FOR CONTRACT NO.: 07-4Y4704

INFORMATION HANDOUT

FOUNDATION RECOMMENDATIONS

SITE INVESTIGATION REPORT

ROUTE 605
LOS ANGELES, CALIFORNIA

ROUTE: 07-LA-605-23.2

State of California

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: MR. LARRY WIERING
District 7, MAINTENANCE ENGINEERING
EAST REGION

Attention: Gehan Attallah

Date: August 4, 2009

File: 07-LA-605-PM 23.2
07-4Y4701

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Geotechnical Services
Office of Geotechnical Design-South 1, Branch C

OVERHEAD SIGN

Subject: Foundation Recommendations

INTRODUCTION

This report presents foundation recommendation for the proposed overhead sign structure based on subsurface information from As-built Log of Test Borings (LOTB) of adjacent structures. There are four adjacent structures in close proximity to the proposed overhead structure. It should be noted that this recommendation has been prepared without site-specific subsurface exploration at the location of pile in order to meet the project schedule.

PROJECT DESCRIPTIONS

This project proposes to install a new 30 feet cantilever overhead sign structure along southbound 605 adjacent to Live Oak on ramp in the City of Irwindale, just south of Graham Access Road Overcrossing Bridge. Based on the project plan, the new cantilever overhead sign will be constructed approximately 15 feet north of the existing overhead sign.

PERTINENT DOCUMENTS

The following documents were reviewed for the preparation of this report:

1. Project Plans for the proposed overhead sign replacement.
2. As-built Log of Test Borings for Graham Access Road Overcrossing Br (No. 53-2034), May 1967.
3. As-built Log of Test Borings for Live Oak Ave Overcrossing Br (No. 53-2036), Nov. 1967.

4. As-built Log of Test Borings for San Gabriel River Br (No. 53-2032L), May 1994

5. As-built Log of Test Borings for Arrow highway Overcrossing Br (No. 53-2038), May 1967

FIELD RECONNAISSANCE

We conducted a field reconnaissance on July 22, 2009 to investigate the site condition and the existing overhead sign and marked the location of the proposed boring. After field observation of the surrounding area, especially the open pit query approximately 50 feet west of the southbound 605, we decided to base our recommendation on the above referenced LOTBs of the adjacent structures.

SITE GEOLOGY

The proposed location of the new replacement sign is adjacent to the San Gabriel River on the south, Santa Fe Dam on the northeast and several queries on the west. The project area is underlain by recent Holocene age sand and gravel of San Gabriel River and alluvial fan detritus from San Gabriel Mountains grading to alluvium. The alluvial material consists of silt, sand, gravel, cobbles and boulders

SUBSURFACE CONDITIONS

Depending on the above referenced LOTBs of the adjacent four structures (Br No. 53-2034,53-2036, 53-2032L, and 53-2038); the subsurface material is from very dense to dense, sandy gravel with pebbles and cobbles. All the four As-Built LOTB sheets show similar soil descriptions up to the depth of 40 feet. In addition there is an open pit query approximately 50 feet west of the proposed overhead structure location, which shows similar soil layers as the LOTBs.

SEISMICITY

The project site is not located within any Alquist-Priolo Earthquake Fault Zones as established by California Geological Survey (CGS, 1997) and surface rupture potential is not considered to be a factor. The closest fault to the site is the Malibu Coast-Santa Monica-Hollywood-Raymond Fault Zone located about 2.5 miles northwest of the site. This fault is included on the 1996 Caltrans Seismic Hazard Map and is depicted to have a potential for a 7.5 Maximum Credible Earthquake. The corresponding Peak Bedrock Acceleration (PBA) and Peak Ground Acceleration (PGA) at the site are estimated to be about 0.6 and 0.7g, respectively (based on Sadigh, et al, 1997).

GROUNDWATER

The ground water is about 100 feet below the freeway level. This is visible from the water surface of the open pit query. Also, State Water Resource Control Board's database (GEOTRACKER) indicates that groundwater table in this area is most likely between 90 and 100 feet bgs (http://geotracker.swrcb.ca.gov). Considering the selected foundation depth (23 feet), groundwater is not anticipated during the construction of this pile.

LIQUEFACTION EVALUATION

Liquefaction is defined as the phenomenon in a soil mass, because of the development of excess pore pressures, soil mass suffers a substantial reduction in its shear strength. During earthquake, excess pore pressures in saturated soil deposits may develop as a result of induced cyclic shear stresses, resulting in liquefaction. However, since the previous drilling records indicate no shallow groundwater at the site, the potential for liquefaction seems to be very low at the depth of the overhead structure.

CORROSIVITY

For the location of CIDH pile, no corrosion test result is available at this time. However, due to the granular nature of the site material, corrosion will not be a concern.

FOUNDATION RECOMMENDATIONS

In order to verify that the foundation depth is sufficient to support the proposed overhead sign, the vertical and lateral capacity of pile were analyzed. Service level loads at the top of pile for this sign were estimated and provided by Mr. K C Liu as follows:

Table No. 1– Service level load & Maximum allowable pile deflection

Type	Axial Force (Kips)	Shear Force (Kips)	Bending Moment (Kips-ft)	Maximum allowable Pile-head deflection (inch)
Full Cantilever Overhead Sign	19.0	13.6	366	1.0

The computer software of Shaft and LPILE plus 5 were employed to estimate the vertical and lateral capacity of CIDH pile. The properties of subsurface material at the location of pile were correlated with blow counts recorded in the LOTBs for Graham Access Road Overcrossing Br. (No. 53-2034), May 1967. Based on the results of analysis, the presented pile depth is sufficient to support the proposed sign without exceeding the maximum allowable pile-head deflection. The foundation depth of the CIDH pile presented in table No. 2 also meets the May 2006 Standard Plan **S8**.

Table No. 2– Foundation Information

Type	Location	Type of Foundation	Diameter	Foundation depth
Full Cantilever	*83+' Lt. STA 1962+30 (C.L of SR-605)	CIDH	5.0 (ft)	23 feet

* The station is estimated roughly based on the As-built plan.

CONSTRUCTION CONSIDERATOINS

1. Since the recommended pile depth is based on subsurface condition from nearby structure (Graham Access Road Overcrossing Br. No. 53-2034), our office shall be contacted during construction so that the pile depth be confirmed or revised based on material recovered during drilling of pile boring.

2. Based on the available LOTBs construction difficulties should be expected. The subsurface materials are mostly very dense to dense, well-graded sandy gravel with cobbles and possible boulders. Rock coring bits for drilling of CIDH pile may be needed to core through hard Boulders.

3. Some caving should be anticipated during excavation of pile boring and during CIDH pile construction due to the presence of scattered gravel and cobbles. It will be necessary for contractor to utilize a stabilizing method, such as temporary casing, to keep the hole open during construction.

The recommendation contained in this report is based on specific project information that has been provided by the District 7 Maintenance Engineering East Region. If any conceptual changes are made during final project design, the office of Geotechnical Design South-1 should review the change to determine if the foundation recommendation is still applicable.

If you have any questions, please contact Amare Tsegie at (213) 620-2133 or Ted Liu at (213) 620-2136.

Prepared by: Date: 8-4-09

Reviewed by: Date: 8/4/2009

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c.c. OGDS-1-Los Angeles File (2)
OGDS-1-Sacramento
GS File- Sacramento

REFERENCES

1. AASHTO, LRFD Bridge Design Specifications 4th Edition, 2007

2. California Geologic Survey, Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region, 2002

3. California Department of Water Resources, Bulletin No. 104 Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, 1961

4. Caltrans, Standard Plans, 2006

5. FHWA, Drilled Shafts: Construction Procedures and Design Methods, 1999

6. Sadigh, et al, 1997, An Empirical Ground Motion Model for Horizontal Spectral Accelerations for Earthquakes in Active Tectonic Regions.

Pn 25.

PROPOSED CCTV CAMERAS AND CONDUIT TRENCHING SITE IN LOS ANGELES COUNTY, CALIFORNIA

TASK ORDER NO. 07-120921-01
EA NO. 120921

SITE INVESTIGATION REPORT

PREPARED FOR

CALIFORNIA DEPARTMENT
OF TRANSPORTATION

LOS ANGELES, CALIFORNIA

SEPTEMBER 1996

GEOCON
Environmental Consultants Inc.

Project No. 08600-06-63
TO No. 07-120921-01
September 6, 1996

OVERNIGHT DELIVERY

Mr. Kanwal Singh
California Department of Transportation
District 7
120 South Spring Street
Los Angeles, California 90012-3606

Subject: SITE INVESTIGATION REPORT
CCTV SITES IN LOS ANGELES COUNTY, CALIFORNIA
TASK ORDER NO. 07-120921-01
EA NO. 120921

Dear Mr. Singh:

In accordance with Caltrans Contract No. 53W202, Task Order (TO) No. 07-120921-01 and EA No. 120921, Geocon Environmental Consultants, Inc. (Geocon) has performed environmental engineering services at the subject site. The project sites were located within the Caltrans right-of-way and were comprised of fourteen test locations within Los Angeles County, California. The approximate locations of the test locations are depicted on the Vicinity Map, Figure 1.

The accompanying report summarizes the services performed including the advancement of hand-auger borings, limited soil sampling, and laboratory testing for the presence of lead. If questions concerning the contents of this report, or if Geocon may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

REGISTERED GEOLOGIST
JOEL C. KLOTH
No.4628
STATE OF CALIFORNIA

Joel C. Kloth
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Task Order No. 07-120921-01
Project No. 08600-06-63
September 6, 1996

EXECUTIVE SUMMARY

The objective of Task Order (TO) Number 07-120921-01, EA No. 12091, was to evaluate the extent of soil impacted with lead from vehicle emissions at proposed closed circuit television (CCTV) sites and fiber optic communication trenches in Los Angeles County, California. A total of 29 soil samples were collected from fourteen boring locations (C1 through C10 and B1 through B4). Borings C1 through C10 were located approximately every 1/2 mile along the proposed fiber optic conduit trenching along Route 605 between approximately Route 10 and Route 210 (see Vicinity Map, Figure 1). Borings B1 through B4 were located at proposed CCTV locations along the shoulders of the same interval of Route 605. As requested by Caltrans, borings C1 through C10 and B2 through B4 were advanced to a depth of approximately 2.0 feet below the ground surface (bgs). These thirteen borings were sampled at the surface and at a depth of approximately 1.5 feet bgs. As requested by Caltrans, boring B1 was advanced to a depth of approximately 5 feet bgs. Boring B1 was sampled at the surface and at depths of approximately 2.0 and 4.5 feet bgs.

The following information summarizes of the laboratory analytical results.

- Twenty-nine (29) soil samples were analyzed for total lead using EPA Test Method 6010 ICAP single element.

- Two soil samples analyzed (C2-S and C9-S) exhibited total lead concentrations greater than the Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg). These soil samples exhibited total lead concentrations of 1,900 and 1,860 mg/kg, respectively, and should be considered hazardous according to Title 22 of the California Code of Regulations (CCR).

- Twenty-two (22) soil samples exhibited total lead concentrations greater than 50 mg/kg and less than 1,000 mg/kg.

- The 22 soil samples were analyzed for soluble lead by the Waste Extraction Test (WET) utilizing EPA Test Method 7420. Twelve of the 22 soil samples exhibited soluble lead concentrations greater than 5.0 mg/l, the Soluble Threshold Limit Concentration (SLTC), and should, therefore, be considered hazardous according to Title 22 of the CCR.

- Four of the soil samples (B1-S, C6-S, C8-1.5, and C9-1.5) exhibiting soluble lead concentrations greater than the STLC were analyzed by the WET utilizing deionized water as the extractant (WET-DI). Two of these soil samples (C6-S and C8-1.5) analyzed by the WET-DI exhibited soluble lead concentrations greater than 0.5 mg/l. These two soil samples exhibited WET-DI soluble lead

concentrations of 2.1 and 3.2 mg/l, respectively. Soil samples B1-S and C9-1.5 exhibited WET-DI soluble lead concentrations of 0.46 and 0.20 mg/l, respectively.

- Based upon laboratory results, it is estimated that approximately 85 cubic yards (approximately 115 tons) of soil at the proposed CCTV locations exhibited hazardous concentrations of total lead (>1,000 mg/kg) or soluble lead (>5.0 mg/l). Laboratory results also indicated that areas along the conduit trenching exhibited hazardous concentrations of total or soluble lead.

Recommendations

It is understood that the data from this site investigation will be used to determine the disposal of soil excavated for the installation of closed circuit televisions (CCTVs) and the conduit trenches. Based upon laboratory results, Geocon recommends that soil in proximity to Borings B1 and B2 be re-used by placing the soil under at least 1 foot of clean fill material, at least 5 feet above the maximum groundwater (see "Plan B" re-use designation on Figures 13 and 14) according to the DTSC variance issued to Caltrans. Based on laboratory results, Geocon recommends that the soil in proximity to borings B3 and B4 be re-used as clean fill material (see "Plan A" re-use designation on Figures 15 and 16) according to the DTSC variance issued to Caltrans. The soil to be excavated along the conduit trenching (borings C1 through C10) may be used as backfill in the original trench in accordance with a utility variance granted to Caltrans.

It is further recommended that Caltrans notify retained subcontractors performing the construction activities that detectable concentrations of lead are present at the site. Necessary health and safety measures should be taken to minimize potential expose to lead.

Task Order No. 07-120921-01
Project No. 08600-06-63
September 6, 1996

SITE INVESTIGATION REPORT

PROJECT DESCRIPTION

This site investigation of Task Order (TO) Number 07-120921-01, EA No. 120921, included the advancement of fourteen hand-auger borings along freeway shoulders in Los Angeles County, California. These test borings were located along Route 605, between approximately the Route 10 and Route 210 interchanges, as depicted on the Vicinity Map, Figure 1. The boring locations are depicted in greater detail on the Boring Location Maps, Figures 2 through 16.

Test locations Borings C1 through C10 were located approximately every 1/2 mile along Route 605 where proposed fiber optic conduit trenches will be excavated. Test locations B1 through B4 were located on the shoulder of Route 605 where proposed CCTV cameras will be installed.

Borings C1 through C10 and B2 through B4 were advanced to a depth of approximately 2.0 feet and sampled at the surface and at a depth of approximately 1.5 feet bgs. Boring B1 was advanced to a depth of approximately 5.0 and sample at the surface (i.e., less than or equal to 3 inches bgs) and at depths of approximately 2.0 and 4.5 feet bgs. A total of 29 soil samples were collected from the fourteen test locations. Soil samples obtained were analyzed by a laboratory for lead content.

Purpose and Objectives

The purpose of the environmental engineering services performed by Geocon was to investigate the extent of soils impacted with lead from vehicle emissions within the Caltrans right-of-way when lead was utilized as gasoline additive. The information obtained from the limited soil sampling and laboratory testing will be used to evaluate the method of re-use and to estimate the volume of lead-impacted soil at the proposed CCTV camera locations and conduit trenching.

Scope of Work

The scope of work requested by Caltrans in TO 07-120921-01 is outlined above. The soil samples collected by Geocon were relinquished to Advanced Technologies Laboratories (ATL), a state-certified hazardous waste testing laboratory.

The procedures and methods used by Geocon to complete this TO are outlined in the following Geocon Standard Operating Procedures (SOPs):

SOP No. 01 - Hand-Augering Pre-Work Activities
SOP No. 11 - Hand-Augering and Soil Sample Collection
SOP No. 31 - Soil Sample Handling and Analytical Procedures
SOP No. 41 - Reporting Procedures

The above-referenced SOPs are presented as Appendix A.

INVESTIGATIVE METHODS

Task Order Meeting

A pre-work task order meeting was attended by Mr. Joel C. Kloth of Geocon and Mr. Kanwal Singh of Caltrans on June 21, 1996. Topics covered included: sampling schemes, health and safety, traffic control to be provided to Geocon workers by Caltrans, and the proposed completion schedule.

Health and Safety Plan

In accordance with the Task Order, a Health and Safety Plan was prepared by Geocon. The Health and Safety Plan was provided to outline recommendations for personal protective equipment for Geocon workers in the field during the performance of the soil sampling activities. The Health and Safety Plan prepared for the site was dated July 1, 1996, and submitted to Mr. Singh for review.

Utility Clearance

On June 28, 1996, a representative of Geocon contacted Underground Service Alert (USA) of Southern California to advise utility companies of the proposed on-site field activities. Geocon as provided with USA Ticket Numbers 365192, 365202, and 365211.

HAND-AUGERING AND SOIL SAMPLING

Rationale of Boring Placement

At the request of Mr. Singh, Geocon advanced ten boreholes (C1 through C10) at approximately 1/2-mile intervals along the proposed conduit trench and advanced four boreholes (B1 through B4) at proposed CCTV camera locations. Boring locations B1 through B4 corresponds to truck turn-outs/retaining walls. The fourteen test location areas have been identified by Caltrans as areas that may potentially contain detectable concentrations of lead. Boring identification, sampling depth, total/soluble lead concentrations, and site conditions are summarized in Table I.

Field Activities

A hand-held, 3-inch-diameter, stainless steel auger was advanced to an initial sample depth. Representatives of Geocon collected soil samples utilizing the stainless steel hand-auger, placed each sample into a laboratory-provided glass jar, and sealed the jar with a teflon lined lid. The glass jars were labeled with the sample identification, date, and project number and placed into a container for transport to ATL. The procedure was repeated at subsequent sampling depths. At the request of Caltrans, the boreholes were backfilled to surface grade with soil cuttings generated during the excavation activities.

Laboratory Analytical Methods

All soil samples obtained were analyzed for total lead following EPA Test Method 6010. Soil samples exhibiting detectable concentrations of total lead greater than 50 mg/kg and less than

1,000 mg/kg and were analyzed for soluble lead following the Waste Extraction Test (WET) Four soil samples analyzed by the standard WET which exhibited soluble lead concentrations greater than 5 mg/l were analyzed by the WET using deionized water for extraction (WET-DI).

INVESTIGATIVE RESULTS

Field Observations

Field observations, and notes of memoranda are presented in the Project Log sheets utilized during the on-site field activities and are included in Appendix B.

Soil Analytical Results

A summary of the analytical results for the soil samples analyzed for total and for soluble lead are presented in Table I. A reproduction of the laboratory report and chain-of-custody documentation are presented in Appendix C.

Total Lead. Total lead concentrations for the 29 soil samples analyzed by EPA Test Method 6010 ranged from 15 to 1,900 mg/kg (see Table I). Two soil samples (C2-S and C9-S) exhibited total lead concentrations greater than 1,000 mg/kg, the Total Threshold Limit Concentration (TTLC) set forth by Title 22 of the California Code of Regulations (CCR). These two soil samples exhibited total lead concentrations of 1,900 and 1,860 mg/kg, respectively, and are considered hazardous in accordance with CCR Title 22.

Soluble Lead. Twenty-two soil samples exhibited total lead concentrations greater than 50 mg/kg and less than 1,000 mg/kg and were analyzed for soluble led by the WET. Soluble lead results for the 22 samples ranged from 0.49 to 60 mg/l. Twelve of the 22 soil samples exhibited soluble lead concentrations greater than 5.0 mg/l, the Soluble Threshold Limit Concentrations (STLC) and should be considered hazardous in accordance with CCR Title 22 (see Table I).

Soluble Lead using Deionized Water. Four of the soil samples (B1-S, C6-S, C8-1.5, and C9-1.5) exhibiting soluble lead concentrations greater than the STLC were analyzed by the WET-DI. These soil samples exhibited soluble lead concentrations after being analyzed by the WET-DI of 0.46, 2.1, 3.2, and 0.20 mg/l, respectively.

Data Validation

Prior to submitting the soil samples to the laboratory, the chain-of-custody documentation was reviewed for accuracy and completeness. The laboratory report of the soil samples analyzed was reviewed for accuracy (i.e., units of concentrations in mg/kg) and consistency with chain-of-custody documentation. The matrix-spikes and duplicates were reviewed to ensure the laboratory results are within tolerance control limits. Based upon this validation process, the data quality is adequate for the purposes of this report.

CONCLUSIONS

Based on the laboratory analytical results, the soil in proximity to borings B1 and B2 (Figures 13 and 14) exhibited hazardous concentrations of total or soluble lead. Laboratory results indicate that soil in proximity to borings B3 and B4 (Figures 15 and 16) did not exhibit hazardous concentrations of total or soluble lead as defined in CCR Title 22.

It is understood that the data from this site investigation will be used to determine the disposition of soil excavated at proposed CCTV camera locations and conduit trenches. Based on laboratory results, soil in proximity to borings C1 and C10 (Figures 2 through 12) exhibited hazardous concentrations of total or soluble lead according to CCR Title 22.

Estimate of Lead Impacted Soil Volume

Based upon the laboratory results for the soil samples collected during the on-site field activities approximately 85 cubic yards (approximately 115 tons) of soil in proximity to borings B1 and B2 were impacted with hazardous concentrations of soluble lead at the proposed CCTV camera locations investigated.

RECOMMENDATIONS

It is understood that Caltrans has negotiated with the DTSC to allow guidelines for the re-use of lead impacted soil within the State right-of-way. It is further understood that Caltrans has obtained a variance allowing re-use and placement of lead-impacted soil at the site. The following is the recommendation for re-use and placement of lead-impacted soil at the site.

CCTV Camera Locations. Locations underlain by soil that exhibited total lead concentrations less than 1,575 mg/kg and soluble lead concentrations greater than the STLC can be re-used following the DTSC variance by placing the impacted soil beneath at least 1-foot of clean fill material, at least 5 feet above the maximum groundwater ("Plan B" re-use designation) (Appendix D). This "Plan B" re-use recommendation applies to soil in proximity to borings B1 and B2. The assumption has been made that the soil samples analyzed for total and soluble lead are representative of each entire locations on Figures 13 and 14. Analytical results indicated that soil in proximity to borings B3 and B4 (Figures 15 and 16) was not impacted with hazardous levels of lead. Soil at borings B3 and B4 can, therefore, be re-used as clean fill material ("Plan A", Appendix D).

Conduit Trench Locations. Laboratory results indicated that soil along the proposed conduit trench was impacted with hazardous concentrations of total and/or soluble lead. The soil to be excavated along the conduit trenching (borings C1 through C10) may be used as backfill in the original trench in accordance with a utility variance granted to Caltrans.

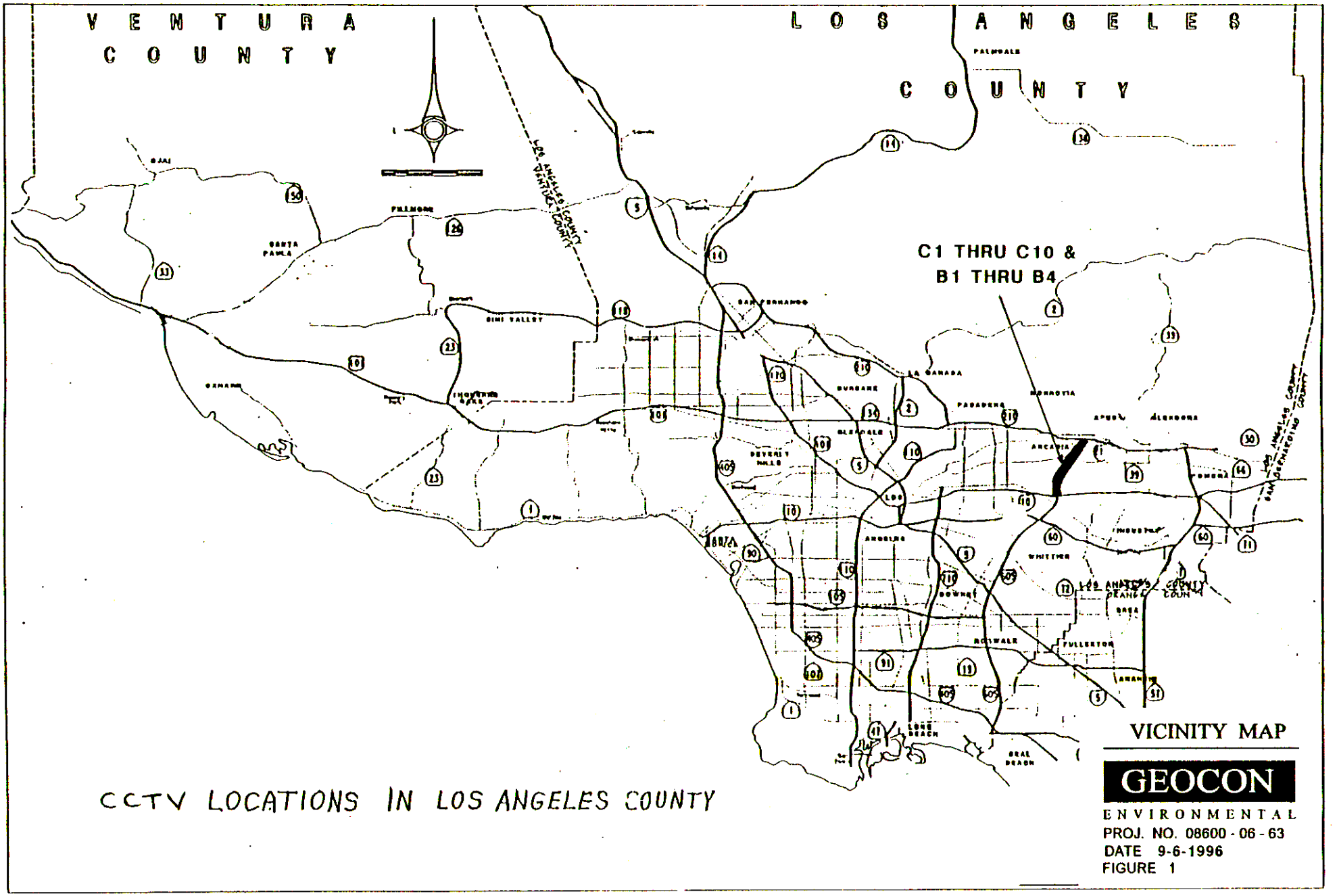
Prior to initiation of the proposed on-site construction activities, it is recommended that Caltrans notify retained subcontractors performing the construction activities that detectable concentrations of lead are present at the site. Necessary health and safety measures should be taken to minimize potential expose to lead.

REPORT LIMITATIONS

This report has been prepared exclusively for Caltrans. The information obtained is only relevant for the dates of the records reviewed or as of the date of the latest site visit. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

The Client should recognize that this report is not a comprehensive site characterization and should not be construed as such. The DTSC or Los Angeles County HMMD may require additional soil sampling. The findings and conclusions as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein.

Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of the report is implied within the intent of this report or any subsequent reports, correspondence or consultation, either expressed or implied. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.



CCTV LOCATIONS IN LOS ANGELES COUNTY

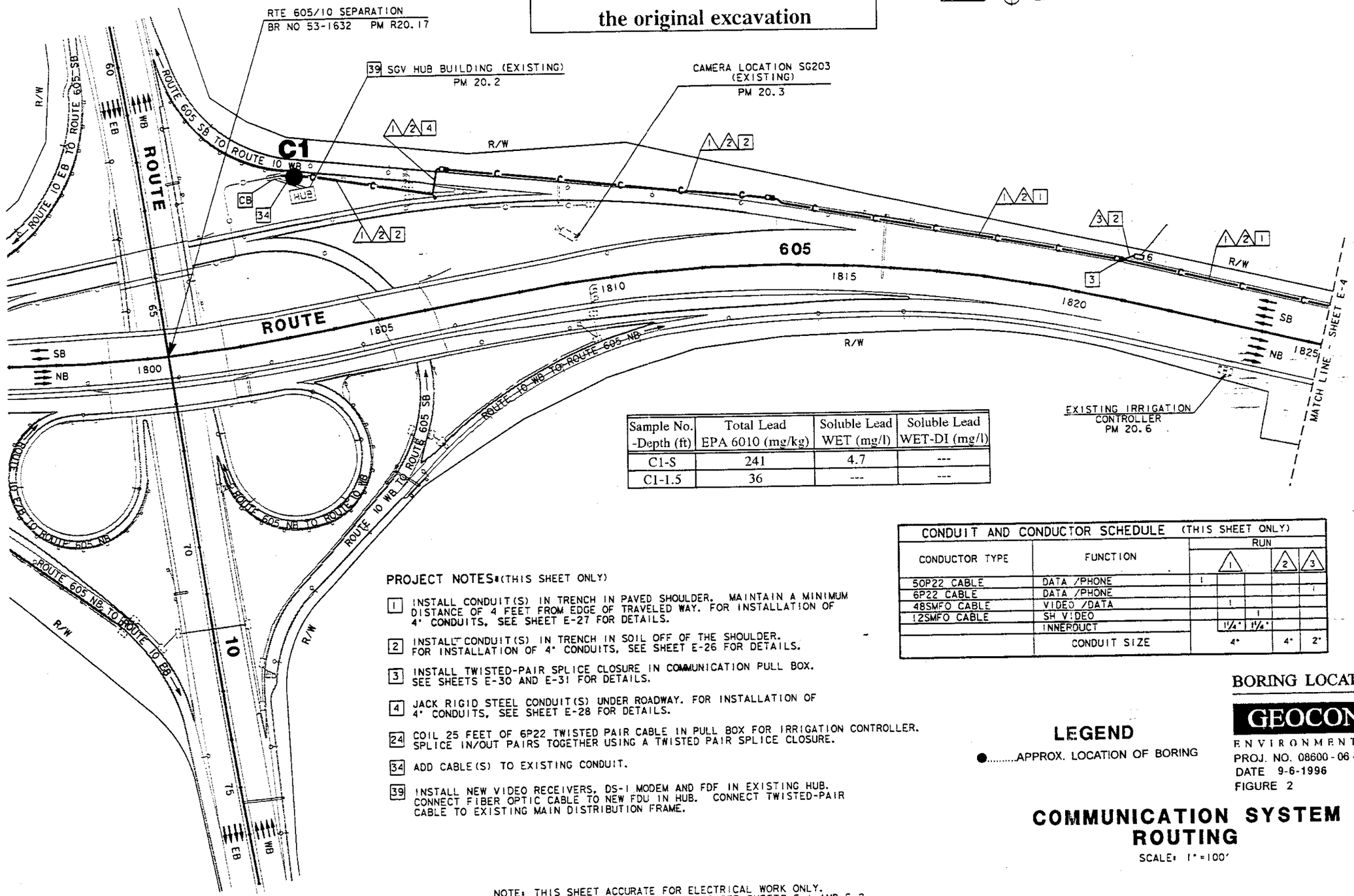
VICINITY MAP

GEOCON
ENVIRONMENTAL

PROJ. NO. 08600 - 06 - 63
DATE 9-6-1996
FIGURE 1

Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation



Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C1-S	241	4.7	---
C1-1.5	36	---	---

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)					
		RUN			
CONDUCTOR TYPE	FUNCTION	1		2	3
50P22 CABLE	DATA /PHONE	1			
6P22 CABLE	DATA /PHONE				1
48SMFO CABLE	VIDEO /DATA		1		
12SMFO CABLE	SH VIDEO		1		
	INNERDUCT		1¼" 1¼"		
	CONDUIT SIZE		4"	4"	2"

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-28 FOR DETAILS.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
34. ADD CABLE(S) TO EXISTING CONDUIT.
39. INSTALL NEW VIDEO RECEIVERS, DS-1 MODEM AND FDF IN EXISTING HUB. CONNECT FIBER OPTIC CABLE TO NEW FDU IN HUB. CONNECT TWISTED-PAIR CABLE TO EXISTING MAIN DISTRIBUTION FRAME.

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 2

COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-3

DATE	REVISED BY	DATE	REVISED
2/96			
2/96			

CALCULATED/DESIGNED BY: DL
CHECKED BY: TP

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

LAST REVISION 00-00-00 | TIME PLOTTED => $$$$$$$SYTIME$$$$$$$

FORM DC-OE-92-PF (REV. 3/86)

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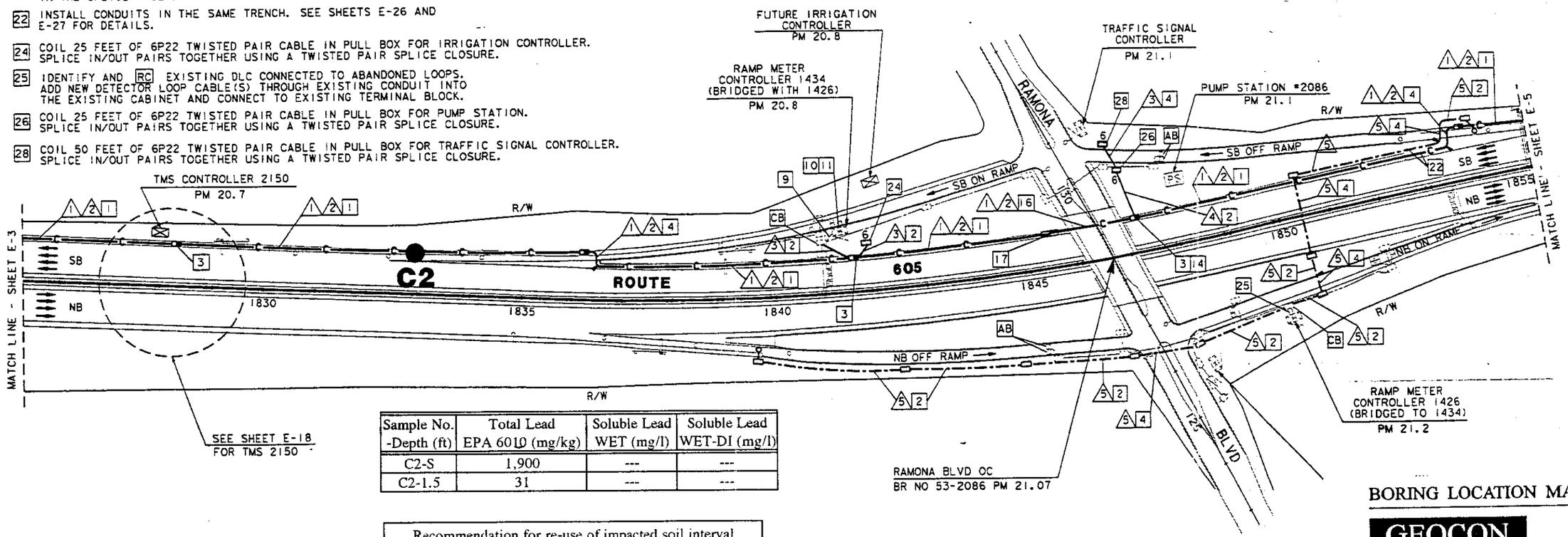
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-28 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-33 AND E-36 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND OBTAINING APPROVAL FROM THE ENGINEER.
14. INSTALL COMMUNICATION PULL BOX APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE.
16. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.
17. INSTALL SPLICE VAULT APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE. WITHOUT TWISTED PAIR AND FIBER OPTIC SPLICE CLOSURES. FIGURE EIGHT 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-26 AND E-27 FOR DETAILS.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
25. IDENTIFY AND RC EXISTING DLC CONNECTED TO ABANDONED LOOPS. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
26. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR PUMP STATION. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
28. COIL 50 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2	RUN 3	RUN 4	RUN 5
50P22 CABLE	DATA /PHONE	1						
6P22 CABLE	DATA /PHONE					1	2	
48SMFO CABLE	VIDEO /DATA		1					
12SMFO CABLE	SH VIDEO			1				
DLC	RAMP COUNT							1
	INNERDUCT		1 1/4"	1 1/4"				
	CONDUIT SIZE		4"		4"	2"	2"	2"



Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C2-S	1,900	---	---
C2-1.5	31	---	---

Recommendation for re-use of impacted soil interval along the conduit trench excavation
Use the soil as backfill in the original excavation

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 3

LEGEND

●.....APPROX. LOCATION OF BORING

LOOP DETECTOR, TMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-4

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DATE	REVISED BY	DATE	REVISED
2/96		2/96	

CALCULATED/DESIGNED BY: DL — CHECKED BY: TP

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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USERNAME => $$$$$$$USER$$$$$$
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CU 07396 | EA 120921

LAST REVISION 00-00-00 | TIME PLOTTED => $$$$$$$SYTIME$$$$$$

FORM DC-OE-92-PF (REV. 3/88)

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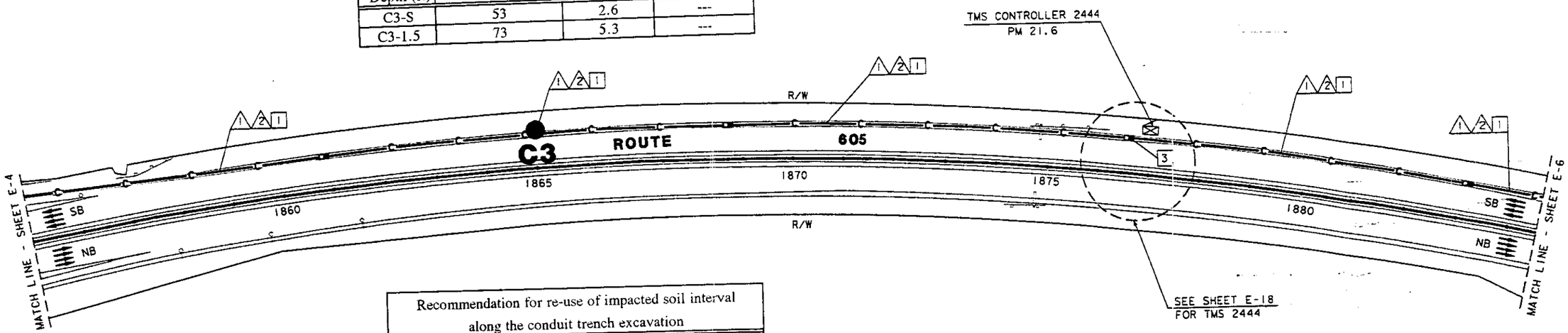
CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2
50P22 CABLE	DATA /PHONE	1		
48SMFO CABLE	VIDEO /DATA		1	
12SMFO CABLE	SH VIDEO		1	
	INNERDUCT		1½"	1½"
	CONDUIT SIZE		4"	4"

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C3-S	53	2.6	---
C3-1.5	73	5.3	---



Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600 - 06 - 63
DATE 9-6-1996
FIGURE 4

LEGEND

●.....APPROX. LOCATION OF BORING

TMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-5

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DESIGN OVERSIGHT: PAT SULLIVAN

CALCULATED/DESIGNED BY: DL — DATE 2/96
CHECKED BY: TP — 2/96

REVISED BY — DATE REVISED

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FORM DC-OE-92-PF (REV. 3/88)

LAST REVISION 11HF PLOTTED => $$$$$$CYTIME$$$$$$

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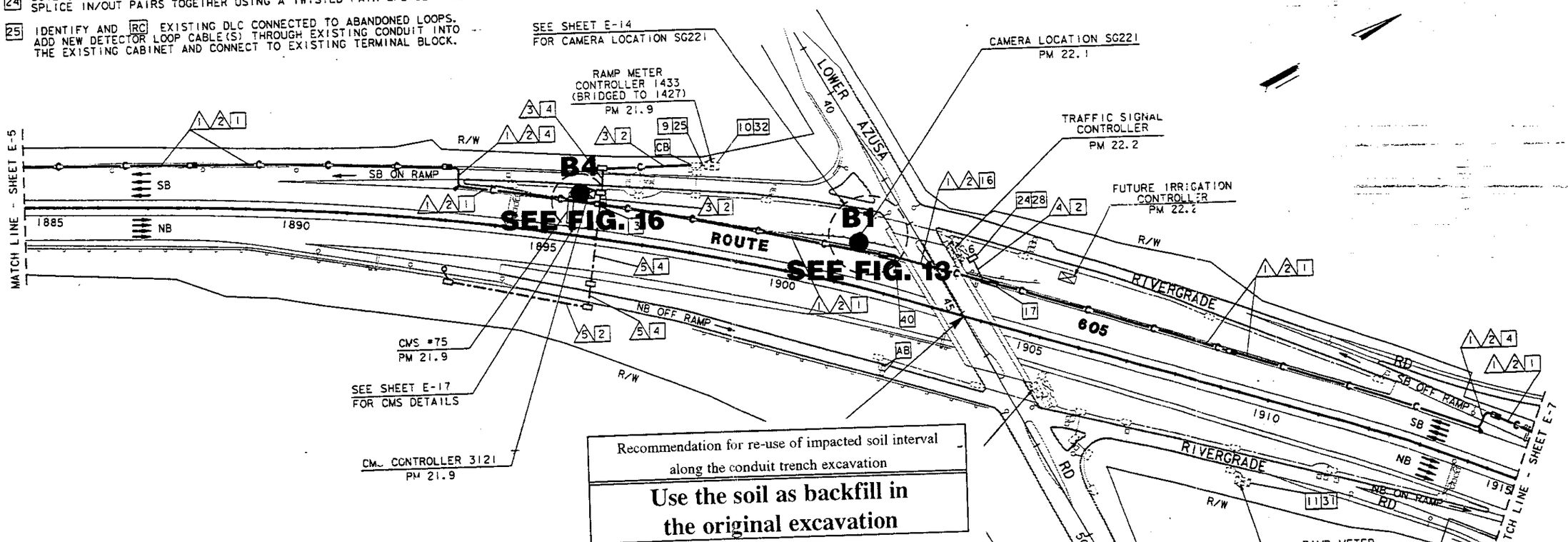
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-28 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-33 AND E-36 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND OBTAINING APPROVAL FROM THE ENGINEER.
16. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.
17. INSTALL SPLICE VAULT APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE, WITHOUT FIBER OPTIC SPLICE CLOSURES. FIGURE EIGHT 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
25. IDENTIFY AND RC EXISTING DLC CONNECTED TO ABANDONED LOOPS. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. COIL 50 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
31. REWIRE EXISTING TELEPHONE BRIDGE. CONNECT EXISTING COMMUNICATION CABLE FROM CONTROLLER 1433 TO BRIDGE INPUT. CONNECT CONTROLLER 1427 TO BRIDGE OUTPUT.
32. CONNECT EXISTING COMMUNICATION CABLE FROM CONTROLLER 1427 TO OUTPUT OF NEW BRIDGE IN CONTROLLER 1433.
40. INSTALL SPLICE VAULT APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2	RUN 3	RUN 4	RUN 5
50P22 CABLE	DATA /PHONE	1				1	2	
6P22 CABLE	DATA /PHONE		1					
48SMFO CABLE	VIDEO /DATA			1				
12SMFO CABLE	SH VIDEO					1		1
DLC	RAMP COUNT							
	INNERDUCT		1¼"	1¼"				
	CONDUIT SIZE	4"			4"	2"	2"	2"



Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 5

LEGEND

● .....APPROX. LOCATION OF BORING

LOOP DETECTOR, CCTV, CMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-6

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DATE	DL	REVISED BY
2/96	TP	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
PAT SULLIVAN

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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CU 07396

EA 120921

FORM DC-OE-92-PF (REV. 3/88)

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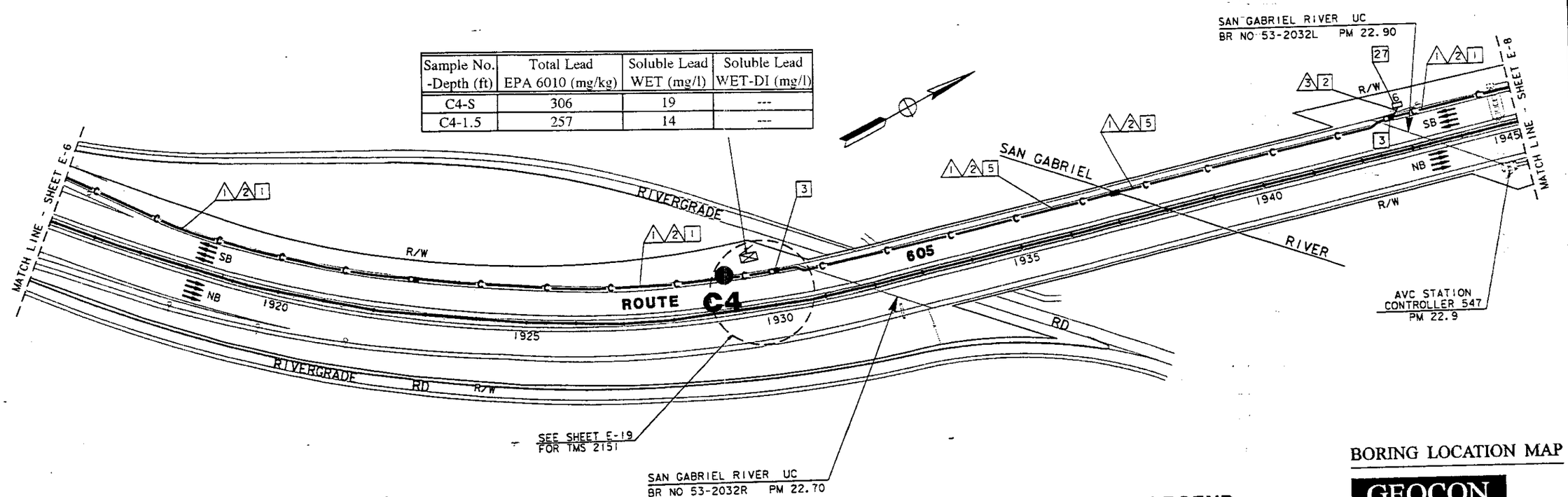
TIME PLOTTED => $$$$$$$SYTIME$$$$$$$

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)					
CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2	RUN 3
50P22 CABLE	DATA /PHONE	1			1
6P22 CABLE	DATA /PHONE				
48SMFO CABLE	VIDEO /DATA	1			
12SMFO CABLE	SH VIDEO		1		
	INNERDUCT	1¼"	1¼"		
	CONDUIT SIZE	4"		4"	2"

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-1 TO C-5 FOR DETAILS.
27. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR AVC. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C4-S	306	19	---
C4-1.5	257	14	---



Recommendation for re-use of impacted soil interval along the conduit trench excavation
Use the soil as backfill in the original excavation

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 6

LEGEND

●.....APPROX. LOCATION OF BORING

TMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-7

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

DESIGN OVERSIGHT: PAT SULLIVAN
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CHECKED BY: TP | 2/96 | DATE REVISED
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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FORM DC-OE-92-PF (REV. 3/88)

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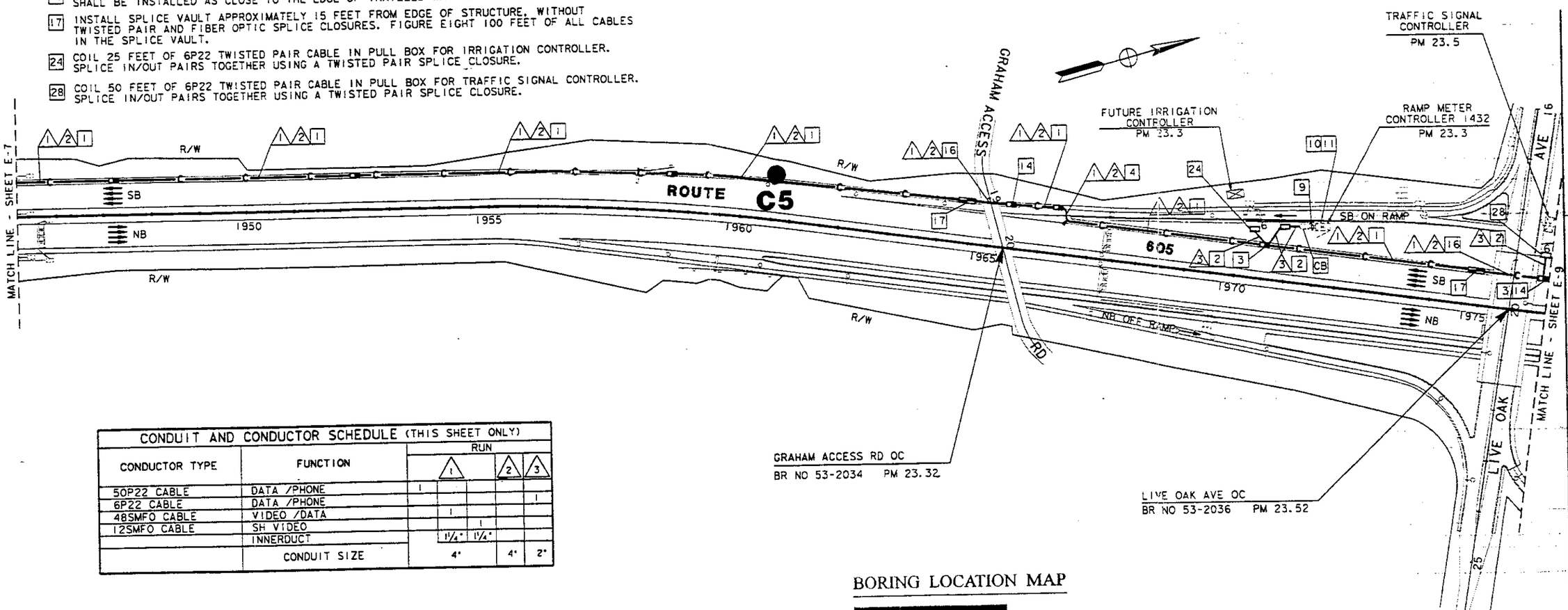
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-28 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-33 AND E-36 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND OBTAINING APPROVAL FROM THE ENGINEER.
14. INSTALL COMMUNICATION PULL BOX APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE.
16. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.
17. INSTALL SPLICE VAULT APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE. WITHOUT TWISTED PAIR AND FIBER OPTIC SPLICE CLOSURES. FIGURE EIGHT 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
28. COIL 50 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C5-S	223	23	---
C5-1.5	234	18	---

Recommendation for re-use of impacted soil interval along the conduit trench excavation
Use the soil as backfill in the original excavation



CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)				
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3
50P22 CABLE	DATA /PHONE	1		
6P22 CABLE	DATA /PHONE			1
48SMFO CABLE	VIDEO /DATA	1		
12SMFO CABLE	SH VIDEO		1	
	INNERDUCT	1¼" 1¼"		
	CONDUIT SIZE	4"	4"	2"

BORING LOCATION MAP

LEGEND

●.....APPROX. LOCATION OF BORING

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 7

COMMUNICATION SYSTEM ROUTING
SCALE: 1"=100'

E-8

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DATE	REVISED BY	DATE	REVISED
2/96		2/96	

CALCULATED/ DESIGNED BY	DL	CHECKED BY	TP

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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CU 07396 | EA 120921

FORM DC-OE-92-PF (REV. 3/88)

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TIME PLOTTED => $$$$$$$SYTIME$$$$$$$

LAST REVISION 00-00-00

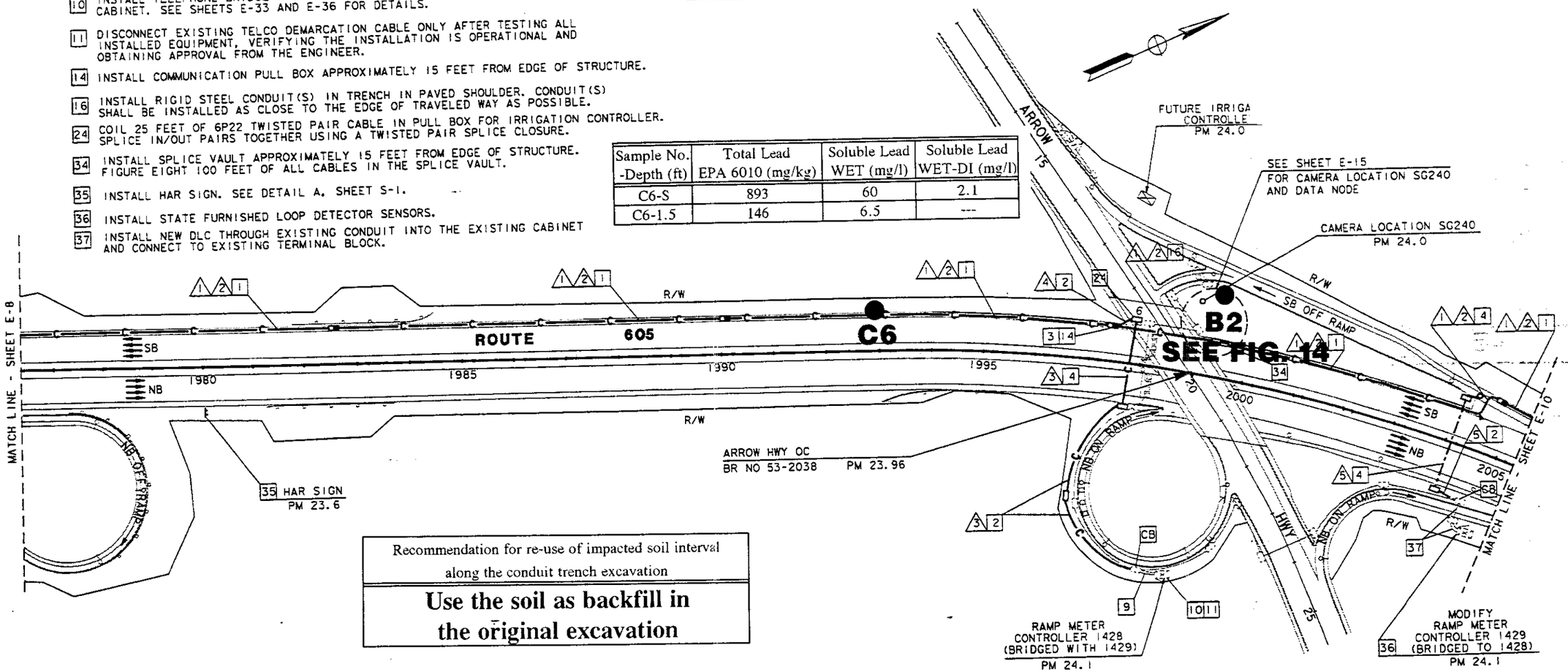
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS. SEE SHEET E-28 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-33 AND E-36 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND OBTAINING APPROVAL FROM THE ENGINEER.
14. INSTALL COMMUNICATION PULL BOX APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE.
16. INSTALL RIGID STEEL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.
34. INSTALL SPLICE VAULT APPROXIMATELY 15 FEET FROM EDGE OF STRUCTURE. FIGURE EIGHT 100 FEET OF ALL CABLES IN THE SPLICE VAULT.
35. INSTALL HAR SIGN. SEE DETAIL A, SHEET S-1.
36. INSTALL STATE FURNISHED LOOP DETECTOR SENSORS.
37. INSTALL NEW DLC THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2	RUN 3	RUN 4	RUN 5
50P22 CABLE	DATA /PHONE	1					
6P22 CABLE	DATA /PHONE				1	2	
48SMFO CABLE	VIDEO /DATA		1				
12SMFO CABLE	SH VIDEO			1			
DLC	RAMP COUNT						1
	INNERDUCT	1 1/4"	1 1/4"				
	CONDUIT SIZE	4"		4"	2"	2"	2"

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C6-S	893	60	2.1
C6-1.5	146	6.5	---



Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation

BORING LOCATION MAP

GEOCON ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 8

LEGEND

●.....APPROX. LOCATION OF BORING

LOOP DETECTOR, CCTV, HAR SIGN AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-9

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DATE	REVISED BY	DATE REVISED
DL 2/96	TP 2/96	

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DESIGN OVERSIGHT: PAT SULLIVAN

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CU 07396 | EA 120921

LAST REVISION 00-00-00 | TIME PLOTTED -> $$$$$$$$SYTIME$$$$$$$

FORM DC-OE-92-PF (REV. 3/88)

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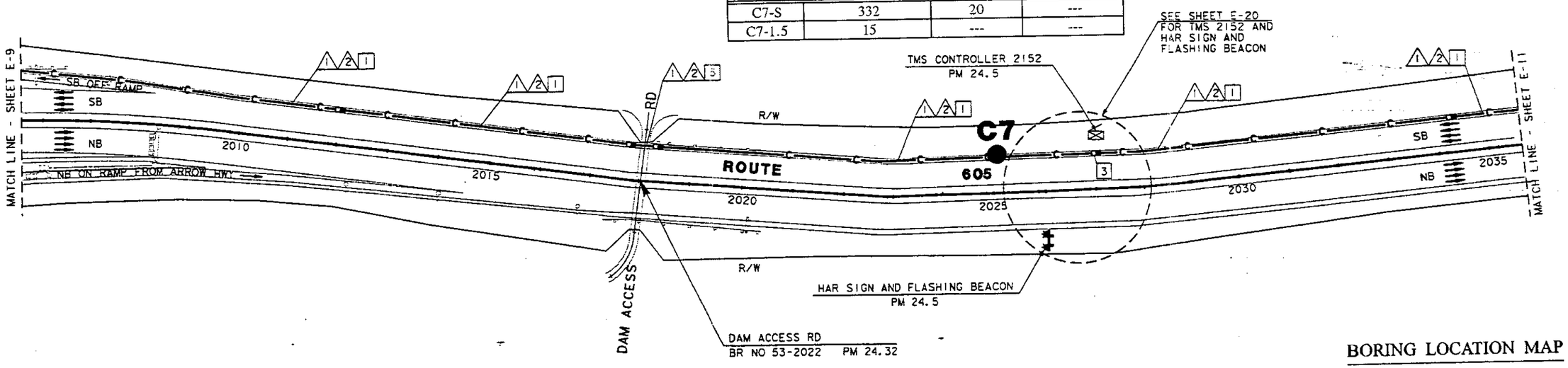
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2
50P22 CABLE	DATA /PHONE	1	
48SMFO CABLE	VIDEO /DATA	1	
12SMFO CABLE	SH VIDEO	1	1
	INNERDUCT	1¼"	1¼"
	CONDUIT SIZE	4"	4"

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-1 TO C-5 FOR DETAILS.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C7-S	332	20	---
C7-1.5	15	---	---



Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation

LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 9

TMS, HAR SIGN AND FLASHING BEACON, AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-10

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY	DATE
DL	2/96
CHECKED BY	
TP	2/96

DESIGN OVERSIGHT: PAT SULLIVAN

XXXXXXXXXXXXXXXXXXXXXXXXXX
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

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USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

LAST REVISION 00-00-00 | TIME PLOTTED => $$$$$$$$SYTIME$$$$$$

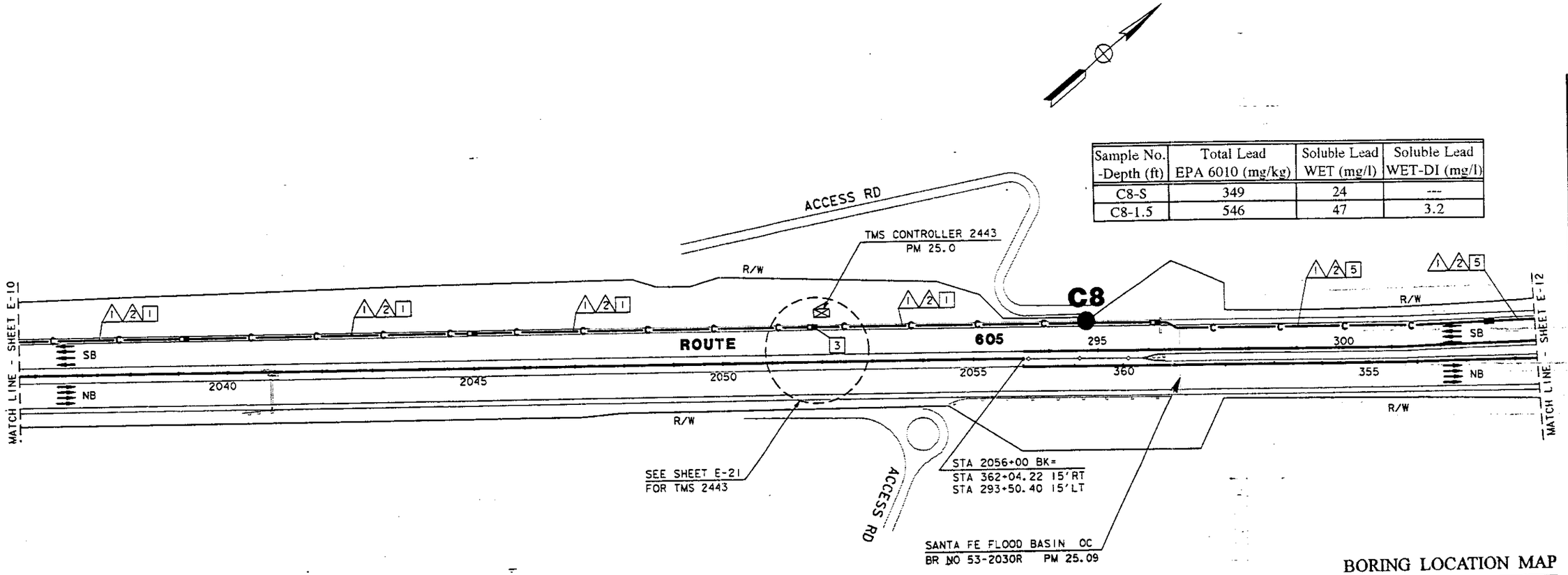
):\data\841007\se\ustn\3\12092u10. Feb. 5, 1996 15:51:18

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)				
CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2
50P22 CABLE	DATA /PHONE	1		
48SMFO CABLE	VIDEO /DATA		1	
12SMFO CABLE	SH VIDEO			1
	INNERDUCT		1¼"	1¼"
	CONDUIT SIZE		4"	4"

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-1 TO C-5 FOR DETAILS.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C8-S	349	24	---
C8-1.5	546	47	3.2



Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation

LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600 - 06 - 63
DATE 9-6-1996
FIGURE 10

TMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-11

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$$

CU 07396 | EA 120921

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FORM DC-OE-92-PF (REV. 3/88)

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2	RUN 3		RUN 4
50P22 CABLE	DATA /PHONE	1			1	1	
6P22 CABLE	DATA /PHONE				1		1
48SMFO CABLE	VIDEO /DATA		1			1	
12SMFO CABLE	SH VIDEO		1			1	
	INNERDUCT		1¼" 1¼"				
	CONDUIT SIZE		4"	4"	3"	3"	2"

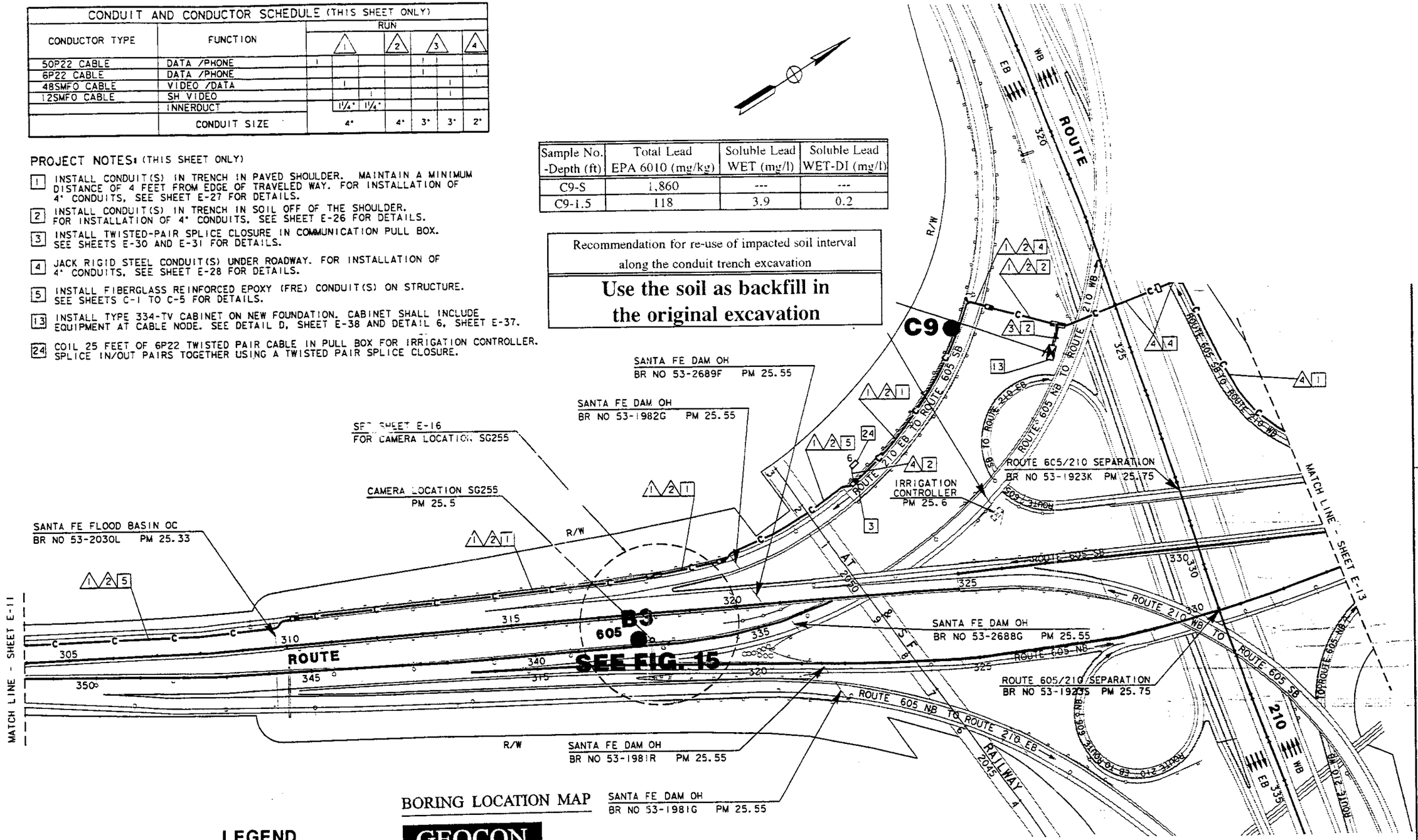
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-26 FOR DETAILS.
3. INSTALL TWISTED-PAIR SPLICE CLOSURE IN COMMUNICATION PULL BOX. SEE SHEETS E-30 AND E-31 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-28 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-1 TO C-5 FOR DETAILS.
13. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT CABLE NODE. SEE DETAIL D, SHEET E-38 AND DETAIL 6, SHEET E-37.
24. COIL 25 FEET OF 6P22 TWISTED PAIR CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A TWISTED PAIR SPLICE CLOSURE.

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C9-S	1,860	---	---
C9-1.5	118	3.9	0.2

Recommendation for re-use of impacted soil interval along the conduit trench excavation

Use the soil as backfill in the original excavation



BORING LOCATION MAP

LEGEND

●.....APPROX. LOCATION OF BORING

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 11

CCTV, CABLE NODE AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

E-12

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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DESIGN OVERSIGHT: PAT SULLIVAN
CALCULATED/DESIGNED BY: DL
CHECKED BY: TP
DATE: 2/96
REVISED BY
DATE REVISED
LAST REVISION 00-00-00
TIME PLOTTED => $$$$$$$SYTIME$$$$$$$

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396
EA 120921

FORM DC-OE-92-PF (REV. 3/88)
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PROJECT NOTES: (THIS SHEET ONLY)

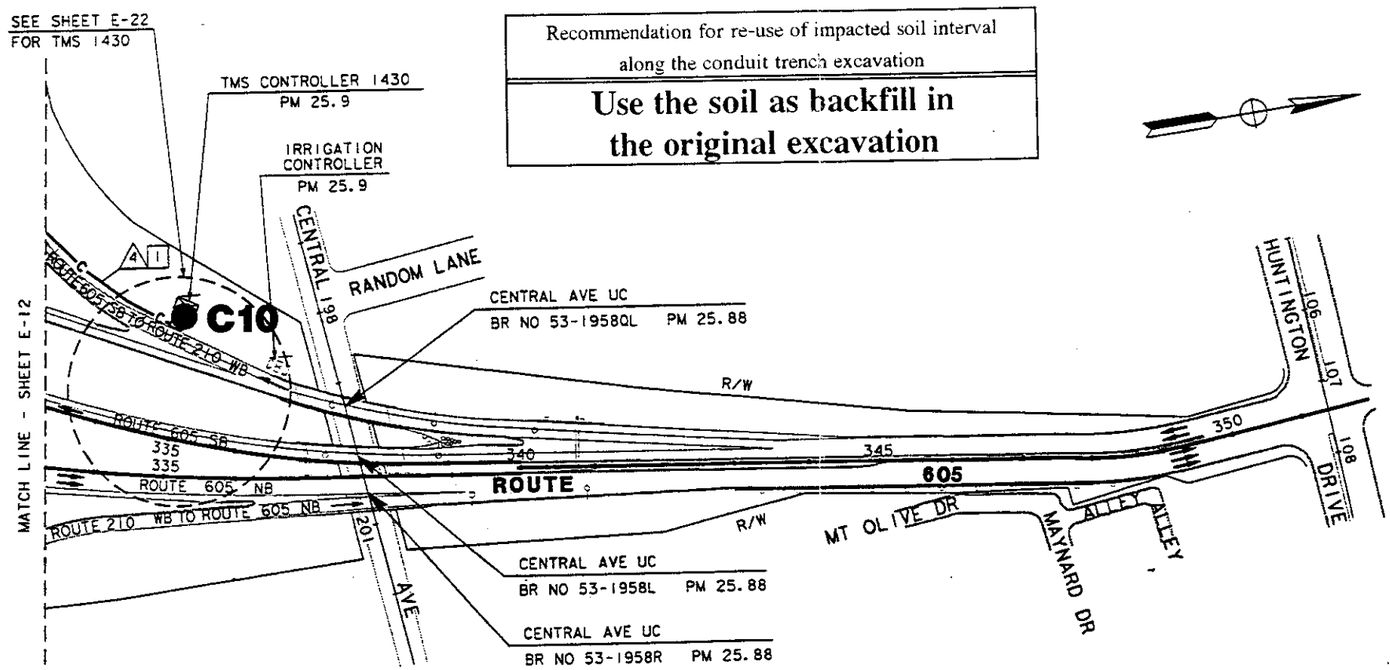
1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELED WAY. FOR INSTALLATION OF 4" CONDUITS, SEE SHEET E-27 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 4
6P22 CABLE	DATA /PHONE	1
	CONDUIT SIZE	2"

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
C10-S	104	2.1	---
C10-1.5	57	0.55	---

Recommendation for re-use of impacted soil interval along the conduit trench excavation
Use the soil as backfill in the original excavation



LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 12

TMS AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-13

NOTE: THIS SHEET ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2.

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

DESIGN OVERSIGHT: PAT SULLIVAN

CALCULATED/DESIGNED BY: DL | DATE 2/96 | REVISED BY
CHECKED BY: TP | 2/96 | DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | TIME PLOTTED => $$$$$$$$SYTIME$$$$$$$

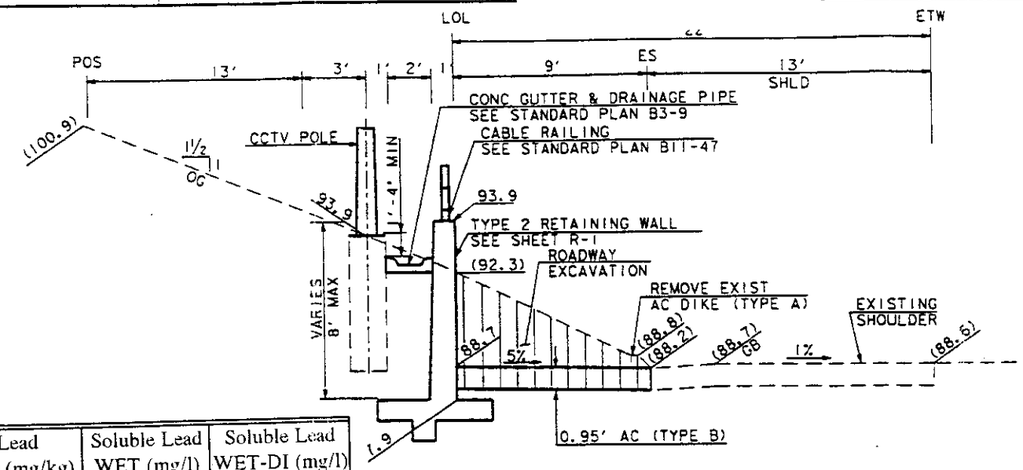
FORM DC-OE-92-PF (REV. 3/88)

j:\data\B41007\se\ustn\3\12092u13. Feb. 5, 1996 15:53:31

NOTES: (THIS SHEET ONLY)

1. THE ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON AN ASSUMED DATUM.
2. ORDER OF WORK - ALL NEW CONDUIT SHALL BE INSTALLED BEFORE AC PULLOUT AREA AND CABINET PAD ARE CONSTRUCTED.
3. CONTRACTOR TO VERIFY SITE CONDITION PRIOR TO CONSTRUCTION.
4. RELOCATE ALL EXISTING CONDUITS AFFECTED BY SITE CONSTRUCTION OR REMOVE AS DETERMINED BY ENGINEER.

BENCH MARK
100 FOOT ELEVATION ASSUMED (1995).
BENCH MARK IS THE TOP OF THE NORTH EAST BOLT AT THE BASE OF EXISTING BRIDGE SIGN # 22161.



SECTION A-A
NO SCALE

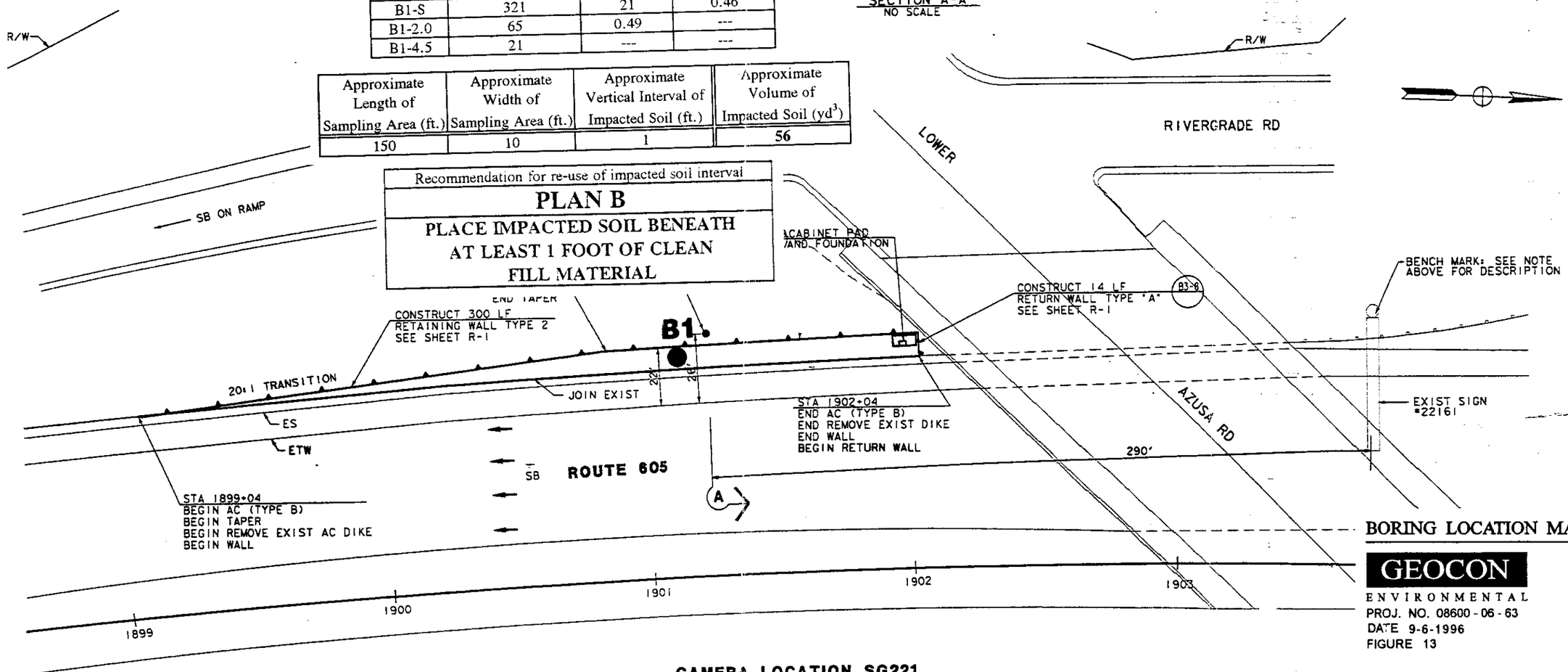
Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
B1-S	321	21	0.46
B1-2.0	65	0.49	---
B1-4.5	21	---	---

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Vertical Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (yd^3)
150	10	1	56

Recommendation for re-use of impacted soil interval

PLAN B

PLACE IMPACTED SOIL BENEATH AT LEAST 1 FOOT OF CLEAN FILL MATERIAL



CAMERA LOCATION SG221
ROUTE 605, LOWER AZUSA ROAD

LEGEND
●.....APPROX. LOCATION OF BORING

LAYOUT
SCALE: 1" = 20'

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 13

L-1

DATE	REVISED BY	DATE REVISED
2/96	JSJ	SAW 2/96

CALCULATED/DESIGNED BY — CHECKED BY

DESIGN OVERSIGHT — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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LST REVISION 00-00-00 — TIME PLOTTED => $$$$$$$SYTIME$$$$$$

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

FORM DC-OE-92-PF (REV. 3/88)

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NOTES: (THIS SHEET ONLY)

1. THE ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON AN ASSUMED DATUM.
2. ORDER OF WORK - ALL NEW CONDUIT SHALL BE INSTALLED BEFORE AC PULLOUT AREA AND CABINET PAD ARE CONSTRUCTED.
3. CONTRACTOR TO VERIFY SITE CONDITION PRIOR TO CONSTRUCTION.
4. RELOCATE ALL EXISTING CONDUITS AFFECTED BY SITE CONSTRUCTION OR REMOVE AS DETERMINED BY ENGINEER.

BENCH MARK:

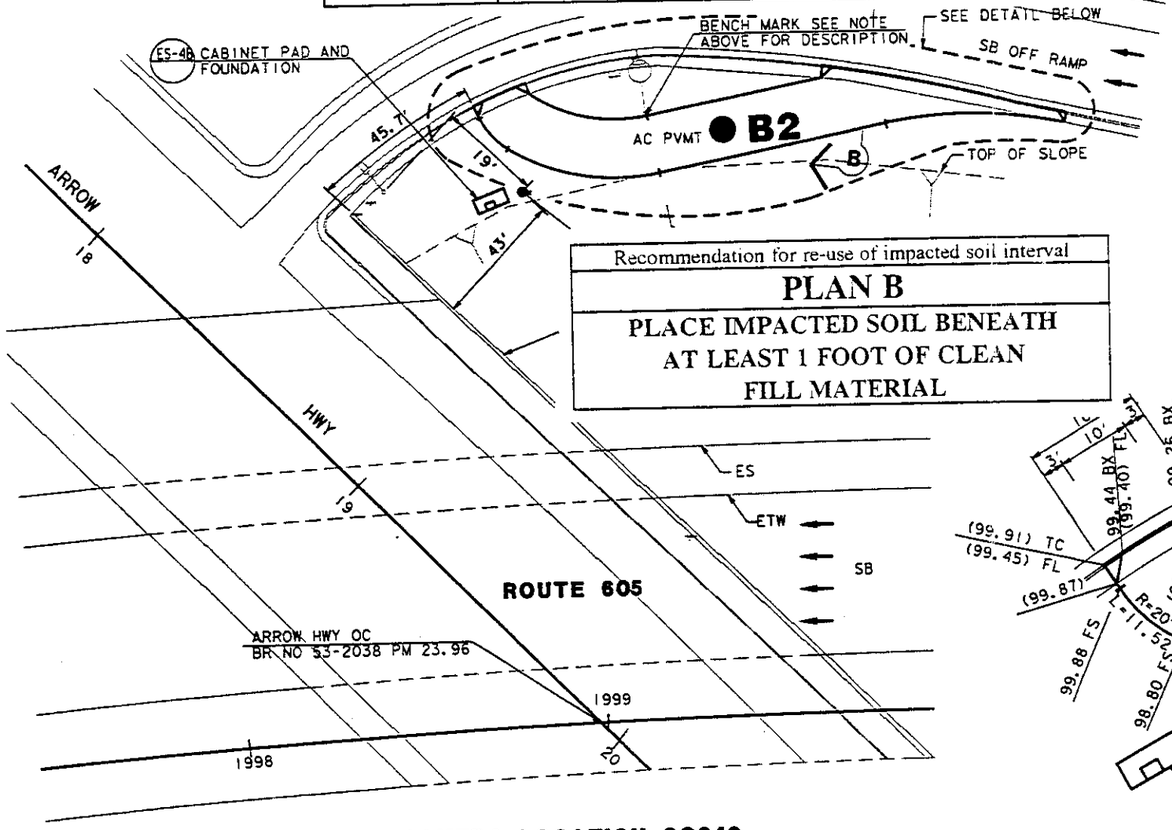
100 FOOT ELEVATION ASSUMED (1994). BENCH MARK IS THE TOP OF THE NORTH EASTERLY BOLT AT THE BASE OF EXISTING ELECTROLIER.

ABBREVIATIONS:

BX- BOTTOM OF X'S
FS-FINISHED SURFACE
LG-LIP OF GUTTER

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
B2-S	219	10	---
B2-1.5	36	---	---

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Vertical Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (yd^3)
65	16	0.75	29

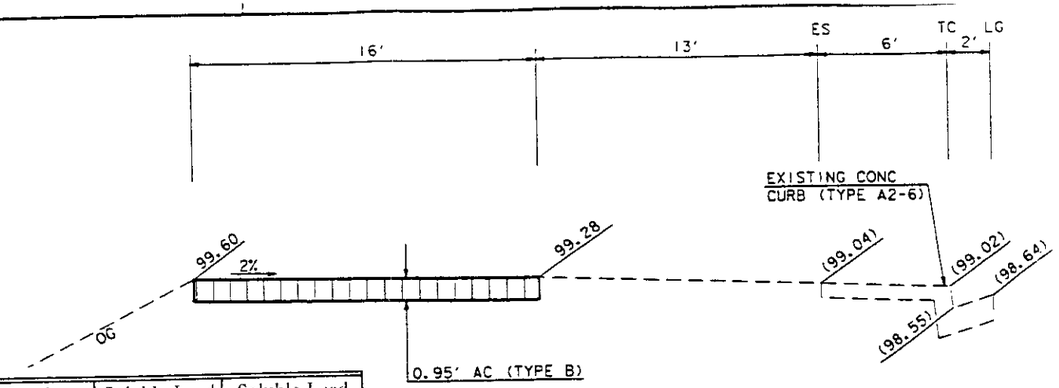


Recommendation for re-use of impacted soil interval

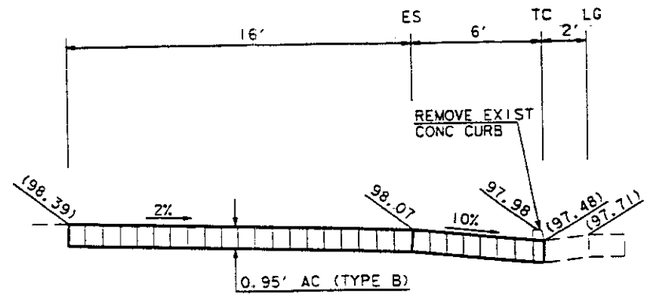
PLAN B

PLACE IMPACTED SOIL BENEATH AT LEAST 1 FOOT OF CLEAN FILL MATERIAL

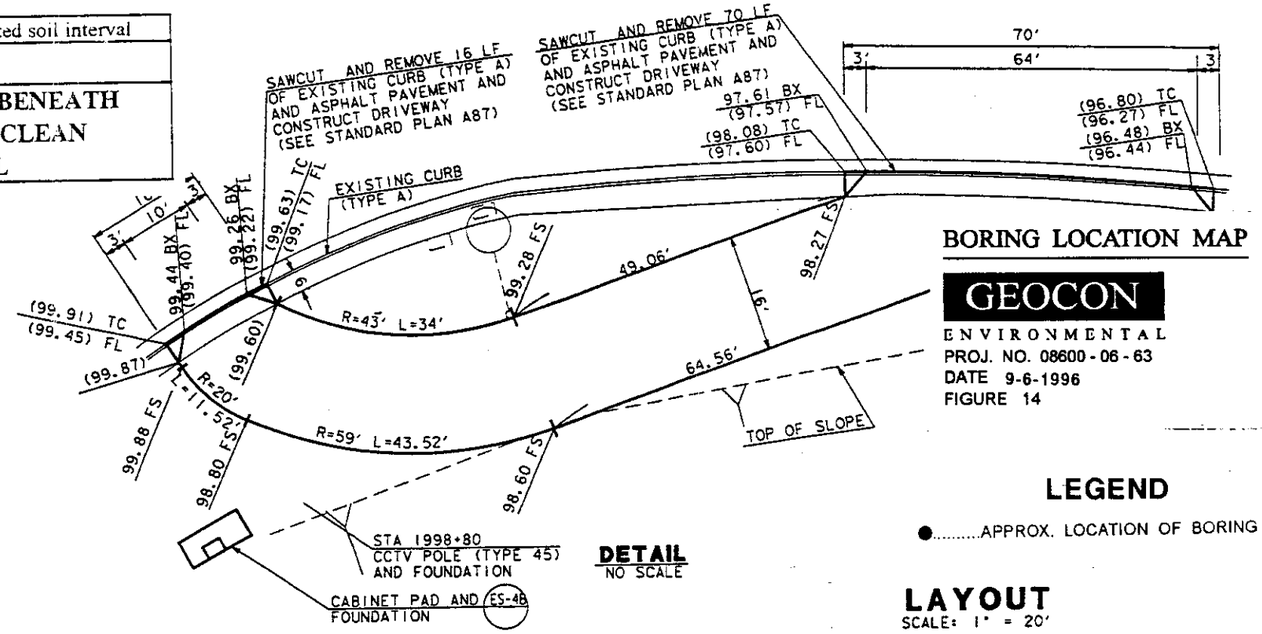
CAMERA LOCATION SG240
ROUTE 605, NORTH OF ARROW HWY



SECTION A-A
NO SCALE



SECTION B-B
NO SCALE



DETAIL
NO SCALE

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 14

LEGEND

●.....APPROX. LOCATION OF BORING

LAYOUT
SCALE: 1" = 20'

L-2

DATE	REVISED BY	DATE	REVISED BY
2/96	JSJ	2/96	SAW

CALCULATED/DESIGNED BY — CHECKED BY

DESIGN OVERSIGHT — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

LAST REVISION 00-00-00

TIME PLOTTED => $$$$$$$SYTIME$$$$$$$

FORM DC-OE-92-PF (REV. 3/88)

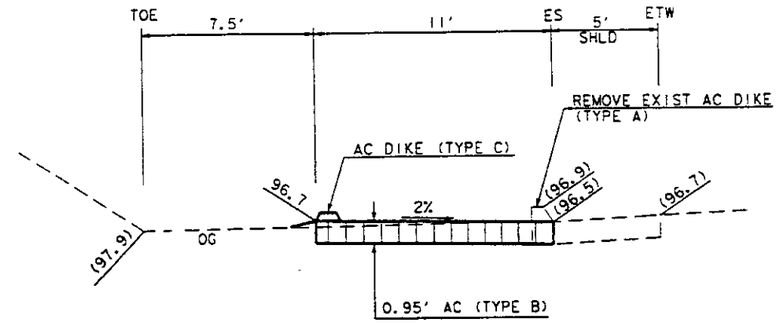
):\data\841007\se\ustn\3\12092e02. Feb. 8, 1996 19:08:13

NOTES: (THIS SHEET ONLY)

1. THE ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON AN ASSUMED DATUM.
2. ORDER OF WORK - ALL NEW CONDUITS SHALL BE INSTALLED BEFORE AC PULLOUT AREA AND CABINET PAD ARE CONSTRUCTED.
3. CONTRACTOR TO VERIFY SITE CONDITION PRIOR TO CONSTRUCTION.
4. RELOCATE ALL EXISTING CONDUITS AFFECTED BY SITE CONSTRUCTION OR REMOVE AS DETERMINED BY ENGINEER.

BENCH MARK:

100 FOOT ELEVATION ASSUMED (1995) BENCH MARK IS THE TOP OF THE NORTH WEST BOLT AT THE BASE OF EXISTING SIGN BRIDGE.



SECTION A-A
NO SCALE

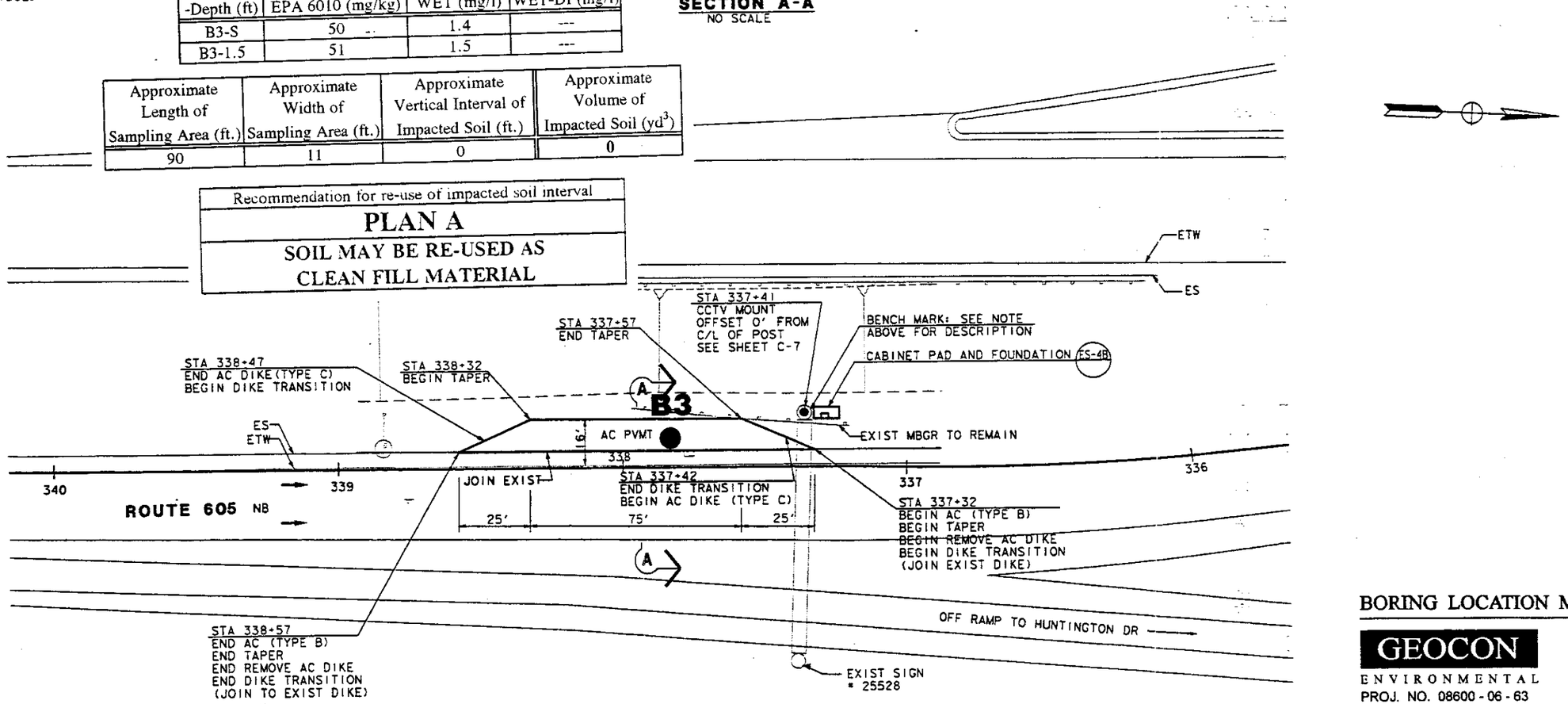
Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
B3-S	50	1.4	---
B3-1.5	51	1.5	---

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Vertical Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (yd^3)
90	11	0	0

Recommendation for re-use of impacted soil interval

PLAN A

SOIL MAY BE RE-USED AS CLEAN FILL MATERIAL



CAMERA LOCATION SG255
ROUTE 605, SOUTH OF I-210 INTERCHANGE

LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 15

LAYOUT
SCALE: 1" = 20'

L-3

DATE	REVISED BY	DATE REVISED
2/96	JSJ	2/96	SAW

CALCULATED/DESIGNED BY | CHECKED BY

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

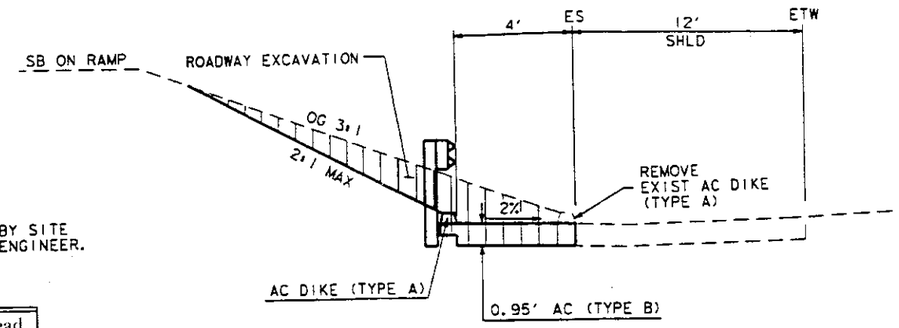
CU 07396 | EA 120921

TIME PLOTTED => $$$$$$$SYTIME$$$$$$$
LST REVISION 00-00-00

FORM DC-OE-92-PF (REV. 3/88)

NOTES: (THIS SHEET ONLY)

1. ORDER OF WORK - ALL NEW CONDUITS SHALL BE INSTALLED BEFORE AC PULLOUT AREA AND CABINET PAD ARE CONSTRUCTED.
2. CONTRACTOR TO VERIFY SITE CONDITION PRIOR TO CONSTRUCTION.
3. RELOCATE ALL EXISTING CONDUITS AFFECTED BY SITE CONSTRUCTION OR REMOVE AS DETERMINED BY ENGINEER.



SECTION A-A
NO SCALE

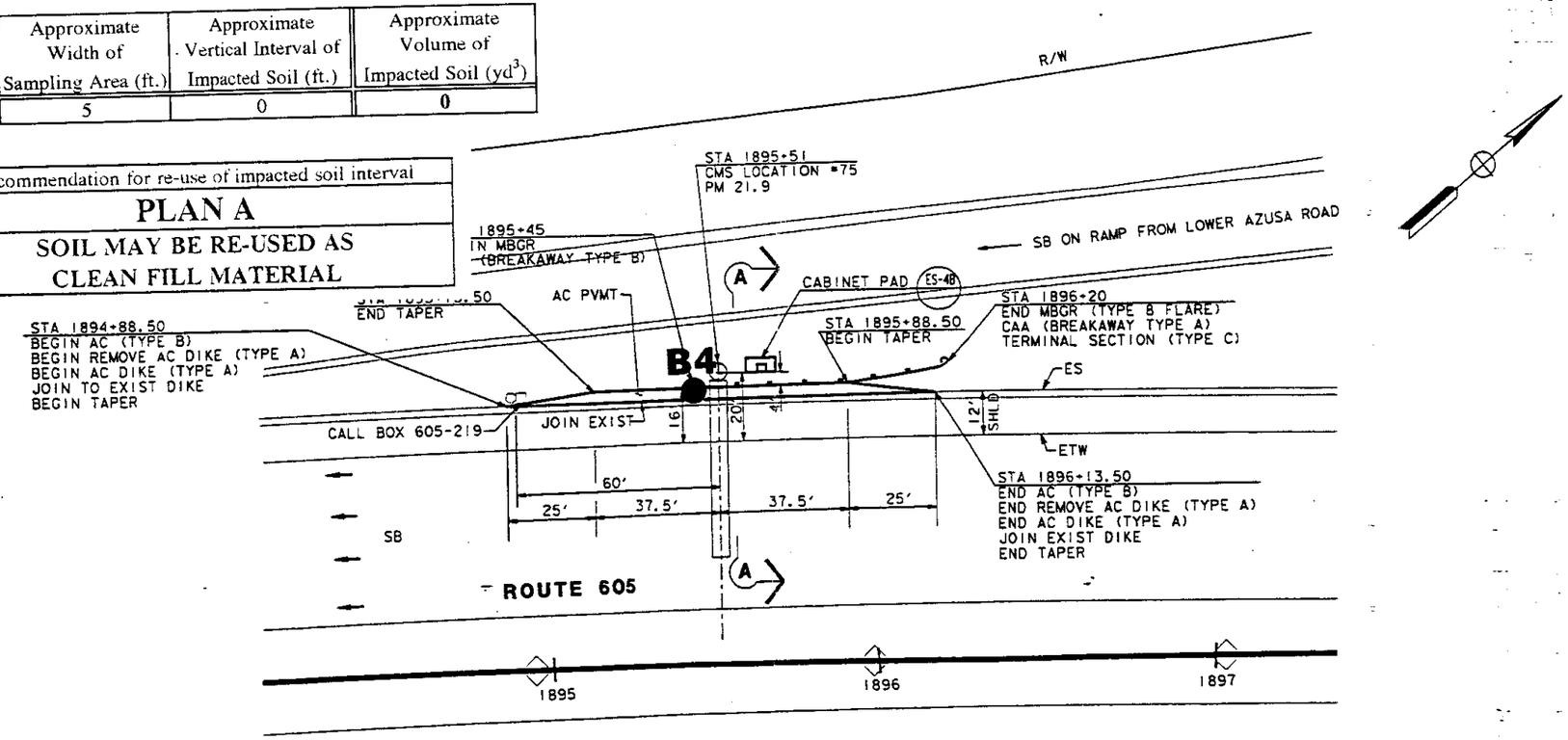
Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
B4-S	345	1.7	---
B4-1.5	72	1.8	---

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Vertical Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (yd^3)
90	5	0	0

Recommendation for re-use of impacted soil interval

PLAN A

SOIL MAY BE RE-USED AS CLEAN FILL MATERIAL



CMS #75, LOCATION 3121
ROUTE 605, SOUTH OF LOWER AZUSA RD

LEGEND

●.....APPROX. LOCATION OF BORING

BORING LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-63
DATE 9-6-1996
FIGURE 16

LAYOUT
SCALE: 1" = 20'

L-4

DATE	REVISED BY	DATE REVISED
2/96	JSJ	SAW 2/96

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DESIGN OVERSIGHT
PAT SULLIVAN

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USERNAME => $$$$$$USER$$$$$$
DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07396 | EA 120921

FORM DC-OE-92-PF (REV. 3/88)

TIME PLOTTED => $$$$$$$$SYTIME$$$$$$$$

Project No. 08600-06-63
September 6, 1996

TABLE I

SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS

Sample No. -Depth (ft)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)	Flat (f) or Sloping (s)	Distance from Edge of Pavement (ft)	General Wind Direction
B1-S	321	21	0.46	s	5	west
B1-2.0	65	0.49	---	s	5	west
B1-4.5	21	---	---	s	5	west
B2-S	219	10	---	s	5	west
B2-1.5	36	---	---	s	5	west
B3-S	50	1.4	---	s	5	west
B3-1.5	51	1.5	---	s	5	west
B4-S	345	1.7	---	s	5	west
B4-1.5	72	1.8	---	s	5	west
C1-S	241	4.7	---	s	5	west
C1-1.5	36	---	---	s	5	west
C2-S	1,900	---	---	s	5	west
C2-1.5	31	---	---	s	5	west
C3-S	53	2.6	---	s	5	west
C3-1.5	73	5.3	---	s	5	west
C4-S	306	19	---	s	5	west
C4-1.5	257	14	---	s	5	west
C5-S	223	23	---	s	5	west
C5-1.5	234	18	---	s	5	west
C6-S	893	60	2.1	s	5	west
C6-1.5	146	6.5	---	s	5	west
C7-S	332	20	---	s	5	west
C7-1.5	15	---	---	s	5	west
C8-S	349	24	---	s	5	west
C8-1.5	546	47	3.2	s	5	west
C9-S	1,860	---	---	s	5	west
C9-1.5	118	3.9	0.2	s	5	west
C10-S	104	2.1	---	s	5	west
C10-1.5	57	0.55	---	s	5	west

Note:
--- = Not analyzed
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
ft = feet

APPENDIX A

APPENDIX A

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 01
HAND-AUGERING PRE-WORK ACTIVITIES

Purpose

The purpose of this SOP is to outline pre-work activities to be performed prior to advancing hand-augered borings at the project site.

Pre-field Activities

1. Conducted a pre-work site visit with Caltrans Contract Manager to inspect work area and excavation sites.

2. Completed Site Visit Checklist with Caltrans Contract Manager.

3. Review proposed borehole locations with Mr. Kanwal Singh as outlined in the Site Plans provided by Caltrans.

4. Record borehole locations on base map and mark excavation locations.

5. Reviewed information and site maps provided by Caltrans.

6. Submitted a Health and Safety Plan to Caltrans Contract Manager for review and approval.

7. Obtained Notice to Proceed from Caltrans Contract manager, countersign and return to Caltrans.

8. Boring permits are not required from environmental agencies for this work.

9. Provided 72 hour notification to Underground Service Alert prior to job site mobilization.

10. Provide notification to Advanced Technology Laboratories.

APPENDIX A

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 11
HAND-AUGERING AND SOIL SAMPLE COLLECTION

Purpose

The purpose of this SOP is to outline procedures and methods to be used to advance hand-augers and collect soil samples for chemical analyses.

Hand-Augering and Soil Sample Collection Procedures

1. Initiated coring using a hand-held, 3-inch diameter stainless steel auger.

2. Advanced borings to initial sample depth of less than or equal to 1-inch below the ground surface (bgs).

3. Collected relatively undisturbed soil samples from the hand-auger and place the soil samples into glass jars supplied by the laboratory.

4. Repeated procedure and collected soil samples at depths as specified in Task Order No. 07-120921-01.

5. At the request of the Caltrans project manager, backfilled the boreholes to surface grade with soil cuttings generated.

6. Cleansed and rinsed sampling equipment prior to the collection of each soil sample by washing the equipment with a trisodium phosphate solution followed by subsequent tap water and deionized water rinses.

APPENDIX A

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 31
SOIL SAMPLE HANDLING AND ANALYTICAL PROCEDURES

Purpose

The purpose of this SOP is to outline procedures and methods to be used to package and transport soil samples to an analytical laboratory.

Soil Sample Handling and Analytical Procedures

1. Soil samples collected from below the ground surface will be retrieved using a stainless steel spade from the hand-auger.

2. After extracting the sample from the auger/trowel, the soil sample will be placed in laboratory supplied glass containers with teflon lined lids.

3. Sample labels will be placed on the outside of the jar to indicate the job name, date, sample number and name of person performing sampling.

4. Each prepared sample jar will be placed in into a cooler for transport to Advanced Technology Laboratory. Blue ice is not required to preserve soil samples.

APPENDIX A

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 41
REPORTING PROCEDURES

Purpose

The purpose of this SOP is to outline the reporting procedures to be implemented to prepare the Site Assessment report.

Reporting Procedures

Reporting procedures will be performed in accordance with contract specifications as outlined in Caltrans Contract 53W202 for Site Assessment reports and the requirements of Caltrans as outlined in Task Order No. 07-120921-01.

APPENDIX B

GEOCON ENVIRONMENTAL CONSULTANTS (GEC)
CALTRANS CONTRACT NO. 53W202
TASK ORDER NO. 07-120921-01
GEC PROJECT 8600-06-63
FIELD PROJECT LOG

Date: 7/2/96 Page ___ of ___

PROJECT NAME: CCTV & CMS IN L.A. & VENTURA COUNTIES	
CALTRANS ONSITE REP: KANWAL SINGH	GEC PROJECT MANAGER: JOEL KLOTH
FIELD ACTIVITY: MOBILIZATION / HAND DIGGING / SOIL SAMPLING / DEMOBILIZATION	BID ITEM NO: 32/33/51 — BID ITEM UNITS:
SUBCONTRACTOR:	BID ITEM UNITS COMP. THIS DATE:

Briefly describe field activities (i.e. soil sampling collection, continuous coring, casing installation, etc.) that verify the number of bid items completed this date.

0600 - 0800 MOBILIZED TO THE SITE (2 hrs) (BID ITEM NO 32)
0900 - 1400 HAND AUGERED 20 BORINGS FOR
A TOTAL OF 49 FEET (BID ITEM 33)
COLLECTED 43 SOIL SAMPLES (BID ITEM 51)
14:00 - 16:00 DEMOBILIZATION BACK TO THE OFFICE (2 hrs) (BID ITEM 32)

PREPARED BY: AK APPROVED BY:

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GEOCON ENVIRONMENTAL CONSULTANTS (GEC)
CALTRANS CONTRACT NO. 53W202
TASK ORDER NO. 07-120921-01
GEC PROJECT NO. 08600-06-03
OFFICE PROJECT LOG

REPORTING DATES: 6/28/96

PROJECT NAME: CCTV & CMS SITES IN L.A. & VENTURA COUNTIES

GEC PROJECT MANAGER: JOEL KLOTH

CALTRANS CONTRACT MANAGER: KANWAL SINGH

DATE	WORK DESCRIPTION	BID ITEM NO.	TIME START	TIME STOP	TOTAL HOURS
6/27	WORKPLAN PREP	004	0800	1200	4
6/27	HEALTH & SAFETY PLAN PREP.	006	1300	1600	3
6/28	WORKPLAN PREP.	004	0900	1100	2
6/28	HEALTH & SAFETY PLAN PREP.	006	0800	0900	1

PREPARED BY:

APPROVED BY:

GEOCON ENVIRONMENTAL CONSULTANTS (GEC)
CALTRANS CONTRACT NO. 53W202
TASK ORDER NO. 07-120921-01
GEC PROJECT NO. 08600-06-63
OFFICE PROJECT LOG

REPORTING DATES: 7/8/96

Page ___ of ___

PROJECT NAME: CCTV & CMS SITES IN L.A. & VENTURA COUNTIES

GEC PROJECT MANAGER: JOEL KLOTH

CALTRANS CONTRACT MANAGER: KANWAL SINGH

DATE	WORK DESCRIPTION	BID ITEM NO.	TIME START	TIME STOP	TOTAL HOURS
6/28/96	UTILITY RESEARCH -	39	15:00	16:00	1 hr
	& SET-UP A SITE MEET W/				
	A UTILITY LOCATOR TO				
	SHOW US WHERE A MULTI-MILLION				
	DOLLAR FIBER OPTIC LINE EXISTS				
	(NON-REG. PROFESSIONAL W/DETAILS)				
	D.				

PREPARED BY: [signature]

APPROVED BY:

GEOCON ENVIRONMENTAL CONSULTANTS (GEC)
CALTRANS CONTRACT NO. 53W202
TASK ORDER NO. 07-120921-01
GEC PROJECT 8600-06-63
FIELD PROJECT LOG

Date: 7/8/96 Page ___ of ___

PROJECT NAME: CCTV & CMS SITES IN L.A. & VENTURA COUNTIES	
CALTRANS ONSITE REP: KANWAL SINGH	GEC PROJECT MANAGER: JOEL KLOTH
FIELD ACTIVITY: MOBILIZATION / ~~[illegible]~~ SOIL SAMPLING / DEMOB. HAND AUGERING	BID ITEM NO: 32/33/51 BID ITEM UNITS:
SUBCONTRACTOR:	BID ITEM UNITS COMP. THIS DATE:

Briefly describe field activities (i.e. soil sampling collection, continuous coring, casing installation, etc.) that verify the number of bid items completed this date.

0600 - 0930 MOBILIZED TO THE SITE (3½ hrs) (BID ITEM NO. 32)

11:00 - 1430 HAND AUGERED 5 BORINGS

FOR A TOTAL OF 19 FEET (BID ITEM NO. 33)

COLLECTED 13 SOIL SAMPLES (BID ITEM NO. 51)

14:30 - 17:00 DEMOBILIZED BACK TO THE OFFICE (2½ hrs) (BID ITEM NO. 32)

0930 - 11:00 WAITED FOR AND MET WITH A UTILITY LOCATOR (BID ITEM 39)

TO DETERMINE LOCATION OF A MULTI-MILLION DOLLAR (1½ hrs)

FIBER OPTIC LINE.

PREPARED BY: [signature] APPROVED BY:

c:\wo51\ciencal\forms\caltrans.Fl3

GEOCON ENVIRONMENTAL CONSULTANTS (GEC)
CALTRANS CONTRACT NO. 53W202
TASK ORDER NO. 07-120921-01
GEC PROJECT NO. 08600-06-63
OFFICE PROJECT LOG

REPORTING DATES: 7/9/96

Page ___ of ___

PROJECT NAME: CCTV & CMS SITES IN L.A. & VENTURA COUNTIES

GEC PROJECT MANAGER: JOEL KLOTH

CALTRANS CONTRACT MANAGER: MANUAL SINGH

DATE	WORK DESCRIPTION	BID ITEM NO.	TIME START	TIME STOP	TOTAL HOURS
7/9/96	CONFER W/ LABORATORY REGARDING ANALYTICAL METHODS		10:30	11:30	1
	(NON-ENG. PROFESSIONAL WITH DEGREE)	39			

PREPARED BY: [illegible]

APPROVED BY:

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APPENDIX C

Client: Geocon Environn. J
Attn: Mr. Joel Kloth

Client's Project: CCTV & CMS Sites, 8600-06-63

Date Received: 07/02/96
Date Sampled: 07/02/96
Date Digested: 07/03/96
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
12019-001	C10-S	EPA 6010 (Lead)	07/05/96	104	Soil, mg/kg	5.0	5.0	LP
12019-002	C10-1.5	EPA 6010 (Lead)	07/05/96	57	Soil, mg/kg	5.0	5.0	LP
12019-003	C9-S	EPA 6010 (Lead)	07/05/96	1860	Soil, mg/kg	5.0	5.0	LP
12019-004	C9-1.5	EPA 6010 (Lead)	07/05/96	118	Soil, mg/kg	5.0	5.0	LP
12019-005	C8-S	EPA 6010 (Lead)	07/05/96	349	Soil, mg/kg	5.0	5.0	LP
12019-006	C8-1.5	EPA 6010 (Lead)	07/05/96	546	Soil, mg/kg	5.0	5.0	LP
12019-007	C7-S	EPA 6010 (Lead)	07/05/96	332	Soil, mg/kg	5.0	5.0	LP
12019-008	C7-1.5	EPA 6010 (Lead)	07/05/96	15	Soil, mg/kg	5.0	5.0	LP
12019-009	B2-S	EPA 6010 (Lead)	07/05/96	219	Soil, mg/kg	5.0	5.0	LP
12019-010	B2-1.5	EPA 6010 (Lead)	07/05/96	36	Soil, mg/kg	5.0	5.0	LP
12019-011	C6-S	EPA 6010 (Lead)	07/05/96	893	Soil, mg/kg	5.0	5.0	LP
12019-012	C6-1.5	EPA 6010 (Lead)	07/05/96	146	Soil, mg/kg	5.0	5.0	LP
12019-013	C5-S	EPA 6010 (Lead)	07/05/96	223	Soil, mg/kg	5.0	5.0	LP
12019-014	C5-1.5	EPA 6010 (Lead)	07/05/96	234	Soil, mg/kg	5.0	5.0	LP
12019-015	C4-S	EPA 6010 (Lead)	07/05/96	306	Soil, mg/kg	5.0	5.0	LP
12019-016	C4-1.5	EPA 6010 (Lead)	07/05/96	257	Soil, mg/kg	5.0	5.0	LP
12019-017	C3-S	EPA 6010 (Lead)	07/05/96	53	Soil, mg/kg	5.0	5.0	LP
12019-018	C3-1.5	EPA 6010 (Lead)	07/05/96	73	Soil, mg/kg	5.0	5.0	LP

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de los Reyes
Cheryl De Los Reyes
Department Supervisor

Date: 7/5/96

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 310 989-4045 Fax: 310 989-4040

Client: Geocon Environme
Attn: Mr. Joel Kloth

Client's Project: CCTV & CMS Sites, 8600-06-63

Date Received: 07/02/96
Date Sampled: 07/02/96
Date Digested: 07/03/96
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
12019-019	C2-S	EPA 6010 (Lead)	07/05/96	1900	Soil, mg/kg	5.0	5.0	LP
12019-020	C2-1.5	EPA 6010 (Lead)	07/05/96	31	Soil, mg/kg	5.0	5.0	LP
12019-021	C1-S	EPA 6010 (Lead)	07/05/96	241	Soil, mg/kg	5.0	5.0	LP
12019-022	C1-1.5	EPA 6010 (Lead)	07/05/96	36	Soil, mg/kg	5.0	5.0	LP
12019-023	B1-S	EPA 6010 (Lead)	07/05/96	321	Soil, mg/kg	5.0	5.0	LP
12019-024	B1-2.0	EPA 6010 (Lead)	07/05/96	65	Soil, mg/kg	5.0	5.0	LP
12019-025	B1-4.5	EPA 6010 (Lead)	07/05/96	21	Soil, mg/kg	5.0	5.0	LP
12019-026	B4-S	EPA 6010 (Lead)	07/05/96	345	Soil, mg/kg	5.0	5.0	LP
12019-027	B4-1.5	EPA 6010 (Lead)	07/05/96	72	Soil, mg/kg	5.0	5.0	LP
12019-028	B3-S	EPA 6010 (Lead)	07/05/96	50	Soil, mg/kg	5.0	5.0	LP
12019-029	B3-1.5	EPA 6010 (Lead)	07/05/96	51	Soil, mg/kg	5.0	5.0	LP
[redacted]								
[redacted]								
[redacted]								
[redacted]								
[redacted]								
[redacted]								
[redacted]								

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de los Reyes
Cheryl De Los Reyes
Department Supervisor

Date: 7/5/96

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 310 989-4045 Fax: 310 989-4040

Spike Recovery and RPD Summary Report

Method: EPA 6010 (Lead)
Analyst: LPCOL
Data File: ICP 60795-1
QA File: 6187-1

Date Analyzed: 07/05/96
Date Digested: 07/03/96
Sample ID: See below
Matrix: Soil

SAMPLE ID	UNITS	LCS Conc	LCS Rec	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
12019-010	mg/kg	5.0	4.8	96	ND	36	30	18	250	268	289	93	101	54 - 124	9	24	5.0
12019-020	mg/kg	5.0	4.4	88	ND	31	27	14	250	273	275	97	98	54 - 124	1	24	5.0
12019-030*	mg/kg	5.0	5.0	100	ND	636	790	22	250	918	1146	113	204	54 - 124	58	24	5.0
12019-040	mg/kg	5.0	5.0	100	ND	436	342	24	250	595	576	64	56	54 - 124	13	24	5.0
12019-043*	mg/kg	5.0	4.8	96	ND	2100	1920	9	250	2380	2060	112	16	54 - 124	150	24	5.0

* High RPD is due to the sample matrices.

Approved by: Cheryl de Leon
Cheryl De Leon Reyes
Inorganics Supervisor

Date: 7/5/96

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989.4045 ^^ FAX (310) 989-4040

FOR LABORATORY USE ONLY

Batch # _____ D.O. # _____
P.O # _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ UPS/Fed Ex ☐ Courier ☐ ATL ☐

Client: Geocon Environmental Consultants, Inc.
Attn: Joel Kloth
6970 Flanders Drive
San Diego, CA 92121
Tel: (619) 558-6100
Fax: (619) 558-8437

Project Name: CCTV & CMS Sites
Project #: 8600-06-63
Sampler: Jason Keyes (Printed Name) (Signature)

Relinquished By: (Signature and Printed Name)
Received By: (Signature and Printed Name)
Date 7-2-96
Time 4:00

Unless Otherwise requested, all samples will be disposed 60 days after receipt.

I hereby autohorize ATL to perform the work indicated below
Project Mgr/Submitter: Jason Keyes
Date 7/2/96
Signature

Send Report To:
Attn: Joel Kloth
Geocon Environmental Consultants Inc.
6970 Flanders Drive
San Diego, California 92121

Special Instructions/Comments:
Analyze all soil samples for total lead. Soil samples exhibiting total lead concentrations greater than or equal to 50 mg/kg and less than 1,000 mg/kg will be analyzed for soluble lead by the standard WET.

SHIP TO LAB:
(SUB CONTRACT) _____
TEST: _____
ATL#: _____
DATE: _____
CLIENT I.D. _____

SHIP TO LAB:
(SUB CONTRACT) _____
TEST: _____
ATL#: _____
DATE: _____
CLIENT I.D. _____

ITEM	LAB USE ONLY Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	Total Lead EPA 6010	Soluble Lead -WET EPA 7420	Soluble Lead WET-DI EPA 7420	Soil pH EPA 9045	TCLP lead			TAT
	12019-001	C10-[illegible] S	7/2/96	8:45	X							
	002	C10-1.5	7/2/96	8:50	X							48-Hour
	003	C9-[illegible] S	7/2/96	8:55	X							48-Hour
	004	C9-1.5	7/2/96	9:01	X							48-Hour
	005	C8-[illegible] S	7/2/96	9:08	X							48-Hour
	006	C8-1.5	7/2/96	9:14	X							48-Hour
	007	C7-[illegible] S	7/2/96	9:22	X							48-Hour
	008	C7-1.5	7/2/96	9:28	X							48-Hour
	009	B2-S	7/2/96	9:34	X							48-Hour
	010	B2-1.5	7/2/96	9:37	X							48-Hour

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989.4045 ^^ FAX (310) 989-4040

FOR LABORATORY USE ONLY

Batch # ____ D.O. # ____
P.O # ____
Logged By: ____ Date: ____ Time: ____

Method of Transport: Walk-In ☐ UPS/Fed Ex ☐ Courier ☐ ATL ☐

Client: Geocon Environmental Consultants, Inc
Attn: Joel Kloth
6970 Flanders Drive
San Diego, CA 92121
Tel: (619) 558-6100
Fax: (619) 558-8437

Project Name: CCTV & CMS Sites Project #: 8600-06-63 Sampler: Jason Keyes (Printed Name) (Signature)

Relinquished By (Signature and Printed Name): [signature]
Received By (Signature and Printed Name): [signature]
Date 7-2-96
Time 4:00

Unless Otherwise requested, all samples will be disposed 60 days after receipt

Thereby authorize ATL to perform the work indicated below
Project Mgr/Submitter: Jason Keyes Date ____
Signature [signature]

Send Report To:
Attn: Joel Kloth
Geocon Environmental Consultants Inc.
6970 Flanders Drive
San Diego, California 92121

Special Instructions/Comments:
Analyze all soil samples for total lead. Soil samples exhibiting total lead concentrations greater than or equal to 50 mg/kg and less than 1,000 mg/kg will be analyzed for soluble lead by the standard WET

SHIP TO LAB:
(SUB CONTRACT) ____
TEST: ____
ATL#: ____
DATE: ____
CLIENT ID ____

SHIP TO LAB:
(SUB CONTRACT) ____
TEST: ____
ATL#: ____
DATE: ____
CLIENT ID ____

LAB USE ONLY Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	Total Lead EPA 6010	Soluble Lead WET EPA 7420	Soluble Lead WET EPA 7420	Soil pH EPA 9045	TCLP lead				TAT
12019-011	C6-S	7/2/96	9:42	X								48-Hour
012	C6-1.5	7/2/96	9:47	X								48-Hour
013	C5-S	7/2/96	9:52	X								48-Hour
014	C5-1.5	7/2/96	9:58	X								48-Hour
015	C4-S	7/2/96	10:09	X								48-Hour
016	C4-1.5	7/2/96	10:03	X								48-Hour
017	C3-S	7/2/96	10:14	X								48-Hour
018	C3-1.5	7/2/96	10:13	X								48-Hour
019	C2-S	7/2/96	10:22	X								48-Hour
020	C2-1.5	7/2/96	10:25	X								48-Hour

JUL-05-1996 17:23 ATL 385 P.07

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989-4045 ^^ FAX (310) 989-4040

FOR LABORATORY USE ONLY

Batch # _____ D.O. # _____
P.O.# _____
Logged By: _____ Date: _____ Time _____

Method of Transport: Walk-in ☐ UPS/Fed Ex ☐ Courier ☐ ATL ☐

Client: Geocon Environmental Consultants, Inc.
Attn: Joel Kloth
6970 Flanders Drive
San Diego, CA 92121
Tel: (619) 558-6100
Fax: (619) 558-8437

Project Name: CCTV & CMS Sites Project #: 8600-06-63 Sampler: Jason Keyes (Printed Name) (Signature)

Relinquished By (Signature and Printed Name): [signature]
Received By (Signature and Printed Name): [signature]
Date 7-2-96
Time 4:00

Unless Otherwise requested, all samples will be disposed 60 days after receipt.

I hereby authorize ATL to perform the work indicated below
Project Mgr/Submitter: Jason Keyes Date 7/2/96
Signature [signature]

Send Report to:
Attn: Joel Kloth
Geocon Environmental Consultants Inc.
6970 Flanders Drive
San Diego, California 92121

Special Instructions/Comments:
Analyze all soil samples for total lead. Soil samples exhibiting total lead concentrations greater than or equal to 50 mg/kg and less than 1,000 mg/kg will be analyzed for soluble lead by the standard WET.

SHIP TO LAB:
(SUB CONTRACT) _____
TEST: _____
ATL#: _____
DATE: _____
CLIENT I.D. _____

SHIP TO LAB:
(SUB CONTRACT) _____
TEST: _____
ATL#: _____
DATE: _____
CLIENT I.D. _____

ITEM	LAB USE ONLY Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	Total Lead EPA 6010	Soluble Lead WET EPA 7420	Soluble Lead WET-DI EPA 7420	Soil pH EPA 9045	TCLP Lead				TAT
	10019-021	C1-S	7/2/96	10:36	X								48-Hour
	022	C1-1.5	7/2/96	10:33	X								48-Hour
	023	B1-S	7/2/96	10:44	X								48-Hour
	024	B1-2.0	7/2/96	10:46	X								48-Hour
	025	B1-4.5	7/2/96	10:49	X								48-Hour
	026	B4-S	7/2/96	11:00	X								48-Hour
	027	B4-1.5	7/2/96	11:03	X								48-Hour
	028	B3-S	7/2/96	11:18	X								48-Hour
	029	B3-1.5	7/2/96	11:22	X								48-Hour
	030	BB-S	7/2/96	11:38	X								48-Hour

JUL-05-1996 17:24 ATL 2885 P.08

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989-4045 ^^ FAX (310) 989-4040

FOR LABORATORY USE ONLY

Batch # _____ D.O. # _____
P.O.# _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ UPS/Fed Ex ☐ Courier ☐ ATL ☐

Client: Geocon Environmental Consultants, Inc.
Attn: Joel Kloth
6970 Flanders Drive
San Diego, CA 92121
Tel: (619) 558-6100
Fax: (619) 558-8437

Project Name: CCTV & CMS Sites Project # : 8600-06-63 Sampler: Jason Keyes (Printed Name) (Signature)

Relinquished By: (Signature and Printed Name) Received By: (Signature and Printed Name) Date 7-2-96 Time 4:00

Unless Otherwise requested, all samples will be disposed 60 days after receipt

I hereby authorize ATL to perform the work indicated below
Project Mgr/Submitter: Jason Keyes Date 7/2/96
Signature

Send Report To:
Attn: Joel Kloth
Geocon Environmental Consultants Inc.
6970 Flanders Drive
San Diego, California 92121

Special Instructions/Comments:
Analyze all soil samples for total lead. Soil samples exhibiting total lead concentrations greater than or equal to 50 mg/kg and less than 1,000 mg/kg will be analyzed for soluble lead by the standard WET.

SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ ATL#: _____ DATE: _____ CLIENT I.D. _____

SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ ATL#: _____ DATE: _____ CLIENT I.D. _____

Item	LAB USE ONLY Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	Total Lead EPA 6010	Soluble Lead WET EPA 7420	Soluble Lead WET-DI EPA 7420	Soil pH EPA 9045	TCLP lead				TAT
	2019-031	B8-2.0	7/2/96	11:40	X								
	032	B8-4.5	7/2/96	11:48	X								48-Hour
	033	B9-5	7/2/96	12:10	X								48-Hour
	034	B9-2.0	7/2/96	12:12	X								48-Hour
	035	B9-4.5	7/2/96	12:17	X								48-Hour
	036	B10-5	7/2/96	12:35	X								48-Hour
	037	B10-1.5	7/2/96	12:39	X								48-Hour
	038	B11-5	7/2/96	13:04	X								48-Hour
	039	B11-1.5	7/2/96	13:08	X								48-Hour
	040	B13-5	7/2/96	13:30	X								48-Hour

JUL-05-1996 17:25 ATL 385 P.09

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989.4045 ^^ FAX (310) 989-4040

FOR LABORATORY USE ONLY

Batch # _____ D.O. # _____
P.O.# _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-In ☐ UPS/Fed Ex ☐ Courier ☐ ATL ☐

Client: Geocon Environmental Consultants, Inc.
Attn: Joel Kloth
6970 Flanders Drive
San Diego, CA 92121
Tel: (619) 558-6100
Fax: (619) 558-8437

Project Name: CCTV & CMS Sites
Project #: 8600-06-63
Sampler: Jason Keyes (Printed Name) (Signature)

Relinquished By (Signature and Printed Name): [signature]
Received By (Signature and Printed Name): [signature]
Date: 7-2-96
Time: 4:00

Unless Otherwise requested, all samples will be disposed 60 days after receipt

I hereby authorize ATL to perform the work indicated below.
Project Mgr/Submitter: Jason Keyes
Date: 7/2/96
Signature: [signature]

Send Report To:
Attn: Joel Kloth
Geocon Environmental Consultants Inc.
6970 Flanders Drive
San Diego, California 92121

Special Instructions/Comments:
Analyze all soil samples for total lead. Soil samples exhibiting total lead concentrations greater than or equal to 50 mg/kg and less than 1,000 mg/kg will be analyzed for soluble lead by the standard WET.

SHIP TO LAB:
(SUB CONTRACT) _____
TEST _____
ATL# _____
DATE _____
CLIENT ID _____

SHIP TO LAB:
(SUB CONTRACT) _____
TEST _____
ATL# _____
DATE _____
CLIENT ID _____

LAB USE ONLY Batch # Lab No.	Sample Description: Sample I.D.	Date	Time	Total Lead EPA 6010	Soluble Lead WET EPA 7420	Soluble Lead WET-DI EPA 7420	Soil pH EPA 9045	TCLP lead					TAT
12019-041	B13-1.5	7/2/96	13:33	X									48-Hour
042	B14-5	7/2/96	13:51	X									48-Hour
043	B14-1.5	7/2/96	13:56	X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour
		7/2/96		X									48-Hour

JUL-05-1996 17:25 ATL 285 P.10

Client: Geocon Environmental
Attn: Mr. Joel Kloth

Client's Project: CCTV & CMS Sites, 8600-06-63

Date Received: 07/02/96
Date Sampled: 07/02/96
Date Extracted: 07/03/96
Extraction Method: WET (Title 22, CCR, 66261.100 Appendix II)
Date Amended: 07/12/96

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
12019-001	C10-S	EPA 7420 (Lead)	07/09/96	2.1	STLC Extract, mg/L	0.15	0.15	DJ
12019-002	C10-1.5	EPA 7420 (Lead)	07/09/96	0.55	STLC Extract, mg/L	0.15	0.15	DJ
12019-004	C9-1.5	EPA 7420 (Lead)	07/09/96	3.9	STLC Extract, mg/L	0.15	0.15	DJ
12019-005	C8-S	EPA 7420 (Lead)	07/09/96	24	STLC Extract, mg/L	0.15	0.75	DJ
12019-006	C8-1.5	EPA 7420 (Lead)	07/09/96	47	STLC Extract, mg/L	0.15	1.5	DJ
12019-007	C7-S	EPA 7420 (Lead)	07/09/96	20	STLC Extract, mg/L	0.15	0.75	DJ
12019-009	B2-S	EPA 7420 (Lead)	07/09/96	10	STLC Extract, mg/L	0.15	0.15	DJ
12019-011	C6-S	EPA 7420 (Lead)	07/09/96	60	STLC Extract, mg/L	0.15	1.5	DJ
12019-012	C6-1.5	EPA 7420 (Lead)	07/09/96	6.5	STLC Extract, mg/L	0.15	0.15	DJ
12019-013	C5-S	EPA 7420 (Lead)	07/09/96	23	STLC Extract, mg/L	0.15	0.75	DJ
12019-014	C5-1.5	EPA 7420 (Lead)	07/09/96	18	STLC Extract, mg/L	0.15	0.75	DJ
12019-015*	C4-S	EPA 7420 (Lead)	07/12/96	19	STLC Extract, mg/L	0.15	0.60	DJ
12019-016	C4-1.5	EPA 7420 (Lead)	07/09/96	14	STLC Extract, mg/L	0.15	0.30	DJ
12019-017	C3-S	EPA 7420 (Lead)	07/09/96	2.6	STLC Extract, mg/L	0.15	0.15	DJ
12019-018	C3-1.5	EPA 7420 (Lead)	07/09/96	5.3	STLC Extract, mg/L	0.15	0.15	DJ
12019-021	C1-S	EPA 7420 (Lead)	07/09/96	4.7	STLC Extract, mg/L	0.15	0.15	DJ
12019-023	B1-S	EPA 7420 (Lead)	07/09/96	21	STLC Extract, mg/L	0.15	0.75	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)
* = Date Extracted: 07/10/96.

Reviewed/Approved By: Cheryl de Los Reyes Date: 7/12/96
Cheryl De Los Reyes
Department Supervisor

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA/420
Analyst: CDEROLDO
Data File: AA60712.2
QA File: 6194-2

Date Analyzed: 07-12-96
Date Digested: 07-10-96
Sample ID: See below
Matrix: STLC extract

SPL ID	UNITS	LCS Conc	LCS Rec	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
12119-005	mg/l	5.0	4.8	96	ND	4.0	3.8	4	5.0	7.2	7.1	64	62	50-150	3	50	0.15
12119-015	mg/l	5.0	5.3	106	ND	0.77	0.76	1	5.0	5.7	5.6	99	97	50-150	2	50	0.15
12119-024	mg/l	5.0	5.2	104	ND	7.4	7.7	4	10	17	16	93	90	50-150	3	50	0.15

Approved by: Cheryl DeLos Reyes
Cheryl DeLos Reyes
Inorganics Supervisor

Date: 7/12/96

Advanced Technology Laboratories

Client: Geocon Environme.
Attn: Mr. Joel Kloth

Client's Project: CCTV & CMS Sites, 8600-06-63

Date Received: 07/02/96
Date Sampled: 07/02/96
Date Extracted: 07/03/96
Extraction Method: WET (Title 22, CCR, 66261.100 Appendix II)

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
12019-024	B1-2.0	EPA 7420 (Lead)	07/09/96	0.49	STLC Extract, mg/L	0.15	0.15	DJ
12019-026	B4-S	EPA 7420 (Lead)	07/09/96	1.7	STLC Extract, mg/L	0.15	0.75	DJ
12019-027	B4-1.5	EPA 7420 (Lead)	07/09/96	1.8	STLC Extract, mg/L	0.15	0.15	DJ
12019-028	B3-S	EPA 7420 (Lead)	07/09/96	1.4	STLC Extract, mg/L	0.15	0.15	DJ
12019-029	B3-1.5	EPA 7420 (Lead)	07/09/96	1.5	STLC Extract, mg/L	0.15	0.15	DJ
[redacted]								

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de Los Reyes
Cheryl De Los Reyes
Department Supervisor

Date: 7/9/96

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 310 989-4045 Fax: 310 989-4040

Spike Recovery and RPD Summary Report

Method: EPA7420
Analyst: CDR/OLS/DI
Data File: AA60709-2
QA File: 6189-2

Date Analyzed: 07-09-96
Date Digested: 07-06-96
Sample ID: See below
Matrix: STLC extract

SPL ID	UNITS	LCS Conc	LCS Rec	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
12019-002	mg/L	5.0	5.3	106	ND	0.31	0.55	1	5.0	3.9	3.8	71	69	50-150	2	50	0.15
12019-014	mg/L	5.0	4.9	98	ND	18	18	1	25	45	45	106	109	50-150	2	50	0.15
12019-040	mg/L	5.0	5.1	102	ND	16	16	0	25	36	36	78	78	50-150	0	50	0.15
12035-007	mg/L	5.0	5.0	100	ND	11	10	10	10	20	21	90	96	50-150	6	50	0.15
12035-018	mg/L	5.0	5.0	100	ND	0.18	0.18	0	5.0	3.9	4.0	75	77	50-150	3	50	0.15

Approved by: Cheryl de los Reyes
Cheryl De los Reyes
Inorganics Supervisor

Date: 7/9/96

Advanced Technology

Client: Geocon Environmental
Attn: Mr. Jason Keyes

Client's Project: CCTV & CMS Sites, 08600 - 06 - 63

Date Received: 07/02/96
Date Sampled: 07/02/96
Date Extracted: 07/13/96
Extraction Method: WET Modified

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix Units	MDL	DLR	Analyst Initials
12112 - 001	C8-1.5	EPA 7420 (Lead)	07/15/96	3.2	STLC DI Water Extract, mg/l	0.15	0.15	LP
12112 - 002	C6-S	EPA 7420 (Lead)	07/15/96	2.1	STLC DI Water Extract, mg/l	0.15	0.15	LP
12112 - 003	B1-S	EPA 7420 (Lead)	07/15/96	0.46	STLC DI Water Extract, mg/l	0.15	0.15	LP

[redacted]

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de los Reyes
Cheryl De Los Reyes
Department Supervisor

Date: 7/15/96

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA 7420
Analyst: LPOF
Data File: AA60715.2
QA File: 6197-2

Date Analyzed: 07-15-96
Date Digested: 07-12-96
Sample ID: See below
Matrix: DI extract

SPL ID	UNITS	LCS Conc	LCS Rec	% Rec	METHOD BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
12012-004	mg/L	5.0	4.8	96	ND	ND	ND	0	5.0	5.1	5.0	102	100	50-150	2	50	0.15

Approved by: Cheryl deLoa
Cheryl DeLos Reyes
Inorganics Supervisor

Date: 7/15/96

Advanced Technology Laboratories

CHAIN OF CUSTODY RECORD

Pg ___ of ___

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989-4045 • FAX (310) 989-4040

FOR LABORATORY USE ONLY:

Batch #: ___ D.O. # ___
P.O.#: ___
Logged By: ___ Date: ___ Time: ___

Method of Transport: Walk-In ☐ Courier ☐ UPS ☐ FED EXP ☐ ATL ☐

Sample Condition Upon Receipt:
1. COOLER TEMP °C ___ (2-6) 5. SEALED YES NO
2. CHILLED YES NO 6. # OF SPLS MATCH COC YES NO
3. HEADSPACE (VOA) YES NO 7. PRESERVED YES NO
4. CONTAINER INTACT YES NO 8. CONTR. LOT # ___

Client: GEOCON
Attn: JASON KEYES
Address: ___ City ___ State ___ Zip Code ___
TEL: ( )
FAX: ( )

Project Name: CCTV & CMS SITES Project #: 08600-06-63 Sampler: (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name) Received by: (Signature and Printed Name) Date: 7/02/96 Time:
Relinquished by: (Signature and Printed Name) Received by: (Signature and Printed Name) Date: 7/10/96 Time:
Relinquished by: (Signature and Printed Name) Received by: (Signature and Printed Name) Date: Time:

Unless otherwise requested, all samples will be disposed 60 days after receipt.

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: ___ Date: / /
Print Name
Signature

Send Report To:
Attn: ___
Co: ___
Address: ___
City ___ State ___ Zip ___

Special Instructions/Comments:
*Please analyze for soluble lead following the WET test using deionized water as the extractant.

SHIP TO LAB: (SUB CONTRACT) ___ TEST ___ ATL # ___ DATE ___ CLIENT ID ___
SHIP TO LAB: (SUB CONTRACT) ___ TEST ___ ATL # ___ DATE ___ CLIENT ID ___
SHIP TO LAB: (SUB CONTRACT) ___ TEST ___ ATL # ___ DATE ___ CLIENT ID ___

Circle or Add Analysis(es) Requested: 8010/8020 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240/8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPH-G/BTEX COMBINATION; 8015M TPH-D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-601/7000); *SOLUBLE Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☒ RWQCB ☐ WIP ☐ NAVY ☐ CT ☐ OTHER ___

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	* SOLUBLE Pb	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	12112-001	12019-006 / C8-1.5	7/02		X	C	1	4oz		
	002	011 / C6-S	↓		X	↓	↓	↓		
	003	023 / B1-S			X					
	004	030 / B8-S			X					

Sample Archive/Disposal: ☐ Laboratory Standard ☐ Other ___ ☐ Return To: ___

TAT: A= Overnight ≤ 24 hr; B= Emergency Next workday; C= Critical 2 Workdays; D= Urgent 3 Workdays; E= Routine 7 Workdays
* TAT starts 8 a.m. following day if samples received after 3 p.m.

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO₃ S=H₂SO₄ C=4°C Z=Zn(AC)₂ O=NaOH T=Na₂S₂O₃

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL

DISTRIBUTION: White with report, Green to organic, Yellow to inorganic, Pink to Biology, Gold to submitter

Client: Geocon Environmental
Attn: Mr. Joel Kloth

Client's Project: 8600-06-63

Date Received: 07/02 & 08/96
Date Sampled: 07/02/96
Date Extracted: 07/23/96
Extraction Method: WET (Title 22, CCR, 66261.100 Appendix II)Modified

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
12323-001	C9-15	EPA 7420 (Lead)	07/25/96	0.20	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-002	B8-5	EPA 7420 (Lead)	07/25/96	ND	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-003	B11-S	EPA 7420 (Lead)	07/25/96	ND	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-004	B13-S	EPA 7420 (Lead)	07/25/96	0.48	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-005	B5-S	EPA 7420 (Lead)	07/25/96	0.23	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-006	B6-S	EPA 7420 (Lead)	07/25/96	0.53	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-007	B7-S	EPA 7420 (Lead)	07/25/96	0.30	STLC DI Water Extract, mg/L	0.15	0.15	CDR
12323-008	B7-2.0	EPA 7420 (Lead)	07/25/96	0.59	STLC DI Water Extract, mg/L	0.15	0.15	CDR

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de los Reyes Date: 7/26/96
Cheryl De Los Reyes
Department Supervisor

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA 7420
Analyst: CDRC01
Data File: AA 60725 - 1
QA File: 6406 - 2

Date Analyzed: 07/25/96
Date Extracted: 07/23/96
Sample ID: 12323 - 005
Matrix: STLC DI Water Extract

ANALYTE	UNITS	LCS Conc	LCS Rec	% Rec	METHOD BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
Lead	mg/l	5.0	4.5	90	ND	0.59	0.51	15	5.0	6.6	6.7	120	122	50-150	2	50	0.15

Approved by: Cheryl de Los Reyes
Cheryl De Los Reyes
Inorganics Supervisor

Date: 7/26/96

Advanced Technology Laboratories

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(310) 989-4045 • FAX (310) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

Sample Condition Upon Receipt
1. COOLER TEMP °C _____ (2-6) 5. SEALED Y☐ N☐
2. CHILLED Y☐ N☐ 6. # OF SPLS MATCH COC Y☐ N☐
3. HEADSPACE (VOA) Y☐ N☐ 7. PRESERVED Y☐ N☐
4. CONTAINER INTACT Y☐ N☐ 8. CONTR. LOT # _____

Client: Geocon
Attn: Joel Kloth
Address: _____ City _____ State _____ Zip Code _____
TEL: ( )
FAX: ( )

Project Name: 8600.006-603 Project #: _____ Sampler: (Printed Name) _____ (Signature) _____

Relinquished by: (Signature and Printed Name) _____ Received by: (Signature and Printed Name) Katie Kootasy Date: 7-8-96 Time: 7-8-96
Relinquished by: (Signature and Printed Name) _____ Received by: (Signature and Printed Name) _____ Date: 7-9-96 Time: _____
Relinquished by: (Signature and Printed Name) _____ Received by: (Signature and Printed Name) _____ Date: _____ Time: _____

Unless otherwise requested, all samples will be disposed 60 days after receipt.

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: _____ Date: / /
Print Name
Signature

Send Report To:
Attn: _____
Co: _____
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:

SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ ATL #: _____ DATE: _____ CLIENT I.D. _____
SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ ATL #: _____ DATE: _____ CLIENT I.D. _____
SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ ATL #: _____ DATE: _____ CLIENT I.D. _____

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/8021B (Aromatic Volatiles-GC); 624/8240 (Purgeables-GC/MS); 625/8270 (Semi-Volatiles-GC/MS); 601/8010 (Halogenated Volatiles-GC); 602/8020/8021B (Aromatic Volatiles-GC); 8015M (Hydrocarbon Combination); 418.1 (TPH-IR); Metals Total (CAM 17/6010); WET DI Lead

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/8021B	624/8240	625/8270	601/8010	602/8020/8021B	8015M	418.1	Metals Total	WET DI Lead	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	12323-001	12019-004 / C9-15	7/2											✓												
	002	030 / B8-S	↓																							
	003	038 / B11-S	↓																							
	004	040 / B13-S	↓																							
	005	12082-001 / B5-S	7/2																							
	006	003 / B6-S	↓																							
	007	006 / B7-S	↓																							
	008	007 / B7-2.0	↓																							

QA/QC: RTNE [ ] RVQCB [ ] WIP [ ] NAVY [ ] CT [ ] OTHER _____

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays
* TAT starts 8 a.m. following day if samples received after 3 p.m.

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO₃ S=H₂SO₄ C=4°C Z=Zn(AC)₂ O=NaOH T=Na₂S₂O₃

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL

DISTRIBUTION: White with report, Green to organic, Yellow to inorganic, Pink to Biology, Gold to [illegible]

APPENDIX D

PLANS FOR SOIL RE-USE FOLLOWING GUIDELINES SET BY THE DTSC

PLAN A

The soil sample(s) analyzed exhibited total lead concentrations less than the TTLC, and exhibited soluble lead concentrations less than the STLC. Therefore, assuming the soil samples analyzed are representative of the remaining area, **the soil at this location is non-hazardous and can be re-used as clean fill material.**

PLAN B

The soil sample(s) analyzed exhibited total lead concentrations less than 1,575 mg/kg and hazardous soluble lead concentrations greater than the STLC. However, when re-analyzed for soluble lead by the WET with deionized water used as the extractant, the sample(s) exhibited soluble lead concentrations less than 0.5 mg/l. **The impacted soil at this location can be re-used following the DTSC variance by placing the soil from within the impacted interval under at least 1 foot of clean fill material at least 5 feet above the maximum groundwater.**

PLAN C

The soil sample(s) analyzed exhibited either hazardous total lead concentrations greater than the TTLC and less than 4,150 mg/kg, or hazardous soluble lead concentrations greater than the STLC. When soil samples with soluble lead concentrations greater than the STLC were re-analyzed for soluble lead by the WET with deionized water used as the extractant, soluble lead concentrations were greater than 0.5 mg/l and less than 50 mg/l*. **The impacted soil at this location can be re-used following the DTSC variance, by placing the soil from within the impacted interval under paved areas at least 5 feet above the maximum groundwater.**

PLAN D

The soil sample(s) analyzed exhibited either total lead concentrations greater than 4,150 mg/kg, or soluble lead concentrations in the deionized water extract, greater than 50 mg/l. According to the DTSC variance, **this impacted soil cannot be reused.**

* Only select soil samples exhibiting standard WET results greater than the STLC were reanalyzed by the WET with deionized water used as the extractant (WET-DI). Those soil samples with standard WET results greater than the STLC not analyzed by the WET-DI are assumed to fall within this range if analyzed by the WET-DI.