<30					
Endrin	132	127	3.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	108	104	3.8	32-127	<30					
Heptachlor	125	105	17.4	34-111	<30					

APPENDIX 2.1.11

Noise Calculations

Location 1 L_{dn}-CNEL Conversion Table

Fire Station 142
Ldn/CNEL Conversion of Monitored Leq's
Existing Conditions

Monitoring Location: FS 142 Location 1
Primary Noise Source: Vehicular traffic

Secondary Noise Source(s):

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight	0 / 24		57.5	562341	5623413	1778279
am	1:00	100	56.7	467735	4677351	1479108
	2:00	200	56.7	467735	4677351	1479108
	3:00	300	55.5	354813	3548134	1122018
	4:00	400	56.5	446684	4466836	1412538
	5:00	500	56.6	457088	4570882	1445440
	6:00	600	58.4	691831	6918310	2187762
	7:00	700	58.2	660693	6606934	2089296
	8:00	800	56.8	478630	4786301	1513561
	9:00	900	56.4	436516	4365158	1380384
	10:00:	1000	58.5	707946	7079458	2238721
	11:00:	1100	57.4	549541	5495409	1737801
	12:00:	1200	57.6	575440	5754399	1819701
pm	1:00	1300	57.4	549541	5495409	1737801
	2:00	1400	58.1	645654	6456542	2041738
	3:00	1500	58.3	676083	6760830	2137962
	4:00	1600		1	10	3
	5:00	1700		1	10	3
	6:00	1800		1	10	3
	7:00	1900		1	10	3
	8:00	2000		1	10	3
	9:00	2100		1	10	3
	10:00:	2200		1	10	3
pm	11:00:	2300		1	10	3

Leq Morning Peak Hour 7:00-10:00 a.m.
57 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
0 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
56 dBA

Leq Daytime 7:00 am-10:00 p.m.
55 dBA

Leq 24-Hour
56 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
62 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
62 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn 7.08508E-07

Location 2 L_{dn}-CNEL Conversion Table

Fire Station 142
Ldn/CNEL Conversion of Monitored Leq's
Existing Conditions

Monitoring Location: FS 142 Location 2
Primary Noise Source: Vehicular traffic

Secondary Noise Source(s):

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight	0 / 24		49.3	85114	851138	269153
am	1:00	100	50.0	100000	1000000	316228
	2:00	200	51.8	151356	1513561	478630
	3:00	300	44.8	30200	301995	95499
	4:00	400	45.2	33113	331131	104713
	5:00	500	47.4	54954	549541	173780
	6:00	600	47.3	53703	537032	169824
	7:00	700	49.2	83176	831764	263027
	8:00	800	47.0	50119	501187	158489
	9:00	900	46.5	44668	446684	141254
	10:00:	1000	47.1	51286	512861	162181
	11:00:	1100	46.3	42658	426580	134896
	12:00:	1200	46.3	42658	426580	134896
pm	1:00	1300	47.0	50119	501187	158489
	2:00	1400	47.4	54954	549541	173780
	3:00	1500	51.2	131826	1318257	416869
	4:00	1600		1	10	3
	5:00	1700		1	10	3
	6:00	1800		1	10	3
	7:00	1900		1	10	3
	8:00	2000		1	10	3
	9:00	2100		1	10	3
	10:00:	2200		1	10	3
pm	11:00:	2300		1	10	3

Leq Morning Peak Hour 7:00-10:00 a.m.
48 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
0 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
48 dBA

Leq Daytime 7:00 am-10:00 p.m.
46 dBA

Leq 24-Hour
46 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
54 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
54 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn 4.99867E-06

Location 3 L_{dn}-CNEL Conversion Table

Fire Station 142
Ldn/CNEL Conversion of Monitored Leq's
Existing Conditions

Monitoring Location: FS 142 Location 3
Primary Noise Source: Vehicular traffic **Secondary Noise Source(s): Single-Family Residential dwelling**

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight	0 / 24		56.6	457088	4570882	1445440
am	1:00	100	55.1	323594	3235937	1023293
	2:00	200	54.8	301995	3019952	954993
	3:00	300	53.6	229087	2290868	724436
	4:00	400	52.8	190546	1905461	602560
	5:00	500	53.0	199526	1995262	630957
	6:00	600	55.0	316228	3162278	1000000
	7:00	700	52.6	181970	1819701	575440
	8:00	800	52.6	181970	1819701	575440
	9:00	900	52.8	190546	1905461	602560
	10:00:	1000	52.0	158489	1584893	501187
	11:00:	1100	51.2	131826	1318257	416869
	12:00:	1200	53.0	199526	1995262	630957
pm	1:00	1300	55.6	363078	3630781	1148154
	2:00	1400	55.8	380189	3801894	1202264
	3:00	1500		1	10	3
	4:00	1600		1	10	3
	5:00	1700		1	10	3
	6:00	1800		1	10	3
	7:00	1900		1	10	3
	8:00	2000		1	10	3
	9:00	2100		1	10	3
	10:00:	2200		1	10	3
pm	11:00:	2300		1	10	3

Leq Morning Peak Hour 7:00-10:00 a.m.
53 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
0 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
54 dBA

Leq Daytime 7:00 am-10:00 p.m.
51 dBA

Leq 24-Hour
52 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
60 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
60 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn 1.28239E-06

On-site Highway Noise Contours

Fire Station 142
On-Site Noise Contours
Existing Conditions

ROADWAY NAME / Segment	Number of Lanes in Each Direction	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor (1)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Distance from Center of Roadway: CNEL at 75 Feet	DISTANCE TO CONTOUR: 75 CNEL	70 CNEL	65 CNEL	60 CNEL
ROADWAY NAME												
Sierra Hwy btwn Crown Valley & Clanfield	1	0	5,200	45	0	1.8%	0.7%	62.9	-	-	-	144
Sierra Hwy btwn Clanfield & Santiago	1	0	5,200	45	0	1.8%	0.7%	62.9	-	-	-	144

Notes:

(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site, such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such, as heavily vegetated ground cover.

"-" = contour is located within the roadway lanes or within 75 feet of the roadway centerline.

Noise levels and distances to contours do not assume any natural or constructed barriers that may attenuate noise.

Assumed 24-Hour Traffic Distribution:	**Day**	**Evening**	**Night**	**Total**
Total ADT Volumes	77.70%	12.70%	9.60%	100.00%
Medium-Duty Trucks	87.43%	5.05%	7.52%	100.00%
Heavy-Duty Trucks	89.10%	2.84%	8.06%	100.00%

I. INTRODUCTION

A. Purpose: To provide instructions to Los Angeles County Fire Department personnel on Emergency Vehicle Operation.

B. Scope: This document applies to all personnel whose responsibilities or duties include the operation of an authorized emergency vehicle.

C. Author: The Deputy Chief of the Special Operations Bureau, through the Training Services Section, is responsible for the content, revision, and periodic review of this instruction.

D. Authority: The California Vehicle Code (CVC); and Los Angeles County Fire Department (LACoFD) policy.

E. Objective: The objective of this policy is to outline and ensure compliance with laws and regulations set forth by the State of California Vehicle Code (CVC), and the operational policies of the Los Angeles County Fire Department (LACoFD).

II. RESPONSIBILITY

A. Supervisors shall review this instruction on Emergency Vehicle Operation with all personnel under their command.

B. Operators/Drivers operating an authorized emergency vehicle shall follow the CVC and LACoFD policies as stated in this instruction.

III. POLICY

A. Emergency Vehicle Operation: There are several CVC laws and LACoFD policies that apply to and govern the operation of an authorized emergency vehicle. The CVC and LACoFD policies direct routine and emergency vehicle operation, and the responsibilities and liabilities of all drivers of emergency vehicles.

1. The California Vehicle Code Section 17000 states: "A public entity is liable for death or injury to a person or property proximately caused by a negligent or wrongful act or omission in the operation of any motor vehicle by an employee of the public entity acting within the scope of his/her employment."

2. All members shall read, understand, and obey the California Vehicle Code sections that apply directly to the fire service.

a. It is the supervisor's responsibility to ensure adherence to the laws and regulations of the CVC, and the policies and procedures of the LACoFD regarding routine and emergency vehicle operation.

3. The authorized use of a warning device requests other drivers to yield the right–of–way to emergency vehicles. Emergency vehicle operators must be aware that their sudden appearance, and actions such as lane changes, and the unusual positioning of the emergency vehicle may surprise and confuse other drivers. Emergency vehicle operators must give other drivers the time and distance to be able to react and yield to our presence. The key to accident avoidance and evasive maneuvers is the ability to recognize hazardous situations and drive defensively. A defensive driver acts to avoid accidents, makes allowances for the mistakes of other drivers, and always drives with due regard for traffic, road, weather and the operational characteristics of the specific vehicle being operated.

B. Exemptions of Authorized Emergency Vehicles

1. California Vehicle Code Section 21055. The driver of an authorized emergency vehicle is exempt from certain "rules of the road" (specific sections are listed in the CVC) under all of the following conditions:

a. If the vehicle is being driven in response to an emergency call or while engaged in rescue operations or is being used in the immediate pursuit of an actual or suspected violator of the law or is responding to, but not returning from, a fire alarm, except that Fire Department vehicles are exempt whether directly responding to an emergency call or operated from one place to another as rendered desirable or necessary by reason of an emergency call and operated to the scene of the emergency or operated from one fire station to another or to some other location by reason of the emergency call.

b. If the driver of the vehicle sounds a siren as may be reasonably necessary and the vehicle displays a lighted red lamp visible from the front as a warning to other drivers and pedestrians.

2. Effect of Exemption:

a. Section 21055 does not relieve the driver of a vehicle from the duty to drive with "due regard" for the safety of all persons using the highway, nor protect him/her from the consequences of an arbitrary exercise of the privileges granted in that section.

3. When responding Code R:

a. Red light(s), siren, and headlights shall be activated. VC 21806.

b. All warning devices shall be operating as required by the CVC and LACoFD guidelines.

c. While on response all drivers shall exercise due regard for all persons, property, and passengers on the emergency vehicle.

C. Warning Devices:

1. The California Vehicle Code 30, authorizes the use of red lights and siren on emergency vehicles. When responding Code R the use of red lights and siren shall be in accordance with CVC 25252, 27003 and LACoFD policy.

2. Sirens:

a. It is the LACoFD policy that the siren shall be sounded in such a manner that full range of sound production is achieved.

b. Intermittent siren use during “Code R” responses is permissible provided it is operated within at least 300 feet of intersections where traffic control devices (signal lights, stop signs, etc.) are present**.**

c. Sirens provide extreme directional (forward) sound and shall be operated through their full range to ensure the maximum warning, for the greatest number of conditions and hearing abilities. Closed windows, air conditioning, radios, cellular telephone use and many other distractions reduce the sirens effectiveness to warn drivers of the presence of the emergency vehicle.

d. Sirens shall be used in a manner that affords other motorists and pedestrians the greatest opportunity to hear that an emergency vehicle is approaching. Safety of response is the highest priority governing the use of sirens. Vehicle operators shall not give any priority to noise disturbance issues while using the siren on an authorized emergency vehicle.

e. The effectiveness of the siren is based upon the speed of the emergency vehicle. At 40 mph the siren is projected 300 feet to the front, at 60 MPH the siren is projected 12 feet. This phenomenon is called sound compression, the greater the speed of the responding vehicle, the less effective the siren becomes.

3. Light bars and warning lights:

a. LACoFD emergency vehicles are equipped with various types of emergency lighting suites, including light bars, dash/visor lights and rear warning lights. To comply with VC 21806, "an authorized

emergency vehicle…has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle. Red lights and headlights shall be in operation at the scene of an emergency unless the vehicle is parked legally. Inspect all warning lights, front, and rear daily. Clean lenses as necessary to ensure maximum visibility.

b. The provisions of VC 21806 shall not operate to relieve the driver of an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons and property. VC 21807.

4. Headlights:

a. It is the LACoFD policy that all vehicles being driven on any road or highway shall be operated with headlights on at all times, with the exception of sedans.

5. Air and Hi/low Horns:

a. Air horns are not authorized warning devices when responding Code “R". The Air horn may be used:

(1) In intermittent bursts so as not to drown out the sound of the siren and render it ineffective.

(2) To let other drivers know of the emergency vehicle’s presence and help avoid accidents.

(3) Only when needed to enhance a safe response.

D. Road position:

1. While responding to an emergency call, LACoFD vehicles shall be driven as near to the center of the roadway as possible without going into oncoming traffic. This will make the emergency vehicle more visible to other drivers and give the emergency vehicle driver better visibility of the road and traffic conditions.

a. Usually it will be safer to pass on the left, even if it means crossing over the centerline into oncoming traffic. If there is a need to cross over into oncoming traffic, it should be done at a reduced speed and far enough in advance to warn other traffic of the intent. Drive with due regard for the safety of all persons and property.

b. When it is necessary to drive in opposing lanes of traffic during a response, and there is a constructed center median separating the traffic lanes and preventing return to the normal travel lane:

(1) Drive in the lane closest to the constructed center median.

(2) Reduce speed to allow the opposing traffic the opportunity to yield the right–of–way.

(3) Return to the normal lane of travel as soon as the constructed median will allow and it is safe to do so.

(4) Never approach opposing traffic in an aggressive manner forcing an evasive maneuver. Stop the emergency vehicle, and allow opposing traffic the opportunity to yield the right–of–way and clear the path of travel. Never weave in and out of opposing traffic.

(5) Be cautious of vehicles entering opposing lanes of traffic from side streets, driveways, and left turn lanes.

c. If traffic will not or cannot (red signal, rush hour traffic) yield to your vehicle and if you cannot pass on the left, turn off the lights and siren, reduce speed and stop. Do not force vehicles into the intersection against moving traffic. Once the signal is green or the traffic has cleared, turn on your red lights and siren and continue to respond safely.

2. VC 21806: Upon the immediate approach of an authorized emergency vehicle . . . every other vehicle shall immediately drive as close to the right-hand edge of the road as possible and stop.

a. The use of red lights and sirens request the right-of-way, they do not guarantee it.

b. Do not assume the right–of–way has been granted. Come to a complete stop to ensure that cross traffic has yielded the right–of–way to you.

c. No matter how skillful the driver of an emergency vehicle is, the cooperation of other drivers is essential to prevent an accident.

E. Prescribed Response Routes

1. The driver of an emergency vehicle should know the safest route to any point in the jurisdiction. Emergency vehicle drivers should be aware of daily traffic patterns, construction, and school zones that will affect the choice of the safest response route.

2. When more than one vehicle is responding from one location to the same destination, all vehicles shall take the same route in caravan fashion, unless alternative routes are dictated by the nature of the emergency. Due regard for the safety of other drivers, and other emergency vehicles, shall be exercised at all times when responding Code R.

3. Keep a safe following distance. At 40 MPH, maintain a minimum distance of 4 seconds. Add 1 second to the following distance for every 10 MPH increase in vehicle speed above 40 MPH. While operating an authorized emergency vehicle, add one additional second to the following distance. For example, at 40 MPH, the safe following distance shall be a minimum of 5 seconds.

4. Use the radio to warn other responding units when approaching intersections.

5. No emergency vehicle shall needlessly pass another emergency vehicle. Do not pass unless the emergency vehicle being passed has pulled to the right and yielded the right–of–way.

6. Paramedic squads, when operating on hospital follow-up, shall follow pre-hospital care guidelines and respond Code R only when it will benefit patient care.

    a. The paramedic squad and ambulance shall begin hospital follow-up together and operate Code R in caravan fashion.

    b. If the ambulance departs on hospital follow-up prior to paramedic squad departure, the paramedic squad shall not operate Code R to the hospital.

7. If an emergency vehicle is unable to reach its destination in response to an emergency dispatch, the commanding officer or operator shall notify Fire Command and Control Facility (FCCF) immediately.

8. Fuel-tenders and Heli-tender shall not be operated as authorized emergency vehicles.

9. Water tenders shall not be operated as authorized emergency vehicles unless required to:

    a. To move into traffic.

    b. To bypass congested traffic. As soon as the traffic impediment is cleared, they shall resume routine, non-emergency operation.

10. Transports shall not be operated as authorized emergency vehicles unless required to:

    a. Move into traffic.

    b. Bypass congested traffic. As soon as the traffic impediment is cleared, they shall resume routine, non–emergency operation.

11. Move-ups shall be non-Code R unless directed otherwise by Fire Command and Control.

F. Speed

1. The policy of this Department is the "Basic Speed Law": VC 22350. This shall apply to all drivers operating an authorized emergency vehicle.

    a. Basic Speed Law VC 22350: "No person shall drive a vehicle upon a highway (road) at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property."

    b. All authorized emergency vehicles shall be operated at all times in accordance with the "Basic Speed Law" as defined by CVC22350.

    c. The following regulations shall apply to all fire apparatus and similarly configured vehicles (engine, truck, quint, tenders, trailer-equipped vehicles, etc).

        (1) No person shall drive any of the above specified vehicles at a speed in excess of 55 miles per hour: This speed restriction includes both emergency and non-emergency operation.

        (2) At no time shall any fire apparatus or other emergency vehicle be operated in excess of the posted speed limit, or any speed limit(s) emplaced by code, ordinance, or regulations governing vehicle speed(s) for specific vehicle classifications. This speed restriction includes both, emergency and non- emergency operation.

G. Use of Freeways

1. The use of freeways on an emergency response or responding to an emergency on the freeway, requires the use of different skills, and poses different hazards than a response on a surface street.

a. When responding on a freeway and traffic is moving well, deactivate the warning system to avoid causing unpredictable behavior from the drivers in front of your vehicle. Activate the rear amber warning lights to warn drivers behind you of possible trouble up ahead.

b. When responding on a freeway and the traffic is slow, the use of the warning system may effectively warn other drivers of the emergency vehicle presence, and request the right–of–way. Determine if the use of the warning system will enhance or inhibit safe progress.

c. The use of the freeway shoulder during emergency operations, when the traffic is moving slow, shall not be attempted unless the traffic has stopped and there is no safer option. Use the warning system, approach the stopped traffic slowly, and prepare to stop should traffic move into the path of travel.

H. Intersections:

1. Intersections pose the greatest potential danger during emergency and routine driving.

a. Drivers of emergency vehicles shall visually account for all traffic before entering intersections, even with a green light or right–of–way.

b. Department personnel riding as passengers shall assist the vehicle operator by observing traffic, and communicating potential danger to the operator, when approaching an intersection.

c. Intersections have reduced roadway visibility due to building construction, trees, fences, road configuration, and parked vehicles. Drivers cannot see or hear your vehicle until they get close to the intersection. Use extreme caution approaching intersections. Congested intersections create additional hazards since traffic is backed up and creates a blind lane where cross traffic in the intersection cannot be seen.

d. Emergency vehicle operators can be blocked from view of other drivers, by large trucks, or other vehicles. While entering an intersection with yielding cross traffic, emergency vehicle operators shall consider every open lane, (right, or left turn lane, open space by the curb) a potential hazard. Approach slowly and do not proceed until safe.

e. If an intersection is blocked, i.e. if traffic will not or cannot yield and if there is no access to pass on the left, the emergency vehicle operator shall deactivate the warning system, reduce speed, and stop. LACoFD emergency vehicle operators shall not drive with the intent or manner to force other vehicles into an intersection. Once the signal is green or the traffic has cleared, activate the warning system and resume emergency operation.

f. Clear the intersection lane–by–lane until all traffic has yielded the right–of–way.

2. Vehicle operators, while operating an authorized emergency vehicle, and approaching an intersection:

a. Shall approach all signal controlled intersections at a speed which will allow stopping of the vehicle if the signal should change from Green to Red.

b. Shall stop at all signal controlled intersections that display a red light in the direction of travel of the emergency vehicle. Proceed through the intersection only when all traffic has stopped and granted the emergency vehicle the right-of-way.

c. Shall stop at all stop sign controlled intersections and proceed only when all traffic has yielded the right-of-way.

d. Shall stop at all railroad crossings controlled or otherwise to ensure the path of travel across the railroad track is clear, and crossing the railroad track can be made safely.

I. Apparatus/Vehicle placement at emergencies:

1. Emergency vehicle operators shall park in a manner that secures and protects personnel and equipment. Priority shall be given to shielding emergency personnel from oncoming traffic whenever possible. Emergency vehicle operators shall utilize vehicle placement to enhance operations by other incoming units.

a. EMS: Position the vehicle to give good access for other incoming units. If the operator is not required for EMS duties, the operator shall keep vehicle(s) running with warning systems activated, and monitor vehicle safety and security.

b. Freeway/Roadway Incidents: Care must be taken for your safety and the safety of others. The safety of personnel and victims takes priority over traffic flow. Vehicle operators shall position emergency vehicles in a manner that shields the incident from oncoming traffic. Park the

emergency vehicles at a 45 degree angle to the flow of traffic. If the emergency vehicle is a fire engine, position the vehicle in such a way that the pump panel will be protected by the rear of the apparatus. When using the vehicle to block traffic turn the front wheels to the left or right to prevent \vehicle movement into the incident if struck from the rear. If an additional travel lane is required to provide a safe working environment, request the CHP or local law enforcement to block the travel lane. Traffic flow shall not be given priority over safety for personnel or victims.

c. Fire Suppression: Vehicle operators shall position the vehicle clear of overhead wires when spotting apparatus. Vehicle operators shall keep the street as clear as possible of equipment, and position emergency vehicles to allow access for other arriving units.

d. HazMat: All emergency personnel responding to a suspected HazMat incident shall approach the incident location from upwind and uphill whenever possible. All emergency vehicles at the scene of a suspected HazMat incident shall be positioned for immediate egress and maximum safety. Refer to Volume 11, Chapter 2, Subject 1.

e. Wildland Fires: All vehicles shall be parked for safe egress and parked as far away from the fire side as possible. Vehicles shall not be parked over a chute, chimney or on unburned brush.

(1) Vehicles shall be parked with motor running, and warning lights and headlights on.

(2) Vehicles shall be backed into position whenever possible.

(3) Vehicles shall be parked so that other equipment can pass safely.

(4) Vehicles shall not be parked on mid-slope roads, with unburned fuel between the vehicle and the fire.

(5) All personnel shall watch for fires igniting on vehicles

(6) Vehicle operators shall roll up all windows and leave keys in the ignition.

(7) Chimneys and ridge-lines can be identified by road terrain features even in the dark. “If it’s an ‘in – turn’ it’s a chimney, if it’s an ‘out – turn’ it’s a ridge.”

(8) Vehicles shall be parked next to the upslope bank, not on the edge of the road.

(9) Emergency vehicle operators shall closely examine the surrounding environment, including overhead, to ensure choosing the best location available.

(10) Emergency vehicle operators shall use the chock block, turn the front tires into the berm, and place the transmission into the proper selection when parking.

(11) If the air filter catches fire, immediately shutdown the motor, and then attempt to extinguish the fire with $CO_{2.}$ Personal protective equipment shall be donned prior to taking any action. After extinguishment, attempt removal of the filter, clean the filter housing and re-start the motor if needed for emergency operations. DO NOT use dry chemical, sand, or water-based suppression agents; severe engine damage may result.

J. Additional Information:

1. Suggested Reading: Volume 10 and 11 Emergency Operation Manuals, Incident Procedures.

2. Suggested Viewing: Wildland Fire Journal, The Harris Memoirs. These video tapes point out several safety issues concerning apparatus placement on fire roads.

APPENDIX 2.1.15

Austin-Foust Associates Traffic Memorandum

AUSTIN-FOUST ASSOCIATES, INC.
TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING

MEMORANDUM

TO: Susan Tebo, Impact Sciences, Inc.

FROM: Daryl Zerfass, P.E.

DATE: September 24, 2009

SUBJECT: **ACTON FIRE STATION TRAFFIC STUDY**

A new fire station (Fire Station No. 142) is proposed to be constructed in the community of Acton in unincorporated Los Angeles County. The site is located on the northwest corner of the Sierra Highway/Clanfield Street intersection, which is approximately 1,300 feet east of Crown Valley Road. The location of the project site is illustrated in the enclosed Figure 1.

Existing Conditions

Sierra Highway is a two-lane roadway with an average daily traffic (ADT) volume of approximately 5,000 ADT in the vicinity of the project site. Clanfield Street is an unimproved dirt road that intersects with Sierra Highway approximately 1,300 feet east of Crown Valley Road. The Crown Valley Road/Sierra Highway intersection is under all way stop control.

Regional access to the project area is via the State Route 14 freeway, which generally parallels Sierra Highway in the vicinity of the project site. Route 14 consists of two general purpose lanes and one high occupancy vehicle (HOV) lane in each direction. Route 14 can be accessed near the project site via a full interchange at Crown Valley Road, as well as at a full interchange at Santiago Road approximately 2 miles east of the project site.

Project Description and Trip Generation

The project site consists of approximately 4.7 acres of undeveloped land at the northwest corner of the Sierra Highway/Clanfield Street intersection, which is approximately 1,300 feet east of Crown Valley Road. The proposed project would consist of a 9,746 square foot (sf) medium fire station and supporting structures.

2223 Wellington Avenue, Suite 300 • Santa Ana, California 92701-3161
Tel: (714) 667-0496 Fax: (714) 667-7952
www.austinfoust.com

Housing would be included for up to seven full time firefighters (implemented on an as needed basis) and initial staffing would include three 24-hour fire fighters. The maximum number of personnel on-site would consist of six personnel during a shift change when staffed by three firefighters, or 14 personnel when staffed by seven firefighters. Shift changes would occur at 8 AM.

A total of 21 parking spaces would be provided on site, consisting of 16 spaces for employees, three spaces for visitors, one employee handicap space, and one visitor handicap space. The proposed number of parking spaces will be sufficient based on the anticipated use of the facility.

Traffic generation will vary throughout the day due to the random nature of emergency calls. The peak generation would occur around 8 AM each day when the shift changes. The peak traffic volumes would consist of seven inbound trips and seven outbound trips around 8 AM. For the purpose of this analysis, 10 inbound and 10 outbound trips are assumed to occur during the AM peak hour, and 5 inbound and 5 outbound trips are assumed to occur during the p.m. peak hour of adjacent street traffic.

Access to the project site would be via Clanfield Street, which would be improved to a paved, two-lane roadway from Sierra Highway to the northerly boundary of the project site where it would then transition from pavement to the existing dirt road. The proposed project would construct two driveways intersecting with Clanfield Street. The southernmost driveway would allow arrival and departure of staff vehicles and visitors along with arrival of the fire fighting apparatus. The northernmost driveway would allow for emergency departure of the apparatus. The project would also be constructing a traffic signal at the Sierra Highway/Clanfield Street intersection.

Impact Analysis

Trips to and from the project site would utilize Sierra Highway to access Clanfield Street, which provides direct access to the project driveways. As noted above, the project would be constructing a traffic signal at the Sierra Highway/Clanfield Street intersection.

Traffic counts collected in September 2005 indicate that Sierra Highway carries approximately 5,700 ADT west of Crown Valley Road. Traffic counts collected in January 2006 indicate that Sierra Highway carries approximately 4,300 ADT east of Santiago Road. For the purpose of this analysis, traffic volumes for the segment of Sierra Highway between Crown Valley Road and Santiago Road are estimated by averaging the aforementioned traffic counts, and applying a growth factor of five percent to estimate 2010 conditions. A summary of the traffic volumes with and without the project traffic is provided in Table 1.

Table 1: Traffic Volume Summary – Year 2010 with Maximum Staffing

	AM Peak Hour		PM Peak Hour		
	EB	**WB**	**EB**	**WB**	**ADT**
Sierra Hwy btwn Crown Valley & Clanfield					
Background Volumes	150	590	370	170	5200
Project Volumes (80%)	8	8	4	4	80
Total Volumes	158	598	374	174	5280
Sierra Hwy btwn Clanfield & Santiago					
Background Volumes	150	590	370	170	5200
Project Volumes (20%)	2	2	1	1	20
Total Volumes	152	592	371	171	5220

The impact to Sierra Highway has been estimated based on the delay to Sierra Highway traffic due to the project traffic and the proposed traffic signal at the Sierra Highway/Clanfield Street intersection. Average vehicle delay during the critical AM peak hour has been estimated based on the Highway Capacity Manual (HCM) methodology for signalized intersections and is summarized in Table 2. Intersection levels of service (LOS) are measured based on a scale of LOS A (best) to LOS F (worst), and the table indicates that during the critical AM peak hour, the average intersection delay results in LOS A. The Sierra Highway levels of service are also LOS A.

Table 2: Intersection Delay Summary – AM Peak Hour

Approach	**Delay (sec/veh)**	**LOS**
Eastbound Approach (Sierra Highway)	4.2	A
Westbound Approach (Sierra Highway)	9.6	A
Southbound Approach (Clanfield St.)	9.3	A
Intersection Average	8.5	A

Conclusion

The analysis of the proposed project's parking and traffic generation indicates that the project will not result in significant impacts. The critical time period for traffic generation is the AM peak hour, and the proposed traffic signal at the Sierra Highway/Clanfield Street intersection results in LOS A conditions for traffic on Sierra Highway and on Clanfield Street.

Enclosures

327015mmFig1.dwg

AUSTIN-FOUST ASSOCIATES, INC.

Project Site Location

Acton Fire Station Traffic Study

	AM Peak Hour		PM Peak Hour		
	IB	OB	IB	OB	ADT
Project Trip Generation	10	10	5	5	100

	AM Peak Hour		PM Peak Hour		
2005/2006 Counts	EB	WB	EB	WB	ADT
West of Crown Valley(1)	209	754	300	220	5728
East of Santiago(1)	78	370	400	101	4267
Btwn Crown Valley & Santiago (Ave.)	144	562	350	161	4998
2010 Forecast - Btwn Crown Valley & Clanfield					
Background Volumes	150	590	370	170	5200
Project Volumes (80%)	8	8	4	4	80
Total Volumes	158	598	374	174	5280
2010 Forecast - Btwn Clanfield & Santiago					
Background Volumes	150	590	370	170	5200
Project Volumes (20%)	2	2	1	1	20
Total Volumes	152	592	371	171	5220

(1) Source: LA County Department of Public Works

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	8	150	590	2	2	8
Satd. Flow (prot)	0	1857	1863	0	1643	0
Flt Permitted		0.968			0.991	
Satd. Flow (perm)	0	1803	1863	0	1643	0
Satd. Flow (RTOR)			1		9	
Lane Group Flow (vph)	0	176	658	0	11	0
Turn Type	Perm					
Protected Phases		4	8		6	
Permitted Phases	4					
Total Split (s)	29.0	29.0	29.0	0.0	11.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		16.4	16.4		7.2	
Actuated g/C Ratio		0.52	0.52		0.23	
v/c Ratio		0.19	0.69		0.03	
Control Delay		4.2	9.6		9.3	
Queue Delay		0.0	0.0		0.0	
Total Delay		4.2	9.6		9.3	
LOS		A	A		A	
Approach Delay		4.2	9.6		9.3	
Approach LOS		A	A		A	

Intersection Summary

Cycle Length: 40
Actuated Cycle Length: 31.8
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 8.5 Intersection LOS: A
Intersection Capacity Utilization 41.2% ICU Level of Service A
Analysis Period (min) 15
Description: Clanfield & Sierra Hwy

Splits and Phases: 1: Sierra Hwy & Clanfield St.

ATTACHMENT D

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL MITIGATION MONITORING AND REPORTING PROGRAM

Fire Station and Helispot 142 Project

Project Files May Be Reviewed at:

Consolidated Fire Protection District of Los Angeles County
(Los Angeles County Fire Department)
28101 Chiquito Canyon Road
Castaic, California 91384

Environmental Mitigation Monitoring and Reporting Program for the Fire Station and Helispot 142 Project

Section 1: Authority

The Environmental Mitigation Monitoring and Reporting Program has been prepared pursuant to Section 21081.6 of the California Environmental Quality Act, known as CEQA (Public Resources Code Section 21000 *et. seq.*), to provide for the monitoring of mitigation measures required of the Fire Station and Helispot 142 Project, as set forth in the Mitigated Negative Declaration (MND) prepared for the project. This project will be kept on file in the office of the Consolidated Fire Protection District of Los Angeles County (Los Angeles County Fire Department), 28101 Chiquito Canyon Road, Castaic, CA 91384.

Section 2: Monitoring Schedule

Los Angeles County Fire Department staff will monitor compliance with the provisions of this program. Los Angeles County Fire Department staff will prepare or cause to be prepared reports identifying compliance with mitigation measures identified in this program. Such reports may consist of, as appropriate, annual project monitoring reports submitted to the Chief of Construction and Maintenance Division, Los Angeles County Fire Department.

Section 3: Changes to Mitigation Measures

Any substantive change made to the monitoring and reporting program shall be reported in writing to the Los Angeles County Fire Department, Chief of Construction and Maintenance Division, Special Services Bureau, and referenced in the Environmental Mitigation Monitoring Report. Modifications to the mitigation measures may be made and approved by the Los Angeles County Fire Department subject to one of the following findings, documented by evidence included in the record:

a. The mitigation measure included in the MND and the Mitigation Monitoring and Reporting Program is no longer required because the significant environmental impact identified in the MND has been found not to exist, or to occur at a level which makes the impact less than significant as a result of changes in the project, changes in conditions of the environment, or other factors.

   OR

b. The modified or substitute mitigation measures to be included in the Mitigation Monitoring and Reporting Program provide a level of environmental protection equal to or greater than those afforded by the mitigation measures included in the MND and the Mitigation Monitoring and Reporting Program; and

The modified or substitute mitigation measures do not have significant adverse effects on the environment in addition to or greater than those which were considered by the Los Angeles County Fire Department in its decisions on the MND and the proposed project; and

The modified or substitute mitigation measures are feasible, and the County, through measures included in the Mitigation Monitoring and Reporting Program or other procedures, can ensure their implementation.

Section 4: Supporting Documentation

Findings and related documentation supporting the findings involving modifications to mitigation measures will be maintained in the project file with the Mitigation Monitoring and Reporting Program and will be made available to the public upon request.

Section 5: Mitigation Monitoring Matrix

The following matrix identifies the environmental issue areas for which monitoring is required, the required mitigation measures, the time frame for monitoring and the responsible monitoring agencies.

Fire Station and Helispot 142
Mitigation Monitoring Plan

Lead Agency:

Consolidated Fire Protection District of Los Angeles County
(Los Angeles County Fire Department)
28101 Chiquito Canyon Road
Castaic, California 91384

Prepared by:

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012

March 2010

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
BIOLOGICAL RESOURCES			
MM 2.1.4-1 The applicant shall retain a qualified biologist with a CDFG Scientific Collection Permit and Memorandum of Understanding (MOU) to conduct preconstruction surveys for silvery legless lizard, coastal western whiptail, coast horned lizard, San Diego black-tailed jackrabbit, and southern grasshopper mouse. All individuals of these species observed within the project site during the preconstruction surveys must be relocated, at the approval of the County and CDFG, to an approved site containing suitable habitat for these species. Surveys and relocation of potentially impacted animals may occur prior to construction to ensure that no special-status species are present within the project site during construction. Silt fencing or other means which would provide a physical barrier to animal movement shall be implemented at the edge of the construction areas and prior to animal relocation to prevent their reentry to the site. Additionally, it is recommended that grading be conducted so as not to corral wildlife into areas adjacent to existing development where they will not be able to escape harm from construction equipment or other suburban hazards to wildlife. Survey methods and relocation areas must be reviewed and approved by the CDFG prior to commencement of grading.	Applicant (Project Biologist)	Conduct Preconstruction Surveys for silvery legless lizard, coastal western whiptail, coast horned lizard, San Diego black-tailed jackrabbit, and southern grasshopper mouse Field verification Report shall be prepared if relocation of species are conducted	1. Los Angeles County Fire Department (LACoFD); California Department of Fish and Game (CDFG) 2. LACoFD/CDFG 3. Prior to Commencement of Grading Activities

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
BIOLOGICAL RESOURCES (continued)				
MM 2.1.4-2	If activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 feet for raptors or federally listed Endangered or Threatened bird species) of the construction zone. Pre-construction nesting bird surveys shall be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Surveys shall include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities. If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.	Applicant (Project Biologist)	Field Surveys for active bird nests Field Verification Surveys shall be conducted 30 days prior to construction activities Report shall be prepared if relocated nest activities are conducted	1. LACoFD 2. CDFG 3. Prior to Grading or Construction Activities

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
BIOLOGICAL RESOURCES (continued)				
MM 2.1.4-3	Prior to grading activities, a qualified biologist shall perform a burrowing owl survey, pursuant to CDFG Guidelines (CDFG 1993). If active burrowing owl burrows are located, the burrows shall be avoided by 500 feet during all construction activities. If breeding, once owls have completed fledging their young and are no longer dependant upon the burrows (as determined by a qualified biologist), one-way doors shall be installed in the burrows, in accordance with CDFG protocols.	Applicant (Project Biologist)	Conduct Burrowing Owl Surveys Surveys shall be conducted 30 days prior to construction activities	1. LACoFD/CDFG 2. LACoFD/CDFG 3. Prior to Grading Activities
CULTURAL RESOURCES				
MM 2.1.5-1	During grading activities, in the unlikely event that paleontological resources are found during grading within the project site, a paleontologist will be notified to stabilize, recover, and evaluate such find.	Applicant (Archeologist)	Qualified Archaeologist Present During Grading Activities of site if not located before	1. LACoFD 2. LACoFD 3. During Grading Activities
GEOTECHNICAL AND SOIL RESOURCES				
MM 2.1.6-1	Prior to the issuance of building or grading permits, the County of Los Angeles Department of Public Works shall ensure that the site-specific design recommendations in the Final Geotechnical Report are incorporated into the final project plans/design.	Applicant (Geotechnical Engineer and Engineering Geologist)	Grading Plan Check Field Verification	1. LACoFD 2. LACDPW 3. Prior to Issuance of Grading Permit and Verify During Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
GEOTECHNICAL AND SOIL RESOURCES (continued)				
MM 2.1.6-2	Prior to the issuance of grading permits the south facing slope of the helispot and the slope along Sierra Highway shall include a stability fill slope which would have a 15-foot-wide keyway and extend to the top of the proposed south facing slope. This stability slope shall be constructed with backdrains, located in the backcut, and should be keyed and benched into the soils on-site.	Applicant (Geotechnical Engineer)	Grading Plan Check Field Verification	1. LACoFD 2. LACDPW 3. Prior to Issuance of Grading Permit and Verify During Grading
NOISE				
MM 2.1.11-1	Construction activities shall be scheduled so as to avoid operating several pieces of heavy equipment simultaneously. In no cases shall more than four pieces of heavy equipment be operated simultaneously.	Applicant (Construction Contractor)	Field Verification	1. LACoFD 2. LACDPW, Building and Safety 3. During Grading and Construction Activities
MM 2.1.11-2	Engine idling from construction equipment such as graders and water trucks shall be limited to no more than 5 minutes.	Applicant (Construction Contractor)	Field Verification	1. LACoFD 2. LACDPW, Building and Safety 3. During Grading and Construction Activities