GARDEN GROVE CALIFORNIA

General Information: 714-741-5307 CITY OF GARDEN GROVE - DEVELOPMENT SERVICES DEPARTMENT Inspection Requests: 714-741-5332

PERMIT (PAGE 2 of 2)

PROJECT/SITE/BUILDING DESCRIPTION

JOB Address : 11162 GARDEN GROVE BLVD
Suite :
PERMIT NO. : 67914
Permit Type : DEMO
Type : B15
DEMOLITIONS - OTHERS
Owner : YANCEY CHARLES B JR & YANCEY C
Applicant : R B S ENTERPRISES INC
Appl Address : 19172 STEWART ST
HUNTINGTON BEACH, CA 92648
Phone : 714-375-2500

Insp Dist : ZB
Date : 06/06/03
Parcel No : 09910505

Value :15000
Floor area :0

PROPOSED WORK:

DEMO 1500 SQ FT CHEVRON SERVICE STATION & 2 CANOPIES

FEES

111 32509	Plan Check	1	
111 32410	Permit	1	269.54
111 32401	issuance	1	35.00
942 22130	General Plan	1	18.93
080 32550	Cultural Arts	1	9.32
TOTAL			332.79

INSPECTION RECORD

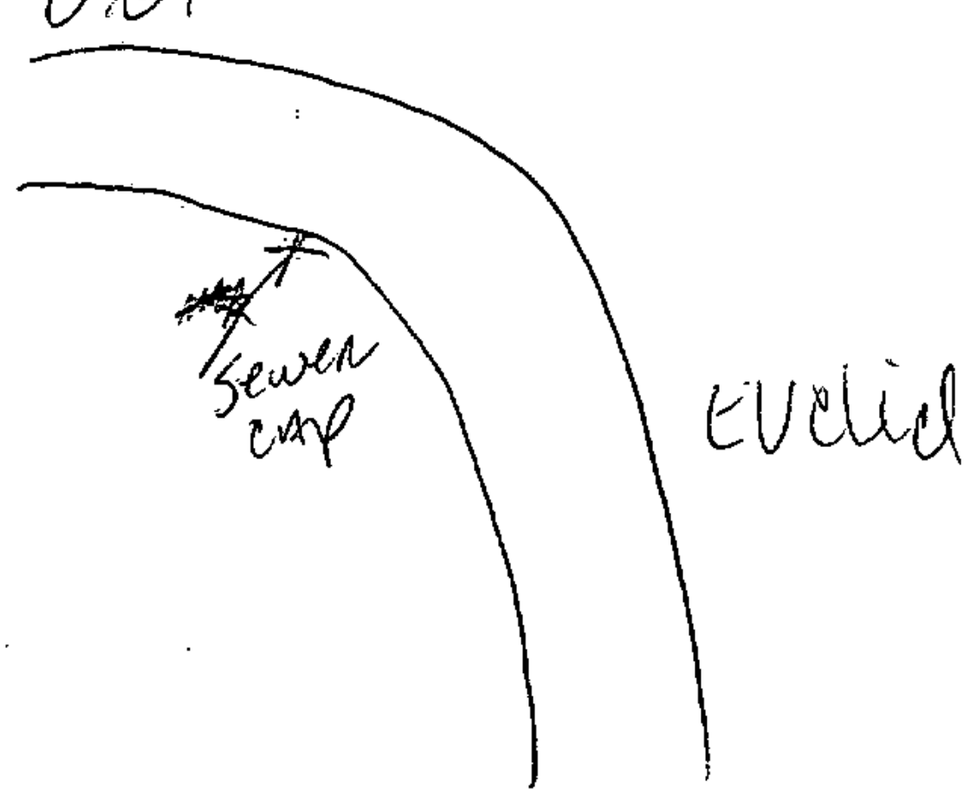
	APPROVAL	DATE	INSPECTOR
Pre Inspect			
Foundation			
Concrete Floor			
Reinforcing			
Masonry			
Roof Shtg			
Rough Frame			
Insul / Energy			
Drywall			
Lath			
Plas.Brown Ct.			
Landscaping			
Pre Gunite			
Pre Deck			
Pre Plaster			
Planning Final			
Bldg Final	9/16/03		
Utility Notified			

SEE ATTACHMENT 5

********** VALIDATION **********
PAID ON 06 Jun 2003 AT 14:15
RECEIVED BY KRISTINB 198.245.206.215/2 TRANS# 149
AMOUNT PAID $332.79 BY CHECK#11816
TOTAL PAID = $332.79

****

66.



AUTHORIZATION

Issued By: valq Date _____

DECLARATION

I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

Applicant's Signature _____

Print Name GREG HOHN Date 6/6/03

CITY OF GARDEN GROVE - COMMUNITY DEVELOPMENT DEPARTMENT

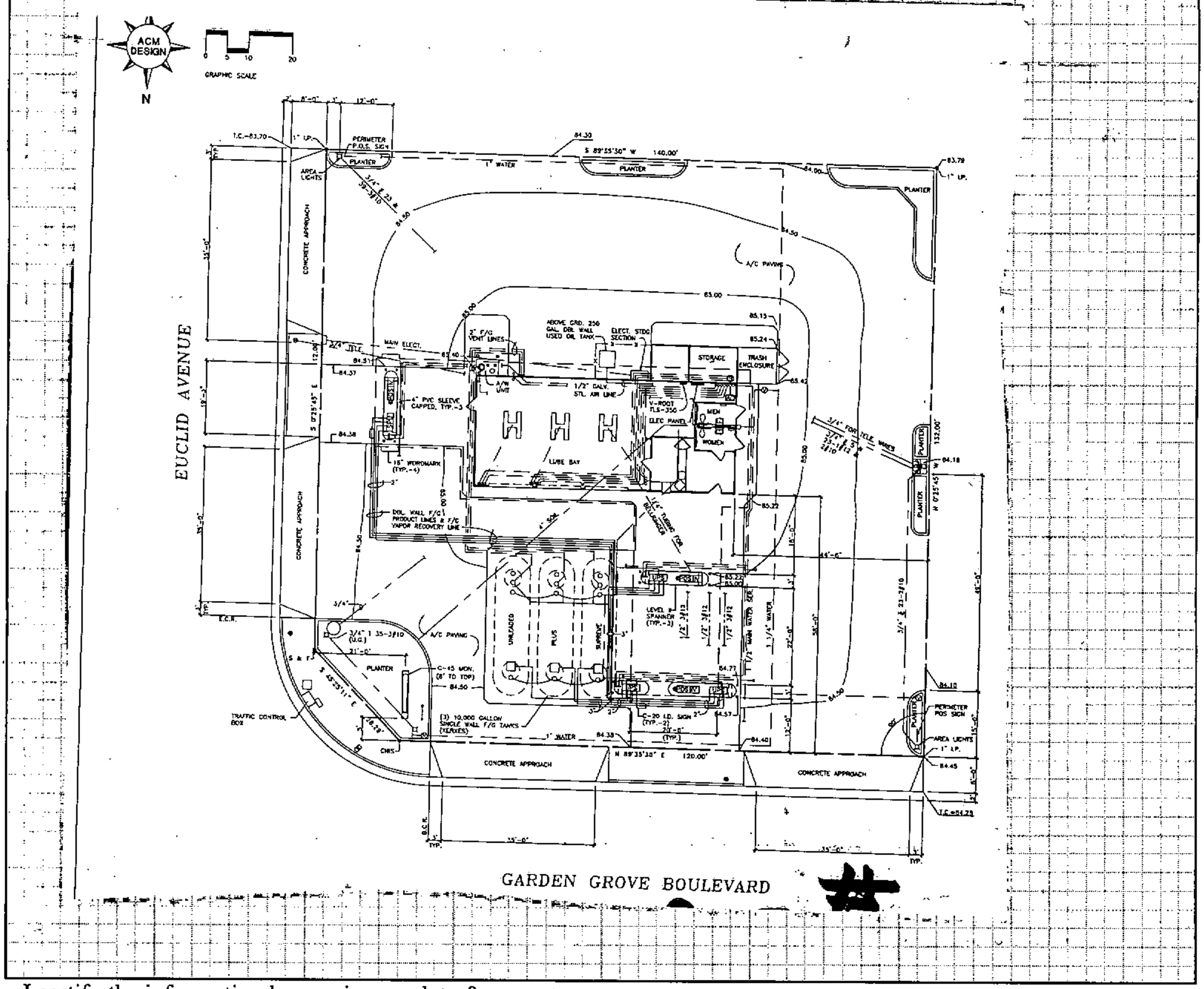
Plot Plan Form

Planning Action:	Zone:	Coverage:
Approved By:	Date:	Increase:
Remarks:		

Job Address: 11162 G G	Permit No.: 67914
Assessor Parcel No.: 099-105-05	Tract & Lot #:
Occupancy:	Const. Type: Demo / Value: 15,000
_____ New _____ Alter _____ Add _____ Repair X Demo	

Job Description:

DEMO SERVICE STATION & 2 Canopies



I certify the information hereon is complete & correct.

GREG HOHN — Owner's Name (print)

Signature (owner/agent)

6/6/03 — Date

WHITE: INSPECTION YELLOW: ASSESSOR PINK: PERMITTEE

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE -
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

May 13, 1993

Beth Brockman
Chevron U.S.A. Products Company
P.O. Box 2833
La Habra, CA 90632

Subject: Notification To Initiate Corrective Action at the Site of An Unauthorized Underground Storage Tank Release

RE: Chevron Station
11162 Garden Grove Boulevard
Garden Grove, CA 92643
O.C.H.C.A. Case #93UT39

Dear Ms. Brockman:

Based on inspections and/or tests performed by, reported to, this Agency, it has been determined that an unauthorized release of waste oil from an underground storage tank has occurred at the above referenced location. According to our records, you or the company you represent, have been identified as responsible for the underground tank at this location. This Agency, which is authorized to oversee underground storage tanks corrective actions at this location, directs Chevron to initiate corrective action.

Corrective action includes all activity necessary to: 1) Investigate and analyze the effects of an unauthorized release; 2) Implement a cost effective plan that will adequately protect human health, safety and the environment, and; 3) Restore or protect current and potential beneficial uses of water. Corrective action, as specified in the California Underground Storage Tank Code of Regulations (CCR), Title 23, includes the following phases: (a copy of referenced regulations is enclosed)

Preliminary Site Assessment and Initial Abatement: Under this phase you are required to conduct an initial site investigation and characterization, and to implement initial abatement actions (Section 2652, 2653, and 2654) in addition, where present, free product removal should also be initiated in accordance with Section 2655.

Soil and Water Investigation: This Agency has made a determination that a Soil and Water Investigation is necessary at this site (Section 2724). This phase includes the collection and analysis of data necessary to assess the nature and vertical and lateral extent of the contamination. You are required to submit to this Agency a Soil and Water Investigation Workplan for site assessment for review and approval (Section 2722[c]). The workplan shall include proposed actions and a proposed schedule for their completion (Section 2722[d]). The workplan must be submitted to this Agency within ninety (90) days of receipt of this letter.

Corrective Action Plan: Using the information obtained in the Soil and Water Investigation, you are required to submit a proposed Corrective Action Plan to this Agency for review and concurrence (Section 2725[b] & [c]). The Plan shall include the elements listed in Section 2725(d), and (see enclosed regulations) a selection of the most cost-effective remedial action alternative (Section 2725[b]).

Corrective Action Implementation: Upon this Agency's concurrence that implementation of the Corrective Action Plan will adequately protect human health, safety, and the environment (Section 2725[c]), you shall implement the Corrective Action and monitor, evaluate and report the results of the implementation on a schedule agreed to by this Agency (Section 2726[b]).

Verification Monitoring: Finally, you will be required to verify completion of the Corrective Action Plan through sampling of soil or monitoring of water. You will be required to submit monitoring data and an evaluation of the results of such monitoring in writing on a schedule and for a duration agreed to by this Agency (CCR, Section 2727).

In addition to the above corrective action, Section 2722(b) requires that you take, or contract for, interim remedial actions to abate or correct the actual or potential effects of an unauthorized release, as necessary. Interim remedial actions include, but are not limited to, those actions listed in Section 2722(b). You may perform interim remedial actions concurrently with any phase of corrective action listed above. This Agency must be notified before the implementation of an interim remedial action (CCR, Section 2722[b]).

All submitted workplans are subject to modification, as necessary, at the direction of this Agency (Section 2722[d]). Guidelines providing further information relating to site assessment and site investigation objectives are available from this office.

For sites with possible or confirmed groundwater contamination, copies of correspondence, workplans, and reports must also be routinely provided to the appropriate Regional Water Quality Control Board.

Upon completion of required corrective action, this Agency will inform the responsible party that no further work is required.

You may contact me at (714) 667-3636.

Sincerely,

David G. Woelfel

David G. Woelfel, M.S.
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

DGW:cjr

cc: Patricia Hannon, Santa Ana Regional Water Quality Control Board
Garden Grove Department

Enclosure

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
NOTIFICATION OF DEMOLITION OR ASBESTOS REMOVAL

MAIL FORM AND FEE TO SCAQMD, ASBESTOS NOTIFICATIONS, FILE # 55641, LOS ANGELES CA 90074-5641

AQMD USE ONLY	SCREEN BY	RECEIVED	POSTMARK	ENTERED BY	NOTIFICATION #
COMPLETED BY Russell Palsmeier	COMPANY ARGOS CONTRACTING INC.		PHONE (562) 422-7370		
DATE 5/22/03	CHECK # 02180864	FEE $ 87.61		PROJECT # CHEVRON	
NOTIFICATION TYPE	(Original)	REVISION DATES	REVISION OTHER (highlight)	CANCELLATION	
PROJECT TYPE	DEMOLITION	ORDERED DEMOLITION	(RENOVATION (removal))	EMERGENCY REMOVAL	PLANNED RENO (annual)
SITE INFORMATION	SITE NAME Chevron Gas Station				
SITE ADDRESS 11162 Garden Grove Blvd.			CROSS STREET		
CITY Garden Grove	STATE CA	ZIP 92840	COUNTY Orange Co.		
DESCRIBE WORK AND LOCATION Caulking and mastic remank on Roofs and Bathrooms					
BUILDING SIZE (SQ FT) 5,000 SF	NUMBER OF FLOORS 1	BUILDING AGE (YEARS) 25	NUMBER OF DWELLING UNITS		
BLDG PRIOR / PRESENT USE	(COMMERCIAL)	HOSPITAL	INDUSTRIAL	Other	OFFICE
	PUBLIC BLDG	HOUSE	SCHOOL	SHIP	UNIV/COLLEGE
SITE OWNER Chevron	ADDRESS 11162 Garden Grove Blvd.				
CITY Garden Grove	STATE CA	ZIP 92840	CONTACT Terry Farley	PHONE 619-299-0083	

REQUIRED BUILDING INFORMATION	ASBESTOS PRESENT? (YES) NO	ASBESTOS SURVEY? * (YES) NO	ASBESTOS REMOVED? YES (NO)	BUILDING TO BE DEMOLISHED? YES (NO)
PROJECT DATES	START 6/6/03	END 6/10/03	WORK SHIFT (day, swing, (night))	

ASBESTOS AMOUNT TO BE REMOVED (in square feet)	FRIABLE	CLASS I	CLASS II	TOTAL AMOUNT (add row)
		3980 SF		3980 SF

ASBESTOS REMOVAL FROM	(SURFACES)	PIPES	COMPONENTS

AMOUNT OF EACH TYPE OF ASBESTOS (in square feet)	ACOUSTIC CEILING	LINOLEUM	INSULATION	FIRE PROOFING	DUCTING	STUCCO	MASTIC
							70 SF

FLOOR TILES (VAT)	DRY WALL	PLASTER	TRANSITE	ROOFING	OTHER (describe)
				3,300	Caulking 610 SF

CONTRACTOR INFORMATION	CSLB LICENSE # 802284	OSHA REG # 803	AQMD ID # #133161
NAME ARGOS CONTRACTING INC.	ADDRESS 2340 East Artesia Blvd.		
CITY Long Beach	STATE CA	ZIP 90805	SITE SUPVR EFRAIN MALVAIZ PHONE (310) 345-6489

WASTE TRANSPORTER #1	BFC SPECIAL WASTE SERVICES	LANDFILL	AZUSA LAND RECLAMATION CO.
ADDRESS	766 So. Ayon Avenue	ADDRESS	1211 W. Gladstone St.
CITY	Azusa	STATE CA	ZIP 91702
CITY	Azusa	STATE CA	ZIP 91702

* Asbestos surveys are required prior to Demolition and Renovation
Forms, instructions, and the Rule 1403 can be obtained from AQMD web site http://www.aqmd.gov Page 1 of 2 Form REV 20020607

SCAQMD NOTIFICATION OF DEMOLITION OR ASBESTOS REMOVAL

MAIL ORIGINAL TO SCAQMD, ASBESTOS NOTIFICATIONS, FILE # 55641, LOS ANGELES CA 90074-5641

WASTE TRANSPORTER #2			WASTE STORAGE SITE		
ADDRESS			ADDRESS		
CITY	STATE	ZIP	CITY	STATE	ZIP

CONTROLS: DESCRIBE WORK PRACTICES AND CONTROLS TO BE USED AT THE RENOVATION AND DEMOLITION SITE. Procedure 4 (5) or Other:

For asbestos removals circle the combination of Rule 1403 procedures used. Procedure 4 and 5 submit plans for AQMD prior approval.

ASBESTOS DETECTION PROCEDURE: CIRCLE THE PROCEDURES AND ANALYTICAL METHODS USED TO DETERMINE ASBESTOS IN THE BUILDING: Survey, Bulk Sampling, Inspection, PLM, PCM, TEM, Assumed as Asbestos-PACM, Describe Other:

FOR DEMOLITIONS GIVE THE COMPANY NAME AND DATES OF THE ASBESTOS REMOVAL:

FOR ORDERED DEMOLITION SEND A COPY OF THE ORDER AND GIVE THE AGENCY NAME & PHONE #
AUTHORIZING PERSON: TITLE:
DATE OF ORDER: DATE ORDERED TO BEGIN:

FOR EMERGENCY ASBESTOS REMOVAL GIVE THE NAME AND PHONE NUMBER OF THE PERSON DECLARING/AUTHORIZING THE EMERGENCY. DATE AND HOUR OF EMERGENCY AND DESCRIBE THE SUDDEN, UNEXPECTED EVENT:

EXPLAIN HOW THE EVENT WOULD CAUSE UNSAFE CONDITIONS, EQUIPMENT DAMAGE OR UNREASONABLE FINANCIAL BURDEN:

CONTINGENCY PLAN: DESCRIBE ACTIONS TO BE FOLLOWED IF UNEXPECTED ASBESTOS IS FOUND DURING DEMOLITION OR ASBESTOS MATERIAL BECOME DISTURBED, CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

Isolate area - mist air - dampen material - clean spill - properly package for disposal.

TRAINING CERTIFICATION: I certify that an individual trained in the provisions of regulation AQMD Rule 1403 and NESHAP will be on site during the removal and evidence that the required training has been accomplished by this person will be available for inspection during normal business hours.

ARGUS CONTRACTING Russell Ragsdale Project Manager 5/22/03
Company Name Print name of owner/operator Signature of owner/operator Title of owner/operator Date

INFORMATION CERTIFICATION: I certify that the above information is correct and I have enclosed any required attachments.

ARGUS CONTRACTING INC. Russell Ragsdale Project Manager 5/22/03
Company Name Print name of owner/operator Signature of owner/operator Title of owner/operator Date

Notifications can not be accepted without the required fee (AQMD Rule 301). Asbestos removals of less than 100 square feet are exempt from notification and fees. Please make checks payable to "SCAQMD". Fees are per notification, not refundable, and vary according to the project size. Fees are as follows:

DEMOLITION OR ASBESTOS REMOVAL	
FROM 100 TO 1,000 SQUARE FEET	$ 28.66
FROM 1,001 TO 5,200 SQUARE FEET	$ 87.51
FROM 5,201 TO 10,000 SQUARE FEET	$209.07
MORE THAN 10,000 SQUARE FEET	$321.55
DEMOLITION OF LESS THAN 100 SQ FT	$ 28.66

PROCEDURE 4 OR 5 PLAN	$ 321.55
SPECIAL HANDLING FEE	$ 27.35
REVISION OF NOTIFICATION	$ 11.50
RETURNED CHECK CHARGE	$ 28.43
CANCELLATION OF NOTIFICATION	$ 0.0
ASBESTOS REMOVAL AT owner-occupied, single-unit dwelling	$ 28.66

ATTENTION: Keep a copy of your notification. State law requires that you provide a copy of the demolition notification to Building and Safety before issuance of a demolition permit. For questions call 909-396-2336. For your convenience please mail the form and fee and do not hand carry to AQMD.

MAIL FORM AND FEE TO: SCAQMD, ASBESTOS NOTIFICATIONS, FILE # 55641, LOS ANGELES CA 90074-5641
TELEPHONE: (909) 396-2336 FAX: (909) 396-3342

FORMS, INSTRUCTIONS, AND THE RULE 1403 CAN BE OBTAINED FROM AQMD WEB SITE AT HTTP://WWW.AQMD.GOV
SCAQMD is located at 21865 E. Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000

TOTAL P.03

GEO ENVIRON
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING CONSULTANTS, INC.
3904 E. Miraloma Ave. Unit I, Anaheim, CA 92806 • (714) 632-3190 • Fax (714) 632-3191

Job No. 03-94H1
August 1, 2003

Mr. Roger Stoddart
RBS Enterprises, Inc.
19172 Stewart Street
Huntington Beach, CA 92648

Subject: **In-Place Density Test Results for the Tank Excavation Backfill**
11162 Garden Grove Blvd., Garden Grove, Orange County, California

Dear Mr. Stoddart:

Submitted herewith is a report of in-place density test results for the excavations backfill on the subject site. Field density test results are presented in the Summary Sheet in Appendix 'A. The approximate location of the excavation area, field density tests, and other pertinent data are shown on the attached plot plan in Appendix 'B'.

DATE OF OBSERVATION

July 13 through July 23, 2003

GRADING EQUIPMENT

Truck Loader

GRADING & FIELD OPERATION

The tank areas were excavated approximately 14 feet to 38 feet from the existing grade. Reportedly, contaminated soils were removed from this excavation.

Groundwater was encountered at the excavation bottom. In order to stabilize this excavation bottom, roughly, 8 feet thick crushed rock/ gravel bedding was made. Geo fabric was installed on gravel bedding to prevent any migration of fine particles. Fill soils were then placed in thin lifts and compacted to a minimum of 90% of the laboratory maximum density. Field density tests were conducted at 2- foot vertical intervals of compacted fill placement. Due to the size of the excavation and unsafe sidewalls, field density tests were started at 12 feet from the existing grade. The backfilling operations were continuously monitored to ensure proper compaction and stability of the sidewalls. The backfill were placed to match existing grade.

See the summary sheet in Appendix 'A' for the description of the on-site fill materials and the density test results.

DENSITY TESTING

In-place density tests were performed in general accordance with Nuclear Methods ASTM D2922 and D3017 and Sand Cone Method ASTM D-1556 at a frequency sufficient to verify the moisture content and degree of compaction obtained. Maximum dry density of the fill soil was obtained in general accordance with ASTM D-1557 procedures.

CONCLUSION

The excavations backfill were placed and compacted to a minimum relative compaction of 90% of maximum dry density. The excavation backfill are determined to be suitable for support for pavement for parking and driveway areas only. If buildings or structures are planned in the excavation backfill areas, a geotechnical investigation must be conducted to evaluate the fill and natural soils for specific supports of the buildings or structures.

CLOSURE

This evaluation was performed in accordance with generally accepted engineering practices. The conclusions and recommendations contained in this report were based on the data available and the interpretation of such data as dictated by our experience and background. Hence, our conclusions and recommendations are professional opinions; no other warranty is offered or implied.

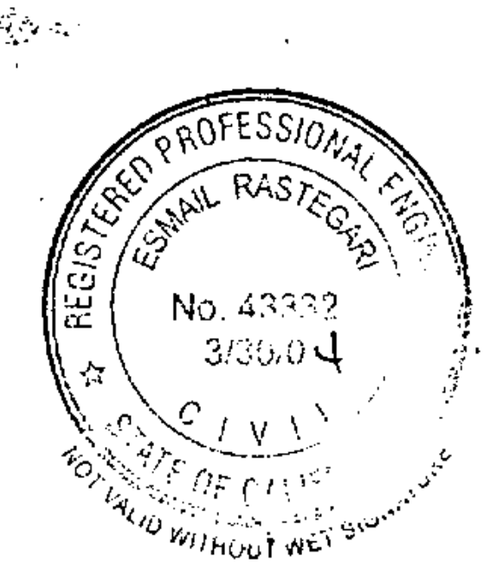
This opportunity to be of service is appreciated. If you have any further questions regarding this matter, please contact our office at your earliest convenience.

Respectfully submitted,

Geo Environ Eng. Consultants, Inc.

Jabed Masud
Project Manager

JM/ER/gm



Esmail Rastegari
RCE 43332

Attachments: Appendix 'A'- Summary Sheet
Appendix 'B'- Plot Plan

APPENDIX A

SUMMARY SHEET

MAXIMUM DENSITY TEST RESULTS

Type	Soil Classification	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
A	Fine Silty Sand	126.0	12.0

FIELD DENSITY TEST RESULTS

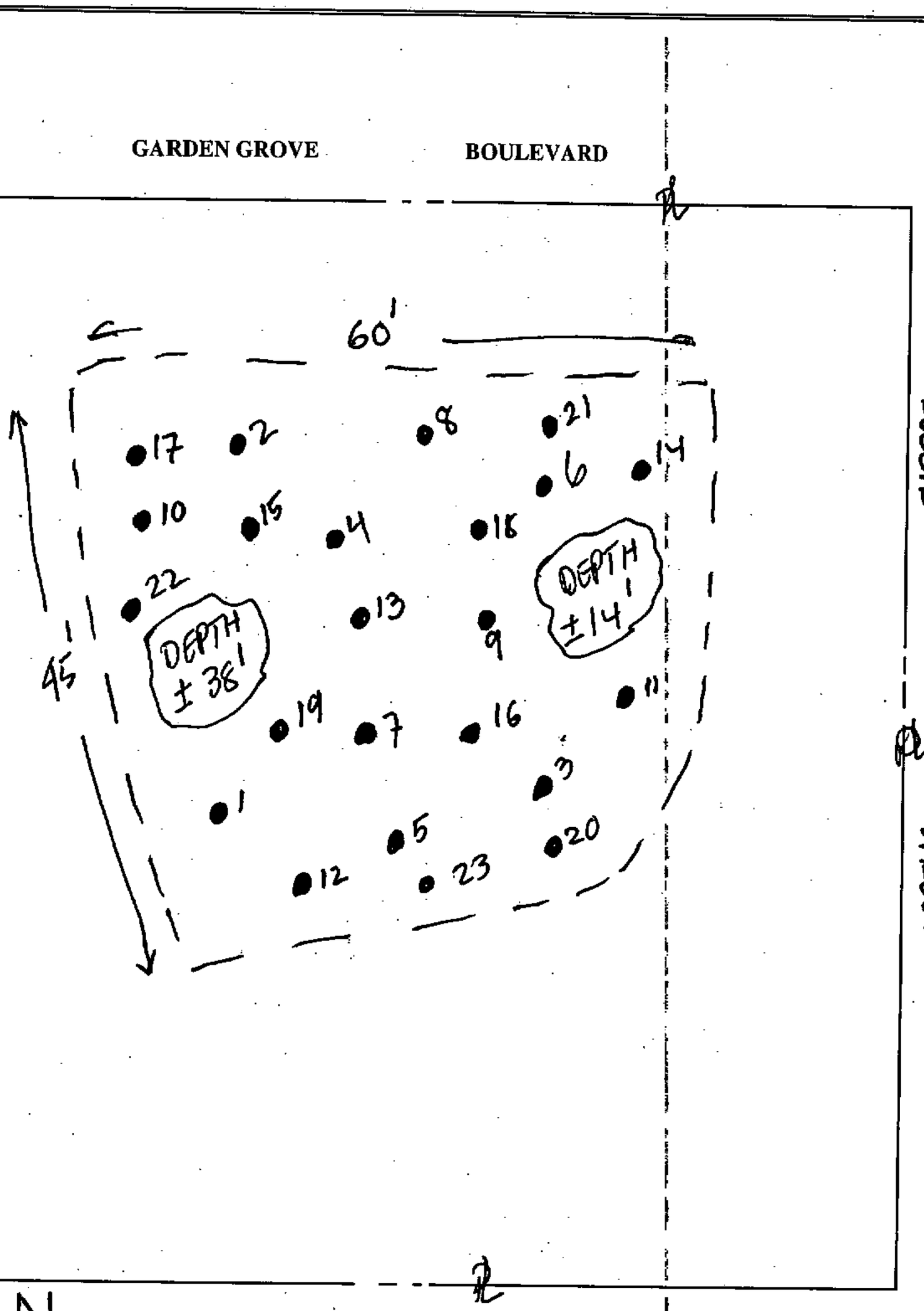
Test No.	Date	Loc.	Test Elev. (ft.)	Soil Type	Mois. Cont. (%)	Dry Density (pcf)	Relative Compac. (%)	Test Type	Rem
1	7/15/03	Excavation Area	-12.0	A	12.0	119.2	94.6	N	P
2	7/15/03	Excavation Area	-12.0	A	10.5	117.9	93.6	N	P
3	7/15/03	Excavation Area	-12.0	A	10.4	119.8	95.1	N	P
4	7/15/03	Excavation Area	-10.0	A	8.4	120.1	95.3	N	P
5	7/15/03	Excavation Area	-10.0	A	8.9	120.7	95.8	N	P
6	7/16/03	Excavation Area	-8.0	A	11.8	120.0	95.1	N	P
7	7/16/03	Excavation Area	-8.0	A	8.9	120.1	95.3	N	P
8	7/16/03	Excavation Area	-8.0	A	10.7	118.0	91.8	N	P
9	7/16/03	Excavation Area	-6.0	A	10.5	114.0	90.5	N	P
10	7/16/03	Excavation Area	-6.0	A	7.9	115.6	91.8	N	P
11	7/17/03	Excavation Area	-4.0	A	9.0	119.5	95.0	N	P
12	7/17/03	Excavation Area	-4.0	A	7.6	120.1	95.3	N	P
13	7/17/03	Excavation Area	-3.0	A	7.5	116.5	92.5	N	P
14	7/17/03	Excavation Area	-3.0	A	8.2	121.3	96.1	N	P
15	7/18/03	Excavation Area	-2.0	A	7.1	122.4	96.3	N	P
16	7/18/03	Excavation Area	-2.0	A	7.9	121.7	96.6	N	P
17	7/18/03	Excavation Area	-2.0	A	8.3	119.0	94.5	N	P
18	7/21/03	Excavation Area	-1.0	A	8.7	119.4	94.7	N	P
19	7/21/03	Excavation Area	-1.0	A	10.2	120.2	95.1	N	P

Test No.	Date	Loc.	Test Elev. (ft.)	Soil Type	Mois. Cont. (%)	Dry Density (pcf)	Relative Compac. (%)	Test Type	Rem.
20	7/21/03	Excavation Area	-1.0	A	8.6	119.2	94.7	N	P
21	7/23/03	Excavation Area	Grade	A	7.9	117.2	93.0	N	P
22	7/23/03	Excavation Area	Grade	A	8.2	119.0	94.2	N	P
23	7/23/03	Excavation Area	Grade	A	7.8	119.7	95.0	N	P

N: Nuclear Method
P: Passed

APPENDIX B

PLOT PLAN



GEO ENVIRON GEOTECHNICAL & ENVIRONMENTAL SERVICES 3904 E. MIRALOMA AVE # I ANAHEIM, CA 92806	11162 Garden Grove Blvd. Garden Grove, CA	DWG. NO. 1 PLOT PLAN Project No. 03-94H1

An Employee-Owned Company

June 4, 2003

Dr. Steven Speer
Orange County Health Care Agency
Hazardous Materials Mitigation Section
2009 E. Edinger Avenue
Santa Ana, CA 92705-4720

Subject: **Remedial Action Plan for Source Hydrocarbon Removal**

Site: **Chevron Service Station No. 9-2153**
11162 East Garden Grove Boulevard, Garden Grove, California
OCHCA Case No. 93UT39

Dear Mr. Speer:

On behalf of Chevron Environmental Management Company (Chevron), Science Applications International Corporation (SAIC) is pleased to submit this Remedial Action Plan (RAP) for the above-mentioned site. On August 12, 2002, Harding ESE, Inc. (Harding ESE) submitted the *Corrective Action Plan* (CAP) requested by the Orange County Health Care Agency (OCHCA) which provided an assessment of the hydrocarbon impacts on the environment, presented a feasibility evaluation of remedial alternatives, and provided applicable cleanup levels with time to reach these levels. On September 24, 2002, Harding ESE submitted the *Corrective Action Plan Addendum* proposing to use groundwater cleanup levels consistent with California Regional Water Quality Control Board, Santa Ana Region (RWQCB) threshold concentrations considered not to pose a significant risk to current or future beneficial uses of an aquifer.

This RAP is being presented due to the site ceasing operations, and all above and underground structures, including the station building, underground storage tanks (USTs), fuel dispensers, associated product piping, and utility conduits, being removed from the site. These construction activities allow access to the subsurface hydrocarbon-impacted source soils that may be removed through excavation. Excavation was recommended as the most feasible alternative in the event the station ceased operations in Harding ESE's CAP submitted to this agency August 12, 2002.

SITE DESCRIPTION

The site is an active Chevron station located at the southwest corner of the intersection between Garden Grove Boulevard and Euclid Avenue in Garden Grove, California (Plate 1). The current station configuration consists of three product dispenser islands, three 10,000-gallon capacity USTs containing gasoline, an above ground 250-gallon capacity used-oil tank, a small service station, and a station building. The station layout is shown on Plate 2.

The site is approximately 87 feet above mean sea level with regional drainage toward the southwest. Historically, depth to groundwater has ranged from approximately 26 feet below ground surface (bgs) to 29 feet bgs.

PROPOSED WELL ABANDONMENT

Wells MW-6, MW-7, and MW-8 lie within the proposed limits of excavation. SAIC proposes to destroy these wells by pressure grouting each well with a bentonite-slurry mix and drill out the top 5 feet of casing. The remainder of the casing will be removed when the wells are encountered in the excavation (Plate 3).

PROPOSED REMEDIAL EXCAVATION SCOPE OF WORK

SAIC proposes to assist by way of observing and documenting the excavation and removal. The overall scope of work will include the following activities, as necessary:

- Air monitoring and documenting volatile organic compound (VOC) emissions in compliance with SCAQMD Rule 1166, as well as for soil segregation and stockpiling;
- Using necessary vapor controls complying with SCAQMD Rule 1166 permit,
- Directing the excavation, stockpiling of soils, and removal of hydrocarbon-bearing soils, as necessary, during the excavation activities;
- Collecting soil samples from the stockpiles, and confirmation soil samples from the sidewalls and the bottom of the excavation, in compliance of the OCHCA, and as necessary;
- Submitting soil samples for laboratory analysis; and
- Preparation of a report in general accordance with the 1994 State of California Code of Regulations Title 23, Division 3, Chapter 16, Underground Storage Tank Regulations.

PROPOSED REMEDIAL EXCAVATION ACTIVITIES

After the station infrastructure has been removed, hydrocarbon-impacted soils across the target zone (approximately 20 to 30 feet bgs) would be overexcavated within the approximate area shown on Plate 3. All excavation field activities will be performed by a qualified SAIC representative working under the supervision of a state of California registered geologist.

Segregation and stockpiling of excavated soils will be implemented based on field screening with a photo-ionization detector (PID). Excavation activities will continue until the limits of excavation are reached, either by confirmation samples resulting in a non detect result, or physical boundaries at which sidewall samples will be collected to determine hydrocarbon-impacted soil to be left in place. Confirmation soil samples will be collected from the sidewalls and bottom of the excavation and submitted to a state of California certified laboratory for analysis. A detailed description of SAIC'S field methods and procedures is included in Appendix A.

Stockpiled hydrocarbon-impacted soils will be profiled and transported offsite to a permitted facility for proper treatment and disposal. In the interim, excavated stockpiled hydrocarbon-impacted soils will be covered as required. Soil samples will be collected from the non-impacted stockpiled soil at one sample per every 50 cubic yards of soil. Non-detectable analytical results of these soil samples will result in the soil being used as backfill. The remainder of the excavation will be backfilled with structural fill meeting the requirements dictated by the future use of the site.

It is anticipated that the area of excavation will need to be dewatered. Dewatering will be accomplished by pumping the groundwater to an aboveground Baker tank placed onsite. A vacuum truck will be contracted to empty the contents of the Baker tank and transport the water offsite to a permitted facility for proper treatment and discharge.

Non-aqueous phase liquids (NAPL) may be encountered and will be removed using a vacuum truck following excavation activities. NAPL will be properly drummed and transported to an appropriate facility for recycling.

Initial soil samples will be analyzed and reported by a state of California certified laboratory on a 24-hour turnaround time. Soil samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MtBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method 8260B. Field screening and preliminary soil sample results will determine if the utilization of a mobile laboratory would benefit the progress of the project. A mobile laboratory would conduct initial screening by using EPA Method 8021B for BTEX and MtBE. If a mobile laboratory for field screening of the soil samples is utilized, it will be determined if additional samples need to be collected for the specified area and submitted to a stationary laboratory for analysis by EPA Method 8260B.

SAIC will conduct a "tailgate" safety meeting at the beginning of the field day to discuss pertinent health and safety issues. A Health and Safety Plan has been prepared in accordance with Code of Federal Regulations 1910.120 to establish safety guidelines and requirements regarding site-assessment activities at the subject site and is presented as Appendix B.

Following completion of the excavation, it will be determined if any further remediation or well re-installation will be required for this site.

If you have any questions, please contact Mr. Daryl Pessler, the SAIC project manager, at (714) 257-6404, or Ms. Lisa Thompson, the Chevron project manager, at (714) 671-3371.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Jevee L. Tagarao
Project Engineer

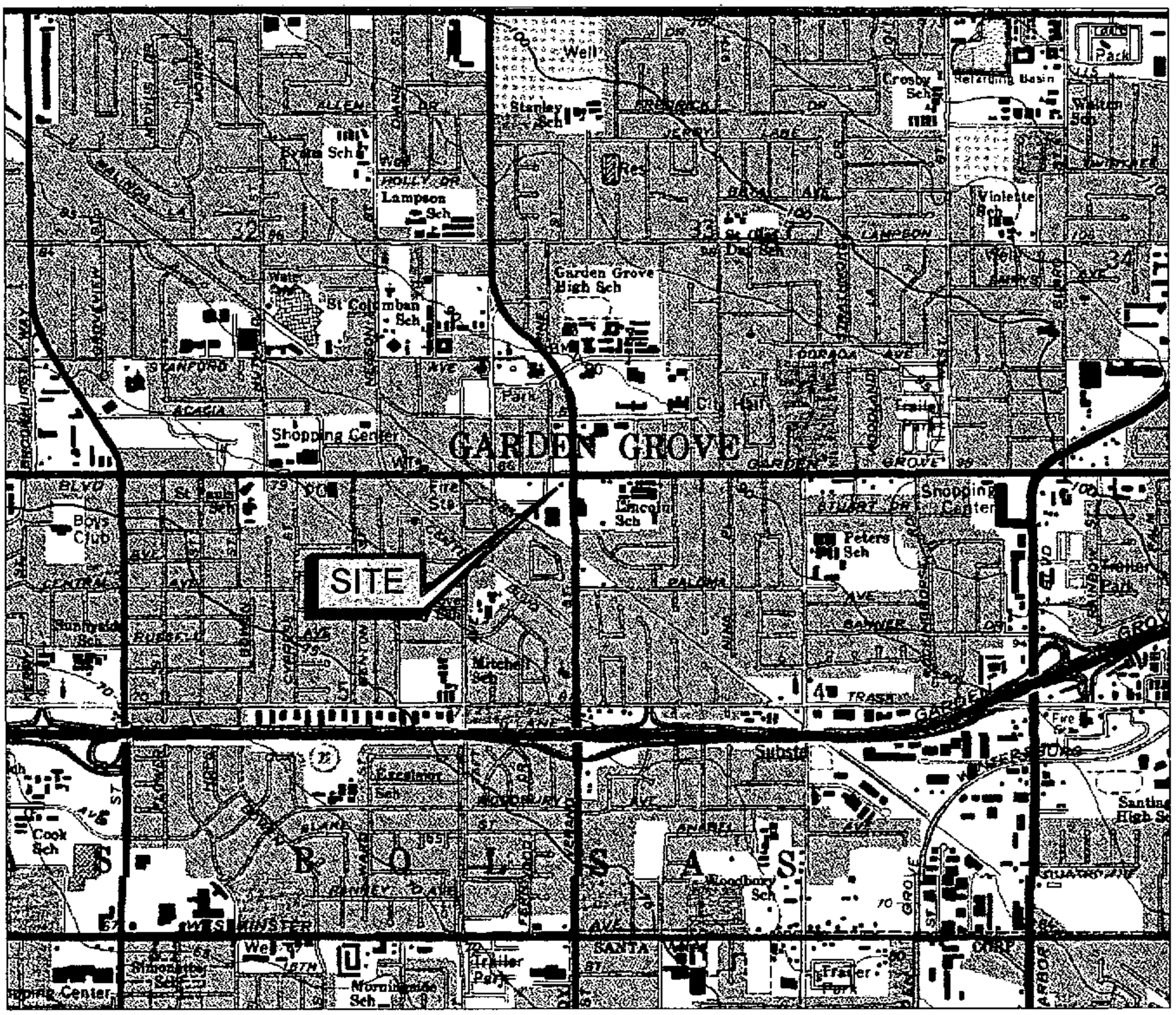
Daryl Pessler
Senior Project Manager

Attachments: Plate 1 – Site Location Map
Plate 2 – Site Vicinity Map
Plate 3 –Excavation Remediation Plan
Appendix A – SAIC Field Methods and Procedures
Appendix B – Site Specific Health and Safety Plan

cc: Lisa Thompson, Chevron
SAIC Project File

X:\Irvine\Orange County\Lisa Thompson\9-2153\Work Plans\RAP-06-02-03\RAP.doc

PLATES



FILE: X:\Drafting\9-2153\BASE\SITE LOCATION MAP.dwg [Layout1]

REFERENCE: USGS 7.5-MINUTE QUADRANGLE, ANAHEIM, CALIFORNIA

Chevron Environmental Management Company
SERVICE STATION NO. 9-2153
11162 EAST GARDEN GROVE BOULEVARD, GARDEN GROVE, CA

SITE LOCATION MAP

drawn GJV	checked	approved	PLATE NO.
date 03/28/03	date	date	1
job. no. _-_-_-_		file no. _-_.DWG	

Science Applications International Corporation
An Employee-Owned Company

EUCLID AVENUE

GARDEN GROVE BOULEVARD

CHEVRON
STATION NO.
9-2153

N

NOT TO SCALE

FILE: X:\Drafting\9-2153\BASE\SITE VICINITY.dwg [Model]

Chevron Environmental Management Company

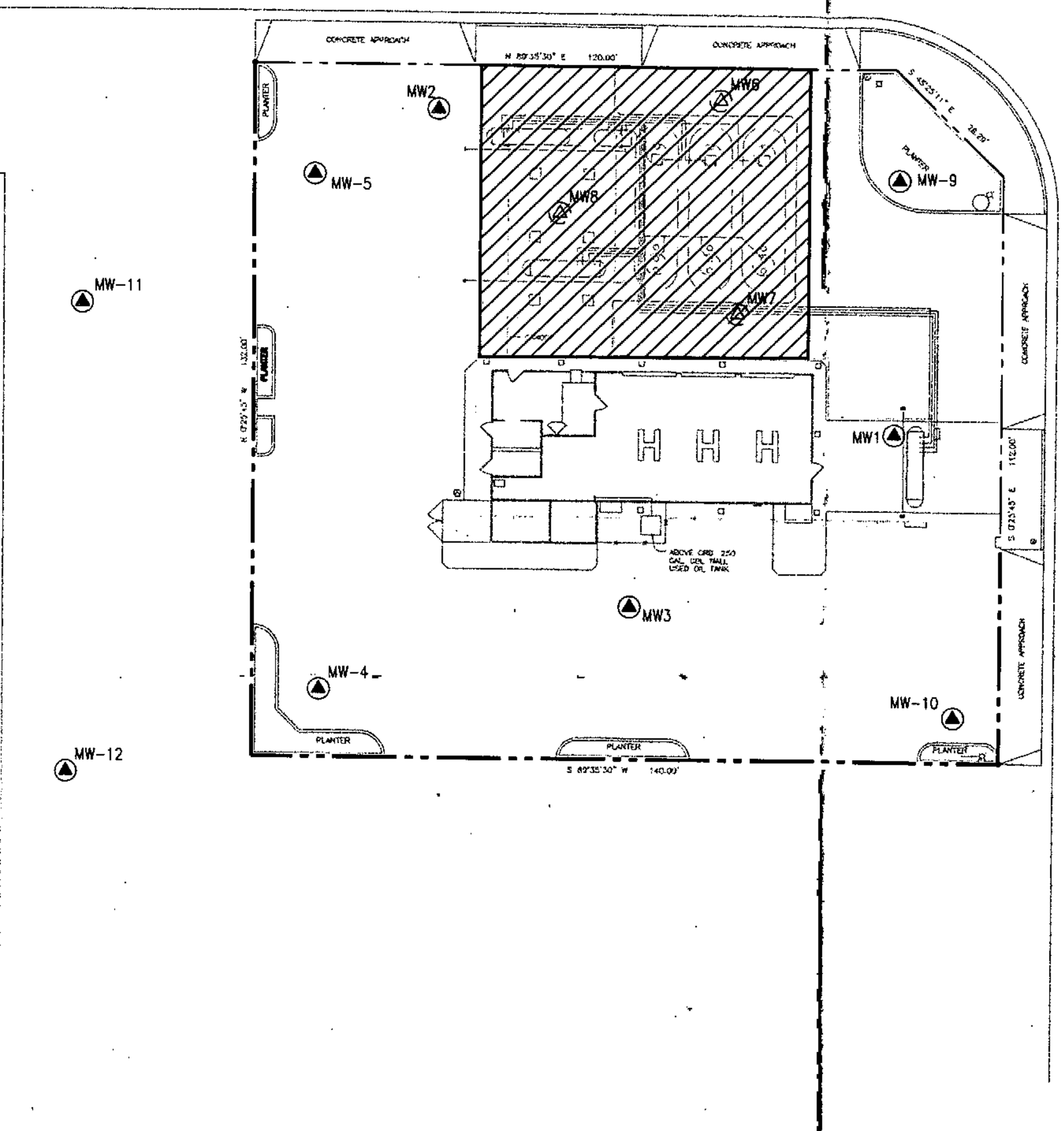
SERVICE STATION NO. 9-2153

11162 EAST GARDEN GROVE BOULEVARD, GARDEN GROVE, CA

SITE VICINITY MAP

drawn: GJV	checked	approved	PLATE NO. 2
date: 03/26/03	date	date	
job no. _____		file no. _____.DWG	

Science Applications International Corporation
An Employee-Owned Company



EUCLID AVENUE

EXPLANATION

- MW1 — GROUNDWATER MONITORING WELL
- MW-8 — PROPOSED ABANDONED WELLS
- APPROXIMATE AREA OF EXCAVATION

N

Scale 0 15 30 feet

Chevron Environmental Management Company
SERVICE STATION NO. 9-2153
11162 EAST GARDEN GROVE BOULEVARD
GARDEN GROVE, CALIFORNIA

EXCAVATION REMEDIATION PLAN

DRAWN RDD CHECKED

APPENDIX A

SAIC FIELD METHODS AND PROCEDURES

APPENDIX A

SAIC FIELD METHODS AND PROCEDURES

Underground Utility Clearance

A survey of underground utilities will be performed prior to the start of field activities to identify possible subsurface obstacles to drilling. Underground Services Alert (USA) will be notified at least 48 hours prior to drilling to clear underground utilities. USA will be responsible for notifying individual utility owners of SAIC's proposed drilling activities. In addition, each boring location will be hand-excavated to a depth of approximately 5 feet below the ground surface to reduce the likelihood of encountering a buried utility line during drilling.

Soil Borings and Sampling

Boreholes will be drilled using a truck-mounted drilling rig equipped with 6-, 8- or 10-inch diameter hollow-stem augers. Soil samples will be collected at 5-foot intervals from 5 feet below grade to the total depth of the borehole. A SAIC geologist or environmental engineer working under the supervision of a California Registered Geologist will visually log each soil boring based on drilling returns and recovered soil samples. Soils will be classified in general accordance with the Unified Soil Classification System (USCS), and American Society for Testing and Materials (ASTM) method D2488.

Soil samples will be collected using 2.5- or 3-inch outside diameter Modified-California split-spoon sampler, or 2-inch outside diameter Standard Penetration Test sampler, in accordance with ASTM method D1586. The sampler will be driven 18-inches into undisturbed soil, or until refusal, using a 140-pound down-hole hammer with a 30-inch drop. The effort taken to drive the sampler will be recorded at 6-inch intervals. If the drilling rig is not equipped with a down-hole hammer, then the sampler will be driven by another method until refusal. A sample-catcher may be used to retain the samples in loose sandy soils.

Samples will be collected in clean brass liners placed inside the sampler. Typically, the first or second liner behind the cutting shoe will be used for laboratory analysis. The liner that is selected for laboratory analysis will be removed from the sampler with as little disturbance as possible and contain little or no observable void space to minimize volatilization of any hydrocarbons which may be present. The ends of the liner will be immediately covered with Teflon™ film and plastic slip-caps. The outside of the liner will be wiped free of any soil or moisture, labeled, sealed in a Ziploc™ bag, and placed on ice in an insulated container.

Each sample will be field tested using a photo-ionization detector (PID) or a flame ionization detector (FID). The contents of another brass liner will be placed in a Ziploc™ bag and allowed to volatilize for approximately 15 minutes. The Teflon™ tip of a PID or FID will be inserted through a small opening in the bag and the reading for each sample will be recorded on the boring log.

At the conclusion of drilling, each borehole not converted to a water or vapor well will be backfilled with either a bentonite grout, or dry bentonite chips or pellets. If bentonite chips or pellets are used, they will be hydrated with tap water following the addition of every three to five 50-pound bags. Boreholes will be capped by a material similar to that of the surrounding pavement (i.e. asphalt or concrete), in accordance with Chevron standards for service station appearance. All backfilled boreholes will be barricaded for a sufficient length of time to allow for set-up of the backfill material. The soil cuttings and decontamination waste-water will be placed in US Department of Transportation (DOT)-approved 55-gallon drums, or a covered commercial waste bin. The drums, or bin, will be temporarily stored on-site at a location designated by the

Chevron representative or station owner. A Drum/Bin Inventory Sheet will be prepared for the site and submitted to the Chevron representative.

All equipment that comes into contact with potentially hydrocarbon-bearing soil, drilling fluid, or ground water will be decontaminated prior to, and after, each use. Equipment to be decontaminated will be steam-cleaned, or washed with a non-phosphate detergent solution and given a tap water rinse followed by a distilled-water rinse. Equipment will be decontaminated on site, and decontaminated equipment will be stored on clean plastic sheeting in an uncontaminated area. Alternatively, sufficient clean equipment will be brought to the site to complete the planned work without re-use.

Groundwater Monitoring Wells, Sampling, and Analysis

Monitoring well permits will be obtained through the appropriate regulatory agency prior to well installation, if required. Wells will be constructed in accordance with Title 23 of the California Code of Regulations, Division 3, Chapter 16, Article 4, Sections 2647 (Ground Water Monitoring) and 2648 (General Construction and Sampling Methods). The drill rig operator will have a C-57 license as required by the State of California.

Well screens and casing will consist of flush-threaded 2- or 4-inch diameter, schedule 40 PVC pipe. Well screens will have 0.020-inch, or smaller, factory slots. New casing and well screens will be used to construct the monitoring wells.

Each well will be screened over a single vertical interval. Typically, ground-water monitoring wells will be screened from ten feet above the ground-water surface to 10 or 20 feet below, for a vertical span of at 20 to 30 feet. The screen placed in each well will be selected to accommodate actual site conditions. Monitoring wells will be designed to minimize the potential for cross-communication between aquifers which may be encountered.

Centralizers will be used to center the well casing in the borehole, if necessary. Filter pack will be placed in the annular space from the well cap to approximately 2 feet above the top of the screened interval. Filter pack material will consist of sorted silica sand matched to the well-screen slot size. The annular seal will consist of at least three feet of bentonite chips or pellets which will be placed above the filter pack and either a cement-bentonite slurry or bentonite chips or pellets will be placed above the annular seal to approximately 3 feet bgs. A minimum of 3 feet of cement will be placed above the bentonite to seal the well to the ground surface. A traffic-rated well head protective casing or vault box will be installed to guard the well casing from damage, and to prevent unauthorized entry. A locking cap will be placed on each well.

After completion, the elevation of the monitoring well top-of-casing will be surveyed. The monitoring well elevation will be recorded with respect to either mean sea level, or to some local datum, and will be measured at a point marked and notched on the well-casing riser. This point will be used as the reference for all future depth-to-water measurements. The elevation of the top of the closed vault-box lid will also be recorded. The locations of important site structures (buildings, underground tanks, piping, pump islands, canopies, planters, property boundaries, etc.) will be recorded as needed.

Groundwater Sampling

Groundwater monitoring wells will be checked for the presence of NAPL hydrocarbons prior to purging. If Non Aqueous Phase Liquid (NAPL) hydrocarbons are encountered, an oil-water interface probe will be used to measure the thickness of the NAPL layer. Monitoring wells containing NAPL hydrocarbons will not be purged. Groundwater samples will not be collected from wells containing NAPL hydrocarbons, however, a

sample of the NAPL hydrocarbons may be collected for hydrocarbon "fingerprint" analysis at the discretion of the Chevron representative.

If NAPL hydrocarbons are not encountered, each well will be developed by airlifting, surging or plunging, bailing, or pumping. Well development will continue until the clarity, temperature, pH, and conductivity of the well water have stabilized. Water produced during well development will be containerized on-site in DOT-approved 55-gallon drums.

Monitoring wells with adequate recharge will be purged a minimum of 3 well volumes prior to sampling. A hand pump, bailer, or vacuum-truck will be used to purge wells. Purge water will be monitored for clarity, temperature, pH, and conductivity to identify representative conditions. If a well is pumped dry, the well will be sampled following recovery to approximately 80% of the static ground-water level. A record of each well-sampling event, including pertinent field observations, will be kept on SAIC Sampling Record Sheets.

Groundwater samples will be collected with a single-use Teflon™ bailer attached to a nylon line. Both bailer and line will be discarded after each use. All sampling equipment which comes in contact with the well will be cleaned according to the decontamination procedures detailed above.

Groundwater samples to be analyzed for the presence of volatile compounds will be collected with minimal entrapment of air. Sample vials will be filled to overflowing, and capped in such a way as to prevent entrapment of air bubbles. After being sealed, each vial will be inverted and gently tapped. If air bubbles are detected in the vials, the sample will be discarded and a new sample will be collected.

All sample containers will be labeled with the Chevron project name and number, well number, date of sampling, sampler's initials, preservative added (if any), and other pertinent information, as necessary. Sample containers will be sealed, placed in packing material, and placed on ice in an insulated container for transport to the laboratory. Samples will be accompanied by appropriate chain-of-custody documentation.

Drums used to contain well purge-water will be stored on-site at a location agreed to by the Chevron representative. Drums will be tightly sealed and individually labeled. A Drum Inventory Sheet will be prepared for the site and submitted to the Chevron representative.

APPENDIX B

SITE SPECIFIC HEALTH AND SAFETY PLAN

APPENDIX B

Zero Accidents
Safety - First and Always

Science Applications International Corporation, (SAIC)
HEALTH AND SAFETY PLAN
PREPARED FOR

Chevron Environmental Management Company

HEALTH AND SAFETY PLAN
SUPPLEMENT TO MASTER HEALTH AND SAFETY PLAN

CHEVRON SERVICE STATION No. 9-2153
11162 Garden Grove Boulevard
Garden Grove, California

SAIC Project No.
06-6041-00-2961-285

All personnel participating in the field must be trained in the general and specific hazards unique to the job and, if applicable, meet recommended medical examination requirements. All site personnel and visitors shall follow the guidelines, rules, and procedures contained in this safety plan. The project manager or site safety officer may impose any other procedures or prohibitions that they believe are necessary for safe operations.

This plan is prepared to inform all field personnel, including SAIC contractors and SAIC subcontractors, of the potential hazards on the site. However, each contractor or subcontractor must assume direct responsibility for his own employees' health and safety.

Site Emergency Information

A Hospital Location Map is provided on B4.

Title	Name	Phone & Pager Number
Emergency		
Ambulance		911
Police		911
Fire		911
Local Hospital	Garden Grove Hospital and Medical Center 12601 Garden Grove Blvd. Garden Grove, CA 92840	(714) 741-2700
Emergency Coordinator	Daryl Pessler	(714) 257-6404 Cell (714) 394-5242
Alternate Emergency Coordinator	Mike Pendergrass	(714) 257-6403 Cell (714) 394-5246
Project/Business		
Project Manager	Daryl Pessler	(714) 257-6404 Cell (714) 394-5242
DHSO	Daryl Pessler	(714) 257-6404 Cell (714) 394-5242
SAIC Field Supervisor	Walid Makhlouf	Cell (714) 305-9894
SAIC Site Safety Officer	Walid Makhlouf	Cell (714) 305-9894
Client Contact	Lisa Thompson	(714) 671-3371
Site Contact		
Subcontractor	West Hazmat	(714) 939-6850
Subcontractor		

ROUTE TO HOSPITAL: (Describe route from Site to nearest Emergency Room).

Start out going east on **GARDEN GROVE BOULEVARD** towards **EUCLID STREET** by turning right. Hospital is on left hand side past **HARBOR BOULEVARD**.

Project Health and Safety Overview

Site Description: Active and Inactive Chevron Service Stations

Project Description (Overview and By Task): Conduct subsurface investigation of soils and groundwater potentially impacted by gasoline, diesel fuel, oil and other petroleum hydrocarbons related to service station operations.

Task 1: Utility Clearance – Contact USA Alert 96 hours in advance of site activities and conduct utilities identification survey.
Task 2: Mobilization and traffic control
Task 3: Concrete and/or asphalt coring
Task 4: Hand-auger to five feet
Task 5: Conduct a pre-determined number of soil borings using drilling equipment or direct push technology.
Task 6: Conduct soil and groundwater sampling
Task 7: Decontaminate equipment.
Task 8: Demobilize and remove all equipment and conduct a final site inspection.

Anticipated Contaminants: Benzene, ethyl benzene, diesel fuel, gasoline, methyl tertiary-butyl ether (MtBE), oil, toluene, xylenes and other related petroleum hydrocarbons.

Summary of Toxic Effects of Known Contaminants: The toxic effects of known contaminants are CNS depressant, headache, dizziness, malaise, eye, nose and throat irritants, liver and kidney toxins. Benzene is a known carcinogen. Toluene and MtBE are known to cause cancer in animals. A description of toxic effects and properties of the known chemical contaminants is provided in Appendix G.

Physical Hazards Identified: Project activities have been assessed and physical hazards and mitigation procedures for each task are listed in Section 3.0.

Summary of Physical Hazard Mitigation Procedures: Site personnel will receive training in Chevron LPS, SAIC's or the subcontractor's health and safety program, 40-HAZWOPER training and annual updates, and site specific safety training. A tailgate safety meeting will be conducted daily and prior to any unusual task or new task. Mitigation procedures are detailed in Section 3.0. Everyone involved in or affected by the job task will review the mitigation procedures prior to the start of the task. The Code of Safe Practices is provided in Appendix E. All site personnel will use the Buddy System when conducting unusual tasks, tasks requiring physical labor, or working around water or electricity.

Anticipated Personal Protective Equipment (PPE) Requirements By Task: Level D personal protective equipment including hardhat, steel-toed boots, eye protection with side shields, reflective traffic vest, protective gloves and proper work attire is the highest level anticipated for the project. Based on information provided, PPE requirements for each task are specified in Section 4.

HOSPITAL ROUTE MAP