# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

**JAMES A. NOYES, Director**

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460


IN REPLY PLEASE
REFER TO FILE: PM-3

May 1, 2003

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:

**PALMDALE SHERIFF'S STATION**
**APPROVE MITIGATED NEGATIVE DECLARATION**
**ADOPT MITIGATION MONITORING AND REPORTING PROGRAM**
**ADOPT AND ADVERTISE**
**AWARD AGREEMENT**
**SPECS. 5415; C.P. 77401**
**SUPERVISORIAL DISTRICT 5**
**3 VOTES**

**JOINT RECOMMENDATION WITH THE CHIEF ADMINISTRATIVE OFFICER AND THE SHERIFF THAT YOUR BOARD:**

1. Consider the enclosed Mitigated Negative Declaration (Enclosure D) for the Palmdale Sheriff's Station together with comments received during the public review process, find that the project with the proposed mitigation measures will not have a significant effect on the environment, find that the Mitigated Negative Declaration reflects the independent judgment of the County, and approve the Mitigated Negative Declaration.

2. Adopt the Mitigation Monitoring and Reporting Program contained in the Mitigated Negative Declaration to ensure compliance with the project changes and conditions to mitigate or avoid significant effects on the environment.

3. Find that the project will have no adverse effect on wildlife resources by implementing the proposed mitigation measures, and authorize Public Works to complete and file a Certificate of Fee Exemption for the project.

4. Adopt plans and specifications for constructing the Palmdale Sheriff's Station at an estimated construction cost of $12,665,073, and instruct the Executive Officer to advertise for bids to be received and opened on June 10, 2003, in accordance with the "Instruction Sheet for Publishing Legal Advertisements" (Enclosure B).

5. Approve the project and authorize the Director of Public Works to carry out the project.

6. Authorize the Director of Public Works to execute a consultant services agreement with the apparent lowest responsible bidder to prepare a baseline construction schedule for a not to exceed fee of $10,000 funded by the existing project budget and establish the effective date following Board approval.

7. Authorize the Chief Administrative Office to finalize an agreement with the City of Palmdale to accept an 11.5-acre parcel to develop and construct the Palmdale Sheriff's Station, and direct the Chief Administrative Office and the Sheriff to return to the Board with these recommendations concurrent with recommendations regarding awarding a construction contract for the new Palmdale Sheriff's Station.

## PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Approving the recommended actions will authorize the Director of Public Works to initiate the bidding process for construction of the Palmdale Sheriff's Station project.

The existing interim Palmdale Station is located in Antelope Valley, which is the fastest growing area within Los Angeles County. The station is currently located in leased space and serves the City of Palmdale and several nearby communities covering approximately 800 square miles. The current facility capacity does not meet the increasing demands of the growing community.

To alleviate staff crowding at the existing leased space and accommodate future staff growth, construction of a new station on an 11.5-acre parcel of land, which will be provided by the City of Palmdale, is recommended. The new station will consist of a 50,000-square-foot main building, including a 7,800-square-foot holding facility, an 8,300-square-foot regional vehicle maintenance center, helistop, and sufficient staff and visitor parking.

Public Works' estimate of the construction contract cost is $12,665,073, without contingency. This includes an allowance of $467,000 for separate bid components. In the event bids exceed the current cost estimate, Public Works and the Sheriff's Department have identified building and site work finish materials, skylights, and the helistop as bid components that can be deleted to maintain construction costs within the project budget. To allow the flexibility of implementing an alternative construction delivery method through Internal Services Department, the communications tower is listed as a separate bid component.

In response to the City of Palmdale's concerns, Public Works has included an alignment of the secured access driveway at Avenue Q with 8th Street as an additive alternate. Additionally, other additive alternates that improve the functionality of the station's operation have been identified in case the bids received are less than the project budget, including increased emergency power reserves, installation of a car canopy, and additional asphalt paving to increase surface parking. These modifications will not affect the operational and functional needs of the Sheriff's station.

The apparent low bidder will be selected based on the sum of the base bid and all alternates. Alternates will be selected based on available budget and best value to the County.

The current lease on the existing Palmdale station is scheduled to expire in November 2008 with the option to terminate after November 2003. The project is now scheduled to be complete in March 2005 because of added time required to resolve scope issues, obtain the City of Palmdale's concurrence on the building's architectural characteristics and site design, obtain design approvals, and negotiate a land acquisition agreement with the City of Palmdale. The CAO will coordinate with the Sheriff's Department to terminate the lease after construction of the station is complete.

The Mitigated Negative Declaration indicates that the project with the proposed mitigation measures would not have a significant effect on the environment. In accordance with the Environmental Document Reporting Procedures and Guidelines adopted by your Board on November 17, 1987, a draft Mitigated Negative Declaration was prepared and circulated for public review and must be approved by your Board prior to starting construction.

The Mitigation Monitoring and Reporting program contained in the Mitigated Negative Declaration will be used to ensure compliance with environmental mitigation measures associated with developing the proposed project.

The proposed agreement with the apparent lowest responsible bidder to prepare a baseline construction schedule that conforms to the County's schedule specification is critical to successfully managing construction activities by both the contractor and the County. A responsible contractor must be able to produce such a construction schedule. Bid specifications provide that if the apparent lowest bidder fails to complete an acceptable schedule, the Director may return to your Board to recommend that the bidder be determined nonresponsible and recommend awarding the construction contract to the next lowest bidder, contingent on that bidder completing a baseline schedule which conforms to the County's specifications.

## Land Transfer

In order to proceed with construction of the Sheriff's station, ownership of the proposed 11.5-acre site must be transferred from the City of Palmdale to the County. The agreement with the City of Palmdale is currently being finalized. The CAO will return to your Board to execute the land agreement with the City of Palmdale when your Board considers awarding a construction contract for the new Palmdale Sheriff's Station.

## Implementation of Strategic Plan Goals

These actions meet the County's Strategic Plan Goals of Service Excellence and Fiscal Responsibility since this construction project provides improved facilities to relieve current overcrowded conditions and increases the County's investment in public infrastructure.

## FISCAL IMPACT/FINANCING

Public Works' current cost estimate for the construction contract is $12,665,073, without contingency. This includes an allowance of $467,000 for separate bid components.

The total project cost estimate is $20,135,400, including design, plan check fees, construction, equipment, consultant services, furnishings, miscellaneous expenditures, County services, and a change order contingency equal to 10 percent of the expected bid amount. A reallocation of $75,000 from Consultant Services to Miscellaneous Expenditures is included to reflect utility connection fees. The sum of $401,580 is being reallocated from the County Services and County-provided equipment categories to the construction cost category to fund increases in construction costs, including escalation, and $15,500 is being reallocated from the County Services category to the Plans and Specifications category.

Sufficient appropriation to award the construction contract for the Palmdale Sheriff's Station project is available in the 2002-03 Capital Project Budget under Capital Project 77401.

The Project Schedule and Budget Summary are included in Enclosure A.

**Operational Financing**

The CAO and Sheriff have identified one-time costs in the amount of $63,376 to open the new station (Enclosure C). Ongoing operating costs for the new Palmdale Sheriff's Station are under review. The new station will be staffed with existing personnel and staff to be relocated from various stations within Region I; therefore, an increase in staff costs is not anticipated at this time. The addition of 44,000 square feet of space will result in additional maintenance and utility costs. Such cost increases cannot be accurately determined at this time due to potential fluctuations in future energy costs. However, any net increases in ongoing costs of the new station will be absorbed by the Sheriff's operating budget following occupancy in the first quarter of 2005.

**FACTS AND PROVISIONS/LEGAL REQUIREMENTS**

A standard contract, in the form previously approved by County Counsel, will be used. The standard Board-directed clauses that provide for contract termination, renegotiation, and hiring qualified displaced County employees will be included in the contract.

The project specifications contain provisions requiring the contractor to report solicitations of improper consideration by County employees and allowing the County to terminate the contract if it is found that the contractor offered or gave improper consideration to County employees.

As requested by your Board and as a threshold requirement for consideration for contract award, bidders will be required to attest their willingness to consider Greater Avenues for Independence Program/General Relief Opportunity for Work participants for future employment.

As required by your Board, language has been incorporated into the project specifications stating that the contractor shall notify its employees, and shall require each subcontractor to notify its employees, that they may be eligible for the Federal Earned Income Credit under the Federal income tax laws.

Bidders will also be required to show full compliance with Los Angeles County Code Chapter 2.200 (Child Support Compliance Program) and Chapter 2.203 (Contractor Employee Jury Service Program).

To ensure that the contract is awarded to a responsible contractor with a satisfactory history of performance, bidders are required to report violation of the False Claims Act, their civil litigation history, and information regarding prior criminal convictions. The information reported was considered before making this recommendation to award.

## ENVIRONMENTAL DOCUMENTATION

On April 26, 2000, Public Works executed a contract for environmental evaluation and preparation of a Mitigated Negative Declaration for the Palmdale Sheriff's Station project.

The Mitigated Negative Declaration was circulated on June 17, 2002, for agency and public review in accordance with California Environmental Quality Act requirements. The review period ended on July 17, 2002. Comments received during the review period did not raise any significant environmental issues associated with the project.

The mitigation measures included in the CEQA environmental documents for this project specifically address lighting, air quality, noise, and critical cultural resources. Recommended measures to mitigate impacts on these resources include construction procedures, which are incorporated into the construction bid documents, and the use of specialized consultants by the County to conduct field observations at critical construction phases. The Mitigated Negative Declaration concluded that the project with the proposed mitigation measures will not have a significant effect on the environment.

Therefore, we recommend that your Board approve the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program and find that, by incorporating the mitigation measures described in the Mitigation Monitoring and Reporting Program, the project will not have a significant effect on the environment.

A fee must be paid to the State Department of Fish and Game when certain notices required by CEQA are filed with the County Clerk. The County is exempt from paying this fee when the Board finds that a project will have no impact on wildlife resources. The initial study of environmental factors concluded that there will be no adverse effects on wildlife resources. Following approval of the Mitigated Negative Declaration by your Board, Public Works will file a Certificate of Fee Exemption with the County Clerk. A

$25 handling fee will be paid to the County Clerk for processing. We will also file a Notice of Determination in accordance with the requirements of Section 21152(a) of the California Public Resources Code.

## CONTRACTING PROCESS

Advertising for bids will be in accordance with the County's standard "Instruction Sheet for Publishing Legal Advertisements" (Enclosure B). Following receipt of bids, we will return to your Board for construction contract award.

The State Labor Code requires contractors to pay prevailing wage rates to all persons employed on Public Works contracts.

As requested by your Board on February 3, 1998, this contract opportunity will be listed on the "Doing Business with the County" website.

Public Works has evaluated and determined that the Living Wage Program (County Code Chapter 2.201) does not apply to this construction contract as this contract is for non-Proposition A services.

Participation by Community Business Enterprises in the project is encouraged through Public Works' Capital Projects CBE Outreach Program and by monitoring the good faith efforts of bidders to use CBEs.

## IMPACT ON CURRENT SERVICES (OR PROJECTS)

There will be no negative impact on current County services or projects during construction. Sheriff services to the community will continue to be provided from the interim Palmdale Sheriff’s Station until construction of the station is complete.

**CONCLUSION**

Please return one adopted copy of this letter to the CAO (Capital Projects Division), Sheriff, and Public Works.

Respectfully submitted,

JAMES A. NOYES
Director of Public Works

DAVID E. JANSSEN
Chief Administrative Officer

LEROY D. BACA
Sheriff

KS:amr
U:Sheriff_BL_AA_PALMDALE_KS 0505033

Enc. 3

cc: County Counsel
Department of Public Social Services (GAIN/GROW Program)
Office of Affirmative Action Compliance

May 1, 2003

**ENCLOSURE A**

**PALMDALE SHERIFF'S STATION**
**APPROVE MITIGATED NEGATIVE DECLARATION**
**ADOPT MITIGATION MONITORING AND REPORTING PROGRAM**
**ADOPT AND ADVERTISE**
**AWARD AGREEMENT**
**SPECS. 5415; C.P. 77401**

## I. PROJECT SCHEDULE

| Project Activity | Scheduled Completion Date | Revised Completion Date Actual |
|---|---|---|
| Design | | |
| Programming | 08/31/99 | 01/17/01* |
| Schematic Design | 12/28/99 | 10/16/01* |
| Design Development | 04/25/00 | 03/04/02* |
| Construction Document Submittal | 11/25/00 | 08/21/02* |
| Jurisdictional Approval | 10/22/00 | 05/13/03 |
| Construction Bid and Award | 03/06/01 | 08/21/03 |
| Construction | | |
| Start | 04/05/01 | 08/25/03 |
| Substantial Completion | 07/29/02 | 10/27/04 |
| Acceptance | 11/26/02 | 03/28/05 |
| Post Construction | N/A | N/A |

* Indicates completed activities.

## II. PROJECT BUDGET SUMMARY

| Budget Category | Original Project Budget | Impact of this Action | Proposed Project Budget |
|---|---|---|---|
| Land Acquisition | -0- | -0- | -0- |
| Construction | | | |
| (a) Construction | $ 12,300,000 | $ 365,073 | $ 12,665,073 |
| (b) Equipment | -0- | -0- | -0- |
| Subtotal | $ 12,300,000 | $ 365,073 | $ 12,665,073 |
| Change Orders | $ 1,230,000 | $ 36,507 | $ 1,266,507 |
| Subtotal | $ 13,530,000 | $ 401,580 | $ 13,931,580 |
| Equipment/Telecommunication Control | $ 1,690,000 | ($ 243,080) | $ 1,446,920 |
| Plans and Specifications | $ 1,300,000 | $ 15,500 | $ 1,315,500 |
| Consultant Services | $ 500,000 | ($ 75,000) | $ 425,000 |
| Miscellaneous Expenditures | $ 785,000 | $ 75,000 | $ 860,000 |
| Jurisdictional Review and Plan Check | $ 75,000 | -0- | $ 75,000 |
| County Services | $ 2,255,400 | ($ 174,000) | $ 2,081,400 |
| TOTAL | $ 20,135,400 | -0- | $ 20,135,400 |

May 1, 2003

**ENCLOSURE B**

**PALMDALE SHERIFF'S STATION**
**APPROVE MITIGATED NEGATIVE DECLARATION**
**ADOPT MITIGATION MONITORING AND REPORTING PROGRAM**
**ADOPT AND ADVERTISE**
**AWARD AGREEMENT**
**SPECS. 5415; C.P. 77401**

PUBLISHING LEGAL ADVERTISEMENTS: In accordance with the State of California Public Contract Code, Section 20125, you may publish once a week for two weeks in a weekly newspaper, or ten times in a daily newspaper. Forward three reprints of this advertisement to Architectural Engineering Division, Department of Public Works, 900 South Fremont Avenue, 8th Floor, Alhambra, California 91803-1331.

**OFFICIAL NOTICE**
**INVITING BIDS**

Notice is hereby given that the Director of Public Works will receive sealed bids for furnishing, materials, labor, and equipment required to complete construction for the following work:

| SD | SPECS | PROJECT | BID DOC FEE | DATE OF BID OPENING |
|---|---|---|---|---|
| 5 | 5415 | Palmdale Sheriff's Station<br>750 Avenue Q<br>Palmdale, CA | $75 | June 10, 2003 |

Copies of the project manual and drawings may be obtained at the Cashier's Office, Department of Public Works, 1st Floor, 900 South Fremont Avenue, Alhambra, California 91803, for the fee stated above. For bid information, please call (626) 458-2563. Each bid shall be submitted on the required form, sealed, and filed at the Cashier's Office before 1:45 p.m. on the date indicated. Bids will be publicly opened, examined, and declared by Public Works at 2:00 p.m. on this date in Conference Room D, 1st Floor, 900 South Fremont Avenue, Alhambra, California 91803.

.

Bids must conform to the drawings and project manual and all bidding requirements. This project requires the prime contractor to possess a "B" license classification at the time of bid. The contractor should verify to his/her satisfaction that he/she holds the correct license for this type of project.

## SPECIAL BIDDING REQUIREMENTS

Bidders are advised that this project includes the following special bidding requirements:

1. Due to the importance of the detention hardware and equipment, one firm shall act as the Detention Equipment Subcontractor (DESC) and be responsible for providing all work specified in Sections 11900, 11901, 11902, 11903, 11905, 11906, and 11908. Qualifications for the DESC must be submitted. See Section 11900 for additional details.

2. Due to the importance of the security systems, the work specified in Division 17 shall be performed by an experienced firm as a direct subcontract to the General Contractor. See Section 17000 for additional details.

3. Included in the construction documents are items and systems that are to be provided as design/build, including, but not limited to, the following:

   Communications Tower.
   Car Wash Canopy , Fuel Island Canopy, and Carport Canopy.
   Fire Sprinkler System.
   Fire Alarm System.
   Light Gage Metal Framing.

## PRE-BID CONFERENCE

Public Works' Project Management Team will hold a pre-bid conference at 10:00 a.m. on May 27, 2003 at the Department of Public Works, 900 South Fremont Avenue, Alhambra, California 91803, in Conference Room C on the 1st Floor, to provide information on the project, bidding process, and answer any questions the potential bidders may have. For further information, please contact Mr. Brian Soria with the Public Works' Project Management Team at (626) 458-2588.

## OTHER INSTRUCTIONS

The County supports and encourages equal opportunity contracting. The contractor shall make good faith efforts, as defined in Section 2000 of the Public Contract Code, to contract with Community Business Enterprises.

The Board of Supervisors reserves the right to reject any or all bids or to waive technical errors and discrepancies in bids submitted in the public's interest.

Si necesita información en español, por favor llame al Telefono (626) 458-2563.

Upon 72 hours notice, the Department can provide program information and publications in alternate formats or make other accommodations for people with disabilities. In addition, program documents are available at our main office in Alhambra (900 S. Fremont Ave.), which is accessible to individuals with disabilities. To request accommodations ONLY, or for more ADA information, please contact our departmental ADA Coordinator at (626) 458-4081 or TDD (626) 282-7829, Monday through Thursday, from 7:00 a.m. to 5:30 p.m.

Con 72 horas de noticia, el Departamento puede proveerle información y publicaciones sobre el programa y formatos alternativos o hacer adaptaciones para incapacitados. Además, documentación sobre el programa está disponsible en nuestra oficina principal en Alhambra (900 S. Ave. Fremont), la cual es accesible para individuos con incapacidades. Para solicitar adaptaciones SOLAMENTE, o para mas información del ADA, pongase en contacto con nuestro Coordinador del ADA del departamento al (626) 458-4081 o TDD (626) 282-7829, de Lunes a Jueves de las 7:00 a.m. a 5:30 p.m.

By order of the Board of Supervisors of the County of Los Angeles, State of California, dated May 13, 2003.

Specs. 5415

VIOLET VARONA-LUKENS, EXECUTIVE OFFICER
OF THE BOARD OF SUPERVISORS
OF THE COUNTY OF LOS ANGELES

**Enclosure C**

**CAPITAL PROJECT OPERATING COST ESTIMATE - ONE-TIME COSTS**

**Department:** Sheriff's Department
**Facility:** Palmdale Sheriff's Station
**Address:** 750 East Avenue Q
Palmdale, CA 93550
**Opening Date:** March-04

| Cost Description | Quantity | Unit Cost | Total Cost |
|---|---|---|---|
| **I. ONE-TIME START-UP COSTS** | | | |
| **A. Fixed Assets - Equipment** | | | |
| a. Agricultural and Landscaping Equipment | 1 | $ 1,000 | $ 1,000 |
| b. Aircraft | 0 | 0 | 0 |
| c. Communication Equipment | 0 | 0 | 0 |
| d. Computer and Data Processing Equipment | 0 | 0 | 0 |
| e. Construction and Heavy Maintenance Equipment | 0 | 0 | 0 |
| f. Electronic Equipment | 0 | 0 | 0 |
| g. Food Preparation Equipment | 0 | 0 | 0 |
| h. Heavy Machinery | 0 | 0 | 0 |
| i. Major Office Equipment | 0 | 0 | 0 |
| j. Manufactured or Prefabricated Structures | 0 | 0 | 0 |
| k. Medical Equipment | 0 | 0 | 0 |
| l. Non-Medical Laboratory Equipment | 0 | 0 | 0 |
| m. Recreation Equipment | 0 | 0 | 0 |
| n. Vehicles - Automobiles | 0 | 0 | 0 |
| o. Vehicles - 12-person custody van | 1 | 31,981 | 31,981 |
| p. Vehicles - pick-up truck | 1 | 25,395 | 25,395 |
| q. Watercraft | 0 | 0 | 0 |
| r. Other - Floor Buffer, Vaccuum | 1 | 5,000 | 5,000 |
| Subtotal | 4 | $ 63,376 | $ 63,376 |
| **B. Services and Supplies** | | | |
| a. Computer Equipment - Desktop | 0 | $ 0 | $ 0 |
| b. Computer Software | 0 | 0 | 0 |
| c. Medical Supplies | 0 | 0 | 0 |
| d. Office Furnishings | 0 | 0 | 0 |
| e. Recreation Equipment | 0 | 0 | 0 |
| f. Relocation Costs | 0 | 0 | 0 |
| g. Training Costs | 0 | 0 | 0 |
| h. Other | 0 | 0 | 0 |
| Subtotal | 0 | $ 0 | $ 0 |
| **TOTAL ONE-TIME START-UP COSTS** | 4 | $ 63,376 | $ 63,376 |

**CAPITAL PROJECT OPERATING COST ESTIMATE - ONGOING COSTS**

**Department:** Sheriff's Department
**Facility:** Palmdale Sheriff's Station
**Address:** 750 East Avenue Q
Palmdale, CA 93550
**Opening Date:** March-04

| Cost Description | Quantity | Unit Cost | Total Cost |
|---|---|---|---|
| **II. ONGOING OPERATING COSTS** | | | |
| **A. Salaries and Employee Benefits** | | | |
| a. Captain | 1 | 186,486 | $ 186,486 |
| b. Lieutenant | 6 | 150,094 | 900,564 |
| c. Sergeant | 24 | 126,308 | 3,031,392 |
| d. Dep. B-1 | 36 | 105,765 | 3,807,540 |
| e. Dep. Gen. | 96 | 97,250 | 9,336,000 |
| f. C.S.A. | 7 | 35,174 | 246,218 |
| g. Crime Analyst | 1 | 73,815 | 73,815 |
| h. Data Systems Analyst II | 1 | 80,875 | 80,875 |
| i. Evidence and Property Custodian | 1 | 51,881 | 51,881 |
| j. L.E.T. | 13 | 53,811 | 699,543 |
| k. Operations Assistant II | 1 | 63,513 | 63,513 |
| l. Operations Assistant III | 1 | 72,730 | 72,730 |
| m. Secretary V | 1 | 56,220 | 56,220 |
| n. S.S.C. II | 13 | 47,417 | 616,421 |
| o. S.S.S.C. | 1 | 57,176 | 57,176 |
| p. Telephone Operator | 2 | 37,532 | 75,064 |
| Subtotal | 205 | $ 1,296,047 | $ 19,355,438 |
| **B. Services and Supplies** | | | |
| a. Clothing and Personal Supplies | 0 | $ 0 | $ 0 |
| b. Communications (internet) | 0 | 0 | 0 |
| c. Household Expense | 1 | 4,600 | 4,600 |
| d. Information Technology Services (maintenance) | 0 | 0 | 0 |
| e. Insurance | 0 | 0 | 0 |
| f. Maintenance - Building | 0 | 0 | 0 |
| g. Maintenance - Equipment | 0 | 0 | 0 |
| h. Medical, Dental, Laboratory Supplies | 0 | 0 | 0 |
| i. Office Expense - Supplies | 1 | 35,000 | 35,000 |
| j. Recreation Supplies | 0 | 0 | 0 |
| k. Rents & Leases - Building | 0 | 0 | 0 |
| l. Rents & Leases - Equipment | 0 | 0 | 0 |
| m. Small Tools and Instruments | 1 | 3,500 | 3,500 |
| n. Telecommunications | 0 | 0 | 0 |
| o. Utilities (not available at this time) | 1 | 0 | 0 |
| p. Other (postage) | 1 | 9,674 | 9,674 |
| Subtotal | 5 | $ 52,774 | $ 52,774 |
| **TOTAL ONGOING OPERATING COSTS** | | | $ 19,408,212 |

**CAPITAL PROJECT OPERATING COST ESTIMATE - POTENTIAL FUNDING SOURCES**

**Department:** Sheriff's Department
**Facility:** Palmdale Sheriff's Station
**Opening Date:** March-04

| | | |
|---|---|---|
| **A.** | **Potential Funding Available for One-Time Start-Up Costs** | |
| a. | Potential Operating Grants | |
| | Amount of Annual Funding | $ 0 |
| | Funding Agency | |
| | Program | |
| | Grant Timeframe | |
| | Funding Restrictions | |
| b. | Other Potential Revenue Sources | |
| | Amount of Potential Funding | $ 0 |
| | Revenue Source | |
| | Program | |
| | **Total Potential Funding for One-Time Start-up Costs** | $ 0 |
| | **Projected Net County Cost Required to Fund One-Time Start-Up Costs** | $ 63,376 |
| **B.** | **Potential Funding for Ongoing Operational Costs** | |
| a. | Currently Budgeted Positions | |
| | Reallocation of Currently Filled Positions | $ 0 |
| | Vacant Positions - Current Budget | 0 |
| | Subtotal | $ 0 |
| b. | Potential Operational Savings / Avoided Costs | |
| | Avoided Rent - Current Space Leases | $ 0 |
| | Avoided Maintenance Costs - Current Budget | 0 |
| | Avoided Utility Costs - Current Budget | 0 |
| | Avoided Services and Supplies - Current Budget | 0 |
| | Other | 0 |
| | Subtotal | $ 0 |
| c. | Potential Operating Grants | |
| | Amount of Annual Funding | $ 0 |
| | Funding Agency | |
| | Program | |
| | Grant Timeframe | |
| | Funding Restrictions | |
| d. | Charges for Services and Fees | |
| | Annual Amount of Charge or Fee | $ 0 |
| | Type of Charge or Fee | |
| | Authorization for Charge or Fee | |
| e. | Other Potential Revenue Sources | |
| | Amount of Annual Funding | $ 0 |
| | Revenue Source | |
| | Program | |
| | **Total Potential Funding for Ongoing Operating Costs** | $ 0 |
| | **Projected Net County Cost Required to Fund Ongoing Operating Costs** | $ 19,408,212 |

SHERIFF

Los Angeles County Sheriff's Department

# INITIAL STUDY and MITIGATED NEGATIVE DECLARATION for the proposed PALMDALE SHERIFF'S STATION

**May 2003**


# INITIAL STUDY and MITIGATED NEGATIVE DECLARATION for the proposed PALMDALE SHERIFF'S STATION

Prepared for:

***Los Angeles County Department of Public Works***
900 South Fremont Avenue, Fifth Floor
Alhambra, California 91803
Ken Schumann, Project Manager
(626) 300-3246

Prepared by:

***David Evans and Associates***
800 North Haven Avenue, Suite 300
Ontario, California 91764
Karen Ruggels, Project Manager
(909) 481-5750

**May 2, 2003**

# TABLE OF CONTENTS

**APPENDICES:**

**A -** ENVIRONMENTAL CHECKLIST
**B -** AIR QUALITY STUDY
**C** – CULTURAL RESOURCES STUDIES
**D** – PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
**E -** NOISE STUDY
**F -** TRAFFIC STUDY

## LIST OF TABLES



## LIST OF FIGURES

## 1.1 INTRODUCTION

This Mitigated Negative Declaration (MND) and Initial Study evaluates and identifies the potential environmental impacts which may result from the proposed Palmdale Sheriff's Station, to be located on approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. The new station would have approximately 50,280 square feet of floor area and will accommodate 221 sworn officers and administrative persons. This new station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5 mile southeast of the proposed project site. The site for the proposed Sheriff's Station also includes a 1.5-acre portion at the northeastern corner that may be developed for a future County Fire Station with approximately 11,000 square feet of floor area. However, no specific plans for the fire station have been developed at this time. The fire station would need to undergo separate environmental review prior to its construction.

The County of Los Angeles is serving as the *Lead Agency* for the proposed Sheriff's Station. Section 21067 of the California Environmental Quality Act (CEQA) defines a Lead Agency as the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect on the environment. As the Lead Agency, the County of Los Angeles has the authority to oversee and approve the environmental review process, as well as the design and construction of the proposed Sheriff's Station.

## 1.2 PURPOSE OF THE MND AND INITIAL STUDY

As part of the environmental review process for the proposed Palmdale Sheriff's Station project, the County of Los Angeles has authorized the preparation of this Initial Study. The Initial Study provides a basis for understanding whether there are environmental impacts associated with the proposed project and, if environmental impacts are likely to occur, if such impacts could be significant. The purposes of this Initial Study, as stated in Section 15063 of the CEQA Guidelines, are as follows:

- To provide the County of Los Angeles with information to use as the basis for deciding whether to prepare an environmental impact report or negative declaration for the proposed Palmdale Sheriff's Station;
- To enable the County of Los Angeles to modify the project, reducing or eliminating any adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
- To assist in the preparation of an EIR, if one is required, by focusing the EIR on the effects determined to be significant; identifying effects determine not to be significant; and explaining reasons for determining that potentially significant effects would not be significant;
- To identify whether a program EIR, tiering, or another appropriate process can be used for the analysis of the project's environmental effects;
- To facilitate the environmental review of the project early in its design;
- To provide documentation for findings in a negative declaration that the project would not have a significant effect on the environment;

- To eliminate unnecessary environmental impact reports; and

- To determine whether a previously prepared EIR can be used for the project.

Based on the findings of the Initial Study, the County of Los Angeles would then determine the subsequent environmental review needed for the project, which may take the form of a (Mitigated) Negative Declaration (MND) or an Environmental Impact Report (EIR).

According to Section 21064.5 of CEQA and Section 15070 of the CEQA Guidelines, the MND is a statement that describes the reasons why the proposed project would not have a significant effect on the environment by itself or because revisions to the project have been made to avoid or reduce the potential adverse impacts of the project to levels considered less than significant and that there is no substantial evidence before the Lead Agency that the project, as revised, may have a significant effect on the environment. The recommended mitigation measures would be incorporated into the project so that it may qualify for an MND. The MND signifies that the project, as revised, would not require additional environmental analysis in the form of an EIR.

## 1.3 SUMMARY OF FINDINGS

Based on the findings of the preliminary environmental analysis in Section 3.0 of this Initial Study, the proposed Palmdale Sheriff's Station has the potential for creating significant adverse impacts on a number of environmental issues during construction and operation. However, the proposed Palmdale Sheriff's Station would replace an existing facility, and no major change in the type or scale of services and activities that are ongoing at the existing station are expected. Rather, a transfer of the activities and services associated with the existing facility (including patrol car trips, on-site office, administrative, public counter, detective, and detention activities, etc.) would occur with the proposed project. The impacts of the activities at the proposed sheriff's station facility on the surrounding environment and adjacent uses at the new project site would be accompanied by a loss of impacts generated by the existing facility from the area of the existing station. Although, the leased space is expected to be reused for commercial purposes.

The potential impacts due to operation of the proposed Sheriff's Station would include impacts associated with ongoing Department operations, along with the increase in floor area at the new station, the proposed helistop, and the associated construction (short-term) impacts of the new facility.

Since no specific design for the fire station has been developed, the potential environmental impacts of the fire station can not be analyzed at this time. When the plan and design for the future fire station is developed, the fire station would have to be subject to the environmental review process, in accordance with CEQA.

Mitigation measures have been developed to ensure that the proposed Sheriff's Station's significant adverse impacts are mitigated to levels considered less than significant. These measures would need to be incorporated into the proposed Palmdale Sheriff's Station project. They include the following:

- ***Aesthetics and Visual Quality***

  To mitigate potential light spillover and glare on adjacent residences, the following measures are proposed:

  - Exterior lights shall be directed downwards into the site.

- Light shields shall be provided for lights to be placed along the northern and eastern sections of the site.

- Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles.

■ ***Air Quality***

To ensure that construction emissions do not affect adjacent residents, the following measures are recommended:

- Use of watering for dust control during clearing, grading, and construction. Availability of brackish or reclaimed water sources should be investigated. Soil disturbance should be terminated when high winds (>25 mph) make dust control extremely difficult.

- Developing a dust control program to supplement the routine watering that constitutes best available control measures (BACMs) in excess of any minimum SCAQMD Rule 403 requirements. BACMs that may be adopted and integrated an enhanced dust control program might include hydroseeding previously disturbed areas while awaiting construction, adding chemical binders or surfactants to increase the effectiveness of watering, early paving or chip sealing of roads, enforcing reduced travel speeds (15 mph) on unpaved surfaces and/or sand fences and perimeter sandbags.

- Minimization of construction interference with regional non-project traffic movement. Measures recommended for inclusion are:
  a. Scheduling receipt of construction materials to non-peak travel periods.
  b. Routing construction traffic through areas of least impact sensitivity.
  c. Limiting lane closures and detours to off-peak travel periods.
  d. Providing ride-share incentives for contractor and subcontractor personnel.

- Reducing "spill-over" effects by preventing soil erosion, washing vehicles entering public roadways from dirt off-road project areas, and washing/sweeping project access to public roadways on an adequate schedule.

- Requiring emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups.

- Limiting grading/soil disturbance to as small an area as practical at any one time and using best available control measures.

- Limiting the application of architectural surface treatments (i.e., paint, etc.) to average no more than 225 gallons per week over the project construction period.

■ ***Cultural Resources***

To ensure that no archeological or paleontological resources are disturbed during ground disturbance activities, the following measures are proposed:

- Monitoring shall be conducted during the removal of the building foundation (if removal is necessary, and during any ground disturbance activities. Additional architectural features of the foundation that may be uncovered shall be recorded and if trash pits are uncovered, any clearly historic artifacts from trash deposits shall be collected.

- Monitoring shall be conducted during earth-moving activities in native soils. If fossil materials are found, grading shall be diverted or redirected and fossils properly salvaged.

- Standard 200-pound sediment samples shall be screenwashed from each formation and if small vertebrate fossils are found, additional sediments shall be screenwashed for up to 6,000 pounds.

- All fossils recovered shall be stabilized, prepared, identified, packaged, and transported to the Natural History Museum of Los Angeles County, along with a documentation of fossil findings.

■ ***Noise***

To ensure that noise from construction and on-site activities do not affect adjacent residents, the following measures are recommended:

- Construction activities shall be restricted to the hours of 7 a.m. to 7 p.m., and prohibited on Sundays and major holidays.

- Use of equipment mufflers for construction equipment

- Location of staging areas away from residential uses to the east

With the incorporation and implementation of these mitigation measures, the potential adverse impacts associated with the proposed Palmdale Sheriff's Station facility would be avoided or reduced to less than significant levels. In accordance with these findings, the County of Los Angeles will consider adoption of a Mitigated Negative Declaration for the proposed Palmdale Sheriff's Station project. This would complete the environmental review process for the project.

## 2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

### *Project Background*

The existing Palmdale Sheriff's Station is located at 1020 Palmdale Boulevard, within the downtown area of the City of Palmdale. The existing station opened in 1992 and was initially a storefront for the Antelope Valley Sheriff's Station (now the Lancaster Sheriff's Station). In 1998, it became a separate stand-alone station serving the City of Palmdale and the surrounding unincorporated areas. The County Sheriff's Department had previously planned on relocating the stand-alone station to a permanent facility in 1998. However, they opted for the expansion of the existing facility instead, through additional leases within the current building.

The existing station currently occupies 13,500 square feet of leased space on Palmdale Boulevard and accommodates 204 officers and administrative staff. The station serves the City of Palmdale and 20 nearby communities, with a total land area covering approximately 852 square miles. There are approximately 180,000 residents within the station's service boundaries. With the growing population of Palmdale and the Antelope Valley, the existing station is once more too small for the officers and staff and the services that are offered by the Los Angeles County Sheriff's Department. Thus, the construction of a larger permanent facility is proposed at the project site.

In 1997, the Redevelopment Agency of the City of Palmdale purchased the property and the surrounding area as part of redevelopment efforts in the downtown area. The City then rezoned the site and amended the Land Use Plan designation from Downtown Commercial to Public Facility. The City is proposing to lease or sell the 11.57-acre portion of the southeastern corner of Sierra Highway and Avenue Q to the County of Los Angeles for the construction of a permanent facility for the Palmdale Sheriff's Station and a Fire Station.

### *Regional Setting*

The City of Palmdale is located at the northern section of Los Angeles County, bounded by the City of Lancaster to the north, and unincorporated county land to the east, west and south, including the Angeles National Forest to the south. The City is located within the southwestern portion of the Antelope Valley in the Mojave Desert and north of the San Gabriel and Sierra Pelona Mountains. The Antelope Valley Freeway (SR-14) provides regional access to the Palmdale area and crosses the City, approximately 58 miles northeast of the City of Los Angeles. Figure 1, *Regional Map,* provides a regional location map of the project area.

The City of Palmdale is one of the fastest growing cities in Los Angeles County. Palmdale incorporated in 1962 with 2.1 square miles of land area and had expanded to 45 square miles in 1983 and to 76 square miles in 1990. Today, the City covers over 102 square miles within its jurisdictional boundaries. In 1980, the City had 12,277 residents. In 1990, it had increased its population more than four times to 56,476 residents and by 2000, its population was more than double the 1990 population.

The California Department of Finance estimates the City's population at 122,392 residents and its housing stock at 39,468 units, as of January 2000. Approximately 78.7 percent of the housing stock consists of single family homes and 5.0 percent are mobile homes. The remaining 16.3 percent are multi-family units. The City has a 9.65 percent vacancy rate and an average household size of 3.43 persons per household. The 2001 population estimates are 121,413 residents and a housing stock of 37,649 units, of which 7.58 percent is vacant.


**FIGURE 1**
**REGIONAL LOCATION**

The City of Palmdale is the first city in the Antelope Valley and has been transformed from an agricultural and rural residential area before the 1970's into a segment of the aerospace industry and a suburban residential community in the 1980's and beyond. Today, the City's land area covers approximately 102 square miles, with the majority of the land developed with single family residential homes and the USAF Plant 42/Palmdale Airport, as well as vacant land.

Commercial areas are concentrated along the SR-14 Freeway, Sierra Highway, Palmdale Boulevard, within neighborhood and community commercial centers, strip development, and regional malls. Industrial areas are found around the USAF Plant 42/Palmdale Airport and along the Southern California Rail Authority (Metrolink) railroad tracks, which run parallel to Sierra Highway.

The Los Angeles County Sheriff's Department is one of the largest sheriff's departments in the country and serves over 2.0 million residents within an approximately 3,161 square mile area that encompasses the unincorporated areas of Los Angeles County and several incorporated cities (under service contracts). There are 21 sheriff's stations and 11 substations located throughout the County, with over 8,000 sworn personnel and 5,300 civilian employees.

The Sheriffs' Department has two stations in the Antelope Valley, one in Lancaster and one in Palmdale. The Palmdale Sheriff's Station serves an approximately 852-square mile area, including the City of Palmdale and the surrounding unincorporated County area, extending east to the San Bernardino County line, west to the Santa Clarita area and south to the San Gabriel Mountains. As indicated earlier, there are approximately 180,000 residents within this service area.

***Project Site***

The proposed project site is located at the southeastern corner of Avenue Q and Sierra Highway. This site is currently vacant, with relatively flat terrain. The project site was previously used for a variety of land uses, including a residence, various fruit stands, an automobile parking garage, a sign and paint shop, and various temporary carnivals. The Palmdale Plaza shopping center occupied the southern portion of the block, and was demolished in 1998 as part of the Youth Library construction. In 1997, the site was purchased by the Redevelopment Agency of the City of Palmdale, as part of redevelopment efforts and revitalization of the downtown area. The site has been intermittently used for temporary carnival events but remains vacant and undeveloped. Street trees, light poles and sidewalks are found along the site's western boundary on Sierra Highway and overhead power lines and undeveloped roadway shoulders are found along the sit boundary on Avenue Q. There are no improvements on-site, except for three scattered signs and a 20-foot by 65-foot concrete pad at the southwestern section near Sierra Highway.

North of the site is Avenue Q and unincorporated County area. Avenue Q forms the southern boundary of this County island. Within this unincorporated area (across Avenue Q to the north of the site) are vacant land and four single-family residential units, with industrial uses farther north. The project site is also adjacent to single family homes to the northeast and southeast, with vacant land, a commercial office use, and residential uses to the east fronting 9$^{th}$ Street East. Vacant land, the Palmdale Youth Library, the Richard Hammack Activity Center (for the Antelope Valley Boys and Girls Club), parking areas and recreational facilities (outdoor roller hockey rink) are located to the south. The Dr. Robert St. Clair Parkway, Metrolink railroad tracks, Anaverde Creek and industrial/manufacturing uses are located to the west of the site, across Sierra Highway. Figure 2, *Vicinity Map*, shows the location of the project site.

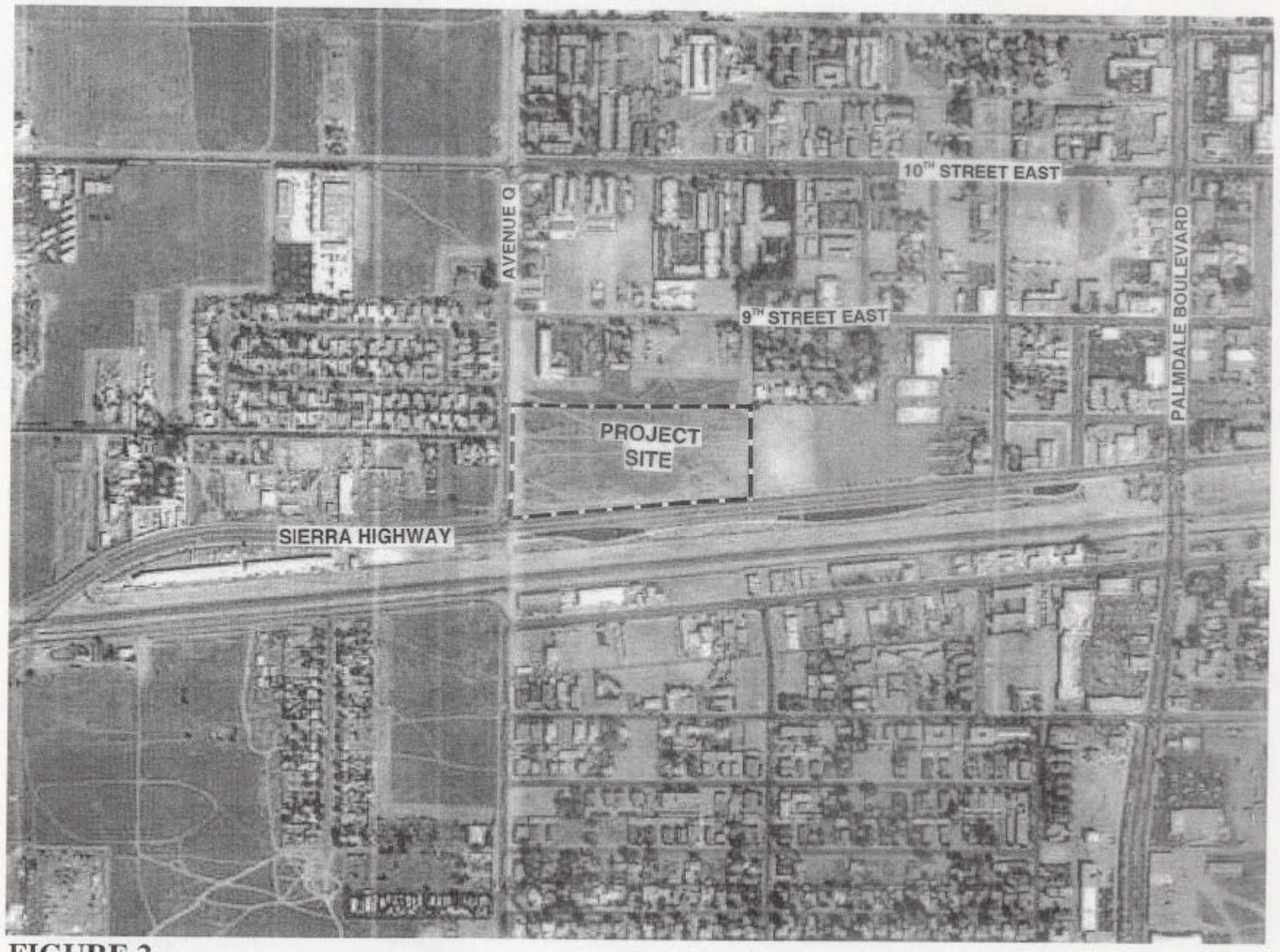



**FIGURE 2**
**VICINITY MAP**

The project site has excellent access and is located adjacent to most area transportation systems. The site is located less than a mile north of Palmdale's downtown area and is bounded by Sierra Highway on the west. Sierra Highway is an 80-foot wide, four-lane major roadway in the City and serves as a primary north-south corridor parallel to SR-14 Freeway. Street trees and streetlights line Sierra Highway. Avenue Q defines the site's northern border and has a 50-foot wide right-of-way with two travel lanes. Curbs and gutters are found only along the northern side of Avenue Q and overhead power poles line the south side of Avenue Q.

The Antelope Valley Freeway (SR-14) runs parallel to and west of Sierra Highway and serves as the regional connector for Antelope Valley to the metropolitan areas of Los Angeles County. Metrolink railroad tracks are found immediately west of Sierra Highway, which carry 5 Union Pacific freight trains and 17 Metrolink passenger trains every day. Metrolink's Antelope Valley Line includes commuter trains from Lancaster (located north of Palmdale) to Los Angeles, which run five to six times a day, Monday through Friday and four times a day on weekends. The Metrolink trains stop at 8 stations along the way. The Palmdale Airport is also located near the site (approximately 1.5 miles to the northeast). This airport is a general aviation facility located n 54 acres of land south of the US Air Force Plant 42. There is no commercial airline service at Palmdale Airport but the airport handles alternative operations for wide-bodied jets when other airports are closed due to weather conditions. The USAF Plant 42 is a military airport located east of Sierra Highway and north of Avenue P. This airport is used mainly for test flights and training flights of military aircraft and personnel.

## 2.2 DESCRIPTION OF THE PROPOSED PROJECT

### *Physical Characteristics*

The County of Los Angeles is proposing the construction of a permanent facility for the Sheriff's Station in the City of Palmdale. The proposed project site consists of approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q. To accommodate a staff of 221 sworn officers, volunteers, and administrative staff, the new Sheriff's Station facility would have approximately 50,280 square feet of floor area and would include a 6,853-square foot maintenance building, fueling island, a 120-foot high communication tower, a helistop, and parking areas for Sheriff's Department vehicles and staff. The project would also involve off-site improvements, such as undergrounding of utility poles and street widening on Avenue Q, as well as traffic signal relocation. In addition, a 1.5-acre portion of the site at the northeastern corner may be developed as a future fire station.

The proposed plans for the Sheriff's Station, as provided in Figure 3, *Proposed Site Plan,* show the one-story structure to be located near the northwestern portion of the site, near the intersection of Sierra Highway and Avenue Q. This structure would feature an irregular rectangular building, with a visitor parking area along Avenue Q and a public arrestee release parking area along Sierra Highway. The proposed building would include office workstations, a detention area, locker rooms, bunk rooms, evidence storage, conference rooms, briefing rooms, community room, and other support areas for sheriff's operations. The building would be approximately 145 feet by 397 feet, with a 22-foot building height. The total floor area would be approximately 50,280 square feet. Figure 4, *Building Elevations*, provides the various elevations for the proposed structure.

The vehicle maintenance building would be located at the southeastern end of the site. The maintenance structure would be 60 feet by 166 feet and 22 feet high, with a total floor area of 6,853 square feet. The maintenance building area would include a fueling island, underground waste oil tank, car wash, and wastewater clarifier.

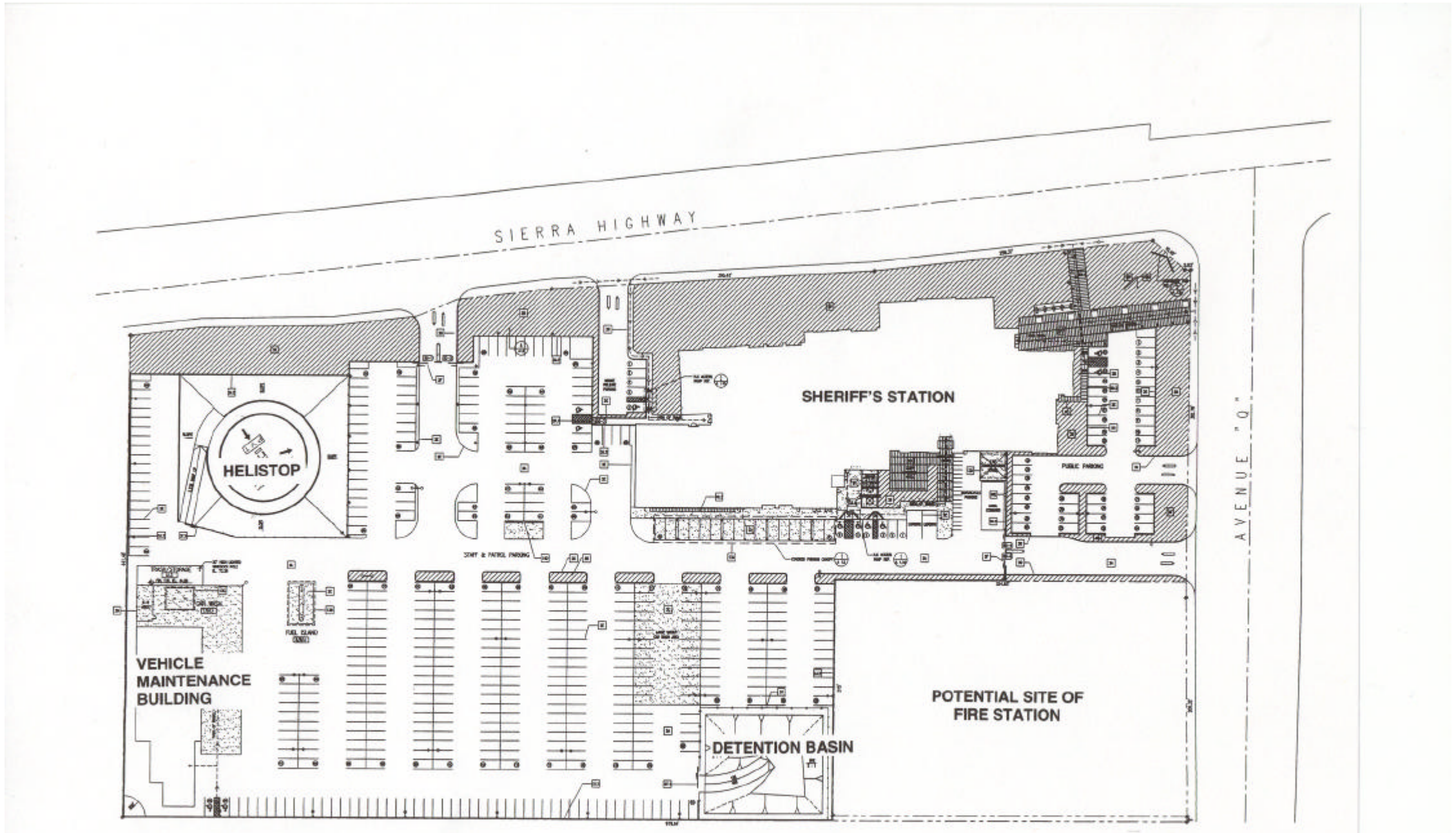
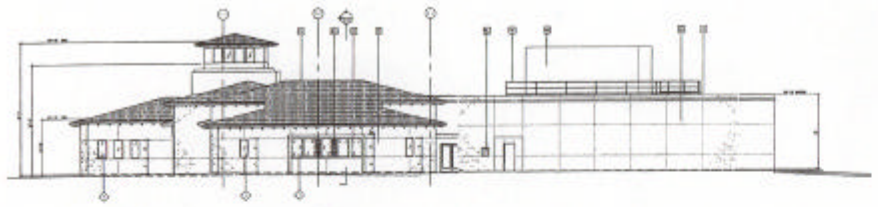
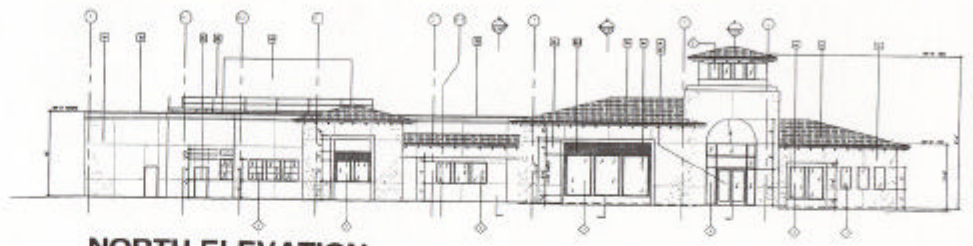


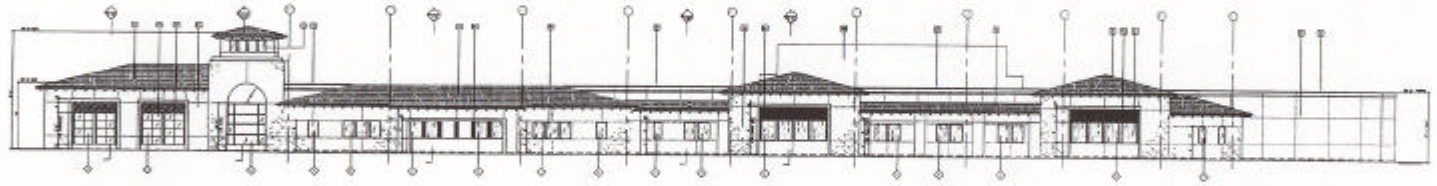

**FIGURE 3**
**PROPOSED SITE PLAN**



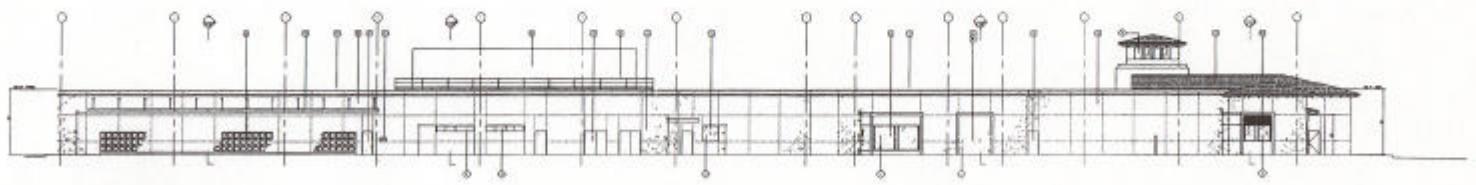
SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION

**FIGURE 4**
**BUILDING ELEVATIONS**

The 110-foot wide helistop would be located at the southwestern portion of the site. The helistop has been designed to be located more than 66 feet from the site boundaries, with a safety zone around the helistop defined by a 2:1 slope and two approach paths at an 8:1 slope. The helistop would occupy approximately 16,720 square feet. Take-off and landing would be from the southwest and the north. No refueling capacity would be provided on-site and no long term parking for helicopters would be provided.

North of the maintenance building would be 10 vehicle maintenance parking spaces, 230 department vehicle parking spaces, 57 staff vehicle parking spaces, and 12 special official vehicle parking spaces. Additionally, 92 staff vehicle parking spaces and 5 intake parking spaces would be located south of the Sheriff's station building. Another 20 covered parking spaces, motorcycle parking, and a 13-space special official vehicle parking area would be located east of the Sheriff's Station. Also, 34 parking spaces may be accommodated within the area located south of the helistop. Additionally, 29 public parking spaces would be located northeast and south of the Sheriff's Station building. Thus, a total of 468 to 502 parking spaces would be provided on-site.

An approximately 9,800-square-foot retention basin would be provided at the east central boundary of the site. There is no underground storm drain system near the site and the City of Palmdale requires large developments, like the proposed sheriff's station, to provide on-site retention facilities. The retention basin would be located south of the proposed site for the fire station and would be fenced. The basin would have a capacity for two acre-feet of runoff.

A 120-foot high communications tower would be located in the north central portion of the site. This tower would house a radio antenna and would occupy approximately 600 square feet. Other outdoor areas include exterior equipment and supply storage, trash storage, vehicle sallyport, mobile command area, and a fenced dog run.

Access to the facility would be provided by two driveways along Sierra Highway and two driveways at Avenue Q. Visitor and public parking areas would be located at the western driveway on Avenue Q and public arrestee release parking would be located at the northern driveway on Sierra Highway while Sheriff and staff vehicle parking would be provided at the southern section of the site. The Sheriff and staff vehicle parking areas would be accessed through the eastern driveway on Avenue Q and the southern driveway on Sierra Highway. These driveways have been located as far as possible and at least 300 feet from the intersection of Avenue Q and Sierra Highway. The southern driveway on Sierra Highway would connect to the eastern driveway proposed on Avenue Q, with both driveways gated.

A 30-foot wide building and parking setback, with a 20-foot wide landscaped area is proposed along Sierra Highway and Avenue Q. In addition, 10-foot wide setbacks would be provided along the eastern and southern boundaries of the site. Along Sierra Highway, a landscaped berm would be provided from the sidewalk toward the block wall/wrought iron fence. A 6-foot fence would be provided along the site perimeter.

The 1.5-acre area at the northeastern corner of the site, which has been reserved for a County Fire Station, is expected to remain vacant until such time that the County considers use of that area.

Aside from these on-site improvements, the proposed project would provide a 32-foot wide roadway dedication along Avenue Q to accommodate the ultimate right-of-way for this street segment. Utility lines along Avenue Q would also be placed underground as part of the project. Street trees, curbs, gutters, and sidewalks would also be provided along Avenue Q. In accordance with the Palmdale Downtown

Revitalization Plan, it is proposed that Modesto Ash tree would be planted along the parkway on Avenue Q. Avenue Q is ultimately planned as a 6-lane roadway, with a bike lane along the project site boundary. Upon project completion, it is anticipated that Avenue Q would provide dual left-turn lanes to southbound Sierra Highway and an exclusive right-turn lane to northbound Sierra Highway. No roadway dedication is required along Sierra Highway.

***Operational Characteristics***

The construction of the Palmdale Sheriff's Station is expected to take approximately 18 months. No set date for the start of construction activities has been scheduled at this time.

Currently, the Palmdale Sheriff's Station is located at 1020 Palmdale Boulevard, approximately 0.5 mile southeast of the project site. This facility occupies leased office space with approximately 13,500 square feet of floor area. All current personnel and facilities would be transferred to the new station, once completed. The existing station's floor space is then expected to be re-used for commercial and office uses, similar to adjacent developments.

The existing and the proposed Palmdale Sheriff's Station would respond to crimes and emergencies in the City of Palmdale and the adjacent unincorporated area. Based on information at the California Department of Justice, the Palmdale Sheriff's Station handled 5,660 and 4,836 crime incidents in 1997 and 1998, respectively. In 1999, there were 3,906 reported crimes in the Palmdale area, consistent with national trends toward decreasing crime incidence. Table 1 shows these crime statistics.

**TABLE 1**
**CRIME STATISTICS**

| Crime | 1997 | 1998 | January to June of 1999 |
|---|---|---|---|
| Willful Homicide | 6 | 7 | 6 |
| Forcible Rape | 46 | 37 | 40 |
| Robbery | 275 | 197 | 192 |
| Aggravated Assault | 919 | 879 | 716 |
| Burglary | 1,146 | 1,063 | 873 |
| Motor Vehicle Theft | 800 | 581 | 475 |
| Larceny-Theft | 2,431 | 2028 | 1,565 |
| Arson | 37 | 44 | 39 |
| Total | 5,660 | 4,836 | 3,906 |
| Source: California Department of Justice, 2000. | | | |

On-site activities at the sheriff's station would include administrative and office operations, public counter and community services, patrol, detective operations, short-term detention, vehicle maintenance and support activities. These activities would include the dispatch of patrol cars and emergency vehicles, complaint and emergency response, foot patrol, narcotics detail, detective detail, special operations, coordination of citizen volunteer patrol, detention of suspects for 96 hours or less, crime prevention and public education programs, and a community-based policing program.

The Palmdale Sheriff's Station would be open 24 hours a day, seven days a week. However, some activities and personnel would be present during the daytime weekday hours only. These include the administrative office personnel and individuals assigned to traffic control, community relations, schedule, training and evidence, crime analysis, and vehicle maintenance.

Table 2 summarizes the internal functions at the proposed Sheriff's Station, along with the assigned personnel, allocated floor area, and operating hours.

**TABLE 2**
**PROPOSED FUNCTIONS, STAFFING AND SCHEDULES**

| Office/Function | Number of Staff | Operating Hours |
|---|---|---|
| Administrative | 5 | M-F, 8 AM to 5 PM |
| Public Counter/Front Office | 17 | 7 days, 24 hrs with 3 shifts per day |
| Traffic Unit | 6 | M-F, 8 AM to 5 PM |
| Reserve Coordinator | 1 | On call 7 days, 8 AM to 5 PM |
| Community Relations | 4 | M-F, 8 AM to 5 PM |
| Records/Secretariat | 19 | 7 days, 24 hrs with 3 shifts per day |
| Schedule/Training/Evidence | 8 | M-F, 8 AM to 5 PM |
| Patrol | 104 | 7 days, 24 hrs with 3 shifts per day |
| Detectives | 35 | 7 days, 8 AM to 12 PM with 2 shifts per day |
| Narcotics | 6 | 7 days, 8 AM to 5 PM |
| Crime Analyst | 2 | M-F, 8 AM to 5 PM |
| Jail/Holding Cell | 12 | 7 days, 24 hrs with 3 shifts per day |
| Support | - | 7 days, 24 hrs |
| Vehicle Maintenance | 2 | M-F, 7 AM to 4 PM |
| Total | 221 | |

Not all 221 officers, volunteers, and personnel would be in the sheriff's station at any one time. Also, most officers would be stationed off-site in patrol areas, crime scenes, or investigation sites. The work schedule for these personnel also shows that 132 persons would be on duty during the AM shift (6 AM to 2 PM), 50 personnel would be on duty during the PM shift (2 PM to 10 PM), and 39 personnel would be on duty during the graveyard shift (10 PM to 6 AM). An overlap in personnel at the station would occur during shift changes, with incoming staff arriving 30 minutes to 1 hour before their shift and outgoing staff leaving 15 minutes after their shift. Accounting for staggered shifts and shared work areas, only 123 workstations would be provided at the station.

There are currently 204 personnel from the existing station that would transfer to the new station. The construction of the proposed Sheriff's Station would be accompanied by the hiring of some employees, with 10 to 12 new staff for the on-site jail. The eventual increase in staffing would depend on the demand for police services in the area and changes in contractual arrangements with the City of Palmdale. As estimated, employees would be found at the new station would be as many as 221 employees at full occupancy.

Also, no inmates are currently housed at the existing station. With the construction of the detention area/holing cell at the new facility, temporary detention would be available. The proposed Sheriff's Station would accommodate as many as 28 detainees for 96 hours (4 days) or less. After the detainees are arrested, they would be temporarily jailed at the Sheriff's Station prior to their transport to the Central Jail in downtown Los Angeles.

There are two helicopters serving the Antelope Valley for aerial photography and surveillance, both of which are parked at a hangar in Fox Field in northern Lancaster. These helicopters use the helistops at the Lancaster Sheriff's Station and the Miraloma Juvenile Facility. With the provision of a helistop at the proposed station, the helicopters would be expected to stop at the Palmdale Sheriff's Station at an average of once per day.

Other users of the station would include visitors of the detainees, persons requesting service, reports, or inquiries, community meeting attendees, and other public visitors.

## 2.3 OBJECTIVES OF THE PROJECT

The Los Angeles County Department of Public Works seeks to accomplish the following objectives with the proposed Palmdale Sheriff's Station project:

- To provide a larger facility for the existing Sheriff's Station in the Palmdale area
- To provide a permanent facility to replace the existing leased facility
- To improve security within a stand-alone facility
- To improve internal work stations and facilities
- To provide adequate site access and on-site circulation
- To provide adequate parking and circulation areas for patrol and special vehicles
- To accommodate an on-site helistop
- To create a publicly accessible station through a prominent public facade

## 2.4 DISCRETIONARY ACTIONS

A discretionary decision is an action taken by a government agency (for this project the government agency is the County of Los Angeles) that calls for the exercise of judgement in deciding whether to approve a project. The proposed Sheriff's Station would require the following specific discretionary approvals from the Board of Supervisors of the County of Los Angeles:

- Adoption of the Mitigated Negative Declaration
- Adoption of Mitigation Monitoring and Reporting Program
- Approval of Plans and Specifications for Construction

# SECTION 3: ENVIRONMENTAL ANALYSIS

The County of Los Angeles is proposing the construction of the Palmdale Sheriff's Station at the southeast corner of Avenue Q and Sierra Highway. This section evaluates the potential environmental impacts of the proposed project and provides explanations of the responses to the Environmental Checklist found in Appendix A of this document.

The Environmental Checklist is based on Appendix G of the CEQA Guidelines. Appendix G of the CEQA Guidelines provides a list of questions that correspond directly to the legal standards for preparing Environmental Impact Reports (EIRs), Negative Declarations, and Mitigated Negative Declarations (MNDs). The environmental issues evaluated in this Initial Study include the following:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/ Traffic
- Utilities and Service Systems

The environmental analysis in this section is patterned after the questions in the Environmental Checklist. Under each issue area, a general discussion of existing conditions is provided. The Environmental Checklist questions are then stated and an answer is provided according to the environmental analysis of the project's impacts. To each question, there are four possible responses:

- **No Impact.** The proposed Palmdale Sheriff's Station project will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The proposed project will have the potential for impacting the environment, although this impact will be below thresholds that may be considered significant.

- **Less Than Significant Impact with Mitigation.** The proposed project will have potentially significant adverse impacts which may exceed established thresholds, although mitigation measures or changes to the project's physical or operational characteristics will reduce these impacts to levels that are less than significant. Measures, which may reduce this impact, are identified.

- **Potentially Significant Impact.** The proposed project will have impacts which are considered significant and additional analysis is required to identify mitigation measures that could reduce these impacts to insignificant levels. When an impact is determined to be potentially significant in the preliminary analysis, the environmental issue will be subject to detailed analysis in an environmental impact report (EIR).

The references and sources used for the analysis are also identified after each response.

## 3.1 AESTHETICS

The project site is an 11.57-acre vacant lot on the southeast corner of Avenue Q and Sierra Highway, in the City of Palmdale. There are no structures on the site, except for three small signs along Sierra Highway. The site is covered with loose soils and occupied by tumbleweeds and low shrubs.

The site is bounded by Sierra Highway on the west, with a linear park, the Metrolink tracks, Anaverde Creek, and industrial uses farther west. North of the site is Avenue Q, vacant land, and residential uses (manufactured homes on permanent foundations). East of the site is vacant land, commercial uses, and single family developments. South of the site is vacant land, parking areas, the Palmdale Youth Library and the Hammack Activity Center. Surrounding structures include a mix of one and two-story residential and commercial structures. An 80-foot length of chain link fencing is found at the eastern boundary of the site, and a block wall extends south and east from the southeastern corner of the site. An ash tree and an elm tree are found just outside the site at the southeastern corner.

Street trees (sycamores) line the western boundary of the project site along Sierra Highway, within an 8-foot wide sidewalk. Light poles are also found along Sierra Highway. Avenue Q has no curbs and gutters on the southern side, and overhead power lines run along the site boundary extending farther east.

*(Sources: Site Survey and Project Location Map)*

### A. Would the project have a substantial adverse effect on a scenic vista?

**Less than Significant Impact.** The project site is located in an area developed with a mix of residential, commercial, and industrial uses. The topography of the project site is relatively flat, and views of the site are limited to the vacant lot and immediate surrounding developments and roadways. Views of the mountains to the south are available from most areas on the valley floor and the site's vacant condition affords adjacent developments to the north of the site, expanded views of the Sierra Pelona and San Gabriel Mountains to the south.

No scenic vistas have been identified on-site or in adjacent areas. No state-designated scenic routes are found in the Palmdale area. City-designated scenic corridors are located west of the SR-14, east of 90$^{th}$ Street East, and south of Avenue S, generally within the hillside areas to the east and south. The City-designated scenic corridors are not visible from the proposed project site. Thus, no impact on any scenic vista is expected from the proposed Sheriff's Station.

The proposed Sheriff's Station facility would consist of a one-story irregular rectangular shaped building located in the northwestern portion of the site. Additionally, a one-story maintenance building would be located in the southeastern portion of the site. The buildings would be the same height as the existing buildings near the site. A 120-foot high communication tower is also proposed behind the Sheriff's Station building at the north central portion of the site. The proposed structure and antenna would block existing views through the site. However, the view blockage created by the proposed building would be at the lower elevations, without affecting the backdrop of the area, while the antenna would consist of steel trusses which would not effectively screen out entire viewsheds.

Residences to the east and southeast face back from the site and a strip of vacant land is located between the project site and the adjacent commercial and residential uses to the east. Changes in view from the rear yards of these residences would include a view of the perimeter fence, parking areas, and the proposed structures on-site. Since this adjacent area is designated for commercial uses, existing dwelling units are likely to be redeveloped in the future.

The area northwest of the site is vacant. View impacts would be limited to the residences located north and northeast of the site. Views of the mountains from these homes would continue to be available on both sides of the station building and from other vantage points and directions. Also, the undergrounding of power lines along Avenue Q and the provision of curbs and gutters would improve the streetscape and foreground views from the north. Thus, this impact is considered less than significant.

*(Sources: Palmdale General Plan, Los Angeles County Scenic Routes, Site Survey, Preliminary Site Plan, and Project Location Map)*

**B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highways?**

**No Impact.** The proposed site is vacant and does not contain any scenic resources. There are no identified scenic trees, rocks, or historic buildings on the site, which would be affected by the proposed project. The site is currently undeveloped and does not provide a scenic resource to the surrounding developments. No state-designated scenic routes are found in the Palmdale area. City-designated scenic corridors are located west of the SR-14, east of 90$^{th}$ Street East, and south of Avenue S, generally within the hillside areas to the east and south. The nearest City-designated scenic highways are Tierra Subida Avenue located approximately two miles to the west of the proposed site and Sierra Highway (south of S Avenue) located approximately two miles south of the proposed site. The site is not visible from these City-designated scenic highways. Thus, no impact on scenic resources or scenic highways is expected.

*(Sources: Palmdale General Plan, Site Survey, Los Angeles County Scenic Routes, and Project Location Map)*

**C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less than Significant Impact.** The proposed project would include the construction of a Sheriff's Station and associated facilities on an existing vacant lot. A conceptual site plan has been created for the project; however architectural plans for the project have not been completed, therefore the physical characteristics of the proposed buildings may only be generalized.

The County has indicated that the Sheriff's Station facility will feature a Spanish or Southwestern style of architecture, reflective of the architecture found at the Palmdale Civic Center and the newer structures in the downtown area. This design would be consistent with the design standards of the City and is not expected to create negative aesthetic impacts. The main station building would be placed near the intersection of Sierra Highway and Avenue Q (northwestern portion of the site) to create a prominent facade and intersection. The maintenance building would be located in the southeastern corner of the site and the retention basin would be located along the east central border of the site away from views from Avenue Q and Sierra Highway.

Landscaped setbacks would be provided along Sierra Highway and Avenue Q and the boundaries would include a combination of landscaped berm, block wall, and/or wrought iron fencing.

Since the site is vacant, the proposed facility would introduce structures, parking areas, driveways, and landscaped pockets on the site. This change in visual quality is not expected to be adverse since the vacant and unmaintained condition of the site would be replaced with paved areas and structures, which is not expected to degrade the visual quality of the site. The landscaping that would be provided on-site, as well as the regular maintenance that would occur as part of the facility's operation would provide a cleaner site than existing conditions. The undergrounding of utility lines along Avenue Q and the provision of curbs

and gutters would also improve the site's physical appearance. Street trees would likewise be provided along the site frontage on Avenue Q. Thus, visual impacts are expected to be less than significant.

*(Sources: Site Survey, Preliminary Site Plan, and Project Location Map)*

**D. Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

**Less than Significant Impact with Mitigation**. The proposed project would introduce light sources in the form of interior and exterior light fixtures on the project site. Since that facility would be in use 24 hours per day, seven days week, the exterior security lighting and parking lot lights may impact adjacent residents to the north, east, northeast and southeast. The residences to the east are separated from the site by vacant land, approximately 100 feet or more in width. The single-family home to the southeast faces back from the site. The maintenance building at the southeastern portion of the site would be blocking light spillover into the adjacent lot. Potential impacts may be avoided with the use lights shields and/or the orientation of the light poles to prevent spillover on adjacent properties.

Glare impacts would be limited since reflective and mirrored surfaces would be limited to glass windows and doors. Building façade is proposed to be stucco, with clay tile roofs of the Southwestern architectural style. Also, the proposed on-site driveways on Sierra Highway would be located across a linear park, railroad tracks, Anaverde Creek, and the rear of industrial uses on 6$^{th}$ Street East. The proposed driveways on Avenue Q would be located across residences and vehicle headlights may be directed into these adjacent homes. Limited use of the driveway for the public parking areas is expected since the majority of public visitors would occur during the daytime hours. However, the use of the Avenue Q driveway for staff vehicles could result in glare impacts on adjacent residences. Use of the driveways on Sierra Highway would prevent glare impacts on these homes.

To mitigate potential light spillover and glare on adjacent residences, the following measures are proposed:

- ***Exterior lights shall be directed downwards into the site.***
- ***Light shields shall be provided for lights to be placed along the northern and eastern sections of the site.***
- ***Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles.***

*(Sources: Project Location Map, Preliminary Site Plan, and Site Survey)*

## 3.2 AGRICULTURE RESOURCES

Although the Palmdale area was historically used for agriculture, in the last 15 years, agriculture throughout the City has decreased significantly. The California Department of Conservation's *Farmland Mapping and Monitoring Program* has designated the Palmdale area as developed and other land, with some grazing land within the USAF Plant 42 area. Agricultural production is occurring on a few large parcels within the Los Angeles Department of Airport's future Regional Airport site, located northeast of the proposed site. The project site is located within the urbanized area of the City of Palmdale and is not designated as farmland.

In determining whether impacts to agricultural resources are a significant environmental effect, Lead Agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

**A. Would the project 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?**

**No Impact**. The project site was historically developed with a residence, fruit stands, and commercial uses, and utilized for temporary carnival events, but is currently vacant. No agricultural lands are located on the site or near the site. The proposed site is designated as developed land and is not designated as farmland under the Farmland Mapping and Monitoring Program of the California Resources Agency or the City of Palmdale's General Plan. Thus, no impact on important farmlands would occur with the proposed project.

*(Sources: Palmdale General Plan, California Farmland Mapping and Monitoring Program, Phase 1 ESA, and Site Survey)*

**B. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The project site is vacant and is not used for agriculture. The site is designated as Public Facility in the Palmdale General Plan Land Use Map and Zoning Map. No agricultural lands have been designated on or near the site. The nearest agricultural lands, *Grazing Lands*, as designated in the *California Farmland Mapping and Monitoring Program*, are located at the southeastern section of the USAF Plant 42 facility, approximately 3.5 miles northeast of the site. The proposed project would not affect agricultural resources in the City. No impact on agricultural zones, resources, or operations in the City would result from the proposed project.

*(Sources: Land Use Map of the Palmdale General Plan, California Farmland Mapping and Monitoring Program, Palmdale Zoning Map, and Site Survey)*

**C. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?**

**No Impact.** The proposed Sheriff's Station would not be located on existing farmland in the City, nor would the project convert agricultural land to non-agricultural uses. The site is currently vacant and was formerly used for a residence, fruit stands, commercial uses, and temporary carnival events. The site is also located in an urbanized area where no agricultural land uses are found nearby. Thus, the project would not induce any farmland conversion.

*(Sources: Land Use Map of the Palmdale General Plan, Phase 1 ESA, and Site Survey)*

## 3.3 AIR QUALITY

*An air quality study has been prepared to analyze the air quality impacts of the proposed Sheriff's Station. The study is provided in Appendix B and the findings summarized below.*

The City of Palmdale is located in the Antelope Valley, which is located in the Mojave Desert Air Basin (MDAB). The climate of the Antelope Valley, technically called an interior valley subclimate of Southern California's Mediterranean-type climate, is characterized by hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. Temperatures in the project area average a very comfortable 61 degrees Fahrenheit year-round, but it gets very hot on summer afternoons (close to 100 degrees) and quite cool on winter mornings (around 30 degrees). About 100 days per year reach 90 degrees, while about

60 days drop to slightly sub-freezing temperatures. The warm summer afternoons are quite dry and the breezes are moderate.

The Antelope Valley is located in a transition area between the semi-arid conditions of the Los Angeles Basin and the completely arid portions of the Mojave Desert. Rainfall averages from 6 to 9 inches per year at various locations around the project area, with light rain falling on 12 days per year, and only 3 to 4 days per year with moderate precipitation. The Antelope Valley may occasionally experience a light winter snowfall, but temperatures are not cold enough for the snow to remain on the ground for very long.

Winds blow primarily from south to north and from west to east in response to the regional pattern of airflow from the cool ocean to the heated interior. These winds are moderately strong during the daytime, averaging from 10 to 13 mph, but become light and variable at night.

The primary air quality concern in the Antelope Valley is the transport of air pollution from the Los Angeles Basin through the Santa Clarita Valley, and then toward the normally cleaner upper desert, especially during the summer smog season. This meteorological pattern makes it difficult for the Antelope Valley area to achieve clean air, until sources in the Los Angeles Basin are better controlled and less pollution is carried downwind across communities within the Antelope Valley.

Air quality monitoring data from the Lancaster Station shows that photochemical smog levels (mainly ozone) are high in summer, and that dust levels may exceed particulate standards throughout the year, but that primary vehicular pollutant levels such as carbon monoxide, nitrogen dioxide or lead are very low in the Antelope Valley area. Table 3 provide air quality readings at the Lancaster Station and suggests that whatever air quality problems are present in the project vicinity, they are mainly due to the transport of pollutants into the area from outside sources.

**TABLE 3**
**LANCASTER STATION AIR QUALITY MONITORING DATA**
**(Days Per Year Exceeding Standards and Maximum Concentrations)**

| Pollutant/Standard | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|
| Ozone: | | | | | | | |
| 1-Hour > 0.09 ppm | 78 | 59 | 62 | 61 | 40 | 14 | 24 |
| 1-Hour > 0.12 ppm | 25 | 14 | 10 | 5 | 1 | 0 | 8 |
| Max. 1-Hour Conc. (ppm) | 0.17 | 0.16 | 0.14 | 0.14 | 0.13 | 0.12 | 0.16 |
| Carbon Monoxide: | | | | | | | |
| 1-Hour > 20. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 9 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 9 | 8 | 9 | 8 | 7 | 6 | 5 |
| Max. 8-Hour Conc. (ppm) | 5.4 | 5.9 | 5.8 | 5.0 | 4.8 | 4.0 | 3.6 |
| Nitrogen Dioxide: | | | | | | | |
| 1-Hour > 0.25 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.16 | 0.11 | 0.10 | 0.14 | 0.08 | 0.07 | 0.08 |
| Inhalable Particulates ($PM_{10}$): | | | | | | | |
| 24-Hour > 50 $\mu g/m^3$ | 5/59 | 9/59 | 3/52 | 3/54 | 2/59 | 2/59 | 2/52 |
| 24-Hour > 150 $\mu g/m^3$ | 0/59 | 0/59 | 0/52 | 0/54 | 0/59 | 0/59 | 0/52 |
| Max. 24-Hour Conc. ($\mu g/m^3$) | 68. | 70. | 97. | 61. | 67. | 54. | 80. |

Source: SCAQMD Annual Summaries, 1992-1998.

The project site's vacant condition is contributing to $PM_{10}$ levels in the area during periods of high winds.

*(Sources: SCAQMD CEQA Handbook and Palmdale General Plan)*

**A. Would the project conflict with or obstruct implementation of the applicable air quality plan?**

**Less than Significant Impact.** The federal Clean Air Act and the California Clean Air Act have established timeframes for air quality improvement in "non-attainment" areas such as the Antelope Valley. Attainment plans and updates are required. The planning process does make some allowances when an airshed, such as the Los Angeles County portion of the Mojave Desert Air Basin, is downwind of an extreme non-attainment airshed, such as the South Coast Air Basin (SCAB). Air pollution control measures embodied in clean air plans for the SCAB therefore are not equally effective in the downwind receptor airshed such as the Antelope Valley. However, it was believed that if air pollution control was excessively relaxed within the Mojave Desert since its air quality fate was controlled by the SCAB, the Antelope Valley would become a haven for polluters seeking to escape the more restrictive SCAB. Required air quality controls are therefore almost identical in Palmdale as in Los Angeles.

As mandated by federal and state clean air legislation, attainment plans must be prepared that document how progress milestones will be achieved. These plans identify the expected baseline conditions for the no-action alternative, and then specify the additional measures needed, if any, that will meet the required continued air quality improvement. The planning process is heavily focused on stationary and area source controls, and also incorporates anticipated changes in the vehicle fleet with time. Planned emissions reductions are offset by project growth in population, housing, employment, and land use. This offset is pronounced in a growth area such as the Antelope Valley. A sheriff station or similar civic use is not directly related to the air quality planning process because the regional plan contains no emissions reduction measures that specifically deal with "indirect" (almost exclusively traffic-generating) sources. Because civic uses are growth-accommodating and not growth inducing, and are designed to meet the needs of the area population as it continues to grow, there is no adverse regional air quality impact from such facilities since they will develop in concert with area population growth.

Also, the various Sheriff's Station activities (patrol, emergency response, helicopter use, and other services) may generate pollutant emissions, which could contribute to existing air pollution levels in the project area. However, the proposed Sheriff's Station would replace an existing facility and the vehicle trip emissions from the proposed project is not expected to be significant, as estimated in Table 5 below. The proposed Sheriff's Station project is not inconsistent with the Air Quality Management Plan (AQMP) of the SCAQMD.

*(Sources: SCAQMD AQMP, SCAQMD CEQA Handbook, and Preliminary Site Plan)*

**B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Less than Significant Impact with Mitigation.** The proposed Sheriff's Station relocation could potentially impact air quality through increased automotive emissions. Any single project typically does not cause enough traffic and associated air pollutants to be generated as to individually threaten clean air standards. Rather, the cumulative effect of hundreds of such developments causes the small incremental impact from any one development to become cumulatively significant. Minor secondary emissions during construction, from increased fossil-fueled energy utilization and from small miscellaneous sources will also be generated, but these are usually much smaller in both duration and volume than the mobile source emissions.

Air pollutant emissions that may be generated by the proposed Sheriff's Station would include emissions from construction activities, vehicle trip emissions, and off-site emissions from power and natural gas consumption. Table 4 estimates construction emissions under a worst case scenario of 100 percent load on construction equipment non-stop for the entire workday.

**TABLE 4**
**DAILY CONSTRUCTION ACTIVITY EMISSIONS**
**(pounds/day)**

| Source | CO | NOx | $PM_{10}$ | SOx | ROG | Note: |
|---|---|---|---|---|---|---|
| 10 Scrapers | 100 | 307 | 33 | 37 | 21 | 1 |
| 2 Dozers | 6 | 20 | 2 | 2 | 2 | 2 |
| Water Trucks | 9 | 9 | 1 | Negl. | 1 | 3 |
| Worker Commuting | 25 | 3 | 1 | Negl. | 3 | 4 |
| Fugitive Dust | -- | -- | 121 | -- | -- | 5 |
| TOTAL | 140 | 339 | 158 | 39 | 27 | -- |
| SCAQMD Threshold | 550 | 100 | 150 | 150 | 75 | -- |
| Percent of Threshold | 25% | 339% | 95% | 26% | 36% | -- |

Notes:
1. SCAQMD Handbook, Table A9-8 (10 X 8 = 80 hours/day)
2. SCAQMD Handbook, Table A9-8 ( 2 X 8 = 16 hours/day)
3. URBEMIS7G Computer Output - Los Angeles Co. (2002) 500 mi/day heavy truck
4. URBEMIS7G Computer Output - Los Angeles Co. (2002) 2000 mi/day light duty auto/truck
5. 11.5 ac/day X 10.56 lb/ac = 121 lb/day (80% dust control)

Although the $NO_x$ emissions exceed the SCAQMD significance threshold, the mobile nature of the on-site construction equipment and off-site trucks will prevent any micro-scale violation of the $NO_x$ or other standards. There may be localized instances when the characteristic diesel exhaust odor is noticeable from passing trucks or nearby heavy equipment, but such transitory exposure is a brief nuisance and will not threaten air quality standards.

During construction, construction equipment and vehicles may drop or carry out dirt or silt that is washed into public streets. Passing non-project vehicles then pulverize the dirt to create off-site dust impacts. Construction activities also generate evaporative emissions of volatile organic compounds (VOC) from paints, solvents, asphalt, roofing tar, and other coatings.

To reduce construction-related pollutant emissions, it is recommended that:

- ***Use of watering for dust control during clearing, grading and construction. Availability of brackish or reclaimed water sources should be investigated. Soil disturbance should be terminated when high winds (>25 mph) make dust control extremely difficult.***

- ***Developing a dust control program to supplement the routine watering that constitutes best available control measures (BACMs) in excess of any minimum SCAQMD Rule 403 requirements. BACMs that may be adopted and integrated an enhanced dust control program might include hydroseeding previously disturbed areas while awaiting construction, adding chemical binders or surfactants to increase the effectiveness of watering, early paving or chip sealing of roads, enforcing reduced travel speeds (15 mph) on unpaved surfaces and/or sand fences and perimeter sandbags.***
- ***Minimization of construction interference with regional non-project traffic movement. Measures recommended for inclusion are:***
  - ***a. Scheduling receipt of construction materials to non-peak travel periods.***
  - ***b. Routing construction traffic through areas of least impact sensitivity.***
  - ***c. Limiting lane closures and detours to off-peak travel periods.***
  - ***d. Providing ride-share incentives for contractor and subcontractor personnel.***
- ***Reducing "spill-over" effects by preventing soil erosion, washing vehicles entering public roadways from dirt off-road project areas, and washing/sweeping project access to public roadways on an adequate schedule.***
- ***Requiring emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups.***
- ***Limiting grading/soil disturbance to as small an area as practical at any one time and using best available control measures.***
- ***Limiting the application of architectural surface treatments (i.e., paint, etc.) to average no more than 225 gallons per week over the project construction period.***

Vehicle trips generated by the facility would result in pollutant emissions, but would not exceed SCAQMD thresholds. Table 5 provides an estimate of vehicle trip emissions.

**TABLE 5**
**PROJECT-RELATED MOBILE EMISSIONS (pounds/day)**

| Sources | ROG | NOx | CO | $PM_{10}$ |
|---|---|---|---|---|
| All "New" Vehicle Trips | 53.7 | 23.2 | 135.4 | 12.5 |
| SCAQMD Threshold | 75 | 100 | 550 | 150 |
| % of Threshold | 72% | 23% | 25% | 8% |
| Exceeds Threshold (?) | No | No | No | No |

Source: URB7G Computer Model

As shown, emission levels for all mobile source pollutants will be less than the SCAQMD CEQA Air Quality Handbook (1993). Thus, impacts would not be significant. Also, a portion of these emissions already occurs as part of the operation of the existing Sheriff's Station. Since the vehicle trips would be moved from the existing facility to the new facility, the redistribution of the vehicle trips to the surrounding roadways would not lead to a major increase in emissions. Existing police protection and law enforcement activities would remain the same and the estimated emissions from the proposed project would not be significant.

*(Sources: SCAQMD CEQA Handbook and Preliminary Site Plan)*

**C. Would the project 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)?**

**Less than Significant Impact.** In the Antelope Valley, photochemical smog levels (mainly ozone) are high in summer, and dust levels may exceed particulate standards throughout the year, but that primary vehicular pollutant levels such as carbon monoxide, nitrogen dioxide, or lead concentrations are very low. The funneling of the daily onshore sea breeze through Soledad Canyon into the upper desert to the north of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This transport pattern creates both unhealthful air quality, as well as destroying the scenic vistas of the mountains surrounding the Antelope Valley. The air quality problems that are present in the project vicinity are mainly due to the transport of pollutants into the area from outside sources. The Antelope Valley can accommodate a reasonable level of growth without threatening the continued attainment of standards such as nitrogen oxides or carbon monoxide. Such growth may, however, exacerbate existing violations of standards for ozone and particulates.

As discussed above, measures to reduce NOx emissions and fugitive dust during construction would be implemented as part of the project. Also, the proposed project would pave the majority of the site and reduce fugitive dust in the long term. The small size of the project, the replacement of the emissions from the existing Sheriff's Station facility, and the recommended mitigation measures would lead to NOx emissions and fugitive dust impacts that would be less than significant.

*(Sources: SCAQMD CEQA Handbook and Urbemis7G computer model)*

**D. Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact.** The proposed project site is bounded by residential land uses to the north, east and southeast; by a linear park, Sierra Highway, railroad tracks, and industrial uses to the west; by residential and commercial uses to the east, and the Palmdale Youth Library, vacant land, and Hammack Activity Center to the south. Emissions from the proposed project would include on-site construction emissions, off-site emissions from vehicle trips generated by the Sheriff's Station, and emissions from energy consumption. The construction emissions have the potential to affect adjacent land uses to the north and east (residences) and south (public recreational uses). However, vacant land and Avenue Q separate the site from these sensitive receptors. Compliance with fugitive dust control measures, in accordance with SCAQMD Rules 402 and 403 would reduce impacts on adjacent land uses. These measures have been outlined above.

Vehicle emissions that would be generated by the proposed Sheriff's Station would be similar to the emissions currently generated by the vehicle trips of the existing station. While an increase in travel may occur to sites located east and south of the project site, shorter travel would occur to sites to the west and north. Thus, minor changes in emissions are expected.

Also, power and gas consumption due to the proposed Sheriff's Station facility would result in pollutant emissions at off-site power generation plants. These emissions are not expected to be significant due to the size of the proposed facility nor expected to generate significant off-site pollutants, which may affect sensitive receptors.

*(Sources: SCAQMD CEQA Handbook, Palmdale General Plan, Site Survey, and Project Location Map)*

**E. Would the project create objectionable odors affecting a substantial number of people?**

**No Impact**. The proposed Sheriff's Station would not handle large quantities of solid waste materials, chemicals, food products, or other odorous materials and has no potential to create objectionable odors. Thus, no impact in terms of objectionable odors is expected from the project.

*(Sources: SCAQMD CEQA Handbook and Preliminary Site Plan)*

## 3.4 BIOLOGICAL RESOURCES

The City of Palmdale and the Antelope Valley contain natural habitats for several rare and endangered species. Los Angeles County has identified five sensitive ecological areas in Palmdale including Little Rock Wash, Ritter Rock, Portal Ridge, Alpine Butte, and Big Rock Wash. However, the project site is not located within or adjacent to these five sensitive ecological areas. The proposed site is located in an urbanized area of the City, near the downtown area, where plant life is limited to disturbed desert scrub and ruderal species. Plants on-site and in the surrounding areas include non-native, introduced, exotic and ornamental species, which are commonly used for landscaping. The project site is classified as containing substantially disturbed desert scrub and ruderal species in the City of Palmdale General Plan. Habitat species on-site include tumbleweeds and artemesia shrubs on the site, sycamores along Sierra Highway, and an elm tree and ash tree near the southeastern boundary. Animal life in the project area consists of common bird, insect, reptile, and mammal species found in urban settings. No endangered or sensitive plant or animal species are found on the site.

*(Sources: Palmdale General Plan and Site Survey)*

**A. Would the project 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?**

**No Impact.** The project site is vacant but does not support native habitat. The project site is classified as containing substantially disturbed desert scrub and ruderal species in the City of Palmdale General Plan. The site was previously graded as part of previous developments, including a residence, fruit stands, commercial uses and temporary carnival events. Plants currently found on-site include tumbleweeds and artemesia shrubs and animals are limited to those species commonly found in the urbanized setting. No rare or endangered species are found on or near the project site. The project site does not contain sensitive plant species or habitat for sensitive animal species. Thus, no impact on sensitive plant and animal species is expected from the project.

*(Sources: Palmdale General Plan and Site Survey)*

**B. Would the project have a substantial adverse effect on any riparian habitat 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?**

**No Impact.** The project site is located within the developed areas of the City of Palmdale. The site is classified as containing substantially disturbed desert scrub and ruderal habitat in the Palmdale General Plan and does not contain any riparian habitat or sensitive natural community. There are no riparian habitats in the project vicinity. The Anaverde Creek located west of the Metrolink tracks is a soft-bottomed creek with riprap banks and other creeks and channels are located more than one mile from the site. The proposed Sheriff's Station is separated from Anaverde Creek by Sierra Highway, a linear park, and the railroad

tracks. Thus, the project would not affect riparian habitats or natural communities at Anaverde Creek or in the project area.

*(Sources: Palmdale General Plan, USGS Palmdale Quadrangle, and Site Survey)*

**C. Would the project 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?**

**No Impact.** The project site is located within a developed area and does not contain any wetland habitat or any designated blue line streams. The nearest creek is Anaverde Creek, which runs parallel to the railroad tracks, west of Sierra Highway and the St. Clair Parkway. This creek would not be affected by the proposed Sheriff's Station. Thus, the proposed project would not affect federally protected wetlands.

*(Sources: USFWS National Wetlands Inventory, Palmdale General Plan, USGS Palmdale Quadrangle, and Site Survey)*

**D. Would the project 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?**

**No Impact**. Neither the site nor nearby areas serve as a wildlife dispersal corridor. The site is located within an urbanized area and is surrounded by roadways, residential, commercial, recreational, public, and industrial land uses. While there are pockets of vacant land north and south of the site, developed areas are found farther north and south. There are no wildlife corridors or open areas nearby which serve as animal migration routes through the site. The proposed project is not expected to affect wildlife migration. No impact to wildlife dispersal or migration would occur with the project.

*(Sources: Palmdale General Plan, Site Survey, and Aerial Photograph)*

**E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact.** The project site is currently vacant but was previously developed with a residence, fruit stands, and various commercial uses and used for temporary carnival events through the years. There are no significant biological resources or joshua trees or junipers on the site, which are subject to the City's Tree Preservation Ordinance. The sycamore trees along Sierra Highway and the tree near the southeastern corner of the site would not be disturbed or removed as part of the project. Street trees would be planted along Avenue Q. The project site is located outside designated natural resource areas, such as the hillside areas, Lake Palmdale, Little Rock Creek, and Big Rock Creek. No adverse impacts on the area's biological resources or trees are anticipated with the proposed project.

*(Sources: Palmdale General Plan, Site Survey, Palmdale Ordinance No. 952, and Phase 1 ESA)*

**F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact.** The project site is located within the developed areas of the City of Palmdale and is surrounded by streets, vacant lots, and developed sites. It is an existing vacant lot that has been highly disturbed by past land

uses, and is not located in an area where natural communities or habitats and sensitive animal species may be found. Thus, the project would have no impact on habitat conservation plans for the area.

*(Sources: Palmdale General Plan, Phase 1 ESA, and Site Survey)*

## 3.5 CULTURAL RESOURCES

*An archaeological resources study and a paleontological resources study have been prepared to analyze the cultural resource impacts of the proposed Sheriff's Station. The studies are provided in Appendix C and the findings summarized below.*

The Antelope Valley and the City of Palmdale have a rich cultural history, with human occupation in the Palmdale area dating back 12,000 years ago. Cultural groups known to occupy the Antelope Valley in the late prehistoric and early historic times include the Kitanemuk, Kawaiisu, Tataviam, and Serrano/Vavyume. These groups were mountain dwellers that seasonally came to the valley for lowland resources. In the 1700's Europeans passed through the Antelope Valley and in the 1800's, the railroad and settlements came to the Palmdale area.

Historic structures can be found within the downtown area and archaeological resources have been found on hillsides and along creeks. The majority of the City has moderately high to high potential for archeological resources. As shown in the Palmdale General Plan, the project site is considered to have a moderately high potential for archaeological resources.

Based on historic aerial photographs of the area, a structure was present east of the site in 1915, one structure was present on-site, and another structure was found near the site in 1937. Currently, there are no historic structures on the vacant site, although a building foundation (CA-LAN-2808) remains at the southwestern section of the site. The foundation is 13 by 66 feet wide and 6 inches thick and is postulated to be part of the previous fruit stand at the site. Lag bolts are embedded in the footing. In addition, trash (such as tin cans, wire nails, bottle glass, steel beer cans, bottle caps, tableware and bone) is scattered over the site, but no historic artifacts were found.

*(Sources: Site Survey, Archaeological Resources Study, Paleontological Resources Study, and Palmdale General Plan)*

### A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

**Less than Significant with Mitigation**. The proposed facility would be located on a vacant site that has been subject to various degrees of ground disturbance associated with past land uses. None of the previous structures are currently present and the site is not considered historically significant. While the remaining building foundation is more than 50 years old, it does not appear to be eligible for inclusion in the California Register of Historic Places since the rest of the building has been demolished and no historic trash deposits were found near it. Also, on-site trash could not be definitely assigned to the historic era.

Construction of the proposed Sheriff's Station would lead to the removal or overcovering of the building foundation and trash materials. The southwestern section where the foundation is located would be used as a driveway, parking area, trash/storage area, helistop for the Sheriff's Station. These uses would not lead to extensive grading and excavation and thus, subsurface disturbance would be minimal. Since the building foundation has no historic significance, no adverse impact on historical resources on-site, in the surrounding area, or in the City would occur with the project.

With the presence of the historic (more than 50 years old) building foundation, the trash found on-site may be historic in origin. It is not known at this time if any trash pits are located on the site. If ground disturbance activities uncover any trash pit, trash may provide diagnostic data on historic activities. Thus, it is recommended that:

- ***Monitoring shall be conducted during the removal of the building foundation (if removal is necessary), and during any ground disturbance activities. Additional architectural features of the foundation that may be uncovered shall be recorded and if trash pits are uncovered, any clearly historic artifacts from trash deposits shall be collected.***

*(Sources: Palmdale General Plan, Phase 1 ESA, Archaeological Resources Study, and Site Survey)*

**B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**No Impact**. A review of all recorded historic and prehistoric archaeological sites within one mile of the project site shows that no recorded archaeological sites are present on or near the project site. Nineteen studies have been completed in the project area, with two studies made near the site. No archaeological resources were found by these studies.

Any surface archaeological resources that may have been present prior to development are not expected to be found at the site due to ground surface disturbance associated with construction of the previous structures built on-site and past land uses. Limited grading and paving is necessary to prepare the site for the proposed buildings and improvements. Thus, no impact on archaeological resources in the area is expected.

*(Sources: Phase 1 ESA, Site Survey, Archaeological Resources Study, and Palmdale General Plan)*

**C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less than Significant with Mitigation**. There have been paleontological resources found near the site but not on or immediately adjacent to the site. The project site has been previously developed and graded as part of past land uses and development of the site. Thus, the potential for finding in-situ paleontological resources on-site is considered low. The project site also has a relatively flat terrain and there are no unique geologic features on or near the site. No fossils were observed or collected during site surveys, although animal bones were found on-site. However, paleontological resources have been uncovered within the same geologic units found underlying the site.

Limited grading and paving is necessary for the construction of the sheriff's station, vehicle maintenance building, and parking areas that are proposed as part of the project. Thus, the underlying geologic formations are unlikely to be disturbed during construction. However, the Anaverde older alluvial fan, which overlies the site, has a high potential for the discovery of fossils and would be subject to excavation during construction. Monitoring and sediment processing techniques shall be implemented to locate both large and small fossils that may be present on the site and to ensure that they are not destroyed by grading activities. The following measures are recommended:

- ***Monitoring shall be conducted during earth-moving activities in native soils. If fossil materials are found, grading shall be diverted or redirected and fossils properly salvaged.***

- ***Standard 200-pound sediment samples shall be screenwashed from each formation and if small vertebrate fossils are found, additional sediments shall be screenwashed for up to 6,000 pounds.***
- ***All fossils recovered shall be stabilized, prepared, identified, packaged, and transported to the Natural History Museum of Los Angeles County, along with a documentation of fossil findings.***

*(Sources: Phase 1 ESA, Site Survey, Paleontological Resources Study, and Palmdale General Plan)*

**D. Would the project disturb any human remains, including those interred outside of formal cemeteries?**

**No Impact**. The project site was previously developed but is not known to be the site of human remains or a previous cemetery. The building foundation and the surface trash found on the site did not indicate the presence of a cemetery or human remains. Also, the proposed project would entail limited grading and excavation for the proposed buildings and improvements. No impact on human remains is expected to occur with the proposed project.

*(Sources: Phase 1 ESA, Site Survey, Archaeological Resources Study, and Palmdale General Plan)*

## 3.6 GEOLOGY AND SOILS

The project site is located within the Antelope Valley, which is bounded by the San Gabriel Mountains to the south and the Sierra Pelona Mountains to the southwest. The valley is a rectangular-shaped area in the western section of the Mojave Desert, north of the San Andreas Fault zone. The valley is covered by sedimentary rock units and underlain by granitic bedrock. Alluvium overlies the valley and floodplain areas in Palmdale and the surrounding area. The surface soils at the site have been mapped as the Anaverde older alluvial fan unit, resulting from sediments deposited by Anaverde creek. These are characterized by silts, sands, pebbles, and small gravels.

The City of Palmdale is located at the southwestern section of the valley and has a varied topography, with elevations ranging from 2,450 to 2,700 feet above mean sea level at the valley floor and up to 4,000 feet above mean sea level in the surrounding mountains. The project site has ground elevations of approximately 2,640 to 2,642 feet above mean sea level, with a slight slope to the northeast.

The site is underlain by the Hesperia-Rosamond soil association, as found in nearly level alluvial fans and valley floors. These soils have moderate drainage potential and permeability, slow to medium runoff potential, moderate wind erosion hazard, low soil expansion potential, and are unsuitable as a source of gravel. The project area is underlain by Recent-age alluvial deposits, consisting of unconsolidated clay, silt, and gravel from the San Gabriel Mountains.

The San Andreas Fault, one of the most dangerous faults in California, runs through the southwestern section of the City, just north of the San Gabriel and Sierra Pelona Mountains. This fault is located 2.0 miles from the project site at its nearest location. Several other faults branch off from the San Andreas Fault and are found in the City: the Clearwater, Powerline, Nadeau, and Cemetery faults, and an unnamed fault. None of these faults run through or near the site.

*(Sources: USGS Palmdale Quadrangle, Palmdale General Plan, Phase 1 ESA, Report and General Soil Map of Los Angeles County, California, and Site Survey)*

**A. Would the project expose people or structures to potential substantial adverse effect, including the 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 for the area or based on other substantial evidence of a known fault?**

**No Impact.** The City is located in a seismically active region, with several earthquake faults located in and near Palmdale. The San Andreas Fault runs parallel to and just north of the Sierra Pelona and San Gabriel Mountains, across the southwestern section of the City. Several other faults branch off from the San Andreas fault, however, none of these run through the project site. The nearest fault trace is the Cemetery Fault, located approximately 1.2 miles south of the site. The project site is not located near local earthquake faults, the extension of these faults would not cross the site. Thus, the proposed facility would not be exposed to fault rupture hazards.

*(Sources: USGS Palmdale Quadrangle, Preliminary Site Plan, Los Angeles County Safety Element, and Palmdale General Plan)*

**B. Would the project be subject to strong seismic groundshaking?**

**Less than Significant Impact.** The proposed project would expose officers and staff to hazards associated with groundshaking during an earthquake event from the San Andreas and other nearby faults. Due to the proximity of the San Andreas fault, groundshaking hazards could lead to severe ground accelerations, causing personal injury and property damage, depending on the magnitude of the earthquake and the distance of the site to the epicenter. However, the proposed new sheriff's station buildings would be constructed to meet the regulations of the Uniform Building Code, including the applicable seismic design criteria for essential facilities/buildings. Thus, the impact of strong seismic ground shaking would be less than significant.

*(Sources: USGS Palmdale Quadrangle, Los Angeles County Safety Element, and Palmdale General Plan)*

**C. Would the project be subject to seismic-related ground failure, including liquefaction?**

**No Impact.** The site is not located in areas with liquefaction susceptibility, as identified in the Palmdale General Plan and the Los Angeles County Safety Element. The site is also located outside areas with perched water conditions, which may support liquefaction hazards. The Lancaster area has experienced some liquefaction, as well as some areas along the San Andreas fault line. However, these identified liquefaction hazards do not come near the project site. Thus, no hazards associated with liquefaction are anticipated with the proposed Sheriff's Station.

*(Sources: USGS Palmdale Quadrangle, Los Angeles County Safety Element, Preliminary Site Plan, and Palmdale General Plan)*

**D. Would the project be subject to landslides?**

**No Impact.** The site has ground elevations ranging from 2,640 to 2,642 feet above mean sea level, and is not located within the hillside areas of the City or within designated landslide susceptibility areas. The site has a relatively flat topography and is not susceptible to landslides. Thus, no impact associated with landslides would occur with the proposed project.

*(Sources: USGS Palmdale Quadrangle, Site Survey, Los Angeles County Safety Element, Preliminary Site Plan, and Palmdale General Plan)*

**E. Would the project result in substantial soil erosion or the loss of topsoil?**

**Less than Significant Impact.** The site is not located in an area with steep slopes or soil creep, where a very high potential for soil erosion is present. However, the soils on-site consists of loose alluvium (Quaternary alluvium) of the Hesperia-Rosamond soil association, which are susceptible to moderate erosion. Since the site is relatively flat and is surrounded by streets, vacant land, and developed areas, soil erosion is expected to be confined on-site. Runoff from the site would be controlled through an on-site retention basin and erosion control measures would be implemented in accordance with the National Pollutant Discharge Elimination System (NPDES). Thus, the proposed project would not result in substantial soil erosion or loss of topsoil and soil erosion hazards would be less than significant.

*(Sources: Preliminary Site Plan, Los Angeles County Safety Element, USGS Palmdale Quadrangle, Report and General Soil Map of Los Angeles County, California, and Palmdale General Plan)*

**F. Would the project 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?**

**No Impact.** Subsidence has occurred in the Antelope Valley and was concentrated in the northern and eastern areas of the City of Palmdale. This condition is not present on the project site. Also, perched water conditions (which may lead to liquefaction hazards) are present within the City of Lancaster and along the San Andreas fault alignment, but are not present on-site. The on-site soils do not present any geologic hazards to development. The site is also located within the area with moderate soil infiltration capacity. There is no known site history of geologic hazards associated with landslide, lateral spreading, subsidence, liquefaction, or collapse on-site or near the site. Thus, the project is not expected to be exposed to these hazards.

*(Sources: USGS Palmdale Quadrangle, Los Angeles County Safety Element, Report and General Soil Map of Los Angeles County, California, and Palmdale General Plan)*

**G. Would the project 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?**

**No Impact.** The expansive soils in the Antelope Valley are generally located within the hillside areas and some isolated areas on the valley floor where clay soils are found. The project site is not located within the area known to have soil expansion hazards or clay soils (which have high shrink-swell potential). Thus, no soil expansion hazard is expected on-site.

*(Sources: Site Survey, Los Angeles County Safety Element, and Palmdale General Plan)*

**H. Would the project 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?**

**No Impact.** The project site is located in an area with moderate septic tank limitations. However, there are sewer lines on Sierra Highway and Avenue Q and the proposed facility would be connected to the public sewer system. Thus, no impacts associated with soils suitable for septic systems would occur.

*(Sources: Palmdale General Plan, Downtown Revitalization Plan, and Preliminary Site Plan)*

## 3.7 HAZARDS AND HAZARDOUS MATERIALS

*In order to assess existing and previous hazardous materials stored and/or used within a 1.0-mile radius of the proposed site and on-site, a Phase I Environmental Site Assessment (ESA) was conducted and is included in Appendix D. The findings of the Phase 1 ESA are summarized below.*

A hazardous material is defined as any substance that may be hazardous to humans, animals, or plants, and may include pesticides, herbicides, toxic metals and chemicals, volatile chemicals, explosives, and even nuclear fuels or low-level radioactive wastes. The City of Palmdale has a wide variety of industries and land uses, which generate, use, or handle hazardous materials. These sites present hazards associated with accidental spills, contamination, fire, explosion, and improper disposal. Railroads and major truck routes also pose hazards associated with accidental spills during transport.

The southwestern section of the project site was previously used as a sign and paint shop and as a garage. No underground storage tanks, clarifiers, or groundwater wells were observed on the vacant site. No surface stains, drums or hazardous wastes are present. The site is located near industrial land uses (to the west and north) and is east of Sierra Highway and the Metrolink tracks. A number of automobile repair shops, a dry cleaner, and equipment rental place are found near the site. These land uses utilize hazardous materials and generate hazardous wastes. However, they are located across Sierra Highway and the Metrolink tracks or Avenue Q.

*(Sources: Palmdale General Plan, Site Survey, Envirofacts Database, and Phase I Environmental Site Assessment)*

**A. Would the project create a significant hazard to the public, or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less than Significant Impact.** The proposed Sheriff's Station would have an on-site fueling station located in the southern portion of the site for patrol and special vehicles and an underground waste oil tank for vehicle maintenance. These tanks carry a potential for fire, explosion, spills, and contamination, which may affect the proposed sheriff's station, or the soils and groundwater resources on-site. The underground fuel tanks and waste oil tank would be constructed in accordance with fire safety standards and would be regulated by existing laws regarding hazardous materials use, transport, and disposal. Other hazardous materials used on-site for building and vehicle maintenance would be used and disposed of in accordance with current health regulations. Thus, while a fire and safety hazard is presented by the fuel tank, waste oil tank, and hazardous materials, compliance with monitoring and maintenance requirements for fuel storage tanks, waste oils, and hazardous materials would reduce hazards to the public to less than significant levels.

*(Sources: Preliminary Site Plan, Functional and Space Requirements, and County Sheriff's Department)*

**B. Would the project create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact.** Construction activities associated with the proposed Sheriff's Station would involve some hazardous materials use, such as paints, thinners, cleaning solvents, oil, grease, etc. Also, the on-site fuel storage tanks and waste oil tank could pose hazards during accidents or upset conditions. However, hazardous materials use, storage, and disposal would be made in accordance with

existing federal, state and local regulations. Fuel tanks and waste oil tanks would be subject to regular monitoring and maintenance as required by the County Fire Department and the County Department of Health Services to prevent accidental release into the ground and fire or explosion hazards. Thus, these hazards are expected to be less than significant.

The Sheriff's Station would also store firearms and ammunition for the police officers. The Watch Sergeant's office would be a secured facility within the station building and only trained personnel would be allowed to handle firearms and ammunition. Thus, no hazards associated with the on-site storage of firearms and ammunition is expected.

*(Sources: Phase 1 ESA, Functional and Space Requirements, and Preliminary Site Plan)*

**C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less than Significant Impact.** The nearest school to the project site is the Oak Tree Learning Center at 39139 10th Street East, located approximately 0.5 mile northeast of the site. In addition, the Palmdale School District offices are located just north of the Oak Tree Learning Center. These school facilities are separated from the project site and the proposed Sheriff's Station by Avenue Q, vacant land, and residential areas. Other nearby schools include the Yucca School and Palm Tree School located west of the site, across the SR-14 Freeway. The on-site fuel tank would be located at the southern section of the site, near the vehicle maintenance area. Hazards associated with the fuel tank are not expected to have significant adverse effects on students of the Oak Tree Learning Center due to the distance separation, presence of structures in between the school and the tanks, and the proposed location of the tanks at the southern portion of the project site. Thus, adverse impact to students and faculty at Oak Tree Learning Center regarding hazardous emissions is expected to be less than significant.

*(Sources: Palmdale School District, Oak Tree Learning Center, Thomas Guide for Los Angeles County, and Preliminary Site Plan)*

**D. Would the project 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?**

**No Impact.** The proposed site is currently vacant and has been used as a temporary site for carnivals in previous years. The site was developed and used for a variety of purposes, including a residence, fruit stands, automobile parking garage, sign shop and paint shop. However, the Phase 1 ESA did not identify any environmental concern or conditions which may be present at the site. The Phase 1 ESA also included a record search of databases for hazardous materials users and the site was not found to be in any of these databases. The previous paint shop occupied 110 square feet and the sign shop occupied 450 square feet. Based on the small size of these facilities, it is highly unlikely that hazardous materials in large quantities would have been used on-site. Thus, the proposed Sheriff's Station would not be located on a site with hazardous materials or ground contamination.

There are a number of industrial land uses near the site, which utilize, generate, store, or dispose of hazardous materials. These include the equipment rental north of the site, various industrial uses west of the Metrolink railroad tracks, and gas stations and auto shops to the south. Facilities within a 0.5-mile radius to the site that could present environmental impacts to the proposed project due to past hazardous material leaks or incidents were identified in the Phase 1 ESA. These facilities include: The Gas Company High Desert Station at 38627 Sierra Highway, the Circle K Store at 38405 Sierra Highway and a tire processing facility at 39125 East 8th

Street. Due to their distance from the site, the Phase I ESA indicates that these nearby facilities do not pose environmental concerns to the project.

The SCAQMD has indicated that there are no reported sources of toxic air contaminants within one-quarter mile of the project site.

The project site is located east of the Metrolink tracks, and these tracks are used by the Metrolink commuter passenger trains and UPRR freight trains. There are no restrictions on the type of cargo that are carried by freight trains. However, the tracks are separated from the site by the St. Clair Parkway and Sierra Highway. No hazards are present on or near the site, which may pose hazards to the proposed Sheriff's Station.

*(Sources: California Government Code, Site Survey, Phase 1 ESA, SCAQMD, and Cal-EPA Envirofacts Database)*

**E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?**

**Less than Significant Impact.** The project site is located approximately 1.5 miles southwest of the boundaries of the Palmdale Airport and USAF Plant 42. The site is located outside designated FAA clear zones and safety zones for the USAF Plant 42 and the proposed runways of the Palmdale Airport. Also, the proposed project site is located outside the 65 dB CNEL noise contour for the USAF Plant 42. Thus, the proposed Sheriff's Station would not be subject to the hazards associated with the USAF Plant 42 and Palmdale Airport.

The proposed structures on-site would not interfere with aircraft operations at the USAF Plant 42/Palmdale Airport, in accordance with FAR Part 77 regulations. The site is located approximately 2.3 miles from the edge of the nearest runway and the most restrictive height limit for structures within this distance is set at 200 feet at 3 miles. The 120-foot high communications tower would be lower than 200 feet and, thus, would not obstruct air navigation at USAF Plant 42/Palmdale Airport.

The proposed helistop could create hazards associated with helicopter operations. Helistops require a 2:1 safety zone around the helistop landing area and an 8:1 slope for the approach paths, one aligned with prevailing winds and a secondary path. The helistop for the Palmdale Sheriff's Station has been design to provide these necessary clearances and setbacks within the site and the surrounding area. The primary approach path to the helistop is from the southwest, at St. Clair Parkway, and Sierra Highway. The secondary approach path is from the north. These paths are not located over residences or other high occupancy structures. The 120-foot high antenna tower would be located outside the designated flight paths for the helistop. Thus, no hazards are expected from helicopter operations on-site.

The communications tower would be located outside the helicopter flight paths, outside the site setbacks, and within the north central portion of the project site. Coordination with the FAA would be needed for construction of the helistop and communications towers, within 5,000 feet of one another.

*(Sources: USGS Palmdale Quadrangle, Thomas Guide for Los Angeles County, Functional and Space Requirements, FAR Part 77 Regulations and Palmdale General Plan)*

**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?**

**No Impact.** As indicated above, the project site is located approximately 2.3 miles from the nearest runway and 1.5 miles southwest of the boundaries of USAF Plant 42 and Palmdale Airport. The site is not located within the designated clear zones and safety zones for this airport. There are no other airstrips located near the site. Thus, no impacts associated with private airstrips would occur with the project. Also, impacts from helicopter operations are not expected to affect adjacent residents, since the approach paths to the helistop do not go over residential areas.

*(Sources: USGS Palmdale Quadrangle, FAR Part 77 Regulations, Thomas Guide for Los Angeles County, Functional and Space Requirements)*

**G. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**No Impact**. The project site is located at the southeastern corner of Sierra Highway and Avenue Q. While Sierra Highway is a major north-south roadway in the City of Palmdale and may be used for evacuation and emergency response, the proposed project would not interfere with evacuation along Sierra Highway since the proposed use would not be located within the street right-of-way. Also, the proposed Sheriff's Station is an emergency response facility and would benefit from the accessibility provided by Sierra Highway. Improvements to Avenue Q, which would be implemented as part of the project, would also benefit access and evacuation on Avenue Q.

The proposed project would not interfere with emergency response or evacuation at the adjacent land uses and lots since the site does not provide direct access to these areas and there are roadways and direct access options to the nearby developments. Provision of the Sheriff's Station facility at the site would improve emergency response to the surrounding area.

*(Sources: Palmdale General Plan, Preliminary Site Plan, and Site Survey)*

**H. Would the project 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?**

**No Impact**. The site is located in a highly urbanized area, away from the large vacant areas or areas with wildlfire hazards. Additionally, the site is not located within the City of Palmdale's Fire Zone 4 Brush Area. There are no flammable brush, tall grass, or trees on the site, which may create wildfire hazards. The adjacent industrial land uses to the USAF Plant 42 and Palmdale Airport are separated from the site by Avenue Q and nearby vacant lands and residential uses. Thus, these industrial uses do not present a risk for fire hazards to the project. The proposed structures would be built in accordance with the Uniform Fire Code and applicable standards for fuel tank construction and maintenance. Also, the proposed Sheriff's Station, including on-site activities, would not involve fire nor create on-site fire hazards.

*(Sources: Site Survey, Palmdale General Plan, Los Angeles County Safety Element, and Preliminary Site Plan)*

## 3.8 HYDROLOGY AND WATER QUALITY

Groundwater resources in the City of Palmdale are found within three groundwater basins: the Pearland, Lancaster and Buttes subunits of the Lancaster subbasin. Groundwater resources and imported water through the California Aqueduct provide domestic water sources for the Antelope Valley. Groundwater is generally of good quality, although some areas have experienced poorer quality due to urban runoff, septic tank failures, declining water tables and perched water conditions. The project site is located just outside the southern edge

of the Lancaster subunit. Depth to groundwater is estimated at 520 feet below the ground surface, with flows to the north/northeast.

Creeks that flow out of the surrounding mountains include the Amargosa and Anaverde Creeks, and the Big Rock and Little Rock Washes. These creeks are the major existing drainage courses for the City. Additionally, lined drainage channels are located throughout the City. The Rosamond and Rogers dry lakes serve as the final destination of runoff water in the Antelope Valley.

Near the site, the Anaverde Creek runs parallel Sierra Highway and the Metrolink tracks west of the project site.

Flood hazards have been identified in the Palmdale area, associated with the creeks and drainage channels. The Flood Insurance Rate Maps show that the 100-year floodplain for Anaverde Creek (Zone A) is near the site but does not extend into the project site. The southeastern portion of the site is designated as Zone C – which is defined as 1) areas within the 500-year floodplain; 2) areas within the 100-year floodplain where water depth would be less than 1 foot; 3) drainage areas with less than one square mile; or 4) areas protected by levees from the 100-year flood. Due to the proximity of the 100-year floodplain, the site is likely to be located within "an area within the 100-year floodplain where water depth would be less than 1 foot".

Some areas of the City of Palmdale are also subject to inundation due to dam failure of the California Aqueduct, Lake Palmdale, and Little Rock Creek Dam. These inundation areas do not extend into the project site. In addition to flooding and inundation, a seismic event could cause water wave or seiche to occur at Lake Palmdale, which could potentially overtop the dam. However, wave volume above the dam would not be substantial and would not result in damaging floods. Overpour on the downstream portion of the dam would not create any damage by erosion, as the existing rockfill was designed to withstand it. The California Aqueduct may also fail in the event of a large magnitude local earthquake along the San Andreas Fault. The project site is not located in an area where the aqueduct failure would cause local flooding.

*(Sources: Palmdale General Plan, FEMA Flood Insurance Rate Map, Phase 1 ESA, USGS Palmdale Quadrangle, Los Angeles County Safety Element)*

**A. Would the project violate any water quality standards or waste discharge requirements?**

**Less than Significant Impact.** The proposed project would involve the construction of the Sheriff's Station and related facilities (maintenance building, radio antenna, helistop, and parking areas). Since the vacant site would be largely paved and built on, stormwater runoff volume is expected to increase. The City requires that new projects construct interim flood control basins on-site. Stormwater runoff on paved areas would be conveyed to an on-site retention basin and are not expected to violate water quality standards. Sheriff's activities on-site would generate runoff pollutants consisting of parking area grease, oil and debris, and would not involve soil sedimentation or pollutants that are generally associated with heavy industrial uses and activities. The stormwater pollutants from the proposed project would be similar to those generated by developed areas and would not be discharged into the off-site storm drain system. Thus, impacts relating to water quality or waste discharge requirements are not expected to be significant.

*(Sources: Site Survey, Preliminary Site Plan, and Regional Water Quality Control Board)*

**B. Would the project 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)?**

**Less Than Significant Impact.** The proposed project site does not have prime percolation soils and does not serve as a recharge area for local groundwater. The proposed project would convert the vacant site into the Sheriff's Station, consisting of impervious buildings, landscaped and paved activity areas, pathways and parking lots. However, an on-site retention basin would be provided, as required by the City, to allow stormwater runoff to continue to percolate into the groundwater table. Thus, no change to on-site groundwater recharge is expected.

No groundwater wells are proposed as part of the project. Also, water demand by the project is not expected to be significant enough to deplete groundwater supplies (see discussion under Section 3.16, *Utilities and Service Systems*). Thus, the project site would not change the amount of rainwater reaching the water table (with the on-site retention basin) and the proposed Sheriff's Station is not expected to create a substantial demand for water that could impact the groundwater levels of nearby wells. Impacts on the groundwater would be less than significant.

(*Sources: Preliminary Site Plan and Palmdale General Plan)*

**C. Would the project 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?**

**Less Than Significant Impact.** The proposed facility would consist of paved driveways, parking lots, landscaped areas, and buildings. The on-site drainage would change from ground absorption of the majority of stormwater due to the vacant condition of the lot, to sloped paved areas leading runoff into the on-site retention basin at the east central boundary of the site. Thus, while only a smaller area of the site (retention basin) would allow ground percolation, the same amount of runoff would be absorbed on-site as existing conditions. This change in drainage pattern would be minor when compared to the developed areas surrounding the site. No alterations to any stream or river or other drainage courses would occur with the project, which would cause substantial erosion or siltation.

*(Sources: USGS Palmdale East Quadrangle, Phase 1 ESA, and Preliminary Site Plan)*

**D. Would the project substantially alter the existing drainage pattern of the site, or area, including through the alteration 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?**

**Less Than Significant Impact.** The site is vacant and drainage consists primarily of on-site ground percolation, with runoffs flowing northeast toward Avenue Q. The proposed project would lead to the construction of buildings, parking lots, driveways and other impervious areas, with pockets of landscaping. Runoff from the developed site would be conveyed into a retention basin proposed at the east central boundary of the site. The retention basin would be designed to handle a 100-year storm and is expected to prevent any on-site flood hazards. While ground percolation would be limited to the retention basin site, the change in drainage patterns is not expected to lead to any adverse impact to the Anaverde Creek, other drainage channels in the area, or the on-site hydrology. Thus, less than significant impacts to existing surface hydrology are expected with the proposed project.

*(Sources: Site Survey, USGS Palmdale East Quadrangle, Los Angeles County Safety Element, Palmdale General Plan, and Preliminary Site Plan)*

**E. Would the project 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?**

**Less Than Significant Impact.** The construction of proposed improvements to the site would lead to paved areas and changes to the drainage patterns on the site. Additionally, pollutants that may enter the stormwater runoff at the proposed Sheriff's Station facility (from driveway, parking area, and walkway debris, and pollutants from landscaped areas). Since the site would provide an on-site retention basin, all runoff would be directed to the basin and would not be conveyed to adjacent streets. Stormwater pollutants from the project would be limited to surface wastes that are washed off into the retention basin. Implementation of debris collection, waste minimization, and other best management practices in accordance with the National Pollutant Discharge Elimination System (NPDES) would limit runoff pollution and less than significant impacts are expected.

*(Sources: Site Survey and Preliminary Site Plan)*

**F. Would the project otherwise substantially degrade water quality?**

**No Impact.** The proposed project would lead to a largely paved surface area on the site, with small pockets of landscaping. The proposed Sheriff's Station would not generate, handle, or dispose of hazardous materials in quantities which may enter and affect stormwater runoff quality or the groundwater. Hazardous materials on-site would be limited to gasoline within the on-site storage tank, waste oils from vehicles, and small amounts of cleaning solvents, fertilizers and pesticides needed for maintenance of the structures and vehicles. Wastewater from the site would be limited to those generated by toilet and kitchen facilities. Proper maintenance and monitoring of the fuel tanks and waste oil tank would prevent leakage which could affect the groundwater quality. No pollutants would be generated by proposed Sheriff's Station activities, which could degrade water quality.

*(Sources: Site Survey, Preliminary Site Plan, and Regional Water Quality Control Board)*

**G. Would the project place 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?**

**Less than Significant Impact.** The site is located outside the 100-year floodplain. The majority of project site is located outside the 500-year floodplain, as mapped in the FEMA Flood Insurance Rate Map, the Los Angeles County Safety Element, and the Palmdale General Plan Safety Element. Only the southeastern portion (proposed for parking areas, the helistop, car wash, fuel island, and trash/storage area) would be located within the 100-year floodplain where water depth would be less than 1 foot. Also, the proposed project does not consist of housing development and, therefore, would not place housing within a flood hazard area.

*(Sources: Los Angeles County Safety Element, Palmdale General Plan Safety Element, FEMA Flood Insurance Rate Map, and Preliminary Site Plan)*

**H. Would the project place structures within a 100-year flood hazard area, which would impede or redirect flood flows?**

**Less than Significant Impact.** The project site is located outside the designated 100-year floodplain in Palmdale. Only the southeastern portion would be located within the 100-year floodplain where water depth would be less than 1 foot. The proposed site plan for the Sheriff's Station shows that this area would be developed with parking areas, the helistop, car wash, fuel island, and trash/storage area. The car wash and fuel island would be the only structures located within the 100-year flood plain. These structures would be small scale and are not expected to impede and/or redirect the flood flows. Buildings and paved areas constructed on the site would redirect stormwater into the on-site retention basin. The proposed facility would not result in impediments to flood flows or the redirection of flood flows.

*(Sources: Site Survey, Los Angeles County Safety Element, Palmdale General Plan Safety Element, FEMA Flood Insurance Rate Map, and Preliminary Site Plan)*

**I. Would the project 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?**

**No Impact.** The proposed project site is located outside designated dam inundation areas for Lake Palmdale, the California Aqueduct, and the Little Rock Creek Dam. Thus, no risk of loss, injury, or property damage involving dam inundation would occur with the proposed project.

*(Sources: Los Angeles County Safety Element, USGS Palmdale East Quadrangle, Palmdale General Plan Safety Element, and Preliminary Site Plan)*

**J. Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

**No Impact.** The project site is located inland and is not subject to seiche or tsunami hazards. The site is also located on a relatively flat terrain and no mudflow hazards are present in the surrounding area. The site is located outside designated dam inundation areas for Lake Palmdale, the California Aqueduct, and the Little Rock Creek Dam. No other dams or water bodies are located near the site, which may pose inundation or seiche hazards. Thus, the proposed Sheriff's Station would not be exposed to seiche, tsunami, or mudflow hazards.

*(Sources: Los Angeles County Safety Element, USGS Palmdale East Quadrangle, Palmdale General Plan Safety Element, and Preliminary Site Plan)*

## 3.9 LAND USE AND PLANNING

According to the Palmdale General Plan, approximately 11.7 percent of the City's land area is developed with residential uses. Commercial and industrial land uses cover 2.2 percent, 4.9 percent of the City is developed with the USAF Plant 42 Airport, and public and institutional uses cover 1.0 percent. The majority of land remains vacant, which is 79.5 percent of the City land use. The project site is vacant and is located just north of the downtown area of the City.

The vacant site is located along the highway commercial corridor defined by Sierra Highway and within the older section of the City of Palmdale, just north of the central business district. Past land uses on the site included fruit stands, a residence, automobile parking garage, sign shop and paint shop. These uses/structures

were present on the site from 1942 to 1970 and have since been demolished. The site has also been used for rodeos, temporary bleachers and carnivals from the mid 1950's to the late 1980's.

Adjacent developments include industrial uses to the west across Sierra Highway, the Metrolink tracks, and Anaverde Creek. Vacant land and residential uses are found to the north across Avenue Q and a commercial use (Palmdale Professional Plaza) and residential developments are found to the east. Vacant land and public and recreational uses are found south of the site. The City of Palmdale proposes the development of an activity center on this adjacent vacant land.

The project site is designated as Public Facility (PF) in the Land Use Policy Map of the Palmdale General Plan. The PF (Public Facilities) zone is intended to provide for public and quasi-public uses including schools, government administrative facilities, police and fire stations, libraries, park and recreational uses, community facilities and public open space. A police station/sheriff station would be a consistent land use within the PF zone.

*(Sources: Palmdale General Plan, Functional and Space Requirements, and Site Survey)*

**A. Would the project physically divide an established community?**

**No Impact.** The proposed project would involve the construction of the Palmdale Sheriff's Station and relocation of the existing station to a permanent facility. The project site is vacant and located along the commercial corridor on Sierra Highway, with residential developments to the north, northeast, southeast, and east. The proposed Sheriff's Station would not be located within the residential neighborhoods adjacent to the site. The proposed project would not physically divide the City, the adjacent residential community, the surrounding neighborhood, or the City's downtown area.

*(Sources: Preliminary Site Plan and Site Survey)*

**B. Would the project 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?**

**Less than Significant Impact.** The proposed site is designated as Public Facility (PF) in the Palmdale General Plan and in the Zoning Map. The site would be surrounded by public facilities to the south, a linear park to the west, business park/industrial uses to the north, and office commercial uses to the east. The proposed project would be in conformance with the PF zoning, which allows for the development of public and quasi-public uses including government administrative facilities, fire stations and police stations. The proposed sheriff's station is consistent with the land use designation and zoning of the site. However, the County does not need to obtain a Conditional Use Permit from the City because it is not subject to City zoning regulations, per Section 53090 et seq. of the California Government Code. No environmental plans or policies of State or regional agencies are directly applicable nor would be affected by the proposed project. The proposed facility would replace the existing station at Palmdale Boulevard, which is located with commercial retail uses in the City's downtown core.

Adjacent land use designations to the site are Public Facility to the south and west, and Office Commercial and Downtown Commercial to the east in the City of Palmdale. Land use designations to the north within the unincorporated area of the County of Los Angeles are Industrial to the northwest and Urban Residential 2 to the northeast.

The project site is located within the boundaries of the Merged Project Area Redevelopment Plan. The Implementation Plan for this project area calls for the redevelopment of the downtown area, rehabilitation of existing businesses, attraction of new businesses into the City, relocation assistance for displaced residents, affordable housing development, and infrastructure system improvements. The proposed facility would lead to the development of a vacant site within the project area and would not conflict with the objectives and programs of the Redevelopment Plan.

The site is also within the Antelope Valley Enterprise Zone. The Enterprise Zone designation offers economic incentives to businesses located within the zone, including State sales and use tax credit, hiring credits, business expense deductions, net operating loss carryover, and interest deduction for lenders. As a government facility, the proposed Sheriff's Station would not benefit from the enterprise zone designation, yet the facility would not conflict nor be inconsistent with the commercial and industrial activities within the Antelope Valley Enterprise Zone.

The site is located within the downtown area for which a revitalization plan has been developed. The Downtown Revitalization Plan calls for the preservation and enhancement of the historic downtown area of Palmdale for civic, entertainment and business uses. This plan would involve the investment in City/public facilities, public-private joint ventures, housing rehabilitation and construction, and the creation of public amenities. The Downtown Revitalization Plan outlines goals and objectives for development of the downtown area. The proposed Sheriff's Station is in general compliance with the goals and objectives of the plan. The proposed Sheriff's Station would locate a high-volume public service in a permanent location and would increase public safety downtown, which are two elements of potential marketing strategies in the Downtown Revitalization Plan. A major component of the plan is the expansion and enhancement of public facilities within the downtown area. The proposed Sheriff's Station would provide an enhanced and larger law enforcement facility in a centralized downtown location. The proposed Sheriff's Station would also be consistent with the components of the Revitalization Plan's Image and Design chapter, which includes a variety of design features that allow for "*development throughout downtown Palmdale to be more cohesive and promote a distinctive sense of place"*.

*(Sources: Palmdale General Plan, Palmdale Zoning Ordinance, Implementation Plan for Palmdale Redevelopment Agency Projects 1,2,3 and 4, Palmdale Downtown Revitalization Plan)*

**C. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?**

**No Impact.** The project site is located in an urbanized area of the City of Palmdale and is surrounded by urban development and pockets of vacant land. While the site is currently vacant, it was previously developed with and used for a variety of uses. There are no natural or native habitats on-site or in the adjacent areas. The City has not adopted any comprehensive conservation plan. There are no habitat conservation plans that are applicable to the site or the surrounding area. Thus, the proposed project would not conflict with any conservation plan.

*(Sources: Site Survey and Palmdale General Plan)*

## 3.10 MINERAL RESOURCES

Mineral resources include non-renewable deposits of ore, stone, and earth materials. Gold, copper, lead, silver, zinc, and manganese deposits are scattered throughout the San Gabriel Mountains. The largest known resources of titanium in California are found in the western San Gabriel Mountains, located south of the project site. However, the majority of these mines have been inactive for many years. There are regionally significant

sand, gravel and other aggregate resources in the Palmdale area, generally found within the limits of Little Rock Wash (at the eastern section of the City) and Big Rock Wash (located east of Palmdale). None of these resources are found near the site. No oil fields are present under or near the site. The project site is a vacant lot that is not subject to oil, gas, or mining operations. Likewise, there are no mineral extraction activities located near the site.

*(Sources: Palmdale General Plan, USGS Palmdale Quadrangle, Site Survey, Phase 1 ESA, and California Department of Conservation)*

**A. Would the project 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?**

**No Impact.** The Palmdale area is known to have sand, gravel, crushed rock, clay, limestone, and dolomite resources. The proposed project site is not located in an area designated to have these significant mineral resources, as defined by the California Department of Conservation under the Surface Mining and Reclamation Act. Oil and gas fields or coal mines are not found in the City, and there are no oil wells on the site. Since no mineral resources are present on-site, the proposed project would not affect the availability of mineral resources in the project area.

*(Sources: Palmdale General Plan, USGS Palmdale Quadrangle, and California Oil, Gas and Geothermal Resources)*

**B. Would the project 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?**

**No Impact**. The project site and the surrounding area are not subject to mineral resource recovery operations. Due to its size, the construction materials that would be needed by the Sheriff's Station project would be minor when compared to regional resources. Thus, the proposed project would not affect mining operations elsewhere in the City nor would it result in the loss of availability of regional sand and gravel resources.

*(Sources: Preliminary Site Plan, USGS Palmdale Quadrangle, Site Survey, and Palmdale General Plan)*

## 3.11 NOISE

*A noise study has been prepared for the project to analyze the noise impacts of the proposed facility. This study is provided in Appendix E and its findings summarized below.*

The proposed project site is located in an area with a mix of land uses. Sierra Highway, the Metrolink tracks and industrial uses are found west of the site. Commercial and residential land uses are located north and east of the site. Public and recreational uses are found south of the site. Noise sources in the area consist of vehicular traffic noise on Sierra Highway, train noise on the railroad tracks, and noise from outdoor activities in the adjacent industrial, residential, recreational, and commercial uses. Existing noise levels in the project vicinity are mainly due to vehicular sources on Sierra Highway and other local roads in the area. The project site is also affected by aircraft activity at USAF Plant 42. According to the adopted "AICUZ Report" prepared by the Air Force, the project site is located outside the 65 dBA CNEL noise contour for US Air Force Plant 42, but the project site aircraft noise exposure is near 60 dB CNEL. A 60 dB CNEL level suggests that single-event aircraft noise would be clearly audible at the project site, but would not constitute any substantial impediment to construction and operation of the proposed facility.

Noise sensitive residential uses are considered to be "normally acceptable" with noise levels up to 60 dB CNEL. Schools and libraries also have a 60 dB CNEL standard. The City of Palmdale has established the exterior noise standard for residential areas and noise sensitive uses (including schools, libraries, and hospitals) at 60 dB CNEL and the interior standard at 45 dB CNEL. The 24-hour noise level termed Community Noise Equivalent Level (CNEL) measures the average noise level throughout a 24-hour period.

Institutional uses such as a sheriff's station are not considered noise-sensitive. Siting standards for "office" uses are 70 dB CNEL or higher.

*(Sources: Site Survey, and Palmdale General Plan)*

**A. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less than Significant Impact.** Temporary construction noise will result during site preparation and building construction of the proposed facility. Construction noise sources are short-term and, thus, will not affect the long-term noise exposure in the project vicinity.

Noise impacts due to use of the proposed Sheriff's Station would derive primarily from the 1,664 daily vehicle trips spread out over the course of a day. Other unique on-site operational activities may generate noise. Patrol vehicles may briefly operate their sirens during vehicle check-out, but such test is usually only performed for a fraction of a second. A more extensive noise intrusion could result from helicopter landings or take-offs at the proposed helistop. However, these activities will be infrequent since the helicopters would be based at Fox Field in Lancaster. Use of the on-site helistop is expected to average only one operation (landing and take-off) per day. Helicopter noise would not exceed the City's 60 dB CNEL standard. Also, emergency activities are exempt from Ordinance compliance.

Non-emergency noise generation from site-related activities due to project-related automobile and helicopter traffic may also occur with the proposed project. The City of Palmdale does not regulate these mobile sources. No conflict with existing noise standards is expected with the project.

*(Sources: Palmdale General Plan, Site Survey, and Preliminary Site Plan)*

**B. Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant with Mitigation.** On-site construction activities would create noise from construction equipment and vibration from excavation and grading activities. Temporary construction noise impacts would vary in noise level according to the type of construction equipment and its activity level. Short-term construction noise impacts tend to occur in separate phases, with large, earth-moving equipment generating 85 dB(A) at 50 feet from the source and finish construction activities and equipment generating less noise.

With the size of the parcel and with roadways separating the site from the closest homes to the northeast, construction noise impacts would be restricted to a few residences when heavy equipment operates in close proximity to the northeast or southeast corner of the project site. An adequate distance buffer to dissipate the equipment noise, and time limits to hours of lesser sensitivity, are expected to maintain construction noise impacts at less than significant levels. The following measures are recommended:

- ***Construction activities shall be restricted to the hours of 7 a.m. to 7 p.m., and prohibited on Sundays and major holidays.***
- ***Use of equipment mufflers for construction equipment***
- ***Location of staging areas away from residential uses to the east***

*(Sources: Site Survey, Palmdale General Plan, and Noise from Construction Equipment and Operations, Building Equipment and Home Appliances)*

**C. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less than Significant Impact.** Existing traffic noise levels already exceed the City of Palmdale residential standard of 60 dB CNEL in close proximity to area roadways and any substantial noise increase due to project-related traffic would create a significant impact. Project-related traffic will be concentrated at the project site, and then will be dispersed over multiple streets and become progressively diluted farther and farther from the Sheriff's Station site.

The project-related vehicle noise impacts were analyzed by estimating the change in traffic noise levels at 100 feet from the centerline of roadways along the site. Table 6 provides the estimated traffic noise levels.

**TABLE 6**
**TRAFFIC NOISE IMPACT ANALYSIS**
**(CNEL in dBA at 100 feet to Centerline)**
**< ---------- NOISE LEVELS (dBA CNEL) ---------->**

| Location | Exist. | Existing + Project | Change | Future No Project | Future w/ Project | Change |
|---|---|---|---|---|---|---|
| **Sierra Highway:** | | | | | | |
| N of Site | 66.4 | 66.5 | +0.1 | 68.2 | 68.3 | +0.1 |
| S of Site | 66.4 | 66.6 | +0.2 | 68.2 | 68.3 | +0.1 |
| **Avenue "Q":** | | | | | | |
| W of Site | 61.6 | 61.9 | +0.3 | 64.8 | 64.9 | +0.1 |
| E of Site | 61.6 | 61.7 | +0.1 | 64.8 | 64.8 | ±0.0 |

Source: FHWA-RD-77-108 (Calveno modified)

As shown in Table 6, the maximum noise increase is +0.3 dB CNEL above existing conditions. With rising baseline traffic volumes, the future project contribution to the total noise environment is +0.1 dB. These levels are far below the +3 dB increase, at which noise level changes are discernible. Thus, vehicle noise impacts would be less than significant.

The Sheriff's Station would introduce noise from outdoor activities at the site. These noises would include sirens from police cars, helicopters, and outdoor maintenance activities. However, these noise sources would occur intermittently.

The primary potential noise impact from site operations would be due to the helistop. Helicopters produce noise both from the propulsion system, as well as from the rotors. In certain cases, the blades make a distinct "whop, whop, whop" noise called "blade slap". Blade slap is somewhat a function of design, as helicopters with high blade tip speeds and a large turbulent wake (such as large military craft) are much more prone to

rattling windows than smaller civilian craft. As a worst-case, noise levels from two flights of an MD 500 helicopter were calculated using the FAA Helicopter Noise Model (HNM). Two flights per day would not generate a noise contour exceeding 60 dB CNEL outside the landing pad area itself. Single-event levels above 65 dB will occur at approximately 600 feet from the flight track, and the helicopter noise may be detectable at limited off-site receptor locations. However, with a low population density in the project vicinity along the predominant southwest and north flight tracks for this helistop, helicopter noise, even for brief periods, would create less than significant impacts.

*(Sources: Site Survey, Preliminary Site Plan, and FHWA Noise Prediction Model)*

**D. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less than Significant Impact with Mitigation.** The proposed project would involve construction activities, which may lead to periodic increases in noise levels during the 18-month construction period. The separation of the site from adjacent land uses by roadways and vacant land, as well as dominant noise level created by vehicular noise would mask some of the noise from construction activities. Implementation of measures outlined in Section 3.11 C. would reduce construction noise impacts from adversely affecting adjacent residents and nearby employees.

Impacts associated with emergency vehicle sirens and helicopter use would be very short, intermittent, and scattered throughout the day. These temporary increases in noise levels would not be significant.

*(Sources: Project Site Plan and Functional and Space Requirements)*

**E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?**

**Less than Significant Impact**. The site for the proposed Sheriff's Station is located 1.5 miles southwest of USAF Plant 42 and the Palmdale Airport. The site is located outside the 65 dB CNEL noise contour for the airport. Thus, station personnel and visitors would not be exposed to excessive noise from airport operations.

Helicopter noise from the on-site helistop would be intermittent and would occur at an average of once per day and only when the helicopter lands or take-offs. Two flights per day would not generate a noise contour exceeding 60 dB CNEL outside the landing pad area itself. Single-event levels above 65 dB will occur at approximately 600 feet from the flight track, and the helicopter noise may be detectable at limited off-site receptor locations.

*(Sources: Site Survey, Palmdale General Plan, and Noise Study)*

**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?**

**No Impact.** There are no private airstrips located near the site which may expose station personnel and visitors to excessive airstrip noise levels. The proposed sheriff's station would not increase on-site exposure to aircraft noise.

*(Sources: Site Survey and Palmdale General Plan)*

## 3.12 POPULATION AND HOUSING

The 1999 resident population of the City of Palmdale was estimated at 120,321 persons, and the housing stock consisted of 39,111 units. The California Department of Finance estimates the City's population as of January 2000 to be 122,392 persons, and the housing stock consists of 39,498 units. This translates to an annual population growth of 1.7 percent and a 1.0 percent annual growth in housing stock.

There are no housing units on the vacant project site. However, single family residences are found to the north and northeast of the site across Avenue Q and to the east and southeast. The site is located within the commercial corridor along Sierra Highway and was used as a residence in the past.

There are currently 166 police officers and administrative personnel at the existing station, who would transfer to the new Sheriff's Station.

*(Sources: California Department of Finance Population and Housing Estimates, Site Survey, Phase 1 ESA, and Palmdale General Plan)*

**A. Would the project 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)?**

**Less than Significant Impact.** The proposed Sheriff's Station facility would replace the existing Sheriff's Station on Palmdale Boulevard. The proposed project is not expected to increase the area's population, since the facility would accommodate the existing station workforce, as well as accommodate future growth. The proposed facility would accommodate a total of 221 officers and staff. There are 204 personnel who are currently housed in the existing station. The construction of the new station would lead to the hiring of 10 to 12 new employees who would work at the on-site jail, as well as provide room for future staff increases and as the need for expanded Sheriff's services occurs in the Palmdale area. Any indirect increase in population due to an immigrating labor force would be insignificant.

The proposed Sheriff's Station would not include new homes or businesses and would not involve the building of new roads. Thus, the station is not expected to cause or induce population growth in the area.

*(Sources: Preliminary Site Plan and Functional and Space Requirements)*

**B. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The site is vacant and the proposed project would not displace any housing units located near the site. Also, the project would not displace existing employees and officers at the existing station. Rather, the project would be constructed and upon completion, the existing facility services would be transferred. Temporary displacement and disruption of some services may occur during this transfer, but no permanent displacement is expected.

*(Sources: Preliminary Site Plan and Site Survey)*

**C. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The project site is vacant and the proposed project would not displace households or residents of the area. These are no housing units or households on-site who would be displaced and no replacement housing is needed for the proposed project. The Sheriff's Department would relocate the existing facilities and employees to the site after completion of the proposed facility. This would ensure that no major disruption in police services and law enforcement services would occur. Thus, while a temporary disruption may occur due to the relocation, this displacement is not expected to have major impacts. Thus, no displacement impacts are expected.

*(Sources: Preliminary Site Plan and Site Survey)*

## 3.13 PUBLIC SERVICES

The City of Palmdale contracts with the Los Angeles County Fire Department for fire protection and emergency services in the area. The nearest station to the project site is Station 37, located at 38318 9th Street East in Palmdale. This station is located approximately 0.75 mile southeast of the site. Other County Fire Stations in the area may also respond to the site according to need and type of emergency.

The County Sheriff's Department provides law enforcement and police protection services in the City of Palmdale and the surrounding unincorporated area. The site is located within the service boundaries of the Palmdale School District and the Antelope Valley Union High School District.

*(Sources: Site Survey, Thomas Guide, and Palmdale General Plan).*

**A. 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 in terms of fire protection?**

**Less than Significant Impact.** The proposed Sheriff's Station would require fire protection services in case of a fire emergency. The nearest station to the project site is Station 37, located at 38318 9th Street East in Palmdale. This station is located approximately 0.75 mile southeast of the site. Five firefighters are assigned to Station 37 per shift and the station houses one fire truck and one paramedic vehicle. Response time to the downtown area is approximately 2 to 3 minutes. Compliance with the requirements of the Uniform Fire Code for fire safety and fire emergency response would avoid the potential for significant impacts on fire protection services. Impacts on fire protection services would be less than significant.

*(Sources: Los Angeles County Fire Department and Preliminary Site Plan)*

**B. 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 in terms of police protection?**

**Less than Significant Impact.** The proposed project would provide a new, larger and permanent Sheriff's Station for the Palmdale area. The demand for police protection services in the area and is not expected to change with the new facility. Some disruption in administration services may occur during the transfer, but this will be temporary and less than significant. In the long term, the proposed facility would improve police protection services in the area by providing a larger and more adequate facility, improved facilities

and equipment, better internal layout and circulation, improved security, and a more prominent public image. The proposed project would not have an adverse effect on police services or response times.

*(Sources: Preliminary Site Plan and Los Angeles County Sheriff's Department)*

**C. 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 in terms of school services?**

**No Impact.** The proposed facility would not involve housing development and thus, no direct student generation is anticipated with the project. The project would result in the relocation of the Palmdale Sheriff's Station. The existing facility and proposed project site are both located within the service boundaries of the Palmdale School District and the Antelope Valley Union High School District. The nearest elementary schools to the proposed project site are Tamarisk Elementary School, located at 1843 East Q Avenue (approximately 1.25 miles west from the proposed site) and Summerwind Elementary School, located at 39360 Summerwind Drive (approximately 2.5 miles from the proposed project site). The nearest intermediate school to the proposed project site is Juniper Intermediate School, located at 39066 Palm Tree Way, which is approximately 2.5 miles from the proposed project site. In the past, the Palmdale School District ran a five-track year around program. However, due to high enrollment and many schools operating over capacity, the District implemented a three-track year around system during the 2000-2001 school year, which will bring schools below capacity for the next two to three years. Both of the elementary schools and the intermediate school have the capacity to accommodate students who may attend the schools if there are officers and staff at the existing station that send their kids to local schools based on employment location.

Palmdale High School is located approximately 2.5 miles from the proposed project site at 2137 East Avenue R and would be the high school serving children of parents working at the Sheriff's Station. The Antelope Valley Union High School District has an open enrollment policy, which allows for students to apply for inter-district transfers. A lottery system is used to choose which inter-district transfers are considered. Approval of an inter-district transfer depends on the capacity of the high school, which the student is requesting to attend. Palmdale High School is currently operating over capacity and very few spaces are available for inter-district transfer. The Antelope Valley Union High School District is currently a participant in the California State Hardship Fund Program and is expecting to receive funds to construct a new high school in approximately three years. The construction of the new high school would decrease the enrollment of Palmdale High School and allow for an increased potential of additional inter-district transfers to the school.

However, it is expected that the children of Sheriff's personnel would be currently attending area schools and the transfer of the Sheriff's Station to a location 0.5 mile to the northwest would not lead to children transferring schools or to any changes in school service demand.

Currently, the Palmdale School District and the Antelope Valley Union High School District share a development fee of $0.33 per a square foot for non-residential development. However, public and governmental facilities are exempt from this fee. No impact on schools is expected.

*(Sources: Palmdale School District, Antelope Valley Union High School District, and Preliminary Site Plan)*

**D. 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 in terms of parks?**

**Less than Significant Impact.** The nearest park facilities to the project site include the St Clair Parkway (across Sierra Highway) and the Courson Park and Desert Sands Park. Although on-site employees may use the adjacent park facilities at lunch or after work, it is not anticipated that the increase in usage would be enough to damage or degrade the park facilities. Thus, impacts to City parks are anticipated to be less than significant.

*(Sources: Thomas Guide for Los Angeles County, Palmdale General Plan, and Site Survey)*

**E. 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 in terms of other public facilities?**

**No Impact.** Building, engineering, and planning services needed for the project would be contracted out by the Los Angeles County Department of Public Works. The project would provide a permanent Sheriff's Station to serve the Palmdale area, to replace the existing facility. Thus, the facility is not expected to create a demand for other public facilities, such as libraries and other public facilities.

The Palmdale Youth Library and the Hammack Activity Center to the south are not expected to be adversely impacted by the project. Additionally, the Palmdale Main Library located less than half a mile to the south of the proposed project site is not expected to be adversely impacted by the development of the proposed Sheriff's Station. The Sheriff's Station is not expected to create a direct need for library services or recreational facilities. Also, since the project would relocate the existing station, the demand for library and recreational uses generated by the existing station, if any, would be the same and no net increase in demand for library and recreational services would occur.

*(Sources: Los Angeles County Department of Public Works, Site Survey, and Preliminary Site Plan)*

## 3.14 RECREATION

The City of Palmdale provides recreational services through city parks, recreational programs, and organized activities. The City's Land Use Map designates 9,458 acres of open space. Of this area approximately 1,500 acres are designated for parkland or golf courses. The nearest park facilities to the project site include the St. Clair Parkway, Courson Park, and Desert Sands Park. St. Clair Parkway is a 4.0-acre linear park located across the site on Sierra Highway. It provides a 12-foot wide bikeway/pedestrian walkway, benches and landscaping. The two other parks are located more than 0.5 mile from the site.

To the south and southeast of the site along Avenue Q-6, are the Hammack Activity Center and Palmdale Youth Library. The Hammack Activity Center is located southeast of the site and is used by the Antelope Valley Boys and Girls Club. This center provides basketball and other sports, table games, a food court, a lounge and two roller hockey rinks. The Palmdale Youth Library is located south of the site, across vacant land and parking areas, and includes a preschool area, homework center, computer lab and activity room for youth to age 14.

*(Sources: Site Survey, Thomas Guide for Los Angeles County, Parks, Recreation and Special Events, and Palmdale General Plan)*

**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?**

**Less than Significant Impact**. The proposed project would involve the construction of a permanent Sheriff's Station to relocate the existing station on Palmdale Boulevard. Although the officers and staff at the stations may use nearby recreational facilities after work, no substantial accelerated physical deterioration of the park facilities is expected. Employees at the Sheriff's Station may use the St. Clair Parkway before and after work or during breaks but the bikeways/walkways and benches at the linear park are not expected to experience substantial deterioration due to use by personnel at the Sheriff's Station. Also, potential use of the Palmdale Youth Library and the Hammack Activity Center may occur, but these facilities are geared towards youth activities and are not expected to attract Sheriff's Station personnel. Thus, impacts would be less than significant.

*(Sources: Site Survey, Preliminary Site Plan and Palmdale General Plan)*

**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?**

**No Impact.** The project site is currently not used for recreation, although the site has been used for temporary carnival events in the past. The proposed Sheriff's Station would not provide on-site recreational facilities. While future carnival events may be limited to the vacant area and parking lots located south of the site, no adverse impacts to the project area are expected from the construction of the project or on nearby recreational facilities (St. Clair Parkway and the Hammack Activity Center).

*(Sources: Site Survey and Preliminary Site Plan)*

## 3.15 TRANSPORTATION AND TRAFFIC

*A traffic study has been prepared for the project to analyze the impacts of the proposed facility on traffic, circulation, and transportation. This study is provided in Appendix F and its findings summarized below.*

The proposed project site is located at the northern portion of the central business district in Palmdale, south of Avenue Q and east of Sierra Highway. Roadways in the area include:

**Antelope Valley Freeway (State Route 14)** is a north-south freeway that connects the Los Angeles Basin with cities and town along the eastern slopes of the Sierra Nevada mountain range. Access to the project site from the freeway would most likely occur at the full interchange at Palmdale Boulevard. At this location, the freeway carries approximately 70,000 trips per day

**Palmdale Boulevard (State Route 138)** is an east-west arterial roadway. Palmdale Boulevard carries approximately 32,570 trips per day at Sierra Highway.

**Sierra Highway** in the project vicinity is a four-lane north-south arterial roadway with a two-way left-turn lane. The prevailing speed limit is 45 miles per hour. The project site is located at the southeast corner of the Sierra Highway/Avenue Q intersection. It is anticipated that an exclusive right-turn lane will be added at Avenue Q in the additional roadway that can be provided by a setback imposed on the project. Sierra Highway carries between 15,000 and 20,600 trips per day.

**Avenue Q** is a two-lane east–west roadway that terminates at Sierra Highway to the west. The roadway fronts the project site to the north and currently carries approximately 6,800 vehicles per day.

Adjacent to the project site, both Sierra Highway and Avenue Q operate at acceptable levels of service as shown in Table 7.

**TABLE 7**
**EXISTING LEVELS OF SERVICE**

| Roadway | Roadway Type | ADT | Estimated Daily Capacity | LOS E or better? |
|---|---|---|---|---|
| Sierra Highway | 4-Lane Divided | 20,600 | 31,000 | YES |
| Avenue Q | 2-Lane Collector | 6,800 | 14,000 | YES |

The Palmdale Airport is located at 41000 North 20th Street east, south of USAF Plant 42. The airport site covers approximately 17,780 acres of mostly undeveloped land. The main airport facility occupies only 54 acres and includes a 9,000-square foot terminal and two gates. The airport serves general aviation aircraft, with approximately 20,000 passengers in 1998. While plans to build an international airport at the site have been completed, no schedule for construction has been set. Meanwhile, the USAF Plant 42 allows commercial aircraft to use the plant runways when weather conditions at nearby airports result in the diversion of planes to the Palmdale Airport.

USAF Plant 42 is a military airport for the production, flight, and testing of the U.S. Air Force aircraft. The plant handles an average of 180 flight operations per day, consisting mainly of military aircraft.

The Metrolink railroad tracks are located west of the site and west of Sierra Highway. The Metrolink commuter passenger trains run along these railroad tracks. The Metrolink's Antelope Valley Line runs five to six times a day, Monday through Friday, and four times a day on the weekends, from Lancaster to Los Angeles or from Los Angeles to Lancaster. In addition, 5 freight trains of the Union Pacific Railroad use these tracks daily.

The Antelope Valley Transit Authority (AVTA) runs buses from 6 a.m. to 8 p.m. Monday through Friday and from 9 a.m. to 6:00 p.m. on Saturday

A bikeway/pedestrian walkway is found along St. Clair Parkway and a bike trail runs along the California Aqueduct, on 5th Street East, and on 6th Street East.

*(Sources: Site Survey, Palmdale General Plan, Parks, Recreation and Special Events, and Antelope Valley Transit Authority, MTA Metrolink)*

**A. Would the project 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)?**

**Less than Significant Impact.** The proposed project would lead to additional vehicle trips from construction equipment and crew during the construction period. This traffic would be limited and temporary and would not be considered significant. The proposed project will result in a relocation of the existing sheriff's facilities located near the project site. As such, the additional traffic related to the proposed Sheriff's Station would be added to the current street system serving the project site.

There will be changes in traffic patterns and volumes directly adjacent to the project site on Sierra Highway and Avenue Q, with a diversion of trips to the new sheriff's station site. Table 8 summarizes the daily trip generation forecast.

| TABLE 8<br>DAILY TRIP GENERATION FORECAST | |
|---|---|
| **Trip Source** | **ADT Volume** |
| **Sheriff's Station** | |
| Staff Trips | 884 |
| Visitor Trips | 480 |
| Patrol Car Trips | 300 |
| **Total** | **1,664** |

The Sheriff's Station is expected to add approximately 1,664 daily trips to the local roadway (Sierra Highway and Avenue Q). The addition of these trips is not sufficient to change or degrade the daily level of service (LOS) to LOS E or worse, which characterizes traffic congestion defined by high delays, generally indicating poor traffic progression, long cycle lengths, and high volume-capacity ratios. This is because both Sierra Highway and Avenue Q have excess capacity. The project is expected to add less than 200 trips during the AM peak hour (the worst case scenario), with fewer trips during other hours of the day. Based on field observations and discussions with City staff, the adjacent roadways have sufficient capacity to accommodate these additional trips. Impacts would be less than significant.

*(Sources: Site Survey, Palmdale General Plan, and ITE Trip Generation Manual)*

**B. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

**Less than Significant Impact.** The City of Palmdale sets LOS C as an acceptable standard for roadway traffic operations and intersection operating conditions. With project traffic assigned to the existing roadway network, the overall level of service for area intersections would not degrade to LOS D. Nearby intersections would also operate at better than LOS D conditions. No impacts to existing intersection and roadway levels of service, which may be considered individually or cumulatively significant impacts, are anticipated from the project.

*(Sources: Palmdale General Plan and Traffic Study)*

**C. Would the project 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?**

**No Impact.** The proposed Sheriff's Station would not affect air traffic at the Palmdale International Airport or other airports. The helicopter flight pattern is not expected to interfere with air traffic associated with the airport. Thus, no impact on air traffic patterns would occur with the project. The project site is not located within the approach zones for the airport and the one-story 22-foot high station and vehicle maintenance structure would not affect nearby aircraft operations. The 120-foot high communication tower would also be located in an area outside the approach zone for the on-site helistop. Thus, no impact on air traffic patterns is expected.

*(Sources: Site Survey, and Functional and Space Requirements)*

**D. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less than Significant Impact.** Vehicle access to the site would be provided by two driveways on Sierra Highway and two driveways on Avenue Q. The eastern driveway on Avenue Q and the southern driveway on Sierra Highway would be dedicated to employee vehicles, patrol vehicles, and special vehicles. The northern driveway on Sierra Highway and the western driveway on Avenue Q would be used by visitors and the public. Improvements on Avenue Q along the project site would also expand the right-of-way and intersection configuration, allowing for improved traffic patterns. No adverse impacts are expected.

*(Sources: Preliminary Site Plan and Site Survey*)

**E. Would the project result in inadequate emergency access?**

**No Impact.** Adequate emergency vehicle access would be provided to the site via four proposed on-site driveways. The proposed project would not alter emergency access to properties surrounding the site. Thus, emergency access to the site or to adjacent uses would not be affected by the proposed project.

*(Sources: Preliminary Site Plan and Site Survey*)

**F. Would the project result in inadequate parking capacity?**

**Less than Significant Impact**. The proposed facility will provide parking areas at the western and southern sections of the project site. These parking areas are expected to provide a approximately 468 to 502 parking spaces to accommodate the station's vehicles, employee vehicles, and visitor parking. The County requires parking at the stations to provide one space per 440 square feet of office space, one space per three seats in assembly space and one space per 250 square feet of vehicle maintenance uses. A total of 180 parking spaces would be required under these standards. The City of Palmdale requires one space per 200 square feet for public buildings. Using this standard, the project would require 251 parking spaces. Thus, parking would be consistent with City standards.

The proposed Sheriff's Station would be operating on three shifts, with overlapping shifts and increased demand for parking during shift changes. Patrol vehicles would also be parked on site and visitor fluctuations would create additional parking demand. Table 9 shows the anticipated parking needs of station vehicles.

**TABLE 9**
**VEHICLE PARKING REQUIREMENTS**

| Vehicle Type | Total |
|---|---|
| Patrol Cars | 71 |
| Motorcycles | 2 |
| Special Sheriff's Vehicles | 20 |
| Tactical Car Spaces | 30 |
| 2 - 40 ft comm. Trailers | 8 |
| 2 horse trailers | 4 |
| Repair Spaces | 10 |
| 10% Contingency | 15 |
| **Station Vehicle Total** | **160** |
| Employee Parking (maximum at 2 PM) | 157 |
| Visitors* | 30 |
| **SUB-TOTAL** | **187** |

| TABLE 9<br>VEHICLE PARKING REQUIREMENTS | |
|---|---|
| **Vehicle Type** | **Total** |
| Sheriff's Vehicle Requirements | 160 |
| **Total Station Parking Requirements** | **347** |

* On average, there would be 20 visitors at a time and 30 visitors during the peak hour. The visitor parking need assumes one car per visitor.

Thus, a maximum of 347 spaces may be needed at the Sheriff's Station during the 2 PM shift change, with 317 spaces within the backlot(s) and approximately 30 spaces at the public parking area to handle visitor parking during peak hour (worst case scenario). The site plan for the project shows that 468 to 502 parking spaces would be provided, with 29 of these spaces within the visitor/public and arrestee release parking areas. Thus, adequate parking would be available on-site. Although the site plan provides 29 public parking spaces, this amount of public parking is expected to be adequate to handle visitor parking, since the 30-space demand is a worst case scenario and assumes one person per vehicle. An area south of the helistop may be used as a 34-space parking area but is not required in order to meet the facilities parking requirements.

*(Sources: Preliminary Site Plan, Palmdale Zoning Ordinance, Functional and Space Requirements, and Palmdale Sheriff's Station)*

**G. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

**No Impact**. As discussed earlier, a number of public transit systems serve the site. The closest Metrolink passenger train stations are located at 44812 Sierra Highway in the City of Lancaster (north of Palmdale) and at 730 West Sierra in the Vincent Grade/Acton area (south of Palmdale). The Antelope Valley Line travels to Los Angeles Union Station, with stops in Lancaster, Vincent Grande/Acton, Princessa, Santa Clarita, Newhall, Sylmar/San Fernando, Sun Valley, Burbank, and Glendale. The Metrolink railroad tracks run west of Sierra Highway and west of the project site. These tracks are also used by 5 UPRR freight trains daily.

The bikeways in the area include the Class I bikeway along the California Aqueduct and a bike trail along 5$^{th}$ Street East and 6$^{th}$ Street East, and within the St. Clair Parkway, west of the site. The proposed project would not impact any bus turnouts, bicycle racks, or otherwise conflict with adopted policies, plans, or programs supporting alternative transportation.

In addition, to commuter trains and bikeways public transit users have the option to ride the Antelope Valley Transit Authority (AVTA) bus system. AVTA runs buses throughout the City of Palmdale and to and from outside surrounding cities. The buses run from 6:00 a.m. to 8:00 p.m. Monday through Friday and from 9:00 a.m. to 6:00 p.m. on Saturday. AVTA Route 3 passes Avenue Q and stops at the northern boundary of the site. The AVTA also offers commuter services to downtown LA and dial-a-ride and paratransit services. A park-and-ride lot is available at the Palmdale Library/Civic Center, south of the project site.

Employees and visitors of the proposed Sheriff's Station would have access to various types of alternative transportation systems and would not impact adopted policies, plans, or programs supporting alternative transportation. No conflict with adopted policies for public transportation is expected with the development of the proposed project.

*(Sources: Site Survey and Los Angeles County Bike Map, Antelope Valley Transit Authority, Parks, Recreation and Special Events, MTA Metrolink)*

## 3.16 UTILITIES AND SERVICE SYSTEMS

Water services to the project site are provided by the Palmdale Water District. An 8-inch water line runs along Sierra Highway and a 10-inch water line runs along Avenue Q.

The County Sanitation District No. 20 provides sewage treatment for wastewater from the central district of Palmdale. Two 8-inch sewer lines run along Sierra Highway, and an 8-inch sewer line runs along Avenue Q. Additionally, a 12-inch extension sewer and an 18- to 21-inch relief sewer trunk are located in Avenue Q. Sewage and wastewater are processed at the Palmdale Water Reclamation Plant located at 39300 30th Street East, between Avenue P and Avenue Q. The treatment plant has an operating capacity of 15.0 million gallons per day (mgd) and is currently processing approximately 9.2 mgd. Thus, there is available capacity at the treatment plant.

Waste hauling for the City is provided by Waste Management of the Antelope Valley, with waste disposal at the Palmdale Landfill, located at 1200 City Ranch Road in the City of Palmdale. The landfill has been in operation since the late 1950's and has a remaining capacity of 8.0 million tons and has a permit to accept 1,800 tons per day.

Storm drainage on-site is provided by ground percolation and surface flows to the northeast. In the City of Palmdale, storm drainage is generally provided by on-site retention basins and channeled creeks and natural streams located throughout the City. Due to the lack of a comprehensive storm drain system in the downtown area, on-site retention basins are generally required for large developments. During heavy rains, localized flooding occurs in portions of the City.

The Palmdale area is served by Southern California Gas Company (SCG) for natural gas services and by the Southern California Edison Company (SCE) for electrical power services. A 6-inch natural gas line and a 2-inch line are located along Avenue Q and a 3-inch gas line runs along Sierra Highway. Underground power lines run along Sierra Highway and overhead power lines are found along Avenue Q and from the southeastern corner of the site, east toward 9th Street East.

*(Sources: Phase 1 ESA , Waste Management of the Antelope Valley, Palmdale Landfill, Site Survey, and Palmdale Department of Public Works)*

### A. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

**No Impact.** The project would involve the construction of facilities for the Palmdale Sheriff's Station on an 11.5-acre vacant site. Wastewater generated from the site would be limited to restroom, bathroom, and kitchen facilities that would be provided on-site. Stormwater runoff would be limited to rainwater from paved areas. The proposed Sheriff's Station would have a vehicle maintenance area which would generate oil, grease and other vehicle chemicals which may affect runoff quality. Wastewater from the vehicle maintenance area would be conveyed to an on-site clarifier, which would be connected to the sewer system. Runoff from the site would not include wastewater whose quality would need to be regulated by the Regional Water Quality Control Board. Thus, no demand for wastewater treatment, which would be regulated by the Regional Water Quality Control Board, would occur with the project.

*(Sources: Preliminary Site Plan and Regional Water Quality Control Board)*

**B. Would the project 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?**

**Less than Significant Impact.** The proposed project would result in the construction of the Sheriff's Station and relocation of the existing facility. The proposed project would require connection to existing water and sewer lines. Water use and wastewater generation by the project would not be substantial, and would be accompanied by a decrease in water demand and sewer generation from the existing Sheriff's Station, which would be closed. Based on an estimated floor area of approximately 57,133 square feet (Sheriff's station and maintenance building), the proposed Sheriff's Station facility is expected to generate a water consumption of approximately 14,283 gallons of water per day (assuming 250 gallons per thousand square feet of building floor area per day). This water use would primarily come from toilet and washroom use and kitchen activities. Additionally the 875-square-foot wand car wash would consume approximately 613 gallons of water per day (assuming a water use of 700 gallons per thousand square feet of building floor area per day). The existing Sheriff's Station is estimated to use 3,375 gallons of water per day (based on 13,500 square feet of floor area and 250 gallons per day per thousand square feet). A net increase of 11,521 gallons per day would occur.

Consultations with the Palmdale Water District have indicated that there is capacity within the existing system to serve the proposed project. Coordination with the District will be made to ensure that timely and adequate service is available to the project.

It is expected that the existing Sheriff's Station is generating 2,700 gallons per a day (assuming 200 gallons per a thousand square feet of building floor area per day) of sewage. The proposed Sheriff's station would generate approximately 12,040 gallons per day of sewage (assuming 200 gallons per a thousand square feet of building floor area per day and 700 gallons per thousand square feet of car wash area per day). The proposed Sheriff's station would result in an increase of 9,340 approximately gallons per day of sewage.

Currently, approximately 0.3 mgd of sewage is being transported into the 12-inch extension sewer trunk in Avenue Q. The 12-inch sewer trunk has a design capacity of 0.9 mgd to 3.8 mgd. Additionally, approximately 0.7 mgd of sewage is being transported through the 18- to 21-inch relief sewer trunk located in Avenue Q. The design capacity of the 18- to 21-inch relief sewer trunk is 3.9 mgd and conveyed a peak flow of 1.3 mgd in 2000. No impacts to this trunk line are expected with the development of the proposed project. Sewage and wastewater generated from the project is not expected to result in adverse impacts to existing sewer/wastewater treatment capacity of the Palmdale Water Reclamation Plant. The treatment plant has a remaining capacity of 5.2 million gallons per day and wastewater volume from the project would be less than 0.012 mgd or 0.25 percent of available capacity.

The estimated water use and sewage generation are not considered substantial amounts that will require new sources or entitlements to local or regional water supplies of the Palmdale Water District or treatment capacity at the Palmdale Water Reclamation Plant. Therefore, the project would not have a significant impact on water or wastewater services or facilities.

*(Sources: Project Site Plan, Palmdale Water District, Functional and Space Requirements, County Sanitation District N o. 20)*

**C. Would the project 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?**

**No Impact.** The proposed project involves the construction of the Sheriff's Station on approximately 11.5 acres of vacant land. The project would replace bare soils with buildings, parking areas, driveways, and landscaped areas. The project would include a retention basin to collect runoff from the site and allow percolation into the groundwater. With this retention basin, no off-site runoff is expected and no impact on the storm drainage system in the surrounding area would occur. As part of the project, curbs and gutters would be constructed along Avenue Q. This would allow street runoff to flow along the gutters eastward to local storm drain facilities. This impact is not adverse and no adverse impacts associated with local storm water drainage facilities would occur.

*(Sources: Preliminary Site Plan, USGS Palmdale Quadrangle, Topographic Survey, and Site Survey)*

**D. Would the project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed?**

**Less than Significant Impact**. The proposed project would result in the construction of the Sheriff's Station and relocation of the existing facility. The existing station is estimated to generate a demand for approximately 3,375 gallons of water per day, based on 250 gallons per thousand square feet of building floor area per a day. The proposed station would generate a demand for 14,896 gallons per day due to the larger facility and the wand car wash. The City of Palmdale receives water from groundwater wells, the Little Rock Dam located at Lake Palmdale and the California Aqueduct. The estimated increase in water use is not considered a substantial amount to require new sources or entitlements to local or regional water supplies of the Palmdale Water District. Thus, impacts would be less than significant.

*(Sources: Preliminary Site Plan and Palmdale Water District)*

**E. Would the project 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?**

**Less than Significant Impact.** The proposed project would generate approximately 12,040 gallons of wastewater a day. This amount is not expected to result in adverse impacts to existing sewer and wastewater treatment capacity of the Palmdale Water Reclamation Plant. There is available capacity at the treatment plant to serve the project and the increase in sewage generation would be less than one percent of available capacity. The project would require connection to the existing sewer lines on Avenue Q and no new or expanded facilities would be needed.

*(Sources: Preliminary Site Plan and County Sanitation District No. 20)*

**F. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

**Less than Significant Impact.** Construction of the Sheriff's Station would lead to construction debris, which would need to be disposed at the Palmdale Landfill. Also, the operation of the Sheriff's Station would generate solid wastes that would need to be disposed at the landfill. Waste Management of the Antelope Valley currently provides waste collection services to the City and would continue to serve the new Sheriff's Station. A substantial increase in the amount of waste being generated by the Sheriff's Station is not anticipated due to the incremental increase in the size of the new Sheriff's facility. Assuming a solid waste generation of six pounds per thousand square feet per day, the new station would generate approximately 343 pounds per day. The Palmdale Landfill, located at 1200 City Ranch Road in the City of

Palmdale, would serve the project and has capacity to operate for the next 15 to 20 years. Thus, landfill capacity would not be adversely affected by the proposed project.

*(Sources: Site Survey, Preliminary Site Plan, and Waste Management of the Antelope Valley)*

**G. Would the project comply with federal, state, and local statutes and regulations related to solid waste?**

**Less than Significant Impact.** The City of Palmdale is currently served by Waste Management of the Antelope Valley for solid waste disposal services. The proposed project would continue to be served by the same private commercial hauler. Trash from the site would be hauled to the Palmdale Landfill in the City of Palmdale. This landfill has remaining capacity to operate for the next 15 to 20 years. Solid waste from the project is expected to be limited to that generated by office uses, locker rooms, detention areas, and other related uses. This solid waste generation is not expected to be substantial. The Sheriff's Station is expected to continue its paper and aluminum can recycling programs at the new station. In addition, the Palmdale Landfill operates waste recycling activities for green wastes, wood, appliances, tires, and concrete. Wastes from the Sheriff's Station would be recycled at the landfill. Thus, impacts on waste generation are not expected to be significant and no conflict with solid waste regulations is expected.

*(Sources: Preliminary Site Plan, Palmdale Sheriff's Station, and Waste Management of the Antelope Valley)*

## 4.1 FINDINGS

The environmental analysis in Section 3 of this document indicates that the proposed Palmdale Sheriff's Station project may have the potential for significant adverse environmental impacts on a number of issue areas, including aesthetics, air quality, cultural resources, and noise. Mitigation measures will be incorporated into the project, which would mitigate potentially significant adverse impacts to below a level of significance. The following findings can be made regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines, as based on the results of this environmental assessment:

- The proposed project would not have the potential to degrade the quality of the environment. There are no sensitive plant or animal species on site and the proposed project will not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. A cultural resources survey of the site and the surrounding area was conducted and the survey results indicate there are no known historic structures or sites, archaeological resources or paleontological resources on the site which may be affected by the proposed project. However, monitoring is recommended to obtain more information on the building foundation and historic activities at the site. The proposed project will not eliminate important examples of the major periods of California history or prehistory. The air quality study prepared for the project has determined that significant adverse impacts, which may be created during construction of the proposed project, can be mitigated to less than significant levels with the incorporation of the proposed mitigation measures.

- The proposed project would not have the potential to achieve short-term goals to the disadvantage of long term environmental goals. The impacts associated with the proposed facility would not be significant due to the limited size of the proposed building. Also, the site is heavily disturbed and the project would not conflict with environmental goals for the project area. While the project may lead to air quality impacts, which may conflict with environmental goals for the area, mitigation measures have been incorporated into the project to reduce these impacts to insignificant levels.

- The proposed project would not have environmental impacts which are individually limited but cumulatively considerable when considering planned or proposed development in the immediate vicinity of the site. The proposed Sheriff's Station facility is limited in size and would not be large enough to cumulatively lead to significant adverse impacts, when added to proposed, planned or anticipated development in the area. It is anticipated that the fire station would be developed on 1.5 acres at the northeastern corner of the project site. However, no project plans have been developed for the fire station at this time. Nonetheless, the future development of this fire station, in conjunction with the proposed Sheriff's Station, is not expected to lead to cumulative adverse impacts in the area due to the limited size of the facilities and the anticipated activities that would occur on site.

- The proposed project would not have environmental impacts which may have adverse effects on humans, either directly or indirectly, with the implementation of the recommended mitigation measures. The project may create noise impacts and the facility may be exposed to on-site hazards which could affect nearby residents and employees of the

facility. However, the incorporation of mitigation measures would reduce these impacts to insignificant levels.

The County of Los Angeles will consider adoption of a Mitigated Negative Declaration as part of the environmental review process for the proposed project. The recommended mitigation measures presented in Section 4.2, below, shall be incorporated as part of the project to prevent the potential for significant adverse impacts.

## 4.2 MITIGATION MEASURES

A number of mitigation measures have been recommended to avoid and reduce potentially significant adverse impacts to levels considered less than significant. The incorporation of these measures as part of the project and their implementation would allow the proposed Palmdale Sheriff's Station project to qualify for a Mitigated Negative Declaration (MND). To mitigate the project's impacts, the following mitigation measures will be implemented as part of the project:

### Aesthetics and Visual Quality

To mitigate potential light spillover and glare on adjacent residences, the following measures are proposed:

- Exterior lights shall be directed downwards into the site.
- Light shields shall be provided for lights to be placed along the northern and eastern sections of the site.
- Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles.

### Air Quality

To ensure that construction emissions do not affect adjacent residents, the following measures are recommended:

- Use of watering for dust control during clearing, grading and construction. Availability of brackish or reclaimed water sources should be investigated. Soil disturbance should be terminated when high winds (>25 mph) make dust control extremely difficult.
- Developing a dust control program to supplement the routine watering that constitutes best available control measures (BACMs) in excess of any minimum SCAQMD Rule 403 requirements. BACMs that may be adopted and integrated an enhanced dust control program might include hydroseeding previously disturbed areas while awaiting construction, adding chemical binders or surfactants to increase the effectiveness of watering, early paving or chip sealing of roads, enforcing reduced travel speeds (15 mph) on unpaved surfaces and/or sand fences and perimeter sandbags.
- Minimization of construction interference with regional non-project traffic movement. Measures recommended for inclusion are:
  a. Scheduling receipt of construction materials to non-peak travel periods.
  b. Routing construction traffic through areas of least impact sensitivity.
  c. Limiting lane closures and detours to off-peak travel periods.
  d. Providing ride-share incentives for contractor and subcontractor personnel.

- Reducing "spill-over" effects by preventing soil erosion, washing vehicles entering public roadways from dirt off-road project areas, and washing/sweeping project access to public roadways on an adequate schedule.
- Requiring emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups.
- Limiting grading/soil disturbance to as small an area as practical at any one time and using best available control measures.
- Limiting the application of architectural surface treatments (i.e., paint, etc.) to average no more than 225 gallons per week over the project construction period.

**Cultural Resources**

To ensure that no archeological or paleontological resources are disturbed during ground disturbance activities, the following measures are proposed:

- Monitoring shall be conducted during the removal of the building foundation, if removal is necessary, and during any ground disturbance activities. Additional architectural features of the foundation that may be uncovered shall be recorded and if trash pits are uncovered, any clearly historic artifacts from trash deposits shall be collected.
- Monitoring shall be conducted during earth-moving activities in native soils. If fossil materials are found, grading shall be diverted or redirected and fossils properly salvaged.
- Standard 200-pound sediment samples shall be screenwashed from each formation and if small vertebrate fossils are found, additional sediments shall be screenwashed for up to 6,000 pounds.
- All fossils recovered shall be stabilized, prepared, identified, packaged, and transported to the Natural History Museum of Los Angeles County, along with a documentation of fossil findings.

**Noise**

To ensure that noise from construction and on-site activities do not affect adjacent residents, the following measures are recommended:

- Construction activities shall be restricted to the hours of 7 a.m. to 7 p.m., and prohibited on Sundays and major holidays.
- Use of equipment mufflers for construction equipment
- Location of staging areas away from residential uses to the east.

## 5.1 PREPARERS OF THE MND/INITIAL STUDY

***David Evans and Associates, Inc.***
800 North Haven Avenue, Suite 300
Ontario, California 91764
(909) 481-5750

Karen Ruggels, Project Manager
Josephine Alido, Project Planner
Rebecca Smirniotis, Project Planner
Eric Craig, Environmental Analyst

***Katz Okitsu & Associates***
1055 Corporate Center Dr., Suite 300
Monterey Park, CA 91754-7642
Phone: (323) 260-4703

George Dunn, P.E., Traffic Engineer
Joel Falter, Traffic Engineer

***Giroux and Associates***
17744 Sky Park Circle, Suite 210
Irvine, CA 92714
Phone (949) 851-8609

Hans Giroux, Principal

***RMW Paleo Associates***
23392 Madero, Suite L
Mission Viejo, CA 92691
Phone (949) 770-8042

Cara Burres
David Ferraro

## 5.2 REFERENCES

The following references were used in the preparation of this MND/Initial Study and are available for review by the public at the offices of the Project Development Division of the Los Angeles County Department of Public Works at 900 South Fremont Avenue, Fifth Floor in Alhambra, California 91803 or at the offices of David Evans and Associates at 800 North Haven Avenue, Suite 300 in Ontario, California 91764 during normal business hours.

California Department of Agriculture, Soil Conservation Service, Report and General Soil Map for Los Angeles County, California, December 1969.'

California Department of Conservation, Division of Oil and Gas, California Oil, Gas and Geothermal Resources, Publication No TR03, 1988.

California Department of Finance, E-5 Report, Population and Housing Estimates for California Cities, January 1999 and January 2000 and 2001.

California Department of Health, Office of Noise Control, Guidelines of the Preparation and Content of Noise Elements of General Plans, February 1976.

California Department of Justice, California and FBI Crime Index, Los Angeles County, 1997-1999.

California Office of Planning and Research, California Environmental Quality Act and the CEQA Guidelines, 2000.

California Trade and Commerce Industry, Los Angeles County, California Scenic Routes, 1994.

County of Los Angeles, Los Angeles County Safety Element and Technical Appendix, December 1990.

Federal Aviation Administration, F.A.R Part 77 Regulations – Objects Affecting Navigable Airspace.

Federal Emergency Management Agency, Flood Insurance Rate Maps.

Legislative Counsel of California, California Law, 1999.

Los Angeles County Assessor's Office, Property Information Data, 2000.

Los Angeles County MTA, Los Angeles County Bike Map, 1993.

Ninyo and Moore, Phase 1 Environmental Site Assessment, August 2000.

Palmdale, City of, Palmdale Downtown Revitalization Plan, April 1998.

Palmdale, City of, General Plan, 1993.

Palmdale, City of, Ordinance No. 952, Joshua Tree and Native Desert Vegetation Preservation, (Title 14 of Palmdale Municipal Code, 1992.

Palmdale, City of, Parks, Recreation and Special Events, March 2000.

Palmdale, City of, Zoning Ordinance, 1987, as amended.

Penco Engineering, Topographic Survey, March 2000.

PMW Associates, Implementation Plan for Palmdale Redevelopment Agency Projects 1,2,3 and 4, December 1999.

Robert Rosenberg, Susan Narduli Architects, Functional and Space Requirements Program, Palmdale Sheriff's Station, February 2000.

SCAQMD, CEQA Air Quality Handbook, May 1993, as amended.

SCAQMD, 1992-1999 Air Quality Readings, 1993-2000.

Thomas-Brothers Maps; The Thomas Guide for Los Angeles County; 2000.

U.S. Bureau of Census, 1990 U.S. Census, 1993.

US Environmental Protection Agency; Envirofacts Database; May 2000.

U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, 1971.

U. S. Fish and Wildlife Service, National Wetlands Inventory, May 2000.

U.S. Geological Survey, 7 ½ Minute Quadrangle for Palmdale, 1974.

## 5.3 PERSONS CONTACTED

Antelope Valley Union High School District, Mr. Foster
City of Palmdale Economic Development Department, Kathy
City of Palmdale, Planning Department, Jaclyn Ota, Lynn O'Brien, Ann Burke
County Sanitation District No. 20, Ruth Frazen
Los Angeles County Department of Public Works, Landfill Operations, Carlos Ruiz
Los Angeles County Fire Department, Scott Zbinden
Oak Tree Learning Center
Palmdale Landfill, Hugh Walker
Palmdale Library, Linda Storsteen
Palmdale Regional Airport
Palmdale School District, Business Services and Dianne Burkholder
Palmdale Sheriff's Station, Sergeant John Hall
Palmdale Water District, Peter Thompson
Palmdale Water Reclamation Plant, Tim Linn
Robert Rosenberg, Susan Narduli Architects
SCE
SCG
Waste Management of the Antelope Valley

# Appendix A - Environmental Checklist

## BACKGROUND

| | | |
|---|---|---|
| 1. | Name of Proponent: | Los Angeles County Department of Public Works<br>Project Development Division |
| 2. | Address: | 900 South Fremont Avenue, Fifth Floor<br>Alhambra, CA 91803 |
| 3. | Telephone Number: | (626) 300-3246 |
| 4. | Project Title: | Palmdale Sheriff's Station |
| 5. | Project Address | Southeast corner of Avenue Q and Sierra Highway |

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ■ Aesthetics | ☐ Agriculture Resources | ■ Air Quality |
| ☐ Biological Resources | ■ Cultural Resources | ☐ Geology /Soils |
| ☐ Hazards & Hazardous Materials | ☐ Hydrology / Water Quality | ☐ Land Use / Planning |
| ☐ Mineral Resources | ■ Noise | ☐ Population / Housing |
| ☐ Public Services | ☐ Recreation | ☐ Transportation/Traffic |
| ☐ Utilities / Service Systems | ■ Mandatory Findings of Significance | |

**DETERMINATION:** (To be completed by the Lead Agency)

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 project 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 measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

_____ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE

DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| Signature | Date |
| Marty Moreno, Senior Civil Engineer | Los Angeles County Department of Public Works |
| 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 should 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

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. 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? | ☐ | ■ | ☐ | ☐ |
| **II. AGRICULTURE RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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? | ☐ | ☐ | ☐ | ■ |
| **III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. 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)? | ☐ | ☐ | ■ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ■ | ☐ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☐ | ■ |
| **IV. 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, and 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 wildlife 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? | ☐ | ☐ | ☐ | ■ |
| **V. 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? | ☐ | ☐ | ☐ | ■ |
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or | ☐ | ☐ | ☐ | ■ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | |
| b) Strong seismic ground shaking? | ☐ | ☐ | ■ | ☐ |
| c) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | ■ |
| d) Landslides? | ☐ | ☐ | ☐ | ■ |
| e) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ■ | ☐ |
| f) 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? | ☐ | ☐ | ☐ | ■ |
| g) 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? | ☐ | ☐ | ☐ | ■ |
| h) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ■ |
| **VII. 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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in | ☐ | ☐ | ■ | ☐ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ☐ | ■ |
| **VIII. 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 alteration 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 | ☐ | ☐ | ☐ | ■ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| result of the failure of a levee or dam? | | | | |
| j) Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ■ |
| **IX. 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? | ☐ | ☐ | ☐ | ■ |
| **X. 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? | ☐ | ☐ | ☐ | ■ |
| **XI. NOISE.** Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels 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 two 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? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ☐ | ■ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. 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? | ☐ | ☐ | ☐ | ■ |
| **XIII. PUBLIC SERVICES**. 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? | ☐ | ☐ | ☐ | ■ |
| Parks? | ☐ | ☐ | ■ | ☐ |
| Other public facilities? | ☐ | ☐ | ☐ | ■ |
| **XIV. 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? | ☐ | ☐ | ☐ | ■ |
| **XV. 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 | ☐ | ☐ | ☐ | ■ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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)? | ☐ | ☐ | ☐ | ■ |
| **XVI. UTILITIES & 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? | ☐ | ☐ | ■ | ☐ |
| **XVII. 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 period of California history or prehistory? | ☐ | ■ | ☐ | ☐ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ■ | ☐ | ☐ |

# Appendix B - Air Quality Study

# AIR QUALITY IMPACT ANALYSIS

## SHERIFF'S STATION

## PALMDALE, CALIFORNIA

Prepared for:

David Evans & Associates
Attn: Josephine Alido
800 North Haven Avenue, Ste. 300
Ontario, CA 91764

Date:

November 1, 2000

## ATMOSPHERIC SETTING

The climate of the Antelope Valley, technically called an interior valley subclimate of Southern California's Mediterranean-type climate, is characterized by hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and fog that form along the Southern California coastline rarely extend as far inland as Palmdale, and if they do, they usually burn off quickly after sunrise. The most important weather pattern is associated with the funneling of the daily onshore seabreeze through Soledad Canyon into the upper desert to the north of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This transport pattern creates both unhealthful air quality as well as destroying the scenic vistas of the mountains surrounding the Antelope Valley.

Temperatures in the project area average a very comfortable 61 degrees Fahrenheit year-round, but it gets very hot on summer afternoons (close to 100 degrees) and quite cool on winter mornings (around 30 degrees). About 100 days per year reach 90 degrees, while about 60 days drop to slightly sub-freezing temperatures. The warm summer afternoons are quite dry and the breezes are moderate such that physical comfort is good despite the warm weather.

Rainfall in the Antelope Valley area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April with summers often completely dry except for occasional widely scattered summer thundershowers. The Antelope Valley is located in a transition area between the semi-arid conditions of the Los Angeles Basin and the completely arid portions of the Mojave Desert. Rainfall averages from 6 to 9 inches per year at various locations around the project area with light rain falling on 12 days per year, and only 3 to 4 days per year with moderate precipitation. The Antelope Valley may occasionally experience a light winter snowfall, but temperatures are not cold enough for the snow to remain on the ground for very long.

Winds blow primarily from south to north and from west to east in response to the regional pattern of airflow from the cool ocean to the heated interior. A large portion of the airflow across the Antelope Valley therefore has its origin in more developed areas of the Los Angeles Basin. Seventy percent of all airflow across Palmdale derives from a narrow sector from southwest through west-northwest. These winds are moderately strong during the daytime, averaging from 10 to 13 mph, but become light and variable at night. Daytime local ventilation is, therefore, very good, but there may be nocturnal stagnation near local emissions sources such

as the major area highways during the calm wind periods. Air pollutant emissions, however, are generally sufficiently low such that even during limited local dispersion conditions, air quality near the project site remains quite healthful. The primary Antelope Valley air quality concern is that there is a general transport of air from the polluted Los Angeles Basin through the Santa Clarita Valley, and then toward the normally cleaner upper desert, especially during the summer smog season. This meteorological pattern will, therefore, make it difficult for the area to achieve clean air until sources in the developed portions of the basin are better controlled and less pollution is carried downwind across communities within the Antelope Valley.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. Such summer inversions, however, occur very infrequently, if at all, in the Antelope Valley. This marine/ subsidence inversion allows for good local mixing, but acts like a giant lid over the South Coast Air Basin. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Some dilution occurs in the thermal chimneys along the heated slopes of the San Gabriel Mountains, but not enough to prevent the intrusion of significantly polluted air into the Antelope Valley. In the absence of strong summer inversions, the dilution process continues as the smoggy air traverses the Valley such that there is considerable variation in air quality across the area. Ozone concentrations (the main ingredient in photochemical smog) decrease markedly in moving from Palmdale out to Edwards AFB and beyond.

A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the valley floor while the air aloft over the valley remains warm. This process forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of Southern California, there is not enough traffic in inland valleys to cause any winter air pollution problems. Thus, while summers are periods of hazy skies and unhealthful air, winter is often a period of spectacular visibility and excellent air quality in the Antelope Valley.

## AIR QUALITY SETTING

Ambient Air Quality Standards (AAQS): In order to gauge the significance of the air quality impacts of the proposed Palmdale Sheriff's Station relocation, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. However, recent research has shown that chronic exposure to ozone, even at levels that just meet the federal clean air standard, may have long-term negative respiratory health effects.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is a considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1.

Baseline Air Quality: Existing levels of ambient air quality and historical trends and projections in the project area are well documented from measurements made by the South Coast Air Quality Management District (SCAQMD). The Antelope Valley is located in the Mojave Desert Air Basin (MDAB). The Los Angeles County portion of the valley, however, is under the regulatory authority of the SCAQMD. Although there are some slightly relaxed criteria for determining air quality impact significance for projects in Palmdale versus in the Los Angeles Basin, most of the very stringent SCAQMD rules, regulations and standards apply equally to both airsheds.

The SCAQMD has operated the air quality monitoring station in Lancaster for a number of years. This station is considered representative of most of the developed areas of the Antelope Valley. Measured air pollutants include ozone, carbon monoxide, nitrogen oxides, and respirable particulates. These measurements have shown that photochemical smog levels (mainly ozone) are high

# TABLE 1
## AMBIENT AIR QUALITY STANDARDS

| Pollutant | Averaging Time | California Standards | | Federal Standards | | |
|---|---|---|---|---|---|---|
| | | Concentration | Method | Primary | Secondary | Method |
| Ozone (O2) | 1 Hour | 0.09 ppm (180 $\mu g/m^3$) | Ultraviolet Photometry | 0.12 ppm (235 $\mu g/m^3$) | Same as Primary standard | Ethylene Chemiluminescence |
| | 8 Hour | - | | 0.08 ppm (157 $\mu g/m^3$) | | |
| Respirable Particulate Matter ($PM_{10}$) | Annual Geometric Mean | 30 $\mu g/m^3$ | Size Selective Inlet Sampler ARB Method P (8/22/85) | - | Same as Primary standard | Inertial Separation and Gravimetic Analysis |
| | 24 Hour | 50 $\mu g/m^3$ | | 150 $\mu g/m^3$ | | |
| | Annual Arithmetic Mean | - | | 50 $\mu g/m^3$ | | |
| Fine Particulate Matter (PM2.5) | 24 Hour | No Separate State Standard | | 65 $\mu g/m^3$ | Same as Primary standard | Inertial Separation and Gravimetic Analysis |
| | Annual Arithmetic Mean | | | 15 $\mu g/m^3$ | | |
| Carbon Monoxide (CO) | 8 Hour | 9.0 ppm (10 $mg/m^3$) | Non-dispersive Infrared Photometry (NDIR) | 9 ppm (10 $mg/m^3$) | None | Non-dispersive Infrared Photometry (NDIR) |
| | 1 Hour | 20 ppm (23 $mg/m^3$) | | 35 ppm (40 $mg/m^3$) | | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 $mg/m^3$) | | - | | |
| Nitrogen Dioxide (NO) | Annual Arithmetic Mean | - | Gas Phase Chemiluminescence | 0.053 ppm (100 $\mu g/m^3$) | Same as Primary standard | Gas Phase Chemiluminescence |
| | 1 Hour | 0.25 ppm (470 $\mu g/m^3$) | | - | | |
| Lead | 30 days average | 1.5 $\mu g/m^3$ | AIHL Method 54 (12/74) Atomic Absorption | - | - | High Volume Sampler and Atomic Absorption |
| | Calendar Quarter | - | | 1.5 $\mu g/m^3$ | Same as Primary standard | |
| Sulfur Dioxide (SO2) | Annual Arithmetic Mean | - | Fluorescence | 0.030 ppm (80 $\mu g/m^3$) | - | Pararosoaniline |
| | 24 Hour | 0.04 ppm (105 $\mu g/m^3$) | | 0.14 ppm (365 $\mu g/m^3$) | - | |
| | 3 Hour | - | | - | 0.5 ppm (1300 $\mu g/m^3$) | |
| | 1 Hour | 0.25 ppm (665 $\mu g/m^3$) | | - | - | |
| Visibility Reducing Particles | 8 Hour (10 am to 6 pm, PST) | In sufficient amount to produce an extinction coefficient of 0.23 per kilometer-visibility of ten miles of more (0.07 - 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: ARB Method V (8/18.89). | | **No Federal Standards** | | |
| Sulfates | 24 Hour | 25 $\mu g/m^3$ | Turbidimetric Barium Sulfate - AIHL Method 61 (2/76) | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 $\mu g/m^3$) | Cadmium Hydroxide STRactan | | | |

in summer, and that dust levels may exceed particulate standards throughout the year, but that primary vehicular pollutant levels such as carbon monoxide, nitrogen dioxide or lead are very low in the Antelope Valley area. Table 2 summarizes the last seven years of published data for the Lancaster station from 1992-98 (1999 results have not yet been finalized). While ozone levels continue to exceed the California and national hourly standards and the California 24-hour suspended particulate (PM-10) standard is often exceeded, all other pollutants, particularly those related to local source emissions, do not exceed their allowable levels. The data in Table 2 suggests that whatever air quality problems are present in the project vicinity, they are mainly due to the transport of pollutants into the area from outside sources. These data also suggest that the Antelope Valley can accommodate a reasonable level of growth without threatening the continued attainment of standards such as nitrogen oxides or carbon monoxide. Such growth may, however, exacerbate existing violations of standards for ozone and particulates.

Meteorological variability creates noticeable year-to-year variations in pollution trends. While the El Niño years of 1996-97 produced only one violation of the federal ozone standard in two years, the La Niña year in 1998 produced eight such violations in one year. Whereas the data trends in 1996-97 suggested that the Antelope Valley is close to meeting federal standards, the 1998 data shows that considerable additional progress needs to be made when summer meteorology is less favorable for good pollution dispersion.

Although air quality data from the Lancaster station is considered generally as representative of the entire Los Angeles County portion of the Antelope Valley, limited measurements of ozone levels in Palmdale show that Lancaster has better air quality than locations closer to Soledad Canyon where the most polluted airstream enters the valley. Baseline ozone levels in Palmdale are approximately 20 percent higher than in Lancaster where the polluted inflow has additional dilution. Attainment of the federal ozone standard as determined by monitoring in Lancaster may not guarantee that the project site is similarly in complete compliance with all applicable clean air standards.

**Air Quality Planning:** The federal Clean Air Act, and the California Clean Air Act, have established timeframes for air quality improvement in "non-attainment" areas such as the Antelope Valley. Attainment plans and updates are required. The planning process does make some allowances when an airshed such as the Los Angeles County portion of the Mojave Desert Air Basin is downwind of an extreme non-attainment airshed such as the South Coast Air Basin (SCAB). Air pollution control measures embodied in clean air

## TABLE 2

## LANCASTER STATION MONITORING SUMMARY
**(Days Per Year Exceeding Standards and Maximum Concentrations)**

| Pollutant/Standard | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|
| Ozone: | | | | | | | |
| 1-Hour > 0.09 ppm | 78 | 59 | 62 | 61 | 40 | 14 | 24 |
| 1-Hour > 0.12 ppm | 25 | 14 | 10 | 5 | 1 | 0 | 8 |
| Max. 1-Hour Conc. (ppm) | 0.17 | 0.16 | 0.14 | 0.14 | 0.13 | 0.12 | 0.16 |
| Carbon Monoxide: | | | | | | | |
| 1-Hour > 20. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 9. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 9 | 8 | 9 | 8 | 7 | 6 | 5 |
| Max. 8-Hour Conc. (ppm) | 5.4 | 5.9 | 5.8 | 5.0 | 4.8 | 4.0 | 3.6 |
| Nitrogen Dioxide: | | | | | | | |
| 1-Hour > 0.25 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.16 | 0.11 | 0.10 | 0.14 | 0.08 | 0.07 | 0.08 |
| Inhalable Particulates ($PM_{10}$): | | | | | | | |
| 24-Hour > 50 $\mu g/m^3$ | 5/59 | 9/59 | 3/52 | 3/54 | 2/59 | 2/59 | 2/52 |
| 24-Hour > 150 $\mu g/m^3$ | 0/59 | 0/59 | 0/52 | 0/54 | 0/59 | 0/59 | 0/52 |
| Max. 24-Hour Conc. ($\mu g/m^3$) | 68 | 70. | 97. | 61. | 67. | 54. | 80. |

Source: South Coast AQMD Annual Summaries, 1992-1998.

plans for the SCAB therefore are not equally effective in the downwind receptor airshed such as the Antelope Valley. However, it was believed that if air pollution control was excessively relaxed within the Mojave Desert since its air quality fate was controlled by the SCAB, the Antelope Valley would become a haven for polluters seeking to escape the more restrictive SCAB. Required air quality controls are therefore almost identical in Palmdale as in Los Angeles.

As mandated by federal and state clean air legislation, attainment plans must be prepared that document how progress milestones will be achieved. These plans identify the expected baseline conditions for the no-action alternative, and then specify the additional measures needed, if any, that will meet the required continued air quality improvement. The planning process is heavily focused on stationary and area source controls, and also incorporates anticipated changes in the vehicle fleet with time. Planned emissions reductions are offset by project growth in population, housing, employment and land use. This offset is pronounced in a growth area such as the Antelope Valley. A sheriff station or similar civic use are not directly related to the air quality planning process because the regional plan contains no emissions reduction measures that specifically deal with "indirect" (almost exclusively traffic-generating) sources. Because civic uses are growth-accommodating and not growth inducing, and are designed to meet the needs of the area population as it continues to grow, there is no adverse regional air quality impact from such facilities since they will develop in concert with area population growth.

## AIR QUALITY IMPACT

Civic projects such as the proposed Sheriff's station relocation, potentially impact air quality almost exclusively through increased automotive emissions. Any single project typically does not cause enough traffic and associated air pollutants to be generated as to individually threaten clean air standards. It is the cumulative effect of hundreds of such developments that causes the small incremental impact from any one development to become cumulatively significant. Minor secondary emissions during construction, from increased fossil-fueled energy utilization and from small miscellaneous sources will also be generated, but these are usually much smaller in both duration and volume than the mobile source emissions.

### Standards of Significance

Many air quality impacts which derive from dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally immeasurably small. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The 1993 SCAQMD CEQA Air Quality Handbook states that any projects in the Antelope Valley with daily emissions that exceed any of the following thresholds should be considered as having an individually and cumulatively significant air quality impact:

75 lbs per day of ROC

100 lbs per day of $NO_x$

550 lbs per day of CO

150 lbs per day of PM-10

150 lbs per day of $SO_x$

Additional indicators are listed in the SCAQMD Handbook that should be used as screening criteria to evaluate the need for further analysis with respect to air quality. Whenever possible, the project should be evaluated in a quantitative analysis; otherwise a qualitative analysis is appropriate. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation;
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP;
- Project could generate vehicle trips that cause a CO hot spot;
- Project might have the potential to create or be subjected to objectionable odors;
- Project could have hazardous materials on site and could result in an accidental release of air toxic emissions;
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or State air toxic list;
- Project could involve disposal of hazardous waste;
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hot spots;
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

For the conversion to civic facility of land previously used in agriculture and low-intensity commercial activities such as the project site, secondary significance criteria are rarely triggered. Historical use of the site to park automobiles or as a paint shop may have caused soil contamination from hydrocarbons spilled or otherwise conveyed into the ground. Project construction would not proceed unless any such combination were safely remediated in compliance with SCAQMD rules. Such compliance would preclude the potential for any adverse levels of air toxic emissions. Potential impact significance thus relates mainly to the SCAQMD CEQA Handbook numerical emissions thresholds identified above resulting from project-related traffic.

**Construction Activity Impacts**

Dust is normally the primary concern during construction of new buildings and infrastructure. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions". Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). Regulatory agencies typically use one universal factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into mid-range average values. This assumption may or may not necessarily be applicable to site-specific conditions on the project site. As noted previously, emissions estimation for project-specific fugitive dust sources is therefore characterized by a considerable degree of imprecision.

The PM-10 fraction of fugitive dust emissions are predicted to be around 55 pounds per day per acre disturbed in the absence of any dust control measures being applied (SCAQMD Handbook, Table 9-2). Mandatory measures required by South Coast AQMD Rule 403 (Fugitive Dust) are generally assumed to reduce this rate by approximately 50%. Average daily PM-10 emissions during site grading and other disturbance are stated in the SCAQMD Handbook to be 26.4 pounds/ acre. This estimate is based upon required dust control measures in effect in 1993 when the AQMD CEQA Air Quality Handbook was prepared. Rule 403 was subsequently revised to require use of a greater array of fugitive dust control on construction projects. Use of enhanced dust control procedures such as continual soil wetting, use of supplemental binders, early paving, etc. can achieve a substantially higher PM-10 control efficiency.

PM-10 emissions were calculated by assuming that, at worst case, 11.5 acres, i.e., the entire project area, is under simultaneous heavy construction. The daily PM-10 generation could be as high as 304 pounds per day for the assumed 11.5 acre disturbance area (11.5 X 26.4 = 304 lbs/day). This estimate includes dust control as required by SCAQMD Rule 403 which was assumed to reduce PM-10 emissions by around 50 percent. A more successful dust control program using multiple techniques (chip sealing access roads, hydroseeding exposed surfaces, adding chemical binders or surfactants to the water) may achieve an 80 percent reduction. With a dust control program that exceeds minimum requirements, (i.e., an 80% control rate) daily PM-10 emissions of 121 pounds per day would not exceed the CEQA Handbook PM-10 significance threshold of 150 pounds per day.

Current research in particulate exposure health effects suggest that the most adverse effect derives from ultra-small diameter

particulate matter comprised of chemically reactive pollutants such as sulfates, nitrates or organic material. A new national clean air standard for particulate matter of 2.5 microns or smaller in diameter (called "PM-2.5") was adopted in 1997. Very little construction activity particulate matter is in the PM-2.5 range. Soil dust is also more chemically benign than typical urban atmospheric PM-2.5. The fact that project-related construction activity PM-10 is predicted to exceed the 150 pound/day threshold without enhanced mitigation is therefore not of itself a good indicator of soil disturbance activity air quality impact potential.

In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard. The major dust deposition zone around a construction project is within several hundred feet of the point of origin of the dust. The distance buffer between on-site disturbance and off-site sensitive land uses is well beyond the impact zone. Dust nuisance potential for this project is therefore not considered individually significant.

Exhaust emissions will result from on- and off-site heavy equipment. The types and numbers of equipment will vary among contractors such that these emissions can not be quantified with certainty. Typical emission rates for a single diesel powered scraper were obtained from the SCAQMD Air Quality Handbook. Diesel scrapers are the most common equipment used for grading activities. A project such as the Palmdale Sheriff's station may utilize 10-15 pieces of heavy equipment at any one time during mass grading operations. Assuming that 10 scrapers are operated an average of eight hours per day, the emissions that would be anticipated are shown in Table 3. The values in Table 3 represent theoretical worst-case conditions with on-site equipment operating at 100 percent load non-stop for the entire work-day. The average daily energy load factor is more likely in the 50 percent range, especially for a relatively flat site. Peak grading day emissions may exceed the SCAQMD thresholds, but not necessarily at the levels shown in Table 3.

Table 3 also contains emissions associated with dozer operations during grading, with water trucks for dust control, and with workers commuting to the job site. Grading emissions are assumed to be a worst-case condition. Subsequent construction will utilize smaller types of equipment (backhoes, cement trucks, portable compressors, etc.) at a reduced level of intensity.

# TABLE 3

## TOTAL DAILY CONSTRUCTION ACTIVITY EMISSIONS

| | EMISSIONS (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **CO** | **NOx** | **PM-10** | **SOX** | **ROG** | **Note:** |
| 10 Scrapers | 100 | 307 | 33 | 37 | 21 | 1 |
| 2 Dozers | 6 | 20 | 2 | 2 | 2 | 2 |
| Water Trucks | 9 | 9 | 1 | Negl. | 1 | 3 |
| Worker Commuting | 25 | 3 | 1 | Negl. | 3 | 4 |
| Fugitive Dust | -- | -- | 121 | -- | -- | 5 |
| TOTAL | 140 | 339 | 158 | 39 | 27 | -- |
| SCAQMD Threshold | 550 | 100 | 150 | 150 | 75 | -- |
| Percent of Threshold | 25% | 339% | 95% | 26% | 36% | -- |

Notes:

1. SCAQMD Handbook, Table A9-8 (10 X 8 = 80 hours/day)

2. SCAQMD Handbook, Table A9-8 ( 2 X 8 = 16 hours/day)

3. URBEMIS7G Computer Output - Los Angeles Co. (2002) 500 mi/day heavy truck

4. URBEMIS7G Computer Output - Los Angeles Co. (2002) 2000 mi/day light duty auto/truck

5. 11.5 ac/day X 10.56 lb/ac = 121 lb/day (80% dust control)

Although the $NO_x$ emissions exceed the SCAQMD significance threshold, the mobile nature of the on-site construction equipment and off-site trucks will prevent any microscale violation of the $NO_x$ or other standards. There may be localized instances when the characteristic diesel exhaust odor is noticeable from passing trucks or nearby heavy equipment, but such transitory exposure is a brief nuisance and will not threaten air quality standards. Truck exhaust impacts can be minimized by controlling construction routes to reduce interference with non-project traffic patterns and to preclude truck queuing or idling near sensitive receptor sites.

Some mitigation in the form of anticipated future emission standards for heavy, off-road equipment have been passed by the California ARB to be phased in later in this decade. Until such mandatory standards are promulgated, the South Coast AQMD urges the inclusion of control measures for construction activities as part of any local discretionary actions that are comparably effective as the future mandatory measures. Recommended measures abstracted from the AQMD "menu" of possible control options are detailed in the mitigation section of this report. With mitigation to keep equipment in good tune (low-$NO_x$ tuneups), average daily construction equipment emissions can likely be reduced to a less-than-significant level since the significance (de minimis) threshold is an annual value instead of only focused on a peak activity day.

Construction activity air quality impacts occur mainly in close proximity to individual disturbance areas. There may, however, be some "spill-over" into the surrounding community. That spill-over may be physical as vehicles drop or carry out dirt or silt is washed into public streets. Passing non-project vehicles then pulverize the dirt to create off-site dust impacts. Spill-over may also occur via congestion effects. Construction may entail roadway encroachment, detours, lane closures and competition between construction vehicles (trucks and contractor employee commuting) and ambient traffic for available roadway capacity. Emissions controls require good housekeeping procedures and a construction traffic management plan the maintains such "spill-over" effects at a less-than-significant level.

Construction activities also generate evaporative emissions of volatile organic compounds (VOC) from paints, solvents, asphalt, roofing tar and other coatings. The volatility of the materials used in asphalt is regulated by AQMD rules, as are paints and solvents. Even water-based paint, however, still contains a high percentage of VOCs such that paint and other architectural coatings are the primary source of construction-related VOC emissions. Typical water-based paints contain around 2 pounds of VOC per gallon of paint (AQMD CEQA Handbook, Table A9-13-C).

Application of more than 37.5 gallons per day of paint would cause the SCAQMD threshold of 75 pounds per day of VOCs to be exceeded. A painting schedule to limit average weekly surface coating to less than 225 gallons (225 gal. ÷ 6 days = 37.5 gal./day) is recommended to maintain VOC emissions impact potential at less than significant levels.

**Operational Impacts**

By far, the greatest project-related air quality concern centers on the 1,845 vehicle trips that will be generated at project completion. The California ARB has developed a land use and air pollution emissions computer model that allows one to reliably calculate the daily emissions increase associated with the proposed project. This model, called URB7G, was run for a project build-out year of 2002. The project-related mobile source emissions burden, along with a comparison of SCAQMD recommended significance thresholds, is shown in Table 4.

Emission levels for all mobile source pollutants will be less than the SCAQMD CEQA Air Quality Handbook (1993). A substantial portion of these emissions already occur at the existing sheriff's station. They will be relocated to the proposed new facility, but are not new in a regional sense. Because ozone, and to a large extent particulates, the two pollutants of concern in the Antelope Valley, are mainly regional pollutants, "new" project impacts will derive only from the increment of additional growth in law enforcement activities. This "delta" is only a small increment of the already sub-threshold emission levels shown in Table 4. Operational air quality impacts are considered less than significant.

## TABLE 4

### PROJECT-RELATED MOBILE EMISSIONS BURDEN

| | Emissions (pounds/day) | | | |
|---|---|---|---|---|
| **Sources** | **ROG** | **NOx** | **CO** | **PM-10** |
| All "New" Vehicle Trips | 59.5 | 25.8 | 150.1 | 13.8 |
| SCAQMD Threshold | 75 | 100 | 550 | 150 |
| % of Threshold | 79% | 26% | 27% | 9% |
| Exceeds Threshold (?) | No | No | No | No |

Source: URB7G Computer Model; Output in Appendix

## MITIGATION

Air quality impacts from site operations (employee and visitor travel) will not exceed identified significance thresholds. Temporary construction emissions may exceed thresholds from fugitive dust and equipment exhaust. Recommended construction activity impact mitigation includes:

1. Use of watering for dust control during clearing, grading and construction using groundwater from on-site wells. Availability of brackish or reclaimed water sources should be investigated. Soil disturbance should be terminated when high winds (>25 mph) make dust control extremely difficult.

2. Developing a dust control program to supplement the routine watering that constitutes best available control measures (BACMs) in excess of any minimum SCAQMD Rule 403 requirements. BACMs that may be adopted and integrated an enhanced dust control program might include hydroseeding previously disturbed areas while awaiting construction, adding chemical binders or surfactants to increase the effectiveness of watering, early paving or chip sealing of roads, enforcing reduced travel speeds (15 mph) on unpaved surfaces and/or sand fences and perimeter sandbags.

3. Minimization of construction interference with regional non-project traffic movement. Measures recommended for inclusion are:

    a. Scheduling receipt of construction materials to non-peak travel periods.

    b. Routing construction traffic through areas of least impact sensitivity.

    c. Limiting lane closures and detours to off-peak travel periods.

    d. Providing ride-share incentives for contractor and subcontractor personnel.

4. Reducing "spill-over" effects by preventing soil erosion, washing vehicles entering public roadways from dirt off-road project areas, and washing/sweeping project access to public roadways on an adequate schedule.

5. Requiring emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups. Maximum daily $NO_x$ emissions from all off- and on-road equipment can

not be reduced to less than 100 pounds per day, longer term (quarterly and annual) emissions can be maintained at less-than-significant regional levels with such a program.

6. Limiting grading/soil disturbance to as small an area as practical at any one time and using best available control measures.

7. Limiting the application of architectural surface treatments (i.e., paint, etc.) to average no more than 225 gallons per week over the project construction period.

With the implementation of these measures, construction activity air quality impacts would be reduced to a less-than-significant level.

# APPENDIX

## URB7G Computer Model Output

## (Year 2002 Project-Related Vehicular Emissions)

URBEMIS 7G: Version 3.1

File Name: palmdale.URB
Project Name: Palmdale Sheriff's Station
Project Location: South Coast Air Basin (Los Angeles area)

DETAILED REPORT
(Pounds/Day - Summer)

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2002 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

| Unit Type | Trip Rate | Size | Total Trips |
|---|---|---|---|
| All new trips | 1.00 trips / per Station | 1664.00 | 1,664.00 |

Vehicle Assumptions:

Fleet Mix:

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Duty Autos | 75.00 | 1.16 | 98.58 | 0.26 |
| Light Duty Trucks | 19.00 | 0.13 | 99.54 | 0.33 |
| Medium Duty Trucks | 1.00 | 1.44 | 98.56 | |
| Lite-Heavy Duty Trucks | 0.00 | 19.56 | 40.00 | 40.44 |
| Med.-Heavy Duty Trucks | 0.00 | 19.56 | 40.00 | 40.44 |
| Heavy-Heavy Trucks | 1.00 | | | 100.00 |
| Urban Buses | 1.00 | | | 100.00 |
| Motorcycles | 3.00 | 100.00 % all fuels | | |

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Custome |
| Urban Trip Length (miles) | 10.6 | 4.5 | 5.6 | 9.5 | 5.1 | 5.7 |
| Rural Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| Trip Speeds (mph) | 35 | 40 | 40 | 40 | 40 | 40 |
| % of Trips - Residential | 20.0 | 37.0 | 43.0 | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| All new trips | | | | 30.0 | 15.0 | 55. |

UNMITIGATED EMISSIONS

| | ROG | NOx | CO | PM10 |
|---|---|---|---|---|
| All new trips | 53.69 | 23.22 | 135.38 | 12.46 |

| | ROG | NOx | CO | PM10 |
|---|---|---|---|---|
| TOTAL EMISSIONS (lbs/day) | 53.69 | 23.22 | 135.38 | 12.46 |

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

| | ROG | NOx | CO | PM10 |
|---|---|---|---|---|
| All new trips | 53.69 | 23.22 | 135.38 | 12.46 |

| | ROG | NOx | CO | PM10 |
|---|---|---|---|---|
| TOTAL EMISSIONS (lbs/day) | 53.69 | 23.22 | 135.38 | 12.46 |

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage
0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Uses Within Walking Distance
0 Street System Enhances Safety: No Streets
0 Pedestrian Safety from Crime: No Degree of Safety
0 Visually Interesting Walking Routes: No Visual Interest

0.0 <- Pedestrian Environmental Credit
0.0 /19 = 0.00 <- Pedestrian Effectiveness Factor

Transit Service

0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness
0.0 <- Pedestrian Factor
0.0 <-Total
0.0 /110 = 0.00 <-Transit Effectiveness Factor

Bicycle Environment

0 Interconnected Bikeways: No Bikeway Coverage
0 Bike Routes Provide Paved Shoulders: No Routes
0.0 Safe Vehicle Speed Limits: No Routes Provided
0 Safe School Routes: No Schools
0 Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0 Bike Parking Ordinance: No Ordinance or Unenforceable

0.0 <- Bike Environmental Credit
0.0 /20 = 0.00 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

| Trips Reduced | Measure |
|---|---|
| 15 | Credit for Existing or Planned Community Transit Service |
| 15 | <- Totals |

Pedestrian Enhancing Infrastructure Measures (Residential)

| Trips Reduced | Measure |
|---|---|
| | Credit for Surrounding Pedestrian Environment |
| 2 | <- Totals |

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

| % Trips Reduced | Measure |
|---|---|
| | Credit for Surrounding Pedestrian Environment |
| 2 | <- Totals |

Bicycle Enhancing Infratructure Measures (Residential)

| % Trips Reduced | Measure |
|---|---|
| 7 | Credit for Surrounding Bicycle Environment |
| 7 | <- Totals |

Bike Enhancing Infrastructure Measures (Non-Residential)

| % Trips Reduced | Measure |
|---|---|
| 5 | Credit for Surrounding Area Bike Environment |
| 5 | <- Totals |

Operational Measures (Applying to Commute Trips)

| % Trips Reduced | Measure |
|---|---|
| 0 | <- Totals |

Operational Measures (Applying to Employee Non-Commute Trips)

| % Trips Reduced | Measure |
|---|---|
| 0 | <- Totals |

Operational Measures (Applying to Customer Trips)

| % Trips Reduced | Measure |
|---|---|
| 0 | <- Totals |

Measures Reducing VMT (Non-Residential)

| VMT Reduced | Measure |
|---|---|
| 0 | Park and Ride Lots |
| 0 | <- Totals |

Measures Reducing VMT (Residential)

| VMT Reduced | Measure |
|---|---|
| 0 | <- Totals |

## Total Percentage Trip Reduction
## with Environmental Factors and Mitigation Measures

| Travel Mode | Home-Work Trips | Home-Shop Trips | Home-Other Trips |
|---|---|---|---|
| Pedestrian | 0.00 | 0.00 | 0.00 |
| Transit | 0.00 | 0.00 | 0.00 |
| Bicycle | 0.00 | 0.00 | 0.00 |
| Totals | 0.00 | 0.00 | 0.00 |

| Travel Mode | Work Trips | Employee Trips | Customer Trips |
|---|---|---|---|
| Pedestrian | 0.00 | 0.00 | 0.00 |
| Transit | 0.00 | 0.00 | 0.00 |
| Bicycle | 0.00 | 0.00 | 0.00 |
| Other | 0.00 | 0.00 | 0.00 |
| Totals | 0.00 | 0.00 | 0.00 |

Changes made to the default values

The user has turned off the construction emissions default switch.
The user has turned off the area source emissions default switch.
The default light duty truck fleet mix percentages or fuel/technology classes have been modified

# Appendix C – Cultural Resources Studies

**Project Number:** 99-1498

# Paleontological Resource Assessment of the Proposed Los Angeles County Sheriff's Station Site Palmdale, California

**Prepared for:**
David Evans and Associates
800 N. Haven Avenue, Suite 300
Ontario, California 91764

**Prepared by:**
RMW Paleo Associates, Incorporated
23392 Madero, Suite L
Mission Viejo, California 92691-2737
(949) 770-8042 Voice (949) 458-9058 FAX
rmwpaleo@pacbell.com

**Author:**
Cara L. Burres

Qualified Paleontologist and
Museum Associate of the Los Angeles County
Museum of Natural History

**Date:** August 2000

# Table of Contents



# List of Figures

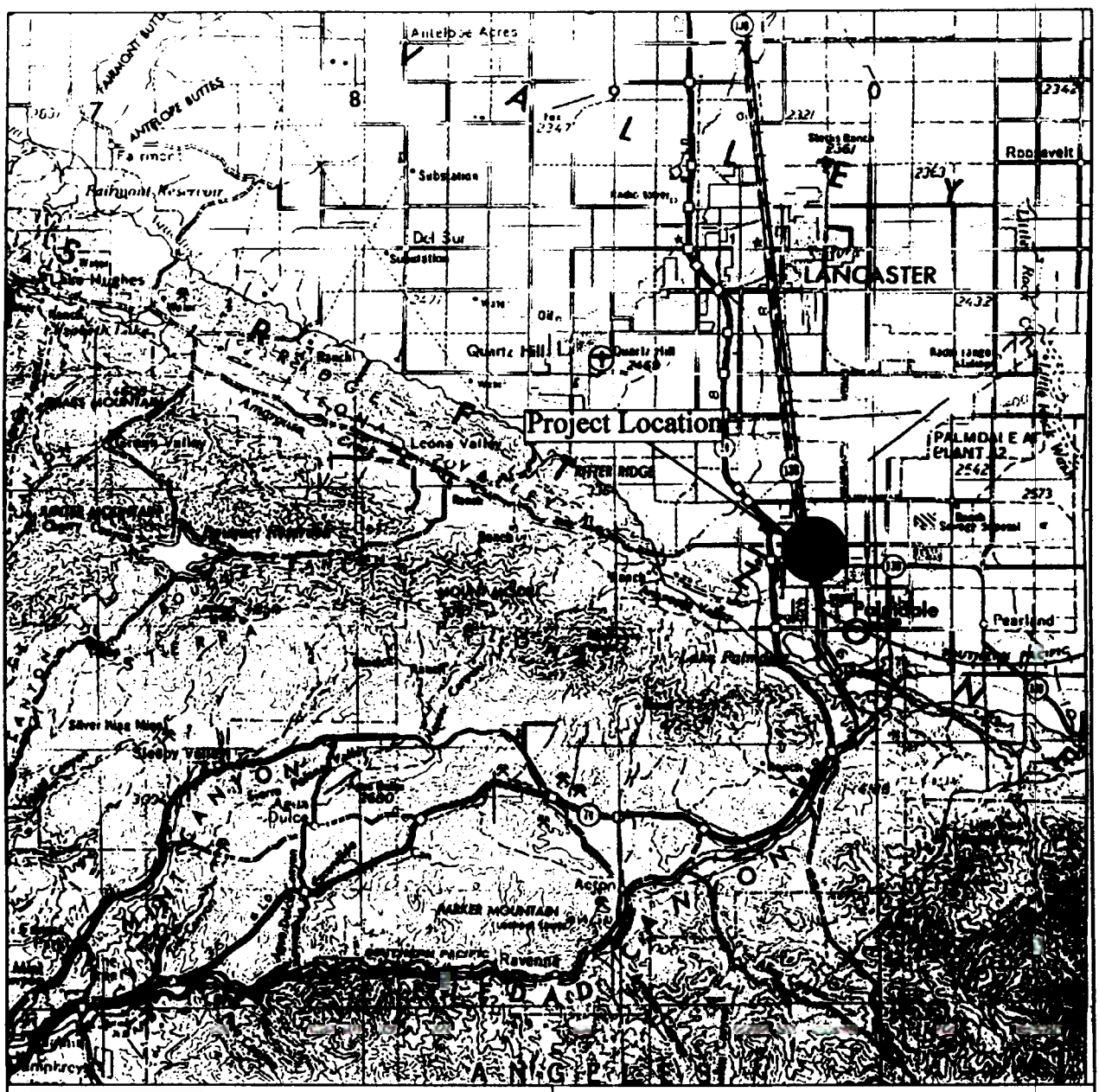
## Introduction

The following report presents the results of RMW Paleo Associates' assessment of the paleontological resources at the proposed location of the Los Angeles County Sheriff's Station, Palmdale, California. The project site consists of an 11.5-acre parcel of land located east of Sierra Highway, south of Avenue Q, west of E Street, and north of Q6 Street (Figure 1 and Figure 2). The proposed undertaking includes construction of the station, a maintenance building, a fuel island, a retention basin, a 120-foot high radio antenna, and a helistop. Other facilities, including a fire station, may be added at a later date.

The purpose of this study is to assess the known and potential paleontological resources within the project area. This assessment is based on a review of the pertinent paleontological and geological literature and maps, previous environmental and paleontological documents and reports, information derived from a record search of known fossil localities of the Los Angeles County Museum of Natural History (Appendix A), and a field reconnaissance of the property by a qualified paleontologist.

## Methods and Personnel

Qualified Paleontologist Cara Burres, of RMW Paleo Associates, surveyed the property on July 12 and 14, 2000. Field procedure consisted of walking transects spaced approximately 5 meters apart across the property and visually examining the ground surface for fossils. Representative rock samples were collected to help determine the geologic formation exposed at the surface. All specimens were transported to the RMW laboratory for analysis.



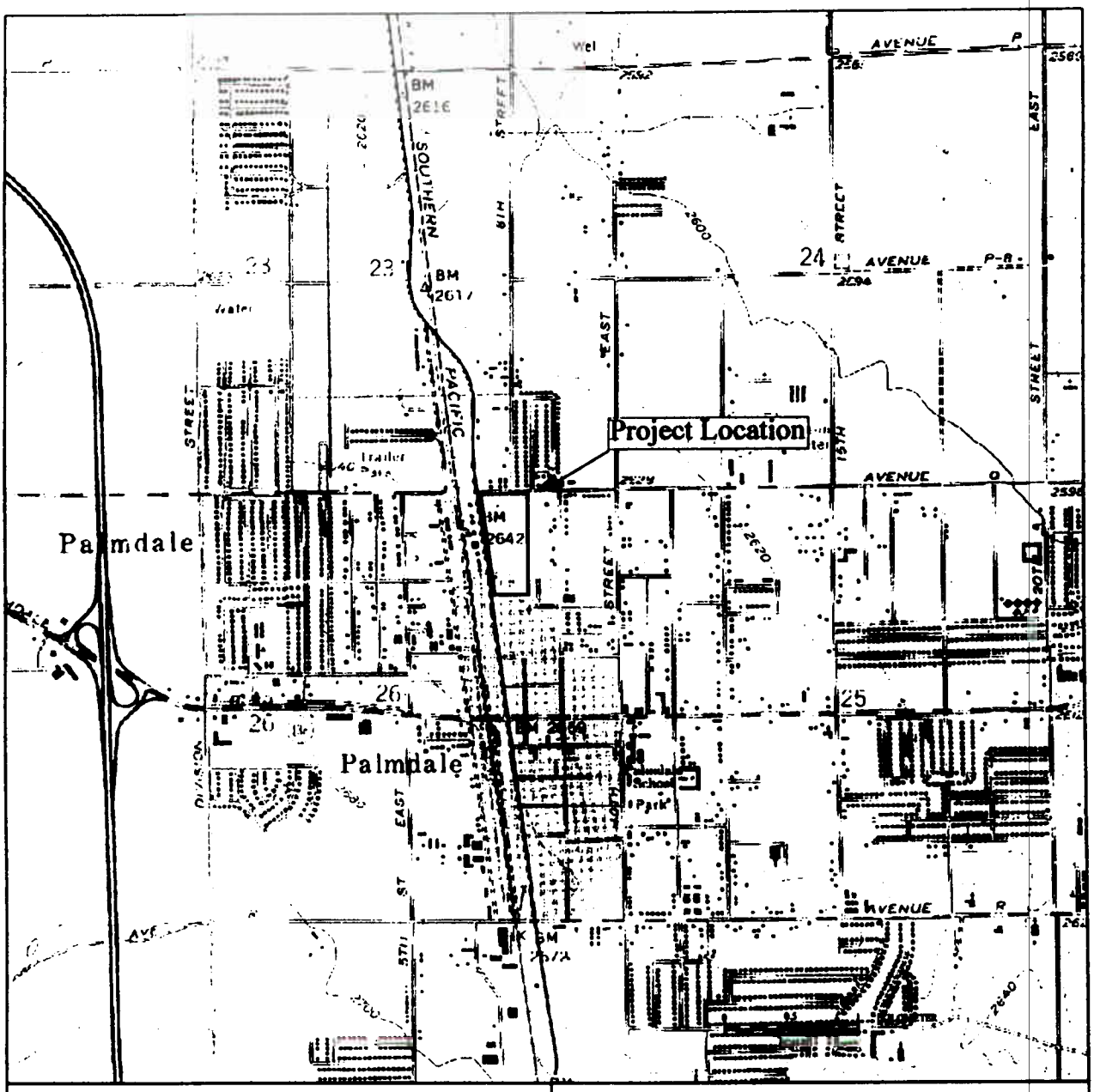

RMW Paleo Associates

Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

Figure 1. Project Vicinity Map

Base Map: Los Angeles, California
USGS 2 Degree Topographic Map
Scale: 1:250,000




RMW Paleo Associates

Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

Figure 1. Project Location Map

N

Base Map: Los Angeles, California
USGS 7.5 minute Topographic Map
Scale: 1:24,000

## Stratigraphy and Paleontology

### *Geologic Setting*

The City of Palmdale lies in the northwest corner of Los Angeles County, north of the San Andreas Fault Zone, within the Antelope Valley region of the western Mojave Desert. The Antelope Valley is roughly a 50 by 100 kilometer rectangle and ranges from 2300 to 2700 feet in elevation. Underlain by granitic bedrock, Antelope Valley is covered by a series of sedimentary rock units ranging in age from late Miocene (about 11 million years ago) to the Recent (less than 10 thousand years in age). The thickness of these sedimentary layers varies dramatically across the valley in different exposures and locations, particularly where faulted. (Woodruff et al 1970, Dibblee 1967)

### *Anaverde Formation*

The oldest sedimentary unit in the Antelope Valley exposed north of the San Andreas Fault is the Anaverde Formation. It is divided into a lower member that is estimated to be late Miocene in age (about 11-5 million years old), and an upper member that is early Pliocene in age (about 4 million years old). The lower Anaverde was deposited as part of an alluvial fan and consists of obscurely bedded, pinkish arkosic sandstone; with occasional rounded granitic cobbles or thin lenses of brown or green shale. The upper Anaverde, in contrast, was laid down as stream, lake, and alluvial fan deposits, and is a well-bedded, yellowish arkosic sandstone, locally conglomeratic, and interbedded with dark, gypsiferous clay shales. (Noble 1953, Dibblee 1967).

Exposures of this formation have been mapped at up to 1500 feet thick in the San Andreas Fault Zone, but it is unlikely that excavations at the study site will impact this rock unit due to the thickness of the overlying, younger sediments. However, several fossil leaf localities are known from the upper Anaverde clay shales, 3.5 miles west of Palmdale (Dibblee 1967). Also, paleosols (ancient soils) within the lower Anaverde have produced significant fossils, both large and small

(Gust 1999). Therefore, if this unit should be encountered during excavations, it must be carefully monitored for significant paleontological resources.

### *Harold Formation*

The Harold Formation dates from the Early Pleistocene or early "ice age", approximately 1.9 to 0.5 million years ago. Deposited in stream bottoms, alluvial fans, and lakes, these sediments consist of well-stratified, interbedded, arkosic sands with pink feldspar, buff sands and silts, mostly angular gravel (generally Pelona schist north of the fault, and granite south of the fault); and, in the lower part of the formation, white or brown clays, locally. The Harold Formation is generally 100 feet or less in thickness due to erosion of the top of the formation in most locations (Weber 1997).

Weber (*personal communication*) states that the Harold Formation is much more limited in area of distribution and in lithology than described previously. His work shows that, "...deposits of the Harold Formation at Palmdale are unique and not correlative with miscellaneous Pleistocene deposits previously identified as Harold Formation extending discontinuously from Palmdale southeast to Cajon Pass" (Weber 1997). Therefore, it is unlikely that subsurface excavations at the study site will impact the Harold Formation due to its limited distribution and the thickness of the overlying sediments.

However, both large and small vertebrate fossils have been recovered from the Harold Formation south and southeast of the project site. These fossils include mammoth, mastodon, camel, horse, wood rat, rabbit, jackrabbit, squirrel, and various mice (Gust 1999, from Natural History Museum of Los Angeles County record search). These fossils are Early Pleistocene in age - a time period which corresponds to the Irvingtonian North American Land Mammal Age (Lundelius et al. 1987). This time period is poorly sampled in Southern California, and any vertebrate fossils recovered from it are significant.

### *Nadeau Gravel*

The Nadeau Gravel was mapped in the Palmdale area by Nobel in 1953. Subsequent workers (Dibblee 1967, Weber *personal communication*) have recognized the Nadeau Gravel as representing a distinct facies (lateral subunit) of the Pleistocene Older Alluvium (see below) occuring in localized deposits, rather than a distinctive formation. The Nadeau Gravel was orignally described as poorly consolidated gravels of several specific types of Pelona Schist, interbedded with dark, micaceous sands, and not easily differentiated from the Harold Formation in some outcrops (Noble 1953). The Nadeau Gravel is commonly less than 50 feet in thickness and no fossils are known from them (Noble 1953, Gust 1999).

### *Quaternary Alluvium*

The Quaternary Age includes both the Pleistocene Epoch (1.8 million to 10,000 years ago) and the Holocene Epoch (10,000 years ago to the present). Generally, most workers have recognized two groups of Quaternary sediments in the Antelope Valley, Older Alluvium and Younger Alluvium. However, the actual age of the sediments has been difficult to determine (Noble 1953, Dibblee 1967, Weber *in review)*. Younger Alluvium is generally considered to be Holocene in age and is, therefore, geologically too young to contain fossils. However, these superficial sediments can contain cultural remains. Older Alluvium was deposited during the Pleistocene and may contain the fossil remains of animals that lived during the Ice Age (Govean 1996). Older alluvium is measured at as much as 400 feet in thickness in the San Gabriel Mountain foothill area, west of Valyermo (Dibblee 1967).

#### Quaternary Alluvial Fans of the Palmdale Area

The alluvial sediments that blanket the desert valleys and floodplains in the Palmdale area were derived from the San Gabriel Mountains and deposited primarily as alluvial fans. Alluvial fans are

formed by deposition of stream sediment. Their characteristic "fan" shape results as the narrow stream channel through mountains opens out onto flat lands in all available directions. The paths of these ancient stream fans can be traced across the valley by analyzing the present topography and tracing the types of rock back to their source areas in the mountains.

The relative age of different fans can be inferred by the degree of compaction and induration (hardening) of the sediments, and by how much the deposits have been dissected by erosion. The older alluvium generally rests unconformably on older formations, tends to be more dissected by erosion, and is relatively compacted. The younger alluvium is generally not as well compacted or dissected by erosion, and may even be part of still-active stream deposits. (Weber *personal communication,* Dibblee 1967).

**Anaverde Older Alluvial Fan**

The older alluvium exposed at the surface of the study site has been mapped by Weber (*in review*) as the Anaverde older alluvial fan (unit $Qof_7$ on his map). These sediments were deposited by Anaverde Creek and extend from the Anaverde Valley, southwest of the city, across Palmdale in a north-northeasterly direction. The sediments are mostly, "...silts, sands, and pebble to small-cobble gravels." The gravels are composed of, "...Pelona Schist, syenite, and gneissic-granitic rocks." The ground surface is, "...generally reddish, firm, clayey, and slightly dissected." A good exposure of the Anaverde fan close to the study site is located in the "...drainage ditch [on the] west side of [the] Southern Pacific Railroad tracks, from Palmdale Boulevard south for 500 meters."). (Weber *in review*).

The Anaverde fan in the study area is estimated to have formed during the Late Pleistocene and could be as old as (or older than) 50,000 years (Weber *personal communication*). Elsewhere in the Mojave Desert, older alluvial sediments have yielded many significant fossils of, both large and

small, Late Pleistocene land mammals (Reynolds 1988, Lander 1998) therefore the potential for finding fossils in these deposits at the study site is high.

Small mammals, such as rodents, are particularly important for paleontologic research, as they generally have a smaller geographic range and speciate more rapidly in response to environmental change due to their higher reproductive rates. Since alluvial fan deposits are the most common Quaternary landform of the Great Basin, the biostratigraphic information derived from small mammal fossils found in the Anaverde alluvial fan could be very significant for geologic studies on a regional scale.

## Survey Results

No fossils were observed or collected during the surface survey. It was noted, however, that the surface of the study site was littered with modern trash. This trash included the bones of many modern animals such as chicken, turkey, pig, cow, and house cat. Rock samples collected during the survey were identified as consistent with Pelona Schist (Carter *personal communication*), one of the primary cobble constituents of the older alluvial fans.

## Paleontologic Potential

Paleontologic potential is a measure of the likelihood that fossils will be discovered during excavations into a given rock unit in a specific location. This potential is based in part on the past discovery of fossils from that rock unit. The potential for discovery of fossils does not measure the significance of individual fossils present within the study area, however, because it is impossible to predict what individual fossils may be discovered. The significance of an individual fossil can only be determined after it is discovered and studied.

The different designations of paleontologic potential for rock units currently in use by the Society of Vertebrate Paleontology are listed below with an abbreviated description of each. The

guidelines for assessment and mitigation of adverse impacts to nonrenewable paleontologic resources of the Society of Vertebrate Paleontology are the national standard (Appendix B).

**High potential:** Rock units from which vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources.

**Indeterminate potential:** Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potential.

**Low potential:** Reports in the paleontologic literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils.

### *Anaverde Formation*

The Anaverde Formation has a high potential for the discovery of fossils. However, it is unlikely that excavations will encounter this unit, due to the thickness of the overlying younger sediments. However, should this unit be encountered during excavations, it must be carefully monitored for significant paleontological resources at the study site.

### *Harold Formation*

The Harold Formation has a high potential for the discovery of fossils. Recent work has shown that the Harold Formation has a restricted distribution, contra previous work, and may not occur as far north as the study site. If this formation does extend in the subsurface to the study site and it is encountered during excavations, it must be carefully monitored for significant paleontologic resources.

### *Anaverde Older Alluvial Fan*

The Anaverde older alluvial fan has a high potential for the discovery of fossils at the study site. Monitoring and sediment processing techniques that can locate both large and small fossils need to be implemented, as fossils from these alluvial fan sediments can be very significant for regional geologic studies.

## Recommendations

Grading operations associated with development of the 11.5-acre parcel in Palmdale will impact paleontological resources of the Anaverde older alluvial fan. The following mitigation measures will reduce the adverse impacts to an acceptable level. These mitigation measures have proven successful in protecting paleontological resources, while allowing the timely completion of many developments in Southern California. The following mitigation measures conform to, but are not limited to, the mitigation measures recommended by the Society of Vertebrate Paleontology and CEQA.

1) Full-time monitoring by a qualified paleontologist is required during earth-moving activities in high sensitivity formations, the most likely being the Anaverde alluvial fan.

2) Due to the high sensitivity of the native sediments in the project area, a full-time paleontological monitor should be present at the beginning of each day of earth moving in native sediments. The monitor will consult with the grading foreman about the plan for the day, determine the impact, and adjust monitoring time accordingly. Fill will not be monitored.

3) The monitor will have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed fossil material within the project area. Any scientifically significant specimens found within the project area or in danger due to indirect impacts of the project will be properly salvaged by the monitor. Contextual stratigraphic

information will also be recovered from the fossil location. This will include lithologic descriptions, plotting localities on standard USGS topographic sheets, field notes, and photographs.

4) Additionally, standard 200-pound sediment samples will be screenwashed from each formation encountered to determine if small vertebrate fossils are present. Sediments may be stockpiled on site to facilitate screenwashing operations and to allow construction to continue without delay. Should a particular formation be productive of small vertebrate fossils, additional sediment will be screenwashed to a total of 6000 pounds per formation.

5) All fossil specimens recovered will be stablized, prepared, identified, packaged, and transported to an accredited museum for curation (Natural History Museum of Los Angeles County).

6) A report will be prepared by the paleontologist upon completion of earth-moving activities that will inventory the recovered specimens, map the locality information, and interpret the recovered fossils. The report will be sent to the City of Palmdale. A copy will accompany the fossils to the repository, along with all other documentation.

## Acknowledgments

RMW Paleo Associates appreciates the opportunity to work with you on this project. Please contact us if you have any questions, or if we can be of any additional service.

Respectfully submitted,

Cara L. Burres

Cara L. Burres
Qualified Paleontologist and
Museum Associate of the Los Angeles County Museum

## References Cited


Dibblee, Thomas Jr.
1967 Areal geology of the Western Mojave Desert, California. *Geological Survey Professional Paper 522*, pp. 1-133.

Govean, Francis
1996 Paleontologic Resources. In: Avenue S Corridor Study Area, Final Environmental Constraints Analysis Report, Jones & Stokes Associates, Inc. On file at the City of Palmdale.

Gust, Sherri M.
1999 Paleontological Assessment Report for Avenue S Widening Project, Palmdale, California. On file at RMW Paleo Associates, Mission Viejo, California.

Lander, E. Bruce.
1988 Paleontologic Resource Assessment City of Palmdale vesting tentative tract 46391 Palmdale, Los Angeles County, California. On file at Paleo Environmental Associates, Altadena, California.

Lundelius, Ernest L., et al.
1987 The North American Quaternary sequence. In: *Cenozoic Mammals of North America, Geochronology and Biostratigraphy*, M. O. Woodburne, editor.

Noble, Levi F.
1953 Geology of the Pearland (6-minute) Quadrangle, California. *U.S. Geological Survey Geologic Quadrangle Map GQ-24*, Washington D.C.

Reynolds, Robert E.
1988 Paleontologic resource overview and management plan for Edwards Air Force Base, California. On file at the San Bernardino County Museum, Redlands, CA.

Weber, F. Harold Jr.
1997 Right-lateral displacement of Pleistocene sedimentary deposits along the San Andreas Fault, Palmdale to Cajon Pass, Southern California. *U.S. Geological Survey, National Earthquake Hazards Reduction Program, Annual Summary*, 5pp.

Weber, F. Harold Jr.
in review Geologic map of the Palmdale 7.5-minute quadrangle. In review by California Department of Conservation, Division of Mines and Geology since April 1998.

Woodruff, George A., William J. McCoy, Wayne B. Sheldon.
1970 Soil survey of the Antelope Valley Area, California. *US Department of Agriculture Soil Conservation Service*, in cooperation with UCLA Agricultural Experiment Station.

## Personal Communications

Carter, Bruce.
2000 Geologist and Dean of Natural Sciences, Pasadena City College. Conversation and examination of rock samples, July.

Weber, F. Harold Jr.
2000 Retired USGS Geologist and Independent Investigator, USGS Award No.: 1434-HQ-97-GR-03168. Telephone conversations and letter, August.

# Appendix A.

# Record Search

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

NATURAL HISTORY MUSEUM
OF LOS ANGELES COUNTY
900 Exposition Boulevard
Los Angeles, CA 90007

21 June 2000

RMW Paleo Associates
23392 Madero, Suite L
Mission Viejo, CA 92691
Attn: Sherri Gust

re: Paleontological resources for the Palmdale Sheriff's Station - RMW project 99-1498

Dear Sherri:

I have searched our paleontology collection records for the locality and specimen data for the Palmdale Sheriff's Station project area as outlined on the section of the Palmdale quadrangle map that you faxed me on 16 June 2000. We have no localities within the project boundaries, but we do have localities nearby.

Our closest localities are LACM (CIT) 399, 451 and 589 as well as LACM 5761, all southeast of the proposed project area. LACM (CIT) 399 and 451 lie in the San Adreas Rift Zone on the north side of Palmdale Ditch southeast of Barrel Springs. LACM (CIT) 589 and LACM 5761 lie southwest of Barrel Springs with LACM 5761 being in the northern-most part of Section 18, T 5 N, R 11 W. These localities are all within the terrestrial Pliocene (Blancan NALMA) Harold Formation. All these localities have produced mastodonts and fossil horses. The more general locality of LACM (CIT) 589, collected by C. Lewis Gazin in the 1920's has produced a more diverse fauna with birds, carnivores, rabbits identified as both *Lepus* and *Sylvilagus*, and rodents of the genera *Reithrodontomys*, *Peromyscus* and *Neotoma*.

Presumably, the Harold Formation extends down elevation to the level exposed in the proposed project area south of Avenue Q and east of the Sierra Highway 14. If so, there is a very good chance that subsurface excavation in the proposed project area will expose significant vertebrates fossils, as this time period is poorly sampled in the southern California region. The surficial deposits in the proposed project area, however, are composed of Quaternary Alluvium which has only a modest chance of producing substantial fossil vertebrates. Thus any substantial subsurface excavation in the project area should be closely monitored to quickly and professionally collect any vertebrate fossil remains without impeding development.

Sincerely,

Samuel A. McLeod
Vertebrate Paleontology

enclosure: invoice

# Appendix B.

# SVP Guidelines

## SOCIETY OF VERTEBRATE PALEONTOLOGY

## ASSESSMENT AND MITIGATION OF ADVERSE IMPACTS TO NONRENEWABLE PALEONTOLGICAL RESOURCES:

## STANDARD GUIDELINES

(SVP Bulletin 163:22-27 1995)

Introduction

Vertebrate fossils are significant nonrenewable paleontologic resources that are afforded protection by federal, state, and local environmental laws and guidelines. The potential for destruction or degradation by construction impacts to paleontologic resources on public lands (federal, state, county, or municipal) and land selected for development under jurisdiction of various governmental planning agencies is recognized. Protection of paleontological resources includes: (a) assessment of the potential for property to contain significant nonrenewable paleontological resources which might be directly or indirectly impacted, damaged, or destroyed by development, and (b) formulation and implementation of measures to mitigate adverse impacts, including permanent preservation of the site and/or permanent preservation of salvaged materials in established institutions. Decisions regarding the intensity of the Paleontological Resource Impact Mitigation Program (PRIMP) will be made by the Project Paleontologist on the basis of the paleontological resources, not on the ability of an applicant to fund the project.

### ASSESSMENT OF THE PALEONTOLOGICAL POTENTIAL OF ROCK UNITS

Sedimentary rock units may be described as having (a) high (or known) potential for containing significant nonrenewable paleontologic resources, (b) low potential for containing nonrenewable paleontologic resources, or (c) undetermined potential.

- It is extremely important to distinguish between archaeological and paleontological (=fossil) resource sites when defining the sensitivity of rock units. The boundaries of archaeological sites define the areal extent of the resource. Paleontologic sites, however, indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontologic potential in each case. Paleontologists can thus develops maps which suggest sensitive areas and units that are likely to contain paleontological resources. These maps form the bases for preliminary planning decisions. Lead agency evaluation of a project relative to paleontologic sensitivity maps should trigger a "request for opinion" from a state paleontologic clearing house or an accredited institution with an established paleontological repository.

The determination of a site's (or rock unit's) degree of paleontological potential is first founded on a review of pertinent geological and paleontological literature and on locality records of specimens deposited in institutions. This preliminary review may suggest particular areas of known high potential. If an area of high potential cannot be delimited from the literature search

and specimen records, a surface survey will determine the fossiliferous potential and extent of the sedimentary units within a specific project. The field survey may extend outside the defined project to areas where rock units are better exposed. If an area is determined to have a high potential for containing paleontologic resources, a program to mitigate impacts is developed. In areas of high sensitivity, a pre-excavation survey prior to excavation is recommended to locate surface concentrations of fossils which might need special salvage methods.

The sensitivity of rock units in which fossils occur may be divided into three operational categories.

I. HIGH POTENTIAL. Rock units from which vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant nonrenewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontologic resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical, and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

II. UNDETERMINED POTENTIAL. Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field Surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

III. LOW POTENTIAL. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections. These deposits generally will not require protection or salvage operations.

## MEASURES TO MITIGATE ADVERSE IMPACTS RESULTING FROM DEVELOPMENT

Measures for adequate protection or salvage of significant nonrenewable paleontologic resources are applied to areas determined to have a high potential for containing significant fossils. Specific mitigation measures generally need not be developed for areas of low paleontological potential. Developers and contractors should be made aware, however, that it is necessary to contact a qualified paleontologist if fossils are unearthed in the course of excavation.

The paleontologist will then salvage the fossils and assess the necessity for further mitigation measures, if applicable.

Areas of High Potential

In areas determined to have a high potential for significant paleontologic resources, an adequate program for mitigating the impact of development should include:

a preliminary survey and surface salvage prior to construction;

monitoring and salvage during excavation;

preparation, including screen washing to recover small specimens (if applicable), and specimen preparation to a point of stabilization and identification;

identification, cataloging, curation, and storage; and

A final report of the finds and their significance after all operations are complete.

All phases of mitigation are supervised by a professional paleontologist who maintains the necessary paleontologic collecting permits and repository agreements. The Lead Agency assures compliance with the measures developed to mitigate impacts of excavation during the initial assessment. To assure compliance from the start of the project, a statement that confirms the site's potential sensitivity, confirms the repository agreement with an established institution, and describes the program for impact mitigation, should be deposited with the Lead Agency and contractors before work begins. The program will be reviewed and accepted by the Lead Agency's designated vertebrate paleontologist. If a mitigation program is initiated early during the course of project planning, construction delays due to paleontologic salvage activities can be minimized or avoided.

## RECOMMENDED GENERAL GUIDELINES

These guidelines are designed to apply to areas of high paleontologic potential.

Assessment Before Construction Starts.

Preconstruction assessment will develop an adequate program of mitigation. This may include a field survey to delimit the specific boundaries of sensitive areas and pre-excavation meetings with contractors and developers. In some cases it may be necessary to conduct field survey and/or a salvage program prior to grading to prevent damage to known resources and to avoid delays to construction schedules. Such a program may involve surface collection and/or quarry excavations. A review of the initial assessment and proposed mitigation program by the Lead Agency before operations begin will confirm the adequacy of the proposed program.

Adequate Monitoring.

An excavation project will retain a qualified project paleontologist. In areas of known high potential, the project paleontologist may designate a paleontologic monitor to be present during 100% of the earth-moving activities. If, after 50% of the grading is completed, it can be demonstrated that the level of monitoring should be reduced, the project paleontologist may so amend the mitigation program.

Paleontologists who monitor excavations must be qualified and experienced in salvaging fossils, and authorized to temporarily divert equipment while removing fossils. They should be properly equipped with tools and supplies to allow rapid removal of specimens.

Provision should be made for additional assistants to monitor or help in removing large or abundant fossils to reduce potential delays to excavation schedules. If many pieces of heavy equipment are in use simultaneously but at diverse locations, each location may be individually monitored.

Macrofossil Salvage.

Many specimens recovered from paleontological excavations are easily visible to the eye and large enough to be easily recognized and removed. Some may be fragile and require hardening before moving. Others may require encasing within a plaster jacket for later preparation and conservation in a laboratory. Occasionally specimens encompass all or much of a skeleton and will require moving either as a whole or in blocks for eventual preparation. Such specimens require time to excavate and strengthen before removal and the patience and understanding of the contractor to recover specimens properly. It is thus important that the contractors and developers are fully aware of the importance and fragility of fossils for their recovery to be undertaken with the optimum chances of successful extraction. The monitor must be empowered to temporarily halt or redirect the excavation equipment away from the fossils to be salvaged.

Microfossil Salvage.

Many significant vertebrate fossils (e.g., small mammal, bird, reptile, or fish remains) are too small to be visible within the sedimentary matrix. Fine-grained sedimentary horizons and paleosols most often contain such fossils. They are recovered through concentration by screen washing. If the sediments are fossiliferous, bulk samples are taken for labor processing to recover any fossils. An adequate sample comprises 12 cubic meters (6,000 lbs. or 2,500 kg) of matrix for each site horizon or paleosol, or as determined by the supervising paleontologist. The uniqueness of the recovered fossils may dictate salvage of larger amounts. To avoid construction delays, samples of matrix should be removed from the site and processed elsewhere.

Preservation of Samples.

Oriented samples must be preserved for paleomagnetic analysis. samples of fine matrices should be obtained and stored for pollen analysis. Other matrix samples may be retained with the samples for potential analysis by later workers, for clast source analysis, as a witness to the source rock unit and possibly for procedures that are not yet envisioned.

Preparation.

Recovered specimens are prepared for identification (not exhibition) and stabilized. Sedimentary matrix with microfossils is screen washed and sorted to identify the contained fossils. Removal of excess matrix during the preparation process reduces storage space.

Identification.

Specimens are identified by competent qualified specialists to a point of maximum specificity. Ideally, identification is of individual specimens to element, genus, and species. Batch identification and batch numbering (e.g., "mammals, 75 specimens") should be avoided.

Analysis.

Specimens may be analyzed by stratigraphic occurrence, and by size, taxa, or taphonomic conditions. This results in a faunal list, a stratigraphic distribution of taxa, or evolutionary, ecological, or depositional deductions.

Storage.

Adequate storage in a recognized repository institution for the recovered specimens is an essential goal of the program. Specimens will be cataloged and a complete list will be prepared of specimens introduced into the collections of a repository by the curator of the museum or university. Adequate storage includes curation of individual specimens into the collections of a recognized, nonprofit paleontologic specimen repository with a permanent curator, such as a museum or a university. A complete set of field notes, geologic maps, and stratigraphic sections accompany the fossil collections. Specimens are stored in a fashion that allows retrieval of specific, individual specimens by researchers in the future.

Site Protection.

In exceptional instances the process of construction may reveal a fossil occurrence of such importance that salvage or removal is unacceptable to all concerned parties. In such cases, the design concept may be modified to protect and exhibit the occurrence within the project's design, e.g., as an exhibit in a basement mall. Under such circumstances, the site may be declared and

dedicated as a protect resource of public value. Associated fragments recovered from such a site will be placed in an approved institutional repository.

Final Report.

A report is prepared by the project paleontologist including a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. A complete set of field notes, geological maps, stratigraphic sections, and a list of identified specimens accompany the report. The report is finalized only after all aspects of the program are completed. The Final Report together with its accompanying documents constitute the goals of a mitigation project. Full copies of the Final Report are deposited with the Lead Agency and the repository institution.

Compliance.

The Lead Agency assures compliance with measures to protect fossil resources from the beginning of the project by:

requesting an assessment and program for impact mitigation which includes salvage and protection during initial planning phases,

by arranging for recovered specimens to be housed in an institutional paleontologic repository, and

by requiring the Final Report.

The supervising paleontologist is responsible for:

assessment and development of the program for impact mitigation during initial planning phases,

the repository agreement,

the adequacy and execution of the mitigation measures, and

the Final Report.

Acceptance of the Final Report for the project by the Lead Agency signifies completion of the program of mitigation for the project. Review of the Final Report by a vertebrate paleontologist designated by the Lead Agency will establish the effectiveness of the program and adequacy of the report. Inadequate performances in either field comprise noncompliance, and may result in the Lead Agency removing the paleontologist from its list of qualified consultants.

DEFINITIONS

A QUALIFIED VERTEBRATE PALEONTOLOGIST is a practicing scientist who is recognized in the paleontologic community and is proficient in vertebrate paleontology, as demonstrated by:

institutional affiliations or appropriate credentials,

ability to recognize and recover vertebrate fossils in the field,

local geological and biostratigraphic expertise,

proficiency in identifying vertebrate fossils, and

publications in scientific journals.

A PALEONTOLOGICAL REPOSITORY is a publicly supported, not-for-profit museum or university employing a permanent curator responsible for paleontological records and materials. Such an institution assigns accession and catalog numbers to individual specimens which are stored and conserved to ensure their preservation under adequate security and climate control. The repository will also retain site lists of recovered specimens, and any associated field notes, maps, diagrams, or associated data. It makes its collections of cataloged specimens available to researchers.

SIGNIFICANT NONRENEWABLE PALEONTOLGOIC RESOURCES are fossils and fossiliferous deposits here restricted to vertebrate fossils and their taphonomic and associated environmental indicators. this definition excludes invertebrate or botanical fossils except when present within a given vertebrate assemblage. certain plant and invertebrate fossils or assemblages may be defined as significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by Lead Agencies or local governments.

A SIGNIFICANT FOSSILIFEROUS DEPOSIT is a rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnities and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years B.P.

A LEAD AGENCY is the agency responsible for addressing impacts to nonrenewable resources that a specific project might generate.

PALEONTOLGIC POTENTIAL is the potential for the presence of significant nonrenewable paleontological resources. All sedimentary rocks, some volcanic rocks, and some metamorphic rocks have potential for the presence of significant nonrenewable paleontologic resources. Review of available literature may further refine the potential of each rock unit, formation, or facies.

PALEONTOLOGIC SENSITIVITY is determined only after a field survey of the rock unit in conjunction with a review of available literature and paleontologic locality records. In cases where no subsurface data are available, sensitivity may be determined by subsurface excavation.

**AUTHOR:** David Ferraro
**PRINCIPAL INVESTIGATOR:** Ronald M. Bissell

**DATE:** August 2000

**TITLE:** Archaeological Survey of the Proposed Locality of the Palmdale Sheriff's Station, Palmdale, Los Angeles County, California.

**SUBMITTED BY:**
RMW Paleo Associates, Incorporated
23392 Madero, Suite L
Mission Viejo, California 92691
(949) 770-8042 FAX (949) 458-9058

**SUBMITTED TO:**
David Evans and Associates, Inc.
800 North Haven Avenue Suite 300
Ontario, California 91764

**CONTRACT NUMBER:** RMW Project Number 99-1498

**MAP:** Palmdale, California

**ACREAGE:** 11.5 Acres

**KEYWORDS:** Palmdale, Los Angeles County, Site CA-LAN-2808, Mojave Desert, Antelope Valley, Palmenthal,

## MANAGEMENT SUMMARY/ABSTRACT

**Purpose and Scope**: RMW Paleo Associates, Inc. has been retained to identify cultural properties located on the proposed site for the Los Angeles County Sheriff's Station located in the City of Palmdale, California. The investigation was performed for David Evans Associates, Inc. under contract with the Los Angeles County Department of Public Works. The proposed undertaking includes construction of the station, a maintenance building, a fuel island, a retention basin, 120-foot tall radio antenna, and a helistop. RMW Paleo Associates, Inc. performed a literature search at the South Coastal Information Center at California State University, Fullerton and a pedestrian survey of the property to determine the presence or absence of cultural properties.

**Dates of Investigation**: The literature search was performed on 20 June 2000, the pedestrian survey on 24 July 2000, and the survey report was written in August 2000.

**Summary of Findings**: The literature review identified two previous archaeological investigations (a literature review and a reconnaissance survey) that touched on the property. Neither discovered previously recorded historic properties on the project locality, but a review of historic maps, USGS Palmdale (1937) and Lake Elizabeth (1915), indicated that two structures existed on or near the property in 1937, and a third existed on or near its eastern border in 1915. The reconnaissance survey revealed the existence a foundation at the location of one of the structures on the 1937 map, and the site was recorded (CA-LAN-2808). Modern and possibly historic trash was scattered over the entire property, but no artifacts dating positively to the historic era could be found.

**Undertaking Effects:** Project design has not yet been completed, so the effects it will have on the site cannot be assessed at this time.

**Investigation Constraints:** No constraints to completion of this reconnaissance were encountered.

**Recommendation Summary**: Site CA-LAN-2808 does not appear to be eligible for inclusion in the California Register of Historic Places, since the foundation lacks architectural integrity and no historic trash deposits providing historical information were noted. Although a great deal of trash was located on the property, its association with any of the structures appearing on the historic maps is unclear. Monitoring of grading on the property and excavation of discrete trash deposits as they appear is recommended.

**Disposition of Data:** A copy of this report will be filed with the South Central Coastal Information Center, David Evans and Associates, and RMW Paleo Associates, Inc. All field notes, photographs, and other documents are on file at RMW Paleo Associates.

## TABLE OF CONTENTS



### Figures

## INTRODUCTION

RMW Paleo Associates, Inc. was retained to identify and evaluate cultural properties located on the proposed site for the Los Angeles County Sheriff's Station located in the City of Palmdale, California. The investigation was performed for David Evans Associates, Inc. under contract with the Los Angeles County Public Works Department. The proposed undertaking includes construction of the station, a maintenance building, a fuel island, a retention basin, 120-foot high radio antenna, and a helistop. Other facilities including a fire station may be added at a later date.

David Ferraro of RMW Paleo Associates, Inc surveyed the site for cultural resources on 24 July 2000. The survey was accomplished in compliance with the *California Environmental Quality Act* (*CEQA*), and the regulations for the *California Register of Historic Resources* (Office of Historic Preservation 1994 and 1997). This report details survey results and complies with Archaeological Resources Management Reports guidelines (Office of Historic Preservation 1990).

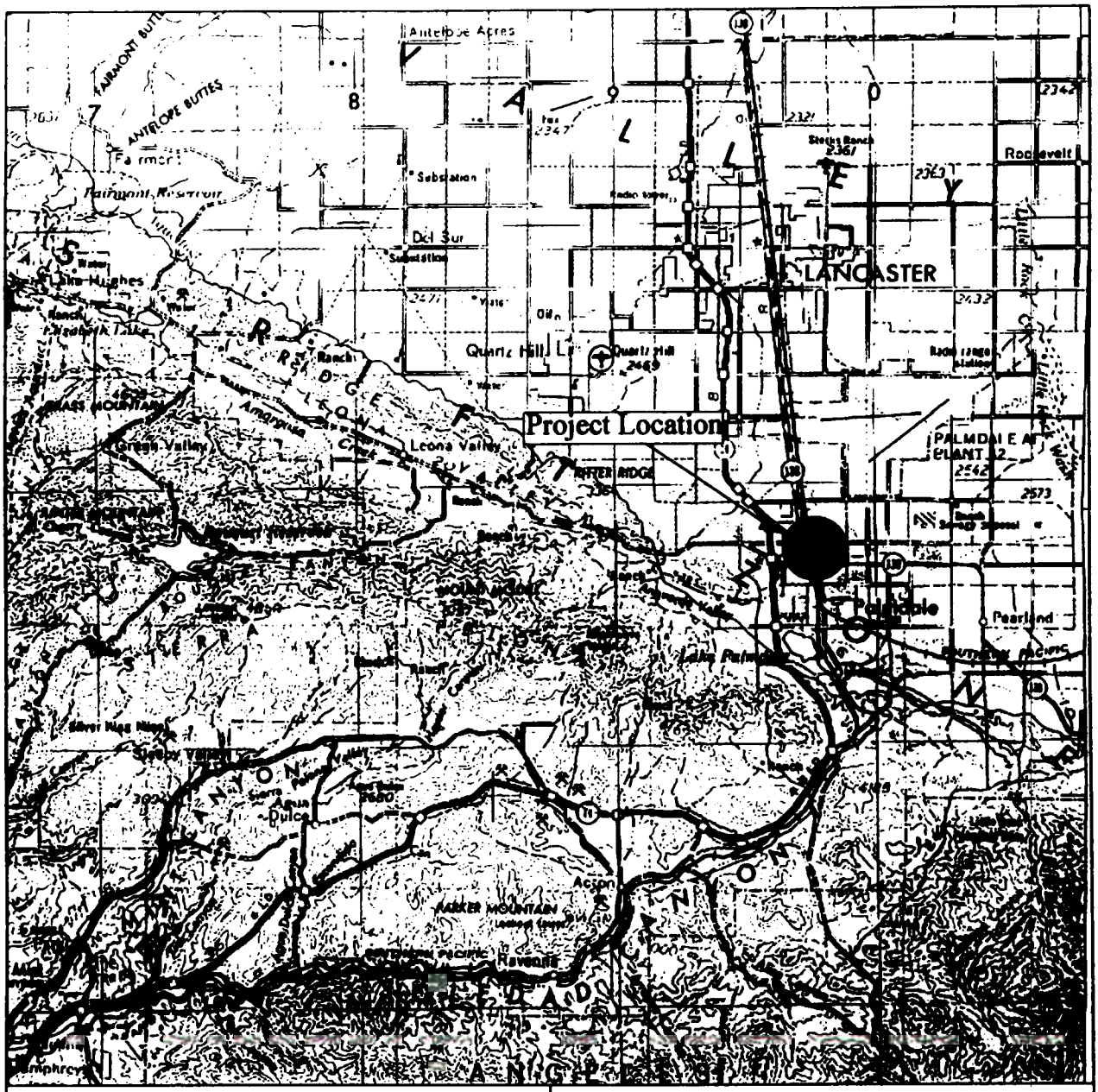
Resources that are at least 50 years old are potentially eligible for listing on the *National Register of Historic Places* and for the *California Register of Historic Places,* and are considered historic. If they occur, such resources must be evaluated for significance. The Office of Historic Preservation recommends *recording* all cultural resources in excess of 45 years old. The 45 year criteria recognizes there is often a five year lag between resource identification and the date when planning decisions are made (Office of Historic Preservation 1995b:2).

The survey resulted in discovery of a historic era structural foundation on the southwestern corner of the property. Review of historic maps (USGS Lake Elizabeth, 1915 and USGS Palmdale, 1937), indicates a structure at this location and a second just off the property to the south in 1937 (Figure 3). Neither is depicted on the 1915 map, but in that year a third structure is located near the northeastern corner of property (Figure 4). Neither the second structure on the 1937 map nor the third on the 1915 map were relocated. The 1937 structure was either destroyed or buried during construction of a parking lot to the south of the property. The existing structure does not appear to qualify for the California Register of Historic Places at this time, but additional materials might be uncovered during site grading. Monitoring is therefore recommended during subsurface excavation.

## SETTING

### Natural

Palmdale lies in the northern corner of Los Angeles County in the Antelope Valley in the western margins of the Mojave Desert. The 50x100 kilometer Antelope Valley ranges from 2300 to 2700 feet in elevation and is located on the northern edge of the San Gabriel Mountains. It is divided from the vast San Joaquin Valley to the northwest by the Tehachapi Mountains. Two playas, Rosamond and Rogers Dry Lakes are found on the valley floor, and in the late Pleistocene



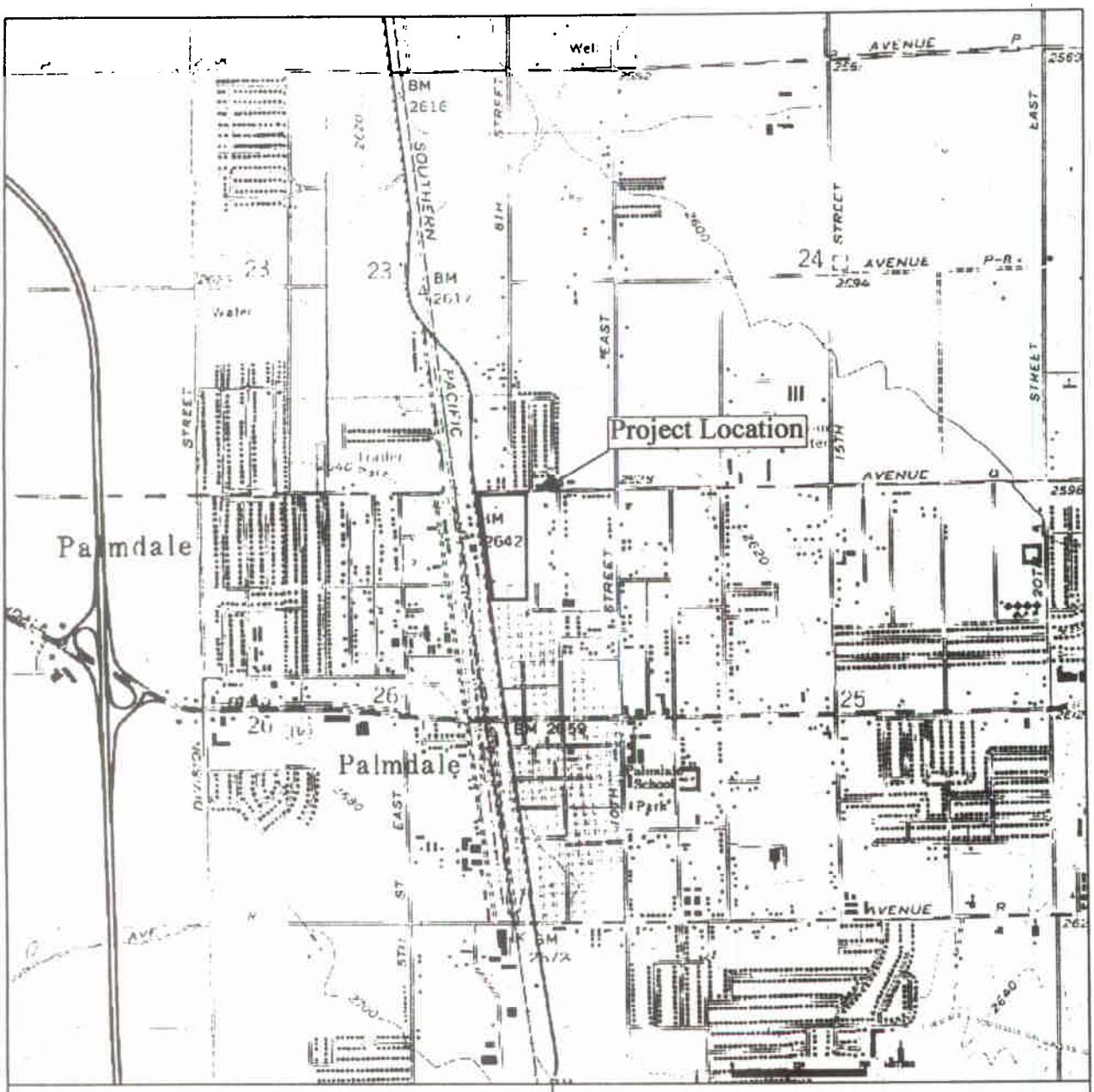

Cottonwood Triangular Projectile Point, Rose Canyon Variant, collected by RMW Paleo, 1994

RMW Paleo Associates
Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

Figure 1. Project Vicinity Map

Base Map: Los Angeles, California
USGS 2 Degree Topographic Map
Scale: 1:250,000




Steatite Bird Effigy
Recovered by
RMW Paleo, 1993

RMW Paleo Associates
Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

Figure 2. Location Map

Base Map: Palmdale, California
USGS 7.5 Minute Topographic Map
Scale: 1:24,000

they were part of Pleistocene Lake Thompson. Palmdale is situated in a valley piedmont (coalescing alluvial fans) on the upper edge of the valley near the alluvium/bedrock interface at the base of the San Gabriel Mountains. The San Andreas Rift Zone parallels this interface, and a small natural lake, Lake Una, is found 3.6 kilometers south of the project location.

**Cultural**

*Prehistory:* The sequence of cultures utilizing the Antelope Valley is just beginning to be understood as the result of large archaeological studies being conducted on Edwards Air Force Base (Environmental Management Office, Edwards Air Force Base 1996). The earliest occupation of the valley is probably associated with Pleistocene Lake Thompson. The lake was occupied as early as circa 12,000 BC to the end of the early Holocene, circa 5,000 BC. Initially, people represented by widely scattered fluted projectile points roamed lakeshore. Their material culture either evolved into or was replaced by the Lake Mojave Tradition. This tradition is a variant of the Western Pluvial Lakes sites associated with pluvial lakes throughout the desert west. Tool assemblages typically included stemmed dart points and lack ground stone. Initially Lake Mojave sites were concentrated along lakeshores, but as pluvial lakes desiccated, the people living along the shorelines began to use springs and the now dry fossil streams elsewhere in the Mojave. In the western Mojave Desert, these people developed a desert adaptation using a core based flaked stone technology during the Pinto Period. Contemporaneously in the eastern Mojave, sites with a different biface based tool manufacturing technology appear. After about 2,000 B.C., biface rich Gypsum Period sites appear in the western Mojave Desert as well. These evolved into Saratoga Springs sites with the introduction of the bow and arrow and the concomitant reduction in point size. About 1,000 years ago, in what is usually referred to as the Late Prehistoric Period, the probable precursors of the ethnographic populations appear in the valley (Sutton 1980).

*Ethnography:* The Antelope Valley is in a boundary zone between the core areas occupied by the Kitanemuk and Tataviam. The sparse ethnographic data available does not establish which group claimed the Palmdale area (Blackburn and Bean 1978 and King and Blackburn 1978); although it lies nearer the accepted Tataviam boundary. The Kitanemuk core area was centered on the Tehachapi Mountains, and the Tataviam in the upper reaches of the Santa Clara River. Both groups spoke dialects of the Takic Language Family, indicating a common origin, but apparently at the time of contact they did not have friendly relations. Both groups were primarily mountain dwellers who seem to have seasonally exploited lowland resources of the Antelope Valley.

*History (from Brown and Ferraro:1999):* There is some dispute regarding the identity of the first European to visit the area. Most sources (Palmdale News 1986) state that Pedro Fages passed through the Antelope Valley in 1772 while searching for deserters from the Spanish army. However, some other sources (Schoeller 1984) credit Padre Frey Francisco Garces as the first European to visit the Antelope Valley in 1776. The Garces expedition was quite remarkable, since he was traveling alone dependent on the hospitality and generosity of the local people.

Jedidiah Smith crossed the valley in 1826, as did Kit Carson in 1829. Jim Bridger supposedly wintered in the valley in 1846. In 1857, a group of Mormons passed through the valley on their way to Salt Lake City. They felt that growth on one local variety of yucca was pointing their way, so they named them Joshua trees in remembrance of the man who led the Israelites into the promised land.

In 1876, the railroad appeared in Palmdale, providing the stimulus for some development. In 1884, about 60 Swiss and Germans arrived from Nebraska and Illinois and settled in an area about three kilometers southeast of current downtown Palmdale. The settlement was known as Palmenthal in the mistaken belief that the Joshua trees were a variety of palm. The post office was opened in 1888, and in 1890 the settlement name was changed to Palmdale.

A growing shortage of water caused the original settlement to fail. However, some people moved to the area around the present downtown and a new settlement developed. The lack of reliable water resources, however, kept growth at a very slow pace until World War II. Muroc Army Airfield was activated as a pilot training facility in 1942 and was reactivated as Edwards Air Force Base with the outbreak of the Korean War. The facility now serves as the United States Air Force Flight Test Center. Many aerospace companies have located manufacturing facilities in the area to be close to the Air Force facility. The result is a recent, dramatic increase in population.

## LITERATURE REVIEW

A review of records housed at the South Central Coastal Information Center, University of California, Los Angeles (now located at Cal State Fullerton) was completed by Grace Wu of the Information Center Staff, on 20 June 1999 (Appendix A). The record search area included the project area and its vicinity within a one-mile radius. The search included a review of all recorded historic and prehistoric archaeological sites within the search area as well as a review of all known cultural resources survey and excavation reports. Information Center review included:

- Information Center's historical resources files.
- *National Register of Historic Places* (NRHP) (Office of Archaeology and Historic Preservation 1997).
- *California State Historic Resources Inventory* (HRI).
- *California Points of Historical Interest* (California Department of Parks and Recreation 1992).
- *California Historical Landmarks* (California Department of Parks and Recreation 1990).

The literature review indicated that no previously recorded archaeological sites are found within one mile of the proposed Sheriff's Station. Nineteen cultural resources investigations have been completed within the review area (Table 1). The investigations consisted of 16 surveys, two environmental impact reports, and a literature review. Two of these investigations fall partially

within the project area. Gibson (1994) reviewed existing literature for the Mojave Alternative of the Pacific Pipeline project. Information Center records contain no indication that this pipeline was ever installed on the property. Love examined, either on foot or by vehicle, a 185-mile long corridor for a fiber optic line. The line route lies in the shoulder of Avenue Q along the northern boundary of the proposed Sheriff's Station property extending about 90 meters from its northeastern corner before turning northward, away from the study area.

Table 1: Archaeological Investigations within One Mile of The Project Area

| Author/Date | Type of Investigation | Result |
|---|---|---|
| Dosh and Weaver:1980 | Reconnaissance, 3,500 acres | One site |
| Dillon 1986 | Reconnaissance; 4 linear miles | None |
| Eggars et al.: 1973 | Reconnaissance; 1,800 acres | None |
| Wessel: 1989 | Reconnaissance; 130 acres | None |
| Wilson: 1989 | Reconnaissance; 20 acres | None |
| DeBarros: 1989 | Reconnaissance | None |
| Campbell 1990 | Reconnaissance, 3 acres | None |
| Thomas:1990 | Draft Environmental Impact Report, 960 acres | None |
| Norwood:1990 | Reconnaissance, 25 acres | None |
| Becker: 1990 | Reconnaissance, 960 acres | CA-LAN-1554H |
| Norwood: 1991 | Reconnaissance | Five sites |
| Robinson: 1990 | Reconnaissance | None |
| Padon: 1988 | Reconnaissance, 26 linear miles | None |
| Gibson: 1994* | Literature Review, 1994 | Four sites |
| SAIC: 1996 | Reconnaissance, 70 linear miles | None |
| Romani: 1995 | Reconnaissance, 7 acres | None |
| Arthur D. Little:1976 | Environmental Impact Report, 3250 acres | Isolated artifacts |
| Love:1997* | Reconnaissance, 185 linear mile | None |
| Lerch:1998 | Intensive Survey, 370 linear miles | Two sites |

*Partially within current study area

## METHODS

The entire project area was systematically examined in parallel transects spaced 15 meters apart. Except for small patches of ruderal vegetation and a sparse grass cover, the surface of the parcel was barren. It was examined for historic and prehistoric artifacts and features. In particular, historic material artifacts diagnostic of depositional period were sought. Historic maps were

consulted to establish the age of a foundation found on the property (Figures 3 and 4). The foundation was recorded using the methodology set forth by the Office of Historic Preservation (1997). Historic era bone was examined and identified by RMW paleontologist Cara Burris-Jones who performed a paleontological assessment of the property.

## RESULTS

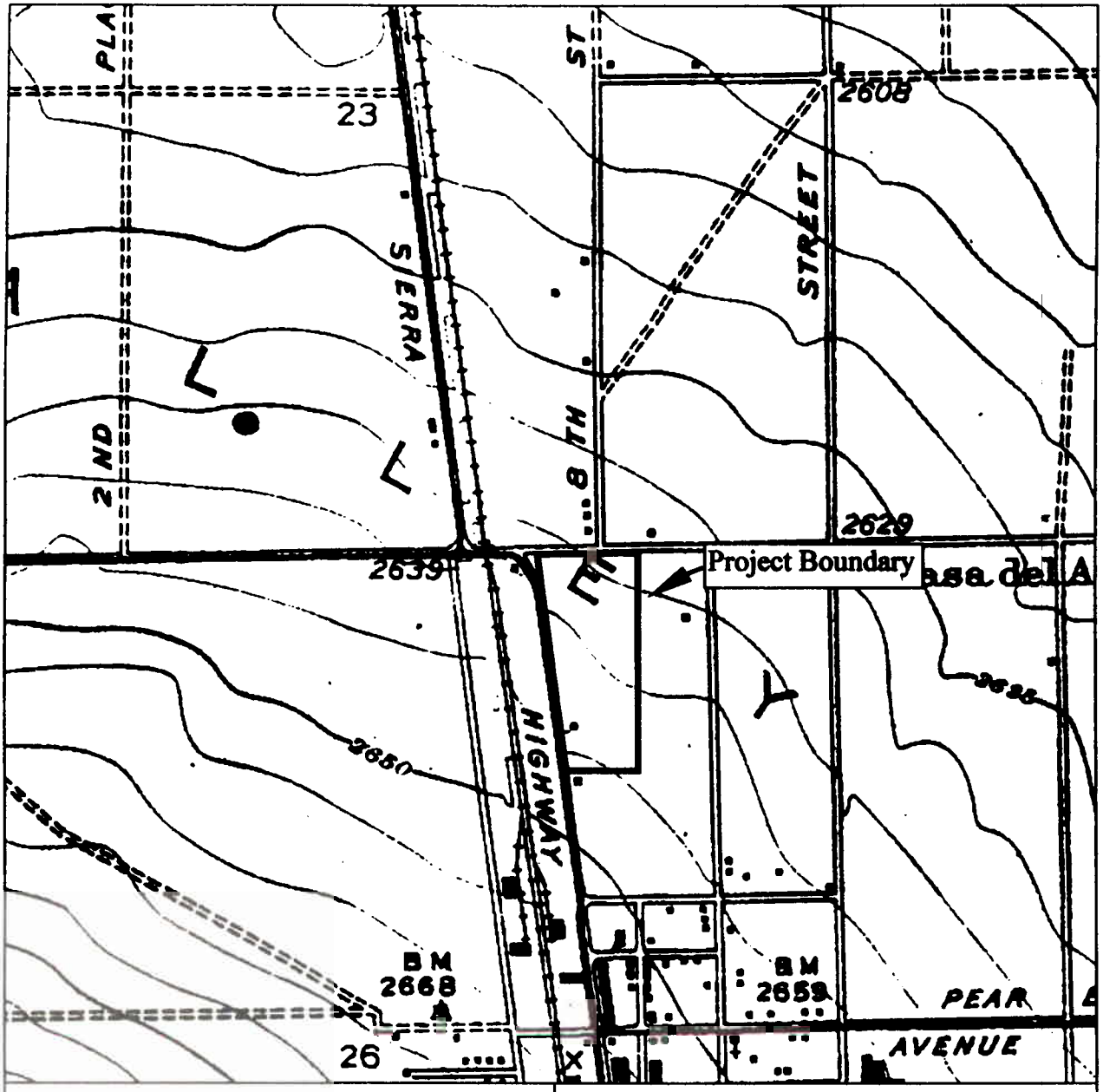
Survey of the proposed Palmdale Sheriff's Station resulted in discovery of a historic period foundation (Site CA-LAN-2808) adjacent to Sierra Highway 300 meters from the southwestern corner of the lot. Historic maps (Figure 3 and 4) indicate a second structure apparently existed just north of the southwestern corner of the property in the 1930s, and that a third lay to the east of the eastern property boundary near the northeastern corner. Modern and possibly historic trash was found scattered over the entire property. While artifacts such as pull top beverage cans that definitely post date the historic era were found, none could definitely be assigned to the historic era.

### Site CA-LAN-2808

The site consists of the concrete wall footings and floors of a structure foundation that measures 13X66 feet. The partially buried, 6-inch wide concrete footings form two adjacent rectangular rooms measuring 13X20 and 13X36 feet. A 10-foot wide walk or driveway divides them. Asphaltic concrete (AC) has been laid up to the walk/driveway, but the AC perimeter was other wise buried. Its shape could not be ascertained. One-half inch lag bolts were embedded into the footing as wall anchors. A footing segment extends three feet westward from the northern room's northwestern corner, where it terminates in a broken end. The feature may have been partially destroyed by construction of the modern Sierra Highway roadway.

The foundation's location coincides with a structure mapped on the 1937 USGS Palmdale Topographic map, which was surveyed in 1931 and 1932 (Figure 3). Bottle glass, metal, nails, bottle caps, and steel and pull top beverage cans are scattered around the structure, covering most of the vacant lot the foundation is found on. Many of these items appear to date from the 1950s and 1960s, but none can be positively dated to the 1930s or older.

A second structure is depicted on the 1937 map 80 meters south of the first. Today, about one meter of fill has been placed on this location and a parking lot constructed on it. The fill was feathered onto the Sheriff's Station lot, and it contains a great deal of building rubble, including concrete, bricks, rebar, and iron sewer pipe. This debris may have been imported with the fill, rather than being the remains of the second structure.



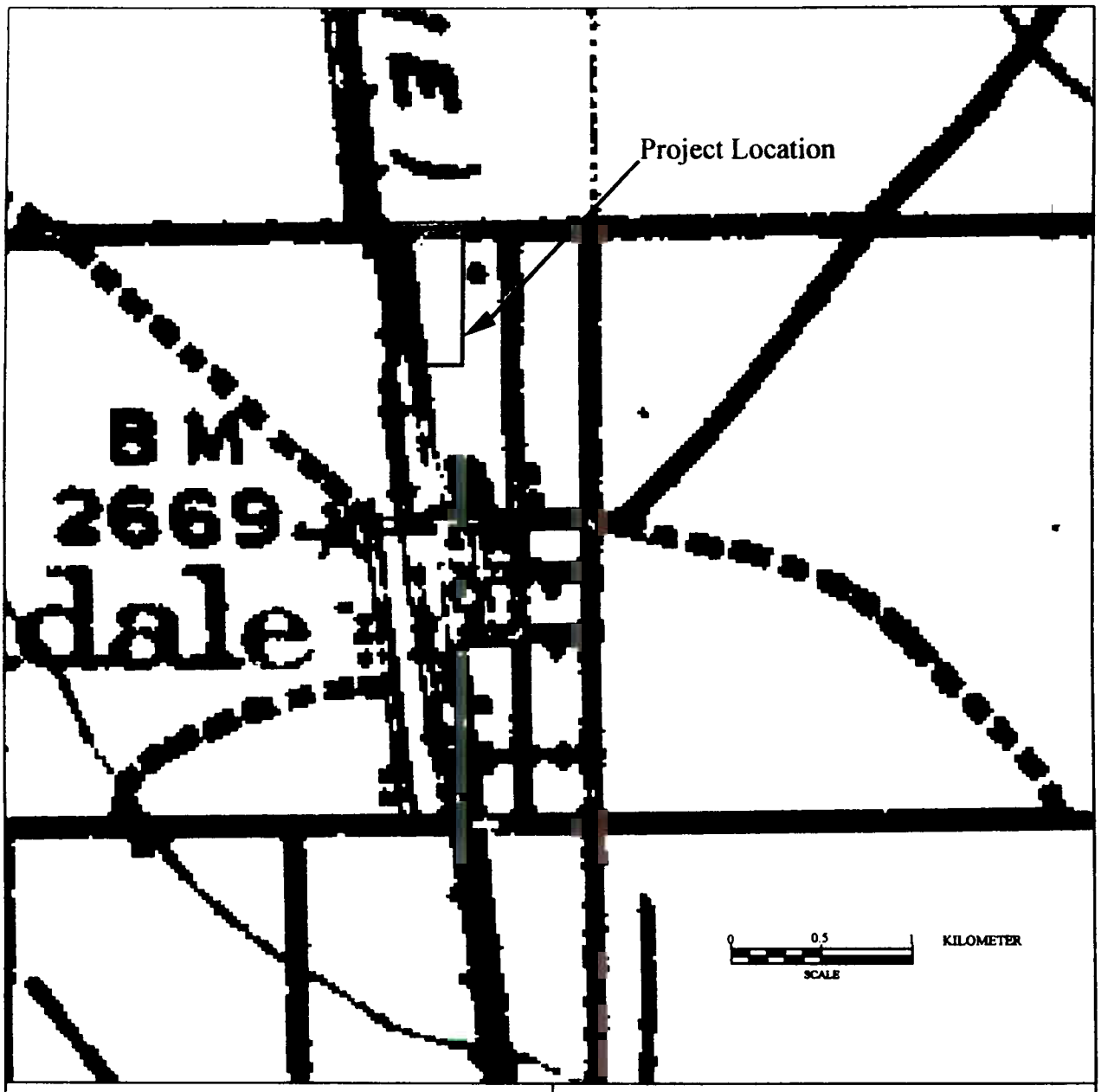

RMW Paleo Associates
Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

The Kelly Barn
Documented by
RMW Paleo, 1994

Figure 3. 1937 Map Showing Historic Structures Present on the Project Area

Map Source: USGS Palmdale 1937
Scale: 1:24,000




Chert Ceremonial Blade
15 cm in length
Recovered by
RMW Paleo, 1993

RMW Paleo Associates
Archaeology
Paleontology
History

23392 Madero, Suite L
Mission Viejo, CA 92691
(949) 770-8042
FAX (949)458-9058

Figure 4. 1915 Map Showing Historic Structure Located Near the Project Location

Base Map: USGS Lake Elizabeth 1915

## Historic and Modern Trash

A great deal of historic trash is found covering most of the proposed Sheriff's Station site. It included crushed tin cans, many wire nails, bottle glass, steel beer cans dating from the early 1930s to the, late 1950s (Rock 1989:76), hybrid aluminum top steel bodied cans, crown cap bottle caps, tableware, and a great deal of bone. One discrete concentration, measuring 8x17 meters and containing bottle glass, nails, bone, tableware, and crown bottle caps, was noted on a burnt surface. Overall, the trash tended to be highly fragmented or crushed as if by vehicle traffic.

Manufacture dates of various items span the 50-year statutory boundary between the historic and modern era, but no item that dates only to the historic era was discovered. Steel beverage cans date from the early 1930s to the late 1950s when they were replaced with hybrid aluminum top, steel body, pull top cans. The modern pop-top cans begin replacing hybrid cans in 1972 (Rock 1989:76). A bottle base, bearing the logo of Latchford-Marble Glass Company of Los Angeles, used between 1939 and 1957 (Toulouse 1971:333), was noted on the property. The trash concentration contained a bottle base with the Owens Illinois maker's mark used after 1954. Other items seen on the property are less diagnostic. Wire nails largely replace square or cut nails after 1885 (Fontana and Greenleaf 1962:48-49) and are still in use today. Crown bottle caps were patented in 1891 (Munsey 1970:105).

The presence of historic structures on or near the lot suggests that some of the trash is historic in origin. A portion of the trash is probably the result of roadside waste disposal common to desert communities. The difficulty in distinguishing between the two diminishes their value. Discrete trash pits dating to the historic era may occur on the property and these would be much more diagnostic of historic activities.

## MANAGMENT RECOMMENDATIONS

Grading plans have not been drawn, and the effect of the project on this site can not yet be determined. The existence of at least one historic structure on the property and both modern and possibly historic trash does raise management issues. These issues can best be addressed by monitoring at the time of grading.

Site CA-LAN-2808 does not appear to be eligible for inclusion in the California Register of Historic Places at this time. The foundation lacks architectural integrity, and no associated trash deposits could be identified. The information that could add to the historic record of the development of Palmdale is probably adequately recorded. The available data do not explain the function of this structure however. Additional architectural information may exist, since the foundation is partially buried. If the foundations must be destroyed during grading, it is recommended that any additional architectural feature be observed and recorded by a qualified archaeologist. If the feature is to be preserved in place, then capping with a few inches of soil is recommended, since the raised footings are a trip hazard.

Although a great deal of trash was noted on the property, its association with any of the structures appearing on the historic maps is unclear. No diagnostic artifacts dating to the historic era could found. Even if some of the scattered trash is actually historic, it is mixed with clearly modern-era trash. Except for items that are chronologically significant, there is no way to separate the two eras. Monitoring of grading on the property and, if they occur, sample excavation of discrete historic era trash deposits is recommended. Collection of any clearly historic artifacts scattered on the project by an archaeological monitor is also recommended during grading.

David Ferraro
Archaeologist

Ronald M. Bissell RPA
Principal Investigator

## REFERENCES CITED


Bean, L. J., and Charles R. Smith
1978 Kitanamuk. In *Handbook of North American Indians, California*, Vol 8, Robert F. Heizer (ed), pp. 538-549. Smithsonian Institution, Washington D. C.

Brown, Joan C. and David Ferraro
1999 A Cultural Resources Reconnaissance for the Proposed Avenue S Road Widening, Located in Palmdale, Los Angles County, California. On file RMW Paleo Associates and South Central Coastal Information Center, California State University, Fullerton.

California Department of Parks and Recreation
1989 *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format.* Office of Historic Preservation, Sacramento.

Environmental Management Office Edwards Air Force Base
1996 *Draft Overview of the Prehistoric Cultural Resources of Edward Air Force Base.* Environmental Management Office, Air Force Flight Test Center, Edward Air Force Base, California.

Fontana, Bernard L. and J. Cameron Greenleaf
1962 *Johnny Ward's Ranch.* Kiva Vol. 28, No. 1-2.

Gibson, Robert
1994 Result of Archaeological Records Check of the Mojave Alternative of the Pacific Pipeline Project, Los Angeles County, California. Manuscript on file with the South Coastal Information Center, California State University, Fullerton.

King Chester and Thomas C. Blackburn
1978 Tataviam In: *Handbook of North American Indians.* Vol 8 California, R.F. Hiezer Ed. pp 535-537. Smithsonian Institute, Washington D.C.

Moratto, Michael J.
1984 *California Archaeology.* Academic Press, San Diego.

Munsey, Cecil
1970 The Illustrated Guide to Collecting Bottles. Hawthorn Books, Inc, New York.

Office of Historic Preservation
1997 *Instruction for Nominating Historical Resources to the California Historical Resources to the California Register of Historic Places.* Office of Historic Preservation, Sacramento.

1995a *The California Register of Historical Resources: Proposed Guidelines for the Nomination of Properties*. Office of Historic Preservation, Sacramento, California.

1995b *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento, California.

Sutton, Mark

1980 Some Aspect of Kitanemuk Prehistory. In Journal of California and Great Basin Anthropology Vol. 2 No. 2 pp 214-225.

Touluse, Julian Harrison

1969 *Bottle Makers and Their Marks*. Thomas Nelson Inc. New York.

# Appendix D – Phase 1 Environmental Site Assessment

# PHASE I
# ENVIRONMENTAL SITE ASSESSMENT
# PROPOSED PALMDALE SHERIFF'S STATION
# PALMDALE, CALIFORNIA

**PREPARED FOR:**
County of Los Angeles Department of Public Works
Project Management Division II
1000 South Fremont Avenue, Building 9E, Courts & Justice Section
Alhambra, California 91803

**PREPARED BY:**
Ninyo & Moore Geotechnical and Environmental Sciences Consultants
9272 Jeronimo Road, Suite 123A
Irvine, California 92618

August 8, 2000
Project No. 202413-02

August 8, 2000
Project No. 202413-02

Mr. Richard Pavlosky
County of Los Angeles Department of Public Works
Project Management Division II
1000 South Fremont Avenue, Building 9E, Courts & Justice Section
Alhambra, California 91803

Subject: Phase I Environmental Site Assessment
Proposed Palmdale Sheriff's Station
Palmdale, California

Dear Mr. Pavlosky:

In accordance with our proposal dated August 2[illegible], 1999, Ninyo & Moore has performed a Phase I Environmental Site Assessment for the above-referenced property. The attached report presents our methodology, findings, conclusions and recommendations regarding the environmental conditions at the site.

We appreciate the opportunity to be of service to County of Los Angeles Department of Public Works. If you have any questions regarding this report, please contact the undersigned at your convenience.

Respectfully submitted,
**NINYO & MOORE**

Michael Dever
Staff Environmental Geologist

Paul A. Roberts, R.G., R.E.A.
Senior Project Environmental Geologist

MBD/PAR/dt

Distribution: (6) Addressee

# TABLE OF CONTENTS

**Illustrations**



**Appendices**

# 1. INTRODUCTION

The County of Los Angeles Department of Public Works (LADPW) has authorized Ninyo & Moore to perform a Phase I Environmental Site Assessment (ESA) for the proposed Palmdale Sheriff's Station located in the city of Palmdale, California (site, Figure 1). The Phase I ESA has been performed in accordance with our proposal dated August 25, 1999. It is our understanding that LADPW is considering redeveloping the property as a sheriff's station.

## 1.1. Purpose

The purpose of this Phase I ESA was to evaluate whether Recognized Environmental Conditions (RECs), as defined in the American Society of Testing and Materials (ASTM) Standard E 1527-97, are present due to past or present land use of the site, and/or properties in the site vicinity.

## 1.2. Limiting Conditions and Methodology

The scope of this evaluation did not include subsurface exploration, soil or water sampling, chemical analysis, or an evaluation of radon, lead or asbestos. The scope of this evaluation did not include an evaluation of geotechnical conditions and/or hazards. Properties surrounding the site were visually inspected from public rights-of-way. Our observations were made from readily accessible vantagepoints. Although reasonable effort was made to view relevant site features, some features may have been concealed.

# 2. SITE DESCRIPTION

This section provides a description of the site and adjoining properties. This section also includes a description of current uses of the site and adjoining properties. Photographs of the site are included in Appendix A.

### 2.1. Site Location

The site comprises approximately 12.86 acres and is bounded to the west by Sierra Highway; north by Avenue 'Q'; east by an office building, residential properties and vacant land; and south by vacant land (Figure 2). The site boundary information was obtained during a site reconnaissance by Ninyo & Moore and a site plan provided by LADPW.

### 2.2. Site Characteristics

During a site reconnaissance conducted by Ninyo & Moore on April 3, 2000, the site was observed as an undeveloped lot with three unpaved access roads trending north to south across the site. A rectangular shaped area of concrete was apparent in the southwest portion of the site that was assessed to have been a foundation for a former building. No evidence of underground storage tanks (USTs), clarifiers, or groundwater monitoring wells were observed. No surficial staining, 55-gallon drums, or indications of hazardous materials or wastes were observed.

### 2.3. Vicinity Characteristics

The site vicinity is an area of commercial and residential properties. The location of these properties is presented on Figure 2. South of the site, beyond the undeveloped land is the Palmdale Library. Sierra Highway adjoined the site to the west, beyond was the City of Palmdale Greenway consisting of a bicycle/sidewalk trail and ornamental vegetation. Avenue 'Q' bounded the site to the north, beyond which was undeveloped land and residential properties. A two-story office building adjoined the site to the northeast. Vacant land and residential properties bounded the site to the east.

## 3. SITE AND VICINITY RECONNAISSANCE

On April 3, 2000, a representative of Ninyo & Moore conducted a site and site vicinity reconnaissance. The reconnaissance involved a walking tour of the site and visual observations of the site and adjoining properties.

### 3.1. On-Site Polychlorinated Biphenyls (PCBs)

No transformers were observed at the site. No other potential sources of PCBs were observed at the site.

### 3.2. On-Site Hazardous Substances

No hazardous substances were observed at the site.

### 3.3. On-Site Hazardous Waste Disposal

No evidence of historical on-site disposal activities was observed during our site reconnaissance.

### 3.4. On-Site Aboveground/Underground Storage Tanks

No Aboveground Storage Tanks (ASTs) or evidence of Underground Storage Tanks (USTs) were observed on-site.

### 3.5. On-Site Asbestos-Containing Building Materials (ACBMs)

No structures were located on the site, and therefore, no evidence of asbestos-containing building materials was observed.

### 3.6. Potential Off-Site Issues

No potential off-site issues were observed during our site reconnaissance.

## 4. PHYSICAL SETTING

The following sections describe the geologic and hydrologic characteristics of the site vicinity.

### 4.1. Site Topography

The general site vicinity slopes downward to the northeast. The site is generally flat. Drainage from the site is via sheet flow to the curb and gutter system on Sierra Highway. Based on the review of the United States Geological Survey (USGS) 7.5-Minute Series Palmdale, California, Topographic Quadrangle Map, the site has an approximate elevation of 2,640 feet above mean sea level (MSL).

### 4.2. Geologic and Hydrogeologic Setting

The site area is situated in the southern portion of the Antelope Valley within the Transverse Ranges Geomorphic Province of California (Norris and Webb, 1990). The general site vicinity is likely underlain by Recent-age alluvial deposits. These deposits generally consist of unconsolidated clay, silt, sand, and gravel originating from the nearby San Gabriel Mountains. (California Division of Mines and Geology, 1969).

According to information provided by the Palmdale Water District (PWD), depth to water in the site vicinity was reported to be reported to be approximately 520 feet below ground surface (bgs). The groundwater gradient in the site vicinity was reported by PWD to be toward the north/northeast.

## 5. SITE AND VICINITY HISTORY

This section describes historical use information regarding the site and adjoining properties compiled from several resources. Current and past uses of the site and adjoining properties are discussed.

### 5.1. Aerial Photographs

Aerial photographs were provided by Continental Aerial Photograph, Inc. of Los Alamitos, California. Aerial photographs were reviewed covering years 1953, 1972, 1980, 1987, 1988,

1993, and 1995. Aerial photographs were taken at high altitudes and at very small scales, therefore small building structures were difficult to observe.

Interpretations of the 1953 through 1995 aerial photographs indicated that the site has been vacant land. A small building structure located in the southwest corner of the site was apparent in the 1972 and 1988 aerial photographs. The site appeared as graded land in the 1980 aerial photograph.

In the 1953 aerial photographs, vacant land adjoined the site to the south, beyond which was a commercial building. Sierra Highway bounded the site to the west, beyond which were scattered commercial buildings (in the approximate area of the existing City of Palmdale Greenway area). Avenue 'Q' bordered the site to the north, beyond which were scattered single-family residences and vacant land. Vacant land and scattered single-family residences adjoined the site to the east.

Interpretations of the 1972 through 1988 aerial photographs indicated that the site was bounded by vacant land to the south, beyond which was a commercial building. Sierra Highway adjoined the site to the west, beyond which were commercial buildings. Avenue 'Q' bounded the site to the north, beyond which were single-family residences. The site was adjoined to the east by mostly vacant land with scattered single-family residences.

Interpretations of the 1993 aerial photograph indicated that the site was adjoined to the south by vacant land. The site was bounded to the west by Sierra Highway, beyond which was several commercial buildings. Avenue 'Q" bordered the site to the north beyond which was vacant land or single-family residences. The existing commercial office building adjoined the site to the northeast. Vacant land and single-family residences bounded the site to the east.

The site and surrounding properties appeared similar to the previous aerial photograph in the 1995 photograph.

### 5.2. Topographic Maps

Ninyo & Moore reviewed the USGS 7.5-Minute Series Palmdale, California, Topographic Quadrangle Map dated 1958. The site appeared to be vacant land.

### 5.3. Sanborn Fire Insurance Maps

Ninyo & Moore retained VISTA Information Solutions, Inc. (VISTA) to obtain Sanborn Fire Insurance Maps (Sanborn). According to VISTA, no Sanborn maps were available for the site or site vicinity.

### 5.4. Oil and Gas Maps

According to the 1997 Munger Oil Map Book Regional Wildcat Map, W-59, there are no active or abandoned oil or gas wells on or adjacent to the site. The site and site vicinity does not lie in an active oil field.

### 5.5. City of Palmdale Department of Building and Safety and Planning Department

Ninyo & Moore reviewed information regarding the site at the City of Palmdale Planning Department (PPD) and Building and Safety Department (PBSD). According to information received from the PPD, the site historically was issued the addresses 990, 996, 38636, 38656, 38700, 38720, 38746 and 38750 Sierra Highway. Historically the site vicinity was under the jurisdiction of the County of Los Angeles Department of Building and Safety (LACBS) until August of 1962. In approximately 1962, the City of Palmdale retained the building permits from the LACBS. No addresses were issued to the site along Avenue 'Q'.

According to building permit information for the southern portion of the site (990, 996, 38636, 38656 Sierra Highway), the site was occupied by two fruit stands, a residence and associated, automobile parking garage, and a sign shop from approximately 1942 to 1969. In 1953, the sign shop occupied one of the small fruit stands located on-site. One of the fruit stands was demolished in 1969 and a small paint shop (approximately 450 square feet) was demolished in 1970.

The remaining information pertaining to the northern portion of the site (38746, 38700, 38720, and 38750 Sierra Highway) were miscellaneous permits relating to rodeos, construction of temporary bleachers, and for carnivals dating from the middle 1950s to the late 1980s.

Ninyo & Moore requested historical land use information from the City of Palmdale Planning Department (PPD). According to the PPD, the site vicinity is zoned as a public facility.

## 5.6. Historical City Directories

Ninyo & Moore reviewed selected historical city directories at the Haines Criss-Cross Directory in Fullerton, California, and at the Sherman Gardens Library in Corona del Mar, California. The selected years reviewed included 1953, 1957/58, 1961, 1966, 1967/68, 1974, 1977, 1982, 1987, 1992, and 1997. The addresses used in the search were a range of addresses along Sierra Highway and Avenue 'Q' that included the historical site address and immediate site vicinity.

The historical site address of 990, 996, 38636, 38656, 38700, 38720, 38746, and 38750 Sierra Highway did not appear in any of the Haines Criss-Cross directories from 1974 and 1997. J.H. Wolley Signs and John Wolley appeared in the Sherman Gardens City Directories from1953 to 1968 at the 38636 Sierra Highway site address. None of the remaining site addresses were listed in Sherman Gardens City Directories. Residential properties occupied the parcels north of the site along Avenue 'Q' from 1953 to present. Commercial properties (restaurants, nursery, automotive garage, auto parts store, specialty stores) occupied the parcels west of the site and beyond Sierra Highway from 1953 to 1997. Copies of Historical Directories are included in Appendix B.

## 5.7. Other Regulatory Agencies

According to the Regional Water Quality Control Board, Los Angeles Region (RWQCB), LADPW, South Coast Air Quality Management District (SCAQMD), and the Los Angeles

County Fire Department, Public Health Investigations Unit (LAPHI), no files exist for the site.

Ninyo & Moore requested information regarding the site from the Los Angeles County Fire Department, Hazardous Materials Division (LACFD). As of the date of this report, the LACFD has not responded to our requests. Based on historical information obtained from other sources during this investigation, it is unlikely that additional information from these agencies would change the conclusions and recommendations of this report. Should information become available which changes the conclusions or recommendations of this report, this information will be included as an addendum to this report.

## 6. REGULATORY RECORDS REVIEW

The following sections include the results and a discussion of the computerized search of state and federal standard environmental databases.

### 6.1. Mapped Database Records Search

A computerized, environmental database search was performed for Ninyo & Moore by VISTA dated March 27, 2000. The VISTA search included federal, state, and local databases. A complete description of the assumptions and approach to the database search, as well as the results, is provided in Appendix C. The review was conducted to evaluate whether the site or properties within the vicinity of the site have been identified as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects. No unmapped sites were identified within the search radii.

#### 6.1.1. National Priorities List (NPL): Distance Searched – 1.0 mile

The NPL is the Environmental Protection Agency's (EPA) database of uncontrolled or abandoned hazardous waste properties identified for priority remedial actions under the Superfund program.

Neither the site nor properties located within a 1.0-mile radius from the site were listed on this database.

### 6.1.2. Corrective Action Report (CORRACTS): Distance Searched – 1.0 mile

The EPA maintains this database of RCRA facilities that are undergoing corrective action. A corrective action order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.

Neither the site nor properties located within a 1.0-mile radius from the site were listed on this database.

### 6.1.3. State Equivalent Priority List (SPL): Distance Searched – 1.0 mile

The Calsites database is maintained by the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substance Control (DTSC). This database contains information on Annual Workplan Sites, and both known and potentially contaminated properties. Two-thirds of these properties have been classified, based on available information, as needing "No Further Action" (NFA) by the DTSC. The remaining properties are in various stages of review and remediation to determine if a problem exists.

Neither the site nor properties located within a 1.0-mile radius from the site were listed on this database.

### 6.1.4. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List: Distance Searched - 0.5 mile

The CERCLIS database contains properties which are either proposed or on the NPL and properties which are in the screening and assessment phase for possible inclusion on the NPL.

Neither the site nor properties located within a 0.5-mile radius from the site were listed on this database.

### 6.1.5. Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities List: Distance Searched - 0.5 mile

The RCRA TSD database is a compilation by the EPA of facilities that report generation, storage, transportation, treatment or disposal of hazardous waste.

Neither the site nor properties located within a 0.5-mile radius from the site were listed on this database.

### 6.1.6. State Leaking Underground Storage Tank (LUST) Lists: Distance Searched - 0.5 mile

Databases of the Leaking Underground Storage Tank (LUST) information system are maintained by the California Environmental Protection Agency and the Regional Water Quality Control Board (RWQCB).

The site was not listed on this database. Two properties were listed within a 0.5-mile radius from the site, none of which were located immediately adjacent to the site. The Gas Company High Desert Station No. 55 at 38627 Sierra Highway is located approximately 0.10 mile south of and crossgradient from the site. According to VISTA, this facility had a hydrocarbon leak which affected soil only in 1996. The site was granted case closure by the RWQCB in August of 1996. Based on the regulatory status and media affected, it is unlikely that this facility has had a significant environmental effect on the site.

Circle K Stores No. 5608 at 38405 Sierra Highway was located 0.45 mile south of and crossgradient from the site. According to VISTA, this facility had a gasoline leak in 1998 and a remediation plan has been submitted. Based on the distance and direction from the site, it is unlikely that this facility has had a significant environmental effect on the site.

### 6.1.7. Solid Waste Landfill Sites (SWLF): Distance Searched - 0.5 mile

The SWLF database consists of open and closed solid waste disposal facilities and transfer stations. The data comes from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

The site was not listed on this database. One property was listed within a 0.5-mile radius from the site. This facility was located approximately 0.35-mile north of and crossgradient from the site, at 39125 East 8th Street. According to VISTA, this facility is an active tire processing and storage facility. Based on the distance and direction of this facility from the site and the type of facility, this facility would not be considered an environmental concern to the site.

### 6.1.8. State Index of Properties with Hazardous Waste - CORTESE List: Distance Searched - 0.5 mile

The CORTESE database is provided by the Office of Environmental Protection, Office of Hazardous Materials and is a state index that identifies potential and confirmed hazardous waste sites throughout California.

Neither the site nor properties located within a 0.5-mile radius from the site were listed on this database.

### 6.1.9. Toxic Pits Cleanup Facilities: Distance Searched - 0.5 mile

The Toxic Pits database is maintained by the Water Quality Control Board, Division of Loans and Grants.

Neither the site nor properties located within a 0.5-mile radius from the site were listed on this database.

### 6.1.10. Toxic Release Inventory Database (TRIS): Distance Searched – 0.25 mile

The Community Right to Know Act (SARA Title III) required the EPA to establish this inventory of toxic chemical emissions from certain facilities.

Neither the site nor properties located within a 0.25-mile radius from the site were listed on this database.

### 6.1.11. Underground Storage Tank (UST) and Aboveground Storage Tank (AST) Registration List: Distance Searched – Site and Adjoining Properties

UST and AST databases are provided by the State Water Resources Control Board (SWRCB). Inclusion on these lists is for permitting purposes and is not indicative of a release.

Neither the site nor adjoining properties were listed on this database.

### 6.1.12. RCRA Generators List: Distance Searched – Site and Adjoining Properties

This list identifies sites that generate hazardous waste as defined by RCRA. Inclusion on these lists is for permitting purposes and is not indicative of a release.

Neither the site nor adjoining properties were listed on this database.

## 7. DISCUSSION AND CONCLUSIONS

Based upon the results of this study as described herein, the following discussion and conclusions regarding the site is presented:

- A residence, two small fruit stands, a small paint shop, an automobile parking garage, and a small sign shop occupied the southern portion of the site from approximately 1942 to 1970. The northern portions of the site had temporary been used as a rodeo and carnival from the mid- 1950s to the late 1980s. The site is currently graded land and is proposed to be developed as a sheriff's station.

- During this investigation two commercial facilities which possibly used hazardous materials were noted to have occupied the southern portion of the site. The paint shop and sign shop were reported to be very small businesses, occupying approximately 110 square feet and

450 square feet of business space. Both of these facilities were removed from the site in approximately 1970 and the property was subsequently graded. Based on the size of these facilities, it is unlikely that these facilities would have used large quantities of hazardous materials. Based on this information and due to the length of time since occupying the site, there is a low likelihood, in our judgment, that these facilities have significant impacted the site.

- Based on the information obtained during this investigation, no potential off-site facilities were noted on regulatory databases or during a site vicinity reconnaissance which may have environmentally impacted the site.

Based upon the methodologies described herein, it is unlikely, in our opinion, that there are significant adverse environmental conditions resulting from current and/or past activities at the site and in the site vicinity. It is our judgment that these activities would not constitute a REC.

## 8. RECOMMENDATIONS

Based on the results of this assessment, Ninyo & Moore has no further recommendations for the site at this time.

## 9. LIMITATIONS AND EXCEPTIONS OF THE ASSESSMENT

The opinions and recommendations presented in this report are based upon the results of a site reconnaissance and a review of available background information. The scope of this evaluation did not include subsurface exploration, soil or water sampling, or chemical analysis. Further assessment of possible adverse environmental impacts from past on-site activities and activities on surrounding facilities may be accomplished by a more comprehensive assessment, which would likely include excavation of on-site soil borings, soil sampling and analysis, installation of groundwater monitoring wells, lead-based paint testing, and asbestos testing.

The opinions presented herein apply to site conditions existing at the time of our Phase I Environmental Site Assessment, and cannot be taken to apply to site changes or conditions of which we are not aware and/or have not had the opportunity to evaluate.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding project information, or the content, interpretations presented, or completeness of this document.

Opinions and judgments expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions. In the event conditions change from those described in this Phase I Environmental Site Assessment, Ninyo & Moore reserves the right to review such conditions and to modify, as appropriate, the assessments and conclusions provided in this report.

## 10. REFERENCES

County of Los Angeles Department of Public Works Underground Storage Tank Unit, 2000: Oral Communication.

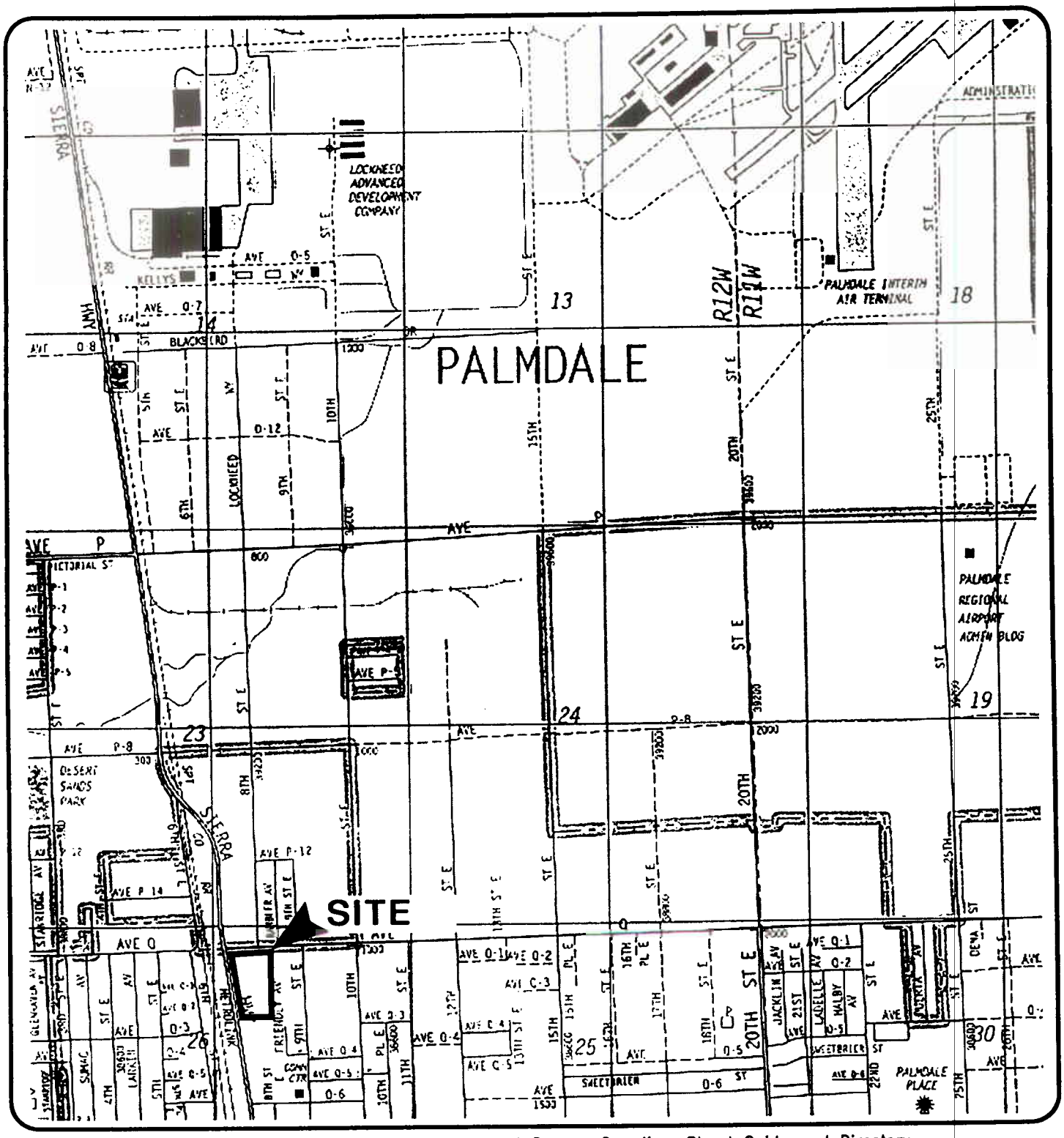
Regional Water Quality Control Board, 2000: Oral Communication.

Palmdale Water District, 2000: Oral Communication.

Munger Map Book, 1997, California and Alaska Oil and Gas Fields, Thirty-Ninth Edition, Regional Wildcat Map, W-59, dated November

United States Geological Survey 1958, Palmdale, California Quadrangle Map, 7.5-Minute Series: Scale 1:24,000.

VISTA Information Solutions, Inc., 2000, Site Assessment Plus Report: dated March 27.




REFERENCE: 1996 Thomas Guide for Los Angeles and Orange Counties, Street Guide and Directory

NORTH

0 1900 3600

Approximate Scale in Feet

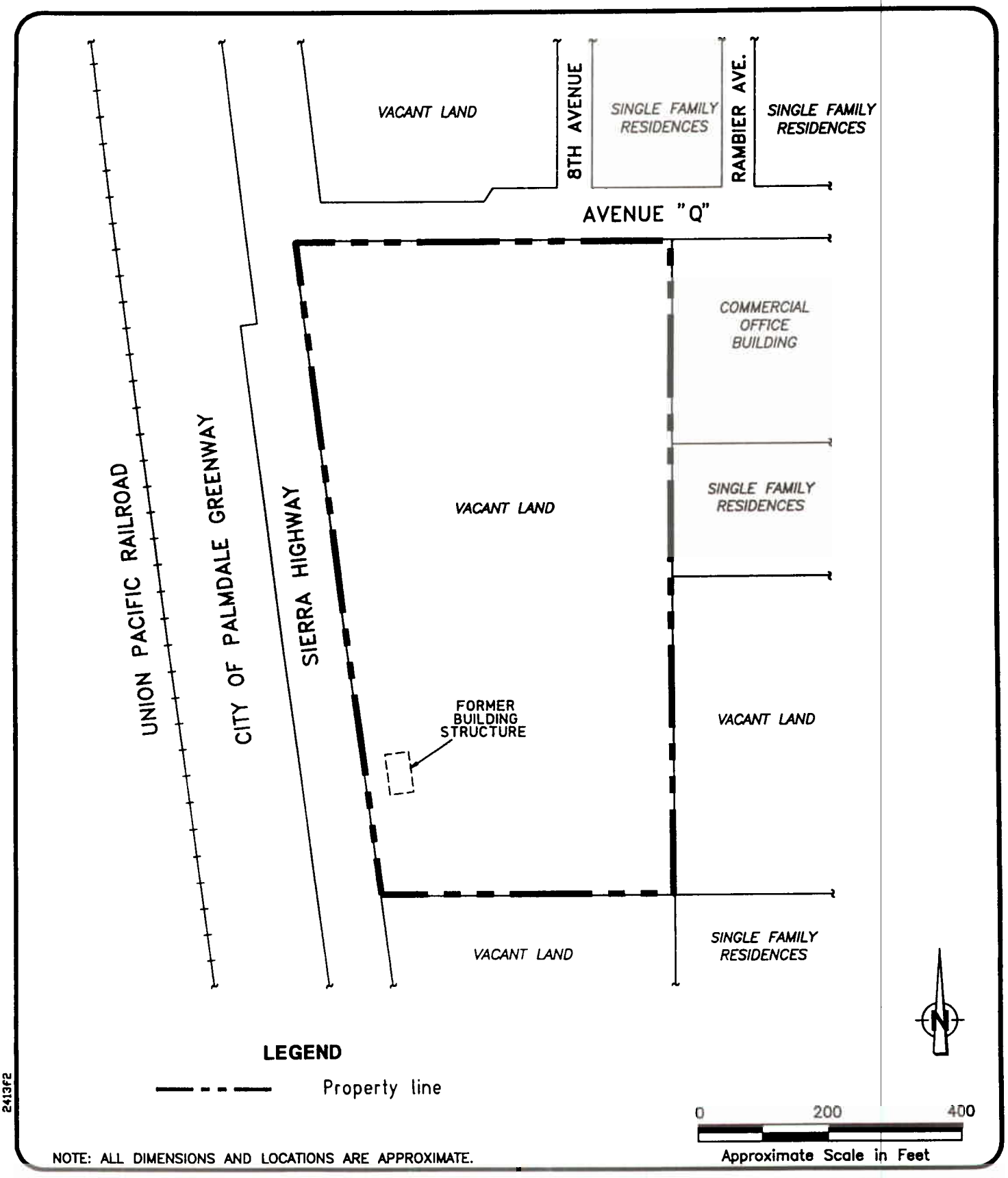
Ninyo & Moore

# SITE LOCATION MAP

PALMDALE SHERIFF'S STATION

PALMDALE, CALIFORNIA

| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 202413-02 | 8/2000 | 1 |




2413f2

NOTE: ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

# SITE PLAN

PALMDALE SHERIFF'S STATION
PALMDALE, CALIFORNIA

| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 202413-02 | 4/2000 | 2 |

# Appendix E - Noise Study

# NOISE IMPACT ANALYSIS

# SHERIFF'S STATION

# PALMDALE, CALIFORNIA

Prepared for:

David Evans & Associates
Attn: Josephine Alido
800 North Haven Avenue, Ste. 300
Ontario, CA 91764

Date:

November 2, 2000

## NOISE SETTING

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level.

The unit of sound pressure ratioed to the lowest sound level detectable by a young person with good auditory acuity is called a decibel (dB). Because sound or noise can vary in intensity by over one million times within the range of human hearing, decibels are a logarithmic progression used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting" written as dB(A). Any further reference to decibels written as "dB" should be understood to be A-weighted.

Time variations in noise exposure are normally expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL). An interior CNEL of 45 dB(A) is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28) for multiple family dwellings and is considered a desirable exterior noise exposure for single family dwelling units as well. Exterior standards apply to normally used recreational exterior space (patio, porch, pool/spa, etc.). They are also a guide to likely interior noise exposure based on the structural attenuation normally achievable with various types of construction.

Residences, schools, libraries and medical care facilities have the greatest interior noise sensitivity. A 45 dB interior exposure is a noise level that has an minimal amount of intrusiveness for sleeping, reading or other noise-sensitive activities. For less noise sensitive uses, such as student assembly areas, offices or public space, interior levels of 55 dB are typically the noise exposure goal. Exterior to interior noise attenuation of 10 dB is normally achieved when windows are open.

With closed windows in substantial structures such as new classroom buildings, noise reduction of 25 dB is often achieved.

The combination of exterior noise loading and the possible range of structural attenuation to achieve a target interior noise exposure is the basis for the development of a set of noise/land use compatibility guidelines in the Noise Element of the City of Palmdale General Plan. Noise sensitive residential uses are considered to be "normally acceptable" with noise levels up to 60 dB CNEL. Schools and libraries also have a 60 dB CNEL standard.

Institutional uses such as a sheriff's station are not considered noise-sensitive. Siting standards for "office" uses are 70 dB CNEL or higher. The future fire station could be considered noise-sensitive because fire fighters will sleep on-site. Sleeping quarter exposure will require adequate structural attenuation to achieve a 45 dB CNEL interior level. Noise attenuation of 25 dB CNEL is readily attainable with only limited acoustic upgrades. A 70 dB CNEL exterior level could thus be readily accommodated without impacting the semi noise-sensitive character of a fire station.

Noise exposures noted above are the standards used by the City of Palmdale to determine if the noise environment is compatible with a proposed land use. They apply to those sources such as traffic or aircraft over which City control is preempted by State or federal law. Since the City can not regulate the source, it controls the type of land uses exposed to such noise levels.

Noise generated by an activity on private or quasi-public property is regulated by the City of Palmdale Municipal Code. The noise ordinance establishes noise level limits at any adjacent property line, and regulates a variety of specific activities that might occur in conjunction with site operations. Regulated activities include times of construction, audibility of any amplified sound during outdoor assembly, live musical instruments for occasional shows or exhibitions, or site maintenance (trash collection, leaf blowers, etc.) functions.

Existing noise levels in the project vicinity derive mainly from vehicular sources on Sierra Highway and other local roads in the area. The project site is also affected by aircraft activity at Plant 42. According to the adopted "AICUZ REPORT" prepared by the Air Force, the project site aircraft noise exposure is near 60 dB CNEL. A 60 dB CNEL level suggests that single-event aircraft noise would be clearly audible at the project site, but would not constitute any substantial impediment to construction and operation of the proposed facility.

## NOISE IMPACTS

Noise impacts due to development such as the proposed sheriff's station would derive primarily from the 1845 daily vehicle trips spread out over the course of a day. Unique on-site operational activities may be noise generating. Patrol vehicles may briefly operate their sirens during vehicle check-out, but such a test is usually only performed for a fraction of a second. A more extensive noise intrusion could result from helicopter landings or take-offs at the proposed helistop. Such activities will be very infrequent since the helicopters would be based at Fox Field in Lancaster. Use of the on-site helistop is expected to average one operation (landing and take-off) per day.

Temporary construction noise will also result during site preparation and building improvements. Such sources are short-term and will thus not affect the long-term noise exposure in the project vicinity.

### Standards of Significance

CEQA Guidelines identify significant impacts as those that cause standards to be exceeded where they are currently met. Project activities that cause a violation of the City of Palmdale Noise Ordinance would thus be considered to have a significant impact.

Emergency activities are, however, exempt from Ordinance compliance. Because most unusual noise generation from site activities are law enforcement related, such activities would be exempt from Code compliance.

Non-emergency (chronic) noise generation from site-related activities derive from project-related automobile and helicopter traffic. The City does not have regulatory authority over these sources. The City does, however, have noise/land use compatibility standards for potentially affected land uses. These guidelines are stated in terms of the weighted 24-hour CNEL metric. For aircraft (helicopter) noise, a 65 dB CNEL exposure would preclude use of the noise-impacted area for noise-sensitive land use. A helicopter noise "footprint" exceeding 65 dB CNEL would be a significant land use impediment.

Traffic noise already exceeds the City of Palmdale residential standard of 60 dB CNEL inclose proximity to site vicinity roadways. A substantial noise increase due to project-related traffic would create a significant impact.

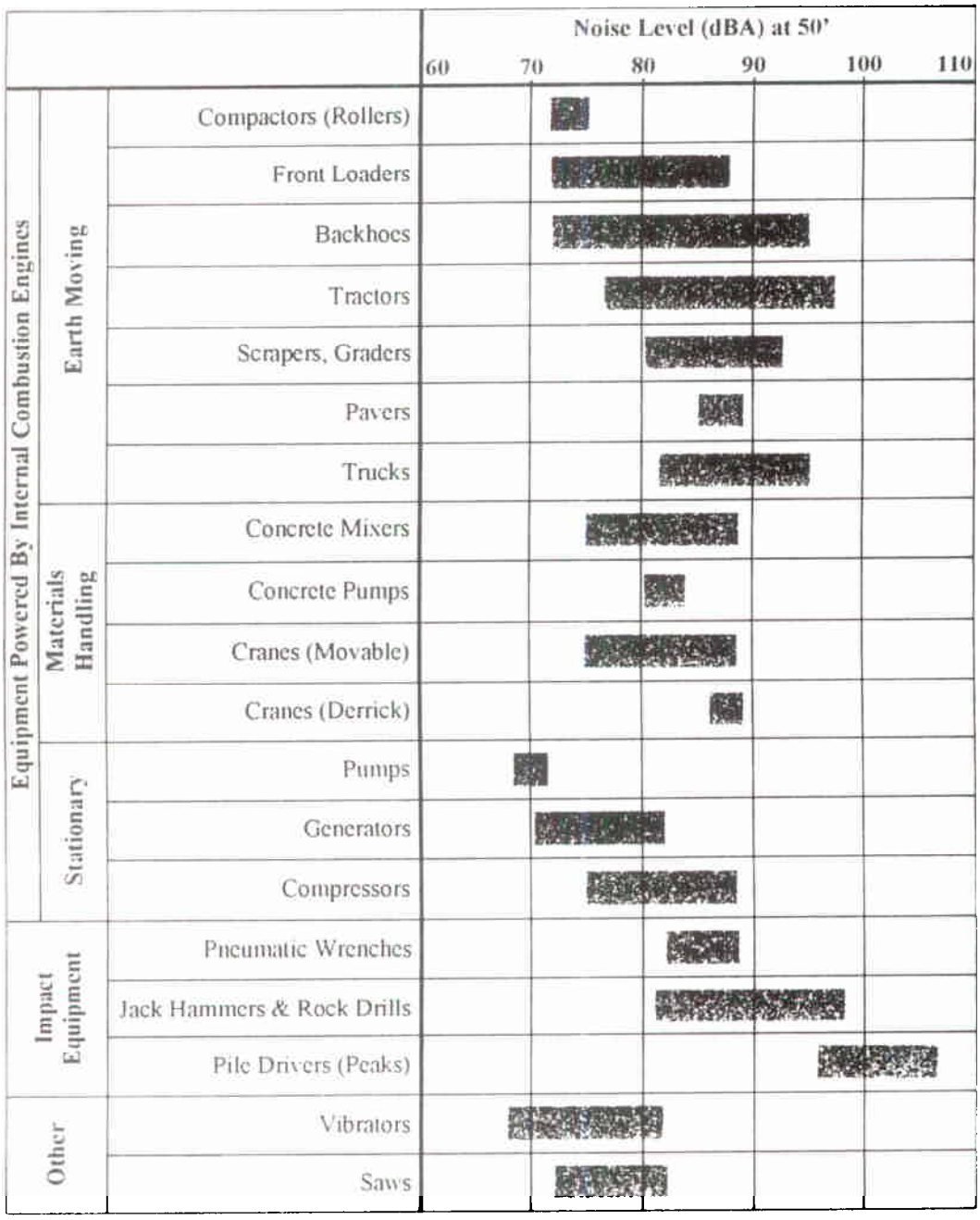
"Substantial" is not defined in any guidelines. The accuracy of sound level meters and of sound propagation computer models is no better than ±1 dB. This is also the human loudness difference discrimination level under ideal laboratory conditions. Under ambient conditions, most people cannot distinguish a change in the noise environment that differs by less than 3 dB between the pre- and post-project exposure. For the purposes of this analysis, an increase of 3 dB in the ambient traffic noise environment would be considered a significant degradation of noise quality.

**Construction Noise Impacts**

Temporary construction noise impacts vary markedly because the noise strength of construction equipment ranges widely as a function of the equipment used and its activity level. Short-term construction noise impacts tend to occur in discrete phases dominated by large, earth-moving and/or demolition equipment sources. During later phases of finish construction, equipment is generally less noisy. Figure 1 shows the typical range of equipment noise during various construction phases. The loudest construction activity noise for equipment likely to be used to grade the site typically ranges around 85 dB(A) at 50 feet from the source. These noise values reflect operation under load and at full throttle. Most equipment operates a variable load and throttle such that longer term noise emissions from construction equipment are toward the lower end of the noise generation range shown in Figure 1.

Point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance. The loudest general construction noises may require around 500 feet of distance between the source and a nearby receiver to reduce the short 85 dB(A) maximum source strength to a generally acceptable 65 dB exterior exposure level.

With a substantial parcel size and with roadways separating the site from the closest homes to the northeast and southeast, construction noise impact potential will be restricted to only a few residences when heavy equipment operates in close proximity to the northeast or southeast corner of the project site. Such operations will be restricted to the hours of 7 a.m. to 7 p.m., and are also prohibited on Sundays and major holidays. A normally adequate distance buffer to dissipate the equipment noise, plus time limits to hours of lesser sensitivity, are expected to maintain construction noise impacts at less-than-significant levels.




SOURCE: Environmental Protection Agency, NTID 300-1



NOISE LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT

**Mobile Source Noise Impacts**

Proposed project development will generate a maximum of 1845 daily trips to/from the facility. Project-related traffic will be concentrated at the project site, and then will be dispersed over multiple streets and become progressively diluted farther and farther from the Sheriff's station. Localized noise impacts in the project vicinity were calculated using the Caltrans microcomputer version of the federal highway traffic noise model (FHWA-RD-77-108) consistent with Caltrans roadway noise assessment guidelines.

The project contribution was analyzed by assuming that 75 percent of project-related traffic will arrive/depart via Sierra Highway (mostly from the south), and 25 percent will use Avenue "Q" (mostly from the west). The change in traffic noise levels at 100 feet from the centerline of various site access opportunities is shown in Table 1. The maximum noise increase is +0.3 dB CNEL above existing conditions. With rising baseline traffic volumes, the future project contribution to the total noise environment is +0.1 dB. These levels are far below the adopted +3 dB threshold of significance. Project-related traffic noise impacts are less than significant.

**Helistop Noise Activity Impacts**

The primary potential noise impact from site operations would be due to daily helistop use. Helicopters produce noise both from the propulsion system as well as from the rotors. In certain cases, the blades make a distinct "whop, whop, whop" noise called "blade slap". Blade slap is somewhat a function of design as helicopters with high blade tip speeds and a large turbulent wake such as large military craft are much more prone to rattling windows than smaller civilian craft. As a worst-case, noise levels from two flights of an MD500 helicopter were calculated using the FAA Helicopter Noise Model (HNM). Two flights per day are not enough to generate a noise contour exceeding 60 dB CNEL outside the landing pad area itself. Not even the most stringent City of Palmdale 60 dB CNEL standard is violated by two flights in/out per day. Single-event levels above 65 dB will occur out to approximately 600 feet from the flight track such that the flights may be detectable at limited off-site receptor locations. However, with a low population density in the project vicinity along the predominant SW or N flight tracks for this helistop, helicopter noise, even for brief periods, creates a less-than-significant impact.

## TABLE 1

### TRAFFIC NOISE IMPACT ANALYSIS
### (CNEL in dBA at 100 feet to Centerline)

| | < ---------- NOISE LEVELS (dBA CNEL) ---------- > | | | | | |
|---|---|---|---|---|---|---|
| **Location** | **Exist.** | **Exist. + Proj.** | **"Δ"** | **Future No Proj.** | **Future w/Proj.** | **"Δ"** |
| **Sierra Highway:** | | | | | | |
| N of Site | 66.4 | 66.5 | +0.1 | 68.2 | 68.3 | +0.1 |
| S of Site | 66.4 | 66.6 | +0.2 | 68.2 | 68.3 | +0.1 |
| **Avenue "Q":** | | | | | | |
| W of Site | 61.6 | 61.9 | +0.3 | 64.8 | 64.9 | +0.1 |
| E of Site | 61.6 | 61.7 | +0.1 | 64.8 | 64.8 | ±0.0 |

Source: FHWA-RD-77-108 (Calveno mod.)

## MITIGATION

The following measures are recommended to reduce potential construction noise impacts:

1. Construction activities shall be restricted to the hours of 7 a.m. to 7 p.m., and prohibited on Sundays and major holidays.

2. Use of equipment mufflers for construction equipment

3. Location of staging areas away from residential uses to the east

There are no significant long-term or operational noise impacts associated with project implementation that would require impact mitigation.

# Appendix F - Traffic Study

# Traffic Study for the Palmdale Sheriff's Station in Palmdale, California

## October 6, 2000

*Prepared For:*
**David Evans & Associates, Inc.**
800 North Haven Avenue, Suite 300
Ontario, California 91764
Telephone: (909) 481-5750
FAX: (909) 481-5757

*Prepared by:*
**Katz, Okitsu & Associates**
1055 Corporate Center Drive, Suite 300
Monterey Park, CA 91754
Telephone: (323) 260-4703
FAX: (323) 260-4705

Job Number J99920

# Table of Contents



# List of Figures



# List of Tables

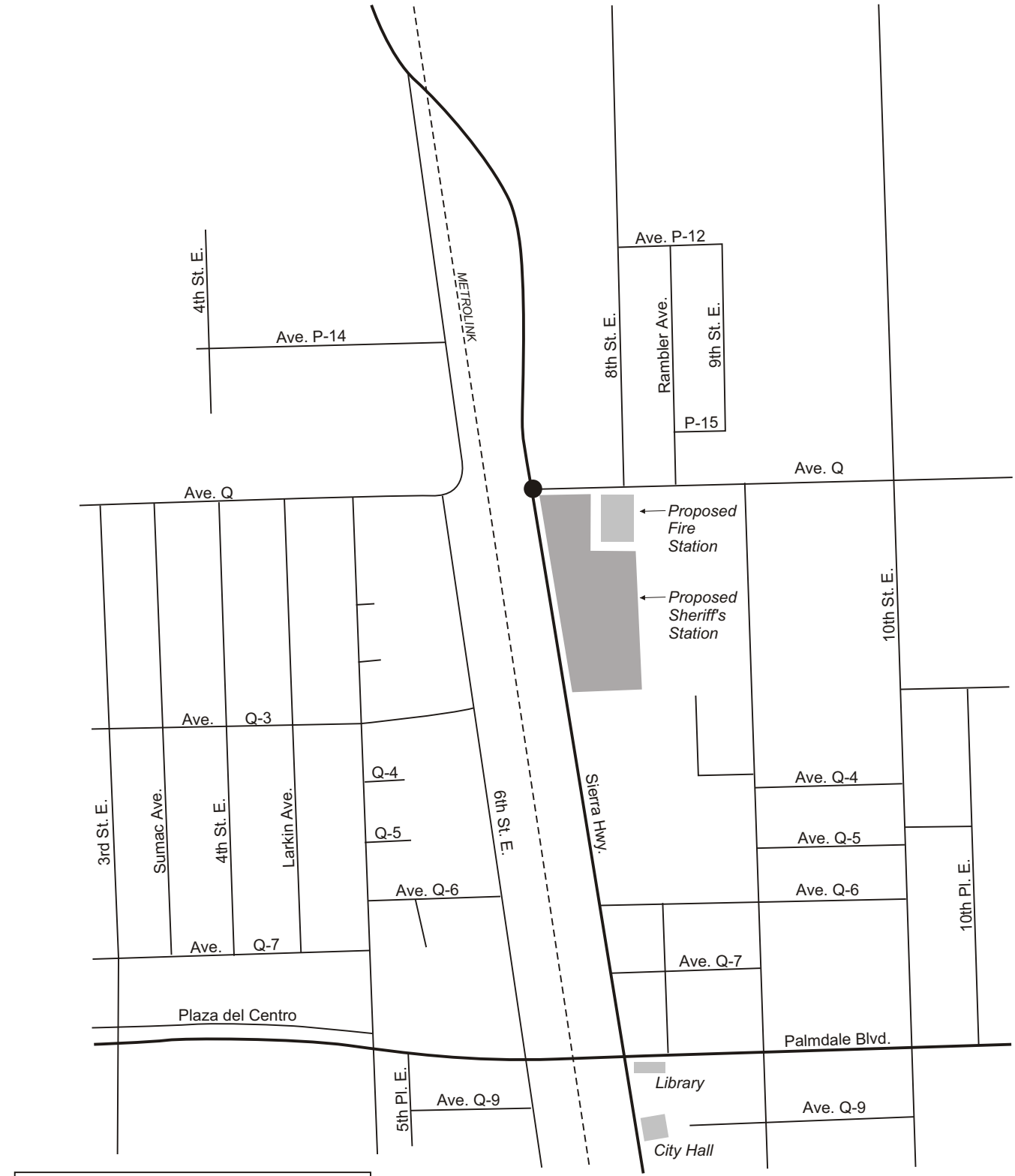
# 1. Introduction

This report documents the traffic analysis prepared by Katz, Okitsu & Associates for the proposed Sheriff's Station to be located at the southwest corner of the Sierra Highway/Avenue Q intersection in the City of Palmdale. The location of the facilities is shown in Figure 1.

**SHERIFF'S STATION PROJECT DESCRIPTION**

The proposed sheriff's station is expected to open in the year 2003 and accommodate a staff of approximately 221. The facility will provide approximately 50,280 of floor space and will include a 6,853 square foot service building, a micro-station, fueling island and helipad. The proposed station will operate 24 hours a day. In addition to the 221 staff members, the facility will also provide workspace for civilian volunteers (currently 108), the sheriff's reserve company (expected to grow from the current 1 reserve coordinator and 5 reserves to a reserve corps of 30). Explorer Scouts and outside units also work at the station as required by their duties.

Based on discussions with representatives of the sheriff's department, it can be expected that an average of 13 visitors might be on site at any one time with the number of visitors increasing to 30-35 people on days when community fingerprinting is taking place.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 1

Project Location


| | | |
|---|---|---|
| **Katz, Okitsu & Associates**<br>*Traffic Engineers and Transportation Planners* | Palmdale Sheriff's Station - *Traffic & Parking Analysis* | Figure 2 |
| | | Project Site Plan |

# 2. Existing Conditions

## EXISTING SITE AND PROPOSED SITE DESCRIPTIONS

The Palmdale Sheriff's Station is located in a mixed-use retail development at 1020 Palmdale Boulevard. The proposed project site is located approximately ½ mile north of this location at the southeast corner of the Sierra Highway /Avenue Q intersection in the City of Palmdale. The new project site will include a fire station that will replace an existing facility within the City.

The proposed project site is currently undeveloped. The project site is located near residential neighborhoods to the north and east.

## EXISTING TRAFFIC CIRCULATION NETWORK

It is anticipated that freeway access (State Route 14) to the site from the north and south will be provided by Palmdale Boulevard to the south via Sierra Highway. To a lesser extent, freeway traffic from the north may exit the freeway at Avenue N and then turn south onto Sierra Highway.

Palmdale Boulevard will provide east-west access to the project site. A discussion of the area roadways is provided below.

**Antelope Valley Freeway (State Route 14)** is a north-south freeway that connects the Los Angeles Basin with cities and town along the eastern slopes of the Sierra Nevada mountain range. Access to the project site from the freeway would most likely occur at the full interchange at Palmdale Boulevard. At this location, the freeway carries approximately 70,000 trips per day *(Source: Caltrans 1999 Traffic Volumes)*

**Palmdale Boulevard (State Route 138)** is an east-west arterial roadway. Palmdale Boulevard carries approximately 32,570 trips per day at Sierra Highway. *(Source: City of Palmdale)*

**Sierra Highway** in the project vicinity is a four-lane north-south arterial roadway with a two-way left-turn lane. The prevailing speed limit if 45 MPH. The project site is located at the southeast corner of the Sierra Highway/Avenue Q intersection. It is anticipated that an exclusive right-turn lane will be added at Avenue Q in the additional roadway that can be provided by a setback imposed on the project. Sierra Highway carries between 15,000 and 20,600 trips per day. *(Source: City of Palmdale.)*

**Avenue Q** is a two-lane east–west roadway that terminates at Sierra Highway to the west. The roadway fronts the project site to the north and currently carries 6,800 vehicles per day. *(Source: City of Palmdale.)*

Upon project completion, it is anticipated that Avenue Q will provide dual left-turn lanes to southbound Sierra Highway and an exclusive right-turn lane to northbound Sierra Highway.

## CAPACITY ANALYSIS CRITERIA

The proposed project will result in a relocation of the existing sheriff's facilities located near the

project site. As such, significant changes to regional traffic patterns and regional increases in traffic volumes *are not anticipated*.

There will be changes in traffic patterns and volumes directly adjacent to the project site on Sierra Highway and Avenue Q with diversion of trips to the new sheriff's station site. To measure these potential impacts, roadway segment analysis was performed at the project locations.

Based on a review of existing volumes, activity at the existing sheriff's station location and discussions with City staff, it was determined that a more detailed traffic analysis was not necessary.

To perform segment level of service analysis for existing and future conditions, the following level of service criteria was used. Generally, level of service (LOS) E is considered acceptable in urbanized area. Level of service criteria for 2-lane Avenue Q and 4-lane Sierra Highway is provided in Table 1. This criterion has been used in the development of city general plans for Southern California Cities.

**Table 1**
**Estimated Roadway Capacities at Level of Service "E"**

| Roadway Type | Estimated Daily Capacity |
|---|---|
| 2-Lane Collector | 14,000 |
| 4-Lane Undivided | 31,000 |

**ROADWAY SEGMENT ANALYSIS FOR EXISTING CONDITIONS**

Adjacent to the project site, both Sierra Highway and Avenue Q operate at acceptable levels of service as shown in Table 2.

**Table 2**
**Existing Levels of Service**

| Roadway | Roadway Type | ADT | Estimated Daily Capacity | LOS E or better? |
|---|---|---|---|---|
| Sierra Highway | 4-Lane Divided | 20,600 | 31,000 | YES |
| Avenue Q | 2-Lane Collector | 6,800 | 14,000 | YES |

# 3. Project Trips

Generally, project trips generation forecasts are based on the Institute of Transportation Engineer *Trip Generation Manual*, 6th Edition. However, the Trip Generation Manual does not provide either daily or peak hour trip rates for a sheriff's station or related facilities. In absence of such data, the estimation of project generated trips was developed utilizing the staffing and visitation data provided by the sheriff's department for their facilities.

**DAILY TRIP GENERATION FORECAST**

Table 4 below shows the basis and results of trip generation forecast calculations performed based on available staffing and visitation data provided by the Sheriff's Department. The calculations are based on the following assumptions:

Sheriff's Station

- 221 staff members make 4 trips per day (arrive at work, leave for lunch, return from lunch and depart from work) This represents a worst case scenario as not all employees will leave for lunch.
- Station averages 20 visitors per hour during the core "business hours" of the day (likely lower during the later evening and early morning hours).
- Generally 50 patrol cars on duty with each patrol car making 6 trips to the station (3 departing and 3 arriving per each of the three shifts)

Table 3 summarizes the daily trip generation forecast.

**Table 3 - Daily Trip Generation Forecast**

| Trip Source | ADT Volume |
|---|---|
| **Sheriff's Station** | |
| Staff Trips | 884 |
| Visitor Trips | 480 |
| Patrol Car Trips | 300 |
| | |
| | |
| | |
| | |
| **Total** | **1,664** |

**PEAK HOUR TRIP GENERATION FORECAST**

In order to develop daily trip generation forecasts, it was necessary to obtain staffing and shift information. The sheriff's station will operate around the clock. Calculations and assumptions used to develop peak hour trip forecasts are provided below.

**Sheriff's Station**

The sheriff's department was contacted to determine the staffing by shift. Table 4 summarizes

the data.

**Table 4**
**Sheriff's Station Staffing Shift Assignments**

| | | Post Positions per Shift | | | | | |
|---|---|---|---|---|---|---|---|
| | | AM | | PM | | Grave | |
| **Department** | Totals | 6A-2P | 8A-4P | 2P-10P | 4P-12A | 10P-6A | 12A-8A |
| Administration | 5 | | 5 | | | | |
| Front Office | 17 | | 7 | 5 | | 5 | |
| Traffic | 6 | 3 | 3 | | | | |
| Reserves | 1 | | 1 | | | | |
| Community Relations | 4 | | 4 | | | | |
| Secretariat/Records | 19 | 2 | 12 | | 3 | | 2 |
| Scheduling/Timekeeping | 5 | | 5 | | | | |
| Training/Special Projs | 2 | | 2 | | | | |
| Evidence/Property | 1 | | 1 | | | | |
| Patrol | 104 | 20 | 20 | 18 | 18 | 14 | 14 |
| Detectives Division | 35 | 8 | 25 | | 2 | | |
| Narcotics | 6 | | 6 | | | | |
| Crime Analyst | 2 | | 2 | | | | |
| Jail | 12 | 2 | 2 | 2 | 2 | 2 | 2 |
| Vehicle Maintenance | 2 | | 2 | | | | |
| | | | | | | | |
| **Employee Totals** | **221** | **35** | **97** | **25** | **25** | **21** | **18** |

Source: Los Angeles County Sheriff's Department

Peak hour trip generation is expected to occur at 8AM when the graveyard shift ends and the normal business day begins. Based on current trip making characteristics, it is assumed that each staff member will continue to drive alone. As a result staff would account for 105 AM peak hour trips (97 entering and 18 departing). It would also be expected that patrol cars and detectives that arrived at 6AM might depart to the field during the 8-9 AM peak hour increasing the outbound trips by 28 to 46.

The sheriff's department has stated that volunteers are used to augment staff and that there is constant activity involving the arrival and departure of visitors. Using sheriff's department data, it can be expected that up to 30 visitors can be expected on days that fingerprinting takes place, If all would arrive by car, then the AM inbound trips would increase by 30 vehicles.

Based on the assumptions above, peak hour trip generation for the sheriff's station would occur during the AM peak hour and would be as follows:

- 127 Inbound Trips
- 46 Departing Trips

**TOTAL PEAK HOUR TRIP GENERATION**

Peak hour trip generation for the proposed stations is expected to occur at 8AM. Forecast peak hour trip generation for the combined facilities is provided below.

- 137 Inbound Trips
- 56 Outbound Trips

# 4. Project Traffic Impacts

The Sheriff's Station are expected to add approximately 1,664 daily trips to the local roadway (Sierra Highway and Avenue Q). The addition of these trips is not sufficient to increase daily level of service above LOS E since both Sierra Highway and Avenue Q have excess capacity as defined in Table 2.

The project is expected to add less than 200 trips during the AM peak hour and lesser amounts during other hours of the day. Based on field observations and discussions with City staff, the adjacent roadways have sufficient capacity to accommodate these additional trips. On a regional basis, increases in traffic are not expected, as the proposed project will replace existing facilities.

The LOS with the project would still be at LOS D or better.

# 5. Parking Requirements

Due to the nature of the development, parking must be provided not only to accommodate employees and visitors to the facility, but also volunteers, government employees from outside agencies and patrol cars.

**SHERIFFS STATION**

In order to determine peak parking demand at the proposed sheriff's station, it was first necessary to calculate the period of peak parking demand. Peak parking demand would not necessarily occur at the same time as peak traffic demand but would be impacted by shift overlaps and fluctuations in visitation to the site. Visitation to the site can vary but shift schedules can be generally forecast. Table 5 calculates the number of staff members that could be expected during the periods of shift overlaps. Shift overlaps occur at 8AM, 2PM and 10PM.

**Table 5**
**Peak Staffing During Shift Overlaps**

| Staff Function\Overlap Time | 8AM | 2PM | 10PM |
|---|---|---|---|
| Administration | 5 | 5 | 0 |
| Front Office | 7 | 12 | 5 |
| Traffic | 6 | 6 | 0 |
| Reserves | 1 | 1 | 0 |
| Community Relations | 4 | 4 | 0 |
| Secretariat/Records | 16 | 14 | 5 |
| Scheduling/Timekeeping | 5 | 5 | 0 |
| Training/Special Projs | 2 | 2 | 0 |
| Evidence/Property | 1 | 1 | 0 |
| Patrol | 54 | 58 | 50 |
| Detectives Division | 33 | 33 | 2 |
| Narcotics | 6 | 6 | 0 |
| Crime Analyst | 2 | 2 | 0 |
| Jail | 6 | 6 | 6 |
| Vehicle Maintenance | 2 | 2 | 0 |
| **Total Staff Parking Demand** | **150** | **157** | **68** |

In order to calculate peak parking demand, it is necessary to account for visitor demand, demand from patrol cars at the station during patrol hours and special demand that may occur during periods of special functions. To provide a worst-case assessment of parking requirements, it is necessary to assume that parking demand for special events would occur during the period of heaviest station activity.

Table 6 summarizes parking demand generated by sheriff's vehicles as defined by sheriff's department staff.

**Table 6**
**Sheriff's Department Vehicle Parking Requirements**

| Vehicle Type | Total |
|---|---|
| Patrol Cars | 71 |
| Motorcycles | 2 |
| Special Sheriff's Vehicles | 20 |
| Tactical Car Spaces | 30 |
| 2 - 40 ft comm. Trailers | 8 |
| 2 horse trailers | 4 |
| Repair Spaces | 10 |
| 10% Contingency | 15 |
| **Total** | **160** |

The space requirements for sheriff's vehicles is based on the following assumptions:

- 30 spaces required for tactical vehicles during emergencies.
- 8 spaces equivalent for communications trailers
- 4 spaces required for horse trailers
- 10 spaces are required to accommodate vehicles under repair
- 10% contingency

Peak parking demand can be calculated by adding parking demand generated by staff and visitors to demand generated by sheriff's vehicles. Based on conversations with the sheriff's department, peak hourly visitor demand would be 30 and it could be assumed that each arrive by vehicle alone.

Table 7 calculates peak parking requirements for the proposed sheriff's station.

**Table 7**
**Sheriff's Station Peak Parking Requirements**

| | |
|---|---|
| Employee Demand at 2PM | 157 |
| Visitors | 30 |
| **SUB-TOTAL** | **187** |
| Sheriff's Vehicle Requirements | 160 |
| **Total Station Parking Requirements** | **347** |

F:\KOA\J99920\Report\J99920.doc

# RESPONSES TO COMMENTS ON DRAFT INITIAL STUDY FOR THE PROPOSED PALMDALE SHERIFF'S STATION

Prepared for:

**Los Angeles County Department of Public Works**

Prepared by:

**David Evans and Associates**

**May 6, 2003**

## RESPONSES TO COMMENTS ON
## DRAFT INITIAL STUDY FOR PALMDALE SHERIFF'S STATION

Provided below are the comments received during the public review period of the draft Initial Study and Mitigated Negative Declaration for the Palmdale Sheriff's Station. Actual letters are provided in Attachment A. Responses to the substantive comments are provided below, which include clarification of the information presented in the draft Initial Study or changes to the text of the document.

The changes to the Initial Study do not reflect major changes to the information or the analysis in the document, and no changes to the conclusions of the Initial Study are needed or proposed. The additional analysis provided by a follow-up traffic study does not change the analysis or findings in the Initial Study. Also, a proposed change in the mitigation measure for light and glare would result in the substitution of the measure with one that is considered equivalent or more effective.

**R. Jordan**
**Registrar-Recorder/County Clerk**
**June 27, 2002**

Comment: There is a $25.00 processing fee required.

Response: The required fee will be included in the Notice of Determination and Mitigated Negative Declaration that would be sent to the County Clerk.

**Ruth Frazen**
**County Sanitation Districts**
**July 3, 2002**

Comment 1: The wastewater flow originating from the proposed project will discharge to…..an 18-inch diameter trunk sewer (that) has a design capacity of 3.9 million gallons per day (gpd) and conveyed a peak flow of 1.3 mgd when last measures in 2000.

Response: This information shall be added into the Initial Study.

Comment 2: The wastewater generated by the proposed project will be treated at the Palmdale Water Reclamation Plant (WRP). The Palmdale WRP has a design capacity of 15 mgd and currently processes an average flow of 9.2 mgd.

Response: The updated info on the average flow shall be included in the document.

Comment: The expected average wastewater flow from the project site is 10,056 gallons per day.

Response: The Initial Study estimates sewage flow at 12, 040 gallons per day, which is greater that the estimate by the Sanitation Districts.

Comment 4: The Districts are empowered by the California Health and Safety Code to charge a feed for the privilege of connecting (directly or indirectly) to the Districts Sewerage System….

Response: The project would pay the required fees for sewer connection and service.

Comment 5: In order for the District to conform with the requirements of the Federal Clean Air Act (CAA), the design capacities of the District's wastewater treatment facilities are based on regional growth forecast adopted by the Southern California Association of Governments (SCAG)……

Response: The project is consistent with land use plans used by SCAG in developing regional projections. Comment noted.

**Eddie Tello**
**Sheriff's Department**
**Facilities Planning Services**
**July 8, 2002**

Comment 1: The report indicates the Palmdale Station has 166 personnel. That is inaccurate. Palmdale Station currently has 195 personnel. The station personnel will also increase upon opening, as there will be additional personnel required to operate the jail. The additional personnel would increase approximately by 10 to 12.

Response: The increase in personnel occurred between the time of preparation of the document and the review period. The updated information would be provided in the Initial Study. The analysis in the document also considers the use of the station by as many as 221 personnel. Thus, the 12 new staff at project opening would lead to 207 people, which is less than what has been considered.

Comment 2: The report indicates that the helicopters would be expected to stop at the Palmdale Sheriff's Station at an average once per day. Unless an emergency or tactical situation exists, there is no need for any helicopter to land at Palmdale Station at all. Needless to say, an average of once per day is highly unlikely.

Response: To consider the worst case, the one helicopter trip per day would account for use of the helistop.

Comment 3: This section should be deemed "No Impact". The parks that already exist are not being used by station personnel with any significance at the present time. The relocation of personnel would not change the use of any recreational facility from what it currently is.

Response: The use of the adjacent park by staff at the new station cannot be dismissed due to its proximity to the new station. Thus, this impact is considered "Less than Significant".

Comment 4: The report indicates that in order to mitigate "potential light spillover and glare on adjacent residences", staff vehicles existing the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies.

This is unacceptable. We were not consulted regarding this issue, and it is simply unreasonable to assume that we will limit the use of either exit at the station. Patrol vehicle will always have a need to use both exists to respond to

calls for service, whether an emergency or not. We find the verbiage, which limits the egress of station personnel, unacceptable and unreasonable.

Response: Based on additional review of the project impacts, it is anticipated that the minor increase in patrol vehicles using the Avenue Q driveway for non-emergency response and the limited number of residents that would be affected is expected to create no more adverse effect than initially anticipated. Thus, the mitigation measure shall be changed to state:

*Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles.*

**Russell Johnson**
**Department of Health Services**
**July 8 ,2002**

Comment 1: The expected potable water needs will be supplied through a public water system, Palmdale Water District, which guarantees water connection and service to the development, and wastewater treatment demand will be accommodated through public wastewater treatment facilities of Los Angeles County Sanitation District No. 20 as proposed.

Response: Comment noted.

Comment 2: If water wells are discovered during the proposed development, permits and written authorization must be obtained from this Department for proper decommissioning of the wells.

Response: Comment noted.

**State Clearinghouse**
**July 11, 2002**

Comment: This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is June 2, 2002 to July 22, 2002.

Response: Comment noted.

**David Leininger**
**County Fire Department**
**July 12, 2002**

Comment: The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. The Department may condition future development to provide additional means of access.

Response: The site plan shows several access points for the project to facilitate circulation. The site plan shall be submitted for review by the Fire Department as part of the plan check process.

Comment: The development of this project must comply with applicable code and ordinance requirements for construction, access, water mains, fire flow and hydrants……

Response: The proposed project has been designed to comply with applicable fire safety requirements. The site plan shall be submitted for review by the Fire Department as part of the plan check process.

Comment: Every building constructed shall be accessible to Fire Department apparatus by way of access roadways …..

Response: Adequate access to all portions of the proposed sheriff's station building has been provided.

Comment: Fire sprinkler systems are required in some residential and most commercial occupancies.

Response: The proposed station shall be equipped with a fire sprinkler system.

Comment: Non-residential-institutional standards
Limited Access Devised (gates etc.) standards
Traffic Calming Measures

Response: The project has been designed to comply with these standards and will go through a plan check process to ensure compliance.

**Stephen Buswell**
**Department of Transportation**
**July 12, 2002**

Comment: Stormwater runoff is a sensitive issue for Los Angeles and Venture counties. Please be mindful of your need to discharge clean runoff water.

Response: Sewage from the site would be conveyed to the public sewer system. Wastewater from the site would be collected at a clarifier and discharged to the sewer system.

Comment: Any transportation of heavy construction equipment and/or materials which requires that use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods.

Response: Comment noted.

**Terry Roberts**
**State Clearinghouse**
**July 24, 2002**

Comment: …Comment letters are forwarded for use in preparing the final environmental document. This letter acknowledged that you have complied with the State Clearinghouse review requirements…..

Response: Comment noted.

**Terry Roberts**
**State Clearinghouse**
**July 25, 2002**

Comment: The enclosed comment on your Negative Declaration was received by the State Clearinghouse after the end of the state review period, which closed on July 22, 2002. We are forwarding these comments to you because they provide information or raise issues that should be addressed in you final environmental document. The CEQA does not require lead agencies to respond to late comments. However, we encourage you to incorporate these additional comments into you final environmental document and to consider them prior to taking final action on the proposed project.

(Attachment: DTSC letter)

Response: Comment noted.

**Harlan Heche**
**Department of Toxic Substances Control**
**July 17, 2002**

Comment 1: The IS/MND states that the proposed project site is currently vacant and that the southern portion was previously used for automobile parking garage and a sign and paint shop from 1942 to 1969. It is possible that hazardous wastes/substances may have been released from the previous land uses to the soil underneath the proposed project site. The IS/MND therefore needs to identify any known or potentially contaminated site within the proposed project area. For all identified sites, the IS/MND needs to evaluate whether conditions at the site pose a threat to human health or the environment.

Response: A Phase 1 Environmental Site Assessment has been completed for the site and provided as Appendix D of the Initial Study, with the findings summarized in Section 3.0 of the Initial Study. As stated on page 3-19, the previous paint shop occupied 110 square feet and the sign shop occupied 450 square feet. Based on the small size of these facilities, it is highly unlikely that hazardous materials in large quantities would have been used on-site. Thus, the proposed Sheriff's Station would not be located on a site with hazardous materials or ground contamination. Adjacent sites are also identified and none of these pose a threat to the project due to their distance from the site.

Comment 2: The IS/MND should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.

Response: Construction activities would be conducted in accordance with existing state, federal and local regulations. These include pertinent regulations of the City of Palmdale, the County of Los Angeles, the County Fire Department, Cal-OSHA, Cal-EPA, and SCAQMD. Since no hazardous materials contamination of the soil or groundwater is expected at the site, no remediation activities are proposed. As required by existing regulations, should soil or groundwater contamination be

encountered, appropriate agencies would be contacted and consulted on appropriate permits and remediation.

Comment 3: If during construction of the project, soil contamination is suspected, construction in the area should stop, and appropriate health and safety procedures should be implemented. If it is determined that contaminated soils exist, the IS/MND should identify how any required investigation and/or remediation will be conducted and the government agency to provide appropriate regulatory oversight.

Response: The project shall comply with pertinent regulations, such as those included in the comment above, as necessary. Since there is no potential for soil contamination at the site, the Initial Study does not identify any required investigation and/or remediation that will be conducted or the government agency that will provide appropriate regulatory oversight.

**Karen Lichtenberg**
**Office of the County Counsel**
**August 5, 2002**

Comment 1: "to lease or to sell?"

Response: Sentence in third paragraph on page 2-1 shall be revised to state "*to lease or sell*"

Comment: "The addition of these trips is not sufficient to increase (decrease?) daily level of service (LOS) above (to) LOS E or worse". To me, an increase n LOS means improve to a lower letter. Maybe I'm wrong but this needs to be clarified for people who think like me.

Response: The second sentence of the fifth paragraph on page 3-38 shall be revised to read:

"*The addition of these trips is not sufficient to change or degrade the daily level of service (LOS) to LOS E or worse*."

**Rob Kubomoto**
**Watershed Management Division**
**County Department of Public Works**
**August 29, 2002**

Comment: …The proposed project will increase the generation of solid waste and will negatively impact the solid waste management infrastructure in the County. The document must identify measures the project proponent may implement to mitigate the impact…..

Response: Section 3.16 of the Initial Study addresses potential impacts on solid waste. The analysis indicates that the project would generate wastes but this amount would not be considered significant.

Comment: In addition, it appears that the proposed project will be constructed under a County contract, in which case the Construction and Demolition Recycling Specifications for County projects will apply…..

Response: The project will comply with the Construction and Demolition Recycling Specifications of the County.

Comment: … The EIR should include/discuss standards to provide adequate waste storage areas for collection/storage of recyclable and green waste materials for this project.

Response: Waste storage bins would be provided at the trash storage area at the southern end of the site, as shown in the site plan for the project.

Comment: Should any operation within the project project/development include the construction/installation, modification or removal of underground storage tanks, industrial waste control, disposal facilities and/or stormwater treatment structures, our Environmental Programs Division must be contacted for required approval and operating permits.

Response: Relevant permits would be obtained for underground storage tanks that would be provided on-site.

Comment: If vehicle washing operations are proposed for the Sheriff's facilities, the wastewater must be segregated from stormwater by use of a wash pad and a clarifier connected to the public sewer.

Response: As stated on page 2-5, a clarifier would be provided at the vehicle maintenance area to separate wastewater from vehicle washing operations and vehicle maintenance activities.

Comment: In order to complete our review we require the Traffic Study to be revised to include the following:

- Analysis of the intersection of Sierra Highway and Avenue Q
- County's traffic impact study methodology
- Any potential traffic impacts/delays on Sierra Highway at the at-grade railroad crossing
- Detailed site plan showing adjacent intersections, driveways and driveways along and opposite project frontage
- On page 2, station is located at the "southeast corner".

Response: As requested, a second traffic study has been completed for the project (see Attachment B). The findings of the new traffic study show that the adjacent roadways are currently operating at LOS A and B and the intersection of Sierra Highway and Avenue Q is operating at LOS A during the AM peak hour and at LOS C during the PM peak hour. The addition of project's 1,504 vehicle trips, related projects proposed in the vicinity, and a 6 % ambient growth to the existing traffic volumes would lead to roadways operating at acceptable service levels of LOS C or better and to the Sierra Highway/ Avenue Q intersection operating at LOS C or better. This is due to the street improvements along the site frontage on Avenue Q that would accompany the proposed project. No traffic impacts are expected at Sierra Highway and the railroad crossing. The

findings of the study do not present any new information nor change the analysis and conclusions in the Initial Study.

Comment: We require that City of Palmdale review this document for significant impacts/mitigation measures within its jurisdictions.

Response: Thefirst traffic study has been prepared in consultation with the traffic engineer of the City of Palmdale. The City has also been provided a copy of the draft Initial Study for review and comment. No comments were received from the City. The second traffic study has been made in accordance with County guidelines, with consultations with the City of Palmdale's Traffic Engineer.

Comment: The second sentence of the fourth paragraph (See Section 3.8) ….and the last sentence of the same paragraph seem contradictory.

Response: This paragraph shall be revised to read:

*Flood hazards have been identified in the Palmdale area, associated with the creeks and drainage channels. The Flood Insurance Rate Maps show that the 100-year floodplain for Anaverde Creek (Zone A) is near the site but does not extend into the project site. The southeastern portion of the site is designated as Zone C – which is defined as 1) areas within the 500-year floodplain; 2) areas within the 100-year floodplain where water depth would be less than 1 foot; 3) drainage areas with less than one square mile; or 4) areas protected by levees from the 100-year flood. Due to the proximity of the 100-year floodplain, the site is likely to be located within "an area within the 100-year floodplain where water depth would be less than 1 foot".*

Comment: The proposed project should include investigation of watershed management opportunities to maximize capture of local rainfall on the project site, eliminate incremental increases in flows to the storm drain system, and provide filtering of flows to capture contaminants originating from the project site.

Response: The on-site runoff would be directed into a detention basin at the eastern edge of the site and will lead to ground percolation of the runoff, with no runoff flows into the local storm drain system.

**Eddie Tello**
**Facilities Planning Bureau**
**Los Angeles County Sheriff's Department**

Comment: Ken, Station staff has reviewed and concur with some clarification, see below.

Comment 1: The report indicates the Palmdale Station has 166 personnel. That is inaccurate. Palmdale Station currently has 195 personnel. The station personnel will also increase upon opening, as there will be additional personnel required to operate the jail. The additional personnel would increase approximately by 10 to 12.

Response: The increase in personnel occurred between the time of preparation of the document and the review period. The updated information would be provided in the Initial Study. The analysis in the document also considers the use of the station by as many as 221

personnel. Thus, the 12 new staff at project opening would lead to 207 people, which is less than what has been considered.

[Raulston, Edward D.] Our current staffing level is 203 with one additional gain December 1, 2002, = 204. We are also hopeful that we will receive four additional sergeant items in the near future. This would put our staffing level at 208. With two years left prior to move in, and additional gains, 10 to 12 personnel upon opening, we could exceed the 221 staff level before we move in.

Response: The current staffing at the existing station has been updated in the Initial Study to 204 personnel. Future additional staffing has not occurred, and we do not need to note them at this time. The anticipated staffing at the new station is 221 personnel, as considered in the Initial Study. We understand that increases in demand for police protection services in the area could lead to further increases in station personnel. Should the station staffing increase, impacts associated with vehicle trips, parking demand, vehicle emissions and vehicle noise impacts would also increase.

Reanalysis of the project's traffic impacts shows that the level of service at the Sierra Highway/Avenue Q intersection would change to LOS C during the PM peak hour with the increase in on-site personnel to 321 people. This is within the acceptable range for intersection operations and would not require mitigation. Adjacent roadways are also expected to continue to operate at the same acceptable levels of service (LOS C or better). Thus, no mitigation would be required with as many as 321 personnel at the station.

Even with as many as 321 personnel, on-site parking would be available and adequate. As many as 502 parking spaces could be provided on-site, with 367 parking spaces needed by the anticipated staff of 221 people. Thus, 135 parking spaces are available for future increases in parking demand from the 100 additional staff. Estimates of parking demand with a staff of 321 people show a maximum parking demand for 440 spaces. It may be necessary that the available parking spaces behind the helistop be striped as increases in personnel and parking demand occur, so as to provide the maximum 502 parking spaces on-site.

The air quality emissions associated with the increase in staffing would also lead to increase in vehicle emissions from the project. Estimates of pollutant emissions associated with daily vehicle trips that would be generated by 321 on-site personnel are provided in the table below.

**ESTIMATED MOBILE EMISSIONS (pounds/day)**

| Sources | ROG | NOx | CO | $PM_{10}$ |
|---|---|---|---|---|
| Vehicle Emissions | 70.27 | 30.39 | 177.20 | 16.30 |
| SCAQMD Threshold | 75.00 | 100.00 | 550.00 | 150.00 |
| % of Threshold | 94% | 30% | 32% | 11% |
| Exceeds Threshold? | No | No | No | No |

Source: URB7G Computer Model

The noise impacts associated with the increase in station staffing were also reconsidered. Existing noise levels are around 61 to 66 dB CNEL and future noise levels are projected at 64 to 68 dB CNEL. The increase in 100 additional staff personnel and approximately 430 new vehicle trips would add only approximately 2 to 6 percent of the projected traffic volumes on Avenue Q and Sierra Highway. Increases in noise levels from these additional trips are not expected to be

greater than 3 dB, which is the minimum level when a change in noise level becomes discernible. This is because it takes a doubling of the traffic volume to increase the noise level by 3 dB. The estimated increase of 430 vehicle trips associated with the 100 additional staff (for a total of 321 station personnel) would not double the existing and future traffic volumes on Sierra Highway and Avenue Q. Thus, any vehicle noise increase would not be significant.

As shown, future increases in station staffing to as many as 321 personnel would not lead to any major change in the anticipated impacts of the proposed project. Impacts on traffic, parking, vehicle emissions and vehicle noise would remain less than significant. Other impacts were analyzed based on station design and size and/or are also not expected to become significant with the additional 100 personnel.

Comment:

> Comment 2: The report indicates that the helicopters would be expected to stop at the Palmdale Sheriff's Station at an average once per day. Unless an emergency or tactical situation exists, there is no need for any helicopter to land at Palmdale Station at all. Needless to say, an average of once per day is highly unlikely.
>
> Response: To consider the worst case, the one helicopter trip per day would account for use of the helistop.

[Raulston, Edward D.] We concur with the worst case accounting for use of the helistop.

Response: Comment noted.

Comment:

> Comment 3: This section should be deemed "No Impact". The parks that already exist are not being used by station personnel with any significance at the present time. The relocation of personnel would not change the use of any recreational facility from what it currently is.
>
> Response: The use of the adjacent park by staff at the new station cannot be dismissed due to its proximity to the new station. Thus, this impact is considered "Less than Significant".

[Raulston, Edward D.] We concur.

Response: Comment noted.

Comment:

> Comment 4: The report indicates that in order to mitigate "potential light spillover and glare on adjacent residences", staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies. This is unacceptable. We were not consulted regarding this issue, and it is simply unreasonable to assume that we will limit the use of either exit at the station. Patrol vehicle will always have a need to use both exits to respond to calls for service, whether an emergency or not. We find the verbiage, which limits the egress of station personnel, unacceptable and unreasonable.
>
> Response: Based on additional review of the project impacts, it is anticipated that the minor increase in patrol vehicles using the Avenue Q driveway for non-emergency response and the

limited number of residents that would be affected is expected to create no more adverse effect than initially anticipated. Thus, the mitigation measure shall be changed to state:

Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles.

[Raulston, Edward D.] We concur.

Response: Comment noted.

# Attachment A – Comment Letters

COUNTY OF LOS ANGELES
REGISTRAR-RECORDER/COUNTY CLERK
12400 IMPERIAL HWY. - P.O. BOX 63592, NORWALK, CALIFORNIA 90650 - (562) 462-2177

CONNY B. McCORMACK
REGISTRAR-RECORDER/COUNTY CLERK

Please resubmit enclosed document/s with necessary corrections for processing

1. ☐ Please submit notice in appropriate form, see attached for example.
2. ☐ Original signatures are required on both notice and certificate of fee exemption when submitted.
3. ☐ A legible copy of notice/certificate of fee exemption is needed for processing.
4. ☐ Notice is incomplete, incomplete portions are in highlight for you convenience.
5. ☒ There is a $25.00 processing fee required.
6. ☐ We do not accept checks dated more than 90 days from date of issuance.
7. ☐ Please make check payable to the Los Angeles County Clerk
8. ☐ There is a $1275.00/$875.00 fee required to process your NOD as submitted. However, if the project was found to be de minimis, resubmit the enclosed NOD along with an original signed certificate of fee exemption and a check made payable to the Los Angeles County Clerk's Office in the amount of $25.00
9. ☐ Please provide an actual copy of your notice for processing.
10. ☐ Check is unsigned.
11. ☐ The bulk of your notice has been held up at our office due to a lack of postage. A prepaid postage envelope in the amount of $10.00 must be provided within 30 days from date of this notice, if you would like for your notice to be returned.
12. ☐ There is a filing fee in the amount of $25.00 for each notice submitted.
13. ☐ Check was sent without documents.
14. ☐ Other notices have been returned because only one check was issued.
15. ☐ Other:

NOTE – Please include the following to ensure prompt processing & return:
A) original signatures on notices & certificate of fee exemptions
B) two copies of notice if applicant/agency would like to receive a stamped copy before the posting periods ends
C) two return addressed envelopes

RECEIVED
JUN 27 2002
PROJECT MANAGEMENT II
DEPT. PUBLIC WORKS

CONNY B. McCORMACK
Registrar-Recorder/County Clerk

R. JORDAN _____ Deputy

COUNTY OF LOS ANGELES
REGISTRAR-RECORDER/COUNTY CLERK
12400 IMPERIAL HWY. - P.O. BOX 53582, NORWALK, CALIFORNIA 90650 - (562) 462-2177

CONNY B. McCORMACK
REGISTRAR-RECORDER/COUNTY CLERK

THERE ARE NO EXCEPTIONS, NO ONE IS EXEMPT FROM THE FILING FEES PER FISH AND GAME CODE SECTION 711.4

The following is a list of notices & requirements in order to be filed in our office for posting:

NOD – Notice of Determination
- Original signatures are required on both notice and certificate of fee exemption
- When filed with a certificate of fee exemption filing fee is $25.00
- When filed without a certificate of fee exemption fees are as follows.
- If a (EIR), Environmental Impact Report was prepared for the project then the fee is $850.00 plus the $25.00 county posting fee = $875.00
- If a (ND), Negative Declaration was prepared for the project then the fee is $1250.00 plus the $25.00 county posting fee = $1275.00
- 1 addition copy of notice and certificate

NOP – Notice of Preparation
- A (NOP) is given to inform the public that the lead agency is in the process of preparing either a draft (EIR) or a (Mitigated) NEG DEC
- Only the $25.00 county posting fee is required
- No original signature is required
- 1 additional copy of notice

INITIAL STUDY
- Are not accepted alone, must have a notice

NOC – Notice of Completion
- A (NOC) is issued to inform the public when the lead agency has completed a NEG DEC, or draft EIR
- Only the $25.00 county posting fee is required
- No original signature is required
- 1 additional copy of notice

(Documents are sometimes for recording and not posting. Be sure that they're Environment projects and not construction)

NOE – Notice of Exemption
- Original signatures are required
- $25.00 county posting fee is required
- 1 additional copy of notice

NPH – Notice of Public Hearing
- Normally issued to inform the public of hearing date on a particular project
- Only the $25.00 county fees is required
- No original signature is required
- 1 additional copy of notice

ND – Negative Declaration
- All NEG DEC filing are considered to be final NEG DECs unless otherwise indicated
- NEVER accept for filing without NOD, unless NEG DEC is proposed or mitigated, not final
- 1 additional copy of notice

PROPOSED ND – Proposed Negative Declaration
- Name is self explanatory
- Only the $25.00 county fee is required
- No original signature is required
- 1 additional copy of notice

MND – Mitigated Negative Declaration
- Same as Proposed Negative Declaration

EIR – Environmental Impact Report
- NEVER accept for filing without NOD

DRAFT EIR – Draft Environmental Report
- NEVER accept for filing alone. Can be accepted with some type of notice (NOI, NPH, NOC, NOP)

NOI – Notice of Intent (adopt a EIR, or ND, or Draft EIR, or MND)
- Normally issued to inform public of hearing date on a particular project
- Only the $25.00 county posting fee is required
- No original signature is required
- 1 additional copy of notice

NOA – Notice of Availability
- Only the $25.00 county posting fee is required
- No original signature is required
- 1 additional copy of notice

# NOTICE OF INTENT TO ADOPT A

# MITIGATED NEGATIVE DECLARATION

The Los Angeles County Department of Public Works proposes to develop a new Palmdale Sheriff's Station on approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. The project site is currently vacant and there are no improvements on-site, except for three scattered signs and a 20-foot by 65-foot concrete pad at the southwestern section near Sierra Highway. The project site was previously used for a variety of land uses, including a residence, various fruit stands, an automobile parking garage, a sign and paint shop, and various temporary carnivals. The site is not listed as a hazardous material site and is not on the list compiled pursuant to Government Code Section 65962.5.

The proposed Sheriff's Station would have approximately 50,280 square feet of floor area and will accommodate a maximum of 221 sworn officers and administrative persons. On-site facilities would include the main sheriff's station building, a maintenance building, fueling island, a helistop, a 120-foot communication tower, and parking areas. The new Sheriff's Station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5-mile southeast of the proposed project site.

The Los Angeles County Department of Public Works has prepared a draft Initial Study and Mitigated Negative Declaration to assess the proposed project impacts to the environment and to the community and is soliciting public comments over a 30-day review period, beginning on June 17, 2002 and ending on July 17, 2002.

A copy of the document is available for public review at the following locations:

Palmdale Main Library
700 East Palmdale Boulevard
Palmdale, CA 93550-4742

Palmdale Youth Library
38510 Sierra Highway
Palmdale, CA 93550-3825

City of Palmdale
Planning Department
38250 Sierra Highway
Palmdale, CA 93550-4609

County of Los Angeles
Department of Public Works
Project Management Division
900 South Fremont Avenue, Fifth Floor
Alhambra, CA 91803

Interested parties may submit their comments to:

Ken Schumann, Project Manager
Project Management Division
Los Angeles County Department of Public Works
900 South Fremont Avenue, Fifth Floor
Alhambra, CA 91803

The Final Mitigated Negative Declaration will incorporate responses to comments received during the public review period, and will be considered by the Board of Supervisors for approval. No public hearing date has been set at this time.

Questions regarding this notice should be directed to Mr. Ken Schumann of the Department of Public Works at (626) 300-3246, Monday through Thursday between 7:00 a.m. and 5:45 p.m.

# NOTICE OF AVAILABILITY OF DRAFT INITIAL STUDY/DRAFT MND

Project Title
**Palmdale Sheriff's Station**

Project Location – Specific
**11.57 acres on the southeast corner of Sierra Highway and Avenue Q**

Project Location – City Project Location – County
**City of Palmdale**
**County of Los Angeles**

Description of Nature and Purpose of Project:
**The proposed Palmdale Sheriff's Station would be located on approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. The project site is currently vacant and there are no improvements on-site, except for three scattered signs and a 20-foot by 65-foot concrete pad at the southwestern section near Sierra Highway. The project site was previously used for a variety of land uses, including a residence, various fruit stands, an automobile parking garage, a sign and paint shop, and various temporary carnivals. The site is not listed as a hazardous materials site.**

**The new station would have approximately 50,280 square feet of floor area and will accommodate a maximum of 221 sworn officers and administrative persons. On-site facilities would include the main sheriff's station building, a maintenance building, fueling island, a helistop, a 120-foot communication tower, and parking areas. The new Sheriff's Station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5-mile southeast of the proposed project site.**

The Significant Effects on the Environment, if any, Anticipated as a Result of the Project:
**The County of Los Angeles, Department of Public Works prepared an Initial Study, which determined that the proposed project could have an effect in the following issue areas: Aesthetics, Air Quality, Cultural Resources, and Noise. Revisions to the project proposal incorporated mitigation measures identified in the Initial Study and Mitigated Negative Declaration. The measures would mitigate to less than a level of significance the potentially significant adverse environmental effects identified, and the preparation of an Environmental Impact Report is not required.**

Lead Agency Division
**County of Los Angeles, Department of Public Works**

Address where copy of the Initial Study and all documents referenced in the Initial Study are available:

**Palmdale Main Library**
**700 East Palmdale Boulevard**
**Palmdale, CA 93550-4742**

**Palmdale Youth Library**
**38510 Sierra Highway**
**Palmdale, CA 93550-3825**

**City of Palmdale**
**Planning Department**
**38250 Sierra Highway**
**Palmdale, CA 93550-4609**

**County of Los Angeles**
**Department of Public Works**
**Project Development Division**
**900 South Fremont Avenue, Fifth Floor**
**Alhambra, CA 91803**

Date of Issue:
June 17, 2002

Review Period:
30 Days

Date, Time and Location of Public Hearing, if any:
**Not available at this time and would be noticed separately.**

Contact Person Area Code - Telephone - Extension
**Ken Schumann, Project Manager**
**Project Development Division**
**900 South Fremont Avenue, Fifth Floor**
**Alhambra, CA 91803**
**(626) 300-3246**

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
*Chief Engineer and General Manager*

July 3, 2002

File No: 20-00.04-00

Mr. Ken Schumann, Project Manager
Project Management Division
Los Angeles County Department of Public Works
900 Fremont Avenue, Fifth Floor
Alhambra, CA 91803



Dear Mr. Schumann:

**Palmdale Sheriff's Station**

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Initial Study and Mitigated Negative Declaration for the subject project on June 17, 2002. The proposed development is located within the jurisdictional boundaries of District No. 20. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Avenue "Q" Relief Trunk Sewer, located in Avenue Q at Sierra Highway. This 18-inch diameter trunk sewer has a design capacity of 3.9 million gallons per day (mgd) and conveyed a peak flow of 1.3 mgd when last measured in 2000.

2. The wastewater generated by the proposed project will be treated at the Palmdale Water Reclamation Plant (WRP). The Palmdale WRP has a design capacity of 15 mgd and currently processes an average flow of 9.2 mgd.

3. The expected average wastewater flow from the project site is 10,056 gallons per day.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected**. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued. A copy of the Connection Fee Information Sheet is enclosed for your convenience. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform with the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into the Air Quality Management Plan, which is prepared by the South Coast Air Quality Management District in order to improve air quality in the South Coast Air Basin as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

James F. Stahl

Ruth I. Frazen

Ruth I. Frazen
Engineering Technician
Planning & Property Management Section

RIF:eg

Enclosure

INFORMATION SHEET FOR APPLICANTS
PROPOSING TO CONNECT OR INCREASE THEIR DISCHARGE TO
THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY SEWERAGE SYSTEM

# THE PROGRAM

The County Sanitation Districts of Los Angeles County are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting to a Sanitation District's sewerage system. Your connection to a City or County sewer constitutes a connection to a Sanitation District's sewerage system as these sewers flow into a Sanitation District's system. The County Sanitation Districts of Los Angeles County provide for the conveyance, treatment, and disposal of your wastewater. **PAYMENT OF A CONNECTION FEE TO THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY WILL BE REQUIRED BEFORE A CITY OR THE COUNTY WILL ISSUE YOU A PERMIT TO CONNECT TO THE SEWER.**

## I. WHO IS REQUIRED TO PAY A CONNECTION FEE?

(1) Anyone connecting to the sewerage system for the first time any structure located on a parcel(s) of land within a County Sanitation District of Los Angeles County.

(2) Anyone increasing the quantity of wastewater discharged due to the construction of additional dwelling units on or a change in land usage of a parcel already connected to the sewerage system.

(3) Anyone increasing the improvement square footage of a commercial or institutional parcel by more than 25 percent.

(4) Anyone increasing the quantity and/or strength of wastewater from an industrial parcel.

(5) If you qualify for an Ad Valorem Tax or Demolition Credit, connection fee will be adjusted accordingly.

## II. HOW ARE THE CONNECTION FEES USED?

The connection fees are used to provide additional conveyance, treatment, and disposal facilities (capital facilities) which are made necessary by new users connecting to a Sanitation District's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program insures that all users pay their fair share for any necessary expansion of the system.

## III. HOW MUCH IS MY CONNECTION FEE?

Your connection fee can be determined from the Connection Fee Schedule specific to the Sanitation District in which your parcel(s) to be connected is located. A Sanitation District boundary map is attached to each corresponding Sanitation District Connection Fee Schedule. Your City or County sewer permitting office has copies of the Connection Fee Schedule(s) and Sanitation District boundary map(s) for your parcel(s). If you require verification of the Sanitation District in which your parcel is located, please call the Sanitation Districts' information number listed under Item IX below.

## IV. WHAT FORMS ARE REQUIRED*?

The Connection Fee application package consists of the following:

# LOS ANGELES COUNTY SHERIFF'S DEPARTMENT FACILITIES PLANNING SERVICES

**PROJECT:** Palmdale Sheriff's Station **ARCHITECT:** David Evans & Associates **DATE:** July 8, 2002

**COMMENTS FOR:** Public Works/Project Management II **C. P. # 77280** **SPEC. # 5415**

**BASED ON:** Sheriff Facilities Planning **REVIEW OF:** Draft Initial Study and Mitigated Negative Declaration **PLANS/SPECS:** DATED 6/14/02

**FACILITIES PROJECT MANAGER:** Eddie Tello **REVIEW ARCHITECT/ENGINEER:** **PHONE#:** (626) 300-3021

NOTE: CONTRACT ARCHITECT (A & E) IS REQUIRED TO RETURN A COPY OF THESE COMMENTS WITH CHECKED NOTATIONS OF ACTION TAKEN WHEN RESUBMITTING PLANS AND SPECS FOR APPROVAL.

| NO. | REF. TO PLANS/SPECS. | COMMENTS | RESOLUTION |
|---|---|---|---|
| 1. | • | Page 2-10 Third paragraph<br>Page 3-32 Section "A"<br><br>The report indicates that Palmdale Station has 166 personnel. That is inaccurate. Palmdale Station currently has 195 personnel. The Station personnel will also increase upon opening as there will be additional personnel required to operate the jail. The additional personnel would increase approximately by 10 - 12. | |
| 2. | • | Page 2 -10 Fifth paragraph<br>Page 3 - 31 Section "E"<br>Page 3 "Noise Impact Analysis"<br><br>The report indicates that the "helicopters would be expected to stop at the Palmdale Sheriff's Station at an average of once per day." Unless an emergency or tactical situation exists, there is no need for any helicopter to land at Palmdale Station at all. Needless to say, an average of once per day is highly unlikely. | |

| | | | |
|---|---|---|---|
| 3. | • | **Page 3 - 36 Section "A"**<br><br>This section should be deemed "No Impact". The parks that already exist, are not being used by station personnel with any significance at the present time. The relocation of personnel would not change the use of any recreational facility from what it currently is. | |
| 4. | • | **Page 4 - 2 "Aesthetics and Visual Quality"**<br><br>The report indicates that in order to mitigate "potential light spillover and glare on adjacent residences", staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies.<br><br>This is unacceptable. We were not consulted regarding this issue, and it is simply unreasonable to assume that we will limit the use of either exit at the station. Patrol vehicles will always have a need to use both exits to respond to calls for service, whether an emergency or not. We find the verbiage, which limits the egress of station personnel, unacceptable and unreasonable. | |

COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
**Public Health**

THOMAS L. GARTHWAITE, M.D.
DIRECTOR and CHIEF MEDICAL OFFICER

FRED LEAF
CHIEF OPERATING OFFICER

JONATHAN E. FIELDING, M.D., M.P.H.
Director of Public Health and Health Officer

**Environmental Health**
ARTURO AGUIRRE, Director

**Bureau of Environmental Protection**
Mountain & Rural/Water, Sewage & Subdivision Program
5050 Commerce Drive, Baldwin Park, CA 91706-1423
TEL (626)430-5380 • FAX (626)813-3016
www.lapublichealth.org/eh/progs/envirp.htm



July 8, 2002

Ken Schumann, Project Manager
Project Management Division
Department of Public Works
900 S. Fremont Ave., 5th fl.
Alhambra, CA 91803

**RE: Palmdale Sheriff's Station, southeast corner of Sierra Highway & Avenue Q**

This is in response to the solicitation of comments for a draft Initial Study and Mitigated Negative Declaration, prepared for above referenced project that was forwarded to Mountain & Rural/Water, Sewage & Subdivision Program for evaluation.

Based on the information provided, this Department has no objection to the noted development with the understanding that:

1. The expected potable water needs will be supplied through a public water system, **Palmdale Water District**, which guarantees water connection and service to the development, and wastewater treatment demands will be accommodated through public wastewater treatment facilities of Los **Angeles County Sanitation District No. 20** as proposed.
2. If water wells are discovered during the proposed development, permits and written authorization must be obtained from this Department for proper decommissioning of the wells.

If you have any questions or need additional information, please contact Patrick Nejadian at (626) 430-5380.

Respectfully,

Russell A. Johnson, R.E.H.S., Chief,
Mountain & Rural/Water, Sewage & Subdivision Program

STATE OF CALIFORNIA

# Governor's Office of Planning and Research

## State Clearinghouse

## ACKNOWLEDGEMENT OF RECEIPT

Gray Davis
GOVERNOR

Tal Finney
INTERIM DIRECTOR

DATE: July 11, 2002

TO: Ken Schumann
Los Angeles County Department of Public Works
900 South Fremont Avenue
Fifth Floor
Alhambra, CA 91803

RE: Palmdale Sheriff's Station
SCH#: 2002061077

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: June 21, 2002
Review End Date: July 22, 2002

We have distributed your document to the following agencies and departments:

California Highway Patrol
Caltrans, District 7
Caltrans, Division of Aeronautics
Department of Conservation
Department of Fish and Game, Region 5
Department of Parks and Recreation
Department of Toxic Substances Control
Department of Water Resources
Native American Heritage Commission
Office of Historic Preservation
Public Utilities Commission
Regional Water Quality Control Board, Region 4
Resources Agency
State Lands Commission

RECEIVED
JUL 22 2002
PROJECT MANAGEMENT II
DEPT. PUBLIC WORKS

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 www.opr.ca.gov

# COUNTY OF LOS ANGELES

**FIRE DEPARTMENT**

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN


July 12, 2002

Ken Schumann, Project Manager
Project Management Division
Los Angeles County Department of Public Works
900 South Fremont Avenue, Fifth Floor
Alhambra, CA 91803



Dear Mr. Schumann:

**DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED PALMDALE SHERIFF'S STATION -- (EIR #1428/2002)**

The Draft Initial Study and Mitigated Negative Declaration for the proposed Palmdale Sheriff's Station has been reviewed by the Planning Section, Land Development Unit, and Forestry Division of the County of Los Angeles Fire Department. The following are their comments:

**LAND DEVELOPMENT UNIT -- GENERAL REQUIREMENTS:**

The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. The Department may condition future development to provide additional means of access.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and hydrants. Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.

Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all weather surface of not less than the prescribed width, unobstructed, clear-to-sky. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems, it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

**NON-RESIDENTIAL - INSTITUTIONAL:**

Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.

2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.

3. Additional hydrants will be required if hydrant spacing exceeds specified distances.

Turning radii shall not be less than 42 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. All on-site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:

1. Provide 28 feet in width, when a building has three or more stories, or is more than 35 feet in height, above access level. Also, for using fire truck ladders, the centerline of the access roadway shall be located parallel to, and within 30 feet of the exterior wall on one side of the proposed structure.

2. Provide 34 feet in width, when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.

3. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.

4. "Fire Lanes" are any ingress/egress, roadway/driveway with paving less than 34 feet in width, and will be clear-to-sky. All "Fire Lanes" will be depicted on the final map.

5. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

**LIMITED ACCESS DEVICES (GATES ETC.):**

1. Any single gate used for ingress and egress shall be a minimum of 26 feet in width, clear-to-sky.

2. Any gate used for a single direction of travel, used in conjunction with another gate, used for travel in the opposite direction, (split gates) shall have a minimum width of 20 feet each, clear-to-sky.

3. All limited access devices shall be of a type approved by the Fire Department.

4. Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates.

TRAFFIC CALMING MEASURES:

All proposals for traffic calming measures (speed humps/bumps, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review, prior to implementation.

Should any questions arise regarding design and construction, and/or water and access, please contact Inspector Mike McHargue at (323) 890-4243 (E-mail: mmchargu@lacofd.org).

**FORESTRY DIVISION** – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. The areas germane to these statutory responsibilities of the County of Los Angeles Fire Department have been addressed.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

David R. Leininger

DAVID R. LEININGER, ACTING CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

DRL:lc

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE: (213) 897-4429
FAX: (213) 897-1337

*Flex your power!*
*Be energy efficient!*

IGR/CEQA No. 020657AL
Palmdale Sheriff's Station
Vic. LA-14 / PM 44.42

July 12, 2002

Mr. Ken Schumann, Project Manager
Project Management Division
Los Angeles County Department of Public Works
900 South Fremont Avenue, Fifth Floor
Alhambra, CA 91803

Dear Mr. Schumann:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project is to develop a new Palmdale Sheriff's Station on approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful of your need to discharge clean run-off water.

Any transportation of heavy construction equipment and/or materials which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods. Thank you for the opportunity to have reviewed this project.

If you have any questions, please feel free to contact me at (213) 897-4429 or Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 020657AL.

Sincerely,

Clear
7.22.02
e

STEPHEN J. BUSWELL
IGR/CEQA Branch Chief

RECEIVED
JUL 15 2002
STATE CLEARING HOUSE

cc: Scott Morgan, State Clearinghouse

Steve Buswell/AL

STATE OF CALIFORNIA

# Governor's Office of Planning and Research

## State Clearinghouse

Gray Davis
GOVERNOR

Tal Finney
INTERIM DIRECTOR

July 24, 2002

Ken Schumann
Los Angeles County Department of Public Works
900 South Fremont Avenue
Fifth Floor
Alhambra, CA 91803

Subject: Palmdale Sheriff's Station
SCH#: 2002061077

Dear Ken Schumann:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 22, 2002, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse



Enclosures
cc: Resources Agency

Document Details Report

# State Clearinghouse Data Base

**SCH#** 2002061077
**Project Title** Palmdale Sheriff's Station
**Lead Agency** Los Angeles County Department of Public Works

**Type** Neg Negative Declaration

**Description** The Los Angeles County Department of Public Works proposes to develop a new Palmdale Sheriff's Station, which would have approx. 50,280 square feet of floor area and will accommodate a maximum of 221 sworn officers and administrative persons. On-site facilties wold include the main sheriff's station building, a maintenance building, fueling island, a helistop, a 120-foot communication tower, and parking areas. The new Sheriff's Station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5-mile southeast of the proposed project site.

## Lead Agency Contact

**Name** Ken Schumann
**Agency** Los Angeles County Department of Public Works
**Phone** 626-300-3246 **Fax**
**email**
**Address** 900 South Fremont Avenue
Fifth Floor
**City** Alhambra **State** CA **Zip** 91803

## Project Location

**County** Los Angeles
**City** Palmdale
**Region**
**Cross Streets** Avenue Q and Sierra Highway
**Parcel No.**
**Township** 6N **Range** 12W **Section** 26 **Base**

## Proximity to:

**Highways** SR 138
**Airports** Palmdale Airport
**Railways** SCRRA/ Metrolink
**Waterways** Anaverde Creek
**Schools**
**Land Use** Vacant land with Public Facility (PF) Zone

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Forest Land/Fire Hazard; Flood Plain/Flooding; Geologic/Seismic; Job Generation; Population/Housing Balance; Minerals; Noise; Public Services; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Supply; Wildlife; Landuse; Other Issues

**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

**Date Received** 08/17/2002 **Start of Review** 06/21/2002 **End of Review** 07/22/2002

Note: Blanks in data fields result from insufficient information provided by lead agency.

# Governor's Office of Planning and Research

## State Clearinghouse

Gray Davis
GOVERNOR

Tal Finney
INTERIM DIRECTOR

July 25, 2002

Ken Schumann
Los Angeles County Department of Public Works
900 South Fremont Avenue
Fifth Floor
Alhambra, CA 91803

Subject: Palmdale Sheriff's Station
SCH#: 2002061077

Dear Ken Schumann:

The enclosed comment (s) on your Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on July 22, 2002. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2002061077) when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

# Department of Toxic Substances Control

Edwin F. Lowry, Director
1011 N. Grandview Avenue
Glendale, California 91201

inston H. Hickox
Agency Secretary
alifornia Environmental
otection Agency

Gray Davis
Governor



Clear 7.22.02 Lake

July 17, 2002

Mr. Ken Schumann
Los Angeles County Department of Public Works
900 South Fremont Avenue, Fifth Floor
Alhambra, California 91803

NOTICE OF COMPLETION OF DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED PALMDALE SHERIFF'S STATION, SCH NO. 2002061077

Dear Mr. Schumann:

The Department of Toxic Substances Control (DTSC) has received your Notice of Completion of draft Initial Study and Mitigated Negative Declaration (IS/MND) for the proposed project mentioned above.

Based on the review of the document, DTSC comments are as follows:

1. The IS/MND states that the proposed Project site is currently vacant and that the southern portion was previously used for automobile parking garage, and sign and paint shop from 1942 to 1969. It is possible that hazardous wastes/substances may have been released from the previous land uses to the soil underneath the proposed Project site. The IS/MND therefore needs to identify any known or potentially contaminated site within the proposed Project area. For all identified sites, the IS/MND needs to evaluate whether conditions at the Site pose a threat to human health or the environment.

2. The IS/MND should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.

3 If during construction of the project, soil contamination is suspected, construction in the area should stop, and appropriate health and safety procedures should be

implemented. If it is determined that contaminated soils exists, the IS/MND should identify how any required investigation and/or remediation will be conducted, and which government agency will provide regulatory oversight.

DTSC provides guidance for Preliminary Endangerment Assessment preparation and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact Mr. Alberto Valmidiano, Project Manager, at (818) 551-2870 or me, at (818) 551-2877.

Sincerely,

Harlan R. Jeche

Harlan R. Jeche
Unit Chief
Southern California Cleanup Operations Branch – Glendale Office

Enclosure

cc: ✓ Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

# Department of Toxic Substances Control

Edwin F. Lowry, Director
1001 I St. 25th Floor
P.O. Box 806
Sacramento, California 95812-0806

nston H. Hickox
ency Secretary
California Environmental
otection Agency

Gray Davis
Governor

## MEMORANDUM

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
SOUTHERN CALIFORNIA SITE MITIGATION BRANCH

JUL 0 2 2002

RECEIVED

**TO:** Sayareh Amirebrahimi, Branch Chief
Site Mitigation Program, Region 3

**FROM:** Guenther W. Moskat, Chief
Planning and Environmental Analysis Section

**DATE:** June 28, 2002

**SUBJECT:** TRANSMITTAL AND REVIEW OF LEAD AGENCY ENVIRONMENTAL DOCUMENTS FOR Palmdale Sheriff's Station

The Department has received the project listed above. The project is being referred to you as a:

- ☒ Non-Essential/Information Item Only
- ☐ Sensitive Land Use Project
- ☐ Non-Sensitive Land Use Project

**A Courtesy Copy of the Notice of Completion Transmittal Form Has Also Been Sent to:**

- ☒ Permitting Branch (document not included)

The Department is encouraged to review this project and if applicable make comments pertaining to the project as it relates to hazardous waste and/or any activities which may fall within the Department's jurisdiction. Please have your staff: 1) conduct its review of the attached document prior to the end of the comment period; 2) complete the appropriate items below; and 3) return this transmittal sheet and a copy of any response letter from your office to:

Planning & Environmental Analysis Section (PEAS)
CEQA Tracking Center
1001 I St., 22nd Floor
P.O. Box 806
Sacramento, California 95812-0806
Fax (916) 323-3215

Date Comment Period Began: 06/21/02

Comments Due to Lead Agcy:

Comments Due to OPR: 07/22/2002

Reviewed By: Alberto Valmidiano Date: 07/17/02

**COMMENTS** have been prepared **and** a copy has been provided to PEAS via:

- ☒ Attached Copy
- ☐ FAX (916-323-3215)

**NO COMMENTS NECESSARY because:**

- ☐ All Department concerns have been adequately addressed; OR
- ☐ Project does not fall within the Department's areas of responsibility.

*Thank you for your assistance with this project. If you have any questions, please contact Ken Tipon, CEQA Tracking Center, at (916) 322-5266 or CALNET 492-5266.*

*The energy crisis facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.*

Printed on Recycled Paper

# COUNTY OF LOS ANGELES
## OFFICE OF THE COUNTY COUNSEL
648 KENNETH HAHN HALL OF ADMINISTRATION
500 WEST TEMPLE STREET
LOS ANGELES, CALIFORNIA 90012-2713

LLOYD W. PELLMAN
County Counsel

TDD
(213) 633-0901
TELEPHONE
(213) 974-1833
TELECOPIER
(213) 617-7182
E-MAIL
Klichtenberg@counsel.co.la.ca.us


August 5, 2002

**CONFIDENTIAL**

THIS MATERIAL IS SUBJECT TO THE ATTORNEY-CLIENT AND/OR THE ATTORNEY WORK PRODUCT PRIVILEGES

## FACSIMILE COVER SHEET

TO: Ken Schumann

Telephone Number:

Facsimile Number: 626-300-2387

FROM: Karen A. Lichtenberg

RE: Attached pages from Palmdale MND

Number of Pages: 3 (Including this page)

MESSAGE:

## 2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

### *Project Background*

The existing Palmdale Sheriff's Station is located at 1020 Palmdale Boulevard, within the downtown area of the City of Palmdale. The existing station opened in 1992 and was initially a storefront for the Antelope Valley Sheriff's Station (now the Lancaster Sheriff's Station). In 1998, it became a separate stand-alone station serving the City of Palmdale and the surrounding unincorporated areas. The County Sheriff's Department had previously planned on relocating the stand-alone station to a permanent facility in 1998. However, they opted for the expansion of the existing facility instead, through additional leases within the current building.

The existing station currently occupies 13,500 square feet of leased space on Palmdale Boulevard and accommodates 166 officers and administrative staff. The station serves the City of Palmdale and 20 nearby communities, with a total land area covering approximately 852 square miles. There are approximately 180,000 residents within the station's service boundaries. With the growing population of Palmdale and the Antelope Valley, the existing station is once more too small for the officers and staff and the services that are offered by the Los Angeles County Sheriff's Department. Thus, the construction of a larger permanent facility is proposed at the project site.

or to sell?

In 1997, the Redevelopment Agency of the City of Palmdale purchased the property and the surrounding area as part of redevelopment efforts in the downtown area. The City then rezoned the site and amended the Land Use Plan designation from Downtown Commercial to Public Facility. The City is proposing to lease the 11.57-acre portion of the southeastern corner of Sierra Highway and Avenue Q to the County of Los Angeles for the construction of a permanent facility for the Palmdale Sheriff's Station and a Fire Station.

### *Regional Setting*

The City of Palmdale is located at the northern section of Los Angeles County, bounded by the City of Lancaster to the north, and unincorporated county land to the east, west and south, including the Angeles National Forest to the south. The City is located within the southwestern portion of the Antelope Valley in the Mojave Desert and north of the San Gabriel and Sierra Pelona Mountains. The Antelope Valley Freeway (SR-14) provides regional access to the Palmdale area and crosses the City, approximately 58 miles northeast of the City of Los Angeles. Figure 1, *Regional Map*, provides a regional location map of the project area.

The City of Palmdale is one of the fastest growing cities in Los Angeles County. Palmdale incorporated in 1962 with 2.1 square miles of land area and had expanded to 45 square miles in 1983 and to 76 square miles in 1990. Today, the City covers over 102 square miles within its jurisdictional boundaries. In 1980, the City had 12,277 residents. In 1990, it had increased its population more than four times to 56,476 residents and by 2000, its population was more than double the 1990 population

The California Department of Finance estimates the City's population at 122,392 residents and its housing stock at 39,468 units, as of January 2000. Approximately 78.7 percent of the housing stock consists of single family homes and 5.0 percent are mobile homes. The remaining 16.3 percent are multi-family units. The City has a 9.65 percent vacancy rate and an average household size of 3.43 persons per household. The 2001 population estimates are 121,413 residents and a housing stock of 37,649 units, of which 7.58 percent is vacant.

The Antelope Valley Transit Authority (AVTA) runs buses from 6 a.m. to 8 p.m. Monday through Friday and from 9 a.m. to 6:00 p.m. on Saturday

A bikeway/pedestrian walkway is found along St. Clair Parkway and a bike trail runs along the California Aqueduct, on 5th Street East, and on 6th Street East.

*(Sources: Site Survey, Palmdale General Plan, Parks, Recreation and Special Events, and Antelope Valley Transit Authority, MTA Metrolink)*

**A. Would the project 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)?**

**Less than Significant Impact.** The proposed project would lead to additional vehicle trips from construction equipment and crew during the construction period. This traffic would be limited and temporary and would not be considered significant. The proposed project will result in a relocation of the existing sheriff's facilities located near the project site. As such, the additional traffic related to the proposed Sheriff's Station would be added to the current street system serving the project site.

There will be changes in traffic patterns and volumes directly adjacent to the project site on Sierra Highway and Avenue Q, with a diversion of trips to the new sheriff's station site. Table 8 summarizes the daily trip generation forecast.

To me, an increase in LOS means conditions improve to a lower letter. Maybe I'm wrong but this needs to be clarified for people who think like me

**TABLE 8**
**DAILY TRIP GENERATION FORECAST**

| Trip Source | ADT Volume |
|---|---|
| Sheriff's Station | |
| Staff Trips | 884 |
| Visitor Trips | 480 |
| Patrol Car Trips | 300 |
| Total | 1,664 |

Increase?

The Sheriff's Station is expected to add approximately 1,664 daily trips to the local roadway (Sierra Highway and Avenue Q). The addition of these trips is not sufficient to increase daily level of service (LOS) above LOS E, which characterizes traffic congestion defined by high delays, generally indicating poor traffic progression, long cycle lengths, and high volume-capacity ratios. This is because both Sierra Highway and Avenue Q have excess capacity. The project is expected to add less than 200 trips during the AM peak hour (the worst case scenario), with fewer trips during other hours of the day. Based on field observations and discussions with City staff, the adjacent roadways have sufficient capacity to accommodate these additional trips. Impacts would be less than significant.

or worse,

*(Sources: Site Survey, Palmdale General Plan, and ITE Trip Generation Manual)*

**B. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

**Less than Significant Impact.** The City of Palmdale sets LOS C as an acceptable standard for roadway traffic operations and intersection operating conditions. With project traffic assigned to the existing

August 29, 2002

TO: Jacob Williams
Project Management II Division

Attention Ken Schumann

FROM: Rod Kubomoto
Watershed Management Division

**REVISED RESPONSE TO A MITIGATED NEGATIVE DECLARATION**
**PALMDALE SHERIFF'S STATION**
**CITY OF PALMDALE**

Thank you for the opportunity to provide comments on the Notice of Intent to adopt a Mitigated Negative Declaration for the proposed Palmdale Sheriff's Station. The proposed project is to develop a new Palmdale sheriff's station on approximately 11.57 acres of vacant land, located at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. We have reviewed the submittal and offer the following comments:

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in Los Angeles County in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The construction and demolition activities associated with the proposed project will increase the generation of solid waste, and will negatively impact the solid waste management infrastructure in the County. Therefore, the proposed environmental document must identify what measures the project proponent may implement to mitigate the impact. Mitigation measures may include, but are not limited to, implementation of waste reduction and recycling programs to divert the solid waste, including construction and demolition waste, from landfills.

In addition, it appears that the proposed project will be constructed under a County contract in which case the Construction and Demolition Recycling Specifications for the County of Los Angeles Department of Public Works projects will apply. These specifications require that County contractors recycle at least 50 percent of construction and demolition debris for projects generating ten tons or ten cubic yards (whichever is less) of debris. A copy of these specifications can be obtained from Genevieve Lebita at the phone number listed below.

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each "development project" to provide an adequate storage area for collection and removal of recyclable materials. The Environmental Impact Report should include/discuss standards to provide adequate "waste storage areas" for collection/storage of recyclable and green waste materials for this project.

Should any operation within the subject project/development include the construction/installation, modification, or removal of underground storage tanks, industrial waste control, disposal facilities, and/or stormwater treatment structures, our Environmental Programs Division must be contacted for required approvals and operating permits.

If vehicle washing operations are proposed for the Sheriff's facilities, the wastewater must be segregated from stormwater by use of a wash pad and a clarifier connected to the public sewer.

If you have any questions, please contact Genevieve Lebita at Extension 2196.

Land Development (Transportation and Planning)

We have reviewed the subject document and have no comments.

If you have any questions, please contact Hubert Seto at Extension 4349.

Traffic and Lighting

In order to complete our review, we require the Traffic Study be revised to include the following:

- A project of this magnitude has the potential to significantly impact the adjacent intersections and roadways. The study shall analyze the intersection of Sierra Highway at Avenue Q. The study shall also analyze the impact of the changed traffic patterns expected after the relocation of the sheriff station.

- The County's traffic impact study methodology shall be used to analyze intersections and roadways. The analysis shall also address the cumulative impacts generated by this and other related projects and include Level of Service (LOS) analysis for the affected intersections for the traffic scenarios in the attached Los Angeles County Traffic Impact Analysis Guidelines (copy attached). The LOS analysis for the

intersections and roadways analysis shall be conducted for the following traffic scenarios and the project's build-out shall be indicated in (b).

(a) Existing traffic;
(b) Existing traffic, plus ambient growth to the Year 2003 (preproject);
(c) Traffic in (b) plus project traffic;
(d) Traffic in (c) with the proposed mitigation measures (if necessary);
(e) Traffic in (c) plus cumulative traffic of other known developments; and
(f) Traffic in (e) with the proposed mitigation measures (if necessary).

- Any potential traffic impacts/delays this project may have on Sierra Highway at the at-grade railroad crossing.

- A detailed site plan showing adjacent intersections, adjacent driveways, and driveways along and opposite project frontage.

- On page 2, "...the proposed Sheriff's Station to be located at the southwest corner...," southwest corner shall be corrected to southeast corner.

We require the City of Palmdale review this document for significant impacts/mitigation measures within its jurisdictions.

If you have any questions, please contact Nickolas VanGunst of the Traffic Studies Section at (626) 300-4768.

Water Resources

The second sentence of the fourth paragraph (see Section 3.8) states that "The 100-year floodplain for Anaverde Creek is found near the site but does not extend into the project site." The last sentence of the same paragraph seems contradictory to the second sentence stating that "Due to proximity of the 100-year floodplain, the site is likely to be located within an area within the 100-year floodplain where water depth would be less than 1 foot." Therefore, it is not clear if the site or portion of it is located within the 100-year floodplain or not.

If you have any questions, please contact Hartun Khachikian at Extension 6151.

Watershed Management

The proposed project should include investigation of watershed management opportunities to maximize capture of local rainfall on the project site, eliminate incremental increases in flows to the storm drain system, and provide filtering of flows to capture contaminants originating from the project site.

According to the FEMA flood insurance maps, this project is located in Flood Zone C, which denotes areas of minimal flooding.

If you have any questions, please contact Geoffrey Owu at Extension 4317.

If you have any questions regarding the above comments or the environmental review process of Public Works, please contact Massie Munroe at Extension 4359.

MM:kk
WM-4/A:\EIR82.wpd

Attach.

cc: Environmental Programs
Land Development
Programs Development
Traffic and Lighting
Water Resources
Watershed Management (David)

# Traffic Impact Analysis Report Guidelines

January 1, 1997

Prepared by the County of Los Angeles
Department of Public Works

**James A. Noyes**
**Director of Public Works**

# Table of Contents



JHC:ce
T-2/ACCESS2
(01/22/99)

## I. Introduction

The County of Los Angeles Department of Public Works has established the following Guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The purpose of these Guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented and timely review by County staff. It is strongly recommended that the applicant's traffic engineer consult with County staff before beginning the study to establish the scope and basic assumptions of the study and any deviations from these Guidelines to avoid unnecessary delays or revisions. For assistance in the TIA scoping process, the Traffic and Lighting Division, Traffic Studies Unit, can be contacted at (626) 458-5909.

## II. Requirements

Generally, the Department staff is concerned with adverse impacts on traffic if:

1. Traffic generated by a project considered alone or cumulatively with other related projects, when added to existing traffic volumes, exceeds certain capacity thresholds of an intersection or roadway, contributes to an unacceptable level of service (LOS), or exacerbates an existing congested condition.

2. Project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, and parking facilities).

3. Proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways).

4. Nonresidential uses generate commuter or truck traffic through a residential area.

5. Project generated traffic significantly increases on a residential street and alters its residential character.

A traffic report must be prepared by a registered Civil or Traffic Engineer. A traffic report is generally needed if a project generates over 500 trips per day or where other possible adverse impacts as discussed in the Analysis and Impact Section (see page 4) of these Guidelines are identified. Before a full review is conducted, the County staff will check the completeness of the TIA report using the attached check list (Exhibit A). If the report is missing any of the check list items, it will be returned for revision.

## III. TIA Report Contents

### A. Project Description

The following information is required:

1. A description of the project, including those factors which quantify traffic generators, e.g., dwelling units, square feet of office space, persons to be employed, restaurant seats, acres of raw land, etc. For residential developments, the description should indicate the type of residence, (e.g., one level or townhouse condominiums, and if its use is for families, adults or retirees).

2. A plot plan showing proposed driveways, streets, internal circulation, and any new parking facilities on the project site.

3. A vicinity map showing the site location and the study area relative to other transportation systems.

4. A brief history of the projects that are part of the phased Master Plan or a parent tract/parcel map.

### B. Transportation Circulation Setting

The following information is required:

1. **Existing and Proposed Site Uses**

   A description of the permitted and/or proposed uses of the project site in terms of the various zoning and land use categories of the County, and the status and the usage of any facilities currently existing on the site.

2. **Existing and Proposed Roadways and Intersections**

   A description of existing streets and roadways, both within the project site (if any) and in the surrounding area. Include information on the roadway classifications (per the Highway Plan), the number of lanes and roadway widths, signalized intersections, separate turn lanes, and the signal phases for turning movements.

Existing daily directional and peak-hour through and turning traffic volumes on the roadways surrounding and/or logically associated with the project site, including Secondary and Major highways and freeways. Local streets affected by the project should also be shown. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over one year old. Since peak volumes vary considerably, a ten percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

All assumed roadways and intersections or any other transportation circulation improvements must be identified and discussed. The discussion should include the scope and the status of the assumed improvements including the construction schedule and financing plan. It should be noted that all assumed roadways and intersections or any other transportation circulation improvements will be made a condition of approval for the project to be in place prior to the issuance of building permits. If assumed improvements do not get built on time due to an unforeseeable condition, traffic conditions for a different assumed highway network or other mitigation measures will be considered if a traffic study is submitted with a different assumed network or other measures are recommended to mitigate the traffic impact in question.

## C. Analysis and Impact

The following information is required:

### 1. Trip Generation Analysis

Tabulate the estimated number of daily trips and a.m. and p.m. peak-hour trips generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. The trip generation rates contained in the latest edition of the Institute of Transportation Engineers Trip Generation manual should generally be used, except in the case of condominiums/townhomes when the following rates should be used per unit:

| | ADT | A.M.-Peak | P.M.-Peak |
|---|---|---|---|
| | | Outgoing/Incoming | Outgoing/Incoming |
| Condominiums/ Townhomes | 8.0 | 0.48/0.06 | 0.26/0.47 |

There may be a trip reduction due to internal and/or pass-by trips. Internal trip reduction can only be applied for mixed-use types of developments and pass-by trip reduction for retail/commercial types of developments. Internal or pass-by trip reduction assumptions will require analytical support based on verifiable actual similar developments to demonstrate how the figures were derived and will require approval by the County.

## 2. Trip Distribution

Diagrams showing the percentages and volumes of the project and nearby project's a.m. and p.m. peak-hour trips logically distributed on the roadway system must be provided. The Regional Daily Trip Distribution Factors (Exhibit D-3) contained in the Congestion Management Program (CMP) Land Use Analysis Guidelines shall be referenced for regional trip distribution assumptions. If it is assumed that new routes will alter traffic patterns, adequate backup including traffic distribution maps must be provided showing how and why these routes will alter traffic patterns.

The study area should include arterial highways, freeways, and intersections generally within a one-mile radius of the project site.

**Note: This distance may be greater than one-mile for rural areas depending on the proximity to nearby signalized intersections and the availability of master plan access routes.**

## 3. Related Projects List

A list of related projects that are approximately within a one-and-a-half mile radius of the project site and would reasonably be expected to be in place by the project's build out year must be included in the report. Related projects shall include all pending, approved, recorded, or constructed projects that are not occupied at the time of the existing traffic counts.

The County of Los Angeles Department of Regional Planning (DRP) and other public agencies (if necessary) should be contacted to obtain the latest listings. A table and a map showing the status, project/zone change/conditional use permit/parcel map/tract number, and the location of each project must be provided. For a computer printout of the listing of all filed projects within the County, Land Development Management Section of the DRP, at (213) 974-6481 can be contacted.

## 4. LOS Analysis

If it appears that the project's generated traffic alone or together with other projects in the area could worsen the LOS of an intersection or roadway, a "before" and "after" LOS analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis are two methods often used to assess existing and future LOS at intersections.

If the ICU planning method is used, a maximum of 1,600 vehicles per hour per lane should be used (2,880 vehicles per hour should be used for dual left-turn lanes) and a ten percent yellow clearance cycle should be included. Intersection LOS analysis and calculation work sheets, as well as diagrams showing turning volumes shall be included in the report for the following traffic conditions.

(a) Existing traffic;
(b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
(c) Traffic in (b) plus project traffic;
(d) Traffic in (c) with the proposed mitigation measures (if necessary);
(e) Traffic in (c) plus the cumulative traffic of other known developments; and
(f) Traffic in (e) with the proposed mitigation measures (if necessary).

The project's impact on two-lane roadways should also be analyzed for all of the above traffic conditions if those two-lane roadways are used for access. LOS service analysis contained in the Highway Capacity Analysis, Chapter 8, Two-Lane Highways, should be used to evaluate the project's impact. For simplified analysis, use the established significant impact thresholds for two-lane roadways as shown on page 7.

## 5. Significant Impact Threshold

For intersections, the impact is considered significant if the project related increase in the volume to capacity (v/c) ratio equals or exceeds the threshold shown below.

| INTERSECTIONS | | |
|---|---|---|
| Preproject | | Project /C Increase |
| LOS | V/C | |
| C | 0.71 to 0.80 | 0.04 or more |
| D | 0.81 to 0.90 | 0.02 or more |
| E/F | 0.91 or more | 0.01 or more |

The project is deemed to have a significant impact on two-lane roadways when it adds the following percentages based on LOS of the preproject conditions.

| TWO-LANE ROADWAYS | | | | |
|---|---|---|---|---|
| | | Percentages Increase in Passenger Car Per Hour (PCPH) by Project | | |
| | | Preproject LOS | | |
| Directional Split | Total Capacity (PCPH) | C | D | E/F |
| 50/50 | 2,800 | 4 | 2 | 1 |
| 60/40 | 2,650 | 4 | 2 | 1 |
| 70/30 | 2,500 | 4 | 2 | 1 |
| 80/20 | 2,300 | 4 | 2 | 1 |
| 90/10 | 2,100 | 4 | 2 | 1 |
| 100/0 | 2,000 | 4 | 2 | 1 |

## 6. Analysis Discussion

Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative traffic impact of this and other projects require mitigation measures, such as traffic signals, then estimate the percent share using the project percent share formula given in the Section III D of the TIA Guidelines. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region. Also, for all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any).

Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening to provide left-turn and right-turn lanes at access points into the proposed project; (3) the impact of increased traffic volumes on local residential streets; and (4) the need for road realignment to improve sight distance.

Projects which propose to amend the County's General Plan Land Use and substantially increase potential traffic generation must provide an analysis of the project at current planned land use versus proposed land use in the build out condition for the project area. The purpose of such analysis is to provide decision makers with the understanding of the planned circulation network's ability to accommodate additional traffic generation caused by the proposed General Plan Land Use amendments.

## D. Traffic Models and Model Generated TIA's

Computerized traffic models are planning tools used to develop future traffic projections based on development growth patterns. The Department currently operates two traffic models, one for the Santa Clarita Valley and another for the Ventura Corridor area. The Department can test proposed development project traffic impacts for the public in these areas for a fee. For assistance in the traffic modeling, the Planning Division, Transportation Planning/Assessments Section, can be contacted at (626) 458-4351.

For TIA's prepared using data from outside traffic modeling, the following information is required:

1. The type of modeling software used to generate the traffic analysis report data (i.e., TRANPLAN, EMME/2, etc.).

2. The list of land use assumptions by traffic analysis zones (TAZ's) and their sources used in the traffic model in lieu of a related projects list.

3. A copy of the computerized roadway network assumed to be in place at the time of the project. Streets should be color-coded by street type. Also, TAZ's and their corresponding centroidal connectors, as well as number of lanes should be displayed.

4. The list of trip generation rates used in the traffic model and their sources.

5. Model runs (plots) identifying both the with and without project scenarios. The volumes displayed on the plots should be in 100's for Average Daily Vehicle Trips (ADT) and 10's for peak-hour plots.

## E. Traffic Signals

The following information is required:

Traffic signal warrant analysis using the State of California Department of Transportation (Caltrans) Peak-Hour (Figures 9-8 and 9-9 of Caltrans Traffic Manual) and Estimated Average Daily (Figure 9-4 of Caltrans Traffic Manual) Traffic Warrant Analysis should be provided. If the installation of signals is warranted with the addition of the project's traffic, then the installation will be the sole responsibility of the project. If it is warranted with cumulative traffic of the project and other related projects, the following formula should be used to calculate the project percent share.

$$\textbf{Project Percentage Share} = \frac{\text{Project Traffic}}{\text{Project+Other Related Projects Traffic}}$$

The project percent share should be based on the peak-hour volumes that warrant signals. If both peak hours satisfy the installation of signals, the average of the two peak-hour volumes should be used in the percent share analysis.

## F. Mitigation Measures

The following information is required.

Identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance. Also, identify those mitigation measures which will be implemented by others. Those mitigation measures that are assumed to be implemented by others will be made a condition of approval for the project to be in place prior to issuance of building permits. Mitigation measures may include, but are not limited to, the following:

1. Traffic Engineering Techniques.

   a. Locate access points to optimize visibility and reduce potential conflict.
   b. Design parking facilities to avoid queuing into public streets during peak arrival periods.
   c. Provide additional off-street parking.
   d. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.
   e. Signalize or modify traffic signals at intersections.
   f. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
   g. Widen the pavement to provide left- or right-turn lanes to lessen the interference with the traffic flow.[1]
   h. Widen intersection approaches to provide additional capacity.
   I. Prohibit left turns to and from the proposed development.
   j. Restrict on-street parking during peak hours to increase street capacity.[1]

2. **Contribute to a benefit district to fund major capital improvements**

---

1 Physical roadway improvements to improve capacity should be considered before considering parking restrictions.

a. Construct a grade separation.
b. Improve or construct alternate routes.
c. Complete proposed routes shown on the Los Angeles Highway Plan.
d. Improve freeway interchanges (bridge, widening, modifications, and etc.).

3. **Transportation System Management (TSM) Techniques[2]**

a. Establish flexible working hours.
b. Encourage employee use of carpools and public transportation (specific measures must be indicated).
c. Establish preferential parking for carpools.
d. Restrict truck deliveries to Major and Secondary highways and encourage deliveries during the off-peak hours.
e. Establish a monitoring program to ensure that project traffic volumes do not exceed projected traffic demand.

**Note: When it appears that other jurisdictions will be impacted by a development, the Department will request that the involved jurisdiction also review the TIA. A written response from that jurisdiction should be provided with appropriate follow-up to the lead County agency.**

## G. CMP Guidelines

The following information is required:

Where the project meets the criteria established in the County of Los Angeles' CMP Land Use Analysis Guidelines, a CMP analysis must be provided. A copy of the latest Guidelines will be available upon request. A CMP TIA is required for all projects required to prepare an Environmental Assessment based on local determination or projects requiring a traffic study.

---

[2] Contributions to a benefit district and/or TSM techniques may not be used to lower LOS in the capacity calculations.

The geographic area examined in the TIA must include the following, at a minimum.

- All CMP arterial monitoring intersections (see Exhibit B of the Guidelines), including freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours.

- Main line freeway monitoring locations (see Exhibit C of the Guidelines) where the project will add 150 or more trips, in either direction, during the a.m. or p.m. weekday peak hours.

- Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system.

If, based on these criteria, the TIA identifies no facilities for study, no further traffic analysis is required.

JHC:ce
T-2/ACCESS
(01/07/99)

Attach.

# EXHIBIT A

## TRAFFIC IMPACT ANALYSIS REPORT CONTENTS CHECK LIST

*Note: Before a full review is conducted, PW's staff will check the completeness of the Traffic Impact Analysis Report. If the Report is missing any of the items listed below, it will be returned for revision.*

| CONTENT | YES/ NO | COMMENT |
|---|---|---|
| **Site Plan**<br>• Access locations<br>• Interior circulation | | |
| **Trip Generation Rates**<br>• Institute of Transportation Engineers (ITE) trip generation rates<br>• Documentation for alternate rates | | |
| **Trip Distribution**<br>• Regional<br>• Local project (am/pm)<br>• Local related projects(am/pm) | | |
| **Traffic Counts**<br>• Taken within one year<br>• Date/Time | | |
| **Discounting**<br>• Internal trip discounts for mixed use developments<br>• Pass-by trip discounts for commercial/retail developments<br>- Backup | | |
| **Level of Service Calculations**<br>• Intersection Capacity Utilization (ICU) or Criteria Movement Analysis<br>• 10 percent yellow clearance for ICU planning method<br>• 1,600 vehicles per lane (vpl); 2,880 vpl for dual left-turn lanes for ICU planning method<br>• Calculation sheets<br>• Scenarios as required per Guidelines<br>• Existing/Future lane configurations | | |
| **Signal Warrant Analysis**<br>• Peak-hour/Average Daily Traffic per the State of California Department of Transportation standards | | |
| **Mitigation Measures**<br>• Project impacts<br>• Cumulative developments impacts<br>• Projects percent share of the cost to mitigate cumulative development impacts | | |
| **Congestion Management Program Analysis** | | |

JHC:ce
T-2/ACCESS3
02/22/99

Received: from nav-ieg.deainc.com
by mail.deainc.com; Wed, 13 Nov 2002 15:21:26 -0800
Received: from magic.co.la.ca.us ([159.83.181.41])
by nav-ieg.deainc.com (NAVGW 2.5.1.18) with SMTP id M2002111315212505147
for <Mja@deainc.com>; Wed, 13 Nov 2002 15:21:25 -0800
Received: from magic.co.la.ca.us (root@localhost)
by magic.co.la.ca.us with ESMTP id PAA24832
for <Mja@deainc.com>; Wed, 13 Nov 2002 15:21:24 -0800 (PST)
Received: from pwex2.dpw.co.la.ca.us (pwex2.dpw.co.la.ca.us [10.5.64.50])
by magic.co.la.ca.us with ESMTP id PAA24807
for <Mja@deainc.com>; Wed, 13 Nov 2002 15:21:23 -0800 (PST)
content-class: urn:content-classes:message
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
Subject: FW: PSS-Review Comments on the Negative Declaration
X-MimeOLE: Produced By Microsoft Exchange V6.0.6249.0
Date: Wed, 13 Nov 2002 15:21:22 -0800
Message-ID: <EC68137BBFDC02499EF954768A53760B2349A4@pwex2.dpw.co.la.ca.us>
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
Thread-Topic: PSS-Review Comments on the Negative Declaration
Thread-Index: AcKLaVfSKY0Bvp7QSEutmD1J53uEEwAAU0Vg
From: "Schumann, Ken" <KSchuman@ladpw.org>
To: "Josephine Alido" <Mja@deainc.com>

FYI

-----Original Message-----
From: Tello, Eddie [mailto:etello@lasd.org]
Sent: Wednesday, November 13, 2002 3:08 PM
To: Schumann, Ken
Cc: Tizani, Al
Subject: PSS-Review Comments on the Negative Declaration

Ken,
Station staff has reviewed and concur with some clarification see below.

Comment 1: The report indicates the Palmdale Station has 166 personnel. That
is inaccurate. Palmdale Station currently has 195 personnel. The station personnel will also increase upon opening, as there will be additional personnel required to operate the jail. The additional personnel would increase approximately by 10 to 12.
Response: The increase in personnel occurred between the time of preparation
of the document and the review period. The updated information would be provided in the Initial Study. The analysis in the document also considers
the use of the station by as many as 221 personnel. Thus, the 12 new staff
at project opening would lead to207 people, which is less than what has been
considered.

[Raulston, Edward D.] Our current staffing level is 203 with one additional gain December 1, 2002, = 204. We are also hopeful that we will receive four additional sergeant items in the near future. This would put our staffing level at 208. With two years left prior to move in, and additional gains, 10 to 12 personnel upon opening, we could exceed the 221 staff level before we move in.

Comment 2: The report indicates that the helicopters would be expected to stop at the Palmdale Sheriff's Station at an average once per day. Unless an emergency or tactical situation exists, there is no need for any helicopter to land at Palmdale Station at all. Needless to say, an average of once per day is highly unlikely.

Response: To consider the worst case, the one helicopter trip per day would account for use of the helistop.

[Raulston, Edward D.] We concur with the worst case accounting for use of the helistop.

Comment 3: This section should be deemed "No Impact". The parks that already exist are not being used by station personnel with any significance at the present time. The relocation of personnel would not change the use of any recreational facility from what it currently is.

Response: The use of the adjacent park by staff at the new station cannot be dismissed due to its proximity to the new station. Thus, this impact is considered "Less than Significant".

[Raulston, Edward D.] We concur.

Comment 4: The report indicates that in order to mitigate "potential light spillover and glare on adjacent residences", staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies.

This is unacceptable. We were not consulted regarding this issue, and it is simply unreasonable to assume that we will limit the use of either exit at the station. Patrol vehicle will always have a need to use both exits to respond to calls for service, whether an emergency or not. We find the verbiage, which limits the egress of station personnel, unacceptable and unreasonable.

Response: Based on additional review of the project impacts, it is anticipated that the minor increase in patrol vehicles using the Avenue Q

driveway for non-emergency response and the limited number of residents that
would be affected is expected to create no more adverse effect than initially anticipated. Thus, the mitigation measure shall be changed to state:
Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and
patrol vehicles.
[Raulston, Edward D.] We concur.

Eddie Tello
Facilities Planning Bureau
Los Angeles County Sheriff's Department
tel 626-300-3021 fax 626-281-2034

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

JAMES A. NOYES, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460


IN REPLY PLEASE
REFER TO FILE:
T-4

February 4, 2003

RECEIVED
FEB 13 2003
DEA

Mr. David Evans
David Evans & Associates, Inc.
800 North Haven Avenue, Suite 300
Ontario, CA 91764

Dear Mr. Evans:

**PALMDALE SHERIFF'S STATION**
**TRAFFIC AND PARKING ANALYSIS (DECEMBER 11, 2002)**
**CITY OF PALMDALE**

As requested, we have reviewed the Traffic and Parking Analysis (TPA) document for the proposed project located southeast of Sierra Highway at Avenue Q in the City of Palmdale.

The County of Los Angeles is the lead agency. The proposed project consists of the development of a 50,280-square-foot Sheriff's station with a 6,853-square-foot maintenance building, a fueling island, a communication tower, and a helistop. The Sheriff station will accommodate a staff of 221 sworn officers, volunteers, and administrative staff. The new station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5 miles south of the proposed site. All current personnel and services will be transferred to the new station. The project is expected to generate 1,504 daily vehicle trips with 188 and 197 vehicle trips during the a.m and p.m. peak hours, respectively.

Generally, we agree with the TPA that the project will have no significant impact to County roadways or intersections in the area and to Congestion Management Program locations nearby.

In order to complete our review, a detailed site plan showing adjacent intersection, adjacent driveways, and driveways along and opposite project frontage shall be submitted to Public Works for review and approval.

If you have any questions, please contact Mr. Nickolas VanGunst of our Traffic Studies Section at (626) 300-4768.

Very truly yours,

JAMES A. NOYES
Director of Public Works

JOHN T. WALKER
Assistant Deputy Director
Traffic and Lighting Division

NV:cn
EIR02331

# Attachment B – Traffic Study

# Traffic and Parking Analysis for the Palmdale Sheriff's Station in the City of Palmdale, California

## December 11, 2002

*Prepared For:*
**David Evans & Associates, Inc.**
800 North Haven Avenue, Suite 300
Ontario, California 91764
Telephone: (909) 481-5750
FAX: (909) 481-5757

*Prepared by:*

Katz, Okitsu & Associates
*Traffic Engineers and Transportation Planners*
1055 Corporate Center Drive, Suite 300
Monterey Park, California 91754
Telephone: (323) 260-4703
FAX: (323) 260-4705

Job Number Ja2348

# Table of Contents

# List of Tables

# List of Figures



# Appendices

# 1. Introduction

This report documents the traffic and parking analysis prepared for the proposed Sheriff's Station to be located at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. Katz, Okitsu & Associates prepared an earlier study for this station and submitted a report dated October 6, 2000. The ensuing analysis was undertaken to reflect slight changes in the project description and to address applicable comments included in the County's Revised Response to a Mitigated Negative Declaration for the project (dated August 29, 2002).

The existing Palmdale Sheriff's Station is located approximately ½ mile southeast of the project site in a mixed-use retail development at 1020 Palmdale Boulevard. The proposed sheriff's station will replace the existing station with a larger, permanent, and more secure facility. All current personnel and services will be transferred to the new station, once completed. Consequently, significant changes to regional traffic patterns and regional increases in traffic volumes are not anticipated. However, there will be changes in traffic patterns and volumes directly adjacent to the project site with diversion of trips to the new facility.

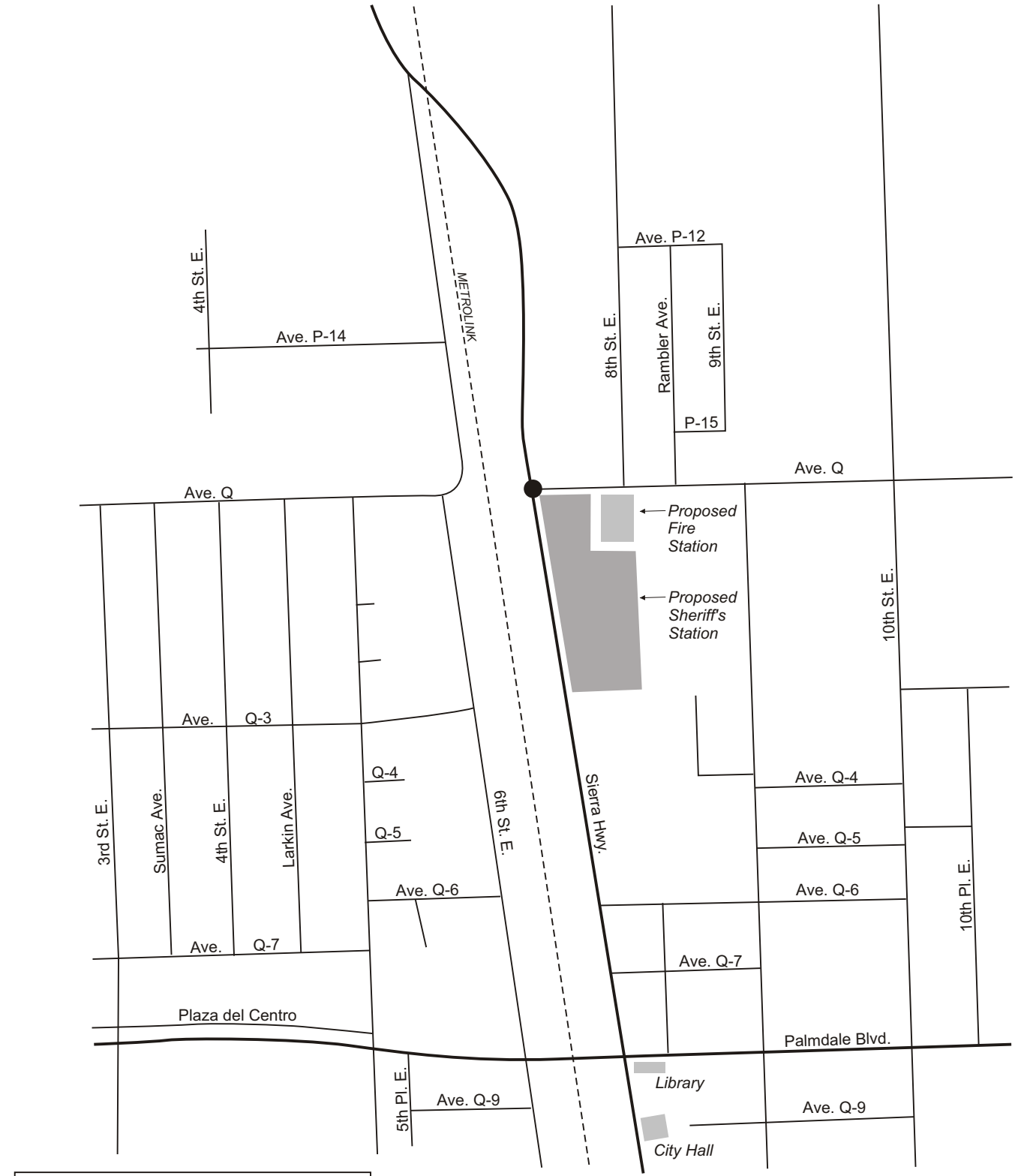
The following sections examine the impacts of the project on adjacent roadway segments and on weekday AM and PM peak hour operations at a key nearby intersection. The findings of this study will be used to prepare the project's final environmental documentation. The scope and methodologies used for this traffic analysis were developed in consultation with the County of Los Angeles Department of Public Works and were later confirmed with the City of Palmdale.

The appendices of this report contain background materials developed in the preparation of this analysis. These materials include manual traffic counts, intersection analysis worksheets, and other details.

### *Project Location*

The project site consists of approximately 11.57 acres of vacant land at the southeast corner of the Sierra Highway/Avenue Q intersection in the City of Palmdale. Palmdale is in the northern section of Los Angeles County, is within the Antelope Valley, and is bounded by the City of Lancaster to the north, and unincorporated county land to the east, south and west. The surrounding area is mostly vacant and is characterized by dispersed single-family homes along minor roadways and commercial developments concentrated along major thoroughfares including the Antelope Valley Freeway (CA-14), Sierra Highway, Palmdale Boulevard, and some segments of Avenue P. Industrial areas are found around the USAF Plant 42/Palmdale Airport (about 1.5 miles to the northeast) and along the Union Pacific (Metrolink) railroad tracks, which run parallel to Sierra Highway. The Palmdale Civic Center, Public Library, Court House and other public facilities are located east of Sierra Highway along the southerly frontage of Palmdale Boulevard.

Figure 1 illustrates the site location in relation to the surrounding street system. As shown, the site is roughly bounded by Avenue Q to the north, 9th Street to the east, Avenue Q-6 to the south, and Sierra Highway to the west. The adjacent properties are mostly vacant and include single-family homes and undeveloped lots on the north, vacant land, a commercial office use, and residential uses to the east fronting 9th Street, vacant land, the Palmdale Youth Library and the Richard Hammack Activity Center to the south, and the Dr. Robert St. Clair Parkway and industrial/manufacturing uses to the west.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 1

Project Location

### *Project Description*

In 1997, the Redevelopment Agency of the City of Palmdale purchased the subject property as part of its redevelopment and revitalization efforts for the downtown area. The City then rezoned the site and amended the Land Use Plan designation from Downtown Commercial to Public Facility. The City is proposing to lease the 11.57-acre property to the County of Los Angeles for the construction of a permanent facility for the Palmdale Sheriff's Station. The 1.5-acre area at the northeastern corner of this site, which has been reserved for a County Fire Station, is expected to remain vacant until such time that the County considers use of that area.

The new Sheriff's Station will accommodate a staff of about 221 (currently 204) and is assumed to open during the year 2005. The construction of the Palmdale Sheriff's Station is expected to take approximately 18 months. No set date for the start of construction activities has been scheduled at this time. Although the project may be completed during the year 2004, the year 2005 was selected as the completion year to provide a more conservative analysis.

The proposed site plan for the Sheriff's Station is provided as Figure 2. As shown, a one-story structure would be located near the northwestern portion of the site. This main structure would feature an irregular shaped rectangular building with approximately 50,280 of floor space. A vehicle maintenance building would be located at the southeastern end of the site. The maintenance building would have a total floor area of approximately 8,300 square feet and would include a fueling island, underground waste oil tank, car wash, and wastewater clarifier. A 110-foot wide helistop would be located at the southwestern portion of the site. The helistop would occupy approximately 16,720 square feet. No refueling capacity would be provided on-site and no long-term parking for helicopters would be provided.

Access to the facility would be provided by two driveways along Sierra Highway and two driveways on Avenue Q. Visitor and public parking areas would be accessed via the western driveway on Avenue Q and access to public arrestee release parking would be via the northern driveway on Sierra Highway. The Sheriff and staff parking areas would be accessed through the southern driveway on Sierra Highway and eastern driveway on Avenue Q. The southern driveway on Sierra Highway would connect to the eastern driveway proposed on Avenue Q, with both driveways gated.

On-site activities at the sheriff's station would include administrative and office operations, public counter and community services, patrol, detective operations, short-term detention, vehicle maintenance and support activities. These activities would include the dispatch of patrol cars and emergency vehicles, complaint and emergency response, foot patrol, narcotics detail, detective detail, special operations, coordination of citizen volunteer patrol (currently about 108 persons), detention of suspects for 96 hours or less, crime prevention and public education programs, and a community-based policing program.

The Palmdale Sheriff's Station would be open 24 hours a day, seven days a week. However, some activities and personnel would be present during the daytime weekday hours only. These include the administrative/office personnel and individuals assigned to traffic control, community relations, schedule, training and evidence, crime analysis, and vehicle maintenance.


| | | |
|---|---|---|
| **Katz, Okitsu & Associates**<br>*Traffic Engineers and Transportation Planners* | Palmdale Sheriff's Station - *Traffic & Parking Analysis* | Figure 2 |
| | | Project Site Plan |

# 2. Traffic Analysis Methodologies

This section documents the scope of analysis and identifies the level of service methodologies used to evaluate traffic circulation on key roadway segments and at select intersections. This report is prepared in conformance with guidelines set forth by the County of Los Angeles for traffic impact studies. Section 11 of this report details the Los Angeles County Congestion Management Plan (CMP) requirements and conformance.

### *Scope of Traffic Analysis*

In the sections that follow, the net traffic impacts of relocating the Sheriff's Station are discussed. Four separate traffic analysis timeframes are reviewed for this study, as shown below:

- Existing (Year 2002)
- Ambient Growth (Year 2005)
- Ambient Growth (Year 2005) WITH the Project
- Ambient Growth (Year 2005) WITH the Project Plus Related Area Projects

The TRAFFIX software program was used to perform the analysis of the surface street network for the timeframes listed above. As a result of project evaluation, three roadway segments and one signalized intersection were selected for detailed analysis.

The three roadway segments studied are:

1. Sierra Highway- (north of Avenue Q)
2. Sierra Highway- (south of Avenue Q)
3. Avenue Q- (east of Sierra Highway)

The intersection studied is:

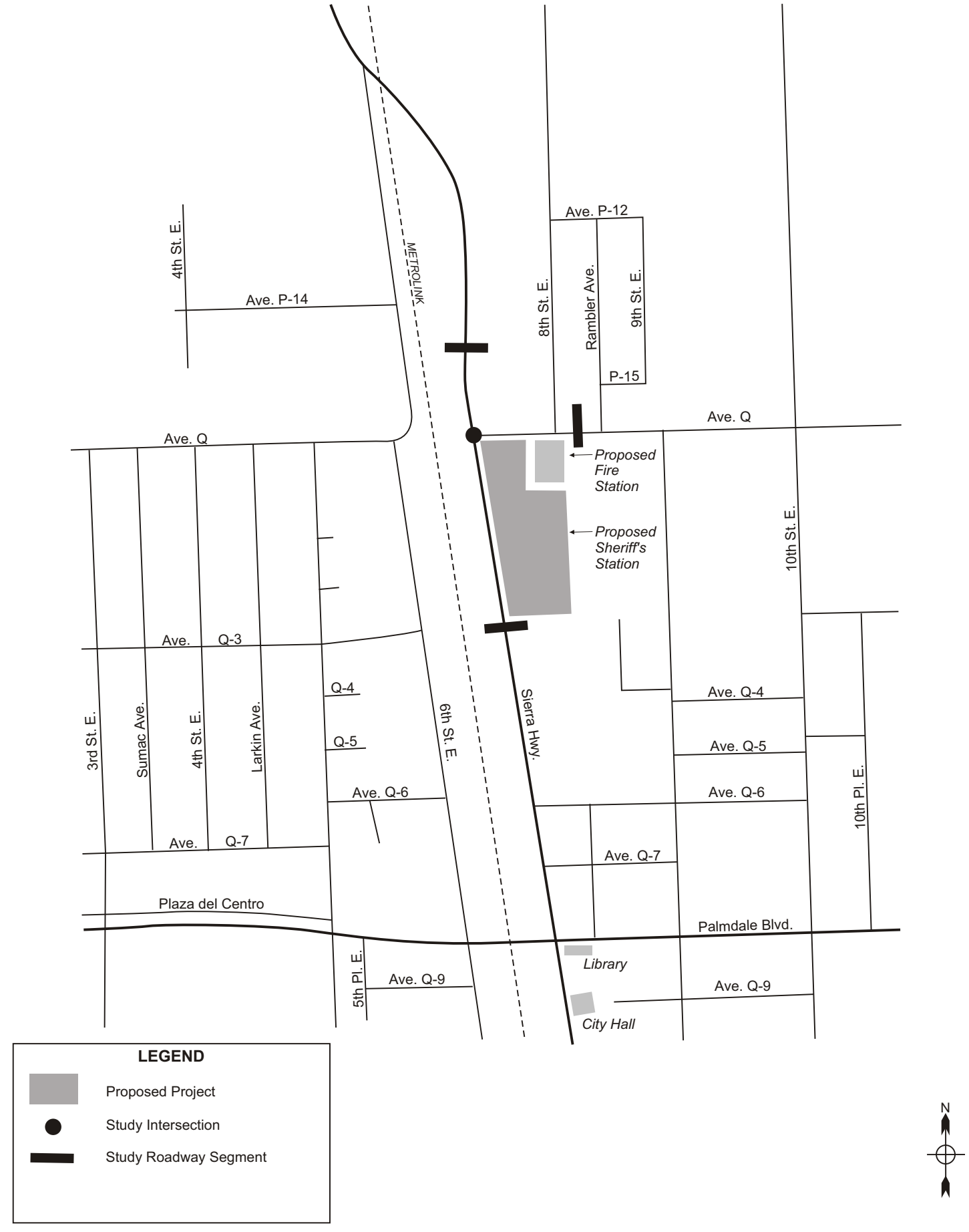
1. Sierra Highway at Avenue Q

Average daily traffic (ADT) counts are used to quantify operating conditions along street segments, while peak hour turning counts are used to determine the levels of service at the study intersection. Figure 3 illustrates the location of the study roadway segments and intersection.

### *Roadway Level of Service Concept*

The concept of roadway (arterial) level of service is typically defined in terms of average travel speed of all vehicles on the roadway. Average travel speed is strongly influenced by the density of signalized intersections per mile, average intersection delay, the number of driveways per segment and the presence of on-street parking.

Levels of service (LOS) range from LOS A to LOS F. Level of Service A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. Generally, LOS D is considered the lowest acceptable operating condition on an urban arterial roadway. Appendix A provides level of service definitions.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 3

Study Roadway Segments and Intersection

The level of service for a roadway segment is based on a ratio of the average daily traffic (ADT) volume vs. the estimated daily carrying capacity of the segment. The daily carrying capacity is defined as the volume that would produce the highest level of LOS E. Level of service criteria for a 4-lane Sierra Highway and 2-lane Avenue Q is provided in Table 1. This criterion has been used in the development of general plans for Southern California Cities.

**Table 1**
**Estimated Daily Roadway Capacities**

| Roadway Type | Daily Capacity for LOS C | Daily Capacity for LOS D | Daily Capacity for LOS E |
|---|---|---|---|
| 4-Lane Major Highway (divided) | 24,800 | 27,900 | 31,000 |
| 2-Lane Collector (undivided) | 11,200 | 12,600 | 14,000 |

### *Signalized Intersection Analysis Methodology*

The Intersection Capacity Utilization (ICU) method of intersection analysis, per the City of Palmdale and County of Los Angeles, was used to determine the intersection volume-to-capacity ratio (V/C) and corresponding level of service (LOS) based on the turning movements and intersection characteristics at the signalized intersection. The methodology calculates the volume/capacity ratio based on a default capacity [C] per lane, usually 1,600 vehicles per hour (vph) per lane. It should be noted that some California jurisdictions assign different capacity values, based on locally prevailing traffic operating conditions. The intersection V/C or critical movement total can be calculated by the summation of the critical flow ratios (volume/capacity per lane) during a given signal phase when concurrent signal phasing is provided or by summing the critical (V/C's) opposing flow ratios which includes the highest combination of opposing movements, for example, the opposing left turn V/C plus the opposing through movement V/C. The formula for calculating an intersection ICU is as follows:

**ICU=V/C+LOSS/CYCLE**

Where:

V/C = sum of critical movement volume/capacity ratios (critical east-west and critical north-south volume/capacity ratios)
CYCLE = cycle length in seconds (typically 100 seconds)
LOSS = total intersection loss time in seconds (typically 10 seconds)

A capacity value of 1,600 vehicles per hour per lane was used with a loss time factor of 0.10. The V/C for the intersection corresponds to a LOS value, which describes the intersection operations. Appendix B contains further discussion of the ICU methodology and level of service definitions.

Traffic congestion and operational deficiency along urban roadways are typically most significant during morning hours from 7 AM to 9 AM and evening hours from 3 PM to 6 PM. Traffic volumes for the morning and evening peak hours were obtained from manual traffic counts taken in early-November 2002. In addition, a series of field surveys were conducted by staff of Katz, Okitsu & Associates to determine the geometries and operational characteristics of the study intersection.

Appendix C contains summaries of the peak hour traffic counts.

# 3. Existing (Year 2002) Conditions

This section documents the existing conditions in the study area. The discussion is limited to key intersections and roadways near the project site. Figure 4 depicts the lane configurations and intersection control at the study intersection.

***Existing Traffic Circulation Network***

The site is located less than a mile north of Palmdale's downtown area and is approximately one mile east of the Antelope Valley Freeway (CA-14). It is anticipated that freeway access from the north and south will be provided by Palmdale Boulevard to the south via Sierra Highway. To a lesser extent, freeway traffic with origins or destinations to the north may use the partial interchange at 10th Street, which is just north of Avenue P, and then access the site via Sierra Highway. Palmdale Boulevard will provide primary east-west access to the project site.

Union Pacific railroad tracks are found immediately west of Sierra Highway, which carry 5 Union Pacific freight trains and 17 Metrolink passenger trains every day. Metrolink's Antelope Valley Line includes commuter trains from Lancaster (located north of Palmdale) to Los Angeles, which run five to six times a day, Monday through Friday and four times a day on weekends. The Metrolink trains stop at 8 stations along the way.

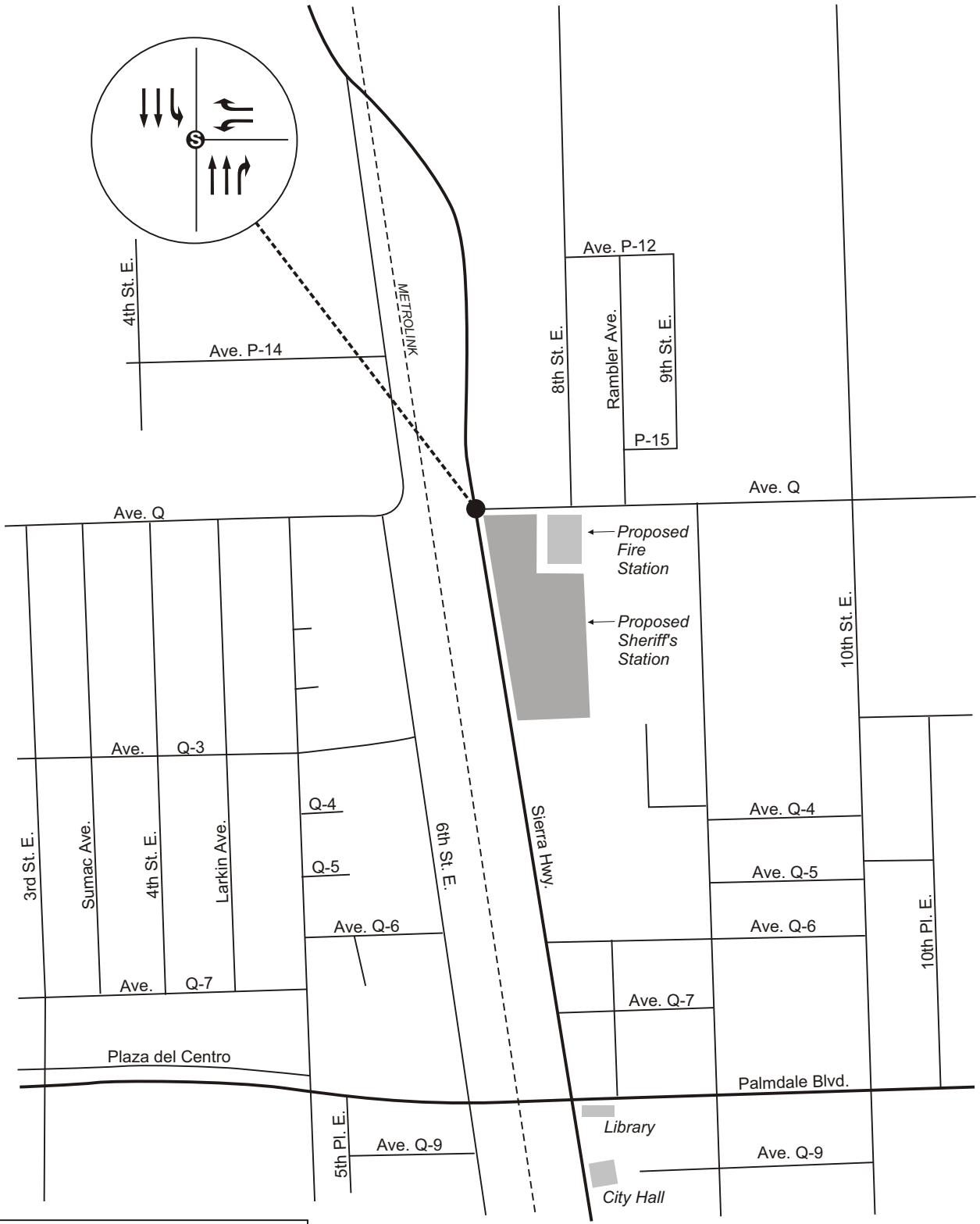
A discussion of the study area roadways is provided below.

**Antelope Valley Freeway (State Route 14)** is a north-south regional freeway that connects the Los Angeles Basin with cities and towns along the eastern slopes of the Sierra Nevada mountain range. Access to the project site from the freeway would most likely occur at the full interchange at Palmdale Boulevard. The freeway carries approximately 69,000 trips per day on the segment north of the Palmdale Boulevard interchange and 62,000 trips per day south of Palmdale Boulevard. *(Source: Caltrans 2001 Traffic Volumes)*

**Sierra Highway** in the project vicinity is a four-lane north-south arterial roadway with a two-way left-turn lane. Street trees and streetlights line Sierra Highway and the prevailing speed limit is 45 miles per hour (MPH). The posted speed limit on the segment adjacent to the project site is 55 MPH. The project site is located at the southeast corner of the Sierra Highway/Avenue Q intersection. Sierra Highway carries between 15,500 and 21,500 trips per day. *(Source: City of Palmdale & LACDPW 2001 Traffic Volumes, respectively)*

**Avenue Q** is an east–west roadway that is discontinuous along its length and terminates at Sierra Highway. Avenue Q defines the site's northern border and has a 50-foot wide right-of-way with two travel lanes. The posted speed limit near the project site is 40 MPH. Curbs and gutters are found only along the northern side of Avenue Q and overhead power poles line the south side of the road. The roadway carries about 6,800 vehicles per day. *(Source: City of Palmdale)*

**Palmdale Boulevard (State Route 138)** is a major east-west arterial roadway, has a two-way left turn lane and intermittent raised median, and provides six travel lanes near the project site. The adjoining land uses are primarily commercial and public facilities and the speed limit is 40 MPH. Palmdale Boulevard carries approximately 32,300 vehicles per day near Sierra Highway. *(Source: City of Palmdale)*




**LEGEND**

- Proposed Project
- Study Intersection
- Intersection Lane Geometry
- Signalized Intersection

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 4

Lane Configurations and Intersection Control

### *Roadway Segment Analysis*

As shown in Table 2, adjacent to the project site, both Sierra Highway and Avenue Q currently operate at acceptable levels of service. It should be noted that the mid-block analysis is based on two-way volumes and the impacts are shown for the entire roadway segment.

**Table 2**
**Roadway Segment Levels of Service**
**Existing (Year 2002) Conditions**

| Roadway Segment | Type | No. of Lanes | Capacity for LOS E | Year 2002 ADT | V/C Ratio | LOS |
|---|---|---|---|---|---|---|
| Sierra Highway: | | | | | | |
| N/O Avenue Q | Major Arterial | 4 | 31,000 | 21,500 | 0.69 | B |
| S/O Avenue Q | | 4 | | 15,500 | 0.50 | A |
| Avenue Q: | | | | | | |
| E/O Sierra Highway | Collector | 2 | 14,000 | 6,800 | 0.49 | A |

### *Peak Hour Intersection Level of Service*

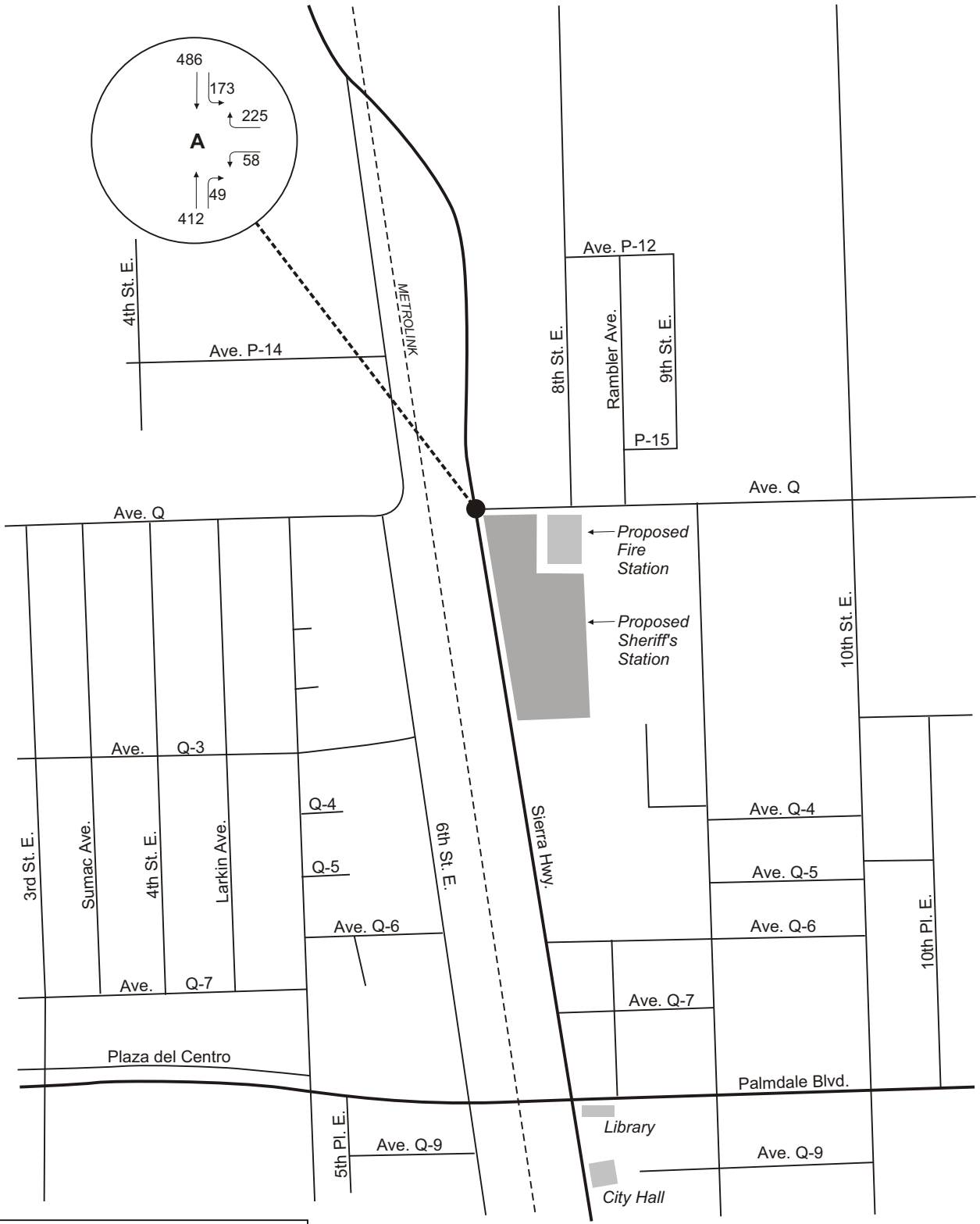
Table 3 summarizes the results of the level of service analysis for the existing weekday AM and PM peak hour conditions. Figure 5 depicts the existing AM peak hour traffic volumes and service levels at the study intersection. Figure 6 illustrates the existing PM peak hour traffic volumes and service levels.

**Table 3**
**Summary of AM/PM Peak Hour Intersection Performance**
**Existing (Year 2002) Conditions**

| Intersection | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | V/C Ratio | LOS | V/C Ratio | LOS |
| Sierra Highway at Avenue Q | 0.448 | A | 0.708 | C |

As shown in Table 3, the intersection operates at an acceptable LOS C or better during the morning and evening peak periods.

Appendix D contains the level of service worksheets.




**LEGEND**

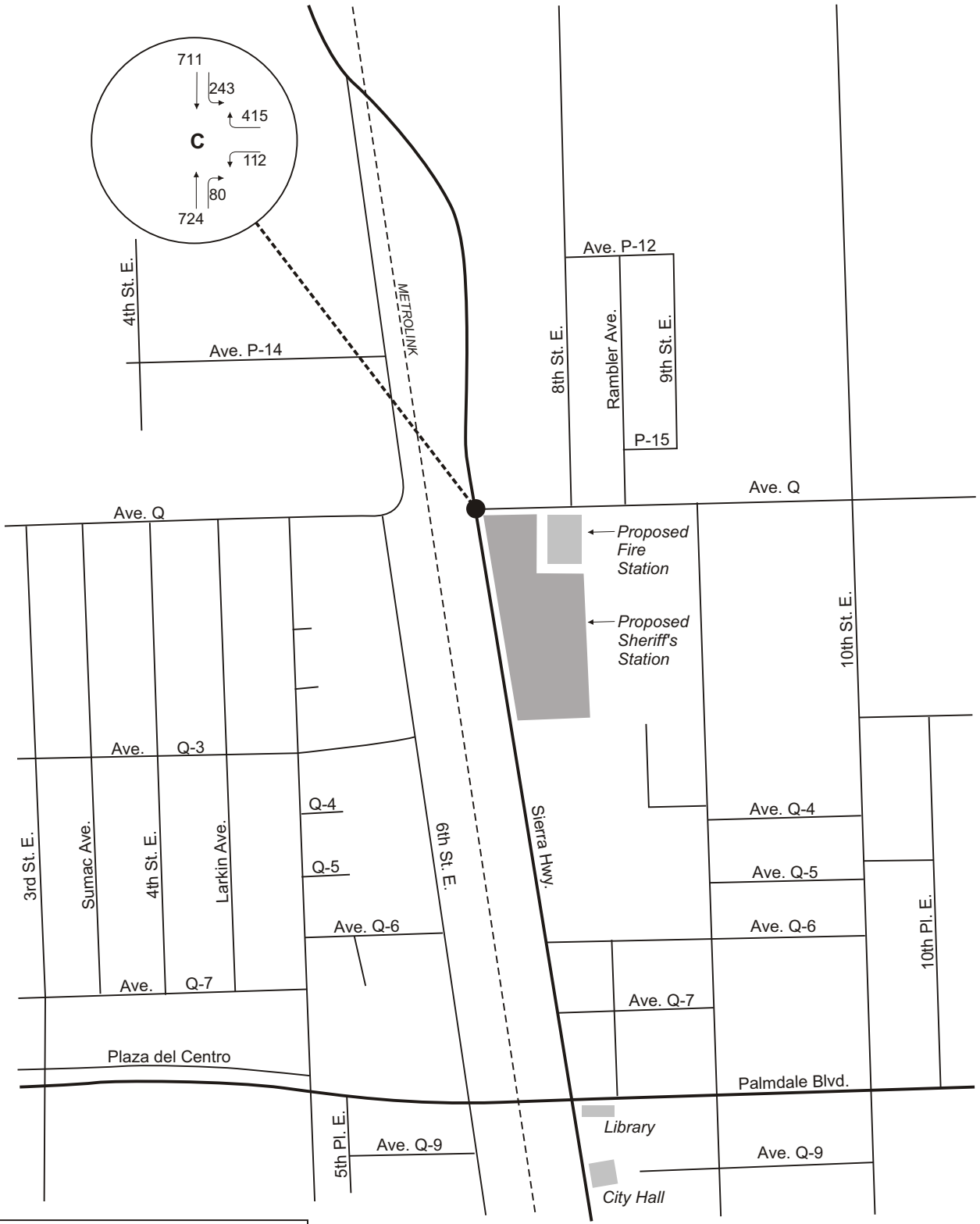
- Proposed Project
- Study Intersection
- XX — Intersection Turn Volume
- X — Intersection Level of Service

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* Figure 5

Existing (Year 2002) AM Peak Hour Traffic Volumes and LOS




**LEGEND**

- Proposed Project
- Study Intersection
- XX — Intersection Turn Volume
- X — Intersection Level of Service

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* — Figure 6

Existing (Year 2002) PM Peak Hour Traffic Volumes and LOS

# 4. Ambient Growth (Year 2005) Conditions

This section develops the future traffic conditions with ambient growth added but without the proposed project and without related area projects. It is of interest to predict future traffic conditions at the time when the project is scheduled for completion, both with and without project traffic. The comparison of these timeframes serves as the primary indication of project-related impacts. The year 2005 was chosen for this analysis to coincide with the expected completion date of the project.

### *Ambient Growth Rate*

Based on discussions with LACDPW staff, it has been established that traffic in the North County Planning Area, which includes the City of Palmdale, has historically (i.e. during the last few years) increased at a rate of about 2% per year. Future increases in the background traffic volumes due to regional growth are expected to continue at this rate in the vicinity of the project. Assuming a completion date of the year 2005, the existing 2002 traffic volumes were adjusted upward by six percent to reflect area-wide growth.

### *Roadway Segment Analysis*

To simulate the Ambient Growth Conditions of the year 2005, the existing daily (ADT) volumes were increased by a factor of 1.06. Adjacent to the project site, both Avenue Q and Sierra Highway continue to operate at acceptable levels of service as shown in Table 4.

**Table 4**
**Roadway Segment Levels of Service**
**Ambient Growth (Year 2005) Conditions**

| Roadway Segment | Type | No. of Lanes | Capacity for LOS E | Year 2002 ADT | V/C Ratio | LOS |
|---|---|---|---|---|---|---|
| Sierra Highway: | | | | | | |
| N/O Avenue Q | Major Arterial | 4 | 31,000 | 22,790 | 0.73 | C |
| S/O Avenue Q | | 4 | | 16,430 | 0.53 | A |
| Avenue Q: | | | | | | |
| E/O Sierra Highway | Collector | 2 | 14,000 | 7,208 | 0.51 | A |

As shown above, the ambient growth conditions show that the roadway segments operate at acceptable service levels of LOS C or better.

### *Peak Hour Intersection Level of Service*

To simulate the Ambient Growth Conditions of the Year 2005, the peak hour volumes shown in Figures 5 and 6 were increased by a factor of 1.06. Figures 7 and Figure 8 illustrate the resulting AM and PM peak hour volumes and service levels, respectively.

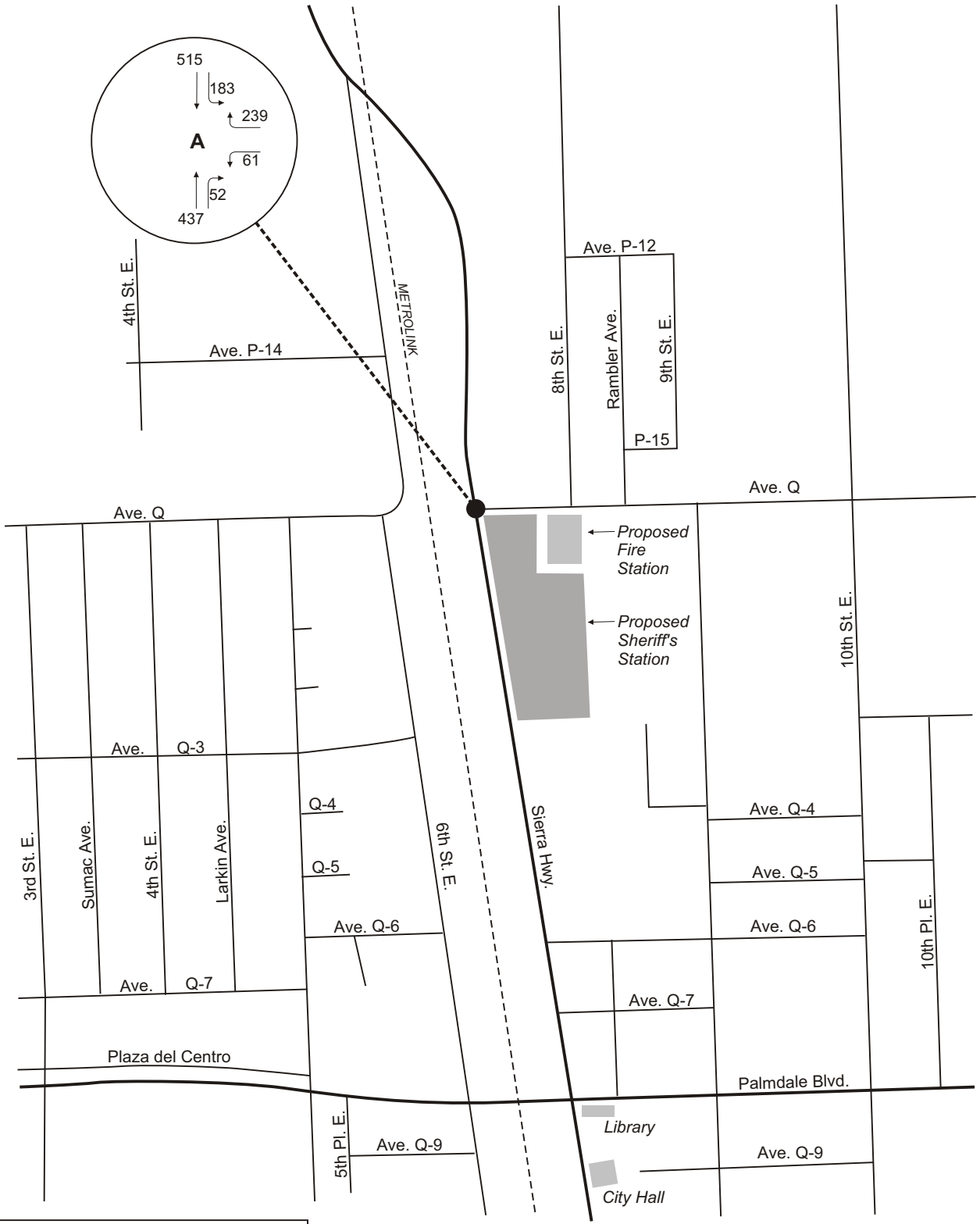
Table 5 summarizes the level of service changes associated with ambient (background) traffic growth.

**Table 5**
**Summary of AM/PM Peak Hour Intersection Performance**
**Ambient Growth (Year 2005) Conditions**

| Intersection | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | V/C Ratio | LOS | V/C Ratio | LOS |
| Sierra Highway at Avenue Q | 0.470 | A | 0.746 | C |

As shown above, the year 2005 conditions without the project and related area projects are forecast to be largely unchanged from existing traffic conditions in the study area.

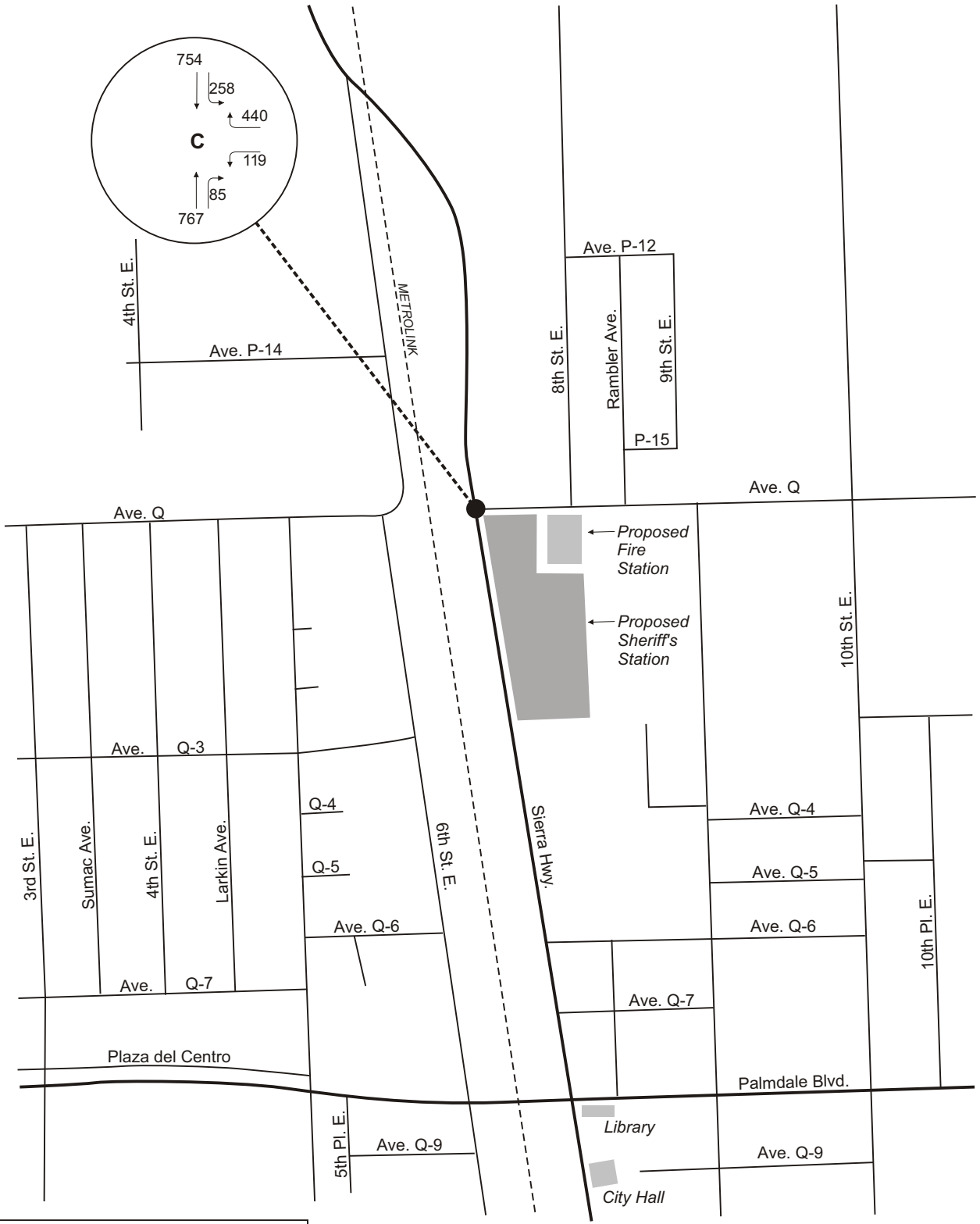
The level of service worksheets are provided in Appendix E.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* Figure 7

Ambient Growth (Year 2005) AM Peak Hour Traffic Volumes and LOS




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* Figure 8

Ambient Growth (Year 2005) PM Peak Hour Traffic Volumes and LOS

# 5. Project Trips

This section defines the project traffic in a three-step process including trip generation, trip distribution, and trip assignment.

The existing station currently occupies 13,500 square feet of leased space on Palmdale Boulevard and accommodates 204 personnel. Upon completion of the project all employees and services will relocate to the new station. The proposed station will occupy 50,280 square feet and is anticipated to have a staff of 221 personnel. The construction of the proposed Sheriff's Station would not be accompanied by the hiring of 17 employees, although 10 to 12 new staff may be hired for the on-site jail. The eventual increase in staffing would depend on the demand for police services and changes in contractual arrangements with the City of Palmdale. Thus, only 216 employees would be found at the new station, increasing to as many as 221 employees at full occupancy. In order to provide a conservative analysis the "WITH Project" conditions are based on the full occupancy of the new station (221 employees).

### *Project Trip Generation*

Generally, project trips generation forecasts are based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 6th Edition*. However, the Trip Generation Manual does not provide either daily or peak hour trip rates for sheriff's stations or similar facilities. In absence of such data, the estimation of project-generated trips was developed utilizing the staffing and visitation data provided by the Sheriff's Department.

### Daily Trip Generation Forecast

Table 6 below shows the basis and results of trip generation calculations performed based on available staffing and visitation data provided by the Sheriff's Department.

The calculations are based on the following assumptions:

- 221 staff members make 4 trips per day (arrive at work, leave for lunch, return from lunch and depart from work). This represents a worst-case scenario, as not all employees will leave for lunch.

- Station averages 20 visitors per hour during the core "business hours" of the day (likely lower during the later evening and early morning hours.

- Generally 50 patrol cars are on duty with each patrol car making 6 trips to the station (3 departing and 3 arriving per each of the three shifts).

Again, table 6 summarizes the daily trip generation forecast.

**Table 6**
**Daily Trip Generation Forecast**

| Trip Source | Calculation | ADT Volume |
|---|---|---|
| Staff Trips | =221 staff X 4 trips per employee | 884 |
| Visitor Trips | =20 visitors per hour X 2 trips (arrival and departure) X 8 hours | 320 |
| Patrol Car Trips | =50 patrol cars X 6 trips per patrol car | 300 |
| **Total Daily Trips** | | **1,504** |

**Peak Hour Trip Generation Forecast**

In order to develop peak hour generation forecasts for the proposed facility, it was necessary to obtain staffing and shift information. The sheriff's department was contacted to determine the staffing by shift. Calculations and assumptions used to develop peak hour trip forecasts are provided below.

Table 7 summarizes the employment data for the new sheriff's station at the project site.

**Table 7**
**Future Sheriff's Station Staffing Shift Assignments**

| Department | Totals | Post Positions per Shift | | | | | |
|---|---|---|---|---|---|---|---|
| | | AM | | PM | | Grave | |
| | | 6A-2P | 8A-4P | 2P-10P | 4P-12A | 10P-6A | 12A-8A |
| Administration | 5 | | 5 | | | | |
| Front Office | 17 | | 7 | 5 | | 5 | |
| Traffic | 6 | 3 | 3 | | | | |
| Reserves | 1 | | 1 | | | | |
| Community Relations | 4 | | 4 | | | | |
| Secretariat/Records | 19 | 2 | 12 | | 3 | | 2 |
| Scheduling/Timekeeping | 5 | | 5 | | | | |
| Training/Special Projects | 2 | | 2 | | | | |
| Evidence/Property | 1 | | 1 | | | | |
| Patrol | 104 | 20 | 20 | 18 | 18 | 14 | 14 |
| Detectives Division | 35 | 8 | 25 | | 2 | | |
| Narcotics | 6 | | 6 | | | | |
| Crime Analyst | 2 | | 2 | | | | |
| Jail | 12 | 2 | 2 | 2 | 2 | 2 | 2 |
| Vehicle Maintenance | 2 | | 2 | | | | |
| **Employee Totals** | **221** | **35** | **97** | **25** | **25** | **21** | **18** |

*Source: Los Angeles County Sheriff's Department (August 2000)*

AM Peak Hour Trips

Peak hour trip generation during the morning period is expected to occur around 8 AM when the graveyard shift ends and the normal business day begins. Based on current trip making characteristics, it is assumed that each staff member will continue to drive alone and arrive 30 minutes to 1 hour before their shift and leave approximately 15 minutes after their shift ends. As a result staff would account for 115 AM peak hour trips (97 entering and 18 departing). It would also be expected that patrol cars and detectives that arrived at 6 AM might depart to the field during the 8-9 AM peak hour thus increasing the outbound trips by 28 to 46 (18 + 28).

The sheriff's department has stated that volunteers are used to augment staff and that there is constant activity involving the arrival and departure of visitors. Using sheriff's department data, it is expected that about 15 volunteers will be present during the AM shift. Additionally, up to 30 visitors per hour can be expected on days that fingerprinting takes place. If all volunteers and visitors would arrive by car, then the AM inbound trips would increase by 45 vehicles (15 volunteers + 30 visitors) to 142 inbound trips (97 + 45).

**Based on the assumptions above, the AM peak hour trip generation for the sheriff's station would be as follows:**

- **142 Inbound Trips**
- **46 Departing Trips**

PM Peak Hour Trips

PM peak hour trip generation expected to occur around 4 PM when the PM shift begins and the normal business day ends. Based on current trip making characteristics, it is assumed that each staff member will continue to drive alone and arrive 30 minutes to 1 hour before their shift and leave approximately 15 minutes after their shift. As a result staff would account for 122 PM peak hour trips (25 entering and 97 departing). It would also be expected that patrol cars and detectives that arrived at 2 PM might depart to the field during the 3-4 PM peak hour thus increasing the outbound trips by 18 to 115 trips (97+ 18).

As mentioned, the sheriff's department stated that volunteers are used to augment staff and that there is constant activity involving the arrival and departure of visitors. It is expected that approximately 12 volunteers will be present during the PM shift. Additionally, up to 30 visitors per hour can be expected on days that fingerprinting takes place. If all volunteers would arrive by car, then the PM inbound trips would increase by 12 vehicles (volunteer arrival) to 37 trips (25 + 12). If all volunteers and visitors departed by car, then the PM outbound trips would increase by 45 (15 volunteers + 30 departing visitors) to 160 departing trips (115 + 45). The 15 volunteers for the AM shift are assumed to depart during the PM peak period.

**Based on the assumptions above, the PM peak hour trip generation for the sheriff's station would be as follows:**

- **37 Inbound Trips**
- **160 Departing Trips**

***Project Trip Distribution***

After projecting the total traffic entering and exiting a project site, that traffic is distributed and assigned to the surrounding street system. Trip distribution is the process of assigning the directions from which traffic will access a project site. Trip distribution is dependent upon the

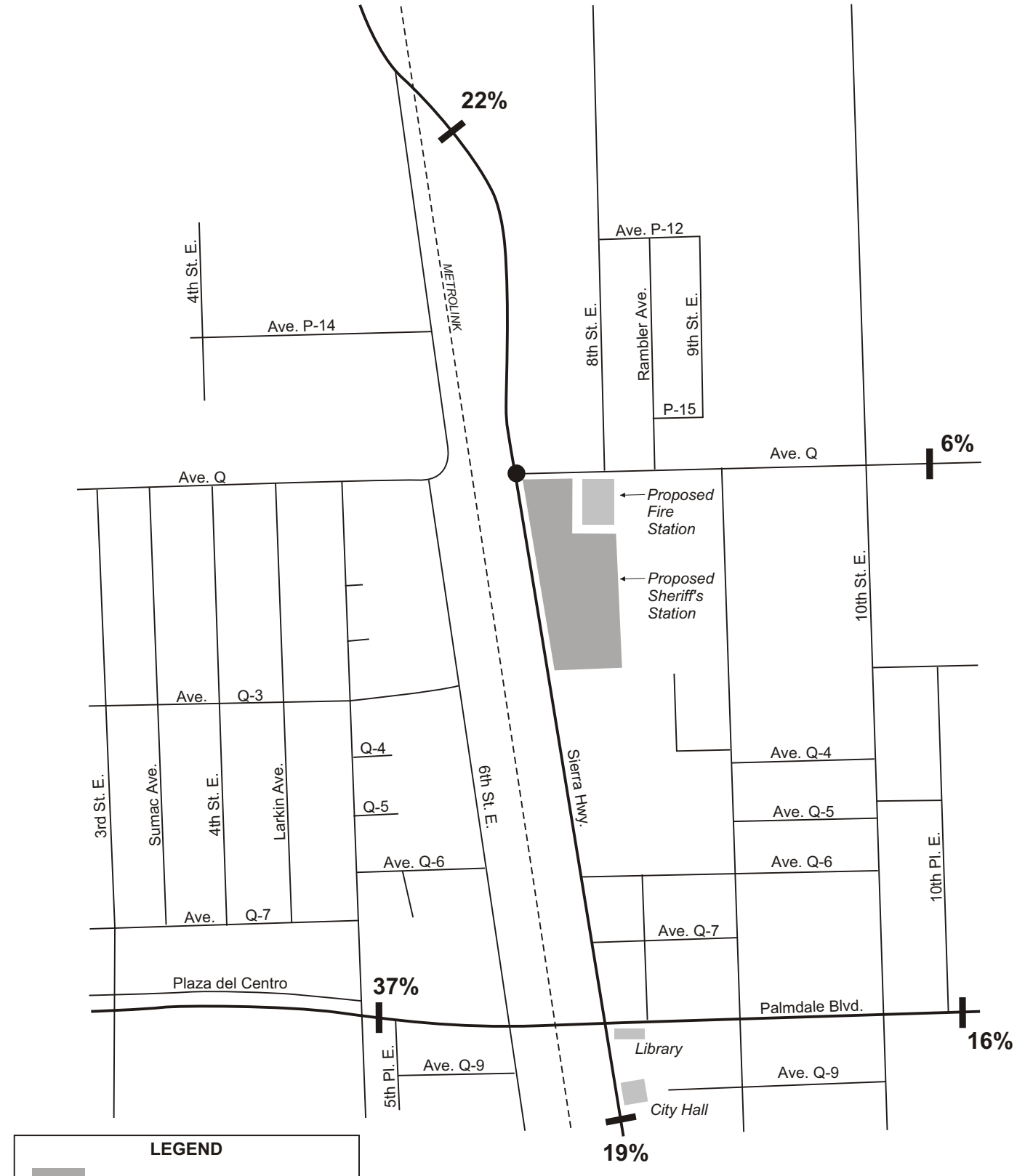
land use characteristics of the project and the general location of other land uses to which project trips would originate or terminate.

The station serves the City of Palmdale and approximately 20 nearby communities, with a total land area covering approximately 852 square miles. There are approximately 180,000 residents living within the station's service boundaries. The service area extends north to Lancaster, east to the San Bernardino County line, west to Santa Clarita, and south to the San Gabriel Mountains.

The trip distribution was derived based on Census Survey 2000 data for the project's area of influence. Census track data was used to determine the density and dispersion of the population within the coverage area. The analytical methodology of the *1997 Congestion Management Program for Los Angeles County (CMP)* was then used to distribute the project trips to geographical groupings of tracts. This method is consistent with the "primary market" or "area-of-influence" method suggested in several ITE textbooks for special types of land uses (service/retail). The trip distribution was also adjusted to account for concentrations of commercial and retail uses. Figure 9 illustrates the project trip distribution to the adjacent street system.

### *Project Trip Assignment*

Trip assignment involves determining the amount of traffic that will use specific routes in a roadway network. Trip assignment is dependent upon the design features of the project (i.e. driveway locations, and special restrictions). The final product of the trip assignment process is a full account of project trips, by direction and turning movement on each study roadway. The project trips were assigned based on the project's design features (i.e. driveway restrictions). Figure 10 illustrates the trip assignment during the AM peak hour and Figure 11 illustrates the trip assignment for the PM peak hour.

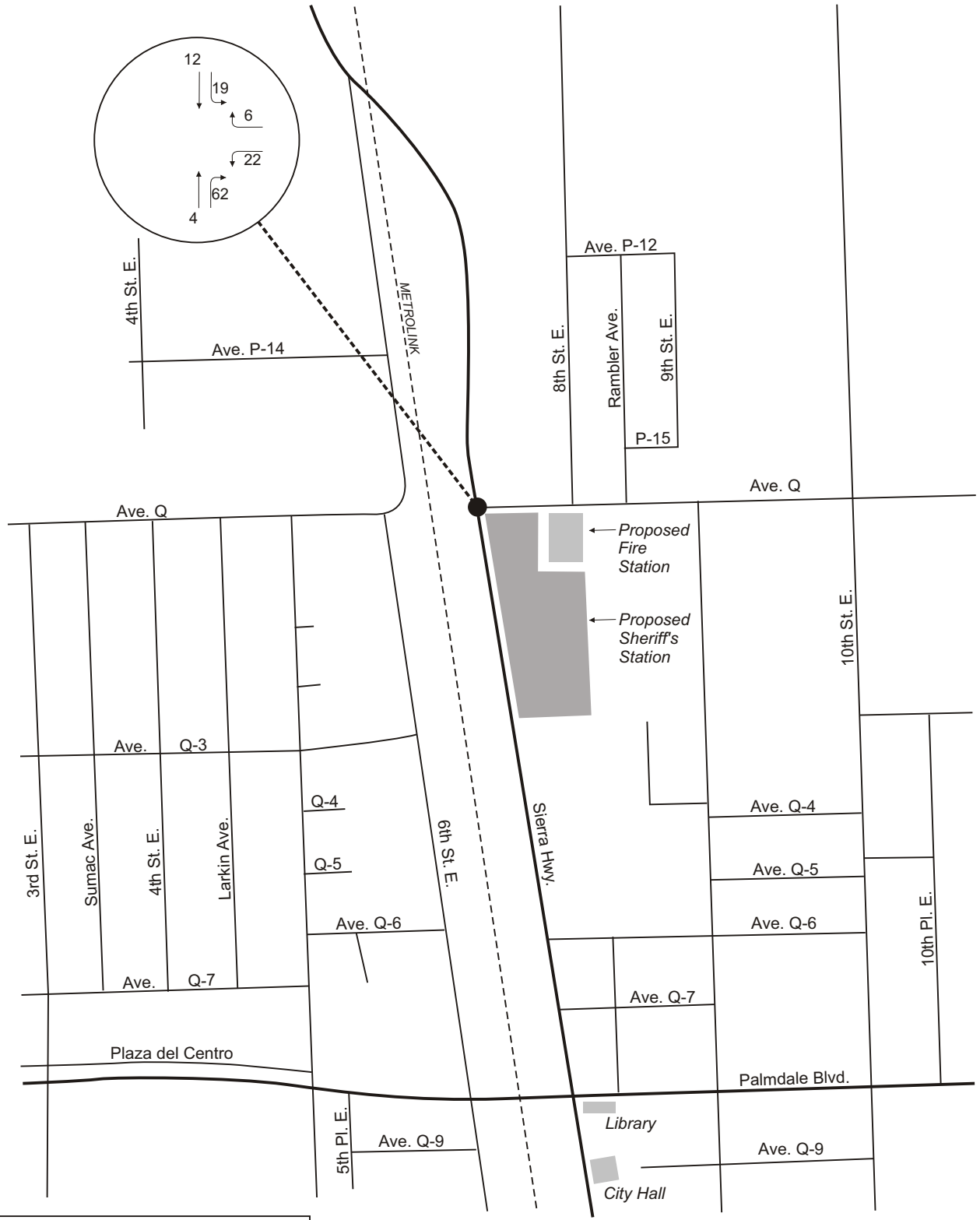



**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 9

Project Trip Distribution by Roadway Segment

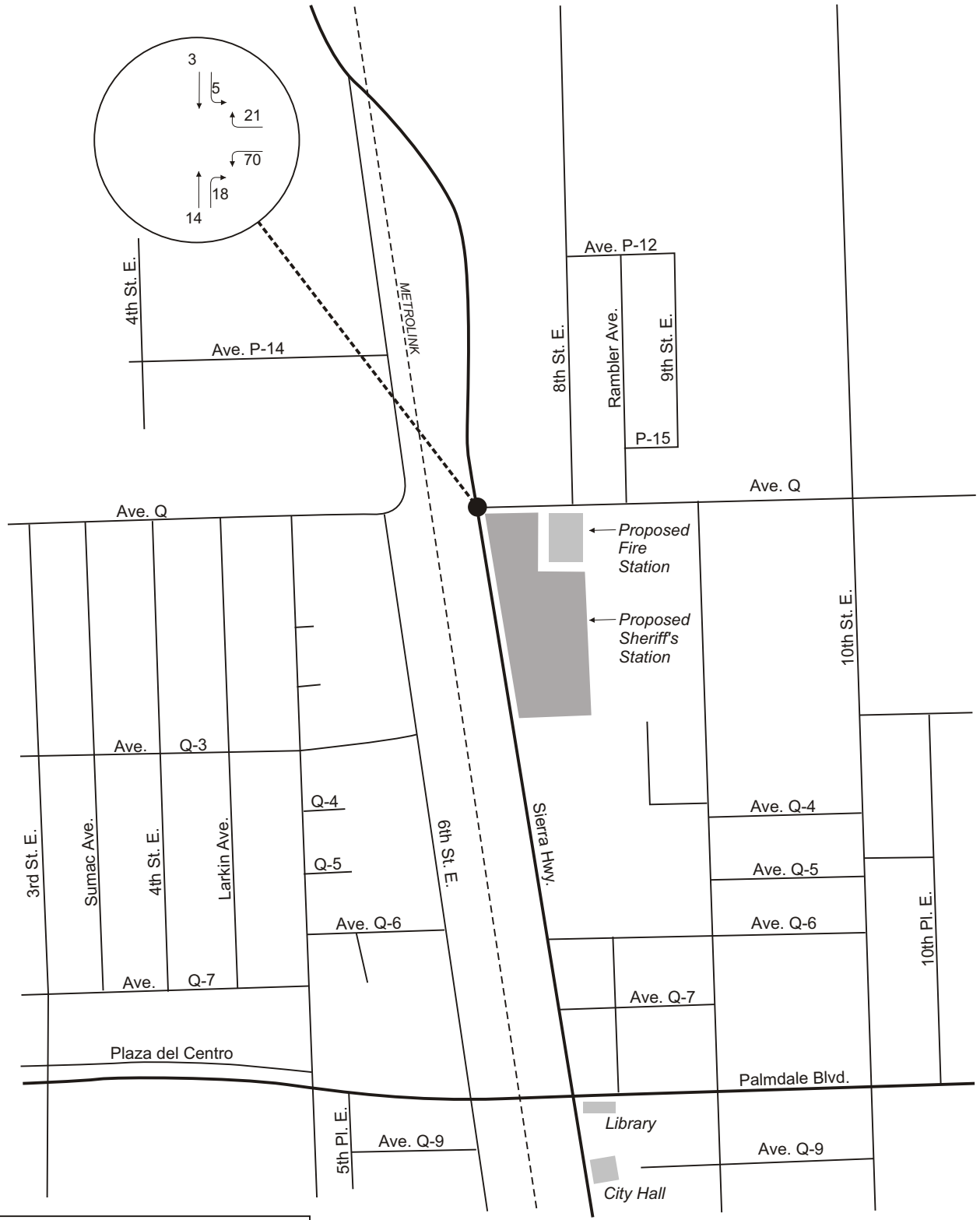



**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 10

AM Peak Hour Project Trip Assignment




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 11

PM Peak Hour Project Trip Assignment

# 6. Ambient Growth (Year 2005) WITH Project Conditions

This section documents the future traffic conditions in the study area with ambient growth added and with the relocation of the Palmdale Sheriff's Station. This section also includes a brief discussion of the street easements (widening and dedication) and intersection improvements that will result from the project's development.

### *Street Easements and Intersection Improvements*

The City's Master Plan for Sierra Highway calls for six traffic lanes plus a two-way left turn lane/raised median. According to the City of Palmdale Traffic Engineering Department, recent street improvements (curb-gutter and sidewalk) on the east side of Sierra highway have already taken into account the addition of traffic lanes in the future. No dedication of land is required along Sierra Highway.

The Master Plan for Avenue Q calls for six traffic lanes plus a two-way left turn lane/raised median. The Station will be required to dedicate 32 feet along its north frontage for future street improvements, which includes a bike lane. Utility lines on the southern edge of Avenue Q would also be placed underground as part of the project.

The project will relocate the traffic signal at the intersection of Sierra Highway and Avenue Q. Upon project completion, it is anticipated that Avenue Q will provide dual left-turn lanes to southbound Sierra Highway and an exclusive right-turn lane to northbound Sierra Highway.

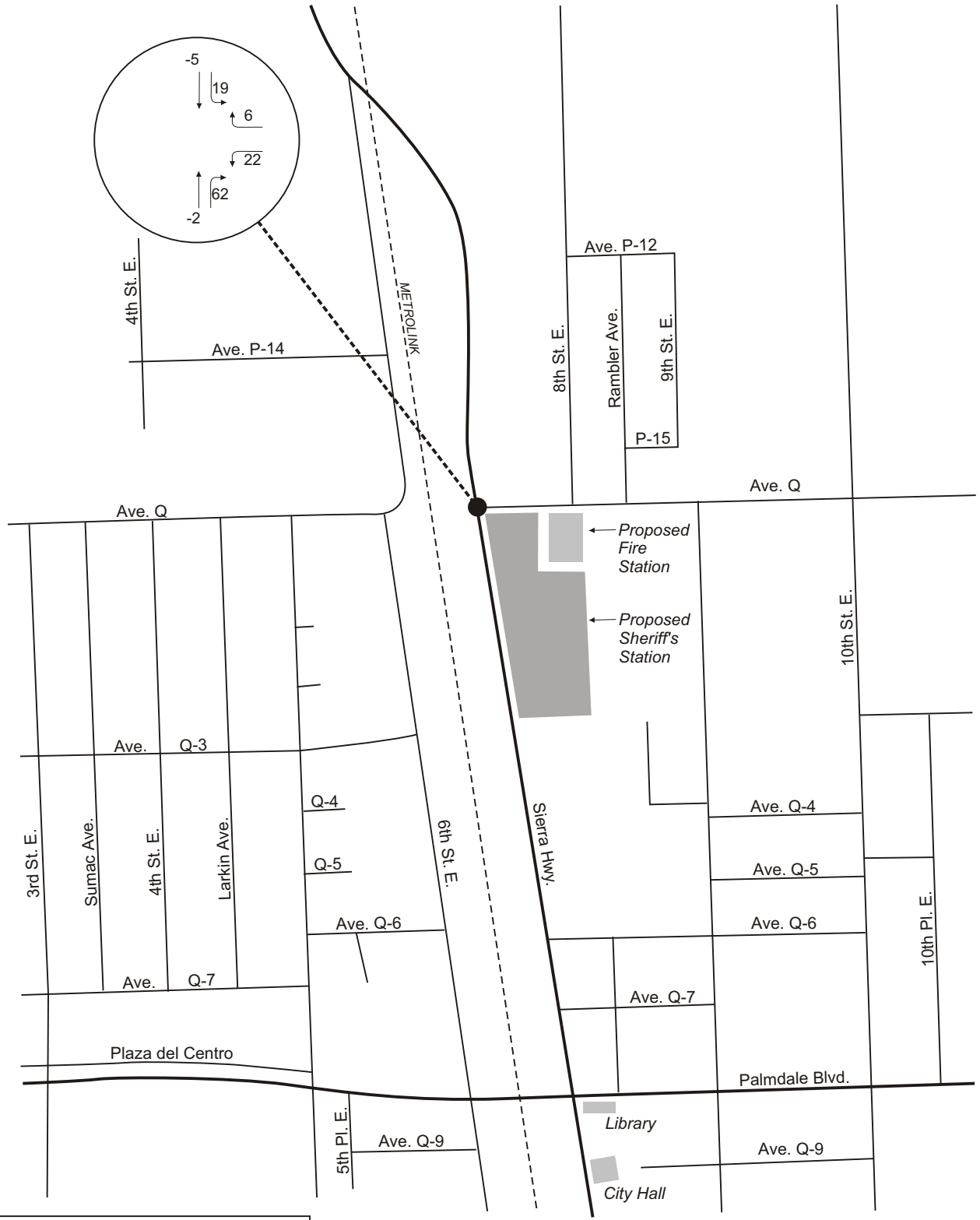
### *Net Impact of Relocating Sheriff's Station*

The following analysis of "WITH Project" conditions evaluates the net traffic impacts of relocating the existing sheriff's station from 1020 Palmdale Boulevard to the proposed location at the corner of Sierra Highway at Avenue Q. The project's net impact on the surrounding street system was assessed by creating a negative zone in the TRAFFIX model for the existing station and a positive zone for the new station. The traffic generated by each of these zones (existing and new station) was distributed and assigned to the surrounding street system and the net difference in traffic volumes was calculated. Figures 12 and 13 illustrate the net traffic volumes during the AM and PM peak hour, respectively. As shown, the relocation of the station and the resulting re-distribution of traffic will cause a reduction in some traffic maneuvers and an increase in other maneuvers.

### *Roadway Segment Analysis*

The "WITH Project" conditions were analyzed for the year 2005 by adding the project's net-daily trips to the adjacent roadway segments. Table 8 summarizes the amount of trips added to each segment and the resulting service levels based on the LOS E definitions provided earlier.

As can be seen in the table, the year 2005 conditions with the project show that the roadway segments operate at acceptable service levels of LOS C or better. Again, it should be noted that the mid-block analysis is based on two-way volumes and the impacts are shown for the entire roadway segment.

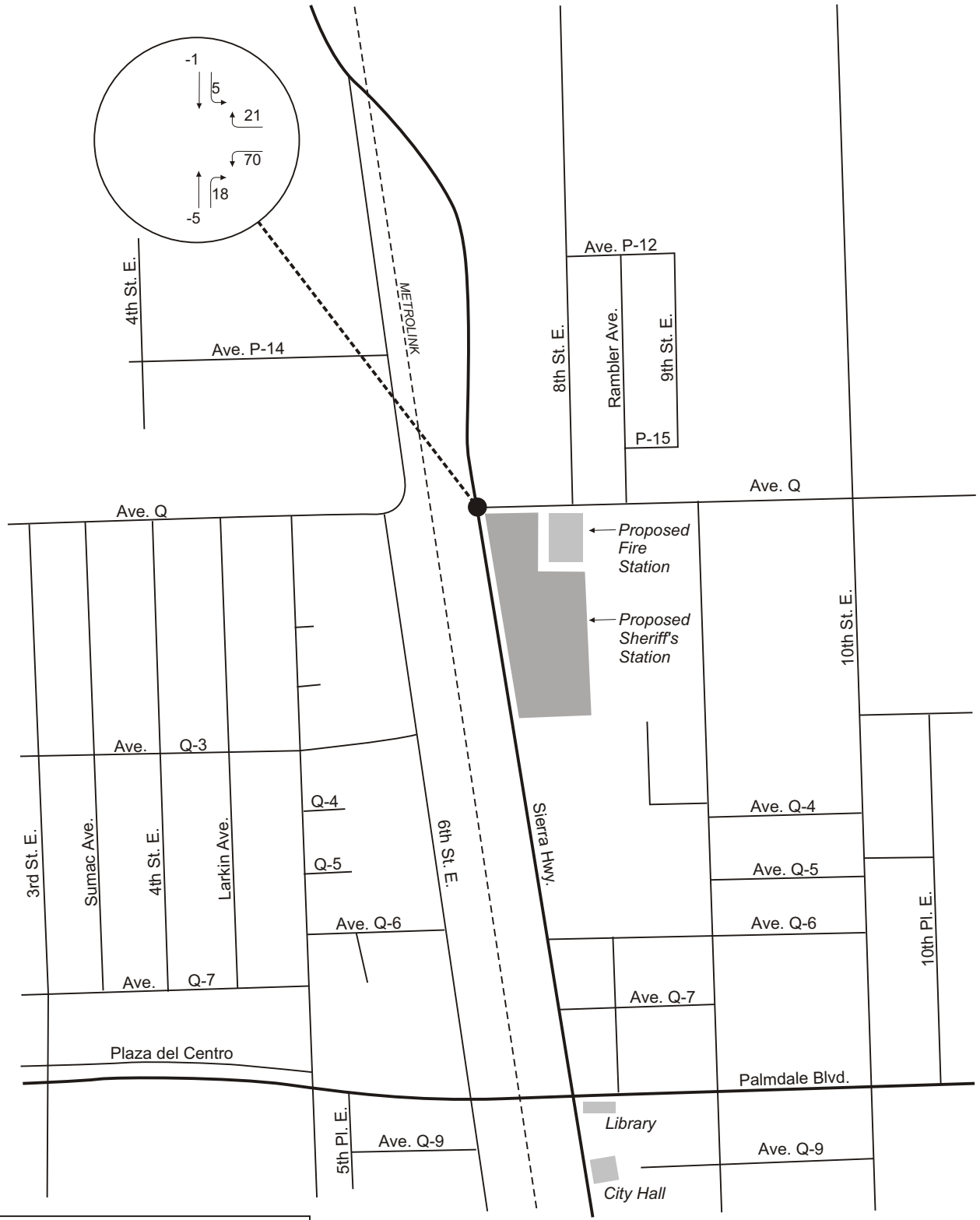



**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 12

AM Peak Hour Net Project Vehicle Trips




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 13

PM Peak Hour Net Project Vehicle Trips

**Table 8**
**Roadway Segment Levels of Service**
**Ambient Growth (Year 2005) WITH Project Conditions**

| Roadway Segment | Class | No. of Lanes | Capacity for LOS E | Year 2005 No-Project ADT | Added Vehicle Trips | Year 2005 WITH-Project ADT | V/C Ratio | LOS |
|---|---|---|---|---|---|---|---|---|
| Sierra Highway: | | | | | | | | |
| N/O Avenue Q | Major Arterial | 4 | 31,000 | 22,790 | 144 | 22,934 | 0.74 | C |
| S/O Avenue Q | | 4 | | 16,430 | 896 | 17,326 | 0.56 | A |
| Avenue Q: | | | | | | | | |
| E/O Sierra Highway | Collector | 2 | 14,000 | 7,208 | 866 | 8,074 | 0.58 | A |

### *Peak Hour Intersection Level of Service*

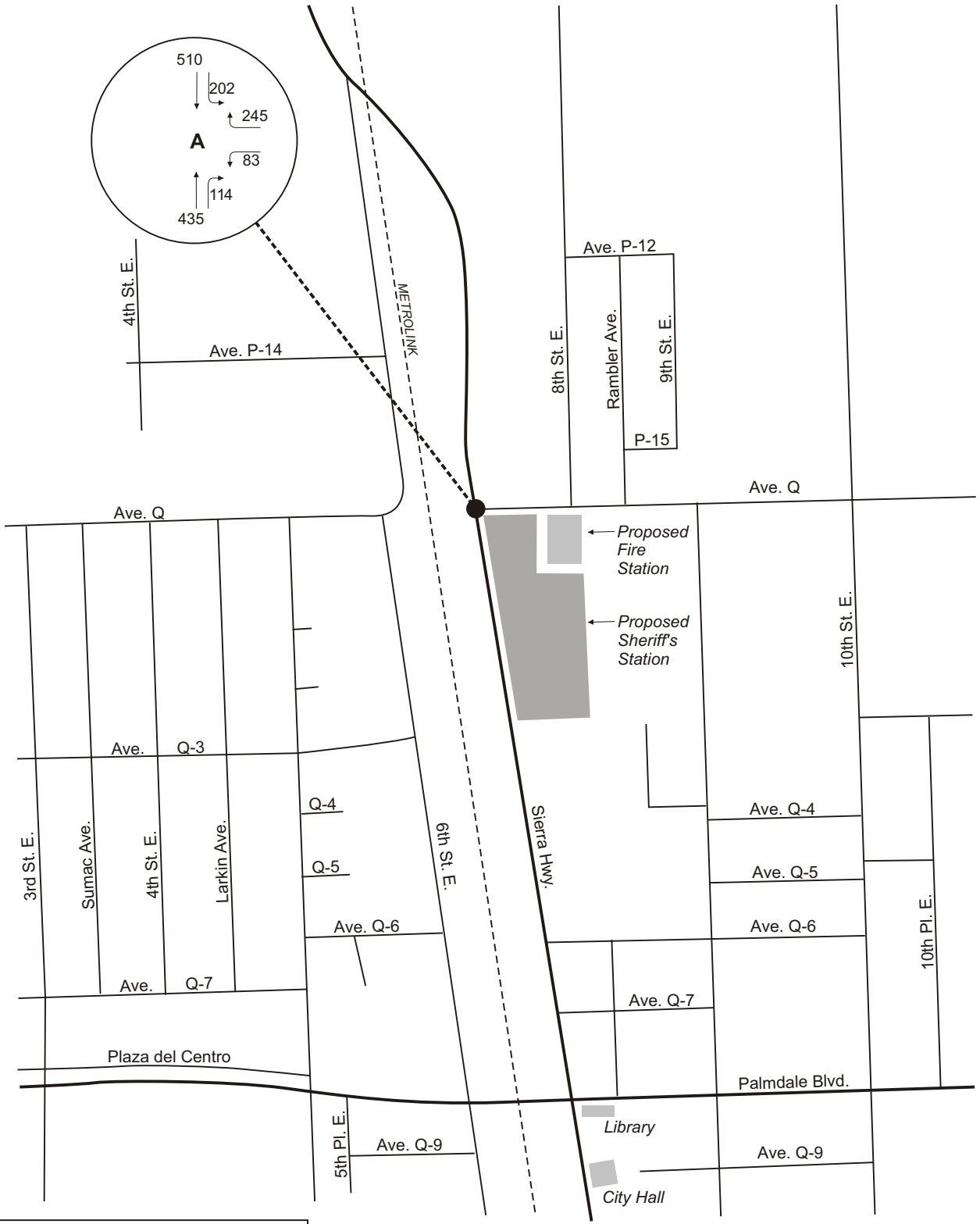
The "WITH Project" traffic volumes were derived by adding the net project trips shown in Figures 12 and 13 to the "Ambient Growth" volumes for the year 2005. Figures 14 and 15 illustrate the resulting AM and PM peak hour volumes and levels of service, respectively. Table 9 summarizes the results of the level of service analysis for this scenario.

**Table 9**
**Summary of AM/PM Peak Hour Intersection Performance**
**Ambient Growth (Year 2005) WITH Project Conditions**

| Intersection | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | V/C Ratio | LOS | V/C Ratio | LOS |
| Sierra Highway at Avenue Q | 0.485 | A | 0.761 | C |

As shown above, service levels deteriorate slightly with the addition of the project *and* inclusion of the related improvements at the Sierra Highway/Avenue Q intersection. As mentioned, as part of the project's development an additional left turn lane will be provided on Avenue Q for southbound Sierra Highway. The study intersection operates at an acceptable level of service "C" or better during AM and PM peak hour.

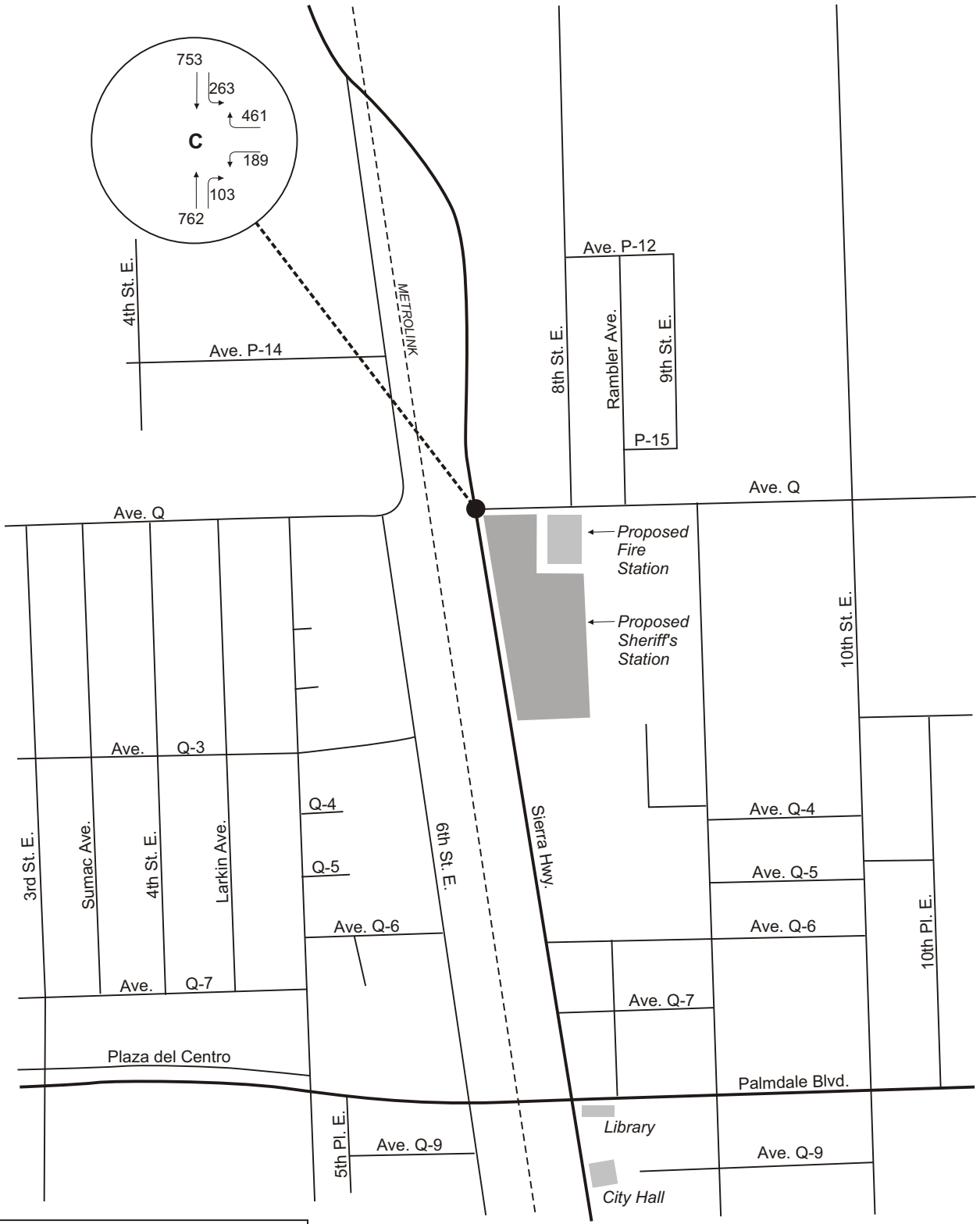
The level of service worksheets are provided in Appendix F.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* Figure 14

Ambient Growth With Project (Year 2005) AM Peak Hour Traffic Volumes and LOS




**LEGEND**

- Proposed Project
- Study Intersection
- XX — Intersection Turn Volume
- X — Intersection Level of Service

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic& Parking Analysis* Figure 15

Ambient Growth With Project (Year 2005) PM Peak Hour Traffic Volumes and LOS

# 7. Ambient Growth (Year 2005) WITH Project + Related Projects Conditions

This section documents the future traffic conditions in the study area with ambient growth, net project trips, and with the addition of related area projects. The fire station that is proposed adjacent to the site is not considered to be part of this project (Palmdale Sheriff's Station) and is therefore included as a related project for purposes of this analysis.

### *Description of Fire Station Project*

The potential fire station at the northeast corner of the project site would replace an existing facility within the City. Information for this project was obtained from the County Fire Department and is representative of a typically sized fire station in the Palmdale area. The fire station would provide approximately 18,000 square feet of floor space and would be staffed by about 15 fire department personnel. Twelve staff members would be on site 24-hours a day and 3 staff members would work 8 hour shifts during regular business hours.

The fire station site would provide storage 5 fire department vehicles as follows:

- 1 engine
- 1 squad car
- 1 truck
- 1 BC vehicle
- 1 AC vehicle

The station would be designed to provide for parking for 15 additional vehicles and would feature its own exclusive driveways.

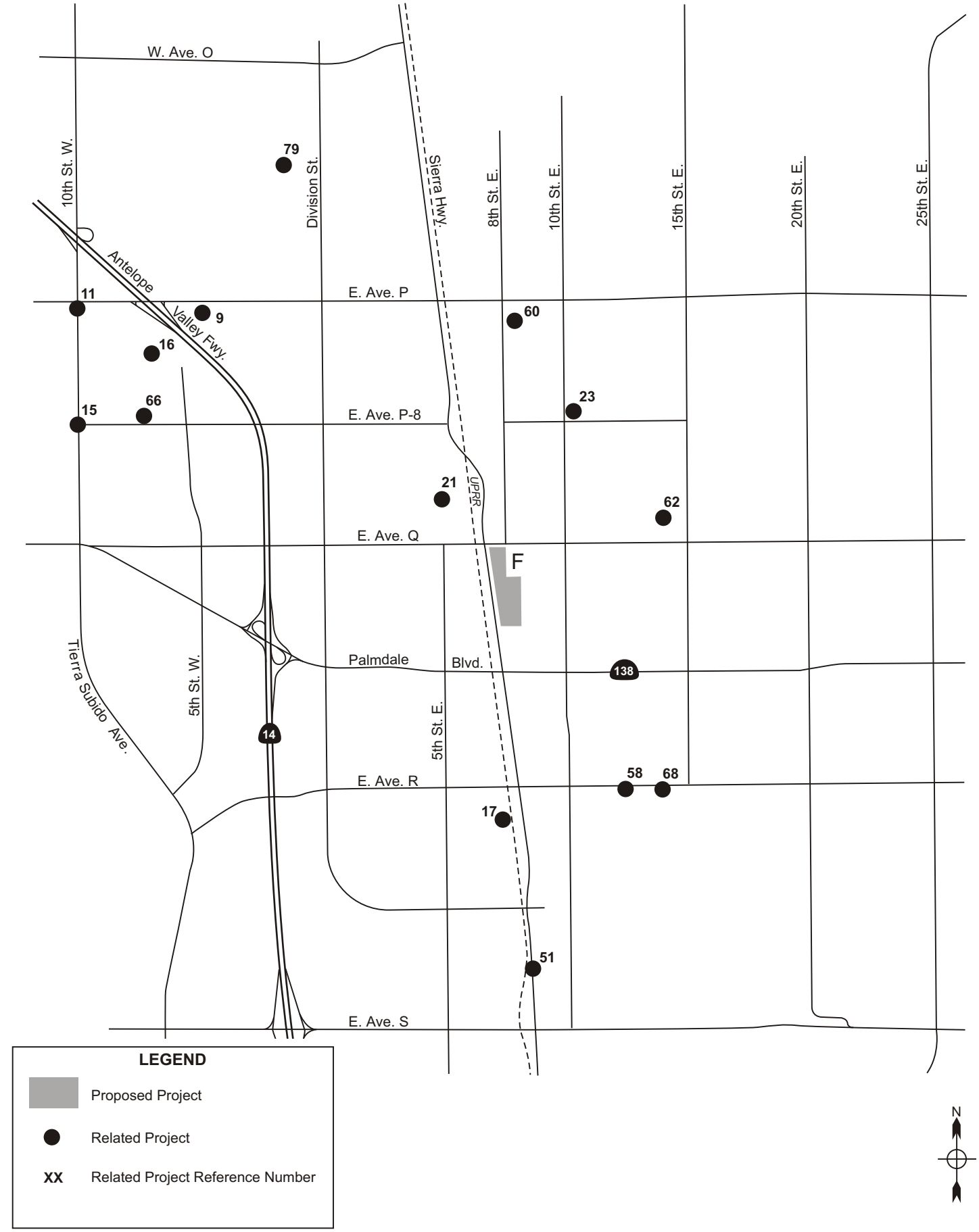
Based on conversations with representatives of the fire department, the facility would make approximately 2,600 emergency responses annually (an average of about 7 emergency responses per day).

### *Other Related Projects*

The area of influence (approximately 2-mile radius from the project site) was scanned to identify the location and status of all other approved and pending projects. Based on a review of planning sources and consultation with the Planning Department of Palmdale, there are 15 related projects that may contribute significant traffic volumes to the study area by the year 2005.

The location of the related projects is shown in Figure 16. Each project (with the exception of the fire station) is identified using a reference number that matches the values used in the following two publications that were provided by the City of Palmdale.

1. Commercial and Industrial Development Summary, July 2002
2. Residential Development Summary, July 2002




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - T*raffic & Parking Analysis*

Figure 16

Location of Related Projects

The projects included for analysis are described in Table 10.

**Table 10**
**Description of Related Area Projects**

| Planning Dept. Ref No. | Project Description | Location |
|---|---|---|
| (F) Fire Station | Potential development of a typically sized fire station | Directly adjacent to proposed sheriff's station on a 1.5-acre property at northeast corner of project site |
| 21 | Develop 24 acres into a transit center | 6th Street East, 200 feet north of Avenue P-14 |
| 60 | Construct a 148,588 sf industrial park with 14 buildings | Southwest corner of Avenue P and 8th Street East |
| 23 | Develop 5 acres into a 3,000 sf pre-fabricated metal building, expansion to the existing facilities | Northeast corner of Avenue P-8 and 10th Street East |
| 62 | Construct a contractor's equipment yard and maintenance facility | Approximately 2,000 feet north of Avenue Q, on the west side of 15th Street East |
| 17 | Develop 2.09 acres into an industrial/office use consisting of one 38,519 sf building | South of Avenue R between the Union Pacific Railroad and 6th Street East |
| 51 | Develop 5.66 acres into a self-storage complex consisting of 11 buildings and totaling 71,600 sf | 37352 Sierra Highway, north of Avenue S |
| 58 | Construct a 1,520 sf building for heavy automotive repair | 38444 12th Street East, just north of Palmdale Boulevard |
| 68 | Develop 1.09 acres into a church use consisting of 6,063 sf | 1328 E Avenue R, west of 15th Street E |
| 9 | Develop 6 acres into 96 multi-family units, totaling 97,640 sf | Northeast corner of Rancho Vista Boulevard and West Avenue O-8 |
| 11 | Develop 3.69 acres into a restaurant/retail center consisting of three buildings and totaling 29,300 sf | 10th Street West near Rancho Vista Boulevard |
| 15 | Construct a restaurant use (24 hr) consisting of 4,022 sf with a 556 square foot patio | 39176 10th Street West, north of Avenue P-8 |
| 16 | Develop 2.06 acres into a hotel | East of Trade Center Drive, south of Rancho Vista Boulevard and north of Avenue P-4 |
| 66 | Develop 0.6 acres into a drive-through fast food use consisting of 2,456 sf | East side of Trade Center Drive |
| 79 | Develop 0.645 acres into a medical office building consisting of 8,304 sf | Northeast corner of Avenue M-14 and 12th Street West |

*Source: City of Palmdale Planning Department*

***Related Project Traffic***

Typically, related project trip forecasts are based on the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, *6th Edition*. With the exception of the trip forecasts for the fire station, the trip rates for the related area projects were derived from the ITE's Trip Generation Manual. Table 11 summarizes the trip generation rates used in this analysis.

The trip generation for the fire station is derived below:

**Trip Generation for Fire Station**

The Trip Generation Manual does not provide either daily or peak hour trip rates for fire station facilities. In absence of such data, the estimation of trips was developed utilizing the staffing and visitation data provided by the fire department.

Daily Trips

The daily calculations for the fire station are based on the following assumptions:

- Each of the 15 fire department staff make 8 trips per day (coming and going to/from work and two miscellaneous midday trips)
- 40 visitor trips per day
- Seven emergency calls per day with 3 vehicles (based on current activity levels)

Using the assumptions above the daily trips for the fire station are summarized as follows:

| Trip Source | Calculation | ADT Volume |
|---|---|---|
| Staff Trips | =15 staff X 8 trips per employee | 120 |
| Visitor Trips | =20 visitors per day X 2 trips (arrival and departure) | 40 |
| Emergency Calls | =7 per day X 3 responding vehicles X 2 (departure and arrival) | 42 |
| **Total Daily Trips** | | **202** |

Peak Hour Trips

There would be 12 fire station staff members on 24-hour shifts. It is assumed that these shifts would not generally end during peak hours. Therefore, peak hour trips should generally be generated by the 3 staff members that work traditional 8 AM to 5 PM shifts and by support vehicles and emergency calls. Since emergency responses occur randomly throughout the day, they are not expected generally to add to peak hour volumes.

Based on the assumptions and discussion above, the fire station is expected to generate less than 15 AM and 15 PM peak hour trips.

**Table 11**
**Applicable ITE Trip Generation Rates for Related Area Projects**

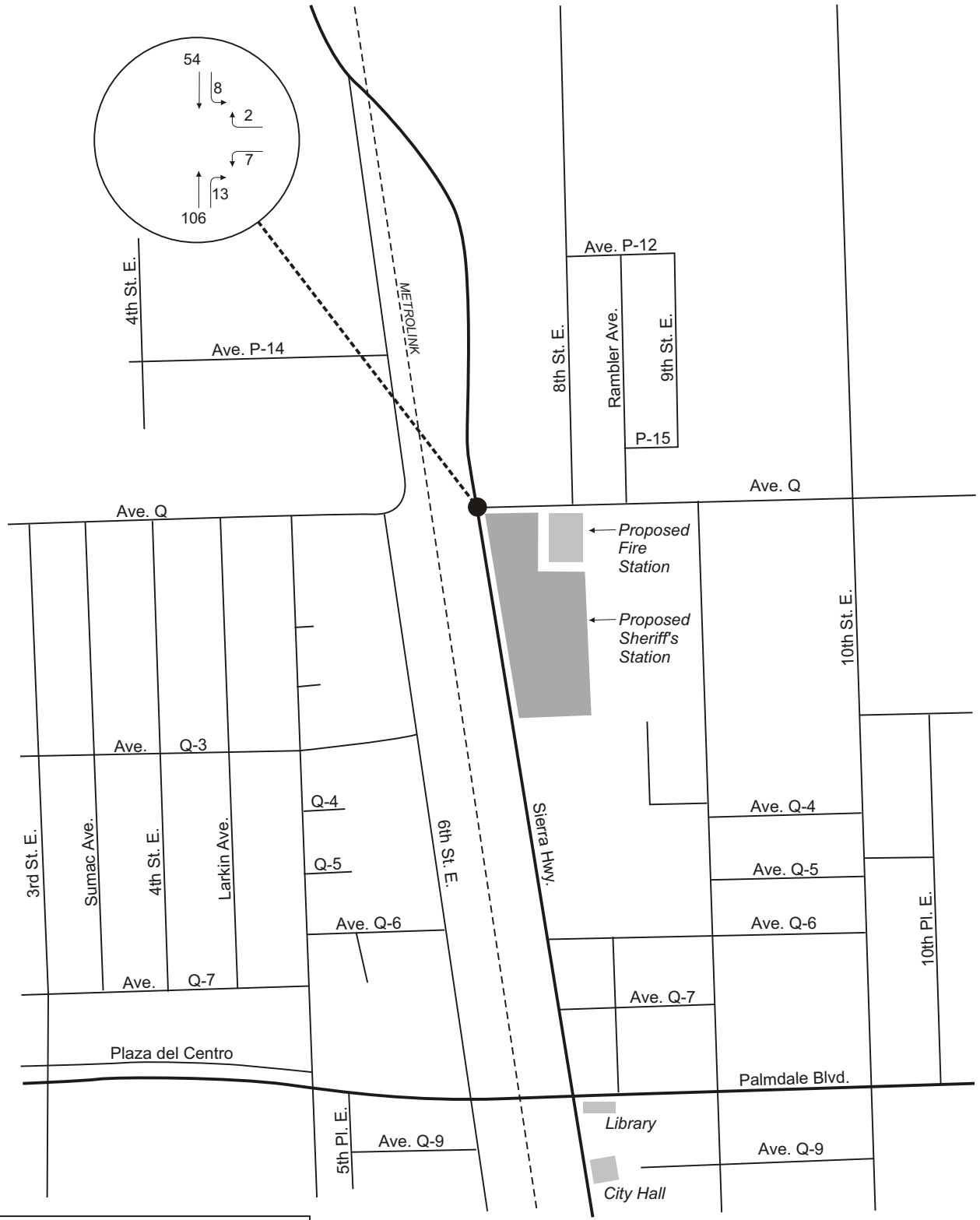
| ITE Land Use (Code) | Units | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|
| | | | Total | In Rate | Out Rate | Total | In Rate | Out Rate |
| Transit Center Development (Land Use 090) | Acres | 372.32 | 48.81 | 33.68 | 15.13 | 43.75 | 10.50 | 33.25 |
| Industrial Park (Land Use 130) | KSF | 6.96 | 0.89 | 0.73 | 0.16 | 0.92 | 0.19 | 0.73 |
| Manufacturing (Land Use 140) | Acres | 38.88 | 7.44 | 6.92 | 0.52 | 8.37 | 4.44 | 3.93 |
| Warehousing (Land Use 150) | KSF | 4.96 | 0.45 | 0.37 | 0.08 | 0.51 | 0.12 | 0.39 |
| Mini-Warehouse (Land Use 151) | KSF | 2.5 | 0.15 | 0.09 | 0.06 | 0.26 | 0.13 | 0.13 |
| Low-Rise Apartments (Land Use 221) | DU | 6.59 | 0.47 | 0.09 | 0.38 | 0.58 | 0.38 | 0.20 |
| Business Hotel (Land Use 312) | Rooms | 9.11 | 0.64 | 0.23 | 0.41 | 0.58 | 0.31 | 0.27 |
| Church (Land Use 560) | KSF | 9.11 | 0.72 | 0.39 | 0.33 | 0.66 | 0.36 | 0.30 |
| Medical Office Building (Land Use 720) | KSF | 36.13 | 2.43 | 1.94 | 0.49 | 3.66 | 0.99 | 2.67 |
| Shopping Center (Land Use 820) | KSF | 42.92 | 1.03 | 0.63 | 0.40 | 3.74 | 1.80 | 1.94 |
| High-Turnover Restaurant (Land Use 832) | KSF | 130.34 | 9.27 | 4.82 | 4.45 | 10.86 | 6.52 | 4.34 |
| Fast-Food with Drive-Thru (Land Use 834) | KSF | 496.12 | 49.86 | 25.43 | 24.43 | 33.48 | 17.41 | 16.07 |
| Auto Care Center (Land Use 840) | KSF | 30 | 2.94 | 1.91 | 1.03 | 3.38 | 1.69 | 1.69 |

Table 12 summarizes the trip generation for the related area projects based on the application of the rates shown in the previous table to the type and intensity (i.e. number of units, amount of floor space) of the proposed land uses. For purposes of traffic modeling, the fifteen related projects were separated into zones that could be included in the TRAFFIX model used in preparation the traffic analysis.

The estimated related project traffic was added to the surrounding roadway system using the same distribution and assignment methodology as the project trips. Figures 17 and 18 show the related project trip assignment by turning movement for the AM and PM peak hour, respectively.

**Table 12**
**Related Project Trip Generation**

| Planning Dept. Ref No. | Project Description | Intensity | Units | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total | In | Out | Total | In | Out |
| (F) Fire Station | Development of Typically Sized Station | 18 | KSF | 202 | 15 | 10 | 5 | 15 | 5 | 10 |
| 21 | Transit Center Development (Land Use 090) | 24 | acres | 8,936 | 1,171 | 808 | 363 | 1,050 | 252 | 798 |
| 60 | Industrial Park (Land Use 130) | 148.588 | KSF | 1,034 | 132 | 108 | 24 | 137 | 29 | 108 |
| 23 | School Storage Facility (Land Use 150) | 3 | KSF | 15 | 1 | 1 | 0 | 1 | 0 | 1 |
| 62 | Contractor Equipment Yard (Land Use 130) | 1 | acres | 39 | 8 | 7 | 1 | 8 | 4 | 4 |
| 17 | Industrial/Office Use (Land Use 130) | 38.519 | KSF | 268 | 34 | 28 | 6 | 35 | 7 | 28 |
| 51 | Self-Storage Facility (Land Use 151) | 71.6 | KSF | 179 | 10 | 6 | 4 | 18 | 9 | 9 |
| 58 | Heavy Automotive Repair (Land Use 840) | 1.52 | KSF | 46 | 5 | 3 | 2 | 6 | 3 | 3 |
| 68 | Church-use (Land Use 560) | 6.063 | KSF | 55 | 4 | 2 | 2 | 4 | 2 | 2 |
| 9 | Multi-family Dwelling Units (Land Use 21) | 96 | DU | 633 | 45 | 9 | 36 | 56 | 37 | 19 |
| 11 | Restaurant/Retail Center (Land Use 820) | 29.3 | KSF | 1,258 | 30 | 18 | 12 | 110 | 53 | 57 |
| 15 | High-Turnover Restaurant (Land Use 832) | 4.5 | KSF | 587 | 42 | 22 | 20 | 49 | 29 | 20 |
| 16 | Extended Stay Hotel (Land Use 312) | 100 | Rooms | 911 | 64 | 23 | 41 | 58 | 31 | 27 |
| 66 | Fast-Food with Drive-Thru (Land Use 834) | 2.456 | KSF | 1,218 | 122 | 62 | 60 | 82 | 43 | 39 |
| 79 | Medical Office Building (Land Use 720) | 8.3 | KSF | 300 | 20 | 16 | 4 | 30 | 8 | 22 |

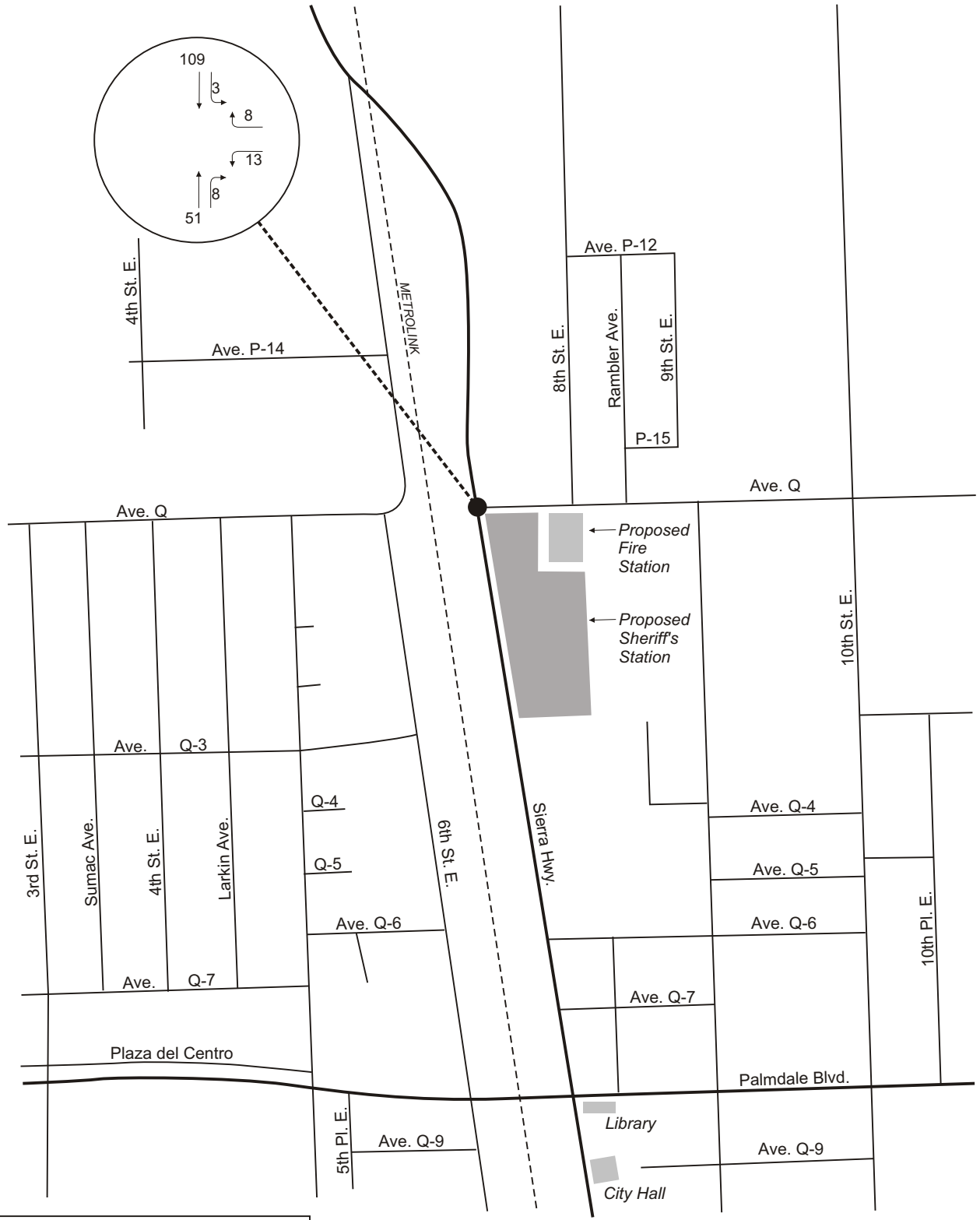



**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 17

AM Peak Hour Related Project Trip Assignment




**LEGEND**

- Proposed Project
- Study Intersection
- XX Related Project Trips

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 18

PM Peak Hour Related Project Trip Assignment

***Roadway Segment Analysis***

The "WITH Project + Related Projects" conditions were analyzed for the year 2005 by adding the daily-added trips generated by the related projects to the adjacent roadway segments. Table 13 summarizes the amount of trips added to each segment and the final service levels based on the LOS E definitions provided earlier.

As can be seen in the table below, the addition of related area projects has a modest impact on the daily service levels of the adjacent roadway segments. The year 2005 conditions with the project and related (cumulative) projects show that the roadway segments operate at acceptable service levels of LOS C or better. Again, it should be noted that the mid-block analysis is based on two-way volumes and the impacts are shown for the entire roadway segment.

**Table 13**
**Roadway Segment Levels of Service**
**Ambient Growth (Year 2005) WITH Project + Related Projects Conditions**

| Roadway Segment | Class | No. of Lanes | Capacity for LOS E | Year 2005 WITH-Project ADT | Added Vehicle Trips | Year 2005 WITH-Project + Related Proj ADT | V/C Ratio | LOS |
|---|---|---|---|---|---|---|---|---|
| Sierra Highway: | | | | | | | | |
| N/O Avenue Q | Major Arterial | 4 | 31,000 | 22,934 | 1,548 | 24,482 | 0.79 | C |
| S/O Avenue Q | | 4 | | 17,326 | 1,690 | 19,016 | 0.61 | B |
| Avenue Q: | | | | | | | | |
| E/O Sierra Highway | Collector | 2 | 14,000 | 8,074 | 332 | 8,406 | 0.60 | A |

### *Peak Hour Intersection Level of Service*

To simulate the "Ambient Growth WITH Project + Related Projects Conditions", the peak hour volumes shown in Figures 17 and 18, were added to the "Ambient Growth WITH Project" traffic volumes. Figures 19 and 20 illustrate the resulting AM and PM peak hour volumes and service levels, respectively. Table 14 summarizes the results of the level of service analysis for this final scenario.

**Table 14**
**Summary of AM/PM Peak Hour Intersection Performance**
**Ambient Growth (Year 2005) WITH Project + Related Projects Conditions**

| Intersection | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | V/C Ratio | LOS | V/C Ratio | LOS |
| Sierra Highway at Avenue Q | 0.525 | A | 0.783 | C |

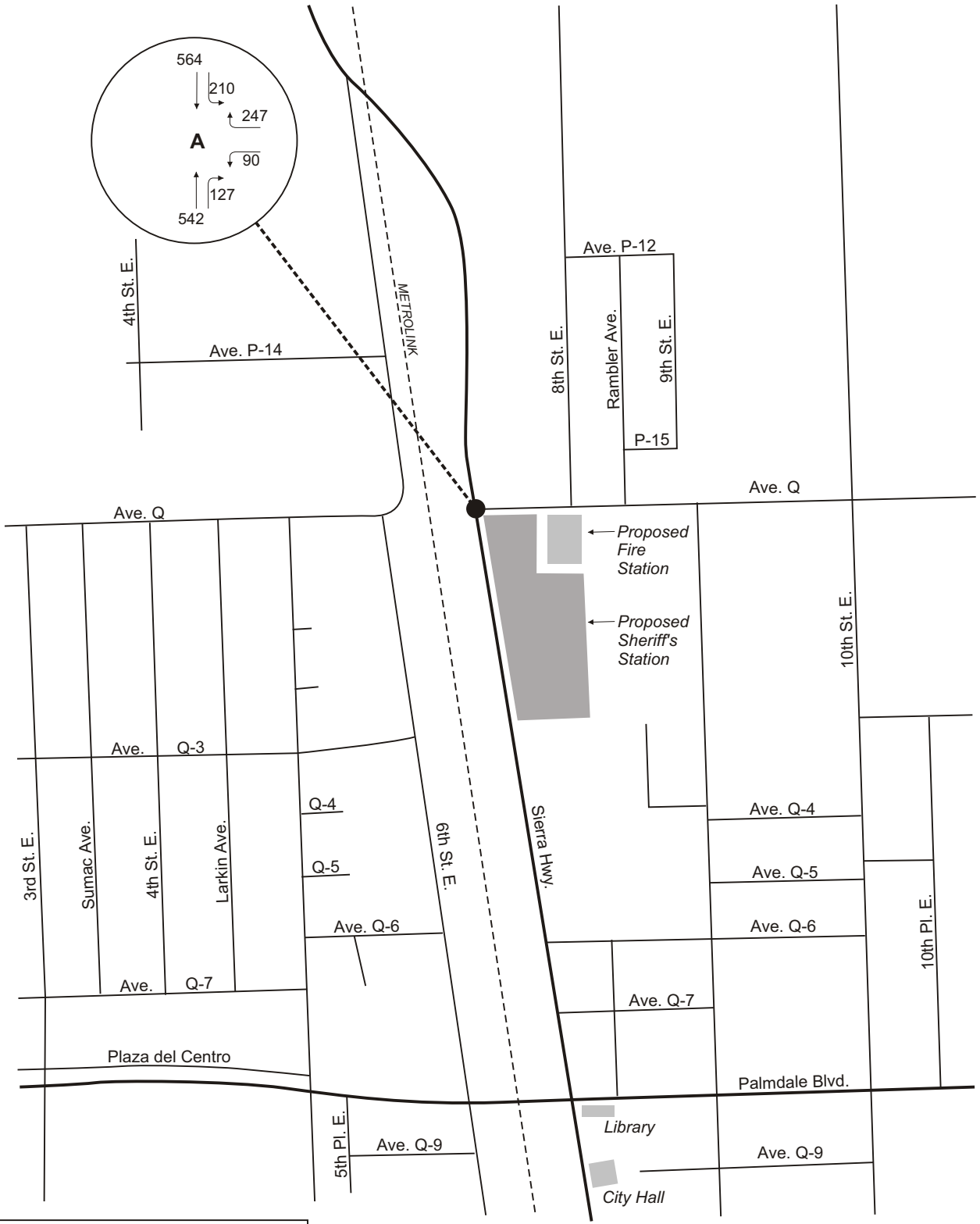
As evident from Table 14, the addition of related project trips has a modest impact on the peak hour operations at the study intersection.

The related project analysis represents a "worst-case" scenario for the following reasons:

- Not all of the projects will be approved and/or built. Furthermore, it is likely that some projects will not be constructed or opened until after the proposed station has been built and occupied.

- Many projects are expressed in terms of gross square footage or are included in conceptual plans such as master plans that assume complete development; in reality, such projects may be smaller (i.e. the net new development) because of the demolition or removal of existing land uses resulting from development of the related project.

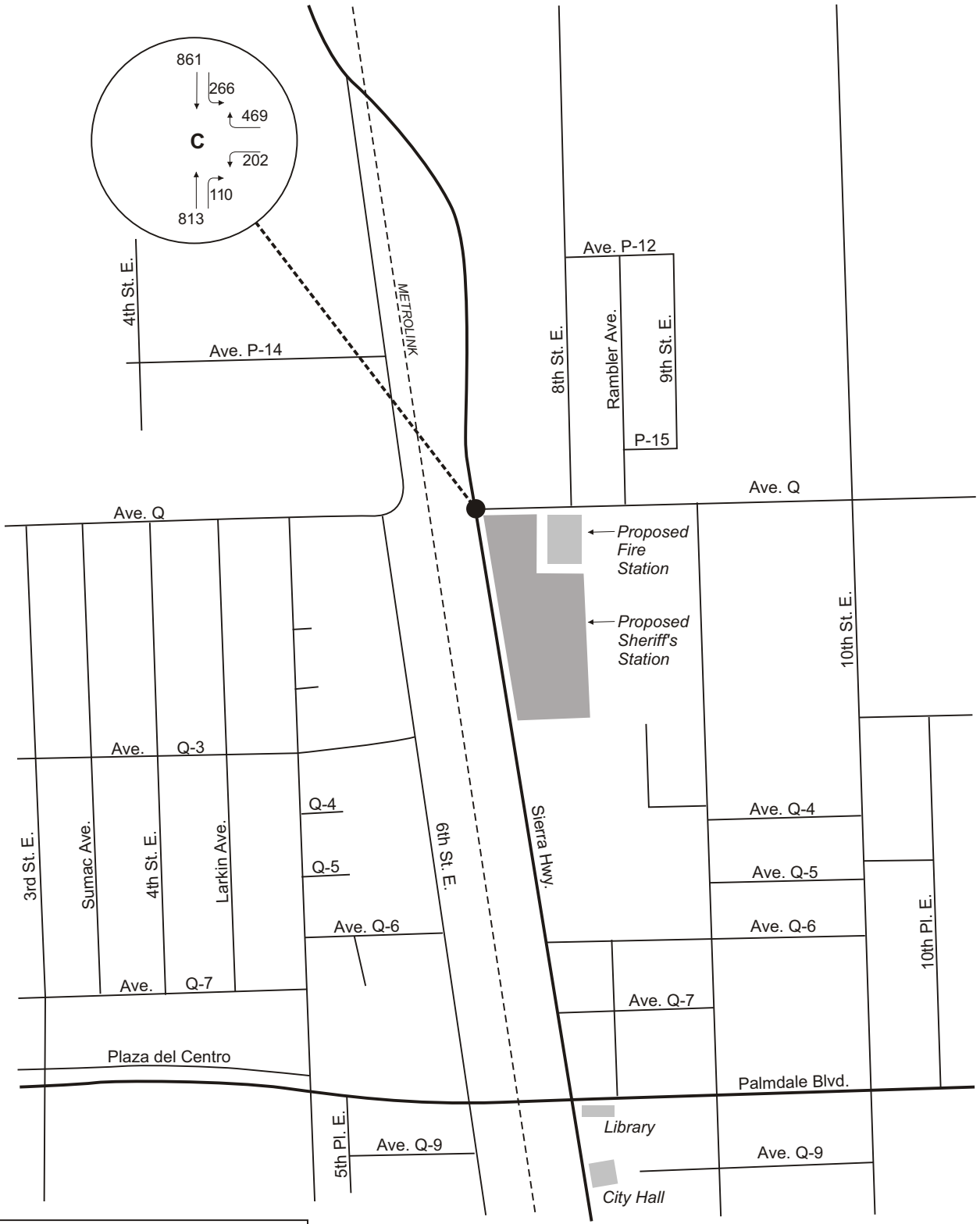
The level of service worksheets are contained in Appendix G.




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* Figure 19

Future Plus Project (Year 2005) AM Peak Hour Traffic Volumes and LOS




**LEGEND**

- Proposed Project
- Study Intersection
- XX — Intersection Turn Volume
- X — Intersection Level of Service

N

**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis* — Figure 20

Future Plus Project (Year 2005) PM Peak Hour Traffic Volumes and LOS

# 8. Determination of Significant Impact

Traffic impacts are identified if the proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts may also be significant if an intersection is already operating below the poorest acceptable level and project traffic will cause a further decline in the level of service.

According to the 1993 Palmdale General Plan, the City's goal for acceptable service levels during daily and peak hour periods is LOS C for all roadway segments and intersections. Moreover, the minimum acceptable service standard is defined as LOS D for Palmdale's roadways and intersections. Circulation Policy C1.4.1 through Policy C1.4.2 provides the following excerpt describing the adopted policies and standards for new developments:

> *Strive to maintain a Level of Service (LOS) C or better to the extent practical; in some circumstances, a LOS D may be acceptable for a short duration during peak periods… Ensure that approvals of new development are correlated with any roadway improvement that would be necessary to maintain the existing level of service, or LOS C, whichever is less, and other performance characteristics applicable to the affected roadways… (Palmdale General Plan, 1993)*

***Roadway Segment Evaluation***

Applying the standard above to the forecast year service levels, those arterial roadway segments that will deteriorate to LOS E or worse will be required to be mitigated. As shown in Table 13 the adjacent street segments will continue to operate at acceptable service levels of LOS C or better with the addition of the project and related area projects. The relocation of the Palmdale Sheriff's station *will not create a significant impact* on any of the roadway segments evaluated in this study.

Furthermore, the project will provide the necessary right-of-way and recommended building setbacks along Sierra Highway to assure that the adjacent segment can be widened to its planned cross-section of three lanes in each direction. Also, as discussed previously the project will dedicate part of its frontage (32-foot setback) along north frontage for future street improvements to Avenue Q, which includes two additional through lanes in each direction and bike lane.

***Peak Hour Intersection Evaluation***

Applying the standard above to the forecast year service levels, those study intersections that will deteriorate to a LOS E or worse will be required to be mitigated. As summarized in the previous section, the study intersection will continue to operate at acceptable service levels of LOS C or better with the development of the new Sheriff's Station.

In addition, the County of Los Angeles has established thresholds for project related increases caused in the volume-to-capacity ratio (V/C) at study intersections. The following increases in peak hour V/C ratios are considered "significant" impacts:

| Level of Service | Final V/C* | V/C increase |
|---|---|---|
| C | < 0.70 – 0.80 | Equal to or greater than 0.040 |
| D | < 0.80 – 0.90 | Equal to or greater than 0.020 |
| E and F | 0.90 or more | Equal to or greater than 0.010 |

Note: Final V/C shall mean the V/C ratio at an intersection considering impacts with the project, ambient and related project growth and without proposed traffic impact mitigation.

Table 15 displays a comparison of the study scenarios. Traffic impacts created by the project are calculated by comparing the "Year 2005 No Project" conditions to the "Year 2005 W/Project" conditions.

**Table 15**
**LOS Analysis Summary/Determination of Impacts**

| Intersection | Year 2002 Existing | Year 2005 No Project | Year 2005 W/Project | Difference | Impact? | Year 2005 W/Project + Related Projects |
|---|---|---|---|---|---|---|
| ***Weekday AM Peak (V/C LOS)*** | | | | | | |
| Sierra Highway at Avenue Q | 0.448 A | 0.470 A | 0.485 A | 0.015 | No | 0.525 A |
| ***Weekday PM Peak (V/C LOS)*** | | | | | | |
| Sierra Highway at Avenue Q | 0.708 C | 0.746 C | 0.761 C | 0.015 | No | 0.783 C |

As shown above, the study intersection will operate at acceptable levels of service "C" or better during the AM and PM peak hour of all study timeframes. Traffic operations in the study area are expected to continue at acceptable service levels with the buildout of the project, addition of ambient and related project traffic, *and* inclusion of the related improvements at the Sierra Highway/Avenue Q intersection. As summarized in Table 15, the proposed project *will not create a significant impact* at the intersection evaluated in this study.

As discussed, the project will relocate the traffic signal for the Sierra Highway/Avenue Q intersection and will widen Avenue Q along the northerly frontage of the site. Upon project completion, it is anticipated that Avenue Q will provide dual left-turn lanes to southbound Sierra Highway and an exclusive right-turn lane to northbound Sierra Highway.

# 9. Street Access and Parking Analysis

This section provides a discussion of local circulation and parking at the project site.

***Street Access***

Access to the facility would be provided by two driveways along Sierra Highway and two driveways on Avenue Q. To minimize potential conflict, these driveways have been located as far as possible and at least 300 feet from the intersection of Sierra Highway and Avenue Q. Visitor and public parking areas would be accessed via the western driveway on Avenue Q and access to public arrestee release parking would be via the northern driveway on Sierra Highway. The Sheriff and staff parking areas would be accessed through the southern driveway on Sierra Highway and the eastern driveway on Avenue Q. The southern driveway on Sierra Highway would connect to the eastern driveway proposed on Avenue Q, with both driveways gated.

***Parking Assessment***

Due to the nature of the development, parking must be provided not only to accommodate employees and visitors to the facility, but also volunteers, government employees from outside agencies, and patrol cars. In order to determine peak parking demand at the proposed sheriff's station, it was first necessary to calculate the period of peak parking demand. Peak parking demand would not necessarily occur at the same time as peak traffic demand but would be impacted by shift overlaps and fluctuations in visitation to the site. Visitation to the site can vary but shift schedules can be generally forecast. Table 16 calculates the number of staff members that could be expected during the periods of shift overlaps. The most crucial shift overlaps occur at 8 AM, 2 PM and 10 PM.

**Table 16**
**Peak Staffing During Shift Overlaps**

| Staff Function | Overlap Time | | |
|---|---|---|---|
| | 8 AM | 2 PM | 10 PM |
| Administration | 5 | 5 | 0 |
| Front Office | 7 | 12 | 10 |
| Traffic | 6 | 6 | 0 |
| Reserves | 1 | 1 | 0 |
| Community Relations | 4 | 4 | 0 |
| Secretariat/Records | 16 | 14 | 5 |
| Scheduling/Timekeeping | 5 | 5 | 0 |
| Training/Special Projects | 2 | 2 | 0 |
| Evidence/Property | 1 | 1 | 0 |
| Patrol | 54 | 58 | 50 |
| Detectives Division | 33 | 33 | 2 |
| Narcotics | 6 | 6 | 0 |
| Crime Analyst | 2 | 2 | 0 |
| Jail | 6 | 6 | 6 |
| Vehicle Maintenance | 2 | 2 | 0 |
| **Total Staff Parking Demand** | **150** | **157** | **73** |

In order to calculate peak parking demand, it is necessary to account for visitor demand, demand from patrol cars at the station during patrol hours, and special demand that may occur during periods of special functions. To provide a worst-case assessment of parking requirements, it is necessary to assume that parking demand for special events would occur

during the period of heaviest station activity (157 employees at 2 PM overlap).

Table 17 summarizes parking demand generated by sheriff's vehicles as defined by sheriff's department staff.

**Table 17**
**Sheriff's Department Vehicle Parking Requirements**

| Vehicle Type | Total |
|---|---|
| Patrol Cars | 71 |
| Motorcycles | 2 |
| Special Sheriff's Vehicles | 20 |
| Tactical Car Spaces | 30 |
| 2 - 40 ft comm. Trailers | 8 |
| 2 horse trailers | 4 |
| Repair Spaces | 10 |
| 10% Contingency | 15 |
| **Total** | **160** |

Peak parking demand can be calculated by adding parking demand generated by staff and visitors to demand generated by sheriff's vehicles. Based on conversations with the sheriff's department, peak hourly visitor demand would be 30 and it could be assumed that each arrive by vehicle alone.

Table 18 calculates peak parking requirements for the proposed sheriff's station and includes 20 additional spaces for civilian volunteers.

**Table 18**
**Sheriff's Station Peak Parking Requirements**

| Vehicle Type | Total Demand |
|---|---|
| Employee Demand at 2:00 PM | 157 |
| Visitors | 30 |
| Civilian Volunteers | 20 |
| **SUB-TOTAL** | **207** |
| Sheriff's Vehicle Requirements | 160 |
| **Total Station Parking Requirements** | **367** |

According to the County, the project will provide at least 468 spaces and could provide as many as 502 parking spaces (if spaces are striped south of the proposed helistop). *The proposed supply of parking will easily accommodate the projected peak demand for the Sheriff's Station.*

# 10. Mitigation and Project Recommendations

The project does not significantly impact the adjacent roadway segments or the study intersection. In addition, the project provides sufficient parking to meet the estimated peak parking requirements of the Sheriff's Station. No mitigation measures are required.

# 11. Congestion Management Plan Conformance

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. The analysis has been conducted according to the guidelines set forth in the 1997 Congestion Management Program for Los Angeles County. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project will add 50 or more trips during either AM or PM weekday peak hours.

- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during the either the AM or the PM weekday peak hours.

***Intersection Analysis***

The project will not add more than 50 peak hour trips to any CMP intersection.

***Freeway Analysis***

The project will not add 150 or more trips to any CMP freeway monitoring location.

# 12. Supplemental Analysis of "Worst-Case" Scenario

This section documents the supplemental analysis conducted for a "worst-case" project scenario. As per discussion with representatives of the County Sheriff's Department it was estimated that the maximum number of personnel that could be employed at the new Palmdale Sheriff's Station is approximately 321 persons. The previous analysis of future traffic conditions with the project (provided in Section 6) was based on the new station accommodating a staff of 221 persons. The analysis provided in this section was conducted to determine the impacts of adding an additional 100 employees. The same trip generation, trip distribution, and trip assignment methodologies, which were developed in the earlier sections of this report, were applied for the project in this added scenario.

***Project Trips for "Worst-Case" Scenario***

The trip generation for the station at its maximum occupancy (321 employees) was estimated by proportioning the additional 100 employees among all departments of the Sheriff's Station.

**Daily Trip Generation Forecast**

The daily calculations are based on the following assumptions:

- 321 staff members make 4 trips per day (arrive at work, leave for lunch, return from lunch and depart from work). This represents a worst-case scenario, as not all employees will leave for lunch.
- Station averages 20 visitors per hour during the core "business hours" of the day (likely lower during the later evening and early morning hours.
- Generally 55 patrol cars are on duty with each patrol car making 6 trips to the station (3 departing and 3 arriving per each of the three shifts).

Table 19 summarizes the daily trip generation forecast.

**Table 19**
**Daily Trip Generation Forecast for "Worst-Case" Scenario**

| Trip Source | Calculation | ADT Volume |
|---|---|---|
| Staff Trips | =321 staff X 4 trips per employee | 1,284 |
| Visitor Trips | =20 visitors per hour X 2 trips (arrival and departure) X 8 hours | 320 |
| Patrol Car Trips | =55 patrol cars X 6 trips per patrol car | 330 |
| **Total Daily Trips** | | **1,934** |

**Peak Hour Trip Generation Forecast**

Calculations and assumptions used to develop peak hour trip forecasts are provided below.

Table 20 summarizes the estimated employment values for the new sheriff's station at its maximum occupancy of 321 employees.

**Table 20**
**Estimated Sheriff's Station Staffing Shift Assignments for "Worst-Case" Scenario**

| Department | Totals | Post Positions per Shift | | | | | |
|---|---|---|---|---|---|---|---|
| | | AM | | PM | | Grave | |
| | | 6A-2P | 8A-4P | 2P-10P | 4P-12A | 10P-6A | 12A-8A |
| Administration | 7 | | 7 | | | | |
| Front Office | 24 | | 10 | 8 | | 6 | |
| Traffic | 9 | 4 | 5 | | | | |
| Reserves | 2 | | 2 | | | | |
| Community Relations | 5 | | 5 | | | | |
| Secretariat/Records | 28 | 3 | 18 | | 4 | | 3 |
| Scheduling/Timekeeping | 7 | | 7 | | | | |
| Training/Special Projects | 3 | | 3 | | | | |
| Evidence/Property | 2 | | 2 | | | | |
| Patrol | 150 | 29 | 29 | 26 | 26 | 20 | 20 |
| Detectives Division | 51 | 12 | 36 | | 3 | | |
| Narcotics | 9 | | 9 | | | | |
| Crime Analyst | 3 | | 3 | | | | |
| Jail | 18 | 3 | 3 | 3 | 3 | 3 | 3 |
| Vehicle Maintenance | 3 | | 3 | | | | |
| **Employee Totals** | **321** | **51** | **142** | **37** | **36** | **29** | **26** |

*Source: Adapted from data provided by Los Angeles County Sheriff's Department (August 2000)*

AM Peak Hour Trips

Peak hour trip generation during the morning period is expected to occur around 8 AM when the graveyard shift ends and the normal business day begins. Staff would account for 168 AM peak hour trips (142 entering and 26 departing). It would also be expected that patrol cars and detectives that arrived at 6 AM might depart to the field during the 8-9 AM peak hour thus increasing the outbound trips by 41 to 67 (26 + 41).

Using sheriff's department data, it is expected that about 15 volunteers will be present during the AM shift. Additionally, up to 30 visitors per hour can be expected on days that fingerprinting takes place. If all volunteers and visitors would arrive by car, then the AM inbound trips would increase by 45 vehicles (15 volunteers + 30 visitors) to 187 inbound trips (142 + 45).

**Based on the assumptions above, the maximum AM peak hour trip generation for the sheriff's station would be as follows:**

- **187 Inbound Trips**
- **67 Departing Trips**

PM Peak Hour Trips

PM peak hour trip generation expected to occur around 4 PM when the PM shift begins and the normal business day ends. Staff would account for 178 PM peak hour trips (36 entering and 142 departing). It would also be expected that patrol cars and detectives that arrived at 2 PM might depart to the field during the 3-4 PM peak hour thus increasing the outbound trips by 26 to 168 trips (142+ 26).

It is expected that approximately 12 volunteers will be present during the PM shift. Additionally, up to 30 visitors per hour can be expected on days that fingerprinting takes place. If all volunteers would arrive by car, then the PM inbound trips would increase by 12 vehicles (volunteer arrival) to 48 trips (36 + 12). The 15 volunteers for the AM shift are assumed to depart during the PM peak period. If all volunteers and visitors departed by car, then the PM outbound trips would increase by 45 (15 volunteers + 30 departing visitors) to 213 departing trips (168 + 45).

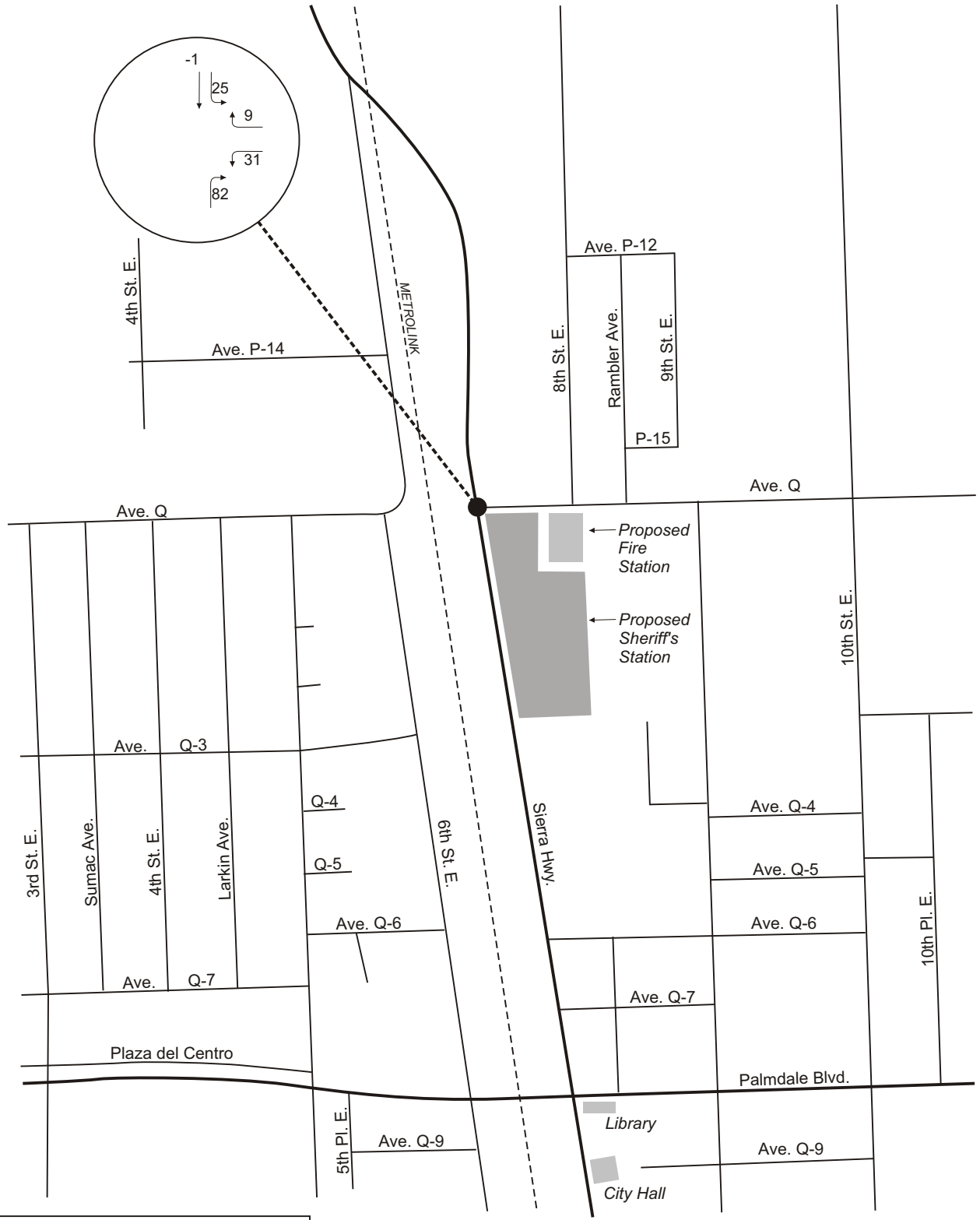
**Based on the assumptions above, the maximum PM peak hour trip generation for the sheriff's station would be as follows:**

- **48 Inbound Trips**
- **213 Departing Trips**

The estimated project traffic was added to the surrounding roadway system using the same distribution and assignment methodology that was applied earlier in this report for the project.

***Project Assessment for the "Worst-Case" Scenario***

The following analysis of future conditions with the project evaluates the net traffic impacts of relocating the existing sheriff's station from 1020 Palmdale Boulevard to the proposed location at the corner of Sierra Highway at Avenue Q. Figures 21 and 22 illustrate the net traffic volumes during the AM and PM peak hour, respectively. As shown, the relocation of the station and the resulting re-distribution of traffic will cause a reduction in some traffic maneuvers and an increase in other maneuvers.

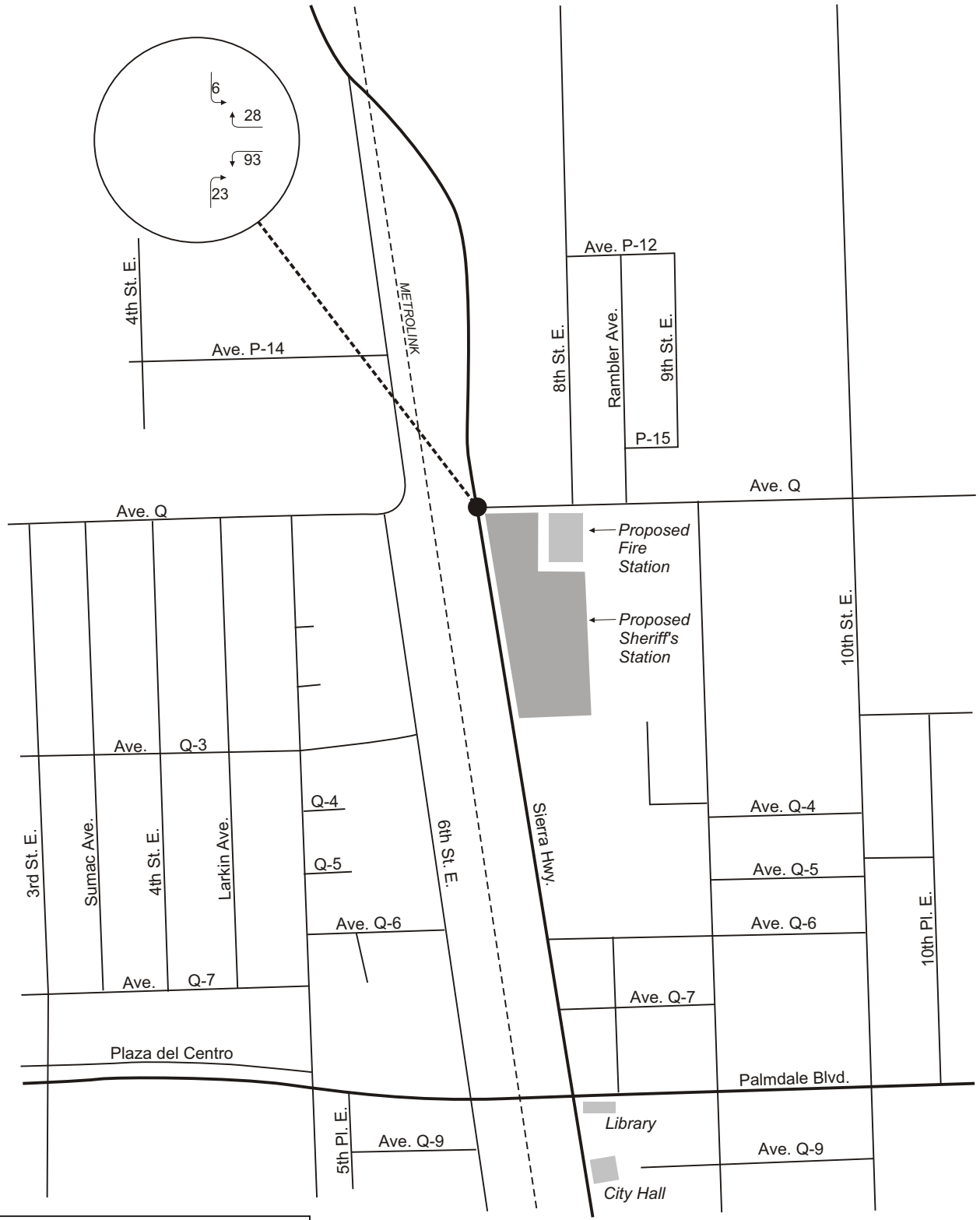



**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 21

AM Peak Hour Net Project Vehicle Trips for Worst-Case Scenario




**Katz, Okitsu & Associates**
*Traffic Engineers and Transportation Planners*

Palmdale Sheriff's Station - *Traffic & Parking Analysis*

Figure 22

PM Peak Hour Net Project Vehicle Trips for Worst-Case Scenario

**Roadway Segment Analysis/Determination of Significant Impact**

The "WITH Project" conditions were analyzed by adding the project's net-daily trips to the adjacent roadway segments. Table 21 summarizes the amount of trips added to each segment and the resulting service levels based on the LOS E definitions provided earlier. The latter columns of the table illustrate the future traffic volumes and service levels with the addition of related area projects.

As summarized in Table 21, future conditions with the maximum occupancy of the project (staff of 321-persons) show that the roadway segments operate at acceptable service levels of LOS C or better. Again, it should be noted that the mid-block analysis is based on two-way volumes and the impacts are shown for the entire roadway segment.

The relocation of the Palmdale Sheriff's station and associated maximum employment of 321 personnel at the new facility *will not create a significant impact* on any of the roadway segments evaluated in this study.

**Table 21**
**Roadway Segment Levels of Service**
**Future (Year 2005) WITH "Worst-Case" of Project Conditions**

| Roadway Segment | Class | No. of Lanes | Capacity for LOS E | Year 2005 NO-Project ADT | Project Added Vehicle Trips | Year 2005 WITH-Project ADT | V/C Ratio | LOS | Year 2005 WITH-Project + Related Proj ADT | V/C Ratio | LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sierra Highway: | | | | | | | | | | | |
| N/O Avenue Q | Major Arterial | 4 | 31,000 | 22,790 | 238 | 23,028 | 0.74 | C | 24,576 | 0.79 | C |
| S/O Avenue Q | | 4 | | 16,430 | 1,206 | 17,636 | 0.57 | A | 19,326 | 0.62 | B |
| Avenue Q: | | | | | | | | | | | |
| E/O Sierra Highway | Collector | 2 | 14,000 | 7,208 | 1,114 | 8,322 | 0.59 | A | 8,654 | 0.62 | B |

**Peak Hour Intersection Level of Service/Determination of Significant Impact**

The "WITH Project" traffic volumes were derived by adding the net project trips shown in Figures 21 and 22 to the "Ambient Growth" volumes for the year 2005.

Table 22 displays a comparison of the study scenarios for this supplemental analysis. Traffic impacts created by the project are calculated by comparing the "Year 2005 No Project" conditions to the "Year 2005 W/Project" conditions.

**Table 22**
**Summary of AM/PM Peak Hour Intersection Performance**
**Future (Year 2005) WITH "Worst-Case" of Project Conditions**

| Intersection | Year 2005 No Project | Year 2005 W/Project | Difference | Impact? | Year 2005 W/Project + Related Projects |
|---|---|---|---|---|---|
| ***Weekday AM Peak (V/C LOS)*** | | | | | |
| Sierra Highway at Avenue Q | 0.470 A | 0.492 A | 0.022 | No | 0.531 A |
| ***Weekday PM Peak (V/C LOS)*** | | | | | |
| Sierra Highway at Avenue Q | 0.746 C | 0.767 C | 0.021 | No | 0.790 C |

As shown above, the study intersection will operate at acceptable levels of service "C" or better during the AM and PM peak hour of all study timeframes. Traffic operations in the study area are expected to continue at acceptable service levels with the maximum occupancy of the station, addition of ambient and related project traffic, *and* inclusion of the related improvements at the Sierra Highway/Avenue Q intersection.

As summarized above in Table 22, the proposed "worst-case" scenario of the project *will not create a significant impact* at the intersection evaluated in this study.

The level of service worksheets are provided in Appendix H.

***Parking Assessment***

In order to determine peak parking demand at the sheriff's station at its maximum occupancy, it was necessary to calculate the period of peak parking demand. Peak parking demand would not necessarily occur at the same time as peak traffic demand but would be impacted by shift overlaps and fluctuations in visitation to the site. Table 23 calculates the number of staff members that could be expected during the periods of shift overlaps.

**Table 23**
**Peak Staffing During Shift Overlaps for "Worst-Case" Scenario**

| Staff Function | Overlap Time | | |
|---|---|---|---|
| | 8 AM | 2 PM | 10 PM |
| Administration | 7 | 7 | 0 |
| Front Office | 16 | 18 | 14 |
| Traffic | 9 | 9 | 0 |
| Reserves | 2 | 2 | 0 |
| Community Relations | 5 | 5 | 0 |
| Secretariat/Records | 24 | 21 | 4 |
| Scheduling/Timekeeping | 7 | 7 | 0 |
| Training/Special Projects | 3 | 3 | 0 |
| Evidence/Property | 2 | 2 | 0 |
| Patrol | 78 | 84 | 72 |
| Detectives Division | 48 | 48 | 3 |
| Narcotics | 9 | 9 | 0 |
| Crime Analyst | 3 | 3 | 0 |
| Jail | 9 | 9 | 9 |
| Vehicle Maintenance | 3 | 3 | 0 |
| **Total Staff Parking Demand** | **225** | **230** | **102** |

In order to calculate peak parking demand, it is necessary to account for visitor demand, demand from patrol cars at the station during patrol hours, and special demand that may occur during periods of special functions. To provide a worst-case assessment of parking requirements, it is assumed that parking demand for special events would occur during the period of heaviest station activity (230 employees at 2 PM overlap).

Table 24 summarizes parking demand generated by sheriff's vehicles as defined by sheriff's department staff.

**Table 24**
**Sheriff's Department Vehicle Parking Requirements for "Worst-Case" Scenario**

| Vehicle Type | Total |
|---|---|
| Patrol Cars | 71 |
| Motorcycles | 2 |
| Special Sheriff's Vehicles | 20 |
| Tactical Car Spaces | 30 |
| 2 - 40 ft comm. Trailers | 8 |
| 2 horse trailers | 4 |
| Repair Spaces | 10 |
| 10% Contingency | 15 |
| **Total** | **160** |

Peak parking demand is adding parking demand generated by staff and visitors to demand generated by sheriff's vehicles. Based on conversations with the sheriff's department, peak hourly visitor demand would be 30 and it could be assumed that each arrive by vehicle alone.

Table 25 calculates peak-parking requirements for the sheriff's station and includes 20 additional spaces for civilian volunteers.

**Table 25**
**Sheriff's Station Peak Parking Requirements for "Worst-Case Scenario"**

| Vehicle Type | Total Demand |
|---|---|
| Employee Demand at 2:00 PM | 230 |
| Visitors | 30 |
| Civilian Volunteers | 20 |
| **SUB-TOTAL** | **280** |
| Sheriff's Vehicle Requirements | 160 |
| **Total Station Parking Requirements** | **440** |

According to the County, the project will provide at least 468 spaces and could provide as many as 502 parking spaces (if spaces are striped south of the proposed helistop). *The proposed supply of parking will accommodate the projected peak demand for the Sheriff's Station.*

**APPENDIX A**
**Roadway Segment LOS Definitions**

**Roadway Level of Service Interpretation**

| Level of Service | Flow Conditions | Volume to Capacity Ratio |
|---|---|---|
| A | LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal. | 0-0.60 |
| B | LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow sped for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension. | 0.61-0.70 |
| C | LOS C represents stable operations; however, ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average speeds of about 50 percent of the average free-flow speed for the arterial classification. Motorists will experience appreciable tension while driving. | 0.71-0.80 |
| D | LOS D borders on a range in which small increases in flow may cause a substantial increase in delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed. | 0.81-0.90 |
| E | LOS E is characterized by significant delays and average travel speeds of one-third the free-flow speed of less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing. | 0.91-1.00 |
| F | LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays and extensive queuing. Adverse progression is frequently a contributor to this condition. | Over 1.00 |

## ICU Methodology
## For Signalized Intersections

The Intersection Capacity Utilization (ICU) analysis method for evaluating signalized intersections involves the computation of volume-to-capacity (V/C) ratios for each critical movement. Capacity, or saturation flow rate, is defined as the maximum rate of flow that can pass through a given intersection approach under prevailing traffic and roadway conditions. The sum of all critical movement V/C ratios, plus an efficiency lost factor of 0.1 to account for the effect of change intervals, is used to determine the total intersection capacity utilization and corresponding level of service from the following table.

**TABLE A-1**
**DEFINITIONS OF LEVEL OF SERVICE**
**FOR SIGNALIZED INTERSECTIONS**

LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
*(Source: County of Los Angeles Traffic Studies Policies and Procedures, November 1993)*

| Level of Service | Volume/Capacity Ratio | Definition |
|---|---|---|
| A | 0.000 - 0.600 | EXCELLENT. No vehicle waits longer than one Red light and no approach phase are fully used. |
| B | 0.601 - 0.700 | VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles. |
| C | 0.701 – 0.800 | GOOD. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles. |
| D | 0.801 – 0.900 | FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups. |
| E | 0.901 – 1.00 | POOR. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles. |
| F | Greater than 1.000 | FAILURE. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths. |

# APPENDIX C
## Intersection Counts (November 2002)

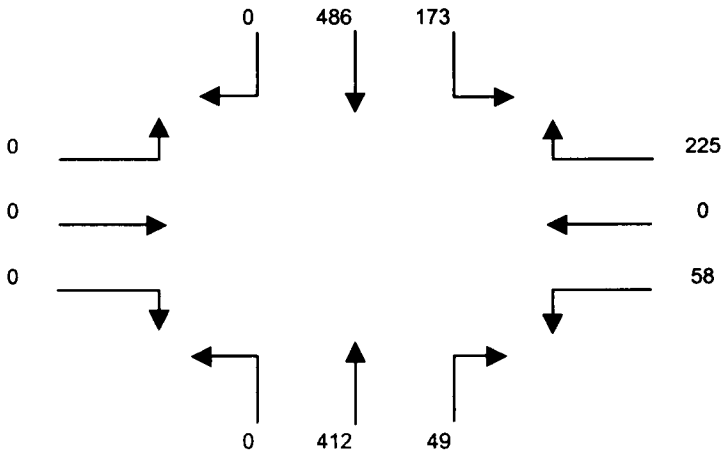
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KATZ, OKITSU & ASSOCIATES
PROJECT: PALMDALE SHERIFF'S STATION PROJECT
DATE: TUESDAY, NOVEMBER 19, 2002
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION N/S SIERRA HIGHWAY
E/W E AVENUE Q
FILE NUMBER: 1-AM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 700-715 | 0 | 78 | 37 | 40 | 0 | 21 | 9 | 71 | 0 | 0 | 0 | 0 |
| 715-730 | 0 | 87 | 41 | 59 | 0 | 14 | 21 | 101 | 0 | 0 | 0 | 0 |
| 730-745 | 0 | 124 | 32 | 76 | 0 | 19 | 4 | 109 | 0 | 0 | 0 | 0 |
| 745-800 | 0 | 162 | 58 | 49 | 0 | 12 | 16 | 107 | 0 | 0 | 0 | 0 |
| 800-815 | 0 | 113 | 42 | 41 | 0 | 13 | 8 | 95 | 0 | 0 | 0 | 0 |
| 815-830 | 0 | 118 | 25 | 30 | 0 | 10 | 10 | 71 | 0 | 0 | 0 | 0 |
| 830-845 | 0 | 114 | 32 | 55 | 0 | 17 | 15 | 109 | 0 | 0 | 0 | 0 |
| 845-900 | 0 | 126 | 41 | 46 | 0 | 11 | 18 | 102 | 0 | 0 | 0 | 0 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 700-800 | 0 | 451 | 168 | 224 | 0 | 66 | 50 | 388 | 0 | 0 | 0 | 0 | 1347 |
| 715-815 | 0 | 486 | 173 | 225 | 0 | 58 | 49 | 412 | 0 | 0 | 0 | 0 | 1403 |
| 730-830 | 0 | 517 | 157 | 196 | 0 | 54 | 38 | 382 | 0 | 0 | 0 | 0 | 1344 |
| 745-845 | 0 | 507 | 157 | 175 | 0 | 52 | 49 | 382 | 0 | 0 | 0 | 0 | 1322 |
| 800-900 | 0 | 471 | 140 | 172 | 0 | 51 | 51 | 377 | 0 | 0 | 0 | 0 | 1262 |

A.M. PEAK HOUR
715-815



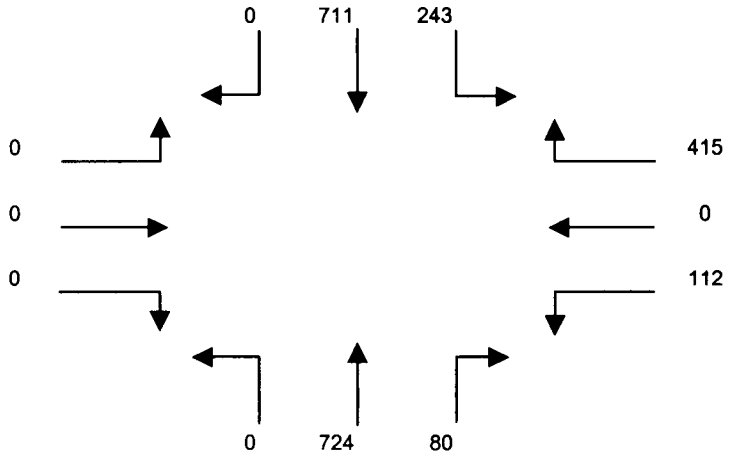
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KATZ, OKITSU & ASSOCIATES
PROJECT: PALMDALE SHERIFF'S STATION PROJECT
DATE: THURSDAY, NOVEMBER 14, 2002
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION N/S SIERRA HIGHWAY
E/W E AVENUE Q
FILE NUMBER: 1-PM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 400-415 | 0 | 176 | 62 | 92 | 0 | 35 | 16 | 151 | 0 | 0 | 0 | 0 |
| 415-430 | 0 | 178 | 49 | 109 | 0 | 27 | 26 | 172 | 0 | 0 | 0 | 0 |
| 430-445 | 0 | 177 | 60 | 107 | 0 | 25 | 22 | 184 | 0 | 0 | 0 | 0 |
| 445-500 | 0 | 184 | 54 | 102 | 0 | 29 | 8 | 191 | 0 | 0 | 0 | 0 |
| 500-515 | 0 | 172 | 80 | 97 | 0 | 31 | 24 | 177 | 0 | 0 | 0 | 0 |
| 515-530 | 0 | 180 | 64 | 65 | 0 | 25 | 25 | 175 | 0 | 0 | 0 | 0 |
| 530-545 | 0 | 185 | 46 | 77 | 0 | 21 | 20 | 155 | 0 | 0 | 0 | 0 |
| 545-600 | 0 | 154 | 40 | 61 | 0 | 17 | 26 | 141 | 0 | 0 | 0 | 0 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 400-500 | 0 | 715 | 225 | 410 | 0 | 116 | 72 | 698 | 0 | 0 | 0 | 0 | 2236 |
| 415-515 | 0 | 711 | 243 | 415 | 0 | 112 | 80 | 724 | 0 | 0 | 0 | 0 | 2285 |
| 430-530 | 0 | 713 | 258 | 371 | 0 | 110 | 79 | 727 | 0 | 0 | 0 | 0 | 2258 |
| 445-545 | 0 | 721 | 244 | 341 | 0 | 106 | 77 | 698 | 0 | 0 | 0 | 0 | 2187 |
| 500-600 | 0 | 691 | 230 | 300 | 0 | 94 | 95 | 648 | 0 | 0 | 0 | 0 | 2058 |

P.M. PEAK HOUR
415-515



# APPENDIX D
## Intersection Level of Service Worksheets
## Existing (Year 2002) Conditions

Palmdale Sheriff's Station
Existing (Year 2002)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.448
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 1 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.13 | 0.03 | 0.11 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.14 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

Palmdale Sheriff's Station
Existing (Year 2002)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.708
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: C

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 1 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.23 | 0.05 | 0.15 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.26 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

# APPENDIX E
## Intersection Level of Service Worksheets
## Ambient Growth (Year 2005) Conditions

Palmdale Sheriff's Station
Ambient Growth (Year 2005)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.470
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.14 | 0.03 | 0.11 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.15 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

Palmdale Sheriff's Station
Ambient Growth (Year 2005)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.746
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: C

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.05 | 0.16 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.28 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

# APPENDIX F
## Intersection Level of Service Worksheets
## Ambient Growth (Year 2005) WITH Project Conditions

Palmdale Sheriff's Station
Ambient Growth (Year 2005) WITH Project
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.485
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 0 | 0 0 | 2 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Added Vol: | 0 | -2 | 62 | 19 | -5 | 0 | 0 | 0 | 0 | 22 | 0 | 6 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 435 | 114 | 202 | 510 | 0 | 0 | 0 | 0 | 83 | 0 | 245 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 435 | 114 | 202 | 510 | 0 | 0 | 0 | 0 | 83 | 0 | 245 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 435 | 114 | 202 | 510 | 0 | 0 | 0 | 0 | 83 | 0 | 245 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 435 | 114 | 202 | 510 | 0 | 0 | 0 | 0 | 83 | 0 | 245 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.14 | 0.07 | 0.13 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.15 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

Palmdale Sheriff's Station
Ambient Growth (Year 2005) WITH Project
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Sierra Highway at Avenue Q

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.761
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

**********

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| Control: | Permitted | | | | Permitted | | | | Split Phase | | | | Split Phase | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Lanes: | 0 | 0 | 2 | 0 1 | 1 | 0 | 2 | 0 0 | 0 | 0 | 0 | 0 0 | 2 | 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | | 243 | 711 | 0 | | 0 | 0 | 0 | | 112 | 0 | 415 | |
| Growth Adj: | 1.06 | 1.06 | 1.06 | | 1.06 | 1.06 | 1.06 | | 1.06 | 1.06 | 1.06 | | 1.06 | 1.06 | 1.06 | |
| Initial Bse: | 0 | 767 | 85 | | 258 | 754 | 0 | | 0 | 0 | 0 | | 119 | 0 | 440 | |
| Added Vol: | 0 | -5 | 18 | | 5 | -1 | 0 | | 0 | 0 | 0 | | 70 | 0 | 21 | |
| PasserByVol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Initial Fut: | 0 | 762 | 103 | | 263 | 753 | 0 | | 0 | 0 | 0 | | 189 | 0 | 461 | |
| User Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 0 | 762 | 103 | | 263 | 753 | 0 | | 0 | 0 | 0 | | 189 | 0 | 461 | |
| Reduct Vol: | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Reduced Vol: | 0 | 762 | 103 | | 263 | 753 | 0 | | 0 | 0 | 0 | | 189 | 0 | 461 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Final Vol.: | 0 | 762 | 103 | | 263 | 753 | 0 | | 0 | 0 | 0 | | 189 | 0 | 461 | |
| Saturation Flow Module: | | | | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | | 1600 | 1600 | 1600 | | 1600 | 1600 | 1600 | | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Lanes: | 0.00 | 2.00 | 1.00 | | 1.00 | 2.00 | 0.00 | | 0.00 | 0.00 | 0.00 | | 2.00 | 0.00 | 1.00 | |
| Final Sat.: | 0 | 3200 | 1600 | | 1600 | 3200 | 0 | | 0 | 0 | 0 | | 3200 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.06 | | 0.16 | 0.24 | 0.00 | | 0.00 | 0.00 | 0.00 | | 0.06 | 0.00 | 0.29 | |
| Crit Moves: | | **** | | | **** | | | | | | | | | | **** | |

**********

# APPENDIX G
## Intersection Level of Service Worksheets
## Ambient Growth (Year 2005) WITH Project + Related Projects Conditions

Palmdale Sheriff's Station
Future (Year 2005) W/Project + Related Projects
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Sierra Highway at Avenue Q

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.525
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 2 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Added Vol: | 0 | 105 | 75 | 27 | 49 | 0 | 0 | 0 | 0 | 29 | 0 | 8 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 542 | 127 | 210 | 564 | 0 | 0 | 0 | 0 | 90 | 0 | 247 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 542 | 127 | 210 | 564 | 0 | 0 | 0 | 0 | 90 | 0 | 247 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 542 | 127 | 210 | 564 | 0 | 0 | 0 | 0 | 90 | 0 | 247 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 542 | 127 | 210 | 564 | 0 | 0 | 0 | 0 | 90 | 0 | 247 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.17 | 0.08 | 0.13 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.15 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

**********

Palmdale Sheriff's Station
Future (Year 2005) W/Project + Related Projects
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Sierra Highway at Avenue Q

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.783
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 2 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Added Vol: | 0 | 46 | 25 | 8 | 107 | 0 | 0 | 0 | 0 | 83 | 0 | 29 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 813 | 110 | 266 | 861 | 0 | 0 | 0 | 0 | 202 | 0 | 469 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 813 | 110 | 266 | 861 | 0 | 0 | 0 | 0 | 202 | 0 | 469 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 813 | 110 | 266 | 861 | 0 | 0 | 0 | 0 | 202 | 0 | 469 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 813 | 110 | 266 | 861 | 0 | 0 | 0 | 0 | 202 | 0 | 469 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.25 | 0.07 | 0.17 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.29 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

**********

# APPENDIX H
## Intersection Level of Service Worksheets
## Future (Year 2005) WITH "Worst-Case" Scenario of Project Conditions

Palmdale Sheriff's Station
Future (Year 2005) WITH Worst-Case of Project
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.492
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 0 | 0 0 0 | 2 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Added Vol: | 0 | 0 | 82 | 25 | -1 | 0 | 0 | 0 | 0 | 31 | 0 | 9 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 437 | 134 | 208 | 514 | 0 | 0 | 0 | 0 | 92 | 0 | 248 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 437 | 134 | 208 | 514 | 0 | 0 | 0 | 0 | 92 | 0 | 248 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 437 | 134 | 208 | 514 | 0 | 0 | 0 | 0 | 92 | 0 | 248 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 437 | 134 | 208 | 514 | 0 | 0 | 0 | 0 | 92 | 0 | 248 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.14 | 0.08 | 0.13 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.16 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

Palmdale Sheriff's Station
Future (Year 2005) WITH Worst-Case of Project
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.767
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 2 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Added Vol: | 0 | 0 | 23 | 6 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 28 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 767 | 108 | 264 | 754 | 0 | 0 | 0 | 0 | 212 | 0 | 468 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 767 | 108 | 264 | 754 | 0 | 0 | 0 | 0 | 212 | 0 | 468 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 767 | 108 | 264 | 754 | 0 | 0 | 0 | 0 | 212 | 0 | 468 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 767 | 108 | 264 | 754 | 0 | 0 | 0 | 0 | 212 | 0 | 468 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.07 | 0.17 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.29 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

Palmdale Sheriff's Station
Future (Year 2005) W/Worst-Case Project + Related Projects
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Sierra Highway at Avenue Q

**********

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.531 |
| Loss Time (sec): | 7 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 29 | Level Of Service: | A |

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 2 | 0 | 1 | 1 0 2 | 0 | 0 | 0 0 0 | 0 | 0 | 2 0 0 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 412 | 49 | 173 | 486 | 0 | 0 | 0 | 0 | 58 | 0 | 225 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 437 | 52 | 183 | 515 | 0 | 0 | 0 | 0 | 61 | 0 | 239 |
| Added Vol: | 0 | 107 | 94 | 32 | 53 | 0 | 0 | 0 | 0 | 38 | 0 | 11 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 544 | 146 | 215 | 568 | 0 | 0 | 0 | 0 | 99 | 0 | 250 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 544 | 146 | 215 | 568 | 0 | 0 | 0 | 0 | 99 | 0 | 250 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 544 | 146 | 215 | 568 | 0 | 0 | 0 | 0 | 99 | 0 | 250 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 544 | 146 | 215 | 568 | 0 | 0 | 0 | 0 | 99 | 0 | 250 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.17 | 0.09 | 0.13 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.16 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

**********

Palmdale Sheriff's Station
Future (Year 2005) W/Worst-Case Project + Related Projects
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sierra Highway at Avenue Q

Cycle (sec): 100 Critical Vol./Cap. (X): 0.790
Loss Time (sec): 7 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: C

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 0 | 0 0 | 2 0 | 0 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 724 | 80 | 243 | 711 | 0 | 0 | 0 | 0 | 112 | 0 | 415 |
| Growth Adj: | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Initial Bse: | 0 | 767 | 85 | 258 | 754 | 0 | 0 | 0 | 0 | 119 | 0 | 440 |
| Added Vol: | 0 | 51 | 31 | 9 | 108 | 0 | 0 | 0 | 0 | 106 | 0 | 36 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 818 | 116 | 267 | 862 | 0 | 0 | 0 | 0 | 225 | 0 | 476 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 818 | 116 | 267 | 862 | 0 | 0 | 0 | 0 | 225 | 0 | 476 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 818 | 116 | 267 | 862 | 0 | 0 | 0 | 0 | 225 | 0 | 476 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 818 | 116 | 267 | 862 | 0 | 0 | 0 | 0 | 225 | 0 | 476 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 |
| Final Sat.: | 0 | 3200 | 1600 | 1600 | 3200 | 0 | 0 | 0 | 0 | 3200 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.26 | 0.07 | 0.17 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.30 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |

# MITIGATED NEGATIVE DECLARATION

1. Name, if any, and a brief description of project:

**PALMDALE SHERIFF'S STATION PROJECT**

The proposed Palmdale Sheriff's Station would be located on approximately 11.57 acres of vacant land at the southeast corner of Sierra Highway and Avenue Q in the City of Palmdale. The new station would have approximately 50,280 square feet of floor area and will accommodate 221 sworn officers and administrative persons. On-site facilities would include the main sheriff's station building, a maintenance building, fueling island, a helistop, a 120-foot communication tower, and parking areas. This new station would replace the existing station currently operating out of leased space at 1020 Palmdale Boulevard, approximately 0.5 mile southeast of the proposed project site.

2. Location:

Southeastern corner of Sierra Highway and Avenue Q
City of Palmdale
County of Los Angeles
California 93550

3. Entity or person undertaking project:

County of Los Angeles
Department of Public Works
900 South Fremont Avenue, 5th Flr
Alhambra, California 91803

An Initial Study has been prepared for the project, which determined that the proposed Palmdale Sheriff's Station would not have an effect on the environment if specific mitigation measures were implemented to reduce potential impacts associated with aesthetics and visual quality, short-term air quality, cultural resources and short-term noise to less than significant levels. The Los Angeles County, having reviewed the Initial Study for the project and having reviewed the written comments received during the public review period, does hereby find and declare that the proposed project will not have a significant effect on the environment. A brief statement of the reasons supporting the County's findings is provided as follows:

> The County has determined that the proposed project has the potential to generate environmental impacts. However, the project would not have a significant adverse effect on the environment, with implementation of mitigation measures. Mitigation measures for aesthetics and visual quality, air quality, cultural resources, and noise would be incorporated into the project.

The County hereby finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study and other documents relating tot the project may be obtained at:

Project Management Division
Los Angeles County Department of Public Works
900 South Fremont Avenue, Fifth Floor
Alhambra, CA 91803
Ken Schumann, Project Manager
(626) 300-3246

# MITIGATION MONITORING AND REPORTING PROGRAM

The analysis in the Initial Study for the proposed Palmdale Sheriff's Station indicates that potentially significant adverse environmental impacts may occur with the project in terms of Aesthetics/Visual Quality, Air Quality, Cultural Resources, and Noise. Mitigation measures are recommended for the identified significant adverse impacts under each relevant environmental issue area. In addition, development on the proposed project would need to comply with a number of standard conditions that are routinely imposed by the County of Los Angeles and other regulatory agencies. The mitigation measures for the development of the Palmdale Sheriff's Station would be approved by the County of Los Angeles, in conjunction with the adoption of the Mitigated Negative Declaration for the project.

Section 21081.6 of the Public Resources Code requires a public agency to adopt a monitoring and reporting program for assessing and ensuring the implementation of required mitigation measures applied to proposed developments. Specific reporting and/or monitoring requirements that will be enforced during project implementation shall be adopted coincidental to final approval of the project by the responsible decision maker(s). In addition, pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker regarding the adoption of the monitoring program, coincidental to certification of the Mitigated Negative Declaration.

In accordance with Public Resources Code Section 21081.6, this Mitigation Monitoring and Reporting Program (MMRP) has been developed for the proposed Palmdale Sheriff's Station project. The purpose of the MMRP is to ensure the project complies with all applicable environmental mitigation and permit requirements. The MMRP for the proposed project designates the County's construction contractors, monitors and the Sheriff's Department as responsible for the implementation of mitigation measures, with County of Los Angeles as responsible for verification for mitigation compliance, review of all monitoring reports, and enforcement actions.

This mitigation monitoring and reporting program shall be considered by the County of Los Angeles prior to completion of the environmental review process, to enable the decision-maker's appropriate action on the proposed Palmdale Sheriff's Station project. In addition, the following language shall be incorporated as part of the decision-maker's findings of fact, and in compliance with requirements of the Public Resources Code.

In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the County of Los Angeles will need to make the following additional findings:

- *That a mitigation monitoring and reporting program shall be implemented for the proposed Palmdale Sheriff's Station project;*

- *Site plans and/or building plans, submitted for approval by the responsible monitoring agency, shall include required mitigation measures/conditions; and*

- *That an accountable enforcement agency and monitoring agency shall be identified for mitigation measures/conditions adopted as part of the decision-maker's final determination.*

## MITIGATION MEASURES

As indicated earlier, the proposed Palmdale Sheriff's Station would be subject to standard conditions, which include existing local, State, and Federal regulations. In addition, a number of mitigation measures have been recommended to reduce or avoid the potentially significant adverse impacts associated with development of the project. These mitigation measures are listed below in Table 1, *Mitigation Monitoring*. Responsible parties,

the time frame for implementation, and the monitoring parties are also identified for each measure. The mitigation measures are primarily the responsibility of the County's construction contractors and monitors, as wells as the County Sheriff's Department as the primary user of the proposed sheriff's station. In order to determine if the County's contractors/monitors have implemented these measures, the method of verification is also identified, along with the agency responsible for monitoring/verifying that the mitigation measure has been implemented.

**TABLE 1**
**MITIGATION MONITORING**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **AESTHETICS AND VISUAL QUALITY**<br>To mitigate potential light spillover and glare on adjacent residences, the following measures are proposed:<br>♦ Exterior lights shall be directed downwards into the site.<br>♦ Light shields shall be provided for lights to be placed along the northern and eastern sections of the site. | Project Architect/ Engineer | During Building Design, prior to approval of building plans | Plan Review by County Department of Public Works |
| ♦ Staff vehicles exiting the site during the nighttime hours shall use the Sierra Highway driveway, except for vehicles responding to emergencies and patrol vehicles. | Sheriff's Department | During use of the facility | Field Inspections by County Department of Public Works |
| **AIR QUALITY**<br>To ensure that construction emissions do not affect adjacent residents, the following measures are recommended:<br>♦ Use of watering for dust control during clearing, grading, and construction. Availability of brackish or reclaimed water sources should be investigated. Soil disturbance should be terminated when high winds (>25 mph) make dust control extremely difficult.<br>♦ Developing a dust control program to supplement the routine watering that constitutes best available control measures (BACMs) in excess of any minimum SCAQMD Rule 403 requirements. BACMs that may be adopted and integrated an enhanced dust control program might include hydroseeding previously disturbed areas while awaiting construction, adding chemical binders or surfactants to increase the effectiveness of watering, early paving or chip sealing of roads, enforcing reduced travel speeds (15 mph) on unpaved surfaces and/or sand fences and perimeter sandbags. | Building Contractor | During Construction | Field Inspections by County Department of Public Works |

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| ♦ Minimization of construction interference with regional non-project traffic movement. Measures recommended for inclusion are:<br>1. Scheduling receipt of construction materials to non-peak travel periods.<br>2. Routing construction traffic through areas of least impact sensitivity.<br>3. Limiting lane closures and detours to off-peak travel periods.<br>4. Providing ride-share incentives for contractor and subcontractor personnel.<br>♦ Reducing "spill-over" effects by preventing soil erosion, washing vehicles entering public roadways from dirt off-road project areas, and washing/sweeping project access to public roadways on an adequate schedule.<br>♦ Requiring emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups.<br>♦ Limiting grading/soil disturbance to as small an area as practical at any one time and using best available control measures.<br>♦ Limiting the application of architectural surface treatments (i.e., paint, etc.) to average no more than 225 gallons per week over the project construction period. | | | |
| **CULTURAL RESOURCES**<br>To ensure that no archeological or paleontological resources are disturbed during ground disturbance activities, the following measures are proposed:<br>♦ Monitoring shall be conducted during the removal of the building foundation (if removal is necessary, and during any ground disturbance activities. Additional architectural features of the foundation that may be uncovered shall be recorded and if trash pits are uncovered, any clearly historic artifacts from trash deposits shall be collected.<br>♦ Monitoring shall be conducted during earth-moving activities in native soils. If fossil materials are found, grading shall be diverted or redirected and fossils properly salvaged.<br>♦ Standard 200-pound sediment samples shall be screenwashed from each formation and if small vertebrate fossils are found, additional sediments shall be screenwashed for up to 6,000 pounds.<br>♦ All fossils recovered shall be stabilized, prepared, identified, packaged, and transported to the Natural History Museum of Los Angeles | Project Archaeologist | During Construction | Field Inspections by County Department of Public Works |

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| County, along with a documentation of fossil findings. | | | |
| **NOISE**<br>To ensure that noise from construction and on-site activities do not affect adjacent residents, the following measures are recommended:<br>♦ Construction activities shall be restricted to the hours of 7 a.m. to 7 p.m., and prohibited on Sundays and major holidays.<br>♦ Use of equipment mufflers for construction equipment<br>♦ Location of staging areas away from residential uses to the east | Building Contractor | During Construction | Field Inspections by County Department of Public Works |