LOS ANGELES COUNTY
SOLID WASTE MANAGEMENT COMMITTEE/
INTEGRATED WASTE MANAGEMENT TASK FORCE
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GAIL FARBER - CHAIR
MARGARET CLARK – VICE CHAIR

February 20, 2014

Honorable Bob Henderson
Mayor of City of Whittier
13230 Penn Street
Whittier, CA 90602

Dear Mayor Henderson:

FINDING OF CONFORMANCE
SAVAGE CANYON LANDFILL, 13919 EAST PENN STREET, WHITTIER, CA
SOLID WASTE FACILITY PERMIT NO. 19-AH-0001

The Los Angeles County Solid Waste Committee/Integrated Waste Management Task Force (Task Force) has reviewed the December 12, 2013, letter from Mr. David Pelser (enclosed) in which the City of Whittier withdrew its October 15, 2013, request for a Finding of Conformance (FOC) with the Los Angeles County Countywide Siting Element (CSE) (enclosed). The City had requested a FOC from the Task Force in conjunction with its application for a revised Solid Waste Facility Permit (SWFP) for the Savage Canyon Landfill in connection with the adoption of a final grading plan that will increase the landfill disposal capacity and expected life of the landfill, clarify the maximum elevation of the landfill as 910 rather than 900 feet, and expressly permit the landfill to accept up to 3,000 tons per day of inert debris for beneficial use.

The Task Force is responsible for coordinating the development of all major solid waste planning documents, including the CSE, prepared for the County of Los Angeles and the 88 cities in Los Angeles County with a combined population in excess of 10 million, pursuant to Chapter 3.67 of the Los Angeles County Code and the California Integrated Waste Management Act of 1989, as amended (AB 939). The Task Force is also responsible for ensuring a coordinated, cost-effective, and environmentally sound solid waste management system in Los Angeles County and addressing the issues impacting the system on a countywide basis. Membership of the Task Force includes representatives of the League of California Cities-Los Angeles County Division, the County of Los Angeles Board of Supervisors, the City of Los Angeles, the waste management industry, environmental groups, the public, and a number of other governmental agencies.

The CSE is a State mandated long-term planning document that describes how the County and the cities within the County plan to manage the disposal of solid waste for a

15-year planning period in accordance with the California Integrated Waste Management Act of 1989 (AB 939, as amended). The CSE was developed under the auspices of the Task Force and includes goals, policies, and procedures for managing solid waste pursuant to Title 14 of the California Code of Regulations (CCR), Section 18755.1 (emphasis added). The CSE describes the method and strategies for meeting the goals, policies, and procedures for facilitating the environmentally safe disposal of solid waste generated within the County. The CSE also describes the criteria, in accordance with the CCR, Title 14, Section 18756, for siting waste disposal facilities which considers factors such as proximity to populations and/or seismic zones, and any traffic impacts.

The CSE was approved in 1997 by a majority of cities in the County containing a majority of the incorporated population, including the City of Whittier, and became effective in June 1998 following approval by the Los Angeles County Board of Supervisors, and the former California Integrated Waste Management Board (CIWMB, now CalRecycle) emphasis added. Pursuant to the CSE existing solid waste disposal facilities that institute a "significant change" to their operation must obtain a FOC with the CSE granted by the Task Force. A revision to the facility's SWFP, such as the recent revision of the SWFP issued to Savage Canyon Landfill, constitutes a "significant change" as defined in the CSE Chapter 10, Section 10.4.

The purpose of the FOC is to ensure that when solid waste disposal facilities in Los Angeles County, including the 88 cities and unincorporated communities, are established, expanded or significantly changed, they are consistent with the CSE and its siting criteria. Benefits of the FOC process include providing a forum in which the public, local jurisdictions, organizations, businesses, industry representatives, and neighboring jurisdictions, if applicable, may collectively address solid waste management issues of public interest, as well as ensure a mechanism through which technical, environmental, and social considerations are taken into account for the benefit of public health and safety, and to provide for consistent and sustainable solid waste management systems in Los Angeles County and the region.

Mr. Pelser's December 12, 2013, letter explains that the City determined that a FOC is not necessary. In support of this determination, Mr. Pelser references certain correspondence between the Task Force and the CIWMB/CalRecycle between 2002 and 2008. He further points out that a revised SWFP for the landfill has already been issued. However, the FOC process is a local matter in Los Angeles County as well as other counties in California which is not tied to the issuance of a SWFP by the State.

Contrary to Mr. Pelser's letter, however, CalRecycle's correspondence and the issuance of the SWFP do not eliminate the need for a FOC. Although CalRecycle states in this correspondence that the Task Force does not have a role in determining conformance with the CSE under state regulations, CalRecycle expressly does not rule out the existence of a local process in which the Task Force has a role in determining whether

a facility conforms with the CSE (emphasis added). When the CIWMB/CalRecycle approved the CSE in 1998, it neither approved nor disapproved the FOC process described in the CSE, but left open the possibility for a local process.

By approving the CSE, the cities in Los Angeles County including the City of Whittier, have delegated to the Task Force the task of evaluating whether new and expanded solid waste facilities are in conformance with the CSE and the goals and siting criteria set forth therein. The City has agreed to this process, which requires that it would obtain a FOC from the Task Force in the event of a "significant change" to a solid waste facility, including a change to a facility requiring a revision to the SWFP. We therefore encourage the City to resubmit its application for a FOC to enable the Task Force to carry out its responsibilities in connection with the changes to the Savage Canyon Landfill.

If you have any questions, please contact Mr. Mike Mohajer of the Task Force at MikeMohajer@yahoo.com or (909) 592-1147.

Sincerely,

Margaret Clark

Margaret Clark, Vice-Chair
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force and
Council Member, City of Rosemead

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Enc.

cc: Each Member of the Whittier City Council
Whittier City Manager (Jeff Collier)
Whittier Director of Public Works (David Pelser)
County of Los Angeles Department of Public Health (Gerry Villalobos,
Dorcas Hanson-Lugo)
CalRecycle (Caroll Mortensen, Mark De Bie)
Each Member of the Los Angeles County Integrated Waste Management Task Force
Each Member of the Facility and Plan Review Subcommittee

City of Whittier

13230 Penn Street, Whittier, California 90602-1772
(562) 567-9999

December 12, 2013

Margaret Clark, Vice-Chair
LA County SWM Committee/Integrated Waste Management Task Force
PO Box 1460
Alhambra, CA 91802

Dear Ms. Clark:

Subject: Finding of Conformance, Savage Canyon Landfill

The City of Whittier respectfully withdraws its request for a Task Force Finding of Conformance (FOC) with the Countywide Siting Element. The Local Enforcement Agency (LEA) and CalRecycle have already made such a finding and issued a revised Solid Waste Facilities Permit on October 30, 2013.

On October 15, 2013 Golder Associates, on the City of Whittier's behalf, submitted to you a request for a FOC related the City's application to the LEA for a revised Solid Waste Facility Permit. This was on the November 21, 2013 agenda of your Facility and Plan Review Subcommittee. In an email to Emiko Thompson dated November 19, I requested the item be deferred to a future meeting to allow the City sufficient time to review and respond to the Task Force's staff report.

The CalRecycle's website has a page on Conformance Finding within the Local Enforcement Agency Permit Toolbox. This led me to correspondence between the California Integrated Waste Management Board (CIWMB), now CalRecycle, and the LA County Task Force that was included in the CIWMB Agenda Item No. 9 on June 17, 2008 (see attachment 6A to that agenda item on the CalRecycle website, http://www.calrecycle.ca.gov/Archive/IWMBMtgDocs/Agenda.asp?RecID=1466&Year=2008&Comm=BRD&Month=6).
Based on my review of letters between CIWMB and the Task Force from 2002 to 2008, and the recent issuance of a revised Solid Waste Facilities Permit for the City's landfill, the City concludes that a Task Force Finding of Conformance is not necessary.

Sincerely,

David A. Pelser, PE, BCEE
Director of Public Works

October 15, 2013 103-97215

Margaret Clark
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force
900 South Fremont Avenue
Alhambra, California 91802-1331

RE: FINDING OF CONFORMANCE SAVAGE CANYON LANDFILL (SCL), 13919 EAST PENN STREET, WHITTIER, CA SOLID WASTE FACILITY PERMIT NO. 19-AH-0001

Dear Ms. Clark:

Golder Associates Inc. is submitting this request for Finding of Conformance on behalf of the City of Whittier as requested by the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force). This request from the Task Force was prompted by the City of Whitter's application for a revised Solid Waste Facility Permit (SWFP) for the Savage Canyon Landfill (SCL). The information provided below addresses the requirements presented in the Task Force letter dated March 22, 2012, Table 10-1 of the "Countywide Siting Element Vol. I". The requirements of Table 10-1 are listed in bold italics for each section with the requested information provided thereafter.

1.0 PROJECT OWNER & OPERATOR

Identity of the project proponent, owner, and operator.

The Savage Canyon Landfill (SCL) is owned by the City of Whittier (City) and operated by the Department of Public Works. The address and telephone number for the City of Whittier is as follows:

Address: City of Whittier
Department of Public Works
13230 East Penn Street
Whittier, California 90602

Telephone: (562) 907-7750

2.0 PROJECT LOCATION

Description of project location.

The landfill is located at 13919 East Penn Street, Whittier California, 90602 (Figure 1). The landfill is located in a canyon and on the southern perimeter of Puente Hills. The site is bounded by Penn Street to the south, Whittier College and Canyon Crest Drive to the west, Philadelphia Street to the north-northwest, Puente Hills to the north-northwest and north-northeast, and Summit Drive to the east, south and southeast (Figure 1).

3.0 PROJECT SCHEDULE

Project implementation schedule (as application) including planned dates for construction start, construction completion, start-up, planned expansion, and closure.

Golder Associates Inc.
1000 Enterprise Way, Suite 190
Roseville, CA 95678 USA
Tel: (916) 786-2424 Fax: (916) 786-2434 www.golder.com

The existing topography is shown on Drawing 1. The remaining base grading plan for the site is shown on Drawing 2. Final grades are shown on Drawing 3. The revised site development sequence for the SCL, including the increase in subject site capacity from 14.95 million to 19.34 million cubic yards, is presented in Table 3-1.

Table 3-1
Site Development Sequence for the Landfill Expansion

Phase	Gross Airspace Volume (CY)	Projected Date For Filling to Begin	Projected Date Capacity Reached
In Place Refuse	10,107,000	-	January 2013
IIC	699,000	January 2013	May 2014
IID	231,000	May 2014	January 2015
III	2,995,000	January 2015	May 2030
V	6,007,000	May 2030	May 2055
TOTAL	19,340,000		

4.0 DESIGN CAPACITY

Project design capacity or acreage as appropriate.

The facility's current operations are governed by the Solid Waste Facility Permit (SWFP) issued on February 28, 1995. According to the 1995 SWFP, the landfill's remaining disposal capacity was 8,119,412 cubic yards (cy), including both refuse and cover materials (overall capacity has been estimated to be 14.95 million cy). In 1996, the City notified the Local Enforcement Agency (LEA) of the extension of the landfill's life expectancy due to the revised refuse to soil ratio based on use of alternative daily cover (ADC). In December of 1996, the City notified the LEA of the new grading plan, which increased the site's remaining capacity effective March 1996 from 8,119,412 cubic yards to 12,508,900 cubic yards (overall capacity from 14.95 million cy to 19.34 million cy).

5.0 DESCRIPTION OF WASTE MATERIAL

Description of waste material to be handled.

The landfill is permitted to receive up to 350 tons of non-hazardous Class III refuse daily. Solid waste delivered to the landfill can generally be classified as residential, commercial, industrial, and mixed municipal. In addition, recycled soil (including asphalt concrete) and recycled inert materials are also received at the site.

6.0 WASTE SOURCES

Identification of waste sources.

Residential waste includes domestic garbage and rubbish that originate in residential dwellings. Commercial waste includes solid waste generated by stores, offices, and other commercial sources. Industrial waste includes types of solid waste that result from industrial processes and manufacturing operations, excluding hazardous materials. Mixed municipal wastes include a combination of residential

and commercial waste. The majority of waste comes from commercial refuse haulers in the 5- to 10-ton capacity range. Loads are also accepted from demolition haulers using 0.5- to 1-ton private trucks and from the public as long as they are City residents.

7.0 PROJECTION OF WASTE QUANTITIES OVER PROJECT LIFE

Projection of waste quantity to be handled at start-up and at five year intervals in project's life.

In December of 1996, the City notified the LEA of the new final grading plan, which increased the site's remaining capacity effective March 1996 from 8,119,412 cubic yards to 12,508,900 cubic yards (overall capacity from 14.95 million cy to 19.34 million cy). The plan did not propose any changes to the permitted boundaries of the site or any increase in elevation above 910 ft. msl. Table 7-1 displays the diminishing landfill capacity based on the ultimate design capacity. Actual data are included through December 2011.

Table 7-1
Projected Consumption of Landfill Capacity

Year	Tons		Cubic Yards			
	Solid Waste Received	Daily Average	Solid Waste Volume	Cover Volume	Total Landfill Volume	Remaining Capacity
				Estimated Landfill Capacity at Start of 1994:		12,508,900
1994	67,637	217	112,728	37,576	150,304	12,358,596
1995	68,661	220	114,435	28,609	143,044	12,215,552
2000	87,950	282	146,583	36,646	183,229	11,294,004
2005	85,103	273	141,838	35,460	177,298	10,410,814
2010	74,964	240	124,940	31,235	156,175	9,592,504
2015	81,454	261	135,757	33,939	169,696	8,776,651
2020	89,932	288	149,887	37,472	187,358	7,875,884
2025	99,292	318	165,487	41,372	206,859	6,881,364
2030	109,200	350	182,000	45,500	227,500	5,784,223
2035	109,200	350	182,000	45,500	227,500	4,646,723
2040	109,200	350	182,000	45,500	227,500	3,509,223
2045	109,200	350	182,000	45,500	227,500	2,371,723
2050	109,200	350	182,000	45,500	227,500	1,234,223
2055	109,200	350	182,000	45,500	227,500	96,723
Total	5,625,736		9,376,226	2,344,057	11,720,283	

1. Daily tonnages from January 2012 to closure assume a two percent growth rate from 2011 until the permitted daily tonnage is reached.
2. Assuming 312 operating days per year for solid waste generated.
3. An in-place waste density of 1,200 lbs/cy was used for the period.
4. Assuming a refuse to daily cover ratio of 3 to 1 due to the use of tarps as alternative daily cover.

8.0 WASTE TRANSPORT CORRIDORS AND DESTINATION

Identification of waste transport corridors and destinations.

The site can be accessed from Whittier Boulevard and Penn Street. Regional access from the cities of Artesia, Bell, Whittier, Norwalk, Rosemead, and Santa Fe Springs is mostly via Interstate 605. The landfill has a gated and signed entrance. Major access routes from Whittier Boulevard, Penn Street, and Interstate 605 to the landfill are shown on Figure 1. Access to the landfill from Penn Street and all access

roads within the SCL are shown in Figure 2. The access road that runs alongside the groundwater tank in the eastern end of the landfill also serves as a drainage channel.

Vehicle traffic follows along the main access road along the northern edge of the property to dump waste in the existing phase 1, 2a, 2b, and 2c as shown in Figure 2. Vehicle traffic also flows along the southern access road to the existing stockpiles.

9.0 TECHNOLOGY TO BE USED FOR TREATMENT FACILITIES

Technology to be used for treatment facilities.

The technology currently utilized at the SCL facilities include a landfill gas blower/flare control system, LFG to energy facility and a leachate control system.

9.1 Landfill Gas Blower/Flare Station Area

Approximately 600 cubic feet per minute (cfm) of landfill gas at approximately 45 percent methane is captured by the landfill gas control and collection system (GCCS). The existing system consists of 82 vertical wells, and 10 horizontal wells. A landfill gas (LFG) monitoring and control system map is shown on Drawing 4. As additional lifts of refuse are placed, additional vertical and horizontal wells will be installed to collect the LFG generated from the newer placed fill. A portion of this collected LFG is flared at a flare station with the majority of the LFG being used in a beneficial use project described below.

As stated previously, 82 vertical wells and 10 horizontal wells have been installed in the landfill. Typical well spacing is 100 to 150 feet. The vertical wells were installed to a depth slightly less than the refuse thickness. Well depths range from 24 to 274 feet. Each borehole is 30 inches in diameter. The annular space between the well casing and the outer diameter of the borehole is backfilled with clean gravel that is terminated 20 to 40 feet below the ground surface to reduce air infiltration. The borehole space above the refuse is sealed with a combination of soil and low swelling bentonite clay, and subsequently backfilled with on-site soil and compacted. Drawing 4 shows a detail of a typical LFG collection well.

The existing flare station consists of one flare, two gas blowers that operate in primary and backup service to maintain continuous operation 24 hours per day, and two propane tanks for the initial igniting of the flare. The flare is used to combust LFG produced at the site. The flare is a square shaped, refractory-lined vessel with the burners located approximately 40-inches above the bottom of the base. The flare is 8 feet square and 26 feet in height. The flare is equipped with inlet air dampers to control the flow of combustion air to the burners, as well as maintain temperature control. Three thermocouples are installed for variations in flame height. The flare is permitted to burn up to 2,000 standard cubic feet per minute (scfm) of LFG.

9.2 LFG to Energy Facility

The majority of the LFG is sent to the Janachek and Associates internal combustion engine (ICE) located approximately 3 miles from the landfill at the Presbyterian Intercommunity Hospital. The ICE uses the LFG as fuel to produce electricity and steam heat for the hospital. Janachek operates two blowers, an after cooler, and a coalescing filter to removed liquid from the LFG and prior to conveying it to the ICE. The Jenbacher JGS320 ICE generates 1 megawatt of electricity

9.3 Leachate Control

A leachate recovery system collects leachate from the lined portions of the landfill to preclude its migration into underlying soils. Collected leachate is gravity drained to the Condensate/Leachate Treatment Facility where it is treated and subsequently released to the Los Angeles County Sanitation District sewer under Industrial Wastewater Discharge Permit No. 012650 issued by the Los Angeles County Sanitation District.

10.0 SITE CLASSIFICATION

Planned site classification for disposal site.

The City of Whittier owns and operates Savage Canyon Landfill as a Class III sanitary municipal solid waste disposal facility.

11.0 END USES

Planned end uses for the land for disposal sites.

The post-closure land use has not yet been determined by the City. The site will likely be devoted to park and recreation purposes following closure of SCL.

12.0 FINAL ENVIRONMENTAL DOCUMENTATION

Final environmental documentation (initial study, negative declaration, categorical exemption, or an Environmental Impact Report) including all Notices of Determinations showing the posting dates with the County Clerk/City Clerk and the State Office of Planning and Research.

The final environmental documentation for SCL includes:

- Initial Study, Savage Canyon Landfill Final Grading Plan, Blodgett Baylosis Associates, dated March 1, 2001.
- Negative Declaration for the implementation of the Final Grading Plan at the Savage Canyon Landfill, dated April 3, 2001.
- Draft Environmental Impact Report Savage Canyon Sanitary Landfill Expansion, Engineering-Science, Inc. dated April 1977.

A copy of this documentation can be found in Appendix A.

13.0 RESOURCE RECOVERY PROJECTS

Planned market for materials/energy recovered from resource recovery projects.

The SCL does not have any resource recovery projects.

14.0 DIVERSION/SALVAGE PROGRAM

Description of proposed waste diversion/salvage programs to be operated at the facility.

The SCL does not have a Materials Recovery Facility onsite. Salvaging is not permitted by customers or employees. The only exception is material that can be used onsite, such as asphalt or concrete, which is diverted to a separate unloading area. In complying with the State mandated AB 939, the City requires contracted waste haulers to segregate metal cans, plastic, glass, and newspaper. Recovered recyclables are taken to various facilities for marketing by each program. The City's current recycling programs include Christmas Tree Recycling, a City Tree Trimming Greenwaste Program, various office paper recycling programs, California Redemption Value (CRV), Lion's Club and Young Men's Christian Association (YMCA) Recycling Programs, cardboard and white goods recycling and a greenwaste program.

15.0 OPERATIONS PLAN

Information and operations plan for meeting applicable permit/regulatory requirements.

The SCL operates in conformance with the Joint Technical Document, Golder 2012, to meet the applicable permit and regulatory requirements.

16.0 SITING CRITERIA COMPLIANCE

Demonstration of compliance with siting criteria requirements as established in Chapter 6 of the CSE.

The SCL is in compliance with the siting criteria as established in Chapter 6 of the County Siting Element (CSE). A copy of the completed Siting Criteria form is located in Appendix B.

17.0 GENERAL PLAN COMPLIANCE

Demonstration of compliance with general plan consistency requirements as required by the California Public Resource Code, Section 50000.5 and 50001, as applicable. In addition, a copy of the appropriate land use permit shall also be provided.

SCL in is compliance with general plan consistency requirements as required by the California Public Resource Code, Section 50000.5 and 50001. According to Section 18.040.030 of the City of Whittier's Municipal Code, the zoning regulations of Title 18 do not apply to City-owned or leased property when actually used by the City. Therefore, the SCL is not required to have a conditional use permit because it is owned by the City of Whittier.

18.0 TARPING PROGRAM

A tarping program designed to prevent the accidental release of litter from vehicles entering and leaving the site.

Litter is controlled by the use of daily cover, portable litter fences, and by confining the working face to a small area. Uncovered loads are not permitted onto the site. The working face is moved to a more sheltered location if wind conditions dictate. Trash pickers collect stray paper and litter.

19.0 WASTE LOAD-CHECKING PROGRAM

A waste-load checking program designed to prevent disposal of hazardous and other unacceptable waste from the site.

The landfill Gatekeeper at the scalehouse visually inspects all incoming loads not enclosed in refuse vehicles as part of his normal duties. The Gatekeeper must ask landfill users if their load contains any hazardous wastes or liquids. If any hazardous waste is declared, the Gatekeeper may either reject the entire load or inform the Lead Equipment Operator on the tipping deck so that he can further scrutinize the load. A Geiger Counter is available to detect radioactive material at the scalehouse and is calibrated per the manufacturer's instructions. A copy of the Landfill Gatekeeper's duties is included in Appendix C.

The Lead Equipment Operator is responsible for the daily operation of the Load Check Program. In his absence, the landfill supervisor will assign the task to one of the HazMat trained equipment operators. The landfill equipment operators visually inspect loads at the working face as part of their normal duties. If either the landfill Gatekeeper or an equipment operator recognizes unacceptable material, one of the following actions will take place:

1. The event is logged and the load is rejected so that the hauler will have to identify another location for proper disposal.
2. If the load is household hazardous waste in small amounts, it can be set aside and transported to the City Yard's hazardous waste holding facility by landfill personnel. A licensed hazardous waste hauler will dispose of it properly.

3. If it is questionable material or in large quantities, the area will be cordoned off from the general public and uninvolved site personnel. The landfill supervisor will contact the Whittier Police Department and the Public Works Manager.
4. The hauler can arrange for a licensed hazardous waste hauler to pick up the unacceptable waste.

As outlined in the City of Whittier Standard Operation Procedure (SOP) No. 50, Response to Abandoned Hazardous Materials and Hazardous Materials Incidents, the LEA will be called by the landfill supervisor and informed of the incident. The hazardous waste will then be handled according to SOP 50.

Before being allowed to participate in the handling of any hazardous materials, all personnel must be trained in hazardous materials handling and the proper use of personal protective equipment. At a minimum, this includes a 24-hour HazMat Technician training course and an annual 8-hour refresher course.

As required by the SWFP, one load per day must be randomly selected for checking. Any suspicious loads will be thoroughly checked for unacceptable materials even if the one mandatory load check has been completed for the day. Loads are randomly checked with a toxic vapor analyzer. A copy of the SCL's Load Check Program is included in Appendix C.

19.1 Medical Load Check Procedures

To protect the health and safety of the load checker or anyone present on the tipping deck when hospital loads are delivered for disposal, medical waste screening procedures are employed at the SCL. Hospital loads are checked to ensure that proper treatment has taken place. Landfill employees do not handle untreated medical waste and are trained to identify the treatment procedure known as "autoclaving".

All loads from hospitals must be dumped downwind and at least 30 yards from the active face of the tipping deck. The load checker is required to wear personal protective equipment including, but not limited to, a filter mask, hard hat, vinyl-impregnated gloves over latex gloves, and safety glasses, all of which must be disposed of after completion of the load check. To avoid direct contact with the possible infectious materials, materials from hospitals will be raked by the load checker. Autoclaved bags within hospital loads do not need to be opened. Visual load checks are performed on autoclaved medical loads and physical load checks are performed on non-medical, clear-bagged cafeteria and office waste from hospitals and medical offices. Random checks of hospital loads involve opening one or two non-medical bags per load. Untreated/non-autoclaved medical bags are not opened but only photographed and documented. Non-autoclaved bags must remain where discovered and the landfill supervisor will contact a representative of the State Medical Waste Board and inform them of the incident. The source of the untreated medical waste will also be contacted and informed of the incident. The generator will be given the option of retrieving the waste or paying for cleanup disposal. Once deemed as "treated" (autoclaved and safe for disposal at a Class III landfill) medical waste, the materials are pushed into the active working face using landfill equipment and covered with another load of waste to prevent contact with landfill personnel.

A copy of the Medical Waste Screening Procedures is incorporated into SCL's Load Check Program included in Appendix C.

20.0 PLANS

A set of plans, drawn-to-scale, clearly identifying property lines, adjacent land uses, all structures such as scale house, administration buildings, locations of any above ground or underground storage tanks, surrounding streets and access roads, etc. The plans must be a minimum of 2 feet by 3 feet in dimension, clearly labeled and bearing the signature and seal of a California Registered Civil Engineer. For land disposal facilities, the plans must show initial and final grades for and delineate the extent of the fill area. For transformation facilities the plans must show

drainage and wastewater discharge lines, the incineration building and equipment, and materials recovery area (if any).

The required information is shown on Drawings 1 to 5.

21.0 ADDITIONAL PROGRAMS FOR IMPLEMENTATION

In addition, the facility owner/operator will be required to implement the following measures/programs:

1) ***Project proponents of new Class III landfills and owners/operators of expansions of existing Class III landfills shall be required to implement the following seismic monitoring requirements:***

    a) ***Install an accelerometer on site to measure seismic ground motions by a date to be established by the Task Force. A set of as-built plans signed and sealed by a California Registered Civil Engineer shall be provided to the Local Enforcement Agency and the Los Angeles County Department of Public Works, Environmental Programs Division for approval.***

    b) ***Following a major seismic event: 1) of magnitude of 5.0 or greater in the Ritcher Scale, as recorded by the closest ground-monitoring device as maintained by the California Division of Mines and Geology, and 2) with an epicenter located within 25 miles from the Landfill (or as directed by the Task Force), thoroughly survey the landfill site for primary and secondary surface expressions of seismic activity (such as, surface ruptures, landslides, chages in flows, liquefaction, etc.). Submit a damage assessment report on the results of the survey to the Los Angeles County Department of Public Works, Environmental Programs Division and the Local Enforcement Agency for review. The assessment report must describe and discuss all features, including damage to the site and infrastructure caused by the seismic event, and the measures that will be taken to mitigate the impact.***

SCL will install an accelerometer on site to measure the seismic ground motions. Following any seismic event of magnitude 5.0 or greater and with an epicenter located within 25 miles of the landfill, SCL will thoroughly survey the site for primary and secondary surface expressions of seismic activity. A complete damage report will be completed and submitted to the Los Angeles County Department of Public Works, Environmental Programs Division and the Local Enforcement Agency for review.

2) ***All Class III landfill owners/operators shall be required to submit a description of the programs that will be implemented at the facility to:***

    a. ***Minimize disposal of inert waste at their facility.***

In complying with the State mandated AB 939, the City requires contracted waste haulers to segregate metal cans, plastic, glass, and newspaper. Recovered recyclables are taken to various facilities for marketing by each program. The City's current recycling programs include Christmas Tree Recycling, a City Tree Trimming Greenwaste Program, various office paper recycling programs, CRV, Lion's Club and YMCA Recycling Programs, cardboard and white goods recycling and a greenwaste program.

    b. ***Maximize density of disposed materials.***

SCL utilizes a tractor dozer or landfill compactor to spread and compact the unloaded refuse over the inclined slope of the working face of the landfill. This method known as the cut and cover method of disposal, compacts solid waste in layers (lifts) approximately 15 feet in height reducing the overall density of disposed materials. Since the CIWMB's (now CalRecycle) approval of the use of tarps at the landfill as

ADC, each successive cell being compacted is covered with tarps daily during the week. On Saturdays when the tarps are removed at the end of the workday, six inches (minimum) of compacted soil is placed over the refuse as daily or interim cover.

c. Use green waste or other appropriate materials for use as landill daily cover other than soil, subject to approval of the appropriate Local Enforcement Agency, the CIWMB, and other appropriate permitting agencies.

In March 1993, the City submitted a proposal to the LEA for a one-year study to test various geotextiles for their suitability as alternative daily cover (ADC). The LEA forwarded the letter to the then CIWMB, who gave approval to begin the demonstration project on March 14, 1994.

The study period began on April 12, 1994 using Typar, a non-woven geotextile manufactured by Exxon, and continued until June 12, 1994. The use of the ADC significantly reduced the amount of soil used for normal operations. The refuse to cover ratio increased from 1:1 to 2.5:1, thereby resulting in an increase of usable airspace for refuse and a reduction in borrow requirements. The use of the geotextile cover also reduced the personnel time involved in closing the working face at the end of the day. Due to the success of this study, the CIWMB approved the use of tarps at the landfill as an ADC in 1997.

3) All solid waste disposal facility operators shall be required to submit a description of the program that will be implemented at the facility to:

a. Acquire and provide the County all data necessary for cities in Los Angeles County and the County to comply with the mandates of Assembly Bill 939. Additionally, disposal facility operators will be encouraged to institute waste salvage operations in compliance with all applicable rules and regulations.

The SCL does not have a Materials Recovery Facility onsite. Salvaging is not permitted by customers or employees. The only exception is material that can be used onsite, such as asphalt or concrete, which is diverted to a separate unloading area. In complying with the State mandated AB 939, the City requires contracted waste haulers to segregate metal cans, plastic, glass, and newspaper. Recovered recyclables are taken to various facilities for marketing by each program. The City's current recycling programs include Christmas Tree Recycling, a City Tree Trimming Greenwaste Program, various office paper recycling programs, CRV, Lion's Club and YMCA Recycling Programs, cardboard and white goods recycling and a greenwaste program.

b. Discourage transportation of uncovered waste to the disposal facility through vehicle tarping enforcement at the gate.

Uncovered loads are not permitted onto the site.

c. Control litter on the streets, highways, and properties surrounding the disposal facility.

Litter is controlled by the use of daily cover, portable litter fences, and by confining the working face to a small area. Uncovered loads are not permitted onto the site. The working face is moved to a more sheltered location if wind conditions dictate. Trash pickers collect stray paper and litter.

22.0 CLOSING

This Finding of Conformance was prepared in accordance with the Los Angeles County Countywide Siting Element dated June 1997 and based on information and calculations provided in the 2012 Savage Canyon Landfill Joint Technical Document.

Please feel free to call either of the undersigned if you have any questions or comments.

GOLDER ASSOCIATES INC.

Randall Wall, P.E.
Senior Consultant

Ken Haskell, P.E.
Principal

cc: David Pelser City of Whittier

Tables:

Table 3-1	Site Development Sequence for Landfill Expansion
Table 7-1	Projected Consumption of Landfill Capacity

Figures:

Figure 1	Site Vicinity Map
Figure 2	Site Plan

Drawings:

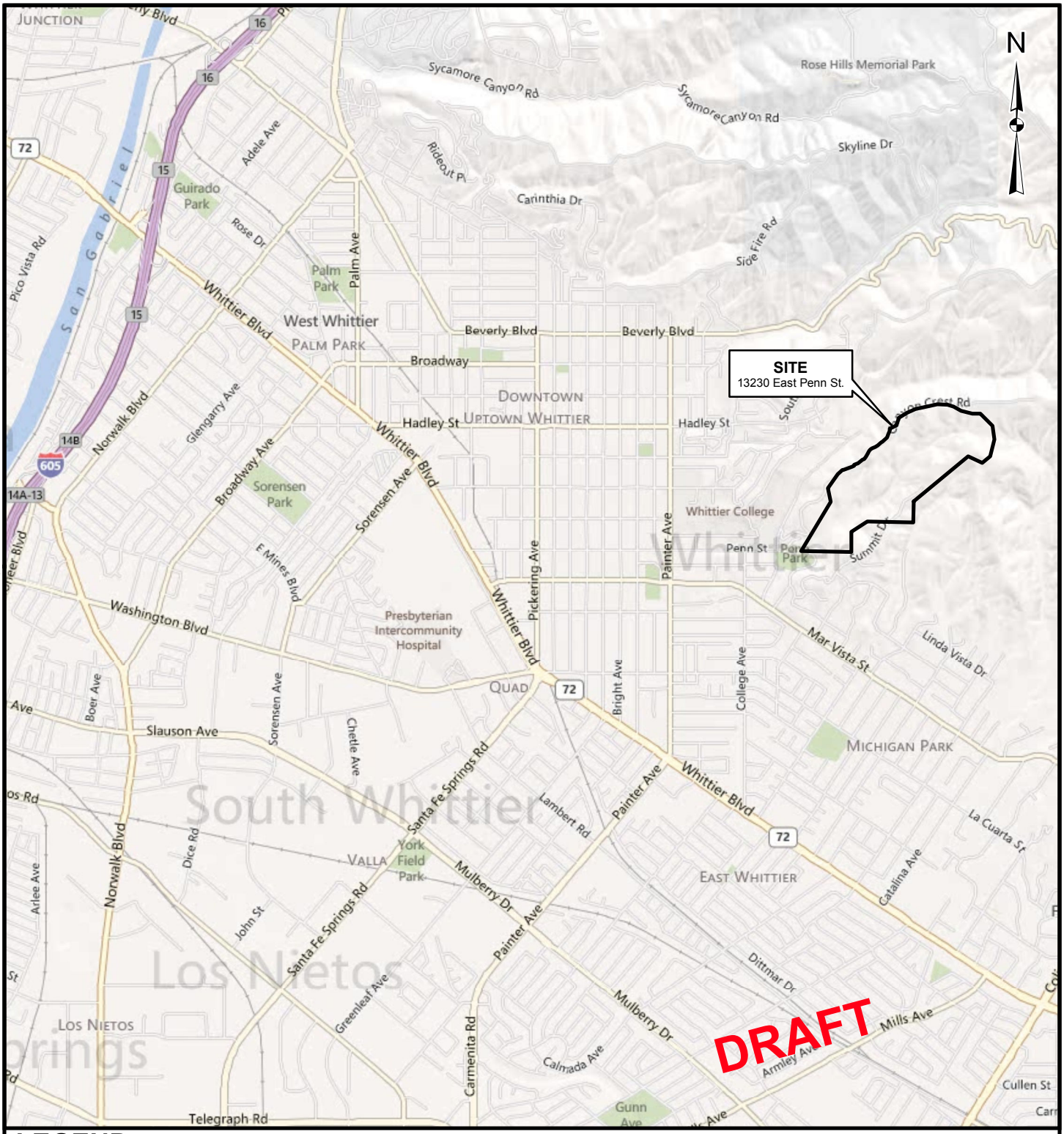
Drawing 1	Existing Topography
Drawing 2	Remaining Base Grading Plan
Drawing 3	Final Grading Plan
Drawing 4	Landfill Gas Monitoring & Controls System Map
Drawing 5	Land Use Structures within 1,000 ft.

Appendices:

Appendix A	Final Environmental Documentation: Initial Study, Negative Declaration, EIR, Notices of Determination
Appendix B	Siting Criteria Form
Appendix C	Load Checking Program

LMD/BB

FIGURES



LEGEND

Limit of Site

3,000 0 3,000

Feet

NOTES

1. Road information obtained from ESRI BaseMap service titled Bing Maps Road, provided by Microsoft Bing Maps.

REFERENCES

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW
0						

PROJECT

CITY OF WHITTIER
SCL FINDING OF CONFORMANCE
WHITTIER, CA

TITLE

SITE VICINITY MAP

Golder Associates

PROJECT No.		103-97215	FILE No.	10397215-F1-SITE_VIC-Ver2.mxd
DESIGN	JDR	8/15/2012	SCALE: AS SHOWN	REV. 0
GIS	JDR	8/21/2012		
CHECK			**FIGURE 1**	
REVIEW				

Map Document: N:\GIS\SITE\SAVAGE_CANYON\103-97215\10397215-F1-SITE_VIC-Ver2.mxd / Modified 8/21/2012 1:28:31 PM by JRaub / Exported 8/21/2012 1:28:43 PM by JRaub

NOTES:

1. THE PRIMARY ROUTE FOR WASTE DISPOSAL IS USED BY CITY AND PUBLIC VEHICLES.
2. THE CONTRACTOR SHALL USE THE PRIMARY HAUL ROUTE AS THE MAIN ACCESS TO THE CELL.
3. CONSTRUCTION WASTE, CONSTRUCTION DEBRIS AND EXCAVATED REFUSE (IF ANY) WILL BE DEPOSITED IN THE ACTIVE WASTE DISPOSAL AREA.

GROUNDWATER MONITORING WELL AND SOIL GAS PROBE
AMBIENT AIR SAMPLER LOCATION AANW 24
PHASE 2C LIMIT OF LINER
SPG-A
MW-A
P-31
P-19A
GROUNDWATER MONITORING WELL AND SOIL GAS PROBE PROTECT IN PLACE
SPG-B
MW-B
EXISTING LANDFILL GAS FLARE STATION
PHASE 2A (EXISTING)
(ACTIVE WASTE DISPOSAL AREA)
PHASE 2B (EXISTING)
PHASE 1 (EXISTING)
PHASE 2C
CONTRACTOR TO REMOVE CONSTRUCTION FENCE
CONTRACTOR TO REMOVE AND SALVAGE 24" ø CPE DOWNDRAIN
P-18
W-16
W-13
W-15
PROPERTY LIMITS
P-17
ABOVE-GROUND DIESEL STORAGE TANK
SPG-C
MW-C
PHASE 2C LIMIT OF LINER
EXISTING CONCRETE CHANNEL TO BE REMOVED BY CONTRACTOR
PHASE 2C GRADING LIMITS
OIL AND GAS WELL TO BE ABANDONED (TYP)
WATER RESERVOIRS
P-16
PRIMARY ROUTE FOR WASTE DISPOSAL SHALL USE EXISTING ACCESS ROAD
P-20A
GROUNDWATER MONITORING WELL AND SOIL GAS PROBE TO BE ABANDONED BY CONTRACTOR
CONCRETE CHANNELS TO BE REMOVED SAW CUT AT SOUTH END
P-15
STOCKPILE AREA
P-14A
P-13
P-12
P-11
V-2
FIRE HYDRANT (WATER SOURCE)
P-10
PRIMARY ROUTE FOR WASTE DISPOSAL BY CITY AND PUBLIC
FACILITY LIMITS
P-21A
GROUNDWATER TANK (10,000 GALLON)
EQUIPMENT YARD
P-9A
LANDFILL OPERATIONS TRAILER
P-8
LEACHATE COLLECTION TANK (3,500 GALLON)
ALTERNATE ACCESS ROAD
P-7
EQUIPMENT SHED
P-6
P-22A
P-32
DESILTING BASIN
P-5A
SCALE HOUSE AND GATED ENTRANCE
P-4
P-3
P-2
WEATHER STATION
AMBIENT AIR SAMPLER LOCATION AASE 24
P-23(3)
P-1(3)
P-1
P-24
V-1
P-25A
P-29
P-26(5)
P-30
P-28
P-27
P-26
PENN STREET
CONDENSATE TREATMENT FACILITY WITH 550 GALLON BELOW-GROUND CONDENSATE STORAGE TANK
LANDFILL ENTRANCE (SITE ACCESS)

E 6,554,500 E 6,555,000 E 6,555,500 E 6,556,000 E 6,556,500 E 6,557,000 E 6,557,500 E 6,558,000 E 6,558,500
N 1,816,500 N 1,816,000 N 1,815,500 N 1,815,000 N 1,814,500 N 1,814,000 N 1,813,500

LEGEND

- LIMIT OF PROPOSED BASE LINER
- LIMIT OF EXISTING BASE LINER
- LIMIT OF PERMITTED LANDFILL
- GAS COLLECTION PIPE
- UNDERGROUND GAS COLLECTION PIPE
- GROUNDWATER MONITORING WELL
- LFG MONITORING WELL
- GAS EXTRACTION WELL
- HORIZONTAL LFG HEADER
- OIL AND GAS WELL TO BE ABANDONED ACCORDING TO DOGGR REQUIREMENTS

400 0 400
SCALE FEET

DATE OF TOPOGRAPHY: 3-31-09, DON READ CORPORATION

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
0						

PROJECT
CITY OF WHITTIER
SAVAGE CANYON LANDFILL
FINDING OF CONFORMANCE

TITLE
SITE PLAN

Golder Associates

PROJECT No.		103-97215	FILE No. FIG 2 - SITE PLAN.dwg
DESIGN	JTK	5/10/11	SCALE AS SHOWN
CADD	JDR	8/15/12	
CHECK			**FIGURE 2**
REVIEW			

M:\Sites\Savage Canyon\2012 Conformance Finding\FIG 2 - SITE PLAN.dwg, 09/06/12 12:34:45pm, RWall

DRAWINGS

N 1,816,500

N 1,815,500

N 1,815,000

N 1,814,500

N 1,814,000

N 1,813,500

LEGEND

PROPOSED LIMIT OF WASTE

FACILITY LIMIT

300 0 300

SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
0						

PROJECT

CITY OF WHITTIER
SAVAGE CANYON LANFILL
LOS ANGELES COUNTY, CALIFORNIA

TITLE

MARCH 31, 2009 TOPOGRAPHY

REGISTERED PROFESSIONAL ENGINEER
RAQUEL VINCENT WALL
NO. C52906
EXP. 12/31/12
CIVIL
STATE OF CALIFORNIA

Golder Associates

PROJECT No.		103-97215	FILE No.	
DESIGN	RVW	5/25/12	SCALE	AS SHOWN
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REVIEW				

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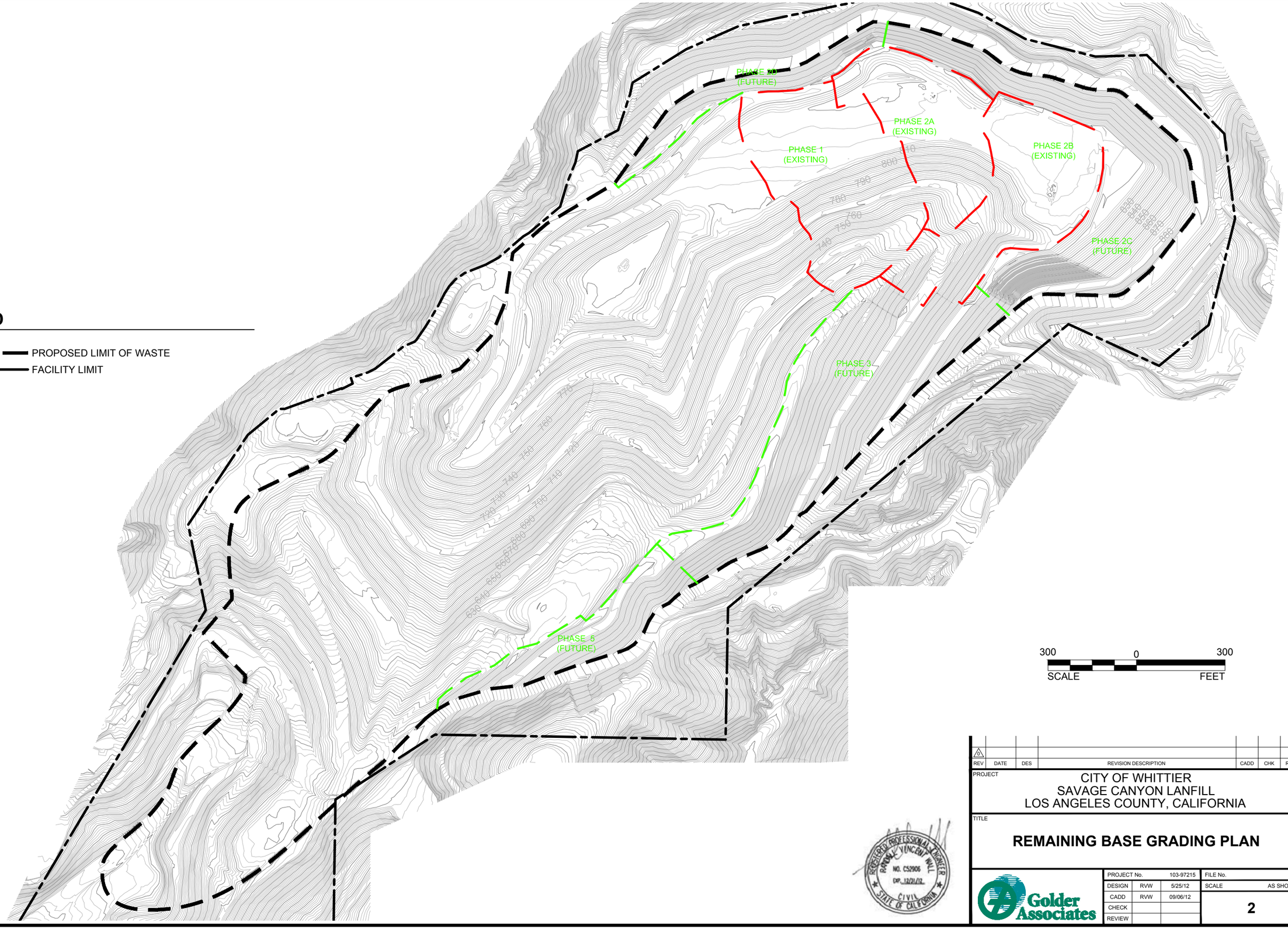

LEGEND

PROPOSED LIMIT OF WASTE

FACILITY LIMIT

300 0 300

SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
0						

PROJECT

CITY OF WHITTIER
SAVAGE CANYON LANFILL
LOS ANGELES COUNTY, CALIFORNIA

TITLE

REMAINING BASE GRADING PLAN

REGISTERED PROFESSIONAL ENGINEER
RAYMOND VINCENT WALL
NO. C52906
EXP. 12/31/12
CIVIL
STATE OF CALIFORNIA

Golder Associates

PROJECT No.		103-97215	FILE No.	
DESIGN	RVW	5/25/12	SCALE	AS SHOWN
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CHECK				
REVIEW				

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LEGEND

PROPOSED LIMIT OF WASTE

FACILITY LIMIT

909.60
RIDGE PT

910.00
RIDGE PT

910.80
RIDGE PT

909.50
RIDGE PT

903.60
RIDGE PT

900
880
860
840
820
800
780
760
740
720

2:1
2:1
2:1
3.5:1
2.5:1
2.5:1
2.5:1
3:1
3:1
3:1
2.8:1

300 0 300
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
0						

PROJECT

CITY OF WHITTIER
SAVAGE CANYON LANFILL
LOS ANGELES COUNTY, CALIFORNIA

TITLE

FINAL GRADING PLAN

REGISTERED PROFESSIONAL ENGINEER
RANDALL VINCENT WALL
NO. C52906
EXP. 12/31/12
CIVIL
STATE OF CALIFORNIA

Golder Associates

PROJECT No.		103-97215	FILE No.	
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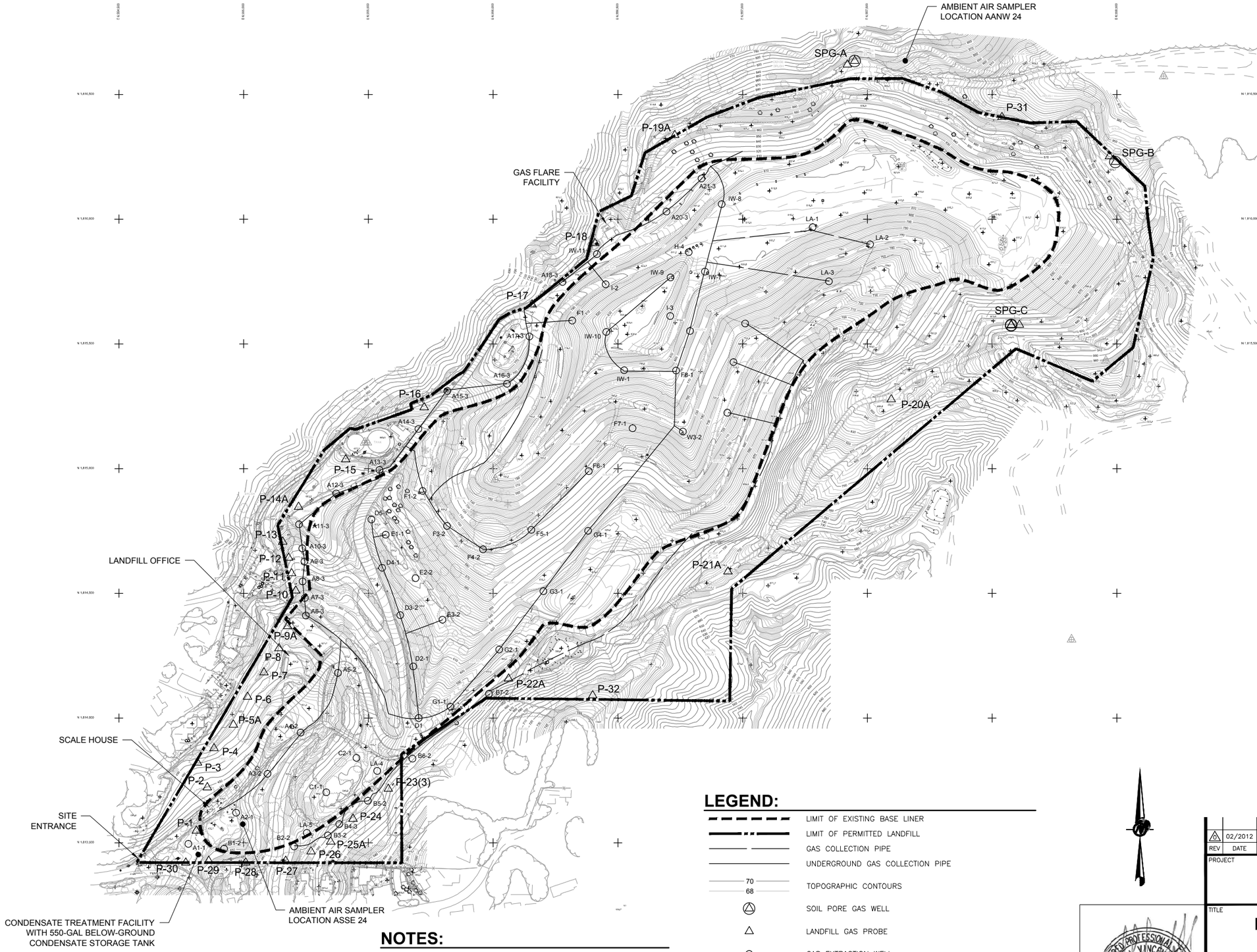

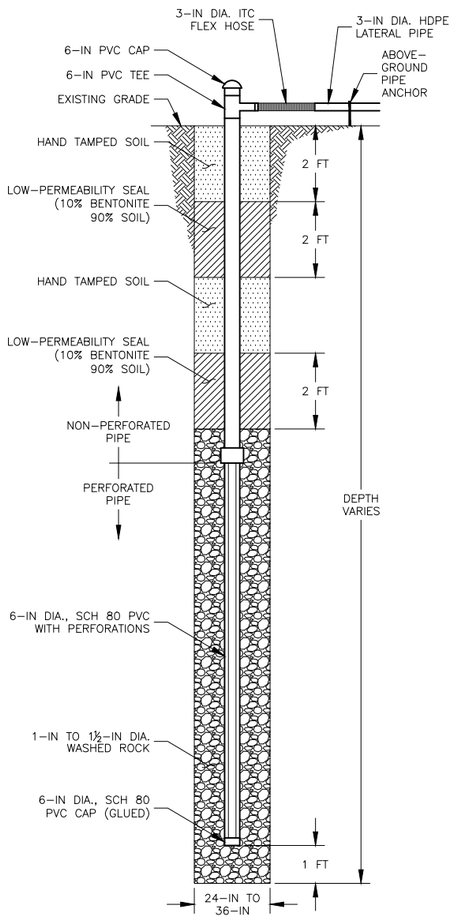

TYPICAL LFG VERTICAL EXTRACTION WELL

NOT TO SCALE

LEGEND:

- LIMIT OF EXISTING BASE LINER
- LIMIT OF PERMITTED LANDFILL
- GAS COLLECTION PIPE
- UNDERGROUND GAS COLLECTION PIPE
- 70 / 68 TOPOGRAPHIC CONTOURS
- SOIL PORE GAS WELL
- LANDFILL GAS PROBE
- GAS EXTRACTION WELL

NOTES:

1. DATE OF TOPOGRPAHY: 3/31/2009
2. COMPACT UPPER 10 FT OF BORE HOLE USING WEIGHTED TAMPER IN 1–IN LIFTS.
3. DEPTH OF EXTRACTION WELLS VARIES.

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
1	02/2012	RVW		JDR		

PROJECT

CITY OF WHITTIER
SCL FINDING OF CONFORMANCE
WHITTIER, CA

TITLE

LANDFILL GAS MONITORING AND CONTROL SYSTEM MAP

REGISTERED PROFESSIONAL ENGINEER — VINCENT WALL — No. C52906 — EXP. 12/31/13 — CIVIL — STATE OF CALIFORNIA

Golder Associates

PROJECT No.	103–97215	
DESIGN	RVW	
CADD	JDR	
CHECK		
REVIEW		

FILE No. Fig 4_5 – LF GW M

SCALE AS SHOWN | REV. 0

4

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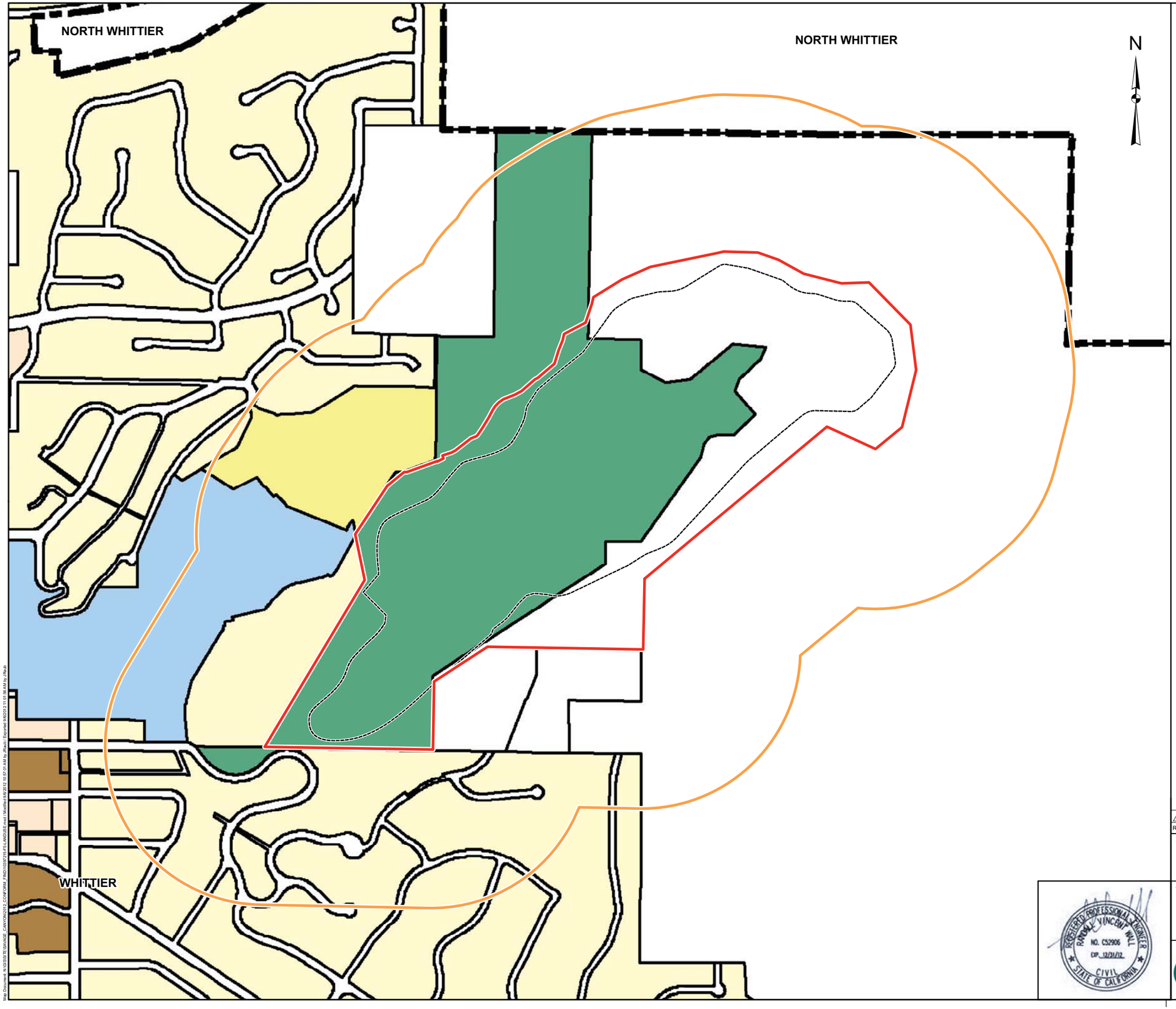

LEGEND

- Property Boundary of Savage Canyon Landfill
- Limit of Waste
- 1,000 Foot Buffer from Savage Canyon Landfill Property Boundary

GENERAL PLAN

Land Use Element

- URBAN DESIGN DISTRICT
- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- MEDIUM HIGH DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- HILLSIDE RESIDENTIAL
- GENERAL INDUSTRIAL
- GENERAL COMMERCIAL
- ADMINISTRATIVE / PROFESSIONAL COMMERCIAL
- SPECIFIC PLAN
- C CIVIC CENTER
- H HOSPITAL
- L LIBRARY
- P POST OFFICE
- E ELEMENTARY SCHOOL
- H HIGH SCHOOL
- J JUNIOR HIGH SCHOOL
- P PRIVATE SCHOOL
- GOLF COURSE
- PARK
- OPEN SPACE

NOTES

1. General Plan information obtained from the City of Whittier Department of City Clerk-Treasurer webiste (http://www.cityofwhittier.org/depts/clerk/gismap/default.asp). Image was converted from PDF into JPEG format and georeferenced to latest City/Community limits of Los Angeles County.

REFERENCES

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

300 0 300 600 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW
0						

PROJECT

CITY OF WHITTIER
SCL FINDING OF CONFORMANCE
WHITTIER, CA

TITLE

LAND USE STRUCTURES WITHIN 1,000 FT

REGISTERED PROFESSIONAL ENGINEER RANDALE VINCENT WALL NO. C52906 EXP. 12/31/12 CIVIL STATE OF CALIFORNIA

Golder Associates

PROJECT No.		103-97215	FILE No.	10397215-F5-LANDUSE.mxd
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GIS	JDR	9/6/2012		
CHECK				5
REVIEW				

Map Document: N:\GIS\SITE\SAVAGE_CANYON\2012_CONFORM_FIND\10397215-F5-LANDUSE.mxd \ Modified:9/6/2012 10:57:01 AM by JReub \ Exported:9/6/2012 11:01:09 AM by JReub

APPENDIX A
FINAL ENVIRONMENTAL DOCUMENTATION

Initial Study

City of Whittier

Savage Canyon Landfill
Final Grading Plan

Submitted to:

City of Whittier
13230 Penn Street
Whittier, California 90602

Submitted by:

BLODGETT BAYLOSIS ASSOCIATES
Planning ❖ Environmental Analysis ❖ Economics ❖ Mapping

6709 Greenleaf Avenue, Suite 314
Whittier, California 90601

-MARCH 1, 2001-

79 page More → Report

file- Final Grading Plan

COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

THOMAS L. GARTHWAITE, M.D.
Director and Chief Medical Officer

JONATHAN E. FIELDING, M.D., M.P.H.
Director of Public Health and Health Officer

Environmental Health
ARTURO AGUIRRE, Director

Bureau of Environmental Protection
Solid Waste Management Program/L.A. County LEA
5050 Commerce Drive
Baldwin Park California 91706-1423
TEL (626) 430-5540 • FAX (626) 813-3022
www.lapublichealth.org/eh

CITY OF WHITTIER
MAY 09 2003
DEPT. OF PUBLIC WORKS

May 7, 2003

Mr. David Schickling
City of Whittier
13230 East Penn Street
Whittier, CA 90602-1772

Subject: **SCH #2000011006:** Notice of Completion (NOC) of a Revised Initial Study (RIS) and Mitigated Negative Declaration (MND) for implementation of the Final Grading Plan (FGP) and for the other related changes in design and operation at the Savage Canyon Landfill (SWFP #19-AH-0001) in Los Angeles County.

Dear Mr. Schickling:

On May 2, 2001 the California Integrated Waste Management Board sent a letter regarding the environmental documents needed to approve the proposed Final Grade Plan for Savage Canyon Landfill. As of today, this office has no evidence that you have properly addressed the CIWMB concerns. If you have responded to the CIWMB, please submit to this office a copy of your response. If you have not, please respond by June 5, 2003 and submit a copy to the Local Enforcement Agency (LEA).

Should you have any questions please contact myself at 626-430-5569.

Very truly yours,

N. Castellanos

Nelly Castellanos, REHS III
Solid Waste Management Program

cc: Gina Nila

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
DIRECTOR

April 9, 2001

CITY OF WHITTIER
APR 12 2001
DEPT. OF PUBLIC WORKS

Dave Schickling
City of Whittier
13230 Penn Street
Whittier, CA 90602-1772

Subject: Savage Canyon Landfill Final Grading Plan
SCH#: 2000011006

Dear Dave Schickling:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. The review period closed on April 6, 2001, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTML

Document Details Report
State Clearinghouse Data Base

SCH# 2000011006
Project Title Savage Canyon Landfill Final Grading Plan
Lead Agency Whittier, City of

Type Neg Negative Declaration
Description Final Grading Plan for 132-acre landfill.

Lead Agency Contact

Name Dave Schickling
Agency City of Whittier
Phone 562-464-3420 **Fax**
email
Address 13230 Penn Street
City Whittier **State** CA **Zip** 90602-1772

Project Location

County Los Angeles
City Whittier
Region
Cross Streets 13919 East Penn Street
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-605
Airports
Railways
Waterways Rio Hondo River
Schools Whittier USD
Land Use Landfill

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 5; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 7; Department of Health Services; Integrated Waste Management Board; State Water Resources Control Board, Clean Water Program; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 03/08/2001 **Start of Review** 03/08/2001 **End of Review** 04/06/2001

Note: Blanks in data fields result from insufficient information provided by lead agency.

FILED

APR 0 3 2001

CONNY B. McCORMACK, COUNTY CLERK

G. MORLA DEPUTY

NOTICE OF AVAILABILITY OF NEGATIVE DECLARATION

Notice is hereby given that the City of Whittier has prepared an Environmental Initial Study for recirculation, pursuant to State and City guidelines and regulations for implementation of the California Environmental Quality Act (CEQA), for the following project:

Subject: Savage Canyon Landfill Final Grading Plan.This project consists of the long-range final configuration of the landfill.

Location: 13919 East Penn Street, Whittier, California

Proponent: City of Whittier

A Negative Declaration has been prepared and is available for public review and comment in the Public Works Department, Whittier City Hall, 13230 Penn Street, Whittier, or at the Main Library, 7344 Washington Avenue.

Due to the time limits mandated by state law, your written response must be sent at the earliest possible date, but no later than 21 days after publication of this notice.

Please send your response to David T. Mochizuki, Director of Public Works, City of Whittier, 13230 Penn Street, Whittier, CA 90602

David T. Mochizuki
Director of Public Works

00191923

THIS NOTICE WAS POSTED
ON APR 0 3 2001
UNTIL MAY 0 3 2001
REGISTRAR-RECORDER/COUNTY CLERK

PW:SW:Landfill:Prog & Proj:Final Grading Plan-Negative Declaration

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
DIRECTOR

ACKNOWLEDGEMENT OF RECEIPT

DATE: March 13, 2001

TO: Dave Schickling
City of Whittier
13230 Penn Street
Whittier, CA 90602-1772

RE: Savage Canyon Landfill Final Grading Plan
SCH#: 2000011006

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: March 8, 2001
Review End Date: April 6, 2001

We have distributed your document to the following agencies and departments:

California Highway Patrol
Caltrans, District 7
Department of Conservation
Department of Fish and Game, Region 5
Department of Health Services
Department of Parks and Recreation
Department of Toxic Substances Control
Integrated Waste Management Board
Native American Heritage Commission
Regional Water Quality Control Board, Region 4
Resources Agency
State Lands Commission
State Water Resources Control Board, Clean Water Program

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

(Space below for use of County Clerk only)

WHITTIER DAILY NEWS

affiliated with
SGV Newspaper Group
7612 Greenleaf Avenue
Whittier, CA 90602

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Los Angeles

I am a citizen of the United States, and a resident of the county aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of WHITTIER DAILY-NEWS, a newspaper of general circulation which has been adjudicated as a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of October 10, 1960, Case Number 369393. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

3/23/01

I declare under penalty of perjury that the foregoing is true and correct.

Executed at West Covina, LA Co. California
this 23 day of MARCH, 20 01

signature

Proof of Publication of

NOTICE OF AVAILABILITY OF NEGATIVE DECLARATION

Notice is hereby given that the City of Whittier has prepared an Environment Initial Study for recirculation, pursuant to State and City guidelines and regulations for implementation of the California Environmental Quality Act (CEQA), for the following project:

Subject: Savage Canyon Landfill Final Grading Plan. This project consists of the long-range final configuration of the landfill.

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Proponent: City of Whittier

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Due to the time limits mandated by state law, your written response must be sent at the earliest possible date, but no later than 21 days after publication of this notice.

Please send your response to David T. Mochizuki, Director of Pubic Works, City of Whittier, 13230 Penn Street, Whittier, CA 90602.

/s/ David T. Mochizuki
Director of Public Works

Publish: March 23, 2001
Whittier Daily News **Ad No 73236**

Initial Study

City of Whittier

Savage Canyon Landfill
Final Grading Plan

Submitted to:

City of Whittier
13230 Penn Street
Whittier, California 90602

Submitted by:

BLODGETT BAYLOSIS ASSOCIATES

Planning ❖ Environmental Analysis ❖ Economics ❖ Mapping

6709 Greenleaf Avenue, Suite 314
Whittier, California 90601

- MARCH 1, 2001 -

Section *Page*

1.0 INTRODUCTION

1.1 Purpose and Scope of Initial Study

This Initial Study analyzes the potential environmental impacts associated with the implementation of the Final Grading Plan (FGP) for the existing Savage Canyon Landfill. The Savage Canyon Landfill is a Class III waste disposal facility located at 13919 East Penn Street in the City of Whittier.[1-1] The City of Whittier is responsible for the environmental review of the proposed action, and as a result, is the designated Lead Agency pursuant to Section 15050(a) of the California Environmental Quality Act (CEQA) Guidelines. As part of the proposed action's review, the City has authorized the preparation of this Initial Study.[1-2] The physical and operational characteristics of the proposed FGP are described herein in greater detail in Section 2.0.

The State of California, through CEQA, has provided local governments with specific guidance regarding how the environmental review process is to be implemented at the local level. The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental implications of a specific action or project. The purpose of this Initial Study is to ascertain whether or not the proposed FGP will have the potential for significant adverse impacts on the environment.[1-3] Other uses for this Initial Study may include the following:

1. To provide the City of Whittier with information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration;

2. To enable the City to modify the proposed FGP to mitigate adverse impacts before a mitigated negative declaration or an EIR is prepared;

3. To facilitate environmental assessment and review early in the design of the proposed FGP;

4. To provide documentation in support of findings that a particular issue will not be affected by the proposed FGP's implementation; and,

5. To determine whether previously-prepared environmental studies may be used in support of the environmental analysis for the proposed project.[1-4]

The City of Whittier has determined, through the preparation of this Initial Study, that a Mitigated Negative Declaration will be sufficient in analyzing the proposed project's potential environmental effects and to identify any requisite mitigation.

Responsible agencies and the public, through the circulation of this Initial Study and the Notice of Intent to Adopt a Mitigated Negative Declaration, are requested to review these documents and to forward any comments to the City of Whittier regarding the proposed action and the findings contained herein. Comments and other information received by the City will be considered in any

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1-1) A Class III landfill designation applies to those landfills that provide disposal to non-hazardous residential solid waste.

1-2) California, State of, *Guidelines for the Implementation of the California Environmental Quality Act.* 1995.

1-3) Ibid.

1-4) This Initial Study references the findings contained in the original Environmental Impact Report prepared for the Savage Canyon Sanitary Landfill Expansion prepared by Engineering Science, Inc. in April 1977.

decision-making undertaken as part of the proposed FGP's approval and subsequent implementation.

1.2 Organization and Format of Initial Study

The format and structure of this Initial Study generally reflect that of the Initial Study Checklist, provided herein in Section 1.4. Following is an annotated outline summarizing the contents of this Initial Study:

1. *Section 1, Introduction*, provides the procedural context surrounding this Initial Study's preparation and insight into its composition. It also includes the Initial Study Checklist, with an issue-by-issue summary of potential impacts.

2. *Section 2, Project Description*, provides an overview of the existing environmental setting of the Savage Canyon Landfill and the proposed FGP's physical and operational characteristics.

3. *Section 3, Environmental Analysis,* contains an analysis of the proposed action's potential impacts and describes the recommended mitigation.

4. *Section 4, Findings,* indicates how the proposed FGP might yield, or have the potential to yield, a significant effect upon one or more of the issue areas analyzed in this Initial Study.

5. *Section 5, List of References,* identifies the references used in the preparation of this Initial Study.

Although this Initial Study was prepared with consultant support, all analyses, conclusions, findings, and determinations made as part of its preparation fully represent the independent judgment and position of the City of Whittier, acting as Lead Agency.

1.3 Disposition of Initial Study

Certain projects or actions undertaken by a Lead Agency (in this instance, the City of Whittier) may require oversight, approvals, or permits from other public agencies. Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, these other agencies are referred to as *Responsible Agencies* and *Trustee Agencies*. Responsible and trustee agencies and other public agencies and/or entities who may use this Initial Study in decision-making or for informational purposes include, but are not limited to, the following:

1. The County of Los Angeles Department of Health Services, Environmental Health Solid Waste Management Division (Local Enforcement Agency);

2. The Regional Water Quality Control Board;

3. The South Coast Air Quality Management District; and,

4. The State of California Integrated Waste Management Board.

Copies of this Initial Study and the Notice of Intent to Adopt a Mitigated Negative Declaration will be forwarded to responsible, trustee, and interested agencies; and the public for review and comment.

A 30-day public review period will be provided to allow the aforementioned and other interested parties to comment on the proposed project and the findings of the Initial Study. Public hearings may also be conducted to consider the merits of the FGP and the findings of the Initial Study.

Public Review of this Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration

Copies of this Initial Study and the Notice of Intent to Adopt a Mitigated Negative Declaration are available at...

City of Whittier Civic Center
13230 Penn Street
Whittier, California 90602

Agencies and parties wishing to comment on the Initial Study's findings are requested to forward their comments in writing to the City of Whittier within 30 days.

1.4 Executive Summary

The environmental analysis in Section 3.0 of this Initial Study indicates that in the absence of mitigation, the proposed FGP may have adverse environmental impacts on a number of issue areas, including water quality, noise, and air quality. These environmental effects were disclosed in previous environmental studies prepared for an earlier landfill expansion.[1-5] Applicable mitigation has been incorporated herein by reference. For this reason, the City of Whittier has directed that this comprehensive initial study be circulated to inform the public and responsible agencies of the proposed FGP's potential impacts and to identify any requisite mitigation.

The proposed FGP will extend the operational life of the Landfill from 2025 to 2048 and expand the landfill's capacity to 12,508,900 cubic yards from the 8,119,412 cubic yards identified in the Landfill's 1995 Solid Waste Facility Permit (SWFP).[1-6] The proposed FGP will not involve any expansion to the existing Landfill boundaries, nor will the FGP increase the elevation above the permitted 900 feet above mean sea level (AMSL).

Table 1-1 contains a summary of the findings of the analysis included herein. The mitigation identified in Section 4.0 largely builds upon mitigation included in previous environmental studies prepared for landfill operations. The proposed FGP by itself will not result in any new environmental effects over and beyond those associated with the current landfill operations.

1-5) City of Whittier. Savage Canyon Sanitary Landfill Expansion Environmental Impact Report. Engineering Science, Inc. in April 1977.

1-6) In 1996 the City upgraded the Landfill's capacity to 11,544,000 cubic yards based on a revised waste-to-cover ratio with the use of an alternative day cover (ADC).

Table 1-1
Initial Study Checklist

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
3.2		**LAND USE AND DEVELOPMENT IMPACTS.** ***Would the project:***				
	a)	Physically divide an established community?	☐	☐	☐	■
	b)	Conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■
	c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■
	d)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
	e)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
	f)	Involve other changes in the existing environment that, due to their location or nature, may result in conversion of farmland to non-agricultural use?	☐	☐	☐	■
3.3		**POPULATION, HOUSING, AND EMPLOYMENT IMPACTS.** ***Would the project:***				
	a)	Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	☐	■
	b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
	c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
3.4		**EARTH AND GEOLOGY IMPACTS.** ***Would the project result in or expose people to potential impacts involving:***				
	a)	The risk of loss or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault rupture?	☐	☐	■	☐

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
	b)	Substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground-failure, including liquefaction?	☐	☐	☐	■
	c)	Substantial soil erosion or the loss of topsoil?	☐	☐	☐	■
	d)	Location on a geologic unit or a soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	■
	e)	Location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	■
	f)	Soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
	g)	Unique geologic or physical features?	☐	☐	☐	■
3.5	**HYDROLOGY AND WATER IMPACTS.** ***Would the project:***					
	a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	■
	b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge in such a way that would cause a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	■
	c)	Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	■
	d)	Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in flooding on- or off-site?	☐	☐	☐	■
	e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	■
	f)	Substantially degrade water quality?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
	g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
	h)	Place within a 100-year flood hazard area, structures which would impede or redirect flood flows?	☐	☐	☐	■
	i)	Expose people or structures to a significant risk of flooding as a result of dam or levee failure?	☐	☐	☐	■
	j)	Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■
3.6	**AIR QUALITY IMPACTS.** ***Would the project:***					
	a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
	b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	■	☐
	c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	■
	d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	■
	e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	■
	f)	Alter air movement, moisture, or temperature, or cause any change in climate?	☐	☐	☐	■
3.7	**BIOLOGICAL RESOURCES IMPACTS.** ***Would the project have a substantial adverse effect:***					
	a)	Either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☐	☐	■
	b)	On any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service ?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
	c)	On federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
	d)	In interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
	e)	In conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■
	f)	By conflicting with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■
3.8		**MINERAL RESOURCES IMPACTS.** ***Would the project:***				
	a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
	b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■
3.9		**RISK OF UPSET AND HUMAN HEALTH.** ***Would the project:***				
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	■
	b)	Create a significant hazard to the public or the environment or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	■
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	■
	d)	Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
	e)	Be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
	f)	Within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
	g)	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency response plan or emergency evacuation plan?	☐	☐	☐	■
	h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fire, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■
3.10	**NOISE IMPACTS.** ***Would the project result in:***					
	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	■
	b)	Exposure of people to, or generation of, excessive ground-borne noise levels?	☐	☐	☐	■
	c)	A substantial permanent increase in ambient noise levels in the project vicinity above noise levels existing without the project?	☐	☐	☐	■
	d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	■
	e)	For a project located with an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■
	f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
3.11		**PUBLIC SERVICES IMPACTS.** ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas:***				
	a)	Fire protection services?	☐	☐	☐	■
	b)	Police protection services?	☐	☐	☐	■
	c)	School services?	☐	☐	☐	■
	d)	Other public facilities?	☐	☐	☐	■
	e)	Other governmental services?	☐	☐	☐	■
3.12		**UTILITIES IMPACTS.** ***Would the project:***				
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
	b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?	☐	☐	☐	■
	c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
	d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	■
	e)	Result in a determination by the wastewater treatment provider which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
	f)	Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	■
	g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	■
	h)	Result in a need for new systems, or substantial alterations in power or natural gas facilities?	☐	☐	☐	■
	i)	Result in a need for new systems, or substantial alterations in communication systems?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
3.13		**AESTHETICS IMPACTS.** ***Would the project:***				
	a)	Affect a scenic vista?	☐	☐	☐	■
	b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
	c)	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	■
3.14		**CULTURAL RESOURCES IMPACTS.** ***Would the project:***				
	a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	■
	b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	■
	c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■
	d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	■
	e)	Have the potential to cause a physical change that would affect unique ethnic cultural values?	☐	☐	☐	■
	f)	Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	■
3.15		**RECREATION IMPACTS.** ***Would the project:***				
	a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
	b)	Affect existing recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■
3.16		**TRANSPORTATION AND TRAFFIC IMPACTS.** ***Would the project:***				
	a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	■

			Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
	b)	Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?	☐	☐	☐	■
	c)	Substantially increase hazards due to the design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	■
	d)	Result in inadequate emergency access?	☐	☐	☐	■
	e)	Result in inadequate parking capacity?	☐	☐	☐	■
	f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	■
	g)	Result in waterborne or air traffic impacts?	☐	☐	☐	■
	h)	Result in hazards or barriers for pedestrians or bicyclists?	☐	☐	☐	■

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2.0 PROJECT DESCRIPTION

2.1 Location and Setting

2.1.1 Project Location

The proposed "project" involves the approval and subsequent implementation of a Final Grading Plan (FGP) for the existing Savage Canyon Landfill, located in the City of Whittier. The City of Whittier is located in the easternmost portion of Los Angeles County, and is bounded on the west by the Cities of Pico Rivera and Montebello, on the north by the City of Hacienda Heights and unincorporated portions of Los Angeles County, on the east by the City of La Habra, and on the south by the City of Santa Fe Springs.

The Savage Canyon Landfill (referred to hereinafter as the "Landfill") is located at 13919 East Penn Street.[2-1] The Landfill is located at the easterly terminus of East Penn Street in the north-central portion of the City. The Landfill's location, in a regional and Citywide context, is provided at the end of this section in Exhibits 2-1 and 2-2, respectively. A vicinity map is provided in Exhibit 2-3.

2.2 Background of Project

The Savage Canyon Landfill is owned and operated by the City of Whittier Public Works Department as a Class III sanitary landfill.[2-2] The Landfill was established in 1935 and was used as an open pit burning dump until 1949, when it was converted to a sanitary landfill.[2-3] Prior to 1977, the Landfill consisted of 87 acres of usable land. At that time, an Environmental Impact Report was prepared to assess the environmental effects associated with an expansion of the Landfill by an additional 45 acres. The proposed expansion plan was determined to be necessary to accommodate an additional disposal capacity of 4,500,000 cubic yards, with an attendant increase in the Landfill's operational life. The maximum permitted fill elevation of the Landfill identified at that time was 900 feet above mean sea level (AMSL).[2-4]

In 1996, the City of Whittier contemplated the sale of the Landfill to the Sanitation Districts of Los Angeles County. While the sale was never implemented, the County identified a more efficient fill sequence and grading plan that would increase the Landfill's overall disposal capacity, while at the same time, extend the Landfill's operational life. The recommended plan, now reflected in the FGP, calls for the laying back of slopes in the back canyon area and the removal of a portion of the existing ridge along the Landfill's easterly boundary (refer to Exhibit 2-4). The FGP will not involve any substantial change in the Landfill's day-to-day operations or otherwise increase the quantities of solid waste received.[2-5]

2-1) United States Geological Survey. *Whittier 7-½ Minute Quadrangle.* Photorevised, 1981.

2-2) City of Whittier Public Works Department. Personal Communication. November 2000.

2-3) City of Whittier. *Savage Canyon Sanitary Landfill Expansion Environmental Impact Report.* Engineering Science, Inc. in April 1977.

2-4) County of Los Angeles Department of Health Services. *Solid Waste Facility Permit Review Report.* June 1999.

2-5) Ibid.

2.3 Project Description

2.3.1 Overview of the Proposed Action

As indicated previously, the proposed project involves the approval and long-term implementation of the final grading plan (FGP) for the existing Savage Canyon Landfill. The Landfill is a Class III waste disposal facility consisting of 132 acres, owned and operated by the City of Whittier Public Works Department. According to the existing Solid Waste Facility Permit (SWFP), the facility is permitted for the disposal of non-hazardous municipal waste only.[2-6] The facility's current operations are governed by the SWFP issued on February 22, 1995. This SWFP dictates the Landfill's maximum daily tonnage, hours of operation, the maximum height of the Landfill, maximum depth of excavation, and other operational elements.[2-7] The projected closure date for the Landfill is 2025, assuming a maximum daily tonnage of 350 tons per day. According to the 1995 SWFP, the Landfill's remaining disposal capacity was 8,119,412 cubic yards (including both refuse and cover materials). The key elements of the SWFP are outlined below in Table 2-1.

Table 2-1
Solid Waste Facility Permit Requirements for the Savage Canyon Landfill

Requirement	Description
Maximum daily tonnage	350 tons/day of non-hazardous solid waste
Hours of operation (restricted by local ordinance)	7:30 am to 3:00 pm, Monday through Saturday
Maximum Landfill height	900 feet above mean sea level (AMSL)
Maximum depth of excavation	650 feet below grade surface
Total permitted Landfill facility area	132 acres
Permitted disposal footprint area	132 acres
Estimated closure date	2025 at 350 tons per day
Remaining solid waste capacity (identified in SWFP)	8,119,412 cubic yards (including waste and cover materials)

Source: Savage Canyon Landfill Solid Waste Facility Permit. February 22, 1995.

The City of Whittier Public Works Department is seeking to amend the Savage Canyon Landfill's SWFP to accommodate the FGP described above. The FGP will result in a change in the permitted design capacity of the Landfill to 12,508,900 cubic yards (compared to the existing permitted capacity of 8,119,412 cubic yards). In addition, the closure date identified in the existing SWFP will be extended to 2048 (from the current projected closure date of 2025) with the implementation of the FGP.[2-8]

2-6) County of Los Angeles. *Solid Waste Facility Permit Review Report.* June 1999.

2-7) California Environmental Protection Agency. Correspondence from William L. Ishmael to Scott Morgan at the Governor's Clearing House, Office of Planning Research, Dated February 2, 2000.

2-8) County of Los Angeles Department of Health Services. *Solid Waste Facility Permit Review Report.* June 1999.

The conceptual fill plan (which reflects the FGP) is illustrated in Exhibit 2-4. The conceptual fill plan indicates the existing and proposed surface contours, the cut fill line, the proposed drainage swale, and existing improvements within the 132-acre Landfill.

2.3.2 Physical Characteristics of the Proposed Action

As indicated previously, the proposed FGP calls for the laying back of slopes in the back canyon area and the removal of a portion of the existing ridge located along the Landfill's easterly boundary (refer to Exhibit 2-4).[2-9] Overall, no substantial changes to the Landfill's contours and slopes are associated with the proposed FGP. The final permitted fill elevation (900 feet AMSL) will not change from that identified in the SWFP, nor will the planned final or intermediate slopes be altered (the existing typical ratio of these slopes is 2:1). The increased capacity provided by the FGP will be accomplished with the implementation of the following elements:

1. An increase in the ratio of waste to dirt from the existing 2:1 to 3:1 due to the use of an alternative daily cover employing a tarp covering;

2. An increase in the compaction rate from the existing 1,000 pounds/cubic yard to 1,400 pounds/cubic yard through the more efficient use of landfill equipment; and,

3. The more efficient use of airspace.

The aforementioned improvements and activities will not exceed the current requirements outlined in the SWFP. The final elevation of the Landfill will not exceed the permitted 900 feet AMSL elevation or extend beyond the permitted boundaries.[2-10] The final grading plan and the grading plan cross-sections are noted in Exhibits 2-4 and 2-5, respectively.

2.3.3 Operational Characteristics

Minimal changes to the day-to-day operations within the Landfill will be required to accommodate the aforementioned changes required to implement the FGP. Overall, no changes to the Landfill's operation between the present time and the Landfill closure in 2048 will be required. The following operations will not be impacted by the approval and subsequent implementation of the FGP:

1. There will not be any increase in the quantities of solid waste received by the Landfill as a result of the FGP's approval and subsequent implementation;

2. There will not be any changes in the Landfill's hours of operation;

3. There are no plans to excavate existing refuse or to penetrate any existing waste cell;[2-11]

4. No additional heavy equipment will be required to implement the FGP;

2-9) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

2-10) Ibid.

2-11) The waste-to-cover ratios and compaction standards have already been revised to correspond with the recommendations made by the Sanitation Districts of the County of Los Angeles.

5. No changes to the existing drainage plan will be required to implement the FGP;

6. Procedures governing excavation and disposal activities will reflect current practices;

7. No additional staffing and/or personnel will be required to implement the FGP; and,

8. No additional off-site traffic will be generated.[2-12]

Modifications to the facility's operations will be limited to areas located within the Landfill, and include the relocation of roads and traffic patterns within the Landfill area. The FGP will also involve minor alterations to the Landfill's existing hydrology and drainage, though the overall existing drainage scheme will not be affected.[2-13]

2.4 Objectives And Discretionary Actions

2.4.1 Project Objectives

In approving or denying this project, the City of Whittier is required to make specific findings. These findings must also consider the objectives the City seeks to accomplish as part of the proposed action's implementation. For this FGP, the following objectives are considered:

1. The City of Whittier seeks to extend the Landfill's operational life to meet the continued waste disposal needs of the community;

2. The City of Whittier seeks to ensure that any adverse environmental effects from the ongoing operations of the Landfill are mitigated to the fullest extent possible; and,

3. The City seeks to ensure that the continued operation of the Landfill is accomplished in an efficient manner.

2.4.2 Discretionary Actions

The proposed FGP will require an amendment to the current SWFP, as well as other State and/or local approvals. The Los Angeles County Department of Health Services, Environmental Health Solid Waste Management Program (DHS) is the designated Local Enforcement Agency (LEA) for the proposed action. The DHS has reviewed the proposed FGP and has determined that the Agency has no objections to the recommended changes arising from the proposed FGP's implementation.[2-14] The Integrated Waste Management Board will also review the proposed FGP and this Initial Study. Finally, the City of Whittier will be required to approve the Mitigated Negative Declaration.

2-12) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

2-13) Ibid.

2-14) County of Los Angeles Department of Health Services. *Review of Solid Waste Facility Permit, Savage Canyon Landfill, 19-AH-0001.* July 1, 1999.

2.5 Overview of the Environmental Setting

The affected area for the FGP is confined to the existing boundaries of the Savage Canyon Landfill. As indicated previously, the Landfill has been operational since the mid-1930s. Land uses in the vicinity of the Landfill include undeveloped hillside areas located to the north and east, and residential development located to the south and west. These undeveloped hillside areas include lands that have undergone extensive disturbance associated with previous oil extraction activities.

Other significant land uses in the area include Penn Park, located immediately to the south, opposite the entrance to the Landfill. Whittier College is located approximately 1,000 feet to the west. The location and extent of land uses are essentially unchanged since the certification of the EIR prepared for the 1977 expansion of the Landfill.[2-15] Land uses in the vicinity of the Landfill are described in greater detail herein in Section 3.2. The environmental setting, relative to the individual environmental issues considered herein, are described in greater detail in Section 3.0.

2-15) Blodgett/Baylosis Associates. *Site Survey.* November 2000.

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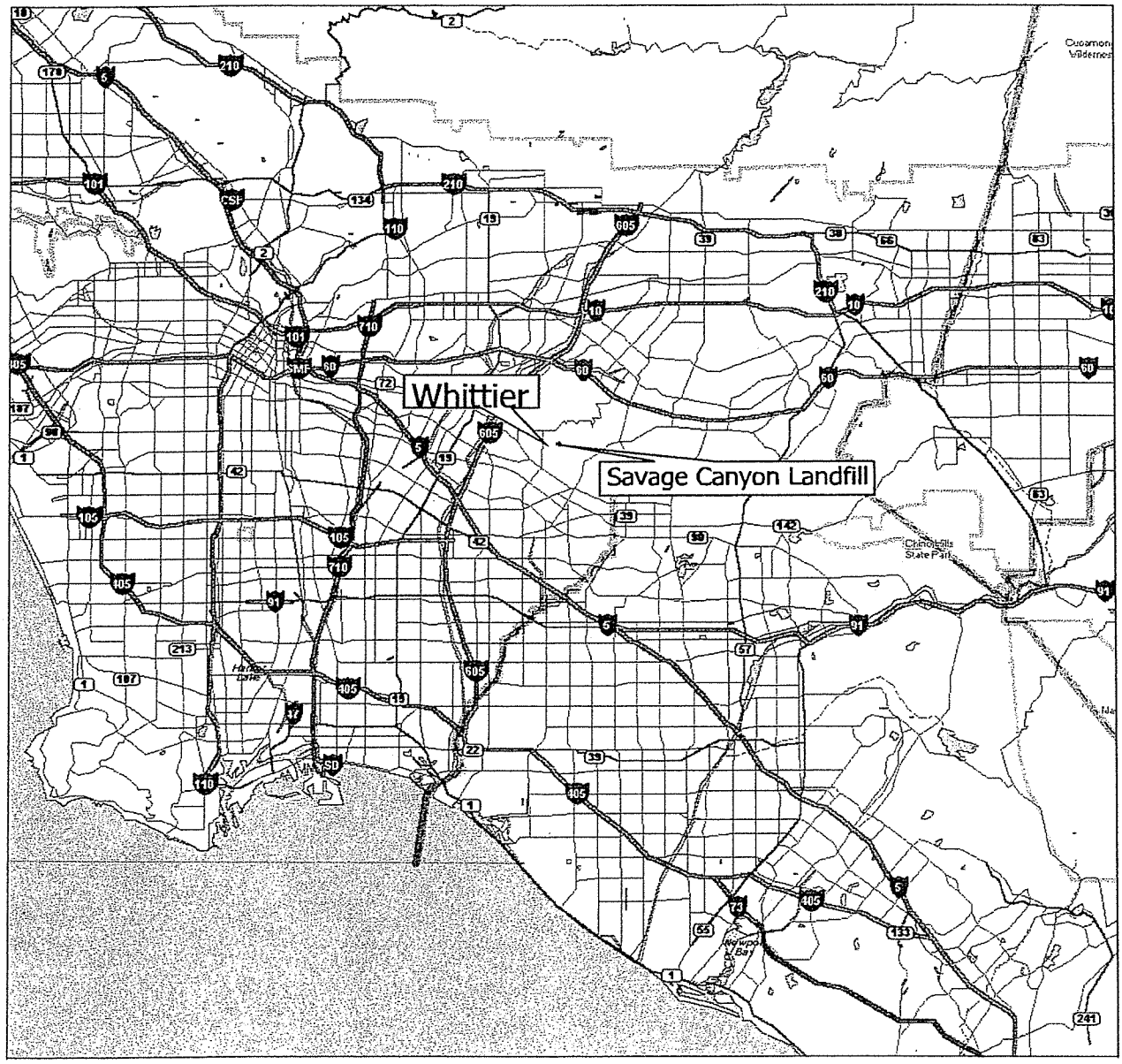

Exhibit 2-1
Regional Location
Source: Blodgett/Baylosis Associates, 2000

North

Exhibit 2-2
Project Location in City of Whittier
Source: Blodgett/Baylosis Associates, 2000

North

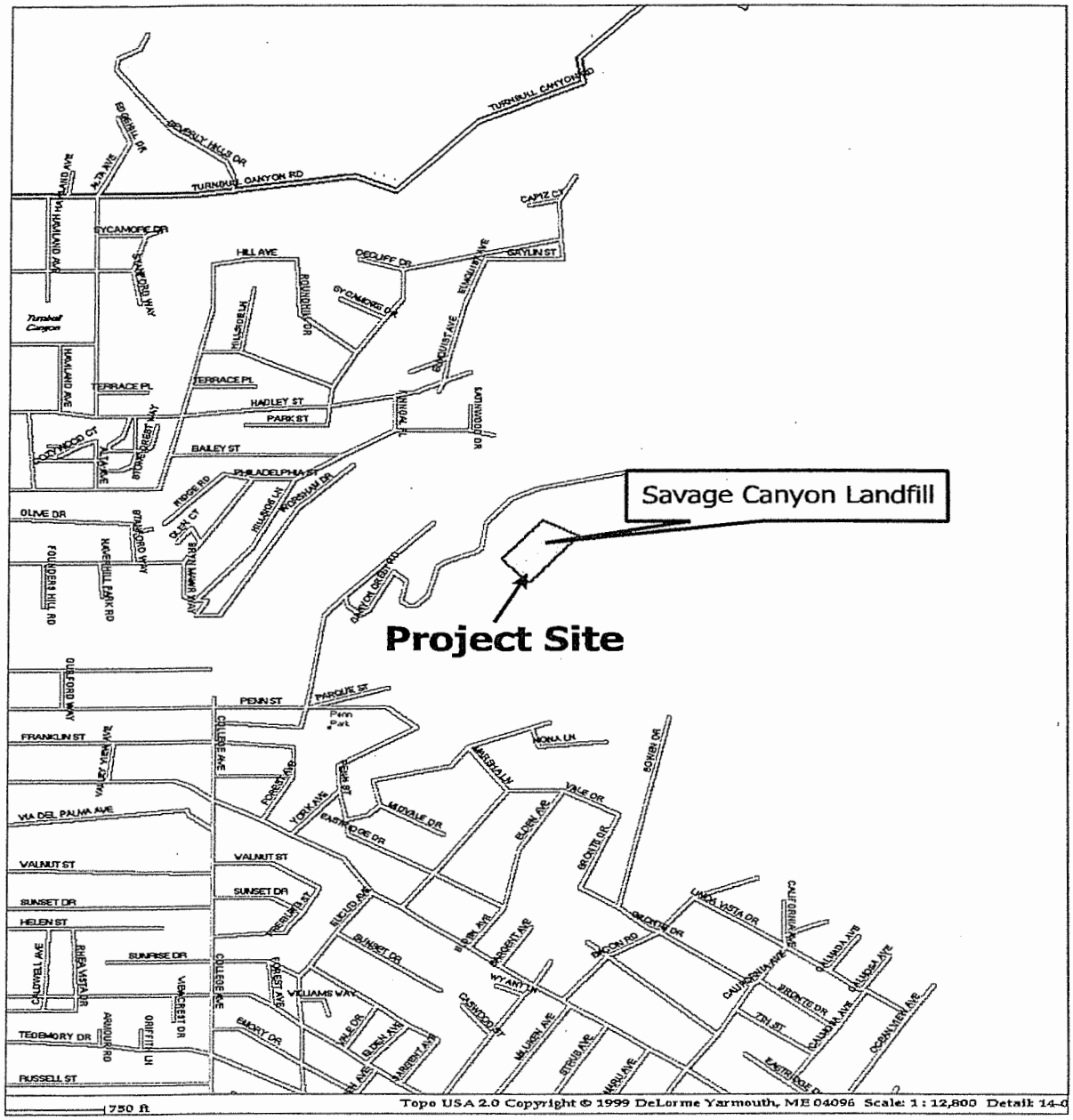

Exhibit 2-3
Vicinity Map
Source: Blodgett/Baylosis Associates, 2000

North

Exhibit 2-4
Proposed Grading Plan
Source: Bryan A. Stirrat and Associates

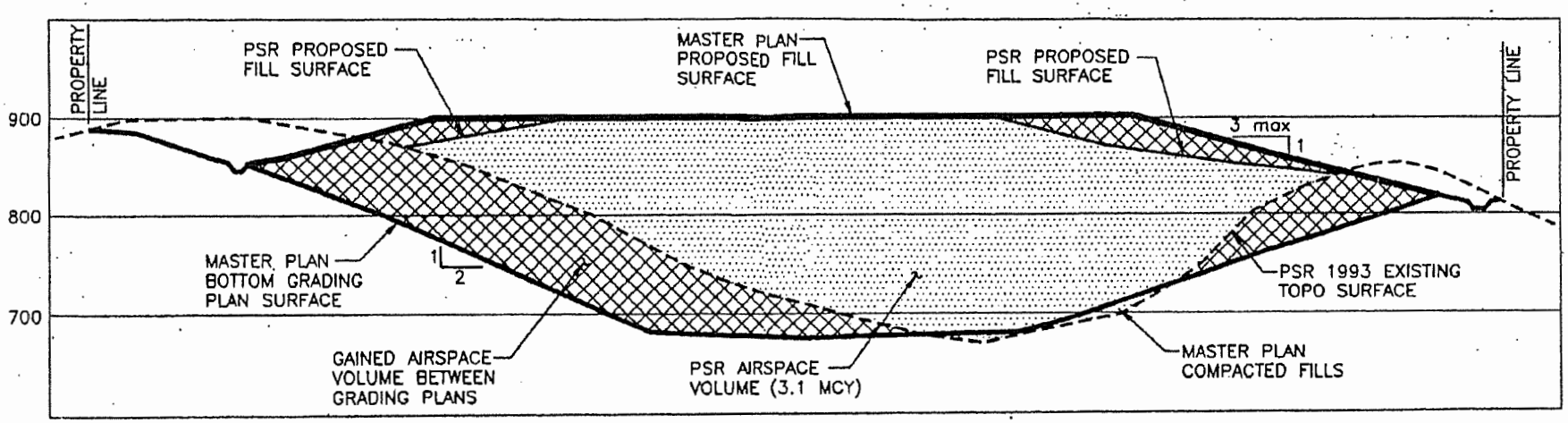

Exhibit 2-5
Proposed Cross Section
Source: Bryan A. Stirrat and Associates

3.0 ENVIRONMENTAL ANALYSIS

3.1 Scope of Analysis

This section of the Initial Study analyzes the potential environmental impacts that may result from the approval and subsequent implementation of the final grading plan (FGP) and the related actions that are described herein in Section 2.0. The issue areas evaluated in this Initial Study include the following: *land use and development; population and housing; earth and geology; water and hydrology; air quality; biological resources; energy and mineral resources; risk of upset and human health; noise; public services; utilities; aesthetics; cultural resources; recreation;* and, *transportation and circulation.*

The environmental analysis contained in this section of the Initial Study is patterned after the Initial Study Checklist used by the City of Whittier in its environmental review process. Under each issue area, a description of the *thresholds of significance* is provided. These thresholds will assist the City in making a determination as to whether there is a potential for significant or adverse changes to the environment associated with the proposed FGP's implementation. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study's preparation. The analysis considers the short-term (construction-related) impacts, long-term impacts associated with the proposed Landfill's operation, and where appropriate, the cumulative impacts. To each question, there are four possible responses:

1. *No Impact.* The proposed action will not have any measurable environmental impact on the environment, and no further analysis is required.

2. *Less Than Significant Impact.* The proposed action may have the potential for impacting the environment, although these impacts are likely to be below levels or thresholds that the City of Whittier or other responsible agencies consider to be significant. Therefore, no further analysis is required.

3. *Potentially Significant Impact - Mitigation Recommended.* The proposed action may have the potential to generate impacts that are considered to be a significant impact on the environment. However, mitigation measures have been recommended that will be effective in reducing impacts to levels that are less than significant.

4. *Potentially Significant Impact.* The proposed action may, or is known to, represent impacts that are considered significant, and additional analysis is required to identify mitigation measures.

An explanation of the response is provided for each issue evaluated. The sources of information for each question are provided using footnotes. The references consulted in this Initial Study's preparation are listed in Section 5.2 herein.

Significant Effects

With regard to the identification of significant effects, CEQA provides the following guidance:

> *"The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of a significant effect is not possible because the significance of an activity may vary with the setting."*

Other criteria and standards used by the City, responsible agencies, and trustee agencies are also used in the identification of potentially significant effects.

3.2 Land Use & Development Impacts

3.2.1 Thresholds of Significance

According to the City of Whittier, acting as Lead Agency, a project may be deemed to have a significant impact on land use and development if it results in any of the following:

1. The disruption or division of the physical arrangement of an established community;
2. A conflict with an applicable land use plan, policy, or regulation of the agency with jurisdiction over the project;
3. A conflict with any applicable conservation plan or natural community conservation plan;
4. The conversion of prime farmland, unique farmland, or farmland of statewide importance;
5. A conflict with existing zoning for agricultural use, or a Williamson Act contract; or,
6. Changes to the existing environment which, due to their location or nature, may result in the conversion of farmland to non-agricultural uses.

3.2.2 Environmental Impacts

A. Would the project physically divide an established community ? ***No Impact.***

The proposed FGP will be confined to the existing 132-acre Savage Canyon Landfill. Land uses in the vicinity of the Landfill include undeveloped hillside areas located to the north and east of the Landfill and residential development to the south and west. The residential neighborhoods located to the south are separated from the Landfill by Penn Street and Penn Park. Penn Park is located immediately to the south of the Landfill's entrance. Residential uses to the west are separated from the Landfill by City-owned open space (Worsham Canyon).[3-1] Surrounding land uses and development are itemized in Table 3-1.

Table 3-1
Land Use Characteristics Near Savage Canyon Landfill

Location in Relation to Landfill	Land Use
North	Undeveloped hillside areas
Northwest	Single-family residential
West	Single-family residential
1,000 feet to the west	Whittier College
West	Open space (Worsham Canyon)
South of Penn Street	Single-family residential along Penn Street
South of Penn Street	Penn Park
Southwest along Penn Street	Multiple-family and single-family development
East and adjacent	Open space, undeveloped hillside areas.

Source: Blodgett/Baylosis Associates. 2000.

3-1) Blodgett/Baylosis Associates. *Site Survey.* November 2000.

The approval and subsequent implementation of the FGP will not result in any physical changes to the location and distribution of housing units within nearby residential neighborhoods, nor affect the existing access. As indicated previously, the proposed FGP will be confined to the existing 132-acre site occupied by the Savage Canyon Landfill.[3-2]

The proposed FGP will not create any new land use barriers or otherwise divide established neighborhoods located in the vicinity of the Landfill. The existing Landfill boundaries will remain unchanged with the approval and subsequent implementation of the FGP.[3-3] As a result, no impacts related to the physical division of an established community will result from the proposed FGP's implementation.

B. *Would the project conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?* ***No Impact.***

The existing Savage Canyon Landfill is designated as a public Open Space use in the City of Whittier General Plan. This land use designation acknowledges that, following closure, the Landfill will be incorporated into the City's open space inventory to ultimately be used for recreation and/or resource conservation.[3-4] The land use designations applicable to nearby parcels generally correspond to the distribution and mix of existing development. The applicable designations to the surrounding parcels are summarized in Table 3-2.

Table 3-2
Land Use Designations (Zoning and General Plan) Near Savage Canyon Landfill

Location in Relation to Landfill	Land Use Designation	Jurisdiction
North and adjacent	Open Space	Los Angeles County
Northwest and adjacent	Open Space	Los Angeles County
West and adjacent	Hillside Residential	City of Whittier
Southwest and adjacent	Open Space (Penn Park)	City of Whittier
South (south of Penn St.)	Low-Density Residential	City of Whittier
Southeast and adjacent	Hillside Residential	City of Whittier
East and adjacent	Open Space	Los Angeles County
Along Penn St. to Painter Ave.	Medium- and High-Density Residential	City of Whittier

Source: City of Whittier General Plan.

The proposed action involves the preparation and the approval of an FGP related to the ultimate closure of the Savage Canyon Landfill. The approval and ultimate implementation of the grading plan will permit the operational life of the Landfill to be extended to 2048 (the current projected closure date is 2025).[3-5] The grading plan will not alter the Landfill's permitted boundaries, nor change the physical characteristics of the Landfill's operations outlined in the approved SWFP. The

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3-2) City of Whittier. Personal communication with Public Works Department representatives.

3-3) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-4) City of Whittier. *Land Use Element of the General Plan*. 1992

3-5) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

disposal operations and activities will continue to be confined to the existing 132-acre Landfill. No changes to the existing General Plan and Zoning designations will be required to implement the proposed action.

There are a number of environmental plans applicable to the City, though not necessarily to the proposed FGP. These include the Regional Comprehensive Plan and Guide, and the Regional Housing Needs Assessment prepared by the Southern California Association of Governments (SCAG); the Air Quality Management Plan prepared and administered by the South Coast Air Quality Management District (SCAQMD); and the Congestion Management Plan administered by the Los Angeles County Metropolitan Transportation Authority (MTA). The proposed FGP's conformity to these plans is discussed in the appropriate sections of this Initial Study (housing, air quality, and traffic).

The proposed FGP is not considered regionally significant according to the guidelines established by the SCAQMD.[3-6] Thus, the FGP will not result in any significant adverse impacts on any applicable environmental plans or policies.

C. *Will the project conflict with any applicable habitat conservation plan or natural community conservation plan?* ***No Impact.***

Under the applicable City of Whittier General Plan land use designations, no agricultural uses or activities are contemplated for the Landfill.[3-7] The Landfill has been historically used for the disposal of municipal wastes. The Landfill was established in 1935, and was initially used as an open pit burning dump until 1949, when it was converted to a sanitary landfill.[3-8]

The proposed FGP provides for the long-term waste disposal needs for the City of Whittier through the year 2048. The approval and subsequent implementation of the FGP is also anticipated to increase the Landfill's overall disposal capacity. This additional capacity is anticipated to extend the Landfill's operational life from the existing projected closure date in 2025 to 2048.[3-9] The closure protocols anticipate that the Landfill's reclamation efforts will include re-vegetation and improvements consistent with its anticipated open space use. Following closure, the Landfill will likely serve as an important element of the Whittier Hills conservation efforts, which include the recent acquisition of Worsham Canyon by the City.

The proposed grading plan will not impact any ongoing conservation efforts currently being implemented for the Whittier Hills. The FGP and the attendant related actions will be confined to the existing 132-acre Landfill site.[3-10] As a result, no adverse impacts on agricultural production or activities are associated with the approval and subsequent implementation of the FGP.

3-6) South Coast Air Quality Management District. *CEQA Air Quality Handbook.* 1993.

3-7) City of Whittier. *General Plan Land Use Element.* 1992

3-8) City of Whittier. *Savage Canyon Sanitary Landfill Expansion Environmental Impact Report.* Engineering Science, Inc. in April 1977.

3-9) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-10) County of Los Angeles Department of Health Services. *Solid Waste Facility Permit Review Report.* June 1999.

D. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ***No Impact.***

No agricultural activities are located within the Landfill, nor does the City of Whittier General Plan contain any agricultural land use designation. No lands within the City are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[3-11] As a result, no impacts on these soil resources will result from the proposed FGP's approval and subsequent implementation.

E. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ***No Impact.***

No agricultural activities are located within the Landfill, nor does the City of Whittier General Plan provide for any specific agricultural land use designation.[3-12] In addition, no parcels within the City are under a Williamson Act contract. As a result, the approval and subsequent implementation of the FGP will not impact any existing Williamson Act contract.

F. Would the project involve other changes in the existing environment that, due to their location or nature, may result in conversion of farmland to non-agricultural use? ***No Impact.***

No significant agricultural activities or farmland uses are located within the Landfill area or in the surrounding area, nor does the City of Whittier General Plan contain any agricultural land use designation.[3-13] The proposed FGP will not result in the conversion of any existing farmland to urban uses. As a result, no farmland conversion impacts will result from the proposed FGP's approval and subsequent implementation.

3.2.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse land use and development impacts. As a result, no mitigation is required or recommended at this time.

3.3 Population & Housing Impacts

3.3.1 Thresholds of Significance

According to the City of Whittier, acting as Lead Agency, a project may be deemed to have a significant impact on housing and population if it results in any of the following:

1. A substantial growth in the population within an area, either directly or indirectly related to a project;

2. The displacement of a substantial number of existing housing units, necessitating the construction of replacement housing; or,

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3-11) State of California Department of Conservation. *Farmland Conversion Report Publication 98-01.* 1998.

3-12) Blodgett/Baylosis Associates. *Site Survey.* 2000.

3-13) City of Whittier. *General Plan.* 1992

3. The displacement of substantial numbers of people, necessitating the construction of replacement housing.

3.3.2 Environmental Impacts

A. *Would the project induce substantial population growth in an area, either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?* ***No Impact.***

The City's current (January, 2000) population is estimated by the California Department of Finance (DOF) to be 86,152 persons. These same DOF statistics indicate there are 29,224 housing units in the City.[3-14] According to the City of Whittier General Plan, there were 1,473 job sites in the City in 1992, with 23,331 employees.[3-15] The proposed FGP, and the attendant actions, will extend the operational life of the Savage Canyon Landfill from its current projected closure date of 2025 to 2048. The proposed FGP will also result in the Landfill's disposal capacity being increased from its current 8,119,412 cubic yards to 12,508,900 cubic yards. The proposed action will not result in any increased employment, since day-to-day operations will not change.[3-16]

The Southern California Association of Governments (SCAG) has prepared preliminary housing, population, and employment growth projections for the City through the year 2020. For these projections, 1997 is used as the baseline year. According to SCAG, there were 30,205 persons employed in the City in 1997. The projections indicate that there would be 30,548 persons employed in the City in the year 2000, 31,619 persons employed in the year 2010, and 32,399 persons employed in the City in the year 2020. The near-term growth in employment (from the 1997 baseline year to the year 2000) is projected to be 343 new jobs.

As indicated previously, the proposed FGP will not affect the employment growth projected for the City.[3-17] The FGP will respond to growth that is likely to occur in the future. Solid waste disposal capacity is likely to diminish in the future due to the continued decline of available landfill capacity. The Spadra Landfill is now closed, and the Puente Hills Landfill is slated for closure within the next several decades. The implementation of the FGP will provide the City with the waste disposal capacity to meet projected demand into the mid-century. As a result, no significant adverse impacts related to population growth inducement are anticipated as part of the proposed FGP's implementation.

3-14) California, State of. Department of Finance. *City/County Population and Housing Estimates. E-5.* 1998

3-15) City of Whittier. *General Plan Housing Element.* 1992

3-16) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-17) Southern California Association of Governments. *Preliminary Population, Housing, and Employment Projections for the Gateway Cities.* 1998.

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B. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere ? ***No Impact.***

The proposed FGP will not displace any existing housing units. No residential units are located within the boundaries of the Savage Canyon Landfill.[3-18] As a result, no adverse impacts related to housing displacement will result from the proposed grading plan's approval and its long-term implementation. The majority of the parcels located to the west and south of the Landfill are committed to residential development or resource preservation.[3-19]

As indicated in Section 3.13 herein, infrastructure connections and upgrades will not be required to accommodate the proposed FGP. As a result, the FGP is not anticipated to result in any growth-inducing impacts, nor serve as a catalyst for new development in adjacent areas.[3-20]

C. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ***No Impact.***

There are no housing units located within the boundaries of the existing Savage Canyon Landfill. The nearest homes to the Landfill are located to the east of the Landfill along and south of Penn Street.[3-21] No residential displacement impacts are associated with the implementation of the proposed FGP. As a result, no relocation or replacement of existing housing units will be necessary, and no adverse impacts will result.

3.3.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse population and housing impacts. As a result, no mitigation is required or recommended at this time.

3.4 Earth & Geology Impacts

3.4.1 Thresholds of Significance

According to the City of Whittier, acting as the Lead Agency, a project may be deemed to have a significant impact on the environment if it results in the following:

1. The exposure of people or structures to potential substantial adverse effects, including the risk of loss, or death related to fault rupture from a known earthquake fault;

2. Substantial soil erosion resulting in the loss of topsoil;

3-18) Blodgett/Baylosis Associates. *Site Survey.* 2000

3-19) Ibid.

3-20) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-21) Blodgett/Baylosis Associates. *Site Survey.* 2000

3. Locating a project within a geologic or soils unit that is unstable, or that would become unstable as a result of the project, potentially resulting in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;

4. Locating on an expansive soil, creating substantial risks to life or property; or,

5. Locating a project on soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

3.4.2 Environmental Impacts

A. *Would the project result in or expose people to potential impacts, including the risk of loss or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault rupture?* ***Less Than Significant Impact.***

The fault trace for the Whittier-Elsinore fault traverses the northeasterly and easterly portions of the Landfill site. Other active faults in the region that could produce moderate to strong motion at the Landfill include the Elysian Park Thrust Fault, the Newport-Inglewood Fault, the Sierra Madre Fault, the Compton Thrust Fault, the San Jacinto Fault, and the San Andreas Fault. However, given its close proximity, the Whittier Fault is considered capable of generating the greatest amount of ground motion at the site.[3-22)] Other major faults within the surrounding region are summarized in Table 3-3.

Table 3-3
Active Earthquake Faults Near the Savage Canyon Landfill

Fault Name	Miles from Site	MCR
Newport-Inglewood	13 NE	7.0
Palos Verdes	20 W	6.7
Elsinore	16 S	7.7
San Jacinto	43 W	7.0
Whittier	within site	7.0
San Madre	20 NE	8.0

MCR - Maximum Credible Richter Magnitude

Source: Los Angeles County Safety Element, 1990.

An earthquake along the Whittier segment of the Whittier-Elsinore fault may result in surface rupture within the Landfill boundaries. However, no critical facilities are contemplated within the Landfill. The FGP will consist of limited modifications to the existing long-range closure plan. No new structures are associated with the approval and subsequent implementation of the FGP. As a result, the impacts are considered to be less than significant.

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39 3-22) City of Whittier. *Master Environmental Assessment.* 1992.

B. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction? ***No Impact.***

The Landfill is not underlain by soils that are considered to be susceptible to liquefaction hazards. As indicated previously, the Landfill is located within Seismic Zone 4, which is also applicable to the majority of the Southern California basin. With an earthquake generating the maximum postulated ground motion intensity, the Landfill and the surrounding region are expected to experience ground motion intensities. The potential for liquefaction is limited to those areas found along the Worsham Canyon drainage, located west of the Landfill.[3-23] However, the Landfill will be subject to seismic hazards and risk similar to that for the surrounding region.

The Mercalli Scale

- **I** Tremor not felt.
- **II** Tremor felt by persons at rest or in upper floors of a building.
- **III** Tremor felt indoors, vibrations feel like a light truck passing by; may not be recognized as an earthquake, hanging objects swing.
- **IV** Hanging objects swing, vibrations similar to a heavy truck, parked cars rock, windows rattle, some cracks in wooden walls and frames.
- **V** Earthquake felt outdoors, small unstable objects are displaced or upset, doors swing.
- **VI** Earthquake felt by everyone, windows, dishes, and glassware are broken. Knick-knacks and books fall off shelves; pictures fall off walls, cracking in weak plaster and masonry structures.
- **VII** Steering of motor cars is affected, partial collapse of masonry structures, failure of stucco and some masonry walls, twisting and falling of chimneys, frame structures may shift.
- **VIII** Damage slight in specially designed structures, though significant in unreinforced buildings.
- **IX** Masonry structures destroyed or heavily damaged, damage to foundations, underground pipes are broken, conspicuous cracks in ground.
- **X** Most masonry and frame structures are destroyed, most foundations, serious damage to dams, dikes, and embankments, underground pipelines are seriously damaged, large landslides.
- **XI** Underground pipelines completely out of service, widespread ground disturbances, severe damage to wood-frame structures.
- **XII** Damage is nearly total.

The proposed FGP will not introduce any additional seismic risk not already present. As a result, the potential ground-shaking effects for the Landfill area will be comparable to those anticipated for the surrounding area. As a result, no significant adverse impacts are expected.

C. Would the project expose people or structures to potential substantial adverse effects, including substantial soil erosion or the loss of topsoil? ***No Impact.***

The underlying soils within the Landfill consist of the Altamont-Diablo Association. These soils are generally well-drained and have a slow subsoil permeability. These soils have a relatively high shrink-swell behavior.[3-24] The FGP provides for the more efficient use of the existing available Landfill capacity. The potential for erosion will not significantly change with the approval and subsequent implementation of the FGP. As a result, no impacts are anticipated.

D. Would the project expose people or structures to potential substantial adverse effects, including location on a geologic unit or a soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? ***No Impact.***

The Landfill has experienced disturbance due to ongoing waste disposal activities since 1935. The United States Department of Agriculture (USDA) has prepared a soils association report and map

3-23) City of Whittier. *Master Environmental Assessment.* 1992.

3-24) United States Department of Agriculture. *Soils Survey for the Los Angeles Area.* 1979.

for Los Angeles County. According to this report, the Landfill is underlain by soils belonging to the Altamont-Diablo Association. This soils association occurs on alluvial fans and is generally 20 to 60 inches deep, well-drained, and has slow soil permeability. The available water-holding capacity is 24 to 36 inches within a layer 60 inches in depth. The inherent fertility of this soil type is high.[3-25]

The Altamont-Diablo soils association has a high shrink-swell behavior, high corrosivity for untreated steel pipe, and a slow water retention capability. This soil classification is often used for agricultural production in non-urban areas. These soils do not present any inherent constraints to continued Landfill operations.[3-26] This is underscored by the nature and extent of development in the surrounding area. As a result, no adverse impacts associated with expansive soils are anticipated. According to the Los Angeles County Safety Element, the Landfill is not located in or near an area identified as having a potential for liquefaction. In addition, the more recent mapping efforts undertaken by the State of California Division of Mines and Geology indicate that the Landfill is not located within an area subject to liquefaction.[3-27] Finally, the FGP will not involve the construction of any new improvements and/or structures. As a result, no significant impacts are anticipated.

E. Would the project result in or expose people to potential impacts, including location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? ***No Impact****.*

The United States Department of Agriculture (USDA) has prepared a soils association report and map for Los Angeles County. According to this report, the Landfill is underlain by soils belonging to the Altamont-Diablo Association. This soils association occurs on alluvial fans and is generally 20 to 60 inches deep, well-drained, and has slow soil permeability. The available water-holding capacity is 24 to 36 inches within a layer 60 inches in depth. The inherent fertility of this soil type is high.[3-28]

The Altamont-Diablo Association has a high shrink-swell behavior, high corrosivity for untreated steel pipe, and a slow water retention capability.[3-29] The proposed FGP will not involve the construction of any improvements that would be adversely impacted by the proposed action. As a result, no impacts are anticipated.

F. Would the project result in or expose people to potential impacts, including soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ***No Impact.***

As indicated previously, the Landfill will undergo continued grading to accommodate future waste disposal activities. The on-site soils do not represent a constraint to development, as evidenced by the nature and extent of the surrounding development. In addition, no use of septic tanks or

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3-25) United States Department of Agriculture. *Soils Survey for the Los Angeles Area.* 1979.

3-26) Ibid.

3-27) California, State of. Division of Mines and Geology. *Official Map of Seismic Hazards, Whittier Quadrangle.* March 25, 1999.

3-28) United States Department of Agriculture. *Soils Survey for the Los Angeles Area.* 1979.

3-29) Ibid.

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alternative sewer systems are permitted, nor will they be required by the proposed FGP. As a result, no impacts will result.

G. Would the project result in or expose people to potential impacts, including unique geologic or physical features? ***No Impact.***

The Landfill is located at the terminus of Penn Street in the City of Whittier. The Landfill's elevation ranges between 600 to 960 feet above mean sea level (AMSL). Review of the USGS quadrangle for the Landfill indicates there are no unique geologic or physical features found on or near the Landfill. The Puente Hills are located to the northeast and north of the Landfill.[3-30] The proposed FGP will not alter the maximum Landfill height of 900 feet permitted under the SWFP. No additional off-site impacts are associated with the approval and subsequent implementation of the FGP.

3.4.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse earth and geology impacts. As a result, no mitigation is required or recommended at this time.

3.5 Water & Hydrology Impacts

3.5.1 Thresholds of Significance

According to the City of Whittier, acting as Lead Agency, a project may be deemed to have a significant adverse environmental impact on water resources or water quality if it results in any of the following:

1. A violation of any water quality standards or waste discharge requirements;

2. A substantial depletion of groundwater supplies or interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;

3. A substantial alteration of the existing drainage pattern of the site or area through the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on- or off-site;

4. A substantial alteration of the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in flooding on- or off-site;

5. The creation or contribution of water runoff that would exceed the capacity of existing or planned storm water drainage systems or the generation of substantial additional sources of polluted runoff;

6. The substantial degradation of water quality;

7. The placement of housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map;

3-30) United States Geological Survey. *Whittier 7-½ Minute Quadrangle.* Photorevised, 1981.

8. The placement of structures within 100-year flood hazard areas that would impede or redirect flood flows; or,

9. The exposure of a project to inundation by seiche, tsunami, or mudflow.

3.5.2 Environmental Impacts

A. *Would the project violate any water quality standards or waste discharge requirements?* ***No Impact.***

The approval and subsequent implementation of the FGP will not alter the overall existing drainage scheme. The minor alterations to the overall drainage plan required to accommodate the FGP will not involve any modification to the existing backbone drainage system. The ultimate discharge point will not change, nor will the amount of runoff change.[3-31] As a result, no impacts on water quality or discharge requirements are anticipated with the approval and subsequent implementation of the FGP.

B. *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge in such a way that would cause a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of a pre-existing nearby well would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?* ***No Impact.***

Domestic water in the area is provided by the City water system and is derived from a local groundwater well located near the Whittier Narrows. The amount of groundwater withdrawal is controlled by the main San Gabriel water master and the Central Basin Replenishment District. The Central West Basin Water and water master levies an assessment on all parties pumping groundwater in the Basins. The proposed FGP will not result in any change in the daily water consumption.[3-32]

The existing Savage Canyon Landfill is not located near any major surface water body.[3-33] The proposed FGP will not affect the amount of undeveloped land available for groundwater recharge in the area. A number of major aquifers are located under the City. The Jefferson Aquifer is found under the entire City at a depth of 100 feet below sea level, and has a thickness ranging from 20 to 40 feet. The Lynwood Aquifer, with a base elevation of 50 to 150 feet below sea level, is a major producer of water, with yields ranging from 200 to 2,100 gallons per minute. The Silverado Aquifer has a maximum thickness of 300 feet in the Whittier area at a maximum depth of 500 feet below sea level. It is a major water producer, with a maximum yield of 4,700 gallons per minute. Finally, the Sunnyside Aquifer, with a base elevation of between 400 to 700 feet below sea level, has a maximum thickness of 300 feet and a maximum yield of 1,500 gallons per minute.[3-34]

The grading associated with the FGP's implementation will not involve any excavations that will extend into the aforementioned aquifers. In addition, the FGP will not involve the construction of any new wells and, as a result, additional groundwater extraction on-site will not occur with this

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3-31) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-32) City of Whittier Public Works Department. Personal Communication with Staff. 2000.

3-33) Ibid.

3-34) Ibid.

FGP (current extraction is for testing only). As a result, the excavation required for the proposed FGP will not interfere with the movement of groundwater within the underlying aquifers, and no adverse impacts are anticipated.

C. *Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?* ***No Impact.***

No streams or bodies of water are located within the Landfill, though Worsham Creek is located within a parcel situated to the west of the existing Landfill.[3-35] Storm water runoff, not absorbed into the soils, will be conveyed into a drainage swale that is to be constructed within the Landfill following closure. The potential for storm water pollution will not increase with the implementation of the proposed FGP.

In addition, the FGP will not result in any significant changes in the runoff patterns on-site and will not impact the surface hydrology of surrounding parcels. As indicated previously, the point of discharge will not change under the proposed FGP.[3-36] As a result, no impacts are anticipated.

D. *Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in flooding on- or off site?* ***No Impact.***

There are no lakes or streams within the existing Savage Canyon Landfill. No natural stream channels remain within the Landfill boundaries.[3-37] Worsham Creek is located to the west of the Landfill. There will not be any change in surface runoff volumes that will be conveyed to the storm drain system. The surrounding hydrological characteristics will not be altered with the implementation of the proposed FGP.[3-38] As a result, no adverse impacts are anticipated.

E. *Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?* ***No Impact.***

There are no lakes or streams within the Landfill. No natural stream channels remain within the Landfill, though Worsham Creek is located to the west.[3-39] There will not be any significant increase in surface runoff volumes that will be conveyed to the storm drain system. As a result, no adverse impacts are anticipated.

3-35) United States Geological Survey. *Whittier 7-½ Minute Quadrangle.* 1981

3-36) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-37) Blodgett/Baylosis Associates. *Site Survey.* November 2000.

3-38) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-39) Blodgett/Baylosis Associates. *Site Survey.* November 2000.

100-year & 500-year flood

The concept of a 100-year or 500-year flood condition is used by engineers as a way to design flood control infrastructure. The terms are related to a "statistical probability" of a flood condition occurring during a period of extreme rainfall, runoff, etc, once every 100 years *and* 500 years. However, reality may be quite different from statistical probabilities...for example, some areas of the Midwest have experienced 100-year floods three times over the past decade. Whether or not a property is located within a designated flood plain, will have a bearing on whether or not flood insurance is required.

F. Would the project otherwise substantially degrade water quality? ***No Impact.***

There are no lakes or streams within the existing Landfill, and no natural stream channels remain within the Landfill boundaries.[3-40] As indicated previously, there will not be any significant increase in surface runoff volumes that will be conveyed to the storm drain system. The proposed FGP will not result in any increase in the daily permitted waste volumes handled at the Landfill. As a result, no adverse impacts are anticipated. No new operational changes are proposed that would otherwise affect water quality. Control of the runoff of on-site silt will help the water quality (silt fences, detention basin).

G. Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? ***No Impact.***

Three flood zones, corresponding to Federal Emergency Management Agency (FEMA) flood zone designations, have been identified within the City of Whittier. Zone "A" refers to areas where there is a potential for a 100-year flood. Zone "B" refers to those areas between the 100-year flood and 500-year flood. Zone "C" includes those areas where there is a risk for minimal flooding.

The majority of the City is designated as Zone "C," indicating there is minimal flood potential. There are twelve areas within the City included within Zone "B" that have a 100-year flood potential, and these areas currently experience localized ponding problems. These streets include short segments of Hadley Street, Palm Avenue, Pickering Avenue, Scott Avenue, Valley Home Avenue, Whittier Boulevard, and Slauson Avenue, among others.

Five areas within the City are designated as Zone "A," which have a 100-500 year flood potential. These areas include small scattered sites along the northeastern and eastern portions of the City. The existing Landfill site is not located within a designated flood zone.[3-41] As a result, no flood hazard impacts will result from the approval and subsequent implementation of the FGP.

H. Would the project place within a 100-year flood hazard area, structures which would impede or redirect flood flows? ***No Impact.***

The proposed FGP will not involve any excavation or the construction of any improvements that would affect or redirect the flows of flood water. The existing Landfill is not located within an area subject to flooding.[3-42] Therefore, the proposed FGP will not result in any significant adverse impacts related to the direction or reduction of flood water.

3-40) Blodgett/Baylosis Associates. *Site Survey.* November 2000.

3-41) City of Whittier. *Master Environmental Assessment.* 1992

3-42) Ibid.

I. Would the project expose people or structures to a significant risk of flooding as a result of dam or levee failure? ***No Impact.***

The existing Savage Canyon Landfill is not located within an area that would be subject to flows from a dam or levee failure. In addition, the Landfill is not located within a 100-year or 500-year flood zone. Worsham Creek is located to the west of the Landfill, and flows from this channel will not impact the Landfill due to its location and topographical differences relative to the Landfill. As a result, no flooding exposure impacts will result from the FGP's approval and subsequent implementation.

J. Would the project result in inundation by seiche, tsunami, or mudflow? ***No Impact.***

There are no bodies of surface water located within or near the Landfill. The Whittier Narrows Recreation Area, located approximately 6 miles to the northwest, includes bodies of water, though the existing stream channels are fully channelized. No other significant reservoirs, lakes, rivers, or streams are located within or adjacent to the Landfill. Additionally, the Pacific Ocean is located 25 miles to the southwest.[3-43] Worsham Creek is located to the east of the existing Landfill, though it does not present a flood risk to the existing Landfill. As a result, no seiche or tsunami hazards are anticipated due to the site's distance from the Pacific Ocean.

3.5.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse water and hydrology impacts. As a result, no mitigation is required or recommended at this time.

3.6 Air Quality Impacts

3.6.1 Thresholds of Significance

According to the City of Whittier, acting as Lead Agency, a project will normally have a significant adverse environmental impact on air quality, if it results in any of the following:

1. A conflict with, or obstructs the implementation of, the applicable air quality plan;

2. A violation of an air quality standard or contribute substantially to an existing or projected air quality violation;

3. A cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;

Characteristics of Key Pollutants

Ozone (O^2) a nearly colorless gas that irritates the lungs and damages materials and vegetation. O^2 is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).
Carbon Monoxide (CO) a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain as produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.
Nitrogen dioxide (NO_2) a yellowish-brown gas that at high levels can cause breathing difficulties. NO_2 is formed when nitric oxide (a pollutant from burning processes) combines with oxygen.
PM_{10} refers to particulate matter less than ten microns in diameter. PM_{10} causes a greater health risk than larger sized particles, since fine particles can more easily cause irritation.

3-43) United States Geological Survey. *Whittier 7-1/2 Minute Quadrangle.* 1994.

4. The exposure of sensitive receptors to substantial pollutant concentrations; or,

5. The creation of objectionable odors.

The South Coast Air Quality Management District (SCAQMD) has also established daily emissions thresholds for a number of criteria pollutants. These thresholds include: 550 pounds of carbon monoxide, 55 pounds of nitrogen oxides, 150 pounds of sulfur dioxide, 55 pounds of reactive organic gases, and 150 pounds of PM_{10} particulates.[3-44]

3.6.2 Environmental Impacts

A. Would the project conflict with or obstruct implementation of the applicable air quality plan? ***No Impact.***

Air Monitoring Station Readings

Pollutant	1993	1994	1995
Carbon Monoxide (CO)			
Max. 1-hr conc. (ppm)	16.0	14.0	11.0
Max. 8-hr conc. (ppm)	10.7	12.0	8.9
No. days federal std. exceeded	3	5	0
No. days state std. exceeded	6	8	0
Ozone (O_3)			
Max. 1-hr conc. (ppm)	0.13	0.11	0.12
No. days federal std. exceeded	1	0	0
No. days state std. exceeded	9	3	3
Nitrogen Dioxide (NO_2)			
Max. 1-hr conc. (ppm)	0.16	0.22	0.18
No. days federal std. exceeded	0	0	0
No. days state std. exceeded	0	0	0
Sulfur Dioxide (SO_2)			
Max. 1-hr conc.(ppm)	0.07	0.04	0.06
No. days federal std. exceeded	0	0	0
No. days state std. exceeded	0	0	0
Suspended Particulates (PM_{10})			
Max.24-hour conc.(ug/m^3)			
% samples exceeding federal std.	91	81	136
% samples exceeding state std.	0.0%	0.0%	0.0%
	14.8%	18.0%	13.8%

ppm = parts per million
ug/m^3 = micrograms per cubic meter
Source: SCAQMD Air Quality Data, 1993 - 1995.

The City of Whittier is located in the southwestern portion of the South Coast Air Basin of California. The basin covers approximately 6,600 square miles, encompassing Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The air basin is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The annual average daytime temperatures in Whittier range from 44 to 63° F in winter and from 60 to 85°F in summer, with temperatures sometimes reaching 100°F during the summer months. Annual rainfall in Whittier is approximately 12 inches and occurs almost exclusively from late October to early April.[3-45]

The South Coast Air Quality Management District (SCAQMD) is a regional agency charged with the regulation of pollutant emissions and the maintenance of local air quality standards. The SCAQMD samples ambient air at scattered monitoring stations in and around the Basin. Ambient air quality in the City of Whittier is characterized by readings taken at the SCAQMD pollutant monitoring station located in the City. As shown in the box to the left, air quality in the Whittier area exceeds ambient air quality standards for ozone and suspended particulates.[3-46] In the winter, temperature inversions occur close to ground level during the night and early morning hours. Thus, carbon monoxide and nitrogen oxide concentrations are highest

3-44) South Coast Air Quality Management District. *CEQA Air Quality Handbook.* 1993

3-45) South Coast Air Quality Management District. *Climatological Profile of Southern California.* 1987

3-46) City of Whittier. *Master Environmental Assessment.* 1992.

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during these times. Since carbon monoxide is produced primarily from automobile exhaust, the highest concentrations are found in areas with heavy traffic.

The proposed FGP will not affect the implementation of SCAG's current AQMP. The proposed FGP will not involve any new development that would affect adopted regional population, housing, and employment projections. In addition, the approval and subsequent implementation of the FGP would not result in any increased employment or traffic generation. As a result, no impacts will result from the approval and subsequent implementation of the proposed FGP.

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

The approval and subsequent implementation of the FGP will not result in any additional daily emissions over those that presently exist. The existing emissions associated with the Landfill's operation include the following:

1. Fugitive dust emissions associated with the excavation and movement of earth;

2. Exhaust emissions from heavy equipment engaged in disposal and operational activities;

3. Emissions from vents releasing methane and other hydrocarbons created from the deterioration of organic wastes; and,

4. Mobile emissions from vehicles (including trash trucks) traveling within the Landfill.

The proposed FGP will not result in any change in overall operations within the Landfill. The maximum permitted daily receipt of solid waste will remain at the current level of 350 tons per day. The proposed FGP will not result in any additional employment or vehicle trips.[3-47] As a result, the daily emissions and other air quality impacts will not change with the approval and subsequent implementation of the proposed FGP.

Compliance with SCAQMD Rule 403 regarding fugitive dust control will ensure that nuisance dust does not affect nearby sensitive land uses. Daily mobile emissions are not projected to exceed air quality thresholds, except for nitrogen dioxide. However, these emissions are currently being generated, and no additional increases are anticipated with the implementation of the proposed FGP. Measures to reduce nitrogen oxide emissions on-site will continue to include the use of properly-maintained equipment, and turning off trucks and construction equipment instead of idling during construction. As a result, impacts upon air quality are expected to be less than significant.

3-47) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

C. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?* ***No Impact.***

The proposed FGP will result in continued emissions associated with the Landfill's ongoing operations, as indicated in the previous section. The proposed FGP will not involve the construction of any new development, nor involve any activities that would generate increased daily emissions. The proposed FGP would not involve any increase in the quantities of solid waste received on a daily basis. Furthermore, the proposed FGP will not result in any increase in employment, traffic, or Landfill operations.[3-48] As a result, no cumulative air quality impacts are anticipated.

D. *Would the project expose sensitive receptors to substantial pollutant concentrations?* ***No Impact.***

Sensitive receptors refer to land uses and/or activities that are especially sensitive to poor air quality, and typically include homes, schools, playgrounds, hospitals, convalescent homes, and other facilities where children or the elderly may congregate. These population groups are generally more sensitive to poor air quality. The single-family neighborhoods located to the south and west of the existing Landfill are considered sensitive receptors.[3-49]

The proposed FGP will not involve any new or altered operations or activities that would adversely impact adjacent sensitive land uses. The proposed FGP does not involve any expansion of the Landfill. No operational changes are proposed in the FGP that would result in any additional air quality impacts that would affect sensitive receptors in the area. The recommended pollutant controls, outlined previously, will further reduce impacts on sensitive receptors. As a result, no impacts on sensitive receptors will result from the approval and subsequent implementation of the FGP.

E. *Would the project create objectionable odors affecting a substantial number of people ?* ***No Impact.***

No odors were noted during surveys of those areas surrounding the Landfill. Future activities will involve limited fugitive dust generation, which is consistent with that associated with grading and excavation activities. Diesel equipment will also involve limited NO_x generation. However, the proposed FGP will not involve any activities that would result in increased emissions generation. Given the nature of the existing operations, no additional significant adverse impacts related to odors are anticipated with the proposed FGP.

F. *Would the project alter air movement, moisture, or temperature, or cause any change in climate?* ***No Impact.***

The approval and subsequent implementation of the proposed FGP will not involve the construction of any improvements that would result in wind jetting or changes in the local micro-climate. As

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3-48) City of Whittier Public Works Department. Correspondence from Gina Nila, Public Works Manager to William L. Ishmael, at the California Integrated Waste Management Board. June 19, 2000.

3-49) South Coast Air Quality Management District. *CEQA Air Quality Handbook*. 1993.

a result, no adverse impacts on local climate or meteorology will occur with the proposed FGP's approval and subsequent implementation.

3.6.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse air quality impacts. As a result, no mitigation is required or recommended at this time.

3.7 Biological Resources Impacts

3.7.1 Thresholds of Significance

According to the City of Whittier, a project will normally have a significant adverse impact on biological resources if it results in:

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

2. A substantial adverse effect on any riparian habitat or other sensitive natural plant community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

3. A substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means;

4. A substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of a native wildlife nursery site;

5. A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,

6. A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.7.2 Environmental Impacts

A. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?* ***No Impact.***

The California Department of Fish and Game (CDFG) maintains a listing (State and Federal) of endangered, rare, threatened, and sensitive plants and animals that warrant protection by the scientific community. The Natural Diversity Database summarizes past biological surveys that have identified sensitive species and habitats. A record search with the CDFG Natural Diversity Database

Rare and Endangered Species...What it Means

Federal and State trustee agencies have categorized sensitive plant and animal species according to the following criteria:

Endangered species are native species or subspecies that are in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

Threatened species are native species or subspecies not presently threatened by extinction but likely to become an endangered species in the future in the absence of special protection and management efforts.

Category I candidate species are species for which data on file is sufficient to support Federal listing.

Category 2 candidate species are species for which threat and/or distribution data are insufficient to support Federal listing.

Species listed under 3A, 3B, and 3C are those withdrawn from the Federal listing due to the following reasons: Species designated as *3A* are those which the Fish and Wildlife Service has overwhelming evidence of extinction. If the species is rediscovered in the future, it may acquire a high priority for listing. Species designated *3B* are those which, under current taxonomic understanding, do not represent distinct species and do not meet the Endangered Species Act's definition of a species. Species designated *3C* are proven to be more abundant or widespread than previously believed or those not subject to any identifiable threat.

identified known habitats of endangered, rare, and threatened plant and animal species in and near the City of Whittier.

The survey indicated that the City is located within a potential habitat area for the San Diego horned lizard.[3-50] The San Diego horned lizard (*Phrynosoma Coronatum Blainvillii*) is approximately four inches long and is yellowish or reddish-gray in color. The lizard has a dark mark on the neck, two horns on the back of the neck, several smaller horns around its neck, and two rows of spines on each side of its back.

The San Diego horned lizard is considered rare and endangered by the CDFG, and is listed as "Category 2" in the Federal listing. The lizard was also found in Sycamore Canyon in the northwestern section of Whittier, approximately 4.5 miles northwest of the Landfill. Finally, a specimen is also housed in the Whittier Narrows Nature Center. It is believed to be in existence at these sites.[3-51] No other sensitive species are known or suspected to inhabit the existing Landfill. As a result, no impacts are anticipated.

B. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?* ***No Impact.***

The proposed Landfill is located within a portion of the City of Whittier that is urbanized, and no natural plant communities or protected natural communities are found within the Landfill boundaries. The vegetation in the City, and the animal species supported in these man-made habitats, include species that are commonly found in urban environments. The Landfill has been operational since the mid-1930s, and no natural ecological communities remain in the area.[3-52] The adjacent open space areas, located to the north and east of the Landfill, have also undergone extensive disturbance due to past oil extraction activities. As a result, the proposed FGP will not have any impact on sensitive plants or animals, since the boundaries of the Landfill will not change.

3-50) City of Whittier. *Master Environmental Assessment.* 1992

3-51) Ibid.

3-52) Blodgett/Baylosis Associates. *Site Survey.* 1999.

C. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?* ***No Impact.***

Major drainage areas within approximately five miles of the Landfill include the Turnbull Canyon Drainage, located approximately 3 miles to the north, and the Sycamore Canyon Drainage, located approximately 4.5 miles to the northwest. Worsham Creek, located to the west of the existing Landfill, will not be affected by the proposed FGP. The existing Landfill boundaries will not change with the implementation of the proposed FGP. The proposed FGP's approval and subsequent implementation will not impact any riparian or wetland areas located in adjacent properties.[3-53] As a result, the proposed FGP will have no impact on protected wetlands.

D. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery site?* ***No Impact.***

The proposed FGP will not affect wildlife dispersal or migration in the region. The Landfill contains limited vegetation and does not support significant plant or animal species or their habitats. There are no natural habitats or wildlife migration corridors within the existing Landfill boundaries.[3-54] A number of public agencies and non-profit organizations are involved in the creation of a land preserve that would extend from Whittier Narrows on the west to the Cleveland National Forest on the east. Following closure, the Landfill will be incorporated into this open space preserve. As a result, no significant adverse impacts are expected on migration corridors with the adoption and subsequent implementation of the proposed FGP.

E. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* ***No Impact.***

The City of Whittier contains a number of mature trees that have been identified as being significant.[3-55] The nearest exceptional trees include jacaranda tree plantings in the Whittier Boulevard median, a Montezuma Cypress tree located in Kennedy Park, and a parkway tree (Orchard tree) on Walnut Street. These trees are located more than 1,000 feet from the Landfill, and will not be impacted by the implementation of the proposed FGP.

F. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* ***No Impact.***

The Puente Hills represent the greatest concentration of undeveloped land containing native plant and animal species. The densest concentrations of vegetation in the Puente Hills are found in the canyon bottoms and drainage area. Vegetation in these hills may be classified as grassland, inland sage scrub, mixed chaparral, or riparian woodland, with some areas supporting non-native

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3-53) City of Whittier. *Master Environmental Assessment.* 1992.

3-54) Blodgett/Baylosis Associates. *Site Survey.* 1999.

3-55) Los Angeles County. *Exceptional Trees of Los Angeles County.* 1988.

eucalyptus trees.[3-56] The proposed FGP will be confined to the existing 132-acre Savage Canyon Landfill. The Landfill's boundaries will remain unchanged. As a result, no impacts on any habitat conservation plan or community conservation plan will result from the grading plan's approval and subsequent implementation.

3.7.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse impacts upon biological resources. As a result, no mitigation is required or recommended at this time.

3.8 Energy & Mineral Resources

3.8.1 Thresholds of Significance

According to the City of Whittier, acting as Lead Agency, an action may be deemed to have a significant adverse impact on energy and mineral resources if it results in any of the following:

1. The loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or,

2. The loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

3.8.2 Environmental Impacts

A. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* ***No Impact.***

No significant aggregate resources have been identified by the State Department of Mines and Geology in the Whittier area, though the sands of the La Habra formation have been historically used for plaster, surfacing material, and fill. An open sand pit, known as the Murphy Ranch deposit, was located along West Road at the City's easterly boundary. The proposed FGP will not affect any resource extraction activities in the area. As a result, no impacts are anticipated.

B. *Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?* ***No Impact.***

There are a number of oil and natural gas fields in the Whittier area, with the majority of the wells located in the nearby Puente Hills. The Whittier oil field includes approximately 855 acres, with 670 acres located in the central area, 90 acres in the La Habra area, and 95 acres in Rideout Heights. The first oil well in Whittier was drilled in 1897 to a depth of 984 feet below the surface. Producing oil fields in the area are located in the eastern hillside areas between Turnbull Canyon Road and Hacienda Boulevard.[3-57] Oil fields are located to the north and east of the site, though much of this land has been acquired for inclusion in the Whittier Hills preserve. The proposed FGP's

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3-56) City of Whittier. *Master Environmental Assessment.* 1992

3-57) Ibid.

implementation will not impact these resources. As a result, no impacts are anticipated with the approval and subsequent implementation of the proposed FGP.[3-58]

3.8.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse impacts upon energy and mineral resources. As a result, no mitigation is required or recommended at this time.

3.9 Risk of Upset & Human Health Impacts

3.9.1 Thresholds of Significance

An action may be deemed to have a significant adverse impact on risk of upset and human health if it results in any of the following:

1. The creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

2. The creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

3. The generation of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

4. The locating of a project on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, resulting in a significant hazard to the public or the environment;

5. A project located within an area governed by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport;

6. A project located in the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the project area;

7. The impairment of the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan; or,

8. The exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wetlands are located adjacent to urbanized areas or where residences are intermixed with wildlands.

3-58) California, State of. Department of Conservation. Map 104.

What is considered a "hazardous material"?

A hazardous material is defined as any injurious substance, including pesticides, herbicides, toxic metals and chemicals, volatile chemicals, explosives, and even nuclear fuels or low-level radioactive wastes. The primary concern associated with the release of a hazardous material is the short- and long-term effects that exposure to a hazardous substance may have on the public. Users of hazardous materials are required by both the Federal and State governments to submit a business plan to their local administering agency (the reportable quantities are 50 or more gallons of a liquid, 500 pounds or more of a solid, or 200 cubic feet or more of a gas at standard temperature and pressure).

3.9.2 Environmental Impacts

A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***No Impact.***

The Public Safety Element of the City of Whittier General Plan indicates those roadways within the City that will be used as evacuation routes in the event of an emergency. The designated emergency evacuation routes in the City include Workman Mill Road, Norwalk Boulevard, Whittier Boulevard, Santa Fe Springs Road, Lambert Road, Beverly Boulevard, and Colima Road.[3-59] Whittier Boulevard and Colima Road would be used as emergency evacuation routes. The construction of the proposed FGP will not result in the closure of any designated emergency evacuation routes. Emergency vehicles will continue to be able to access adjacent properties via the existing roadways.

The proposed FGP's approval and subsequent implementation will not involve the use of any chemicals or substances other than those commonly found in similar operations. The Landfill will remain a Class III Sanitary Landfill, and the types and daily quantities of solid waste will not change with the approval and subsequent implementation of the FGP. As a result, no impacts are anticipated.

B. Would the project create a significant hazard to the public or the environment, or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ***No Impact.***

As indicated previously, the Landfill accommodates non-hazardous municipal solid waste. The proposed FGP will not alter the existing SWFP regarding the types of wastes that may be disposed at the Landfill.[3-60] The implementation of the proposed FGP will be in compliance with all public health and safety regulations. No changes in the Landfill's day-to-day operations are proposed, and no new impacts will result from the FGP's implementation.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***No Impact.***

As indicated previously, the Landfill accommodates non-hazardous municipal solid waste. The proposed FGP will not alter the existing SWFP regarding the types of wastes that may be disposed at the Landfill.[3-61] The approval and subsequent implementation of the proposed FGP will be in

3-59) City of Whittier. *Whittier General Plan Public Safety Element.* 1992

3-60) County of Los Angeles Department of Health Services. *Solid Waste Facility Permit Review Report.* June 1999.

3-61) Ibid.

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compliance with all public health and safety regulations. As a result, the FGP will not create any new health hazards.

D. Would the project be located on a site which is included on a list of hazardous material site compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***No Impact.***

The approval and subsequent implementation of the proposed FGP will be in compliance with all public health and safety regulations, and it is not expected to create any health hazards. Since the boundaries of the existing Landfill will not change, no significant adverse impacts are anticipated.

E. Would the project be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? ***No Impact.***

The Landfill is not located within two miles of an operational public airport or within an area governed by an airport land use plan. The nearest airport is in El Monte, located approximately 7 miles to the northeast. Los Angeles international Airport (LAX) is located approximately 18 miles to the southwest.[3-62] As a result, the proposed FGP will not create any safety hazards related to airport operations.

F. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area? ***No Impact.***

The Landfill is not located within two miles of an operational private airport or airstrip. The nearest airport is located in El Monte, approximately 7 miles to the northeast. Los Angeles International Airport (LAX) is located approximately 18 miles to the southwest. As a result, the proposed FGP's approval and subsequent implementation will not result in any safety hazards associated with the operation of a private airport.

G. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***No Impact.***

The approval and subsequent implementation of the FGP would not result in any closure or obstruction of Penn Street or any designated emergency evacuation route. As a result, no impacts on these roadways would result.

H. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fire, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ***No Impact.***

Fire protection services in the City are provided by the Los Angeles County Fire Department. The nearest fire stations include Station Number 17 (located at 12006 Hadley Street), Station Number 59 (located at 10021 Scott Avenue) and Station Number 28 (located at 7733 South Greenleaf Avenue). According to the Los Angeles County Safety Element, the Landfill is located near areas

3-62) Rand McNally. *Street Finder,* 1998.

designated as Fire Zone 4.[3-63] This designation indicates those areas of the County that may be subject to woodland or brush fires.

The activities associated with the implementation of the FGP will be confined to the existing Landfill boundaries. In addition, no changes in the Landfill's day-to-day operations will result from the FGP's approval and subsequent implementation. As a result, no adverse impacts from wildfire are anticipated.

3.9.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse risk of upset and human health impacts. As a result, no mitigation is required or recommended at this time.

3.10 Noise Impacts

3.10.1 Thresholds of Significance

An action may be deemed to have a significant impact on the environment if it results in any of the following:

1. The exposure of persons to, or the generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

2. A substantial permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project;

3. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

4. The locating of a project within an area governed by an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or private use airport, where the project would expose people residing or working in the project area to excessive noise levels; or,

5. The locating of a project within the vicinity of a private airstrip that would result in the exposure of people residing or working in the project area to excessive noise levels.

3-63) Leighton and Associates. *Los Angeles County Safety Element, Technical Appendix.* 1991

3.10.2 Environmental Impacts

A. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ***No Impact.***

What is a decibel?

The decibel is a measurement of sound level pressure. The noise levels associated with various activities are provided below:

Activity	*Noise Level in decibels*
Very quiet night	10 dB
Library	35 dB
Refrigerator	45 dB
Light traffic	45 dB
Air conditioner	60 dB
Freeway traffic (50 ft.)	80 dB
Power mower (20 ft.)	105 dB
Jet takeoff (200 ft.)	125 dB

The Landfill is located in an area subject to relatively low ambient noise levels due to its distance from major arterials (such as Painter Avenue). The major source of daytime noise in the immediate area involves truck traffic and landfill equipment.[3-64] A noise survey was undertaken at the Landfill, which used statistical samples in terms of percentile noise levels. For example, the L_{10} noise level represents the noise level that is exceeded 10% of the time. The L_{50} noise level represents the median noise level; half the time, noise exceeds this level, and half the time noise is less than this level. The L_{90} noise level represents the ambient noise environment or the noise level that is exceeded 90% of the time.

As indicated in Table 3-4, the daytime noise levels in the immediate area were relatively quiet, although the passing trucks (on Penn Street) did contribute to temporary noise peaks exceeding 80 dBA from the roadway's edge. The proposed FGP will not involve any changes to the Landfill's current operations.

As indicated previously, the proposed FGP will not involve any revisions to the Landfill boundaries, nor will traffic volumes or patterns change. As a result, no significant adverse impacts are anticipated.

Table 3-4
Noise Measurement Results

% of Measurement Period	Noise Level (in dBA)
99%	62.1
90%	65.3
50%	65.9
33%	67.8
10%	69.0
1%	75.2
Maximum Noise Level	89.3

Note: The measurement location was near the main entry to the Landfill at Penn Street.

Source: Blodgett/Baylosis Associates, 2000.

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3-64) Blodgett/Baylosis Associates. *Site Survey.* 2000.

B. Would the project result in exposure of people to or generation of excessive ground-borne noise levels? ***No Impact.***

Construction machinery used in the day-to-day operations of the Landfill is capable of generating periodic peak noise levels ranging from 70 to 95 dBA at a distance of 50 feet from the source.[3-65] However, the proposed FGP will not result in any additional traffic. The maximum permitted daily capacity will not change with the implementation of the FGP. As a result, no adverse noise impacts are anticipated.

C. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ***No Impact.***

The proposed FGP will not result in additional traffic noise, since no additional traffic will be generated. As a result, no noise impacts are associated with the approval and subsequent implementation of the proposed FGP.

D. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? ***No Impact.***

The proposed FGP will not result in any activities that would lead to substantial temporary or periodic increases in the ambient noise levels. The Landfill's day-to-day operations will not change with the approval and implementation of the FGP. Therefore, no significant adverse short-term noise impacts are anticipated from the approval of the proposed FGP.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ***No Impact.***

The Landfill is not located within two miles of an operational public airport. The nearest airport is in El Monte, located approximately 7 miles to the northeast. Los Angeles International Airport (LAX) is located approximately 18 miles to the southwest. The Landfill's boundaries will not change with the approval of the FGP. As a result, no impacts are anticipated with the approval and subsequent implementation of the proposed FGP.

F. Within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? ***No Impact.***

The Landfill is not located within two miles of an operational private airstrip. The nearest airport is in El Monte, located approximately 7 miles to the northeast. Los Angeles International Airport (LAX) is located approximately 18 miles to the southwest. As a result, no impacts are anticipated with the implementation of the proposed FGP.

3.10.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse noise impacts. As a result, no mitigation is required or recommended at this time.

3-65) Environmental Protection Agency. *Construction Equipment Noise.* 1983.

3.11 Public Services Impacts

3.11.1 Thresholds of Significance

An action may be deemed to have a significant adverse impact on public services if it results in any of the following:

1. A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to fire protection services;

2. A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to law enforcement services;

3. A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to educational services;

4. A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to other public services; or,

5. A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to other governmental services.

3.11.2 Environmental Impacts

A. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas: fire protection services?* ***No Impact.***

Fire protection services for the City of Whittier are provided by the Los Angeles County Fire Department. The three local fire stations include Station Number 17 (12006 Hadley Street), Station Number 59 (10021 Scott Avenue), and Station Number 28 (7733 South Greenleaf Avenue). The Fire Department is responsible for fire and emergency services, including hazardous material spills.[3-66] The proposed FGP will not result in any significant impacts on fire protection services,

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3-66) City of Whittier. *Master Environmental Assessment.* 1992.

since no change in the Landfill's day-to-day operations will result from the implementation of the FGP. As a result, no adverse impacts on the Los Angeles County Fire Department are anticipated.

B. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas: Police protection?* ***No Impact.***

Law enforcement services are provided by the Whittier Police Department. The Department operates out of a main facility located at 7315 South Painter Avenue, located near City Hall. The response time for emergency calls averages 3 minutes, and non-emergency calls have an average response time of 12 minutes.[3-67] The proposed FGP's approval and subsequent implementation will not result in any additional demands for law enforcement services. [3-68] As a result, no impacts upon police protection services are expected.

C. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas: School services?* ***No Impact.***

The nearest schools to the Landfill include Hoover School, located 0.7 miles to the north, and Jackson School, located approximately 1.2 miles to the southwest. The proposed FGP will not affect the demand for educational services or enrollments. As a result, no impacts on educational services will occur with the proposed FGP's implementation.

D. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas: Other public facilities?* ***No Impact.***

The Landfill is located within an area currently served by area roadways. No additional roadways or public improvements will be required to serve the Landfill following the approval and subsequent implementation of the proposed FGP. The proposed FGP will not require any additional governmental personnel or staff to operate. As a result, no impacts are anticipated.

E. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives in any of the following areas: Other governmental services?* ***No Impact.***

The proposed FGP will not involve any commitment of governmental services, since no employment generation is contemplated as part of the proposed FGP. No demand for library services is expected with the implementation of the proposed FGP, and as a result, no impacts are expected.

3-67) City of Whittier. *Master Environmental Assessment.* 1992.

3-68) Personal communication with City of Whittier Police Department.

3.11.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse impacts upon public services. As a result, no mitigation is required or recommended at this time.

3.12 Utilities Impacts

3.12.1 Thresholds of Significance

An action may be deemed to have a significant adverse impact on utilities if it results in any of the following:

1. The project exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board;
2. The project requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts;
3. The project requires or results in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
4. The project results in an overcapacity of the storm drain system, causing area flooding;
5. The project results in a determination by the wastewater treatment provider that serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
6. The project will be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or,
7. The project will not be in compliance with federal, state, and local statutes and regulations relative to solid waste.

3.12.2 Environmental Impacts

A. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?* ***No Impact.***

The Los Angeles County Sanitation Districts maintain and operate the sewer system in the City of Whittier. The project area is served by Los Angeles County Sanitation District No. 18. Sewer lines are maintained by the County Department of Public Works, with sewage from the City conveyed through sewer mains into the Joint Water Pollution Control Plant (JWPCP) in the City of Carson. The JWPCP has a design capacity of 385 million gallons per day (mgd) and currently treats 360 mgd. The proposed FGP will not result in any increase in effluent generation or otherwise affect the County's wastewater treatment capacity. No additional wastewater treatment facilities will be required, since no additional effluent generation will occur with the implementation of the FGP. As

a result, no wastewater treatment impacts are associated with the implementation of the proposed FGP.

B. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? ***No Impact.***

Water service in the City of Whittier is provided by four agencies: the City of Whittier, the Suburban Water System, California Domestic Water Company, and California American Water Company. Approximately 60% of Whittier is served by the City Department of Public Services. Water is extracted from nine groundwater wells in the Whittier Narrows area and near the San Gabriel River. Groundwater is pumped from the Central and Upper (San Gabriel Valley) water basins, from which the City has water pumping rights to a maximum of approximately 9,166 acre-feet per year. The water distribution system operates through a gravity feed that permits water from the reservoirs to flow to those users located at lower elevations. Suburban Water Company serves the remainder (40%) of the City, and California Domestic Water Company and California American Water Company only serve a total of approximately 200 users.[3-69] The proposed FGP will not result in any additional water consumption over the existing levels. The day-to-day operation of the Landfill will not change with the implementation of the FGP. As a result, no impacts will result.

C. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects ? ***No Impact.***

The City's storm drainage system is accommodated by the southwestern slope of the area and the proximity of the San Gabriel River. The San Gabriel River is the major drainage channel that conveys stormwater runoff from the City and the Puente Hills into the ocean. Main storm drain lines are maintained by the County Department of Public Works. City storm drain facilities supplement the system with local lines to provide a complete storm drainage system.[3-70]

The proposed FGP will not require any changes to the off-site storm drain system. The boundaries of the existing Landfill will not change with the implementation of the FGP. As a result, no impacts will occur.

D. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? ***No Impact.***

Water service in the City of Whittier is provided by four agencies: the City of Whittier, the Suburban Water System, California Domestic Water Company, and California American Water Company. The water distribution system operates through a gravity feed system that permits water from the reservoirs to flow to those users located at lower elevations. The City of Whittier provides water service to approximately 60% of the City's users. Suburban Water Company serves approximately 40% of the City, and California Domestic Water Company and California American Water Company combined only serve a total of approximately 200 users.[3-71]

3-69) City of Whittier. *Master Environmental Assessment.* 1992.

3-70) Ibid.

3-71) Ibid.

The proposed FGP will not require any changes to the off-site storm drain system. The boundaries of the existing Landfill will not change with the implementation of the FGP. As a result, no water impacts will occur.

E. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments ? ***No Impact.***

The City is served by Los Angeles County Sanitation District 18. Wastewater from the City is transported by sewer lines to County sewer mains continuing to the Los Coyotes Water Reclamation Plant in Cerritos (Piuma Avenue), and/or the Joint Water Pollution Control Plant in the City of Carson. The Los Coyotes Water Reclamation Plant has a design capacity of 37.5 mgd and currently provides tertiary treatment to 29.8 mgd. All sludge and excess wastewater are diverted to the Joint Water Pollution Control Plant (JWPCP) in the City of Carson. The JWPCP has a design capacity of 385 mgd and currently treats 360 mgd. The effluent from the JWPCP is discharged into the Pacific Ocean through a two-mile outfall located 200 feet below sea level. An average of 344 dry tons of sludge is processed at the JWPCP, with 17 percent of it composted on-site and 83 percent disposed at the Puente Hills Landfill.

The proposed FGP will not require any new connections to the existing local sewer lines. As a result, no impacts on sewer or septic tank systems are associated with the implementation of the proposed FGP.

F. Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs? ***No Impact.***

Solid waste disposal is provided by the City of Whittier, with collection services provided by the City and a number of private haulers. Solid waste is disposed of at Savage Canyon Landfill, a Class III Landfill that receives municipal wastes only. The Landfill is permitted for 350 tons of solid waste per day, or 108,000 tons per year. The Landfill's total land area is approximately 132 acres (including the recent expansion area), and is projected to accommodate the solid waste disposal needs of the City to the year 2048.[3-72] As a result, no impacts are anticipated.

G. Will the project comply with federal, state, and local statutes and regulations related to solid waste? ***No Impact.***

As indicated previously, implementation of the proposed FGP will not result in the generation of any additional solid waste. As a result, no adverse impacts upon regulations governing the generation, handling, and disposal of solid waste will result.

H. Would the project result in a need for new systems, or substantial alterations in power or natural gas facilities? ***No Impact.***

The Southern California Edison Company provides electric power service to the region, including the City of Whittier. Whittier is served primarily by the Murphy Substation on Mulberry Drive, located southwest of the City; the Westgate substation, located on Whittier Boulevard; the Friendly Hills substation located on Colima Road; and the Telegraph substation located on Lambert and

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3-72) City of Whittier. *Master Environmental Assessment.* 1992.

Leffingwell Roads in the eastern section of the City. High-voltage transmission lines are not found within the City boundaries, although 220-kilovolt transmission lines run approximately parallel to the San Gabriel River on the western boundary of the City and along the Puente Hills on the northeastern boundary of the City.[3-73]

Natural gas service to the region is provided by the Southern California Gas Company. The Santa Fe Springs Regulating Station at Pike Street serves the City and the surrounding area. A 30-inch line extends from the station to the Southern Pacific Railroad right-of-way, and runs along this right-of-way to the east with a maximum pressure of 465 pounds per square inch. The East Whittier Storage Facility in La Habra Heights is a natural gas field and storage facility with 10- and 16-inch lines running south of the facility and along Leffingwell Road, La Habra Boulevard, and Lambert Road.[3-74]

The day-to-day operations at the Landfill will not change with the implementation of the FGP. The approval and subsequent implementation of the proposed FGP will not require any additional electrical utility connections.[3-75] No additional natural gas connections will be required. As a result, no impacts on natural gas facilities are anticipated.

I. Would the project result in a need for new systems, or substantial alterations in communications systems? ***No Impact.***

General Telephone and Electric (GTE) provides local telephone service to Whittier customers through above-ground telephone cables. Several long-distance telephone companies are available to residents and commercial customers. Cable television in the City is provided by Marcus Cable.[3-76] The proposed FGP's implementation will not impact these service providers.

3.12.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse impacts upon utilities. As a result, no mitigation is required or recommended at this time.

3.13 Aesthetic Impacts

3.13.1 Thresholds of Significance

An action may be deemed to have a significant adverse aesthetic impact if it results in any of the following:

1. An adverse effect on a scenic vista;

2. Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or,

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3-73) City of Whittier. *Master Environmental Assessment.* 1992.

3-74) Ibid.

3-75) Ibid.

3-76) Ibid.

3. A new source of substantial light and glare that would adversely affect day or nighttime

3.13.2 Environmental Impacts

A. Would the project have a substantial adverse affect on a scenic vista? ***No Impact.***

The City of Whittier General Plan has designated a number of routes within the area that may be considered for their scenic potential. The designated scenic routes include the following:

1. *Colima Road* (east of Mar Vista Street) - This route passes through natural undeveloped terrain and offers unique views of large stands of trees on the westerly slope of the hills. This route provides the City with a scenic connection to Rowland Heights and Hacienda Heights.

2. *Turnbull Canyon Road* (east of Painter Avenue) - Turnbull Canyon is historically one of the earliest sources of water for Whittier. The road consists of rugged steep slopes, varied natural vegetation, and wildlife habitats, and provides easy access to Workman Hill.

3. *Beverly Boulevard* (Norwalk Boulevard to Pickering Avenue) - This street is planted on each side with rows of large mature pine trees (Canary Island Pines) and serves as an important entryway into the City.[3-77]

The Landfill is not visible from the aforementioned scenic roadways in the area. The portion of Colima Road included in the "scenic corridor designation" is located north of Mar Vista Street, approximately 1.5 miles north of the Landfill. As a result, no significant impacts are anticipated.

B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ***No Impact.***

The proposed project involves the approval and subsequent implementation of the FGP. The Landfill boundaries will not be altered as part of the FGP's implementation, nor will the overall profile of the Landfill change following closure. The maximum permitted height of the Landfill is 900 feet AMSL, and this maximum permitted height will not change under the FGP's implementation. As a result, no impacts will result.

C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? ***No Impact.***

The proposed project involves the approval and subsequent implementation of the FGP. The Landfill boundaries will not be altered as part of the FGP's implementation, nor will the overall profile of the Landfill significantly change following closure (refer to Exhibit 2-5 at the end of Section 2.0). The maximum permitted height of the Landfill is 900 feet AMSL, and this maximum permitted height will not change under the FGP's implementation. As a result, no impacts will result.

[3-77] City of Whittier. *Master Environmental Assessment.* 1992.

D. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? ***No Impact.***

Vehicle headlights, building lighting, and street lights are the major sources of light in the area. None of the land uses in the immediate area that will be affected by potential light trespass are considered sensitive to such impacts. As a result, no impacts from light and glare are anticipated.

3.13.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse aesthetic impacts. As a result, no mitigation is required or recommended at this time.

3.14 Cultural Resources Impacts

3.14.1 Thresholds of Significance

An action will normally have a significant adverse impact on cultural resources if it results in any of the following:

1. The project causes a substantial adverse change in the significance of a historical resource as defined in §15064.5;

2. The project causes a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;

3. The project directly or indirectly destroys a unique paleontological resource or site or unique geologic feature; or,

4. The project disturbs any human remains, including those interred outside of formal cemeteries.

3.14.2 Environmental Impacts

A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? ***No Impact.***

During the 1970s, three studies were prepared documenting historic resources in the City. The first, a publication of the Whittier Historical Society and Rio Hondo College prepared in 1977, entitled *Founders and Friends*, provided a listing and description of 59 sites in the City that were determined to be of "historical interest." A second study, completed in 1977 by the Los Angeles County Museum of Natural History, used a methodology that conformed to the requirements of the Department of the Interior (Federal Register). This survey identified 49 potentially significant buildings in the City. Finally, the City retained the services of a consultant to identify significantly historic buildings in "Uptown."[3-78] The proposed FGP will be confined to the existing Landfill boundaries. No historically significant structures or sites are found within the Landfill boundaries. As a result, no impacts are expected with the approval and subsequent implementation of the FGP.

[3-78] City of Whittier. *Master Environmental Assessment.* 1992.

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ***No Impact.***

A records search conducted as part of the City's General Plan update consulted the UCLA Archaeological Center. This records search revealed the presence of known historic and archaeological resources in the Whittier area. One prehistoric site was identified near the intersection of Whittier Boulevard and the San Gabriel Freeway. This site is recorded as LAn-182a, and is believed to be the site of a historic Gabrielino Village. The occupied area may have been at the knoll of sandy soil, downstream of the Pio Pico Mansion near the Southern Pacific Junction Tower or near the Tomas Sanchez Colima House. The two latter sites were also Indian graveyards. The village site was known as Sejat and was occupied by Shoshonean-speaking Indians.[3-79]

Archaeological surveys have been recorded for six different locations in the City, and approximately 1,058 acres were surveyed in total. The results for a single survey uncovered unrecorded middens, a tightly-packed rock scatter or possible hearth, burned bone fragments, tarring pebbles, chert flakes, fire-altered stones, fired clay and seeds, mano, pestles, and metate. The other five surveys uncovered no archaeological resources, and those areas surveyed are considered to have low sensitivity.[3-80] All of the sites where resources were encountered are located more than two miles from the Landfill. The proposed FGP will not result in any additional disturbance beyond that currently permitted under the Landfill's SWFP. The Landfill's boundaries will not change under the FGP's implementation, and no impacts are expected

C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***No Impact.***

Sedimentary rocks in the City that are known to produce fossils include the Miocene Monterey and Repetto Formations, Late Pliocene Fernando Formation, the Pleistocene Palos Verdes Sand, and other Quaternary sediments located in the vicinity of the Puente Hills. The proposed FGP will not involve any additional grading and/or excavation beyond that currently permitted under the SWFP. In addition, the proposal will not result in any expansion beyond its current boundaries. As a result, no impacts are anticipated.

D. Would the project disturb any human remains, including those interred outside of formal cemeteries? ***No Impact.***

The Landfill has undergone extensive disturbance as part of the previous waste disposal activities that occurred. As a result, the likelihood of discovering any human remains are considered unlikely. In addition, there are no cemeteries in that portion of the City located north of the Santa Ana Freeway. The proposed FGP will not result in any impact on cemeteries or burial sites in the City.

3-79) City of Whittier. *Master Environmental Assessment.* 1992.

3-80) Ibid.

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E. Would the project have the potential to cause a physical change that would affect unique ethnic cultural values? ***No Impact.***

The Landfill does not represent any known historic or cultural significance to any ethnic or cultural group. No impact on ethnic cultural values is expected with the implementation of the proposed FGP.

F. Would the project restrict existing religious or sacred uses within the potential impact area? ***No Impact.***

The Landfill does not contain any religious or sacred structure.[3-81] There are no churches that will be displaced or demolished as part of the proposed FGP's implementation. No religious uses will be affected by the proposed FGP's approval and subsequent implementation, and as a result, no impacts are expected.

3.14.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse impacts upon cultural resources. As a result, no mitigation is required or recommended at this time.

3.15 Recreation Impacts

3.15.1 Thresholds of Significance

An action may be deemed to have a significant adverse impact on the environment if it results in any of the following:

1. The use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or,

2. The construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

3.15.2 Environmental Impacts

A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ***No Impact.***

The Landfill is located to the north of Penn Park. The park is located to the south of Penn Street, opposite the Landfill's entrance. The proposed project (the FGP) will not result in any changes in the day-to-day operations of the existing Landfill, or involve any expansion of the Landfill's boundaries. As a result, no impacts upon recreational facilities are anticipated.

3-81) Blodgett/Baylosis Associates. *Site Survey.* 2000.

B. Would the project affect existing recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ***No Impact.***

The proposed development site is not located in close proximity to an existing park. The nearest park to the Landfill is Penn Park, located south of the main Landfill entrance. The proposed FGP will not impact Penn Park or any other parks in the area. As a result, no impacts upon recreational facilities are expected.

3.15.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse recreation impacts. As a result, no mitigation is required or recommended at this time.

3.16 Transportation & Circulation Impacts

3.16.1 Thresholds of Significance

According to the City of Whittier, a project will normally have a significant adverse impact on traffic and circulation if it causes an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.

1. An increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections;
2. An increase in the level of service standard established by the Los Angeles County Management Program for designated roads or intersections;

Level of Service Standards

To understand how well a roadway or intersection is handling traffic, several concepts have been devised. The first, a qualitative measure referred to as *Level of Service (LOS)*, evaluates operations based on observations. A LOS "A" is an optimal traffic condition, while a LOS "F" represents severe congestion. A second, more quantitative measure, referred to as *Volume to Capacity Ratio (V/C Ratio),* is the ratio of an intersection's or roadway's traffic volumes to its design capacity.

3. An increase in hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
4. Inadequate emergency access;
5. Inadequate parking capacity; or,
6. A conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The Los Angeles County Congestion Management Plan (CMP) has also established criteria for significant impacts. According to the CMP, a significant project impact occurs when a proposed project increases traffic demand on a CMP facility by 2%, or results in a decline in the volume-to-capacity ratio of 0.02 or greater, which results in a level of service (LOS) "F."

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3.16.2 Environmental Impacts

A. *Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?* ***No Impact.***

As indicated previously, access to the existing Landfill is limited to Penn Street (the Landfill is located at the easterly terminus of Penn Street). The proposed FGP will not result in any change in the maximum permitted daily capacity of 350 tons per day. No additional truck traffic will be associated with Landfill operations. In addition, no additional employment or other service trips will be required as part of the FGP's implementation. As a result, no additional daily traffic impacts are associated with the proposed FGP's implementation.

B. *Would the project exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?* ***No Impact.***

As indicated previously, the proposed FGP will not result in a change in the operating level of service of the Painter Avenue/Penn Street intersection. No additional traffic generation will result from the proposed FGP's approval and subsequent implementation. As a result, no significant adverse impacts will result.

C. *Would the project substantially increase hazards due to the design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* ***No Impact.***

The proposed FGP will be confined to the existing Savage Canyon Landfill. The proposed FGP will not involve the alteration of any existing roads off-site. No day-to-day operations will be altered with the approval and subsequent implementation of the FGP, nor will there be any increase in daily traffic volumes. As a result, no significant traffic impacts will result.

D. *Would the project result in inadequate emergency access?* ***No Impact.***

The City of Whittier Public Safety Element includes an identification of emergency routes within the City. The designated emergency evacuation routes in the City include Workman Mill Road, Norwalk Boulevard, Whittier Boulevard, Santa Fe Springs Road, Lambert Road, Beverly Boulevard, and Colima Road.[3-82] Penn Street provides the only access to the Landfill. This street will not be impacted by the proposed FGP. As a result, no impacts related to emergency access will result from the FGP's implementation.

E. *Would the project result in inadequate parking capacity?* ***No Impact.***

The proposed FGP will not involve any changes to the Landfill's day-to-day operation or involve any expansion of the Landfill's boundaries. The proposed FGP will not involve any operational changes that would affect the existing parking demand. No new employment or increases in daily solid waste input will result from the implementation of the FGP. The proposed FGP will not lead to any new parking-related impacts.

3-82) City of Whittier. *Whittier General Plan Public Safety Element.* 1992.

F. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ***No Impact.***

Whittier Transit and the Metropolitan Transit Authority operate transit buses throughout the City. The nearest bus stop, serving both Whittier Transit and the MTA, is located near the intersection of Penn Street and Painter Avenue. No transit stops located within the vicinity of the existing Landfill will be impacted by the proposed FGP. The implementation of the FGP will not alter traffic movement patterns in the area, nor require the relocation of any existing transit stops. As a result, no significant adverse impacts on alternative transit services are anticipated with the proposed FGP's implementation.

G. Would the project result in waterborne or air traffic impacts? ***No Impact.***

The nearest port or harbor to the Landfill is located in the Los Angeles - San Pedro - Long Beach Harbor complex, located more than 30 miles from the project area. There are no railroads or terminals located within the surrounding area that would be impacted by the proposed FGP's implementation. The implementation of the proposed FGP will not impact the operations of any railroad located in the area. As indicated previously, there are no public airports or private airstrips located within two miles of the Landfill. As a result, the proposed FGP will not impact these facilities.[3-83)]

H. Would the project result in hazards or barriers for pedestrians or bicyclists? ***No Impact.***

The proposed FGP will not involve any changes or alterations to the existing Penn Street right-of-way. Bicycle lanes are designated for Penn Street (west of Painter Avenue) and Painter Avenue itself. No existing bicycle lanes will be impacted. As a result, no significant adverse impacts are anticipated.

3.16.3 Mitigation Measures

The Initial Study indicated that the proposed FGP would not result in any significant adverse traffic impacts. As a result, no mitigation is required or recommended at this time.

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3-83) United States Geological Survey. *Whittier 7-½ Minute Quadrangle.* 1981.

4.0 FINDINGS

4.1 Findings of Initial Study

The following findings may be made by the City of Whittier regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines, based on the results of the environmental analysis contained in this Initial Study:

1. The proposed FGP does not have the potential to degrade the quality of the environment, with the implementation of the recommended mitigation measures described herein.

2. The proposed FGP does not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.

3. The proposed FGP is not expected to have impacts which are individually limited but cumulatively considerable when considering planned or proposed development in the immediate vicinity.

4. The proposed FGP is not expected to have environmental effects that will adversely affect humans, either directly or indirectly, in the absence of mitigation.

In addition, pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to the approval of a Negative Declaration. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the City of Whittier can make the following additional finding: a mitigation reporting or monitoring program will not be required.

4.2 Mitigation Monitoring

No mitigation measures have been recommended, since no unmitigable adverse impacts were identified. The analysis provided in Section 3.0 of this Initial Study determined that the proposed FGP would not result in any impacts requiring mitigation. As a result, no mitigation monitoring and reporting program is required.

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5.0 REFERENCES

5.1 Preparers

BLODGETT/BAYLOSIS ASSOCIATES
6709 Greenleaf Avenue, Suite 314
Whittier, CA 90601
(562) 907-4541

Marc Blodgett, Project Manager
Jan Stanakis, Project Coordinator/Editor
Deeah Riley, Environmental Planner

5.2 References

Documents may be viewed at the offices of Blodgett/Baylosis Associates (BBA) at 6709 Greenleaf Avenue, Suite 314, Whittier, California 90601. The BBA office is open for business Monday through Friday, 8:00 a.m. to 5:00 p.m. Review of reference information at BBA can be arranged by appointment. Please call (562) 907-4541.

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Encina Kinser May 29, 1985

CITY OF WHITTIER

ENVIRONMENT REASSESSMENT
FOR
SAVAGE CANYON
SANITARY LANDFILL EXPANSION

This reassessment of the City of Whittier City Council approved Final Environmental Impact Report for the Savage Canyon Sanitary Landfill Expansion adopted (August 23, 1977) is in anticipation of the start of acquisition of the property necessary for the expansion of the solid waste disposal facilities for the City of Whittier.

The proposed project requires purchasing of and negotiating filling rights to land parcels adjacent to the existing Savage Canyon site. The acquired property would be annexed to the City and appropriate zoning classification adopted. Approximately 45 acres are proposed for acquisition to provide an additional 4,500,000 cubic yards of available capacity. This increases the remaining capacity to ~~8,800,000~~ cubic yards which will serve the City of Whittier for over 50 years at projected filling rates. In addition, the City proposes to acquire an additional 13 acres around the perimeter of the proposed acquisition to preclude any development adjacent to the landfill.

This reassessment was accomplished by evaluating the project in today's environment with the environmental document that was previously approved. The following were used as a basis for determining any changes:

1. Actions likely to precipitate significant foreseeable alterations in land use.
2. Actions likely to impact natural ecological or scenic resources.
3. Actions likely to impact relocation of individuals or families.
4. Actions likely to impact social groups (elderly, handicapped, illiterate,....etc).
5. Actions likely to impact air quality.
6. Actions likely to impact noise.
7. Actions likely to impact water quality.
8. Actions likely to impact wetlands and coastal zones.
9. Actions likely to affect streams or lakes.
10. Actions likely to affect the flood plain.
11. Actions likely to impact in general due to the project construction.

There is no change to the approved environmental document. Based on the foregoing analysis of the proposed project with respect to the approved final environmental document, the following determinations are made:

1. The project as now proposed is not different in scope than originally planned.

2. The environmental setting and circumstances surrounding the project remain essentially the same as they were when the final environmental document was approved.

3. There are no new significant social, economic, or environmental effect.

4. Therefore, the no growth inducing impact conclusion found in the 1977 City of Whittier City Council approved document is still valid with this project.

Louis F. Sandoval
Director of Public Services

4210-66

FILE COPY

NOTICE OF DETERMINATION

To: (x) County Clerk
Corporations Division, Room 106
111 North Hill Street, P.O. Box 151
Los Angeles, California 90053

From: City of Whittier
13230 Penn Street
Whittier, CA 90602

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

Project Title: Savage Canyon Sanitary Landfill Expansion

Contact Person: D. J. Laughlin

Telephone Number: Area Code 213 698-2551

Project Location: 13919 East Penn St., Whittier, CA 90602

Project Description: Expansion of the solid waste disposal facilities.

This is to advise that the City of Whittier has made the following determinations regarding the above described project:

1. The project has been (x) approved by the Lead Agency. *
   ( ) disapproved

2. The project ( ) will have a significant effect on the environmen
   (x) will not

3. (x) An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ( ) A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. A copy of the Negative Declaration is attached.

* Copy of Resolution adopting EIR attached.

Date August 23, 1977

Director of Public Services

RESOLUTION NO. 4807

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WHITTIER APPROVING AND CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT (SAVAGE CANYON SANITARY LANDFILL EXPANSION).

THE CITY COUNCIL OF THE CITY OF WHITTIER DOES RESOLVE AS FOLLOWS:

SECTION 1. That the City Council of the City of Whittier does hereby find, determine and declare as follows:

(a) That the City heretofore commenced proceedings to investigate and determine whether or not the Savage Canyon Sanitary Landfill, owned by the City, should be expanded so as to include additional property therein, (hereinafter "project"); and

(b) That the said City Council, determined that the project was feasible and desirable; and

(c) That thereafter, the City staff commenced the steps necessary to review the project as required by the California Environmental Quality Control Act of 1970 as amended; and

(d) That all studies required to be taken pursuant to said Act were, in fact, accomplished, and a draft Environmental Impact Report was the subject of public hearings before this City Council, the same having been duly noticed in the manner prescribed by law; and

(e) That as a result of the consideration by the City Council of the said draft Environmental Impact Report, and the evidence presented at said public hearings, and each member of the Council having fully considered all of the written and oral material presented, including but not limited to the draft Environmental Impact Report and addenda thereto, as was filed with the City Clerk, the City Council determined that the said project is required to protect the public peace, health and safety.

RESOLUTION NO. 4807

SECTION 2. That with respect to the draft Environmental Impact Report, the City Council does hereby order as follows:

(1) That the draft Environmental Impact Report, and addenda, on file with the City Clerk, be amended to include the comments of all those persons testifying at the public hearings, by incorporating a copy of the minutes of those said meetings into the said final Environmental Impact Report; and

(2) That the final Environmental Impact Report be certified as having been completed in conformance with the requirements of the California Environmental Quality Control Act and State guidelines relating thereto; and

(3) That the adverse environmental impacts, as described in said report, be, and the same hereby are, overruled. The economic and social needs, objectives, and concerns, in providing this community with the public improvements of the kind contemplated in this project counterbalance the effects of any such impacts and, in addition thereto, make feasible the project alternative identified in the Environmental Impact Report.

SECTION 3. That attached hereto, incorporated herein by this reference, marked Exhibit "A", are the draft Findings of Fact which justify the action in overruling the adverse Environmental Impacts, as submitted by the staff to the City Council. Said draft Findings of Fact are hereby adopted as the Findings of Fact of this City Council.

SECTION 4. That the City Clerk shall certify to the adoption of this Resolution.

PASSED and APPROVED this 23rd day of August, 1977.

JACK MELE, MAYOR

ATTEST:

JENNY YOUNG
City Clerk

RESOLUTION NO. 4807

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WHITTIER APPROVING AND CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT (SAVAGE CANYON SANITARY LANDFILL EXPANSION).

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(e) That as a result of the consideration by the City Council of the said draft Environmental Impact Report, and the evidence presented at said public hearings, and each member of the Council having fully considered all of the written and oral material presented, including but not limited to the draft Environmental Impact Report and addenda thereto, as was filed with the City Clerk, the City Council determined that the said project is required to protect the public peace, health and safety.

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PASSED and APPROVED this 23rd day of August, 1977.

JACK MELE, MAYOR

ATTEST:

JENNY YOUNG
City Clerk

There are three (3) adverse environmental effects identified in the EIR (see Chapter VI). Notwithstanding these said adverse effects, the same must be overruled, and the project must be approved, and ordered carried out based upon the following economic, social and other considerations:

(1) A sanitary landfill facility is required to maintain the present level of life in the City of Whittier; and

(2) The evidence presented, and the EIR, clearly indicates such necessity; and

(3) The cost to the City of obtaining alternate landfill facilities, at the expiration of the current capacity, would be prohibitive; the estimates of such cost range between $ 450,000.00 and $ 1,000,000.00, annually; and

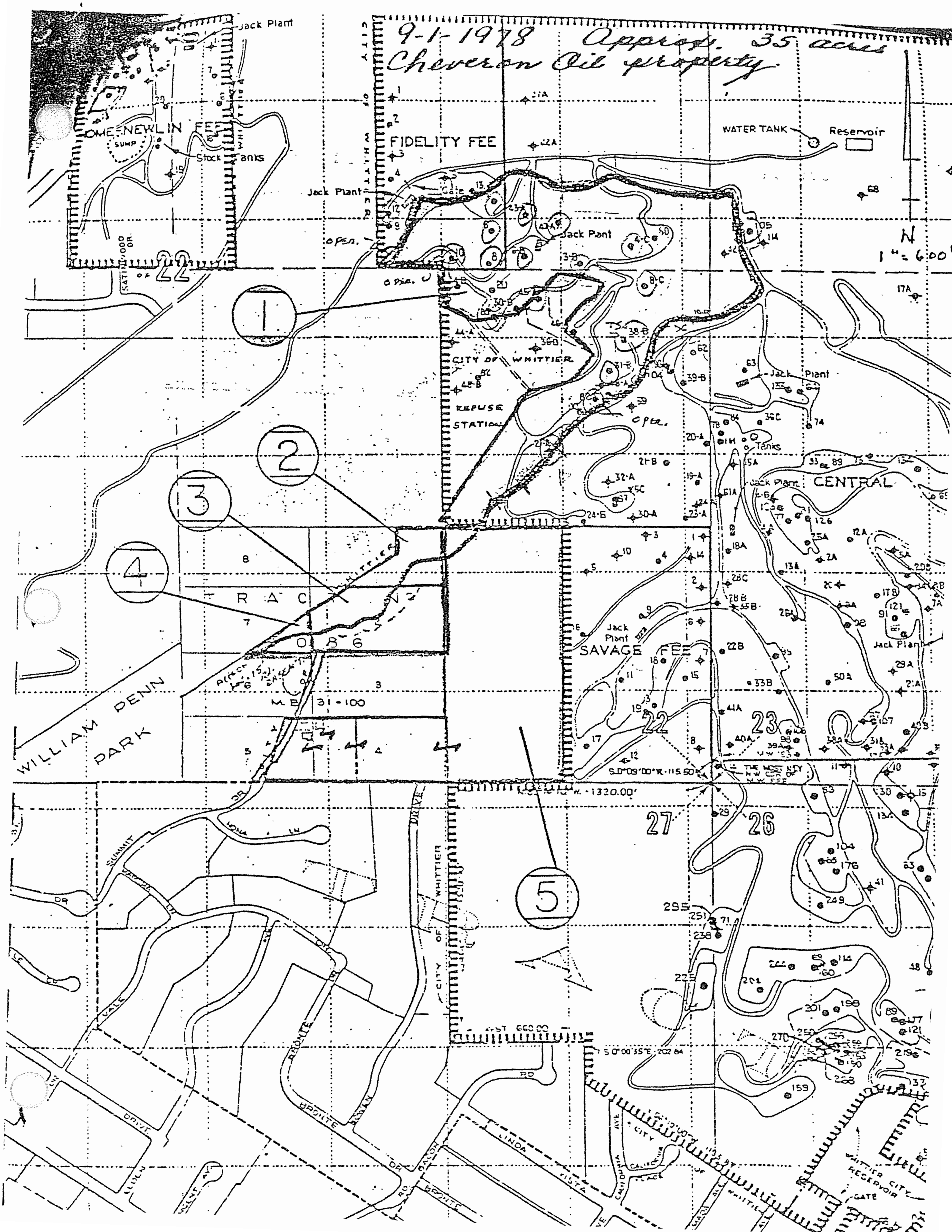
(4) That even if such future expenditures were made, there is no guarantee that such landfill facilities will even be available, notwithstanding the expenditures; and

(5) That if the alternative of no project were to be accepted, in the hope that future landfill capacity would be available, use of such other landfill capacity would generate much more by way of adverse environmental effects, in terms of increased use of energy to transport refuse; resulting in substantial air pollution, primarily by reason of increased use of vehicles; substantially increased use of already congested public streets and highways; and

(6) That the loss of existing questionable open space, and resulting loss of landscaping and wildlife, will be, over the years, more than compensated by the future dedication to public recreational uses, of the landfill area after completion of its use for that purpose; and

(7) Notwithstanding the alterations in landscape and the effect thereof, said impacts will be considerably reduced through proper sanitary landfilling procedures which will be utilized by the City; and

(8) There will be no substantial increase in the present ambient noise level as a result of said project. Such existing ambient noise level will continue for a larger period of time, however, its situs at higher elevations will be further removed from surrounding residences which alleviate any potential impact of said noise.


9-1-1978 Approx. 35 acres
Chevron Oil property
Jack Plant
NEWLIN FEE
Sump
Stock Tanks
CITY OF WHITTIER
FIDELITY FEE
WATER TANK
Reservoir
N
1" = 600'
open
CITY OF WHITTIER
REFUSE STATION
Tanks
CENTRAL
SAVAGE FEE
Jack Plant
WILLIAM PENN PARK
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GATE
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DRAFT ENVIRONMENTAL IMPACT REPORT

SAVAGE CANYON

SANITARY LANDFILL EXPANSION

Prepared for

CITY OF WHITTIER

WHITTIER, CALIFORNIA

April 1977

Engineering-Science, Inc.
150 North Santa Anita Avenue
Arcadia, California 91006

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SUMMARY

The City of Whittier proposes to expand the existing sanitary landfill at Savage Canyon. The proposed expansion provides an additional 4,500,000 cubic yards of available capacity and increases the useful life of the sanitary landfill approximately 30 years, i.e., to the year 2027. Expanding the existing facility will preclude the need to transport solid wastes further distances or utilize other more expensive methods of disposal. Thus, the proposed project provides significant savings of cost to the public over other currently available methods and locations of solid waste disposal.

No increases in the area served or the projected rates of solid waste disposal are anticipated upon implementation of the proposed project. Most impacts associated with solid waste disposal will be mitigated against through the continued use of proper sanitary landfill operating procedures as outlined in the Los Angeles County Solid Waste Management Plan. A significant impact resulting from implementation of the proposed project is the loss of approximately 45 acres of undeveloped land immediately adjacent to the existing sanitary landfill. This impact, although significant, is considered acceptable in view of the long-term benefits to City residents. Upon completion of filling operations, the land would continue to be part of the open space land of the City of Whittier.

CHAPTER I

INTRODUCTION

AUTHORIZATION

The City of Whittier proposes to expand its sanitary landfill operation in Savage Canyon to accommodate projected needs for solid waste disposal. In 1975, the City authorized the preparation of plans for expansion of the existing site and for preliminary development of an adjacent unnamed canyon to the east. A report was submitted in November 1975 detailing these plans.

The Initial Study (Appendix A), completed by the City, indicated that potential significant impacts could result from implementation of the proposed expansion of the existing sanitary landfill. On 14 January 1977, the City of Whittier authorized Engineering-Science (ES) to investigate the environmental impacts associated with the proposed expansion of the existing site and to prepare a draft Environmental Impact Report (EIR) for presentation to the State and to the general public.

PROJECT NEED

The existing site presently receives between 300 and 350 tons of municipal and industrial solid wastes daily. The existing site will be useful for another 18 to 20 years given the remaining capacity and projected rates of solid waste disposal for the City. Implementation of the proposed expansion will provide capacity for an additional 30 years of operation over the projected life span of the existing site, i.e., 50 years from present (to 2027). Failure to implement the project would require the City to find an alternative means of solid waste disposal within 20 years (by 1997) if disposal rates continue at the estimated level.

HISTORY

The City of Whittier initiated use of Savage Canyon as a refuse disposal site in 1935. The site operated as an open burning dump until 1949 when it was converted to a sanitary landfill operation to minimize air pollution and public health hazards. In 1969, a master plan

(Reference I-1) was prepared to guide filling activities and recommended staged filling sequences and an increase in lift depth from four to eight feet. The master plan also examined the development of Worsham Canyon to the north as a possible future sanitary landfill site and the future use of Savage and Worsham Canyons as recreational areas after the completion of filling operations. However, the City did not purchase the lands in Worsham Canyon. In 1975, a revised master plan (Reference I-2) recommended expansion of the existing site in Savage Canyon and examined the possible use of an easterly adjacent canyon for future landfill operations. Long-term planning by the City is considering the possible use of Savage Canyon as a recreational area upon completion of filling operations.

CHAPTER II

PROJECT DESCRIPTION

INTRODUCTION

The proposed project involves the expansion of the solid waste disposal facilities for the City of Whittier. Figure II-1 shows the location of the project site to the northeast of the City. Descriptions of the existing facilities and the expanded facilities resulting from the proposed project are presented in this Chapter.

EXISTING FACILITIES

The City of Whittier owns and operates a Class II sanitary landfill in the lower elevations of Savage Canyon. The landfill serves only residents and industrial users within the incorporated boundaries of the City, an area of approximately 12 square miles. The site is open six days per week and presently receives between 300 and 350 tons (560 and 650 cubic yards) of municipal and industrial solid wastes per day of operation. Table II-1 presents a monthly summary, by volume, of the types and amounts of refuse received during 1976. Table II-2 shows the amounts delivered by City vehicles which service the western portion of the City. Collection service for the eastern part of Whittier is provided by private contractors. The cut and cover method of disposal is practiced utilizing approximately ten foot lifts and one foot of compacted soil between cells. Refuse is deposited into designated locations, compacted in place by the D-8 and/or D-9 caterpillar tractors, and covered periodically with soil excavated by a TS-14 scraper. A sprinkling truck is used through the day to minimize dust. A pick-up truck is also used at the site. Access roads to the site and to the dumping area are either asphalt or well-compacted soil. Drainage from the canyon walls is intercepted by culverts and/or open channels to prevent water from reaching fill areas and is diverted toward Penn Street. Equipment is maintained and stored in a metal equipment shed located adjacent to the access road within the site boundaries. Personnel at the site include two heavy equipment operators, one landfill foreperson, and one landfill gate keeper. The landfill is screened from view by steep ridges on the north, east, and west, and by trees and shrubs near the access on Penn Street to the south.

FIGURE II-1

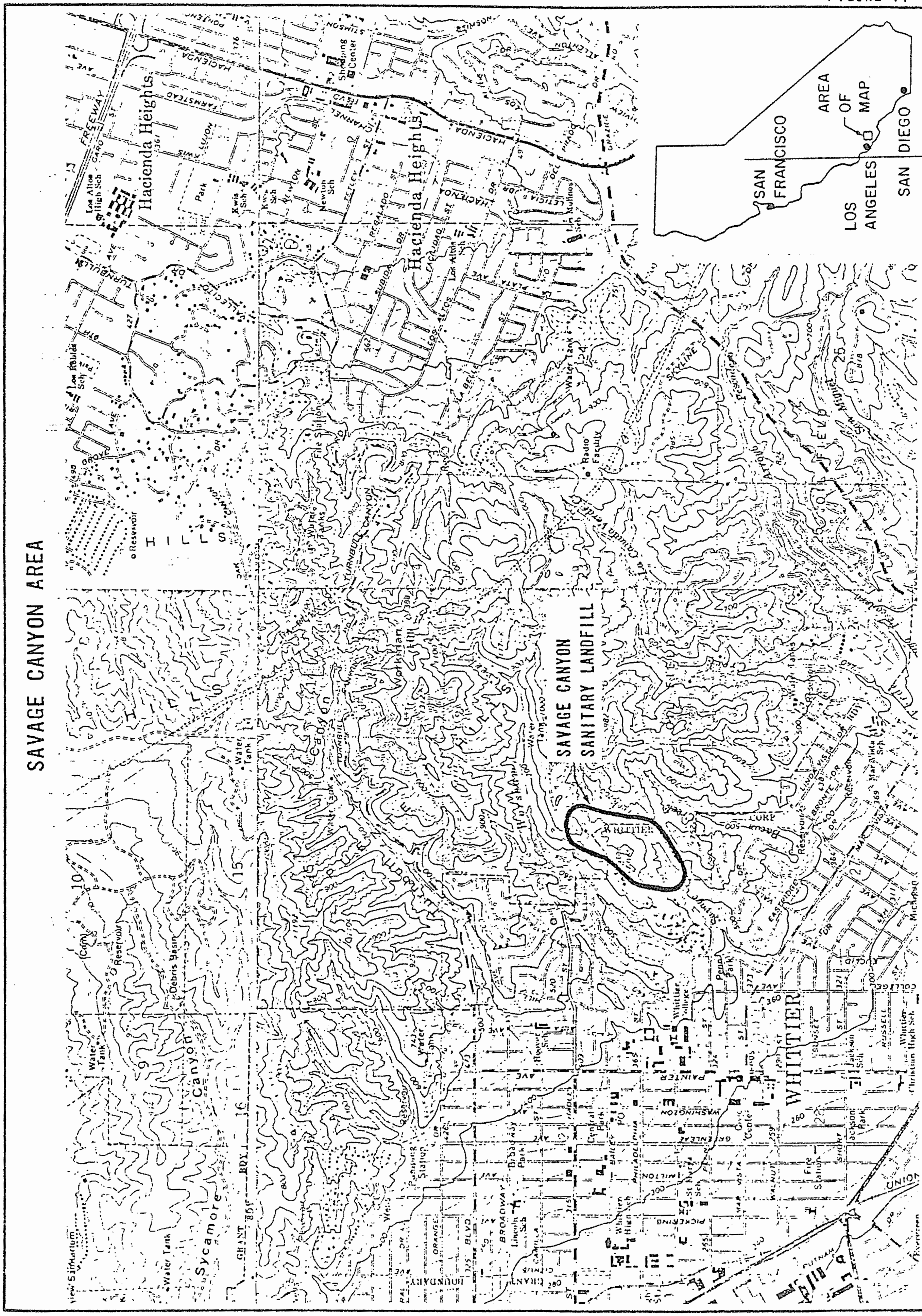

SAVAGE CANYON AREA
SAVAGE CANYON
SANITARY LANDFILL
Hacienda Heights
HILLS
WHITTIER
Sycamore Canyon
Turnbull Canyon
SAN FRANCISCO
LOS ANGELES
SAN DIEGO
AREA OF MAP

TABLE II-1

AMOUNTS AND TYPES OF MATERIALS DISPOSED AT SAVAGE CANYON[1, 2]
(cubic yards)

Month	Rubbish	Concrete Blacktop	Trimmings	Demolition	Wood and Building Materials	Furniture	Industrial Waste	Debris	Total
January	26,764	1,364	2,295	46	289	49	2,132	1,019	33,958
February	22,891	1,058	1,569	320	271	64	1,815	663	28,651
March	24,728	1,395	1,810	206	358	40	2,282	949	31,768
April	24,292	1,212	2,102	232	460	50	2,197	863	31,408
May	24,020	955	1,765	241	492	34	2,066	677	30,250
June	25,166	972	1,925	174	450	49	2,203	1,030	31,969
July	24,399	1,857	2,235	70	421	38	2,340	815	32,175
August	23,674	2,745	1,931	20	426	43	2,349	692	31,880
September	22,906	912	1,955	47	305	41	2,146	866	29,178
October	22,746	1,064	2,081	726	358	47	2,109	943	30,074
November	23,312	795	2,006	100	333	46	2,226	986	29,804
December	24,551	790	1,868	88	395	49	2,412	883	31,034
Annual	289,449	15,119	23,542	2,270	4,558	548	26,277	10,386	372,149

(1) Source: Reference II-1.
(2) 1976

TABLE II-2

SOLID WASTE MATERIALS HAULED TO LANDFILL
BY CITY VEHICLES(1)
(Cubic Yards)
1976

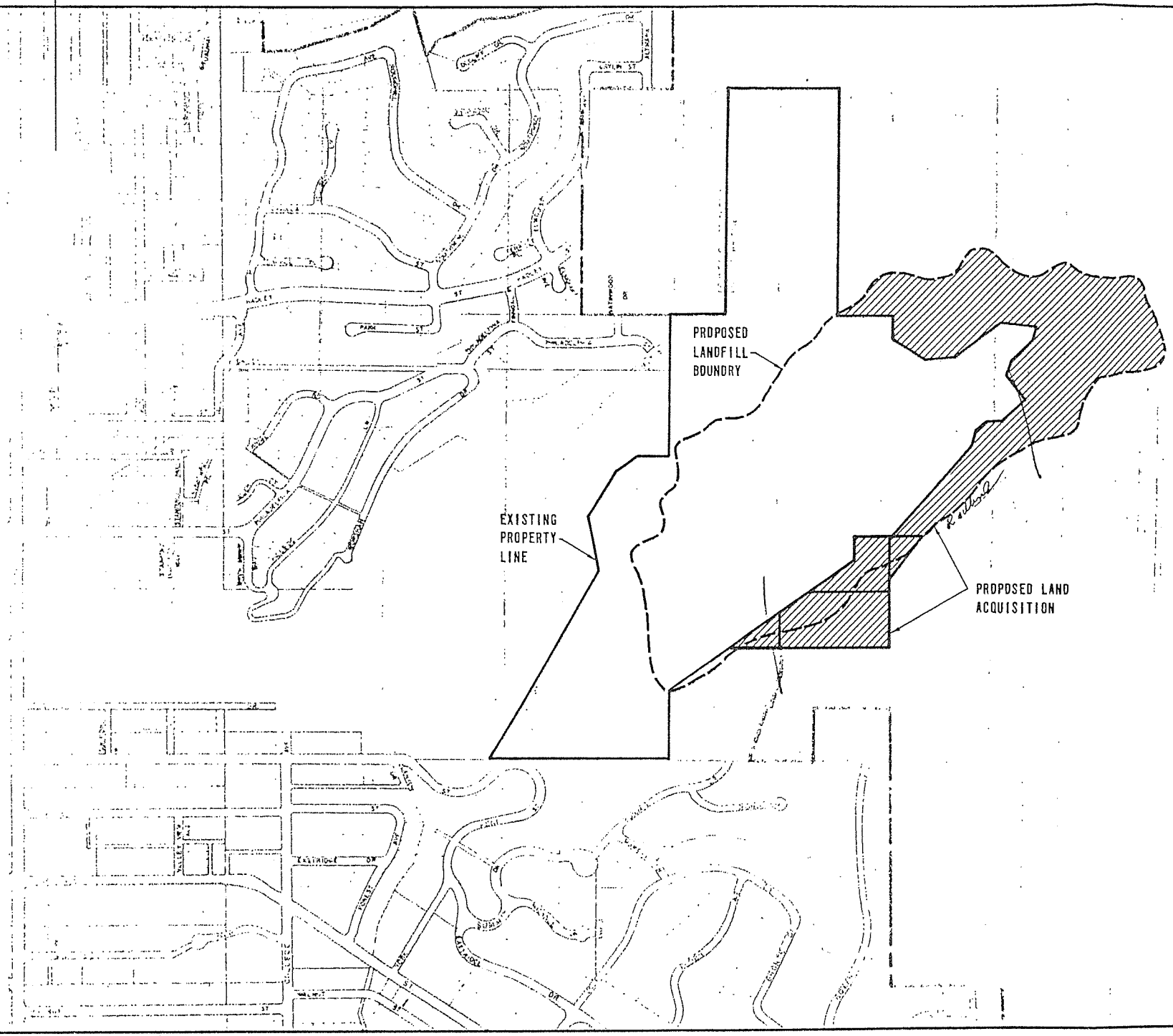
Month	Vehicle Category				
	Sanitation	Street	Park	Water	Total
January	13,785	246	418	15	14,464
February	10,532	298	255	1	11,086
March	10,388	131	262	47	10,828
April	10,667	279	211	0	11,157
May	13,616	180	258	5	14,059
June	11,204	112	222	9	11,547
July	14,003	200	237	2	14,442
August	10,853	82	192	5	11,132
September	10,488	182	246	0	10,916
October	13,445	134	244	25	13,848
November	10,977	129	196	11	11,313
December	13,146	154	308	3	13,611
Annual	143,104	2,127	3,049	123	148,403

(1) Source: Reference II-1

Given the remaining capacity of the site and projected rates of disposal, the useful life of the existing landfill is another 18 to 20 years.

PROPOSED EXPANDED FACILITIES

The proposed project entails purchasing of and negotiating filling rights to land parcels adjacent to the existing Savage Canyon site. The acquired property would be annexed to the City and appropriate zoning classification adopted. Approximately 45 acres are proposed for acquisition to provide an additional 4,500,000 cubic yards of available capacity. This increases the remaining capacity to 8,800,000 cubic yards which will serve the City of Whittier for over 50 years at projected filling rates. Proposed land acquisition (Figure II-2) is outside the City limits of Whittier and is under the jurisdiction of Los Angeles County. The proposed expansion utilizes a narrow strip of land within the City limits but outside the existing landfill boundary (Figure II-2). Rights to this property



PROPOSED PROJ

ENGINEE

will have to be negotiated. Figure II-3 shows the proposed expanded landfill, depicting locations of the access road, drainage system, and major contours. Cross-sections of the landfill site are presented in Figures II-4 and II-5 and show existing surfaces, completed fill surfaces, and excavated areas. The proposed landfill is approximately 3,000 feet in length with a maximum width of about 1,300 feet. Fill depth varies considerably due to underlying terrain. Maximum fill elevation is 900 feet. The completed fill surface provides an area of 52 acres for possible open space or recreational development.

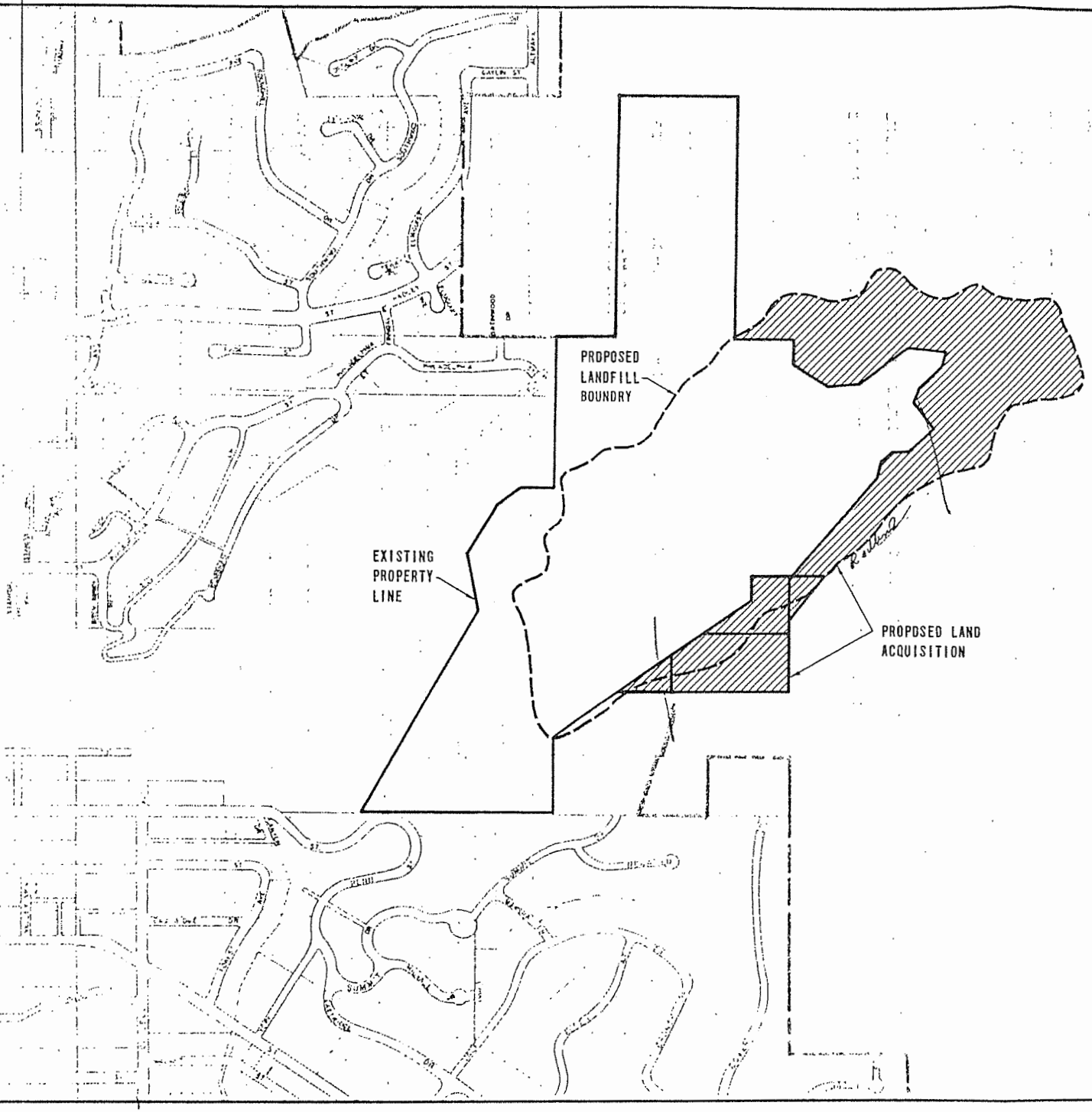
The access road has a maximum grade of seven percent along its length except for a short segment with a grade of four percent. A minimum curve radius of 100 feet is provided to facilitate maneuvering of collection vehicles.

Cover material will be taken primarily from the canyon sidewalls as shown in Figure II-6. A sufficient volume of cover material is available on the site for total project requirements. Cover excavation areas are also used for refuse filling activities thereby necessitating stockpiling of cover materials. Excess cover material will be initially stockpiled on the existing plateau of fill shown in Figure II-4.

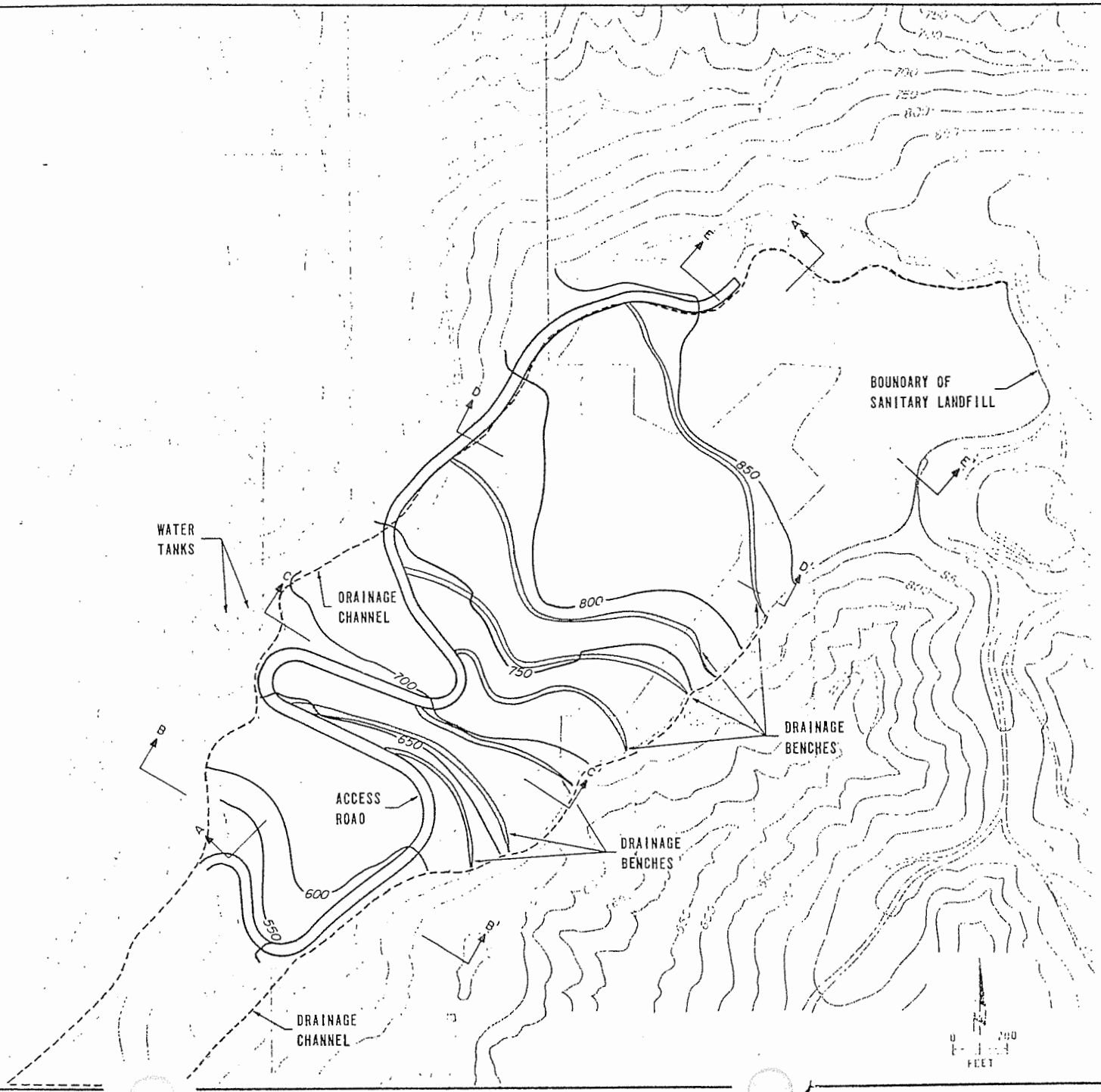
Site drainage is designed to prevent surface runoff from entering the fill area. Surface water originating from upstream drainage areas above the deposited waste will be intercepted by drainage channels installed in natural ground. Temporary drainage control facilities are recommended for areas that will be covered during subsequent filling operations. Runoff will be diverted around the waste fill and discharged downstream. Fill slope benches and the access road are designed to help reduce runoff velocities and divert runoff from filled areas. The surface of all filled areas will be graded to promote maximum practical runoff of precipitation to the diversion channels.

A final cover of at least three feet of compacted soil will be provided on all completed fill areas to minimize infiltration of surface waters. Additionally, the final fill surfaces will be graded at no less than three percent toward drainage facilities and planted with vegetation to minimize erosion hazards.

Detailed technical information on the proposed expanded landfill design is available in Reference II-2.

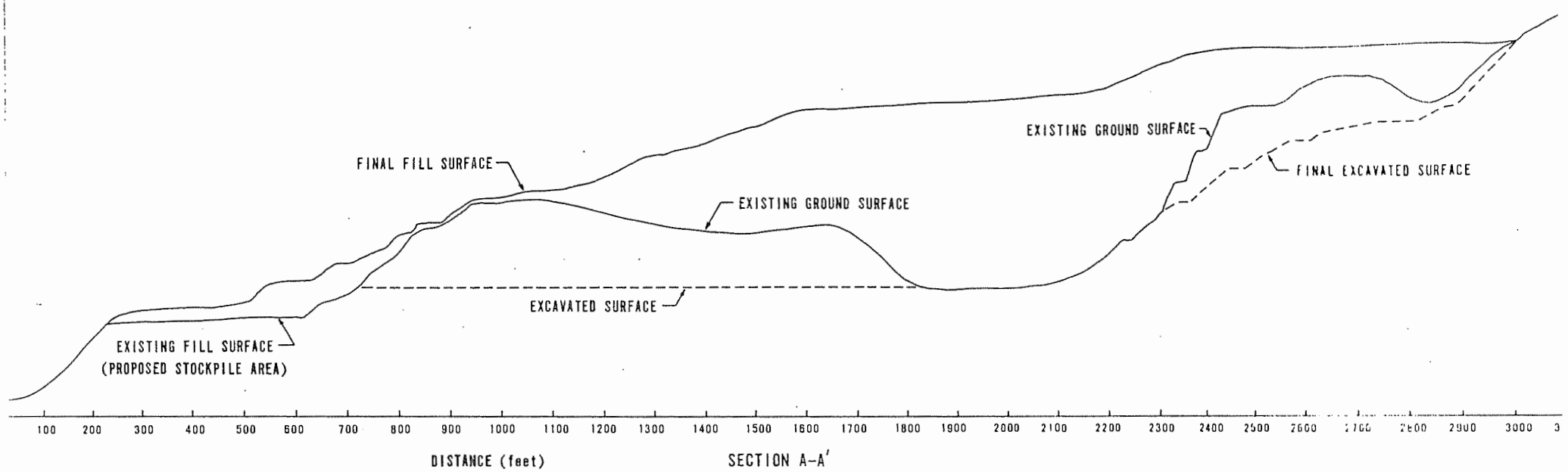


PROPOSED PROJECT SITE



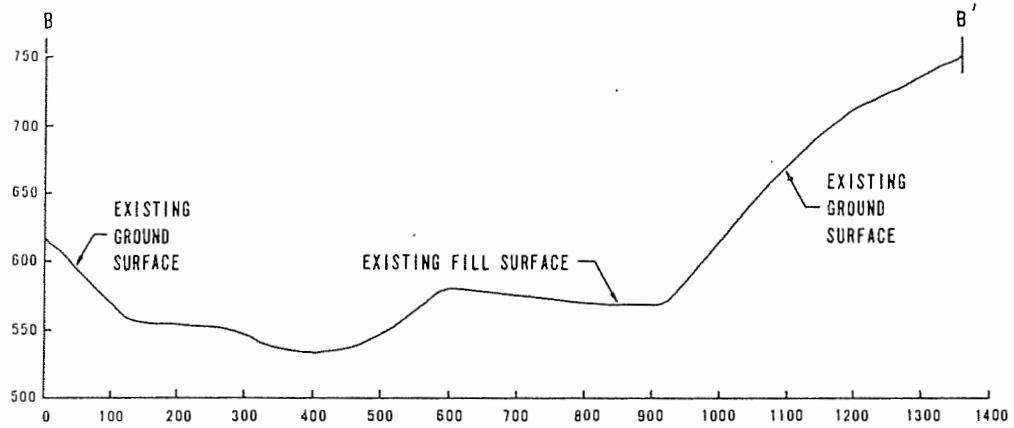
NOTE: A-A THROUGH E-E' REFER TO CROSS-SECTIONS IN FIGURES 11-4 AND

PROPOSED LANDFI
EXPANSION
(TOP VIEW)

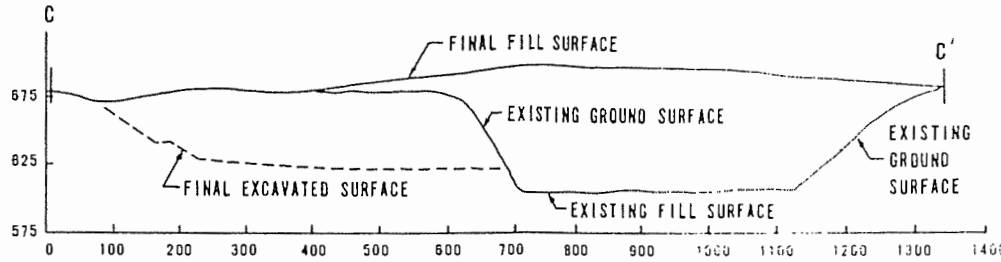


SECTION A-A'

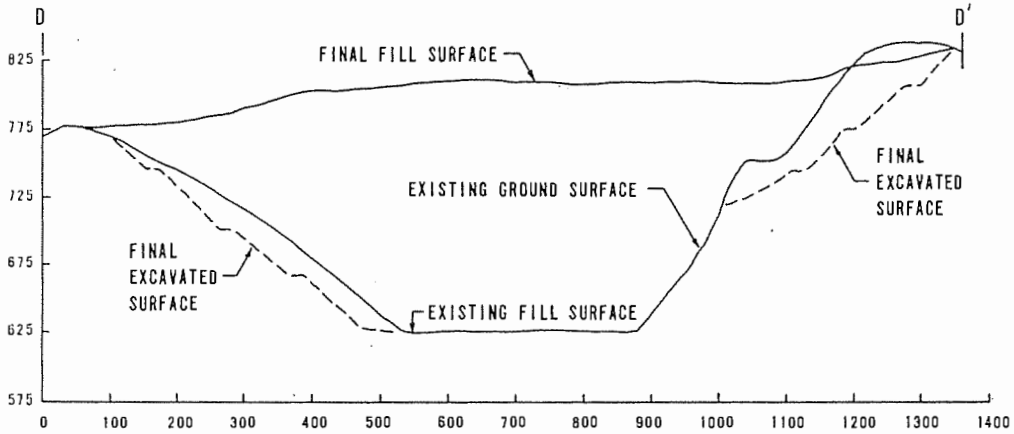
SECTION
EXPANDED LANDFILL



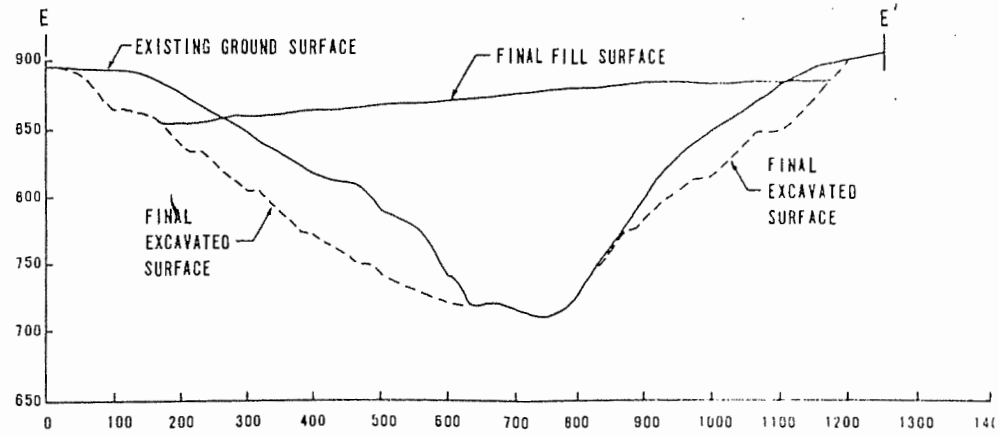
SECTION B-B'



SECTION C-C'



SECTION D-D'

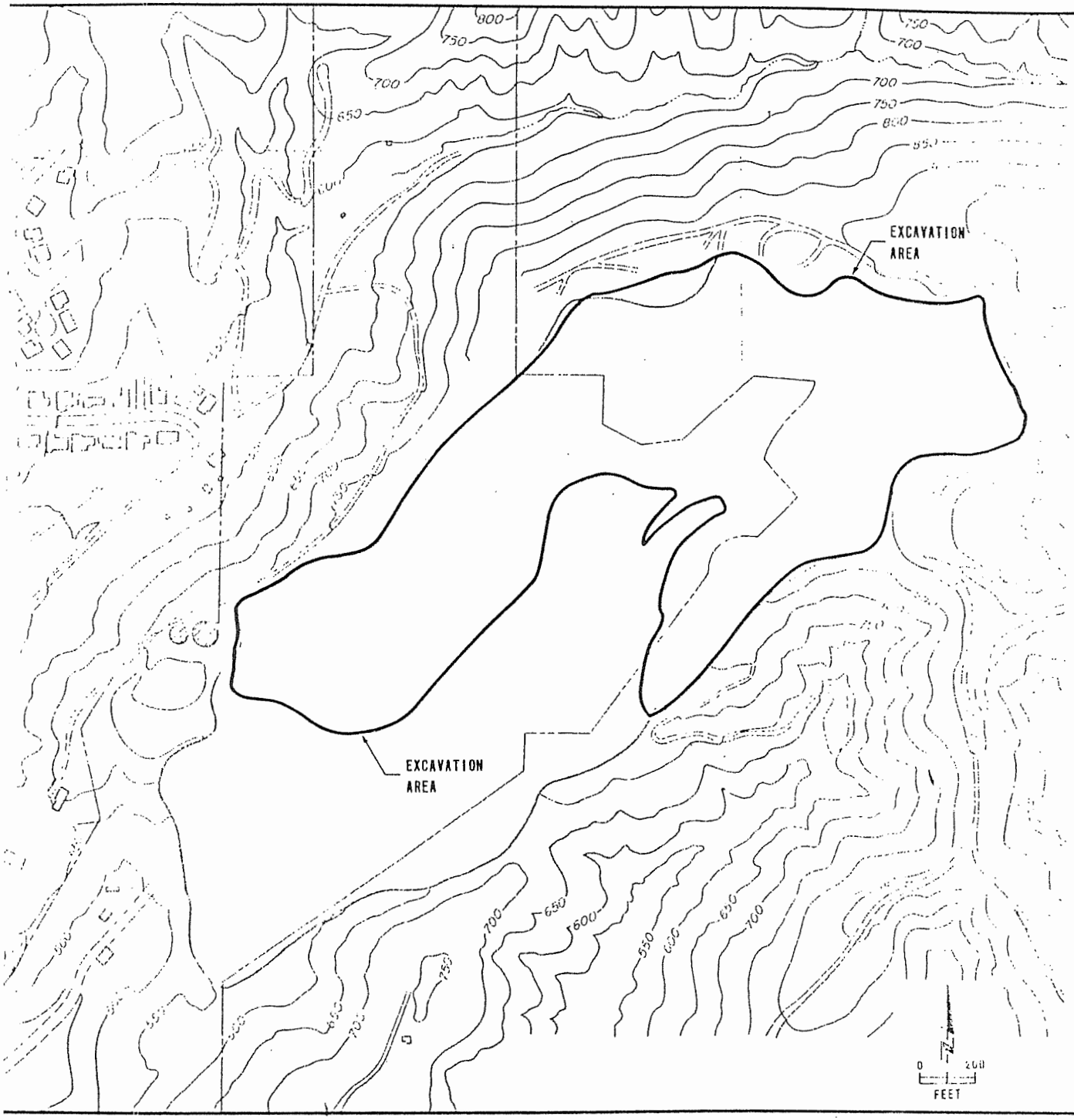


SECTION E-E'

DISTANCE (feet)

SECTIONS

FIGURE 11-6



EXCAVATION AREA MAP

CHAPTER III

ENVIRONMENTAL SETTING

INTRODUCTION

Background information pertinent to the general character of the environmental setting of the proposed landfill expansion and to the identification and evaluation of the potential environmental, social, and economic consequences of the proposed project are presented in this Chapter.

PHYSICAL ENVIRONMENT

The City of Whittier is located in the southeastern portion of the Los Angeles Basin approximately 15 miles east of the Los Angeles downtown metropolitan area. The Pacific Ocean is located 20 miles to the south and the San Gabriel Mountains are about 15 miles to the north. The incorporated area of the City covers approximately 12 square miles and ranges in elevation from about 200 to 600 feet above sea level. The City is located at the base of the Puente Hills which trend in a general east-west direction. Most of the incorporated area of the City rests on the gentle, uniform plain that slopes from the Puente Hills toward the ocean.

Bedrock in the Whittier area consists of sedimentary deposits, predominately sandstones and siltstones lain down over a period of several million years as the ocean receded. Major geologic formations include Puente, Fernando, La Habra, and San Pedro Formations (Reference II-1). Alluvium derived from the San Gabriel Mountains or locally from the Puente Hills covers the plain. More comprehensive information on the geology of the Whittier area is presented in References III-1 and III-2.

Ten soil associations have been identified in the Whittier area by the United States Department of Agriculture Soil Conservation Service (Reference III-3) and descriptions of their properties summarized in Reference III-4. In general, soils consist of loams, silty clay loams, and clay loams derived from alluvium on the plain and sandy loams, clay loams, and clays derived from residuum on the hills. Soils of the Yolo Association predominate on the alluvial plain. These soils are generally

well drained, highly fertile loams and formerly supported extensive citrus and avocado groves. Recently, much of the area occupied by this soil association has experienced urban development. In the Puente Hills, soils are of the San Andreas-San Benito and Altamont-Diablo Associations. These soils consist of fine, sandy loams, clay loams, and clays which are generally well drained and have high to moderately high fertility. These soils are exposed to moderate to very high erosion hazard depending on the steepness of the terrain.

The City of Whittier is located near several major fault zones (Figure III-1). Major fault zones which could generate moderate to severe ground shaking in the City include the San Andreas, Newport-Inglewood, Sierra Madre, and Whittier Faults (Reference III-4). The San Andreas Fault is located approximately 30 miles to the northeast of the City. Maximum credible event for this fault is magnitude 8.0+. The Newport-Inglewood and Sierra Madre fault zones are located about 12 miles to the north and southwest respectively. Maximum credible event for these two faults ranges from magnitude 6.5 to 7.0. The Whittier fault is a potentially active fault that bisects the Puente Hills. The maximum credible event for this fault is magnitude 6.6 (Reference III-5). Epicenters for earthquakes of magnitude 4.0 or greater are shown in Figure III-1. Additional information on seismicity in and around the Whittier environs is available in References III-1 and III-4 through III-6.

Natural water resources in the Whittier area are limited. Extensive urban development has altered most of the natural watershed on the alluvial plain. Surface streams in the Puente Hills are typically ephemeral, maintaining flows during and shortly after rain storms. The major water course in the area is the San Gabriel River which passes to the west of the City. Two flood control basins are located on the river near the City, i.e., Whittier Narrows Dam west of the Puente Hills and the Santa Fe Dam ten miles to the north.

Groundwater is generally at depths greater than 100 feet below the surface, except in the southerly and southwesterly portions of the City where it ranges from 20 to 25 feet. Perched aquifers are present locally but are generally limited in extent. Wells in the City draw water from

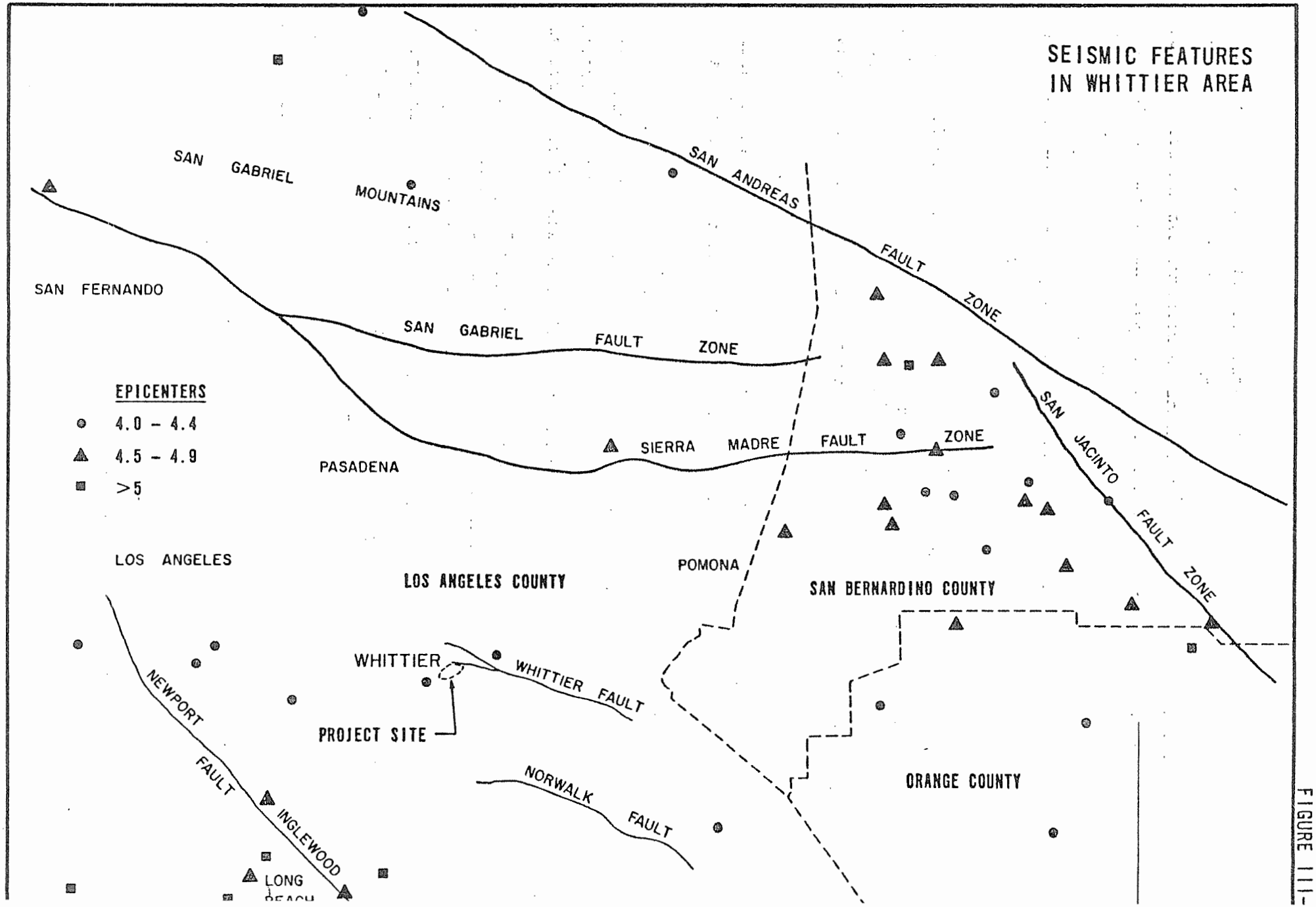
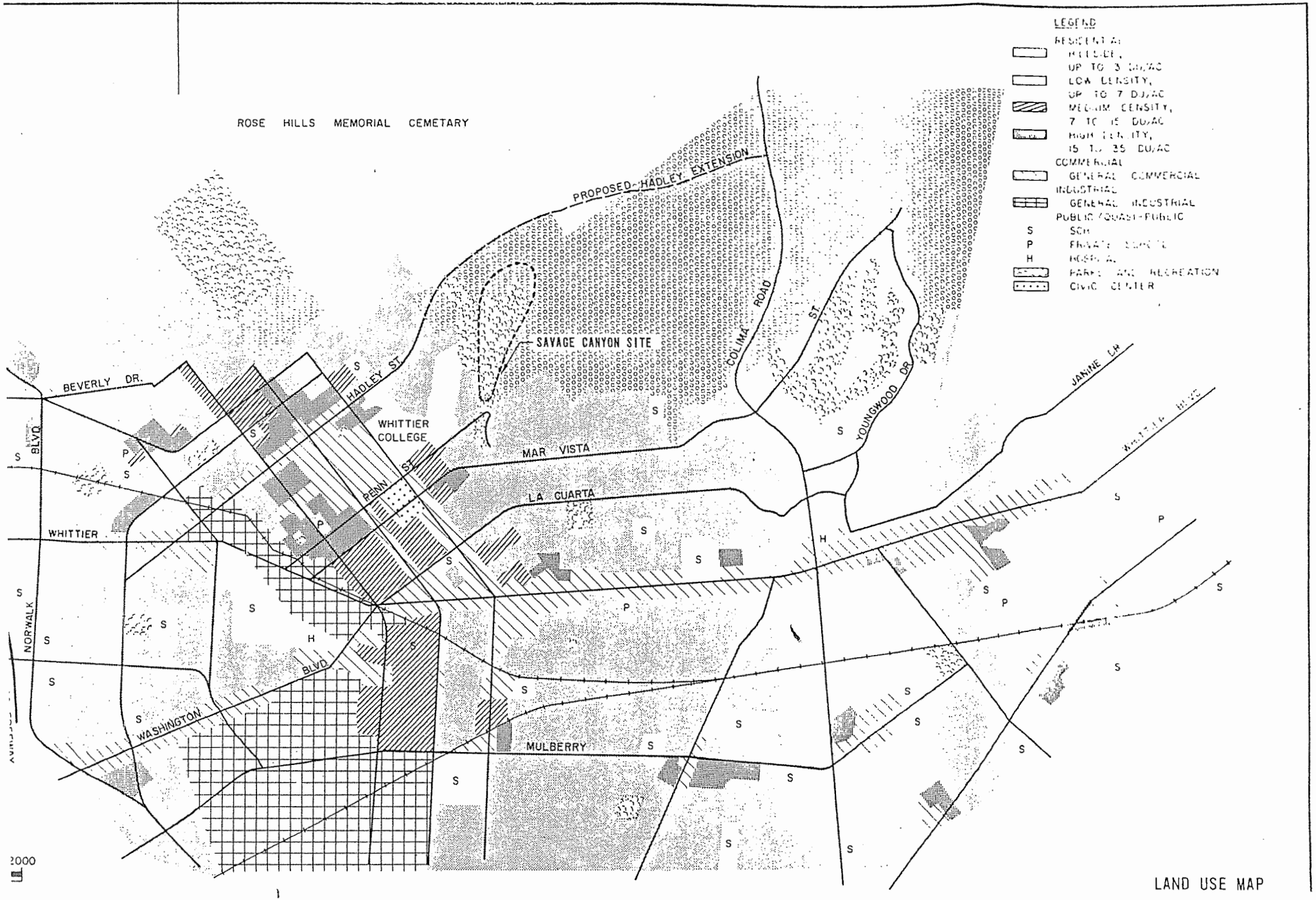

SEISMIC FEATURES
IN WHITTIER AREA
SAN GABRIEL MOUNTAINS
SAN ANDREAS FAULT ZONE
SAN FERNANDO
SAN GABRIEL FAULT ZONE
EPICENTERS
4.0 - 4.4
4.5 - 4.9
>5
SIERRA MADRE FAULT ZONE
PASADENA
SAN JACINTO FAULT ZONE
LOS ANGELES
LOS ANGELES COUNTY
POMONA
SAN BERNARDINO COUNTY
WHITTIER
WHITTIER FAULT
PROJECT SITE
NEWPORT FAULT
INGLEWOOD
NORWALK FAULT
ORANGE COUNTY
LONG

FIGURE III-

FIGURE III-2



LAND USE MAP

the Central Groundwater Basin. The groundwater is designated as "very hard" and has a relatively high total dissolved solids content.

BIOTIC ENVIRONMENT

The major plant communities in the Whittier area are Coastal Sage Scrub and Herbland. These communities are generally confined to the Puente Hills. The Coastal Sage Scrub community is located on steep, dry slopes and consists primarily of shrub growth two to six feet high. Shrubs can occur as dense stands or be sparsely distributed and mixed with herbland species. Dominant members of this community are California sage brush, California buckwheat, white sage, and laurel sumac. Herbland vegetation consists mainly as annual grasses from one to three feet in height. Dominant grasses are wildoats and ripgut. Other plants which are locally abundant include mustard and Russian thistle.

The plant communities in the area support a rich assemblage of animals. Birds are perhaps the most conspicuous members of the animal community. Common species include the mourning dove, wrentit, house-finch, brown towhee, English sparrow, and California quail. Other wildlife such as mammals, reptiles, and amphibians are common in the area, but they are, in general, seldom encountered because of their nocturnal and/or secretive habits.

Inventories of plant and animal species occurring in the Puente Hills region are presented in References III-7 through III-9. No rare, endangered, or threatened species are known to occur in the area (References III-10 and III-11).

CLIMATE AND AIR QUALITY

The local climatic conditions in the Whittier area are essentially those of the Los Angeles Basin. The climate in this basin is the integrated result of the effects of three general factors:

(1) semi-permanent high pressure zone off the coast of California,

(2) Pacific Ocean, and

(3) mountains forming the northern and eastern edges of the basin.

Mean annual high and low temperatures are 64.8°F and 55.3°F, respectively. The yearly average total rainfall is 14.05 inches, with most of precipitation falling in the mountainous areas during the November-April period. The air near the land surface is surprisingly moist, with relative humidity averaging 75 percent in the early morning and 49 percent near mid-day. Winds play an important role in the air quality of the basin. Generally, the winds are very light (average speed of 5.7 mph), exhibit little seasonal variability, and dominated during the daytime by sea breezes and at nighttime by land breezes. Under spring and early summer conditions, when ocean air moves inland as warm air currents transport air aloft along the mountain ranges ("chimney effect"), and during certain winter conditions, when northeasterly Santa Ana winds move warm air from the desert areas seaward across the basin, the Los Angeles Basin experiences good dispersion forces. However, during most of the year there is limited capability to disperse air contaminants and vertical movement of air masses is hampered by the presence of a persistent temperature inversion at about 1,000 feet.

The major sources of four key air contaminants are identified in Table III-1 for the Los Angeles Basin.

Five major air quality monitoring stations are located near Whittier. The location of these stations and data in days when State Air Standards were exceeded by either ozone, carbon monoxide, nitrogen oxide, or sulfur dioxide are presented in Table III-2. Using Station 80 as an index of the Whittier environs, the Whittier area appears to experience relatively frequent periods of high sulfur dioxide levels.

HUMAN ENVIRONMENT

Land Use, Development, and Facilities

The City of Whittier is 12 square miles (7,440 acres) in size. Figure III-2 presents a land use pattern map for the City of Whittier planning area. Presently (Table III-3), over 90 percent of this land is developed with 51.2 percent of the land used for residential housing, especially single family residences. Vacant lands include all lands within the City limits that are undeveloped for urban uses and are not being used for agriculture or oil extraction. Most notable of the vacant

TABLE III-1

MAJOR SOURCES OF KEY CONTAMINANTS
(Fiscal 1974-1975)

	Major Sources	Key Contaminants: Carbon Monoxide	Oxides of Nitrogen	Hydro-Carbons	Oxides of Sulfur	Particulates
(1)	Gasoline Motor Vehicles	93.4	51.7	81.4	5.2	46.4
(2)	Other Transportation	6.6	19.4	1.2	8.6	14.3
(3)	Combustion of Fuels		22.2		51.7	21.4
(4)	Organic Solvent Operations			10.4		3.6
(5)	Petroleum Operations and Sulfur Recovery Operation				27.6	
(6)	Other Industrial Operations		6.7	7.0	6.9	14.3
Total		100.0	100.0	100.0	100.0	100.0

Source: Reference III-2

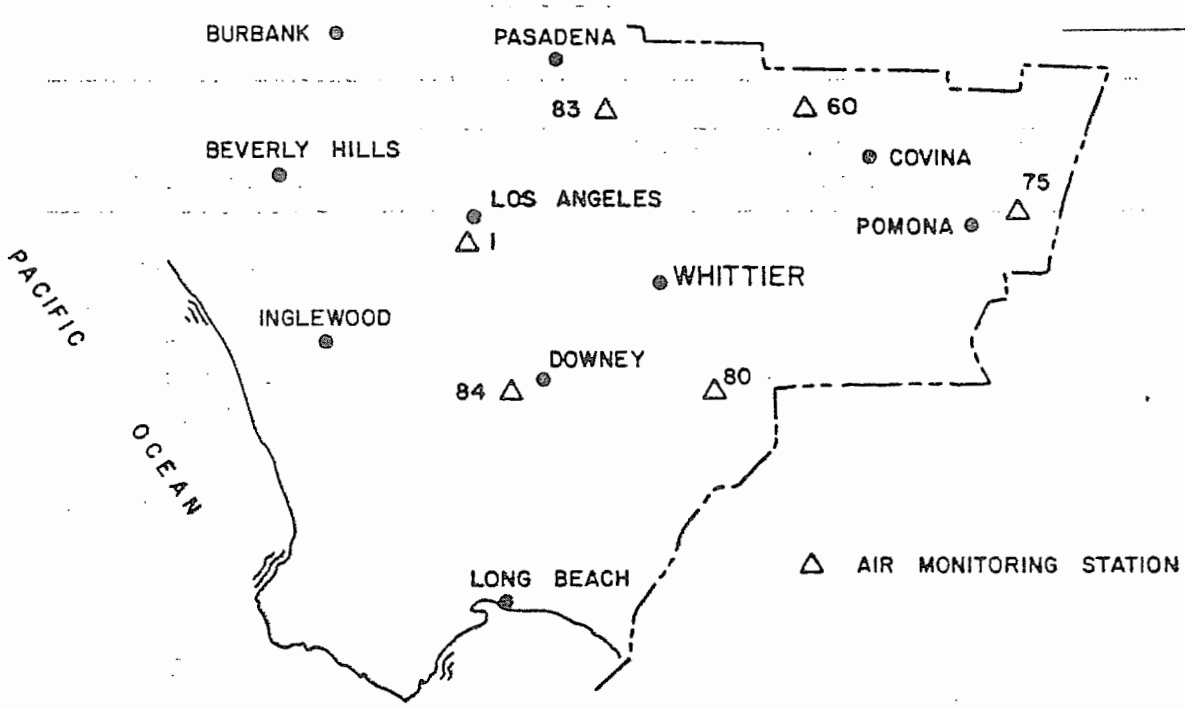
lands are the Hellman Estate, the Childs Estate, and Savage Canyon. An estimate of the ultimate land uses in this incorporated area, reflecting maximum residential development based on land suitability considerations, is provided in Table III-3. The largest expected land use change is the development of vacant land for additional residential areas (about 600 acres).

Development within the City is primarily commercial with some light industry associated with railroad and trucking services. Little change is expected in these land uses in the future.

The facilities available in Whittier are adequate to meet the needs of the residents. However, there are some features of the existing

TABLE III-2

AIR QUALITY DATA



Days when short-period air contaminant concentration means equaled or exceeded State Standards

	Air Contaminant	Time	Station 1	60	75	80	83	84	L.A. Basin
(1)	Ozone	1974	127	192	150	75	190	24	215
	0.10 ppm	1975	129	168	155	76	171	23	201
	1 hour	Jan-Oct 1976	110	163	152	111	169	1	--
(2)	Carbon Monoxide	1974	49	2	2	19	31	87	128
	10 ppm	1975	55	3	0	25	46	93	123
	12 hours	Jan-Oct 1976	15	0	1	6	0	49	--
(3)	Nitrogen Oxide	1974	33	14	7	9	18	7	69
	0.25 ppm	1975	30	9	17	25	35	12	78
	1 hour	Jan-Oct 1976	17	2	3	12	13	4	--
(4)	Sulfur Dioxide	1974	--	--	--	--	--	--	--
	0.04 ppm	1975	19	1	0	35	0	5	62
	24 hours	Jan-Oct 1976	11	0	0	6	0	0	--

TABLE III-3

LAND USE PROFILE
CITY OF WHITTIER

Land Use	1974	Ultimate	Percent Change
Residential			
Single Family	47.8	49.5	+12
Multi-Family	3.4	7.8	
Commercial	4.1	7.9	+03
Industrial	2.0	3.3	+65
Public/Quasi-Public	12.7	13.3	+ 5
Transportation Right-of-Ways and other Developed Area	21.8	18.6	-17
Vacant (Undeveloped)	8.2	--	-10
	100.0	100.0	

Land area within City of Whittier limits equals 7,820 acres

transportation mode that are not convenient. Residents have to travel substantial distances to use commercial airline and railroad services. Some intersections in the downtown area are less than desirable to maintain traffic flow during periods of conjestion.

Population

The rate of population growth in Whittier is decreasing. Following a major annexation, the growth rate ranged from 1 to 4 percent (1962 to 1967). Since then (1967 to 1975) the rate has been less than one percent. During the 1962 to 1975 period, the population has expanded by ten percent (64,538 to 71,199). Population projections in the Whittier General Plan, which are based on land use suitability forecasts, for the ultimate population in this incorporated area, range from 70,000 to 112,000 with the probable projection value equal to 80,000. A straight-line projection of 1962-1975 growth rate to 1990 indicates a possible population of 80,000. This horizon projection represents an increase of 12 percent over the 1975 population.

Table III-4 presents additional information on the population of the Whittier area, emphasizing the comparison between the Whittier population and the population of the census tract adjacent to the project site. About nine percent of the City's population and families reside in the census tract in which the landfill site is located. This portion of the City's population differs from the entire population in a number of ways: (1) a higher percentage of the families have children under 18 years, (2) a significantly higher percentage of the population is non-white, and (3) a large proportion of the population is less than 21 years.

Economic Factors

An overview of key economic features of Whittier and the site census tract is shown in Table III-4. The mean income of Whittier ($14,678) is 11 percent higher than that for Los Angeles County as a whole. The mean income in the site census tract is 50 percent higher than that of Whittier as a whole. This difference is also reflected in the percentage of income exceeding $25,000 per year. Additional indications of the relatively higher economic status of this census tract, as compared to Whittier as a whole, is seen in the house values (Table III-4).

Employment

Most of the Whittier residents are employed outside their City limits. The local employment base consists of trade (wholesale and retail) and service-type employers.

SAVAGE CANYON ENVIRONS

The Savage Canyon Sanitary Landfill is located in the southwestern portion of the Puente Hills within the incorporated boundary of the City of Whittier. The elevation of Savage Canyon ranges from about 400 feet near the landfill entrance at Penn Street to over 1,000 feet above sea level on the ridge to the northeast. Much of the steep slopes of the canyon are disturbed by previous excavation activities. The lower elevations of the canyon floor are covered with fill from on-going solid waste disposal activities. Drainage of the site is to the southwest.

TABLE III-4

1970 POPULATION DATA

	Whittier	Site Census Tract
Population	72,863	6,534
Families	19,584	1,491
Percent with children under 18	49.8%	53.5%
Race (non-white)	0.4%	0.8%
Males (percent	47.6%	46.4%
Females (percent)	52.4%	53.6%
Age		
Less than 21 years	38%	46%
21-59 years	50%	46%
Over 59 years	12%	8%
Annual Income		
Mean	$14,678	$21,621
Over $25,000 (%)	11%	30%
Below Poverty Level (%)	4%	4%
Houses		
Median Value	$24,300	$40,400
Over $50,000 (%)	8%	26%
Built since 1960 (%)	20%	32%
Same Occupancy since 1965 (%)	53%	48%

The surrounding area to the north and east of the site is generally undeveloped and characterized by high topographic relief. To the east and south extends the broad alluvial plain that is part of the Los Angeles Basin. Residential development has occurred on the lower slopes adjacent to the landfill and along the ridge east of the site.

Underlying substrate is predominantly light colored massive siltstones of the Lower Fernando Formation. Also represented are light-brown massive unsorted conglomerates with well-rounded pebbles. Minor silty and platey sandstones are also present. The bedrock has weathered into expansive clayey soils of the Altamont-Diablo Association. These soils are well drained, exhibit high shrink-swell behavior and are subject to moderate to high erosion hazard.

Natural drainage patterns in the lower elevations of Savage Canyon have been permanently altered by filling operations. Storm runoff is conveyed by drainage channels and culverts to a storm sewer near the mouth of the canyon. The runoff is eventually released to the San Gabriel River. No groundwater is present at the landfill site and thus does not pose a problem for filling operations. Only perched aquifers have been encountered in Savage Canyon and all contained brackish water.

Vegetation in the lower portions of the canyon have been altered considerably by landfill operations. Large expanses of bare ground are exposed on the canyon floor and on adjacent slopes where cover material has been removed. Vegetation on completed portions of the landfill is dominated by herbland species such as grasses, mustard, and mallow. Tree tobacco and castor bean are also present. Coastal Sage Scrub predominates on the surrounding slopes. Much of this area has been disturbed by excavation activities and roads. Common species include California sagebrush, mule fat, California buckwheat, and several grasses. Several eucalyptus are present along the crest of the east ridge. Evidence of wildlife activities is common throughout the area, e.g., canid scats, deer tracks, rodent excavations.

The land use designation of the portion of Savage Canyon within the Whittier corporate boundary is Parks and Recreation (Figure III-2). The portion of Savage Canyon outside the city limits is (1) considered Hillside Residential (up to three dwelling units per acre) by the City and (2) is designated as Rural II (one dwelling unit per acre) by Los Angeles County (Reference III-13). It should be noted, however, that due to a referendum election on hillside development held in March 1977, that the density would be limited to one or less families for each five acres. This limitation would be at least for a year, or longer, depending upon City Council considerations.

No known archaeological resources are present in the Savage Canyon area (Appendix B). The lack of recorded data results from no systematic field reconnaissance having been conducted in this area. Determination of the occurrence and potential value of archaeological resources would require a field survey.

CHAPTER IV

POTENTIAL IMPACTS OF PROPOSED PROJECT

ADDITIONAL CAPACITY

The proposed project provides an additional 4,500,000 cubic yards of fill capacity for solid waste disposal which will extend the useful life of the Savage Canyon sanitary landfill approximately 30 years. Thus the City of Whittier can provide a continued level of service to its residents for another 50 years from the present. Expanding the existing facility will preclude the need to transport solid wastes further distances to another landfill operation or utilize other more expensive methods of disposal. Thus, the proposed project provides significant savings of cost to the public over other currently available methods and locations of solid waste disposal.

GAS RECOVERY

Another possible beneficial impact which may result from the additional refuse volume provided by the proposed expansion is gas recovery. Gas generated within the landfill represents a potential source of energy. This gas, containing approximately 50 percent methane, could be cleaned and used as a supplementary gas supply for local industrial users. The Savage Canyon landfill does not have sufficient refuse volume to generate enough gas to make gas recovery practical at this time. However, the additional volume resulting from the proposed project coupled with new technological advances and favorable market conditions, may make gas recovery economically feasible in the future.

ALTERATION OF LANDSCAPE

Modification of existing terrain will be a continuing impact as long as waste is being disposed of in the canyon. Continual alteration of topography will result in changes in existing drainage patterns.

Approximately 45 acres of Coastal Sage Scrub will be permanently removed from production as a result of the proposed expansion. The concomittant loss of cover and food supply will cause animals to move

out of the area. This change is considered permanent, although some species may continue to use the area periodically during times when no filling activities are in progress.

CONSTRUCTION IMPACTS

Slope failure may result in faulting of cells within the sanitary landfill. However, corrective grading of slide, slump, and creep areas and buttressing of cells will help prevent this occurrence. Under normal sanitary landfilling practice, minor uniform settlement of the underlying soil is of no practical structural concern since much greater settlement of fill materials (up to 20 percent) is expected to occur after compaction has been completed.

Settlement of refuse will be smallest where demolition and construction wastes are deposited and greatest in areas of primarily organic refuse. Some of the settlement is caused by further compaction of the materials, but most of it occurs as a result of biological and chemical decomposition of organic matter over a very long period of time. While most of the settlement may occur in the first five years, the process will continue indefinitely at a decelerating rate.

SEISMIC HAZARD

Massive horizontal sliding over the underlying bedrock (due to liquefaction) is an extremely remote possibility under static or earthquake conditions. Under seismic shaking, minor consolidation and structural shifts in underlying substrate is expected to be uniformly distributed to the surface by the intervening soft layers, causing no appreciable differential settlement. An extremely severe earthquake may cause surface rupture and horizontal or vertical displacement. No practical methods are available to mitigate against catastrophic seismic events. The likelihood of such an impact in Savage Canyon is highly speculative.

SURFACE RUNOFF AND GROUNDWATER QUALITY

Vegetation removal, excavation of surface materials, and surface compaction after filling all act to increase surface runoff. As long as excavated areas of completed portions of the landfill are left bare and otherwise unprotected, storm runoff will cause erosion and subsequent sedimentation in downstream areas.

Leachate formation and subsequent entry into groundwater basins is an important consideration in sanitary landfill design and operation. The impact of filling activities upon groundwater quality is ameliorated in sanitary landfill operations through provisions that (1) reduce penetration of surface water, (2) remove permeable strata from the bottom of the landfill, and (3) isolate individual cells with blankets of soil capable of absorbing significant volumes of liquids. These provisions are currently incorporated into the operation practices at the existing site and will continue if the proposed project is implemented. No groundwater is present in Savage Canyon and the likelihood of leachate from the landfill significantly affecting groundwater basins away from the site is slight.

Another aspect of the leachate hazard concerns the irrigation of the fill surface after disposal operations are completed. Irrigation of the completed landfill surface for maintenance of a recreational area (e.g., water golf course or park lawns) greatly increases the potential of water entering the fill and subsequent leachate formation.

COMBUSTIBLE GAS

Methane, a by-product of anaerobic decomposition of organic matter within landfills, is explosive when mixed with air to a concentration of five to 15 percent by volume. The positive pressures and gas concentration gradients developed within landfills tend to force the gases to move out in all directions. In the course of its movement away from the boundaries of the fill area, methane is gradually diluted with air. If the gas mixture is vented into a building, concentrated, mixed in combustible proportions with oxygen, and exposed to an ignition source, an explosion could occur.

Fortunately, conditions prevailing in the vicinity of most parts of the Savage Canyon area are not generally favorable to gas movement away from the landfill itself. That portion of the fill which is below natural ground level is surrounded by impermeable clay layers inhibiting gas movement. The part which is above the undisturbed ground level vents gas directly to the atmosphere from the sides and the top, posing no hazards except where enclosed spaces may be constructed directly on top of the fill. Two such enclosures are presently located on completed fill areas: the equipment storage and maintenance shed and the toilet facility. Both of these structures have concrete floors which help to act as a barrier to gas entry. These buildings are well ventilated, thus the possibility of the lower explosive limit of methane concentration being reached inside the buildings is reduced to a minimum. If the proposed project is implemented, the equipment storage and maintenance shed will be moved to a location on the west side of the canyon. When moved to the new location, these facilities will not be closer to residential areas than at present. Even though this location is on natural substrate as opposed to completed fill area, additional precautions may be necessary to ensure no future hazard from migrating methane gas occur to maintenance and operating personnel using these facilities.

Also, when the landfill is completed, the potential hazard of gas migration should be considered during future development of the completed landfill surface.

HAZARDOUS AND TOXIC WASTES

The California State Water Resources Control Board regulations limit the types of wastes which may be deposited in a Class II-2 disposal site to Group 2 and Group 3 Wastes as defined in Reference IV-1. The proposed sanitary landfill expansion for which the City of Whittier is applying for a permit will be designated, if approved, as Class II-2. Furthermore, the groups of wastes permissible at such a site specifically exclude all hazardous and toxic wastes. Continued inspection and control of waste deliveries is necessary if the proposed project is implemented. However, in spite of inspections and controls, accidental delivery of hazardous and toxic wastes is a distinct possibility which must be recognized and appropriately dealt with.

Radioactive wastes will not be accepted at the Savage Canyon landfill. Such wastes are only handled under under supervision and control at the U.S. Atomic Energy Commission, at specific locations by licensed disposal companies.

FIRE

Savage Canyon is located in a high fire risk area (Reference IV-2); however, accidental and spontaneous fires at the landfill do not pose a significant safety hazard to operators or the general public. Standard procedures in sanitary landfill operation all but eliminate any danger of fires to life and property. Since implementation of sanitary landfill procedures at the site, no accidental or spontaneous fires resulting from disposal operations have occurred.

AIR QUALITY

There are three main components of possible air pollution from the proposed expansion of the sanitary landfill. These are emissions from compacting and earth-moving equipment at or near the working face; dust and blowing paper which arise during dumping, moving, and compaction of wastes, and also from daily soil cover operations; and the threat of accidental fires at the working face or spontaneous ignition and combustion in older fill areas. It is anticipated that the contributions from these sources will remain unchanged relative to existing levels. No increase in equipment is planned, water sprinkling will continue to be practiced and blowing papers controlled. Fires have not occurred at the site since sanitary landfilling procedures were implemented.

ODORS

Odors are generated from delivered refuse which may have been stored over a long period of time. These odors usually result from anaerobic digestion of putrescible materials. The magnitude of odor nuisance is dependent on dispersion characteristics caused by the prevailing daytime winds. These winds are predominately upslope (north-

easterly) but small scale variations and eddies occur making it difficult to forecast dispersal patterns. Winds are generally strong enough to completely disperse detectable odors before they reach the nearby residential areas. However, in lighter winds, weak convection currents will carry noticeable odors into these areas. Dominant daytime winds will be sufficient to disperse odors away from residences most of the time.

NOISE

Noise generated at the landfill is caused by collection vehicles, water truck, and the compaction and excavation equipment operating at the site. Noise levels are most intense at the landfill working face and fade with distance. Vehicle noise is muted, but audible near residences on the ridge overlooking the landfill, and fades to background levels throughout the remainder of the residential area.

RATS, FLIES, AND GULLS

Rats are occasionally inadvertently brought in with refuse and released at the landfill site. Upon release, these animals generally seek cover within the exposed waste material. They are usually destroyed and buried when the waste is compacted and covered. Flies are also frequently brought in with refuse and are attracted to exposed refuse at the working face. Daily application of 12 inches of cover prevents larval emergence and usually eliminates fly breeding and development. Gulls are occasionally attracted to landfill sites, but here again standard sanitary landfill procedures act to decrease the chance of them becoming a nuisance. Inspection reports from the Los Angeles County Department of Health Services dating from 1966 to the present show that prophylactic measures at the landfill site have been effective in preventing rat, fly, and gull nuisances.

TRAFFIC

The City of Whittier presently owns and operates 11 collection vehicles for solid waste materials. These vehicles are in service five days a week and average 2.5 trips per day to the landfill site. City

collection vehicles service only about half of the City. In the eastern portion of Whittier, refuse collection service is provided by three private contractors, i.e., C. V. Disposal, Consolidated Disposal, and Peoples Disposal Service. Table IV-1 summarizes the number of trips to the landfill made monthly by these contractors. The primary access route to the landfill is Penn Street which traverses a residential area at the base of Savage Canyon. Traffic volume on Penn Street from collection vehicles alone is estimated at about 75 trips per day including travel to and from the landfill site. This means that one City collection vehicle is traveling on Penn Street every six minutes during working hours, either going to or coming from the landfill. This estimate does not take into account trips made by private citizens to the landfill. Thus traffic volume going to and from the landfill is actually greater than that accounted for by the City and contractor collection vehicles. It is anticipated that the proposed project will have no effect on prevailing traffic levels since no increases in projected rates of disposal are planned.

PROPERTY VALUE AND JURISDICTIONAL CONSIDERATIONS

The proposed expansion involves property that is currently under the jurisdiction of Los Angeles County. Utilization of this property as a sanitary landfill site will result in acquisition by the City. The land, when purchased by the City of Whittier, will still be subject to county property taxes and controls. The City is planning to annex the acquired property and adopt appropriate zoning classification for the acquired land. Upon completion, the landfill will remain a public facility and part of the open space element (Parks and Recreation).

Studies have shown that property values in residential areas adjacent to existing landfill sites are not adversely affected (References IV-3 and IV-4). Thus the proposed expansion should not affect the surrounding property values.

ARCHAEOLOGICAL AND HISTORIC RESOURCES

Since there are no known archaeological, historic, and palenotologic resources at the site, there will be no impact, unless unsuspected or obscured resources are uncovered during excavation. In such cases, activities should be halted within at least a 100-foot radius of the

TABLE IV-1

MONTHLY SUMMARY OF TRIPS TO LANDFILL BY PRIVATE COLLECTION CONTRACTORS (1976)

Month	C.V.	Consolidated	Peoples	Total
January	72	246	150	468
February	72	200	128	400
March	59	221	130	410
April	54	205	131	390
May	51	199	119	369
June	54	220	121	395
July	48	219	114	381
August	50	217	107	374
September	51	205	110	366
October	49	199	123	371
November	54	206	116	376
December	57	210	123	390
Annual Total				4,690

find. Qualified archaeologists and State authorities would be consulted for evaluation of the find and recommendation of mitigative measures, if necessary.

IMPACTS ASSOCIATED WITH COMPLETED FILL SURFACE DEVELOPMENT

The ultimate use of the completed landfill site is for a recreational facility such as a golf course or City park. Several factors must be taken into consideration for the final use and operation of the facilities. Extensive planting for park or golf course requires heavy irrigation during the summer and fall, application of fertilizer and continual maintenance. Soil cover over the completed fill must be adequately designed to facilitate surface drainage and minimize leaching. Applications of fertilizer, on a golf course or park atop the fill, will

cause movement of mineral nutrients from surface drainage. In the case of the elevated landfill at Savage Canyon, nutrients would be leached from surface irrigation and enter Savage Creek near the mouth of the canyon. They would then enter a storm sewer and be discharged eventually to the San Gabriel River.

The planting of non-native plants for landscaping purposes introduces a potential source of change in vegetation in surrounding areas. Compatible and successful plants such as grasses and herbs would grow quickly and disperse seeds in competition with the existing vegetation.

Any structures constructed in the landfill must be protected against gas hazard and settlement by proper design.

As the City of Whittier is an automobile-oriented community, any facility would require access roads and a paved parking lot. These asphalt areas, in conjunction with paved areas for playgrounds, walkways, and paths would augment surface runoff and increase the immediate temperature slightly from insolation on broad surfaces.

Public use of any facility over the landfill will involve automobile traffic along Penn Street. Often, a suburban city planner's dilemma is a facility or scenic natural site so popular that the sheer numbers of people and their automobiles pose a severe adverse impact on the area and its natural setting.

Another consequence of the completed fill surface is the improved accessibility of the interior region of the Puente Hills. By providing access into this region, the completed landfill may in effect facilitate development of the interior canyons. For example, the adjacent canyon east of Savage Canyon has been suggested as a possible future solid waste disposal site (Reference IV-5).

CHAPTER V

MITIGATION MEASURES PROPOSED TO MINIMIZE ADVERSE ENVIRONMENTAL EFFECTS OF PROPOSED PROJECT

MITIGATION MEASURES INCORPORATED INTO SANITARY LANDFILL DESIGN AND OPERATION

Mitigation measures for most impacts associated with solid waste disposal are already incorporated into the design and operation of a sanitary landfill. Such measures are an integral part of the standard operating procedures at the existing facility at Savage Canyon and will continue to be for the proposed landfill expansion. As a result, impacts such as slope failure, subsidence, surface runoff, leachate formation, fire, odors, dust, blowing papers, and vectors will be effectively mitigated against for the proposed project if proper sanitary landfill operating procedures are continued.

GAS GENERATION AND MIGRATION

Even though sanitary landfill construction is designed to prevent gas migration, gases generated within the landfill must be recognized as a potential hazard as well as a possible inhibitor of plant growth on the sanitary landfill and in surrounding areas. At present, visual reconnaissance of vegetated areas is done to determine if gas concentrations and distribution patterns are becoming a problem. To date, no evidence of gas accumulation sufficient to impair plant growth has been detected. With the additional refuse volume resulting from the proposed landfill expansion, more sophisticated means of gas detection may be required in the future.

EROSION AND SEDIMENTATION

Considerable excavation and stockpiling of cover materials is planned as part of the proposed project. This leaves extensive areas without protective vegetation and vulnerable to erosion and sedimentation hazard. Revegetation efforts utilizing fast-growing species would stabilize the exposed surfaces and encourage entrapment of precipitation within the soil cover as well as prevention of movement of material down slope.

TAXES AND JURISDICTION

The property to be purchased by the City for the proposed project is in Los Angeles County and is subject to county property taxes and controls. Annexation of this property will bring it under City control and eliminate county taxes. The annexation process would require pre-annexation zoning by the City before consideration by the Local Agency Formation Commission (LAFCO). The land area is included in the hillside area of the City's General Plan. If it were to remain in private ownership, use would be limited to very low residential density. However, the ultimate use of the property, as presently planned, is as a Park and Recreational Area.

LEACHATE FORMATION AFTER RECREATIONAL DEVELOPMENT OF COMPLETED LANDFILL SURFACE

The conversion of the completed landfill surface into a recreational area such as a golf course or park will require extensive irrigation. The extensive watering of the surface greatly increases the potential of water entering the fill and subsequent leachate formation. This hazard can be limited considerably by careful irrigation scheduling and control of application uniformity, such as through the use of drip irrigation methods. Careful irrigation practices would result in the leachate remaining largely confined to the refuse mass itself with no permanent downward movement below the refuse layer.

CHAPTER VI

ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED SHOULD THE PROJECT BE IMPLEMENTED

ALTERATIONS IN LANDSCAPE

Refuse disposal by landfilling in the proposed fill area would have a permanent unavoidable effect on the existing topographic features and vegetation in the proposed fill area. Operation constraints would make it unfeasible to save the vegetation by transplantation. Dirt and dust blanketing effects on the adjacent vegetation in the surrounding area are unavoidable but will be considerably reduced through proper sanitary landfilling procedures, e.g., sprinkling. Destruction of wildlife habitat necessarily will displace the resident animals in the proposed site. Small animals will probably move into adjacent areas causing minor and temporary changes in the population dynamics of the involved species. Ultimate conversion of the site to a recreational area will result in a permanent change in plant community type and species representation.

TRAFFIC AND CIRCULATION

Continuation of public use of the disposal facility will not change the present traffic patterns and trip generations. Slow-moving vehicles laden with refuse and trash will cause minor congestion on roads leading to the site, especially Penn Street. Expansion of the facilities, as proposed, would extend the time period that the existing traffic volume would prevail. There would be continued use of the same streets as at present unless another access road were built as use extended further north in the landfill area.

AIR QUALITY AND NOISE

Impact of landfill equipment, collection trucks and other vehicles upon air quality will continue unavoidably unless future air pollution emission standards for vehicles are, in fact, implemented by State and Federal authorities and extended to off-the-road vehicles.

Present levels of noise from collection vehicles and landfill equipment will continue throughout the duration of the proposed project.

Noise levels may increase in intensity as the fill surface rises and gets closer to residences located near the ridge overlooking the site. However, the highest fill elevations are near the rear of the canyon away from residences which will alleviate the noise disturbance potential.

CHAPTER VII

ALTERNATIVES TO THE PROPOSED PROJECT

NO PROJECT

The "No Project" alternative would allow for continued disposal of solid wastes at the existing site for the next 18 to 20 years. At the end of that period, the City would be forced into an alternative means of eliminating its solid wastes. Refuse disposal, in one form or another, is a basic necessity which cannot be escaped. Past experience with municipal refuse disposal operations which have come to a sudden halt due to different circumstances has shown that the consequences can be catastropic, leading to public health hazards and nuisance problems.

It is almost inconceivable that stoppage of service would be permitted to last long enough in Whittier to reach such proportions. With the level of evident planning and past performance, it is expected that long before a "No Project" situation would threaten public health and well being, contingency measures will have been planned, adopted and readied for implementation.

ALTERNATIVE LOCATIONS WITHIN THE PLANNING AREA OF THE CITY

Two alternative areas within the planning area of the City of Whittier have been considered as sites for possible sanitary landfill development. These areas are Worsham Canyon immediately to the west and north of Savage Canyon and an unnamed canyon adjacent to and east of Savage Canyon.

Worsham Canyon would provide a fill capacity of 7,210,000 cubic yards. Surface area available after completion of fill activities is 70.7 acres. This alternative was ruled out because of limited accessibility. Collection vehicles would have to enter the landfill site by Philadelphia Street which is narrow, on a relatively steep grade, and passes through a residential area. Other factors considered included the amount of disposal capacity available within existing City property, the resulting area for recreational use, and the location of the permanent access road. If an alternative access route is made

available, i.e., extending Hadley Street into the canyon, then this alternative might become more attractive.

The unnamed canyon to the east of Savage Canyon has a fill capacity of 35,000,000 cubic yards. This equates to a life span of 200 years based on projected disposal rates and an average in-place compacted waste density of 1,200 pounds per cubic yard. Access into this canyon would be from Savage Canyon. This alternative was considered in conjunction with the proposed expansion of the existing landfill.

It should be noted that implementation of the proposed project does not foreclose on the future development of the two alternative locations as sanitary landfills.

DISPOSAL SITES OUTSIDE THE WHITTIER PLANNING AREA

Three alternative major landfill sites are located within a 15-mile radius of Whittier (Reference VII-1). These sites are Puente Hills approximately two miles north, Operating Industries in Monterey Park, and BKK Landfill in West Covina.

Puente Hills is a Class II landfill operated by the Los Angeles County Sanitation District. It currently receives 1,182,000 tons per year of refuse. Remaining capacity at the site provides another three years use. A new Conditional Use Permit would be necessary to utilize its maximum capacity and if applied for and approved, this facility will provide service until the year 2010. Thus, the remaining useful life of this facility available when the existing Savage Canyon site is completed is 13 years. This assumes that the pending Conditional Use Permit is approved for expanding Puente Hills. If it is not approved, then the Puente Hills Landfill will not be available for use by Whittier when Savage Canyon is completed.

Operating Industries Landfill is located approximately eight miles northwest of Whittier. It is a privately operated Class II landfill that presently receives 766,000 tons of refuse annually. The estimated year of completion for this site is 1980; therefore this landfill will not be available for use by Whittier when Savage Canyon closes.

The BKK Landfill is a privately operated Class I landfill located about ten miles to the northeast of Whittier. It currently receives

about 606,000 tons of refuse annually. Projected life span of this facility is until the year 2165, and this could provide disposal service for Whittier.

Table VII-1 presents estimates of travel distances involved if the Puente Hills or BKK Landfill sites are used. Transport of refuse to either of these sites would consume energy, add to traffic congestion on major traffic arteries, and contribute to air pollution problems prevailing in the Los Angeles Basin. Table VII-2 presents estimates of the amounts of exhaust emissions produced by heavy-duty diesel vehicles if refuse was transported to either of these sites.

OPERATIONAL ALTERNATIVES

Volume Reduction

One method of achieving volume reduction is baling, whereby higher densities are obtained than by ordinary landfilling. Volume reductions of about 15 percent can be achieved, thus increasing the capacity of a given volume over the available area. Shredding prior to compaction also helps achieve higher densities (Reference VII-3) although not nearly as much as can be obtained with baling.

A significant initial investment for shredding and/or baling equipment would be required and due to the relatively small size of the Savage Canyon landfill, operation costs may be prohibitive. For example, the City of San Diego experimented with a small (250-short-ton-per-day) baler and abandoned it after costs ran as high as $4.50 per short ton.

An advantage of utilizing a shredding plant is that it can be easily used as basic equipment for any resource recovery system which may later be found appropriate.

Energy Recovery

Three methods of energy recovery from solid wastes are now under intensive development in the United States. These methods are incineration with heat recovery, supplementary fuels, and pyrolysis. A brief summary of these processes is presented in Appendix C. For more detailed information, a description of energy recovery methods is presented in References VII-4 through VII-6.

TABLE VII-1

TRAVEL DISTANCE FOR SOLID WASTE DISPOSAL
OUTSIDE OF WHITTIER PLANNING AREA

	Puente Hills	BKK (West Covina)
Number of Trips Per Day	47	47
Miles Per Trip	15	25
Miles Per Day	705	1,175

TABLE VII-2

EXHAUST EMISSIONS RESULTING FROM TRANSPORTING
SOLID WASTES OUTSIDE WHITTIER PLANNING AREA

Pollutant	Emission Rate[1] (grams/mile)	Puente Hills (kg/day)[2]	BKK (kg/day)
Particulate	1.3	0.92 (2.0)	1.5 (3.3)
Sulfur Oxides	2.8	2.0 (4.4)	3.3 (7.3)
Carbon Monoxide	28.7	20.2 (44.4)	33.7 (74.1)
Hydrocarbons	4.6	3.2 (7.0)	5.4 (12)
Nitrogen Oxides	20.9	14.7 (32.3)	24.6 (54.1)
Aldehydes	0.3	0.2 (0.4)	0.3 (0.7)
Organic Acids	0.3	0.2 (0.4)	0.3 (0.7)

(1) Source: Reference VII-2
(2) Values in parenthesis are pounds/day

Each of these energy recovery alternatives is considerably more expensive than landfill disposal currently in operation at Savage Canyon. Table VII-3 shows the differences in cost estimates for the three energy recovery methods. For comparison, the current cost of solid waste disposal at Savage Canyon is $1.50 per ton. Another consideration applicable to incineration and supplementary fuel is that of air pollution. Even though emission control equipment such as scrubbers and electrostatic precipitators can be installed, there are no known municipal incinerators which can meet the stringent operating requirements of the Los Angeles Air Pollution Control District (Reference VII-1). Emission control devices are also expensive and difficult to operate.

TABLE VII-3

DOLLAR COSTS ASSOCIATED WITH ENERGY RECOVERY TECHNIQUES

System	Energy Recovery Net Operating Costs Dollars per Ton(1)	Capital Cost (Dollars) per Ton of Rated Daily Capacity(2)
Incineration with Heat Recovery	13.00 - 14.00	40,000 - 50,000
Supplementary Fuel	8.00 - 12.00	18,000 - 20,000
Pyrolysis	14.00 - 20.00	40,000 - 70,000

(1) Source: Reference VII-5.
(2) Source: Reference VII-6.

Resource Recovery

Resource recovery is being tried on various scales in a number of communities across the United States. In Los Angeles County, a considerable amount of material resource recovery is taking place from the commercial and industrial waste stream. These wastes have a high proportion of secondary material, i.e., metal, glass, corregated paper, rags, which can be separated from the remainder of the refuse easily because of its relatively high density. Little material recovery is undertaken in the household waste stream because of the high concentrations of non-salvable items, e.g., tree trimmings, grass, dirt.

Technological breakthroughs, accompanied by changes in the relative economics of the various secondary materials, are gradually making the concept of resource recovery competitive with other traditional waste disposal methods. The main barriers to adoption of resource recovery schemes are: (1) usually very high initial investments in comparison with sanitary landfilling; (2) largely unproven technology; (3) uncertainty in marketability of the recovered materials; and (4) resistance to commit large amounts of resources to what are sometimes viewed as "adventuresome" schemes.

In spite of these obstacles, limited resource recovery for items with proven markets appears to be the future trend as an integral part of solid waste management. It is an environmentally sane approach; it conserves valuable and diminishing land areas and may well provide sources of supply for some of our otherwise non-renewable resources. Paper and ferrous metals can readily be recovered with the use of shredders and magnetic separators. With more sophisticated machinery, non-ferrous metals and glass can be separated and recovered. Plastics are somewhat less amenable to reuse at this time; they represent only a relatively small fraction of the solid waste stream (two to three percent).

Nearly all processing methods for resource recovery require a residue disposal subsystem, such as a landfill or transport to other communities. The volume of this residue can vary from three to 70 percent of the incoming wastes.

The economics of resource recovery is in a state of flux and depends a great deal on availability and distance to markets for recovered materials.

Thus, although one might expect the City to make a net profit from an ideally planned resource recovery plant over its long-term life, it is expected that in its early years such a scheme would be very expensive and would probably require substantial subsidy.

It is expected that resource recovery schemes will be found most economical when conducted on a large scale, with over 980 ton per day capacity. This is considerably more than the projected disposal rates at Savage Canyon. Regional solid waste management schemes will be required to funnel sufficient waste from many communities to large central plants. The State of California Solid Waste Management Board is presently discussing the desirability of financing two or more such resource recovery plants, as demonstration projects.

Planning, design and construction of facilities for resource recovery schemes usually entail passage of several years time. Thus, any resource recovery scheme should be viewed as a long-term alternative rather than an immediate alternative to the proposed project.

Recycling Centers

Separation of recoverable materials at their source for processing at recycling centers is practiced successfully to a limited extent in Whittier at the present time. Substantial reductions in solid waste volumes can be achieved through separation of recoverable wastes and recycling. For example, the Whittier Lions Club Recycling Center recycles paper, aluminum, and glass wastes. Between the period from 1 January 1973 and 30 June 1976, the center processed 2,000,000 pounds of newspaper, 36,000 pounds of aluminum, and 295,000 pounds of glass (Reference VII-7). The feasibility of this alternative is largely dependent upon the marketability of recovered wastes. This market has undergone tremendous fluctuations in the recent past. The market value of newspaper waste alone has varied from $3 to $65 per ton. Current market prices for newspaper, glass, and aluminum, respectively, are $18 to $30 per ton, $21 per ton, and 17 cents per pound.

More thorough separation of recoverable wastes such as tin cans, wet garbage, paper, aluminum, glass (color sorted), cardboard, etc., can be achieved through a concerted effort, including passage of necessary ordinances, education and gradually escalating enforcement (including

"free" collection of separated wastes, provision of special containers, issuance of warnings or citations and refusal to collect unseparated wastes) simultaneous with the necessary modifications to collection equipment and procedures. Source separation can be accomplished probably in less than one year with relatively minimal initial cost. If steady markets and/or disposal schemes can be found for the separated materials, it is envisioned that source separation may actually reduce collection and disposal costs to the City and the residents. Even though source separation was practiced during World War II, Whittier would be a pioneer in modern-day source separation and a model for other communities.

A certain amount of landfilling will still be required for trash, lawn and yard trimmings, demolition and construction debris, industrial and commercial waste products, and refuse from sources violating the separation scheme.

CHAPTER VIII

GROWTH INDUCING IMPACT

Refuse disposal is a recognized necessity in modern urban societies. In nearly all communities refuse disposal is taken for granted, its quality is not questioned, and until recently, its long-term impact upon the living systems was generally ignored. Recently, however, a heightened awareness of environmental degradation on one hand, and a sudden realization that landfill space is quickly becoming exhausted on the other, have made people conscious of refuse disposal.

Still, people do not choose their homes on the basis of the merits of the community's refuse disposal operations. The monthly cost of provision of even an extremely sophsticated refuse collection and disposal system is unlikely to have a sufficient impact on the average family's budget to influence its choice of dwelling place. Thus the economics of refuse disposal will not in itself affect growth rates. It is conceivable, however, that in the future, as regulations become more stringent, communities that do not provide adequate refuse collection and disposal may be the subject of growth control measures similar to the sewer connection bans imposed by State regulatory agencies on communities with inadequate wastewater treatment. Implementation of the proposed project would reduce the likelihood of this eventuality, which may appear unfortunate to some because building bans have proved a convenient means of growth control.

Industry, and to a lesser degree, commerce, considers the cost and availability of solid waste disposal service in their long-range plant location decision-making. However, this factor is rarely of paramount importance unless the industry produces hazardous or large-volume wastes. In summary, provision of good refuse disposal as represented by the proposed project will have negligible impact on residential development and a slight growth-inducing impact on industry and commerce.

It should be noted, however, that recreational development of the completed fill surface, i.e., the existing site plus the proposed

expansion, could influence development and population growth on the adjacent properties. The complete fill surface would provide access to areas surrounding the landfill thereby facilitating development. Converting the fill surface to a recreational area may encourage development of the surrounding canyons. The influx of people would increase loads on public services, e.g., waste disposal, sewer and water service, schools. It is conceivable that this increase in public services would be borne by the City of Whittier because of its proximity and the topographic characteristics of the area. Such a scenerio is highly speculative but should be considered in planning studies for the City and the Los Angeles County property immediately adjacent to the landfill site.

CHAPTER IX

RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The short-term operational impacts associated with the proposed project are primarily beneficial, especially in terms of public health. The principal impact of the project, from a public health point of view, is the provision of continued sanitary service--for the ultimate disposal of refuse--to the residents of Whittier. Thus, a decidedly positive contribution is expected to be made by the proposed project toward public health and well-being. The proposed expansion will provide citizens of Whittier with refuse disposal services for an additional 30 years. With proper operation and attention to detailed sanitary landfilling provisions, it is expected that no threats to public health will be posed from water supply pollution, rats and vermin, flies and other ill effects generally associated with solid waste disposal.

The short-term use of the site for refuse disposal by landfilling will reduce the potential productivity of the area as a whole and destroy that of the site in total since landfilling will eliminate any vegetation and wildlife currently present. The ultimate recreational use of the completed fill surface will have the long-term effect of increasing productivity by converting the Coastal Sage Scrub plant community to golf course or regional park lawns and other ornamental vegetation. Park and/or golf course landscaping, which requires extensive maintenance and irrigation, could cause unnatural inputs to the adjacent environment as discussed in Chapter IV. Attendant paving and auto traffic would contribute to a reduction in air quality which would also have a prolonged effect if the facility was planned for long-term use.

CHAPTER X

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED SHOULD THE PROPOSED ACTION BE IMPLEMENTED

Four major commitments of resources in the proposed project have been identified. They are: (1) irreversible loss of about 45 acres of shrublands, exclusive of what has already been lost to landfilling in previous years; (2) irretrievable loss of cover material from excavation areas; (3) irretrievable loss of energy and resource value from solid wastes unless recovered through a mining operation; and (4) the irretrievable loss of wildlife habitat. These commitments are an integral part of the filling operations for the proposed action and, even with mitigation factors, are unavoidable.

IRREVERSIBLE LOSS OF SHRUBLANDS

The proposed project involves the irreversible loss of approximately 45 acres of shrublands of relatively low productivity. Landfilling obliterates this productivity and removes even the remote chance of this area returning to its natural condition. Even though the area involved is small, in itself, it represents an incremental loss of open land in the Puente Hills region which is presently under the pressure of expanding urban development.

IRRETRIEVABLE LOSS OF COVER MATERIALS FROM EXCAVATION AREAS

The proposed landfill expansion will use 12 inches of soil cover daily, assuming continuation of current operating procedures, and a final cover of from three to six feet. Approximated 1,656,000 cubic yards of cover material will be needed. About 428,000 cubic yards of cover material will be excavated directly from the area involved in the proposed project. The remainder (i.e., 1,228,000 cubic yards) will come from materials excavated on existing City landfill property and stockpiled (Reference X-1). The soil material, once applied to the landfill site, will be irretrievably lost.

IRRETRIEVABLE LOSS OF ENERGY AND RESOURCE VALUE OF SOLID WASTES

In the present operation, all of the trash and refuse is buried permanently. In this age, when the public is becoming acutely aware of resource shortages, the loss of potentially recoverable materials such as newspaper, bottles, scrap metals, rubber, plastics and synthetics in the disposal operation becomes more significant. The configuration of the completed fill area, its projected ultimate use, and the relatively small volume of decomposing refuse, limit gas regeneration, resource recovery, and the ability to tap these resources successfully.

IRRETRIEVABLE LOSS OF WILDLIFE HABITAT

The loss of wildlife habitat is irretrievable even though the individual animals may temporarily migrate to neighboring areas. The overall decrease in "living space" will offset the equilibrium of adjacent areas. The new habitat provided upon the final fill will not approximate the lost initial habitat, even though it will be used by a different, and possibly less, diverse population.

REFERENCES

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I-2 Sterns, Conrad, and Schmidt, Consulting Engineers, Inc., 1975, Report on Savage Canyon Sanitary Landfill. Prepared for City of Whittier, California.

II-1 Department of Sanitation, City of Whittier (unpublished records).

II-2 See Reference I-2.

III-1 F. Beach Leighton and Associates (undated), Seismic Safety Element for City of Whittier.

III-2 Troxel, B. W., 1954, Geologic Guide for the Los Angeles Basin, Southern California. In Geology of Southern California (R. H. Jahns, ed.). Department of Natural Resources, Division of Mines Bulletin 170.

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III-4 Lampman and Associates (undated), Whittier General Plan.

III-5 Los Angeles County, 1974, Seismic Element. Los Angeles County General Plan.

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III-7 Williams, R. E., 1974, An Ecological Assessment of La Habra Heights, California. Rio Hondo College.

III-8 Planning Department (undated), Plants and Animals Known to or Expected to be Found in the Puente Hills. City of Whittier.

III-9 Dames and Moore, 1974, Draft Environmental Impact Report, Whittier Drillsite for Seaboard Oil and Gas Company.

III-10 California Department of Fish and Game, 1974, At the Crossroads. 1974, A Report on California Endangered and Rare Fish and Wildlife. California Department of Fish and Game, Sacramento, California.

III-11 Powell, W. R., 1974, Inventory of Rare and Endangered Vascular Plants of California. Special Bulletin No. 1, California Native Plant Society.

REFERENCES (Continued)

III-12 Southern California Air Pollution Control District, 1976 Metropolitan Zone, Air Quality and Meteorology, 1975, Annual Report (with comparative data for past years), Volume XX.

III-13 County of Los Angeles, 1973. General Plan of Los Angeles County.

IV-1 California State Water Resources Control Board, 1972, Waste Discharge Requirements for Waste Disposal to Land--Disposal Site Design and Operation Information.

IV-2 See Reference III-4.

IV-3 Goldberg, L., B.T. Jensen, D.A. Joseph, L.T. Lockhart-Mummery and E. Smith. 1972. The Effect of Solid Waste Disposal Sites on Property Values. EPA Contract CPE-70-133. Prepared by General Behavioral Systems, Inc.

IV-4 VTN Consolidated, Inc. 1974. Draft Environmental Impact Report for Mission Canyon Sanitary Landfill. Prepared for County Sanitation Districts of Los Angeles County.

IV-5 See Reference I-2.

VII-1 Los Angeles County Sanitary Districts, 1975, Solid Waste Management Plan.

VII-2 Environmental Protection Agency, 1976, Compilation of Air Pollution Emission Factors, AP-42. Research Triangle Park, North Carolina.

VII-3 Reinhardt, J.J. and R.K. Ham, 1973. An In-Depth Study of the Milling of Solid Wastes, Final Report on a Milling Project at Madison, Wisconsin between 1966 and 1972, Vol. I.

VII-4 Midwest Research Institutes, 1973. Resource Recovery Catalogue of Processes (February).

VII-5 Parkhurst, J.D. 1976. Report on Status of Technology in the Recovery of Resources from Solid Wastes. County Sanitation Districts of Los Angeles County. (As updated February 1977.)

VII-6 Bechtel. 1977. Final Report Edison-Coordinated Joint Regional Solid Waste Energy Recovery Project. Feasibility Investigation.

VII-7 Casper, R., Lions Club Recycle Center (personal communication).

IX-1 See Reference I-2.

APPENDIX A

INITIAL STUDY

ENVIRONMENTAL INFORMATION FORM
(To be completed by applicant)

(Note: This form is adapted from Appendix H as contained in State Guidelines for Implementation of California Environmental Quality Act of 1970, as amended)

Case No. Landfill Expansion

Date Filed March 29, 1977

GENERAL INFORMATION

1. Name and address of developer or project sponsor City of Whittier, 13230 East Penn Street, Whittier, California 90602

2. Location of project City Landfill, 13919 East Penn Street, Whittier, Ca. Assessor's parcel number: Book_____ Page_____ Parcel_____

3. Name, address, and telephone number of person to be contacted concerning this project D. J. Laughlin, Director of Public Services, City of Whittier, 13230 East Penn Street, Whittier, California 90602, Phone No. (213) 698-2551.

4. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state, and federal agencies Regional Water Quality Control Board and Los Angeles County Health Department.

5. Existing zoning district A-1-1 Los Angeles County (Probable City Zone R-1(5))

6. Proposed use of site (project for which this form is filed) Sanitary Landfill Site.

7. Attach Plans: No. of sheets See Sterns, Conrad, and Schmidt-1975 Report on Savage Canyon Sanitary Landfill.

PROJECT DESCRIPTION

8. Site size 45 Acres (Approximate)

9. Amount of off-street parking provided and basis for determination of number required. Garages N/A Covered N/A Open N/A

10. Proposed scheduling N/A

11. Anticipated related projects None

12. Anticipated incremental development Yes

13. Estimated cost of project N/A

Attachment A
of
Resolution No. 4754

14. If residential, include the number of units, number of structures, schedule of unit sizes. N/A

15. If commercial, indicate the type, whether neighborhood, city, or regionally oriented, gross floor area, loading facilities, types of uses for which buildings are intended, and number of floors. N/A

16. If industrial, indicate type, estimated employment per shift, and loading facilities. N/A

17. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. N/A

18. If the project involves a variance, conditional use, or rezoning application, state this and indicate clearly why the application is required.

(See Attachment) The property to be acquired by the City of Whittier is presently in the jurisdiction of Los Angeles County. The City plans to annex the property after acquisition, which requires appropriate zoning classification in accordance with the City's General Plan.

Are the following items applicable to the project or its effects? Discuss below all items checked "Yes." (If you wish to explain any of the answers, use additional sheets.)

YES	NO	
X		19. Change in existing features of any hills or substantial alteration of ground contours.
X		20. Change in scenic views or vistas from existing residential areas or public lands or roads.
X		21. Change in pattern, scale, or character of general area of project.
X		22. Significant amounts of solid waste or litter.
X		23. Change in dust, ash, smoke, fumes, or odors in vicinity.
X		24. Change in stream or ground water quality or quantity, or alteration of existing drainage patterns.
	X	25. Substantial change in existing noise or vibration levels in the vicinity.
X		26. Site on filled land or on slope of 10 per cent or more.
	X	27. Use or disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives.

YES	NO	
____	X	28. Substantial change in demand for municipal services (police, fire, water, sewage, etc.)
____	X	29. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
____	X	30. Relationship to a larger project or series of projects.

ENVIRONMENTAL SETTING

31. Describe the project site as it exists before the project, including information on topography, soil stability, plants, and animals, and any cultural, historical of scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or polaroid photos will be accepted. (See Attachment)

32. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.). Attach photographs of the vicinity. Snapshots or polaroid photos will be accepted.

(See Attachment)

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE March 29, 1977

D. J. Laughlin (Signature)
Director of Public Services

ENVIRONMENTAL INFORMATION FORM

PROJECT DESCRIPTION

18. The property to be acquired by the City of Whittier is presently in the jurisdiction of Los Angeles County. The City plans to annex the property after acquisition, which requires appropriate zoning classification in accordance with the City's General Plan.

ENVIRONMENTAL SETTING

31. The proposed total project site consists of approximately 45 acres of land immediately adjacent to the existing sanitary landfill in Savage Canyon. The area is characterized by high topographic relief and dominated by the Coastal Sage Scrub plant and wildlife community. No known historical or archaeological resources are present at the proposed site.

32. The area surrounding the proposed project site consists primarily of undeveloped canyons of the Puente Hills. Coastal Sage Scrub and Herbland are the dominant communities in the undeveloped regions. Much of the surrounding land is in private ownership and under the jurisdiction of Los Angeles County. The lower elevations of the Puente Hills in the vicinity of the proposed project are within the corporate boundary of the City of Whittier. This land would be zoned for residential development in accordance with the City's General Plan upon annexation. Extensive residential development has occurred on the lower slopes and alluvial plain near the mouth of Savage Canyon.

ENVIRONMENTAL CHECKLIST FORM
(To be completed by Lead Agency)

(Note: This form has been adapted from Appendix I as contained in State Guidelines for Implementation of California Environmental Quality Act of 1970, as amended)

I. BACKGROUND

1. Name of applicant City of Whittier
2. Address and phone number of applicant 13230 East Penn Street, Whittier, California, 90602 (213) 698-2551
3. Date of checklist submitted March 29, 1977
4. Agency requiring checklist City of Whittier
5. Name of proposal, if applicable Savage Canyon Sanitary Landfill Expansion

II. ENVIRONMENTAL IMPACTS
(Attach explanations of all YES and MAYBE answers)

	YES	MAYBE	NO
1. Earth. Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures?		X	
b. Disruptions, displacements, compaction or overcovering of the soil?	X		
c. Change in topography or ground surface relief features?	X		
d. The destruction, covering, or modification of any unique geologic or physical features:			X
e. Any increase in wind or water erosion of soils, either on or off the site?	X		
f. Changes in siltation, deposition or erosion which may modify a stream?	X		

Attachment B
of
Resolution No. 4754

	YES	MAYBE	NO
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	___	___	X
2. Air. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	___	___	X
b. The creation of objectionable odors?	X	___	___
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	___	___	X
3. Water. Will the proposal result in:			
a. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	X	___	___
b. Alterations to the course of flow of flood waters?	___	___	X
c. Discharge into surface waters, or in any alteration of surface water quality, including, but not limited to, temperature, dissolved oxygen or turbidity?	___	___	X
d. Alteration of the direction or rate of flow of ground waters?	___	___	X
e. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	___	___	X
f. Substantial reduction in the amount of water otherwise available for public water supplies?	___	___	X
4. Plant Life. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)?	X	___	___
b. Reduction of the numbers of any unique, rare or endangered species of plants?	___	___	X

	YES	MAYBE	NO
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	X		
5. Animal Life. Will the proposal result in:			
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals, including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?	X		
b. Reduction of the numbers of any unique, rare or endangered species of animals?			X
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?			X
d. Deterioration of existing wildlife habitat?	X		
6. Noise. Will the proposal result in:			
a. Increases in existing noise levels?			X
b. Exposure of people to severe noise levels?			X
7. Light and Glare. Will the proposal produce new light or glare?			X
8. Land Use. Will the proposal result in a substantial alteration of the present or planned land use of an area?			X
9. Natural Resources. Will the proposal result in:			
a. Increase in the rate of use of any natural resources?			X
b. Substantial depletion of any nonrenewable natural resource?			X
10. Risk of Upset. Does the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?		X	

	YES	MAYBE	NO
11. Population. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	___	___	X
12. Housing. Will the proposal affect existing housing, or create a demand for additional housing?	___	___	X
13. Transportation/Circulation. Will the proposal result in:			
a. Generation of substantial additional vehicular movement:	___	___	X
b. Effects on existing parking facilities, or demand for new parking?	___	___	X
c. Substantial impact upon existing transportation systems?	___	___	X
d. Alterations to present patterns of circulation or movement of people and/or goods?	___	___	X
e. Alterations to rail traffic?	___	___	X
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	___	___	X
14. Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	___	___	X
b. Police protection?	___	___	X
c. Schools?	___	___	X
d. Parks or other recreational facilities?	___	___	X
e. Maintenance of public facilities, including roads?	___	___	X
f. Other governmental services?	___	___	X
15. Energy. Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	___	___	X
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	___	___	X

	YES	MAYBE	NO
16. Utilities. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Power or natural gas?	___	___	X
b. Communications systems?	___	___	X
c. Water?	___	___	X
d. Sewer or septic tanks?	___	___	X
e. Storm water drainage?	___	___	X
f. Solid waste and disposal?	___	___	X
17. Human Health. Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?	___	___	X
b. Exposure of people to potential health hazards?	___	___	X
18. Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	___	___	X
19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	___	___	X
20. Archeological/Historical. Will the proposal result in an alteration of a significant archeological or historical site, structure, object, or building?	___	___	X
21. Mandatory Findings of Significance.			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of wildlife species or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	___	___	X

	YES	MAYBE	NO
b. Does the project have the potential to achieve short-term, to the disadvantage of long term, environmental goals? (A short term impact on the environment is one which occurs in a relatively brief, definitive period of time while long term impacts will endure well into the future.)	___	___	X
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	___	___	X
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	___	___	X

III. DISCUSSION OF ENVIRONMENTAL EVALUATION

IV. DETERMINATION

On the basis of this initial evaluation:

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

( ) I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.

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

Date March 29, 1977

(Signature)

D. J. Laughlin
Director of Public Services
(Title)

EXPLANATIONS FOR "YES" AND "MAYBE" ANSWERS ON ENVIRONMENTAL CHECKLIST FORM

1. EARTH

   a. The potential exists for unstable earth conditions over filled areas due to differentials in settling rates of compacted solid wastes.

   b. Large-scale soil over-covering and excavation activities are planned during the course of sanitary landfill operations.

   c. Sanitary landfill operations will result in changes in existing topographic features.

   e. Excavation activities will increase the erosion potential at the site.

   f. Savage Creek, although ephemeral, may experience modifications due to changes in siltation, deposition, and/or erosion resulting from excavation activities.

2. AIR

   b. The potential exists for objectionable odors to emanate from the working face of the sanitary landfill during compaction activities.

3. WATER

   a. Drainage patterns within Savage Canyon will be altered as a result of the proposed project.

4. PLANT LIFE

   a. There will be a loss of Coastal Sage Scrub species in the area directly affected by filling and excavation activities.

   c. Sanitary landfill operations will present a barrier to the normal replenishment of existing species. Large-scale disturbances in the area will allow ruderal species to invade the area and become established.

5. ANIMAL LIFE

   a. Sanitary landfill operations will displace animals currently present at the site.

   d. Approximately 45 acres of Coastal Sage Scrub habitat will be eliminated.

10. RISK OF UPSET

    A remote potential exists for combustible gases generated from wastes in the sanitary landfill to be involved in an explosion in the event of an accident or upset conditions.

APPENDIX B

ARCHAEOLOGICAL RECORDS SEARCH
(Letter)

UNIVERSITY OF CALIFORNIA, LOS ANGELES

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

SANTA BARBARA • SANTA CRUZ

THE INSTITUTE OF ARCHAEOLOGY
LOS ANGELES, CALIFORNIA 90024
ARCHAEOLOGICAL SURVEY

rec'd 2-4-77 GP

February 3, 1977

Mr. Gary Potter, Ph.D.
Project Manager
Engineering-Science, Inc.
150 North Santa Anita Avenue
Arcadia, California 91006

RE: Archaeological records search for known resources in the environs of the proposed expansion of the sanitary landfill in Savage Canyon, City of Whittier, California.

At the request of Dr. Potter, Engineering-Science, Inc., the staff of the UCLA Archaeological Survey conducted a map and records search to determine if the proposed expansion of a sanitary landfill in Savage Canyon, Whittier, would disturb any known archaeological resources.

According to the files housed at the Survey, no archaeological sites have been recorded in the areas of concern. However, no systematic field reconnaissance of the project region has ever been performed. The lack of recorded data is most probably due to this incompleteness of first-hand field knowledge.

We would recommend that such a survey be conducted in those areas where the expansion of the landfill will incorporate lands which have not been previously disturbed.

We have very little if no archaeological information for this region in Los Angeles County; therefore, should resources be extant on the property in question, they would be of great importance for scientific study and preservation.

Sincerely,

Martin D. Rosen
Survey Archaeologist

Enclosure: Invoice

APPENDIX C

ENERGY RECOVERY METHODS

APPENDIX C

INCINERATION

Incineration is a combustion process that converts combustible portions of solid wastes to gases, water, and ashes, thereby reducing the weight and volume of refuse. The gases and water vapor are released to the atmosphere. The gas stream includes entrained particulate matter, sulfur oxides, carbon monoxide, hydrocarbons, nitrogen oxides, hydrogen chloride, and organic acids. The residue includes ash, process water, and the non-combustible material such as metal and glass. Volume reduction is 80 to 90 percent and weight reduction is about 75 to 80 percent. Solid wastes processed by incineration and then compacted in a fill may occupy only four to ten percent of its original volume. Recently "water wall" incinerators have been used to recover the heat of combustion and use it to produce steam for generating electrical energy.

SUPPLEMENTARY FUEL

Supplementary fuel systems involve adding shredded combustible refuse to power plant boiler furnaces or some other incineration device. This concept is relatively new in solid waste disposal and appears to be an effective method of disposal and energy recovery.

PYROLYSIS

The process of pyrolysis involves the combustion of organic material in an environment of inadequate oxygen, but under optimum conditions of temperature and time to convert that material to fuel gas, oil, charcoal, and other materials. An important aspect of pyrolysis is the separation in space and time of the processes of fuel formation and fuel combustion. This allows a greater degree of flexibility during the process of burning an organic refuse for energy recovery. Laboratory and pilot plant pyrolysis units have been successfully constructed and operated, and these units have demonstrated the technical feasibility of the pyrolysis of household refuse.

APPENDIX D

ORGANIZATIONS CONTACTED

ORGANIZATIONS CONTACTED

City of Whittier, Department of Planning, Whittier, California

City of Whittier, Department of Sanitation, Whittier, California

Lions Club Recycle Center, Whittier, California

Los Angeles County Regional Planning Commission, Los Angeles, California

Los Angeles County Sanitation Districts, Whittier, California

Southern California Air Pollution Control District, El Monte, California

University of California, Institute of Archaeology, Los Angeles, California

APPENDIX E

COMMENTS AND RESPONSES

COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES

313 NORTH FIGUEROA STREET • LOS ANGELES, CALIFORNIA 90012 • PHONE 974-7784

May 6, 1977

N A. WITHERILL
r
E 213-974-8101

SON E. CHAMBERLIN
Deputy Director
E 213-974-8104

E. AFFELDT, M.D.
l Director
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D. J. Laughlin
Director of Public Services
City of Whittier
13230 East Penn Street
Whittier, California 90602

Ref. No: DHS-(31)-77

Dear Mr. Laughlin:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT - SAVAGE CANYON SANITARY LANDFILL EXPANSION

The staff of Environmental Management have reviewed the subject report and submits the following comments for your consideration:

The report is substandard in its coverage of noise and traffic information. Even though this will be an expansion to an existing landfill, the report should discuss in quantitative terms the ambient noise levels and the anticipated noise levels at the site during the future of the landfill.

What mitigation measures will be provided to eliminate or reduce the impact of noise upon the surrounding community and the personal employed at the site. This Department recommends that noise surveys be done at and adjacent to the site during all operational times to certify the ambient noise levels.

There is no quantitative discussion of total or average daily traffic on the streets surrounding or leading to the site; or actual counts of number of vehicles at the site during a normal work day. What impact will the site have on the general circulation patterns surrounding the site? and the anticipated noise levels from this traffic?

The Solid Waste Management Section of this Department offers the following information for inclusion in the environmental impact report.

a) the City of Whittier shall take the action necessary to properly zone the area surrounding the landfill to prevent future residential development along the landfill periphery.

b) the City shall prevent road building or other construction on the site which would result in the excavation or exposure of previously buried refuse in order to prevent odors.

c) the City shall provide and/or continue to use methods for the control of dust and blowing litter. This Department recommends the use of water trucks and portable litter control fencing.

d) the City of Whittier shall comply with all requirements and standards of the State of California Solid Waste Management Board.

If you have any questions regarding this matter, please contact Donald E. Motley at 974-7784 or Charles Coffee at 974-7868.

Very truly yours,

Walter F. Wilson

Walter F. Wilson
Environmental Management Deputy

WFW/DM/mrh

cc: Clifford Gutting

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
DISTRICT HEADQUARTERS
9420 TELSTAR AVENUE EL MONTE CALIFORNIA 91731 • (213) 443-3931

File No. A70421L

MAY 9, 1977

D. J. LAUGHLIN
Director of Public Services
City of Whittier
13230 East Penn Street
Whittier, CA 90602

Dear MR. LAUGHLIN:

COMMENTS ON: DRAFT ENVIRONMENTAL IMPACT REPORT SAVAGE CANYON SANITARY LANDFILL EXPANSION

ADEQUACY OF AIR QUALITY ANALYSIS

	Adequate		Inadequate
Existing Air Quality in Area	☒		☐
Existing Emissions in Area	☐		☒ 1)
Project Emissions:			
Construction phase	☐	NA	☐
Completed project vehicular	☐		☒ 2)
Stationary	☐	NA	☐
Project Impact on Air Quality	☒		☐

ARE ADEQUATE MITIGATION MEASURES PROVIDED FOR PROJECT AIR POLLUTANTS?

☒ Yes ☐ No ☐ Incomplete

ARE GROWTH INDUCING EFFECTS OF PROJECT ON POLLUTANT EMISSIONS DISCUSSED?

☒ Yes ☐ No ☐ Partially

APCD PERMIT

☐ Not required
☒ Required
☐ May be required, contact Zone office

POTENTIAL EFFECT ON AIR QUALITY (AQ)

☐ Beneficial: will probably tend to improve AQ
☐ No effect
☒ Impairment: probably no substantial adverse effect
☐ Unfavorable: may degrade AQ to a significant extent
☐ Adverse: will degrade AQ to a significant extent

COMMENTS:

1) Existing emissions caused by the landfill operation should be calculated and listed. These would include emissions from the garbage pickup ~~runs~~ and delivery runs to the site.

2) Any increases in vehicular miles travelled as a result of the landfill expansion should be converted to emissions and listed in the EIR.

FURTHER APCD REVIEW REQUIRED? ☐ Yes ☒ No

If you have any further questions please call me at (213) 443-3931, Ext.258, Tom Mullins at Ext.241 or John Gins at Ext.240.

Very truly yours,

J. A. Stuart
Executive Officer

Alan K. [illegible]
Senior Air Pollution Analyst

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

STANLEY E. BARLOW
CHIEF DEPUTY

267-2467

"SMOKE DETECTORS SAVE LIVES"

April 26, 1977

City of Whittier
13230 East Penn Street
Whittier, CA 90602

Attention D. J. Laughlin
Director of Public Services

Gentlemen:

SUBJECT: E.I.R. SAVAGE CANYON SANITARY LANDFILL EXPANSION
CITY OF WHITTIER

The proposed project will have no adverse effect on existing fire protection if all sections of the Fire Code relating to activities in hazardous wildland (brush) areas are complied with.

Should any questions arise regarding this matter, please feel free to call Captain Allan Dalton at 267-2467.

Very truly yours,

STANLEY E. BARLOW, ACTING CHIEF ENGINEER
LOS ANGELES COUNTY FIRE DEPARTMENT

By John W. Englund
JOHN W. ENGLUND, FIRE PREVENTION ENGINEER
FIRE PREVENTION DIVISION

JWE:jz

CITY OF WHITTIER—INTER-OFFICE COMMUNICATION

Write it - Don't say it

Date 4/25/77

JAMES F. BALE, CHIEF OF POLICE

D. J. LAUGHLIN, DIRECTOR OF PUBLIC SERVICES

Subject ENVIRONMENTAL IMPACT REPORT - SAVAGE CANYON

In reviewing the attached Environmental Impact Report concerning the proposed expansion of the Sanitary Landfill in Savage Canyon, I can find no item of major concern to the Police Department.

Our primary concern in this matter would relate to the possible increase in vehicular traffic to and from the site, however, the E.I.R. adequately covers this area with the overall conclusion that there will be no appreciable change from the present conditions.

APR 28 1977

rg

RESPONSES TO COMMENTS

WALT WILSON - LOS ANGELES COUNTY DEPARTMENT OF HEALTH SERVICES

Paragraph 2: The proposed project will result in no changes in ambient noise levels at the landfill site. For this reason, no monitoring program to quantify present noise levels was initiated nor is such a program considered warranted.

Paragraph 3: Mitigation measures have already been implemented to reduce the impact of noise upon the surrounding community and the personnel employed at the site. All vehicles operating at the site are equiped with State approved noise attentuation devices. Personnel working on or immediately adjacent to heavy equipment are provided with ear protectors.

Paragraph 4: The proposed project will not change the present traffic patterns on the streets surrounding or leading to the site. Thus no impacts on the general circulation patterns or increases in noise levels due to traffic are anticipated.

Approximately 100 vehicles that visit site per day of operation.

Paragraph 5:

A. Most of the area surrounding the expanded landfill boundry is under the jurisdiction of Los Angeles County and is designated as Rural II (one dwelling unit per acre). Land which is outside the city limits but is within the City's sphere of influence is considered by the City as Hillside Residential (up to three dwelling units per acre). A referendum election held in March 1977 limits the density to one or less families per five acres. This limitation is for at least a year and could be extended depending upon City Council considerations.

B. The City shall take the necessary precautions to prevent the accidental excavation and/or exposure of previously buried refuse during any road building or other construction activities at the site.

C. The City shall continue to use appropriate methods for the control of dust and blowing litter.

D. The City shall continue to comply with all requirements and standards of the State of California Solid Waste Management Board.

ALAN STAZER - SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Comment 1: Estimates of existing emissions from vehicles operating at the landfill are presented below and assume that the vehicles are in use for 8.5 hours daily.

ESTIMATED EMISSIONS ASSOCIATED WITH ON-SITE ACTIVITIES

Pollutant	Tractor kg/day	Tractor (lb/day)	Scraper kg/day	Scraper (lg/day)	Sprinkling Truck kg/day	Sprinkling Truck (lb/day)
Carbon Monoxide	1.49	(3.28)	5.61	(12.4)	5.18	(11.4)
Hydrocarbons	0.426	(0.935)	2.41	(5.32)	1.68	(3.71)
Nitrogen Oxides	5.65	(12.5)	24.0	(52.9)	29.4	(64.8)
Aldehydes	0.105	(0.229)	0.552	(1.21)	0.433	(0.952)
Sulfur Oxides	0.529	(1.16)	1.78	(3.93)	1.75	(3.86)
Particulates	0.431	(0.952)	1.56	(3.45)	0.986	(2.18)

The City operates 11 collection vehicles each of which travels approximately 10 miles per day, i.e. 110 miles per day for City vehicles. Private contractors, collectively, make approximately 18 trips daily to the landfill with an average travel distance of five miles per trip. Thus vehicles of the private contractors travel approximately 90 miles daily. The daily emissions associated with the operation of these vehicles for the 200 miles of travel are as follows:

Pollutant	kg/day	(lb/day)
Particulates	0.26	(0.57)
Sulfur Oxides	0.56	(1.2)
Carbon Monoxide	5.7	(12.6)
Hydrocarbons	0.92	(2.0)
Nitrogen Oxides	4.2	(9.3)
Aldehydes	0.06	(0.13)
Organic Acids	0.06	(0.13)

Comment: 2 The proposed expansion extends the landfill boundry approximately 0.2 mile at the maximum distance. Using this value as a worse case condition, daily emissions associated with this increase in distance travelled by refuse vehicles are as follows (based on 65 trips per day of operation):

Pollutant	kg/day	(lb/day)
Particulate	0.017	(0.037)
Sulfur Oxides	0.036	(0.079)
Carbon Monoxide	0.373	(0.822)
Hydrocarbons	0.060	(0.13)
Nitrogen Oxides	0.271	(0.597)
Aldehydes	0.004	(0.008)
Organic Acids	0.004	(0.008)

APPENDIX B
SITING CRITERIA FORM

LOS ANGELES COUNTY INTEGRATED WASTE MANAGEMENT TASK FORCE
COUNTYWIDE SITING ELEMENT FACILITY SITING CRITERIA

Facility Name: SAVAGE CANYON LANDFILL
Location: 13919 EAST PENN STREET, WHITTIER, CA

SITTING FACTORS	GENERAL CRITERIA	CRITERIA MET		EXPLANATION FOR MEETING OR NOT MEETING CRITERIA
		YES	NO	
A. PROTECT THE RESIDENTTS				
Proximity to populations	Facility must be in conformance with the local land use and zoning requirements of a county or city planning agency.	x		Complies with the County of Los Angeles Zoning Plan requirements. Section 18.040.030 of the City of Whittier's municipal code, the regulations of Title 18 do not apply to City-owned or leased property when actually used by the City. Therefore, the SCL is not required to have a conditional use permit because it is owned by the City of Whittier.
	Construction of building or structures on or within 1,000 feet of a land disposal facility must contain a natural or manmade protective system.	x		Will comply with Section 110 of the building code requirement of the County of Los Angeles. Natural Vegetation utilized as manmade protective system between the site and neighboring communities.
B. ENSURE THE STRUCTURAL STABILITY AND SAFETY OF THE FACILITY				
Flood hazard areas	Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended and local Stormwater/Urban Runoff requirements.	x		Complies with the State Water Resource Control Board Order No. 97-03-DWQ National Pollutant Discharge Elimination System Permit No. CA 0000001. Filed Notice of Intent on 6/17/1993.
	Land Disposal Facilities must be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return period.	x		The site is located in an area categorized by FEMA as “Zone C” with moderate or minimal flood hazard. The site lies entirely outside the area classified by FEMA as the 100-year floodplain. Complies with the Stormwater requirement of the California Regional Water Quality Control Board.
Areas subject to tsunamis, seiches, and storm surges.	Disposal facilities should avoid areas subject to such events unless designed, constructed, operated, and maintained to preclude failure due to such events.	x		Due to its inland location and elevation, the facility is not subject to these coastal phenomena.
Proximity to active or potentially active faults/seismic	All facilities are to be designed and constructed in accordance with the local building code.	x		Complies with the building code requirement of the City of Whittier and Los Angeles Department of Public Works.
	New or expansion of Class III landfill is prohibited on a known Holocene fault.	x		Not Applicable. The Facility is not located on a Holocene Fault.
Slope Stability	Facilities should have engineered design safety features to assure structural stability.	x		Complies with CalRecycle and the Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR # R4-2006-0080 and R4-2011-0052.

Subsidence/liquefaction	All facilities should avoid location in areas subject to such change unless, designed, constructed, and maintained to preclude failure as a result of such change	x		Not Applicable. The site is underlain by the Pliocene marine sandstones, Quaternary alluvial fan deposits and upper Cretaceous granodiorite of the Penninsular Ranges batholith. Landfill liner systems will be founded on this formation, which is solid bedrock and therefore not subject to subsidence or liquefaction.
Dam failure inundation areas	Facilities should be located outside dam failure inundation areas.	x		Not Applicable. There is no dam located upslope from the facility site or on any adjacent stream.
C. PROTECT SURFACE WATER				
Aqueducts and reservoirs	New or existing Class III landfills should be fitted with subsurface barriers, as well as, precipitation and drainage control facilities.	x		Complies with the Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
Discharge of treated effluent	Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. On site treatment should be considered if no sewers are available.	x		Complies with the industrial wastewater discharge permit No. 012650 requirement of the County of Los Angeles and the Waste Containment/Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
	Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System Permits issued by the Regional Water Quality Control Board.	x		Complies with the industrial wastewater discharge permit No. 012650 requirement of the County of Los Angeles and the Waste Containment/Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
D. PROTECT GROUNDWATER				
Proximity to supply wells and well fields	Facilities must meet State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.	x		Not applicable. There are no drinking water wells known to be in use within a one-mile radius of the facility site. Will comply with the Waste Containment/Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
Depth to ground water	All containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift.	x		Will comply with the drainage requirement of the County of Los Angeles, and the Waste Containment/Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
	Class III landfills should be fitted with containment structures that meet specified Federal and State permeability standards. Facility to be fitted with groundwater collection systems and leachate collection and removal systems.	x		Will comply with the drainage requirement of the County of Los Angeles, and the Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
Groundwater monitoring reliability	Facilities must comply with the California RWQCB permit requirements for ground water monitoring.	x		Groundwater Monitoring is conducted in accordance with WDR R4-2006-0080 and R4-2011-0052. Will comply with the Waste Discharge Requirements of the CRWQCB-LA Region.

Major aquifer recharge areas	Facilities must meet State of California's minimum requirements for ensuring no impairment of beneficial use of surface water or groundwater beneath or adjacent to landfill.	x		The groundwater aquifer is located several hundred feet below the ground surface. Will comply with the Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
Permeability of surficial materials	Class III landfill should be underlain by a composite liner, consisting of lower class liner and upper synthetic membrane, and which is of sufficient thickness to prevent vertical movement of fluids including waste and leachate.	x		A composite liner of highdensity polyethylene (HDPE) liner and a low-permeability layer are utilized, meeting the performance criteria of State and Federal regulations. Will comply with the Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
Existing groundwater quality	Facility should meet California Water Quality Control Board's minimum water quality protection standards and criteria.	x		Will comply with Waste Discharge Requirements of the CRWQCB-LA Region. Currently the site conforms to WDR# R4-2006-0080 and R4-2011-0052.
E. PROTECT AIR QUALITY				
Prevention of significant deterioration (PSD) areas	Facilities located in regions which are classified under PSD regulation as major stationary sources will be required to submit to preconstruction review and apply the Best Available Control Technology.	x		Will comply with the County of Los Angeles and the requirements of the South Coast Air Quality Management District.
Non-attainment areas	Facilities with air emissions located in non-attainment areas and emitting air contaminants in excess of established limits will require preconstruction review under New Source Review requirements and the obtaining of a Permit of Construct and a Permit to Operate from the South Coast Air Quality Management District.	x		Will comply with the California Code of Regulations Title 27 20917-20939 and the requirements of the South Coast Air Quality Management District. Currently the site operates under SCAQMD permit No. F32872.
Landfill surface emissions	Class III land disposal facilities are subject to SCAQMD rules and regulations which includes installation of a landfill gas control system and perimeter monitoring probes, as well as, implementation of a monitoring program to ensure that landfill gas emissions do not exceed specified SCAQMD standards.	x		Will comply with the California Code of Regulations Title 27 20917-20939 and the requirements of the South Coast Air Quality Management District under permit No. F32872. Currently the site operates under SCAQMD permit No. F32872.
F. PROTECTION OF ENVIRONMENTAL SENSITIVE AREAS				
Wetlands	Land disposal facilities should be located outside wetland areas.	x		Not Applicable. The facility is not located in a wetland area.
Proximity to habitats of threatened and endangered species	A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource.	x		This is an expansion of an existing active Class III landfill. Complies with the County of Los Angeles Zoning Plan requirements and the EIR states that there is no impact on the habitats of threatened and endangered species.
Agricultural lands	A facility located in areas zones for agriculture uses must obtain a local land use permit from the local jurisdiction.	x		This is an expansion of an existing active Class III landfill. Complies with the County of Los Angeles Zoning Plan requirements.

Natural, recreations, cultural, and aesthetic resources	Facilities should avoid location in theses areas unless the applicant can demonstrate that a facility is compatible with the land use in the area.	x		This is an expansion of an existing active Class III landfill. Complies with the County of Los Angeles Zoning Plan requirements.
Significant ecological areas	Location of a proposed facility must be in conformance with local jurisdiction's General Plan and abide by Federal and State regulations regarding unique or protected species and their habitat.	x		This is an expansion of an existing active Class III landfill. Complies with the County of Los Angeles Zoning Plan requirements.
G. ENSURE SAFE TRANSPORTATION OF SOILD WASTE				
Proximity to areas of waste generation	Facilities should be centrally located near wasteshed areas to minimize potential impacts associated with greater travel distances.	x		The site is located in the City of Whittier, readily accessible to the major population centers of Los Angeles County.
	Alternate transportation, by rail, may be evaluated in regard to specific sites to be located at distant areas from the watershed.	x		Not Applicable.
Distance from major route	Distance traveled on minor roads should be kept to a minimum.	x		Major roads are used to access the site. The Penn Street entrance to the site is 3.5 miles from the Whitter Blvd exit for the 605 Freeway on the south side of the facility.
Structures and properties fronting minor routes	Facilities should be located such that any minor routes from the major route to the facility are used by trucks, and the number of nonindustrial structures is minimal.	x		Whittier Blvd, properly considered a major route, leads to Penn Street which is used foraccess to the facility.
Highway accident rate	The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates.	x		The major transportation corridors are Freeway 605 and Route 72 (Whittier Blvd), which are maintained by the State of California to carry high traffic volumes with the lowest possible accident rates.
Capacity vs. average Annual Daily Traffic (AADT) of access roads	The changes in the ratio capacity to AADT should be negligible after calculating the number of trucks on the major and minor routes expected to service the facility.	x		This is an existing active Class III landfill. Complies with the County of Los Angeles Zoning Plan requirements. The EIR states that the facility will not change the present traffic patterns and trip generations.
H. PROTECT THE SOCIAL AND ECONOMIC DEVELOPMENT GOALS OF THE COMMUNITY				
Consistency with General Plan	The proposed facility must be consistent with the County or City General Plan. Also, it must be in conformance with the Countywide Siting Element of the County of Los Angeles, by obtaining FOC granted by Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force.	x		This is an expansion of an existing active Class III landfill. Complies with the General Plan.

APPENDIX C
LOAD CHECKING PROGRAM

Date Adopted: MAR 05 1991
Code: 6915

CITY OF WHITTIER

LANDFILL GATEKEEPER

DEFINITION

Under general supervision, performs a variety of duties involved in the control of traffic into the City solid waste disposal facility; collects fees; performs related duties as required.

EXAMPLES OF DUTIES

Duties may include, but are not limited to, the following:

Receives the public and collects fees; calculates fees requiring judgment in the use of established fee schedules; controls and directs traffic into the solid waste disposal facility.

Operates a data terminal and scale; checks vehicles for proof of residence, or business license.

Prepares and maintains routine records and reports of cash receipts and solid waste disposal activity; tracks and enforces conditions of dumping permits.

Answers facility phone and radio; takes or relays messages.

Assists in the performance of routine grounds maintenance tasks at the solid waste disposal facility.

QUALIFICATIONS GUIDELINES

Education and/or Experience

Any combination of training or experience in related clerical work that would demonstrate the knowledge and ability to perform duties associated with Landfill Gatekeeper responsibilities.

Knowledge, Skills, and Abilities

Working knowledge of general clerical procedures, including handling cash transactions and basic record keeping. Ability to understand and follow verbal and written directions; work effectively in the absence of supervision; operate a data terminal and scale, count money, and make change; prepare and maintain simple records and reports; receive the public in person and over the phone; establish and maintain cooperative working relationships.

Savage Canyon Landfill's Load Check Program

I. Introduction

Savage Canyon's load check program is designed to detect, segregate, identify and properly manage hazardous waste. The load check/waste screening program begins with continuous visual observation by the landfill gatekeeper and landfill operations personnel. Another element of the program is physically screening a random load check of the solid waste stream per day. Signs have been posted at the scalehouse that clearly state the types of waste that are not accepted at Savage Canyon Landfill. Regulated hazardous waste includes materials that are ignitable, corrosive, reactive, or toxic, as well as PCBs.

II. Pre-Notification of Franchise Haulers

The franchise haulers will receive mailed notices from the City containing the following general information:

a. Hazardous and certain other types (as described in the notice) of wastes are not accepted at Savage Canyon Landfill and should not be placed in refuse containers for collection.

b. A load-check waste screen program is in effect at the site for detecting hazardous and other unacceptable material.

c. If hazardous or other unacceptable wastes are delivered to Savage Canyon Landfill, the hauler will be responsible for the cost of clean-up, removal, and proper disposal.

d. There are Federal and State penalties for the improper disposal of hazardous and certain other types of wastes.

III. Handling and Storage of Hazardous Materials

Before personnel can participate in the handling of any hazardous materials, they shall be thoroughly trained in hazardous materials handling and the proper use of personal protective equipment. This will include, as a minimum, a 24-hour HazMat Technician training course.

Suspected hazardous materials discovered in the Load Check Program shall be isolated from the acceptable refuse. After all of the suspect material has been removed from the load, the remaining refuse should be pushed to the working face and treated as normal waste.

Unidentifiable wastes (suspected to be hazardous) discovered in loads will be set aside for manifesting and delivered to the City Yard's hazardous material storage facility where they can be properly disposed of by a licensed hazardous waste hauler.

informed of the incident. The hazardous waste should then be handled according to SOP 50. The radiation detector is calibrated per the manufacturer's recommendations.

D. Visual Screening at the Tipping Deck

The Lead Equipment Operator is responsible for the daily operation of the Load Check Program. In his absence, the Landfill Supervisor will assign this task to one of the HazMat trained equipment operators. The landfill equipment operators will visually inspect loads at the working face as part of their normal duties. If they recognize unacceptable material, one of the following actions will take place:

1. They can inform the hauler that it is unacceptable waste and have the hauler put it back on their truck for his company's proper disposal. The event is then logged into the daily operations log.

2. It can be set aside (household hazardous waste in small amounts) and transported to the City Yard's hazardous waste holding facility by landfill personnel. A licensed hazardous waste hauler will dispose of it properly.

3. If it is questionable material or in large quantities, the area will immediately be cordoned off from the general public and site personnel not involved in the incident. The landfill supervisor will call the Whittier Police Department at (562) 945-8250 for appropriate action. The landfill supervisor will also contact the Director of Public Works in the Public Works Department at (562) 464-3510.

4. The hauler can arrange for a licensed hazardous waste hauler to pick up the unacceptable waste.

As outlined in the City of Whittier Standard Operating Procedure No. 50, Response to Abandoned Hazardous Materials and Hazard Materials Incidents, the Los Angeles County Department of Health Services (323-890-7500) will be called by the landfill supervisor to inform them of the incident. The hazardous waste will then be handled according to SOP 50.

As required in the landfill permit, if the hazardous waste presents a serious potential danger or if a large quantity is involved, the Director of Public Works or the Landfill Supervisor will then call:

a. The County of Los Angeles Department of Public Health (Solid Waste Management Program / LA County LEA), 626-430-5540,

b. The Duty Supervisor of the Los Angeles County Fire Department, Health Hazardous Emergency Operations Section, (323) 890-4317,

c. Consumer Protection Division, Environmental Law Section, Los Angeles County District Attorney, (213) 580-8777,

d. The California Highway Patrol (562) 868-0503, to report the release.

j. When satisfied that the load is free of unacceptable material, push the load to the working face.
k. Document all retrieved material on the Load Check Form.
l. Transport hazardous waste to the materials storage facility at the City Yard for proper manifesting and disposal.

B. Medical Waste Screening

Hospital loads are checked to ensure that proper treatment has taken place. Landfill employees do not handle untreated medical waste and are trained to identify the treatment procedure known as "autoclaving."

a. Designate a load check area daily downwind and at least 30 yards from the active face of the tipping deck.
b. Set up a cone delineation
c. Wear appropriate personal protective equipment, including, but not limited to a filter mask, hardhat, vinyl impregnated gloves over latex gloves and safety glasses.
d. Materials from hospitals will be raked by the load checker to avoid direct contact with the possible infectious materials.
e. Untreated medical waste is photographed and documented. It must remain where discovered and the Landfill Supervisor will contact a representative of the State Medical Waste Board and informed of the incident.
f. The source of the untreated medical waste is contacted and informed of the incident. The generator is given the option of retrieving the waste or paying for cleanup and disposal.
g. Once deemed "treated" medical waste (autoclaved and safe for disposal at a Class III landfill), the materials are pushed, using landfill equipment, into the active working face and covered with another load of rubbish to prevent any possible contact with other landfill personnel.

2. Documentation

All load checks are documented. Upon selection of a load for screening, the checker will record the following information on the Load Check Data Sheet:

1. Date
2. Time
3. Name of transporter
4. Truck number
5. Name of driver
6. Telephone contact number
7. License plate number of the vehicle
8. Source of waste as stated by the driver
9. Receipt number

The Load Check Form will be signed by the driver and landfill worker conducting the load check. If hazardous materials are found, the Landfill Supervisor will be required to sign the form and record the material in the special occurrence log.

Waste Management:

- Waste Management requests that the City dispose of any hazardous materials deemed unacceptable and bill Waste Management (apportion direct costs).

CR&R

- CR&R requests that any hazardous waste found in their loads be segregated until their licensed waste transporter can arrive to manifest said material and dispose of it properly at their cost.

CITY OF WHITTIER
SAVAGE CANYON LANDFILL
LOAD CHECK DATA SHEET

Date: _____ Sheet No.: _____

Time: _____

Hauling Firm or Vehicle Owner: _____

Driver's Name: _____

Telephone Number of Contact: _____

Vehicle License Plate/Truck No.: _____

Source of Waste Hauled: _____

Type of Vehicle: _____ Capacity in C.Y. _____

Notes (What was found, type of material, percentages): _____

_____

_____

_____

Hazardous Waste Found: Yes ☐ No ☐

If yes, explain:

_____

_____

Method of Disposal for Above Hazardous Waste:

- ☐ Returned to Owner/Hauler
- ☐ Taken to Yard for proper disposal
- ☐ Disposition form filled out
- ☐ City took possession of material ad disposed of through a licensed hazardous waste hauler
- ☐ Hauler arranged for a licensed hazardous waste hauler

Company Name & Date of Disposal: _____

Manifest Number: _____

Driver's Signature: _____

Landfill Operator's Signature: _____

Landfill Supervisor's Signature: _____
(If hazardous waste is found)

PW:SW:Landfill:Reports & Worksheets:Load Check Program
Revised: 5/2/2007

CITY OF WHITTIER
STANDARD OPERATING PROCEDURE

NUMBER 50
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SUBJECT: RESPONSE TO ABANDONED HAZARDOUS MATERIALS AND HAZARDOUS MATERIAL INCIDENTS

EFFECTIVE DATE: 4-30-87 REVISED: 7-87; 3-91; 7-91; 7-94; 11-06	ISSUE DATE: 4-30-87	APPROVED BY: City Manager

I. PURPOSE/AUTHORITY:

To ensure the safety of all City employees and the public concerning hazardous materials that are abandoned on public property or in hazardous materials incidents. To ensure the proper reporting, documentation and resolution of such incidents.

To describe the purpose and procedures for the use of the City Yard Hazardous Waste Temporary Holding site.

II. PERSONNEL AFFECTED: All City Employees.

III. PROCEDURE

PLACE THIS PROCEDURE IN YOUR VEHICLE

A. Abandoned Hazardous Material or Hazardous Material Incident

Whenever a City employee encounters a situation where a hazardous material may be present, such as a traffic accident, spill or abandoned material, the City employee is to follow the checklist below.

READ THIS ENTIRE CHECKLIST PROCEDURE. DO NOT WALK IN OR TOUCH ANY SPILLED MATERIAL. AVOID INHALATION OF ALL GASES, FUMES OR SMOKE.

1. Abandoned Hazardous Material - Assessment and Call for Assistance

   a. Assume a hazardous material may be involved.

   b. DO NOT GO NEAR, INHALE OR TOUCH ANY MATERIAL OR CONTAINER. AVOID INHALATION OF GASES, FUMES, SMOKE OR VAPORS. IF POSSIBLE, POSITION YOURSELF UPWIND and stay in your vehicle.

   c. To communicate with others use a two-way radio or loudspeaker on your vehicle as may be applicable.

   d. If there is anything unusual about the material or container such as the presence of a wire or battery, or it is reacting such as bulging, smoking, fuming, bubbling or if there is nothing unusual about the material or container, call the Los Angeles County Fire Department's Health Hazardous Materials Emergency Response Section:

Days	Hours	Telephone Number
Monday – Friday	7:00 a.m. – 5:00 p.m.	(323) 890-4317
All other days/times including weekends and holidays		(323) 881-2455 (Ask that Health Hazmat personnel respond)

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(3) (continued) Make a note of complaints of dizziness, nausea, burning sensation, etc. This information may help in identifying the type of hazardous material. Note: Do not try to physically restrain any individuals.

b. Contain hazardous materials spills only if you can do so without becoming exposed yourself. Contain material at a safe distance to safeguard yourself.

c. Do NOT wash or channel substances into the sewer drain or storm drain.

d. Do not leave the site until relieved by your supervisor or by Fire or Police personnel, unless you feel there is a clear and present danger to your safety, in which case you should move to a safer area.

e. Do not discuss the incident with news reporters, and instead let Fire and Police personnel respond to such news/media inquiries.

f. Check with your supervisor, Police or Fire Department personnel if you should immediately have an appropriate medical examination at Presbyterian Intercommunity Hospital – WorkCare.

3. Disposal of Hazardous Materials

The Los Angeles County Fire Department will coordinate the transport and disposal of the hazardous material. Depending on the situation, the Fire Department may assign this responsibility to the party responsible for the material, to the State of California or to the City. City employees may transport hazardous waste only as specified in Section B1 below:

B. City Hazardous Waste Transporting and Temporary Holding Site Procedures

1. Authorized Transport of Hazardous Waste - If the Fire Department identifies the material as being one of these substances, AND authorizes you to transport the items, it may be brought to the City Yard Hazardous Waste Temporary Holding Site under a variance obtained from the State Department of Toxic Substances Control.

- Paint
- Solvent
- Pesticide
- Battery
- Gasoline
- Oil

a. Employees who are authorized to transport the above wastes shall do so following these procedures:

(1) Drivers must fill out and carry in the vehicle a Transporting Form (Attachment A) containing all information required by the U.S. Department of Transportation (DOT).

(2) Any accidents involving hazardous waste materials being transported by City employees under this variance and SOP, which result in a spill or release to the environment, must be immediately reported to your supervisor and the City's Hazardous Materials Program Coordinator (Director of Public Works), who must then

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c. The hazardous waste will be taken from the City Yard Hazardous Waste Temporary Holding Site and properly disposed of no later than 90 days from the date of receipt.

d. Only employees authorized by the Street Division Supervisor are permitted to be in the Hazardous Waste Temporary Holding Facility.

CITY OF WHITTIER

HAZARDOUS WASTE TRANSPORTING FORM

Date: _____ Employee (Driver): _____

Point of Origin: _____ Dept./Division: _____

If material identified by Los Angeles County Health Hazmat Team representative, indicate name of representative: _____

Fill in amount of waste being transported. For pesticides, read the label and select the "poison" or "insecticide" description that best describes the material. For herbicides, select "Poison B". (It is possible that these descriptions are more restrictive then necessary.)

The Transporting Form must be placed in the box at the City Yard Hazardous Waste Temporary Holding Site.

Hazardous Waste Description	Hazard Class	ID #	Amount of Material (gals., lbs., etc.)
Flammable liquid, n.o.s. (not otherwise specified)	Flammable liquid	UN 1993	
Gasoline	Flammable liquid	UN 1203	
Insecticide, dry, n.o.s.	Poison B	NA 2588	
Insecticide, liquid, n.o.s.	Flammable liquid	NA 1993	
Insecticide, liquid, n.o.s.	Poison B	NA 2902	
Paint	Combustible liquid	UN 1263	
Paint-related material	Combustible liquid	NA 1263	
Petroleum distillates (diesel)	Combustible liquid	UN 1268	
Petroleum oil, n.o.s.	Combustible liquid	UN 1270	
Poison B, liquid, n.o.s.	Poison B	UN 2810	
Poison B, solid, n.o.s.	Poison B	UN 2811	
Sulfuric acid (car battery)	Corrosive material	UN 1830	