Executive Summary

Final Subsequent Environmental Impact Report

Sunshine Canyon Landfill

State Clearinghouse Number 92041053

SEIR 91-0377-ZC/GPA

Lead Agency:

City of Los Angeles

Department of City Planning

Environmental Review Section

221 N. Figueroa Street, 15th Floor

Los Angeles, CA 90012-2601

October 1998

EXECUTIVE SUMMARY
FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
SUNSHINE CANYON LANDFILL

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State Clearinghouse Number 92041053

Lead Agency:

CITY OF LOS ANGELES
Department of City Planning
Environmental Review Section
221 North Figueroa Street, 15th Floor
Los Angeles, California 90012-2601

Project Proponent:

BROWNING-FERRIS INDUSTRIES OF CALIFORNIA, INC.
14747 San Fernando Road
Sylmar, California 91342

Environmental Consultant:

ULTRASYSTEMS ENVIRONMENTAL INCORPORATED
6 Jenner, Suite 210
Irvine, California 92618

October 1998

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1.0 INTRODUCTION

1.1 Purpose of the Final SEIR

The *Final Subsequent Environmental Impact Report, Sunshine Canyon Landfill*, State Clearinghouse Number 92041053 (Final SEIR), was prepared for the purpose of incorporating all public and agency comments received on the *Draft Subsequent Environmental Impact Report* (Draft SEIR) in its decision-making process in accordance with the *Guidelines for the Implementation of the California Environmental Quality Act* (State CEQA Guidelines).

The Lead Agency is required to evaluate comments on environmental issues received from persons who reviewed the Draft SEIR and to prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and has the option of responding to late comments.

In accordance with State CEQA Guidelines, the Final SEIR includes the following: the Draft SEIR; comments and recommendations received on the Draft SEIR; a list of persons, organizations, and public agencies that commented on the Draft SEIR; responses to significant environmental issues raised during the Draft SEIR review and consultation process; and additional information by the Lead Agency.

1.2 Document Review Period and Noticing

On July 24,1997, the Governor's Office of Planning and Research (OPR), in its capacity as the State Clearinghouse (SCH), acknowledged receipt of the City's Notice of Completion (NOC) for the Draft SEIR. This receipt subsequently commenced the 90-day public review period on the Draft SEIR. The review period was to conclude on October 31, 1997; however, due to a City Councilman's request, the review period was officially extended by City staff until December 5, 1997 (for a total review period of 132 days).

The Notice of Completion and Availability (NOCA) and Request for Comments were distributed with the Draft SEIR to federal, State, regional, and local agencies; community homeowner associations; other interested parties; and libraries. In addition, other governmental agencies, property owners/occupants, and interested parties received a NOCA. The NOCA was published on July 24, 26, and 27, and on August 2 and 3, 1997, in *The Signal*, *Saugus Enterprise*, and *Daily News*. The NOCA was also published in the *Los Angeles Times* on July 24, 1997, as part of the City's notification process. The NOCA listed library locations where copies of the Draft SEIR could be reviewed, the comment period, and the address to submit comments on the Draft SEIR. The NOCA and list of library review locations are included in the Final SEIR, Appendices A2 and B8, respectively.

1.3 Revised Summary Matrix of Environmental Impacts, Mitigation Measures, and Monitoring Phasing for the Proposed Project

Based on the comments received on the Draft SEIR, changes or additions to mitigation measures previously presented or changes to the monitoring or enforcement agency have been incorporated into the proposed City/County Landfill Mitigation Reporting and Monitoring Program. These revisions are presented in Section 2.5 of the Final SEIR (Table 1.10-1 [Revised]) and under separate cover. These changes primarily remove the project geologist or site manager as monitoring and enforcement agencies, add or revise mitigation measures, and delete air quality calculation summaries (however these are provided in the Final

SEIR, Appendix D2). Major changes to mitigation measures are also presented in Section 2.0 of this document.

1.4 Revised Mitigation Reporting and Monitoring Program

To incorporate changes identified by responsible agencies, each new or revised mitigation measure and changes to the monitoring/enforcement agency are presented in the Final SEIR, Table 7.4-1 (Revised). These revisions amend information previously presented in Section 7.0 in the Draft SEIR. These changes are the same as identified in the Final SEIR, Table 1.10-1 (Revised).

1.5 Written Comments Received

The following agencies, organizations, and individuals submitted written comments on the Draft SEIR. These comments were responded to in the Final SEIR. In addition an Introduction and Key Response Matrix (Section 3.1) and Environmental Issues Response Index (Section 4.0) in the Final SEIR assist the reader in finding specific key responses. Also Topical Issues and Responses were provided based on certain issues that were repeatedly identified by State, local, and regional agencies and other interested parties. These issues are summarized in Section 3.0 of this document. Copies of the original comment letters received are included in Appendix C of the Final SEIR.

State Agencies

Jeannie H. Blakeslee — **Letter 3.3-1**
Permitting and Enforcement Division
California Integrated Waste Management Board
Sacramento, CA

Antero A. Rivasplata, Chief — **Letter 3.3-2**
State of California
Governor's Office of Planning and Research
Sacramento, CA

Regional Agencies

J. David Stein, Manager — **Letter 3.4-1**
Performance Assessment and Implementation
Southern California Association of Governments
Los Angeles, CA

J. David Stein, Manager — **Letter 3.4-2**
Performance Assessment and Implementation
Southern California Association of Governments
Los Angeles, CA

Rodney H. Nelson, Chief — **Letter 3.4-3**
Groundwater Regulatory Unit
Los Angeles Regional Water Quality Control Board
Monterey Park, CA

Henry Hogo, Planning Manager — **Letter 3.4-4**
Planning and Policy
South Coast Air Quality Management District
Diamond Bar, CA

Laura J. Simonek — **Letter 3.4-5**
Principal Environmental Specialist
Metropolitan Water District of Southern California
Los Angeles, CA

County Agencies

Don Stockenberg, REHS — **Letter 3.5-1**
Solid Waste Management Program
County of Los Angeles
Department of Health Services
Monterey Park, CA

David Yamahara — **Letter 3.5-2**
Assistant Deputy Director
Planning Division
County of Los Angeles
Department of Public Works
Alhambra, CA

M. Michael Mohajer — **Letter 3.5-3**
Assistant Division Engineer
Environmental Programs Division
County of Los Angeles
Department of Public Works
Alhambra, CA

City Departments

Richard E. Olsen, Assistant Fire Marshall — **Letter 3.6-1**
Bureau of Fire Prevention and Public Safety
City of Los Angeles Fire Department
Los Angeles, CA

Homer M. Morimoto, Division Engineer — **Letter 3.6-2**
Development Services Division
City of Los Angeles
Bureau of Engineering
Los Angeles, CA

Charles C. Holloway — **Letter 3.6-3**
Supervisor of Environmental Assessment and EMF
City of Los Angeles
Department of Water and Power
Los Angeles, CA

Robert T. Takasaki, Senior Transportation Engineer — **Letter 3.6-4**
City of Los Angeles
Department of Transportation
Los Angeles, CA

Hal Bernson, Councilman 12th District — **Letter 3.6-5**
City Council of the City of Los Angeles
Los Angeles, CA

Wayne Tsuda, Director — **Letter 3.6-6**
Materials and Waste Resources Division
City of Los Angeles
Environmental Affairs Department
Los Angeles, CA

Local Agencies

David A. Bobardt, Planner — **Letter 3.7-1**
City of Glendale
Glendale, CA

Donald M. Williams, Senior Planner — **Letter 3.7.-2**
City of Santa Clarita
Public Works
Santa Clarita, CA

Other Interested Parties/Organizations

Patricia Dean, Real Estate and Asset Management Branch — **Letter 3.8-1**
Bill Piazza, Environmental Health and Safety Branch
Los Angeles Unified School District
Los Angeles, CA

Sharon McGowan — **Letter 3.8-2**
13327 Golden Valley
Granada Hills, CA

Joycelyn and Davidson Turner — **Letter 3.8-3**
Granada Hills, CA

Blair Norris, Environmental Engineer — **Letter 3.8-4**
Anheuser-Busch Companies, Inc.
Executive Offices
St. Louis, MO

Commenter and address unknown — **Letter 3.8-5**

George R. Monte, Principal — **Letter 3.8-6**
Richmont Investment Property Services, Inc.
Monterey Park, CA

Sharon E. Yackey — **Letter 3.8-7**
12715 Goethe Place
Granada Hills, CA

Louie Carnevale — **Letter 3.8-8**
Carnevale & Lohr, Inc.
Bell Gardens, CA

Lynne A. Plambeck, Chairperson — **Letter 3.8-9**
Landfill Alternatives Save Environmental Resources (LASER)
Newhall, CA

Donald T. Kasper — **Letter 3.8-10**
12356 Jolette Avenue
Granada Hills, CA

Nancy and Phil Bogna — **Letter 3.8-11**
16924 Knollwood Drive
Granada Hills, CA

Albert Knight, Vice President — **Letter 3.8-12**
Santa Susana Mountains Park Association
Chatsworth, CA

Ed You — **Letter 3.8-13**
North Hills, CA

Joanne Collins — **Letter 3.8-14**
Granada Hills, CA

Jeffrey H. Hill — **Letter 3.8-15**
Law Office of Jeffrey H. Hill
Valencia, CA

Mary Edwards — **Letter 3.8-16**
North Valley Coalition
Granada Hills, CA

Wayde Hunter — **Letter 3.8-17**
[No address provided]

Elizabeth Folb — **Letter 3.8-18**
Granada Hills, CA

Anne Ziliak — **Letter 3.8-19**
[No address provided]

Iris S. Shah, Ph.D., Secretary — **Letter 3.8-20**
Knollwood Property Owners Association
Granada Hills

Leonard M. Salle, P.E. — **Letter 3.8-21**
Portola Valley, CA

William F. Salle — **Letter 3.8-22**
Law Offices of William F. Salle
Glendale, CA

George Kane — **Letter 3.8-23**
Granada Hills, CA

Lynn A. Plambeck, Chairperson — **Letter 3.8-24**
Jeff Yann, 2nd Vice President
Landfill Alternatives Save Environmental Resources (LASER)
Newhall, CA

Thomas K. Murphy — **Letter 3.8-25**
Granada Hills, CA

Esther Simmons — **Letter 3.8-26**
Granada Hills, CA

North Valley Coalition — **Letter 3.8-27**
Granada Hills, CA

Dr. Stanley P. Sander — **Letter 3.8-28**
Senior Research Scientist in Atmospheric Chemistry
Jet Propulsion Laboratory
Pasadena, CA

Wendy Danner — **Letter 3.8-29**
Granada Hills, CA

Barbara A. Fine — **Letter 3.8-30**
Barbara A. Fine Consultants
Beverly Hills, CA

Charlotte Rodrigues — **Letter 3.8-31**
Granada Hills, CA

Stephen J. Bushwell, Program Manager — **Letter 3.9-1**
IGR/CEQA
California Department of Transportation
District 7
Los Angeles, CA

Stephen J. Bushwell, Program Manager — **Letter 3.9-2**
IGR/CEQA
California Department of Transportation
District 7
Los Angeles, CA

2.0 REVISIONS AND/OR ADDITIONS TO DRAFT SEIR

2.1 Introduction

Based on written comments received by the City in response to the circulation of the NOA, NOCA, and the Draft SEIR, corrections and/or revisions to the Draft SEIR have been identified. The incorporated revisions are cross-referenced to the agency/individual, letter, and comment number. The bracketed and numbered comments are included in the Final SEIR, Appendix C.

The revisions are identified by section number, page number, and paragraph number that correspond to the Draft SEIR. The paragraph symbol (¶) is used to further assist the reader in locating the corresponding text. For example, reference to ¶3 indicates the third paragraph on the page cited. Paragraph numbering commences at the top of the referenced page and includes both partial paragraphs (i.e., those commencing on the previous page) and "bulleted" items (i.e., those portions of the text that commence with either a graphic or numeric symbol) as separate paragraphs.

The errata, revisions, changes, and other modifications to the Draft SEIR do not result in the introduction of (1) any new significant environmental impacts not previously disclosed in the Draft SEIR that result from either the proposed project or new or amended mitigation measures proposed for implementation, (2) a substantial increase in the severity of an environmental impact identified in the Draft SEIR, and/or (3) the introduction of a feasible alternative or mitigation measure that would clearly lessen the environmental impacts of the project below those levels previously indicated in the Draft SEIR. As a result, the additional information presented in the Final SEIR neither warrants the re circulation of the Draft SEIR nor a revision to the preliminary findings presented in the Draft SEIR nor necessitates substantive revisions to the information previously presented.

2.2 Errata

The Errata section is included as Section 2.2 of the Final SEIR and contains corrections and clarification to text and figures that have been identified in the Draft SEIR by the project proponent and comments received on the Draft SEIR.

2.3 Changes/Revisions/Additional Information

The following section is a summary of key changes and revisions which are incorporated into the Final SEIR based on comments received on the Draft SEIR by the Lead Agency, Responsible Agencies, and Other Interested Parties. These changes are contained in their entirety in Section 2.3 of the Final SEIR. They primarily address air quality, landfill disposal capacity, daily cover, stockpile material, landfill liner and cover, groundwater monitoring, hazardous waste load checking, the provisions for establishing a Citizens Advisory Committee, and traffic mitigation.

Section 1.7.1, Unavoidable Significant Adverse Impacts, p. 1-10, ¶6

Air Quality. As defined by the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook, residual air quality impacts are expected to remain significant for criteria pollutants ~~(i.e., nitrogen oxides [NO_x], reactive organic gases [ROG], and suspended particulate matter [PM_{10}]) due to project implementation. Regional emissions of all criteria pollutants (i.e., carbon monoxide [CO], NO_x, ROG, sulfur oxides [SO_x], and PM_{10}) will decrease by reduced mileage traveled within the South Coast Air Basin.~~

~~Emission levels for CO and SO_x are projected to remain below their applicable threshold levels. Furthermore, CO emissions are not projected to exceed either State or federal ambient air quality standards or create "hot spots."~~ During construction, emissions for NO_x and PM_{10} would result in an exceedance of the SCAQMD significance thresholds after the incorporation of mitigation measures. Operations would result in exceedances of the CO, NO_x, SO_x, ROG, and PM_{10} criteria and would remain significant after the incorporation of mitigation measures.

Refer to Response 68 (Letter 3.4-4, South Coast Air Quality Management District) in Section 3.0, Response to Comments.

Section 1.9.1, Alternatives Not Evaluated, p. 1-12, ¶6

Mission/Rustic-Sullivan Landfill

Although the Mission/Rustic-Sullivan Landfill was originally mentioned as a proposed new solid waste landfill in the Solid Waste Management Status and Disposal Options in Los Angeles County, City Action Plan, City of Los Angeles Solid Waste Management Plan, Integrated Solid Waste Management System for Los Angeles County, City of Los Angeles Solid Waste Management Policy Plan, County of Los Angeles Source Reduction and Recycling Element, and Los Angeles County Countywide Siting Element, it was not included in the City of Los Angeles Source Reduction and Recycling Element. The City of Los Angeles, Department of Public Works, Bureau of Sanitation has recently stated that "development of these canyons is no longer considered a feasible alternative . . ."[1] In addition, because the Mission/Rustic-Sullivan Canyons are located within the area designated as the Santa Monica Mountains National Recreation Area, which is a unit of the National Park System (Public Law 95-625), the use of these canyons for a landfill site is in conflict with Public Law 98-506. Therefore, these canyons have been removed from further consideration.[2]

Refer to Response 122 (Letter 3.5-3, Department of Public Works, County of Los Angeles) in Section 3.0, Response to Comments.

Section 2.3.1, Statistical Information in Connection with Solid Waste Generation and Permitted Capacity within the City of Los Angeles, p. 2-4, ¶4

- ~~Based on the above data, approximately 5,665,909 tons of solid waste were generated within the City in 1995. The California Department of Finance estimates that approximately 3,593,729 people lived in the City in 1995. Based on the waste generation total of 5,665,909 tons for 1995, approximately 1.58 tons of solid waste/person/year was generated in the City in 1995. This equates to a waste generation per capita of 10.13 pounds/person/day of solid waste generated in the City.~~

The following identifies the quantities and distribution of the portion of the solid waste generated in the City of Los Angeles in 1995 and disposed of at permitted disposal facilities within and outside of Los Angeles County:

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[1]/ *Final Supplement to the 1991 Subsequent Environmental Impact Report Lopez Canyon Sanitary Landfill Operation Through 2001*, Volume 1, p. 6-5. April 1995.

[2]/ *Los Angeles County Countywide Siting Element, Volume I: The Element*, Los Angeles County, Department of Public Works, Environmental Programs Division, p. 7-5. June 1997.

Permitted disposal facilities in Los Angeles County:	
- Class III landfills	3,627,037 tons
- Unclassified landfills	145,239 tons
- Transformation facilities	56,525 tons
Permitted disposal facilities outside of Los Angeles County:	
- Exports to Riverside County	4,623 tons
- Exports to Ventura County	8,630 tons
Total disposed	3,842,054 tons

Based on the 1995 estimated diversion rate of 40.6 percent listed in the above-mentioned section and the disposal quantities cited above, the estimated solid waste generation rate for the City in 1995 was 6,468,104 tons. Based on the estimated City population of 3,593,729, this translates into a per-capita waste generation rate of 1.80 tons of solid waste per person per year in the City.

Refer to Responses 115 and 116 (Letter 3.5-3, Department of Public Works, County of Los Angeles) in Section 3.0, Response to Comments.

Section 2.3.2, Remaining Permitted Landfill Capacity in Los Angeles County, Table 2.3-1, pp. 2-5 and 2-6

A revised Table 2.3-1 (Remaining Permitted Disposal Capacity of Existing Solid Waste Disposal Facilities in the County of Los Angeles) is included in this section.

Refer to Responses 119 and 120 (Letter 3.5-3, Department of Public Works, County of Los Angeles) in Section 3.0, Response to Comments.

Section 2.3.3, County of Los Angeles Daily Disposal Capacity Projections, p. 2-9, ¶2

For example, and as noted in **Table 2.3-1,** ~~In January 1996~~ as of December 31, 1995, the remaining permitted capacity at all Class III landfills within Los Angeles County was estimated at ~~102.19~~ 102.31 million tons (or ~~187.74~~ 187.92 million cu. yd.). This capacity included the operational County Landfill. Based on the 1995 average disposal rate of 35,800 tpd (6-day week), excluding waste being imported into the County, this capacity is expected to be exhausted in less than 9 years. Additionally, the Los Angeles County Department of Public Works stated that the remaining combined permitted disposal capacity of all Class III landfills in Los Angeles County is estimated at approximately 86 million tons as of July 1, 1997.

Refer to Response 121 (Letter 3.5-3, Department of Public Works, County of Los Angeles) in Section 3.0, Response to Comments.

Section 2.6.3, City/County Landfill Design, p. 2-45, ¶5

. . . At the end of each working day, the final daily slopes would be graded to 3H:1V, and ~~9~~ 6 inches of clean, compacted daily cover material or approved alternative daily cover would be placed over the disposed refuse.

Table 2.3-1 (Revised)
REMAINING PERMITTED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN THE COUNTY OF LOS ANGELES
~~JANUARY 1996~~ DECEMBER 31, 1995

Landfill Facility	Solid Waste Facility Permit (SWFP)	Facility Location	Operation Days/ Week	~~January '94~~ December 31, 1995 SWFP Daily Capacity (tons)	LUP Daily Capacity (tons)	1995 Average Daily Disposal 6 Days/Week (tons)			Quantity of MSW in 1995 (million tons)			Estimated Remaining Permitted Capacity (Effective ~~Jan. 1996~~ Dec. 1995)		Comments
						Source			Source					
						In-County	Out-of-County	Total	In-County	Out-of-County	Total	Million Tons	Million Cubic Yards [a]	
Class III Landfill Facilities														
Antelope Valley	19-AA-0009	Palmdale	7	1,400 (b)	—	~~548~~ 553	—	~~548~~ 553	0.17	—	0.17	2.13	3.55	Proposed expansion not fully permitted as of ~~1/1/96~~ 1/1/97.
~~Azusa Land Reclamation~~	~~19-AA-0013~~	~~Azusa~~	~~6~~	~~6,000 (b)~~	~~—~~	~~1,189~~ 1,430	~~398~~ 157	~~1,326~~ 1,587	~~0.36~~ 0.45	~~0.04~~ 0.05	~~0.41~~ 0.50	~~3.09~~ 3.00	~~4.41~~ 4.29	~~Class III portion of the landfill only.~~ Closed
~~BKK~~	~~19-AA-0004~~	~~West Covina~~	~~6~~	~~12,000~~	~~—~~	~~8,748.~~ 8,587	~~953~~ 1,206	~~9,701.~~ 9,786	~~2.73~~ 2.68	~~0.30~~ 0.38	~~3.03~~ 3.05	7.65	4.42	~~Closure on 9/15/96.~~ Closed
Bradley West	19-AA-0008	Los Angeles	6	7,000	—	~~4,475~~ 4,055	9	~~4,484~~ 4,604	~~1.40~~ 1.27	0.003	~~1.40~~ 1.27	~~7.51~~ 7.64	~~10.72~~ 10.91	LUP expires 4/13/2007.[c]
Brand Park	19-AA-0006	Glendale	5	102	—..	~~22~~ 28	—	~~22~~ 28	~~0.0068~~ 0.009	—	~~0.01~~ 0.009	0.59	0.99	Limited to City of Glendale Dept. of Public Works use only.
Burbank	19-AA-0040	Burbank	5	240	—	~~134~~ 132	—	~~134~~ 132	~~0.04~~ 0.041	—	~~0.04~~ 0.041	6.36	10.60	Limited to City's use only.
Calabasas	19-AA-0056	Unincorporated	6	3,500	—	~~2,017~~ 1,833	~~317~~ 326	~~2,334~~ 2,159	~~0.63~~ 0.57	~~0.099~~ 0.10	~~0.73~~ 0.67	~~15.00~~ 15.06	~~30.00~~ 30.12	Limited to the Calabasas wasteshed only.
Chiquita Canyon	19-AA-0052	Unincorporated	7	5,000	—	~~1,337~~ 1,236	~~151~~ 153	~~1,489~~ 1,389	~~0.42~~ 0.39	~~0.047~~ 0.048	~~0.46~~ 0.43	~~1.85~~ 1.88[d]	~~2.74~~ 2.78	~~LUP expires 11/24/97.[c]~~ LUP expires 2019[d]
Lancaster	19-AA-0050	Lancaster	6	1,000	—	~~338~~ 328	~~258~~ 264	~~596~~ 593	~~0.11~~ 0.10	~~0.08~~ 0.083	~~0.19~~ 0.18	0.47	0.69	Approximate closure date 4/98.
~~Lopez Canyon~~	~~19-AA-0820~~	~~Los Angeles~~	~~5~~	~~4,000~~	~~4,000~~	~~2,927~~ 2,968	—	~~2,927~~ 2,968	~~0.91~~ 0.98	—	~~0.91~~ 0.93	0.82	0.93	~~Closure on 7/1/96.~~ Closed
Pebbly Beach	19-AA-0061	Unincorporated	6	33	—	~~13~~ 8	—	~~13~~ 8	~~0.004~~ 0.003	—	~~0.004~~ 0.003	~~0.04~~ 0.042	~~0.06~~ 0.07	~~Summer time capacity~~ Facility annual average capacity is ~~30~~ 49 tpd.
Puente Hills	19-AA-0053	Unincorporated	6	13,200	13,200	~~10,334~~ 10,150	7	~~10,341~~ 10,157	~~3.22~~ 3.17	0.002	~~3.23~~ 3.17	29.33	62.40	LUP limits to 72,000 tons per week. LUP expires 11/01/2003. No wastes from City of Los Angeles or Orange County.
San Clemente	19-AA-0063	Unincorporated	2	1.5	—	2	—	2	~~0.0007~~ 0.0006	—	~~0.0007~~ 0.0006	0.048	0.38	Landfill owned and operated by the U.S. Navy.

Table 2.3-1 (Revised - Cont.)
REMAINING PERMITTED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN THE COUNTY OF LOS ANGELES
~~JANUARY 1996~~ DECEMBER 31, 1995

Landfill Facility	Solid Waste Facility Permit (SWFP)	Facility Location	Operation Days/ Week	~~January 1994~~ December 31, 1995 SWFP Daily Capacity (tons)	LUP Daily Capacity (tons)	1995 Average Daily Disposal 6 Days/Week (tons)			Quantity of MSW in 1995 (million tons)			Estimated Remaining Permitted Capacity (Effective ~~Jan. 1996~~ Dec. 1995)		Comments
						Source			Source					
						In-County	Out-of-County	Total	In-County	Out-of-County	Total	Million Tons	Million Cubic Yards [e]	
Scholl Canyon	19-AA-0012	Glendale	6	3,400	—	~~1,487~~ 1,448	0.39	~~1,487~~ 1,448	~~0.46~~ 0.45	0.0001	~~0.4641~~ 0.45	~~10.90~~ 10.91	~~22.71~~ 22.73	Limited to the Scholl Canyon wasteshed only.
Spadra	19-AA-0015	Unincorporated/ Pomona	6	3,700	—	~~1,994~~ 2,064	~~130~~ 158	~~2,124~~ 2,222	~~0.62~~ 0.64	~~0.040~~ 0.049	~~0.6626~~ 0.69	~~2.15~~ 2.12	~~5.08~~ 5.00	LUP limits to 15,000 tons per week. No wastes from City of Los Angeles or Orange County.[c]
Sunshine Canyon	19-AA0853	Unincorporated	6	6,600	6,600	—	—	—	—	—	—	16.90	23.72	~~Not operational as of 1/1/96.~~ Facility ~~began~~ accepting waste for disposal on ~~opening date~~ 8/5/96.[f]
Two Harbors	19-AA-0062	Unincorporated	5	—	—	~~0.54~~ 0.35	—	~~0.54~~ 0.35	~~0.0002~~ 0.0001	—	~~0.0002~~ 0.0001	—	—	Facility closed ~~9/30/96~~ 9/30/95.
Whittier (Savage Canyon)	19-AH-0001	Whittier	6	350	—	~~228.85~~ 232	—	~~229~~ 232	0.0724	—	~~0.0714~~ 0.072	2.66	4.44	Limited to the City of Whittier use only.
Total				67,527		~~35,793~~ 35,048	~~1,966~~ 2,281	~~37,758~~ 37,328	~~11.17~~ 10.93	~~0.61~~ 0.71	~~11.78~~ 11.68	~~102.19~~ 102.31	~~187.74~~ 187.92	

Source: Los Angeles County Department of Public Works, ~~Solid Waste Management Division~~ Environmental Programs Division, ~~January 1996~~ *Los Angeles Countywide Siting Element, Volume I: The Element*, Table 4-3, June 1997.

Notes:
1. Disposal quantities are based on actual tonnages reported by landfill owners/operators to the DPW as part of monthly monitoring reports and/or solid waste management fee invoice payments and a written survey conducted by the DPW.
2. Estimated remaining permitted capacity based on landfill owner/operator responses to a written survey conducted by the DPW, ~~in January 1996~~, as well as a review of site-specific permit criteria established by local land use agencies, LEAs, LARWQCB, and SCAQMD.

Footnotes:
(a) Conversion factor based on in-place solid waste density, if provided by landfill operators; otherwise, a conversion factor of 1,200 pounds/cu. yd. was used.
(b) ~~Permitted capacity of 6,500 tpd consists of 6,000 tpd of refuse and 500 tpd of inert waste. Refuse disposal is limited to the Class III portion of the landfill.~~ Antelope Valley Landfill's daily capacity of 1,400 tpd is based on the SWFP issued on 12/26/95.
© The Bradley West Landfill is anticipated to reach capacity in the year 2000, as stated in the revised SWFP 19-AR-0008, Bradley West Landfill and West Extension, p. 1, August 13, 1996.
(d) ~~The Chiquita Canyon Landfill has been approved a anticipated capacity expansion of 23 million tons, extending the life of the landfill operation until the year 2019.~~ The Chiquita Canyon Landfill has recently obtained a land use permit that provides for an anticipated disposal capacity of 23 million tons.
(e) The Spadra Landfill is anticipated to close in 1999 as stated in the *Preliminary Draft County Countywide Siting Element*, p. 3-32, January 1996.
(f) The Sunshine Canyon Landfill (County) is anticipated to reach capacity in 2006, based on landfill operations in the current footprint area.
~~(g) Based on SWFP limit of 2,800 tons per week, expressed as a daily average, 6 days/week.~~
~~(h) Based on SWFP limit of 471,000 tons per year, expressed as a daily average, 6 days/week.~~

Abbreviations:
LARWQCB Los Angeles Regional Water Quality Control Board
DPW Los Angeles County Department of Public Works

Table 2.3-1 (Revised - Cont.)
REMAINING PERMITTED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN THE COUNTY OF LOS ANGELES
~~JANUARY 1996~~ DECEMBER 31, 1995

LEA	Local Enforcement Agency
LUP	Land Use Permit
MSW	Municipal Solid Waste
SCAQMD	South Coast Air Quality Management District
SWFP	Solid Waste Facilities Permit
tpd-6	Tons per day, 6 days/week
	Denotes closed landfill facilities (i.e., Azusa, BKK, and Lopez Canyon Landfills)

Refer to Response 84 (Letter 3.4-5, Metropolitan Water District of Southern California) in Section 3.0, Response to Comments.

Section 2.6.3 City/County Landfill Design, p. 2-50, ¶5

. . . When operational, it is anticipated that this same canyon area would be used as a stockpile area for the proposed City/County Landfill, until landfill footprint development occurs in this area. Once development occurs, the stockpiled area would be moved northwest to the anticipated northwest canyon stockpile area ~~or along flat deck areas of the existing landfill~~. For the existing north canyon stockpile area, ~~This area can accommodate stockpiled material, for example~~ an extensive dual line subgrade drainage system was installed. This system includes dual, perforated high-density polyethylene (i.e., plastic), drainage lines, surrounded by an aggregate drainage blanket and geotextile filter fabric. The subgrade drainage system was installed within a collector trench along the lowest point of the canyon area, prior to stockpile placement.

A similar subgrade drainage system would be installed for the anticipated northwest canyon stockpile area, prior to stockpile placement

Refer to Response 5 (Letter 3.3-1, California Integrated Waste Management Board) in Section 3.0, Response to Comments.

Section 2.7.4, Leachate Collection and Removal System, Figure 2.7-3, p. 2-59

Figure 2.7-3 (Preferred Waste-on-Waste Liner) has been revised as Figures 2.7-3a (Monolithic Cover for Sunshine Canyon City Landfill Closure) and 2.7-3b (Preferred Waste-on-Waste Liner and Re-compacted Monolithic Final Cover) to reflect the proposed monolithic final cover and the waste-on-waste liner.

Refer to Responses 198, 199, and 201 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 2.7.8, Groundwater Protection, p. 2-70, ¶1

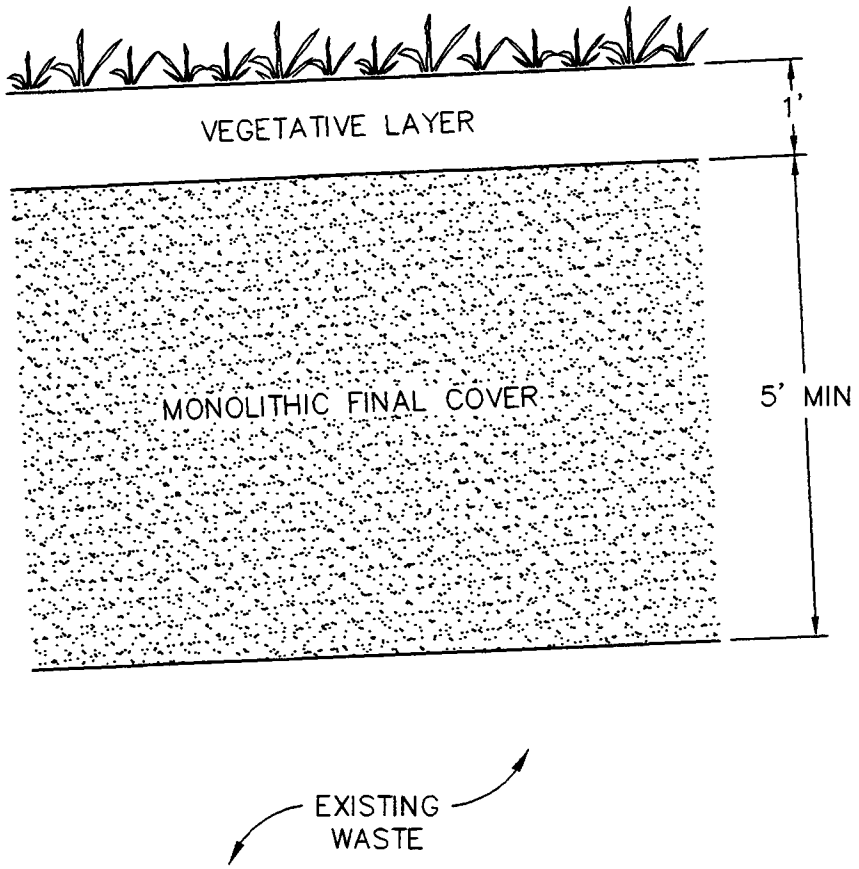
- deposited waste would be compacted and then covered daily with approximately ~~9~~ 6 inches of ~~loose~~, clean, compacted soil or approved alternative daily cover,

Refer to Response 84 (Letter 3.4-5, Metropolitan Water District of Southern California) in Section 3.0, Response to Comments.

Section 2.10.3, Unloading Waste Materials at the Landfill Working Face, p. 2-74, ¶8

During the unloading process, onsite landfill personnel (or landfill spotters) would observe the waste-hauling vehicles to ensure that safe disposal occurs. A load check program will be required as part of the City's solid waste facility permit (SWFP) and monitored by the onsite designated Local Enforcement Agency (LEA). Random loads would be periodically inspected by landfill personnel ~~and the onsite designated LEA~~ to prevent the unauthorized disposal of hazardous wastes.

Refer to Response 203 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.



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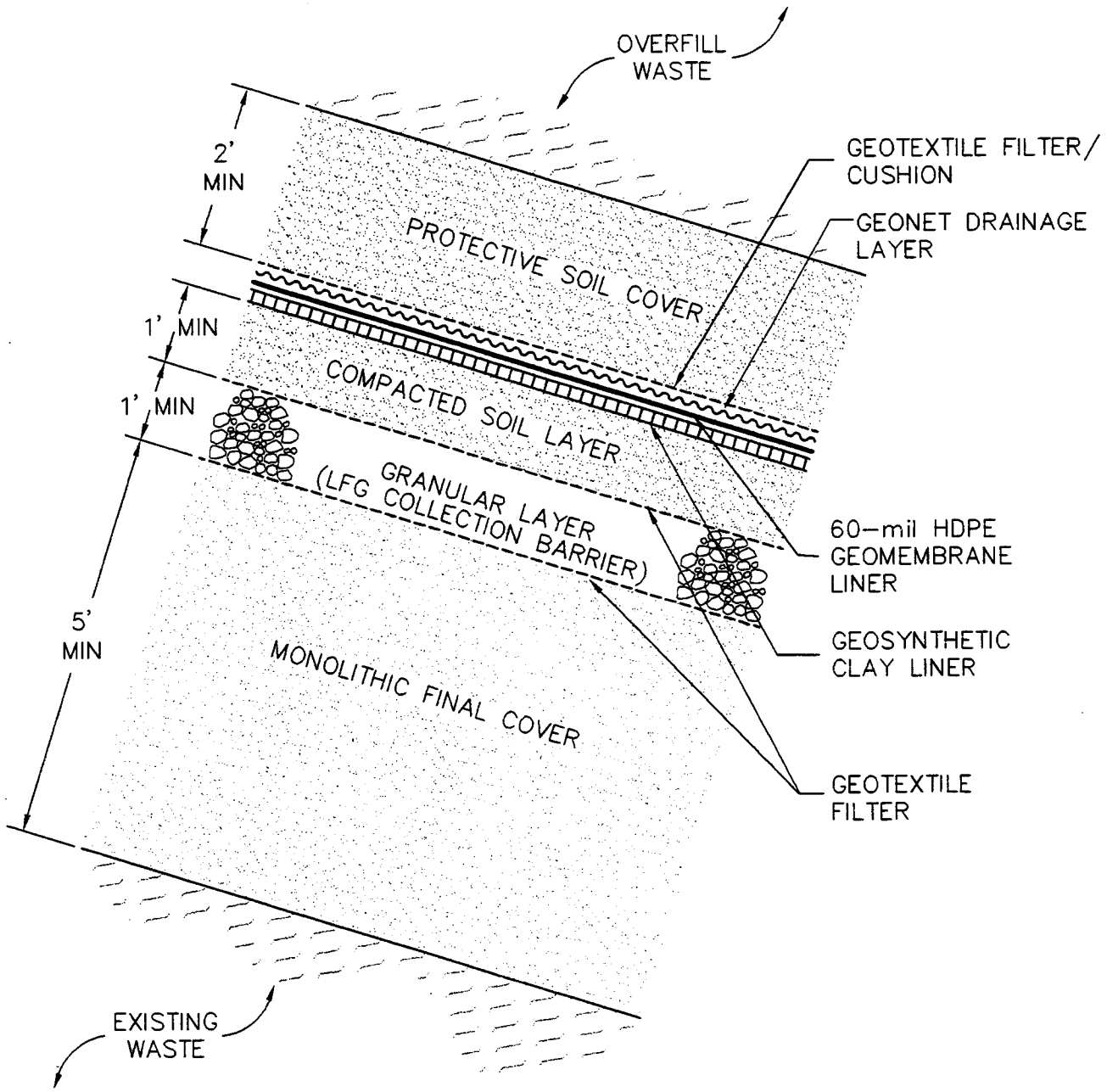
MONOLITHIC FINAL COVER FOR SUNSHINE CANYON CITY LANDFILL CLOSURE SUNSHINE CANYON LANDFILL SYLMAR, CALIFORNIA	FIGURE NO. 2.7-3a (REVISED) PROJECT NO. HL0178-62-1 DATE: 6 MAY 1998

DWG: 0178F002.DWG 19980602143 LP



NOTE: ENGINEERING DETAIL OF WASTE ON WASTE LINER
REVISED FOR JOINT TECHNICAL DOCUMENT

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PREFERRED WASTE ON WASTE LINER
AND RECOMPACTED MONOLITHIC FINAL COVER
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	2.7-3B (REVISED)
PROJECT NO.	HL0178-62-1
DATE:	15 SEPTEMBER 1998

DWG: 0178F014.DWG 199806021230 LP

Section 2.10.4, Spreading and Compacting Daily Cover on Refuse, p. 2-75, ¶4

All solid waste deposited in the proposed landfill footprint would be compacted and then covered on a daily basis with ~~approximately 9~~ 6 inches ~~(exceeding the State minimum requirement of 6 inches)~~ of ~~loose,~~ clean, compacted onsite soil or approved alternative daily cover ~~that would be spread and applied over the top of each cell~~.

Refer to Response 84 (Letter 3.4-5, Metropolitan Water District of Southern California) in Section 3.0, Response to Comments.

Section 2.11.3, Vector and Bird Control Measures, p. 2-84, ¶2

. . . All waste materials brought to the site would be unloaded at the active working face of the landfill, compacted, and covered with at least ~~9~~ 6 inches of clean, compacted soil or approved alternative daily cover by the end of the working day.

Refer to Response 84 (Letter 3.4-5, Metropolitan Water District of Southern California) in Section 3.0, Response to Comments.

Section 4.1.1, Grading Activities, Figure 4.1-1, p. 4-5

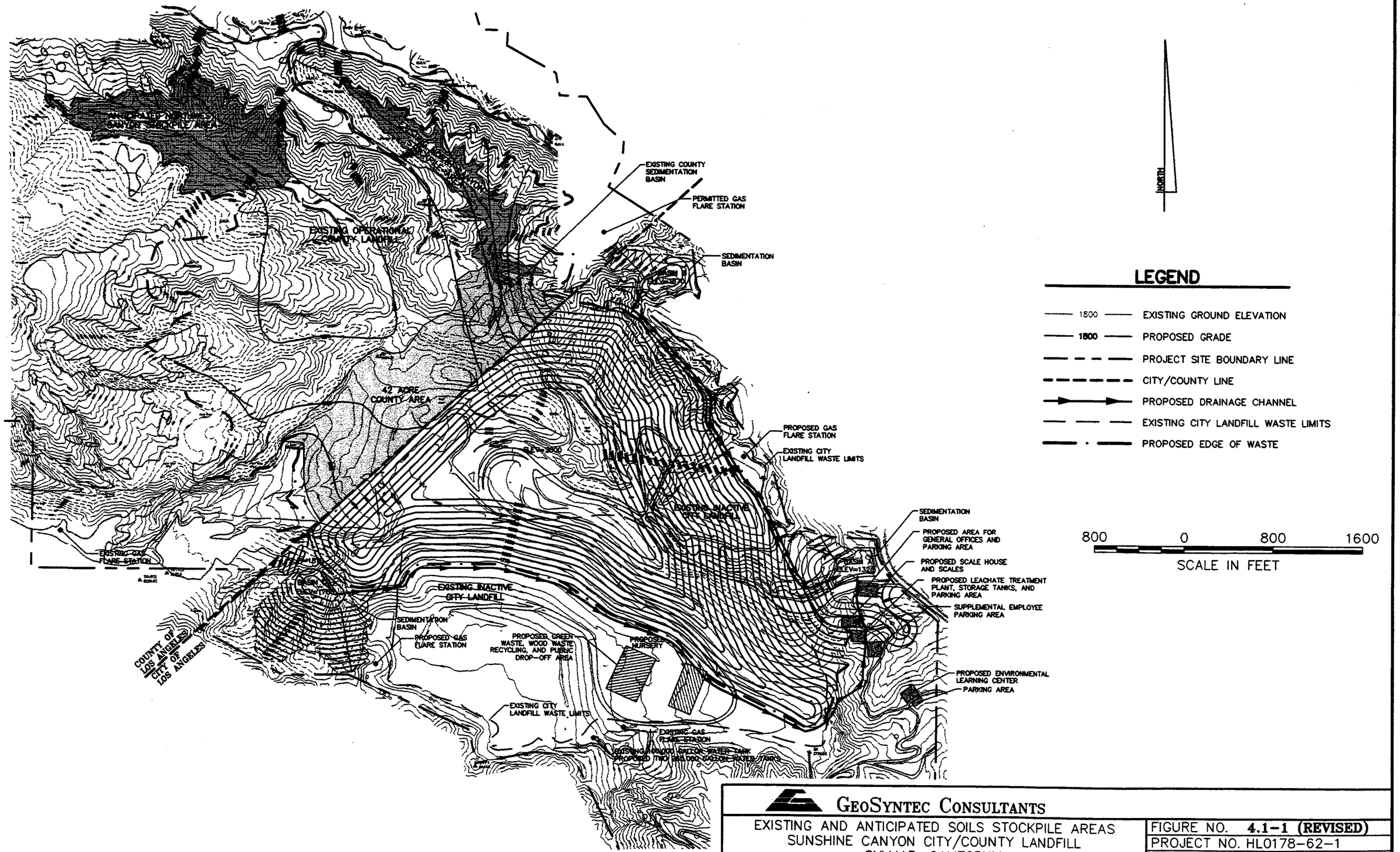
This figure has been revised to delete the previously proposed stockpile area on the top deck of the existing inactive City Landfill.

Refer to Response 5 (Letter 3.3-1, California Integrated Waste Management Board) in Section 3.0, Response to Comments.

Section 4.2, Air Quality

Several components of the air quality analyses in Section 4.2, Air Quality of the Draft SEIR have been revised to incorporate comments received by the SCAQMD, County LEA, and LAUSD. Many of the comments resulted in more refined emissions estimates and modeled impacts than shown in the Draft SEIR. Section 4.2, Air Quality, of the Draft SEIR has now been revised to incorporate these changes in one location, rather than simply reporting the revised estimates in the responses to comments. This information is incorporated into this Final SEIR as Appendix D2, Revisions to Draft SEIR, Section 4.2, Air Quality.

Since the Draft SEIR was prepared, certain reference documents and analytical tools relied upon to conduct the air quality analyses have been updated. Specifically, the Draft SEIR circulated for public comment in July 1997 used a standard reference document (the 1985 version of AP-42) to calculate emissions from certain operational and construction activities and to quantify the effectiveness of some mitigation measures. However, AP-42 was updated in 1995 and includes more refined emission factors for fugitive dust emissions. In the revised air quality analyses, the construction and operational emissions have been updated to reflect these new emission factors. This has resulted in an increase in emissions from some sources and in other cases estimates were reduced. For example, the emission factor for dust from vehicles driving over paved roads was reduced, and, as a result, the estimate of PM_{10} emissions dropped substantially.



GeoSyntec Consultants

EXISTING AND ANTICIPATED SOILS STOCKPILE AREAS
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**4.1-1 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F009.DWG 199806151512 RCG

In addition, the Draft SEIR used the SCREEN 2 model to perform the Health Risk Analysis for the flares and EMFAC7ED to model vehicle emissions. The SCAQMD in its comments recommended the use of the ISCST3 model and the 1998 version of EMFAC7G. Additional modeling studies were run using the suggested models and the results are included in the Final SEIR, Appendix D2, Revisions to Draft SEIR, Section 4.2, Air Quality; and in the Final SEIR, Appendix D3, Revisions to Draft SEIR, Appendix B6, Low-Level Health Risk Assessment.

Landfill gas generation and gas composition rates have been revised to reflect current conditions at the project site. Based on experience gained from the gas collection system at the existing inactive City Landfill and the County Landfill, gas generation from the proposed project is now expected to be substantially lower than originally projected. Accordingly, the project proponent anticipates only five flares will be required to flare gas generated for the entire City/County Landfill. The information on gas composition was also updated to reflect onsite data from the gas flared by the two flares already in operation. The revised modeling study now uses the maximum permitted capacity of five flares for the worst-case analysis and onsite gas composition data. As a result, emissions estimates from the flares have increased and SO_x emissions now exceed the SCAQMD's CEQA significance threshold. These results are included in the Final SEIR, Appendix D2, Revisions to Draft SEIR, Section 4.2, Air Quality; and the Final SEIR, Appendix D3, Revisions to Draft SEIR, Appendix B6, Low-Level Health Risk Assessment.

The revisions to Section 4.2, Air Quality, of the Draft SEIR do not identify any new emission sources or contaminants. These revisions provide a more accurate estimate of emissions from landfill construction and operation, and impact on air quality.

Refer to Responses 63 and 70 (Letter 3.4-4, SCAQMD), 97 (Letter 3.5.1, Department of Health Services County of Los Angeles), and 252 and 257 (Letter 3.8-1, Los Angeles Unified School District) in Section 3.0, Response to Comments.

Section 4.3.2, Groundwater, p. 4-125, ¶5

In addition to groundwater monitoring wells, the vadose zone is also monitored. This zone is defined as the area below the landfill and above groundwater where water may be present or suspended in the weathered bedrock or soil. The presence or absence of this water ~~is~~ **has historically been** monitored **at the existing inactive City Landfill** through the use of lysimeters, which are special ~~wells~~ **monitoring points** designed to permit the ~~measurement~~ **collection** of water that may be in the pores of the soil or weathered bedrock above the groundwater zone. **These monitoring points are shown on Figure 4.3-4 in the Draft SEIR.** ~~These wells provide monitoring of the alluvial deposits to detect seasonal flow within Sunshine Canyon.~~

For the proposed City/County Landfill, lysimeters will not be installed as part of the landfill's groundwater monitoring network. Instead, the vadose or unsaturated zone monitoring will be monitored through the gravel subdrain, which is constructed beneath the liner system. Continuous monitoring of the subdrain system will detect the migration of constituents beneath the liner system in a more comprehensive manner than using lysimeters.

Section 4.3.2, Groundwater, p. 4-125, ¶6

Currently, vadose zone monitoring is accomplished by ~~five~~ **four** lysimeters that have been installed ~~within Sunshine Canyon~~ **in the vadose zone at the existing inactive City Landfill**. Quarterly monitoring ~~results~~

records (since lysimeter installation) have indicated that no liquid ~~or moisture is present~~ can generally be collected from the lysimeters. ~~Considering the historical lack of recovery of moisture, it appears that areas of the canyon remain unsaturated year round because the lysimeters have never yielded sufficient volumes of soil moisture for sampling and analysis.~~ Monitoring of the vadose zone is also conducted using a series of gas sampling probes installed around the waste mass. These probes are monitored on a monthly basis for the presence of methane, as required by the SCAQMD. One sample is collected in one of the probes exhibiting the highest methane concentration, as required by the SCAQMD. Monitoring at the County Landfill is accomplished by sampling the under drain system outfall points instead of lysimeters. For both areas, sampling is performed quarterly and findings are reported to the LARWQCB. This would also occur for the proposed City/County Landfill.

Refer to Response 631 (Letter 3.8-19, Anne Ziliak) in Section 3.0, Response to Comments.

Section 4.3.2, Groundwater, p. 4-132, ¶2

Unsaturated Zone Monitoring Program (UZMP). Under this program the unsaturated zone is monitored to detect waste constituents that may escape from the waste management unit prior to reaching groundwater. ~~The UZMP consists of installing lysimeters within the vadose zone.~~ Monitoring the vadose zone for the proposed City/County Landfill would be accomplished by sampling the under drain system outfall points and installing and sampling multi depth vadose zone gas monitoring probes. Sampling would be performed quarterly with findings reported to the LARWQCB.

Refer to Response 631 (Letter 3.8-19, Anne Ziliak) in Section 3.0, Response to Comments.

Section 4.9.1, Hazardous Materials, p. 4-293, ¶2

~~Similar to the program that is currently used at the County Landfill,~~ it is anticipated that of the total amount of incoming solid waste brought to the landfill each day, ~~one waste~~ 1.5 load checks per 1,000 tons of solid waste would be unloaded in a segregated (isolated) area of the landfill site for visual inspection.

Refer to Response 222 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 4.9.1, Hazardous Materials, p. 4-297, ¶5

- The landfill operator shall implement a hazardous waste load-checking program. This program shall include inspecting random loads for hazardous wastes in a segregated area of the landfill, and landfill employees shall scan waste materials as they are being unloaded at the active working face. Hazardous waste load checks at the proposed City/County Landfill will be 1.5 load checks per 1,000 tons of solid waste received at the landfill for the first year of operation. However, after the first year of operation, BFI may request that the City LEA decrease the required load checking frequency to one load check per 1,000 tons of waste received at the City/County Landfill.

Refer to Response 222 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 4.9.2, Vectors, p. 4-299, ¶6

. . . Similar to the existing County Landfill vector control practices, all waste materials brought to the site would be unloaded at an active working face area, compacted, and covered with at least ~~9~~ 6 inches of clean, compacted soil or approved alternative daily cover by the end of the working day.

Refer to Response 84 (Letter 3.4-5, Metropolitan Water District of Southern California) in Section 3.0, Response to Comments.

Section 4.9.3, Litter, p. 4-305, ¶2

- The landfill site shall be operated to minimize litter generation through implementation of the following measures: compaction of waste at the working face (i.e., 1,400 pounds of compaction per cu. yd.) ~~periodic application of cover material during the day and at the end of the working day~~, waste materials covered with at least 6 inches of clean, compacted soil or approved alternative daily cover by the end of the working day;, and maintenance of the active working face areas as small as safely possible given the type and quantity of landfill equipment.

Refer to Response 226 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 4.9.5, Human Health, p. 4-317, ¶3

- A citizen's advisory committee shall be established, if deemed necessary by the City Council or Planning Commission through a project condition, to address area resident health concerns about the existing inactive and proposed City/County Landfill Project. The committee's mandate shall include discussions with appropriate technical experts and regulatory agencies responsible for the on- and offsite monitoring activities at the project site. The advisory committee would be responsible for presenting information and discussions of these regulatory agency members back to area residents through planned informational meetings.

Refer to Response 917 (Letter 3.8-24, LASER) in Section 3.0, Response to Comments.

Section 4.13.1, Traffic, Table 4.13-9, p. 4-372

A revised Table 4.13-9 (Project-Specific Mitigation Measures) is presented in this section to include mitigation measures and corrections identified by LADOT.

Refer to Responses 138 through 147 (Letter 3.6-4, Department of Transportation, City of Los Angeles) in Section 3.0, Response to Comments.

Table 4.13-9 (Revised)
PROJECT SPECIFIC MITIGATION MEASURES

No.	Key Intersection	Mitigation Measure
1	Roxford Street at the I-5 Freeway (SB ramp)	Restripe ~~SB~~ WB approach on Roxford Street to provide dual left-turn lanes and one through lane.
2	Roxford Street at the Encinitas/ I-5 Freeway (NB ramp)	Restripe ~~WB through lane~~ NB approach on Encinitas Avenue to ~~left/through option lane~~ provide left-turn lane, shared through/ left-turn lane, and shared through/right-turn lane.
6	San Fernando Road at Balboa Boulevard	This key intersection features two through lanes in each direction on San Fernando Road and two NB approach lanes, striped as an exclusive left-turn lane and an option left-right turn lane, provided on Balboa connector. A separate WB left-turn lane as well as protected left-turn phasing is provided. Existing pavement widths and physical constraints (i.e., hillside encroachment) do not allow for any physical improvements, such as providing an exclusive EB right-turn lane on San Fernando Road for heavy existing and anticipated right-turn volumes. ~~Given the lack of available physical improvements, it is recommended that automatic traffic surveillance and control signal equipment be installed at this intersection. LADOT believes that the overall capacity of an intersection increases 7 percent by allowing a computer signal control system to improve the efficiency of operations. Preliminary discussions with LADOT staff indicate that this is a possible mitigation measure that could be implemented to offset the impact of Sunshine Canyon Landfill Project traffic.~~ Contribute to the design, construction, and operation of the Northeast Valley Automated Traffic Surveillance and Control (ATSAC) system for this intersection. The current cost of ATSAC for the Northeast Valley System is $79,000 per intersection. The contribution to ATSAC should be made prior to the start of construction for this ATSAC system, which is scheduled for the year 2003.
8	San Fernando Road at Sierra Highway	Restripe ~~NB through lane~~ NB approach on San Fernando Road to ~~through/right option lane~~ provide a shared through/right-turn lane and exclusive right-turn lane and restripe the WB approach of Sierra Highway for a 12-foot-wide curb lane.
9	San Fernando Road at project driveway	~~Restripe San Fernando Road to provide a second northbound left-turn lane. The installation of automatic traffic surveillance and control signal equipment is recommended at this intersection.~~ Install a new traffic signal at San Fernando Road/Project Driveway and widen and restripe the northbound approach of San Fernando Road at Project Driveway to provide a left-turn

Table 4.13-9 (Revised) (Cont.)
PROJECT SPECIFIC MITIGATION MEASURES

No.	Key Intersection	Mitigation Measure
		lane and through lane. Also contribute to the design, construction, and operation of the Northeast Valley ATSAC system for this intersection. The current cost of ATSAC for the Northeast Valley System is $79,000 per intersection. The contribution to ATSAC would be completed prior to the start of construction for this ATSAC system, which is scheduled for the year 2003. The required street improvements and signal modifications shall be guaranteed before the issuance of any building permit for this project through the B-permit process of the Bureau of Engineering, Department of Public Works, and the encroachment permit process of Caltrans (where applicable). Construction of the improvements to the satisfaction of the LADOT, the Bureau of Engineering, and Caltrans (where applicable) must be completed before issuance of any certificate of occupancy. Prior to setting the bond amount, the Bureau of Engineering shall require that the developer's engineer or contractor contact LADOT's B-Permit Coordinator, telephone (213) 580-5336, to arrange a predesign meeting to finalize the proposed geometric and traffic signal designs needed for the project.

Section 4.13.4, Parking and Safety Concerns, p. 4-379, ¶7

CITY MITIGATION MEASURE

Although no significant impacts are anticipated, the following mitigation measure is proposed by the project proponent to alleviate ~~any~~ potential safety concerns resulting from truck traffic at the landfill entrance:

- ~~Until the installation of a signal at the landfill entrance occurs, vehicular warning signs shall be placed in NB/SB directions along San Fernando Road (authorized by LADOT) to slow traffic along that roadway.~~

- Prior to issuance of any certificate of occupancy for the project, install a new traffic signal at San Fernando Road/Project Driveway and widen and restripe the northbound approach of San Fernando Road at Project Driveway to provide a left-turn lane and through lane. Also contribute to the design, construction, and operation of the Northeast Valley ATSAC system for this intersection. The current cost of ATSAC for the Northeast Valley System is $79,000 per intersection. The contribution to ATSAC would be completed prior to the start of construction for this ATSAC system, which is scheduled for the year 2003.

Refer to Responses 143 and 147 (Letter 3.6-4, Department of Transportation, City of Los Angeles) in Section 3.0, Response to Comments.

2.4 Revisions and/or Additions Requested by Project Proponent

The following revisions and/or additions have been requested by the project proponent since the completion of the Draft SEIR to incorporate revised information related to the proposed project and to respond to comments received on the Draft SEIR. These issues include expansion of the County Landfill in the upper reaches of Sunshine Canyon, proposed uses, and the deletion of the public drop off and buyback recycling center.

Section 1.5.1, Prior Environmental Record Pertaining to the Proposed City/County Landfill Project and Existing Inactive Landfill, p. 1-4, ¶5

. . . With respect to that condition, if the City denied necessary entitlements for landfilling in the City, the Board would consider approving the extension of landfilling into higher elevations in the County area of Sunshine Canyon~~, providing for development of the 70-million-ton landfill encompassing ±542 acres~~. However, even though this could result in the expansion of the County Landfill, up to a disposal capacity of 70 million tons, it cannot be simply assumed that such a request would be approved by the County. The purpose of this CUP condition (by the Board) was to minimize the destruction of ~~over 1,363~~ approximately 3,200 oak trees, and big-cone Douglas fir trees, as well as other significant biological resources in the upper reaches of Sunshine Canyon~~ and to provide additional landfill disposal capacity within Sunshine Canyon and the City's jurisdiction~~ by encouraging the City to provide additional landfill disposal capacity within the portion of the Sunshine Canyon that is already substantially disturbed.

Refer to Response 165 (Letter 3.6-5, Hal Bernson, Councilman 12th District, City of Los Angeles) in Section 3.0, Response to Comments.

Section 1.9.3, No Project, p. 1-19, ¶6

- potential for the future expansion of the County Landfill within the upper reaches of Sunshine Canyon (consistent with the current County Landfill CUP, with a disposal capacity of 70 million tons) resulting in significant impacts on biological resources (specifically, the loss of ~~an additional 1,363~~ approximately 3,200 oak trees, and big-cone Douglas fir trees, as well as other significant ~~ecological~~ biological resources within the project site);

Refer to Response 165 (Letter 3.6-5, Hal Bernson, Councilman 12th District, City of Los Angeles) in Section 3.0, Response to Comments.

Section 1.9.3, No Project, p. 1-20, ¶7

- recover, recycle, and/or reuse waste materials that would otherwise be disposed of in landfills by providing ~~a public "drop-off" and "buyback" area for recycling and~~ an onsite green waste/wood waste recycling area;

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 2.2.3, Solid Waste Objectives, p. 2-3 , ¶4

- recover, recycle, and/or reuse waste materials that would otherwise be disposed of at the City/ County Landfill by providing ~~public "drop off," "buyback," and~~ a green waste/wood waste recycling area~~s for local residents~~;

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 2.4.4, Surrounding Land Uses, Figure 2.4-5, p. 2-19

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 2.5.1, Proposed City/County Landfill Footprint, Figure 2.5-1, p. 2-27

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 2.5.1, Proposed City/County Landfill Footprint, Figure 2.5-2, p. 2-29

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 2.5.1, Proposed City/County Landfill Footprint, Figure 2.5-3, p. 2-31

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

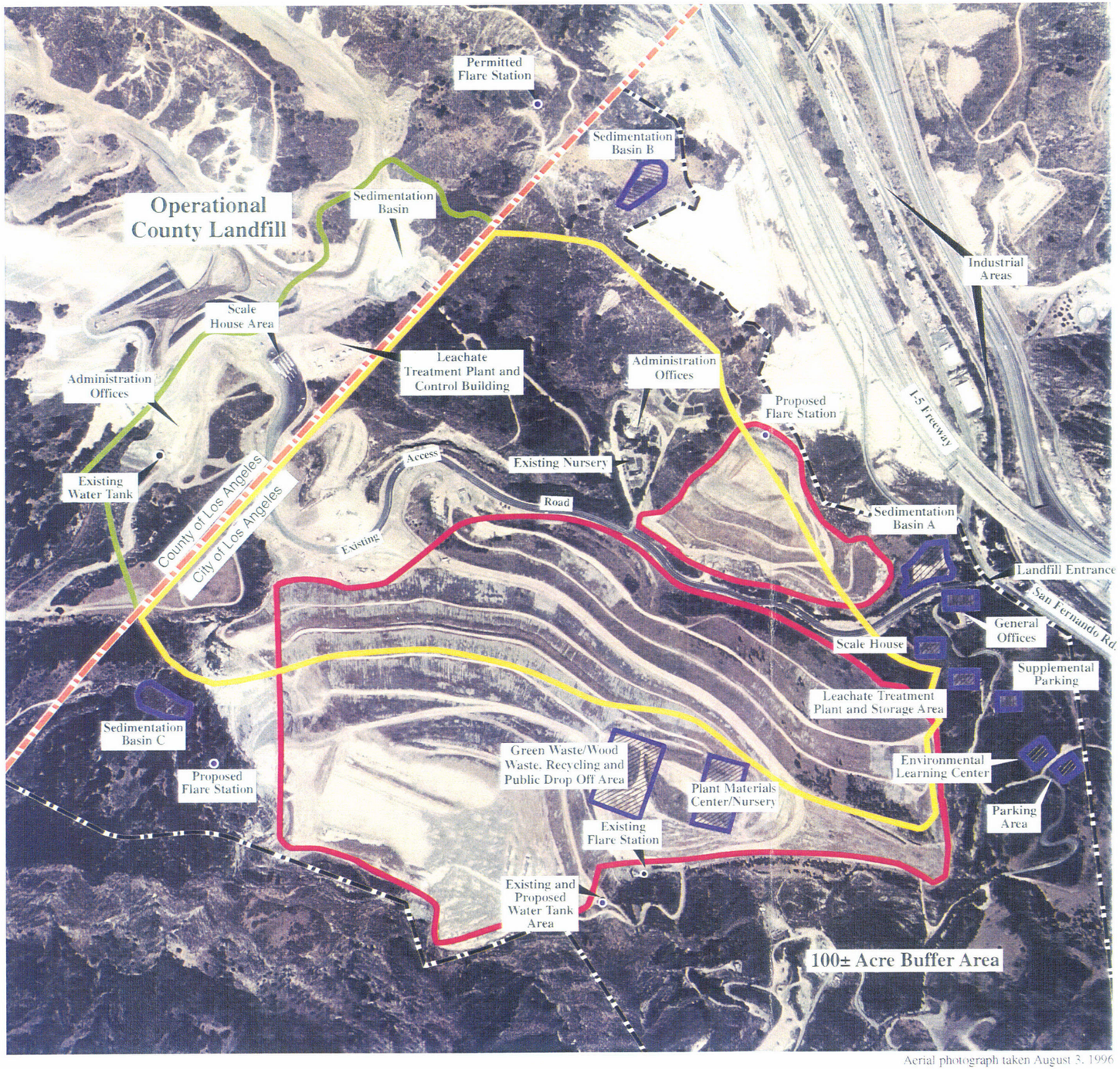
Section 2.5.1, Proposed City/County Landfill Footprint, Figure 2.5-5, p. 2-35

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 2.5.6, General Design Features of the City/County Landfill Facility, p. 2-39 , ¶4

. . . Onsite ancillary facilities or proposed environmental pollution and control features in the City include, but are not limited to, an access road; gate, scales, checker facilities, and general maintenance area; general administrative office; caretaker building; lunchroom/locker storage; employee parking; flaring stations; plant materials center; environmental learning center; green waste/wood waste recycling area ~~and buyback center~~; leachate treatment facility and storage tanks and control building; sedimentation basins; and water storage tanks.

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.



Aerial photograph taken August 3, 1996

Proposed Uses within the Project Site and Operational County Landfill

Legend

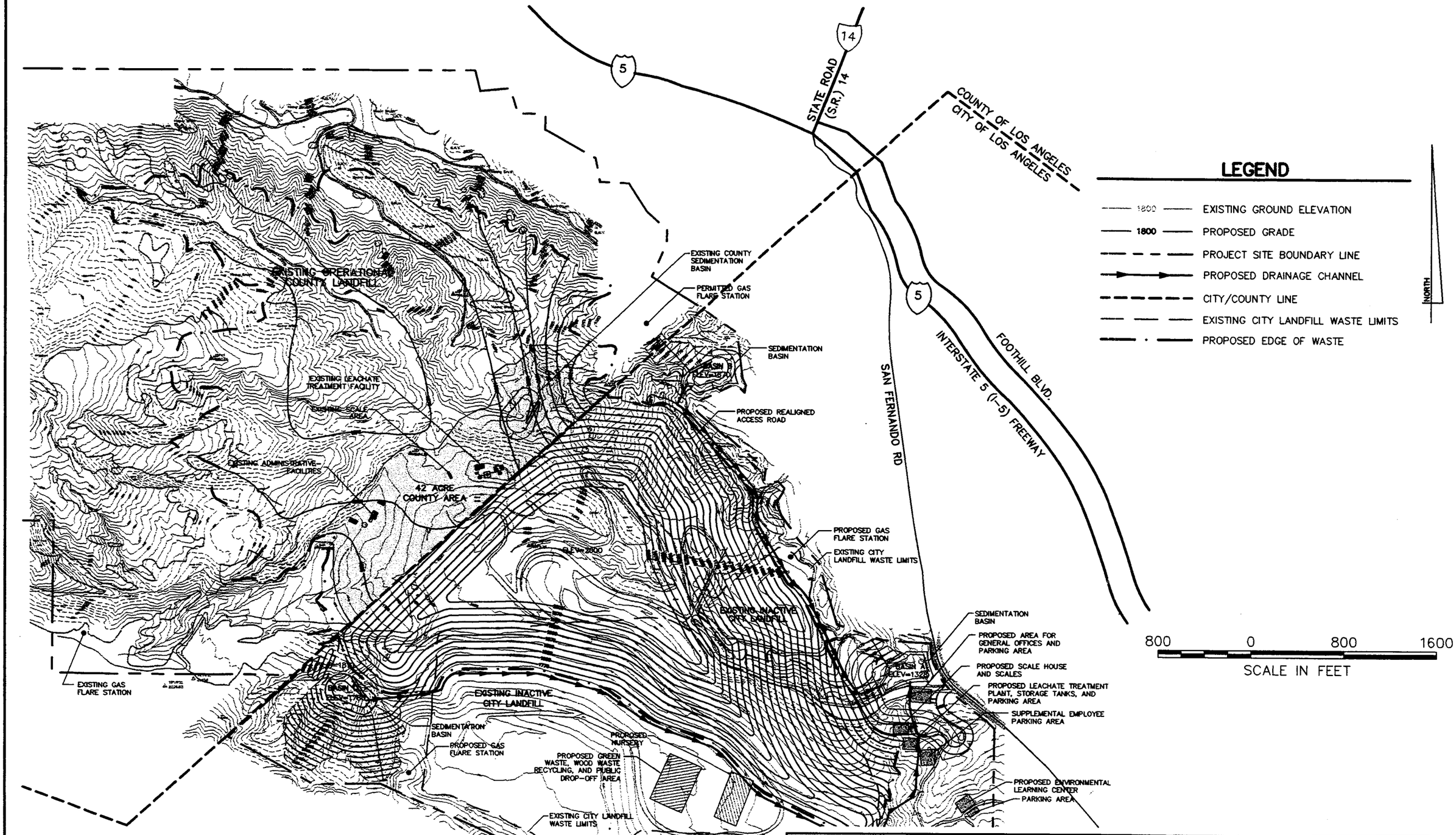
- Project Site Boundary
- County/City of Los Angeles Boundary
- Existing Inactive Landfill (2 fill areas)
- Proposed Landfill Footprint (194± acres)
- Proposed Landfill Area (42± acres)
- Proposed Ancillary Facilities/Areas in City

NOTE:
Operational County Landfill Footprint is ±215 acres.

Source: Inland Aerial Surveys, Inc.
Ultrasystems Environmental Incorporated

ULTRASYSTEMS ENVIRONMENTAL INCORPORATED

FIGURE 2.4-5 (Revised)



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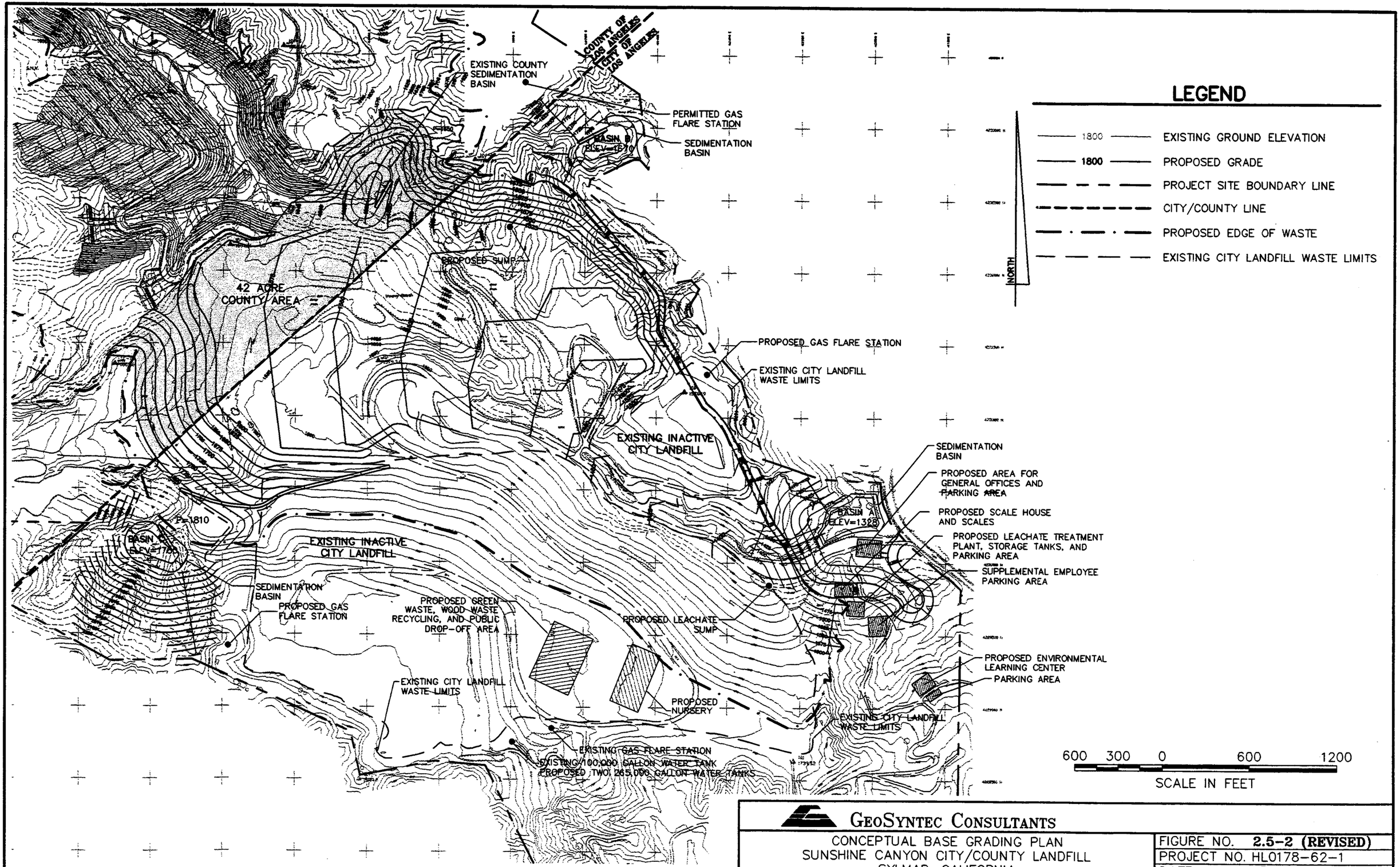
CITY/COUNTY LANDFILL CONCEPTUAL SITE PLAN
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**2.5-1 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F005.DWG 199806151433 RCG

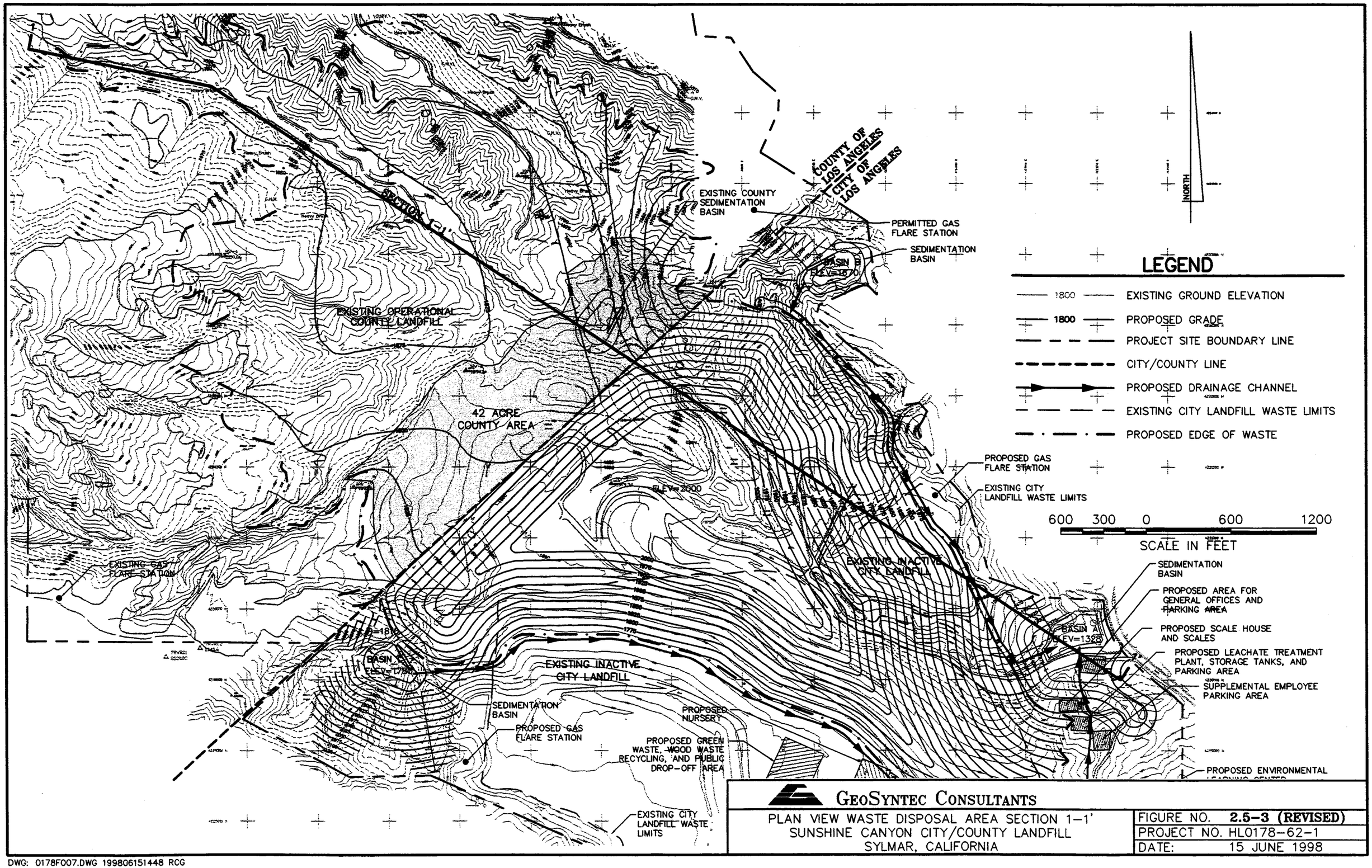


GeoSyntec Consultants

CONCEPTUAL BASE GRADING PLAN
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**2.5-2 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F006.DWG 199806151437 RCG



GeoSyntec Consultants

PLAN VIEW WASTE DISPOSAL AREA SECTION 1-1'
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**2.5-3 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F007.DWG 199806151448 RCG

EXISTING COUNTY SEDIMENTATION BASIN

SEDIMENTATION BASIN

BASIN B ELEV=1870

EXISTING OPERATIONAL COUNTY LANDFILL

42 ACRE COUNTY AREA

SECTION B-B'

ELEV=2000

PROPOSED GAS FLARE STATION

EXISTING CITY LANDFILL WASTE LIMITS

EXISTING INACTIVE CITY LANDFILL

SEDIMENTATION BASIN

PROPOSED AREA FOR GENERAL OFFICES AND PARKING AREA

BASIN A ELEV=1328

PROPOSED SCALE HOUSE AND SCALES

PROPOSED LEACHATE TREATMENT PLANT, STORAGE TANKS, AND PARKING AREA

SUPPLEMENTAL EMPLOYEE PARKING AREA

P=1810

COUNTY OF LOS ANGELES

CITY OF LOS ANGELES

BASIN C ELEV=1760

EXISTING INACTIVE CITY LANDFILL

SEDIMENTATION BASIN

PROPOSED GAS FLARE STATION

PROPOSED GREEN WASTE, WOOD WASTE RECYCLING, AND PUBLIC DROP-OFF AREA

PROPOSED ENVIRONMENTAL LEARNING CENTER

PARKING AREA

PROPOSED NURSERY

EXISTING CITY LANDFILL WASTE LIMITS

EXISTING GAS FLARE SYSTEM

EXISTING 100,000 GALLON WATER TANK
PROPOSED TWO 265,000 GALLON WATER TANKS

NORTH

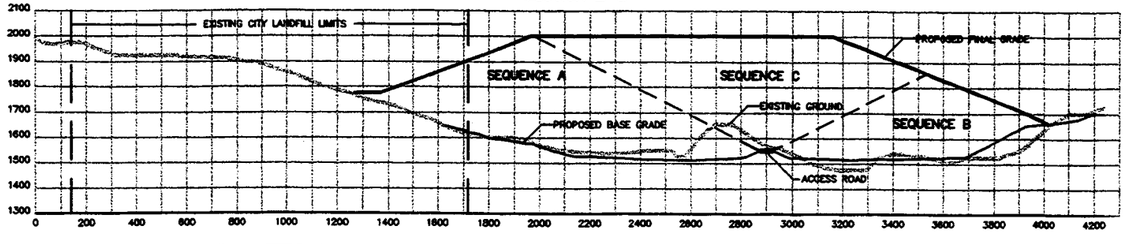
LEGEND

- 1800 — EXISTING GROUND ELEVATION
- **1800** — PROPOSED GRADE
- PROJECT SITE BOUNDARY LINE
- CITY/COUNTY LINE
- PROPOSED DRAINAGE CHANNEL
- EXISTING CITY LANDFILL WASTE LIMITS
- PROPOSED EDGE OF WASTE

600 300 0 600 1200

SCALE IN FEET

SECTION 2-2'



GeoSyntec Consultants

DISPOSAL AREA SEQUENCING SECTION 2-2'
FINAL ELEVATIONS
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO. **2.5-5 (REVISED)**
PROJECT NO. HL0178-62-1
DATE: 15 JUNE 1998

DWG: 0178F008.DWG 199806151454 RCG

Section 2.5.7, Proposed Landfill Ancillary Facilities, p. 2-42 , ¶4

~~As a component of this general area, a drop off and buyback recycling center would be established for use by the local community. Source-separated materials would be delivered to this area. Only nonhazardous materials, such as aluminum, metal, newsprint, office paper, glass, and plastics and would be accepted at this center for recycling.~~

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 2.12, Proposed Hours of Operation, Table 2.12-1, p. 2-89, ¶1

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Table 2.12-1 (Revised)
OPERATIONAL HOURS

Areas of Landfill	Weekdays	Operating Hours
Gates Open	Monday through Friday Saturday	5:00 a.m. 7:00 a.m.
Scales Open	Monday through Friday Saturday	6:00 a.m. 7:00 a.m.
Scales Close	Monday through Friday Saturday	6:00 p.m. 2:00 p.m.
General Office and Administrative Area	Monday through Friday Saturday	8:00 a.m. - 5:00 p.m. 8:00 a.m. - 2:00 p.m.
Green Waste/Wood Waste Recycling Area	Monday through Friday Saturday	6:00 a.m. - 6:00 p.m. 7:00 a.m. - 2:00 p.m.
~~Public Drop off Area~~	~~Monday through Friday~~ ~~Saturday~~	~~6:00 a.m. - 6:00 p.m.~~ ~~7:00 a.m. - 2:00 p.m.~~

Source: BFI

Note: General maintenance activities are anticipated to take place immediately following landfilling operations during the hours of 6:00 to 9:00 p.m.

Section 4.2.10, Project Consistency with Applicable Plans, 4-83, ¶4

. . . The proposed project would include development of a green waste and wood waste recycling ~~and public drop-off~~ area to support recycling efforts.

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 4.3.1, Surface Water, Figure 4.3-2, p. 4-107

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 4.3.2, Groundwater, Figure 4.3-4, p. 4-119

Revisions to this figure, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 4.9.1, Hazardous Materials, p. 4-297, ¶4

- A refuse inspection program that includes direct visual inspection, remote television monitors to inspect incoming roll off-type loads and open-top vehicles and radiation-detecting devices, ~~and sensors capable of detecting volatile compounds~~ shall be implemented by the landfill operator to prohibit the illegal dumping or disposal of liquids and hazardous wastes at the landfill.

Refer to Response 1424 (Letter 3.8-27, North Valley Coalition) in Section 3.0, Response to Comments.

Section 5.4, No Project Alternative, 5-10, ¶6

- recover, recycle, and/or reuse waste materials that would otherwise be disposed of in landfills by providing ~~a public "drop off" and "buyback" area for recycling and~~ an onsite green waste/wood waste recycling area;

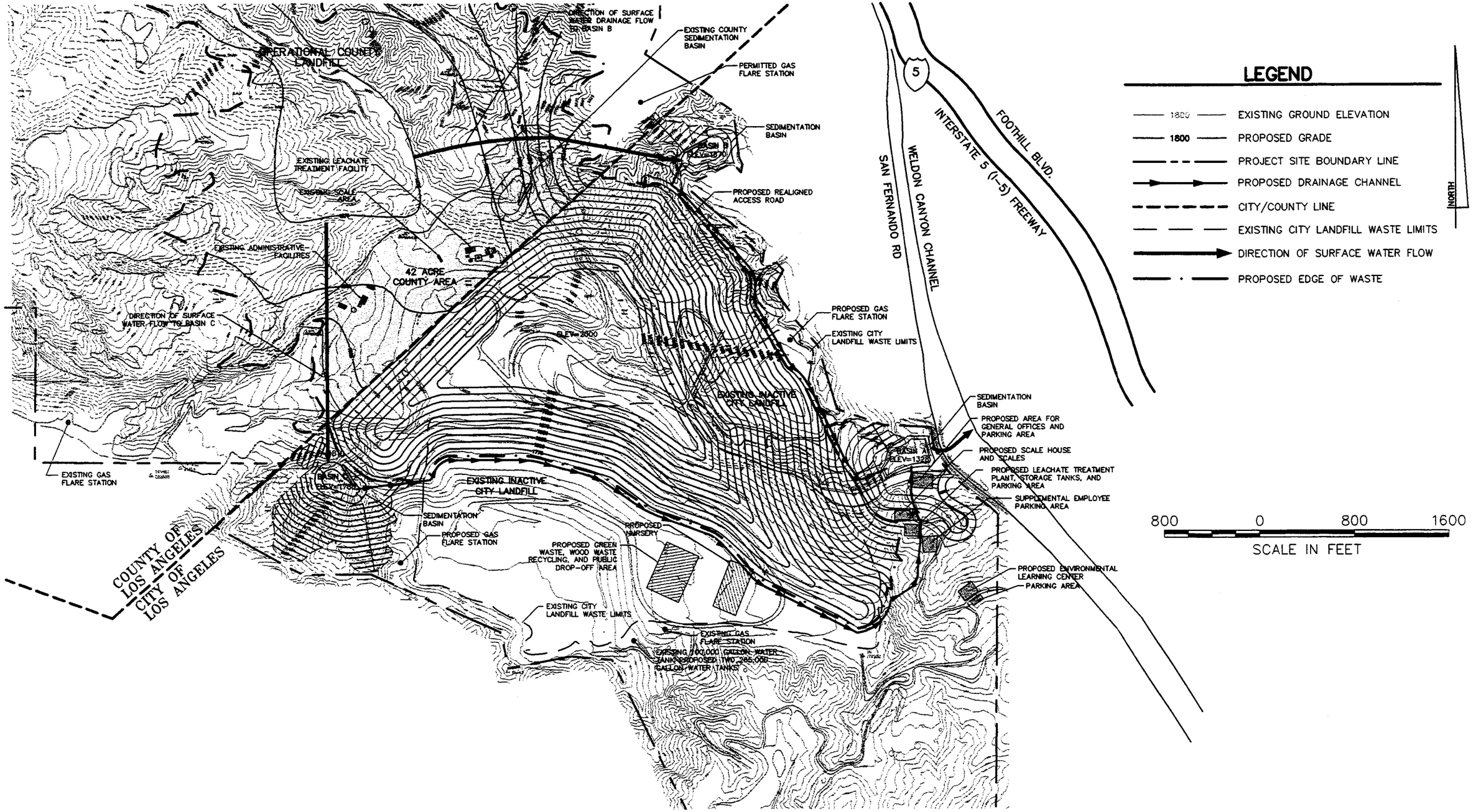
Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 5.4, No Project Alternative, p. 5-5, ¶8

. . . ~~That landfill's anticipated operational site life is 10 years; however, that site life may be extended if future landfill development occurs within the upper reaches of Sunshine Canyon or if the proposed project is denied. Therefore, if authorized, this landfill has the future potential to increase its disposal capacity to 70 million tons.~~ It is anticipated that the County Landfill capacity will be exhausted by approximately the year 2006, based on its allowable daily intake rate.

If the No Project Alternative were to be approved, the project proponent would pursue future project entitlements pursuant to existing County Landfill CUP Conditions to expand landfill development in the upper reaches of the County portion of Sunshine Canyon. However, even though this could result in the expansion of the County Landfill, up to a disposal capacity of 70 million tons, it cannot be simply assumed that such a request would be approved by the County.

Refer to Response 165 (Letter 3.6-5, Hal Bernson, Councilman 12th District, City of Los Angeles) in Section 3.0, Response to Comments.

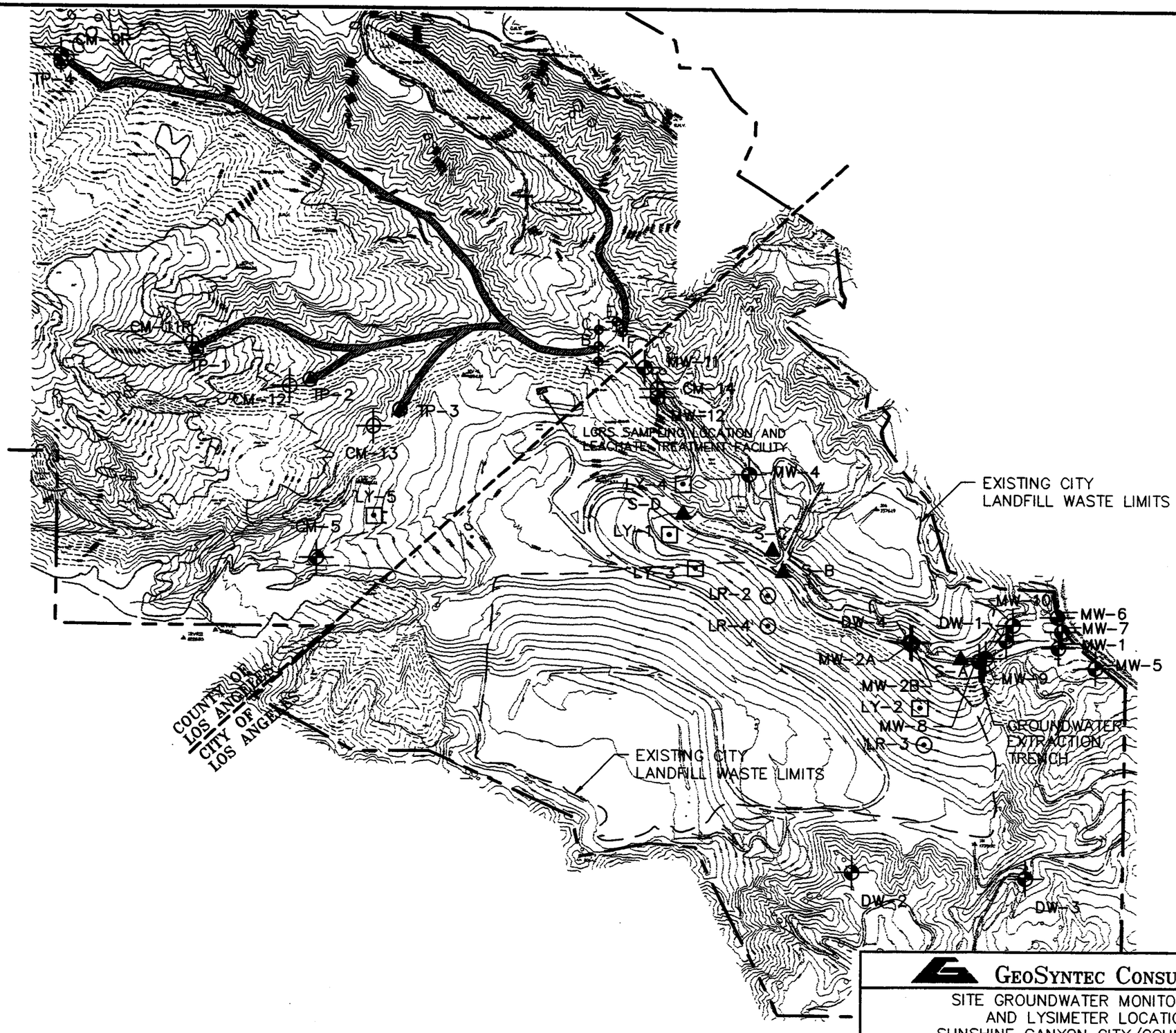


GeoSyntec Consultants

SITE DRAINAGE PLAN
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**4.3-2 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F010.DWG 199806151518 RCG



LEGEND

- 1800 — EXISTING GROUND ELEVATION
- PROJECT SITE BOUNDARY
- CITY/COUNTY LINE
- EXISTING CITY LANDFILL WASTE LIMITS
- MW-1 — GROUNDWATER MONITORING WELL
- CM-3 — EXPLORATORY BORING/ MONITORING WELL
- LY-2 — LYSIMETER
- LR-3 — LEACHATE MONITORING WELL
- S-D — SURFACE WATER STATION
- SUBDRAIN
- SUBDRAIN UPPER TERMINATION POINT
- SUBDRAIN OUTFALL AND SAMPLING LOCATION

800 400 0 800 1600

SCALE IN FEET

GeoSyntec Consultants

SITE GROUNDWATER MONITORING WELLS
AND LYSIMETER LOCATION MAP
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO. **4.3-4 (REVISED)**
PROJECT NO. HL0178-62-1
DATE: 15 JUNE 1998

DWG: 0178F004.DWG 199806181446 RCG

Section 5.4, No Project Alternative, p. 5-9, ¶4

- potential for the future expansion of the County Landfill within the upper reaches of Sunshine Canyon (consistent with the current County Landfill CUP, with a disposal capacity of 70 million tons) resulting in significant impacts on biological resources (specifically, the loss of ~~an additional 1,363~~ approximately 3,200 oak trees, big-cone Douglas fir trees, as well as ~~ecological~~ other significant biological resources within the project site);

Refer to Response 165 (Letter 3.6-5, Hal Bernson, Councilman 12th District, City of Los Angeles) in Section 3.0, Response to Comments.

Section 5.5, Reduced Volume Alternative, Figure 5.5-1, p. 13

These changes, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 5.5, Reduced Volume Alternative, Figure 5.5-2, p. 15

These changes, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 5.6, Immediate Combined City/County Landfill Operations Alternative, Figure 5.6-1, p. 5-19

These changes, made by the project proponent, are not in response to any of the comments included in Section 3.0 of this document.

Section 5.11, Environmentally Superior Alternative, 5-70, ¶2

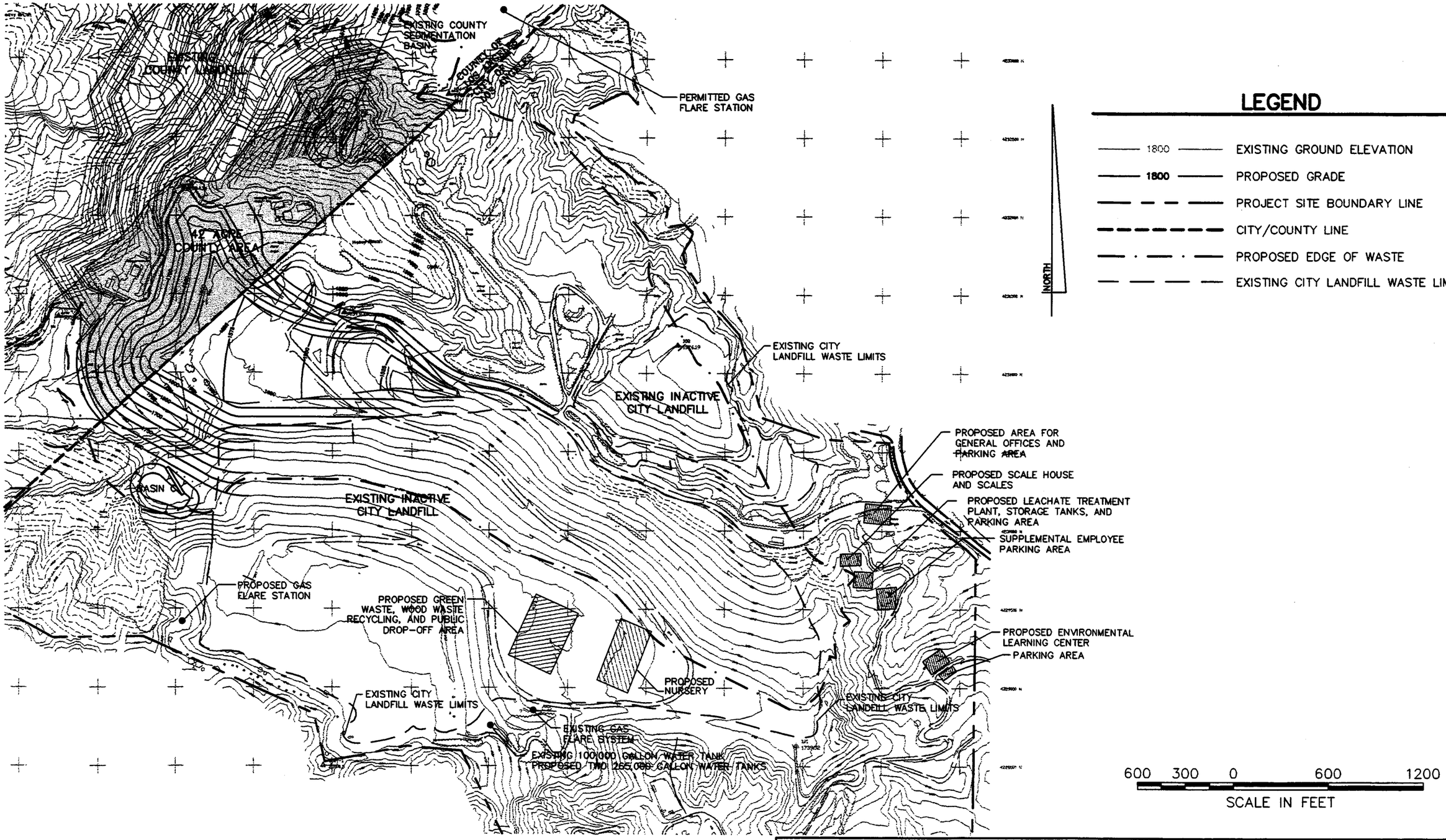
- recover, recycle, and/or reuse waste materials that would otherwise be disposed of in landfills by providing ~~a public "drop off" and "buyback" area for recycling and~~ an onsite green waste/wood waste recycling area;

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

Section 6.1.2, Project Proponent's Justification for Implementing the Proposed Project Now, 6-2, ¶7

- recover, recycle, and/or reuse waste materials that would otherwise be disposed of at the City/ County Landfill by providing ~~public "drop off," "buyback," and~~ an onsite green waste/wood waste recycling areas ~~for local residents~~;

Refer to Response 190 (Letter 3.6-6, Environmental Affairs Department, City of Los Angeles) in Section 3.0, Response to Comments.

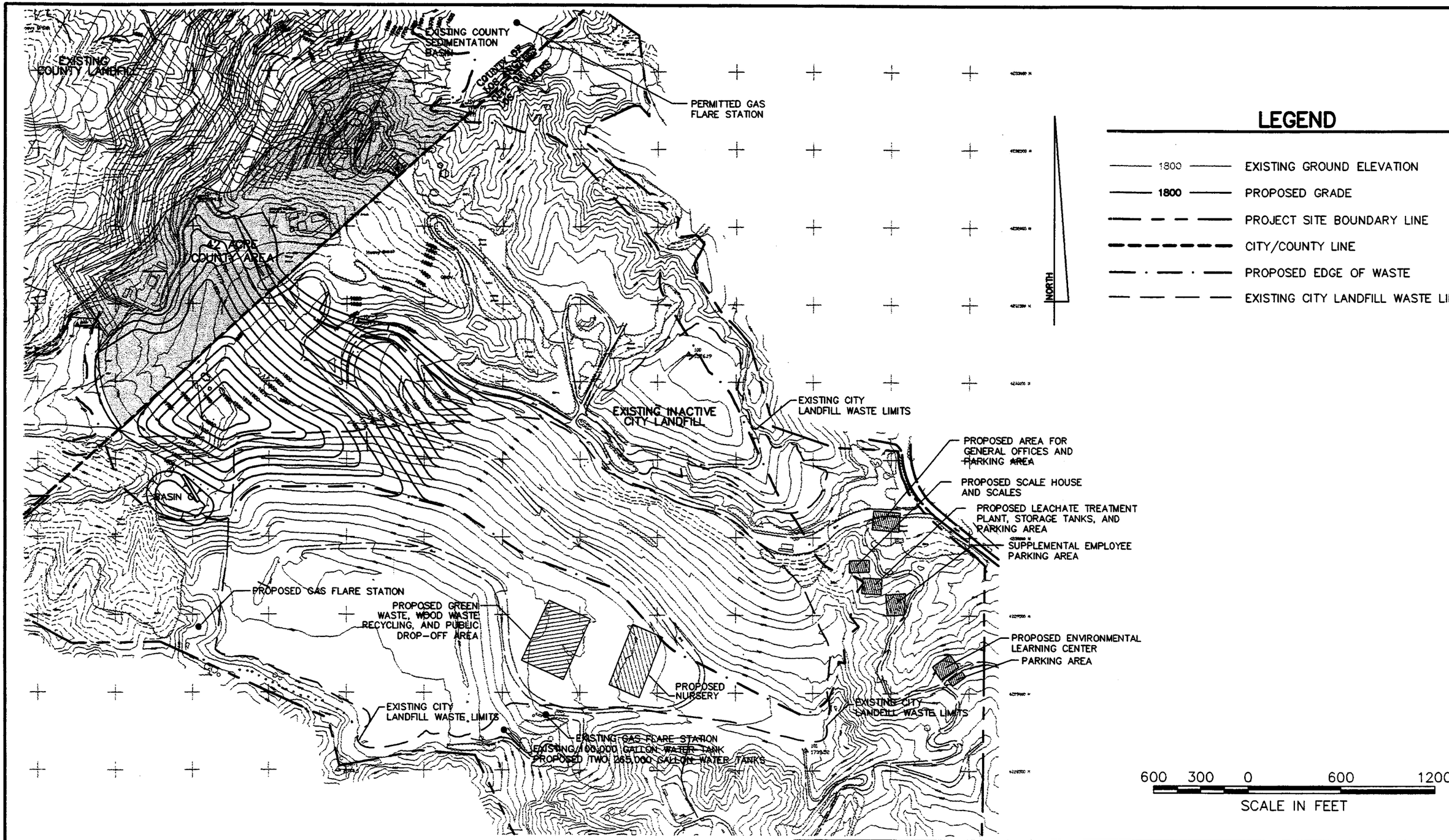


GeoSyntec Consultants

REDUCED VOLUME ALTERNATIVE
CONCEPTUAL BASE GRADING PLAN
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**5.5-1 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F011.DWG 199806151525 RCG

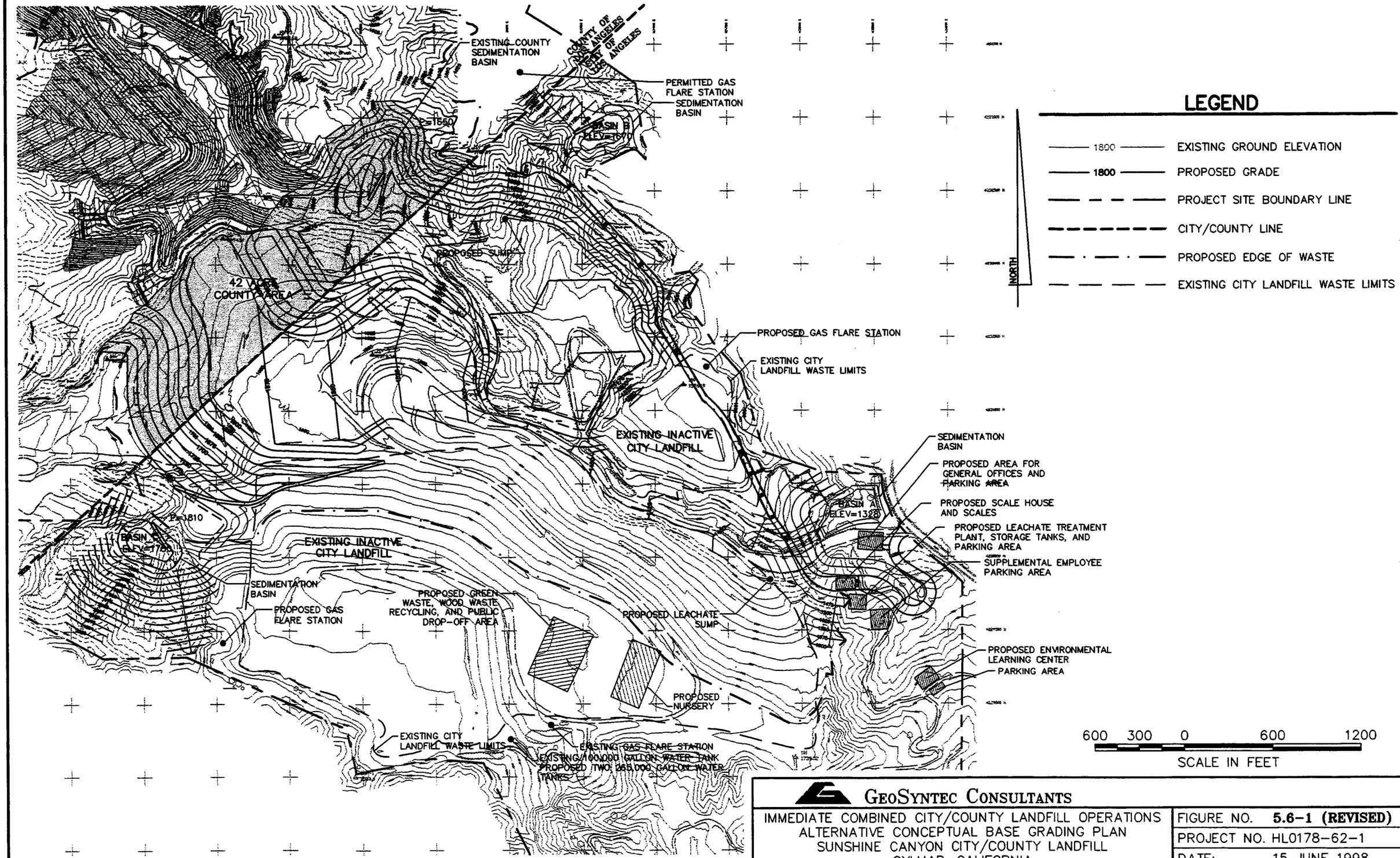


GeoSyntec Consultants

REDUCED VOLUME ALTERNATIVE
FINAL ELEVATIONS
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO. **5.5-2 (REVISED)**
PROJECT NO. HL0178-62-1
DATE: 15 JUNE 1998

DWG: 0178F012.DWG 199806151533 RCG



GeoSyntec Consultants

IMMEDIATE COMBINED CITY/COUNTY LANDFILL OPERATIONS
ALTERNATIVE CONCEPTUAL BASE GRADING PLAN
SUNSHINE CANYON CITY/COUNTY LANDFILL
SYLMAR, CALIFORNIA

FIGURE NO.	**5.6-1 (REVISED)**
PROJECT NO.	HL0178-62-1
DATE:	15 JUNE 1998

DWG: 0178F013.DWG 199806151536 RCG

3.0 TOPICAL ISSUES

Each comment received in the letters referenced in Section 1.0, above, was responded to individually in the Final SEIR. The following Topical Issues are also contained in the Final SEIR in order to provide detailed technical information and clarification in response to significant concerns that were received as written comments during the Draft SEIR public review period. The Topical Issues section is contained in Section 3.2 of the Final SEIR and is summarized below.

Topical Issue 1: Seismicity

> *Questions have been raised regarding the design of the proposed City/County Landfill to resist the effects of seismic ground shaking and whether potential active faults would result in the failure of the landfill liner or other proposed environmental control systems.*

Response

Several faults in the vicinity of the project site have been mapped by various consulting geologists.[3] The orientations and sense of movement of the faults on the project site, as well as their proximity to the Santa Susana thrust fault system, suggest that they all may be related tectonically. A group of faults with a northeasterly trend is clustered in the southeastern portion of the project site and another group of faults lies in the northern portion of the site as shown on Figures 4.1-4 and 4.1-7 in the Draft SEIR. No features indicative of recent faulting (e.g., fault scarps or offset structures) were detected from field investigations and detailed analyses of aerial photographs.

Figure 4.1-5 in the Draft SEIR depicts regional earthquake faults, and Figure 4.1-6 shows the tectonic setting of the project site. The most important active and potentially active faults that have the potential to generate significant strong ground motions at the site include the Santa Susana, San Fernando-Sierra Madre, and Northridge Blind Thrust Faults (less than 6 miles from the site) and San Andreas Faults (greater than 20 miles from the site). The Santa Susana fault is the closest to the project site at approximately 3.1 miles.

Seismic hazards that must be considered at the Sunshine Canyon site include primary fault rupture, secondary ground rupture (i.e., development of folds and fractures), and strong ground shaking. The potential for primary fault rupture within the boundaries of Sunshine Canyon is considered minimal. The faults that intersect the ground surface onsite do not display evidence of Holocene movement (e.g., within the last 11,000 years), indicating they are inactive. One relatively major inactive fault has been exposed to date during excavation for the County Landfill. This inactive fault, located in the ridge between the northwest and north canyons, was recognized and shown on site geologic maps prior to landfill development. These site geologic maps do not indicate that any major inactive faults would be exposed during construction of the proposed City/County Landfill. Extensive field investigation, including geologic mapping and logging of exploratory trenches by both consulting geologists and CDMG representatives, indicates that fault rupture

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3/ *Geology of Southeastern Ventura Basin, Los Angeles County, California*, U.S. Geological Survey Professional Paper 334-H, E.L. Winterer and D.L. Durham, pp. 275-336, 1962. *Geologic Map of the San Fernando Earthquake Area*, A.G. Barrows, J.E. Kahle, R.B. Saul, and F.H. Weber Jr., in *San Fernando, California, Earthquake of 9 February 1971:* California Department of Conservation, Division of Mines and Geology Bulletin 196, Plate 2, ed. G.B. Oakshott, 1975a. *Geology of the S.E. 1/4, Oat Mountain Quadrangle, Los Angeles County, California*, Richard B. Saul, California Department of Conservation, Division of Mines and Geology, Map Sheet 30, 1979; *Preliminary Geotechnical Feasibility Study - Proposed Class I Disposal Site, Los Angeles, California*, Geolabs, unpublished report, February 1981.

from the 1971 San Fernando earthquake did not occur within the boundary of the project site and that known fault traces show that there has not been fault displacement onsite in Holocene time.

The design of a landfill above a thrust fault accommodates the ground deformation associated with secondary ground rupture. The design models used for predicting the effects of thrust faults ensure the integrity of the liner and environmental control systems.

Seismic activity occurring in the site vicinity can produce strong ground shaking, which could result in damage to the landfill waste containment system, if these systems were designed, engineered, or installed incorrectly. Strong shaking can also induce landsliding in natural geologic materials that could, in turn, result in damage to the landfill containment and surface water control systems.

Seismic design of the landfill system includes providing mitigation for landslide potential by appropriate grading of the waste mass and natural slopes, designing the containment system to resist the effects of strong shaking, providing an emergency response plan to mitigate damage to containment systems that may occur (e.g., cracking of pipes or drainage channels, loss of power), and providing redundant systems where damage is not readily observable or repairable (e.g., use of a composite liner system).

With the implementation of City Mitigation Measures identified in the Draft SEIR, Section 4.1.4, Geologic Hazards-Seismicity, pp. 4-40 and 4-41, no significant impacts would occur.

Topical Issue 2: Landfill Stability During Northridge Earthquake

> *Questions have been raised regarding the performance and stability of solid waste landfills that experienced strong ground shaking during the January 17, 1994, Northridge earthquake. Additionally, the performance and stability of the inactive City Landfill in Sunshine Canyon during the Northridge earthquake have been questioned.*

Response

The Northridge earthquake occurred on January 17, 1994 (at 4:30 a.m. local time), and the main shock of the earthquake was centered near Northridge. This event was assessed by the University of California at Berkeley seismographic station to have a moment magnitude (M_w) of 6.7. Damage resulting from the earthquake was widespread within Los Angeles County. Damage in the epicentral region included the collapse of highway structures, damaged and/or destroyed residential and commercial structures, widespread disruption of utilities and other facilities, and numerous landslides.[4]

The performance of Class III nonhazardous landfills in the Southern California area affected by the earthquake was excellent. No landfills showed any physical signs of major instability, although several facilities experienced minor levels of lateral deformation and/or cracking at the surface. Additionally, many

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[4]/ *Preliminary Report on the Principal Geotechnical Aspects of the January 17, 1994, Northridge Earthquake*, eds. Jonathan P. Stewart, Jonathan D. Bray, Raymond B. Seed, and Nicholas Sitar, University of California at Berkeley, Earthquake Engineering Research Center Report No. UCB/EERC, p. 1. June 1994.

landfills experienced a temporary shutdown of their gas flare systems due to the loss of power after the earthquake.[5]

The Northridge earthquake produced no significant adverse impacts on the proposed project site. No cracking or deformation in the waste mass was found at the base of the existing inactive landfill. The minor cracking observed was limited to the landfill's surface cover area, and no waste was exposed. This cracking was repaired immediately by placing additional cover material over the cracks. During this period the landfill gas (LFG) extraction system was shut down for 2 days. However, no damage to the landfill's ancillary structures resulted.

The performance of the existing landfill in the Northridge earthquake and observations of the performance of other solid waste landfills in major earthquakes indicate that solid waste is extremely resistant to the effects of strong ground motions and is not susceptible to loss of strength or large internal displacements due to earthquake shaking. Therefore, the waste mass of the existing landfill and solid waste placed within the proposed fill areas are expected to perform well when subjected to strong shaking from earthquakes.

In regard to other solid waste landfills after the Northridge earthquake, cracks were observed in all waste cells of the Chiquita Canyon Landfill and tears were discovered in the landfill liner. A smooth liner was used at the base of the landfill, providing inadequate shear resistance to restrain the base from sliding, thereby resulting in a large deformation.

The Lopez Canyon Landfill liner system performed extremely well during the Northridge earthquake and sustained no damage despite being subjected to stronger shaking than the Chiquita Canyon Landfill. A similar liner design for the Sunshine Canyon County Landfill was used. Measures used in the design of the Lopez Canyon Landfill liner system that prevented rupture or tearing of the liner system included anchor trenches used above or outside (laterally) of the waste for temporary anchorage, no destructive samples collected within 5 feet of the crest or toe of a slope or an anchor trench, and a textured liner at the base of the landfill to limit permanent seismic displacement to less than 12 inches. Similar design methods would be incorporated for the City/County Landfill. For additional information, refer to the Draft SEIR, Appendix C16, Assessment of the Performance of Class III Nonharzardous Solid Waste Landfills in Recent Earthquakes.

Topical Issue 3: Landfill Fugitive Dust Emissions During High Wind Conditions

> *Concerns have been raised regarding the proposed City/County Landfill and the potential for fugitive dust emissions to occur during high wind conditions, potentially creating significant impacts on sensitive land uses within the community of Granada Hills.*

Response

As stated in the Draft SEIR, Section 4.2.2, California's SCAB Regional Climate Conditions, p. 4-47, during the winter months the project area experiences a frequent wind flow from the north and northwest through the Newhall Pass into the western San Fernando Valley. These winds predominate between 11:00 a.m. through 5:00 p.m. The speeds (16.5 mph average in the Newhall Pass) reflect the influence of Santa Ana winds, which are strongest during those hours of the day and blow in a similar direction. Onsite

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[5]/ Ibid., p. 200.

measurement has shown the overall average wind speed to be 9.9 mph with a maximum 1-hour measurement of 45 mph. It should be noted that the overall average wind speed and maximum 1-hour wind speed do not preclude the presence of very low or high wind speeds, especially during Santa Ana conditions.

Dust from construction activities, including physical site disturbance, material deliveries, employee commuting, and potential wind erosion during high wind episodes, may create a visual and soiling nuisance beyond the property line. Because dust impacts are expected to be significant during the construction phase, standard mitigation measures (by project design) will be implemented to control fugitive dust emissions during construction as required by SCAQMD Rules 402 (Nuisance) and 403 (Fugitive Dust).

In addition, fugitive dust emissions in combination with particulate matter less than 10 microns in diameter (PM_{10}) emissions generated from vehicular exhaust are anticipated to create a significant impact. Past operations have shown that the higher-elevation upper plateau and southern berm areas of the existing inactive landfill have experienced greater wind-generated fugitive dust occurrences than the lower elevations within the canyon. However, enhanced soil treatment measures have stabilized soil conditions and further enhance onsite revegetation.

The closest residential area in the community of Granada Hills to the proposed landfill footprint would be approximately 1,700 feet. During high wind events, monitoring of weather conditions is conducted by BFI personnel stationed in the existing environmental control center. Weather information is conveyed by radio transmission from environmental control system personnel to the BFI foreman and the onsite construction contractors and/or operating personnel. The BFI foreman has control over construction activities and land filling operations, and has the authority to cease construction activities and/or close the landfill if warranted.

In addition to standard dust suppression measures, the project proponent will use soil sealant to control fugitive dust emissions and provide erosion control. The soil sealant is supplied as a highly concentrated liquid catalyst and applied in dilute water solutions. A grader would be used mix and blend the soil sealant into the soil. After soil is blended with the soil sealant solution, a compactor would be used to thoroughly compact the treated material. The soil sealant requires no special safety precautions in handling or storage and will not harm personnel or equipment.

A number of mitigation measures will reduce fugitive dust emissions during construction and operational activities at the project site, including daily watering of construction areas; wind speed monitoring; revegetation of disturbed areas; use of chemical dust suppressants and soil stabilizers; use of crushed stone topcoat in addition to dust suppressants; use of cover material from adjacent areas when possible to reduce travel distances; and restricting operations to no more than a 10-acre active working face area. Refer to Appendix D2, Revisions to Draft SEIR, Section 4.2, Air Quality and Appendix D4, Revisions to Draft SEIR, Appendix B8, Air Quality Modeling and Wind Speed and Direction Summary, in the Final SEIR for a detailed discussion of project mitigation. With the implementation of these mitigation measures for the proposed City/County Landfill, significant impacts from fugitive dust emissions would be substantially reduced.

Topical Issue 4: Landfill Gas Generation and Odor Control

Concerns have been raised that the proposed City/County Landfill would generate substantial volumes of LFG, resulting in the potential for odor migration onto sensitive land uses.

Response

Odors can occur when the landfill surface, due to differential waste settlement, subsidence, or cracks, allows the LFG to escape into the atmosphere. At the existing inactive City Landfill, cracks found on the landfill surface are filled as part of a continuous maintenance program. A similar procedure would be performed at the proposed landfill footprint area.

The proposed LFG collection and flaring system would be installed to collect gases generated by the decomposition of refuse through a series of horizontal and vertical gas collector wells designed to minimize the potential of onsite and offsite gas emissions and odors. The proposed LFG collection and disposal system will consist of gas extraction wells and piping. This system will be constructed of polyethylene pipe, which will flex as differential settlement occurs at the landfill. Once LFG is generated, it will be drawn into the horizontal collectors or wells and subsequently to the collection piping system by the vacuum blowers. The horizontal gas collection system will be installed when preparing each new cell area and will be expanded as necessary to ensure compliance with SCAQMD Rule 1150.1 (Control of Gaseous Emissions from Active Landfills).

The monitoring of surface and ambient air quality is a required by the SCAQMD throughout the site life of the landfill and during its closure and postclosure maintenance period. Both the LFG collection and flaring system and surface sampling program will require approval by the SCAQMD (to identify areas of the landfill where gas may be escaping).

The project would prepare and implement an odor abatement program to ensure that odor levels within the facility are kept within baseline odor standards and odors emanating form the facility would not be detectable at the property boundaries. The best method for ensuring that there will be no odor generation is by proper compaction and coverage of all solid waste materials by the end of the working day. Refuse received at the proposed landfill would be property disposed within 1hour of receipt, compacted, and covered with a minimum layer of 6 inches (i.e., State standard) of compacted soil cover material or an approved alternative daily cover by the end of the working day. The odors that may be released directly from the refuse prior to being covered with cover material are usually at low levels and are dispersed in the atmosphere at levels of concentration below which they do not create a nuisance to local receptors. The proposed land filling operations are located at sufficient distances from the potential receptors (residential) and separated by sufficient terrain so that no odor nuisance from refuse emplacement should occur.

Mitigation measures that would be implemented as part of a comprehensive odor control program include the following: using daily and intermediate cover material over deposited wastes; filling any surface cracks with clean dirt as necessary; extracting LFG through the use of an LFG collection and recovery system; limiting the size of the working face; compacting solid waste within 1 hour of its arrival at the working face; and continuous landfill surface sampling, collection of ambient air samples, and regular monitoring of the LFG collection and recovery system.

With the implementation of City Mitigation Measures in the Draft SEIR, Section 4.2.13, Odor Impacts, pp. 4-94 through 4-96, no significant impacts from odors would occur.

Topical Issue 5: Stormwater Runoff Control Measures

> *Questions have been raised regarding the project proponent's ability to control and contain stormwater runoff so that contact between stormwater and the landfill will be avoided.*

Response

Implementation of the proposed project would result in a net change (or diversion) to existing drainage patterns, hydrologic conditions, and quantities through alterations to and discharges from the project site. Construction grading and the removal of surficial vegetation would remove existing barriers that currently act to dissipate (i.e., slow down and reduce) stormwater runoff from the site. As a result, if surface water control measures are not implemented, the proposed project has the potential to increase the stormwater runoff and peak discharge, increase erosion and sediment transport, and decrease surface water quality due to increased sediment loads. The recommended mitigation measures provided in the Draft SEIR, pp. 4-113 and 4-114, require the project proponent to make improvements consisting of surface water drainage channels, interceptor ditches, pipelines, and sedimentation basins. These proposed features will collect, direct, and safely convey stormwater runoff around the landfill site and route runoff into regulated sedimentation basins. Figure 4.3-2 of the Draft SEIR shows the proposed site drainage plan. Moreover, these features will be designed and constructed to minimize ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping. The proposed City/County Landfill will be designed to accommodate a 100-year storm event. Specifically, the sedimentation basins will handle sediment and debris flow, settle out suspended soil particles, prevent silting of the downstream channel, and maintain the natural watercourse.

Drainage from the project site (including the main canyon and four tributary canyons) converges at the mouth of Sunshine Canyon near the landfill entrance. Currently, stormwater from within the upper reaches of Sunshine Canyon is collected in the County Landfill sedimentation basin. Water that collects in that basin is periodically monitored under the stormwater monitoring plan for the operational County Landfill. Drainage from this basin travels southerly into a wash before reaching the mouth of the canyon near the landfill entrance.

The inactive City Landfill has numerous drainage control features, such as benches, interceptor ditches, and concrete drainage channels (see Draft SEIR, Figure 4.3-2), to divert stormwater runoff away from the landfill. These control improvements are maintained regularly and closely monitored during the rainy season so that any necessary repairs or maintenance can be performed in an expeditious manner. Areas of ponding or erosion damage on the existing inactive landfill are repaired upon discovery and as weather permits.

To minimize potential stormwater quality impacts during construction, the project proponent will request coverage under the General National Pollutant Discharge Elimination System (NPDES) permit from the Los Angeles Regional Water Quality Control Board (LARWQCB) for nonpoint-source stormwater runoff. The NPDES permit regulates general construction activities and industrial activities. In general, the NPDES permit application would describe the landfill, type and quantity of wastes expected, effluent and receiving water limitations, pretreatment requirements, and monitoring programs. This permit is intended to eliminate nonstormwater discharge to existing stormwater systems, implement a water pollution prevention plan and monitoring program, and require monitoring of discharges into the localized stormwater system.

During the operational phase of the project, various control measures and features described in the Draft SEIR will be used to separate stormwater from wastes being disposed of in the proposed landfill and to control sediment load, debris, and erosion impacts caused by stormwater runoff. However, the long-term impacts associated with development and operation of the landfill could allow potential pollutant sources to be transported into local stormwater systems. These potential impacts will be minimized by properly storing all liquids (e.g., oil, antifreeze, lubricants, or diesel fuels) necessary for the operation and maintenance of landfill equipment and reducing the potential for spills. Any onsite spills will be contained in accordance with an approved spill response plan. In addition, any fertilizers or insecticides used for

revegetation purposes will be stored within the plant materials center. To the greatest extent possible, the products used will be biodegradable and nontoxic. With the implementation of City Mitigation Measures identified in the Draft SEIR, Section 4.3.1, Surface Water, pp. 4-113 and 4-114 for stormwater runoff, no significant impacts would occur.

Topical Issue 6: Hydrogeologic Relationship between Sunshine Canyon and the San Fernando Valley Groundwater Basin

Questions have been raised regarding the hydrogeologic connection between Sunshine Canyon and the San Fernando Valley Groundwater Basin.

Response

Studies indicate that the limited groundwater that lies beneath the project site generally flows in a south to southeast direction. Results of an exploratory drilling program and subsequent water level readings indicate that confined groundwater conditions may exist at numerous locations within the project site. Although groundwater in the uppermost aquifer occurs under unconfined conditions in the alluvial sediments, it generally occurs under confined conditions in the top weathered zone of the Towsley Formation. Groundwater in the lower bedrock zone was also found to occur under confined conditions.

The geologic structure works in conjunction with onsite topography to restrict groundwater movement within and down the canyon axis. With the relatively low hydraulic conductivity documented in the Towsley Formation and the hydraulic gradients at the site, groundwater velocities are low. The bedrock units to the south of the main canyon generally dip to the north into the main canyon, and this minimizes groundwater movement to the south and southeast. Along the northern side of the main canyon, the bedrock units dip to the north, and groundwater movement is not likely to be impeded by the structure.

Within Sunshine Canyon, groundwater follows the topography and moves down slopes, continuing toward the valley axis. The primary component of groundwater flow is shown to be horizontal. The vertical component of flow is highly variable over the project site. In the upper portions of the canyon where recharge is likely, a downward component of flow is suspected. In the lower portion of the canyon, there is evidence of an upward component of groundwater flow direction. This upward component is also demonstrated further downstream and near the landfill entrance.

Movement of shallow groundwater follows the direction of surface drainage. Water stored in the alluvium and shallow bedrock generally flows below grade within the canyon. Based on estimates of hydraulic conductivity using soil descriptions from boring logs, the estimated groundwater discharge velocity in the alluvium ranges from approximately 0.005 to 1 foot/day. Groundwater in the bottom of the canyon flows slowly toward the mouth of Sunshine Canyon.

Due to the nature of the bedrock (i.e., interbedded sandstone and shale), the flow rate of groundwater at the project site can vary significantly over short distances. However, the presence of nonactive faults in addition to interbeds of low-permeability shale and mudstone tends to restrict the flow of groundwater. Subsurface water in Sunshine Canyon is effectively hydraulically separated from the San Fernando Valley alluvium by the low-permeability bedrock. Groundwater flow in the bedrock is not continuous between the canyon and valley floor area.

After independently reviewing published hydrogeologic reports for the Sunshine Canyon area, the Watermaster for the Upper Los Angeles River Area (ULARA) concluded that, other than through the alluvium, there was no groundwater connection between Sunshine Canyon and the San Fernando Valley Groundwater Basin. The Watermaster also concluded that the natural bedrock material underlying the canyon is of low permeability and has low storage capability.

A report prepared for the City Bureau of Sanitation (BOS) on groundwater movement in Sunshine Canyon states:

> Whatever groundwater movement does occur is undoubtedly complicated and slow. Complications include the bedding, which, although generally dipping towards the east in the lower canyon, dips steeper than the hydraulic gradient making it necessary for the groundwater to move across the bedding. Interbeds of siltstone and shale act as subsurface dams with little or no permeability. Groundwater quality is poor.[6]

No contact between deposited refuse and alluvial soils would occur as a result of proposed landfill development. Additionally, any possibility for groundwater migration has been effectively cut off since the installation of the groundwater extraction trench across the bottom of Sunshine Canyon. This trench also serves to intercept drainage from the County Landfill. Subject to Waste Discharge Requirements (WDRs), liquids can be subsequently used onsite for landscape irrigation, dust control, or other non emergency uses.

It is anticipated that the proposed City/County Landfill would not impact imported drinking water or domestically produced drinking water (e.g., from local area wells) since the nearest spreading ground is the Hansen Spreading Ground located approximately 5 miles southeast of the project site. In addition, surface water runoff from the project site is safely conveyed into the City's flood control system, which connects with the County's flood control system. No significant impacts to beneficial uses of groundwater of the San Fernando Groundwater Basin would occur as a result of the development of the proposed City/County Landfill.

Topical Issue 7: Groundwater Protection

> *Questions have been raised regarding whether the monitoring systems required for the proposed City/County Landfill would be sufficient to ensure groundwater protection.*

Response

Currently, 22 groundwater monitoring wells are installed at the project site to monitor groundwater conditions and water quality. Both shallow and deep groundwater monitoring wells have been installed. The shallow wells are screened exclusively within alluvial material and bedrock to properly evaluate and compare groundwater quality up gradient and down gradient in similar geologic formations. Up gradient wells were installed and designed to monitor natural groundwater conditions present within the water-bearing strata. These wells are intended to supplement monitoring of groundwater conditions around the perimeter of the existing landfill and to monitor for possible offsite pollution migration. Down gradient wells (i.e., deep monitoring wells) were installed to monitor potential impacts resulting from the existing inactive

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6/ *Hydrology of Sunshine Canyon North Valley Landfill Site*, Robert T. Bean, Consulting Geologist. Unpublished report, July 28, 1978.

landfill. Of the 22 wells installed, 13 specifically monitor groundwater down gradient from the existing landfill. The County Landfill is hydrogeologically up gradient of the existing inactive City landfill.

In addition to groundwater monitoring wells, the vadose zone is also monitored. This zone is defined as the area below the landfill and above groundwater where water may be present or suspended in the weathered bedrock or soil. The presence or absence of this water has historically been monitored at the City Landfill through the use of lysimeters, which are special monitoring points designed to permit the collection of water that may be in the pores of the soil or weathered bedrock above the groundwater zone. These wells are shown in the Draft SEIR, Figure 4.3-4.

Currently, vadose zone monitoring is accomplished by four lysimeters that have been installed in the vadose zone of the existing inactive City Landfill. Quarterly monitoring records (since lysimeter installation) have indicated that no liquid can generally be collected from the lysimeters. Monitoring of the vadose zone is also conducted using a series of gas sampling probes installed around the waste mass. These probes are monitored on a monthly basis for the presence of LFG as required by the SCAQMD. One groundwater sample is collected in one of the probes exhibiting the highest LFG concentration, as required by the SCAQMD. Monitoring at the County Landfill is accomplished by sampling the under drain system outfall points instead of lysimeters. For both areas, sampling is performed quarterly and findings are reported to the LARWQCB. This would also occur for the City/County Landfill.

As indicated in Topical Issue 6, any possibility for groundwater migration has been effectively cut off since the installation of the groundwater extraction trench across the bottom of Sunshine Canyon. With the implementation of City Mitigation Measures identified in the Draft SEIR, Section 4.3.2, Groundwater, pp. 4-135 and 4-136, and the design and installation of the comprehensive monitoring system, no significant impacts to the beneficial groundwater uses of the San Fernando Valley Groundwater Basin would occur.

Topical Issue 8: Landfill Liner Design

> *Concerns have been raised that the proposed design for the landfill liner system would not provide sufficient protection against the degradation of existing groundwater resources.*

Response

As stated in City Mitigation Measures identified in the Draft SEIR, Section 4.3.2, Groundwater, p. 4-135, in compliance with the Resource Conservation and Recovery Act (RCRA), the proposed development of the City/County Landfill would include the installation of a composite liner system which will be placed under the entire landfill footprint, including the canyon bottom and side slopes. Design details of each site-specific liner system will be described in the project proponent's Report of Waste Discharge (ROWD) for the landfill facility. The liner systems will be constructed and field tested in accordance with strict quality assurance/ quality control (QA/QC) procedures submitted to and approved by the LARWQCB prior to construction.

Areas of natural groundwater seepage will be intercepted by the installation of a subgrade gravel drainage blanket. A series of under drains will be placed in areas where seeps and springs have been identified and will collect and convey any water from these sources to the sedimentation basin. The nature and source of the seep will be investigated including sampling and laboratory testing.With the proper installation of the proposed liner system, no significant impacts on groundwater resources are anticipated with development of the proposed project.

Topical Issue 9: Leachate Generation, Collection, and Treatment

Concerns have been raised that the proposed City/County Landfill would result in substantial leachate generation, which could result in surface or groundwater contamination.

Response

The potential for leachate to form when water passes through deposited waste could occur from excess water use, water spreading for irrigation or dust control, or heavy rainfall. Leachate generation rates are primarily dependent on the amount of liquid the waste originally contained and the quantity of precipitation that enters the landfill through the cover and falls directly into the waste. The leachate's chemical composition will change as the proposed landfill goes through the various phases of decomposition, similar to the changes that occur in LFG production.

Based on local average precipitation data, combined with the assumptions of an operating landfill designed with interim covers in place, an engineering model indicated that approximately 5.2 to 9.2 inches of precipitation may percolate through the landfill in 1 year. It is anticipated that after closure, and with an engineered final cover placed on the landfill, only minimal amounts of precipitation would percolate through the landfill in 1 year.[7] The steeper slopes of the City/County Landfill would be built with surface drainage systems that would not be subject to significant percolation due to the rapid rate of surface water runoff. As such, the major contributor of percolation is expected to be the top deck surface area of the landfill, which is relatively flat. Preliminary design of the project site indicated that infiltration would be lessened by reducing the area of percolation in the canyon.

With regard to the long-term contamination potential of a "typical" landfill permitted to accept municipal solid waste, an extensive review of published material conclusively demonstrated that landfill leachate possesses a trend of decreasing pollution loads over time.[8] By using the engineering model, the County Landfill had an estimated leachate production rate of 120 gallons per minute (gpm). No leachate has been detected in the groundwater monitoring wells at the County Landfill, and all extracted, treated alluvial groundwater has been approved for onsite irrigation and dust control use by the LARWQCB.

To address potential environmental impacts resulting from leachate formation, the proposed City/County Landfill is mandated by State and federal laws to install a leachate collection and removal system (LCRS). The LCRS will be installed on top of the liner system in all areas of the proposed landfill footprint including side slope and waste-on-waste areas of the existing inactive City Landfill. This system will be constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the landfill. The LCRS will be designed of sufficient strength and thickness to withstand pressures exerted by overlying wastes, waste cover materials, and equipment used during land filling activities.

The LCRS will be of the blanket type and overlay the liner, and it will collect and direct the intercepted leachate toward leachate sumps where it will be collected and removed from beneath the waste. The blanket system will be sloped toward the sumps to prevent ponding of leachate. The proposed LCRS drainage

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7/ *Report of Disposal Site Information, Proposed Sunshine Canyon Landfill Extension Site*, Volume I, PRA Group, p. 72, August 16,1991.

8/ M. Reinhard, Ph.D., Stanford University. Unpublished letter to Purcell, Rhoades & Associates, December 21, 1987.

network will be designed and engineered to withstand the potential effects of seismic events. The pipe selected for the proposed LCRS drainage network will have the ability to deform (be flexible) without leakage during potentially strong earthquakes.

In addition to design features described above, operational practices will be performed by the landfill operator to minimize leachate generation. These include diverting stormwater runon around the landfill, diverting surface water runoff away from active landfilling areas, minimizing the size of the landfill working face area, compacting disposed waste to decrease its permeability and increase its ability to shed water, grading the landfill surface away from active landfill areas, and applying daily, intermediate, and final cover material to minimize moisture infiltration into the waste mass. Additionally, the proposed City/County Landfill will not accept liquid wastes or wastes with high-moisture content (i.e., wastes containing greater than 50 percent water by weight).

A description of the components of the leachate treatment system is provided in the Draft SEIR, Section 2.7.4, Leachate Collection and Removal System, p. 2-61. Leachate treatment processes and the reuse of treated liquids would be conducted in accordance with applicable permit conditions of the LARWQCB.

The project site is also located in a relatively dry area (average annual rainfall is estimated at approximately 10 inches);[9] a typical rainstorm has a short duration and high intensity. Rainfall would tend to run off the landfill surface and not infiltrate the surface area, minimizing the potential for leachate formation. The design and operational characteristics of the proposed landfill, the installation of numerous environmental protection and control systems, and the continuous monitoring during landfilling operations and the closure and postclosure maintenance period will ensure the integrity of groundwater resources within Sunshine Canyon. It is not expected that this resource would be impacted by the proposed project development.

With the implementation of City Mitigation Measures identified in the Draft SEIR, Section 4.3.2, Groundwater, pp. 4-135 and 4-136, for leachate generation, no significant impacts would occur.

Topical Issue 10: Sensitive Biological Habitats

> *Statements have been made that the removal of Venturan coastal sage scrub at the site would result in unavoidable significant impacts on endangered and sensitive animal species.*

Response

The development of the proposed City/County Landfill within the City portion of Sunshine Canyon would result in the direct loss of approximately 82.2 acres of Venturan coastal sage scrub habitat (identified as "highly" threatened) and resulting loss of small mammals, reptiles, amphibians, and other small animals of slow mobility. This impact is considered significant. More mobile wildlife species would be forced to move into remaining areas of open space or other habitats.

The California Department of Fish and Game (CDFG) has identified a list of Species of Special Concern (SSC). Several SSCs were located during field surveys or have the potential to occur onsite. (Refer to the Draft SEIR, Table 4.4-4, p. 4-159, for a status of sensitive wildlife species.)

9/ Based on County Department of Public Works Oat Mountain Hydrologic Map (1969), closest 50-year isohyet (maximum 24-hour amount) located within project site boundary.

Suitable habitat exists within the Venturan coastal sage scrub habitat for the California gnat catcher *(Polioptila californica californica)* that is federally listed as threatened and is an SSC. Although the species was not observed during numerous field surveys conducted onsite, the project site is located within this species' historic geographical range; consequently, the species could possibly move onsite prior to project implementation. Mitigation measures are proposed to reduce impacts on the California gnat catcher to a less than significant level. Surveys for the California gnat catcher will be conducted prior to obtaining grading permits to determine the status of the species within the proposed development areas. If grading activities occur during the nesting season, a federally permitted biologist will survey areas to determine whether the species is present. If gnatcatchers are present, grading activities will cease until proper officials are notified, and additional habitat restoration or purchase of suitable offsite habitat will be required.

The existing Venturan coastal sage scrub also provides suitable habitat for reptiles such as the San Diego horned lizard *(Phrynosoma coronatum blainvillei)*, the coastal western whiptail *(Cnemidophorus tigris multiscutatus)*, and the silvery legless lizard *(Aneilla pulchra pulchra)*, considered an SSC, and the coastal rosy boa *(Lichanura trivirgata roseofusca)*. Because suitable habitats are available in the vicinity of the project site, impacts on these species are considered adverse but not significant. The removal of Venturan coastal sage scrub would also affect the following SSC bird species that were observed onsite and could potentially breed onsite: Southern California rufous-crowned sparrow *(Aimophilia ruficeps canescens)* and loggerhead shrike *(Lanius ludovicianus)*. Because suitable habitat exists for these species in the vicinity of the project site, impacts on these species are considered adverse but not significant.

Coastal sage scrub habitat also provides winter foraging habitat for the northern harrier *(Circus cyaneus)* (SSC), which was observed on the adjacent site. The prairie falcon *(Falco mexicanus)* (SSC) was also observed onsite. The golden eagle *(Aquila chrysaetos)* is a California Fully Protected Species, an SSC, and protected by the federal Bald Eagle Act. A golden eagle was observed onsite during previous field surveys. Because of the large amount of foraging habitat available for this raptor species in the vicinity of the site, impacts on raptor foraging habitat are not significant. If habitat removal is proposed during the raptor breeding season (i.e., March to July), a survey will be conducted for active nesting areas. If active nests are found, no construction activities will occur within 500 feet of an active nest until the young have fledged. The 500-foot perimeter around each nest will be fenced. Trees containing nests will only be removed during the nonbreeding season.

Proposed project mitigation includes the restoration of Venturan coastal sage scrub onsite, which will include a detailed conceptual mitigation plan containing information on planting, maintaining, and monitoring revegetated coastal sage scrub habitat. The implementation of this plan will provide greater than a 1:1 (replacement: removal) ratio to offset loss of habitat. Surface soils and seed sources of Venturan coastal sage scrub will be gathered from areas of the project site and spread within onsite mitigation areas.

After the incorporation of the City Mitigation Measures identified in the Draft SEIR, Section 4.4.1, Vegetation and Wildlife Habitat Assessment, pp. 4-179 through 4-181, no significant impacts on endangered and sensitive animal species due to the removal of Venturan coastal sage scrub would occur.

Topical Issue 11: Oak Trees and Douglas Fir Trees

> *Questions have been raised regarding why the project proponent would perform offsite rather than onsite big-cone Douglas fir and oak tree mitigation for those resources that would be disturbed within Sunshine Canyon.*

Response

Both onsite and offsite planting areas are being proposed for big-cone Douglas fir and oak tree mitigation. The proposed project (including closure activities) would result in the direct loss of 545 coast live oak trees, 19 canyon live oak trees, and 2.7 acres of big-cone Douglas Fir trees. Direct project impacts on these resources will be mitigated to the greatest extent possible by implementing replanting programs and performing phased restoration on the landfill site. Mitigation tree planting will primarily occur within O'Melveny Park and the ±100 acre open-space area located south of the existing landfill. Walnut and oak trees will be planted in suitable barren portions of the open-space area between the existing City Landfill and Granada Hills, O'Melveny Park, in East Canyon, and on the canyon ridge areas above the clearing limits. Sycamores and willows will be planted along Bee Canyon and East Canyon Creek. Appropriate planting locations will be selected based on soil types, steepness of the slope, and aspect (i.e., location and or direction of the sun). City Mitigation Measures for the loss of oak tree resources will comply with the Los Angeles City Oak Tree Ordinance and include replanting native trees at a 2:1 (replacement:removal) ratio, consisting of 15-gallon or a 5:1 ratio of 3-gallon container trees. Mitigation trees will be planted prior to removal of impacted trees, and all mitigation trees will need to be specimen size within 1 year after tree removal. (A specimen tree is defined as a 15-gallon tree with a minimum trunk caliper of 1 inch measured 1 foot above the ground.) A total of one hundred 24-inch box and twenty-five 36-inch box size coast live oak trees will be planted in areas identified by the City. The trees planted will be required to be in natural form. The total mitigation tree count obtained using the 5:1 replacement ratio will be reduced by 125 trees to account for the inclusion of these larger trees. To assure successful establishment and survival of the mitigation trees, a 3-year monitoring and maintenance program will be implemented. Each year, the mitigation planting will be monitored for growth and survival.

Native tree seed stock will be obtained from the onsite plant materials center. The center will include a greenhouse and shade house that will be used for the germination of native tree seed stock (e.g., coast live oak, canyon live oak, big-cone Douglas fir, sycamore, maple, and black walnut) and native vegetation gathered in and around the Sunshine Canyon area. Once germinated, these species will be used as part of the revegetation programs within Sunshine Canyon.

The existing nursery (located in the City) is recognized as one of the largest growers of coast live oak trees in the Southern California region. The project proponent, in conjunction with its consulting forester, has advanced the growing techniques for both the coast live oak and the big-cone Douglas fir tree species. A cooperative research program has been established at this nursery with Oregon State University, Department of Forest Sciences. Future onsite revegetation programs that are being proposed will be established in cooperation with the City's Chief Forester (Street Tree Division). The current tree planting and mitigation program at the existing City Landfill is achieving a near 90-percent average success rate, and trees planted in the open-space area are increasing in height by 6 inches or more per month.

After the incorporation of City Mitigation Measures for Douglas firs and oak trees identified in the Draft SEIR, Section 4.4.3, Native and Nonnative Tree Resources, pp. 4-197 and 4-198, no significant impacts on these resources would occur.

Topical Issue 12: Wetlands

> *Questions have been raised regarding why the project proponent would perform offsite rather than onsite wetlands mitigation for impacts on resources that would be disturbed within Sunshine Canyon.*

Response

Onsite mitigation for the loss of wetlands is not practical due to unsuitable conditions for establishing both wetlands and riparian habitats. As a result of this determination, the project proponent will provide mitigation that will result in no net loss of wetland habitat. Development of the City/County Landfill would remove both wetland and riparian habitats from the project site. It is expected that the stream zones and wetland areas located within the proposed landfill footprint and some areas external to those areas (i.e., used for ancillary facilities) would be graded, filled, or disturbed as a result of landfill development. Because the landfill would remain indefinitely (as a constructed fill area), wetland habitats would not be reestablished within these areas.

Potential candidate mitigation sites have been identified by the project proponent in conjunction with resource agencies include Bull Creek, Bee Canyon, and East Canyon, which are located either adjacent to or in proximity to the project site. If neither of these potential candidate sites are available, the project proponent will purchase wetland credit through an established mitigation bank (one that is already established by a developer, public, nonprofit, or private entity) in consultation with regulatory agencies as compensatory mitigation for impacts on wetland and riparian resources.

After the incorporation of City Mitigation Measures for wetlands identified within the Draft SEIR, Section 4.4.2, Wetlands and Riparian Habitat, pp. 4-189 through 4-191, no significant impacts on this resource would occur.

Topical Issue 13: Closure of Existing Inactive City Landfill

> *Questions have been raised regarding the required closure of the existing inactive City Landfill, and revegetation activities.*

Response

The proposed engineered equivalent of the required final cover (pursuant to California Code of Regulations [CCR], Title 27, §21090) would consist of a monolithic soil layer placed on the landfill's top slopes, side slopes, and bench areas. The vegetative layer would be placed on top of the final cover for closure of the existing inactive City Landfill on those portions of the landfill's top slopes, side slopes, and bench areas that are not part of the proposed City/County Landfill project design. Vegetative cover would be placed on an estimated ±125 acres of the ±205 acre existing inactive City Landfill.

The vegetative layer would provide long-term erosion control caused by potential surface water runoff. When revegetated, a permanent grass and legume cover will provide an effective means to control fugitive dust emissions. Selected plant species would be chosen for rapid establishment. Due to the existing terrain, the seed mix chosen would be comprised of shallow-rooted (less than 12 inches) drought- and pH-tolerant plants. Native and nonnative seed mix would be applied. It is anticipated that the vegetation cover soil would eventually evolve into a mosaic of shrubs interspersed with annual grasslands. Once established, selected plant species are intended to be self-propagating and not require excessive irrigation or long-term maintenance.

To ensure successful revegetation, a 3-year monitoring and maintenance program would be implemented. Periodically, revegetated areas would be monitored for growth and survival rates. A maintenance and monitoring program would be implemented during the 30-year postclosure maintenance period.

A ±100 acre open-space area is located southeast of the existing inactive landfill within the City jurisdiction. This area is maintained as open space and will be enhanced by the project proponent with additional natural vegetation to promote wildlife in this area. Appropriate planting locations will be selected within this area based on soils, slope steepness, and aspect. The external abutting slopes and peaks of the inactive landfill site will remain undisturbed. The upper portions of the ridgeline (i.e., 50 vertical feet below the ridgeline) will also be left undisturbed. The upper perimeter ridges of the inactive City Landfill will be planted with native trees in order to minimize visibility of the inactive landfill and proposed City/County Landfill.

The project proponent proposes that the City/County Landfill would be planted with a variety of trees, shrubs, and grasslands to provide wildlife habitats. As operating landfill areas are completed, it is proposed that the finished slope will be covered with both amended soil and recycled green waste material. This soil cover will provide rooting material for the final vegetation. The project proponent also proposes that revegetation would take place concurrently with filling operations as the landfill progresses up the canyon; only the active filling areas and other operational areas of landfill would not be vegetated. The remainder of the inactive disturbed areas onsite would be planted with either temporary vegetation (on areas that remain inactive for a period longer than 180 days) or permanent vegetation.

Revegetation of slopes and fill areas with appropriate native flora will be accomplished to support local fauna. As part of the proposed revegetation plan, the reestablishment of vegetation will focus on using native species from local seed sources. Nonnative species may be used only if it is approved by the consulting biologists for areas where quick cover or a nurse crop is needed and would be removed later if appropriate. Replacement cover material will be obtained from within Sunshine Canyon to retain soil composition compatible with native flora and leave the surrounding topography undisturbed.

Topical Issue 14: Noise

> *Concerns have been raised that the proposed City/County Landfill operations would create significant noise impacts on sensitive receptors within the area.*

Response

During construction, the nearest residential unit (located 1,700 feet southwest of the nearest point of the construction area onsite) would be exposed to a noise level of 54 decibels on an A-weighted scale (dBA). Because the existing ambient noise level near the closest receptor is 52.4 dBA, a construction noise increase to 54 dBA at that location would not be a perceptible audible increase and therefore is not significant. In 1995, noise readings were taken at five different locations in proximity to the landfill to determine existing ambient noise levels. The proposed City/County Landfill would not significantly impact existing ambient noise levels at any of the selected noise reading locations.

The noise generated from landfilling operations is expected to be similar to the noise produced during construction activities because construction and landfilling activities would use similar types of equipment. The noise emanating from the inactive City Landfill (associated with routine maintenance) is not audible to the residential developments located south of the project site unless the maintenance equipment is operating near the top deck area of this landfill. All operational activity related to the proposed project would take place within the boundaries of the project site and well below existing perimeter ridgelines. Therefore, any sound emanating from landfilling operations would be effectively blocked by the existing landfill, intervening terrain, and the existing landscaped berm near the ±100 acre open-space area. Any landfill operation noise that may be audible at the trailers located across from the landfill entrance would be

attenuated by the extended distance and masked by existing noise from the I-5 Freeway, railroad, and wood-chopping business.

Any additional increases in traffic-generated noise would be largely masked by traffic traveling on the I-5 Freeway. Ambient noise increase due to the proposed project near the trailers located across San Fernando Road is only projected to increase by about 1 dBA. When additional ambient noises are considered (e.g., the railroad and existing firewood chopping operation), the community noise equivalent level (CNEL) increase would be further reduced. Based on the presented significance criteria (i.e., City Noise Ordinance), a noise impact is considered significant when it exceeds a 3-dBA CNEL increase; therefore, project-generated traffic would not result in a significant noise increase at this location.

With the incorporation of City Mitigation Measures for noise identified in the Draft SEIR, Section 4.5.2, Operational Noise Impacts, p. 4-220, no significant impacts would occur.

Topical Issue 15: Land Use

> *Comments have been made that the proposed City/County Landfill would not be consistent with the Granada Hills-Knollwood Community Plan.*

Response

Development of the proposed City/County Landfill would require an amendment to the *Granada Hills-Knollwood Community Plan* from Open Space to Heavy Industrial and a zone change from A1-1-O to M3-1-O. A portion of the proposed City/County Landfill, comprising ±42 acres, is already authorized in the County portion of Sunshine Canyon under existing County General Plan and zoning designations. The majority of acreage within the City portion of Sunshine Canyon is substantially disturbed from previous landfilling operations that occurred from 1958 to 1991.

Development of the proposed City/County Landfill would have minimal impacts on adjacent land uses. The operational County Landfill is located northwest of the proposed landfill footprint area. Other surrounding uses include open space to the north and west, gas storage fields to the west, an oil field to the southwest, and several freeways to the north and east of the project site. The nearest residential dwelling in Granada Hills is located approximately 1,700 feet from the proposed landfill footprint area. An existing ridgeline and a ±100 acre open-space area separate these uses. The existing perimeter ridgeline separates O'Melveny Park to the southwest, effectively blocking views from ground-level, park-related uses. Trailers and industrial uses located across San Fernando Road to the east are 700 feet from the proposed landfill footprint area. These uses would not have views of proposed landfill operations. In addition, landfill operations would be regularly monitored by City, State, regional, and federal agencies for compliance with conditions of approval. There is a caretaker onsite 24 hours a day, and the telephone numbers of the District Manager of the landfill and SCAQMD are posted to immediately resolve any concerns due to landfill operations.

Following the direction of City staff, the project proponent is pursuing a General Plan Amendment/Zone Change (GPA/ZC) to accommodate the operation of a landfill facility. Maintaining the current Open Space designation on the project site would be inconsistent with future heavy-construction activities that must occur as part of State-mandated closure and postclosure maintenance of the existing inactive City Landfill. In addition, maintaining the *Granada Hills-Knollwood Community Plan* Open Space designation for the site would not be compatible with the adjoining operational County Landfill. Implementation of a GPA/ZC would also remedy these existing inconsistencies.

Several of the *Granada Hills-Knollwood Community Plan* objectives would be achieved through designating a facility to provide disposal capacity to meet the needs of the City's population and by preserving the ridgelines that surround the landfill. The *Citywide General Plan Framework* goals would be achieved by providing adequate disposal capacity, ensuring an environmentally sound and cost-effective solid waste management system, creating job opportunities, and preserving the existing perimeter ridge lines. In addition, development of the proposed City/County Landfill would conform to the criteria stated in the *City-Collected Refuse Disposal Plan*. The proposed landfill would also implement the solid waste management goals and policies of the City and County of Los Angeles by providing needed solid waste disposal capacity within the County.

Topical Issue 16: Hazardous Materials

> *Comments have been raised that the proposed City/County Landfill would have the potential to accept hazardous waste materials, thereby resulting in risk-of-upset conditions.*

Response

The proposed project will be designed as a Class III nonhazardous solid waste landfill facility. No hazardous, acutely hazardous, radioactive, infectious medical, or liquid wastes will be accepted at this facility. The project proponent will implement a hazardous waste load-checking program at the project site similar to the program that currently exists at the operational County Landfill. This program will include employees visually inspecting incoming waste-hauling loads at the scale house area and using remote television monitors to inspect incoming rolloff-type loads and open-top vehicles. Radiation-detecting devices and sensors capable of detecting volatile organic compounds (VOCs) will also be used at the scale house area to prevent the unauthorized disposal of hazardous waste materials.

Hazardous waste load checks at the proposed City/County Landfill will be 1.5 load checks per 1,000 tons of solid waste received during the first year. After the first year the load check frequency may be decreased to one per 1,000. Solid waste would be unloaded in an isolated area for visual inspection.

During random load checks, unacceptable wastes that are safe to handle will be picked out of the waste stream and placed in a sealed holding bin that is currently located adjacent to the landfill access road south of the scale facilities. Material from this bin will be removed by a contracted hazardous waste hauler and replaced with an empty, sealed bin. If a hazardous waste that may pose a serious risk to facility workers or the public or if unidentifiable material (that may be hazardous) is discovered during random load checking by one of the spotters at the active working face, the area will be immediately cordoned off. The spotter will immediately notify a landfill supervisor who will have the vehicle driver detained and inform the LEA inspector assigned to the landfill. In addition, the supervisor will call the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), to correctly identify the material and, if necessary, take preventive steps to guarantee the highest level of safety.

If the duty officer at the DTSC states that the material is safe to handle, the refuse will be removed and temporarily stored onsite. The project operator will obtain an identification number from Cal-EPA. All containers used for storage of hazardous waste material will be clearly marked to indicate the date of waste accumulation. A label will be placed on all nonstationary containers in which hazardous wastes are stored.

If the material has the potential to pose a serious threat to facility workers, waste haulers, or the public (e.g., radioactive or acutely hazardous material), the immediate project area will be evacuated, and a contracted

hazardous waste hauler will be called to remove the material from the project site and transport it to a permitted Class I hazardous waste landfill. The landfill supervisor will then inform the City of Los Angeles Police Department (LAPD) and the County of Los Angeles Office of the District Attorney, Environmental Crimes Unit, so that proper criminal action can be taken. In addition, the City of Los Angeles Fire Department (LAFD), City of Los Angeles Department of Environmental Affairs, and the LARWQCB will be informed of the incident and all necessary reports completed.

The County Landfill operation currently has signs at the landfill entrance informing waste haulers that the facility is designated as a Class III nonhazardous landfill site. Signs inform waste haulers of the rules and regulations governing the disposal of hazardous waste.

It is expected that small amounts of household hazardous waste (HHW) would remain undetected and be disposed of at the proposed landfill. These wastes are generally inadvertently mixed in with residential solid wastes by residential customers. However, it should be noted that approximately 46 percent of all refuse entering the project site would be delivered via transfer trucks. These transfer trucks would haul residual (i.e., nonrecyclable) waste materials from transfer stations/material recovery facilities (MRFs). All transfer stations/MRFs have existing load-checking programs in place. At these facilities, HHW, if found, is manually sorted and picked out of the waste stream and disposed of properly. In some cases, this material can be recycled. For those HHWs that are land filled, environmental control systems (e.g., landfill liner, LCRS, and leachate treatment) will reduce this potential risk-of-upset conditions to a less than significant level. It is expected that any trace contaminants in the LCRS will be collected and removed through that system.

With the incorporation of City Mitigation Measures for hazardous materials identified in the Draft SEIR, Section 4.9.1, Hazardous Materials, pp. 4-296 and 4-297, no significant impacts would occur.

Topical Issue 17: Vector Prevention and Control

> *Comments have been raised that the proposed City/County Landfill would attract vectors and spread disease and litter offsite.*

Response

The proposed City/County Landfill has the potential to attract several different types of vectors to the project site. Certain types of vectors, such as rodents and insects, can be transported to the site via collection vehicles or self-haul trucks. General compaction densities would inhibit vector migration and destroy some existing vectors that may be present in these vehicles.

Effective operational procedures and quality assurance will be provided to ensure that the proper coverage of land filled waste materials will be performed on a daily basis, similar to the existing County Landfill vector control practices. All waste materials brought to the site will be unloaded at an active working face area, compacted, tarped, or covered with clean soil by the end of the working day to reduce potential food source or habitation for vectors. To reduce fly nuisances at the green waste site and wood waste recycling area, all wastes would be processed within 24 hours.

Many items that would be stored and used at the landfill facilities have the potential to attract vectors (e.g., food, seed, office supplies). These items will be stored in closed containers and within an enclosed structure. In addition, insect breeding will be minimized by preventing the ponding of surface water at the project site.

By following such procedures, the project proponent will ensure that potential food sources for common scavenging birds, such as pigeons, crows, and sea gulls, will not result in potential impacts, such as food and other wastes being carried to nearby properties, as well as deposited feathers and excrement that could potentially support ticks, mites, lice, and fleas.

All buildings, paved surfaces, landscaped areas, and perimeter areas will be inspected regularly for signs of vector activity. Any structural defects will be repaired following discovery or during routine maintenance inspections. This will help prevent the intrusion of any ground-dwelling rodents. Additionally, both landfill operations and onsite ancillary facilities will be inspected routinely by the LEA.

With the incorporation of City Mitigation Measures for vectors identified in the Draft SEIR, Section 4.9.2, Vectors, pp. 4-300 and 4-301, no significant impacts would occur.

Topical Issue 18: Litter Control

> *Comments have been made that the proposed City/County Landfill would result in substantial litter generation beyond the project site boundary and within the adjacent community.*

Response

Solid waste landfills have the potential to generate high volumes of litter. Litter generation can result in potential nuisance or aesthetic impacts. Sources of litter associated with operation of a landfill facility include waste materials blown from or dropped by refuse hauling vehicles, litter blown from the active working face by the wind or by the movement of landfill equipment, and unauthorized or illegal dumping.

Because the project site is located in the eastern edge of the Santa Susana Mountains near the entrance of the Newhall Pass area, wind conditions could potentially transport litter offsite. The strongest winds generated within this area are during short-term episodes of Santa Ana wind conditions. During high wind conditions, the project site manager will designate confined and shielded portions of the landfill for disposal.

Currently, for the operational County Landfill, the project proponent uses an extensive litter control program with specific preventive and response measures to control windblown litter and debris onsite and, if necessary, within the vicinity of the landfill site. These measures include placing waste materials within confined working face areas, using proper compaction techniques and daily cover material, using portable litter fences adjacent to the daily operating area, and installing a 25-foot-high secondary litter fence along the southern boundary of the landfill's perimeter. In addition, the project proponent provides cleanup along San Fernando Road and its frontage road to the Roxford Street exit of the I-5 Freeway, Balboa Boulevard to Sesnon Boulevard, and within O'Melveny Enforcement of litter control practices at the operational County Landfill is under the authority of the County of Los Angeles, Department of Health Services (County LEA).

Vehicles transporting waste loads to the project site that are not covered, as required by law, are also a contributor of onsite litter at the project site and within the general vicinity of the project area. Currently, haulers with uncovered waste loads are informed at the scale house area that all future waste loads must be tarped and covered. If a specific refuse hauler continues to bring solid waste to the project site in vehicles that are not fully covered, the project proponent has the option to refuse delivery of the load and will impose fines and/or surcharges upon the violating waste-hauling company.

Large-volume customers currently comply with these requirements at the operating County Landfill. If these large-volume customers do not comply, there is a mechanism (via their existing contract) to enforce a fine(s). Also, the project proponent is presently working with the County LEA to encourage small-volume haulers to use proper tarping.

The proposed City/County Landfill will incorporate litter control measures similar to those described above for the operational County Landfill. The potential for litter migration into O'Melveny Park or residential areas within Granada Hills is very unlikely due to existing topographic features and the separation distance from the working face areas to these areas. However, should fugitive litter reach these areas, the landfill's litter control crew will be dispatched immediately to clean up any migrating litter from the landfill project.

With the incorporation of City Mitigation Measures for litter identified in the Draft SEIR, Section 4.9.3, Litter, pp. 4-305 and 4-306, no significant impacts would occur.

Topical Issue 19: Traffic Conditions at Landfill Entrance

> *Comments have been made that the proposed City/County Landfill would result in unacceptable level of service (LOS) conditions on San Fernando Road during the morning and evening peak hours. In addition, it has been suggested that the proposed project would result in unsafe turning movements on San Fernando Road at the landfill entrance.*

Response

The improvements recommended at the landfill entrance on San Fernando Road, listed in the Draft SEIR, Table 4.13-9, p. 4-372, will mitigate the impacts of the proposed project traffic at this location to a less than significant level. The San Fernando Road/Project Driveway intersection is expected to operate at LOS C during both the a.m. and p.m. peak hours with the implementation of the recommended mitigation measures.

In addition, intersection improvements have been made to the landfill entrance (adjacent to San Fernando Road) as a result of developing the County Landfill. These improvements were required pursuant to the adopted Conditional Use Permit (CUP) for the County Landfill. Improvements were also authorized under a "B" permit granted by the City of Los Angeles, Department of Public Works, Bureau of Engineering (City BOE). The installation of a new signal at the landfill entrance on San Fernando Road will alleviate any potential safety concerns resulting from truck traffic entering or exiting the project site, as well as improve access.

Topical Issue 20: Planned Haul Routes

> *Comments have been made that waste-hauling vehicles traveling to and from the proposed project would adversely impact the local circulation system, including Balboa Boulevard.*

Response

Regional access to the project site is provided via the following freeway systems: Antelope Valley (SR-14), Foothill (I-210), Simi Valley-San Fernando Valley (SR-118), Golden State (I-5), and San Diego (I-405) Freeways.

Immediate ingress to and egress from the project site are provided via San Fernando Road. Project-generated traffic is expected to use the following local area roadways in proximity to the site: Sepulveda Boulevard, Roxford Street, Balboa Boulevard (limited use only), Foothill Boulevard, and Yarnell Street. All traffic will enter the project site via San Fernando Road from one of the eight main access routes, including (1) north along the I-5 Freeway, (2) south along SR-14, (3) west along the I-210 Freeway, (4) southeast along the I-5 Freeway, (5) north along the I-405 Freeway, (6) east and west along the SR-118 Freeway, (7) north on San Fernando Road, and (8) north on Balboa Boulevard to San Fernando Road (this route is restricted to vehicles weighing less than 6 tons, except for refuse collection vehicles that serve the local communities).[10]

The Draft SEIR, Section 4.13.1, Traffic, p. 4-348, identifies the general distribution pattern for the proposed City/County Landfill. The vast majority of daily traffic generated by the landfill would be truck traffic (approximately 94 percent truck traffic, 6 percent from employee-related vehicles). Project-generated traffic was distributed and assigned to the local area system based on expected origins and destinations of the refuse truck traffic. Because the project is envisioned to serve the local and regional area, the following distribution patterns are assumed for traffic distribution and generation:

- Twelve percent of the project-related traffic is expected to be distributed north of the project site on the I-5 Freeway (10 percent) and Sierra Highway (2 percent).

- Sixty-eight percent is expected to be oriented to the south on the I-5 Freeway (45 percent), San Fernando Road (21 percent), and Balboa Boulevard (2 percent).

- Twenty percent is expected to be distributed east of the site on the I-210 Freeway (5 percent), Foothill Boulevard (5 percent), and Roxford Street (10 percent).

Generally, three types of trucks would be used to transport refuse to the project site: transfer trucks (approximately 46 percent) that bring in materials from transfer stations, curbside collection trucks (approximately 92 percent) that obtain wastes from the local collection routes, and pickup and small stakebed trucks (approximately 2 percent) that are primarily used by private contractors to bring in refuse (such as gardening and landscaping green wastes).

Mitigation measures that would reduce cumulative impacts resulting from development of the proposed project are identified in Table 4.13-9 (Revised) in this document. These measures are intended to offset the cumulative impacts due to project implementation. The Draft SEIR, Table 4.13-7, p. 4-369, Column 5, 1998 w/Mitigation, depicts the expected volume-to-capacity (V/C) and LOS values for the impacted intersections after implementation of mitigation measures. As shown in Columns 5 and 6, Project Impact Post Mitigation, therein, all cumulative project traffic is not expected to impact either local area streets or freeway systems within the region on either a project-specific or cumulative basis with the implementation of these mitigation measures. Therefore, no significant impacts are anticipated as a result of project implementation.

After the implementation of project-specific City Mitigation Measures for transportation and circulation listed in Table 4.13-9 (Revised) in this document, no significant impacts would occur.

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[10]/ City Ordinance No. 161,201.

Topical Issue 21: Fire Prevention and Control

Comments have been raised that the proposed project could create a major fire that could spread into the adjacent community.

Response

The project site where the proposed landfill footprint is planned is disturbed due to extensive landfilling operations and would be adjacent to current County Landfill operations. However, much of the surrounding terrain is mountainous and in a natural state. The portion of the project site located within the City is designated as a Mountain Fire District. Areas adjacent to the site are covered with chaparral and coastal sage scrub that, in combination with high winds, have the potential to create an extreme fire hazard.

Brush fires have the potential to occur at or near the project site. Small onsite brush fires will be controlled by using landfill equipment such as tracked dozers, scrapers, and water trucks. In the event that a brush fire encroaches onto the project site, landfill operations would immediately cease until either the LAFD or Los Angeles County Fire Department (LACFD) is notified. All landfill personnel are trained to handle small fires and, if necessary, could provide assistance to fire personnel extinguishing small brush fires in and around the project site. The threat of a fire igniting onsite and then spreading offsite would be considered rare because most areas around the landfill's footprint area would be graded and surficial vegetation removed, thereby eliminating combustible brush.

The primary fire concern at a landfill site is associated with a "hot load." A hot load is defined as a truck that brings ignited refuse to the landfill site. If a hot load is brought to the project site, landfill personnel will direct the load to an isolated area of the site where it would be properly extinguished with either tracked dozers, scrapers, or other fire-suppression measures, including water, dry chemical extinguishers, or smothering.

Another potential fire source is a subsurface refuse fire. This fire is triggered by the burial of a hot load igniting other refuse materials, the improper operation of the LFG collection system, or the inadvertent burial of chemical waste. Subsurface fires are dependent on waste composition, moisture content, available oxygen, ambient soil-air pressure, and the insulating characteristics of the surrounding fill-and-cover material. This type of fire is minimized by landfill design features, in-place control features used during the operation of the LFG collection and flaring system, and the proper application of cover material. The proposed design of the landfill and environmental control features will alleviate this hazard.

The potential for a subsurface fire ignited by a surface fire is also extremely remote because cover soils isolate surface fires, preventing them from igniting subsurface waste materials; the amount of waste materials above the surface is limited to the amount deposited on any given day; and landfill personnel can quickly extinguish surface fires with fire-suppression equipment. Open flames in a landfill as a result of a subsurface fire are highly unlikely.

The inactive City Landfill, access road, and operational County Landfill serve as a partial firebreak from surrounding brush areas. Located near the western perimeter ridgeline of the site is a 100,000-gallon water tank that supplies water to the inactive City Landfill and provides necessary onsite fire flow capability. Existing water lines distribute water throughout the project site. In addition, within the County, another 265,000-gallon water tank and three fire hydrants are provided to meet fire flow demands for the County landfill.

A fire response plan has been prepared for all landfill personnel. This plan details procedures to follow in the event of a fire or explosion, designates an emergency coordinator, and establishes safe havens for employees. All landfill personnel are trained in where the nearest fire extinguishers are located, how to extinguish small fires, and who to contact in case of an emergency.

With the incorporation of City Mitigation Measures for fires identified in the Draft SEIR, Section 4.14.1, Fire Emergency Medical Services, pp. 4-398 through 4-400, no significant impacts would occur.

Topical Issue 22: Compatibility with Residential Uses

Comments have been raised regarding the proximity of the site to residential uses.

Response

The project site has undergone extensive revegetation and has been planted with over 11,000 trees. Many of these trees are native and are over 15 feet high. This open-space area is elevated several hundred feet higher than existing residential areas located to the south.

Six trailers are located immediately east of the landfill entrance, across San Fernando Road. At final fill, the proposed landfill footprint would be located ±700 feet from these uses. Additionally, the proposed landfill footprint would be located ±1,700 feet from the closest residential house located on Timber Ridge Drive in Granada Hills. The existing perimeter ridgeline, open-space area, and portions of the existing inactive landfill form an effective transition between residential use and proposed landfill operations and activities.

The proposed City/County Landfill footprint's maximum vertical height at build out would result in a final fill elevation (at its top deck area) of 2,000 feet mean sea level (MSL). This top deck area would be contoured to blend into the surrounding natural terrain. Due to its physical location within the interior of Sunshine Canyon, the top deck of the landfill footprint will be effectively shielded from public views within Granada Hills. However, the following landfill locations would be visible: a comparatively small portion of the landfill footprint near the mouth of the canyon, along the northern perimeter ridge line, and adjacent to the mountainous areas near O'Melveny Park (where trails exist) that are higher in elevation than the landfill.

The perimeter ridgeline along the southern boundary of the project site (near the City/County boundary) rises to a maximum elevation of about 2,150 feet mean sea level (MSL). The existing southern fill limits of the inactive landfill range in elevation from 1,725 to 1,950 feet mean sea level (MSL). Elevations in this area would effectively block interior views of the final fill areas from the south and southwest, especially residential uses located in the community of Granada Hills.

Topical Issue 23: Immediate Combined City/County Landfill Operations Alternative

Comments have been raised regarding which of the alternatives considered in the Draft SEIR would be the environmentally superior alternative.

Response

Under the Immediate Combined City/County Landfill Operations Alternative, project development would immediately result in landfilling operations being commenced within one landfill footprint located in Sunshine Canyon. In comparison with the proposed project, this alternative would have a similar landfill footprint configuration encompassing ±451 acres. Also, like the proposed project, this landfill footprint would connect with the operational ±215 acre County Landfill. Refer to **Figure 5.6-1** (Revised) for the conceptual base grading plan for this alternative.

This alternative would provide a net disposal capacity of 90 million tons, and unlike the proposed project, landfilling operations would occur immediately at one single working face during the first 18 to 24 months rather than at two separate working faces, and there would be a single, joint intake area with a single set of scales and supporting administrative facilities. Approximately 11,000 tpd of waste would be received at one landfill footprint. The site life would be approximately 26 years.[11]

Development sequencing for this alternative would result in three sequences similar to the proposed project, as shown on **Figure 2.5-5** (Revised). Under this alternative, development of the landfill footprint would initiate in the City jurisdiction, abut and overlay portions of the inactive landfill (Sequence A), proceed in a northerly direction across the City and County boundary, and connect to the operational County Landfill (Sequence B). Once interim fill elevations are reached, the landfill footprint would extend back into the City jurisdiction (Sequence C).

Similar to the proposed project, implementation of this alternative would require some form of agreement between the City and the County to authorize common power over the entire project site. This agreement would recognize existing discretionary approvals, contractual agreements, or other arrangements that were approved by the County Board of Supervisors and regulatory agencies in connection with the approved County Landfill. Therefore, existing permitting requirements and regulatory obligations in connection with that landfill would effectively be maintained and, if necessary, modified or amended to reflect the resulting provisions established under the subject agreement.

Development of this alternative would reduce the long-term capital outlay necessary for infrastructure improvements because in-place infrastructure would be used immediately. By reducing the long-term capital costs for the project, the project proponent would be able to provide cost-effective tipping fees for the City, County, and private haulers at a centrally located, high-volume landfill facility.

In comparison with the proposed project, this alternative would meet all development and solid waste objectives. Implementation of this alternative would facilitate the waste planning efforts of the City and County necessary to meet their short-, mid-, and long-term planning needs.

The Immediate Combined City/County Landfill Operations Alternative would have less significant impacts than the proposed project for the first 18 to 24 months. Specifically, this alternative would result in less significant impacts on air quality (e.g., dust emissions), create less potential risk-of-upset conditions (windblown litter and worker safety associated with onsite vehicle routing), improve public services response (fire and emergency service access), and generate less potential demand for onsite water consumption.

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[11]/ Based on 90,000,000 tons of disposal capacity ÷ 11,000 intake tonnage x 312 operating days = 26.22 years of anticipated site life.

Implementation of this alternative would not result in any area-wide or regional impacts that would be greater than the proposed project. Overall, this alternative would be considered environmentally superior to the proposed City/County Landfill Project because environmental impacts would be less for up to a 2-year period.