INFORMATION HANDOUT

For Contract No. 07-2827U4
At 07-LA-5,101-16.4, S0.0/25.9

Identified by
Project ID 0714000204

MATERIALS INFORMATION

Aerially Deposited Lead Site Investigation Reports

Geotechnical Design Reports

Fiber Optic System As-Built Drawings

Lead

LA 101
TO # 07-170211-01
KP 0.00 – 0.64

SITE INVESTIGATION LETTER REPORT LEAD TESTING AT THE LA RIVER BRIDGE (BRIDGE NO. 53-405) B-WEST APPROACH AND D-EAST APPROACH LOS ANGELES COUNTY, CALIFORNIA TASK ORDER NO. 07-170211-01 EA 170221 [SR 794]

PREPARED FOR

CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 7

LOS ANGELES, CALIFORNIA

SEPTEMBER 1996

INDEX OF SHEETS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

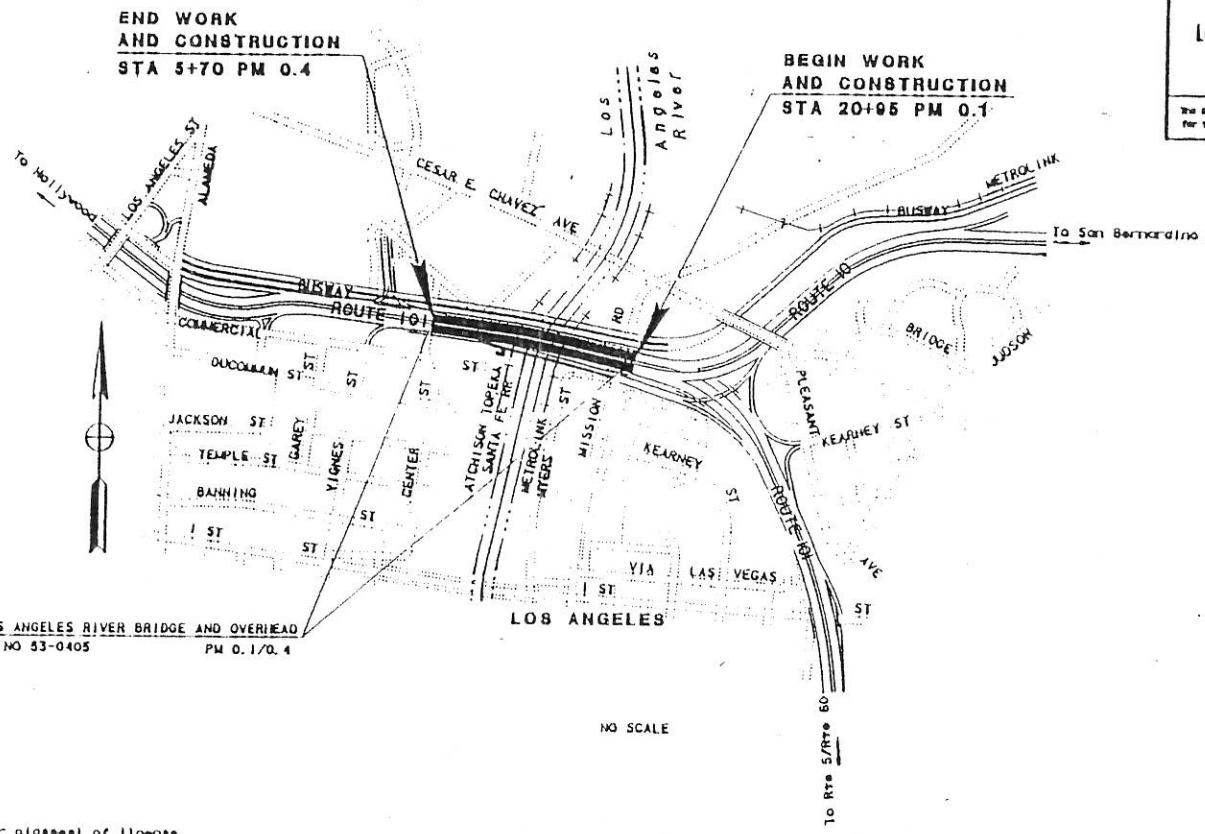
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN LOS ANGELES COUNTY IN LOS ANGELES ON ROUTE 101 AT LOS ANGELES RIVER BRIDGE AND OVERHEAD

To be supplemented by Standard Plans dated July, 1992

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

The State of California or the officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



LOS ANGELES RIVER BRIDGE AND OVERHEAD
BR NO 53-0405 PM 0.1/0.4

SITE PLAN

GEOCON

PROJ. NO. 08600-06-69
FIGURE 1
DATE 9-05-1996

Project Engineer Date
Registered Civil Engineer

SIMON KUO
No. C52465
Exp. 12-31-98
CIVIL
STATE OF CALIFORNIA

Plans Approval Date

The Contractor shall possess the Class (or classes) of license as specified in the "Notice to Contractors".

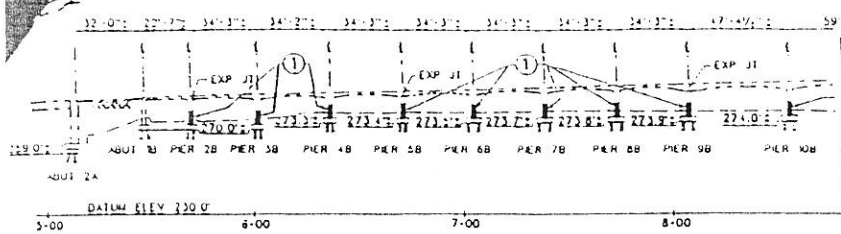
Contract No.	170224

USERNAME => $$USER
DGN FILE => $$CNSPFC

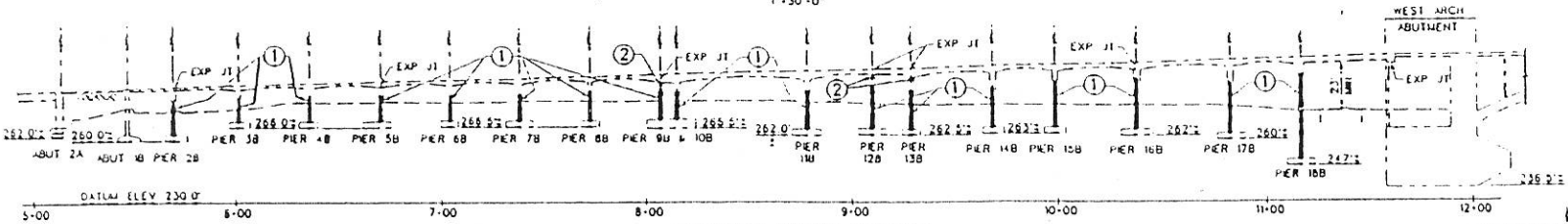
CU 07227 EA 170221

100-00-00 TIME PLOTTED => $$SYSTIME

Boring Location	Depth of Soil Impacted With Hazardous Concentrations of Lead
Pier 13B north portion (Boring PB3)	0 to 1.5 feet
Pier 13B south portion (Boring PB4)	0 to 1.5 feet



ELEVATION (NORTH PORTION)
1"=30'-0"



ELEVATION (SOUTH PORTION)
1"=30'-0"

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

INDEX TO PLAN

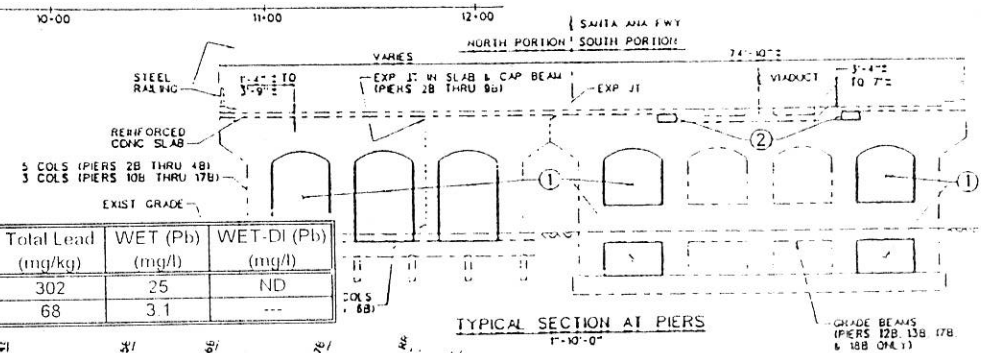
SHEET NO	TITLE
1.	STRUCTURE PLAN 1
2.	PIER DETAILS 1
3.	PIER DETAILS 2
4.	PIER DETAILS 3
5.	PIER DETAILS 4
6.	PIER DETAILS 5

RETROFIT LEGEND

1. ADD IN-FILL WALLS
2. RETROFIT SHEAR KEYS

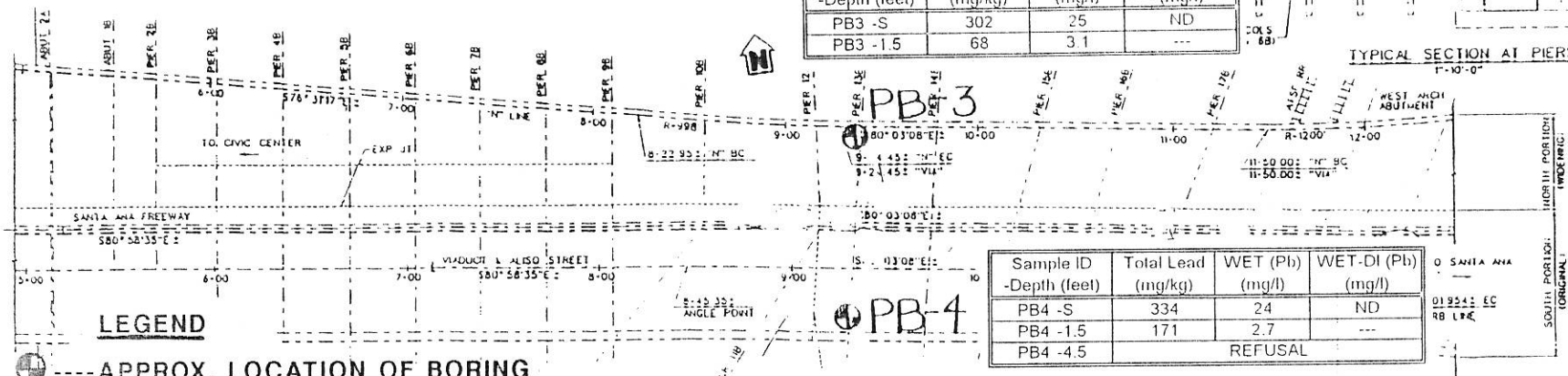
NOTE

1. WHEN NEW CONCRETE IS JOINED TO EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY ¼-INCH BY ABRASIVE BLASTING OR MECHANICAL EQUIPMENT. CLEANING OF ROUGHENED SURFACE SHALL BE IN ACCORDANCE WITH THE CLEANING METHODS USED FOR CONSTRUCTION JOINT BONDING.



TYPICAL SECTION AT PIERS
1"=10'-0"

Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PB3 -S	302	25	ND
PB3 -1.5	68	3.1	---



Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PB4 -S	334	24	ND
PB4 -1.5	171	2.7	---
PB4 -4.5	REFUSAL		

LEGEND

----APPROX. LOCATION OF BORING

PLAN
1"=30'-0"

BORING LOCATION MAP

GEOCON

PROJ. NO. 08600-06-69
FIGURE 2
DATE 9-05-1996

100% SUBMITTAL

CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

EARTHQUAKE RETROFIT PROJECT 794

LA RIVER BR & OH (B-WEST APPROACH)

STRUCTURE PLAN 1

DESIGN	J. TEDROW/K. PARIKH	P. GUPTA/S. MENDA	
DETAILS	J. TEDROW/R. ONGPIN	P. GUPTA	
QUANTITIES	K. HO	J. TEDROW	

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

K.T. LAM

BRIDGE NO. 53-405
POST MILE 0.08

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

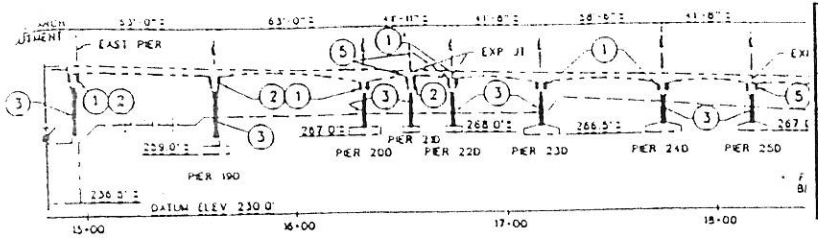
CU 07227
EA 170221

DISREGARD PRINTS BEARING EARLIER REVISION DATES

DOUGLAS

RP6-21DGN (Mon May 27 1996 08:04:45 PROGRAM)

Boring Location	Depth of Soil Impacted With Hazardous Concentrations of Lead
Pier 19D south portion (Boring PD1)	0 to the maximum depth of exploration (1.5 feet)
Pier 19D north portion (Boring PD2)	0 to the maximum depth of exploration (1.5 feet)
Pier 20D north portion (Boring PD3)	0 to 1.5 feet
Pier 22D south portion (Boring PD8)	not impacted with hazardous concentrations



ELEVATION
1"=30'-0"

ELEVATION (ON RAMP)
1"=30'-0"

INDEX TO PLAN

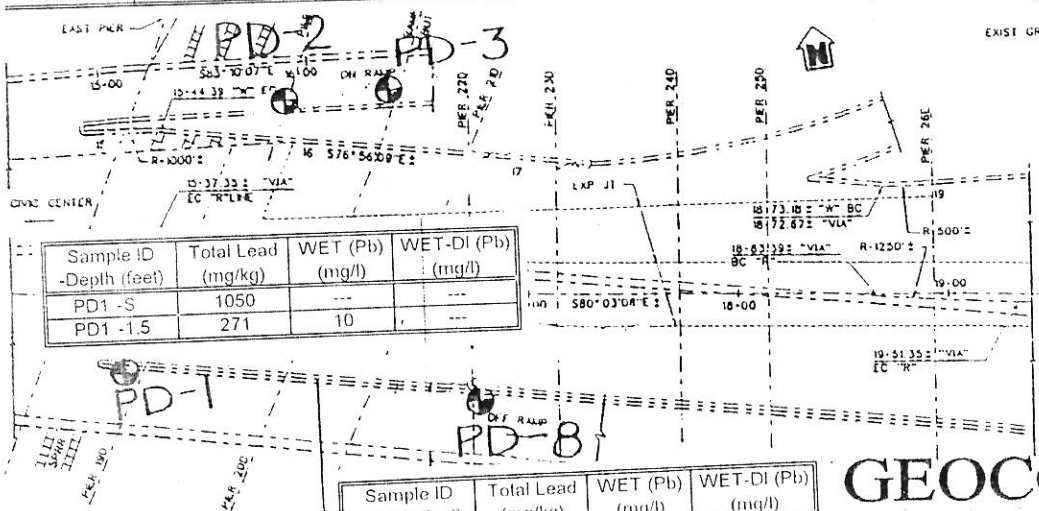
SHEET NO	TITLE
1	STRUCTURE PLAN 3
2	DECK PLAN
3	DECK SECTIONS & DETAILS
4	ABUTMENT DETAILS
5	PIER DETAILS 1

NOTE:

WHEN NEW CONCRETE IS JOINED TO EXISTING CONCRETE THE EXISTING CONCRETE SURFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE APPROXIMATELY 1/4 INCH BY ABRASIVE BLASTING OR MECHANICAL EQUIPMENT. CLEANING OF ROUGHENED SURFACE SHALL BE IN ACCORDANCE WITH THE

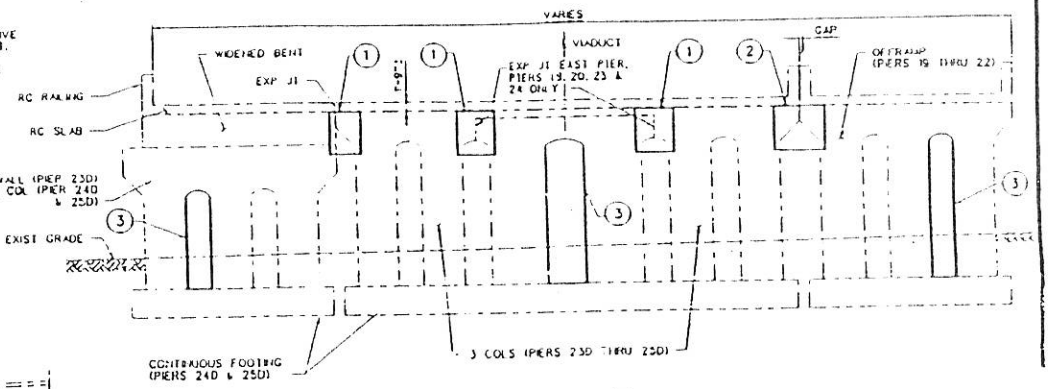
Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PD2 -S	146	7	---
PD2 -1.5	398	19	ND

Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PD3 -S	478	24	ND
PD3 -1.5	107	4.5	---



Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PD1 -S	1050	---	---
PD1 -1.5	271	10	---

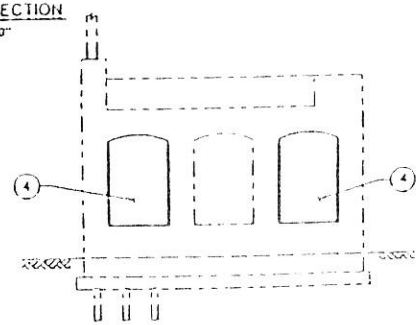
Sample ID -Depth (feet)	Total Lead (mg/kg)	WET (Pb) (mg/l)	WET-DI (Pb) (mg/l)
PD8 -S	91	2.3	---
PD8 -1.5	21	---	---



TYPICAL SECTION
1"=10'-0"

RETROFIT LEGEND

1. ADD CONNECTION TO EXPANSION JOINTS AT PIERS
2. ADD CONNECTION BETWEEN GAP AT OFF RAMP PIERS
3. ADD IN-FILL WALL AT PIERS
4. ADD IN-FILL WALL AT ON RAMP
5. ADD SHEAR KEY
6. RETROFIT EXTERIOR CONCRETE SHEAR KEY AT ON RAMP



SECTION (ON RAMP)
1"=10'-0"

GEOCON

PROJ. NO. 08600-06-69
FIGURE 3
DATE 9-05-1996

100% SUBMITTAL

BORING LOCATION MAP

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	T. CHIN/J. CHAI	S. GABALLAH	
DETAILS	T. CHIN/R. ONGPIN	S. GABALLAH	
QUANTITIES	K. HO	T. CHIN	

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

K.T. LAM

CU 07227
EA 170221

53-405
POST MKE 0.08

EARTHQUAKE RETROFIT PROJECT 794
LA RIVER BR & OH (D-EAST APPROACH)
STRUCTURE PLAN 3

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

DISREGARD PRINTS BEARING EARLIER REVISION DATES

SRP6-41DGN / Tue May 21 1996 13:16:12 / RONGPIN

TABLE I

SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS
LA RIVER BRIDGE & OVERHEAD (B-WEST APPROACH)

Location of Boring	Sample ID -Depth (feet)	Total Lead EPA Test Method 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
Pier 12B	SOIL NOT EXPOSED			
Pier 13B -North	PB3 -S	302	25	ND
	PB3 -1.5	68	3.1	---
Pier 13B - South	PB4 -S	334	24	ND
	PB4 -1.5	171	2.7	---
	PB4 -4.5	REFUSAL		
Pier 17B	SOIL NOT EXPOSED			
Pier 18B	SOIL NOT EXPOSED			

mg/kg = milligrams per kilogram
mg/l = milligrams per liter
--- = sample not analyzed

Project No. 08600-06-69
TO No. 07-170211-01
September 5, 1996

TABLE II

SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS
LA RIVER BRIDGE & OVERHEAD (D-EAST APPROACH)

Location of Boring	Sample ID -Depth (feet)	Total Lead EPA Test Method 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-DI (mg/l)
Pier 19D - South	PD1 -S	1050	---	---
	PD1 -1.5	271	10	---
Pier 19D - North	PD2 -S	146	7	---
	PD2 -1.5	398	19	ND
Pier 20D - North	PD3 -S	478	24	ND
	PD3 -1.5	107/93*	4.5	---
Pier 20D - South	SOIL NOT EXPOSED			
Pier 21D	SOIL NOT EXPOSED			
Pier 22D - North	SOIL NOT EXPOSED			
Pier 22D - South	PD8 -S	91	2.3	---
	PD8 -1.5	21	---	---
Pier 23D	SOIL NOT EXPOSED			

mg/kg = milligrams per kilogram
mg/l = milligrams per liter
--- = sample not analyzed
* duplicate sample analysis performed

Lead

LA 101
TO # 07-119911-QM
KP 1.27

7G02

LEAD SITE INVESTIGATION
and
ALAMEDA PUMP HOUSE INVESTIGATION REPORT
STATE ROUTE 101

Los Angeles, California
Task Order: 07-119911-QM

Prepared For:
Department of Transportation – District 7
120 South Spring Street
Los Angeles, California 90012

Prepared By:
Environmental Geoscience Services
909 Electric Avenue, Suite 312
Seal Beach, California 90740

AUGUST 2002

REFERENCE: Rand McNally

SITE LOCATION MAP		Date: Jun 10, 2002	FIGURE 1
Project: Alameda Pump House	Task Order: 07-119911-QM	ENVIRONMENTAL GEOSCIENCE SERVICES 909 Electric Avenue, Suite 312 Seal Beach, CA 90740 (562) 280-3481	
Drawn By: A. Drummond	Checked By: J. Findl		

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY MAPS AT DISTRICT OFFICE

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — NO. — EXP. — CIVIL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

Caltrans Metric

DATE	REVISED BY
	DATE REVISED

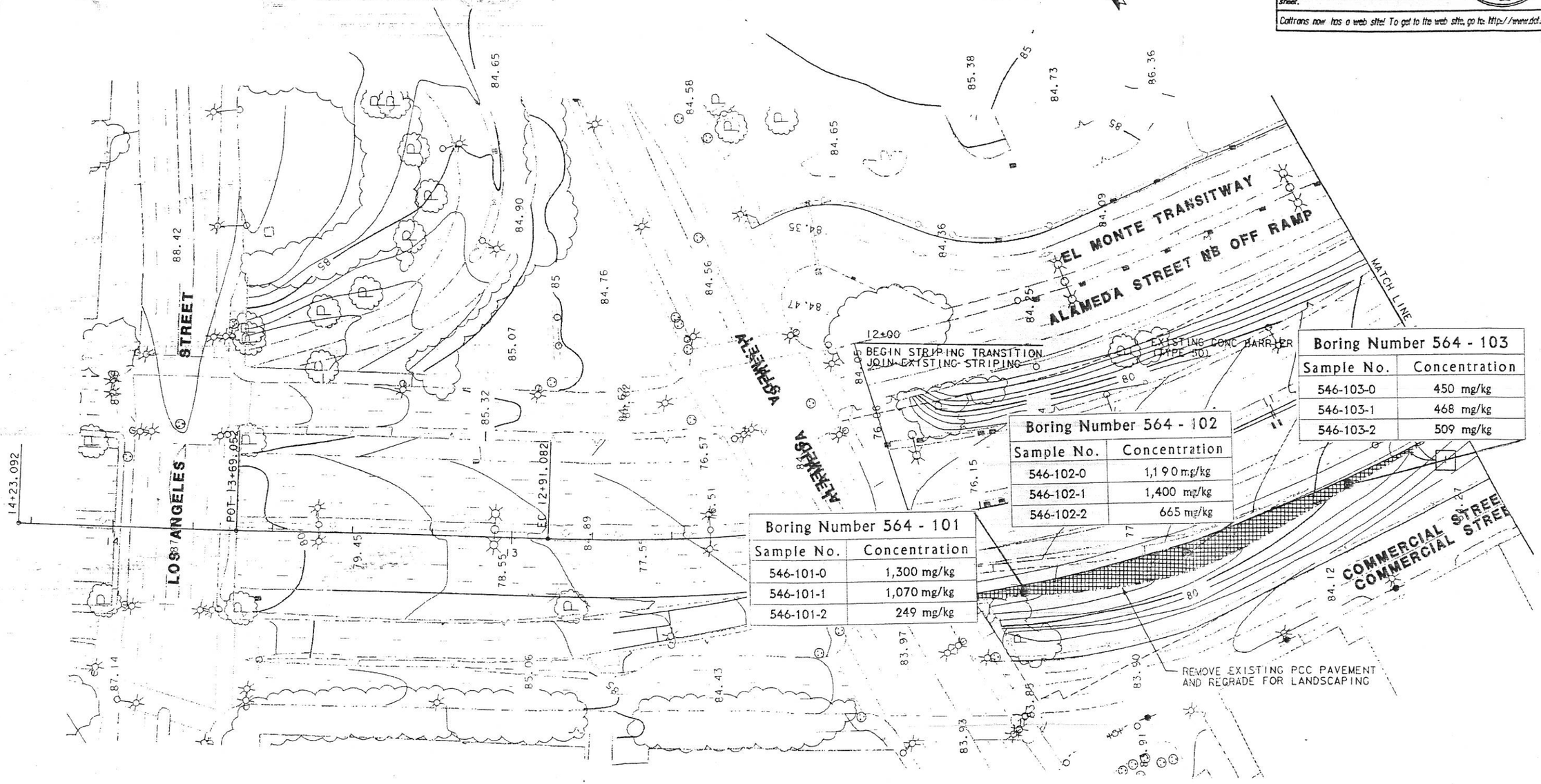
CALCULATED/ DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans



Boring Number 564 - 103	
Sample No.	Concentration
546-103-0	450 mg/kg
546-103-1	468 mg/kg
546-103-2	509 mg/kg

Boring Number 564 - 102	
Sample No.	Concentration
546-102-0	1,190 mg/kg
546-102-1	1,400 mg/kg
546-102-2	665 mg/kg

Boring Number 564 - 101	
Sample No.	Concentration
546-101-0	1,300 mg/kg
546-101-1	1,070 mg/kg
546-101-2	249 mg/kg

Figure 2

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME •> $USER
DGN FILE •> $REQUEST

CU 00000 EA 00000

REVISION DATE PLOTTED •> $DATE
00+00 TIME PLOTTED •> $TIME

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Cal-Trans now has a web site! To get to the web site, go to: http://trescdot.ca.gov

Caltrans Metric

REGISTERED PROFESSIONAL ENGINEER — No. — EXP. — CIVIL — STATE OF CALIFORNIA

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

MTA GATEWAY TRANSIT PLAZA

ROUTE 101

HEWITT STREET

GAREY STREET

VIGNES STREET

COMMERCIAL STREET

Boring Number 564 - 104	
Sample No.	Concentration
546-104-0	1,080 mg/kg
546-104-1	915 mg/kg
546-104-2	3.28 mg/kg

Boring Number 564 - 105	
Sample No.	Concentration
546-105-0	352 mg/kg
546-105-1	166 mg/kg
546-105-2	56.8 mg/kg
546-105-3	123 mg/kg
546-105-4	55.7 mg/kg

Figure 3

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => $USER
DGN FILE => $REQUEST

DATE PLOTTED => $DATE
TIME PLOTTED => $TIME

CU 00000 EA 000000

TABLE 2
SOIL ANALYTICAL RESULTS for LEAD SAMPLES
STATE ROUTE 101 - LOS ANGELES, CA

Sample Date	Sample Depth	Sample Identification	Test Type	Value	Results Units	Method Detection Limit	Analysis Date	Analyte	Matrix	Laboratory
06/26/02	surface	564-101-0	1. TTLC	1,300	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	surface	564-101-0	2. STLC	N/A[a]	mg/l			Lead	Soil	Associated
06/26/02	surface	564-101-0	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-101-0	4. TCLP	0.191	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	surface	564-101-0	5. PH	N/A					Soil	Associated
06/26/02	0.3 m	564-101-1	1. TTLC	1,070	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.3 m	564-101-1	2. STLC	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.3 m	564-101-1	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.3 m	564-101-1	4. TCLP	0.438	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.3 m	564-101-1	5. PH	N/A					Soil	Associated
06/26/02	0.6 m	564-101-2	1. TTLC	249	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.6 m	564-101-2	2. STLC	11.1	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.6 m	564-101-2	3. STLC-DI	0.026	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.6 m	564-101-2	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-101-2	5. PH	N/A					Soil	Associated
06/26/02	surface	564-102-0	1. TTLC	1,190	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	surface	564-102-0	2. STLC	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-102-0	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-102-0	4. TCLP	0.933	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	surface	564-102-0	5. PH	7.19			07/03/02		Soil	Associated
06/26/02	0.3 m	564-102-1	1. TTLC	1,400	mg/kg	0.5 mg/kg	07/12/02	Lead	Soil	Associated
06/26/02	0.3 m	546-102-1	2. STLC	NA	mg/l	0.005 mg/l		Lead	Soil	Associated
06/26/02	0.3 m	546-102-1	3. STLC-DI	NA	mg/l	0.005 mg/l		Lead	Soil	Associated
06/26/02	0.3 m	546-102-1	4. TCLP	1.75	mg/l	0.005 mg/l	07/16/02	Lead	Soil	Associated
06/26/02	0.3 m	546-102-1	5. PH	N/A					Soil	Associated
06/26/02	0.6 m	564-102-2	1. TTLC	665	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.6 m	564-102-2	2. STLC	26.2	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.6 m	564-102-2	3. STLC-DI	0.11	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.6 m	564-102-2	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-102-2	5. PH	N/A					Soil	Associated
06/26/02	surface	564-103-0	1. TTLC	450	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	surface	564-103-0	2. STLC	64.8	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	surface	564-103-0	3. STLC-DI	0.10	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	surface	564-103-0	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-103-0	5. PH	N/A					Soil	Associated

TABLE 2
SOIL ANALYTICAL RESULTS for LEAD SAMPLES
STATE ROUTE 101 - LOS ANGELES, CA

Sample Date	Sample Depth	Sample Identification	Test Type	Value	Results Units	Method Detection Limit	Analysis Date	Analyte	Matrix	Laboratory
06/26/02	0.3 m	564-103-1	1. TTLC	468	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.3 m	564-103-1	2. STLC	31.6	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.3 m	564-103-1	3. STLC-DI	0.083	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.3 m	564-103-1	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.3 m	564-103-1	5. PH	N/A					Soil	Associated
06/26/02	0.6 m	564-103-2	1. TTLC	509	mg/kg	0.5 mg/kg	07/12/02	Lead	Soil	Associated
06/26/02	0.6 m	564-103-2	2. STLC	43.0	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.6 m	564-103-2	3. STLC-DI	0.209	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.6 m	564-103-2	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-103-2	5. PH	N/A					Soil	Associated
06/26/02	surface	564-104-0	1. TTLC	1,080	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	surface	564-104-0	2. STLC	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-104-0	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-104-0	4. TCLP	1.28	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	surface	564-104-0	5. PH	N/A					Soil	Associated
06/26/02	0.3 m	564-104-1	1. TTLC	915	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.3 m	564-104-1	2. STLC	53.8	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.3 m	564-104-1	3. STLC-DI	0.324	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.3 m	564-104-1	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.3 m	564-104-1	5. PH	7.42		0.005 mg/l	07/03/02		Soil	Associated
06/26/02	0.6 m	564-104-2	1. TTLC	3.28	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.6 m	564-104-2	2. STLC	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-104-2	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-104-2	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-104-2	5. PH	N/A					Soil	Associated
06/26/02	surface	564-105-0	1. TTLC	352	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	surface	564-105-0	2. STLC	16.4	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	surface	564-105-0	3. STLC-DI	0.073	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	surface	564-105-0	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	surface	564-105-0	5. PH	N/A					Soil	Associated
06/26/02	0.3 m	564-105-1	1. TTLC	166	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.3 m	564-105-1	2. STLC	8.11	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.3 m	564-105-1	3. STLC-DI	0.036	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.3 m	564-105-1	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.3 m	564-105-1	5. PH	N/A					Soil	Associated

TABLE 2
SOIL ANALYTICAL RESULTS for LEAD SAMPLES
STATE ROUTE 101 - LOS ANGELES, CA

Sample Date	Sample Depth	Sample Identification	Test Type	Value	Results Units	Method Detection Limit	Analysis Date	Analyte	Matrix	Laboratory
06/26/02	0.6 m	564-105-2	1. TTLC	56.8	mg/kg	0.5 mg/kg	07/12/02	Lead	Soil	Associated
06/26/02	0.6 m	564-105-2	2. STLC	2.16	mg/l	0.005 mg/l	07/15/02	Lead	Soil	Associated
06/26/02	0.6 m	564-105-2	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-105-2	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.6 m	564-105-2	5. PH	N/A					Soil	Associated
06/26/02	0.9 m	564-105-3	1. TTLC	123	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	0.9 m	564-105-3	2. STLC	3.33	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	0.9 m	564-105-3	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.9 m	564-105-3	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	0.9 m	564-105-3	5. PH	7.75			07/01/02		Soil	Associated
06/26/02	1.2 m	564-105-4	1. TTLC	55.7	mg/kg	0.5 mg/kg	07/03/02	Lead	Soil	Associated
06/26/02	1.2 m	564-105-4	2. STLC	0.77	mg/l	0.005 mg/l	07/11/02	Lead	Soil	Associated
06/26/02	1.2 m	564-105-4	3. STLC-DI	N/A	mg/l			Lead	Soil	Associated
06/26/02	1.2 m	564-105-4	4. TCLP	N/A	mg/l			Lead	Soil	Associated
06/26/02	1.2 m	564-105-4	5. PH	N/A					Soil	Associated

(a) N/A not analyzed

Lead

LA 101
TO # 07-170401-01
KP 1.29 - 2.57

7GO3

SITE INVESTIGATION REPORT

SEISMIC RETROFITS AT VARIOUS BRIDGES ON ROUTES 110 AND 101 LOS ANGELES COUNTY, CALIFORNIA CONTRACT NO. 43Y097 TASK ORDER NO. 07-170401-01

SR #146

Prepared for

CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 7
LOS ANGELES, CALIFORNIA

Prepared by

GEOCON ENVIRONMENTAL CONSULTANTS, INC.
6970 FLANDERS DRIVE
SAN DIEGO, CALIFORNIA 92121-2974

GEOCON

GEOTECHNICAL
&
ENVIRONMENTAL
CONSULTANTS

DECEMBER 1996

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101, 110	Var		

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

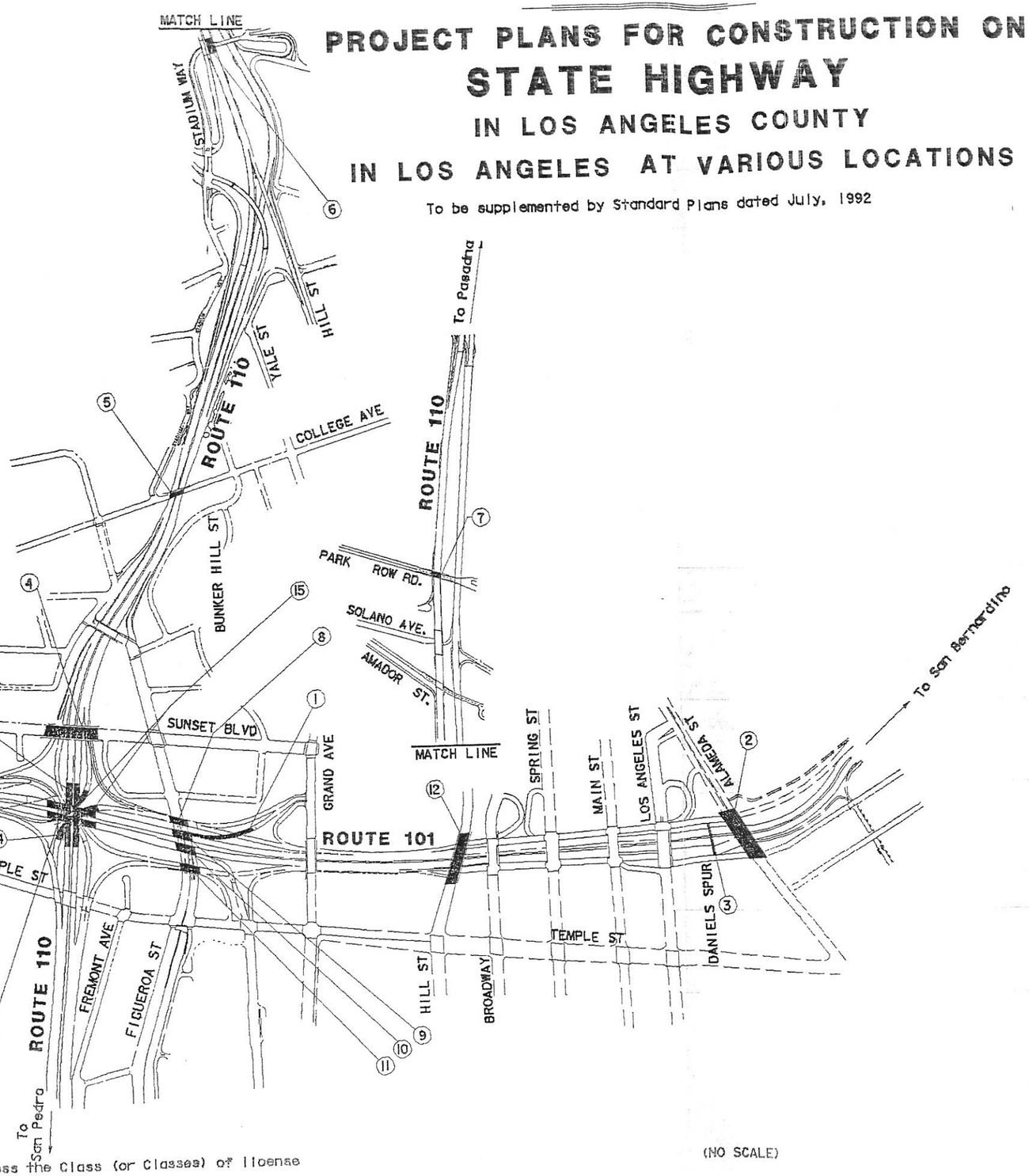
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN LOS ANGELES COUNTY

IN LOS ANGELES AT VARIOUS LOCATIONS

To be supplemented by Standard Plans dated July, 1992



(NO SCALE)

LOCATION MAP

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

WORK LOCATIONS

	LOC	ROUTE	PM	NAME	BR NO
1	1	101	1.42	GRAND AVE. RAMP	53-103S
	2	101	0.76	ALAMEDA ST UP	53-782
	3	101	0.80	DANIELS SPUR UP	53-799
2	4	110	23.83	SUNSET BLVD. OC	53-246
	5	110	24.16	COLLEGE ST. OC	53-382
3	6	110	24.73	STADIUM WAY UC	53-540L
4	7	110	25.20	PARK ROW OC	53-542L
6	8	101	1.45	FIGUEROA ST. UC	53-623G
	9	101	1.45	FIGUEROA ST. UC	53-623L
	10	101	1.45	FIGUEROA ST. UC	53-623R
	11	101	1.45	FIGUEROA ST. UC	53-662H
	12	101	1.13	HILL ST OC	53-625
5	13	110	1.57	FOUR LEVEL STRUC (LEVEL TWO)	53-622
	14	110	1.57	FOUR LEVEL STRUC (LEVEL THREE)	53-622F
	15	101	1.57	FOUR LEVEL STRUC (LEVEL THREE)	53-622G
	16	101	1.57	FOUR LEVEL STRUC (LEVEL FOUR)	53-622R

GEOCON

PROJ. NO. 08730-06-09
FIGURE 1
DATE 12 - 24 - 1996

VICINITY MAP

The Contractor shall possess the Class (or Classes) of license

ST ENGINEER	DATE	PROJECT MANAGER	DATE
L-JAMAL		PAT HOBERT	

Contract No. 170404

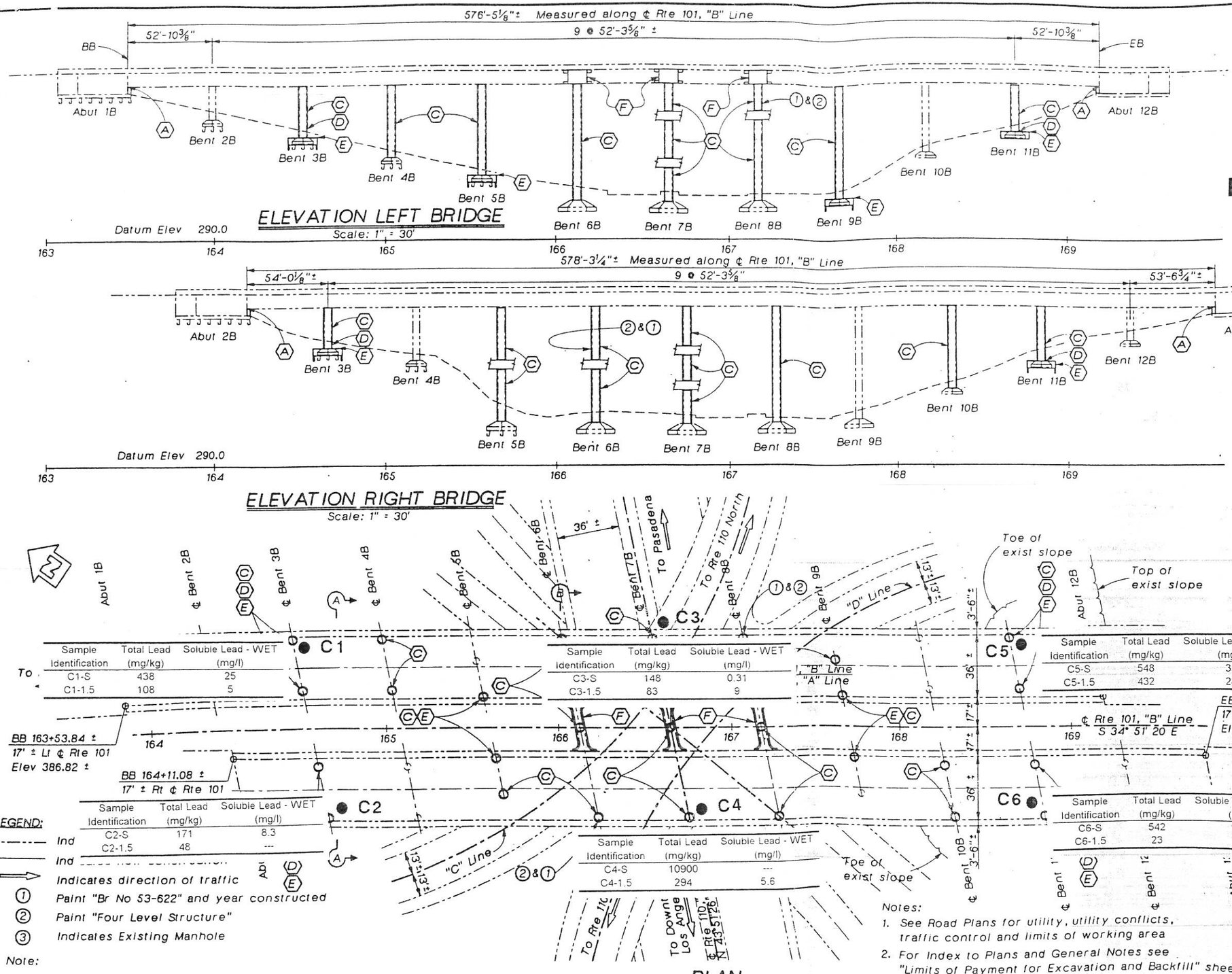
LAST REVISION 00-00-00
TIME PLOTTED => $$$$$$$$SYTIME$$$$$$$$

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07					

GEOCON

PROJ. NO. 08730-06-09
FIGURE 6
DATE 12 - 24 - 1996

BORING LOCATIONS MAP



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C1-S	438	25
C1-1.5	108	5

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C2-S	171	8.3
C2-1.5	48	---

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C3-S	148	0.31
C3-1.5	83	9

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C4-S	10900	---
C4-1.5	294	5.6

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C5-S	548	31
C5-1.5	432	28

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C6-S	542	30
C6-1.5	23	---

LEGEND:

- Ind
- Ind
- Indicates direction of traffic
- ① Paint "Br No 53-622" and year constructed
- ② Paint "Four Level Structure"
- ③ Indicates Existing Manhole

Note:

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

Notes:

1. See Road Plans for utility, utility conflicts, traffic control and limits of working area
2. For Index to Plans and General Notes see "Limits of Payment for Excavation and Backfill" sheet
3. For clarity some columns are not shown on elevations
4. For Pile data see "Footing Retrofit Details No 3" sheet

RETROFIT LEGEND

- (A) Abutment shear keys
- (C) Steel Column Casing
- (D) Column/footing connection strengthening
- (E) Footing Retrofit
- (F) Link Beam Strengthening

DESIGN OVERSIGHT Stephen Bandirola	DESIGN	BY B. Veksler	CHECKED H. Fellen / M. N. Palaskas	LOAD FACTOR DESIGN			
SIGN OFF DATE	DETAILS	BY B. Leach	CHECKED M. N. Palaskas	LAYOUT	BY B. Veksler	CHECKED R. Schroeder	
	QUANTITIES	BY L. He	CHECKED H. Fellen	SPECIFICATIONS	BY R. Schroeder	PLANS AND SPECS COMPARED B. Veksler	

ORIGINAL SCALE IN INCHES

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Boris Veksler
PROJECT ENGINEER

CU 07

BRIDGE NO.	53-622 R/L/GH
POST MILE	1.57

DISREGARD PRINTS BEARING

EARTHQUAKE RETROFIT PROJECT NO 146

FOUR LEVEL STRUCTURE

GENERAL PLAN - "B" LINE

REVISION DATES (PRELIMINARY STAGE ONLY)

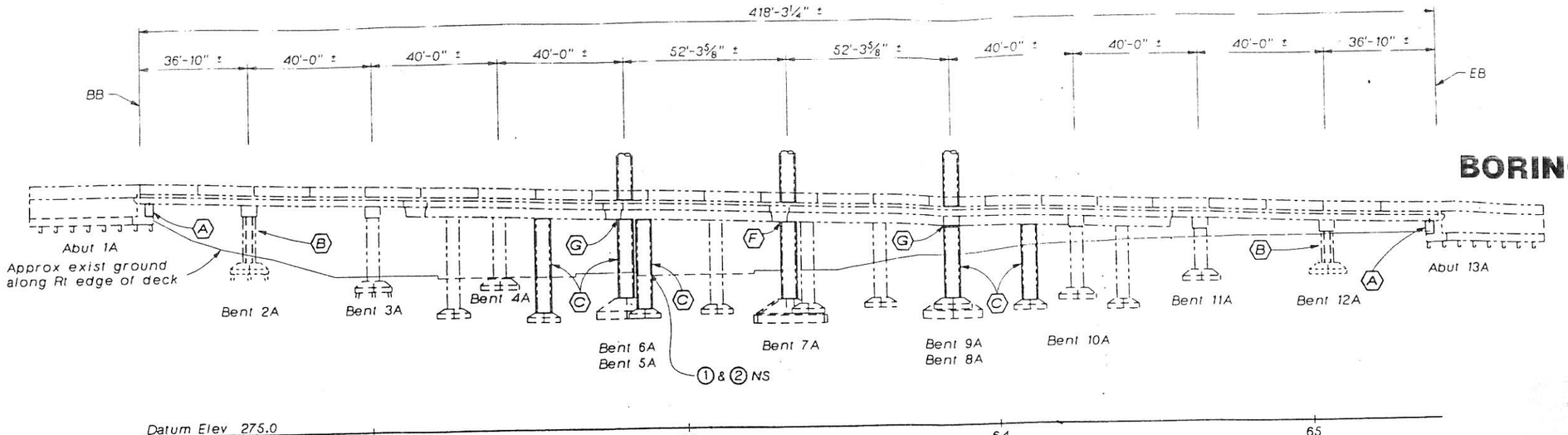
1 SHEET 12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07					

GEOCON

PROJ. NO. 08730-06-09
FIGURE 7
DATE 12 - 24 - 1996

BORING LOCATIONS MAP



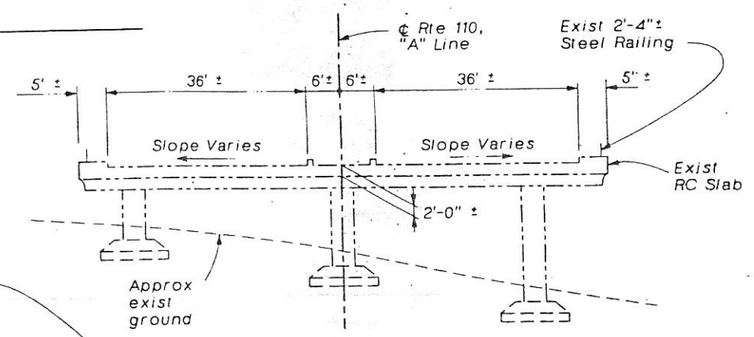
ELEVATION
Scale: 1" = 20'-0"

Notes:

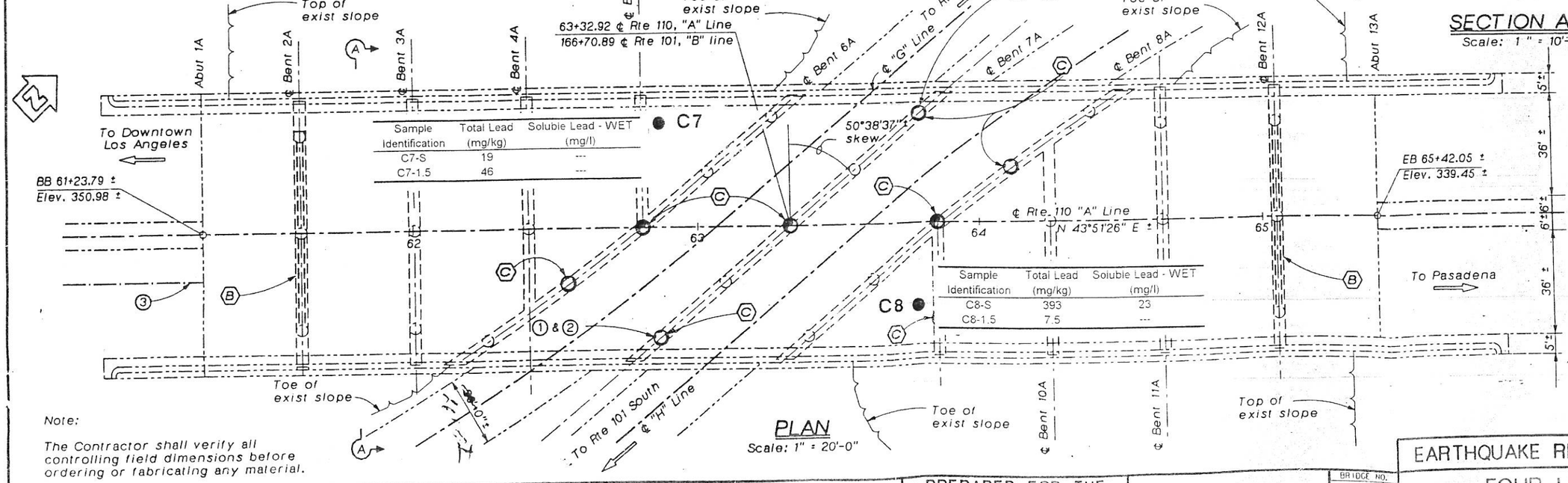
1. For Index to Plans and General Notes see "Limits of Payment for Excavation and Backfill" sheet
2. For clarity, some columns are not shown on elevation
3. See Road Plans for utility, utility conflicts, traffic control and limits of working area

LEGEND:

- Indicates existing structure
- Indicates new construction
- Indicates direction of traffic
- Indicates shared columns
- ① Paint "Br No 53-622" and year completed
- ② Paint "Four Level Structure"
- ③ 8" Sewer Abandoned (approx location)



SECTION A-A
Scale: 1" = 10'-0"



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C7-S	19	---
C7-1.5	46	---

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
C8-S	393	23
C8-1.5	7.5	---

PLAN
Scale: 1" = 20'-0"

RETROFIT LEGEND

- (A) Abutment Shear Keys
- (B) Infill Wall
- (C) Steel Column Casing
- (F) Beam Casing
- (G) Column/Superstructure connection strengthening

Note:

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN OVERSIGHT Stephen Bandirola	DESIGN	BY B. Veksler	CHECKED H. Fellen, M. N. Palaskas	LOAD FACTOR DESIGN			
	DETAILS	BY B. Leach	CHECKED M. N. Palaskas	LAYOUT	BY B. Veksler	CHECKED R. Schroeder	
SIGN OFF DATE	QUANTITIES	BY L. He	CHECKED N. Negrete, Jr.	SPECIFICATIONS	BY R. Schroeder	PLANS AND SPECS COMPARED B. Veksler	

ORIGINAL SCALE IN INCHES

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Boris Veksler
PROJECT ENGINEER

CU 07

BRIDGE NO.	EARTHQUAKE RETROFIT PROJECT NO 146
53-622 R/L/G/H	FOUR LEVEL STRUCTURE
POST MILE 1.57	GENERAL PLAN - "A" LINE

DISREGARD PRINTS BEARING EARLIER REVISION DATES (PRELIMINARY STAGE ONLY)

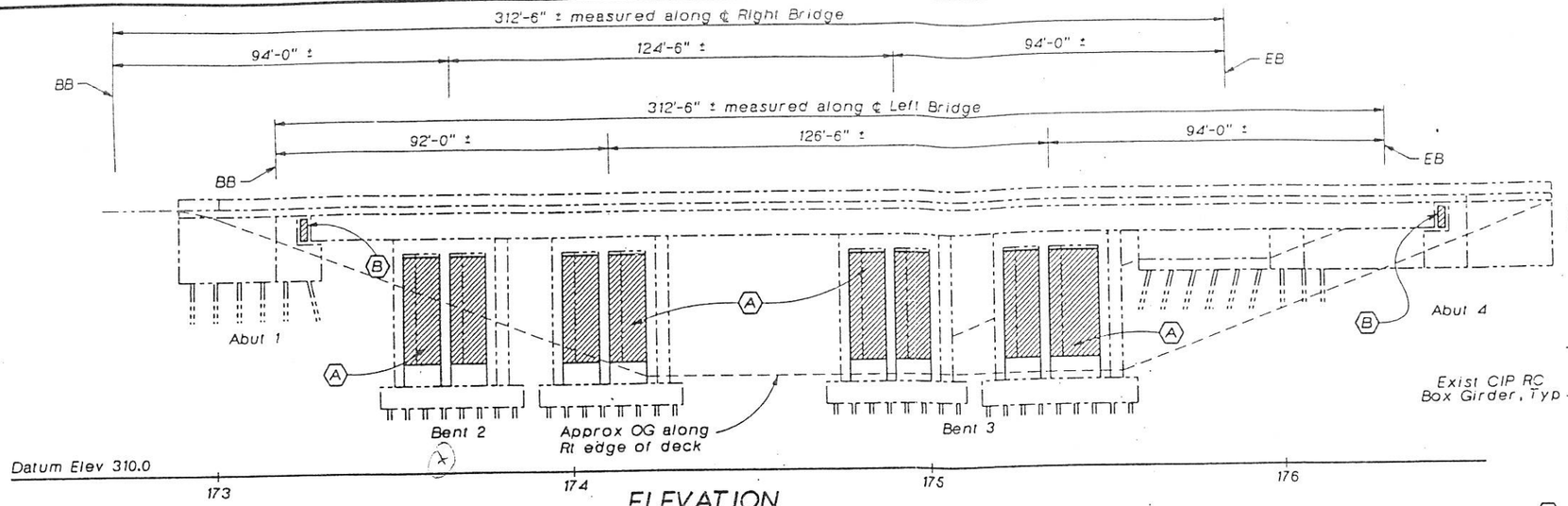
SHEET OF

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07					

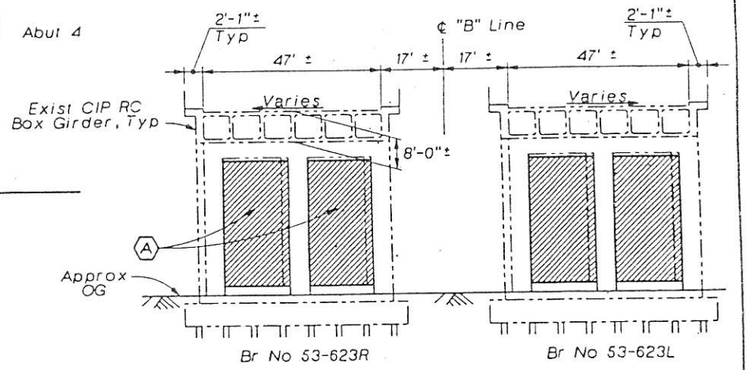
GEOCON

PROJ. NO. 08730-06-09
FIGURE 9
DATE 12 - 24 - 1996

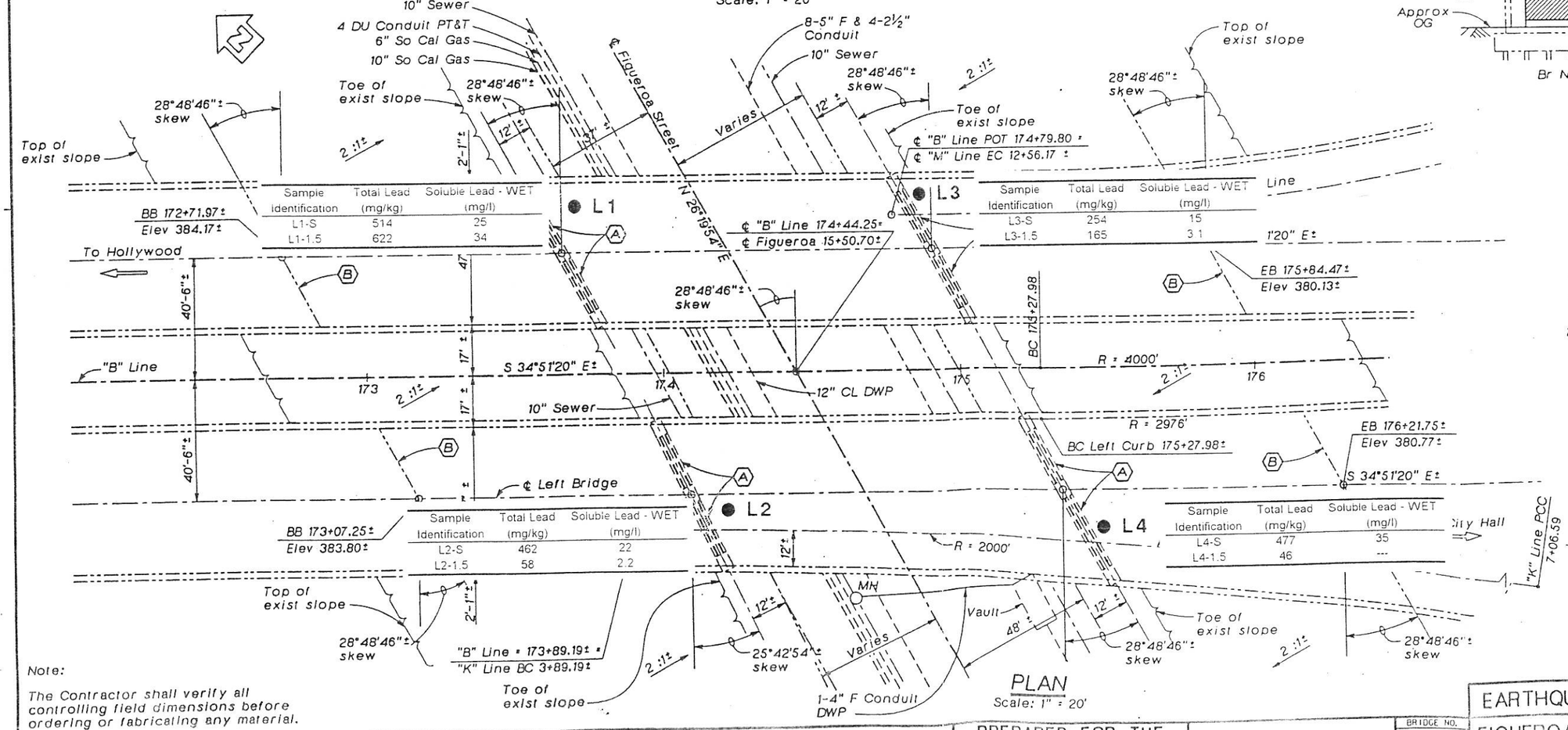
BORING LOCATIONS MAP



ELEVATION
Scale: 1" = 20'



TYPICAL SECTION
Scale: 1" = 20'



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L1-S	514	25
L1-1.5	622	34

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L2-S	462	22
L2-1.5	58	2.2

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L3-S	254	15
L3-1.5	165	3.1

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L4-S	477	35
L4-1.5	46	---

PLAN
Scale: 1" = 20'

LEGEND:

- Indicates Existing Structure
- Indicates New Construction
- Indicates direction of traffic

Notes:

1. See Road Plans for utilities, utility conflicts, traffic control and limits of working area.
2. For General Notes see "Abutment Retrofit Details No 1" sheet.

RETROFIT CODES

- (A) Infill Wall
- (B) Abutment Lumber Blocking

INDEX TO PLANS

1. General Plan
2. Abutment Retrofit Details No 1
3. Abutment Retrofit Details No 2
4. Bent Retrofit Details

STANDARD PLANS DATED JULY 1992

A10A	ABBREVIATIONS
A10B	SYMBOLS
B0-1	BRIDGE DETAILS

Note:

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN OVERSIGHT Stephen Bandirola	DESIGN	BY H. Fellen	CHECKED B. Veksler / N. Negrete Jr	LAYOUT	BY B. Veksler	CHECKED H. Fellen	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
	DETAILS	BY B. Leach	CHECKED B. Veksler	SPECIFICATIONS	BY R. Schroeder	PLANS AND SPECS COMPARED B. Veksler	
	QUANTITIES	BY H. Fellen	CHECKED N. Negrete Jr				

Boris Veksler
PROJECT ENGINEER

BRIDGE NO.	53-623 L/R
POST MILE	1.45

EARTHQUAKE RETROFIT PROJECT NO. 146

FIGUEROA STREET UNDERCROSSING "L" & "R"

GENERAL PLAN

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

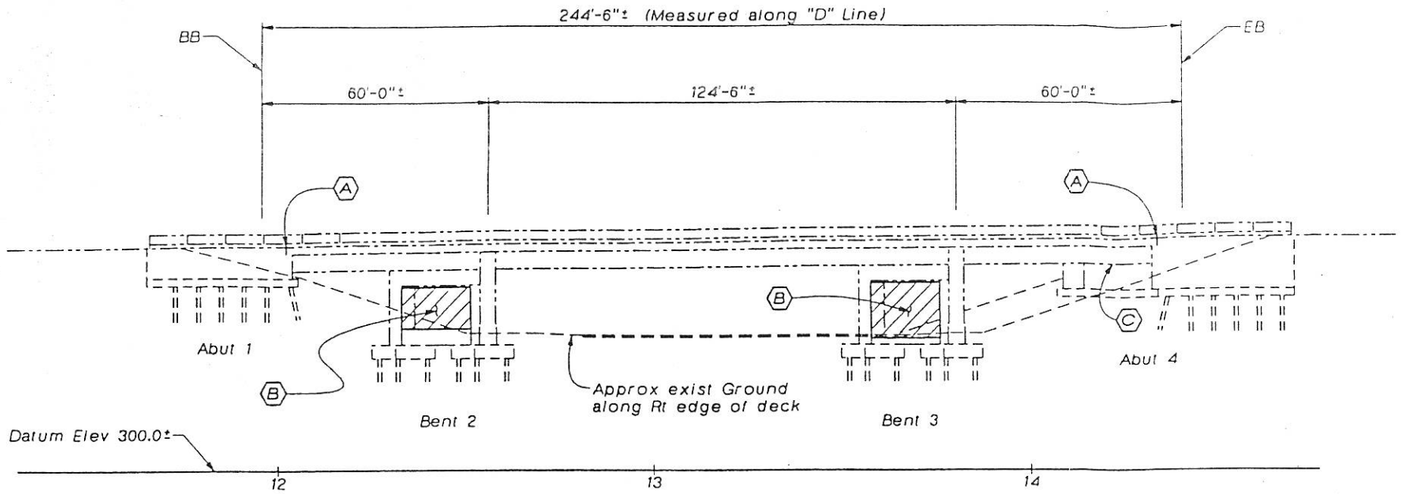
9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07					

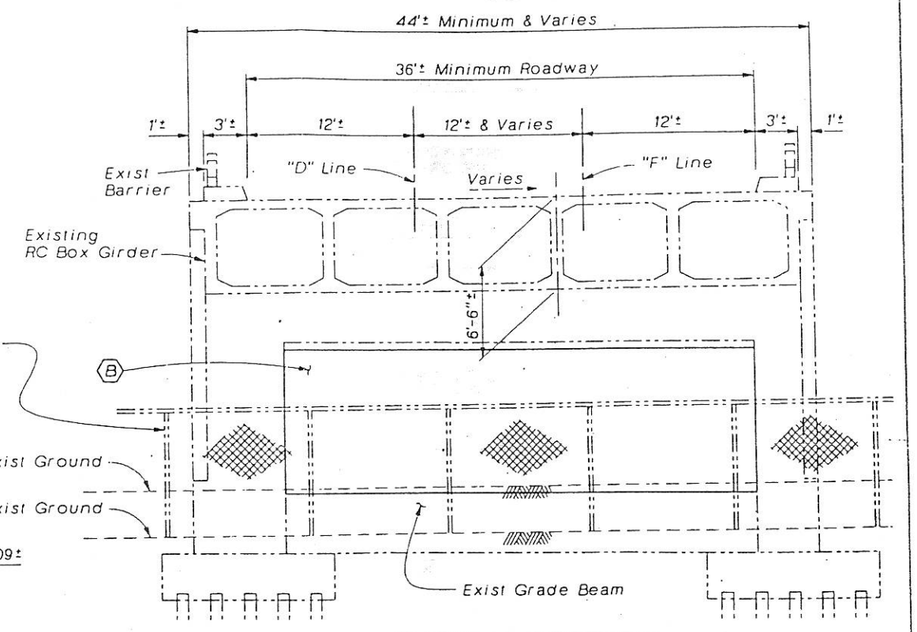
GEOCON

PROJ. NO. 08730-06-09
FIGURE 8
DATE 12 - 24 - 1996

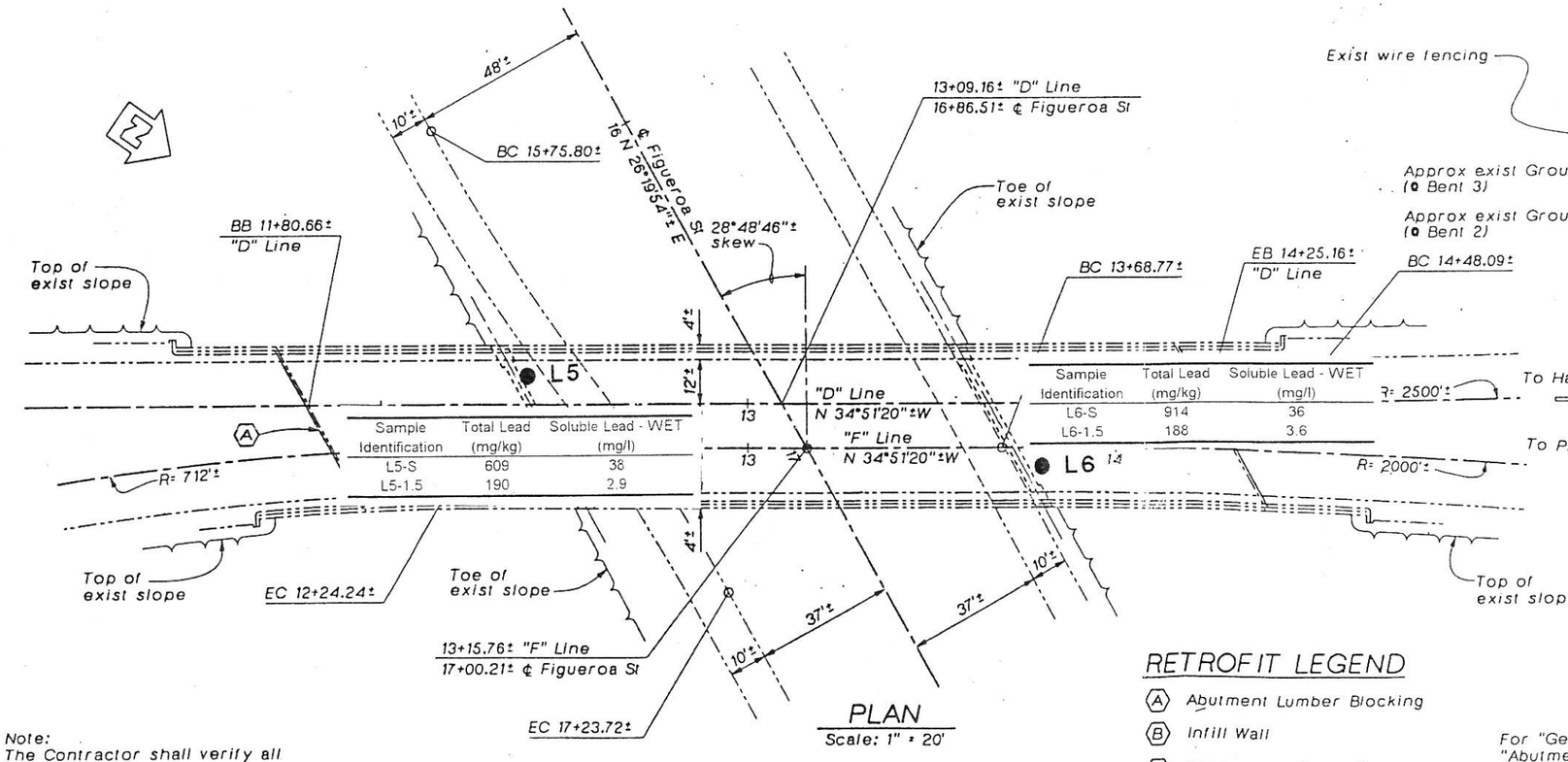
BORING LOCATIONS MAP



ELEVATION
Scale: 1" = 20'



TYPICAL SECTION
Scale: 3/16" = 1'-0"



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L5-S	609	38
L5-1.5	190	2.9

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
L6-S	914	36
L6-1.5	188	3.6

PLAN
Scale: 1" = 20'

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

RETROFIT LEGEND

Ⓐ Abutment Lumber Blocking

Ⓑ Infill Wall

Ⓒ Transverse Shear Key (Abut 4 only)

For "General Notes" see "Abutment Retrofit Details No. 1" sheet.

Note:
Existing fencing shall be removed and reinstalled by the Contractor after infill wall construction.

LEGEND

Denotes existing structure

Denotes new construction

INDEX TO PLANS

1. GENERAL PLAN
2. ABUTMENT RETROFIT DETAILS No. 1
3. ABUTMENT RETROFIT DETAILS No. 2
4. ABUTMENT RETROFIT DETAILS No. 3
5. ABUTMENT RETROFIT DETAILS No. 4
6. BENT RETROFIT DETAILS
7. DECK AND SOFFIT OPENINGS

STANDARD PLANS DATED JULY, 1992

A10A	ABBREVIATIONS
A10B	SYMBOLS
B0-1	BRIDGE DETAILS

DESIGN OVERSIGHT STEPHEN BANDIROLA	DESIGN	BY C. CHANG/C. LIM	CHECKED G. CHU	LOAD FACTOR DESIGN			
	DETAILS	BY R. ANDRASEK	CHECKED S. XIE	LAYOUT	BY R. ANDRASEK	CHECKED S. XIE	
SIGN OFF DATE	QUANTITIES	BY H. LAM	CHECKED M. NGUYEN	SPECIFICATIONS	BY R. SCHROEDER	PLANS AND SPECS COMPARED S. XIE	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

CHEN L. LIM
PROJECT ENGINEER

CU 07

BRIDGE NO. 53-623G
POST MILE 1.45

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

EARTHQUAKE RETROFIT PROJECT No. 146

FIGUEROA STREET UNDERCROSSING "G"

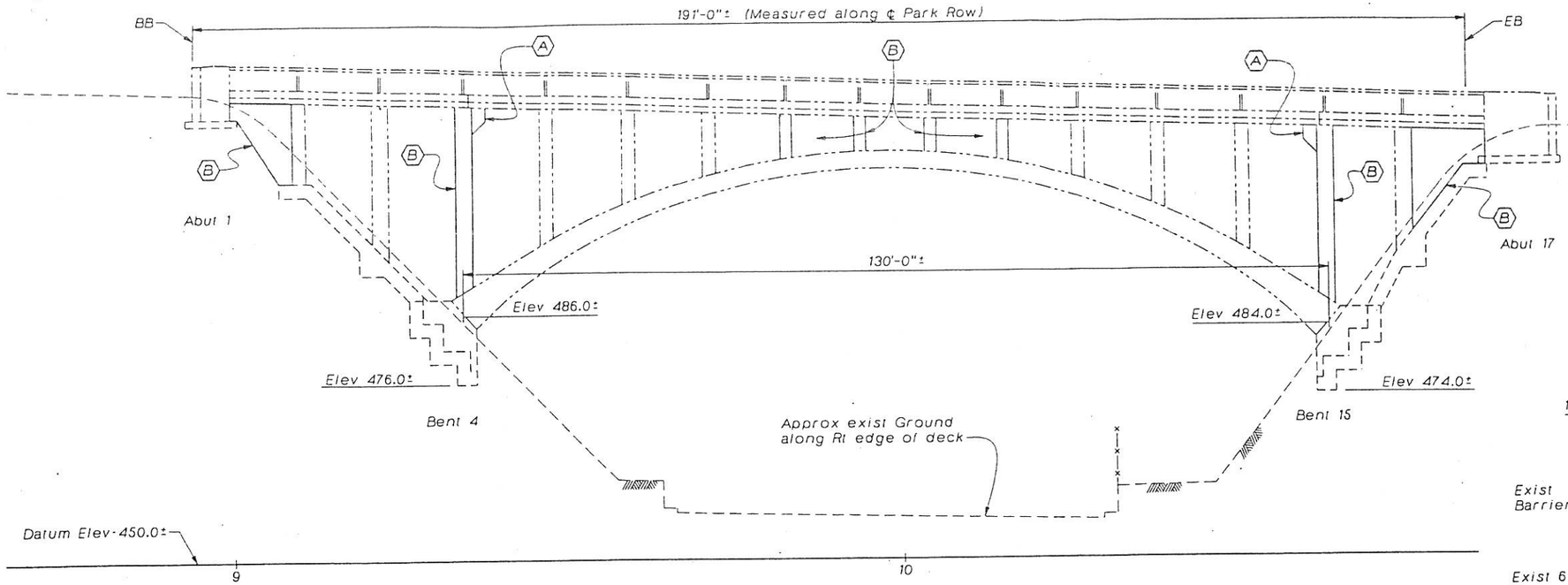
GENERAL PLAN

DIST	COUNTY	ROUTE	TOTAL PROJECT	NO.	SHEETS
07					

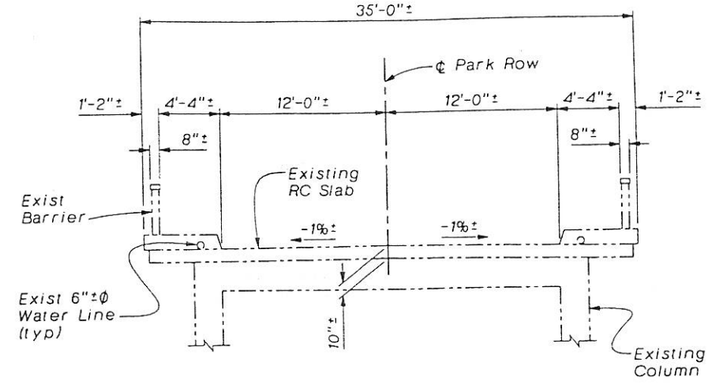
GEOCON

PROJ. NO. 08730-06-09
FIGURE 5
DATE 12 - 24 - 1996

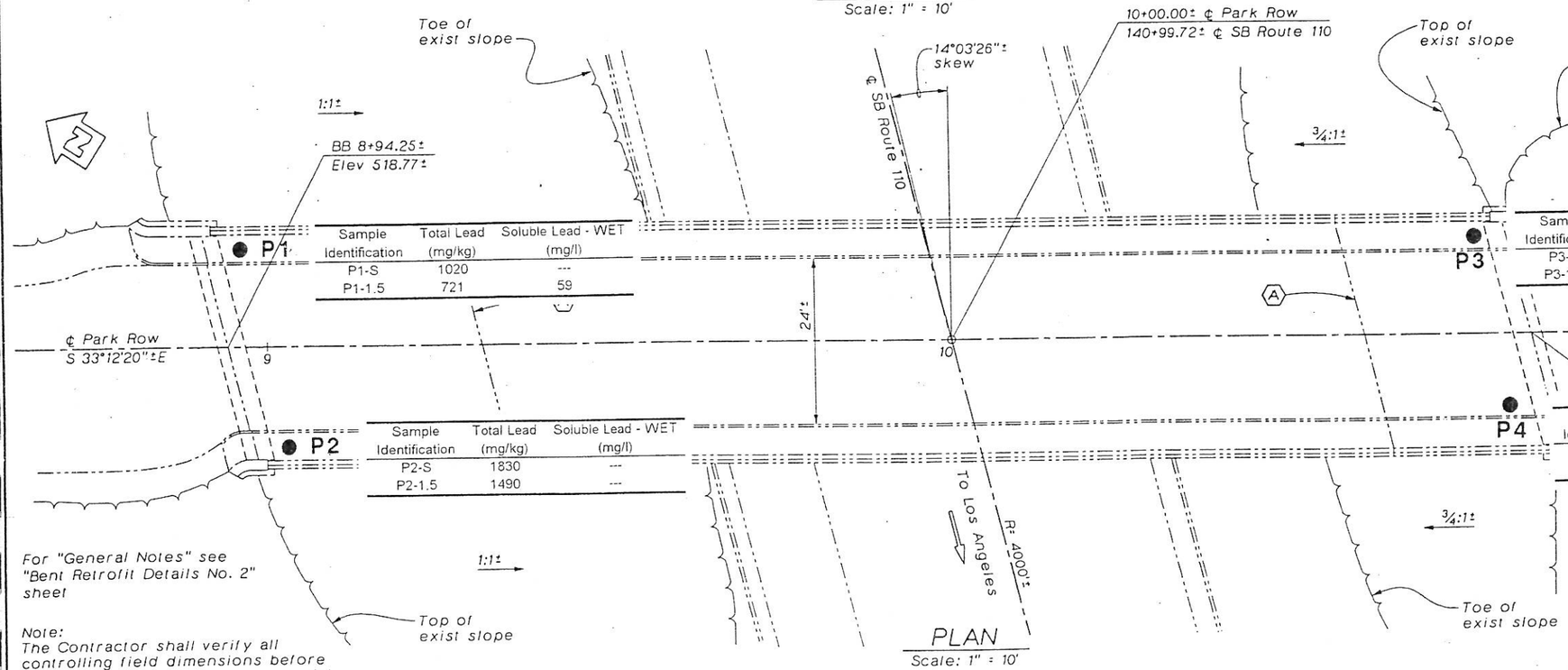
BORING LOCATIONS MAP



ELEVATION
Scale: 1" = 10'



TYPICAL SECTION
Scale: 3/16" = 1'-0"



PLAN
Scale: 1" = 10'

For "General Notes" see "Bent Retrofit Details No. 2" sheet

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

LEGEND

Denotes existing structure

Denotes new construction

INDEX TO PLANS

1. GENERAL PLAN
2. BENT RETROFIT DETAILS No. 1
3. BENT RETROFIT DETAILS No. 2
4. BENT RETROFIT DETAILS No. 3
5. BENT RETROFIT DETAILS No. 4
6. BENT RETROFIT DETAILS No. 5
7. BENT RETROFIT DETAILS No. 6
8. HINGE RETROFIT DETAILS

RETROFIT LEGEND

(A) Pipe Restrainer

(B) Infill Wall

STANDARD PLANS DATED JULY, 1992

A10A	ABBREVIATIONS
A10B	SYMBOLS
B0-1	BRIDGE DETAILS

DESIGN OVERSIGHT STEPHEN BANDIROLA	DESIGN	BY G. CHU	CHECKED M. ZAHEDI	LOAD FACTOR DESIGN			
	DETAILS	BY R. ANDRASEK	CHECKED G. CHU	LAYOUT	BY R. ANDRASEK	CHECKED G. CHU	
SIGN OFF DATE	QUANTITIES	BY M. ZAHEDI	CHECKED M. NGUYEN	SPECIFICATIONS	BY R. SCHROEDER	PLANS AND SPECS COMPARED S. XIE	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

CHEN L. LIM
PROJECT ENGINEER

CU 07
EA 170401
CONTRACT NO. 59X653-1

BRIDGE NO. 53-542L
POST MILE 25.20

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 2/14/96 4/22/96 5/17/96

SHEET 1 OF 8

EARTHQUAKE RETROFIT PROJECT No. 146

PARK ROW OVERCROSSING

GENERAL PLAN

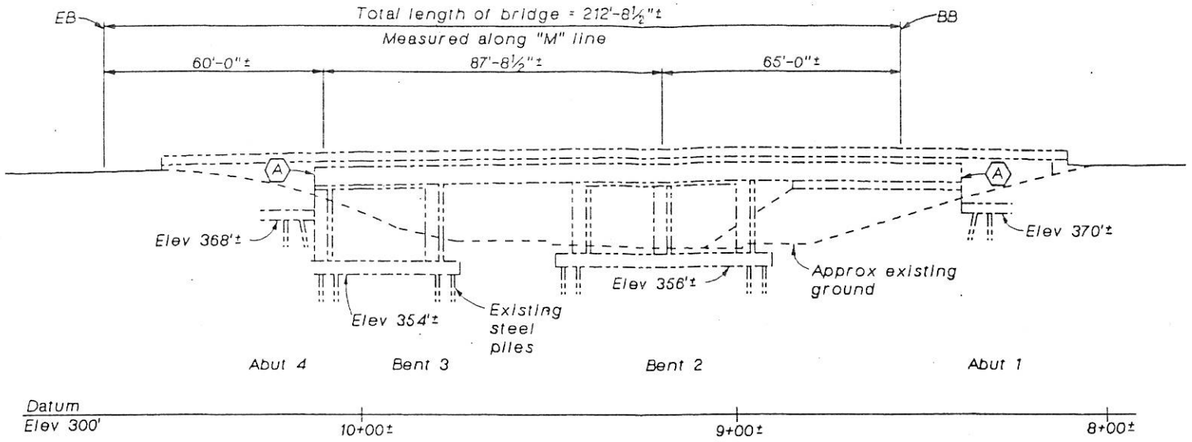
GP12.DGN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7					

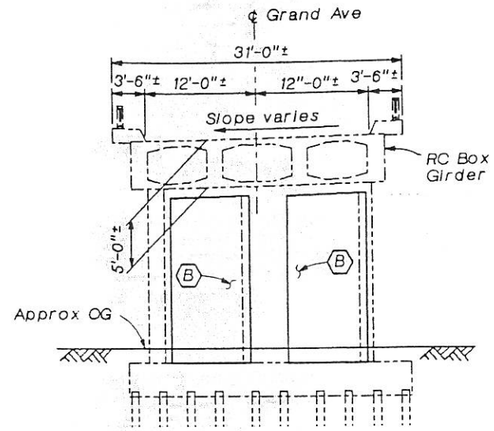
GEOCON

PROJ. NO. 08730-06-09
FIGURE 2
DATE 12 - 24 - 1996

BORING LOCATIONS MAP

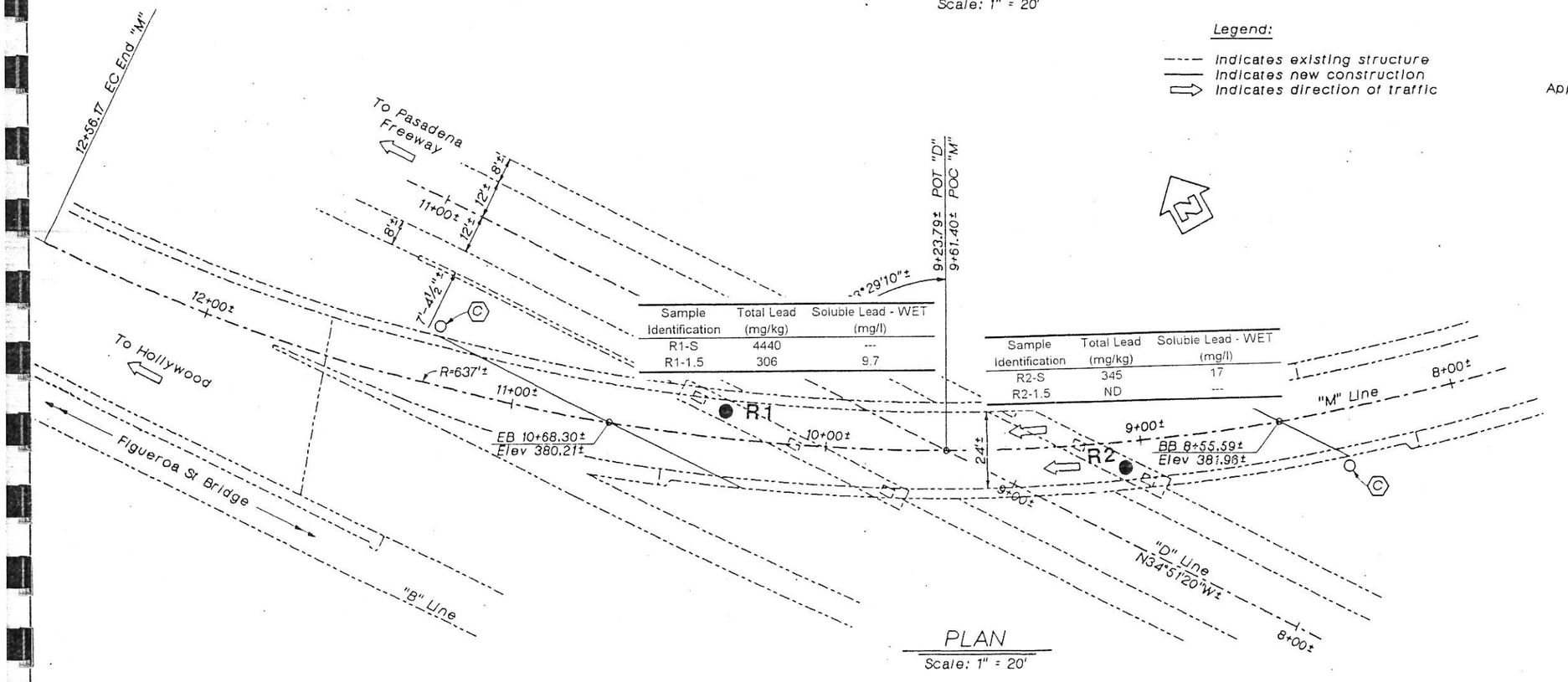


ELEVATION
Scale: 1" = 20'



TYPICAL SECTION
Scale: ⅛" = 1'-0"

Bent No 2 shown,
Bent No 3 similar



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
R1-S	4440	---
R1-1.5	306	9.7

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
R2-S	345	17
R2-1.5	ND	---

PLAN
Scale: 1" = 20'

Legend:

---- Indicates existing structure
——— Indicates new construction
⇨ Indicates direction of traffic

INDEX TO PLANS

Sheet No	Title
1	General Plan
2	Abutment Retrofit Details No 1
3	Abutment Retrofit Details No 2
4	Abutment Retrofit Details No 3
5	Bent Retrofit Details

RETROFIT LEGEND

(A) Abutment Lumber Blocking
(B) Infill wall
(C) CIDH Pile

STANDARD PLANS DATED JULY, 1992

A10A	Abbreviations
A10B	Symbols
B0-1	Bridge Details

Note:

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material

Notes:

For GENERAL NOTES see "ABUTMENT RETROFIT DETAILS NO. 2" sheet

DESIGN OVERSIGHT: STEPHEN BANDTROLA	DESIGN	By F. Kang	Checked M.R. Khalafbeigi	LAYOUT	By J. Quinoveva	Checked F. Kang	
SIGN OFF DATE	DETAILS	By N. Van Winkle	Checked M.R. Khalafbeigi	SPECIFICATIONS	By R. Schroeder	PLANS AND SPECS COMPARED H. Ahmed	
	QUANTITIES	By F. Kang	Checked Y. Matsuo				

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

M. R. KHALAFBEIGI
PROJECT ENGINEER

CU 07
EA 170401

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

BRIDGE NO. 53-103S
POST MILE 1.41

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 4/1/96 4/22/96 5/21/96 5/28/96

SHEET 1 OF 5

EARTHQUAKE RETROFIT PROJECT NO 146

GRAND AVENUE RAMP

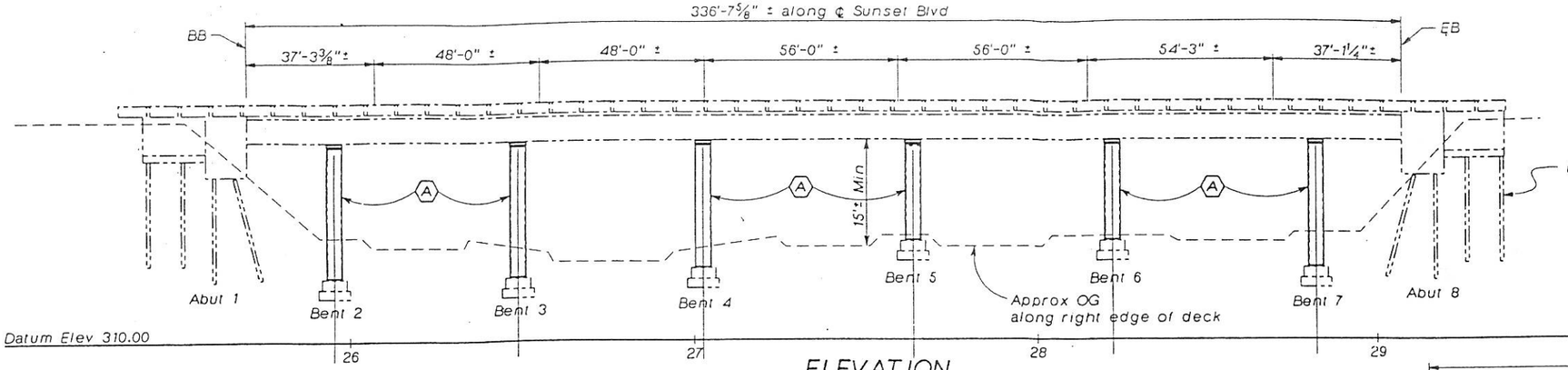
GENERAL PLAN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07				4	

GEOCON

PROJ. NO. 08730-06-09
FIGURE 3
DATE 12 - 24 - 1996

BORING LOCATIONS MAP



ELEVATION
Scale: 1" = 20'

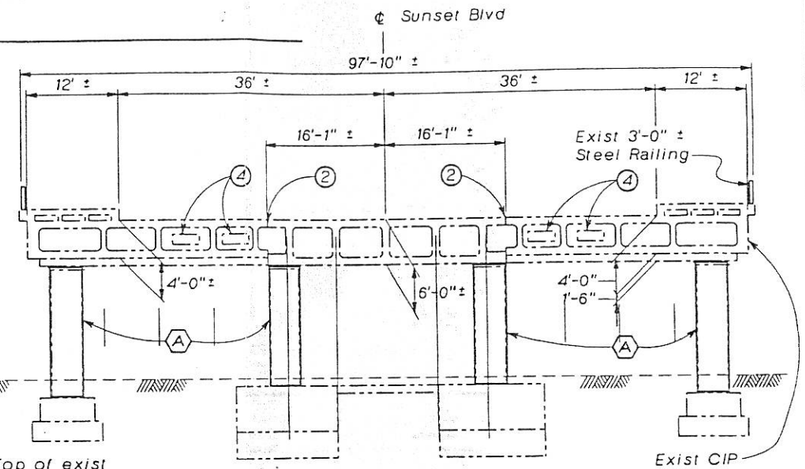
LEGEND:

- Point of minimum vertical clearance
- Indicates existing structure
- Indicates new construction
- Indicates direction of traffic
- ① Existing Manhole
- ② ½"± Expansion Joint
- ③ Storm Drain
- ④ Existing Utility Openings
- ⑤ Paint "Bridge No. 53-246" and year constructed
- ⑥ Paint " Sunset Blvd OC"

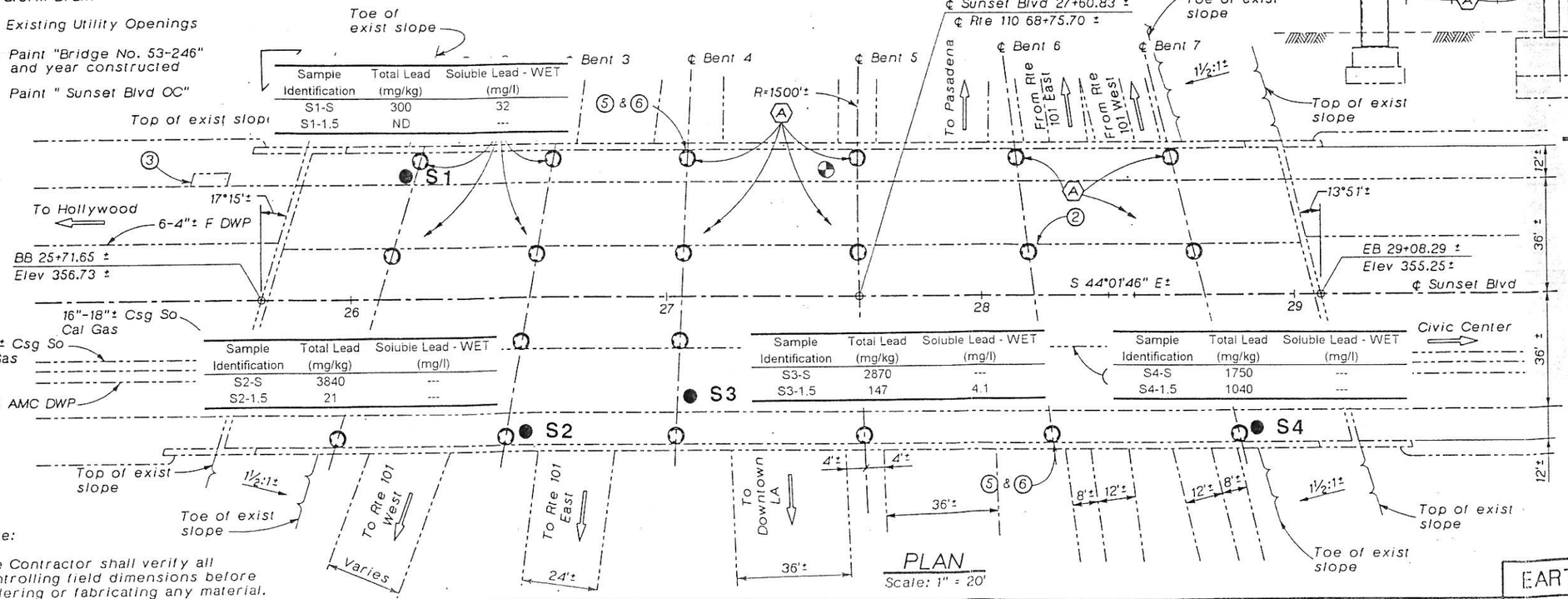
STANDARD PLANS DATED JULY 1992

A10A	ABBREVIATIONS
A10B	SYMBOLS
B0-1	BRIDGE DETAILS
B7-6	DECK DRAINS TYPES D-1 AND D-2

(A) — STANDARD PLAN SHEET No
DETAIL No



TYPICAL SECTION
Scale: 1" = 10'



Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
S1-S	300	32
S1-1.5	ND	---

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
S2-S	3840	---
S2-1.5	21	---

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
S3-S	2870	---
S3-1.5	147	4.1

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
S4-S	1750	---
S4-1.5	1040	---

PLAN
Scale: 1" = 20'

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

INDEX TO PLANS

1. General Plan
2. Column Retrofit Details No 1
3. Column Retrofit Details No 2
4. Steel Column Casing

RETROFIT LEGEND

(A) Steel Column Casing

Notes:

1. See Road Plans for utilities, utilities conflicts, traffic control and limits of working area
2. For General Notes see "Column Retrofit Details No 2" sheet

DESIGN OVERSIGHT Stephen Bandirola	DESIGN	BY L. He B. Veksler	CHECKED M.N. Palaskas	LAYOUT	BY B. Veksler	CHECKED M.N. Palaskas	
SIGN OFF DATE	DETAILS	BY B. Leach	CHECKED M.N. Palaskas	SPECIFICATIONS	BY R. Schroeder	PLANS AND SPECS COMPARED B. Veksler	
	QUANTITIES	BY L. He	CHECKED N. Negrete Jr				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Boris Veksler
PROJECT ENGINEER

CU 07

BRIDGE NO.	53-246
POST MILE	23.83

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET 1 OF 4

EARTHQUAKE RETROFIT PROJECT NO 146

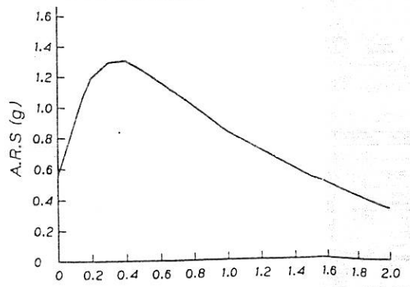
SUNSET BOULEVARD OVERCROSSING

GENERAL PLAN

DIST	COUNTY	ROUTE	TOTAL PROJECT	NO.	SHEETS
07					

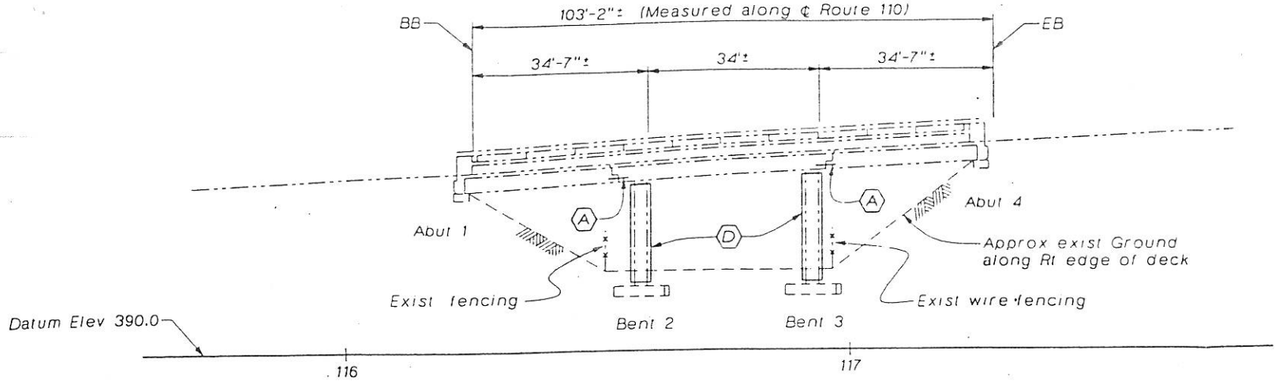
GEOCON

PROJ. NO. 08730-06-09
FIGURE 4
DATE 12 - 24 - 1996

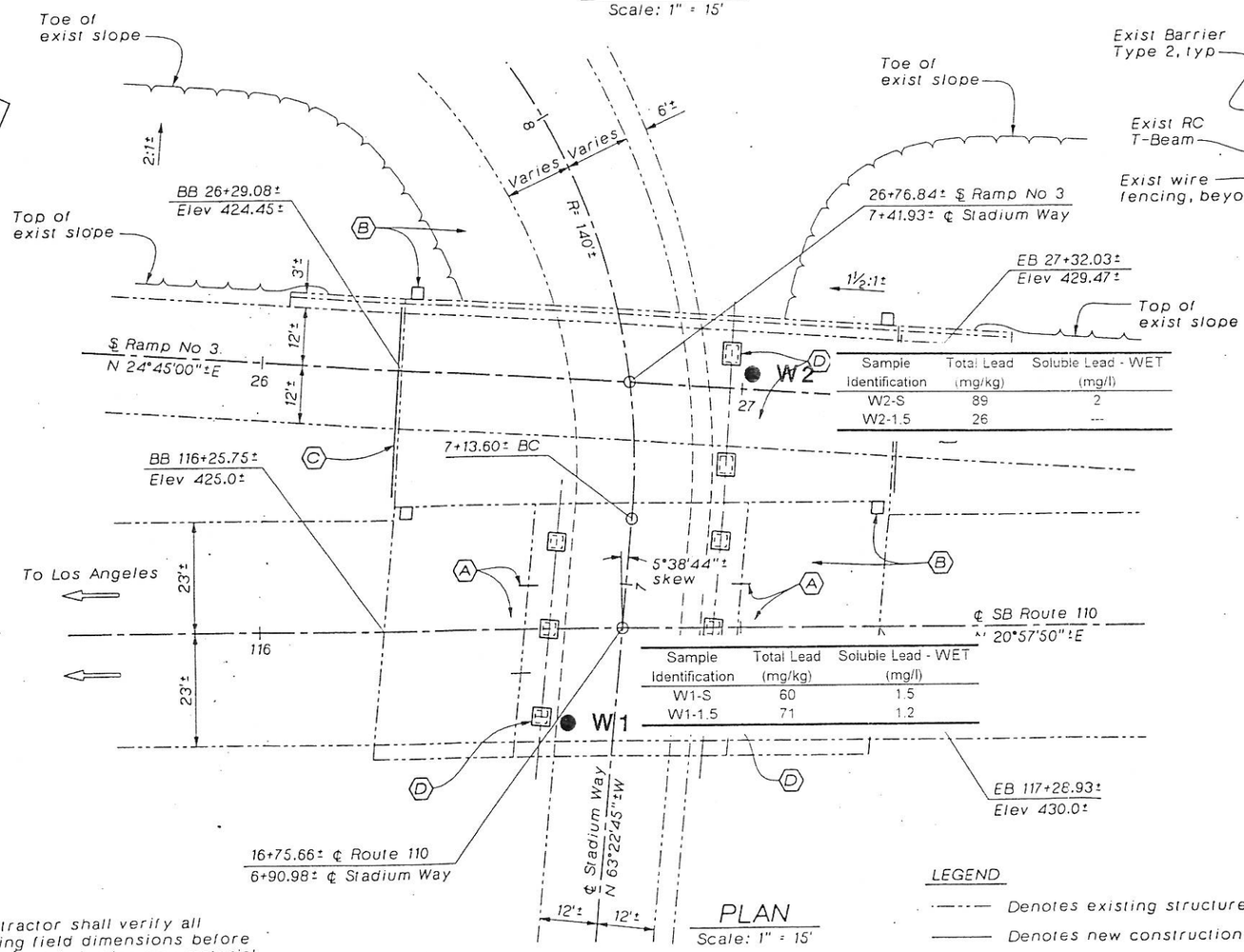


SITE SPECIFIC RESPONSE SPECTRA
No Scale

BORING LOCATIONS MAP



ELEVATION
Scale: 1" = 15'



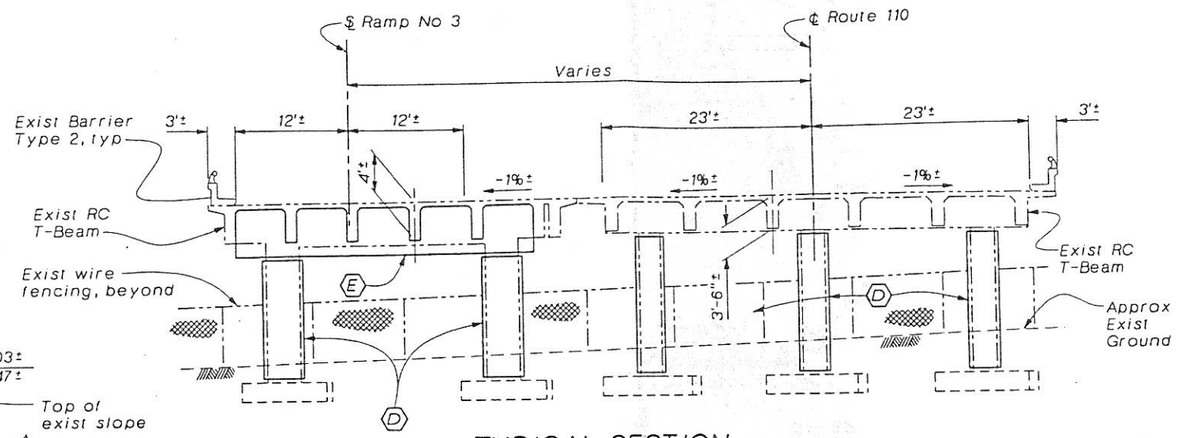
Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
W2-S	89	2
W2-1.5	26	---

Sample Identification	Total Lead (mg/kg)	Soluble Lead - WET (mg/l)
W1-S	60	1.5
W1-1.5	71	1.2

PLAN
Scale: 1" = 15'

LEGEND
- Denotes existing structure
- Denotes new construction

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.



TYPICAL SECTION
Scale: ⅛" = 1'-0"

STANDARD PLANS DATED JULY 1992

A10A	ABBREVIATIONS
A10B	SYMBOLS
B0-1	BRIDGE DETAILS

GENERAL NOTES
LOAD FACTOR DESIGN

DESIGN:	BRIDGE DESIGN SPECIFICATIONS (1983 AASHTO with Interims and Revisions by CALTRANS)
SEISMIC LOADING:	Peak Rock Acceleration = 0.6g Depth of Alluvium = 10 to 80 ft See "Site Specific Response Spectra"
REINFORCED CONCRETE:	Existing Concrete (Assumed for Retrofit Evaluation) fy = 44,000 psi f'c = 5,000 psi New Concrete (Bridge) fy = 60,000 psi f'c = 3,250 psi n = 9
MISCELLANEOUS METAL:	Plates-ASTM A36, fy = 36,000 psi

INDEX TO PLANS

1. GENERAL PLAN
2. ABUTMENT RETROFIT DETAILS NO. 1
3. ABUTMENT RETROFIT DETAILS NO. 2
4. ABUTMENT RETROFIT DETAILS NO. 3
5. BENT RETROFIT DETAILS NO. 1
6. BENT RETROFIT DETAILS NO. 2
7. BENT RETROFIT DETAILS NO. 3
8. HINGE RETROFIT DETAILS
9. STEEL COLUMN CASING

RETROFIT LEGEND

- (A) Pipe Restrainer
- (B) Abutment Transverse Shear Key
- (C) Abutment Lumber Blocking
- (D) Rectangular Steel Column Casing
- (E) Bent Cap Retrofit

DESIGN OVERSIGHT STEPHEN BANDIROLA	DESIGN	BY C. LIM / C. CHANG	CHECKED G. CHU	LOAD FACTOR DESIGN			
	DETAILS	BY R. ANDRASEK	CHECKED S. XIE	LAYOUT	BY R. ANDRASEK	CHECKED C. LIM	
SIGN OFF DATE	QUANTITIES	BY H. LAM	CHECKED M. NGUYEN	SPECIFICATIONS	BY R. SCHROEDER	PLANS AND SPECS COMPARED S. XIE	

PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CHEN L. LIM
PROJECT ENGINEER

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 07
EA 170401
CONTRACT NO. 59X853-1

BRIDGE NO. 53-540L
POST MILE 24.73

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)

EARTHQUAKE RETROFIT PROJECT No. 146

STADIUM WAY UNDERCROSSING

GENERAL PLAN

SHEET 1 OF 9

GP11.DGN

TABLE I

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 1 - GRAND AVENUE RAMP

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead- WET EPA 7420 (mg/l)
Bent 3	R1-S	< ½	4440	---
	R1-1.5	1½	306 (307)	9.7
Bent 2	R2-S	< ½	345	17
	R2-1.5	1½	ND	---

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

TABLE II

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 2 - SUNSET BOULEVARD OVERCROSSING

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead- WET EPA 7420 (mg/l)
Bent 2	S1-S	< ½	300	32
	S1-1.5	1½	ND	---
Bent 3	S2-S	< ½	3840	---
	S2-1.5	1½	21	---
Bent 4	S3-S	< ½	2870	---
	S3-1.5	1½	147	4.1
Bent 7	S4-S	< ½	1750	---
	S4-1.5	1½	1040 (929)	---

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

TABLE III

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 3 - STADIUM WAY UNDERCROSSING

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead- WET EPA 7420 (mg/l)
Bent 2	W1-S	< ½	60	1.5
	W1-1.5	1½	71	1.2
Bent 3	W2-S	< ½	89	2.0
	W2-1.5	1½	26	---

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

TABLE IV

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 4 - PARK ROW OVERCROSSING

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead- WET EPA 7420 (mg/l)
Bent 4	P1-S	< ½	1020	---
	P1-1.5	1½	721	59
	P2-S	< ½	1830	---
	P2-1.5	1½	1490	---
Bent 15	P3-S	< ½	2690	---
	P3-1.5	1½	350 (592)	27
	P4-S	< ½	2960	---
	P4-1.5	1½	814 (971)	65

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

TABLE V

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 5 - 101/110 FOUR LEVEL STRUCTURE

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead- WET EPA 7420 (mg/l)
Bent 3B	C1-S	< ½	438	25
	C1-1.5	1½	108	5.0
	C2-S	< ½	171	8.3
	C2-1.5	1½	48	---
Bent 7B	C3-S	< ½	148	0.31
	C3-1.5	1½	83	9.0
	C4-S	< ½	10900	---
	C4-1.5	1½	294	5.6
Bent 11B	C5-S	< ½	548	31
	C5-1.5	1½	432 (343)	28
	C6-S	< ½	542	30
	C6-1.5	1½	23	---
Bent 5A	C7-S	< ½	19	---
	C7-1.5	1½	46	---
Bent 9A	C8-S	< ½	393	23
	C8-1.5	1½	7.5	---

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

TABLE VI

SUMMARY OF ANALYTICAL LABORATORY RESULTS
SITE 6 - FIGUEROA STREET UNDERCROSSING

Boring Location	Sample Identification	Depth (feet)	Total Lead EPA 6010 (mg/kg)	Soluble Lead - WET EPA 7420 (mg/l)
Bent 2	L1-S	< ½	514	25
	L1-1.5	1½	622	34
	L2-S	< ½	462	22
	L2-1.5	1½	58 (61)	2.2
Bent 3	L3-S	< ½	254	15
	L3-1.5	1½	165	3.1
	L4-S	< ½	477	35
	L4-1.5	1½	46	---
Bent 2	L5-S	< ½	609	38
	L5-1.5	1½	190	2.9
Bent 3	L6-S	< ½	914	36
	L6-1.5	1½	188	3.6

Note:
ND = not detected above the laboratory detection limit
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
WET = Waste Extraction Test
--- = analysis not performed
(307) = duplicate analysis result

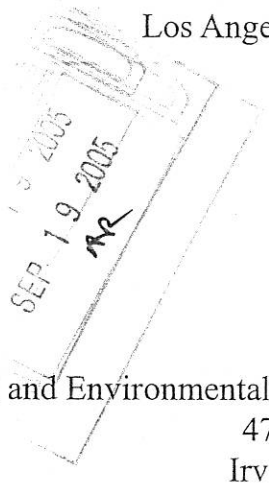
Ninyo & Moore

Lead

LA 101
TO # 07-A1752-05 EA 232301
KP 2.8 13.5

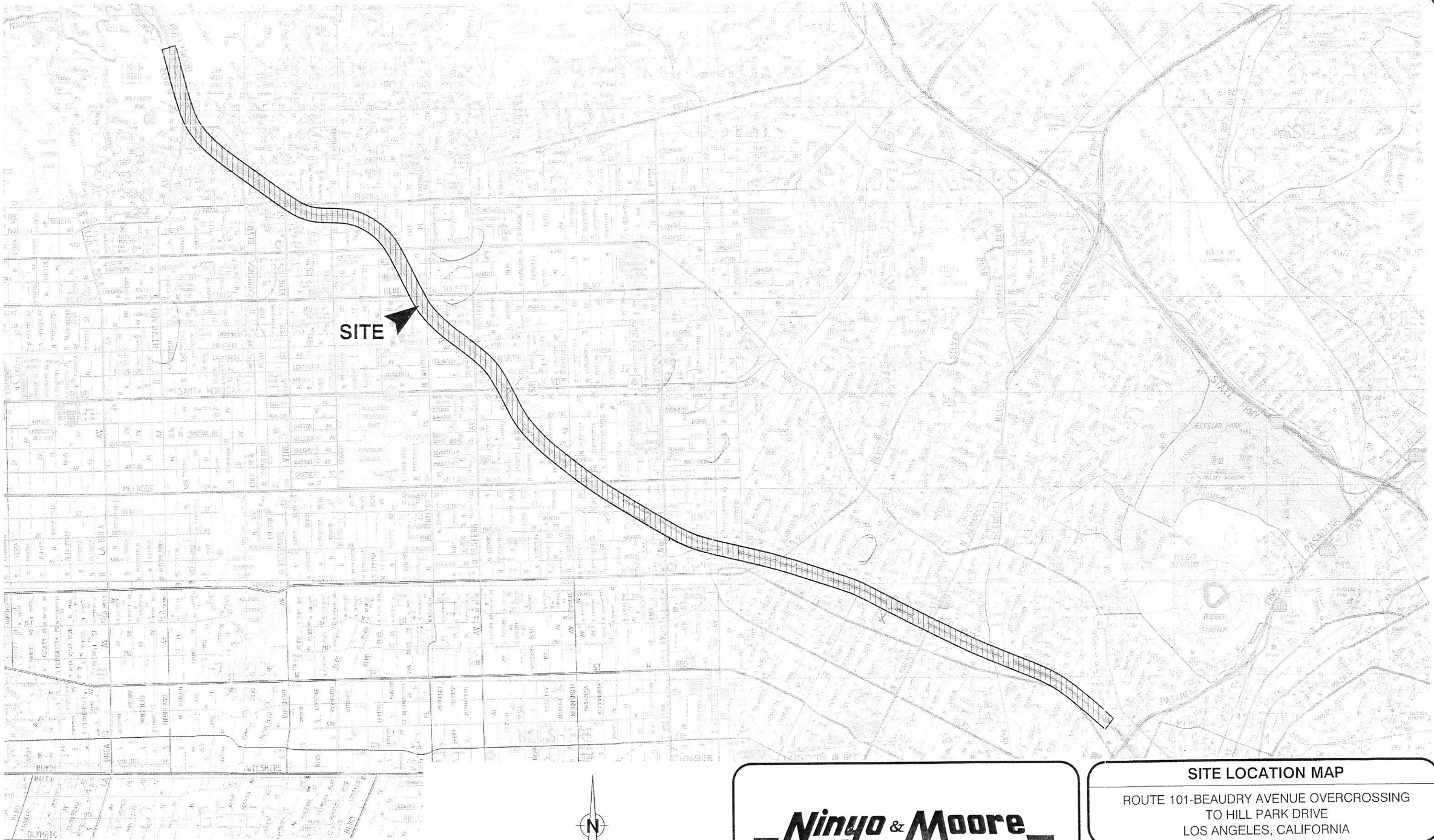
LEAD SITE INVESTIGATION REPORT
ROUTE 101,
BEAUDRY AVENUE OVERCROSSING TO
HILLPARK DRIVE (KP 2.8/13.5)
LOS ANGELES, CALIFORNIA
TASK ORDER NO. 07A1752-05
EXPENDITURE AUTHORIZATION NO. 232301
CONTRACT NO. 07A1752

PREPARED FOR:
State of California
Department of Transportation
District 7, Division of Planning, 12th Floor, MS-16
Office of Environmental Engineering and Feasibility Studies
100 South Main Street
Los Angeles, California 90012



PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
475 Goddard, Suite 200
Irvine, California 92618

September 15, 2005
Project No. 206133005



REFERENCE: 2002 THOMAS GUIDE FOR LOS ANGELES/ORANGE COUNTIES, STREET GUIDE AND DIRECTORY

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

N

0 2600 3200

APPROXIMATE SCALE IN FEET

Ninyo & Moore

SITE LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	1

206133-B1.DWG

LEGEND

837-104 ⊙ BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

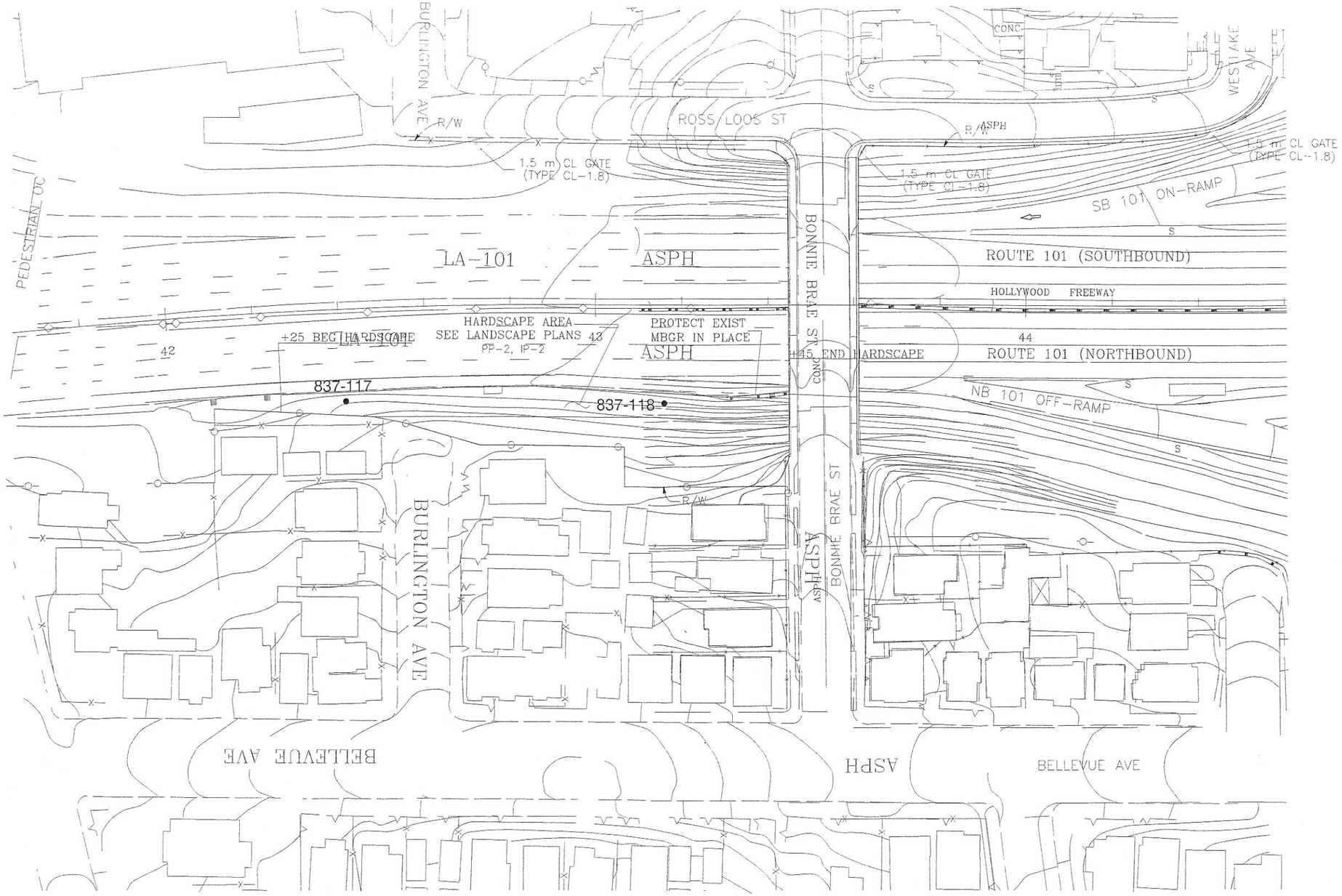
Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	2

206133-B2.DWG



LEGEND

837-118 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

206133-B3.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	3

LEGEND

837-126 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

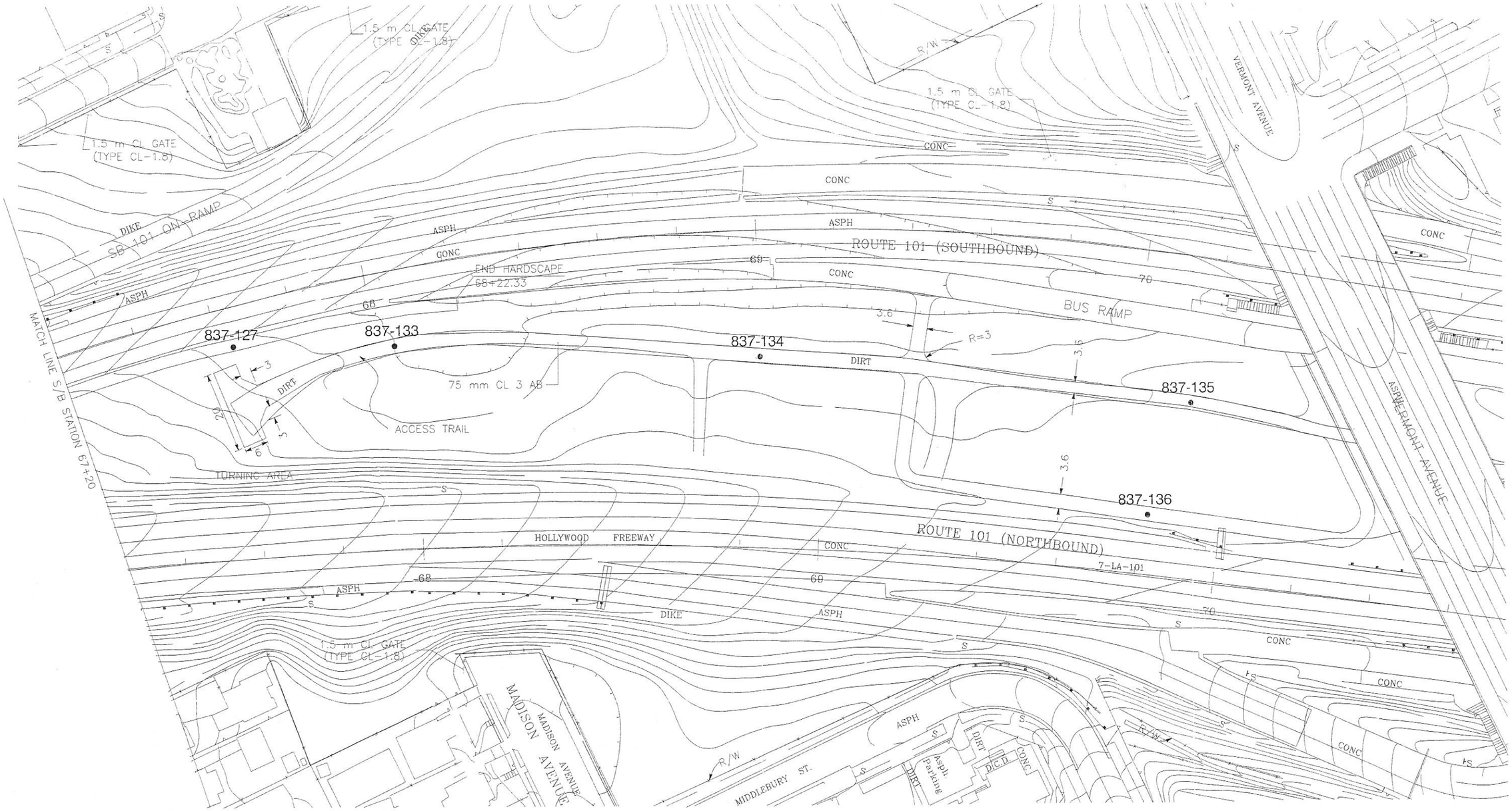
206133-B4.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	4



LEGEND

837-136 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

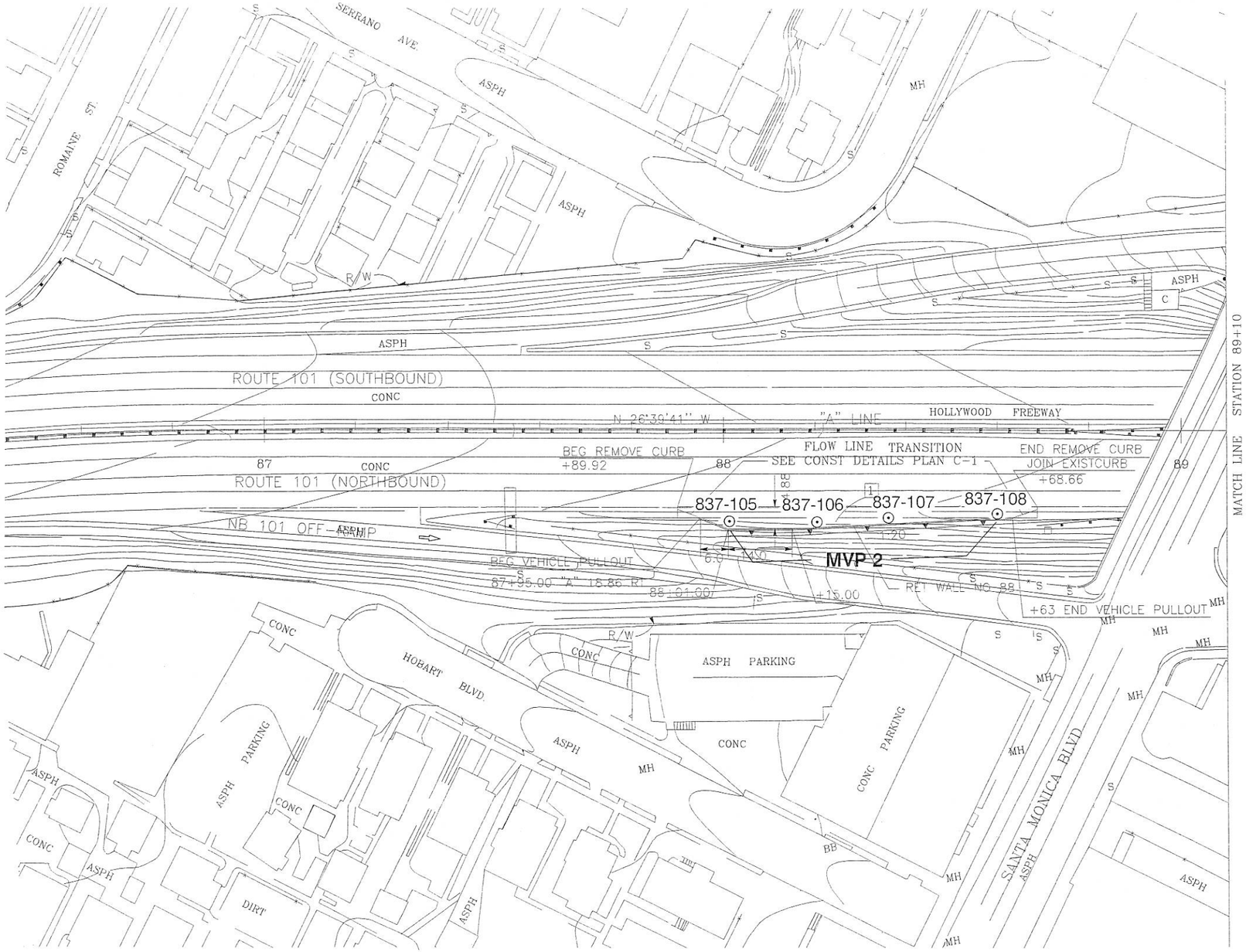
206133-B5.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	5



LEGEND

837-108 ⊙ BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

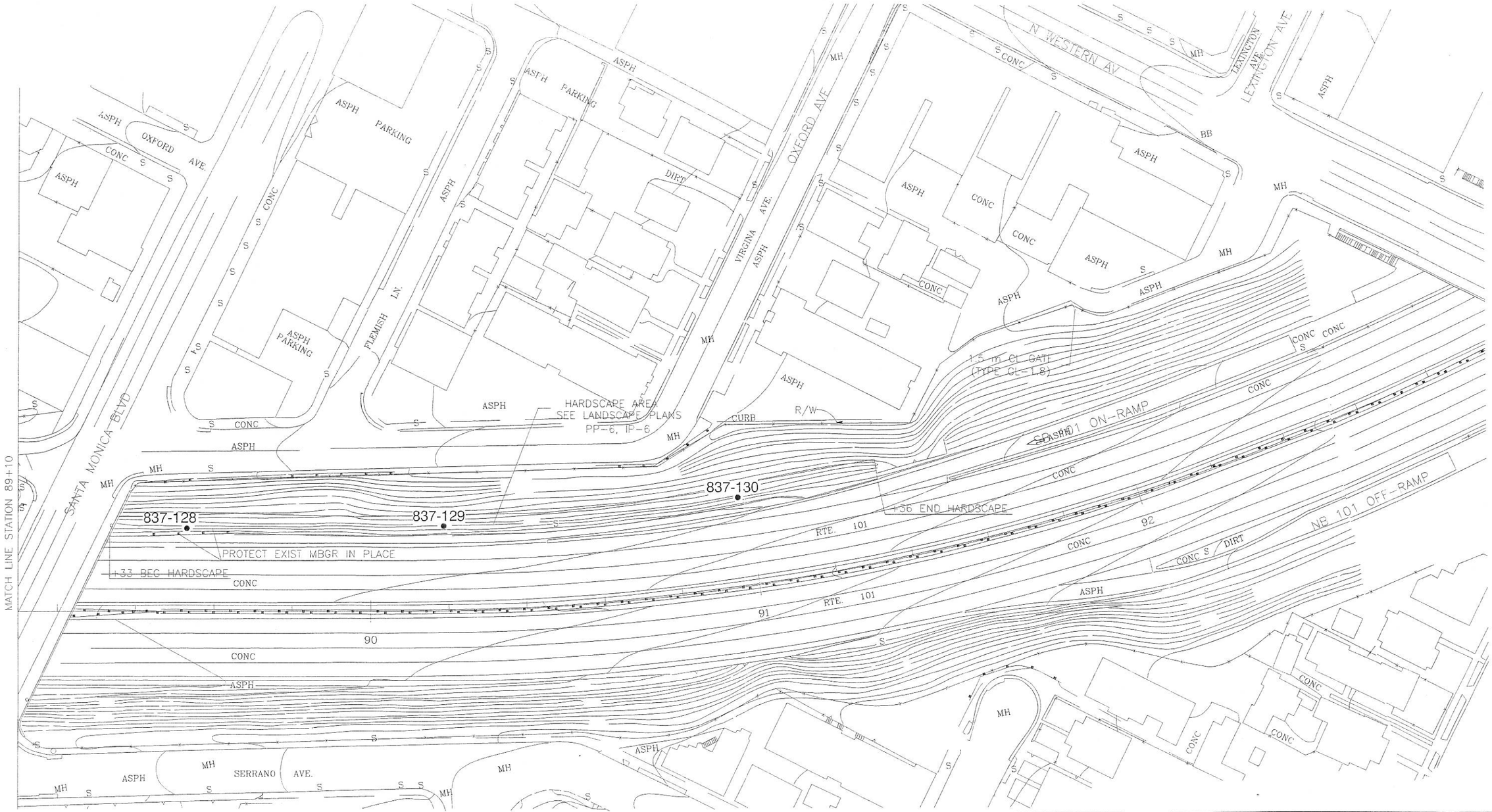
Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	6

206133-B6.DWG



LEGEND

837-130 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

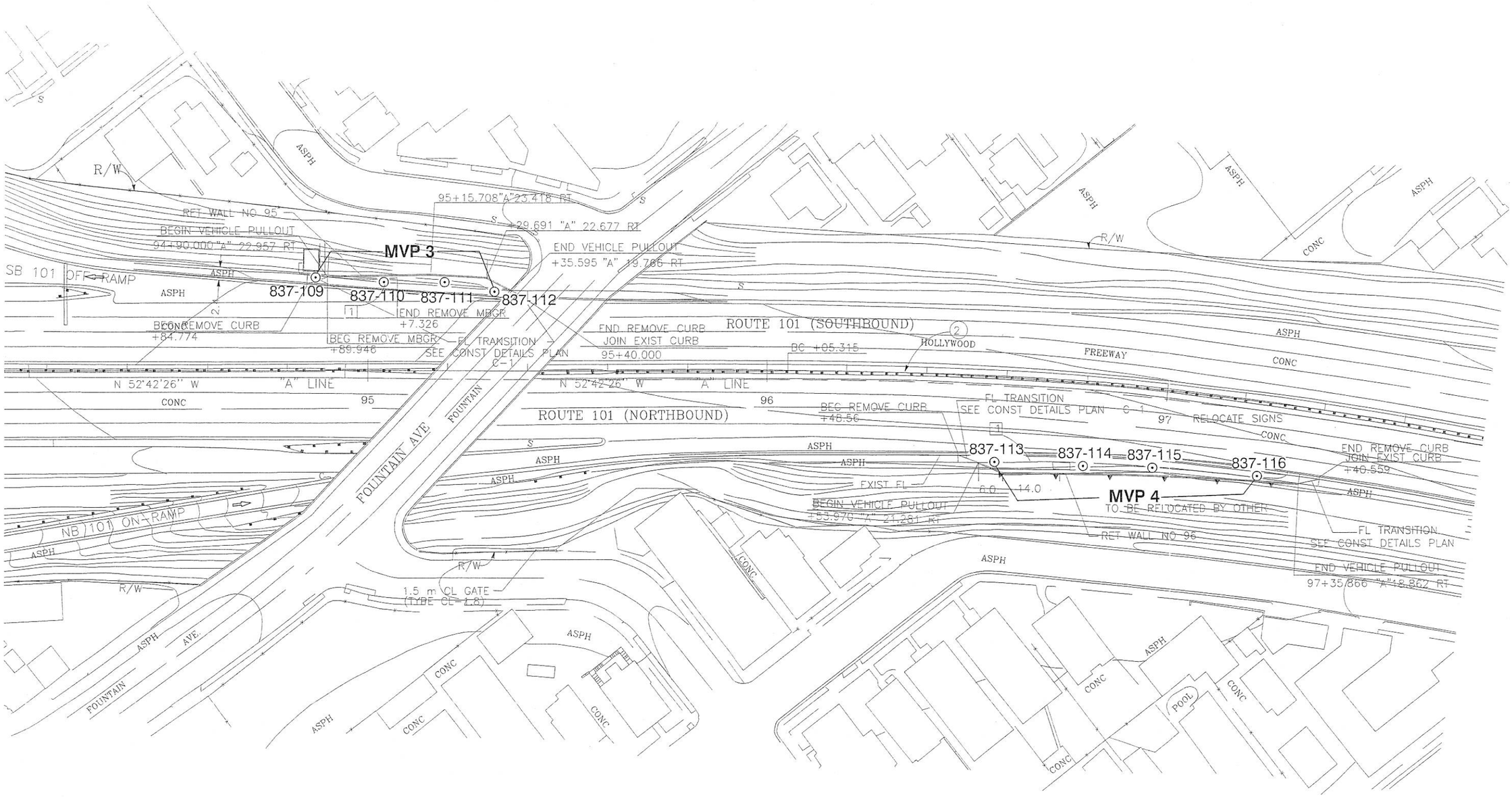
206133-B7.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	7



LEGEND

837-116 ⊙ BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

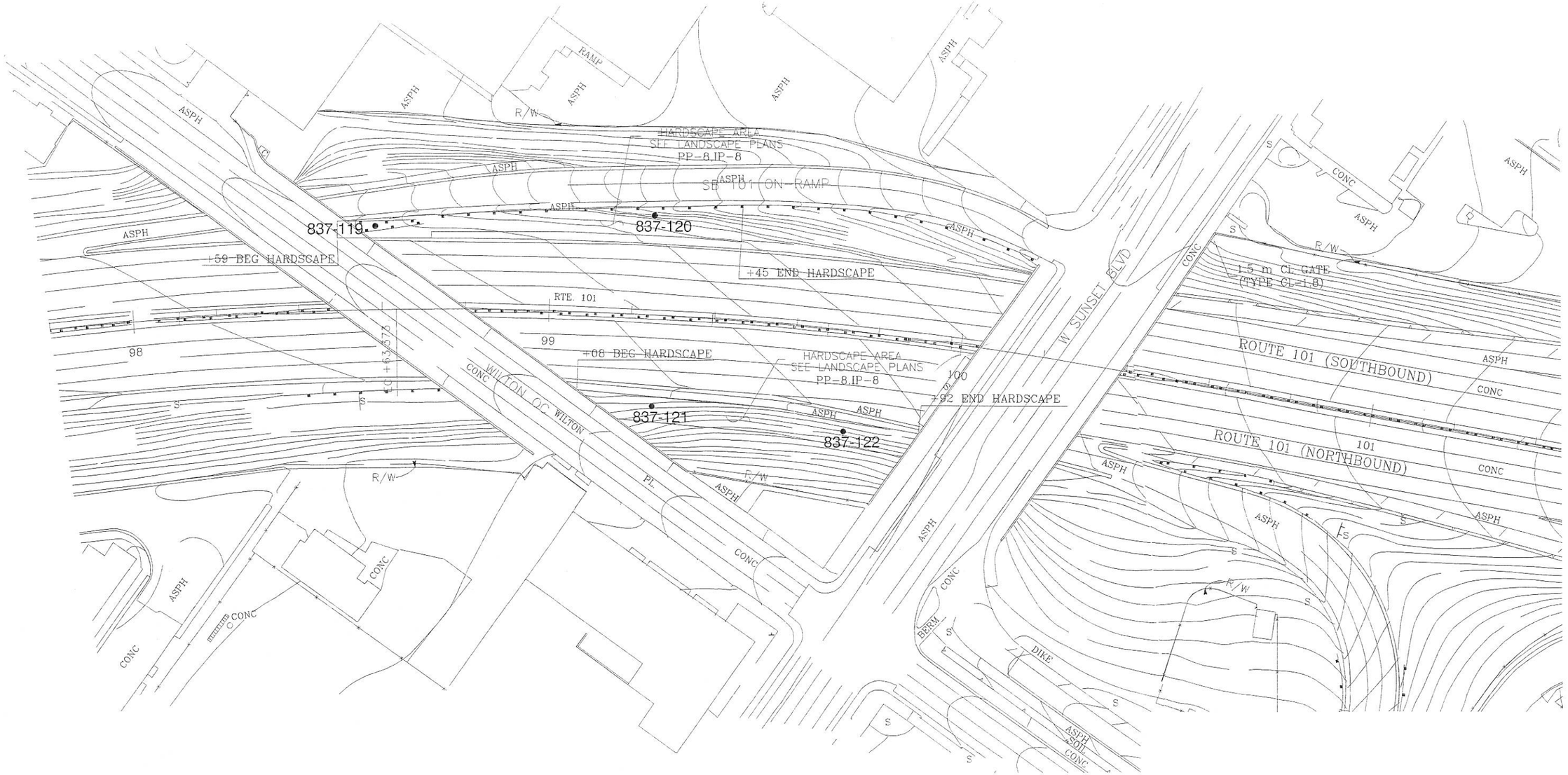
Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	8

206133-B8.DWG



LEGEND

837-122 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

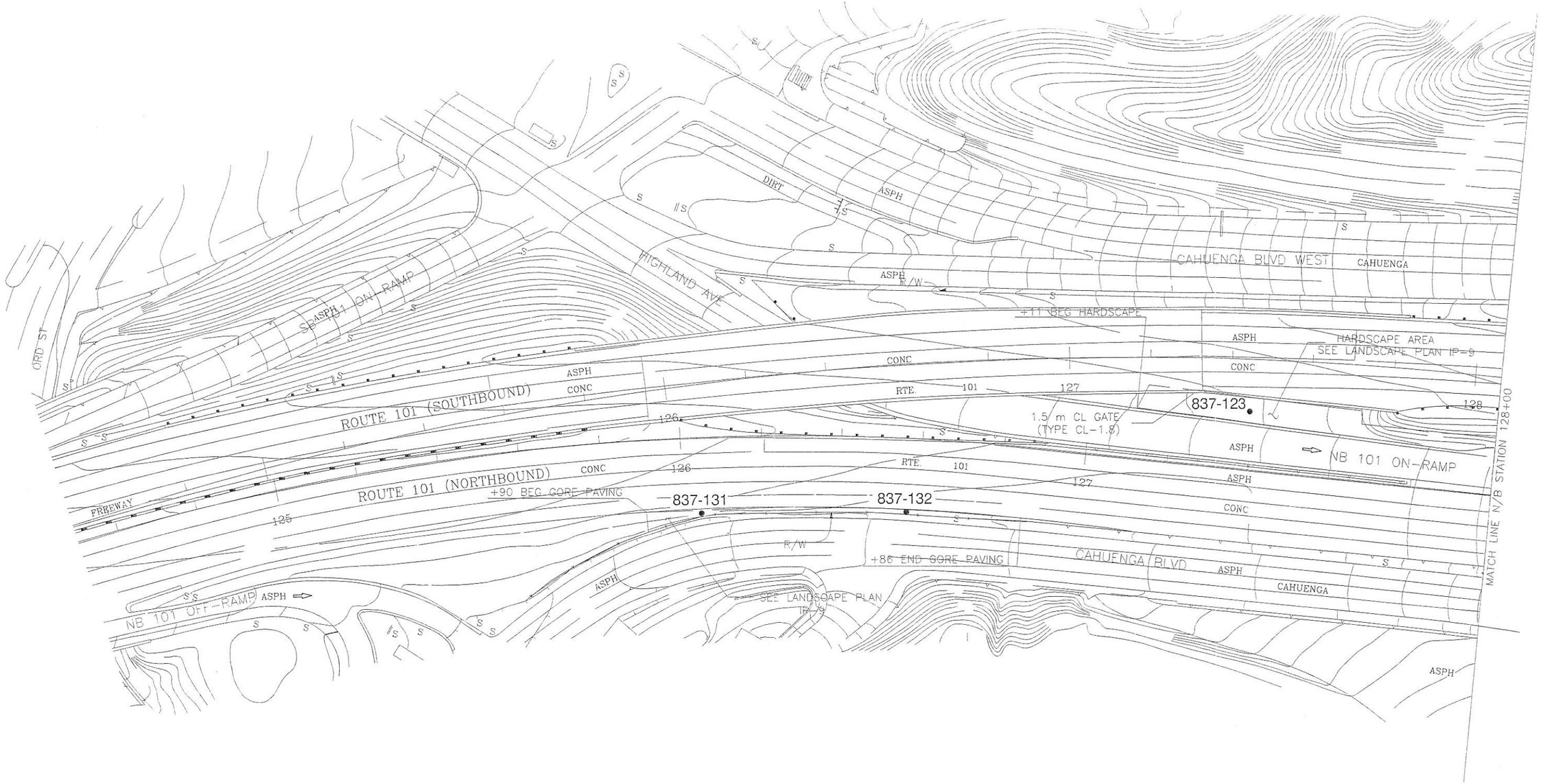
206133-B9.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	96/2005	9



LEGEND

837-132 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

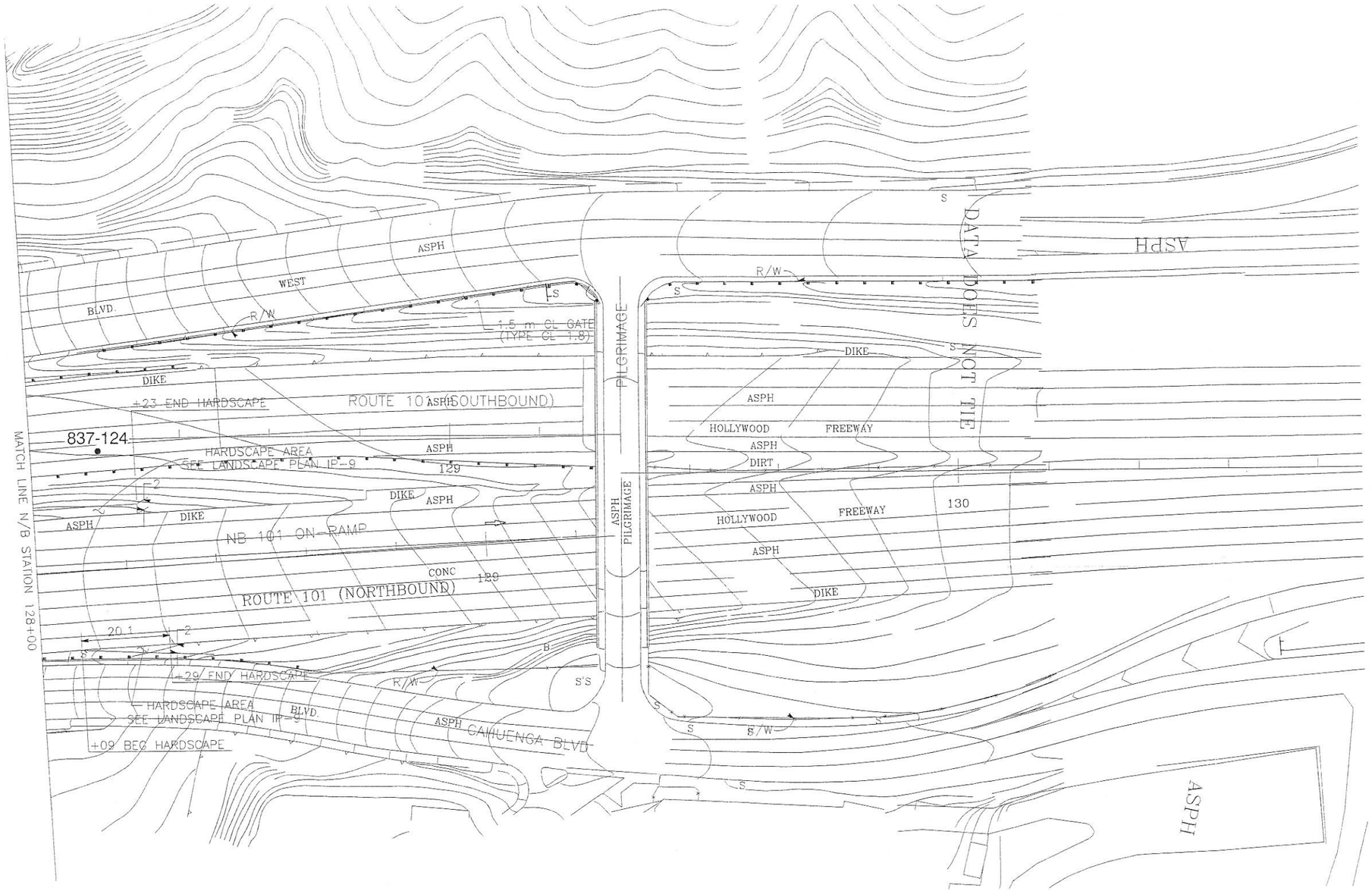
206133-B10.DWG

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	10



LEGEND

837-124 • BORING LOCATION AND IDENTIFICATION

0 10 20 30 40 50 60 70 80 90 100

APPROXIMATE SCALE IN METER

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

BORING LOCATION MAP

ROUTE 101-BEAUDRY AVENUE OVERCROSSING
TO HILL PARK DRIVE
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
206133005	9/2005	11

206133-B11.DWG

TABLE 1 – ROUTE 101 SOIL SAMPLE RESULTS - LEAD AND pH

Sample ID	Sample Depth (m)	Sample Date	TTLC (mg/kg)	STLC (mg/l)	DI-WET (mg/l)	TCLP (mg/l)	pH
Group 1: Maintenance Vehicle Pullout Locations							
837-101-0.0	0.0	5/12/2005	480	82	ND<0.25	---	---
837-101-0.3	0.3	5/12/2005	57	1.0	---	---	---
837-101-0.6	0.6	5/12/2005	13	---	---	---	---
837-101-0.9	0.9	5/12/2005	ND<5.0	---	---	---	---
837-101-1.5	1.5	5/12/2005	39	---	---	---	---
837-102-0.0	0.0	5/12/2005	3,400	---	---	8.1	7.38
837-102-0.3	0.3	5/12/2005	3,900	---	---	13	---
837-102-0.6	0.6	5/12/2005	1,200	---	---	8.3	---
837-102-0.9	0.9	5/12/2005	1,500	---	---	5.9	---
837-102-1.5	1.5	5/12/2005	540	7.8	ND<0.25	---	---
837-103-0.0	0.0	5/12/2005	1,800	---	---	2.7	---
837-103-0.3	0.3	5/12/2005	330	32	ND<0.25	---	---
837-103-0.6	0.6	5/12/2005	61	0.87	---	---	---
837-103-0.9	0.9	5/12/2005	110	1.8	---	---	---
837-103-1.5	1.5	5/12/2005	140	28	0.39	---	---
837-104-0.0	0.0	5/12/2005	2,700	---	---	6.1	---
837-104-0.3	0.3	5/12/2005	570	100	0.74	---	---
837-104-0.6	0.6	5/12/2005	280	18	0.27	---	8.23
837-104-0.9	0.9	5/12/2005	560	23	ND<0.25	---	---
837-104-1.5	1.5	5/12/2005	530	10	ND<0.25	---	---
837-105-0.0	0.0	5/12/2005	2,700	---	---	9.1	7.49
837-105-0.3	0.3	5/12/2005	100	3.2	---	---	---
837-105-0.6	0.6	5/12/2005	32	---	---	---	---
837-105-0.9	0.9	5/12/2005	44	---	---	---	---
837-105-1.5	1.5	5/12/2005	ND<5.0	---	---	---	---
837-106-0.0	0.0	5/12/2005	250	30	0.49	---	---
837-106-0.3	0.3	5/12/2005	180	31	0.38	---	---
837-106-0.6	0.6	5/12/2005	ND<5.0	---	---	---	---
837-106-0.9	0.9	5/12/2005	36	---	---	---	---
837-106-1.5	1.5	5/12/2005	64	5.0	ND<0.25	---	---
837-107-0.0	0.0	5/12/2005	340	35	0.50	---	---
837-107-0.3	0.3	5/12/2005	9.4	---	---	---	---
837-107-0.6	0.6	5/12/2005	Refusal	---	---	---	---
837-107-0.9	0.9	5/12/2005	Refusal	---	---	---	---
837-107-1.5	1.5	5/12/2005	Refusal	---	---	---	---
837-108-0.0	0.0	5/12/2005	470	47	0.63	0.68	---
837-108-0.3	0.3	5/12/2005	35	---	---	---	---
837-108-0.6	0.6	5/12/2005	13	---	---	---	---
837-108-0.9	0.9	5/12/2005	ND<5.0	---	---	---	7.78
837-108-1.5	1.5	5/12/2005	ND<5.0	---	---	---	---
837-109-0.0	0.0	5/13/2005	780	69	1.2	1.3	---
837-109-0.3	0.3	5/13/2005	300	29	1.1	---	---
837-109-0.6	0.6	5/13/2005	Refusal	---	---	---	---
837-109-0.9	0.9	5/13/2005	Refusal	---	---	---	---
837-109-1.5	1.5	5/13/2005	Refusal	---	---	---	---
837-110-0.0	0.0	5/13/2005	1,300	---	---	4.6	---
837-110-0.3	0.3	5/13/2005	50	7.1	0.38	---	---
837-110-0.6	0.6	5/13/2005	6.9	---	---	---	---
837-110-0.9	0.9	5/13/2005	16	---	---	---	---
837-110-1.5	1.5	5/13/2005	5.3	---	---	---	---
837-111-0.0	0.0	5/12/2005	290	33	0.67	---	7.81
837-111-0.3	0.3	5/12/2005	240	25	ND<0.25	---	---
837-111-0.6	0.6	5/12/2005	58	8.1	ND<0.25	---	---
837-111-0.9	0.9	5/12/2005	ND<5.0	---	---	---	---
837-111-1.5	1.5	5/12/2005	ND<5.0	---	---	---	---
837-112-0.0	0.0	5/12/2005	510	64	2.1	---	7.39
837-112-0.3	0.3	5/12/2005	30	---	---	---	---
837-112-0.6	0.6	5/12/2005	8.9	---	---	---	---
837-112-0.9	0.9	5/12/2005	ND<5.0	---	---	---	---
837-112-1.5	1.5	5/12/2005	ND<5.0	---	---	---	---
837-113-0.0	0.0	5/12/2005	680	49	0.95	---	---
837-113-0.3	0.3	5/12/2005	ND<5.0	---	---	---	---

TABLE 1 – ROUTE 101 SOIL SAMPLE RESULTS - LEAD AND pH

Sample ID	Sample Depth (m)	Sample Date	TTLC (mg/kg)	STLC (mg/l)	DI-WET (mg/l)	TCLP (mg/l)	pH
837-113-0.6	0.6	5/12/2005	ND<5.0	---	---	---	---
837-113-0.9	0.9	5/12/2005	ND<5.0	---	---	---	---
837-113-1.5	1.5	5/12/2005	ND<5.0	---	---	---	---
837-114-0.0	0.0	5/12/2005	1,700	---	---	4.4	---
837-114-0.3	0.3	5/12/2005	480	30	0.58	---	---
837-114-0.6	0.6	5/12/2005	110	4.6	---	---	---
837-114-0.9	0.9	5/12/2005	20	---	---	---	---
837-114-1.5	1.5	5/12/2005	190	13	0.25	---	8.11
837-115-0.0	0.0	5/12/2005	410	35	1.1	---	
837-115-0.3	0.3	5/12/2005	ND<5.0	---	---	---	7.99
837-115-0.6	0.6	5/12/2005	ND<5.0	---	---	---	---
837-115-0.9	0.9	5/12/2005	Refusal	---	---	---	---
837-115-1.5	1.5	5/12/2005	Refusal	---	---	---	---
837-116-0.0	0.0	5/12/2005	260	37	0.50	---	---
837-116-0.3	0.3	5/12/2005	780	75	1.4	2.2	---
837-116-0.6	0.6	5/12/2005	91	3.6	---	---	---
837-116-0.9	0.9	5/12/2005	240	22	0.38	---	---
837-116-1.5	1.5	5/12/2005	100	14	0.33	---	---
Group 2: Hardscape Areas							
837-117-0.0	0.0	5/12/2005	280	45	ND<0.25	---	---
837-118-0.0	0.0	5/12/2005	500	58	ND<0.25	---	---
837-119-0.0	0.0	5/13/2005	2,600	---	---	6.5	---
837-120-0.0	0.0	5/13/2005	130*	15*	0.27	---	8.09
837-121-0.0	0.0	5/13/2005	500	87	0.37	---	---
837-122-0.0	0.0	5/13/2005	180	14	ND<0.25	---	---
837-123-0.0	0.0	5/13/2005	320	50	1.1	---	---
837-124-0.0	0.0	5/13/2005	250	17	0.93	---	---
837-125-0.0	0.0	5/13/2005	4,200	---	---	2.9	---
837-126-0.0	0.0	5/13/2005	220	11	ND<0.25	---	---
837-127-0.0	0.0	5/13/2005	1,600	---	---	4.3	---
837-128-0.0	0.0	5/13/2005	830	74	0.41	---	---
837-129-0.0	0.0	5/13/2005	810	53	1.6	---	---
837-130-0.0	0.0	5/13/2005	1,300	---	---	2.1	---
Group 3: Gore Point Area							
837-131-0.0	0.0	5/13/2005	81	15	ND<0.25	---	8.01
837-132-0.0	0.0	5/13/2005	1,100*	47*	ND<0.25	0.30	---
Group 4: Median Access Trail							
837-133-0.0	0.0	5/13/2005	61	4.9	---	---	---
837-134-0.0	0.0	5/13/2005	290	16	ND<0.25	---	---
837-135-0.0	0.0	5/13/2005	59	1.5	---	---	6.93
837-136-0.0	0.0	5/13/2005	240	16	ND<0.25	---	---
Equipment Rinsate Samples (mg/l)							
EQ1	NA	5/12/2005	ND<0.25	---	---	---	---
EQ2	NA	5/12/2005	ND<0.25	---	---	---	---
EQ3	NA	5/13/2005	ND<0.25	---	---	---	---

Notes:

TTLC – Total Threshold Limit Concentration for Lead using United States Environmental Protection Agency (EPA) Test Method 6010B.

STLC – Soluble Threshold Limit Concentration for Lead using EPA Test Method 7420.

DI-WET – Soluble Threshold Limit Concentration for Lead using De-Ionized Water Extraction using EPA Test Method 7420.

TCLP – Toxic Characteristic Leaching Procedure for Lead using EPA Test Methods 1311/7420.

pH – analyzed using EPA Test Method 9045C.

mg/kg – milligrams per kilogram

mg/l – milligrams per liter

-- – not analyzed.

ND<5.0 – not detected above the laboratory Practical Quantitation Limit

NA – not applicable

NS – no sample

*Sample reanalyzed. New result presented in this table.

Lead

LA 101
TO # 07-4J9801-3Z
KP 6.54 - 7.73

7GO6

JAN - 5 2

AERIALLY DEPOSITED LEAD INVESTIGATION REPORT

ROUTE 101 VIRGIL AVENUE TO MELROSE AVENUE
LA 101 NORTHBOUND KP 6.54/7.02 AND KP 7.34/7.73
LOS ANGELES COUNTY, CALIFORNIA
CONTRACT NO. 43A0078
TASK ORDER NO. 07-4J9801-3Z
EA 4J9801

PREPARED FOR

CALIFORNIA DEPARTMENT
OF TRANSPORTATION
DISTRICT 7
ENVIRONMENTAL ENGINEERING
LOS ANGELES, CALIFORNIA

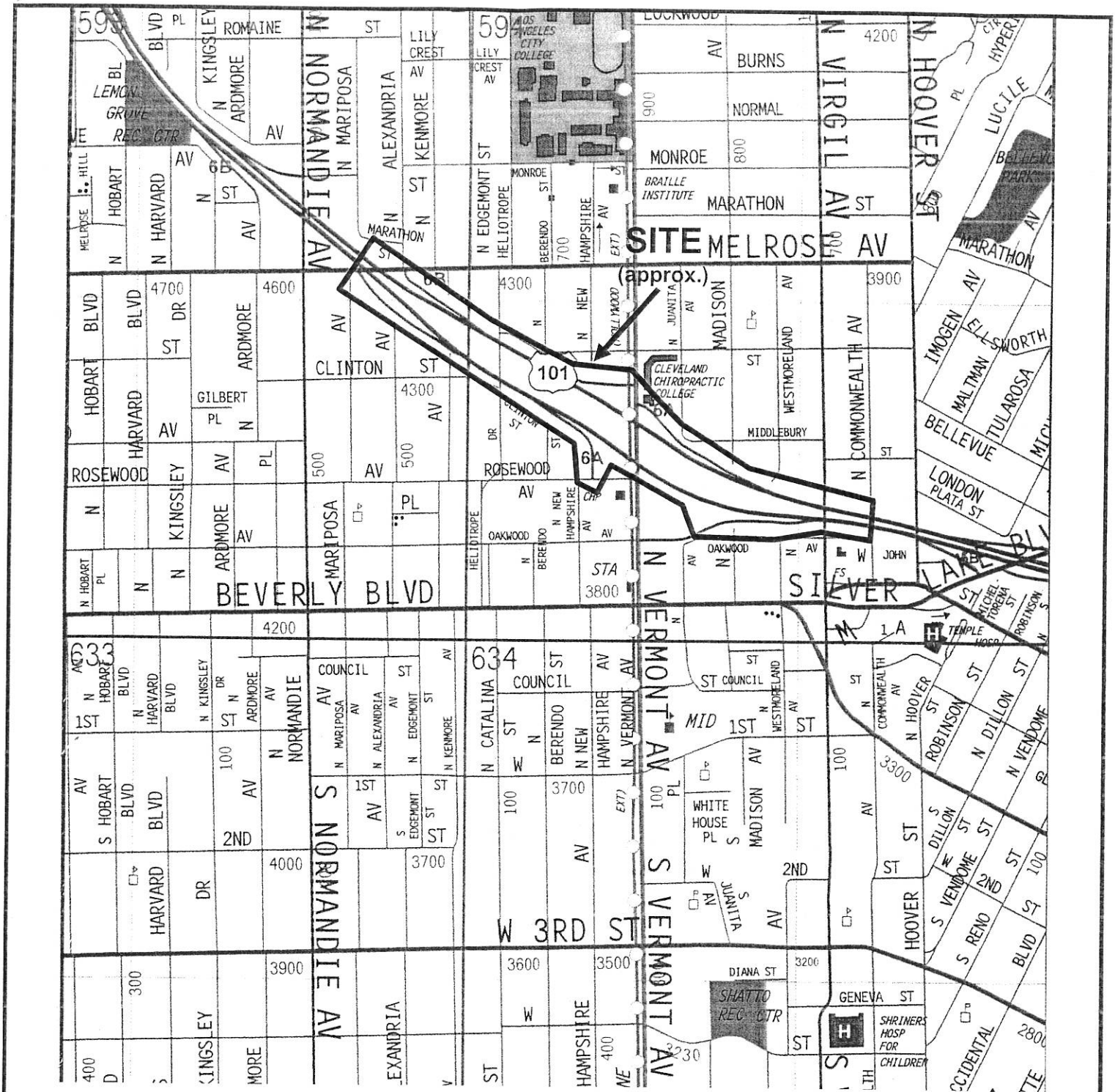
PREPARED BY

GEOCON CONSULTANTS, INC.
6970 FLANDERS DRIVE
SAN DIEGO, CALIFORNIA 92121
Tel. (858) 558-6100 Fax. (858) 558-8437
Email: environmental@geoconinc.com

GEOCON PROJECT NO. 09100-06-93

DECEMBER 26, 2003

GEOCON
CONSULTANTS, INC.
ENVIRONMENTAL
GEOTECHNICAL
MATERIALS



SOURCE: 2004 THOMAS BROS. MAP DIGITAL EDITION
LOS ANGELES AND VENTURA COUNTIES, CALIFORNIA

REPRODUCED WITH PERMISSION GRANTED BY THOMAS BROS. MAPS.
THIS MAP IS COPYRIGHTED BY THOMAS BROS. MAPS. IT IS UNLAWFUL TO COPY OR REPRODUCE ALL OR ANY PART THEREOF, WHETHER FOR PERSONAL USE OR RESALE, WITHOUT PERMISSION.

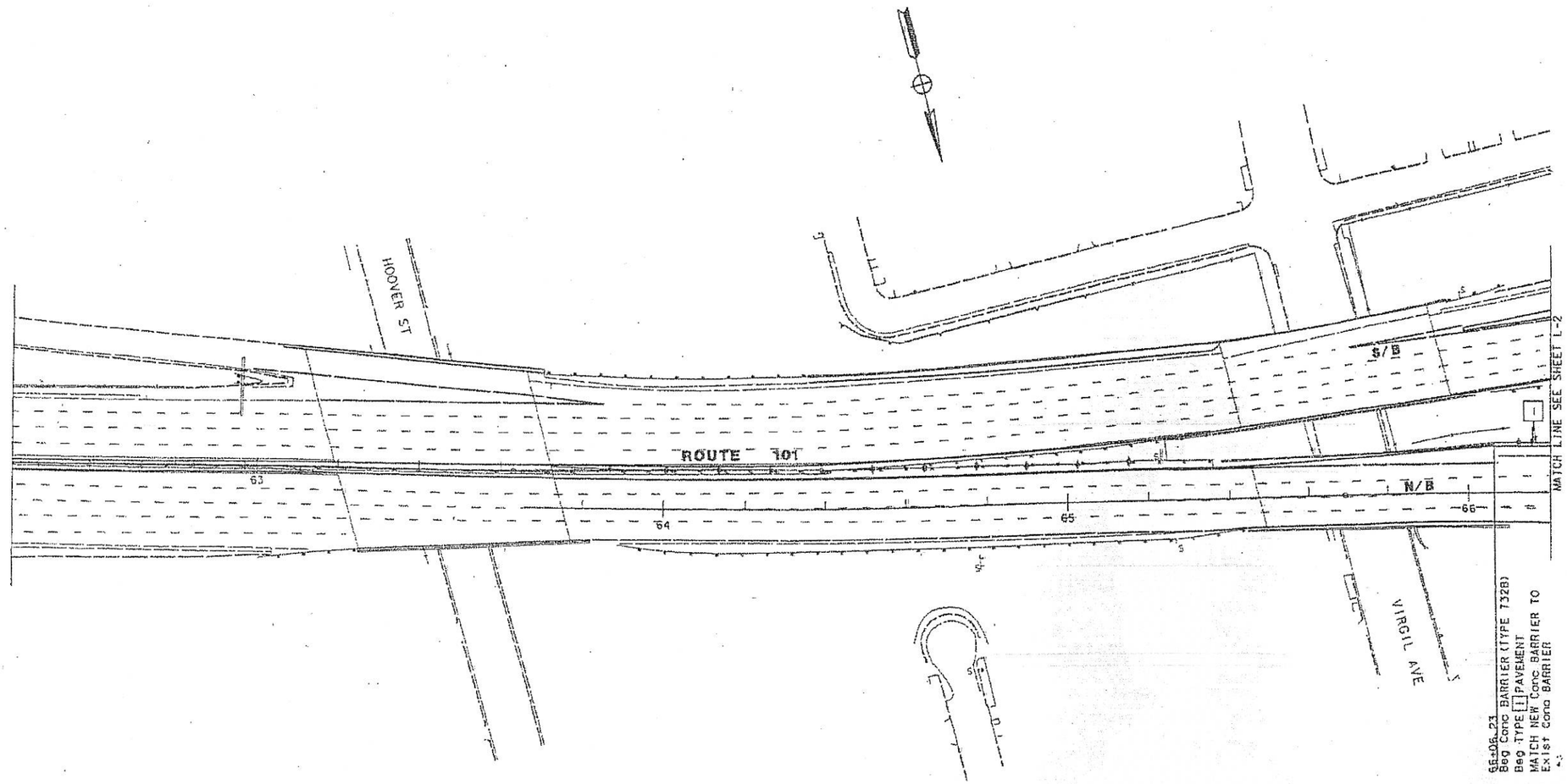
GEOCON
CONSULTANTS, INC
ENVIRONMENTAL ■ GEOTECHNICAL ■ MATERIALS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858 558-6100 - FAX 858 558-8437

NJJ:sc | TASK ORDER NO. 07-4J9801-3Z

VICINITY MAP

ROUTE 101 – VIRGIL AVENUE TO MELROSE AVENUE
LA NORTHBOUND 101
KP 6.54/7.02 AND KP 7.34/7.73
LOS ANGELES COUNTY, CALIFORNIA

DATE: 12-26-2003 | PROJECT NO. 09100-06-93 | FIG. 1



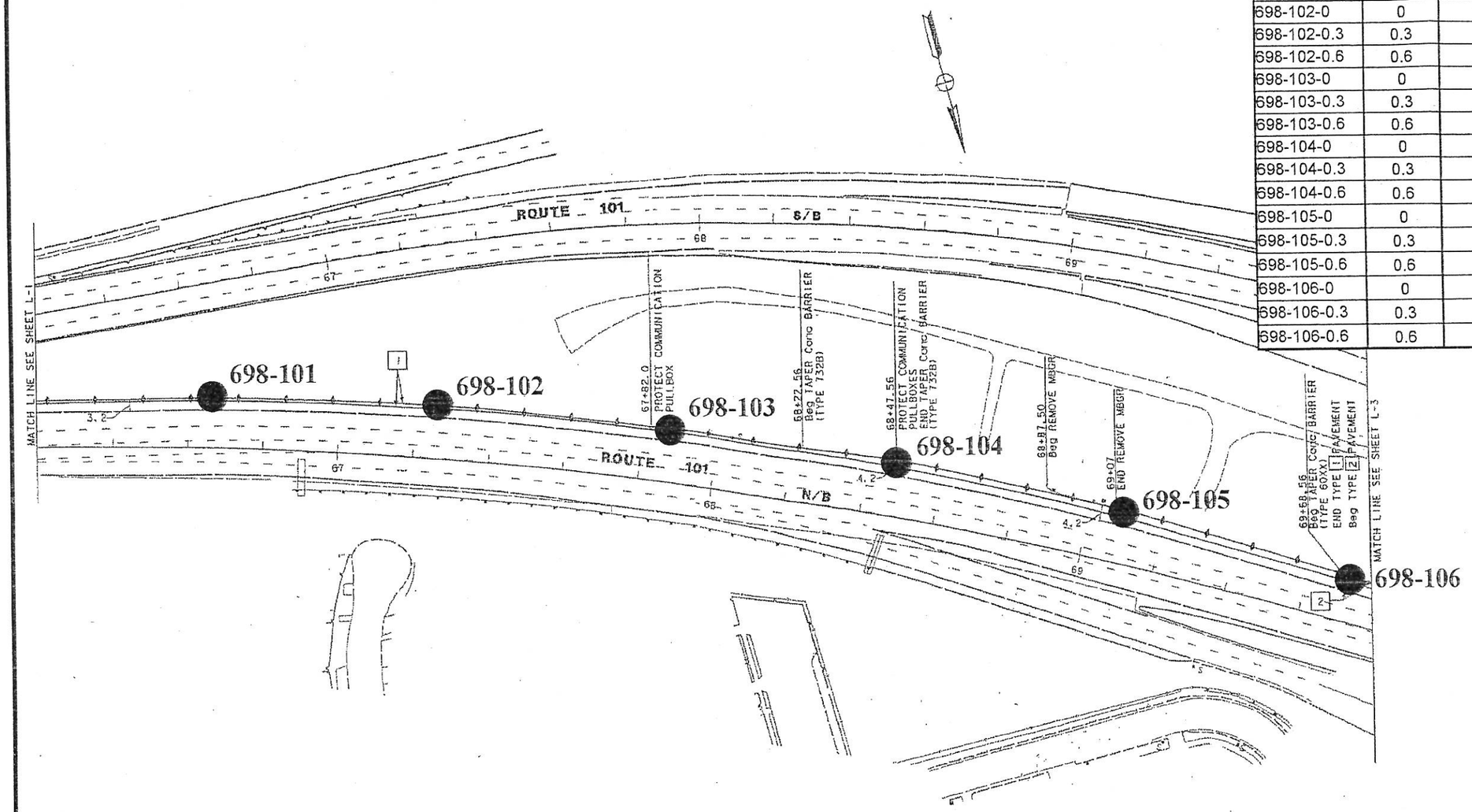
BORING LOCATION MAP

ROUTE 101 VIRGIL AVE TO MELROSE AVE
LOS ANGELES, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858. 558-6100 - FAX 858. 558-8437

PROJECT NO. 09100-06-93	
FIGURE 2, PLATE 1	TO # 07-4J9801-3Z
DATE: 12-26-2003	

Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP	pH
Group 1						
698-101-0	0	260	22	ND	0.69	-
698-101-0.3	0.3	480	57	0.55	1.2	8.25
698-101-0.6	0.6	16	-	-	-	-
698-102-0	0	140	11	ND	-	-
698-102-0.3	0.3	62	1.9	-	-	-
698-102-0.6	0.6	35	-	-	-	-
698-103-0	0	100	7	ND	-	8.31
698-103-0.3	0.3	32	-	-	-	-
698-103-0.6	0.6	36	-	-	-	-
698-104-0	0	98	4.9	-	-	-
698-104-0.3	0.3	28	-	-	-	-
698-104-0.6	0.6	42	-	-	-	8.51
698-105-0	0	86	6.6	ND	-	-
698-105-0.3	0.3	100	8.3	ND	-	-
698-105-0.6	0.6	48	-	-	-	-
698-106-0	0	70	5.5	ND	-	-
698-106-0.3	0.3	78	8	ND	-	7.47
698-106-0.6	0.6	9	-	-	-	-



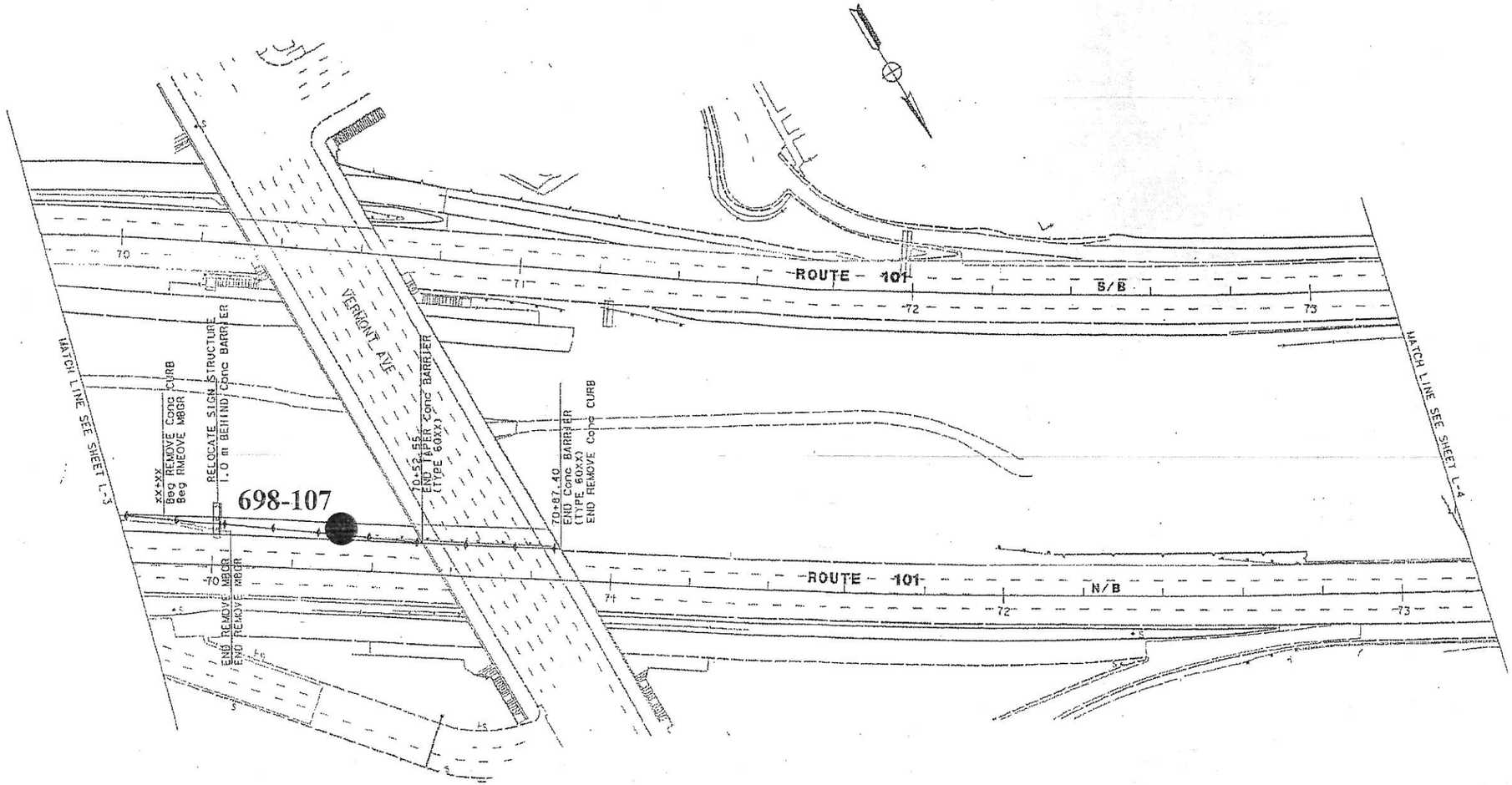
BORING LOCATION MAP

ROUTE 101 VIRGIL AVE TO MELROSE AVE
LOS ANGELES, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858. 558-6100 - FAX 858. 558-8437

PROJECT NO. 09100-06-93
FIGURE 2, PLATE 2 | TO # 07-4J9801-3Z
DATE: 12-26-2003

Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP	pH
Group 1						
698-107-0	0	410	54	0.3	1.5	-
698-107-0.3	0.3	89	9.7	ND	-	-
698-107-0.6	0.6	12	-	-	-	-



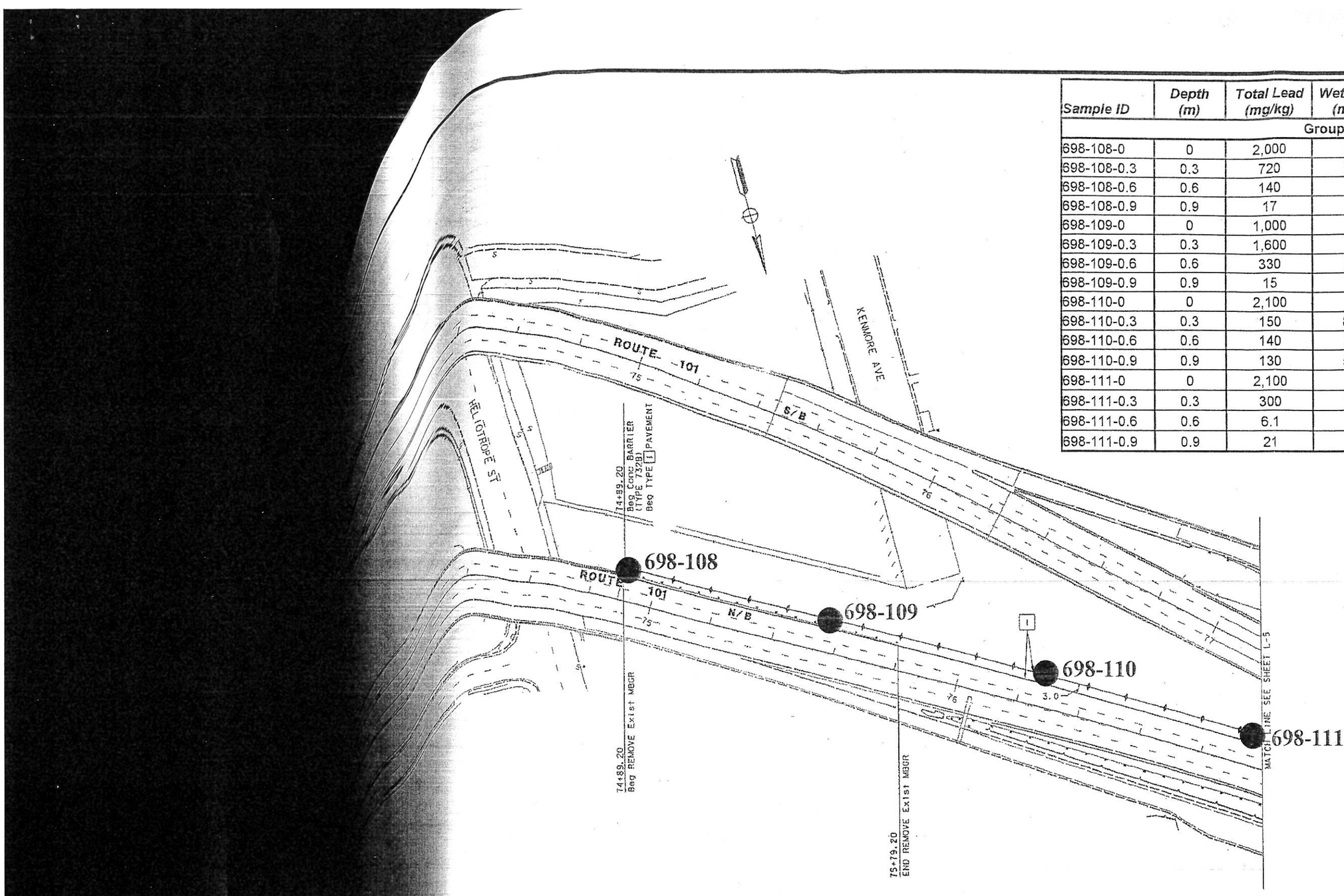
BORING LOCATION MAP

ROUTE 101 VIRGIL AVE TO MELROSE AVE
LOS ANGELES, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858. 558-6100 - FAX 858. 558-8437

PROJECT NO. 09100-06-93
FIGURE 2, PLATE 3 | TO # 07-4J9801-3Z
DATE: 12-26-2003

Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP (mg/l)	pH
Group 2						
698-108-0	0	2,000	-	-	7.3	6.88
698-108-0.3	0.3	720	67	ND	-	-
698-108-0.6	0.6	140	10	ND	-	-
698-108-0.9	0.9	17	-	-	-	-
698-109-0	0	1,000	-	-	1.8	
698-109-0.3	0.3	1,600	-	-	3.7	7.47
698-109-0.6	0.6	330	37	0.6	-	-
698-109-0.9	0.9	15	-	-	-	-
698-110-0	0	2,100	-	-	14	
698-110-0.3	0.3	150	8.9	ND	-	-
698-110-0.6	0.6	140	23	ND	-	7.89
698-110-0.9	0.9	130	5.5	ND	-	-
698-111-0	0	2,100	-	-	6.4	
698-111-0.3	0.3	300	16	0.64	-	-
698-111-0.6	0.6	6.1	-	-	-	-
698-111-0.9	0.9	21	-	-	-	8.17



BORING LOCATION MAP

ROUTE 101 VIRGIL AVE TO MELROSE AVE

LOS ANGELES, CALIFORNIA

GEOCON

CONSULTANTS, INC.

6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974

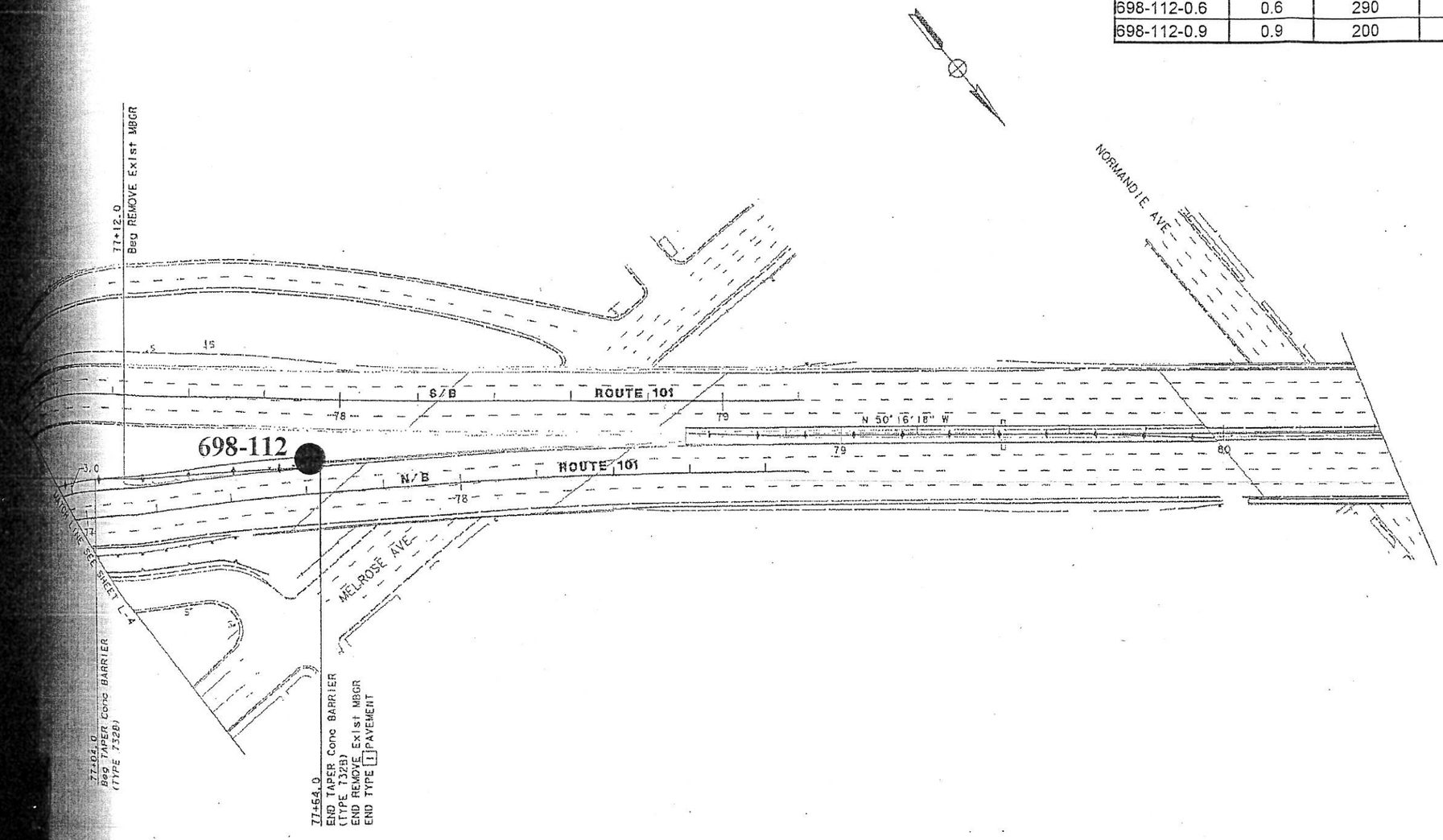
PHONE 858. 558-6100 - FAX 858. 558-8437

PROJECT NO. 09100-06-93

FIGURE 2, PLATE 4 | TO # 07-439801-3Z

DATE: 12-26-2003

Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	pH
Group 2					
698-112-0	0	480	30	ND	-
698-112-0.3	0.3	250	18	ND	-
698-112-0.6	0.6	290	19	0.28	-
698-112-0.9	0.9	200	13	ND	-



BORING LOCATION MAP

ROUTE 101 VIRGIL AVE TO MELROSE AVE
LOS ANGELES, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858. 558-6100 - FAX 858. 558-8437

PROJECT NO. 09100-06-93
FIGURE 2, PLATE 5 | TO # 07-4J9801-3Z
DATE: 12-26-2003

TABLE I
SUMMARY OF ANALYTICAL LABORATORY RESULTS- SOIL SAMPLES

Sample ID	Depth (m)	Total Lead EPA method 6010 (mg/kg)	Soluble Lead – WET Citric EPA method 7420 (mg/l)	Soluble Lead WET-DI Water EPA method 7420 (mg/l)	Soluble Lead TCLP EPA method 1311 (mg/l)	Soil pH EPA method 9045	Latitude	Longitude
Group 1								
698-101-0	0	260	22	ND	0.69		34.0783447	-118.2871851
698-101-0.3	0.3	480	57	0.55	1.2	8.25	34.0783447	-118.2871851
698-101-0.6	0.6	16	---	---	---	---	34.0783447	-118.2871851
698-102-0	0	140	11	ND	---	---	34.0784822	-118.2878387
698-102-0.3	0.3	62	1.9	---	---	---	34.0784822	-118.2878387
698-102-0.6	0.6	35	---	---	---	---	34.0784822	-118.2878387
698-103-0	0	100	7.0	ND	---	8.31	34.0786428	-118.2884804
698-103-0.3	0.3	32	---	---	---	---	34.0786428	-118.2884804
698-103-0.6	0.6	36	---	---	---	---	34.0786428	-118.2884804
698-104-0	0	98	4.9	---	---	---	34.0788544	-118.2891142
698-104-0.3	0.3	28	---	---	---	---	34.0788544	-118.2891142
698-104-0.6	0.6	42	---	---	---	8.51	34.0788544	-118.2891142
698-105-0	0	86	6.6	ND	---	---	34.0790696	-118.2897
698-105-0.3	0.3	100	8.3	ND	---	---	34.0790696	-118.289732
698-105-0.6	0.6	48	---	---	---	---	34.0790696	-118.2897321
698-106-0	0	70	5.5	ND	---	---	34.0793275	-118.29033
698-106-0.3	0.3	78	8.0	ND	---	8.49	34.0793275	-118.29033
698-106-0.6	0.6	9.0	---	---	---	---	34.0793275	-118.29033
698-107-0	0	410	54	0.30	1.5	---	34.079645	-118.2908743
698-107-0.3	0.3	89	9.7	ND	---	---	34.079645	-118.2908743
698-107-0.6	0.6	12	---	---	---	---	34.079645	-118.2908743
Group 2								
698-108-0	0	2,000	---	---	7.3	6.88	34.082011	-118.2956052
698-108-0.3	0.3	720	67	ND	---	---	34.082011	-118.2956052
698-108-0.6	0.6	140	10	ND	---	---	34.082011	-118.2956052
698-108-0.9	0.9	17	---	---	---	---	34.082011	-118.2956052
698-109-0	0	1,000	---	---	1.8	---	34.0823299	-118.2962956
698-109-0.3	0.3	1,600	---	---	3.7	7.47	34.0823299	-118.2962956
698-109-0.6	0.6	330	37	0.60	---	---	34.0823299	-118.2962956

TABLE I (concluded)
SUMMARY OF ANALYTICAL LABORATORY RESULTS- SOIL SAMPLES

Sample ID	Depth (m)	Total Lead EPA method 6010 (mg/kg)	Soluble Lead – WET Citric EPA method 7420 (mg/l)	Soluble Lead WET-DI Water EPA method 7420 (mg/l)	Soluble Lead TCLP EPA method 1311 (mg/l)	Soil pH EPA method 9045	Latitude	Longitude
698-109-0.9	0.9	15	---	---	---	---	34.0823299	-118.2962956
698-110-0	0	2,100	---	---	14	---	34.0826648	-118.2970002
698-110-0.3	0.3	150	8.9	ND	---	---	34.0826648	-118.2970002
698-110-0.6	0.6	140	23	ND	---	7.89	34.0826648	-118.2970002
698-110-0.9	0.9	130	5.5	ND	---	---	34.0826648	-118.2970002
698-111-0	0	2,100	---	---	6.4	---	34.0829858	-118.2976355
698-111-0.3	0.3	300	16	0.64	---	---	34.0829858	-118.2976355
698-111-0.6	0.6	6.1	---	---	---	---	34.0829858	-118.2976355
698-111-0.9	0.9	21	---	---	---	8.17	34.0829858	-118.2976355
698-112-0	0	480	30	ND	---	---	34.0833135	-118.298231
698-112-0.3	0.3	250	18	ND	---	---	34.0833135	-118.298231
698-112-0.6	0.6	290	19	0.28	---	---	34.0833135	-118.298231
698-112-0.9	0.9	200	13	ND	---	---	34.0833135	-118.298231

Notes:

m = meters
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
--- = analysis not performed
TCLP = Toxicity Characteristic Leaching Procedure
EPA = United States Environmental Protection Agency
ND = Not detected at or above laboratory detection limits (5 mg/kg Total lead and 0.2 mg/l Soluble lead)

Lead

LA 101
TO # 07-120721-01
KP 7.08 - 28.00

SITE INVESTIGATION REPORT

NORTHBOUND AND SOUTHBOUND ROUTE 101 BETWEEN VERMONT AVENUE AND ROUTE 405

TASK ORDER NO. 07-120721-01
EA #120721

PREPARED FOR

DEPARTMENT OF TRANSPORTATION
DISTRICT 7

LOS ANGELES, CALIFORNIA

MARCH 1996

INDEX OF SHEETS

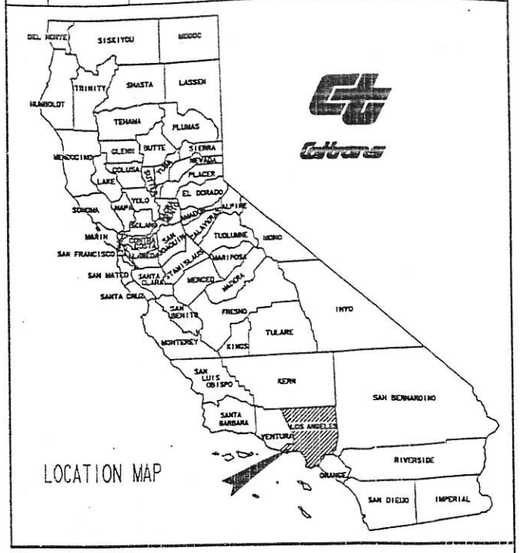
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN LOS ANGELES COUNTY, IN LOS ANGELES ON ROUTE 101 FROM VERMONT AVE TO THE ROUTE 101/ROUTE 405 SEPERATION

To be supplemented by Standard Plans dated July, 1992

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101			



LOCATION MAP

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

BEGIN CONSTRUCTION
STA 195+00 PM R4.4

Begin Work
Sta 40+00

To Los Angeles

191+83.13 Bk
18+29.02 Ahd

VERMONT AVE OC
BR NO 53-0609

CLINTON ST UC
BR NO 53-0317L

MELROSE AVE UC
BR NO 53-0673L

HELIOTROPE DR UC
BR NO 53-0672R

MELROSE AVE UC
BR NO 53-0673R

SANTA MONICA BLVD SEP
BR NO 53-0675

175+70.35 Bk
175+75.78 Ahd

NORMANDIE AVE UC
BR NO 53-0674

SUNSET BLVD OC
BR NO 53-0677

FOUNTAIN AVE OC
BR NO 53-0722

WESTERN AVE OC
BR NO 53-0676

WILTON PL OC
BR NO 53-0731

HOLLYWOOD BLVD OC
BR NO 53-0678

FRANKLIN AVE RP UC
BR NO 53-0728K

GOWER ST OFF RP
BR NO 53-0865K

VAN NESS AVE RP
BR NO 53-0732K

GOWER ST UC
BR NO 53-0679

BRONSON AVE OC
BR NO 53-0724

ARGYLE-FRANKLIN AVE UC
BR NO 53-0680

IVAR AVE RP SEP
BR NO 53-0783K

HOLLY DR UC
BR NO 53-0801

ODIN ST UC
BR NO 53-0696

RTE 101/170 SEP
BR NO 53-0729L

PILGRIMAGE OC
BR NO 53-0468

IVAR AVE UC
BR NO 53-0797

HOLLY DR UC RP
BR NO 53-1782S

CAHUENGA BLVD UC
BR NO 53-0681

MULHOLLAND DR OC
BR NO 53-0301

LOS ANGELES

VENTURA BLVD OR OC
BR NO 53-1223S

LANKERSHIM BLVD UC
BR NO 53-0098

BARHAM BLVD OC
BR NO 53-0466

CAHUENGA BLVD UC
BR NO 53-0866K

235+50.00 Bk
1+22.53 Ahd

187+69.76 Bk
187+66.93 Ahd

UNIVERSAL DR OC
BR NO 53-2712

LOS ANGELES RIVER
BR NO 53-1224R/L

20-00.00 Bk
113+86.11 Ahd

MOORPARK ST UC
BR NO 53-1226R/L

VINELAND AVE UC
BR NO 53-1225L/R

TUJUNGA AVE UC
BR NO 53-1338L

Match Line

ROUTE 170
To San Fernando

RTE 101/134, 170SEP
BR NO 53-1336R

RIVERSIDE DR OC
BR NO 53-1493S

RTE 134/101, 170SEP
BR NO 53-1339F

To Burbank
ROUTE 134

LOS ANGELES

LAUREL CANYON BLVD UC
BR NO 53-1315

VAN NUYS BLVD UC
BR NO 53-1376

EAST CONNECTOR UC
BR NO 53-1145L

SEPULVEDA BLVD UC
BR NO 53-1102L/R

WEST CONNECTOR UC
BR NO 53-1147R

COLFAX AVE UC
BR NO 53-1310

RADFORD AVE UC
BR NO 53-1311

TUJUNGA WASH
BR NO 53-1337

WHITSETT AVE UC
BR NO 53-1340

COLDWATER CANYON AVE UC
BR NO 53-1353

FULTON AVE UC
BR NO 53-1354

WOODMAN AVE UC
BR NO 53-1355

LA RIVER BRIDGE
BR NO 53-1371

KESTER AVE UC
BR NO 53-1375

RTE 101/405 SEP
BR NO 53-1146R/L

RTE 101/405 SEP
BR NO 53-1146G/F

To Santa Monica

END CONSTRUCTION
STA 20+00 PM R17.1

LOS ANGELES

ROUTE 101

Match Line
COLFAX AVE
RADFORD AVE
LAUREL CANYON BLVD
TUJUNGA
WHITSETT AVE
COLDWATER CANYON AVE
FULTON AVE
WOODMAN AVE
HAZELTINE AVE
LA RIVER
VAN NUYS BLVD
KESTER AVE
SEPULVEDA BLVD
HASKELL AVE
RIVERSIDE DR
WASH

NO SCALE

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 1 DATE 3-1-1996

VICINITY MAP

Project Engineer
Registered Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

Plans Approval Date

Approved as to Impact on State facilities and conformance with applicable State standards and practices and that technical oversight was performed as described in the California Department of Transportation A & E Consultant Services Manual

PROJECT ENGINEER	DESIGN OVERSIGHT APPROVAL	REGISTRATION NO.	DATE
SEAN WONG	PRINTED NAME: PAT SULLIVAN SIGNATURE	C30912	

The Contractor shall possess the Class or Classes of license as specified in the "Notice to Contractors".

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

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD, #100
LA MIRADA, CA 90638

Contract No. 07-120724

CU 07387 EA 120721

LAST REVISION

FORM OC-OE-93-PF (REV. 3/88)

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
B 1- S	132	4	---	s	5.5	W
B 1- 1.5	10	---	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
235	8	0 to 0.75	52

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

PLAN B

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

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
B 22 S	ND	---	---	s	5.5	W
B 22 1.5	3220	228	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
225	6	0.75 to 2	63

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

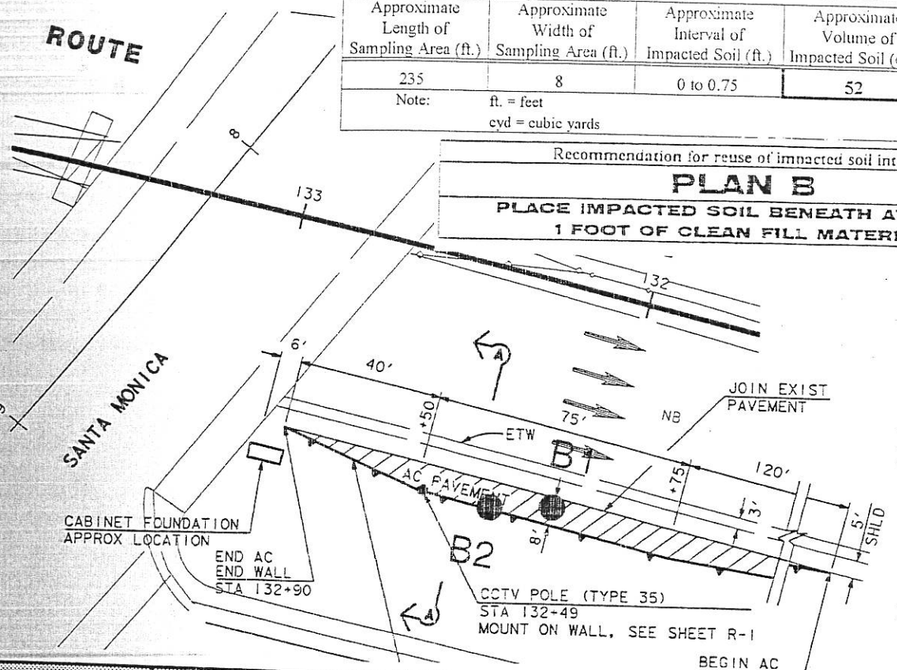
PLAN C

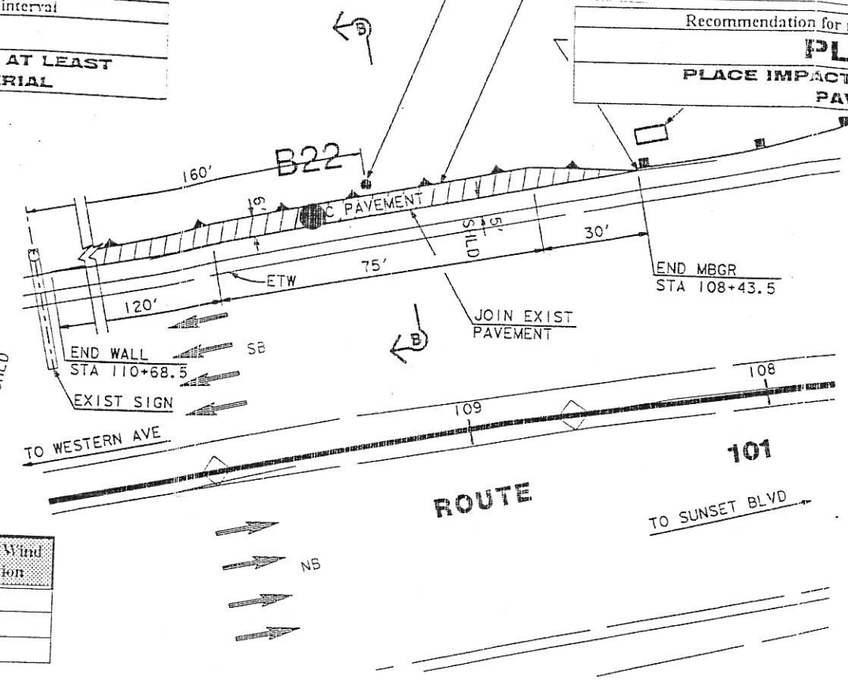
PLACE IMPACTED SOIL BENEATH PAVEMENT

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
B 2- S	702	32	ND	s	8	W
B 2- 2	6.1	---	---	s	8	W
B 2- 4.5	6.3	---	---	s	8	W

LOCATION 3, TV-HO055

ROUTE 101 AT SANTA MONICA BLVD



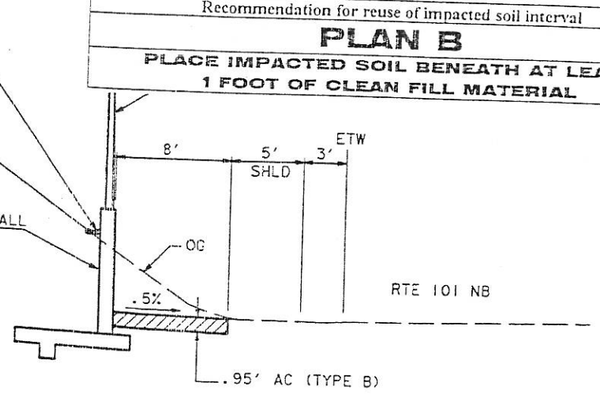


BEGIN MBGR (TYPE 8 FLARE)
CAA BREAKAWAY (TYPE A)
TERMINAL SECTION (TYPE C)
STA 107+81

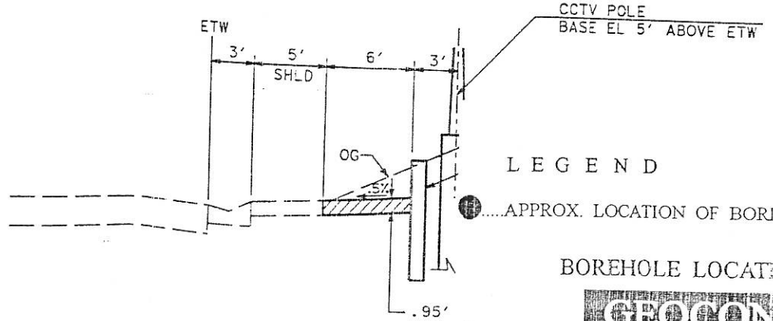
ELEVATION OF WALL
LOCATION 4, TV-HO060
NO SCALE

LOCATION 4, TV-HO060

ROUTE 101, NORTH OF FOUNTAIN AVE



SECTION A-A
LOCATION 3
NO SCALE

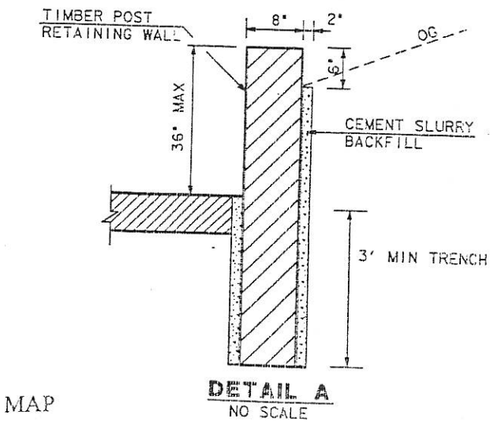


SECTION B-B
LOCATION 4
NO SCALE

LEGEND

.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP



DETAIL A
NO SCALE

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 2 DATE 3-1-1996

LAYOUT
LOCATIONS 3 AND 4)
SCALE: 1"=20'

L-2

2/17/95
NEER (Date)

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

NEERING TECHNOLOGY
NE BLVD., SUITE 100

SERVICES, INC.
S, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

DATE	REVISED BY
2/95	SW

DATE	REVISED BY
2/95	WJW

CALCULATED/ DESIGNED BY
CHECKED BY
DESIGN OVERSIGHT
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FORM DC-OE-92-PF (REV. 3/88)
841004\se\ustn\2\12072e02. Feb. 19, 1995 21:17:59

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

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
B 3- S	1690	---	---	s	5.5	W
B 3- 1.5	186	9.2	---	s	5.5	W

POLE
OF CAMERA
OP OF SIGN

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
35	9	0 to 2	23

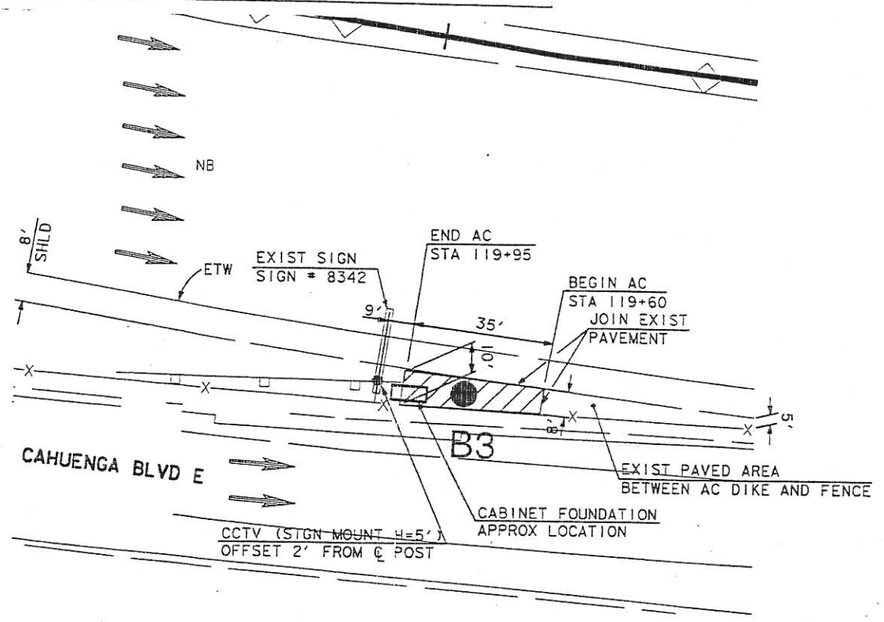
Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

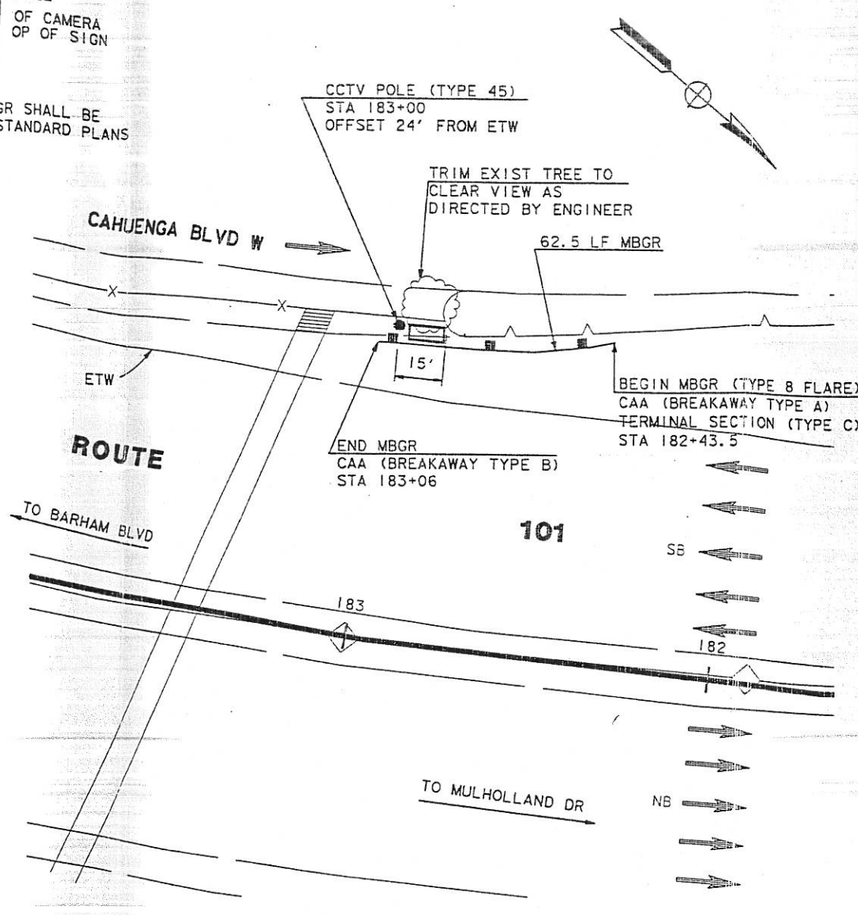
PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT

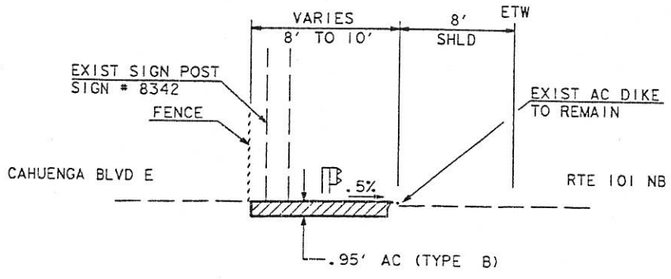
1. NEW MBGR AND RECONSTRUCTED MBGR SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS A77A TO A77K



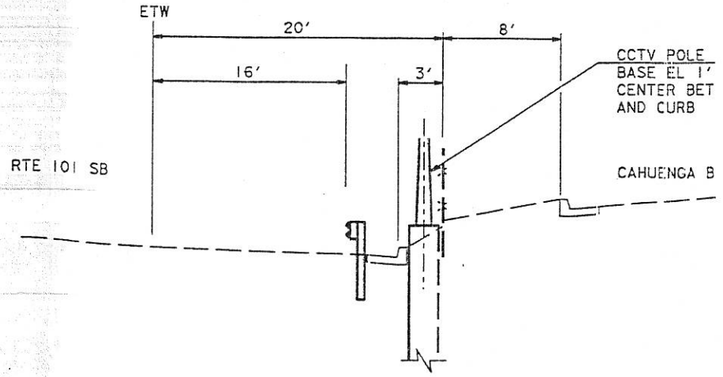
LOCATION 9 , TV-H0083
ROUTE 101, SOUTH OF MULHOLLAND DR



LOCATION 10, TV-H0090
ROUTE 101, SOUTH OF BARHAM BLVD



TYPICAL SECTION
LOCATION 9
NO SCALE



SECTION AT POLE
LOCATION 10
NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 3 DATE 3-1-1996

LAYOUT
(LOCATIONS 9 AND 10)
SCALE: 1"=20'

L-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN
CALCULATED/DESIGNED BY: WJW DATE 2/95 REVISED BY
CHECKED BY: SW 2/95 DATE REVISED

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
CU 07387 EA 120721
J:\data\841004\se\ustn\2\12072e06. Feb. 19, 1995 21:56:39

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
B 4- S	668	25	---	s	5.5	W
B 4- 1.5	117	1.7	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	12	0 to 0.75	33

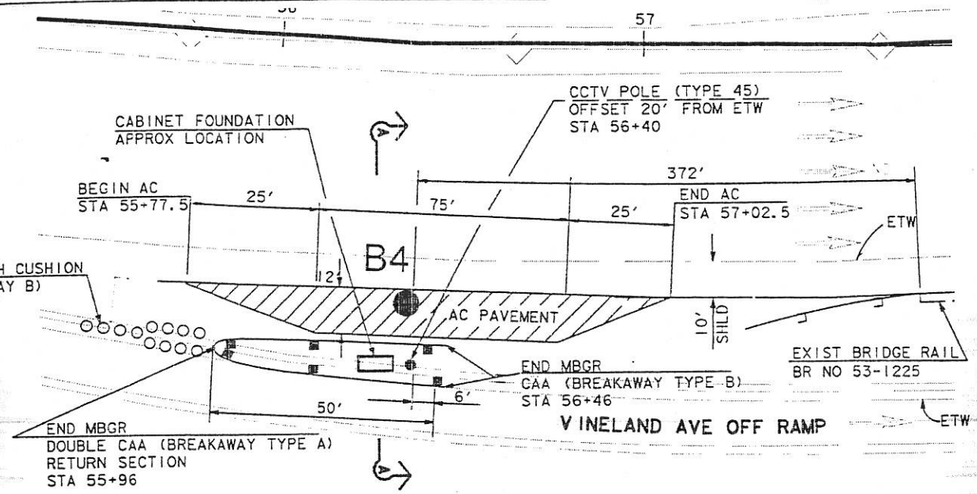
Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

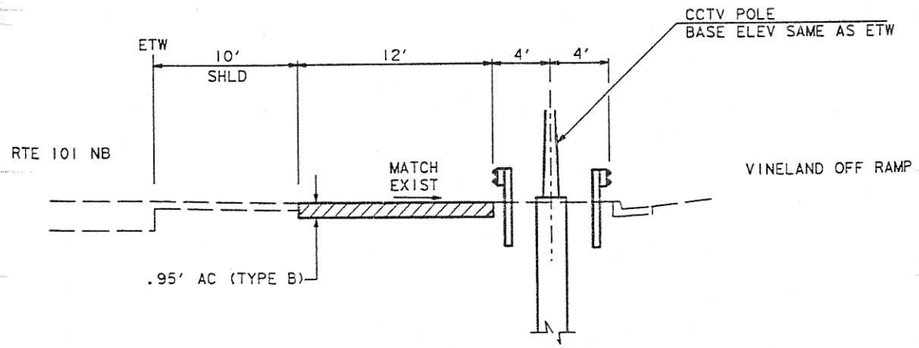
PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT

LEGEND
PE N):
UNT H=X')



LOCATION 13, TV-HO110
ROUTE 101, SOUTH OF VINELAND



SECTION A-A
LOCATION 13
NO SCALE

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
B 13 S	ND	---	---	s	5.5	W
B 13 1.5	217	1.2	---	s	5.5	W

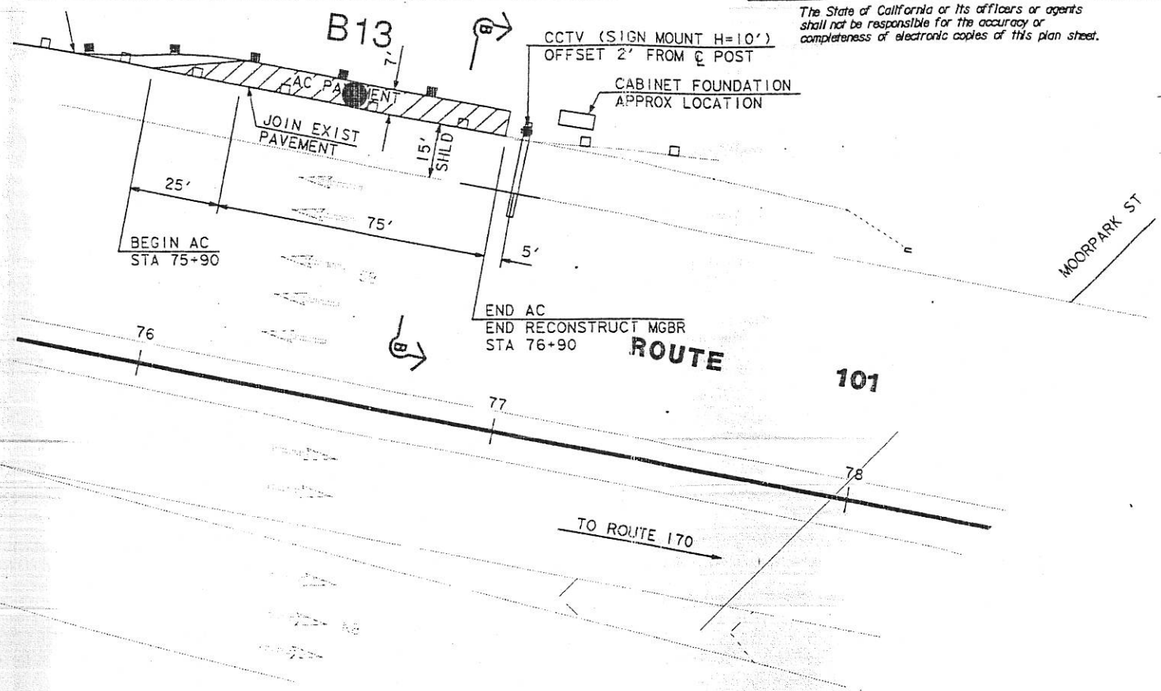
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	7	0 to 0	0

Note: ft. = feet
cyd = cubic yards

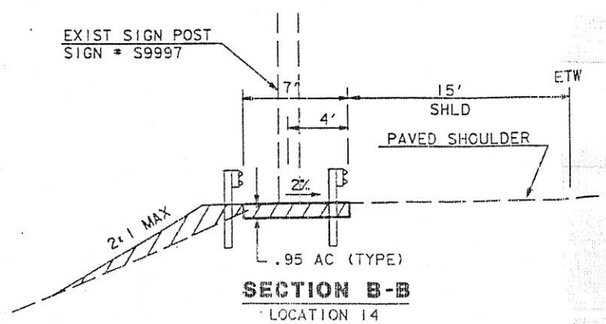
Recommendation for reuse of soil

PLAN A

SOIL CAN BE REUSED AS CLEAN FILL



LOCATION 14, TV-HO114
ROUTE 101 AT MOORPARK ST



SECTION B-B
LOCATION 14
NO SCALE

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

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600 - 06 - 45
FIGURE 4 DATE 3-1-1996

LAYOUT
(LOCATION 13 AND 14)
SCALE: 1"=20'

L-8

DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS

7/95

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

DESIGN OVERSIGHT
PAT SULLIVAN
CALCULATED/ DESIGNED BY
CHECKED BY
WJW 2/95 DATE REVISED BY
SW 2/95 DATE REVISED
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DONSPEC USERNAME SYSTIME

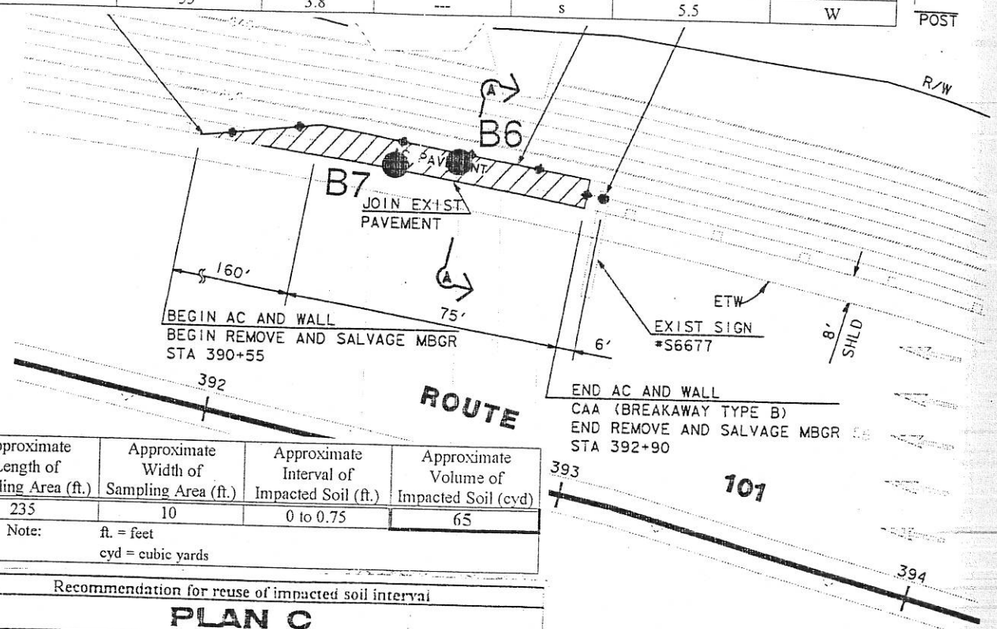
FORM DC-OE-92-PF (REV. 3/88)
J:\data\841004\se\plot2\12070.00 4605 22:20:22

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

CU 07387 EA 120721

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
B 6- S	871	28	0.17	s	8	W
B 6- 2	6.7	---	---	s	8	W
B 6- 4.5	13	---	---	s	8	W

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
B 7- S	1570	---	---	s	5.5	W
B 7- 1.5	55	3.8	---	s	5.5	W



Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
235	10	0 to 0.75	65

Note: ft. = feet
cyd = cubic yards

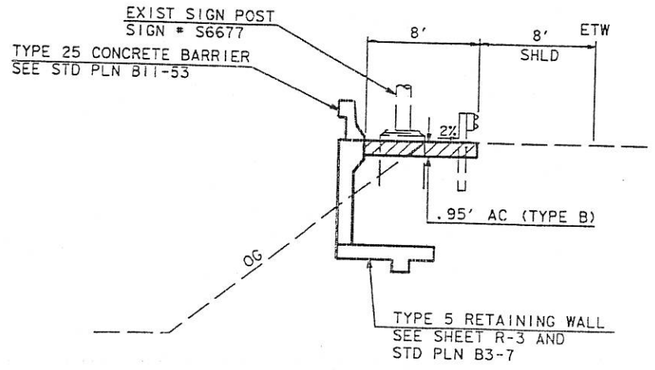
Recommendation for reuse of impacted soil interval

PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT

LOCATION 19, TV-VE157

ROUTE 101, SOUTH OF VAN NUYS



SECTION A-A

LOCATION 19
NO SCALE

LEGEND

CCTV POLE (TYPE N): N = HEIGHT OF POLE
SCTV (SIGN MOUNT H=X) H, X = HEIGHT OF CAMERA ABOVE TOP OF SIGN

NOTE:

1. NEW MBGR AND RECONSTRUCTED MBGR SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS A77A TO A77K

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PROFESSIONAL ENGINEER REGISTERED SEAN WONG No. C049893 Exp. 9/30/96 CIVIL STATE OF CALIFORNIA

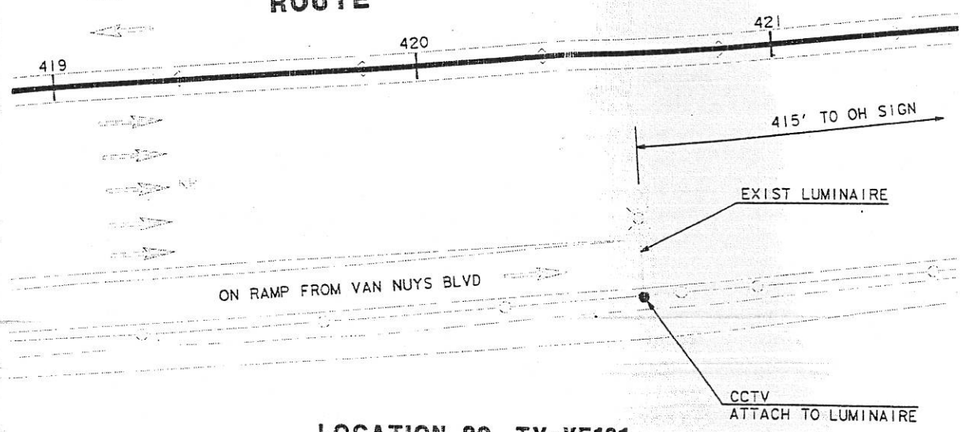
PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

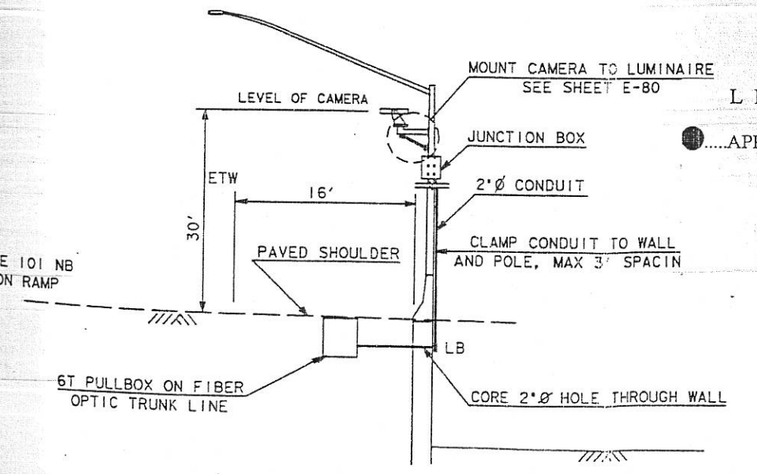
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



LOCATION 20, TV-VE161

ROUTE 101, NORTH OF VAN NUYS



SECTION AT LUMINAIRE

LOCATION 20
NO SCALE

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600 - 06 - 45
FIGURE 6 DATE 3-1-1996

LAYOUT
(LOCATIONS 19 AND 20)

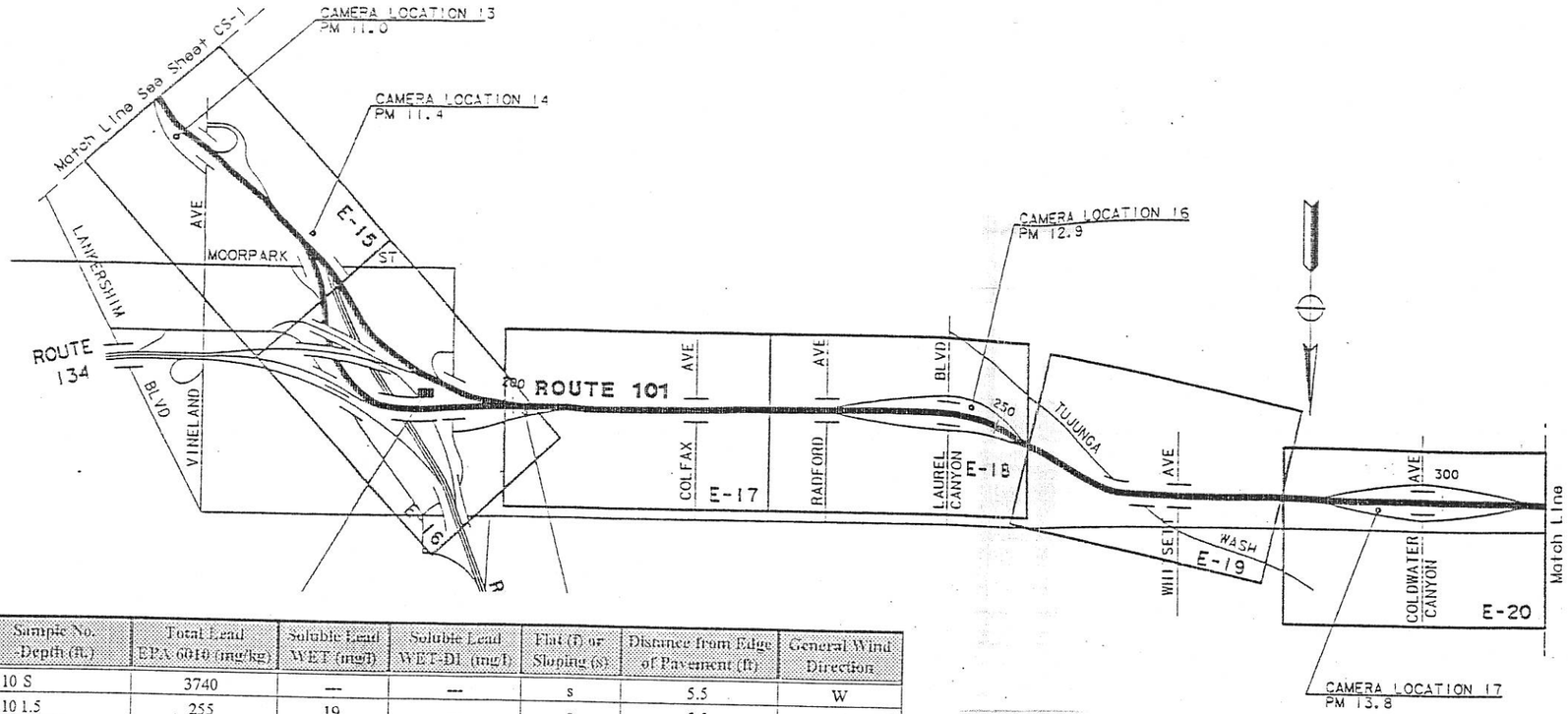
SCALE: 1"=20'

L - 11

DESIGN OVERSIGHT - PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
CALCULATED/DESIGNED BY | WJW | DATE 2/95 | REVISED BY
CHECKED BY | SW | 2/95 | DATE REVISED
DONSPEC@SYSTIME.USER4

FORM DC-OE-92-PF (REV. 3/88)
):\data\641004\se\ustn\2\12072e11. Feb. 21, 1995 00:05:07

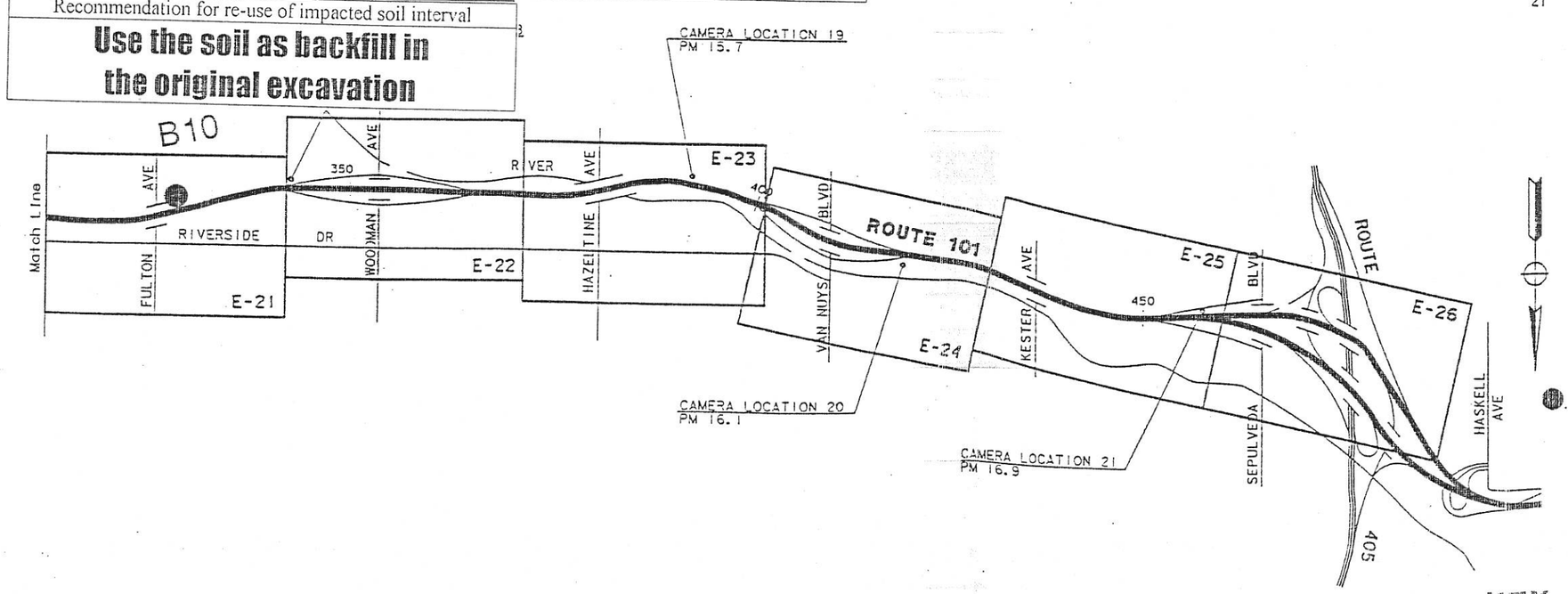
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3



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
B 10 S	3740	---	---	s	5.5	W
B 10 1.5	255	19	---	s	5.5	W

Recommendation for re-use of impacted soil interval

Use the soil as backfill in the original excavation



LOC	CAMERA ID	SITE
13	H0110	ROUTE 101 / VINELAND AVE
14	H0114	ROUTE 101 / MCORPARK ST
15	VE12	ROUTE 101 / ROUTE 170
16	VE129	ROUTE 101 / LAUREL CANYON BLVD
17	VE138	ROUTE 101 / COLDWATER CANYON BLVD
18	VE147	ROUTE 101 / WOODMAN AVE
19	VE157	ROUTE 101 / HAZELTINE AVE
20	VE161	ROUTE 101 / VAN NUYS BLVD
21	VE169	ROUTE 101 / SEPULVEDA BLVD

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON ENVIRONMENTAL

PROJ. NO. 08600-06-45

FIGURE 7 DATE 3-1-1996

KEY MAP AND LINE INDEX

NO SCALE

K-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95

REGISTERED CIVIL ENGINEER (Date)

SEAN WONG No. C049893 Exp. 9/30/96 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CALCULATED/ DESIGNED BY	CII	DATE 2/95	REVISED BY	DATE REVISED
CHECKED BY	SW	2/95		

DESIGN OVERSIGHT — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

CONSPEC SYSTEM USE

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
B 5- S	3080	---	---	s	5.5	W
B 5- 1.5	176	16	---	s	5.5	W

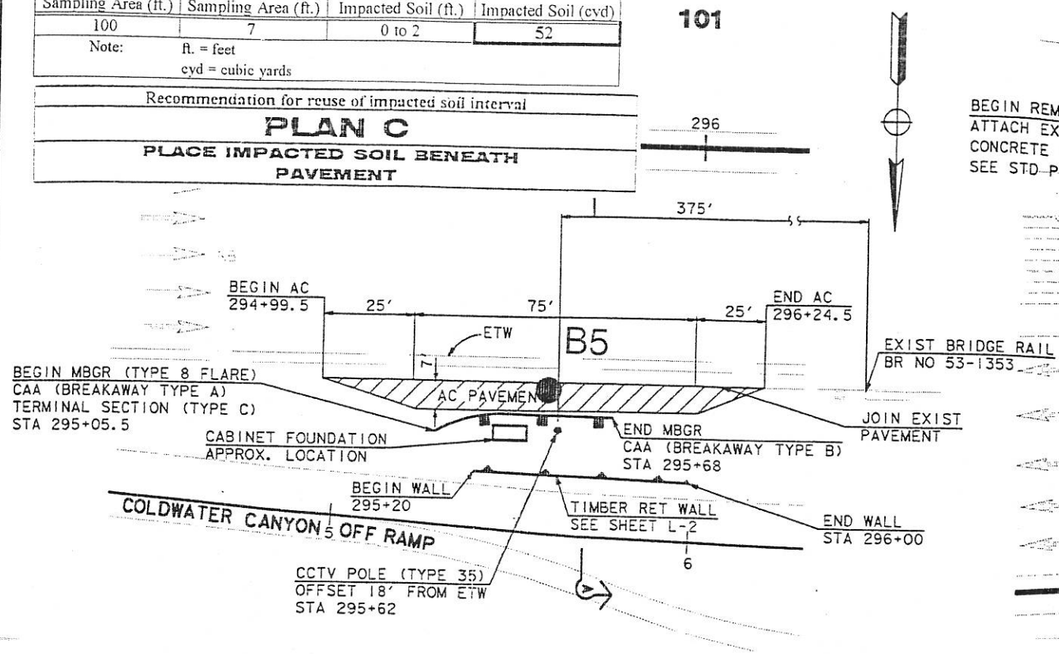
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	7	0 to 2	52

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT



LEGEND

CAMERA POLE (TYPE N): N = LE
SIGN MOUNT H=X: H, X =

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
B 8- S	430	29	---	s	8	W
B 8- 2	ND	---	---	s	8	W
B 8- 4.5	24	---	---	s	8	W

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
B 9- S	460	30	ND	s	5.5	W
B 9- 1.5	186	8.8	---	s	5.5	W

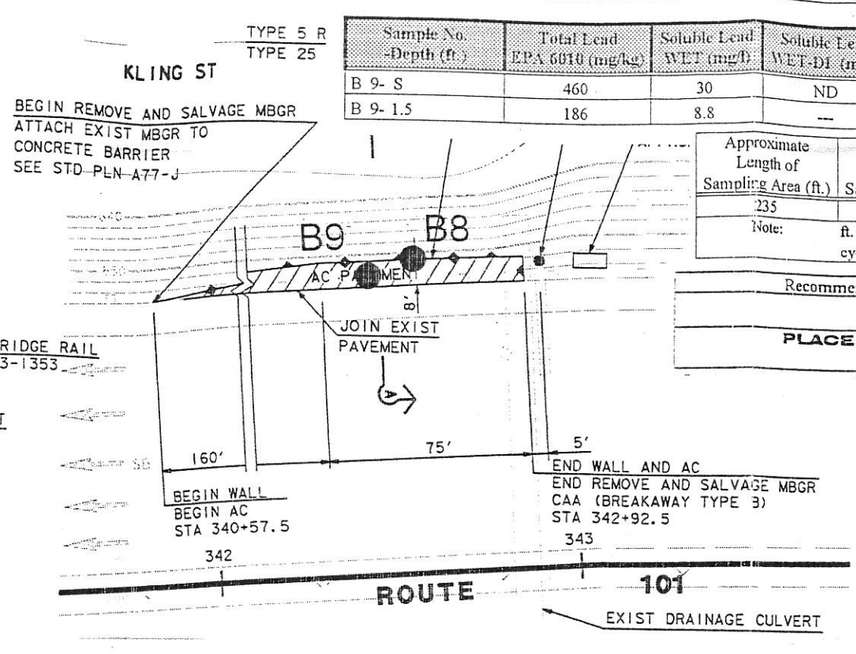
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
235	8	0 to 2	139

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

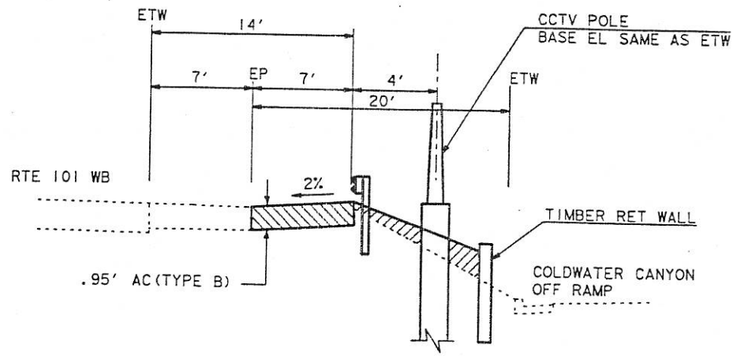
PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT



LOCATION 17, TV-VE138

ROUTE 101, SOUTH OF COLDWATER CANYON

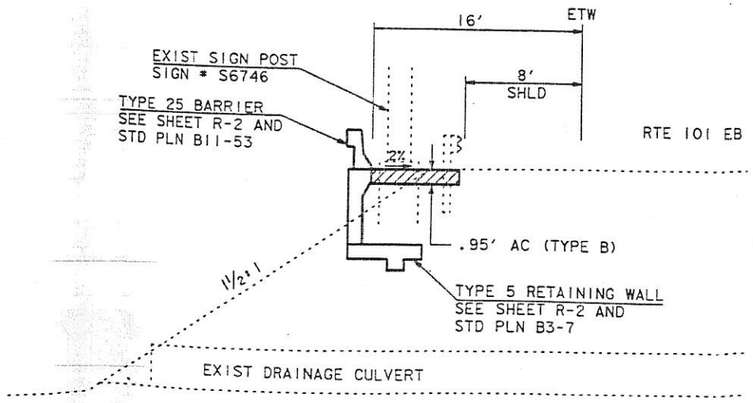


SECTION A-A

LOCATION 17
NO SCALE

LOCATION 18, TV-VE147

ROUTE 101, SOUTH OF WOODMAN



SECTION A-A

LOCATION 18
NO SCALE

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 5 DATE 3-1-1996

(LOCATION 17 AND 18)

SCALE: 1" = 20'

L-10

DESIGN OVERSIGHT | PAT SULLIVAN
DESIGNED BY | CALCULATED/ CHECKED BY | SW 2/95 | WJW 2/95 | DATE REVISED BY | DATE REVISED
DEPARTMENT OF TRANSPORTATION - STATE OF CALIFORNIA
Caltrans
XXXXXXXX.DGN NET X/XXX/XX
DGNSPEC USERNAME SYSTIME

FORM DC-OE-92-PF (REV. 3/88)
): \data\841004\se\ustn\2\12072e10. Feb. 20, 1995 22:35:01

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

CU 07387 | EA 120721

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
B 11 S	477	23	---	s	5.5	W
B 11 1.5	18	---	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	14	0 to 0.75	39

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

PLAN C

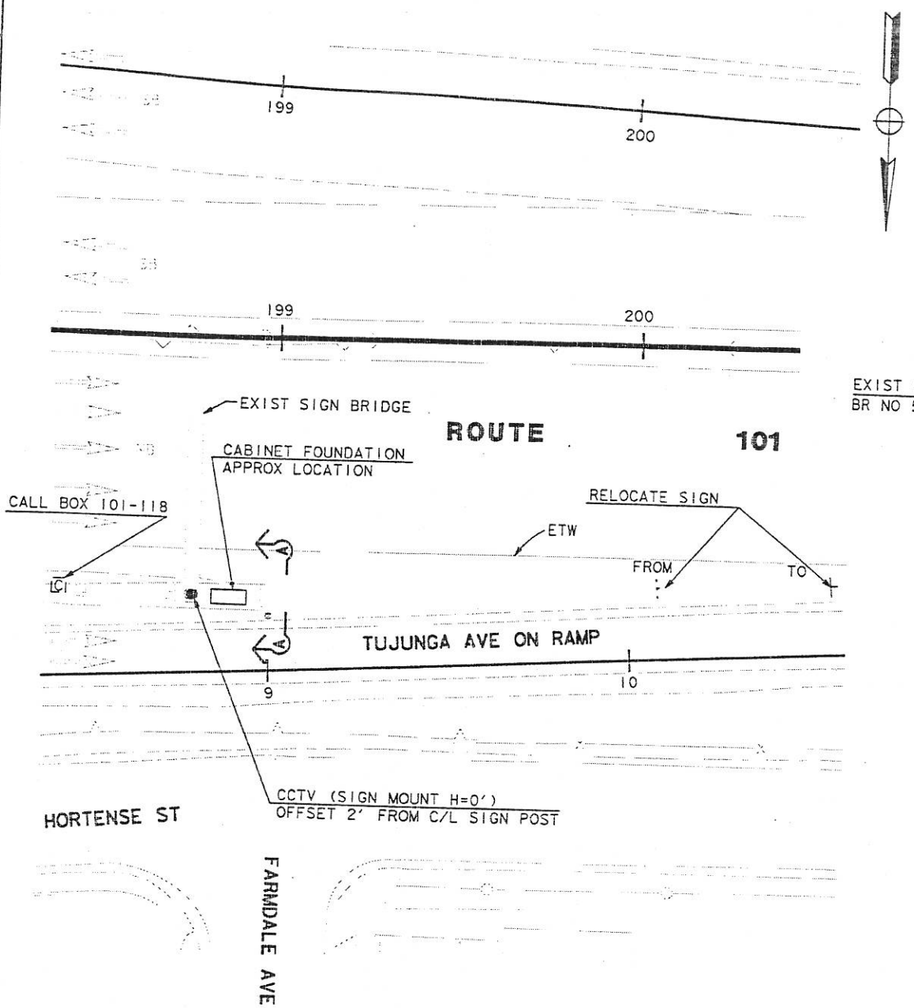
PLACE IMPACTED SOIL BENEATH PAVEMENT

LEGEND

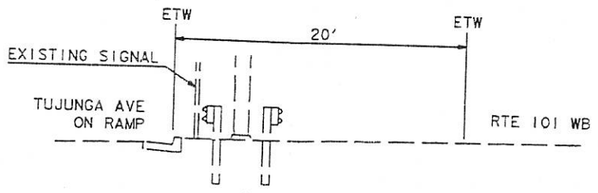
CAMERA POLE (T
CCTV (SIGN MOU

NOTES:

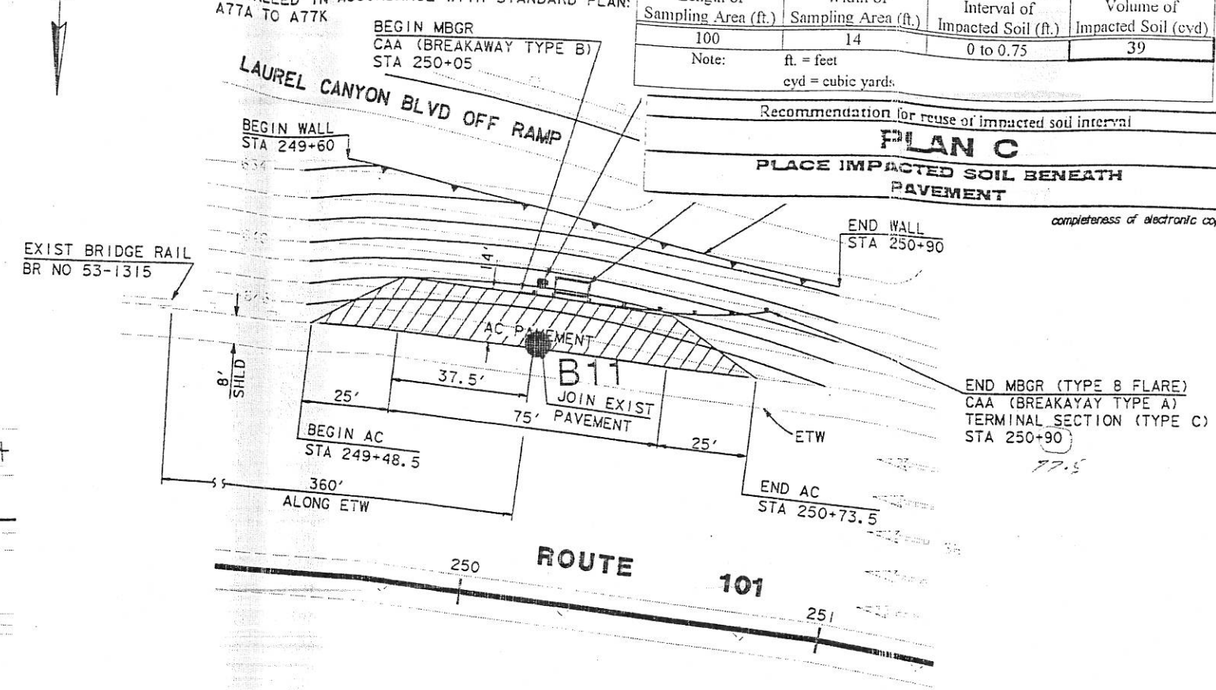
1. NEW MBGR AND RECONSTRUCTED MBGR SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS A77A TO A77K



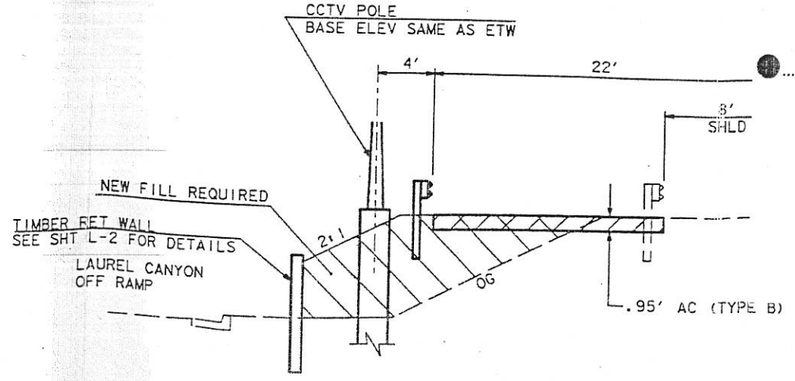
LOCATION 15, TV-VE120
ROUTE 101 AT TUJUNGA AVE



SECTION A-A
LOCATION 15, FOR INFORMATION ONLY
NO SCALE



LOCATION 16, TV-VE129
ROUTE 101 AT LAUREL CANYON BLVD



SECTION AT POLE
LOCATION 16
NO SCALE

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL

PROJ. NO. 08600-06-45
FIGURE 8 DATE 3-1-1996

LAYOUT
(LOCATIONS 15 AND 16)
SCALE: 1"=20'

L-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN
CALCULATED/DESIGNED BY: WJW DATE 2/95
CHECKED BY: SW 2/95
REVISED BY
DATE REVISED

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

:\data\841004\se\ustn\2\12072e09. Feb. 20, 1995 20:18:36

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

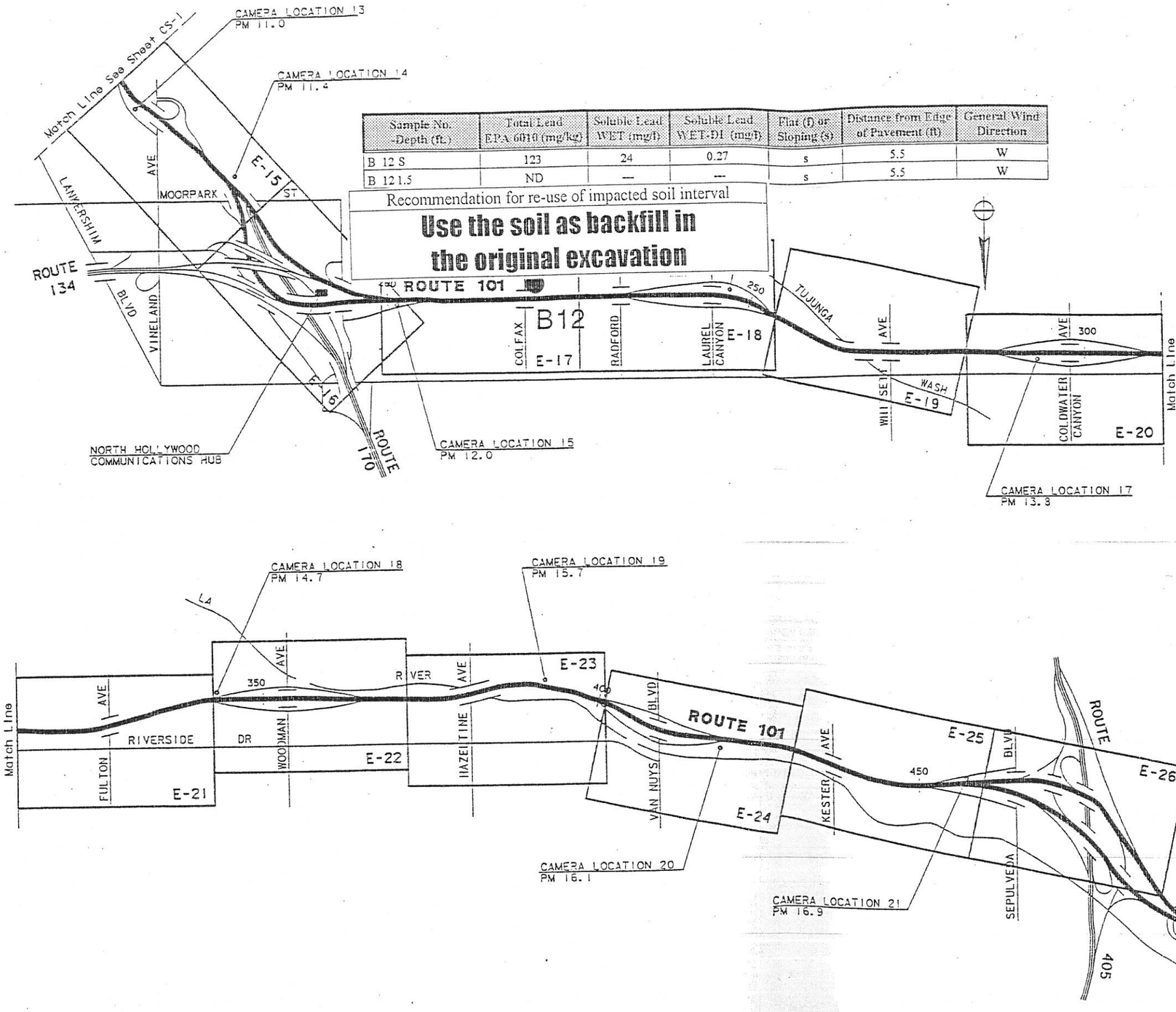
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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
B 12 S	123	24	0.27	s	5.5	W
B 12 1.5	ND	—	—	s	5.5	W

Recommendation for re-use of impacted soil interval

Use the soil as backfill in the original excavation



LOC	CAMERA ID	SITE
13	H0110	ROUTE 101 / VINELAND AVE
14	H0114	ROUTE 101 / MOORPARK ST
15	VE12	ROUTE 101 / ROUTE 170
16	VE129	ROUTE 101 / LAUREL CANYON BLVD
17	VE138	ROUTE 101 / COLDWATER CANYON BLVD
18	VE147	ROUTE 101 / WOODMAN AVE
19	VE157	ROUTE 101 / HAZELTINE AVE
20	VE161	ROUTE 101 / VAN NUYS BLVD
21	VE169	ROUTE 101 / SEPULVEDA BLVD

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

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600 - 06 - 45
FIGURE 9 DATE 3-1-1996

KEY MAP AND LINE INDEX
NO SCALE

K-2

DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	DATE	REVISED BY	DATE REVISED
PAT SULLIVAN	CHECKED BY	CH 2/95	SW 2/95	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

CU 07387 EA 120721

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
B 16 S	189	3.5	---	s	5.5	W
B 16 1.5	86	ND	---	s	5.5	W

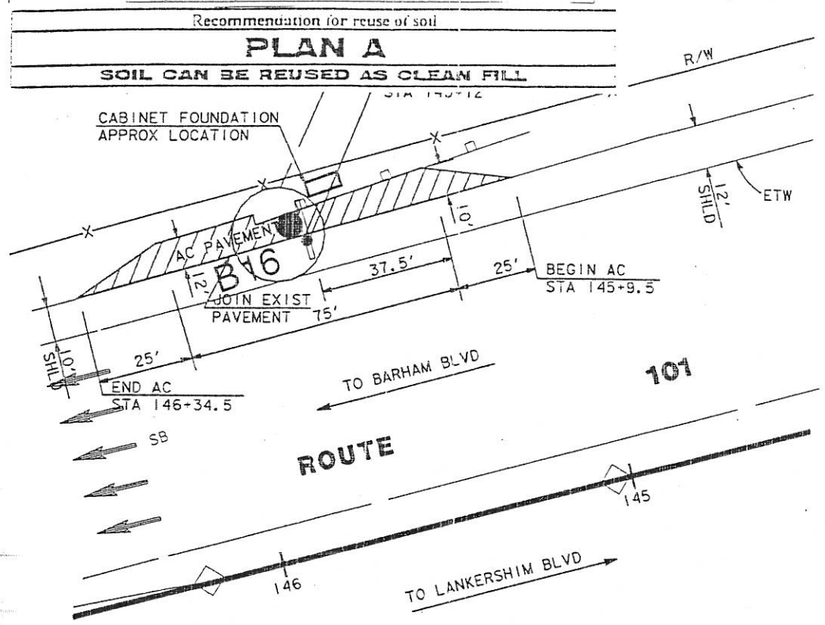
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
125	12	0 to 0	0

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of soil

PLAN A

SOIL CAN BE REUSED AS CLEAN FILL



LOCATION 11, TV-HO095

ROUTE 101, NORTH OF UNIVERSAL CENTER DR

N = HEIGHT
(X') H.X = HEI

CABINET
APPROX

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
B 14 S	27	---	---	s	5.5	W
B 14 1.5	ND	---	---	s	5.5	W

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
B 15 S	ND	---	---	s	5.5	W
B 15 1.5	536	0.51	---	s	5.5	W

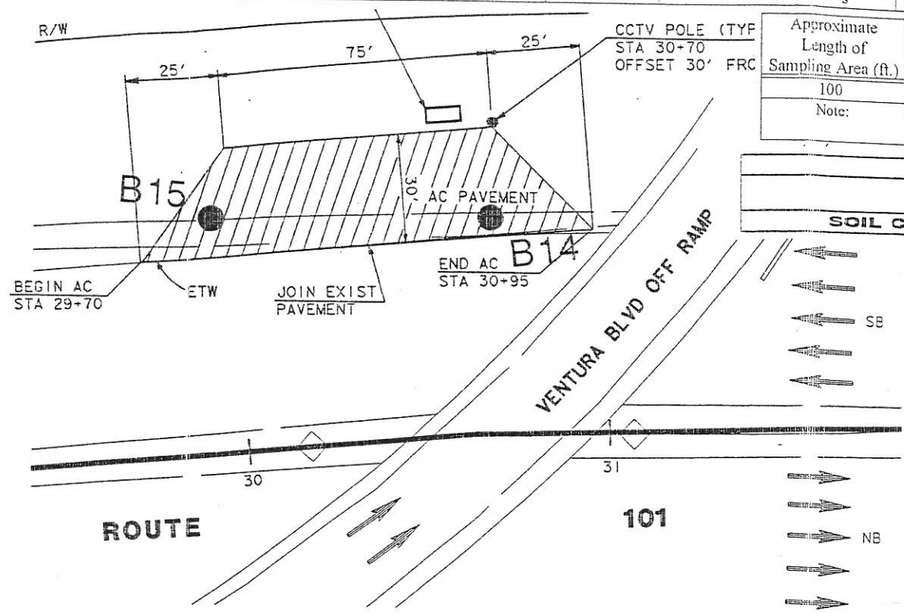
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	30	0 to 0	0

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of soil

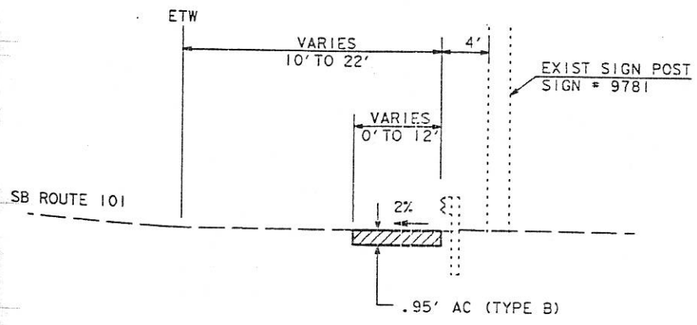
PLAN A

SOIL CAN BE REUSED AS CLEAN FILL



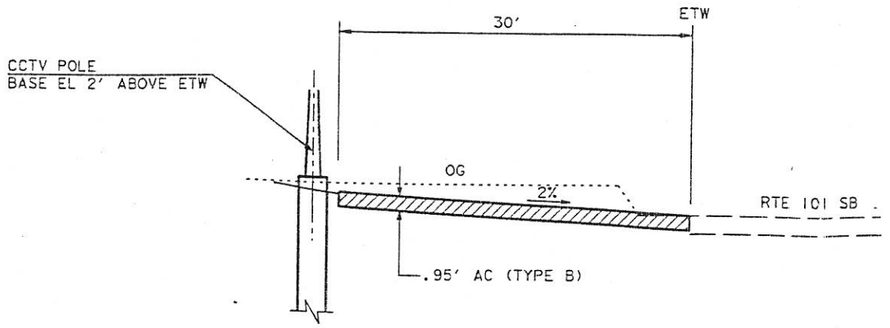
LOCATION 12, TV-HO106

ROUTE 101 AT VENTURA BLVD OFF RAMP



TYPICAL SECTION

LOCATION 11
NO SCALE



TYPICAL SECTION

LOCATION 12
NO SCALE

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 10 DATE 3-1-1996

LAYOUT
(LOCATIONS 11 AND 12)

SCALE: 1"=20'

L-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN
CALCULATED/DESIGNED BY: WJW DATE 2/95
CHECKED BY: SW 2/95
REVISED BY
DATE REVISED

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
CU 07387
EA 120721
j:\data\841004\se\ustn\2\12072e07. Feb. 19, 1995 22:17:38

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

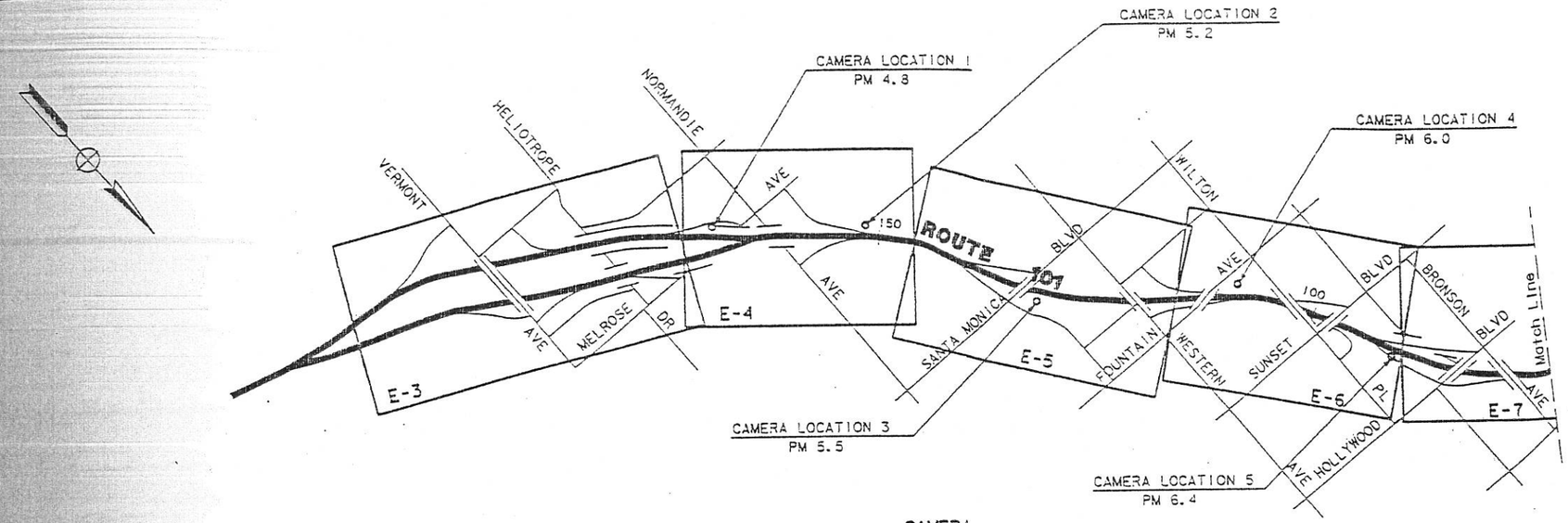
REGISTERED PROFESSIONAL ENGINEER SEAN WONG No. C049893 Exp. 9/30/96 CIVIL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

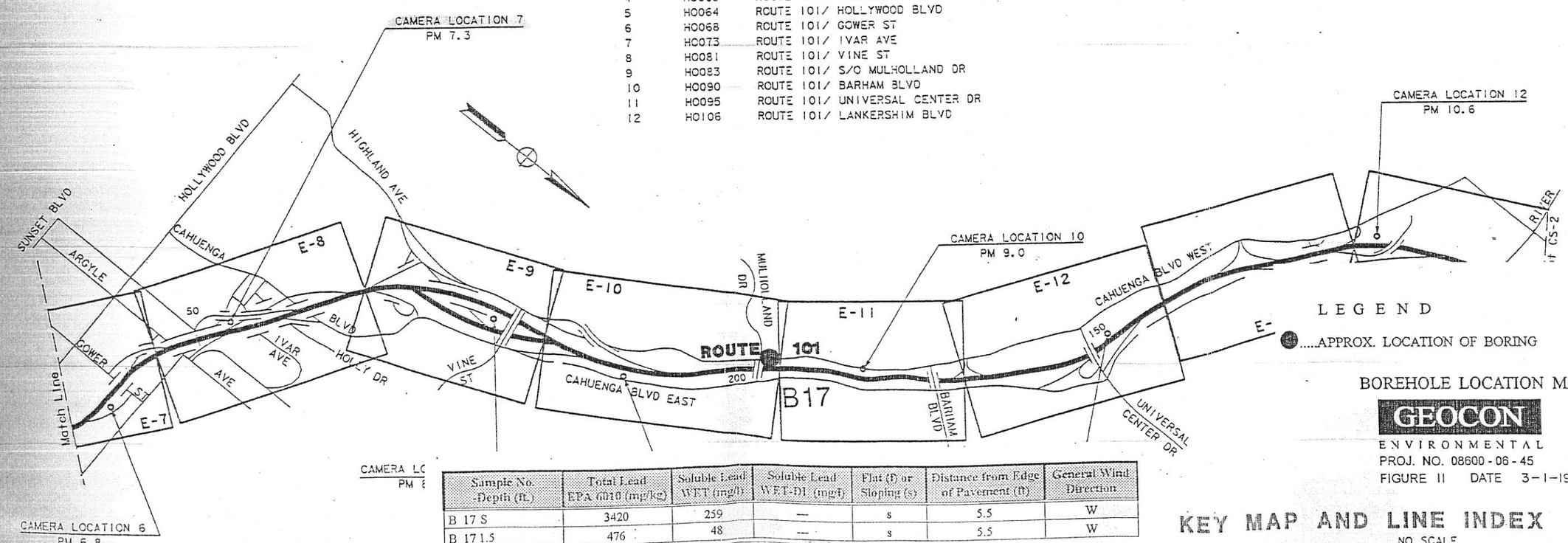
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



LOC	CAMERA ID	SITE
1	H0048	ROUTE 101/ MELROSE AVE
2	H0052	ROUTE 101/ N/O NORMANDIE AVE
3	H0055	ROUTE 101/ SANTA MONICA BLVD
4	H0060	ROUTE 101/ FOUNTAIN AVE
5	H0064	ROUTE 101/ HOLLYWOOD BLVD
6	H0068	ROUTE 101/ GOWER ST
7	H0073	ROUTE 101/ IVAR AVE
8	H0081	ROUTE 101/ VINE ST
9	H0083	ROUTE 101/ S/O MULHOLLAND DR
10	H0090	ROUTE 101/ BARHAM BLVD
11	H0095	ROUTE 101/ UNIVERSAL CENTER DR
12	H0106	ROUTE 101/ LANKERSHIM BLVD



LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 11 DATE 3-1-1996

Sample No. -Depth (ft.)	Total Lead EPA 6010 (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead WET-D1 (mg/l)	Flat (f) or Sloping (s)	Distance from Edge of Pavement (ft)	General Wind Direction
B 17 S	3420	259	—	s	5.5	W
B 17 1.5	476	48	—	s	5.5	W

Recommendation for re-use of impacted soil interval

Use the soil as backfill in the original excavation

KEY MAP AND LINE INDEX

NO SCALE

K-1

CALCULATED/ DESIGNED BY	CH	DATE 2/95	REVISED BY
CHECKED BY	SW	2/95	DATE REVISED

DESIGN OVERSIGHT
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FORM DC-OE-92-PE (REV. 3/94)

CU 07387 | EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SEAN WONG No. C049893 Exp. 9/30/96 CIVIL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

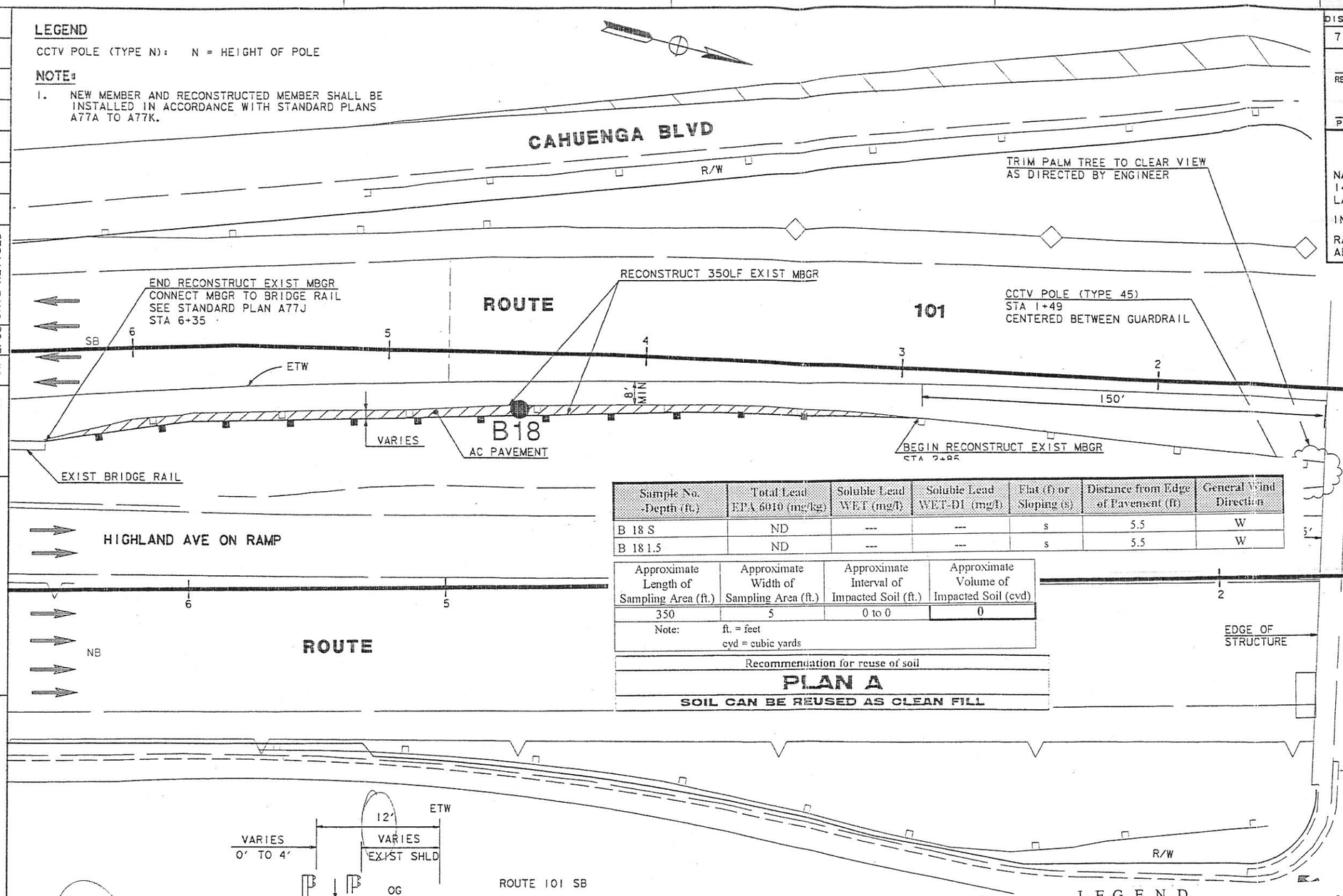
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND

CCTV POLE (TYPE N): N = HEIGHT OF POLE

NOTE:

1. NEW MEMBER AND RECONSTRUCTED MEMBER SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS A77A TO A77K.



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
B 18 S	ND	---	---	s	5.5	W
B 18 1.5	ND	---	---	s	5.5	W

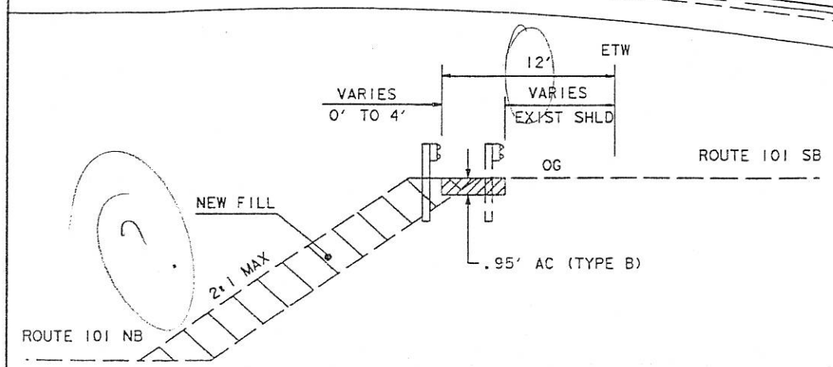
Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
350	5	0 to 0	0

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of soil

PLAN A

SOIL CAN BE REUSED AS CLEAN FILL



TYPICAL SECTION
NO SCALE

LOCATION 8, TV-HO081
ROUTE 101 AT PILGRIMAGE OC

LEGEND

●....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 12 DATE 3-1-1996

LAYOUT (LOCATION 8)
SCALE: 1"=20'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN

CALCULATED/ DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
WJW	SW	DATE 2/95	2/95

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

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

CU 07387 | EA 120721

\data\841004\se\usfn\2\12072e05 Feb 19 1995 21:40:46

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
B 19-S	108	4.5	---	s	5.5	W
B 19-1.5	7.1	---	---	s	5.5	W

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
B 20-S	41	---	---	s	5.5	W
B 20-1.5	108	0.93	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	15	0 to 0	0

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of soil

PLAN A

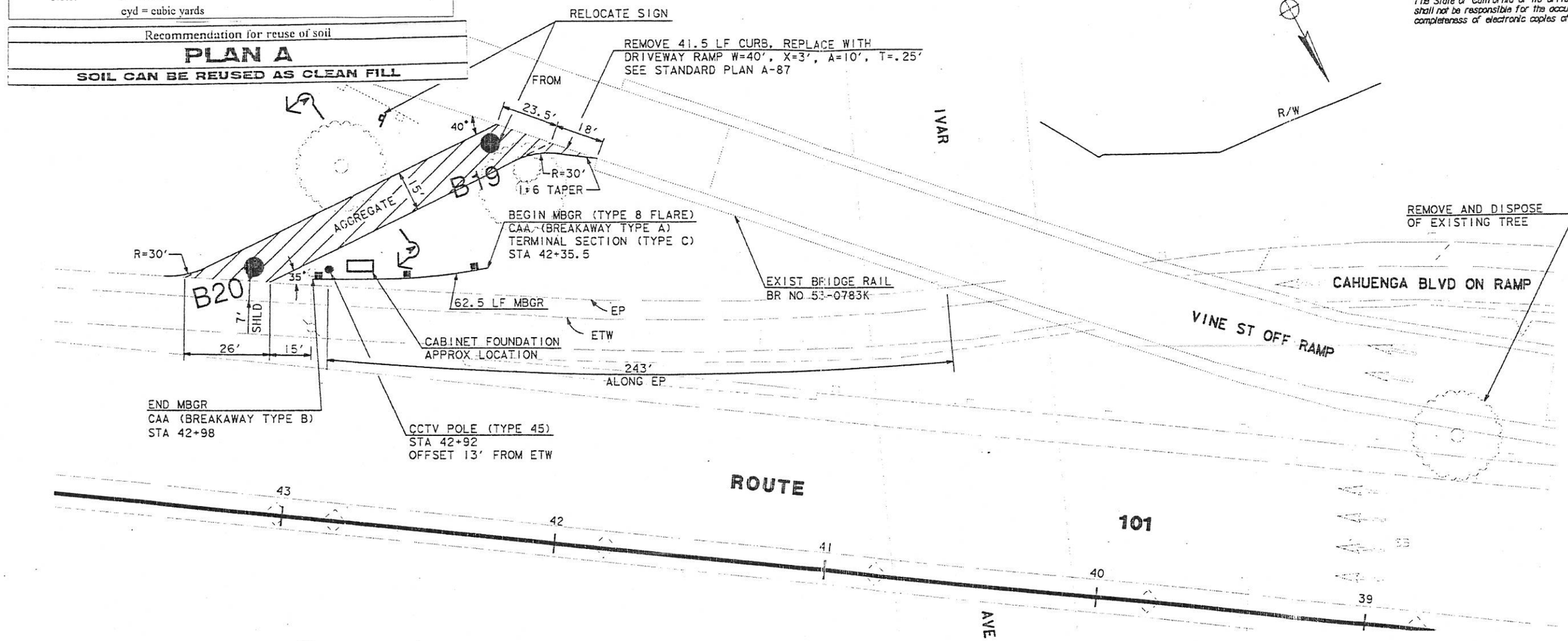
SOIL CAN BE REUSED AS CLEAN FILL

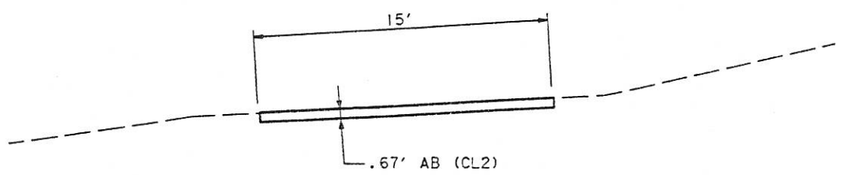
EIGHT OF POLE

RUCTED MBGR SHALL BE
NCE WITH STANDARD PLANS

SHOWN ARE APPROXIMATE
FIELD CONDITIONS.

3. EXISTING IRRIGATION SPRINKLER ASSEMBLIES THAT CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE RELOCATED.





SECTION A-A
LOCATION 7
NO SCALE

LOCATION 7, TV-H0073
ROUTE 101, SOUTH OF CAHUENGA BLVD

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

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 13 DATE 3-1-1996

LAYOUT (LOCATION 7)
SCALE: 1"=20'

L-4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
PAT SULLIVAN	WJW	SW	2/95		2/95

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

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

CU 07387 EA 120721

j:\data\841004\se\ustn\2\12072e04. Feb. 20, 1995 21:05:32

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

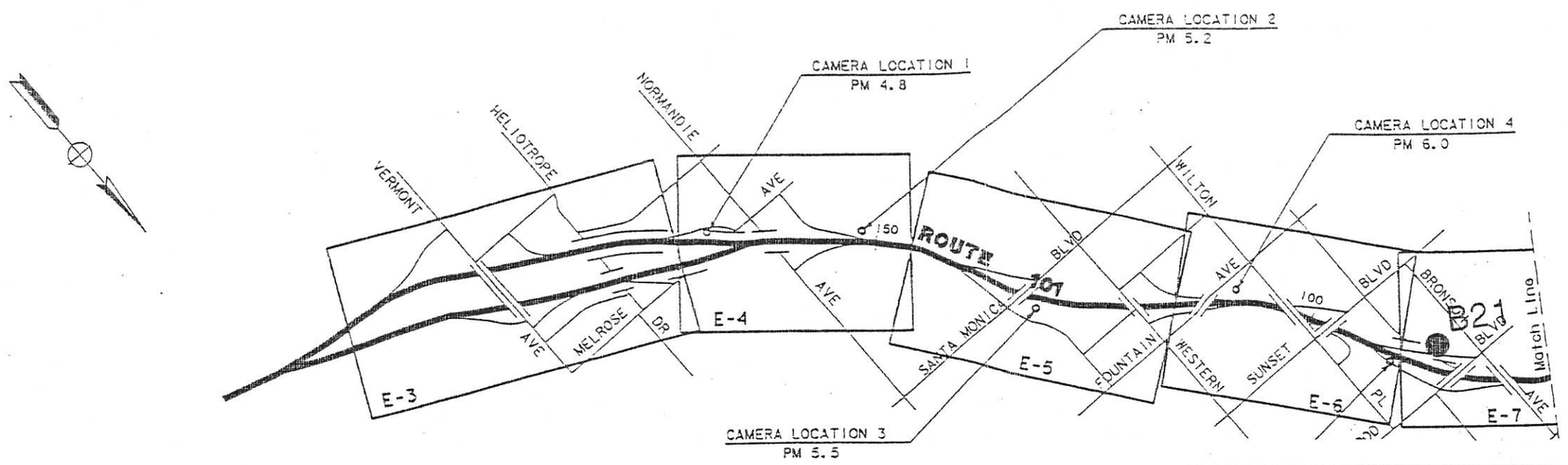
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

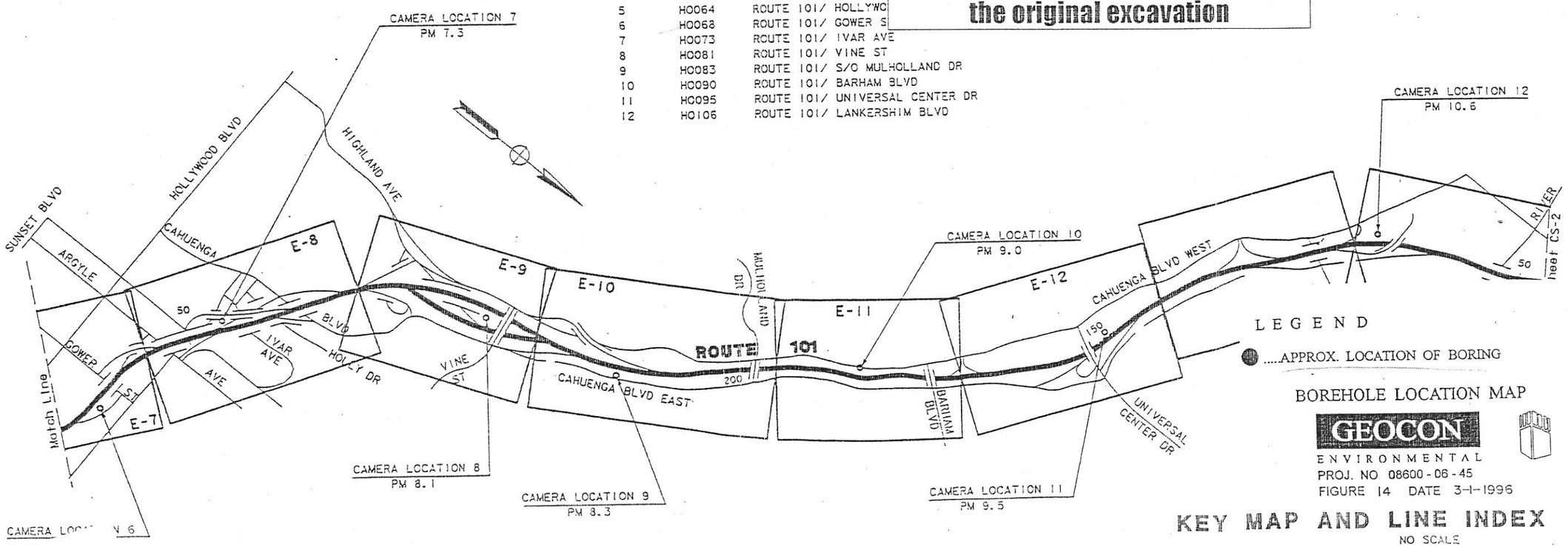
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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
B 21 S	42	---	---	s	5.5	W
B 21 1.5	ND	---	---	s	5.5	W

Recommendation for re-use of impacted soil interval

Use the soil as backfill in the original excavation





LOC	CAMERA ID	SITE
1	H0048	ROUTE 101/ MELROSE
2	H0052	ROUTE 101/ N/O NOR
3	H0055	ROUTE 101/ SANTA M
4	H0060	ROUTE 101/ FOUNTAI
5	H0064	ROUTE 101/ HOLLYWO
6	H0068	ROUTE 101/ GOWER S
7	H0073	ROUTE 101/ IVAR AVE
8	H0081	ROUTE 101/ VINE ST
9	H0083	ROUTE 101/ S/O MULHOLLAND DR
10	H0090	ROUTE 101/ BARHAM BLVD
11	H0095	ROUTE 101/ UNIVERSAL CENTER DR
12	H0106	ROUTE 101/ LANKERSHIM BLVD

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON
ENVIRONMENTAL
PROJ. NO 08600-06-45
FIGURE 14 DATE 3-1-1996

KEY MAP AND LINE INDEX

NO SCALE

K-1

DATE	REVISED BY	DATE REVISED
2/95	SW	2/95

CALCULATED/ DESIGNED BY: CH
CHECKED BY:

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN OVERSIGHT: PAT SULLIVAN

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

CU 07387 EA 120721

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
B 23 S	409	29	---	s	5.5	W
B 23 1.5	1430	---	---	s	5.5	W

Approximate Length of Sampling Area (ft.)	Approximate Width of Sampling Area (ft.)	Approximate Interval of Impacted Soil (ft.)	Approximate Volume of Impacted Soil (cyd)
100	14	0 to 2	104

Note: ft. = feet
cyd = cubic yards

Recommendation for reuse of impacted soil interval

PLAN C

PLACE IMPACTED SOIL BENEATH PAVEMENT

LEGEND

CCTV POLE (TYPE N): N = HEIGHT OF POLE
CCTV (SIGN MOUNT H=X) H, X = HEIGHT OF CAMERA ABOVE TOP OF SIGN

NOTE:

1. NEW MBGR AND RECONSTRUCTED MBGR SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS A77A TO A77K

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	101			

2/17/95
REGISTERED CIVIL ENGINEER (Date)

PLANS APPROVAL DATE

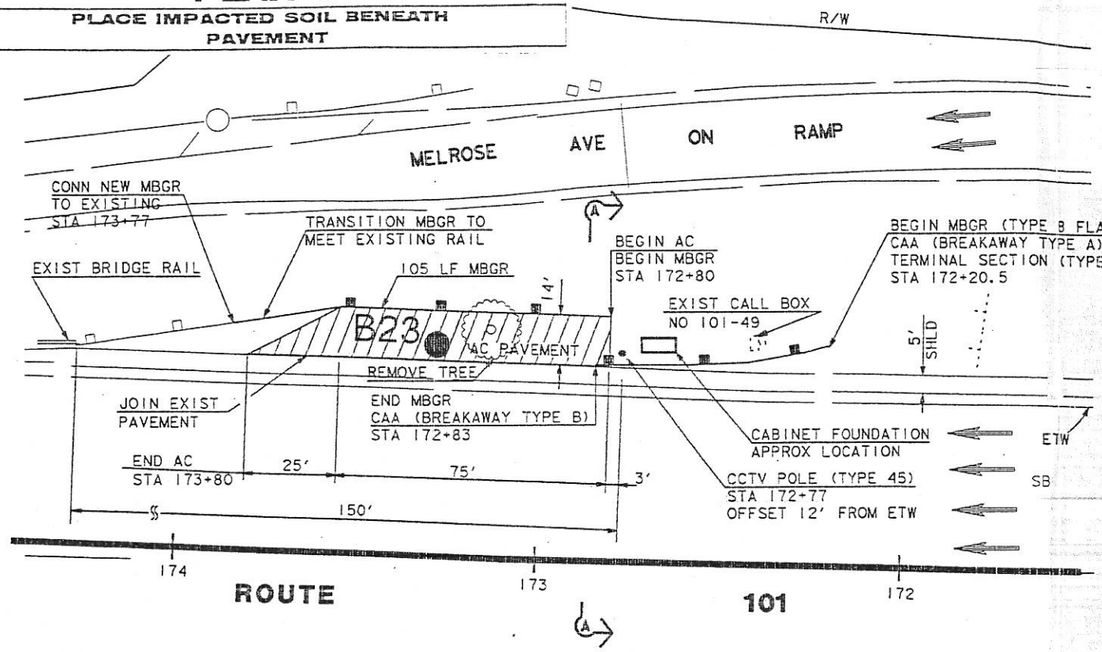
REGISTERED PROFESSIONAL ENGINEER SEAN WONG No. C049893 Exp. 9/30/96 CIVIL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

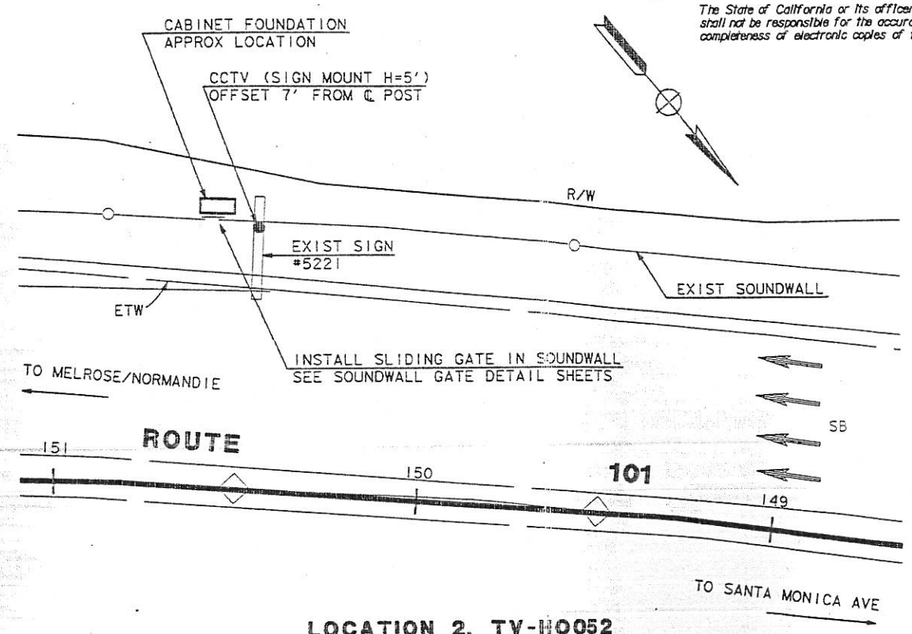
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

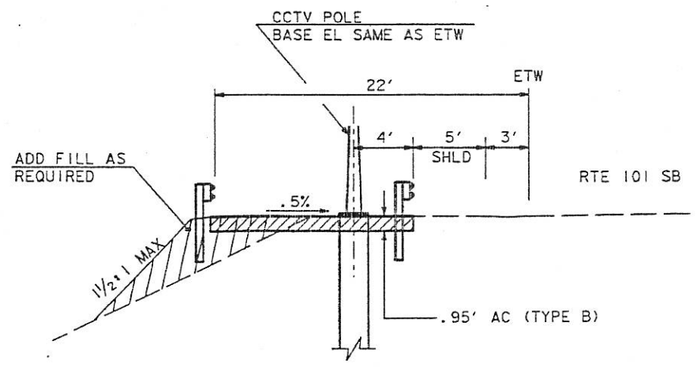
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



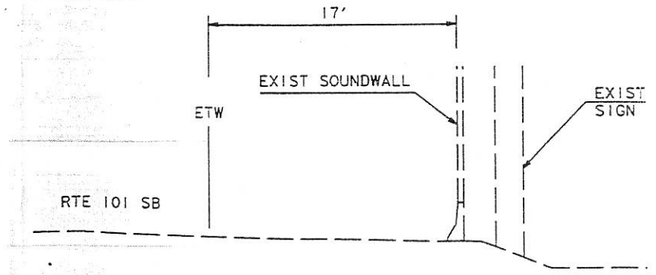
LOCATION 1, TV-H0048
ROUTE 101, SOUTH OF MELROSE AVE



LOCATION 2, TV-H0052
ROUTE 101, NORTH OF NORMANDIE AVE



SECTION A-A
LOCATION 1
NO SCALE



SECTION AT SIGN
LOCATION 2, FOR INFORMATION ONLY
NO SCALE

LEGEND

●.....APPROX. LOCATION OF BORING

BOREHOLE LOCATION MAP

GEOCON ENVIRONMENTAL
PROJ. NO. 08600-06-45
FIGURE 15 DATE 3-1-1996

LAYOUT
(LOCATIONS 1 AND 2)
SCALE: 1"=20'

L-1

REVISED BY	DATE REVISED	DATE 2/95	CALCULATED/DESIGNED BY	CHECKED BY	DESIGN OVERSIGHT
		WJW	SW		PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

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

CU 07387 EA 120721

j:\data\841004\se\ustn\2\12072e01. Feb. 19, 1995 21:10:24

Project No. 08600-06-45
TO No. 07-120721-01
March 4, 1996

TABLE I

EA NO. 120721

SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS
SOIL SAMPLES COLLECTED AT NORTH AND SOUTHBOUND ROUTE 101
BETWEEN VERMONT AVENUE AND ROUTE 405

LOCATION	SAMPLE I.D. - DEPTH (ft.)	EPA TEST METHOD 6010 TOTAL LEAD (mg/kg)	EPA TEST METHOD 7420 WET (mg/l)	EPA TEST METHOD 7420 WET D.I. (mg/l)	FLAT OR SLOPING TERRAIN	DISTANCE FROM PAVEMENT (ft.)	WIND DIRECTION
Northbound Route 101 Between Vermont Avenue and Rte. 405	B1-S	132	4	---	S	6	west
	B1-1.5	10	---	---	S	6	west
	B2-S	702	32	ND	S	8	west
	B2-2	6.1	---	---	S	8	west
	B2-4.5	6.3	---	---	S	8	west
	B3-S	1,690	---	---	S	6	west
	B3-1.5	186	9.2	---	S	6	west
	B4-S	668	25	---	S	6	west
	B4-1.5	117	1.7	---	S	6	west
	B5-S	3,080	---	---	S	6	west
	B5-1.5	176	16	---	S	6	west
Southbound Route 101 Between Route 405 and Vermont Avenue	B6-S	871	28	0.17	S	8	west
	B6-2	6.7	---	---	S	8	west
	B6-4.5	13	---	---	S	8	west
	B7-S	1,570	---	---	S	6	west
	B7-1.5	55	3.8	---	S	6	west
	B8-S	430	29	---	S	8	west
	B8-2	ND	---	---	S	8	west
	B8-4.5	24	---	---	S	8	west
	B9-S	460	30	ND	S	6	west
	B9-1.5	186	8.8	---	S	6	west
	B10-S	3,740	---	---	S	6	west
	B10-1.5	255	19	---	S	6	west
	B11-S	477	23	---	S	6	west
	B11-1.5	18	---	---	S	6	west
	B12-S	123	24	0.27	S	6	west

Project No. 08600-06-45
TO No. 07-120721-01
March 4, 1996

TABLE I (continued)

EA NO. 120721

SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS
SOIL SAMPLES COLLECTED AT NORTH AND SOUTHBOUND ROUTE 101
BETWEEN VERMONT AVENUE AND ROUTE 405

LOCATION	SAMPLE I.D. - DEPTH (ft.)	EPA TEST METHOD 6010 TOTAL LEAD (mg/kg)	EPA TEST METHOD 7420 WET (mg/l)	EPA TEST METHOD 7420 WET D.I. (mg/l)	FLAT OR SLOPING TERRAIN	DISTANCE FROM PAVEMENT (ft.)	WIND DIRECTION
Southbound Route 101 Between Route 405 and Vermont Avenue (continued)	B12-1.5	ND	---	---	S	6	west
	B13-S	ND	---	---	S	6	west
	B13-1.5	217	1.2	---	S	6	west
	B14-S	27	---	---	S	6	west
	B14-1.5	ND	---	---	S	6	west
	B15-S	ND	---	---	S	6	west
	B15-1.5	536	0.51	---	S	6	west
	B16-S	189	3.5	---	S	6	west
	B16-1.5	86	ND	---	S	6	west
	B17-S	3420	259	---	S	6	west
	B17-1.5	476	48	---	S	6	west
	B18-S	ND	---	---	S	6	west
	B18-1.5	ND	---	---	S	6	west
	B19-S	108	4.5	---	S	6	west
	B19-1.5	7.1	---	---	S	6	west
	B20-S	41	---	---	S	6	west
	B20-1.5	108	0.93	---	S	6	west
	B21-S	42	---	---	S	6	west
	B21-1.5	ND	---	---	S	6	west
	B22-S	ND	---	---	S	6	west
	B22-1.5	3220	228	---	S	6	west
	B23-S	409	29	---	S	6	west
	B23-1.5	1,430	---	---	S	6	west

Note: mg/kg = milligrams per kilogram
mg/l = milligrams per liter
ND = not detected above laboratory detection limit
--- = sample not analyzed

Stantec

SITE INVESTIGATION REPORT

SITE INVESTIGATION FOR MAINTENANCE VEHICLE (MVP) PULLOUT LOCATIONS
170/101 INTERCHANGE TO KANAN ROAD,
LOS ANGELES COUNTY, CALIFORNIA
LOCATION: LA-101; PM 11.8/35.3

E-FIS NUMBER: 0713000013
EA NUMBER: 294701
TASK ORDER NO. 10

STANTEC PROJECT NO.: 185832010

Submitted to:
California Department of Transportation,
District 7 – 07A3322
100 South Main Street
Los Angeles, California 90012

Submitted by:
Stantec Consulting Services Inc.
25864-F Business Center Drive
Redlands, California 92374

Prepared by:
Kristy Edblad
Senior Engineer, P.E.

Reviewed by:
Anne E. Perez
Associate Geologist

Approved by:
Kevin Miskin, P.E. C48458
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
KEVIN KOY MISKIN
No. C48458
Exp. 6/14
CIVIL
STATE OF CALIFORNIA

September 30, 2013

RECEIVED
OCT - 4 2013
BY

T 3
SUMMARY OF SOIL AN. TICAL RESULTS - LEAD
SITE INVESTIGATION FOR MAINTENANCE VEHICLE PULLOUT LOCATIONS
LA-101-PM 11.8/35.3
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0713000013 (EA#294701)
TASK ORDER #10
CONTRACT 07A3322

	MVP Location	Sample ID	Total Lead [1] (mg/kg)	Soluble Lead [1] Cal WET-Citric (mg/L)	Soluble Lead [1] Cal WET-DI (mg/L)	Soluble Lead [1] TCLP (mg/L)	pH [2]	Recommendations	
								Surplus Soil	Onsite Reuse
Raw Sample Data	L-13 / PM 15.23	1216-101-1	**3,300**	**140**	1.1	1.1	6.0	Non-RCRA Cal-Haz	Y2
		1216-102-1	**3,000**	**160**	0.15	1.4	--		
	L-30 / PM 19.89	1216-103-1	**1,100**	**59**	0.13	0.60	6.0	Non-RCRA Cal-Haz	Y1
		1216-104-1	**820**	**42**	<0.056	0.46	--		
	L-34 / PM 21.00	1216-105-1	**1,000**	**79**	<0.056	2.6	--	Non-RCRA Cal-Haz	Y2
		1216-106-1	**1,500**	**120**	0.11	2.1	7.4		
	L-43 / PM 23.54	1216-107-1	300	**13**	<0.056	0.11	--	Non-RCRA Cal-Haz	Y1
		1216-108-1	**400**	**18**	<0.056	0.18	7.2		
	L-44 / PM 23.90	1216-109-1	**1,300**	**62**	0.17	0.38	6.2	Non-RCRA Cal-Haz	Y1
		1216-110-1	**380**	**14**	0.082	0.074	--		
	L-45 / PM 24.12	1216-111-1	**430**	**20**	0.089	0.013	--	Non-RCRA Cal-Haz	Y1
		1216-112-1	**640**	**31**	0.11	0.04	6.7		
	L-48 / PM 24.84	1216-113-1	130	**6.4**	<0.056	0.056	--	Non-RCRA Cal-Haz	Y1
		1216-114-1	270	**10**	<0.056	0.16	6.2		
	L-50 / PM 25.32	1216-115-1	**870**	**33**	<0.056	0.27	6.2	Non-RCRA Cal-Haz	Y1
		1216-116-1	300	**11**	<0.056	0.031	--		
	L-61 / PM 28.60	1216-117-1*	40	1.8	<0.056	--	--	Release to Contractor	X
		1216-118-1	78	2.3	<0.056	0.0059	7.5		
	QA / QC	1216-EB-1**	<0.0022	<0.056	<0.056	<0.0022	--	--	--
		1216-EB-2**	<0.0022	<0.056	<0.056	<0.0022	--	--	--
Threshold Limits	California Hazardous Waste		1,000	5	--	--	--	--	--
	RCRA Hazardous Waste		--	--	--	5	≤2 or ≥12.5	--	--
	X		1,000	5	--	5	--	--	--
	Y1		1,411	--	1.5	5	>5.5	--	--
	Y2		3,397	--	150	5	>5	--	--
	California Human Health Screening Level[3]		320	--	--	--	--	--	--
	Regional Screening Level[4]		800	--	--	--	--	--	--

Notes:

(1) Total Lead, California Waste Extraction Test (Cal WET - Citric), and Toxicity Characteristic Leaching Procedure (TCLP) analysis done using EPA method 6010B. Extraction methods vary.

(2) pH determined with EPA method 9045B.

(3) California Human Health Screening Levels for Commercial/Industrial and Residential Land Use, Soil, California Environmental Protection Agency, January 2005; updated 2010 Office of Environmental Health Hazard Assessment Table 1.

(4) United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in mg/Kg) for VOCs for industrial and residential soil (last updated May 2013)

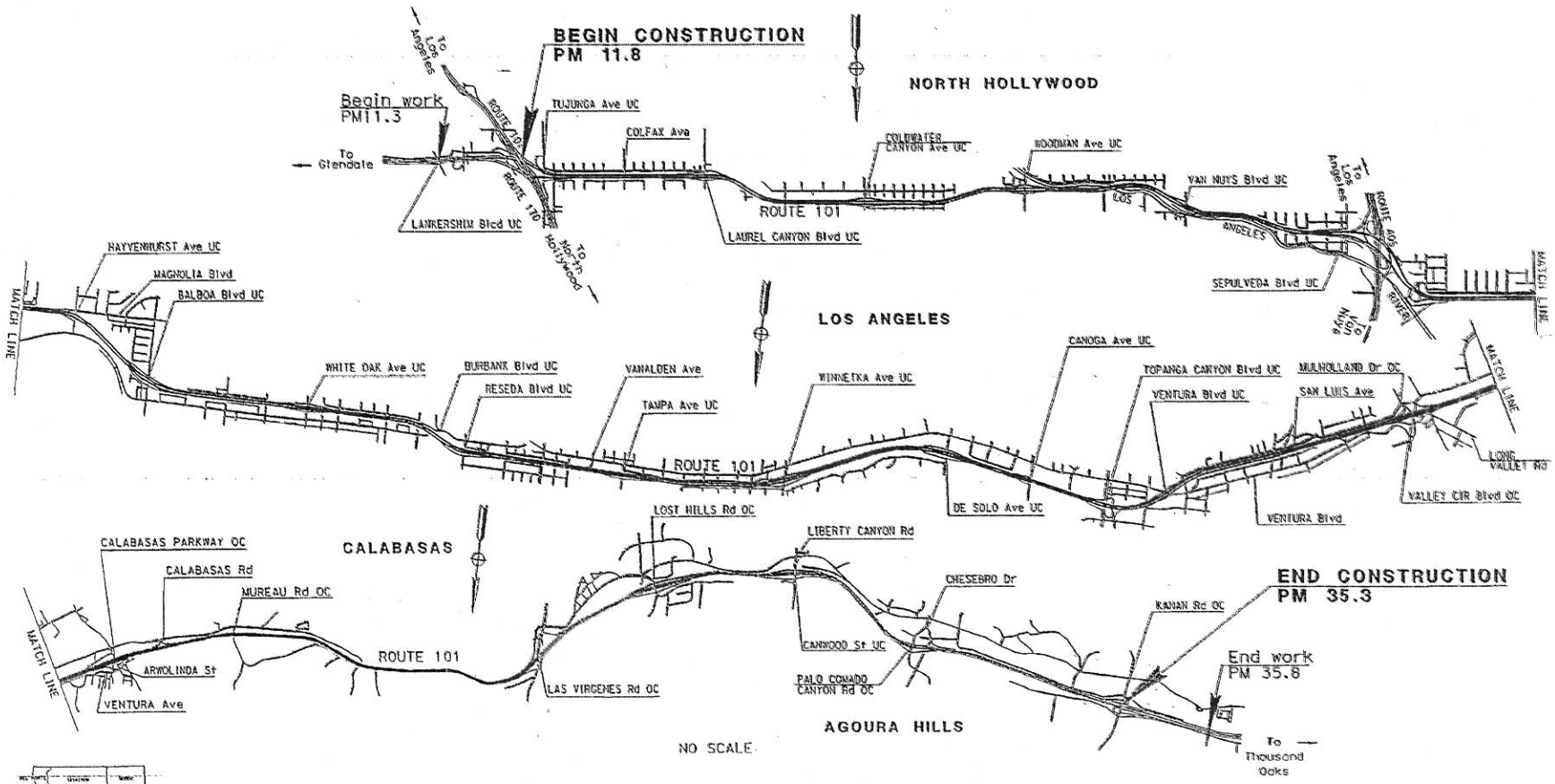
* Sample was re-run for total lead and soluble lead Cal WET-Citric

** QA/QC samples consisted of liquid equipment blanks (mg/L)

MVP = Maintenance Vehicle Pullout Location / Post Mile

mg/kg = milligrams per kilogram -- = Not analyzed or not applicable

mg/L = milligrams per liter Bold = Exceeds threshold limit



No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX:(909) 556-6516

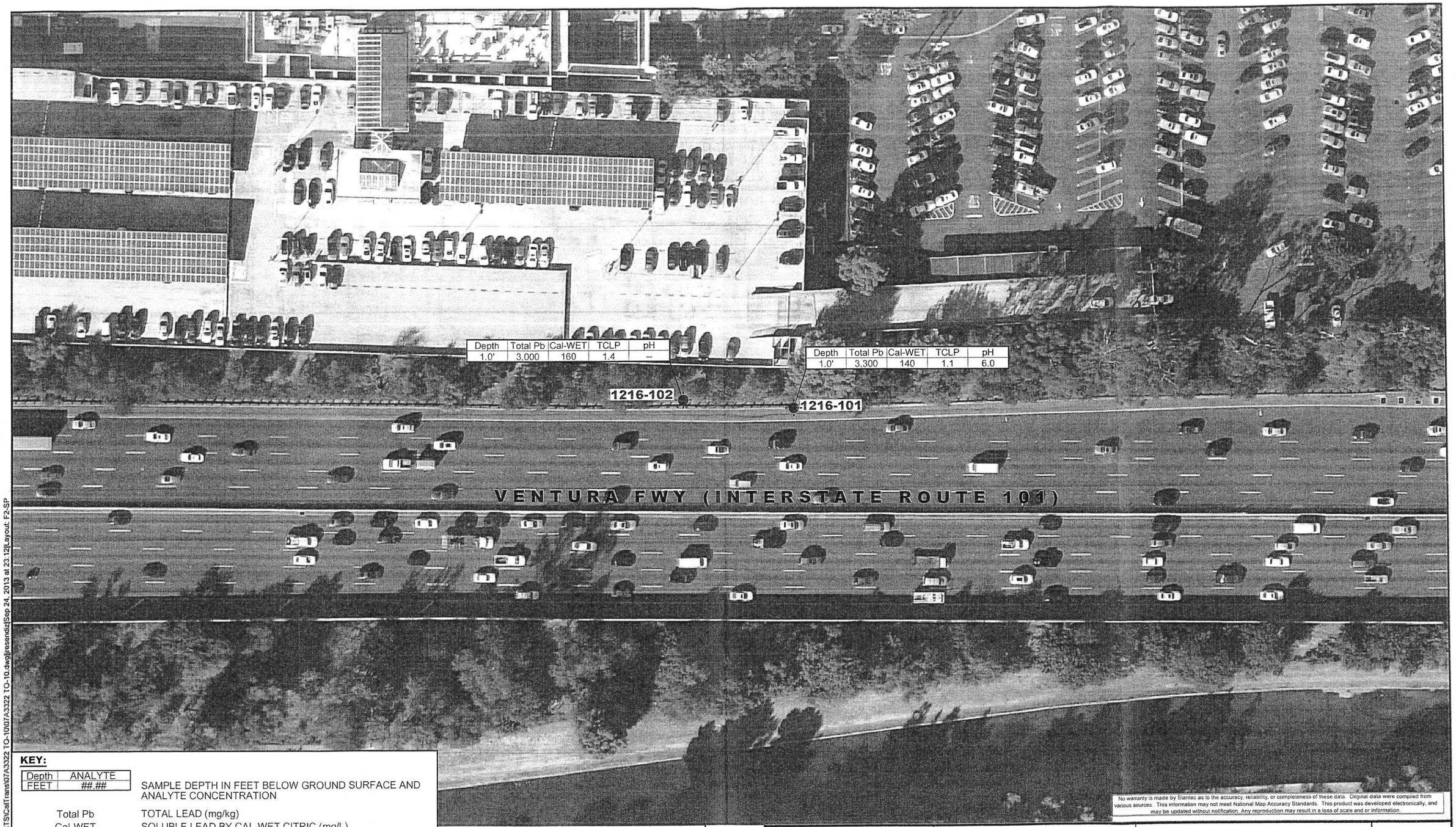
FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

SITE LOCATION MAP

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 23, 2013 at 21:08|Layout: F1-SLM



No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

KEY:

Depth / FEET	ANALYTE / ##.##	
		SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
Total Pb		TOTAL LEAD (mg/kg)
Cal-WET		SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP		SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg		MILLIGRAMS PER KILOGRAM
mg/L		MILLIGRAMS PER LITER
<		ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--		NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE:(909) 335-6116 FAX:(909) 556-6516

FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-13, PM 15.23)

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:12|Layout: F2-SP

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	820	42	0.46	--

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	1,100	59	0.60	6.0

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

KEY:

Depth / FEET	ANALYTE / ##.##	
		SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
Total Pb		TOTAL LEAD (mg/kg)
Cal-WET		SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP		SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg		MILLIGRAMS PER KILOGRAM
mg/L		MILLIGRAMS PER LITER
<		ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--		NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX: (909) 556-6516

FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-30, PM 19.89)

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:11|Layout: F3-SP

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	1,500	120	2.1	7.4

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	1,000	79	2.6	--

KEY:

Depth / FEET ##.##	SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
Total Pb	TOTAL LEAD (mg/kg)
Cal-WET	SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP	SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg	MILLIGRAMS PER KILOGRAM
mg/L	MILLIGRAMS PER LITER
<	ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--	NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX: (909) 556-6516

FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-34, PM 21.00)

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP, 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:09|Layout: F4-SP

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	300	13	0.11	--

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	400	18	0.18	7.2

KEY:

Depth FEET	ANALYTE ##.##	SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
	Total Pb	TOTAL LEAD (mg/kg)
	Cal-WET	SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
	TCLP	SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
	mg/kg	MILLIGRAMS PER KILOGRAM
	mg/L	MILLIGRAMS PER LITER
	<	ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
	--	NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX: (909) 556-6516

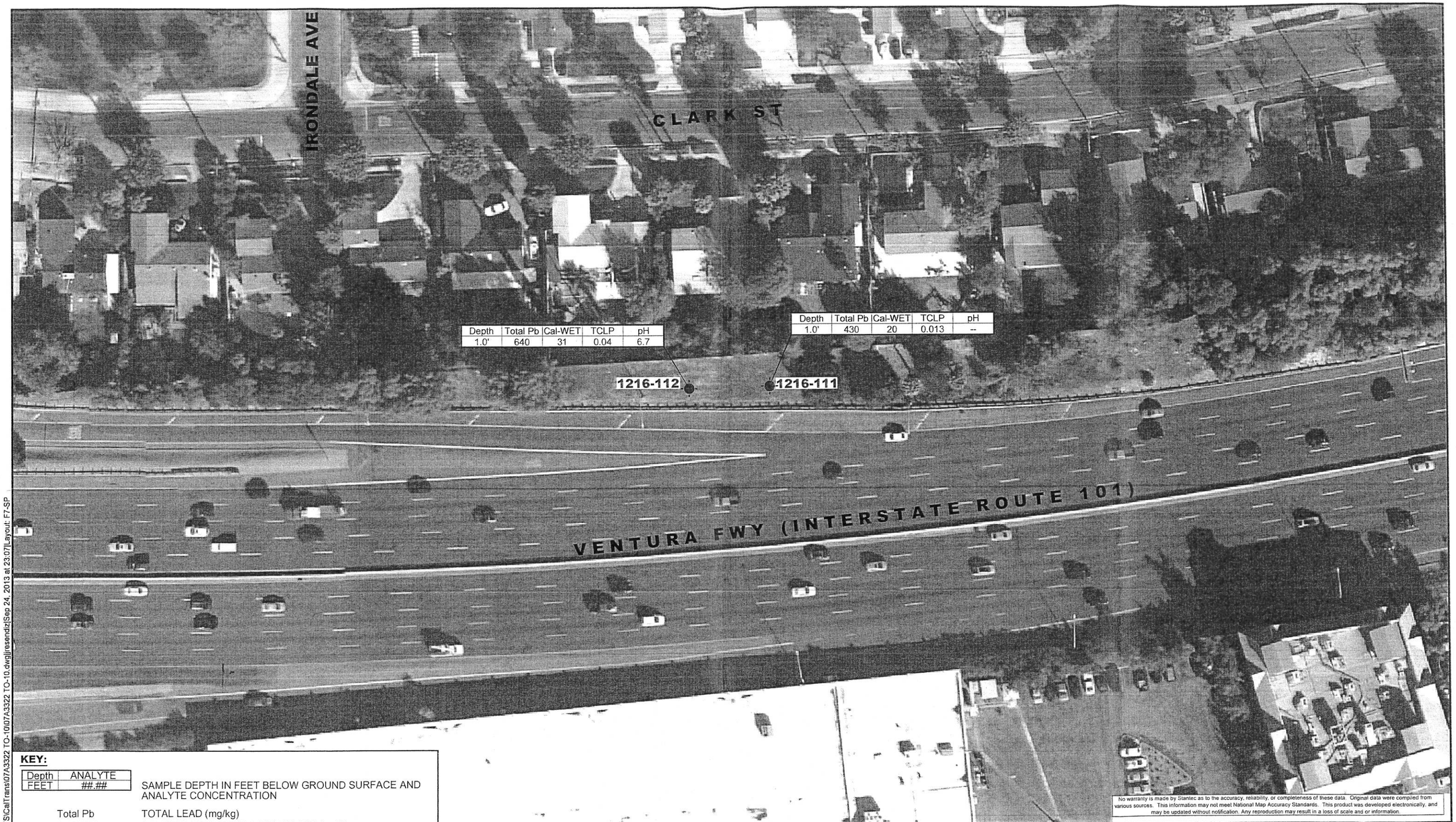
FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-43, PM 23.54)

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:08|Layout: F5-SP



Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	640	31	0.04	6.7

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	430	20	0.013	--

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

KEY:

Depth / FEET	ANALYTE / ##.##	
		SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
Total Pb		TOTAL LEAD (mg/kg)
Cal-WET		SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP		SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg		MILLIGRAMS PER KILOGRAM
mg/L		MILLIGRAMS PER LITER
<		ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--		NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX: (909) 556-6516

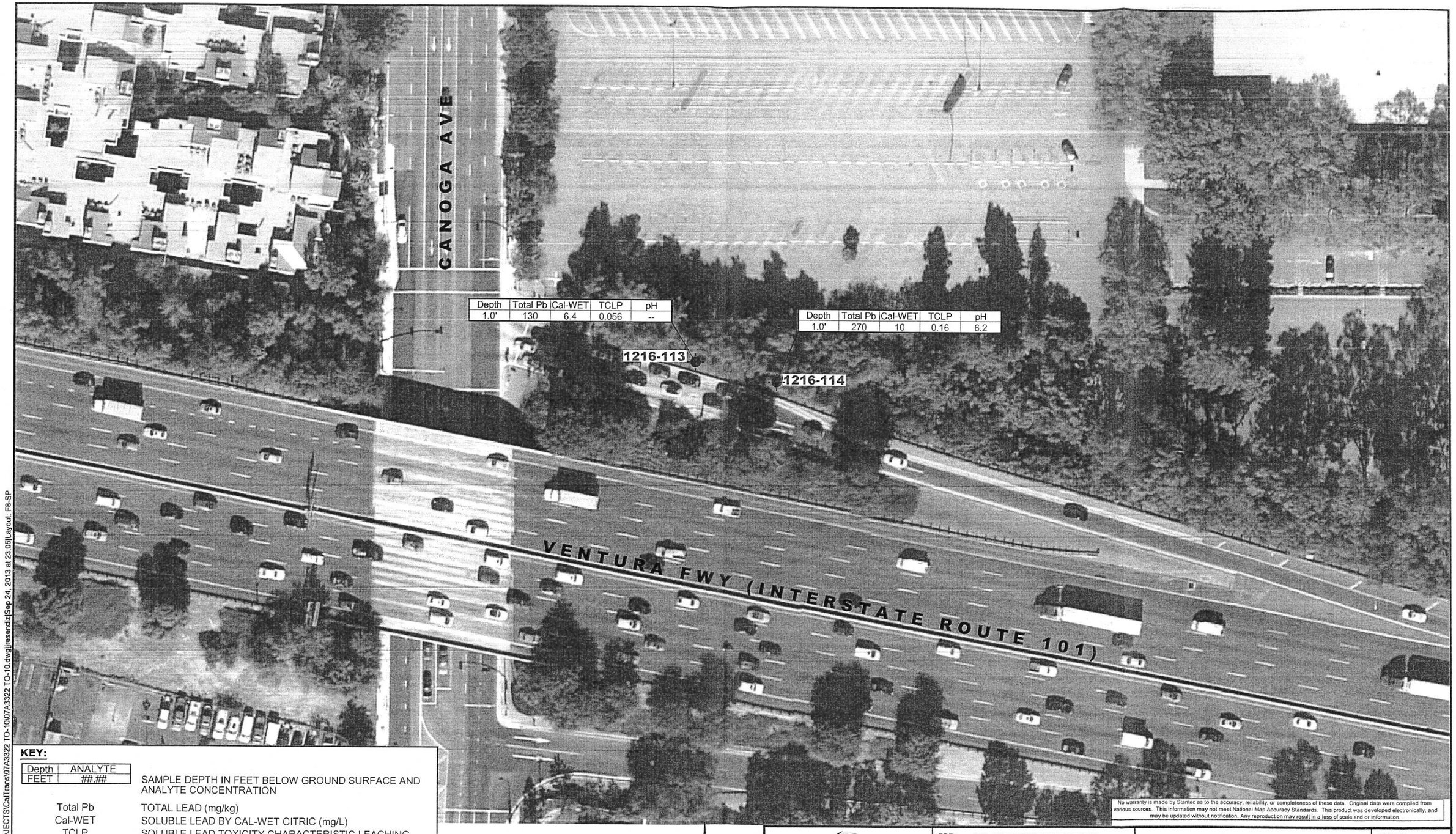
FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-45, PM 24.12)

FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|resendizj|Sep 24, 2013 at 23:07|Layout: F7-SP



No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

KEY:

Depth	ANALYTE
FEET	##.##

SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION

Total Pb	TOTAL LEAD (mg/kg)
Cal-WET	SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP	SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg	MILLIGRAMS PER KILOGRAM
mg/L	MILLIGRAMS PER LITER
<	ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--	NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX:(909) 556-6516

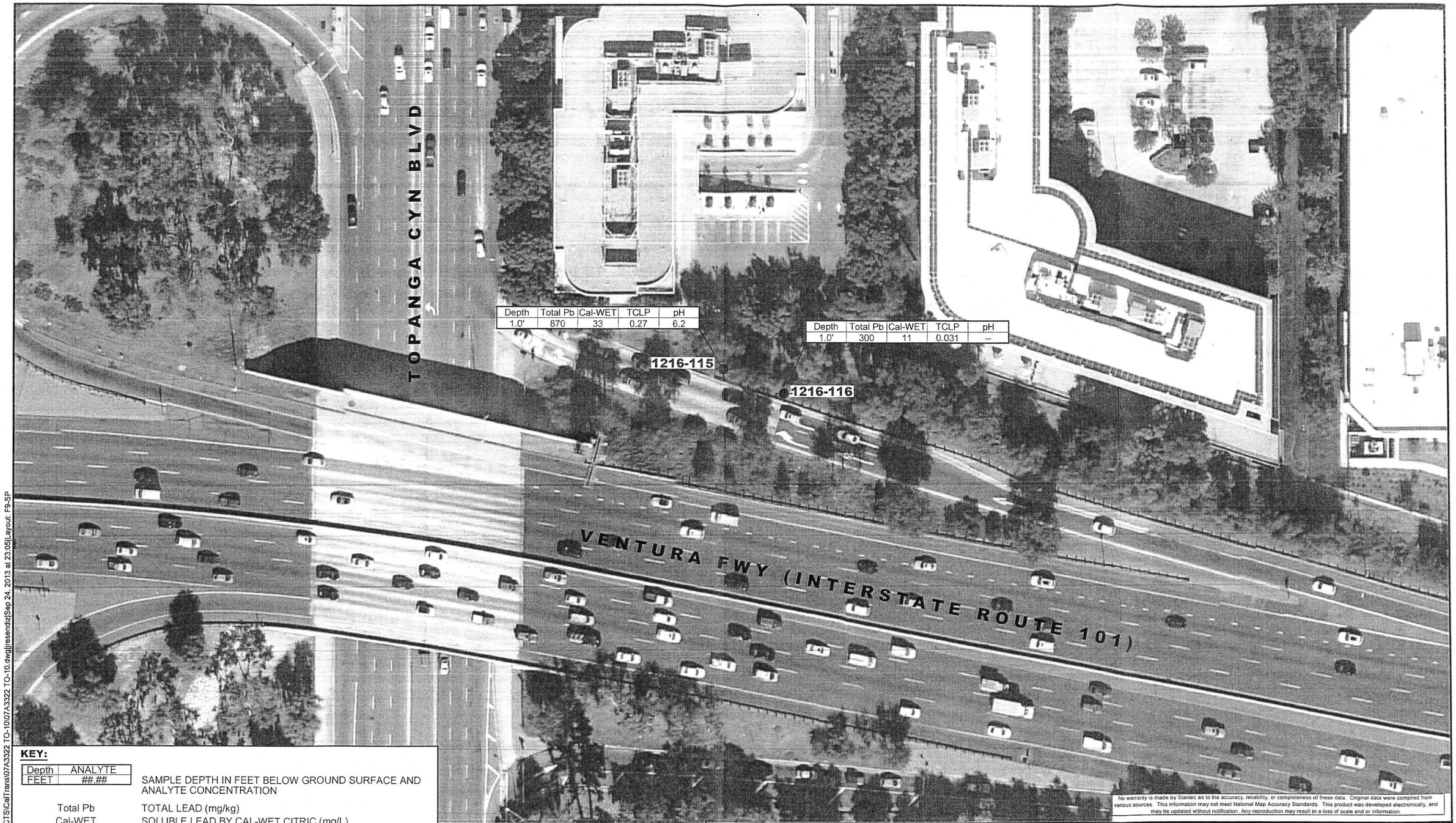
FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-48, PM 24.84)

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|resendizj|Sep 24, 2013 at 23:05|Layout: F8-SP



Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	870	33	0.27	6.2

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	300	11	0.031	–

KEY:

Depth / FEET ; ANALYTE / ##.##	SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION
Total Pb	TOTAL LEAD (mg/kg)
Cal-WET	SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP	SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg	MILLIGRAMS PER KILOGRAM
mg/L	MILLIGRAMS PER LITER
<	ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--	NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX:(909) 556-6516

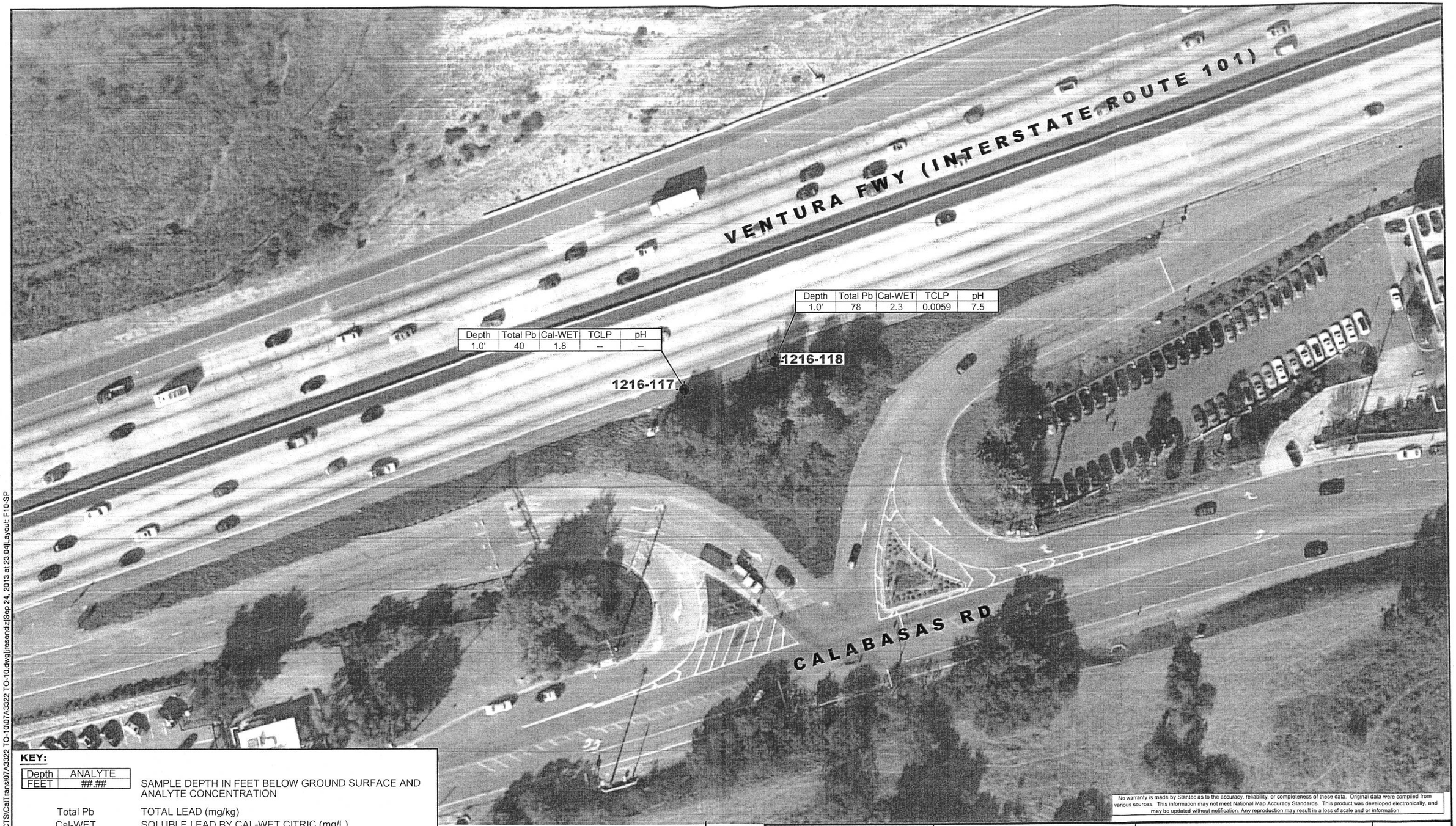
FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-50, PM 25.32)

FIGURE: 9

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADDPROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:05|Layout: F9-SP



Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	40	1.8	--	--

Depth	Total Pb	Cal-WET	TCLP	pH
1.0'	78	2.3	0.0059	7.5

KEY:

Depth	ANALYTE
FEET	##.##

SAMPLE DEPTH IN FEET BELOW GROUND SURFACE AND ANALYTE CONCENTRATION

Total Pb	TOTAL LEAD (mg/kg)
Cal-WET	SOLUBLE LEAD BY CAL-WET CITRIC (mg/L)
TCLP	SOLUBLE LEAD TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/L)
mg/kg	MILLIGRAMS PER KILOGRAM
mg/L	MILLIGRAMS PER LITER
<	ANALYTE NOT REPORTED AT OR ABOVE STATED LABORATORY METHOD DETECTION LIMIT (MDL)
--	NOT ANALYZED

HAND AUGER BORING LOCATION

0 60 120

APPROXIMATE SCALE IN FEET

N

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
25864-F BUSINESS CENTER DRIVE
REDLANDS, CALIFORNIA 92374
PHONE: (909) 335-6116 FAX: (909) 556-6516

FOR: ADL SITE INVESTIGATION
Agreement No. 07A2047
Task Order No. 10
LOS ANGELES & AGOURA HILL
From 11.8 mile SR 170 to North of Kanan Road overcrossing

MAINTENANCE VEHICLE PULLOUT LOCATION (L-61, PM 28.60)

FIGURE: 10

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832010	J. RESENDIZ	K. EDBLAD	-	SEP. 2013

FILEPATH:P:\CADD\PROJECTS\CalTrans\07A3322 TO-10\07A3322 TO-10.dwg|jresendiz|Sep 24, 2013 at 23:04|Layout: F10-SP

Lead

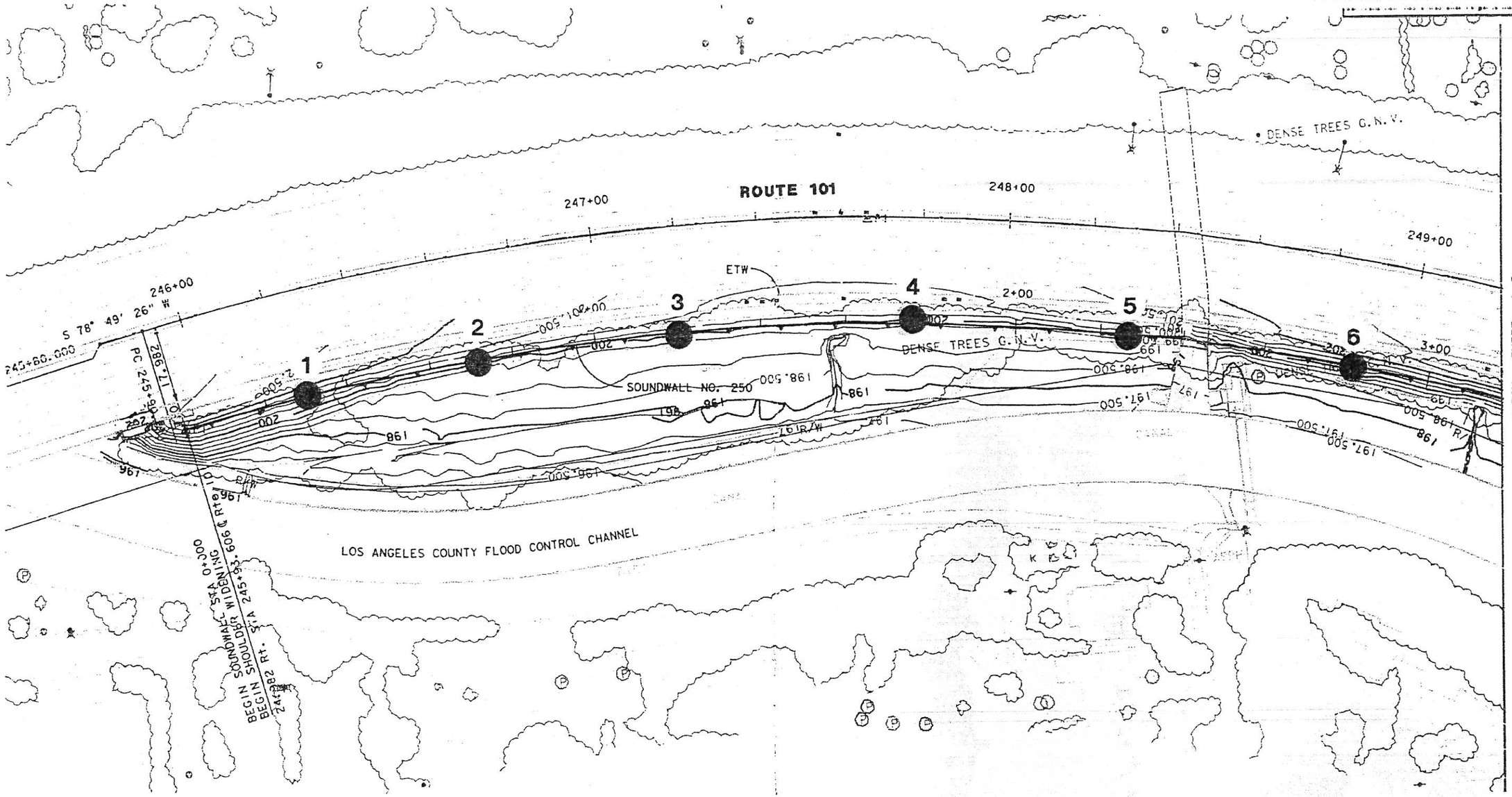
LA 101
TO # 07-020741-3X
KP 15.40 - 15.90
24.78 - 25.59

LEAD SITE INVESTIGATION REPORT
ROUTE 101 SOUNDWALL PROJECT (EA 053341)
LOS ANGELES COUNTY, CALIFORNIA
TASK ORDER NO. 07-020741-3X
STATEWIDE CONTRACT NO. 43A0012

PREPARED FOR:
Department of Transportation, District 7
Office of Environmental Engineering and Feasibility Studies
120 South Spring Street, 3-G4
Los Angeles, California 90012-3606

PREPARED BY:
Ninyo & Moore Geotechnical and Environmental Sciences Consultants
9272 Jeronimo Road, Suite 123A
Irvine, California 92618

July 26, 2001
Project No. 202931001A



LOCATION 1

LEGEND

12 — Hand-Auger boring location and designation

SOURCE: STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, 12/1999.

0 100 200
Approximate Scale in Feet

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

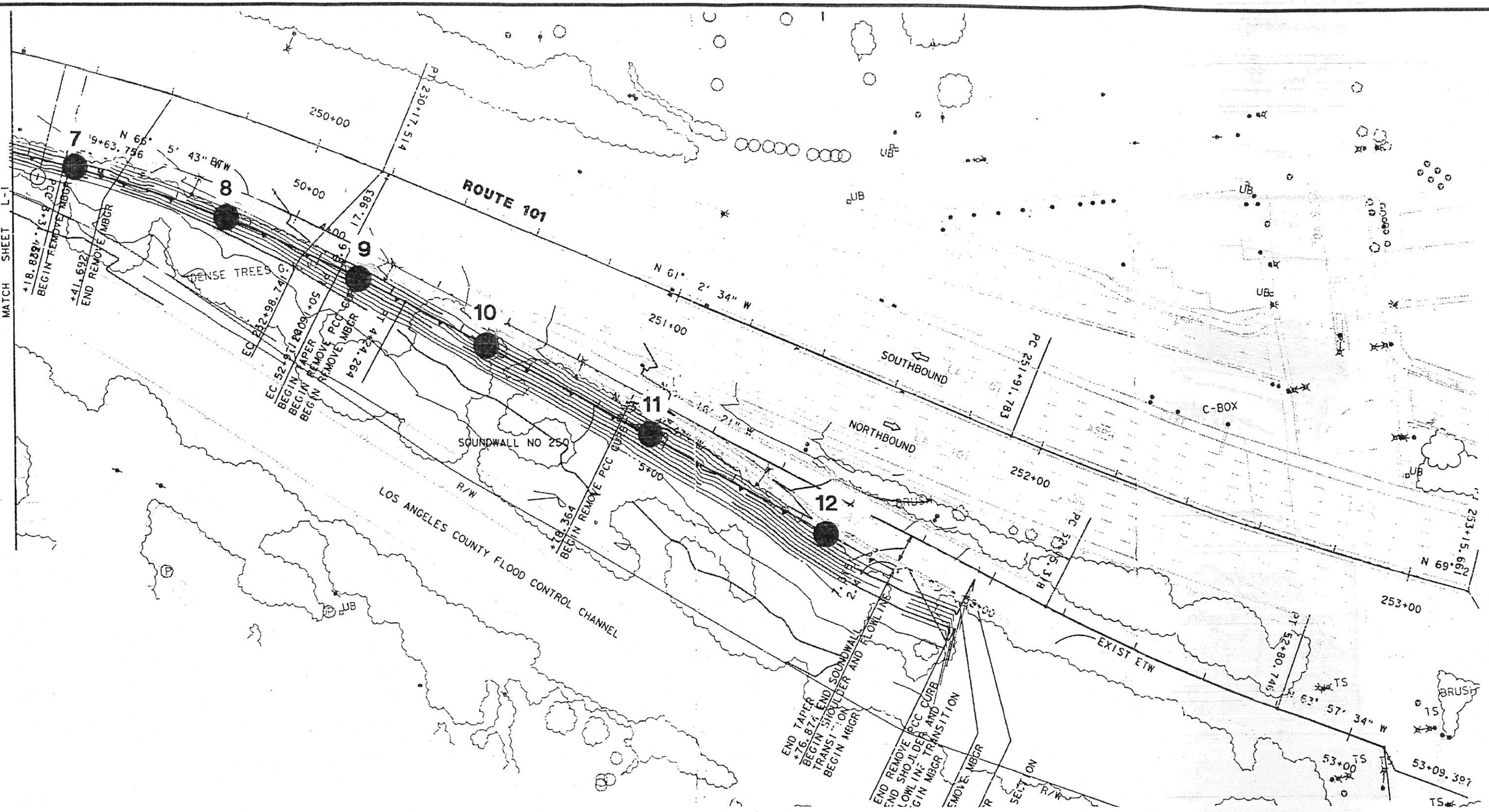
Ninyo & Moore

SAMPLE LOCATION MAP

LEAD INVESTIGATION AT
ROUTE 101 SOUNDWALL PROJECT EA 053341
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
202931001A	6/2001	2A

area1-2 F2_A



AREA 1

LEGEND

12 ● Hand-Auger boring location and designation

SOURCE: STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, 12/1999.

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

0 100 200
Approximate Scale in Feet

Ninyo & Moore

SAMPLE LOCATION MAP

LEAD INVESTIGATION AT
ROUTE 101 SOUNDWALL PROJECT EA 053341
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
202931001A	6/2001	2B

area1-1 fig2B

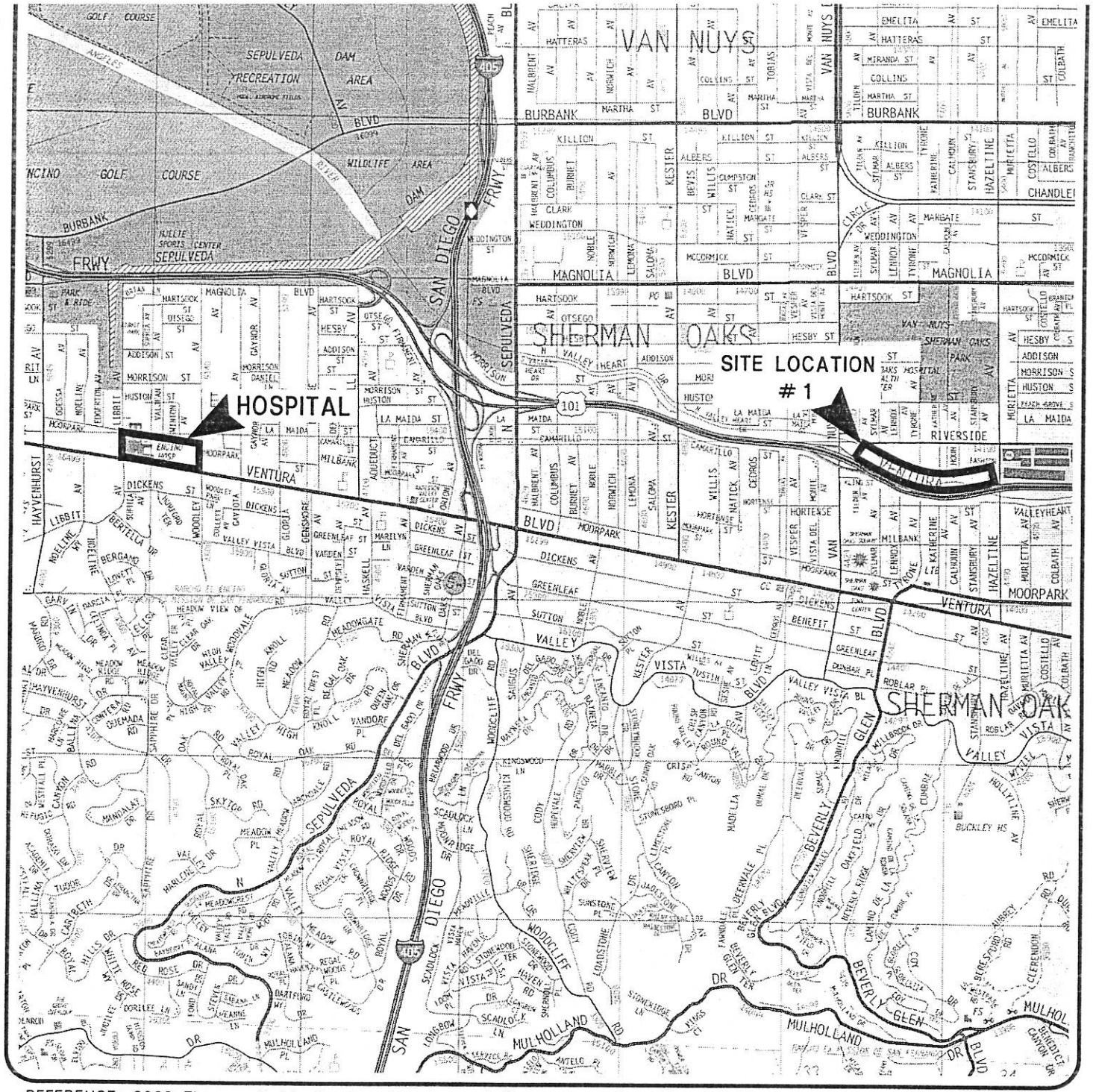
TABLE 1 - SUMMARY OF ANALYTICAL RESULTS

Sample ID	Depth Meters	Total Lead (mg/kg)	MDL (mg/kg)	Soluble Lead (mg/l)	MDL (mg/l)	DI-WET Lead (mg/l)	MDL (mg/l)	TCLP Lead (mg/l)	pH
3X-3341-1-SF	SF	1,200.0	100.0	-		-		0.45	-
3X-3341-1-1.5	0.45	1,530.0	100.0	-		-		-	-
3X-3341-1-3	0.91	694.0	100.0	26.50	0.8	ND	0.2	-	-
3X-3341-2-SF	SF	4,100.0	100.0	-		-		1.05	6.81
3X-3341-2-1.5	0.45	31.8	10.0	-		-		-	-
3X-3341-2-3	0.91	116.0	10.0	1.10	0.2	-		-	-
3X-3341-2-4.5	1.35	14.0	10.0	-		-		-	-
3X-3341-3-SF	SF	420.0	10.0	19.60	0.4	ND	0.2	-	-
3X-3341-3-1.5	0.45	16.3	10.0	-		-		-	-
3X-3341-3-3	0.91	ND	10.0	-		-		-	-
3X-3341-3-4.5	1.35	ND	10.0	-		-		-	7.54
3X-3341-4-SF	SF	823.0	10.0	22.50	0.6	ND	0.2	-	-
3X-3341-4-1.5	0.45	73.8	10.0	4.10	0.2	-		-	-
3X-3341-4-3	0.91	47.3	10.0	-		-		-	-
3X-3341-4-4.5	1.35	ND	10.0	-		-		-	-
3X-3341-5-SF	SF	3,100.0	100.0	-		-		0.68	-
3X-3341-5-1.5	0.45	863.0	100.0	32.10	1.2	ND	0.2	-	-
3X-3341-5-3	0.91	203.0	10.0	11.10	0.4	ND	0.2	-	-
3X-3341-5-4.5	1.35	204.0	10.0	3.94	0.2	-		-	-
3X-3341-6-SF	SF	1,080.0	100.0	-		-		0.52	-
3X-3341-6-1.5	0.45	16.8	10.0	-		-		-	7.55
3X-3341-6-3	0.91	12.6	10.0	-		-		-	-
3X-3341-6-4.5	1.35	9.8	10.0	-		-		-	-
3X-3341-7-SF	SF	1,320.0	100.0	-		-		0.67	-
3X-3341-7-1.5	0.45	215.0	10.0	12.10	0.4	ND	0.2	-	-
3X-3341-7-3	0.91	321.0	10.0	14.30	0.4	ND	0.2	-	-
3X-3341-7-4.5	1.35	31.9	10.0	-		-		-	7.18
3X-3341-8-SF	SF	1,780.0	100.0	-		-		0.51	-

TABLE 1 - SUMMARY OF ANALYTICAL RESULTS

Sample ID	Depth Meters	Total Lead (mg/kg)	MDL (mg/kg)	Soluble Lead (mg/l)	MDL (mg/l)	DI-WET Lead (mg/l)	MDL (mg/l)	TCLP Lead (mg/l)	pH
3X-3341-8-1.5	0.45	295.0	10.0	17.80	0.4	ND	0.2	-	-
3X-3341-8-3	0.91	20.6	10.0	-		-		-	7.1
3X-3341-8-4.5	1.35	59.7	10.0	2.07	0.2	-		-	-
3X-3341-9-SF	SF	2,070.0	100.0	-		-		0.51	-
3X-3341-9-1.5	0.45	176.0	10.0	7.70	0.4	ND	0.2	-	-
3X-3341-9-3	0.91	251.0	10.0	13.30	0.4	ND	0.2	-	-
3X-3341-9-4.5	1.35	ND	10.0	-		-		-	-
3X-3341-10-SF	SF	813.0	100.0	37.70	0.8	ND	0.2	-	-
3X-3341-10-1.5	0.45	67.1	10.0	2.25	0.2	-		-	-
3X-3341-10-3	0.91	55.0	10.0	6.72	0.4	ND	0.2	-	-
3X-3341-10-4.5	1.35	33.6	10.0	-		-		-	-
3X-3341-11-SF	SF	1,320.0	100.0	-		-		0.48	-
3X-3341-11-1.5	0.45	29.4	10.0	-		-		-	-
3X-3341-11-3	0.91	65.1	10.0	4.31	0.2	-		-	-
3X-3341-11-4.5	1.35	27.2	10.0	-		-		-	-
3X-3341-12-SF	SF	395.0	10.0	14.40	0.4	ND	0.2	-	-
3X-3341-12-1.5	0.45	72.2	10.0	3.00	0.2	-		-	-
3X-3341-12-3	0.91	11.2	10.0	-		-		-	7.73
3X-3341-12-4.5	1.35	24.8	10.0	-		-		-	-

Notes:
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
DI-WET = deionized water extraction
ND - Non Detect
MDL = Method Detection Limit
- = Not Analyzed



REFERENCE: 2000 Thomas Guide for Los Angeles and Orange counties, Street Guide and Directory.

NORTH

0 1885 3770

Approximate Scale in Feet

Ninyo & Moore

SITE LOCATION MAP

ROUTE 101 SOUNDWALL PROJECTS
TASK ORDER # 07-020741-3X
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
202931-01	3/2001	1A

State of California **Business, Transportation and Housing Agency**

M e m o r a n d u m

To : Mr. Derek Higa
Design Manager
Office of Design C
Division of Engineering Services

Date: April 30, 2014

File No.: 07-LA-101 PM 0.0/25.9
Concrete Barrier Type 736SV
Project ID 0700001842
EA 07-2827U1

From : **DEPARTMENT OF TRANSPORTATION**
Division of Engineering Services
METS-Geotechnical Service
Office of Geotechnical Design South-1

Subject : Geotechnical Design Report For Concrete Barrier Type 736SV

INTRODUCTION

As requested by your office in the memo dated March 17, 2014, the followings are the geotechnical recommendations for new concrete barrier Type 736SV foundations proposed on State Route 101 in Los Angeles County.

PROJECT LOCATION

The new concrete barrier type 736SV locations are shown in Figures 1 thru 3.

SCOPE OF WORK

The geotechnical work performed for this project includes:

- Review of geologic information.
- Visual inspection of job site.
- Interpretation of subsurface geologic and groundwater conditions.
- Preparation of this memorandum to present geotechnical recommendation for new concrete barrier Type 736SV foundations.

It should be note that no subsurface exploration has been performed at the proposed barrier locations due to project schedule constraint.

PROJECT DESCRIPTION

The proposed project consists of three new barrier Type 736SV structures. The existing roadway metal barrier rails, as shown in the appendix at the project locations will be removed and new concrete barriers will be constructed.

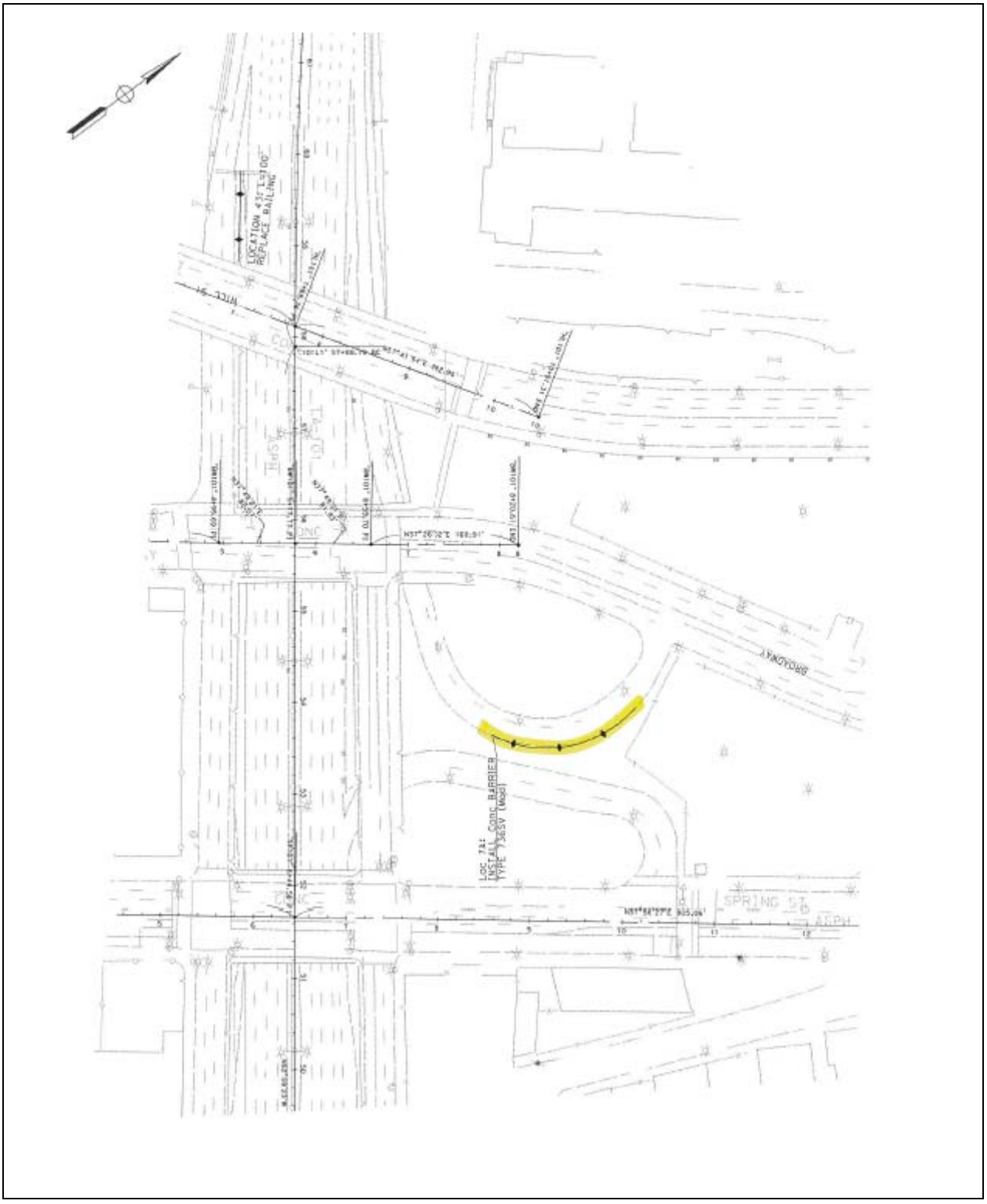


Figure 1. New Concrete Barrier Type 736SV
(PM 1.19 Left shoulder at NB LA-101 on ramp from Broadway)

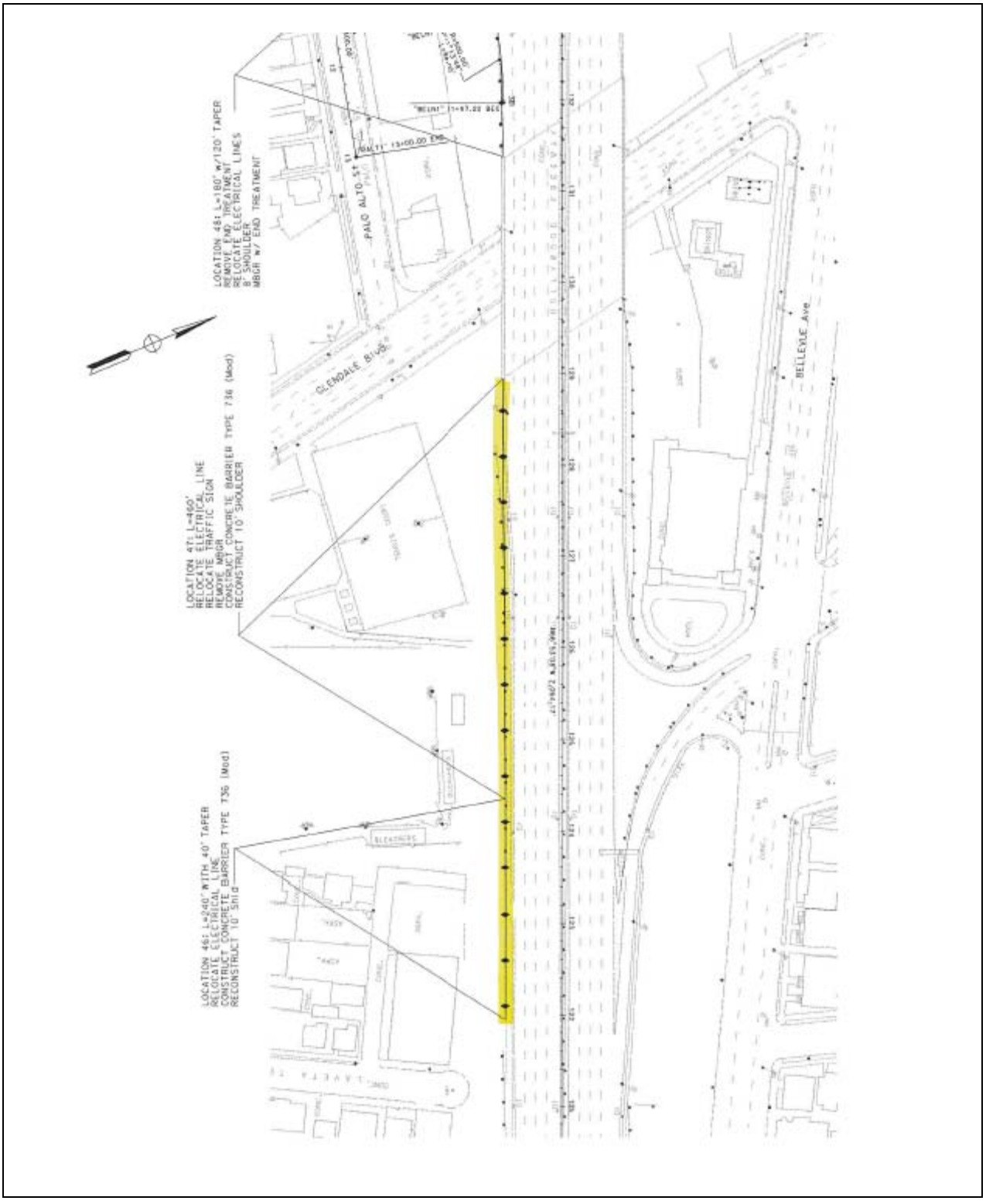


Figure 2. New Concrete Barrier Type 736SV
(PM 2.483 Right shoulder at SB LA-101 South of Glendale Blvd UC)

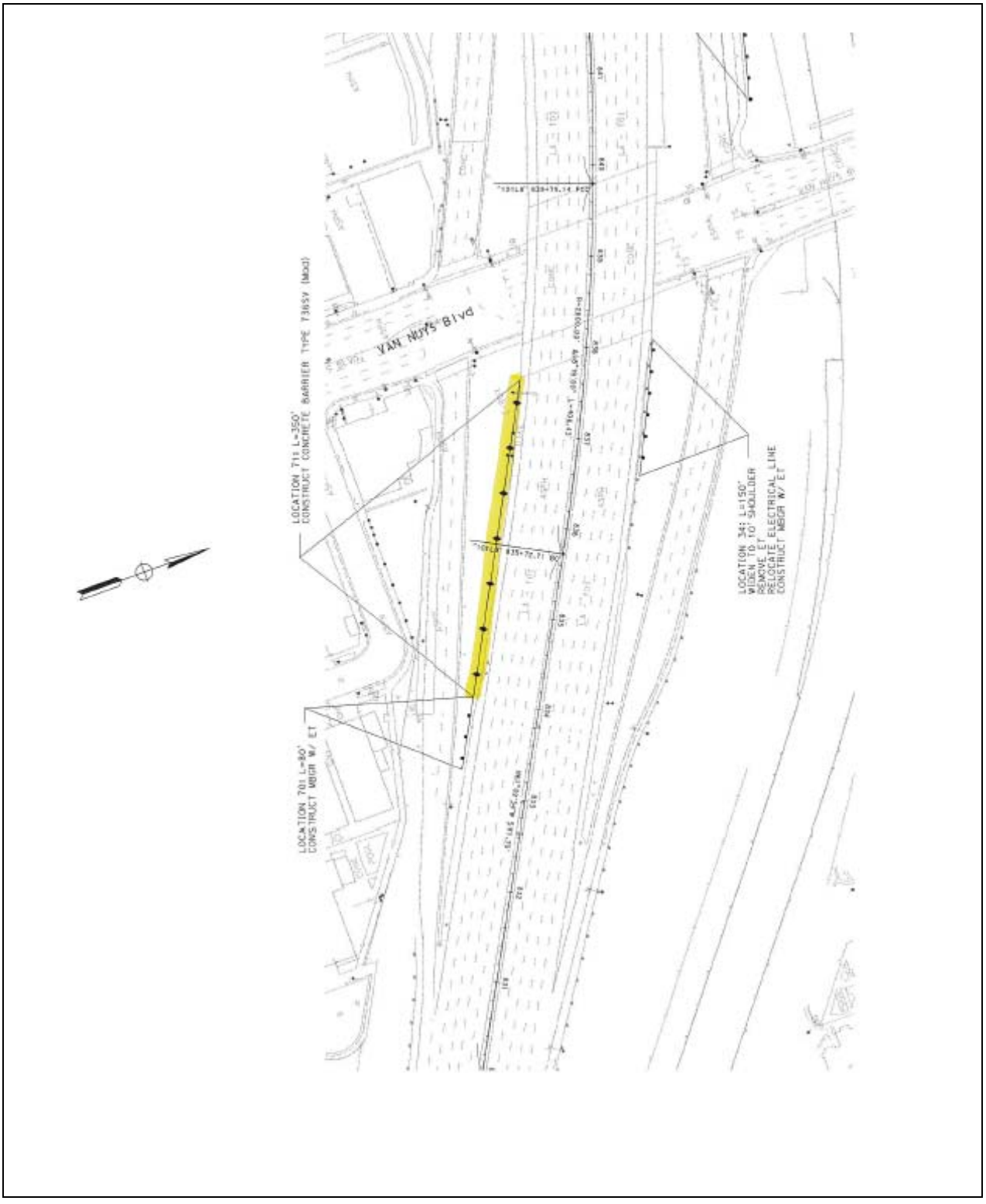


Figure 3. New Concrete Barrier Type 736SV
(PM 15.908 Right shoulder at SB LA-101 South of Van Nuys Blvd UC)

SITE GEOLOGY AND SUBSURFACE CONDITIONS

Site Geology

Concrete Barrier at LA 101 Broadway (Downtown Los Angeles)

According to the Geologic Map of the Los Angeles Quadrangle, Los Angeles County, California, By Thomas W. Dibblee, Jr. (1989), the site is underlain by Quaternary Alluvium consisting of unconsolidated flood plain deposits of silt, sand, and gravel.

Concrete Barrier at LA 101 Glendale Boulevard (Los Angeles)

For this report we reviewed the Geologic Map of the Hollywood and Burbank (South ½) Quadrangles, Los Angeles County, California, By Thomas W. Dibblee, Jr. (1991). The site is located south of Echo Park Lake along a segment of the free way that traverses a geologic contact between Quaternary Alluvium and an unnamed shale, mapped by Lamar (1970), Weber (1980, and Dibblee (1991). The Quaternary Alluvium is deposited in a shallow, narrow canyon that contains Echo Park Lake and trends from north to south where the mouth of the canyon opens near downtown Los Angeles where Beverly Boulevard crosses under the Interstate 10 freeway. According to Dibblee (1991) the Quaternary Alluvium consists of clay, sand, and gravel and includes gravel and sand of minor stream channels. The unnamed shale is described by Dibblee (1991) as gray to light brown, thinly-bedded silty clay shale that is soft. The shale may contain locally scattered hard calcareous nodules. In some places the shale contains laminae of fine-grained soft sandstone.

Concrete Barrier at LA 101 Van Nuys Bouldevard (San Fernando Valley)

The site is located in the southern portion of the San Fernando Valley, which is an approximately 260 square mile area bounded by the Santa Susana Mountains, San Gabriel Mountains, and Verdugo Mountains to the north and bounded by the Santa Monica Mountains to south. The San Fernando Valley is generally flat or slightly sloping less than two percent and is characterized by alluvial fan deposits and alluviated floodplains.

For this report we reviewed the Geologic Map of the Beverly Hills and Van Nuys (South ½) Quadrangles, Los Angeles County, California, By Thomas W. Dibblee, Jr. (1991) (Dibblee). According to Dibblee, the site is underlain by Quaternary Alluvium consisting of alluvial gravel, sand, and silt-clay, derived mostly from Santa Monica Mountains. Quaternary Alluvium includes gravel and sand of stream channels.

Subsurface Conditions

Concrete Barrier at LA 101 Broadway (Downtown Los Angeles)

The site has been graded during construction of adjacent city streets and highway structures. Some artificial fill may be present. Subsurface profile is expected to be a mixture of clay, silt, sand, and gravel.

Concrete Barrier at LA 101 Glendale Boulevard (Los Angeles)

Since it is embankment fills, subsurface profile is expected to be a mixture of clay, silt, sand, and gravel.

Concrete Barrier at LA 101 Van Nuys Boulevard (San Fernando Valley)

Since it is embankment fills, subsurface profile is expected to be a mixture of clay, silt, sand, and gravel.

Groundwater

Concrete Barrier at LA 101 Broadway (Downtown Los Angeles)
Based on "Seismic Hazard Zone Report for the Los Angles 7.5 Minute Quadrangle, Los Angeles County, California (1998)", the historically highest groundwater depth was about 20 feet below ground surface.

Concrete Barrier at LA 101 Glendale Boulevard (Los Angeles)
Due to the proximity of the job site to standing surficial water (Echo Lake), groundwater is expected approximately 15 feet below the ground surface (elev. 386 feet).

Concrete Barrier at LA 101 Van Nuys Boulevard (San Fernando Valley)
Based on the Van Nuys Boulevard as-built LOTB (Bridge No. 53-1376), groundwater is encountered about 46 feet below the ground surface (elev. 634 feet).

It should be noted that groundwater table levels can fluctuate with the change of season and other factors including local irrigation.

Seismic Evaluation

The job sites are outside of California Geological Survey (CGS) designated Earthquake Fault Zone (EFZ). The job site is not considered prone to surface fault rupture hazard; therefore, the possibility of surface fault repture hazard at this site is considered low.

Liquefaction

Although groundwater table is assumed relatively shallow at the location, liquefaction potential is considered to be low because of relatively high densities of the subsurface material at the site.

CORROSIVITY

Due to lack of soil samples for corrosion tests, foundation soil at the job sites should be assumed to be corrosive.

GEOTECHNICAL RECOMMENDATIONS

Based on the review of geologic information, and as-built LOTBs**,** the engineering properties of the foundation soils at proposed locations satisfy the design requirements of Caltrans Standard Plans.

- Because job sites are located at the embankment, or partially embankment fill and native sandy soil, the friction angle of soil may be assumed to be 34 degrees. Because the proposed concrete barriers 736SV, as shown on Standard Plan B15-8, exclude the soundwall the barrier design for a foundation soil with a friction angle of 35 degrees may be used.

If you have any questions or comments, please call Sungro Cho at (916) 227-5398, or Deh-Jeng Jang at (916) 227-5722.

Prepared by: Date: 4/30/2014

Sungro Cho, Ph.D., P.E.
Transportation Engineer
Branch A

Appendix

PM 1.19 Left shoulder at NB LA-101 on ramp from Broadway (view from South to North)

PM 1.19 Left shoulder at NB LA-101 on ramp from Broadway (view from North to South)

PM 2.5 Right shoulder at SB LA-101 South of Glendale Blvd UC (view from West to East)

PM 2.5 Right shoulder at SB LA-101 South of Glendale Blvd UC (view from West to East)

PM 15.9 Right shoulder at SB LA-101 S.of Van Nuys Blvd UC (view from West to East)

PM 15.9 Right shoulder at SB LA-101 S.of Van Nuys Blvd UC (view from East to West)

State of California **Business, Transportation and Housing Agency**

M e m o r a n d u m

To : Mr. Derek Higa
Design Manager
Office of Design C
Division of Engineering Services

Date: July 31, 2014

File No.: 07-LA-101 PM 0.0/25.9
Concrete Barrier Type 736SV
Project ID 0700001842
EA 07-2827U1

From : **DEPARTMENT OF TRANSPORTATION**
Division of Engineering Services
METS-Geotechnical Service
Office of Geotechnical Design South-1

Subject : Geotechnical Design Report For Concrete Barrier Type 736SV

INTRODUCTION

As requested by your office in the memo dated May 19, 2014, the following are the geotechnical recommendations for new concrete barrier Type 736SV foundations proposed on State Route 101 in Los Angeles County.

PROJECT LOCATION

The new concrete barrier type 736SV locations are shown in Figures 1 thru 18.

SCOPE OF WORK

The geotechnical work performed for this project includes:

- Review of geologic information.
- Visual inspection of the job sites.
- Interpretation of subsurface geologic and groundwater conditions.
- Preparation of this memorandum to present geotechnical recommendation for the foundations of new concrete barrier Type 736SV.

It should be note that no subsurface exploration has been performed at the proposed barrier locations due to project schedule constraint.

PROJECT DESCRIPTION

The proposed project consists of installing eighteen new concrete barriers Type 736SV.

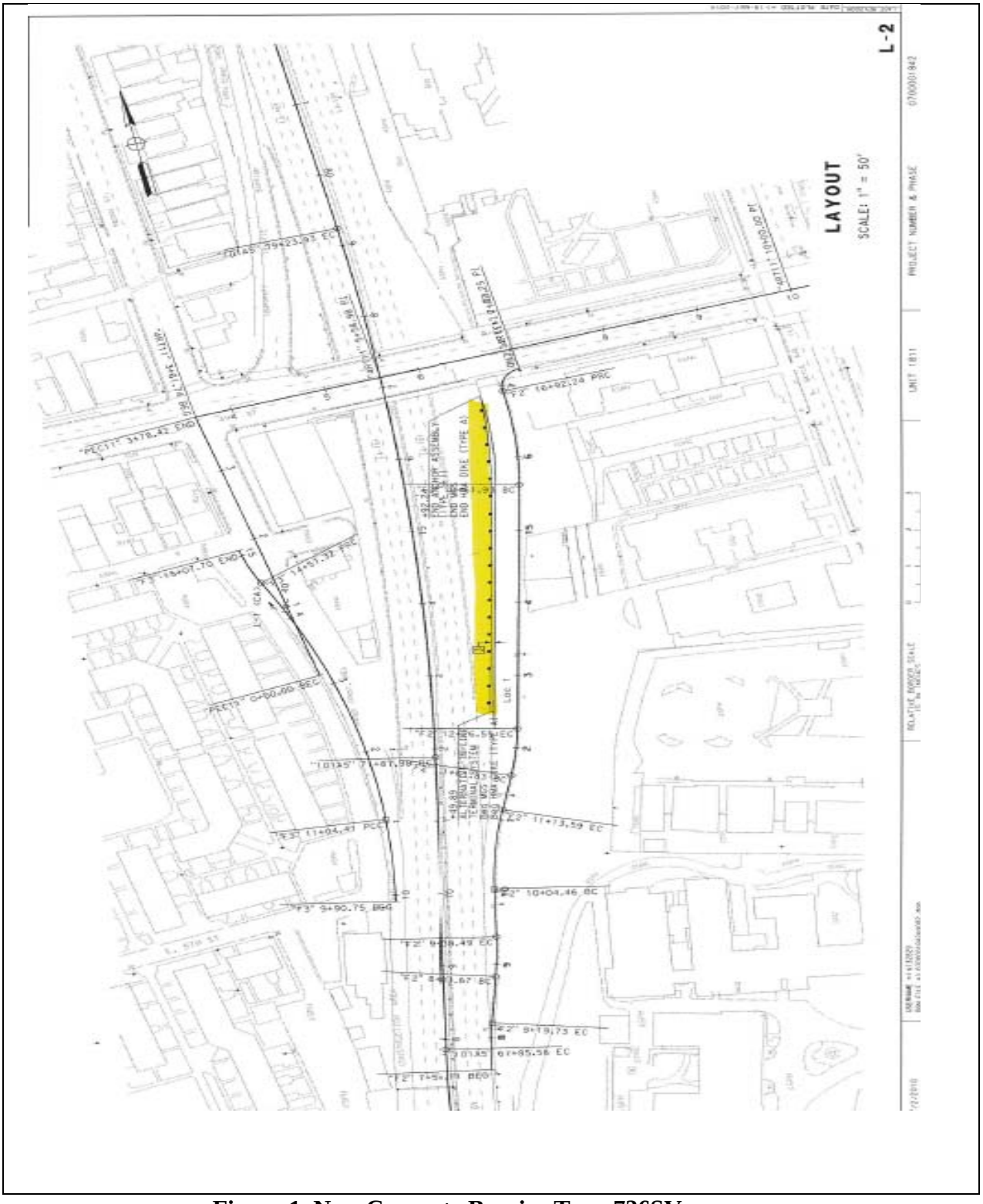


Figure 1. New Concrete Barrier Type 736SV
(PM S0.52, Left Shoulder, Off-ramp to 4th St)

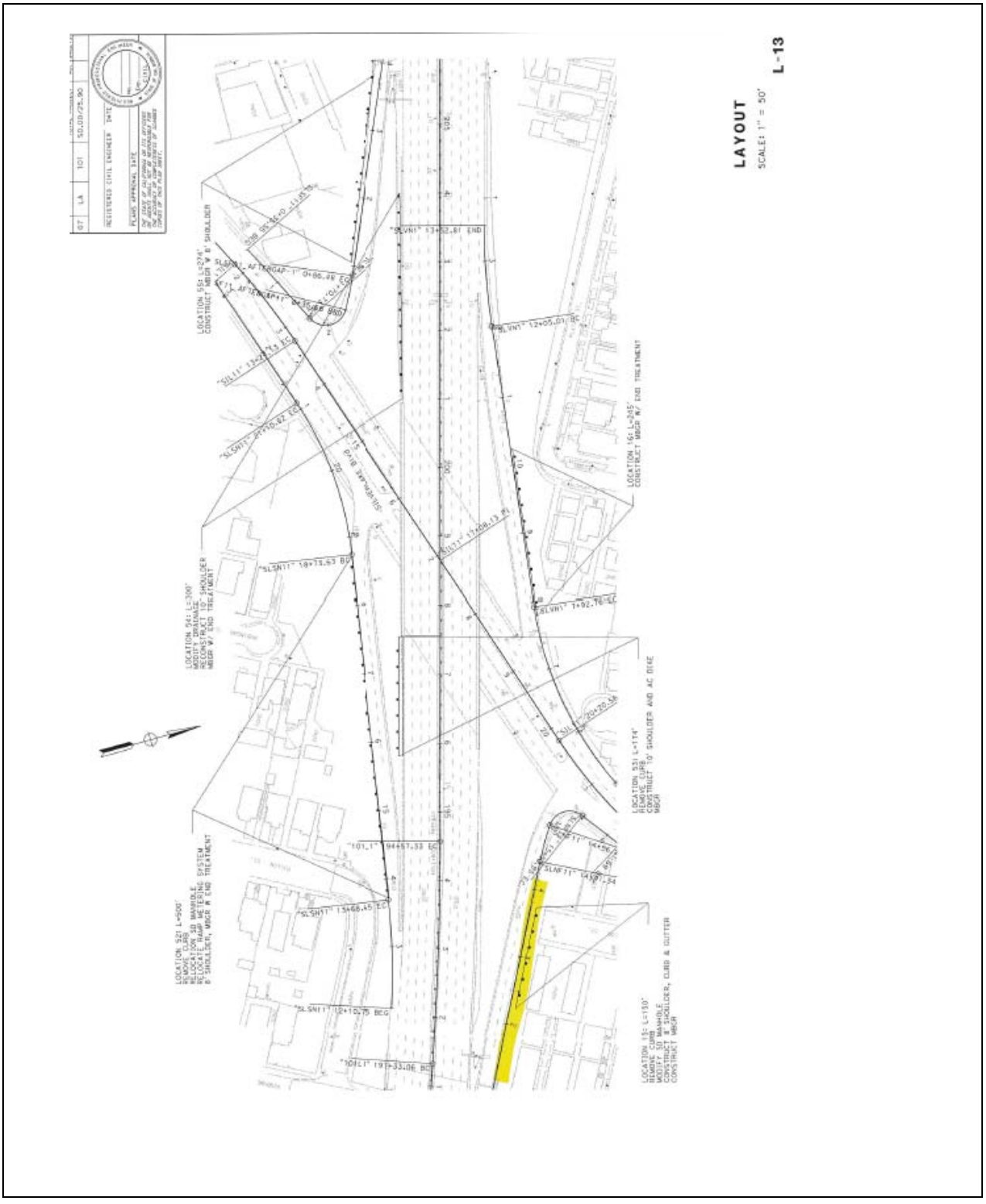


Figure 2. New Concrete Barrier Type 736SV
(PM 3.643, Right Shoulder, Off-ramp to Silver Lake Blvd)

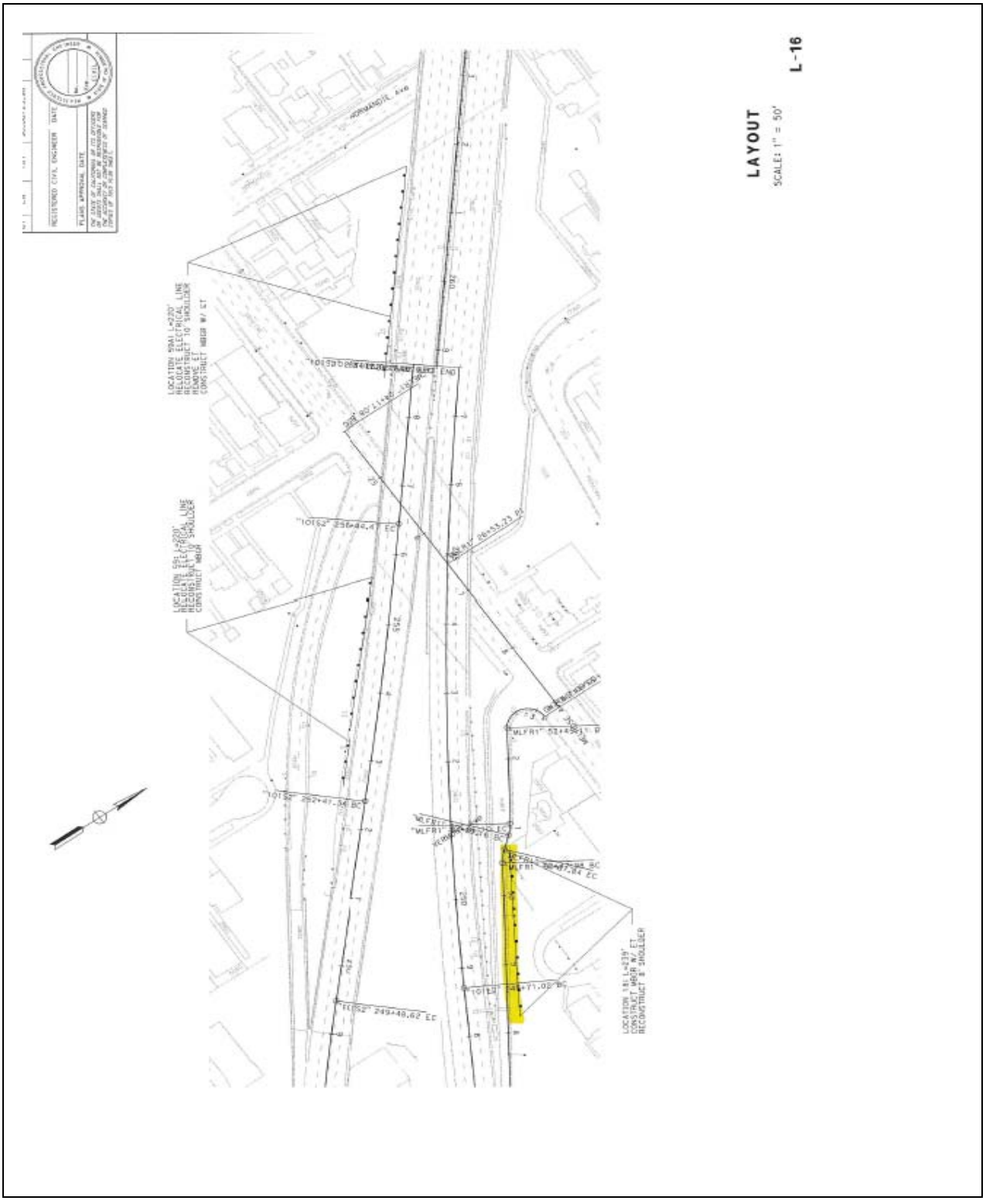


Figure 3. New Concrete Barrier Type 736SV
(PM 4.736, Right Shoulder, Off -ramp to Melrose Ave)

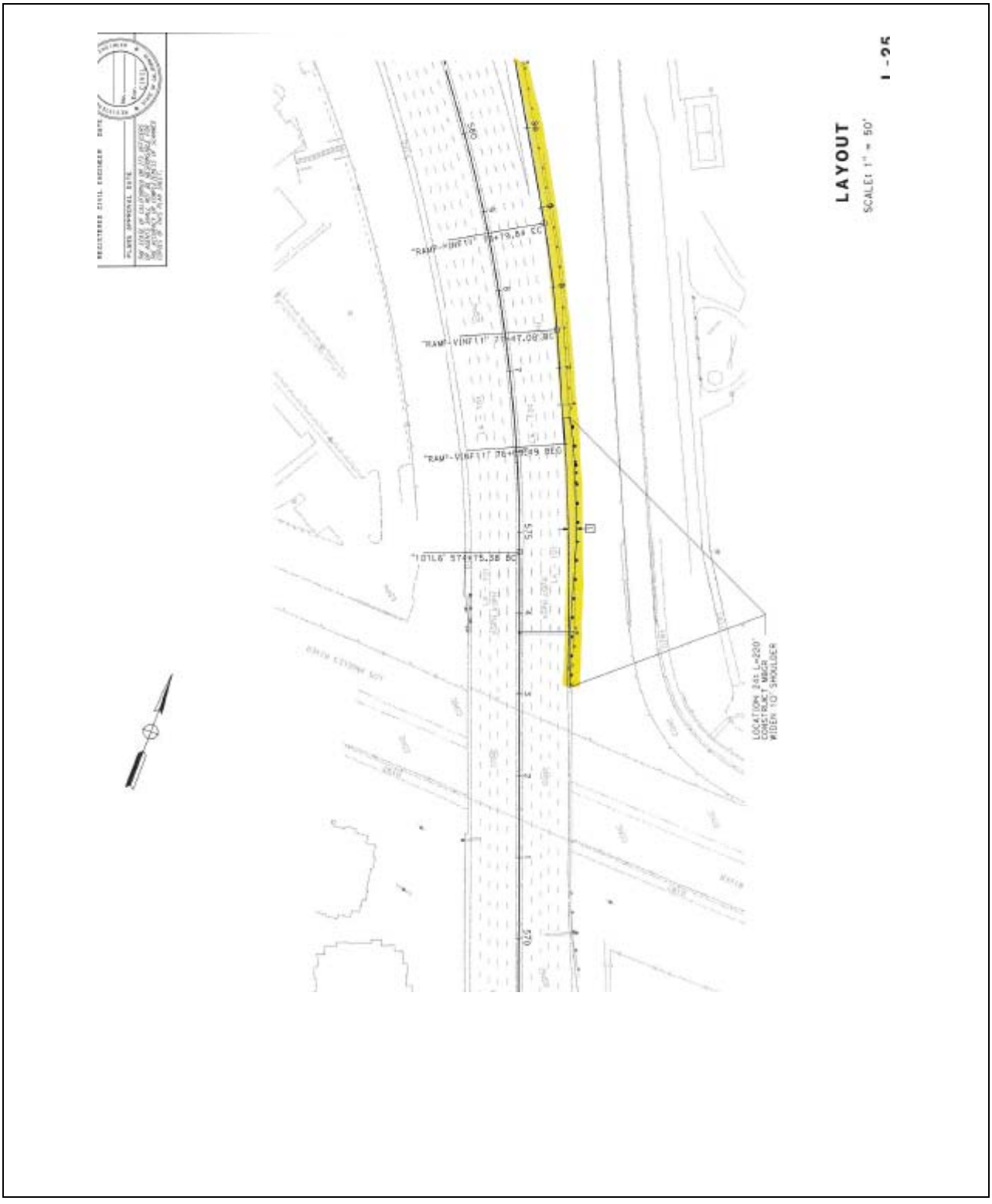


Figure 4. New Concrete Barrier Type 736SV
(PM 10.859, Right Shoulder, North of LA River Bridge)

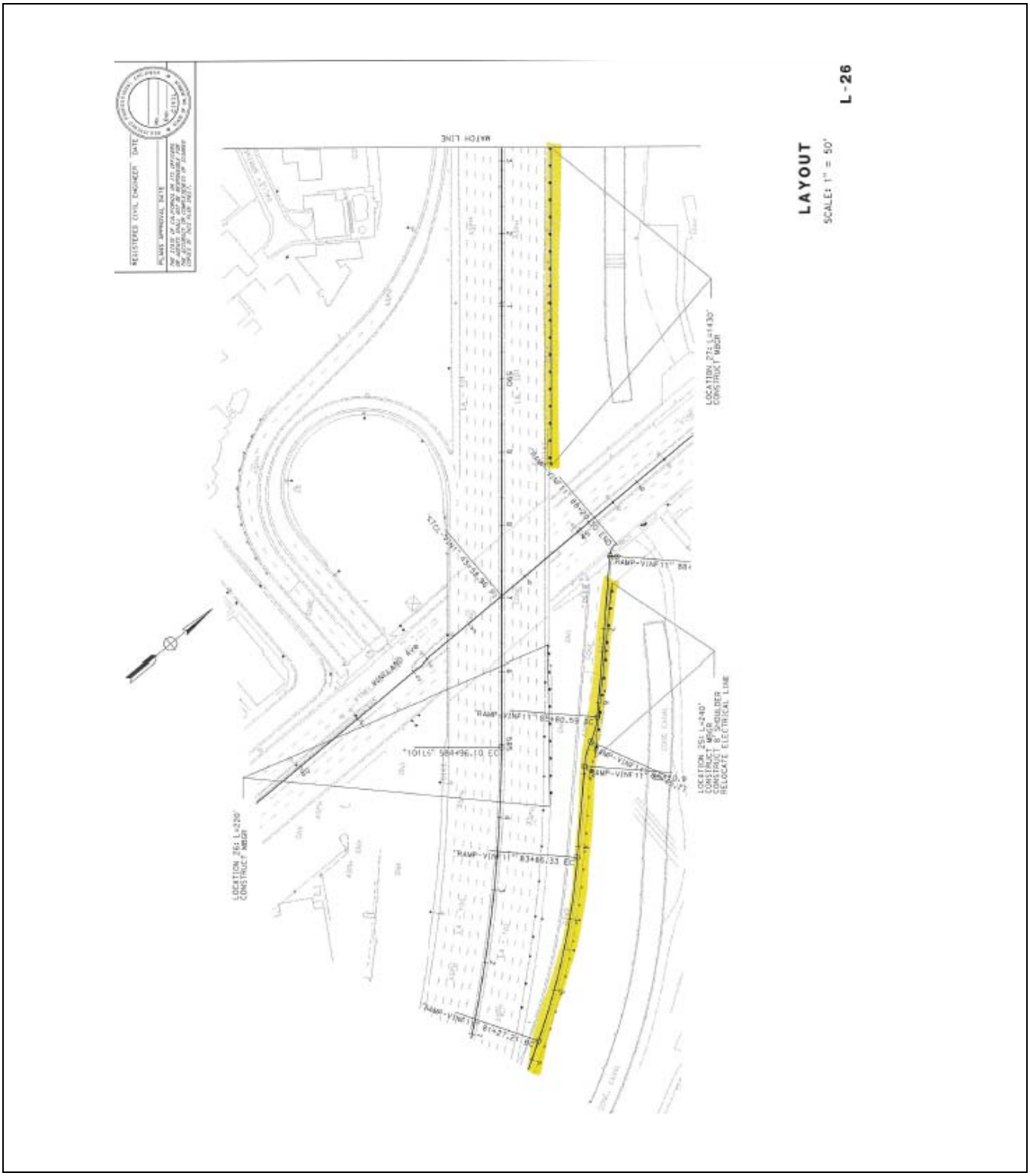


Figure 5. New Concrete Barrier Type 736SV
(PM 10.999, Right Shoulder, Off -ramp to Vineland Ave)

Figure 6. New Concrete Barrier Type 736SV
(PM 11.143, Right Shoulder, Between Vineland Ave UC and Moorpark St UC)

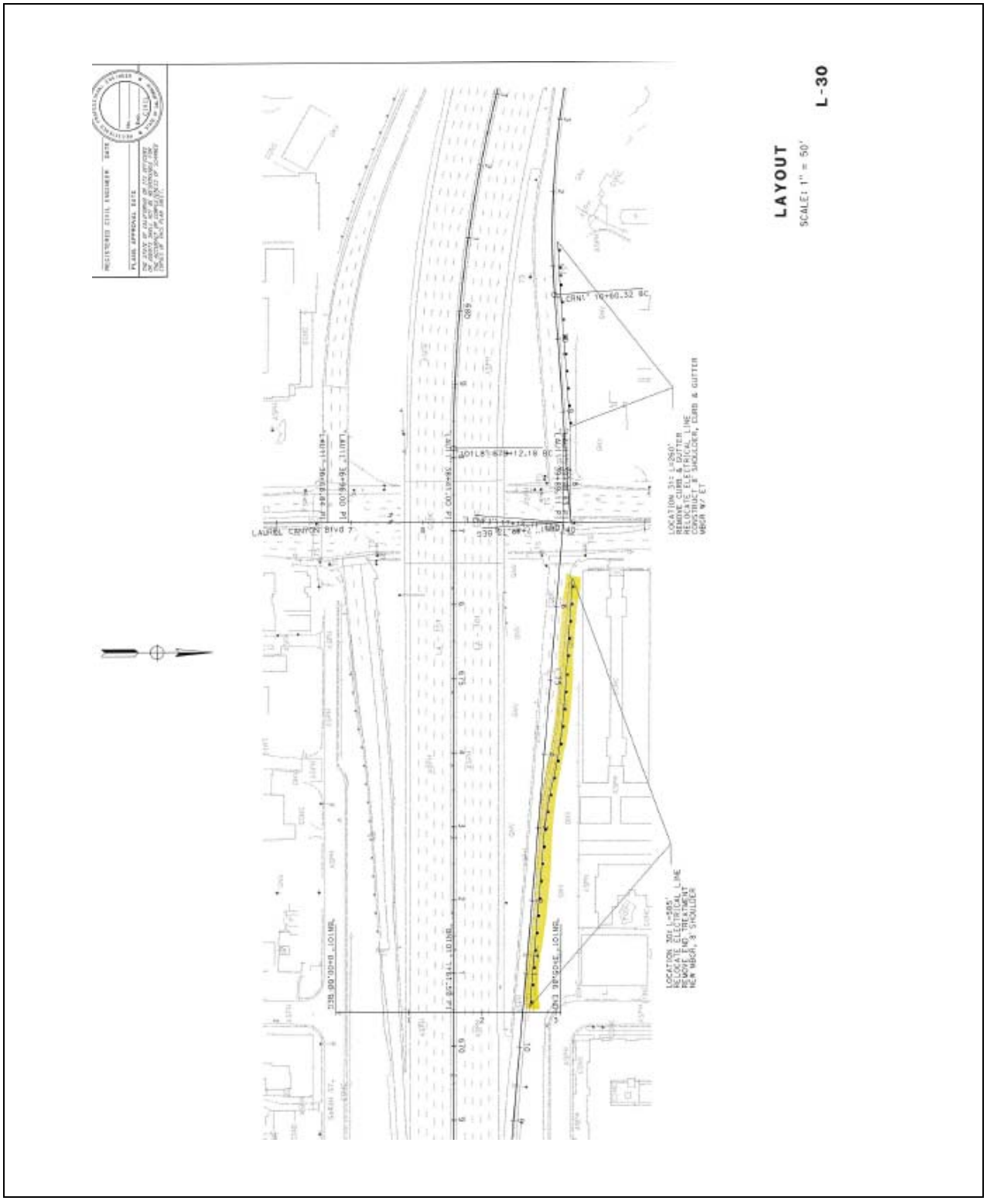


Figure 7. New Concrete Barrier Type 736SV
(PM 12.72, Right Shoulder, Off -ramp to Laurel Canyon Blvd)

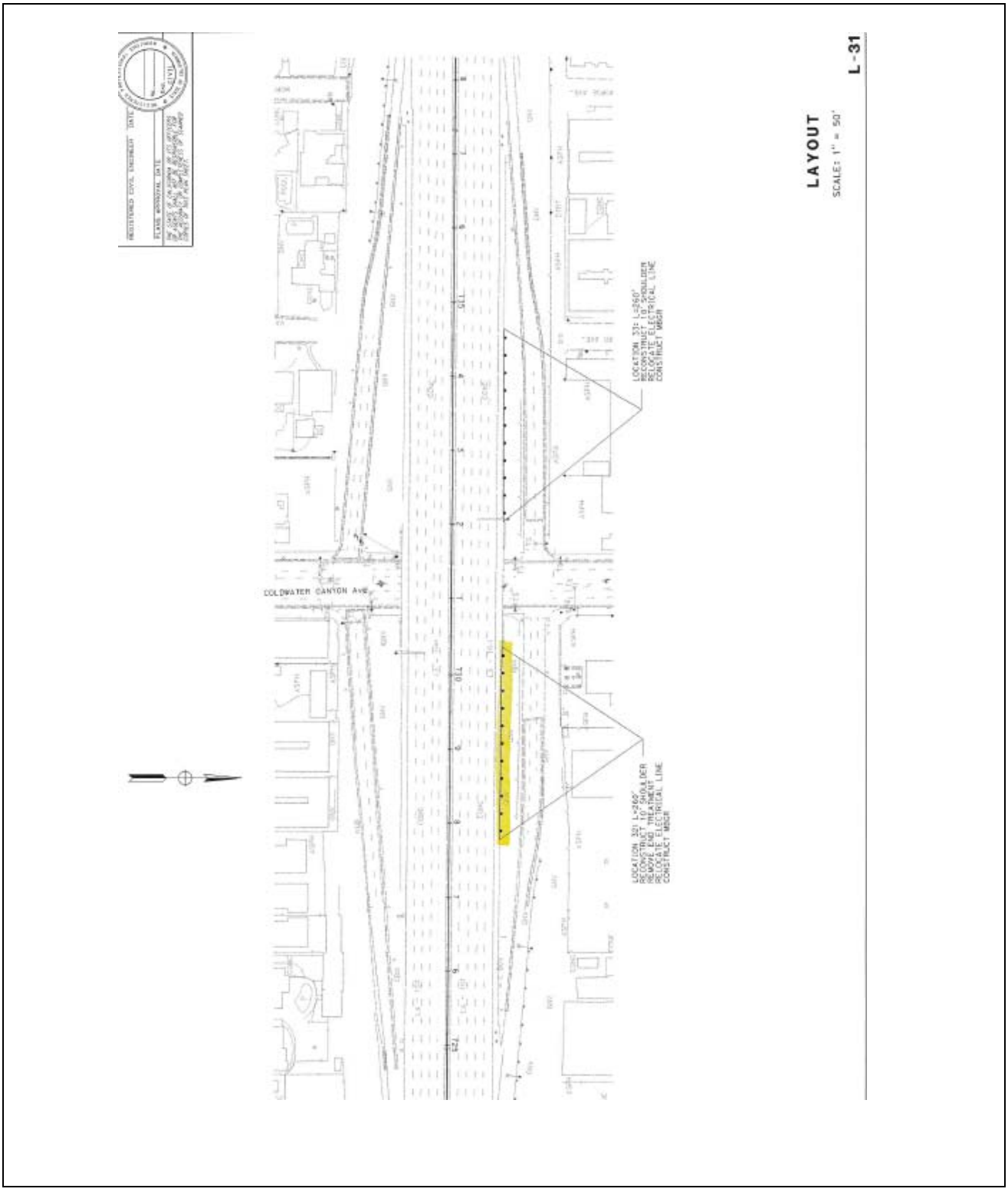


Figure 8. New Concrete Barrier Type 736SV
(PM 13.878, Right Shoulder, East of Coldwater Canyon Ave UC)

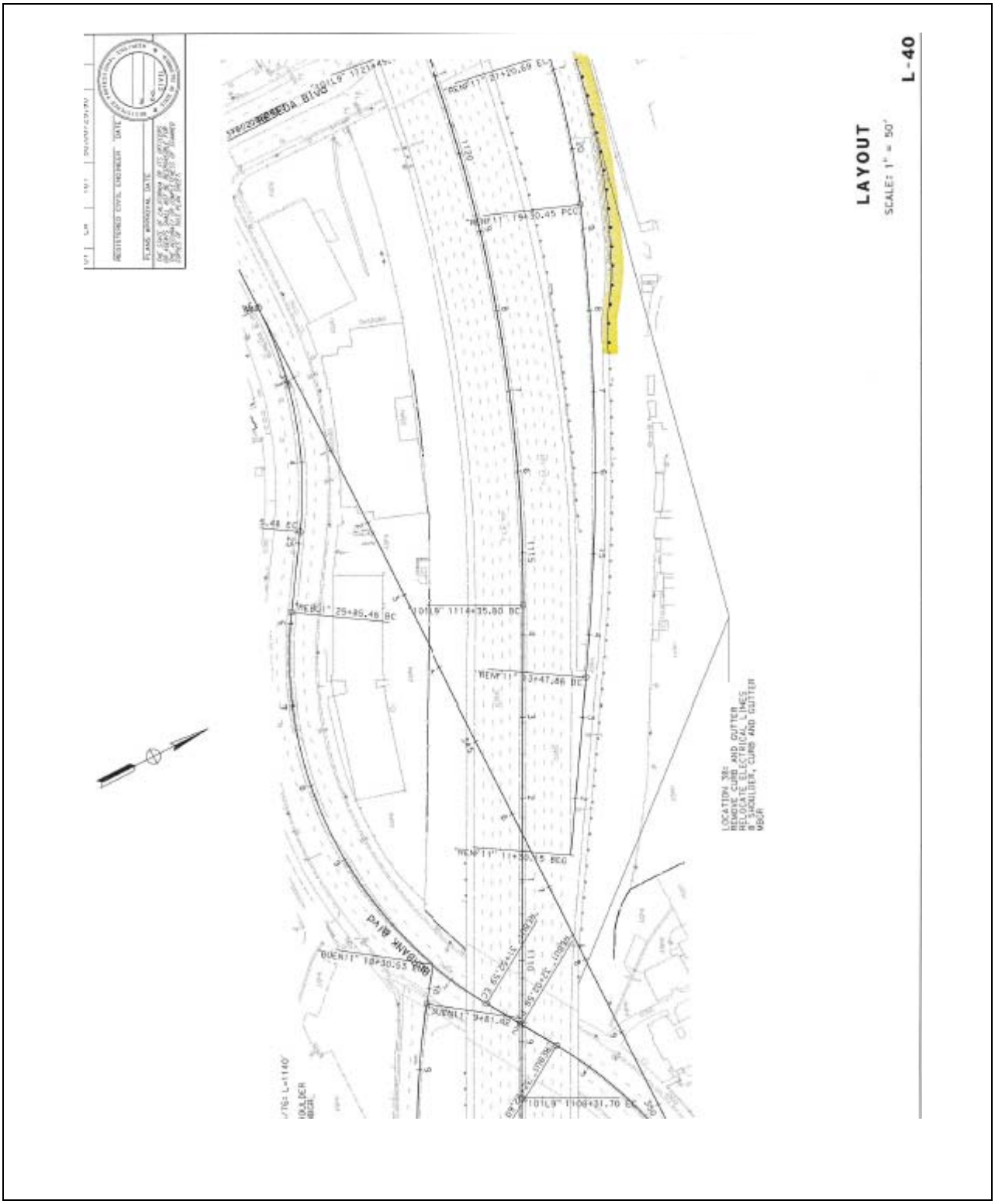


Figure 9. New Concrete Barrier Type 736SV
(PM 21.104, Right Shoulder, Off -ramp to Reseda Blvd)

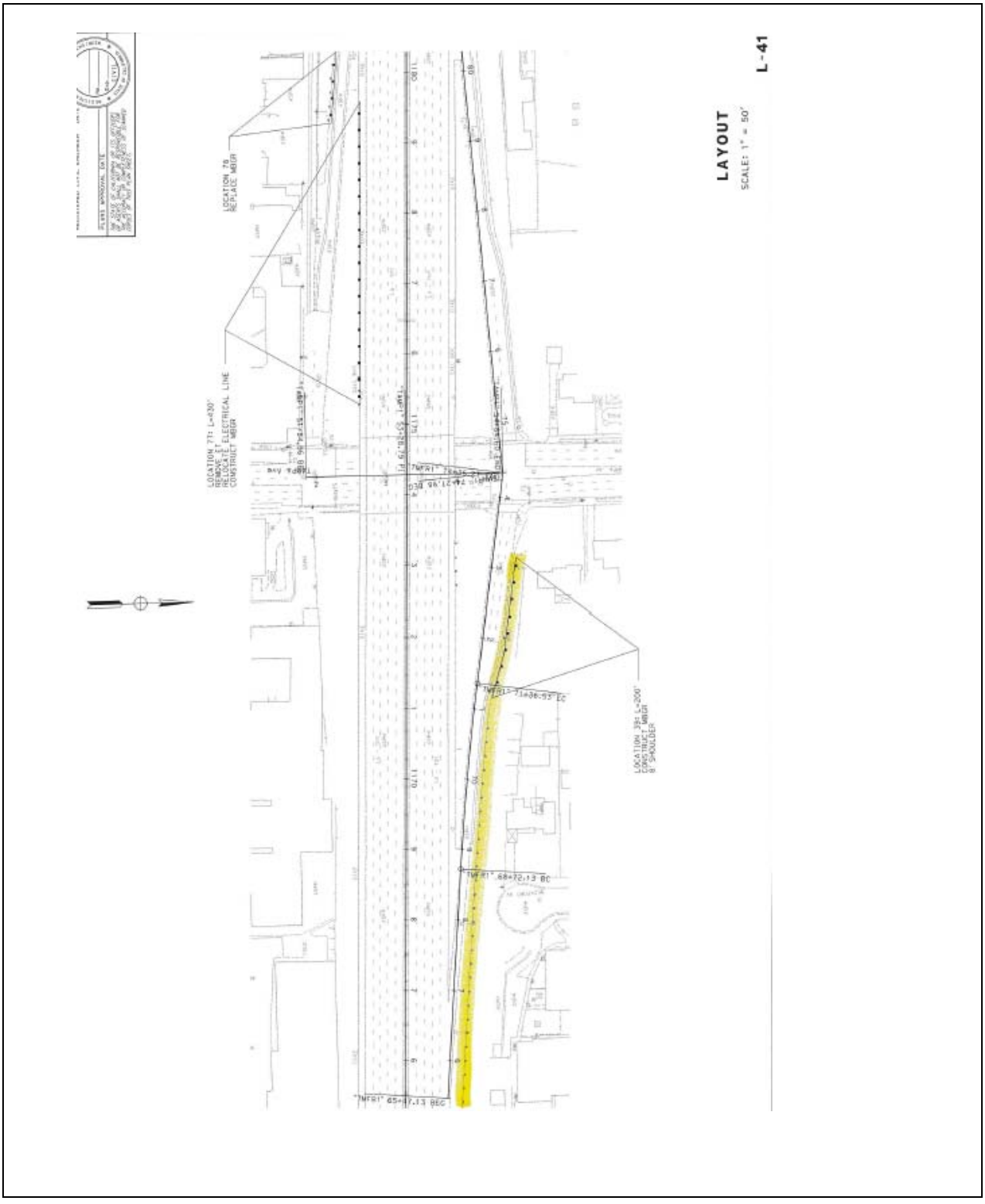


Figure 10. New Concrete Barrier Type 736SV
(PM 22.149, Right Shoulder, Off -ramp to Tampa Ave)

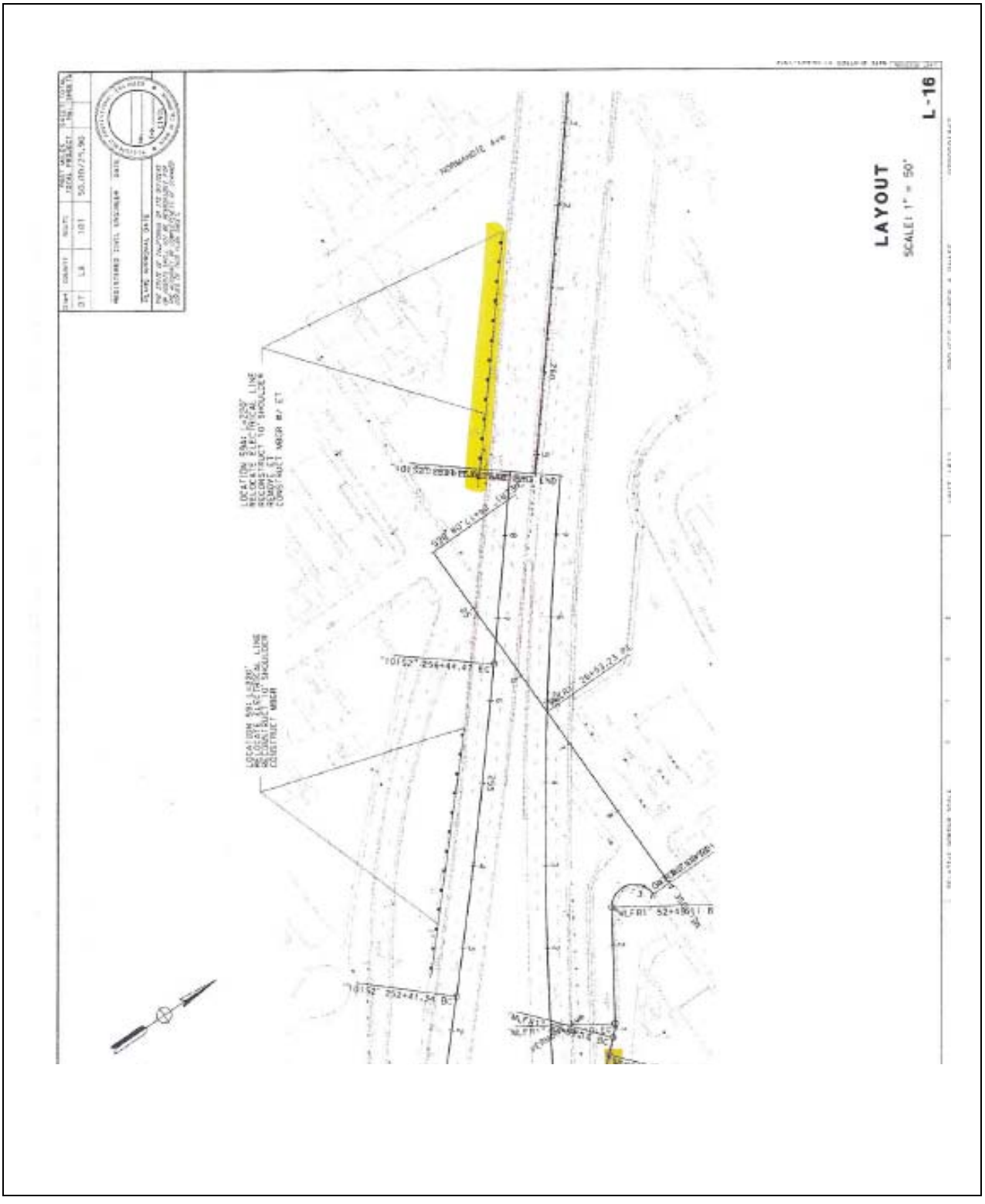


Figure 11. New Concrete Barrier Type 736SV
(SB LA-101, PM 4.98, Right Shoulder, Between Normandie Ave UC and Melrose Ave UC)

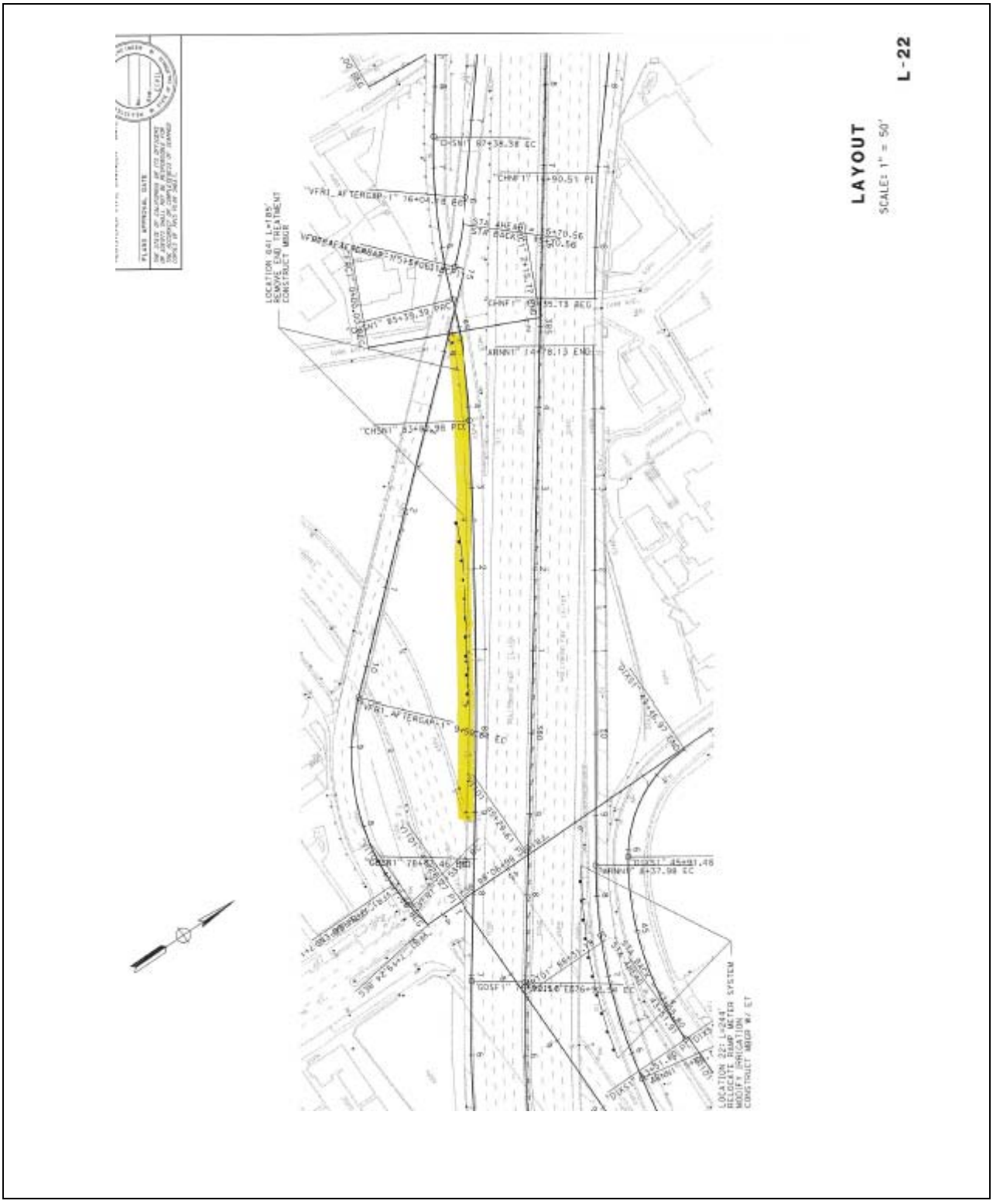


Figure 12. New Concrete Barrier Type 736SV
(PM 7.277, Right Shoulder, On-ramp from Cahuenga Blvd)

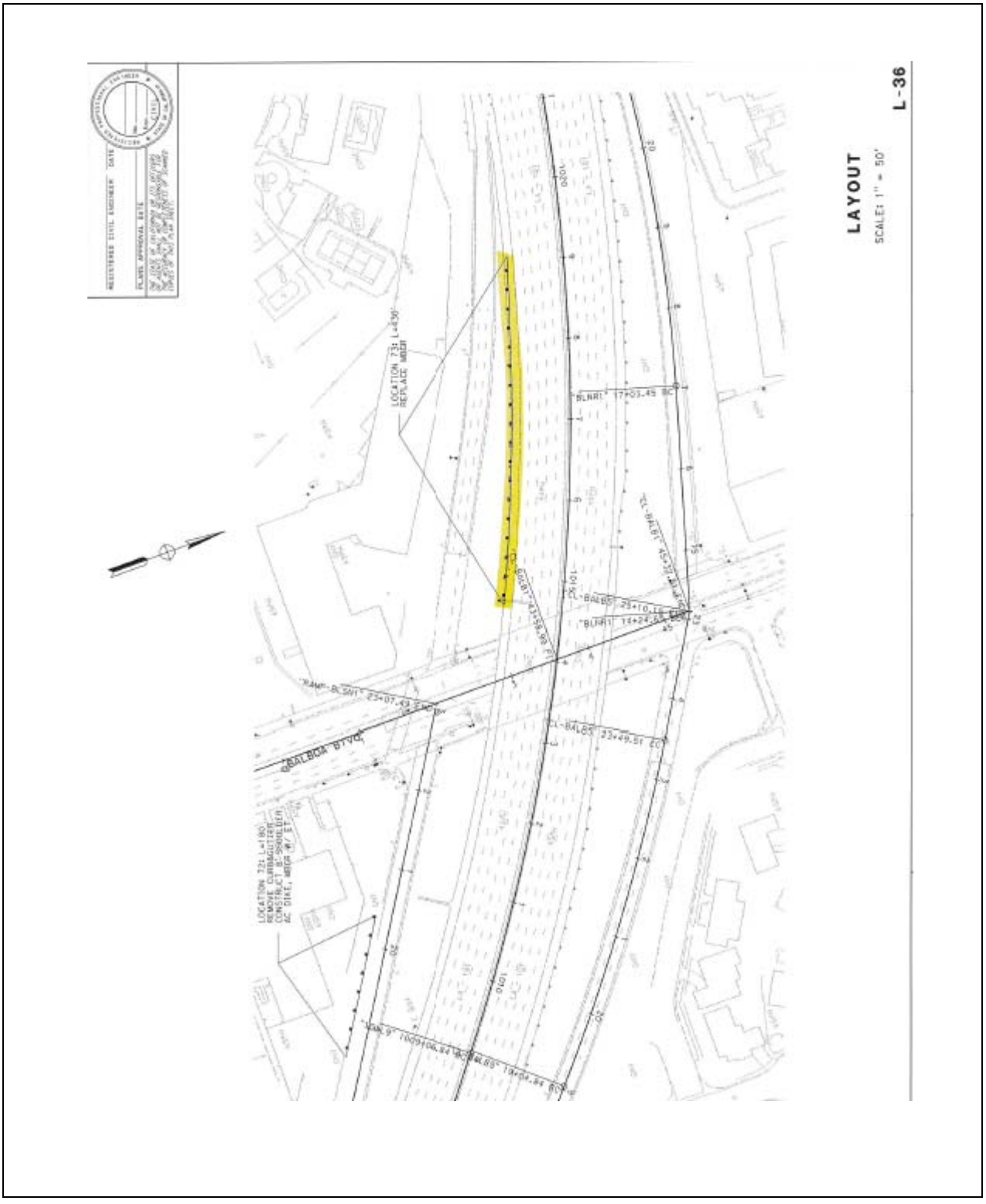


Figure 13. New Concrete Barrier Type 736SV
(PM 19.217, Right Shoulder, West of Balboa Blvd UC)

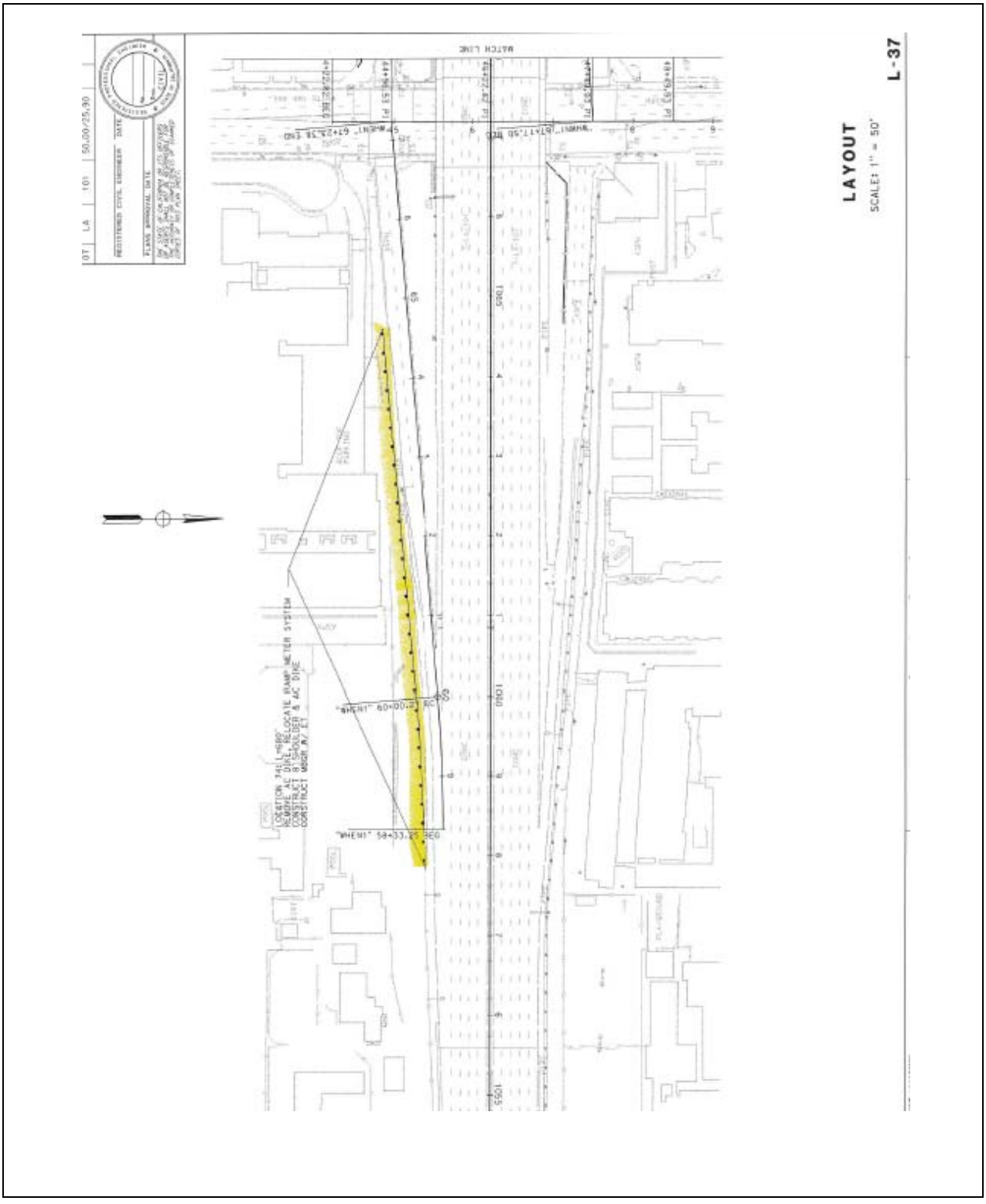


Figure 14. New Concrete Barrier Type 736SV
(PM 20.11, Right Shoulder, On -ramp from White Oak Ave)

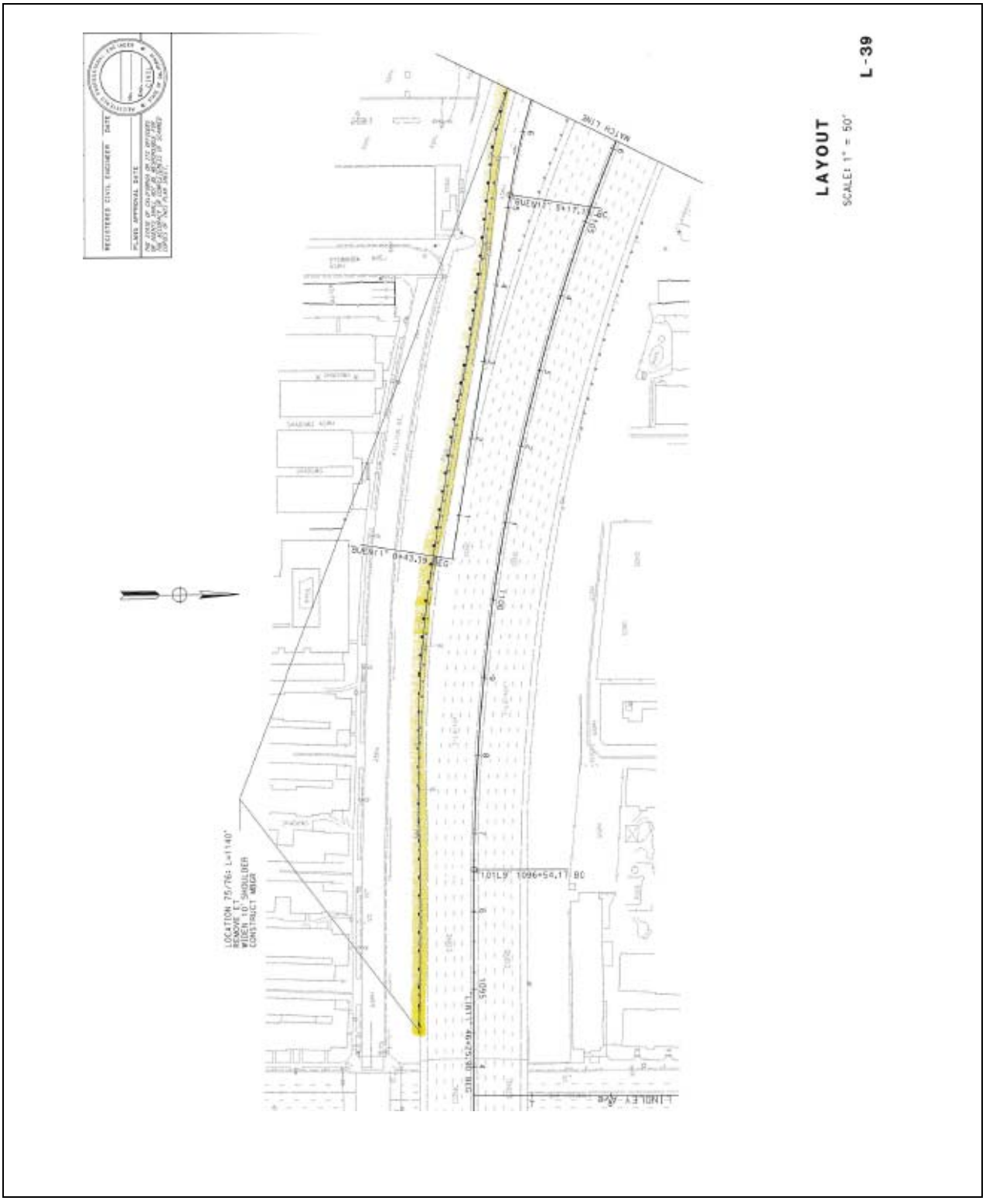


Figure 15. New Concrete Barrier Type 736SV
(PM 20.728, Right Shoulder, North of Lindley Ave UC)

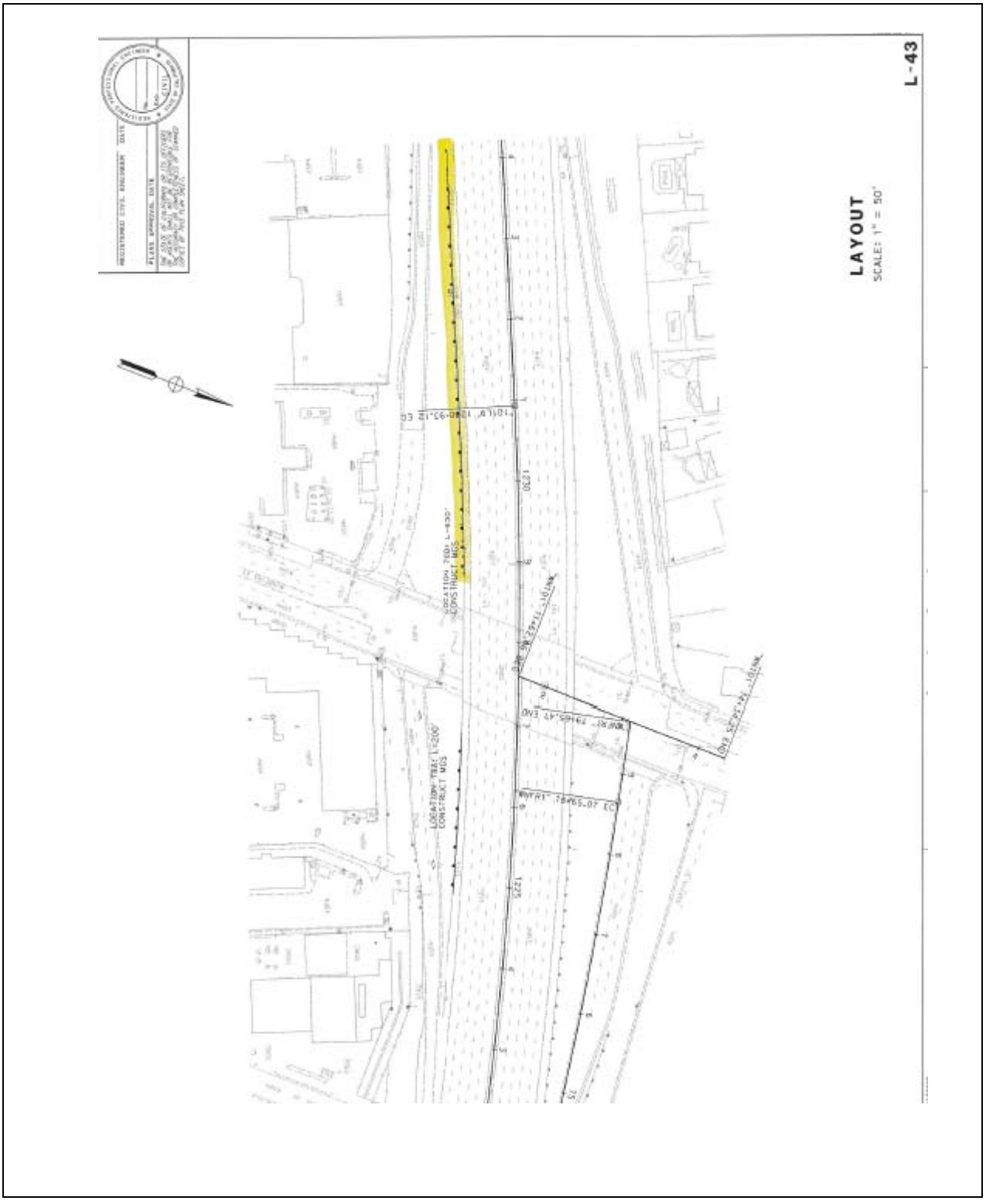


Figure 16. New Concrete Barrier Type 736SV
(PM 23.6, Right Shoulder, North of Winnetka Ave UC)

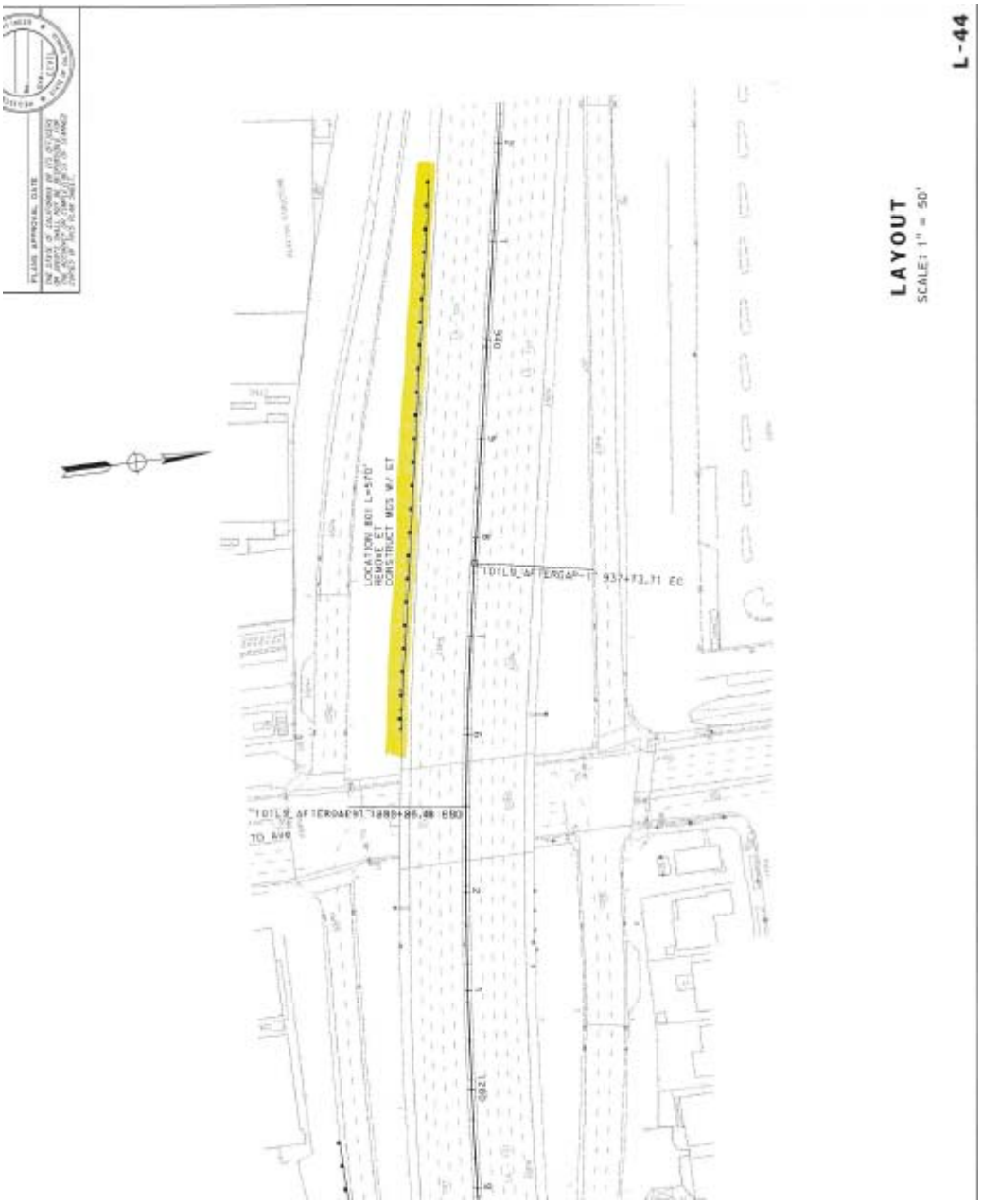


Figure 17. New Concrete Barrier Type 736SV
(PM 24.311, Right Shoulder, North of De Soto Ave UC)

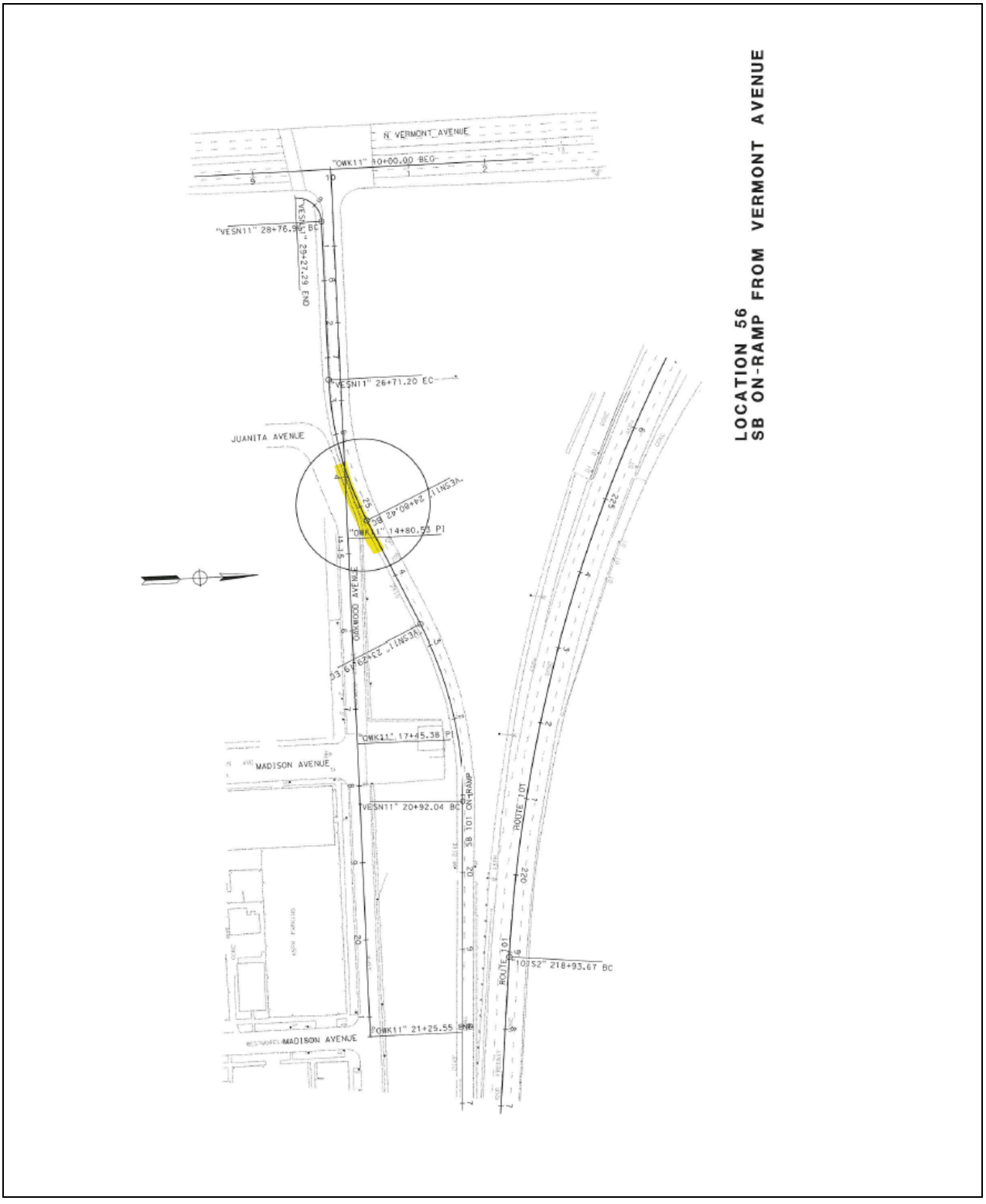


Figure 18. New Concrete Barrier Type 736SV
(PM 24.311, Right Shoulder, On Ramp-Southbound of Vermont Ave UC)

SITE GEOLOGY AND SUBSURFACE CONDITIONS

Site Geology and Subsurface Conditions

For this report we reviewed the Geologic Map of the Van Nuys, Los Angeles, Hollywood, Canoga Park, and Burbank Quadrangles, 7.5 Minute Quadrangle, Los Angeles County, California, and United State Geological Survey (USGS) web site, http://ngmdb.usgs.gov/maps/mapview/.

The sites are at various geologies and summarized in Table 1. Also subsurface conditions are summarized in Table 1. Most locations are embankment fills, composed of a mixture of clay, silt, sand, and gravel while some locations have been graded during construction of adjacent city streets and highway structures. At these locations, some artificial fill may be present. Subsurface profile is expected to be a mixture of clay, silt, sand, and gravel.

Groundwater

Groundwater, summarized in Table 1 is estimated based on the as-built groundwater information for the adjacent bridge structures, Seismic Hazard Zone Reports, 7.5 Minute Quadrangle, in the subject area, and Los Angeles County well records in the vicinity of the sites.

It should be noted that groundwater table levels can fluctuate with the change of season and other factors including local irrigation.

Seismic Evaluation

The job sites are outside of California Geological Survey (CGS) designated Earthquake Fault Zone (EFZ). The job sites are not considered prone to surface fault rupture hazard; therefore, the possibility of surface fault repture hazard at these sites are considered low.

Liquefaction

Although groundwater table is assumed relatively shallow at some locations, liquefaction potential is considered to be low because of relatively high densities of the subsurface material at the sites.

CORROSIVITY

Due to lack of soil samples for corrosion tests, foundation soil at the job sites should be assumed to be corrosive.

Table 1. Summary of Site Geology, Subsurface, and Groundwater Information

Location		Site Geology Legend	Expected Subsurface Materials	Groundwater	
				Approx. Groundwater Table Below Ground Surface (ft)	Approx. Groundwater Elevation (ft)
NB LA-101	1	Qa, Qoa	Roadway backfill &Native Material	80	200
	2	Qa	Roadway backfill	20	280
	3	Qae	Roadway backfill	20	280
	4	Qg	Roadway backfill	80 ~ 110	470 ~ 500
	5	Qg	Roadway backfill	130	470
	6	Qa, Qg	Roadway backfill	150	470
	7	Qa	Roadway backfill	140	500
	8	Qa	Roadway backfill	140	510
	9	Qa	Roadway backfill	55	730
	10	Qa	Roadway backfill	10 ~ 30	765
SB LA-101	11	Qae	Roadway backfill	40 ~ 50	280 ~ 290
	12	Ttusi	Roadway backfill &Native Material	90	380
	13	Qa	Roadway backfill	34	716
	14	Qa	Roadway backfill	70	700
	15	Qa	Roadway backfill	110	690
	16	Qa	Roadway backfill	45	810
	17	Qa	Roadway backfill	37	873
	18	Qa	Roadway backfill &Native Material	20	250

1: PM S0.52, Left Shld, off-ramp to 4th St (Sheet L-2)
2: PM 3.643, Right Shld, off-ramp to Silver Lake Blvd (Sheet L-13)
3: PM 4.736, Right Shld, off-ramp to Melrose Ave (Sheet L-16)
4: PM 10.859, Right Shld, north of LA River Bridge (Sheet L-25)
5: PM 10.999, Right Shld, off-ramp to Vineland Ave (Sheet L-26)
6: PM 11.143, Right Shld, between Vineland Ave UC and Moorpark St UC (Sheet L-26, L-27)
7: PM 12.720, Right Shld, off-ramp to Laurel Canyon Blvd (Sheet L-30)
8: PM 13.878, Right Shld, east of Coldwater Canyon Ave UC (Sheet L-31)
9: PM 21.104, Right Shld, off-ramp to Reseda Blvd (Sheet L-40)
10: PM 22.149, Right Shld, off-ramp to Tampa Ave (Sheet L-41)
11: PM 4.98, Right Shld between Normandie Ave UC and Melrose Ave UC (Sheet L-16)
12: PM 7.277, Right Shld, on-ramp from Cahuenga Blvd (Sheet L-22)
13: PM 19.217 Right Shld, west of Balboa Blvd UC (Sheet L-36)
14: PM 20.110, Right Shld, on-ramp from White Oak Ave (Sheet L-37)
15: PM 20.728, Right Shld, north of Lindley Ave UC (Sheet L-39)
16: PM 23.600, Right Shld, north of Winnetka Ave (Sheet L-43)
17: PM 24.311, Right Shld, north of De Soto Ave (Sheet L-44)
18: PM 5.135, Right Shld, on-ramp southbound of Vermont Ave UC

Qa: Alluvium, unconsolidated floodplain deposits of silt, sand and gravel
Qoa: Remnants of Older weakly consolidated alluvial deposits of gravel, sand and silt
Qae: Similar to Qa, but slightly elevated and dissected; includes alluvial fan sediments
Qg: Gravel and sand of major stream channels
Ttusi: Mostly gray micaceous clay shale or claystone, crumbly where weathered, and thin interbeds of gray to tan semi-friable sandstone.

Roadway backfill: Fill (Gravel, sand, silt, & clay)
Native Material: Top soil, silt, sand, and gravel

GEOTECHNICAL RECOMMENDATIONS

Based on the review of geologic information, and as-built LOTBs**,** the engineering properties of the foundation soils at proposed locations satisfy the design requirements of Caltrans Standard Plans.

- Because job sites are located at the embankment, or partially embankment fill and native sandy soil, the unit weight and friction angle of soil may be assumed to be 120 pcf and 34 degrees, respectively. Because the proposed concrete barriers 736SV, as shown on Standard Plan B15-8, exclude the soundwall the barrier design for a foundation soil with a friction angle of 35 degrees may be used.

If you have any questions or comments, please call Sungro Cho at (916) 227-5398, or Deh-Jeng Jang at (916) 227-5722.

Prepared by: Date: 7/31/2014

Sungro Cho, Ph.D., P.E.
Transportation Engineer
Branch A

Appendix

PM S0.52, Left shoulder at NB LA-101 off ramp to 4th Street

PM 3.643, Right shoulder at NB LA-101 off ramp to Silver Lake Blvd

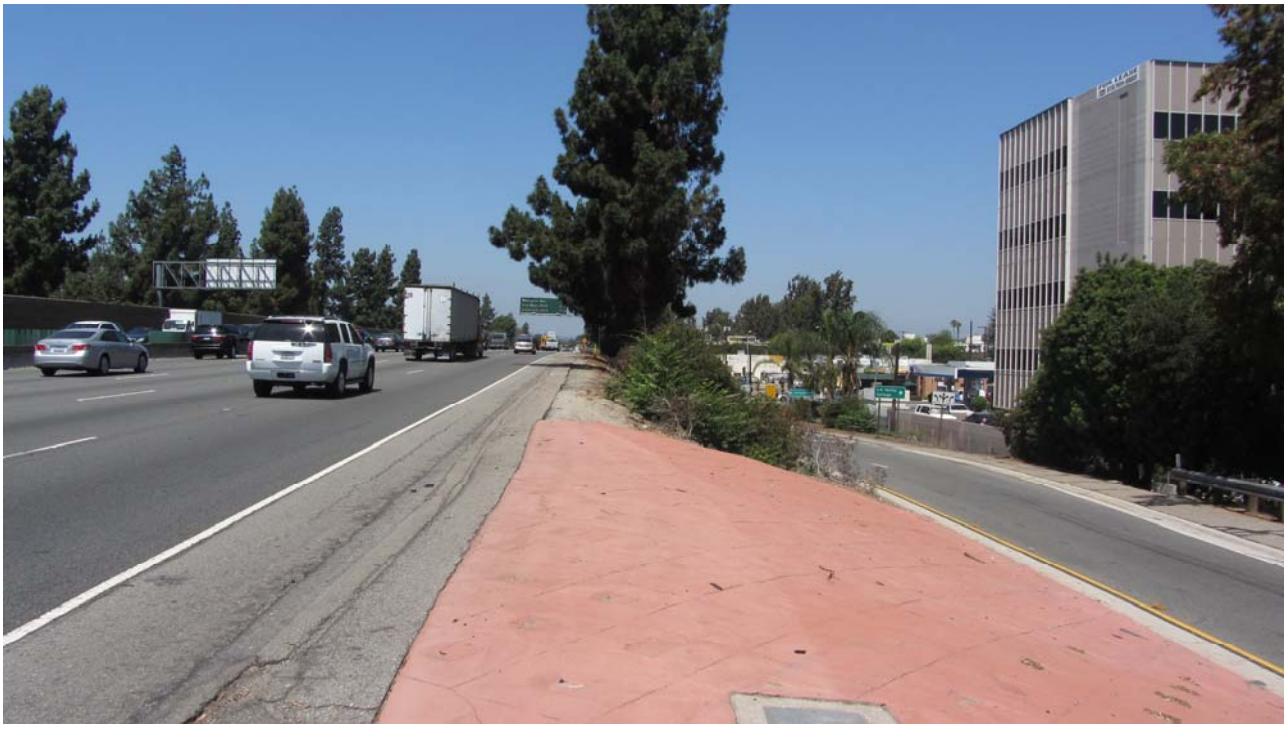
PM 4.736, Right Shoulder at NB LA-101 off ramp to Melrose Avenue

PM 10.859, Right shoulder at NB LA-101 LA River Bridge

PM 10.999, Right shoulder at NB LA-101 Off-ramp Vineland Ave

PM 11.143, Right shoulder between Vineland Ave UC and Moorpark St. UC

PM 12.720, Right Shoulder at NB LA-101 off ramp to Laurel Canyon Blvd



PM 13.878, Right Shoulder at NB LA-101 East of Coldwater Canyon Ave

PM 21.104, Right Shoulder at NB LA-101 off ramp to Reseda Blvd

PM 22.149, Right Shoulder at NB LA-101 off ramp to Tampa Ave

PM 4.980, Right Shoulder at SB LA-101 Between Normandie Ave and Melrose Ave

PM 7.277, Right Shoulder at SB LA-101 On ramp from Cahuenga Blvd

PM 19.217, Right Shoulder at SB LA-101 West of Balboa Blvd

PM 20.110, Right Shoulder at SB LA-101 on ramp from White Oak Ave

PM 20.728, Right Shoulder at SB LA-101 North of Lindley Ave

PM 23.600, Right Shoulder at SB LA-101 North of Winnetka Ave

PM 24.311, Right Shoulder at SB LA-101 North of De Soto Ave

PM 4.135, Right shoulder at SB LA-101 On ramp-from Vermont Ave

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	1	83

INDEX OF SHEETS

Sheet No.	1	Title and Location Map
" "	2-3	Standard plans List
" "	4	Key Map and Line Index
" "	5-8	Layouts
" "	9	Construction Details
" "	10	Contour Grading
" "	11-19	Utility Plans
" "	20-24	Traffic Handling Plans
" "	25	Construction Area Signs
" "	26	Pavement Delineation
" "	27	Summary of Quantities
" "	28-29	Retaining Wall Plans
" "	30-66	Electrical Plans
" "	67-68	Revised Standard Plans
" "	69	New Standard Plan

STRUCTURE SHEETS

" "	70-83	Structure Plans

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

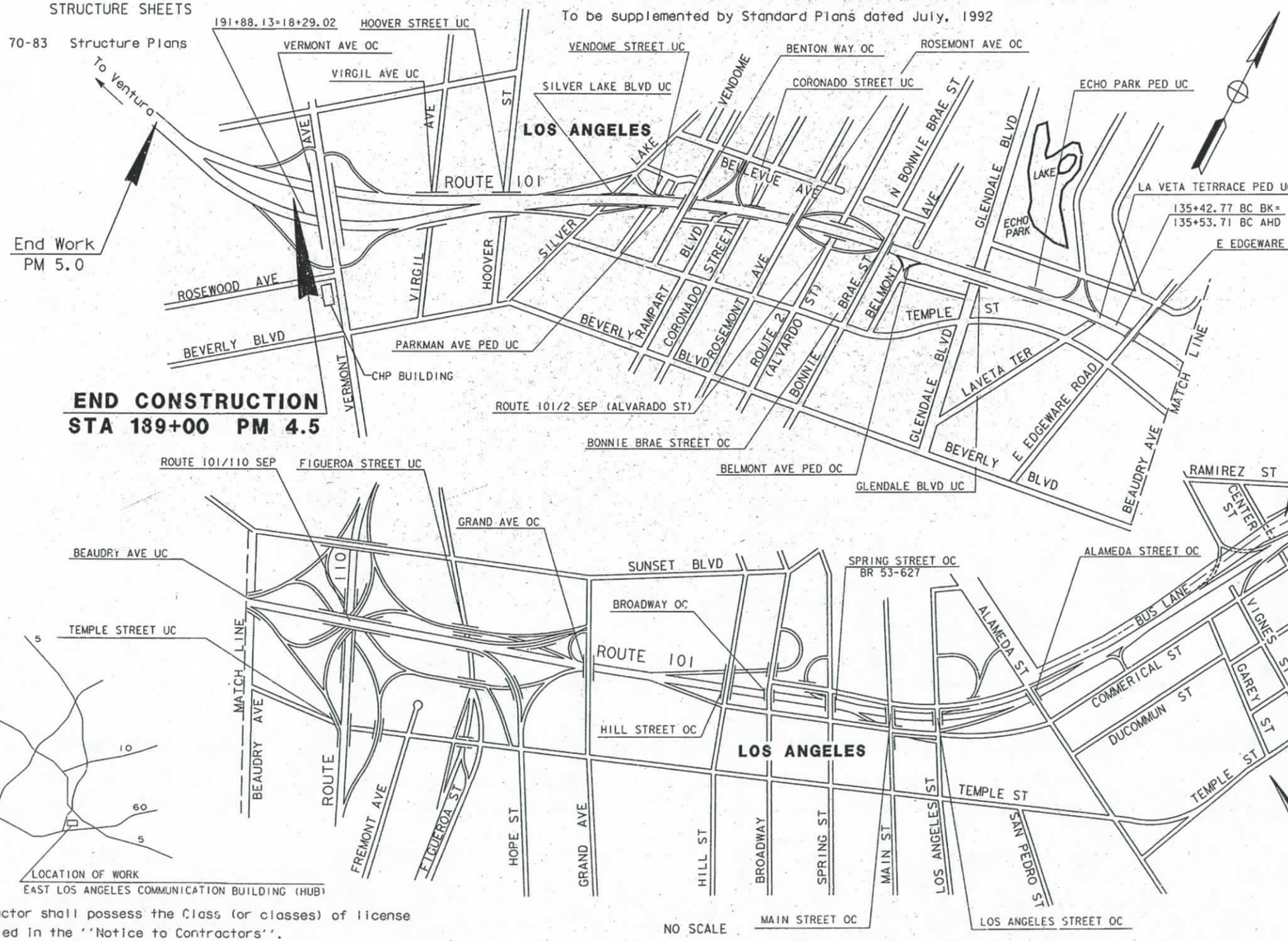
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN LOS ANGELES COUNTY
IN LOS ANGELES
AT VARIOUS LOCATIONS FROM
LOS ANGELES RIVER BRIDGE AND OVERHEAD
TO 0.1 MILE WEST OF VERMONT AVENUE OVERCROSSING

To be supplemented by Standard Plans dated July, 1992

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



The Contractor shall possess the Class (or classes) of license as specified in the ''Notice to Contractors''.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer:
Completion Date: 08/21/1998

Project Manager
Registered Civil Engineer

March 13, 1995
Plans Approval Date

REGISTERED PROFESSIONAL ENGINEER
PAT SULLIVAN
No. C30912
Exp. 3/31/96
CIVIL
STATE OF CALIFORNIA

PROJECT MANAGER	DATE	PROJECT ENGINEER	DATE	APPROVAL RECOMMENDED BY	DATE
PAT SULLIVAN		ALLEN CHEN		PATRICIA P. PEROVICH	

LAST REVISION 00-00-00 TIME PLOTTED => 21-MAR-1995 16:07

FORM DC-OE-93-PF (REV. 3/88)	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3	USERNAME => trjlmt DGN FILE => /usr/trjlmt/P2/71186ca01.dg	CU 07374 / EA 1186C1

Contract No. **07-1186C4**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	30	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

ALLEN CHEN
No. E-14106
Exp. 06-30-97
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES (FOR SHEETS E-2 THROUGH E-9):

[1] TRENCH CONDUIT IN SOIL.

[2] TRENCH CONDUIT IN CONCRETE.

[3] TRENCH CONDUIT IN ASPHALT.

~~[4] ATTACH CONDUIT TO STRUCTURE.~~ DELETED BY CCO #9

[5] JACK RIGID STEEL CONDUIT BENEATH ROADWAY.

[6] INSTALL MODEL 170 CONTROLLER INTERFACE IN THE CONTROLLER CABINET. SEE SHEET E-24 FOR DETAILS.

[7] INSTALL AN ADDITIONAL MODEL 170 CONTROLLER INTERFACE IN THE CONTROLLER CABINET, SEE SHEET E-24 FOR DETAILS.

GENERAL NOTES:

1. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL FACILITIES, THE CONTRACTOR SHALL GIVE 72 HOURS ADVANCE NOTICE IN WRITING TO THE ENGINEER.
2. SERVICE EQUIPMENT ENCLOSURE SHALL BE LOCATED 10' MINIMUM FROM THE POWER POLE OR VAULT.
3. ELECTRICAL SERVICE INSTALLATION SHALL MEET THE UTILITY COMPANY REQUIREMENTS SERVING IN THE LOCAL JURISDICTION.
4. TRENCH FOR CONDUIT INSTALLATION BETWEEN POWER POLE OR VAULT AND SERVICE ENCLOSURE SHALL BE LEFT OPEN FOR INSPECTION AND APPROVAL BY CONCERNED UTILITY COMPANY INSPECTOR BEFORE BACKFILL.
5. STENCIL CAMERA IDENTICATION NUMBER ON POLE IN 3" CHARACTERS 10 FEET ABOVE BASE. SEE SHEET K1.

ABBREVIATIONS:

CCR	CAMERA CONTROL RECEIVER
CCTV	CLOSED CIRCUIT TELEVISION
CH	CHANNEL
COMM	COMMUNICATION
DACCS	DIGITAL CROSS CONNECTION SWITCH
DEMUX	DEMULTIPLEXER
DSI OTU	DSI OPTICAL TRANSMISSION UNIT
E/O	ELECTRICAL TO OPTICAL
FDF	FIBER DISTRIBUTION FRAME
F/O, FO	FIBER OPTIC
FXO	FOREIGN EXCHANGE OFFICE
JKFD	JACKFIELD
MM	MILTIMODE
MMFO	MULTIMODE FIBER OPTIC CABLE
MOD	MODEM
MUX	MULTIPLEXER
NC	NORMALLY CLOSE
O/E	OPTICAL TO ELECTRICAL
OHS	OVERHEAD SIGN
OW	ORDER WIRE
RMS	RAMP METERING STATION
RX	RECEIVER
SM	SINGLEMODE
SMFO	SINGLEMODE FIBER OPTIC CABLE
T	TERMINATE
TX	TRANSMITTER
VDX	VIDEO DEMULTIPLEXER
VID	VIDEO
VMX	VIDEO MULTIPLEXER
VR	VIDEO RECEIVER
VX	VIDEO TRANSMITTER
4WTO	4 WIRE TRANSMISSION ONLY
2WFXS	2 WIRE FOREIGN EXCHANGE SERVICE
4WE&M	4 WIRE ANALOG WITH E&M SIGNALING

LEGEND:

	CCTV ASSEMBLY CAMERA AND POLE
	EXISTING CCTV ASSEMBLY CAMERA AND POLE
	NEW CCTV 334-TV CABINET
	EXISTING 334 CABINET
	334 CABINET
	SPLICE VAULT
	EXISTING SPLICE VAULT
	TELEPHONE BRIDGE
	EXISTING TELEPHONE BRIDGE
R	DUPLEX RECEPTACLE
	CIRCUIT BREAKER
	SURGE PROTECTOR
HT	THERMOSTATIC CONTROL
	RELAY CONTACT NC
F	FAN
L	INDICATOR LAMP
HT	RELAY COIL - HIGH TEMPERATURE
THERMO	ADJUSTABLE CALIBRATED THERMOSTAT
	EQUIPMENT GROUND
PP# xxx	POWER POLE NUMBER
HOxxx	CCTV IDENTIFICATION NUMBER: (HO = HOLLYWOOD FREEWAY) (xxx = POST MILE DESIGNATOR TO ONE DECIMAL PLACE)
x W	x-WIRE CIRCUIT
xP22	x-PAIR 22AWG CONDUCTORS

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

LEGEND AND NOTES

E-1

DATE	REVISED BY	DATE REVISED
5/94	PW	5/94 AC

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER: ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 00-00-00
TIME PLOTTED => 18-MAR-1995 14:49

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

USERNAME => tomd
DGN FILE => /usr/tomd/P2/71186cu01.dgn

CU 07396

EA 1186C1

NOTES (THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-2.
19 FOR DETAIL AND CONTINUATION, SEE SHEET E-18.

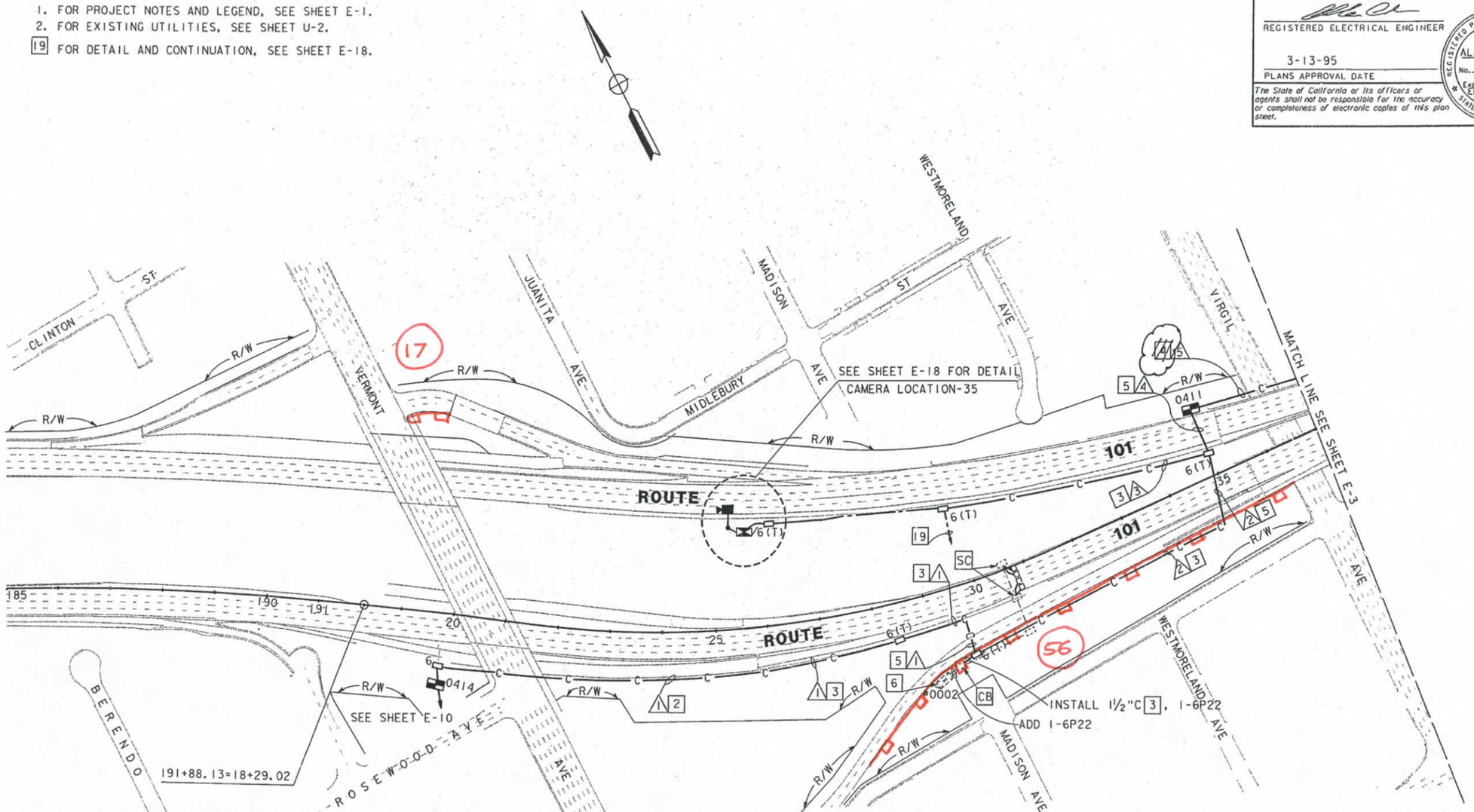
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	31	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

ALLEN CHEN No. 14106 Exp 6/30/97 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN 1	2	3	4	5
50P22 CABLE					1
6P22 CABLE		1	1	2	
2SMFO			1	1	
60SMFO	1	1		1	1
12SMFO	1	1		1	1
DLC					
INNERDUCT	1 1	1 1		1 1	1 1
CONDUIT SIZE	4"	4"	2"	3"*	4"

(* EXISTING TO BE REUSED)

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1"=100'

E-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: AL
CHECKED BY: AC

DATE	REVISED BY	DATE REVISED

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 14:34

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => tomd
DGN FILE => /usr/tomd/P2/71186cu02.dgn
CU 07396
EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	32	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

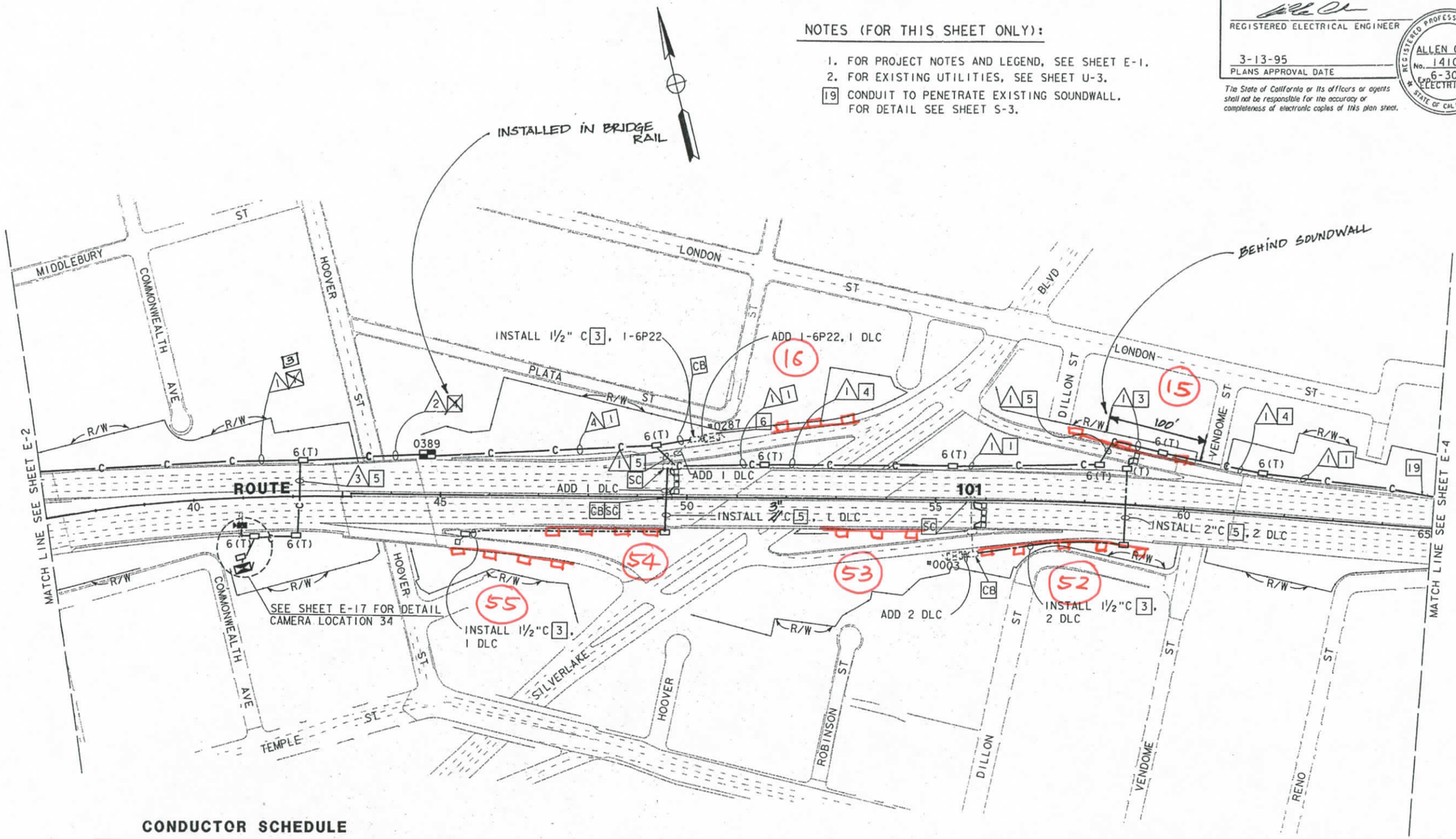
REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. 14106 — Exp. 6-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-3.

[19] CONDUIT TO PENETRATE EXISTING SOUNDWALL. FOR DETAIL SEE SHEET S-3.



CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN											
	1			2			3		4			
50P22 CABLE			1			1						1
6P22 CABLE						1		1				1
2SMFO						1		1				
60SMFO	1			1					1			
12SMFO		1			1					1		
#4 POWER CABLE												
DLC												
INNERDUCT	1	1		1	1				1	1		
CONDUIT SIZE	4"			4"			2"		4"			

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE : 1" = 100'

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

E-3

DATE	REVISED BY
5/94	AL
6/94	AC

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER: ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 11:53

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

USERNAME => COOK
DGN FILE => ZH3:[330004]71186CU03.DGN

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	33	83

REGISTERED ELECTRICAL ENGINEER

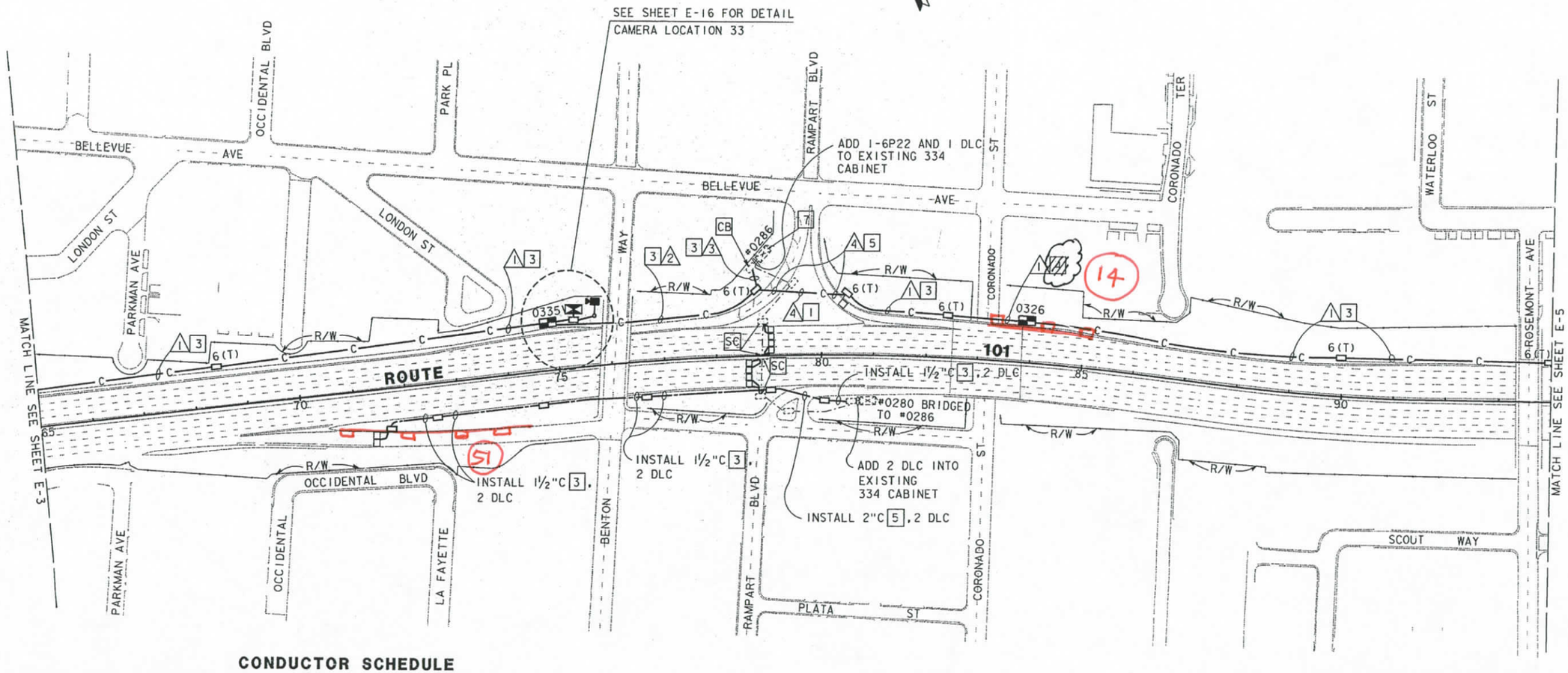
3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN No. 14106 Exp. 6/30/97 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-4.



CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN 1			CONDUCTOR RUN 2			CONDUCTOR RUN 3			CONDUCTOR RUN 4		
50P22 CABLE			1			1						1
6P22 CABLE						1		1				
2SMFO												
60SMFO	1			1						1		
12SMFO		1			1						1	
DLC								1				1
INNERDUCT	1	1		1	1					1	1	
CONDUIT SIZE	*3" & 4"			4"			2"			4"		

* EXISTING TO BE REUSED

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-4

DATE	REVISED BY
	DATE REVISED
AL	CALCULATED/ DESIGNED BY
AC	CHECKED BY

PROJECT ENGINEER: ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 11:53

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cu04.dg

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	34	83

REGISTERED ELECTRICAL ENGINEER

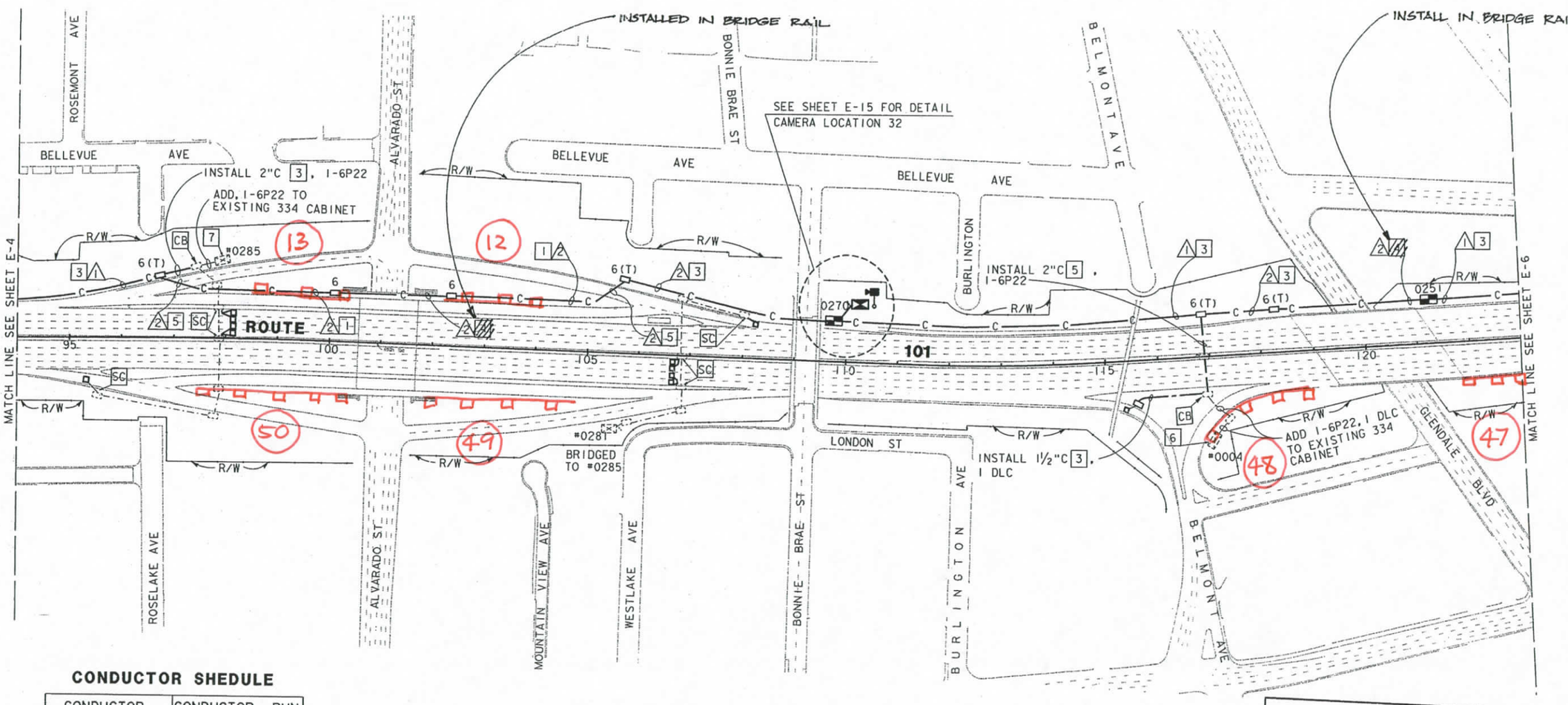
3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. 14106 — Exp. 6-30-97 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-5.



CONDUCTOR SHEDULE

CONDUCTOR TYPE	CONDUCTOR ⚠			RUN ⚠			RUN ⚠
50P22 CABLE			1			1	
6P22 CABLE						1	
2SMFO							
60SMFO	1			1			
12SMFO		1			1		
DLC							
INNERDUCT	1	1		1	1		
CONDUIT SIZE		4"			3" *		

* EXISTING TO BE REUSED

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1" = 100'

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER
Caltrans IVHS DEVELOPMENT	ALLEN CHEN

CALCULATED/ DESIGNED BY	DATE	REVISED BY
AL	5/94	
CHECKED BY	DATE	REVISED
AC	6/94	

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 11:54

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cu05.dg

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	35	83

REGISTERED ELECTRICAL ENGINEER

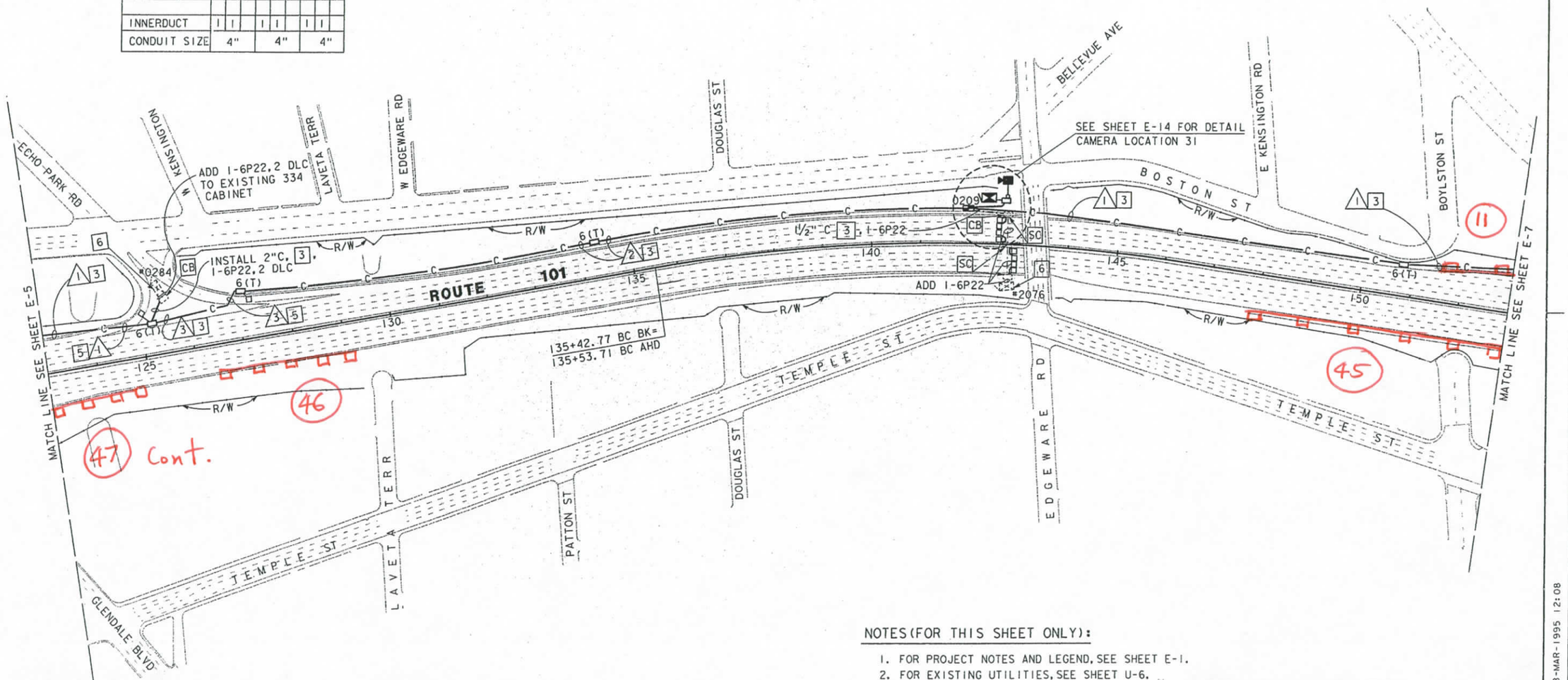
3-13-95
PLANS APPROVAL DATE

ALLEN CHEN
No. 14106
Exp. 6/30/97
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN 1		CONDUCTOR RUN 2		CONDUCTOR RUN 3	
50P22 CABLE		1		1		1
6P22 CABLE				1		1
2SMFO						
60SMFO	1		1		1	
12SMFO		1		1		1
DLC						1
INNERDUCT	1	1	1	1	1	1
CONDUIT SIZE	4"		4"		4"	



NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-6.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

SCALE: 1"=100'

E-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

PROJECT ENGINEER: ALLEN CHEN

	CALCULATED/ DESIGNED BY	DATE
REVISED BY	AL	5/94
DATE REVISED	AC	6/94
	CHECKED BY	

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 12:08

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/7;186cu06.dg

CU 07396

EA 1186C1

NOTE (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-7.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	36	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

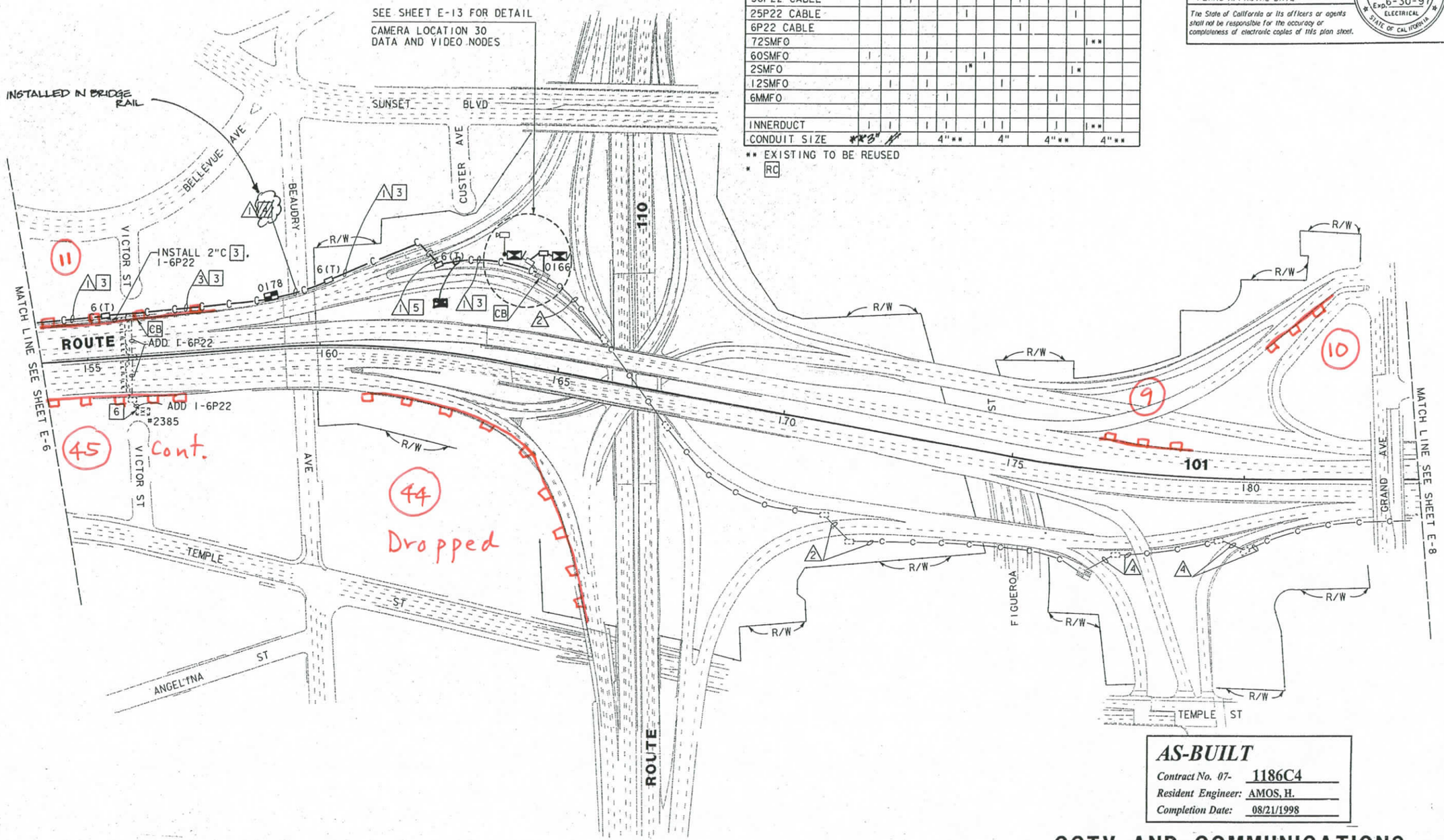
REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. 14106 — Exp 6-30-97 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN 1	2	3	4
50P22 CABLE	1		1	
25P22 CABLE		1		1
6P22 CABLE			1	
72SMFO				1 **
60SMFO	1	1		
2SMFO		1*		1*
12SMFO	1	1	1	
6MMFO		1		1
INNERDUCT	1 1	1 1	1 1	1 1 **
CONDUIT SIZE	**3"	4"**	4"	4"** 4"**

** EXISTING TO BE REUSED
* RC



AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS ROUTING

SCALE: 1"=100'

E-7

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

DATE	REVISED BY	DATE REVISED
5/94	AL	6/94 AC

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER: ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 08-31-94
TIME PLOTTED => 18-MAR-1995 12:09

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cu07.dg

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.:/4.5	37	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

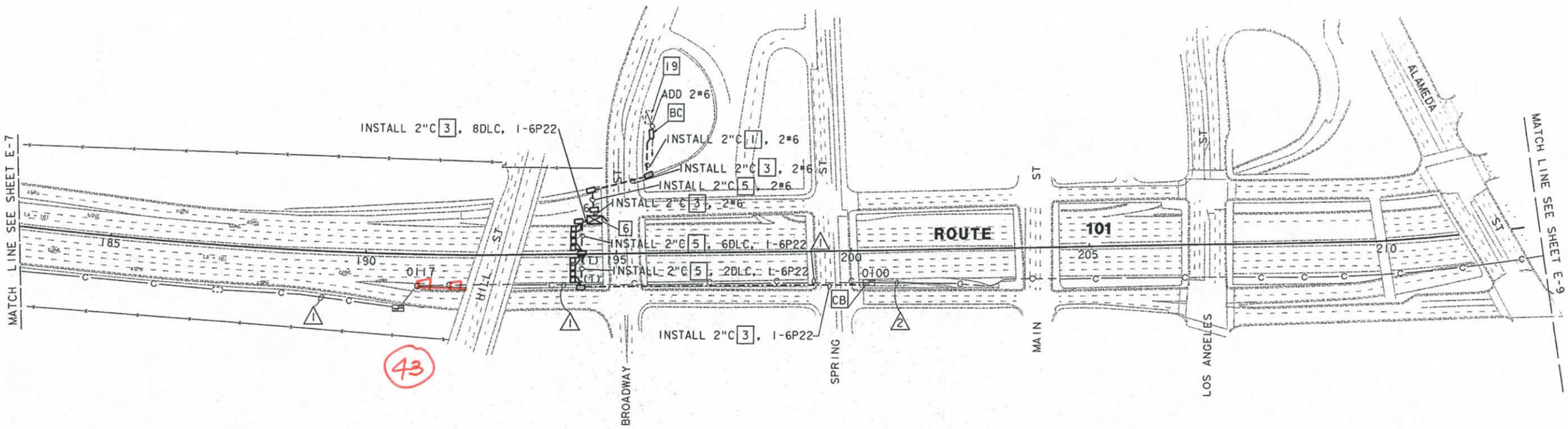
REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. 14106 — Exp. 6-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

	DATE	REVISED BY
CALCULATED/ DESIGNED BY	AL	5/94
CHECKED BY	AC	6/94
		DATE REVISED

PROJECT ENGINEER
ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **IVHS DEVELOPMENT**



(43)

(42) • No As-built plans
• No room for parking → No field check

(41) • No As-built plans
• Need to modify curb.
No impact

(40) • No As-built plans
No impact

CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN ①	CONDUCTOR RUN ②
50P22 CABLE		
25P22 CABLE	1	1**
6P22 CABLE		
72SMFO	1**	1**
60SMFO		
6MMFO	1	1**
2SMFO	1*	
INNERDUCT	1 | 1**	1** | 1**
CONDUIT SIZE	4** | 4**	

**-EXISTING TO BE REUSED.
*- RC

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-8.

19 ADD A 120V-1P-30 AMP CIRCUIT BREAKER TO EXISTING IRRIGATION SERVICE (#433640) FOR COUNT STATION.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATION SYSTEM ROUTING AND COUNT STATION

SCALE: 1" = 100'

E-8

LAST REVISION 08-19-94
TIME PLOTTED => 18-MAR-1995 11:41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	38	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. 14106 — Exp. 6-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

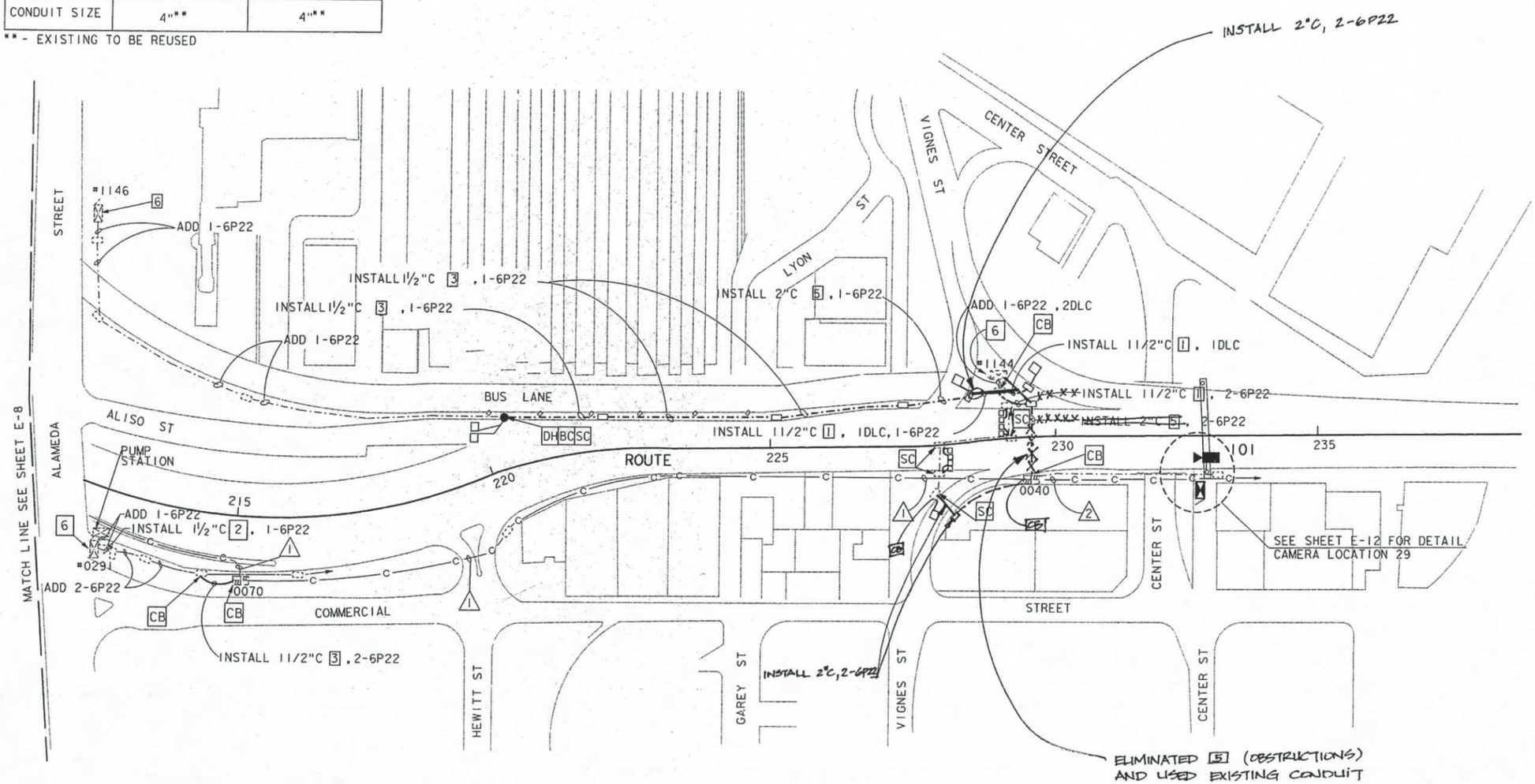
CONDUCTOR SCHEDULE

CONDUCTOR TYPE	CONDUCTOR RUN 1			CONDUCTOR RUN 2		
25P22 CABLE			1**			
6P22 CABLE						
72SMFO	1**			1**		
6MMFO		1**				
INNERDUCT	1**	1**		1**	1**	
CONDUIT SIZE	4"**			4"**		

** - EXISTING TO BE REUSED

NOTES (FOR THIS SHEET ONLY):

1. FOR PROJECT NOTES AND LEGEND, SEE SHEET E-1.
2. FOR EXISTING UTILITIES, SEE SHEET U-8.



AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1"=100'

E-9

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: AL
CHECKED BY: AC
DATE REVISED: 8/94
REVISED BY: DATE 8/94

LAST REVISION 00-00-00
TIME PLOTTED => 18-MAR-1995 14:25

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

USERNAME => maria
DGN FILE => /usr/maria/P5/71186cu09.dgn

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	39	83

REGISTERED ELECTRICAL ENGINEER

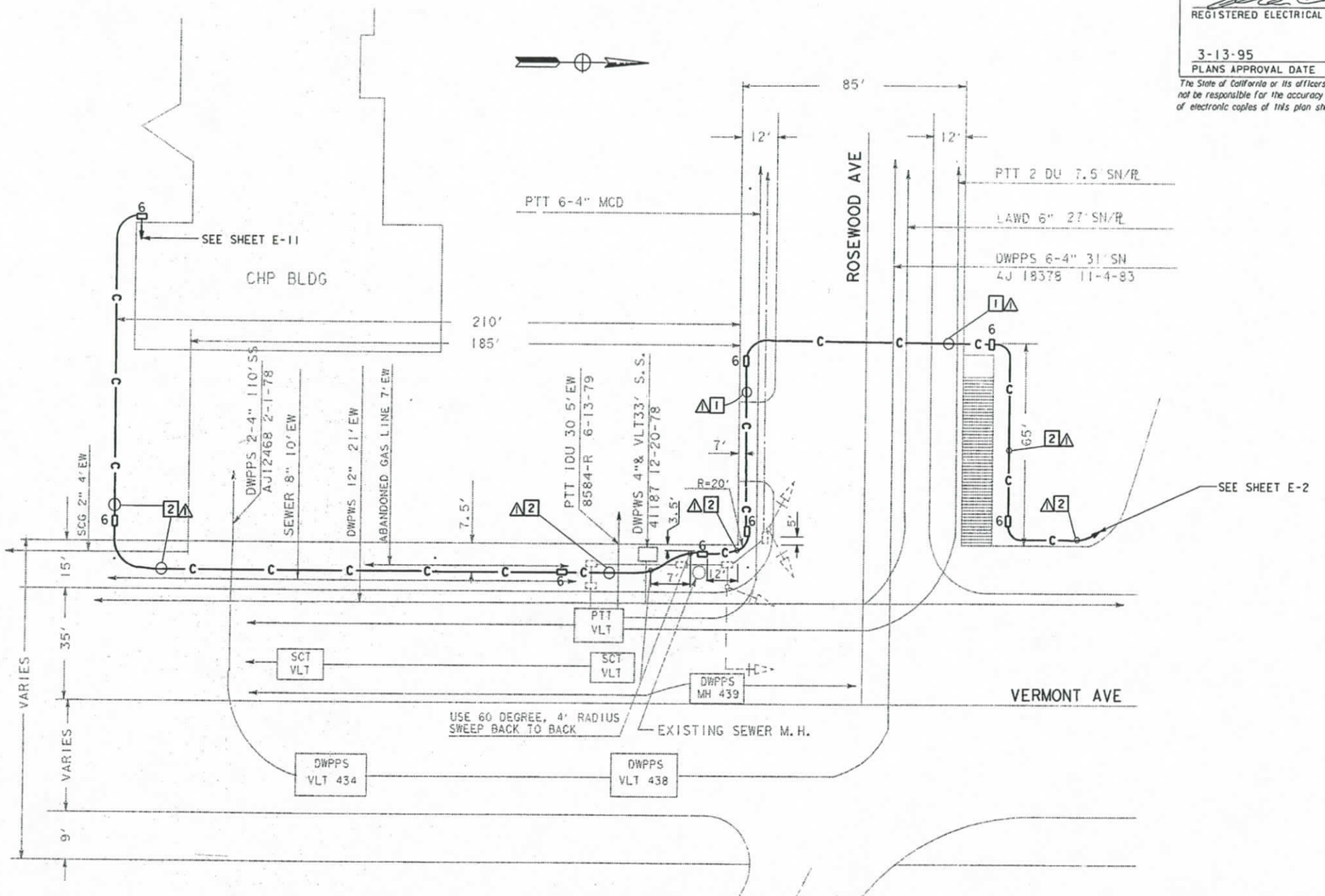
3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUCTOR SCHEDULE

	⚠
12 SMFO CABLE	1
INNERDUCT	1
CONDUIT SIZE	3"



NOTES (THIS SHEET ONLY):

1. JACK 3" CONDUIT BENEATH ROADWAY 30" DEEP.
2. TRENCH AND INSTALL 3" CONDUIT 30" DEEP.
3. ALL CONDUIT SWEEP SHOWN ON THIS PLAN SHALL BE 3' RADIUS MINIMUM UNLESS OTHERWISE AS INDICATED.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1"=20'

E-10

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

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

USERNAME => marla
DGN FILE => /usr/marla/P5/71186cu10.dgn

CU 07396

EA 1186C1

DATE	REVISED BY
5/94	DATE REVISED
PW	AC

CALCULATED/ DESIGNED BY
CHECKED BY

PROJECT ENGINEER
ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 00-00-00

TIME PLOTTED => 18-MAR-1995 14:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	40	83

REGISTERED ELECTRICAL ENGINEER

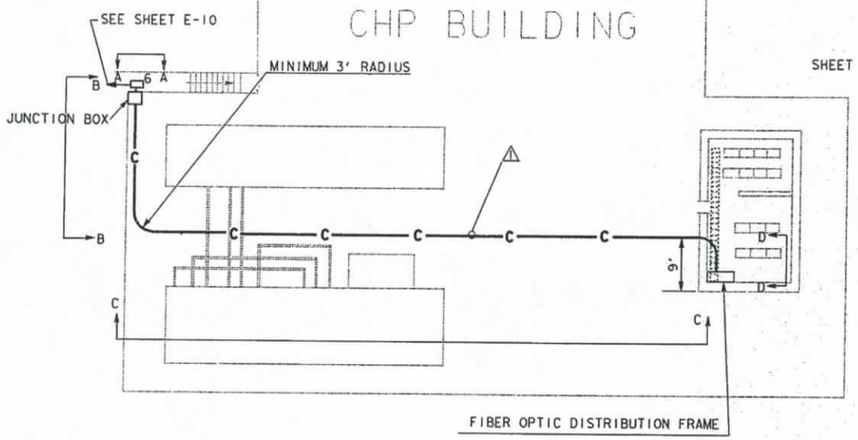
3-13-95
PLANS APPROVAL DATE

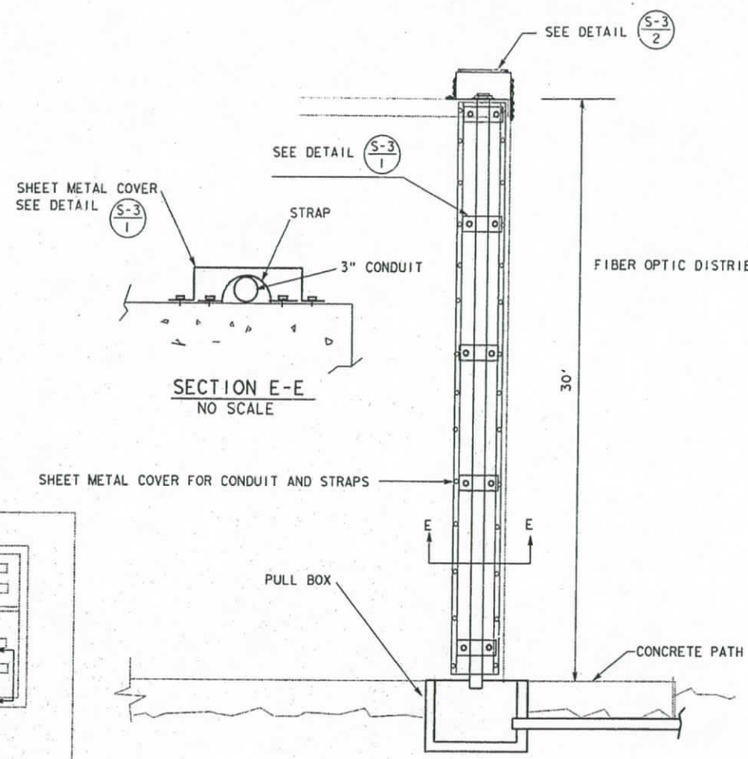
REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUCTOR SCHEDULE

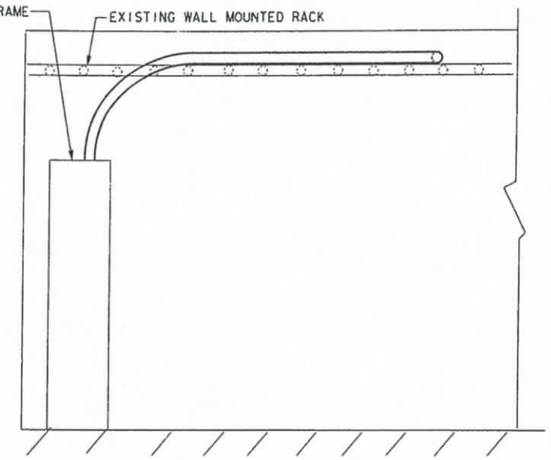
	⚠
12 SMFO CABLE	1
INNERDUCT	1
CONDUIT SIZE	3"



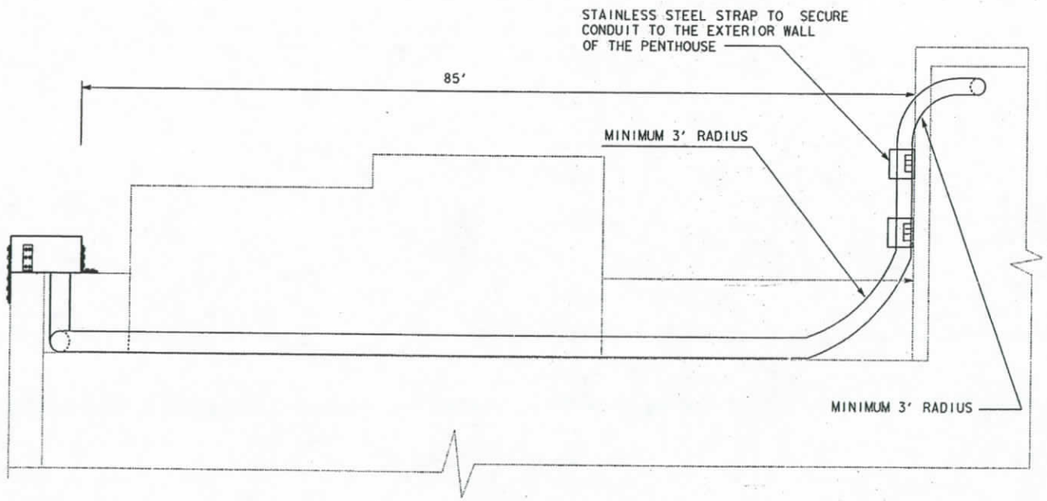


SECTION E-E
NO SCALE

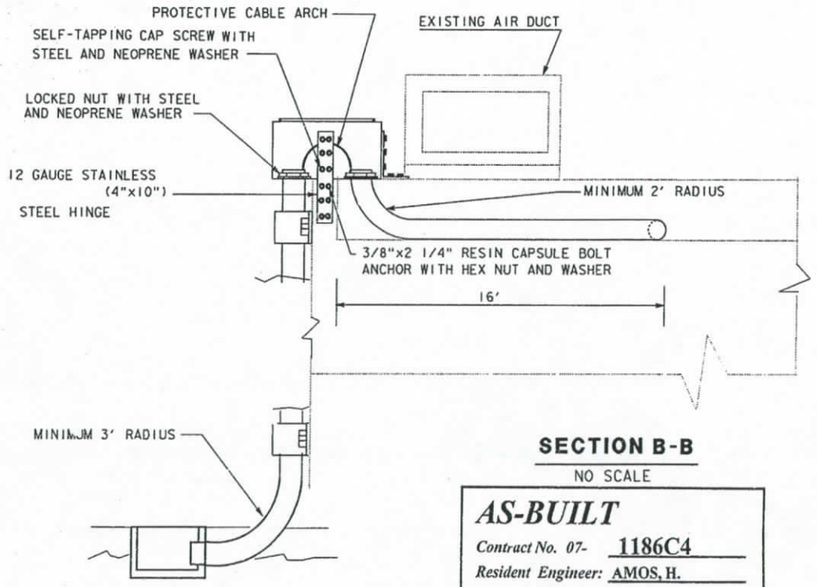
SECTION A-A
NO SCALE



SECTION D-D
NO SCALE



SECTION C-C
NO SCALE



SECTION B-B
NO SCALE

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV AND COMMUNICATION SYSTEM ROUTING

E-11

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: PW 5/94
CHECKED BY: AC 5/94
REVISED BY / DATE REVISED

LAST REVISION 00-00-00
TIME PLOTTED => 18-MAR-1995 14:25

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => maria
DGN FILE => /usr/maria/P5/71186cull.dgn
CU 07396
EA 1186C1

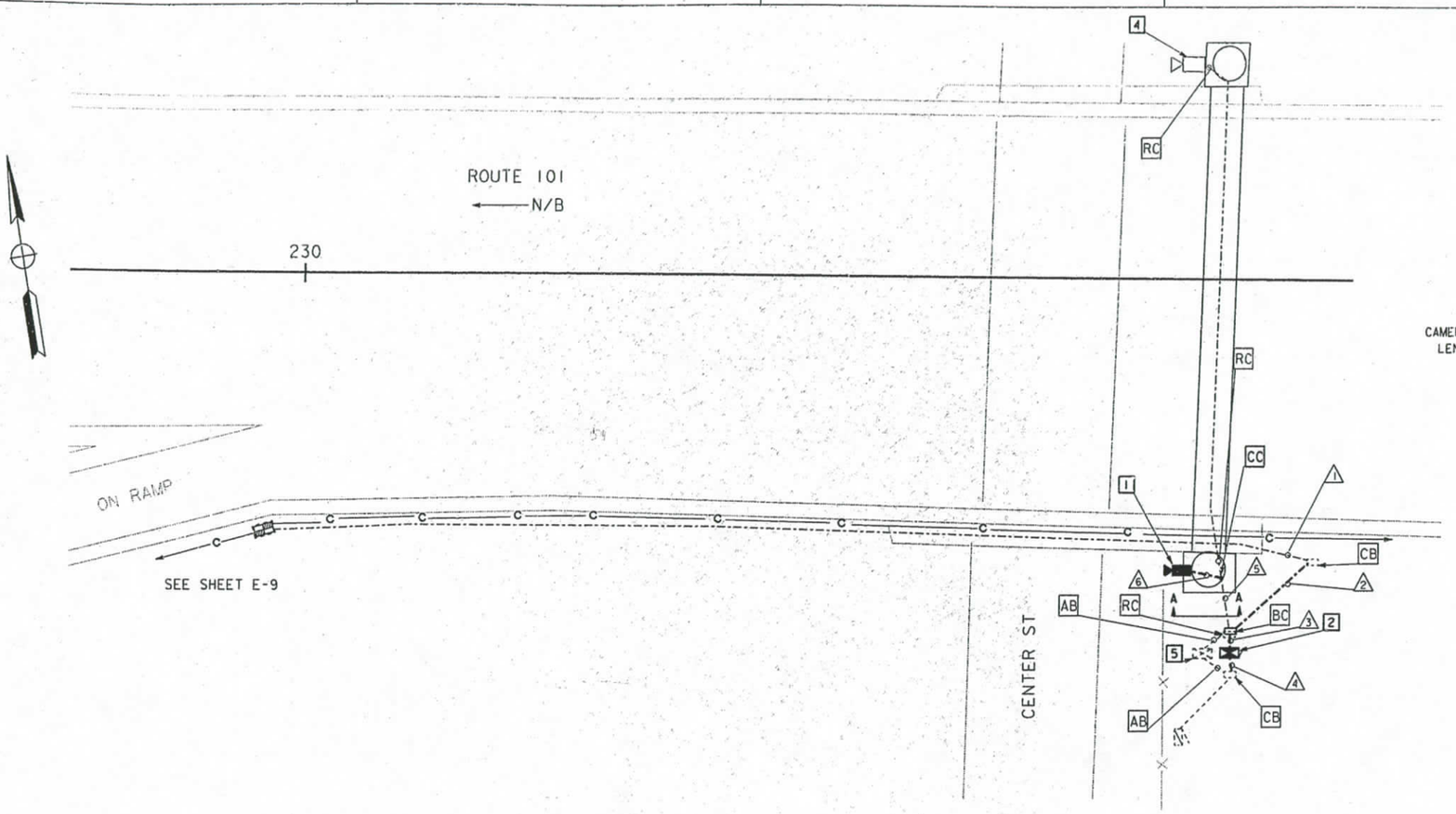
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	41	83

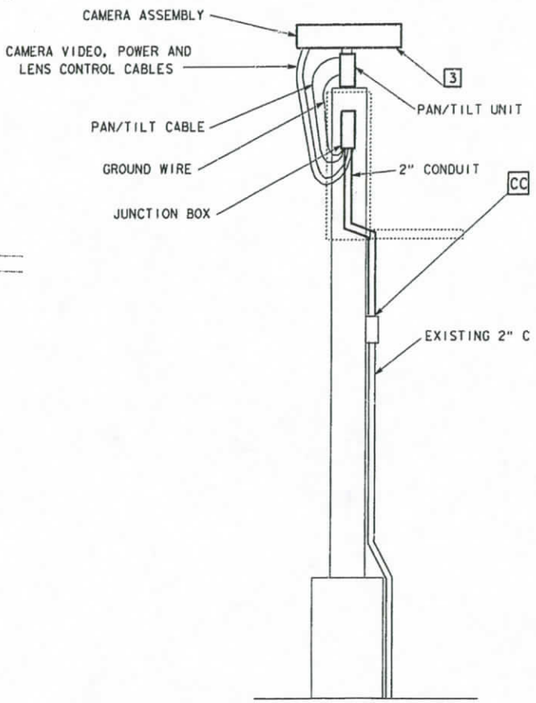
REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — EXP. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.





SECTION A-A

NO SCALE

CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6
CAMERA VIDEO INTERFACE CABLE			1		1	1
PAN/TILT CONTROL CABLE			1		1	1
LENS CONTROL CABLE			1		1	1
CAMERA POWER CABLE			1		1	1
CAMERA GROUND CABLE			1		1	1
2 MULTIMODE FIBER OPTIC CABLE	1	1	1			
6P22 COMMUNICATION DIST. CABLE	1	1	1			
#10 POWER CABLE				2		
CONDUIT SIZE	2"(E)	3"	2-3"	2"	2"(E)	2"

(E): EXISTING CONDUIT TO BE REUSED

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. FOR CAMERA INSTALLATION DIRECT ON OHS STRUCTURE, SEE CCTV POLE AND MOUNTING DETAILS SHEET E-29.
4. RS EXISTING CAMERA ASSEMBLY AND PAN/TILT UNIT.
5. RS EXISTING CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER.
   RC EXISTING CABINET, EQUIPMENT NOT INDICATED IN THIS PLAN, AND CABINET FOUNDATION.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA (LOCATION HO 004)

SCALE: 1" = 20'

E-12

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
IVHS DEVELOPMENT

	CALCULATED/ DESIGNED	PW	5/94	REVISED BY
PROJECT ENGINEER	CHECKED BY	AC	5/94	DATE REVISED
ALLEN CHEN				

LAST REVISION 00-00-00
TIME PLOTTED => 21-MAR-1995 15:25

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

USERNAME => trjlmt
DGN FILE => /usr/trjlmt/P2/71186cu12.dg

CU 07396

EA 1186C1

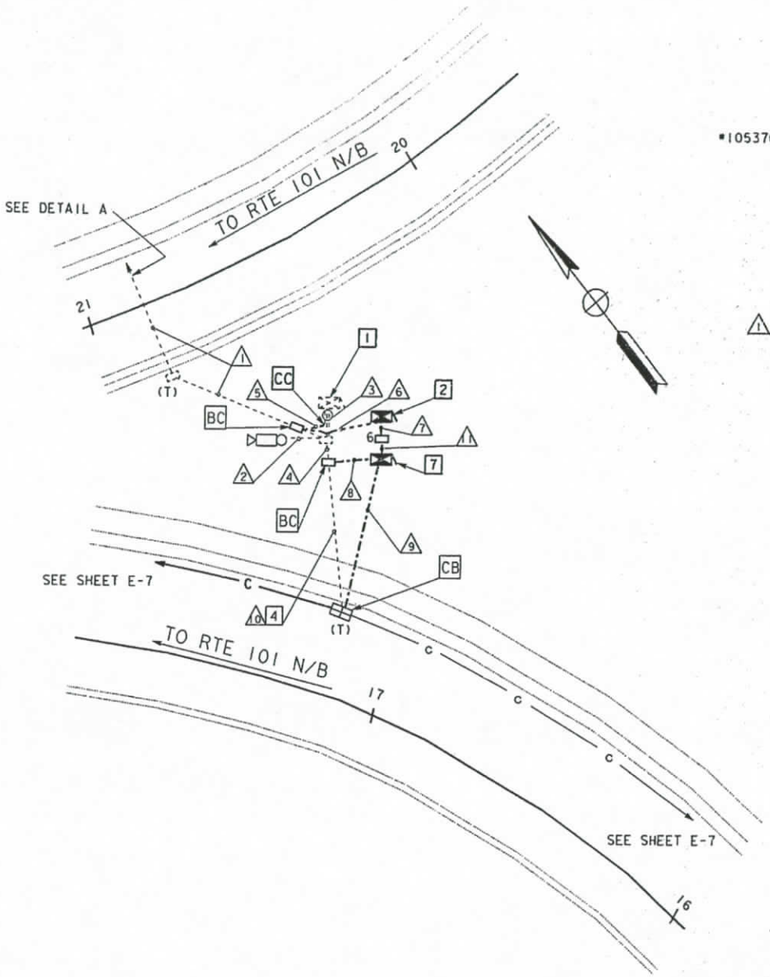
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	42	83

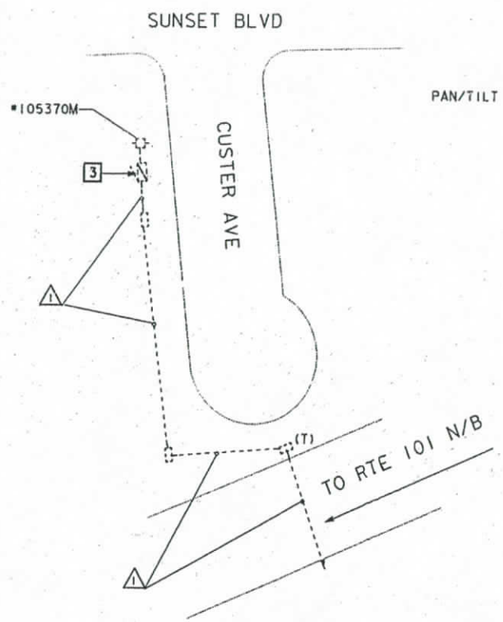
REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

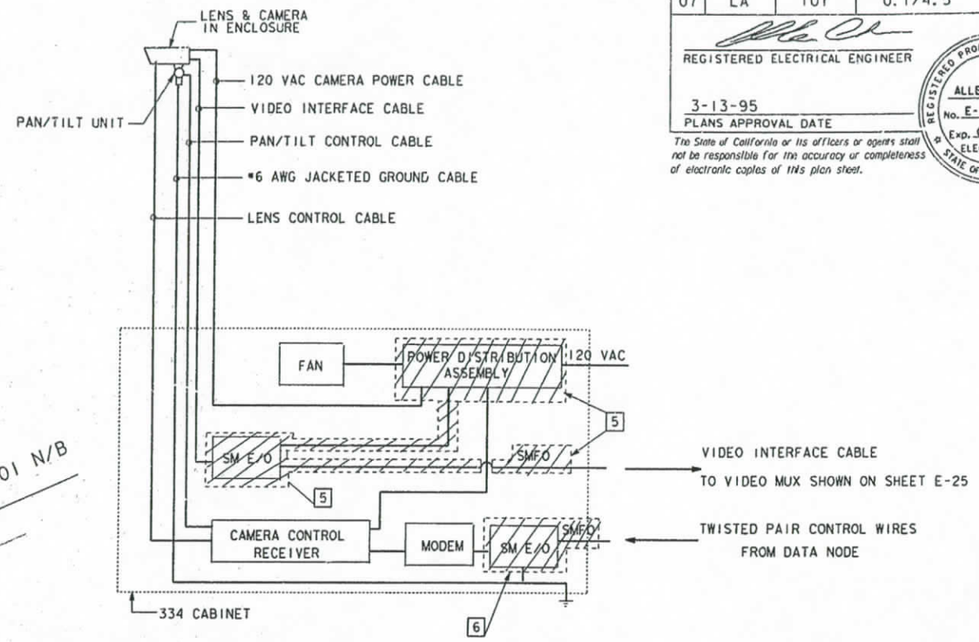
ALLEN CHEN No. E-14106 Exp. 06-30-97 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.





DETAIL A
NO SCALE



DETAIL B
NO SCALE

NOTES (THIS SHEET ONLY):

1. INSTALL A 16-CHANNEL VIDEO MULTIPLEXER AND 6 VIDEO RECEIVERS IN VIDEO CABINET. FOR DETAILS ON ALL EQUIPMENT LAYOUT, WIRING, AND POWER DISTRIBUTION ASSEMBLY UPGRADE, SEE DETAIL-B THIS SHEET, E-25 AND E-26. INCLUDED IN BID ITEM "EQUIPMENT AT VIDEO NODE".
2. INSTALL STATE-FURNISHED TYPE 334 CABINET. INSTALL ONE D4 CHANNEL BANK IN DATA NODE CABINET. SEE E-26 FOR DETAIL ON ALL EQUIPMENT LAYOUT. INCLUDED IN BID ITEM "EQUIPMENT AT DATA NODE".
3. USE EXISTING 120V-1P-30AMP CCTV CAMERA CIRCUIT BREAKER FOR VIDEO NODE. ADD A METERED 120V-1P-30AMP CIRCUIT BREAKER FOR DATA NODE AND A METERED 120V-1P-30AMP CIRCUIT BREAKER FOR CABLE NODE IN EXISTING TYPE 111-BF SERVICE CABINET. THE DISTANCE OF EXISTING SERVICE TO VIDEO AND DATA NODES IS APPROXIMATELY 260'.
4. RC EXISTING 2SMFO CABLE.
5. RS EXISTING EQUIPMENT AS SHOWN. CONNECT A VIDEO INTERFACE CABLE TO VIDEO MUX AND MATCH EXISTING BNC CONNECTOR INSIDE VIDEO NODE CABINET, SEE E-25 FOR DETAILS. INSTALL NEW POWER DISTRIBUTION ASSEMBLY SHOWN ON SHEET E-26.
6. RS EXISTING EQUIPMENT AS SHOWN. CONNECT TWISTED PAIR CONTROL WIRES FROM DATA NODE TO EXISTING MODEM INSIDE CAMERA CONTROL CABINET.
7. INSTALL A FIBER DISTRIBUTION FRAME IN CABLE NODE (STATE-FURNISHED TYPE 334 CABINET).

CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6	7	8	9	10	11
CAMERA VIDEO INTERFACE CABLE		1(E)	1(E)								
PAN/TILT CONTROL CABLE		1(E)	1(E)								
LENS CONTROL CABLE		1(E)	1(E)								
CAMERA POWER CABLE		1(E)	1(E)								
CAMERA GROUND CABLE		1(E)	1(E)								
50P22 CABLE							1		1		1
25P22 CABLE							1		1		1
60 SMFO									2		
SMFO BREAK OUT CABLE			2	2			8	2			8
12SMFO CABLE			1	1				1	2		
6MMFO CABLE			1	1				1	1		
6P22 COMMUNICATION DIST. CABLE			1	1			1	1			1
#4 POWER CABLE	2(E), 4		2(E)		2(E)	4	2				2
CONDUIT SIZE	2"(E)	2-2"(E)	3-2"(E)	2"(E)	2"	2"	2-3"	2"	4"	2"(E)	4"

(E): EXISTING TO BE REUSED

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

EQUIPMENT AT DATA NODE, EQUIPMENT AT VIDEO NODE, AND MODIFY CCTV CAMERA (LOCATION HO 017)

SCALE: 1" = 20'

E-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: PW — DATE 5/94 — REVISED BY
CHECKED BY: AC — 5/94 — DATE REVISED

LAST REVISION 00-00-00
TIME PLOTTED => 21-MAR-1995 15:25

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => trjlmt
DGN FILE => /usr/trjlmt/P2/71186cu13.dg
CU 07396
EA 1186C1

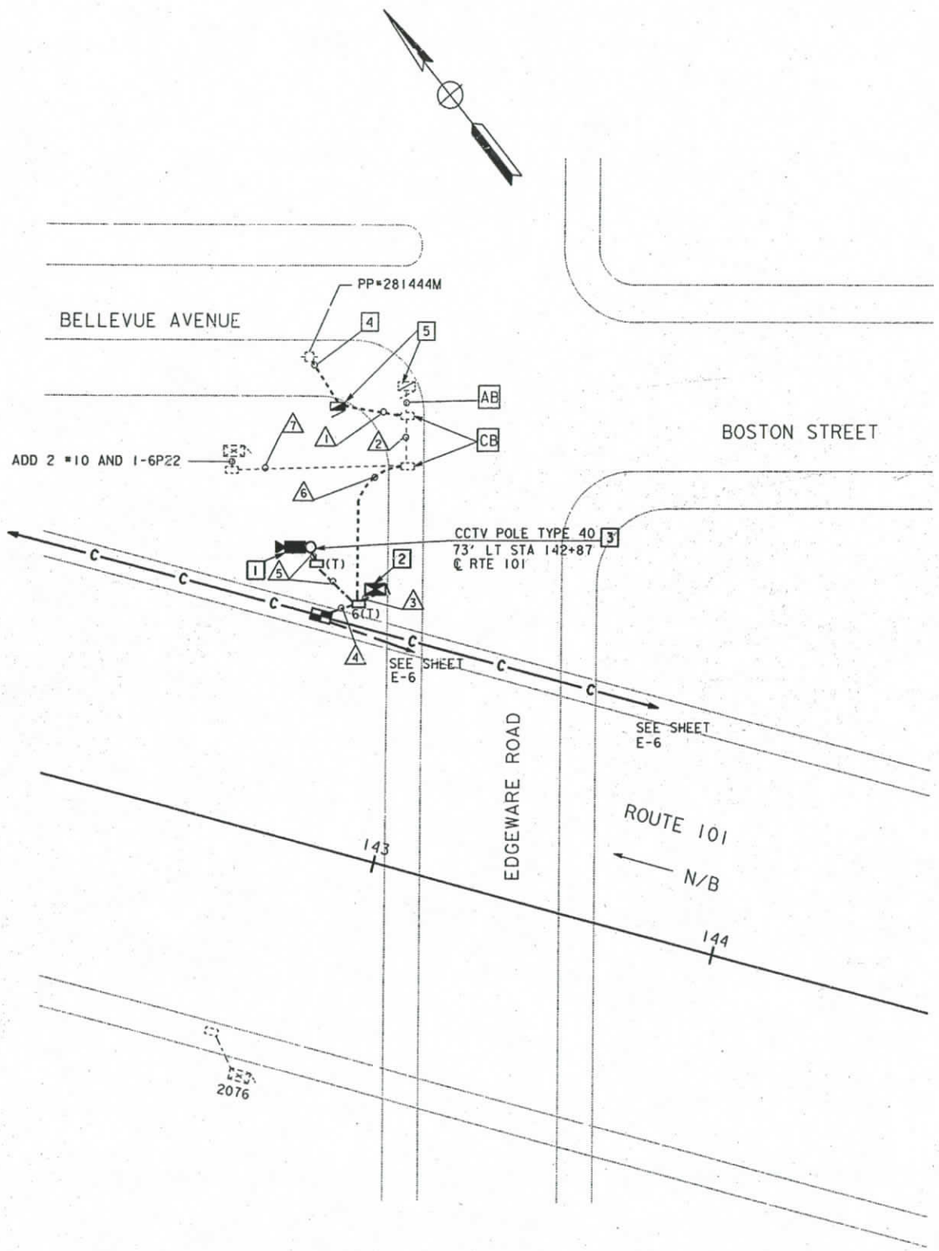
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	43	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6	7
CAMERA VIDEO INTERFACE CABLE			1		1		
PAN/TILT CONTROL CABLE			1		1		
LENS CONTROL CABLE			1		1		
CAMERA POWER CABLE			1		1		
CAMERA GROUND CABLE			1		1		
2 SINGLEMODE FIBER OPTIC CABLE			1	1			
6P22 COMMUNICATION DIST CABLE			1	2		1	1
#10 POWER CABLE	2	2					2
#8 POWER CABLE	2	2	2			2	
CONDUIT SIZE	2"	2"(E)	2-3"	2"	2-2"	2"	2"(E)

(E): EXISTING CONDUIT TO BE REUSED

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. INSTALL TYPE 40 CCTV POLE. FOR INSTALLATION AND MOUNTING DETAILS, SEE POLE MOUNT DETAIL PLAN SHEET E-28.
4. INSTALL TYPE 'H' RISER AND 3" CONDUIT. CONDUCTORS BY OTHERS.
5. RC EXISTING SERVICE (ALREADY DISCONNECTED). INSTALL A 120/240V, 3 WIRE SINGLE PHASE 100 AMP TYPE III-BF SERVICE EQUIPMENT ENCLOSURE WITH 100 AMP MAIN BREAKER, A METERED 120-1P-30 AMP CIRCUIT BREAKER FOR CCTV 334 CABINET, A 120-1P-30 AMP CIRCUIT BREAKER FOR COUNT STATIONS.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA
(LOCATION HO 021)

SCALE: 1" = 20'

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

E-14

DATE	REVISED BY	DATE REVISED
5/94	PW	5/94 AC

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **IVHS DEVELOPMENT**

LAST REVISION 00-00-00
TIME PLOTTED => 20-MAR-1995 09:56

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

USERNAME => jimt
DGN FILE => /usr/jimt/P0/71186cu14.dgn

CU07396

EA1186C1

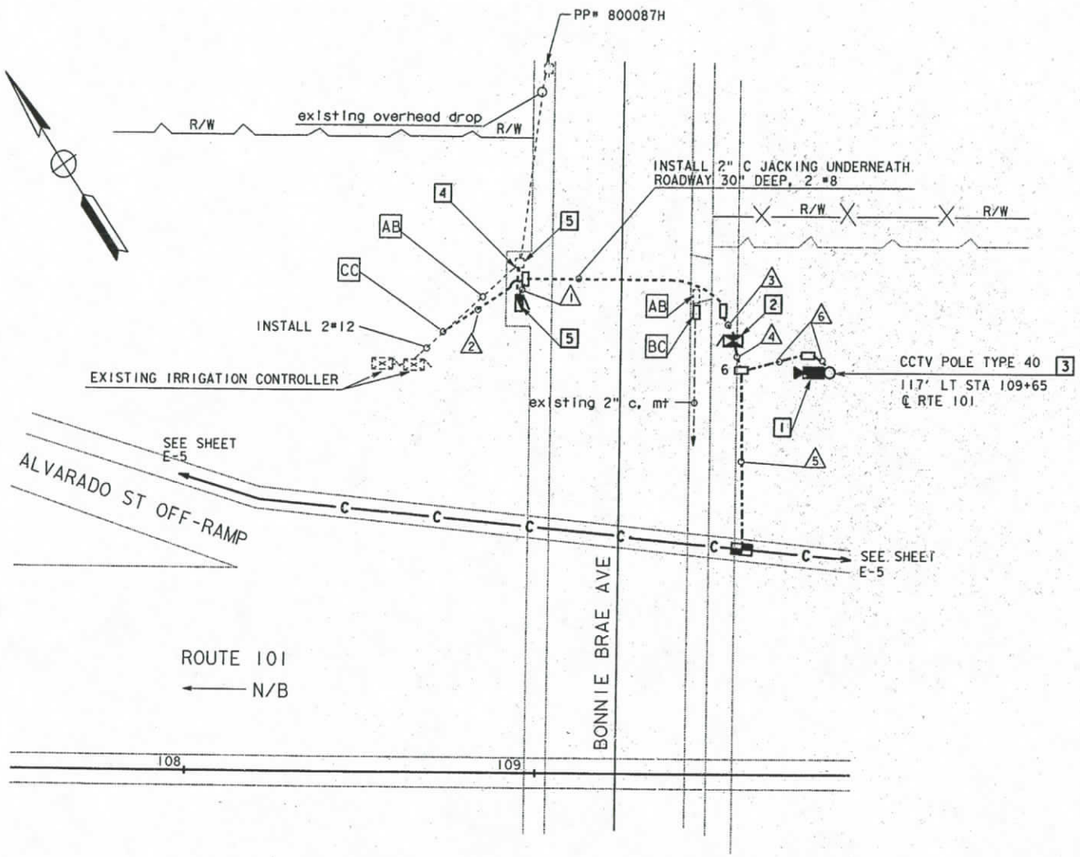
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	44	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
ALLEN CHEN
No. E-14106
Exp. 06-30-97
ELECTRICAL
STATE OF CALIFORNIA



CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6
CAMERA VIDEO INTERFACE CABLE				1		1
PAN/TILT CONTROL CABLE				1		1
LENS CONTROL CABLE				1		1
CAMERA POWER CABLE				1		1
CAMERA GROUND CABLE				1		1
2 SINGLEMODE FIBER OPTIC CABLE				1	1	
6P22 COMMUNICATION DIST. CABLE				1	1	
#12 POWER CABLE	2	2				
#8 POWER CABLE	2		2			
CONDUIT SIZE	2"	2"	2"	2-3"	2"	2-2"

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. INSTALL TYPE 40 CCTV POLE. FOR INSTALLATION AND MOUNTING DETAILS, SEE POLE MOUNT DETAIL PLAN SHEET E-28.
4. INSTALL TYPE 'H' RISER AND 3" CONDUIT. CONDUCTORS BY OTHERS.
5. RC EXISTING 120/240V POLE-MOUNTED SERVICE FOR IRRIGATION. INSTALL A 120/240V, 3 WIRE, SINGLE PHASE, 100 AMP TYPE III-BF SERVICE EQUIPMENT ENCLOSURE WITH 100 AMP MAIN BREAKER, A METERED 120-1P-30 AMP CIRCUIT BREAKER FOR 334 CCTV CABINET, A 120-1P-20 AMP CIRCUIT BREAKER FOR IRRIGATION.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA (LOCATION HO 027)
SCALE: 1" = 20'

E-15

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: PW DATE 5/94
CHECKED BY: AC 5/94
REVISED BY
DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cu15.dg
CU07396
EA1186C1
LAST REVISION 00-00-00
TIME PLOTTED => 20-MAR-1995 06:30

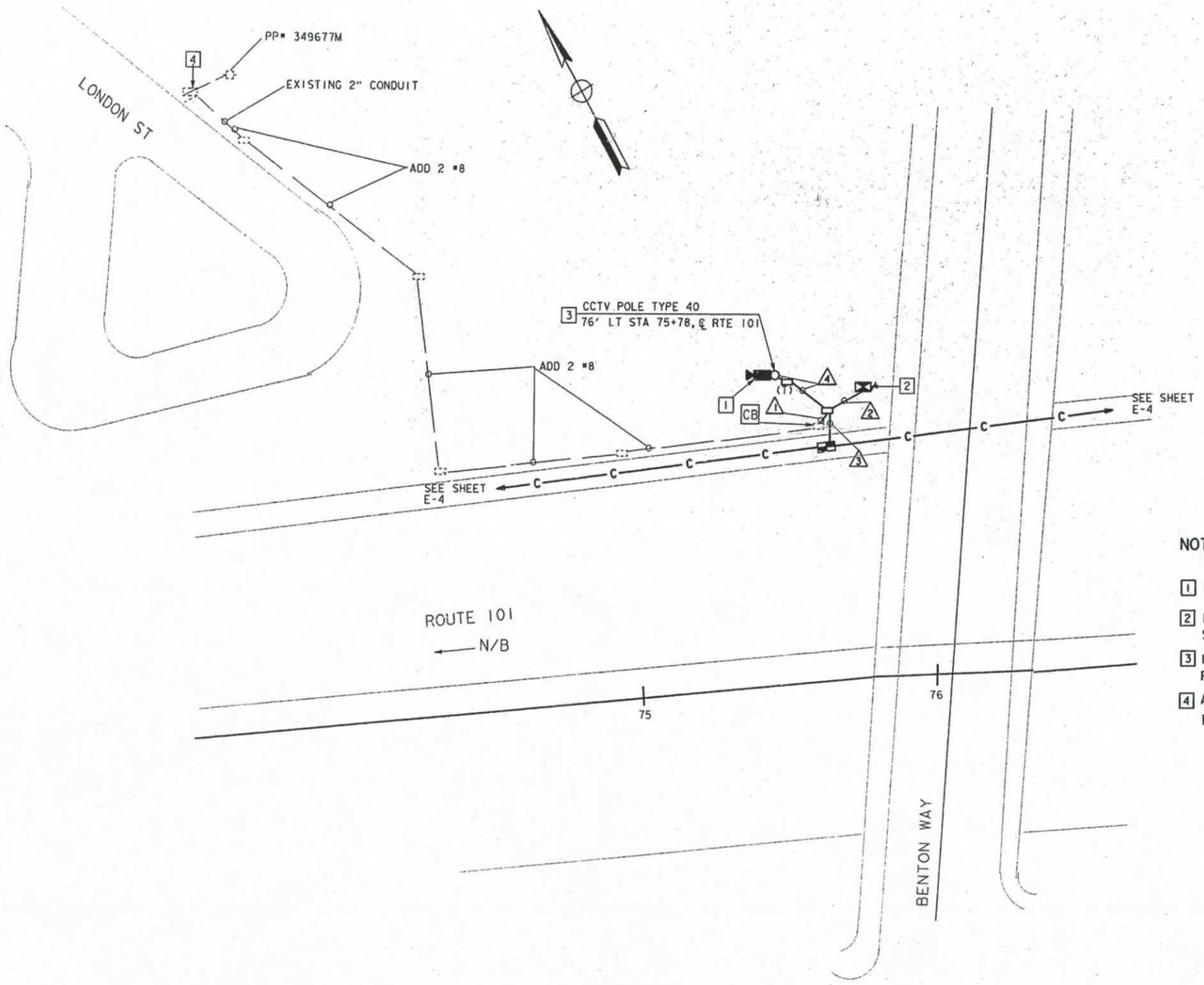
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	45	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4
CAMERA VIDEO INTERFACE CABLE		1		1
PAN/TILT CONTROL CABLE		1		1
LENS CONTROL CABLE		1		1
CAMERA POWER CABLE		1		1
CAMERA GROUND CABLE		1		1
2 SINGLEMODE FIBER OPTIC CABLE		1	1	
6P22 COMMUNICATION DIST. CABLE		1	1	
#8 POWER CABLE	2	2		
CONDUIT SIZE	2"	2-3"	2"	2-2"

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. INSTALL TYPE 40 CCTV POLE. FOR INSTALLATION AND MOUNTING DETAILS, SEE POLE MOUNT DETAIL PLAN SHEET E-28.
4. ADD A 120-1P-30 AMP CIRCUIT BREAKER TO EXISTING TYPE III-BF SERVICE EQUIPMENT ENCLOSURE FOR CCTV 334 CABINET.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA (LOCATION HO 033)

SCALE: 1" = 20'

E-16

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROJECT ENGINEER: ALLEN CHEN
IVHS DEVELOPMENT

	DATE	REVISED BY
CALCULATED/DESIGNED BY	PW 5/94	
CHECKED BY	AC 5/94	DATE REVISED

LAST REVISION 00-00-00 TIME PLOTTED => 20-MAR-1995 06:31

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cu16.dg

CU 07396

EA 1186C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	46	83

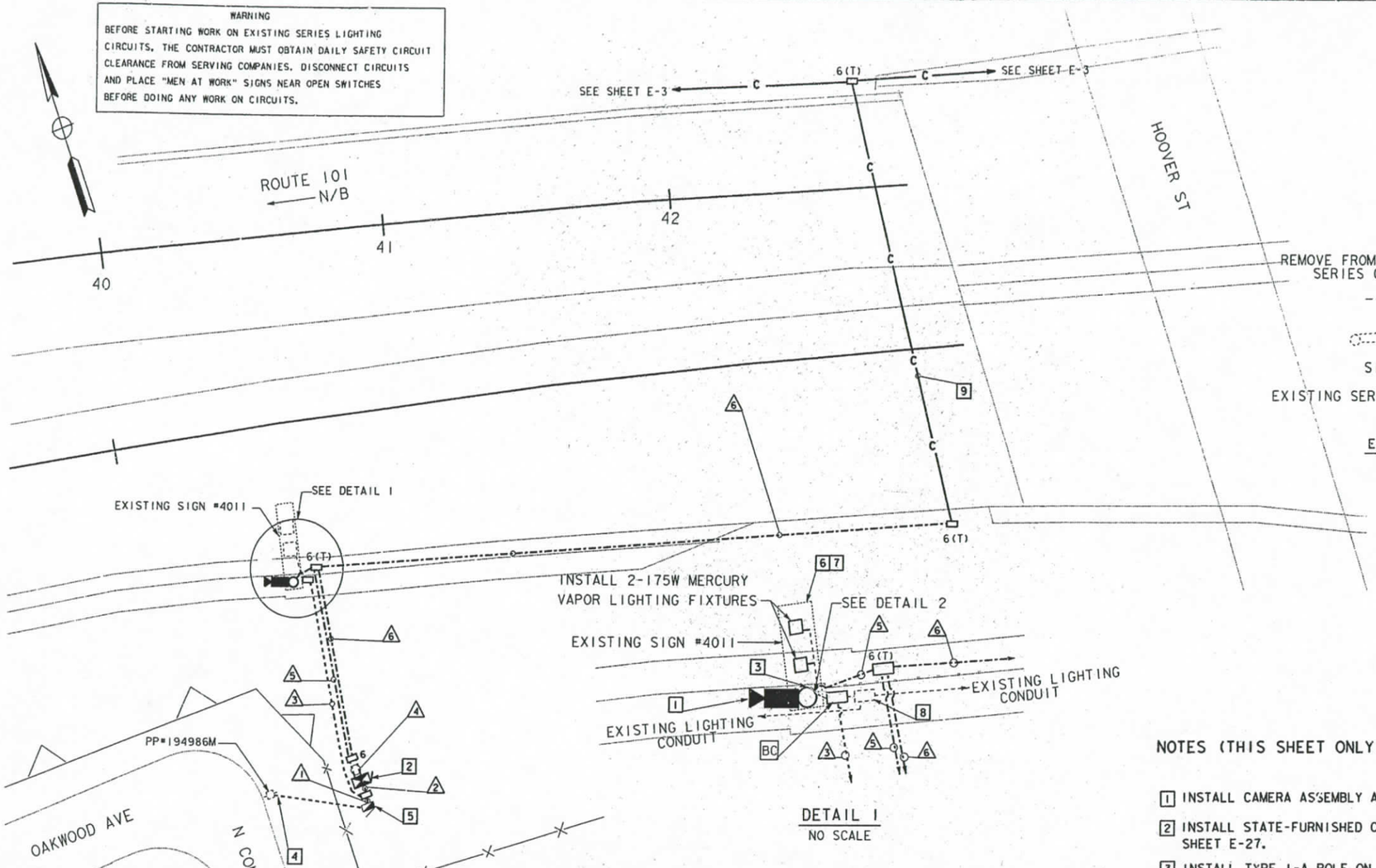
REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

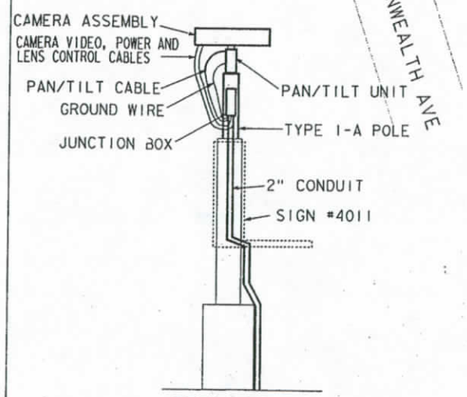
REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

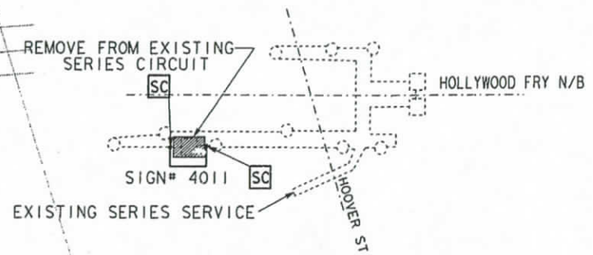
WARNING
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.



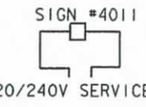
DETAIL 1
NO SCALE



DETAIL 2
NO SCALE



EXISTING SERIES CURCUIT FOR SIGN #4011



LEGEND (THIS SHEET ONLY):
- EXISTING SIGN LUMINAIRE
- EXISTING LUMINAIRE
- PROPOSED SIGN LUMINAIRE

LIGHTING CONVERSION DIAGRAM
NO SCALE

CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6
CAMERA VIDEO INTERFACE CABLE				1	1	
PAN/TILT CONTROL CABLE				1	1	
LENS CONTROL CABLE				1	1	
CAMERA POWER CABLE				1	1	
CAMERA GROUND CABLE				1	1	
2 SINGLEMODE FIBER OPTIC CABLE				1		1
6P22 COMMUNICATION DIST. CABLE				1		1
#6 POWER CABLE	2	2				
#10 POWER CABLE	2		2			
CONDUIT SIZE	2"	2"	1 1/2"	2-3"	2"	2"

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. INSTALL TYPE I-A POLE ON EXISTING SIGN STRUCTURE. FOR INSTALLATION AND MOUNTING DETAILS, SEE SHEET E-28, AND E-29.
4. INSTALL TYPE 'H' RISER AND 3" CONDUIT. CONDUCTORS BY OTHERS.
5. INSTALL A 120/240V, 3-WIRE, SINGLE PHASE 100AMP, TYPE III-BF SERVICE EQUIPMENT ENCLOSURE WITH 100AMP MAIN BREAKER WITH, A METERED 120-1P-30 AMP CIRCUIT BREAKER FOR CCTV 334 CABINET, AND AN UNMETERED 120-1P-15AMP CIRCUIT BREAKER FOR SIGN ILLUMINATION.
6. RC EXISTING FLUORESCENT ILLUMINATION EQUIPMENT.
7. INSTALL TYPE SC3 SIGN CONTROL. RC EXISTING SIGN DISCONNECT.
8. RC EXISTING S/M TRANSFORMER.
9. INCLUDED IN CCTV AND COMMUNICATION SYSTEM ROUTING PLANS.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA (LOCATION HO 041)

SCALE: 1" = 20'

E-17

CALCULATED/ DESIGNED BY	CHECKED BY	DATE REVISED BY	DATE REVISED
PW	AC	5/94	5/94

PROJECT ENGINEER: ALLEN CHEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

LAST REVISION 00-00-00
TIME PLOTTED => 20-MAR-1995 06:31

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P4/71186cul7.dg

CU 07396

EA 1186C1

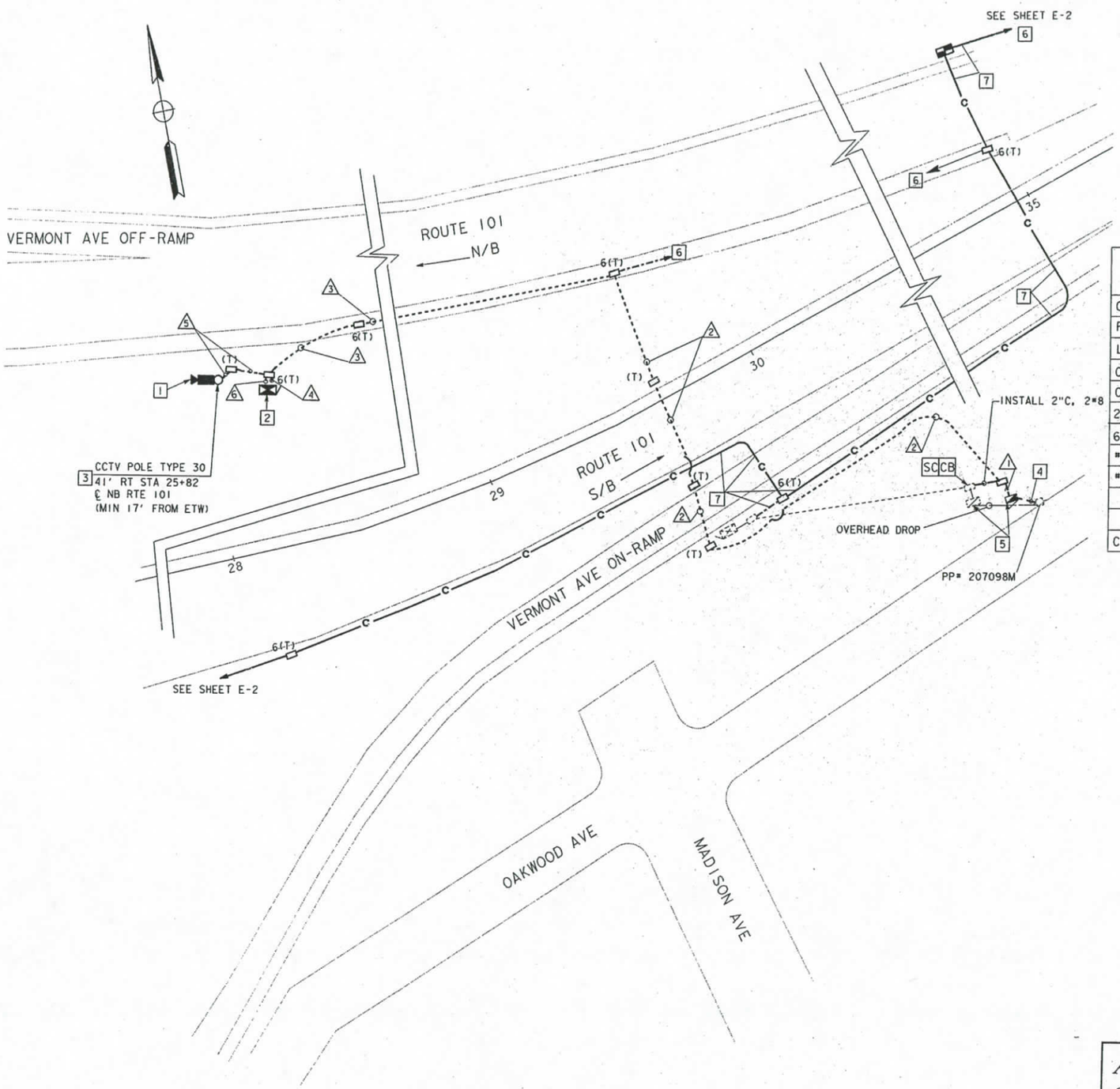
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	0.1/4.5	47	83

REGISTERED ELECTRICAL ENGINEER

3-13-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ALLEN CHEN — No. E-14106 — Exp. 06-30-97 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CONDUCTOR AND CONDUIT SCHEDULE

	1	2	3	4	5	6
CAMERA VIDEO INTERFACE CABLE				1	1	
PAN/TILT CONTROL CABLE				1	1	
LENS CONTROL CABLE				1	1	
CAMERA POWER CABLE				1	1	
CAMERA GROUND CABLE				1	1	
2 SINGLEMODE FIBER OPTIC CABLE			1	1		
6P22 COMMUNICATION DIST. CABLE			1	1		
#8 POWER CABLE	2					
#4 POWER CABLE	2	2	2			2
CONDUIT SIZE	2"	2"	2"	2-3"	2-2"	2"

NOTES (THIS SHEET ONLY):

1. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT. SET PAN STOPS FOR 350°.
2. INSTALL STATE-FURNISHED CCTV 334 CABINET. SEE CABINET DETAIL PLAN SHEET E-27.
3. INSTALL TYPE 30 CCTV POLE. FOR INSTALLATION AND MOUNTING DETAILS, SEE POLE MOUNT DETAIL PLAN SHEET E-28.
4. INSTALL TYPE 'H' RISER AND 3" CONDUIT. CONDUCTORS BY OTHERS.
5. RC EXISTING POLE MOUNTED TYPE E SERVICE. INSTALL A 120/240V, 3 WIRE SINGLE PHASE 100 AMP TYPE 111-BF SERVICE EQUIPMENT ENCLOSURE WITH 100 AMP MAIN BREAKER, A METERED 120-1P-30 AMP CIRCUIT BREAKER FOR CCTV 334 CABINET, A 120-1P-30 AMP CIRCUIT BREAKER FOR RAMP METERING.
6. SEE SHEET E-2 FOR CONTINUATION.
7. INCLUDED IN CCTV AND COMMUNICATION SYSTEM ROUTING PLANS.

AS-BUILT
Contract No. 07- 1186C4
Resident Engineer: AMOS, H.
Completion Date: 08/21/1998

CCTV CAMERA (LOCATION HO 044)

SCALE: 1"=20'

E-18

THIS PLAN IS ACCURATE FOR ELECTRICAL ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
5/94	PW	AC	
DATE REVISED			

LAST REVISION 00-00-00
TIME PLOTTED => 20-MAR-1995 08:23

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

USERNAME => trjlmt
DGN FILE => /usr/trjlmt/P2/71186cu18.dg

CU07396

EA1186C1

INDEX OF SHEETS

Sheet No	1	Title and Location Map
"	2-3	Standard Plans List
"	4-5	Key Map and Line Index
"	6-7	Layouts
"	18-32	Construction Details
"	33-57	Utility Plans
"	58	Traffic Handling Plan
"	59-60	Consrruction Area Signs
"	61	Summary of Quantities
"	62-64	Retaining Wall Plans
"	65-137	Electrical Plans
"	138-139	Revised and New Standard Plans
Architectural Plans		
"	140-154	101/134/170 Communications Hub Building

AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hassan Mansour
Completion Date: 04/20/1999

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN LOS ANGELES COUNTY IN LOS ANGELES FROM VERMONT AVENUE TO ROUTE 101/405 SEPARATION

To be supplemented by Standard Plans dated July, 1992

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	1	154

LOCATION MAP

Caltrans

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

BEGIN CONSTRUCTION
STA 195+00 PM R4.4

Begin Work
Sta 175+00

To Los Angeles

191+83.13 Bk
18+29.02 Ahd

175+70.35 Bk
175+75.78 Ahd

HELIOTROPE DR UC
VERMONT AVE OC
CLINTON ST UC
MELROSE AVE UC
SANTA MONICA BLVD SEP
NORMANDIE AVE UC
SUNSET BLVD OC
FOUNTAIN AVE OC
WESTERN AVE OC
WILTON PL OC
HOLLYWOOD BLVD OC
FRANKLIN AVE RP UC
GOWER ST OFF RP
VAN NESS AVE RP
GOWER ST UC
BRONSON AVE OC
ARGYLE-FRANKLIN AVE UC
IVAR AVE FP SEP
HOLLY DR UC
ODIN ST UC
RTE 101/170 SEP
PILGRIMAGE OC
IVAR AVE UC
HOLLY DR UC RP
CAHUENGA BLVD UC
CAHUENGA BLVD EAST
235+50.00 Bk
1+22.53 Ahd
CAHUENGA BLVD UC
MULHOLLAND DR OC
187+69.76 Bk
187+66.93 Ahd
BARHAM BLVD OC
CAHUENGA BLVD WEST
UNIVERSAL DR OC
20+00.00 Bk
113+86.11 Ahd
VENTURA BLVD OR OC
LOS ANGELES RIVER
LANKERSHIM BLVD UC
VINELAND AVE UC
TUJUNGA AVE UC
MOORPARK ST UC
RTE 101/134, 170 SEP
RIVERSIDE DR OC
RTE 134/101, 170 SEP
MATCH LINE
ROUTE 170 To San Fernando
ROUTE 134 To Burbank
ROUTE 101 To Santa Ana
ROUTE 101 To Santa Monica
ROUTE 405 To Van Nuys

TRAFFIC MANAGEMENT CENTER (TMC)
ROUTE 110
SPRING ST
NORTH MAIN ST
LOS ANGELES
4TH ST OC
5TH ST OC
6TH ST OC
WILSHIRE BLVD
TEMPLE
1ST ST
2ND ST
3RD ST
LOS ANGELES

LOS ANGELES

LOS ANGELES

LOS ANGELES

LOS ANGELES

LAUREL CANYON BLVD UC
COLFAX AVE UC
RADFORD AVE UC
TUJUNGA WASH
WHITSETT AVE UC
COLDWATER CANYON AVE UC
FULTON AVE UC
WOODMAN AVE UC
LA RIVER BRIDGE
VAN NUYS BLVD UC
KESTER AVE UC
EAST CONNECTOR UC
SEPULVEDA BLVD UC
RTE 101/405 SEP
WEST CONNECTOR UC
HASKELL AVE
To Ventura

END CONSTRUCTION
STA 20+00 PM R17.1

End Work
Sta 40+00

NO SCALE

Approved as to impact on State facilities and conformance with applicable State standards and practices and that technical oversight was performed as described in the California Department of Transportation A & E Consultant Services Manual

The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

Project Engineer
Registered Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
SEAN WONG
No. C049893
Exp. 9/30/96
CIVIL
STATE OF CALIFORNIA

October 10, 1995
Plans Approval Date

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD. #100
LA MIRADA, CA 90638

Contract No. 07-120724

PROJECT ENGINEER: N TONG
DESIGN OVERSIGHT APPROVAL: PRINTED NAME: PAT SULLIVAN SIGNATURE: Pat Sullivan
REGISTRATION NO.: C30912
DATE: 5-22-95
LAST REVISION: 00-00-00
TIME PLOTTED => 16-OCT-1995 10:54

FORM DC-OE-93-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => trmariak
DGN FILE => /usr/trmariak/P2/712072a01.
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	65	154

Elia G. Saghir 4/3/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ELIA G. SAGHIR
No. 014922
Exp. 6/30/95
ELECTRICAL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

TABLE OF CONTENTS-ELECTRICAL PLANS

E-1, E-2	CCTV AND COMMUNICATION SYSTEM (LEGEND AND NOTES)
E-3-E-26	CCTV AND COMMUNICATION SYSTEM AND UTILITY
E-27-E-47	CCTV AND COMMUNICATION SYSTEM (CAMERA LOCATIONS)
E-48-E-50	CCTV AND COMMUNICATION SYSTEM (SCHEMATICS)
E-51	TRENCH IN DIRT DETAILS
E-52	TRENCH IN PAVEMENT DETAILS
E-53	JACKING DETAILS
E-54	ELECTRICAL DIAGRAM FOR CCTV AND PAN/TILT UNIT
E-55	COMMUNICATION PULL BOX
E-56	DETAILS FOR 5(T) AND COMMUNICATION PULL BOX
E-57	SPLICE VAULT DETAILS
E-58	MODEL 170 CONTROLLER INTERFACE
E-59	334-TV CABINET DETAILS
E-60-E-62	CCTV AND COMMUNICATION SYSTEM DETAILS
E-63-E-65	CCTV AND COMMUNICATION SYSTEM (TWISTED PAIR ASSIGNMENT TABLE)
E-66	CCTV AND COMMUNICATION SYSTEM (FIBER ASSIGNMENTS)
E-67	DATA NODE CIRCUIT ASSIGNMENT TABLES
E-68	COMMUNICATION SYSTEM DETAIL
E-69	VIDEO NODE CIRCUIT ASSIGNMENT TABEL
E-70	CCTV AND COMMUNICATION SYSTEM (HUB EQUIPMENT LAYOUT)
E-71	CMS CONTROLLER INTERFACE
E-72	CCTV AND COMMUNICATION SYSTEM (ELECTRICAL QUANTITIES)

ABBREVIATIONS

12SMFO	FIBER OPTIC CABLE, 12 SINGLEMODE FIBERS
2SMFO	FIBER OPTIC CABLE, 2 SINGLEMODE FIBERS
48SMFO	FIBER OPTIC CABLE, 48 SINGLEMODE FIBERS
50P22	TWISTED PAIR CABLE, 50 PAIR 22 AWG CONDUCTORS
6P22	TWISTED PAIR CABLE, 6 PAIR 22 AWG CONDUCTORS
ø	DIAMETER
BB	BASE BAND
B/O	BREAKOUT CABLE
CCR	CAMERA CONTROL RECEIVER
CCT	CAMERA CONTROL TRANSMITTER
CCTV	CLOSED CIRCUIT TELEVISION
CHAN #	CHANNEL NUMBER
CMS	CHANGEABLE MESSAGE SIGN
DEMARC	DEMARCATION
DEMUX	DEMULTIPLEXER
DIST	DISTRIBUTION
DWP	DEPARTMENT OF POWER & WATER
FDF	FIBER DISTRIBUTION FRAME
FDU	FIBER DISTRIBUTION UNIT
FLEX	FLEXIBLE
F/O OR FO	FIBER OPTIC
FRE	FIBERGLASS REINFORCED EPOXY CONDUIT
INTRFCE	INTERFACE
J-BOX	JUNCTION BOX
MDF	MAIN DISTRIBUTION FRAME
MUX	MULTIPLEXER
NOM	NOMINAL
OC	ON CENTER
PDA	POWER DISTRIBUTION ASSEMBLY
PR	PAIR
PTZ	PAN, TILT AND ZOOM
REQ'D	REQUIRED
RMS	RAMP METERING SYSTEM OR STATION
RX	RECEIVER
SCE	SOUTHERN CALIFORNIA EDISON
SCHED	SCHEDULE
SH	SHORT HAUL
SM	SINGLEMODE
SONET	SYNCHRONOUS NETWORK
STL	STEEL
TDM	TIME DIVISON MULTIPLEXER
TELCO	TELEPHONE COMPANY
TMC	TRAFFIC MANAGEMENT CENTER
TMS	TRAFFIC MONITORING STATION
TP	TWISTED PAIR
TX	TRANSMITTER
VDS	VEHICLE DETECTOR STATION
VDX	VIDEO DEMULTIPLEXER
VMX	VIDEO MULTIPLEXER
VR	SINGLE VIDEO RECEIVER
VX	SINGLE VIDEO TRANSMITTER
#X	X AWG CONDUCTOR, Ie #10 MEANS 10 AWG CONDUCTOR
YP	Y PAIRS OF CONDUCTORS, Ie 2P MEANS 2 PAIRS

LEGEND

- CCTV CAMERA
- EXISTING CCTV CAMERA
- SPLICE VAULT
- EXISTING SPLICE VAULT
- FIBER OPTIC PATCH CORD
- COMMUNICATION PULL BOX
- C — COMMUNICATIONS CONDUIT(S)
- E — SERVICE CONDUIT(S)
- 1 / 2 — CONDUIT LINE DELIMITER FOR CONSTRUCTION NOTES
- TYPE 334-TV CABINET
- EXISTING TELEPHONE BRIDGE
- TELEPHONE BRIDGE
- FIBER OPTIC CABLE

TABLE 1 - CCTV WIRING		
CONDUCTOR TYPE	FUNCTION	QUANTITY
RG-6A/U	CAMERA VIDEO INTERFACE CABLE	1
9# 18 CABLE	PAN/TILT CONTROL CABLE	1
12# CABLE	LENS CONTROL CABLE	1
1# 8	CAMERA GROUND CABLE	1

AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Maruaa
Completion Date: 04/20/1999

CCTV AND COMMUNICATIONS SYSTEM
(LEGEND AND NOTES)

E-1

DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	CHECKED BY	DRAWN	DATE	REVISED BY	DATE REVISED
PAT SULLIVAN	ES	JZ		2/95	5/95	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FILE NAME = 00-00-00
TIME PLOTTED = 19-OCT-1995 15:32

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

USERNAME = mikesl
DGN FILE = /usr/mikesl/PO/712072u01.dg

CU 07387

EA 120721

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	66	154

Elia G. Saghir 4/3/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

GENERAL NOTES:

1. THE LOCATION OF ELECTRICAL HIGHWAY LIGHTING CONDUITS AND PULL BOXES ARE APPROXIMATE AND WERE OBTAINED FROM LIMITED LIGHTING RECORDS. CONTRACTOR SHALL AVOID DAMAGING EXISTING LIGHTING CONDUITS.
2. THE LOCATIONS OF EXISTING DETECTOR LOOPS, EXISTING CONTROLLER CABINETS, EXISTING SERVICE ENCLOSURES, POWER POLES AND EXISTING DEMARCATION BOXES ARE APPROXIMATE.
3. THE CONTRACTOR SHALL VERIFY PROPOSED CCTV POLE LOCATIONS WITH THE ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.
4. THE LOCATIONS OF PROPOSED ELEMENTS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED OR APPROVED BY THE ENGINEER. SEE L-SHEETS FOR EXACT LOCATION OF CCTV CAMERAS.
5. WHEN EXISTING DETECTOR LOOPS AND CONDUITS ARE SHOWN IN THE VICINITY OF PROPOSED CONDUIT TRENCHES, THE CONTRACTOR SHALL AVOID DAMAGING THE EXISTING CONDUIT. TRENCHING WITH HAND TOOLS MAY BE REQUIRED.
6. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL OR TELCO FACILITIES, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE ENGINEER AND ALL AGENCIES CONCERNED 72 HOURS PRIOR TO COMMENCING WORK.
7. PULL ROPE SHALL BE INSTALLED IN ALL EMPTY CONDUITS.
8. UNLESS OTHERWISE NOTED, ALL FIBER OPTIC CONDUIT BENDS SHALL BE 4 FT RADIUS FACTORY BENDS. ALL OTHER CONDUITS SHALL HAVE A MINIMUM BEND RADIUS OF NO LESS THAN 6 TIMES THE CONDUIT DIAMETER.
9. CONDUITS AND CONDUCTORS IN CONDUIT AND CONDUCTOR SCHEDULE TABLES ARE NEW UNLESS MARKED (E) INDICATING EXISTING.
10. PVC, WHERE CALLED OUT IN THESE PLANS, SHALL MEAN RIGID NON-METALLIC CONDUIT AS DEFINED IN THE STANDARD SPECIFICATIONS.
11. ALL NO.5, COMMUNICATION PULL BOXES AND SPLICE VAULTS SHALL BE TRAFFIC TYPE. SEE SHEETS E-55, E-56 AND E-57 FOR DETAILS.
12. LOCATIONS OF ROADWAY SHOULDER AND EDGE OF TRAVELWAY WERE OBTAINED FROM AS-BUILT PLANS , ARE APPROXIMATE, AND DO NOT INCLUDE ANY RELOCATION DUE TO RECENT ROADWAY CONSTRUCTION. LOCATIONS OF EXISTING SHOULDER MAY VARY. CONDUIT(S) SHALL BE INSTALLED WHERE SHOWN ON THE PLANS RELATIVE TO THE EXISTING SHOULDER.
13. IDENTIFICATION FORMAT OF TRAFFIC OPERATION SYSTEM (TOS) ELEMENTS:

TV-FYXXX
- POST MILE (TO NEAREST 10TH)
- FREEWAY NAME SHORT FORM
- TOS ELEMENT TYPE: TV = CCTV CAMERA; CMS = CHANGEABLE MESSAGE SIGN; HAR = HIGHWAY ADVISORY RADIO

14. MODEM NUMBERS FOR SOME CONTROLLERS HAVE NOT YET BEEN ASSIGNED, AND THEREFORE SUCH LOCATIONS HAVE (X,X,X-X) FOR CABLE PAIR ASSIGNMENTS. VERIFY MODEM NUMBERS BEFORE CONSTRUCTION. WHERE CONTROLLER NUMBERS ARE NOT ASSIGNED, XXXX HAS BEEN SHOWN.
15. FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.

PROJECT NOTES: (MASTER LIST)

[1] INSTALL CONDUIT(S) IN TRENCH IN P.. 'ED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.

[2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

[3] INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.

[4] JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

[5] INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.

[6] ADD POWER CONDUCTORS TO EXISTING CONDUIT.

[7] INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

[8] INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 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-58 AND E-60 FOR DETAILS.

[11] DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

[12] INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

[13] INSTALL TWO TYPE 334-TV CABINETS ON NEW FOUNDATIONS. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO AND DATA NODES. SEE DETAIL C , SHEET E-59 AND DETAIL 5, SHEET E-61 FOR DETAILS.

[14] REMOVE EXISTING SIGN FROM BACK OF BRIDGE RAIL BEFORE INSTALLING CONDUIT. RE-INSTALL SIGN AFTER CONDUIT IS INSTALLED.

[15] TRANSITION CONDUIT UNDER SOUNDWALL. DIG WITH HAND TOOLS AS REQUIRED. SEE SHEET C-15 FOR DETAILS.

[16] INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.

[17] INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV.

[19] INSTALL ON NEW FOUNDATION TYPE 111-BF 100A, 120/240V SERVICE WITH A 100A, 240V, 2P MAIN CIRCUIT BREAKER.

[20] INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.

[21] INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.

[22] INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

[23] THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

[24] ADD CABLE TO EXISTING CONDUIT.

[25] IDENTIFY AND [RC] EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.

[28] INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

[31] INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-60 AND SHEET E-11 FOR DETAILS.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV AND COMMUNICATION SYSTEM (NOTES)

NO SCALE

E-2

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXX

LAST REVISION 00-00-00
TIME PLOTTED = 19-OCT-1995 15:32

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

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PD/7120720002.dg

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	67	154

REGISTERED ELECTRICAL ENGINEER — Elia G. Sachir — 2/17/95

ELIA G. SACHIR No. E014922 Exp. 6/30/95 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

10-10-95
PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

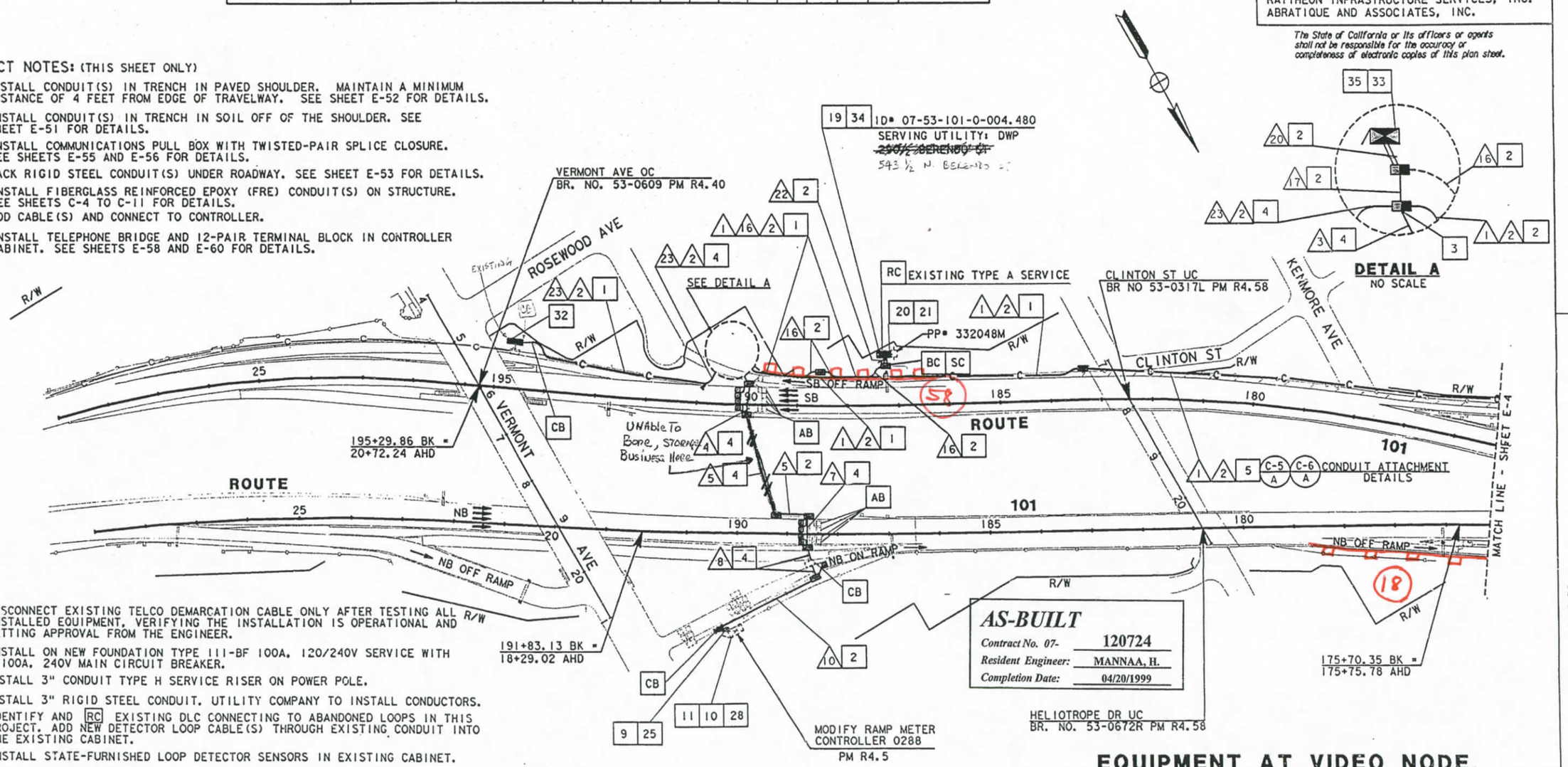
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	1A	2	3	4	5	7	8	10	16	17	20	22	23
50P22 CABLE	DATA/PHONE	1													
6P22 CABLE	DATA/PHONE				1	1	1	1	1						
48 SMFO CABLE	VIDEO/DATA		1												1
12 SMFO CABLE	SH VIDEO			1								1	1		
2 SMFO B/O CABLE	SH VIDEO											1	1		1
#12	POWER													2	
#8	POWER										2		2	2	
DLC	RAMP/COUNT					2	4	6	8	9					
	INNERDUCT		1¼"	1¼"											1¼" 1¼"
CONDUIT	SIZE		4"	4"	2"	2"	2"	2"	2"	2"	2"	3"	3"	3"	2" 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 TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATIONS PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.



11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
19. INSTALL ON NEW FOUNDATION TYPE III-BF 100A. 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.
32. SPLICE 48SMFO AND 2SMFO B/O CABLE TO EXISTING 60SMFO CABLE IN EXISTING SPLICE VAULT PER CONTRACT EA 1186C4. SEE SHEET E-66 FOR FIBER ASSIGNMENTS.
33. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO NODE SEE DETAIL 4, SHEET E-61.
34. INSTALL 1-30A AND 1-20A 120V SINGLE POLE CIRCUIT BREAKERS FOR VIDEO NODE AND FOR EXISTING IRRIGATION CABINET. REUSE EXISTING CONDUCTORS TO PROVIDE POWER TO IRRIGATION CABINET.
35. ITEM INCLUDED IN BID ITEM "EQUIPMENT AT VIDEO NODE."

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

EQUIPMENT AT VIDEO NODE, LOOP DETECTOR AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-3

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY — CHECKED BY

PROJECT ENGINEER — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 — TIME PLOTTED => 19-OCT-1995 16:36

FORM CT-DE-92-PE (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PO/712072u03.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	68	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

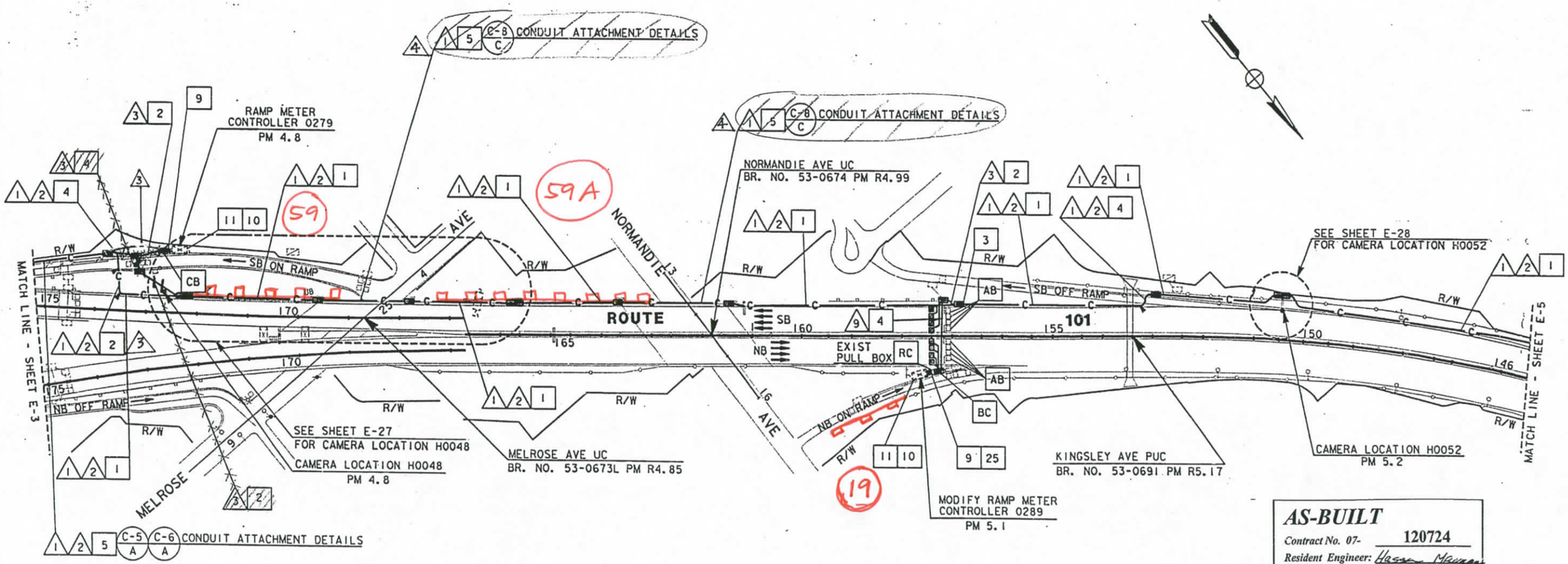
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.
9. ADD CABLE(S) AND CONNECT TO CONTROLLER.
10. INSTALLTELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT. VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8	9
50P22 CABLE	DATA/PHONE	1						1		
6P22 CABLE	DATA/PHONE					1	1			
48 SMFO CABLE	VIDEO/DATA		1					1		
12 SMFO CABLE	SH VIDEO			1					1	
DLC	RAMP/COUNT						4			
	INNERDUCT		1¼"	1¼"				1¼"	1¼"	
CONDUIT	SIZE		4"		4"	2"	2"	2"**	3"**	

** EXISTING TO BE REUSED
CHANGED PER CCO #6



AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Mansoor
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-4

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10:17

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

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

USERNAME => trmarlak
DGN FILE => /usr/trmarlak/P2/712072u04.

CU 07387 EA 120721

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. ADD DETECTOR LOOP CABLE(S) TO EXISTING CONDUIT.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.
32. INSTALL CONDUIT(S) IN TRENCH OVER UNDERGROUND STRUCTURE. MAINTAIN A MINIMUM OF 4 FEET FROM EDGE OF TRAVEL WAY. SEE SHEET E-52 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8
50P22 CABLE	DATA/PHONE	I							
6P22 CABLE	DATA/PHONE				I				I
48 SMFO CABLE	VIDEO/DATA		II						
12 SMFO CABLE	SB VIDEO			I					
DLC	RAMP/COUNT					2	6	8	9
	INNERDUCT	1¼"	1¼"						
CONDUIT	SIZE	4"			4"	2"	2"	2"	2"

DIST 07 | COUNTY LA | ROUTE 101 | POST MILES TOTAL PROJECT R4.4/R17.1 | SHEET NO. 69 | TOTAL SHEETS 154

Celia G. Saghi 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

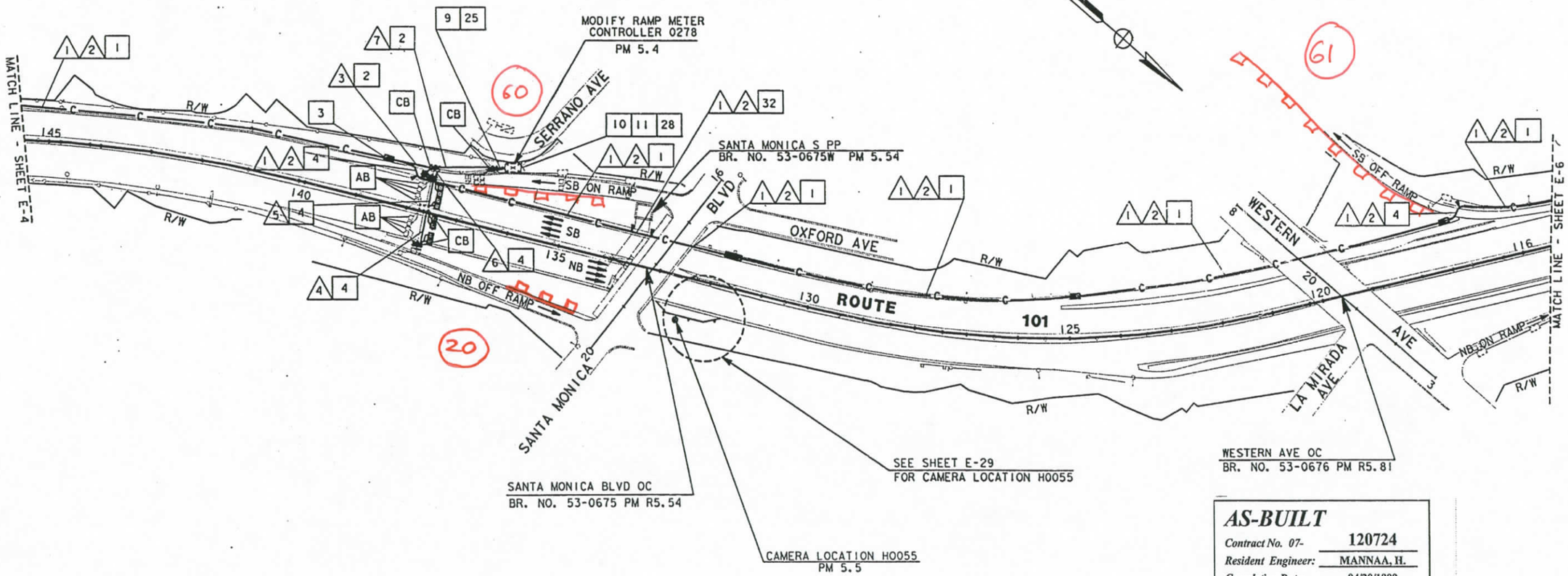
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-5

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

CALCULATED/DESIGNED BY ES | CHECKED BY JZ | DATE 2/95 | REVISED BY | 5/95 | DATE REVISED

PROJECT ENGINEER PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXX

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10:17

FORM DC-OT-92-FF (REV. 3/88)

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

USERNAME => trmarlak
DGN FILE => /usr/trmarlak/P2/712072u05.

CU 07387 | EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	70	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

DATE	REVISED BY
2/95	ES
5/95	JZ

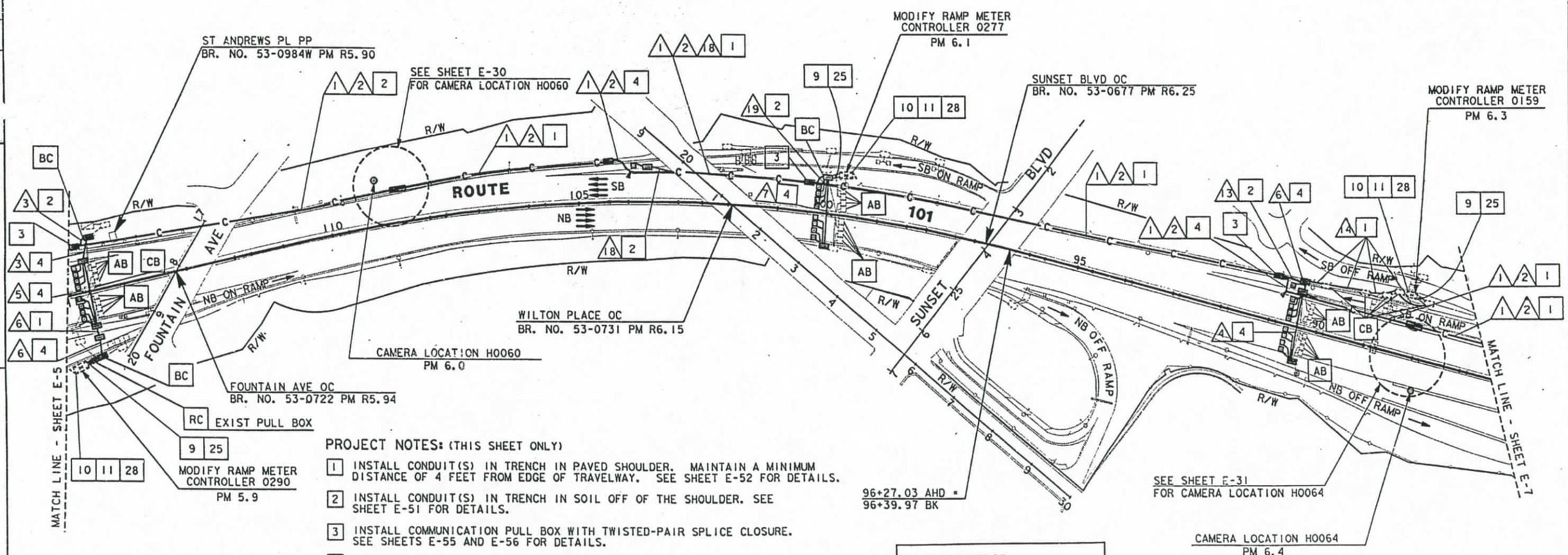
DATE REVISED	CALCULATED/ DESIGNED BY	CHECKED BY
5/95	ES	JZ

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	13	14	18	19
50P22 CABLE	DATA/PHONE	1										
6P22 CABLE	DATA/PHONE			1		1			1	1		1
48 SMFO CABLE	VIDEO/DATA		1									
12 SMFO CABLE	SH VIDEO			1								
DLC	RAMP/COUNT				4	4	8	4		9	1	1
	INNERDUCT		1¼"	1¼"								
CONDUIT	SIZE	4"	4"	2"	2"	2"	2"	2"	2"	2	2"	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 TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

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

AS-BUILT

Contract No. 07-	120724
Resident Engineer:	MANNAA, H.
Completion Date:	04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-6

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 08:29

FORM DC-GE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u06.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	71	154

REGISTERED ELECTRICAL ENGINEER — 2/17/95

PLANS APPROVAL DATE — 10-10-95

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

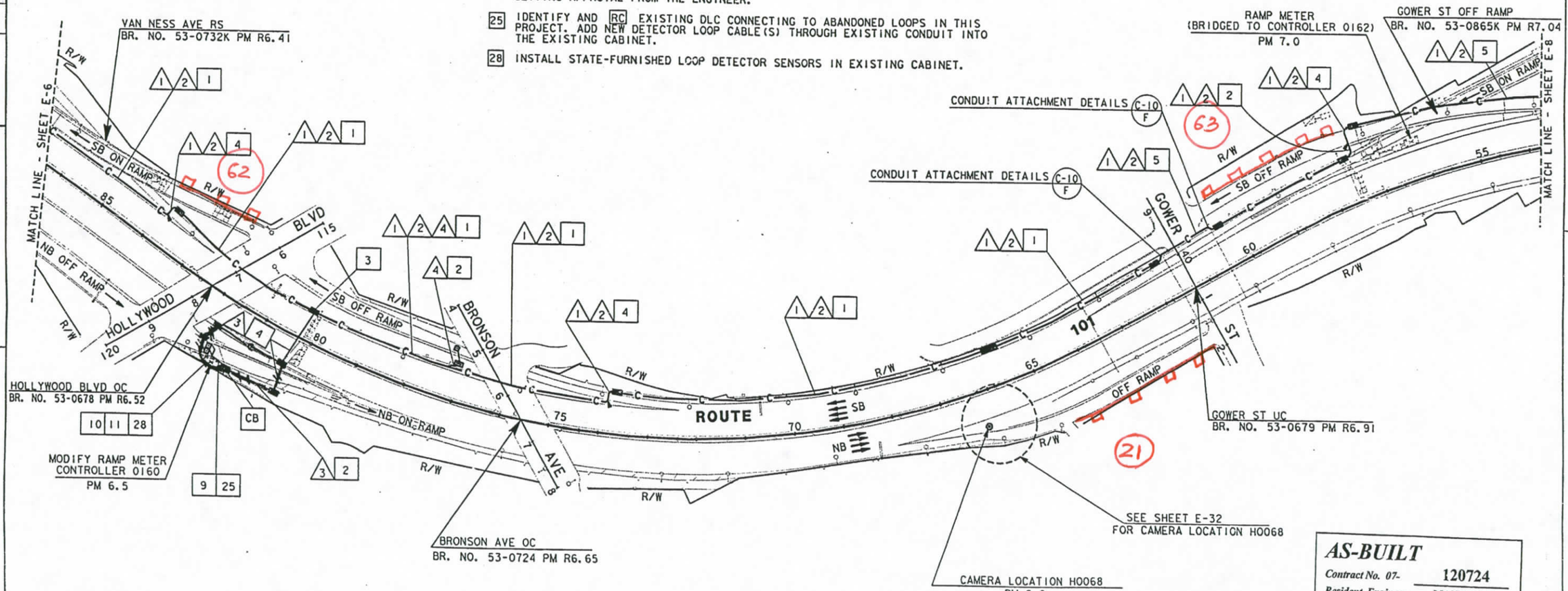
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

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

(E) - EXISTING CONDUIT OR CONDUCTOR

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-7

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY | CHECKED BY

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 08:29

FORM CE-CE 92-PF (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PO/712072u07.dg

CU 07397 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	72	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

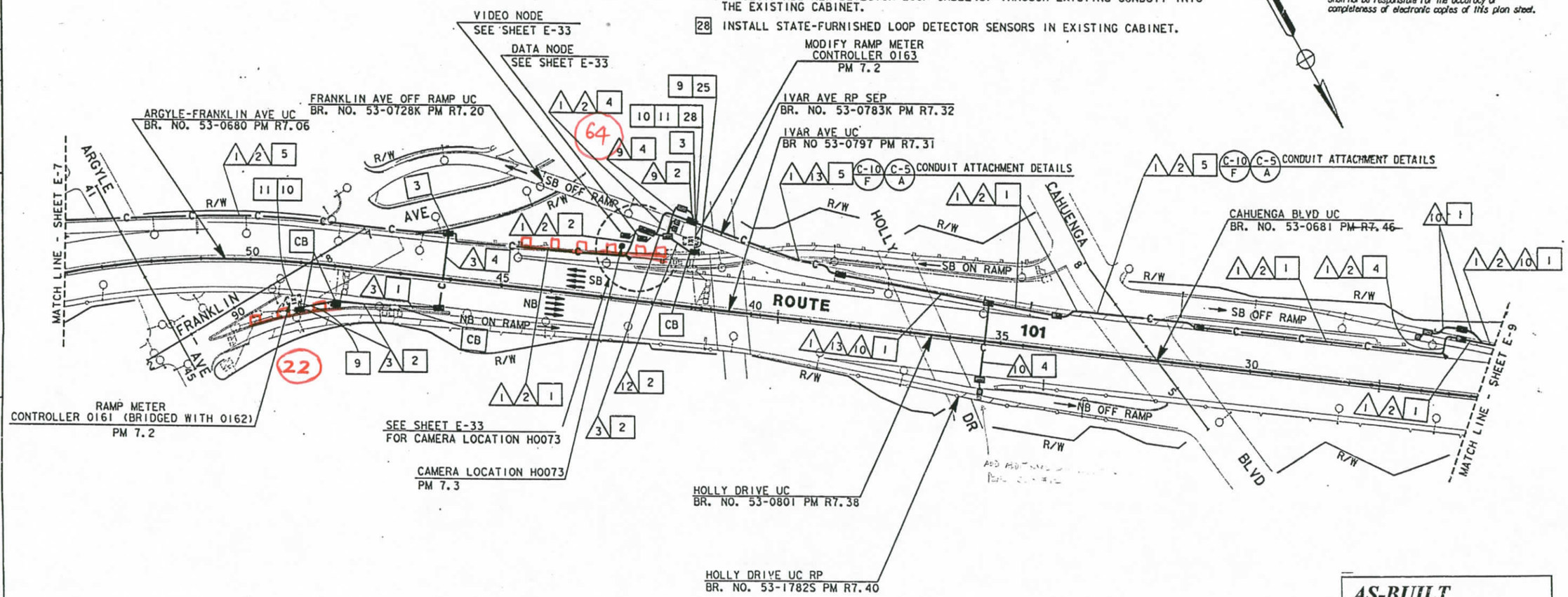
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1		2	3	8	9	10	12	13		
50P22 CABLE	DATA /PHONE	1										
6P22 CABLE	DATA /PHONE				1				1			
48 SMFO CABLE	VIDEO/DATA		1									
12 SMFO CABLE	SH VIDEO			1		2						
DLC	RAMP/COUNT					1	1	1	3			1
	INNERDUCT		1¼" 1¼"				1¼"			1¼" 1¼" 1¼"		
CONDUIT	SIZE		4"	4"	2"	2"	3"	2"	2"	4"		



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-8

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

REVISED BY	DATE REVISED
ES	2/95
JZ	5/95

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXX

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 08:29

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

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

USERNAME => mikes1
DGN FILE => /usr/mikes1/PO/712072u08.dg

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	73	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

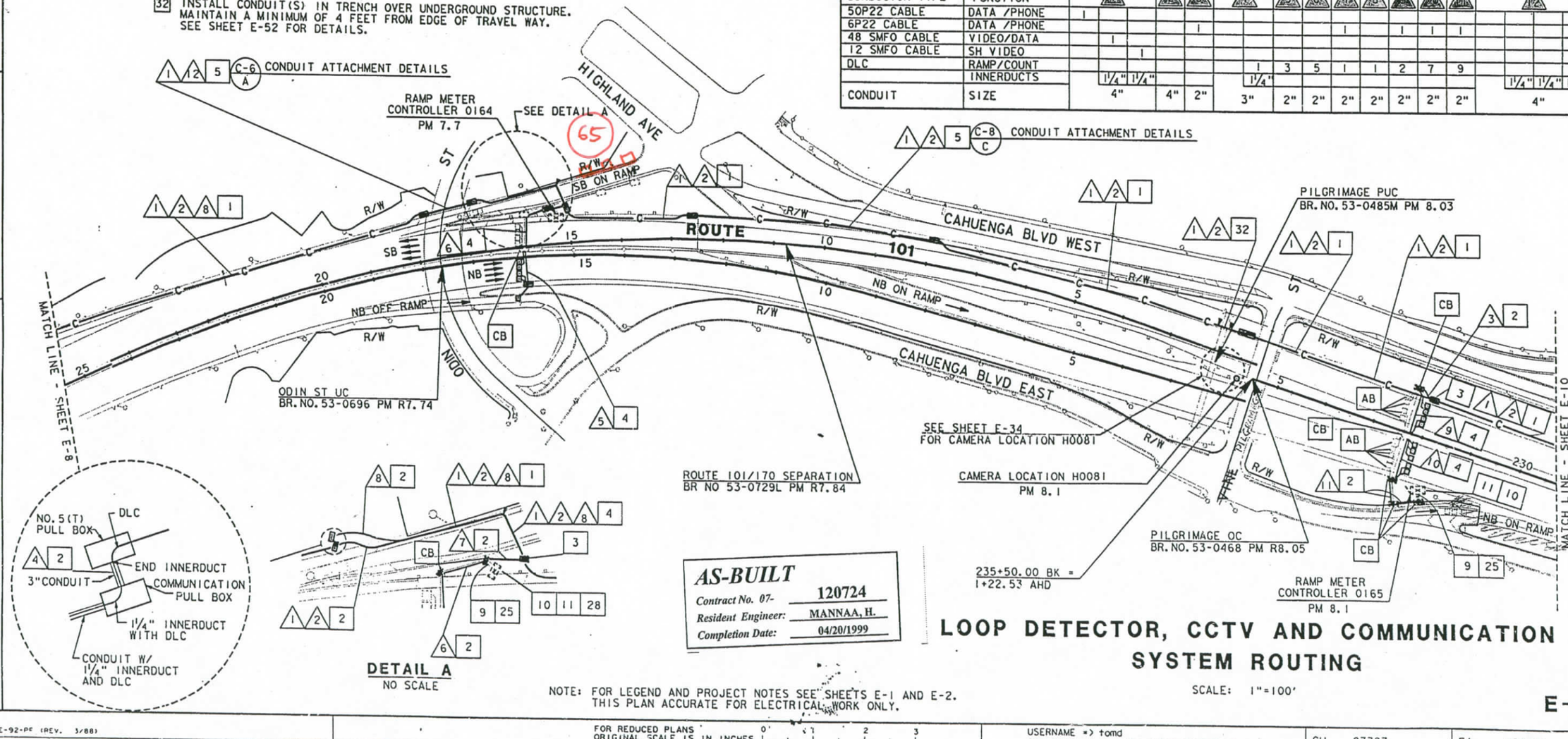
1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. ADD DETECTOR LOOP CABLE(S) TO EXISTING CONDUIT.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.
32. INSTALL CONDUIT(S) IN TRENCH OVER UNDERGROUND STRUCTURE. MAINTAIN A MINIMUM OF 4 FEET FROM EDGE OF TRAVEL WAY. SEE SHEET E-52 FOR DETAILS.

1 12 5 C-6 A CONDUIT ATTACHMENT DETAILS

1 2 5 C-8 C CONDUIT ATTACHMENT DETAILS

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8	9	10	11	12		
50P22 CABLE	DATA /PHONE	1													
6P22 CABLE	DATA /PHONE			1					1		1	1	1		
48 SMFO CABLE	VIDEO/DATA		1												
12 SMFO CABLE	SH VIDEO			1											
DLC	RAMP/COUNT					1	3	5	1	1	2	7	9		1
	INNERDUCTS		1¼"	1¼"		1¼"								1¼"	1¼"	1¼"
CONDUIT	SIZE		4"		4"	2"	3"	2"	2"	2"	2"	2"	2"	4"	



DETAIL A
NO SCALE

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-9

CALCULATED/DESIGNED BY: ES
CHECKED BY: JZ
DATE: 2/95 5/95
REVISED BY / DATE REVISED:

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 09:07

FORM DC-OE-92-PE (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => tomd
DGN FILE => /usr/tomd/P39/712072u09.dgn
CU 07387
EA 120721

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6
50P22 CABLE	DATA /PHONE	1					
6P22 CABLE	DATA /PHONE						
48 SMFO CABLE	VIDEO/DATA		1			1	1
12 SMFO CABLE	SH VIDEO			1			
#6	POWER				2	2	
DLC	RAMP/COUNT			7		12	
	INNERDUCT		1¼"	1¼"			
CONDUIT	SIZE		4"	4"	2"	2" 3"	3" 2"

(E) - EXISTING CONDUIT OR CONDUCTOR

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	74	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

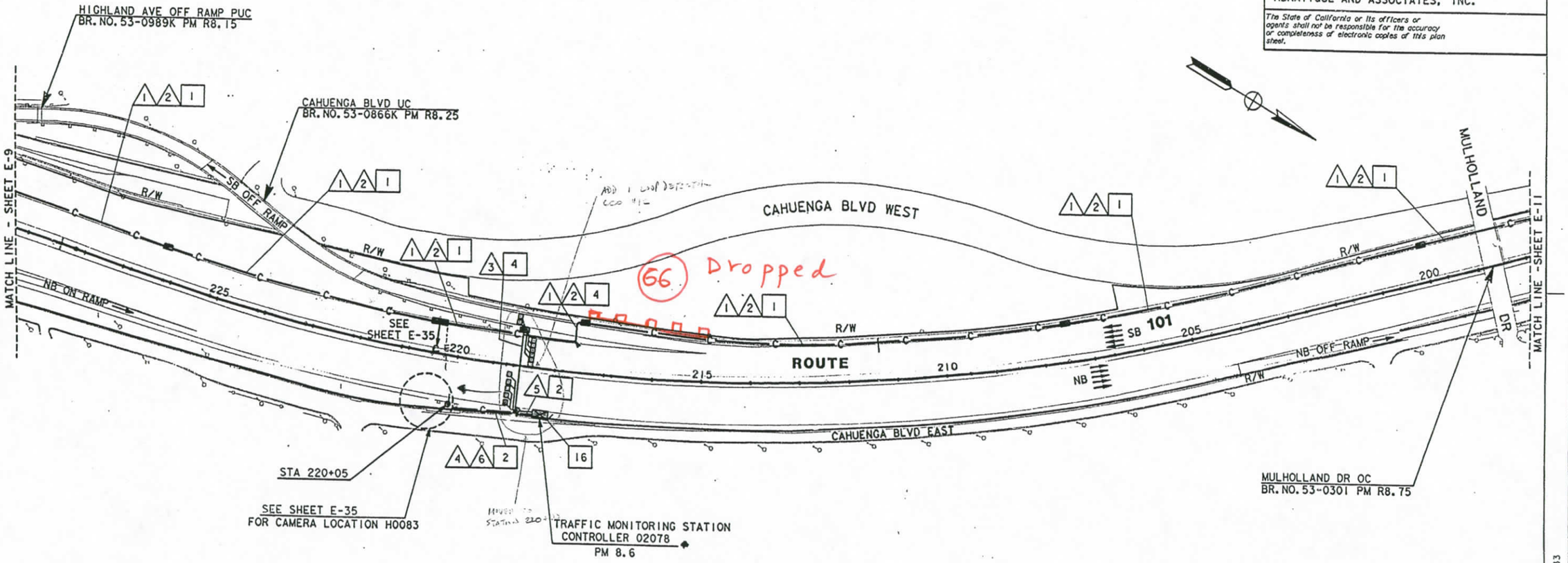
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-10

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u10.dg

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 19-OCT-1995 15:33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	75	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. E014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

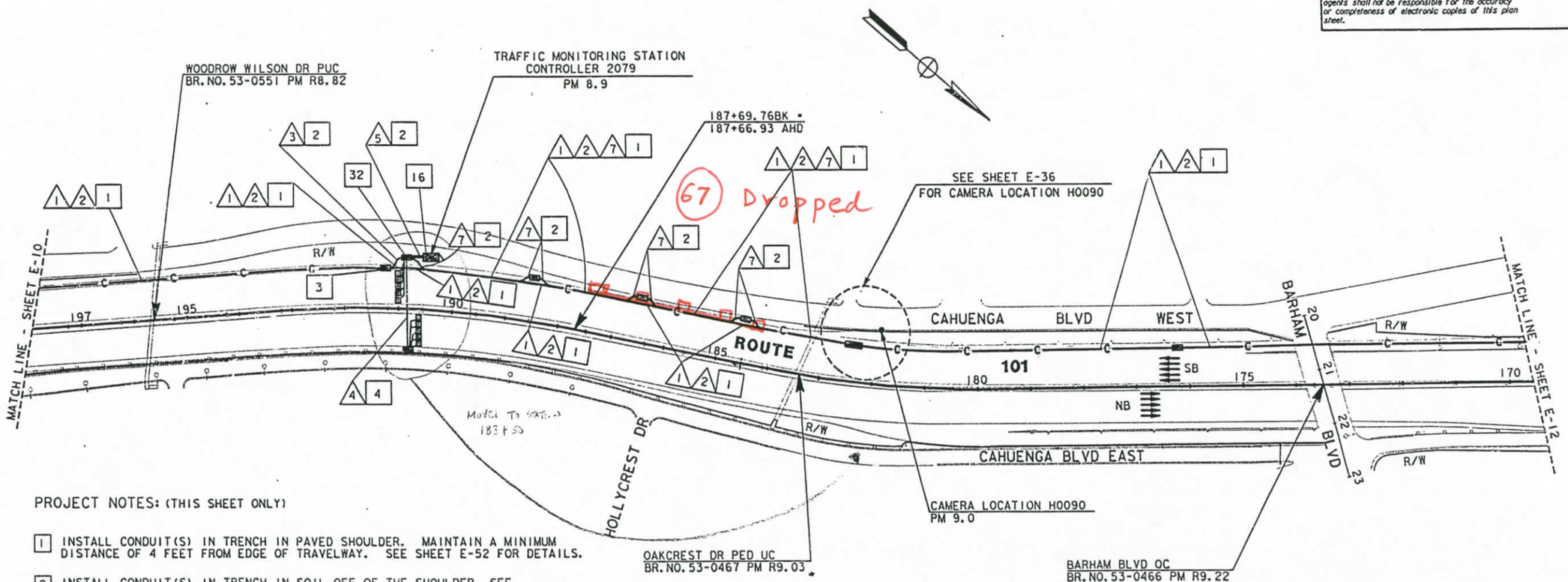
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1			2	3	4	5		7
50P22 CABLE	DATA/PHONE	1								
6P22 CABLE	DATA/PHONE					1			1	
48 SMFO CABLE	VIDEO/DATA		1							
12 SMFO CABLE	SH VIDEO			1						
#4	POWER							2		2
DLC	TMS						5		10	
	INNERDUCT		1¼"	1¼"						
CONDUIT	SIZE		4"		4"	2"	2"	3"	3"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
32. INSTALL A MINIMUM 2KVA, SINGLE PHASE 240/120V STEP DOWN TRANSFORMER.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-11

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

CALCULATED/DESIGNED BY	ES	DATE 2/95	REVISED BY
CHECKED BY	JZ	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 12:39
LAST REVISION 00-00-00

FORM DC-CE-92-FF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => tomd
DGN FILE => /usr/tomd/P39/712072u11.dgn
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	76	154

2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ELIA G. SAGHIR
No. E014922
Exp. 6/30/95
ELECTRICAL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1 INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

3 INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 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-58 AND E-60 FOR DETAILS.

11 DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

25 IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.

28 INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

31 INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-60 AND SHEET E-71 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	Δ1			Δ2	Δ3	Δ4	Δ5	Δ6	Δ13
50P22 CABLE	DATA/PHONE	1								
6P22 CABLE	DATA/PHONE					1	1	1		
12P22 CABLE	DATA/PHONE								1	
48 SMFO CABLE	VIDEO/DATA		1							
12 SMFO CABLE	SH VIDEO			1						
DLC	RAMP/COUNT						5	6		1
	INNERDUCT		1¼"	1¼"						
CONDUIT	SIZE	4"			4"	2"	2"	2"	2"	2"

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-12

PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: ES — DATE 2/95
CHECKED BY: JZ — 5/95
REVISED BY / DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
XXXXXXXXXXXXXXXXXXXXXXXXXX

TIME PLOTTED => 17-OCT-1995 10:52
LAST REVISION 00-00-00

FORM DC-OE-92 95 (REV. 3/88)

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

USERNAME => richard
DGN FILE => /usr/richard/P11/712072u12.

CU 07387 | EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	77	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. E014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

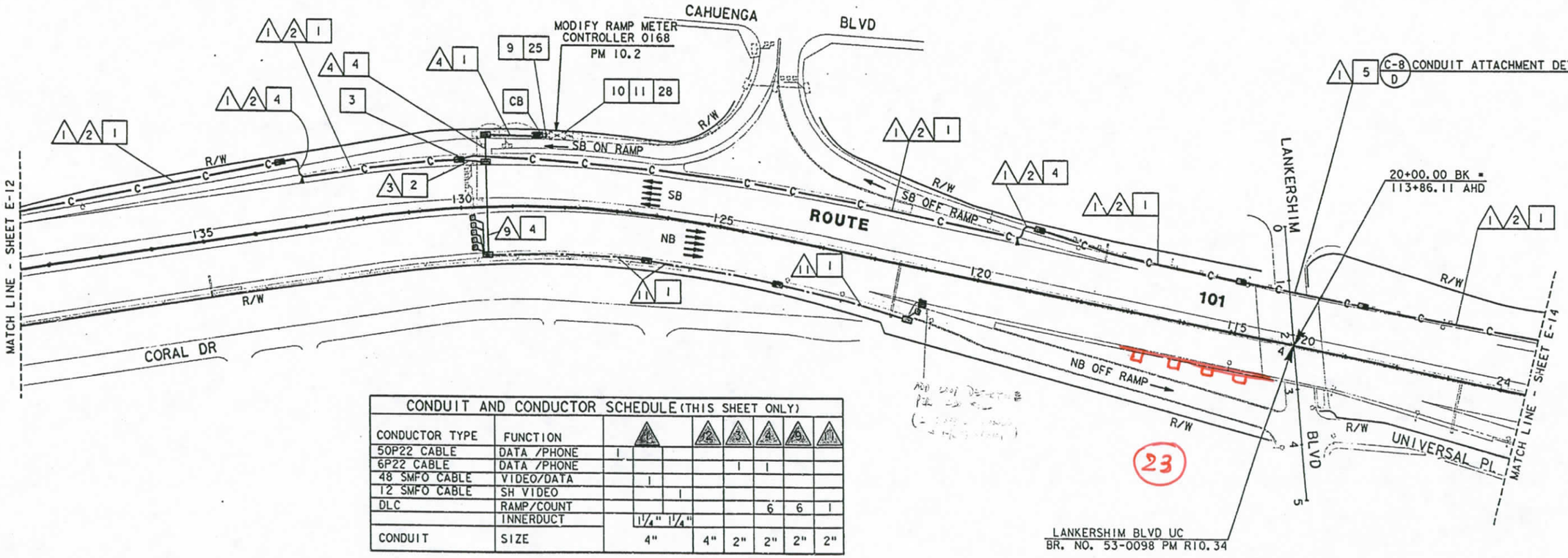
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.



CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1			2	3	4	9	11
50P22 CABLE	DATA /PHONE	1							
6P22 CABLE	DATA /PHONE					1	1		
48 SMFO CABLE	VIDEO/DATA		1						
12 SMFO CABLE	SH VIDEO			1					
DLC	RAMP/COUNT						6	6	1
	INNERDUCT		1¼"	1¼"					
CONDUIT	SIZE		4"		4"	2"	2"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-13

CALCULATED/DESIGNED BY	ES	DATE 2/95	REVISED BY
CHECKED BY	JZ	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 19-OCT-1995 15:33
LAST REVISION 00-00-00

FORM DC-SE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesi
DGN FILE => /usr/mikesi/PO/712072u13.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	78	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

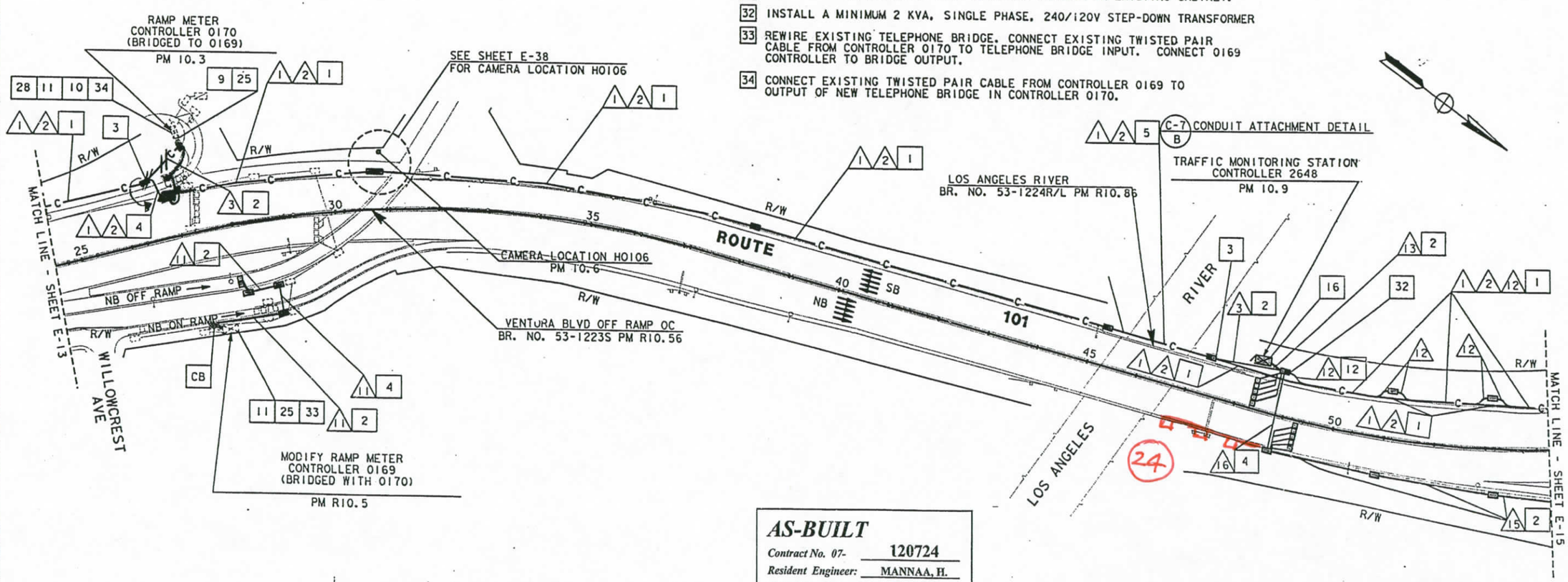
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE DETAIL B, SHEET E-56.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.
9. CONNECT 6P22 TWISTED PAIR CABLE TO CONTROLLER.
10. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
25. IDENTIFY AND [RC] EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.
32. INSTALL A MINIMUM 2 KVA, SINGLE PHASE, 240/120V STEP-DOWN TRANSFORMER
33. REWIRE EXISTING TELEPHONE BRIDGE. CONNECT EXISTING TWISTED PAIR CABLE FROM CONTROLLER 0170 TO TELEPHONE BRIDGE INPUT. CONNECT 0169 CONTROLLER TO BRIDGE OUTPUT.
34. CONNECT EXISTING TWISTED PAIR CABLE FROM CONTROLLER 0169 TO OUTPUT OF NEW TELEPHONE BRIDGE IN CONTROLLER 0170.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8	9	10
50P22 CABLE	DATA/PHONE	1									
6P22 CABLE	DATA/PHONE			1				1			
48 SMFO CABLE	VIDEO/DATA		1								
12 SMFO CABLE	SH VIDEO			1							
#4	POWER					2		2			
DLC	RAMP/COUNT				2		11		1	6	
	INNERDUCT		1¼"	1¼"							
CONDUIT	SIZE	4"		4"	2"	2"	2"	3"	3"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-14

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 12:23

FORM DC-CE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => richard
DGN FILE => /usr/richard/P11/712072u14.
CU 07387
EA 120721

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT. VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1 (SPARE)	2	3	4	6	7	12	13	14
50P22 CABLE	DATA/PHONE	1								
6P22 CABLE	DATA/PHONE				1	1		1		
48 SMFO CABLE	VIDEO/DATA		1							
12 SMFO CABLE	SH VIDEO			1						
#4	POWER								2	
DLC	RAMP/COUNT					10	5	4	2	
	INNERDUCT	1¼"	1¼"							1
CONDUIT	SIZE	4"	4"	2"	2"	2"	2"	2"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	79	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

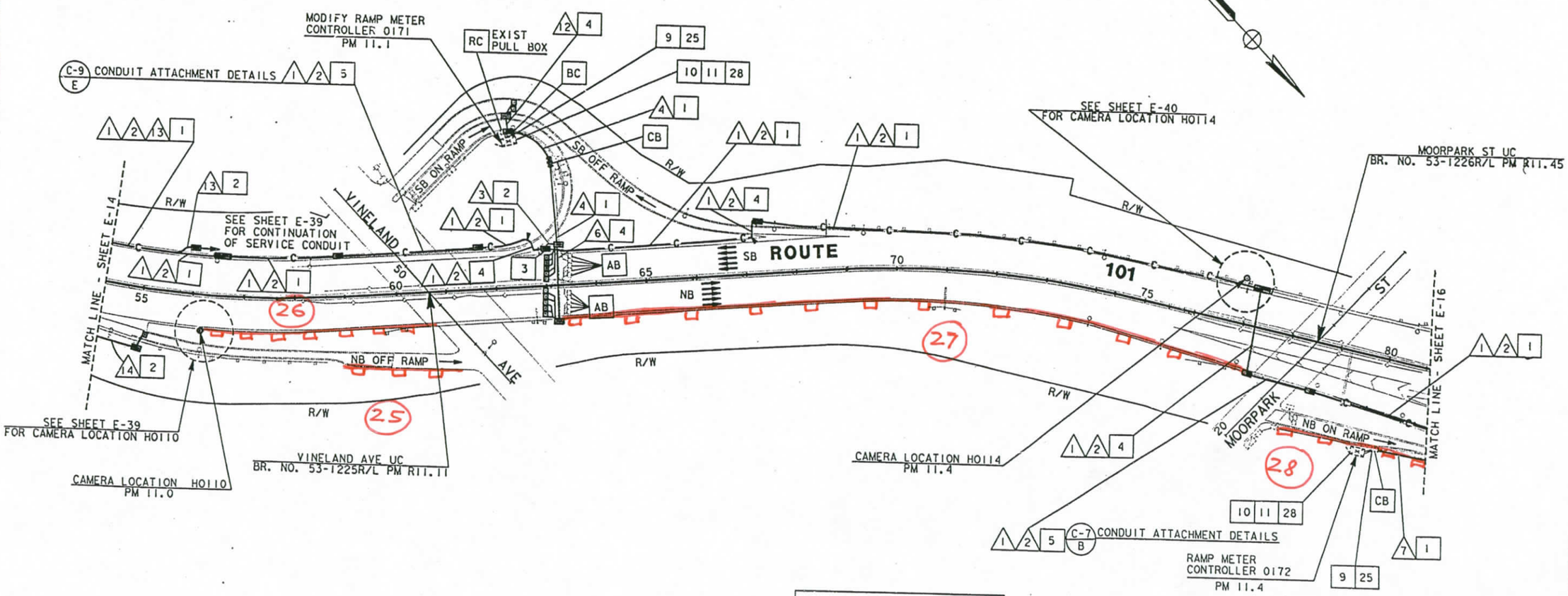
10-10-95
PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-15

CALCULATED/ DESIGNED BY	DATE	REVISED BY
ES	2/95	
CHECKED BY	DATE REVISED	
JZ	5/95	

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FORM DC-GE-92-LE (REV. 3/88)

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

USERNAME => richard
DGN FILE => /usr/richard/P11/712072u15.

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10:53

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	5	7	8	9	10	11	12	13
50P22 CABLE	DATA/PHONE	1							1			
6P22 CABLE	DATA/PHONE											
72 SMFO CABLE	VIDEO/DATA			1	1					1	1	
48 SMFO CABLE	VIDEO/DATA	1							1			
12 SMFO CABLE	SH VIDEO		1									
24 SMFO CABLE	SH VIDEO								1			
DLC	RAMP COUNT			4	7	1	1	1		1		
	INNERDUCT	1¼" 1¼"					1¼" 1¼" 1¼" 1¼" 1¼"		1¼" 1¼"	1¼" 1¼"		4
CONDUIT	SIZE	4"	4"	2"	2"	2"	4"	4"	4"	4"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	80	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

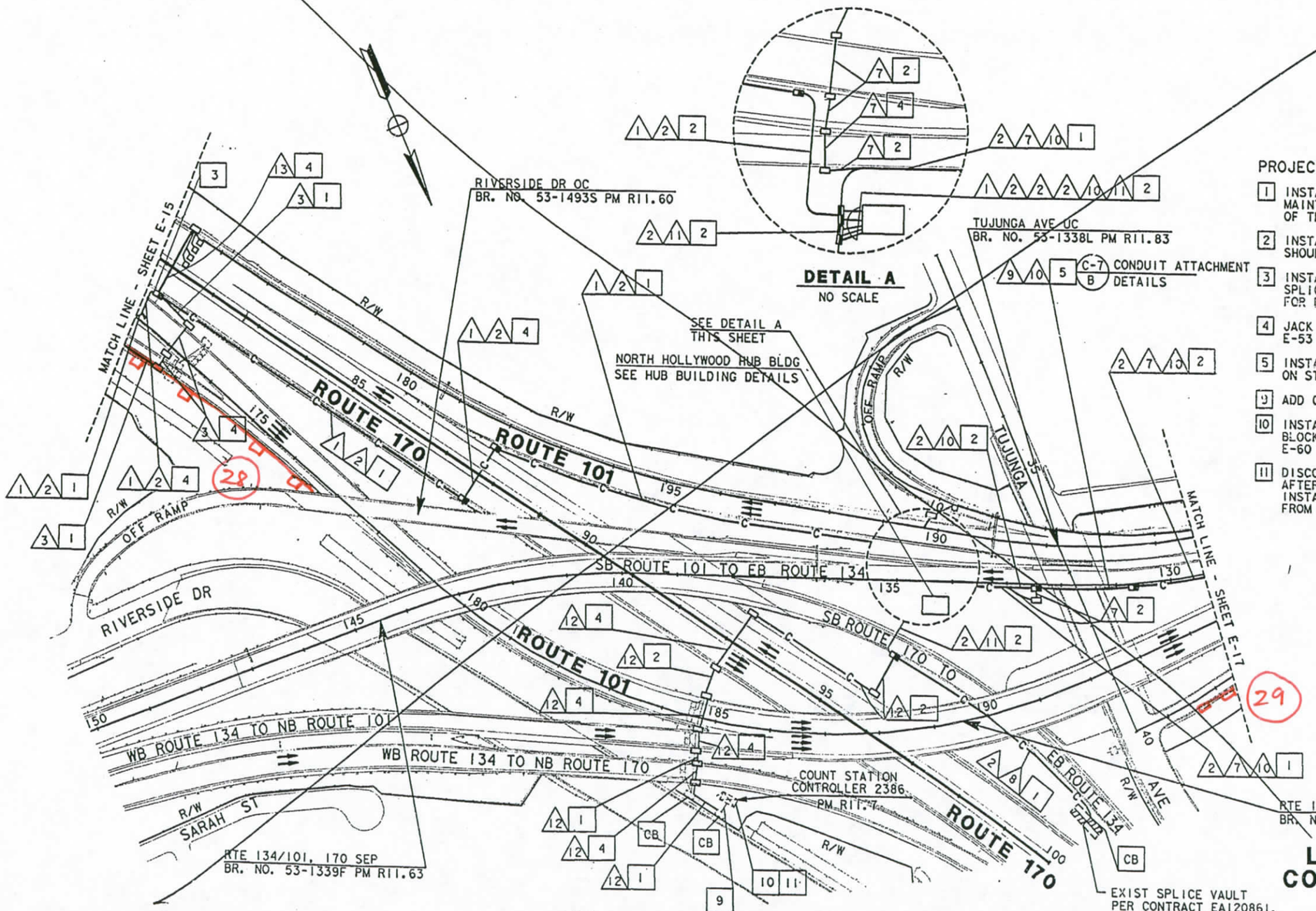
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



NOTE: FOR LEGEND AND PROJECT NOTES SEE SHEETS E-1 AND E-2. THIS PLAN ACCURATE FOR ELECTRICAL WORK 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 TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND SHEET E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-16

CALCULATED/ DESIGNED BY	DATE	REVISED BY	DATE REVISED
ES	2/95		
CHECKED BY			
JZ	5/95		

PROJECT ENGINEER — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

FORM DC-OT-92-PE (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u16.dg

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 19-OCT-1995 15:33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	81	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

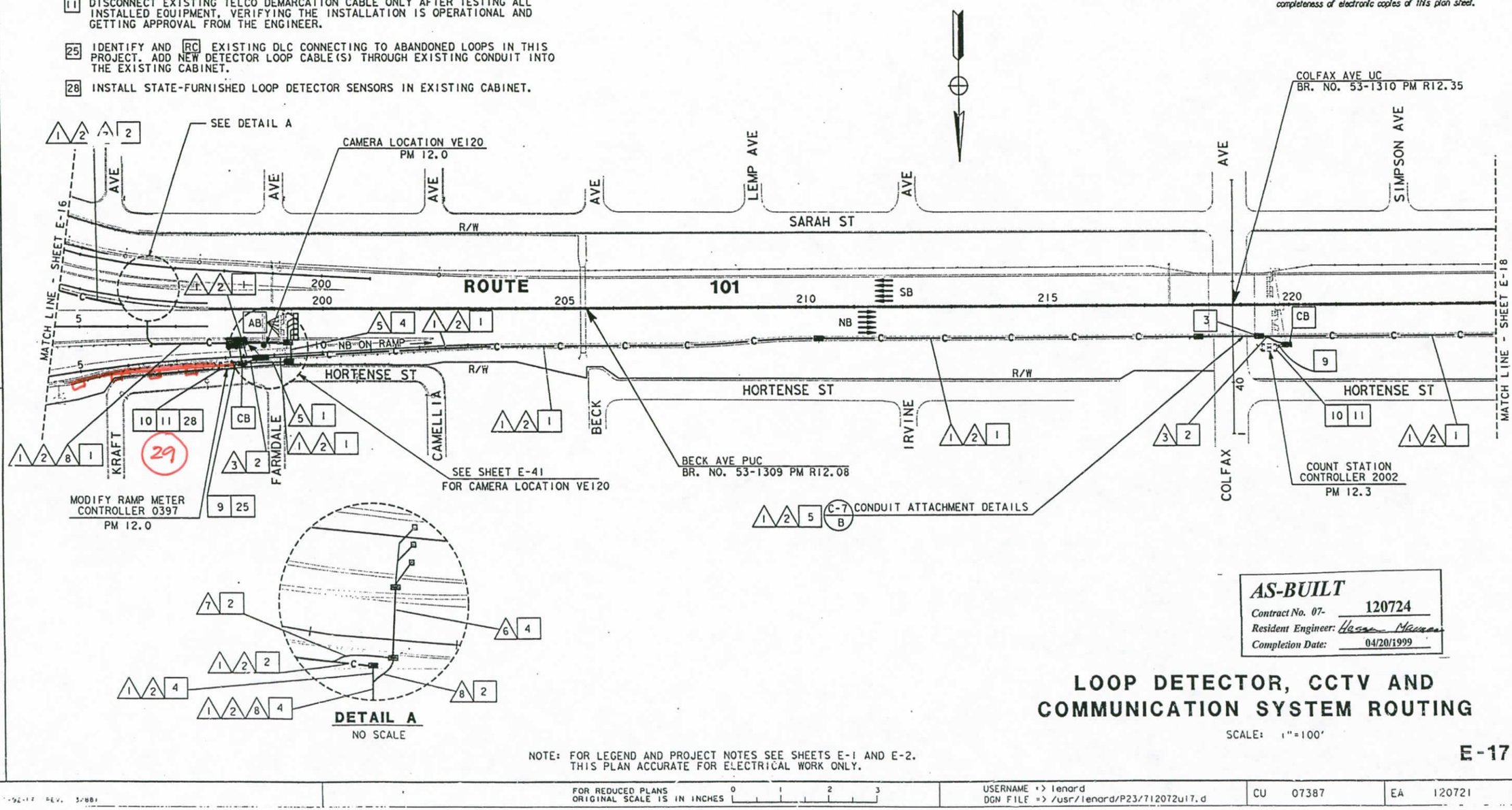
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND [RC] EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8
50P22 CABLE	DATA /PHONE	1							
6P22 CABLE	DATA /PHONE					1			
72 SMFO CABLE	VIDEO/DATA		1						
12 SMFO CABLE	SH VIDEO			1					
DLC	RAMP/COUNT					5	3	1	4
	INNERDUCT	1¼"	1¼"						
CONDUIT	SIZE	4"			4"	2"	2"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Maruan
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-17

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

DATE	REVISED BY	DATE REVISED
2/95	ES	
5/95	JZ	

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 08:48

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

USERNAME => lenard
DGN FILE => /usr/lenard/P23/712072u17.d

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	82	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. E014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

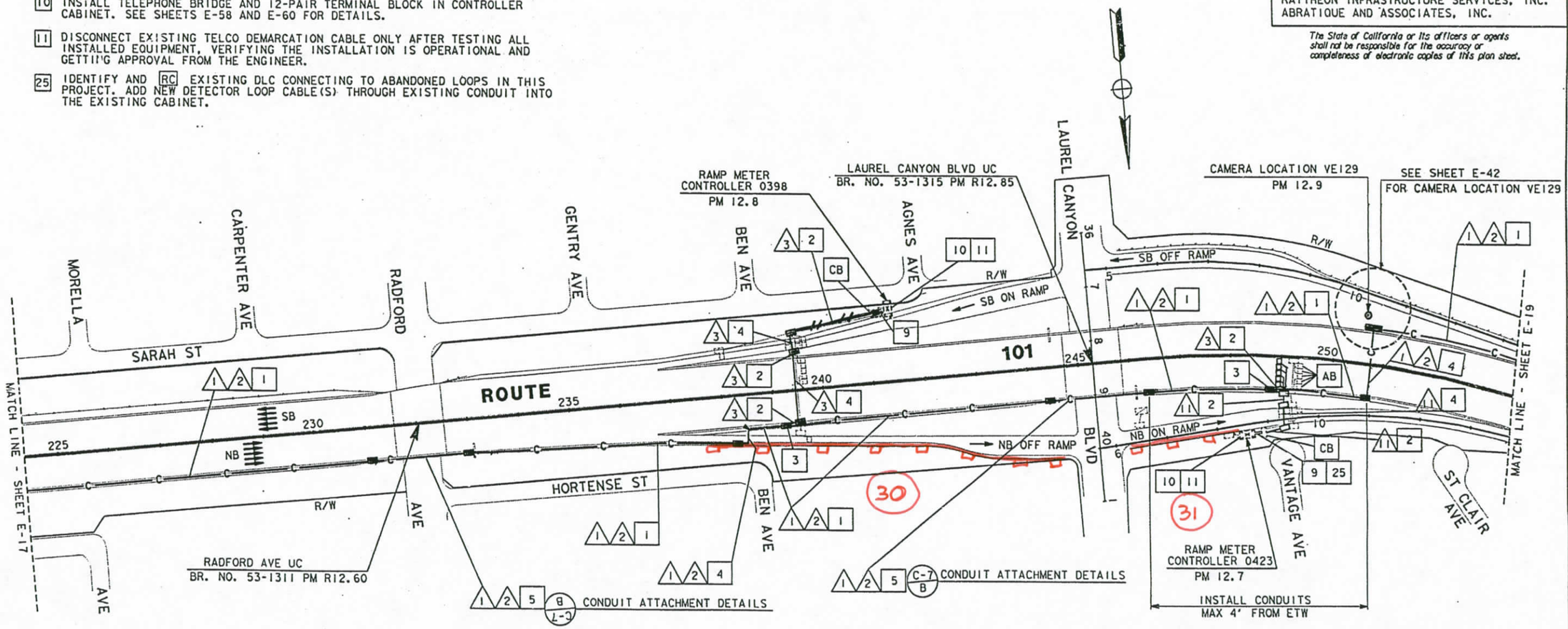
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1			2	3	10
50P22 CABLE	DATA/PHONE	1					
6P22 CABLE	DATA/PHONE					1	1
72 SMFO CABLE	VIDEO/DATA		1				
12 SMFO CABLE	SH VIDEO			1			
DLC	RAMP/COUNT						5
	INNERDUCT		1¼"	1¼"			
CONDUIT	SIZE	4"			4"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hassan Mirzaee
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-18

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

CALCULATED/DESIGNED BY	ES	DATE 2/95	REVISED BY	
CHECKED BY	JZ	5/95	DATE REVISED	

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 08:48
LAST REVISION 00-00-00

FORM DC-3E-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => lenard
DGN FILE => /usr/lenard/P23/712072u18.d
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	83	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

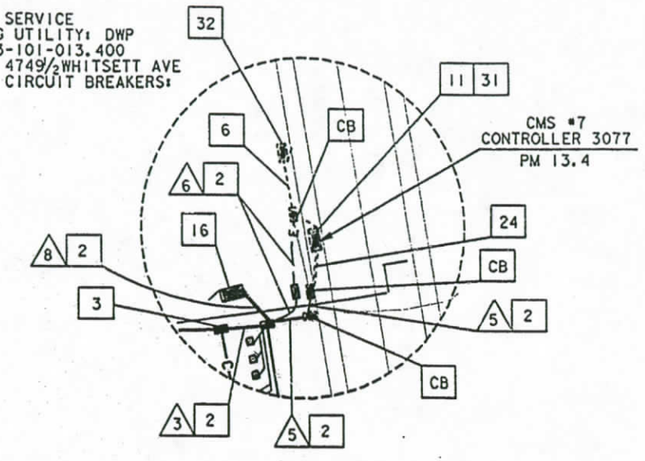
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

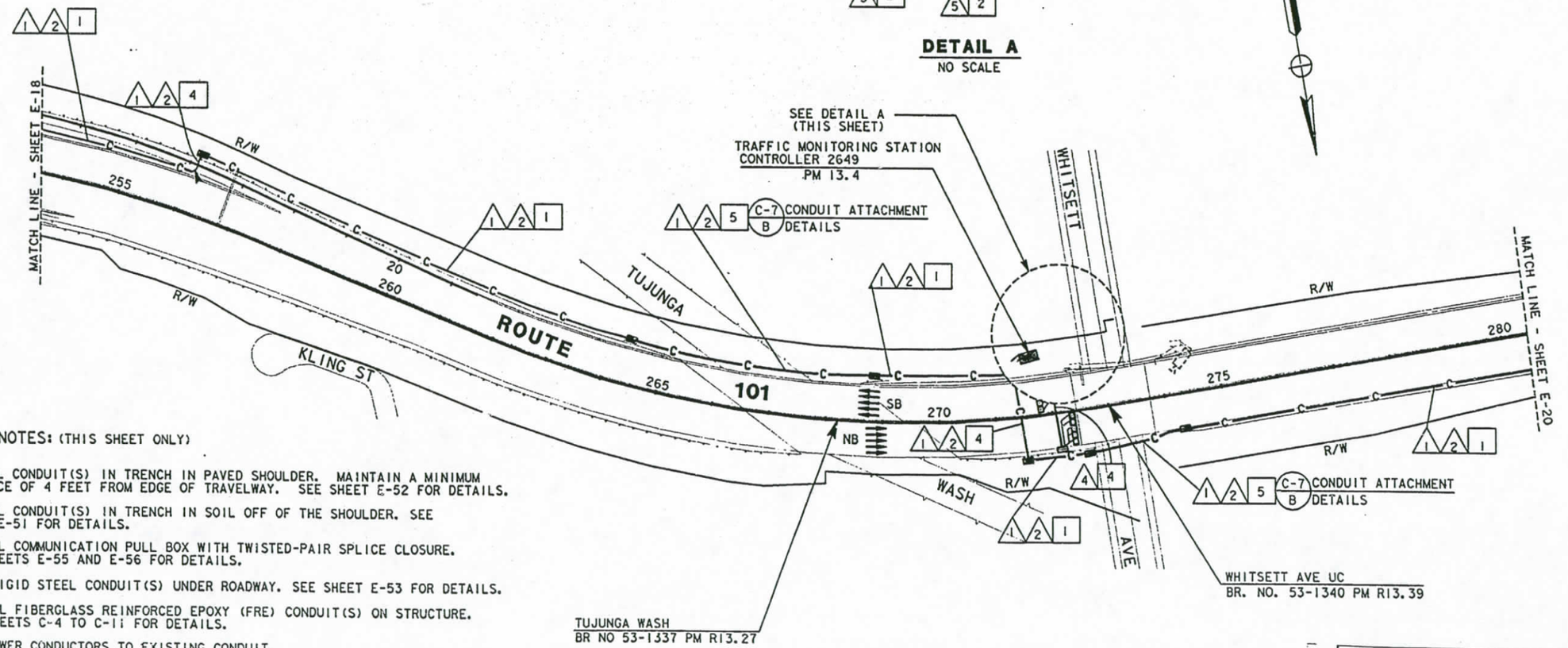
CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8
50P22 CABLE	DATA/PHONE	1							
6P22 CABLE	DATA/PHONE				1			1	
72 SMFO CABLE	VIDEO/DATA		1						
12 SMFO CABLE	SH VIDEO			1					
12P22 CABLE	DATA/PHONE				1		1		
#8	POWER							2	2
DLC	TMS					5		10	
	INNERDUCT	1¼"	1¼"						
CONDUIT	SIZE	4"		4"	2"	2"	2"	3"	3"

(E) - EXISTING CONDUIT OR CONDUCTOR

EXISTING SERVICE
SERVICING UTILITY: DWP
ID# 07-53-101-013.400
ADDRESS: 4749½ WHITSETT AVE
EXISTING CIRCUIT BREAKERS:



DETAIL A
NO SCALE



PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE- FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
24. ADD CABLE TO EXISTING CONDUIT.
31. INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-60 AND SHEET E-71 FOR DETAILS.
32. ADD ONE 30A, SINGLE POLE CIRCUIT BREAKER FOR TMS.

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Maruan
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-19

REVISED BY	DATE REVISED
ES	2/95
JZ	5/95

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 19-OCT-1995 15:34

FORM DC-OE-92-PE (REV. 3/98)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u19.dg

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	84	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

10-10-95
PLANS APPROVAL DATE

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

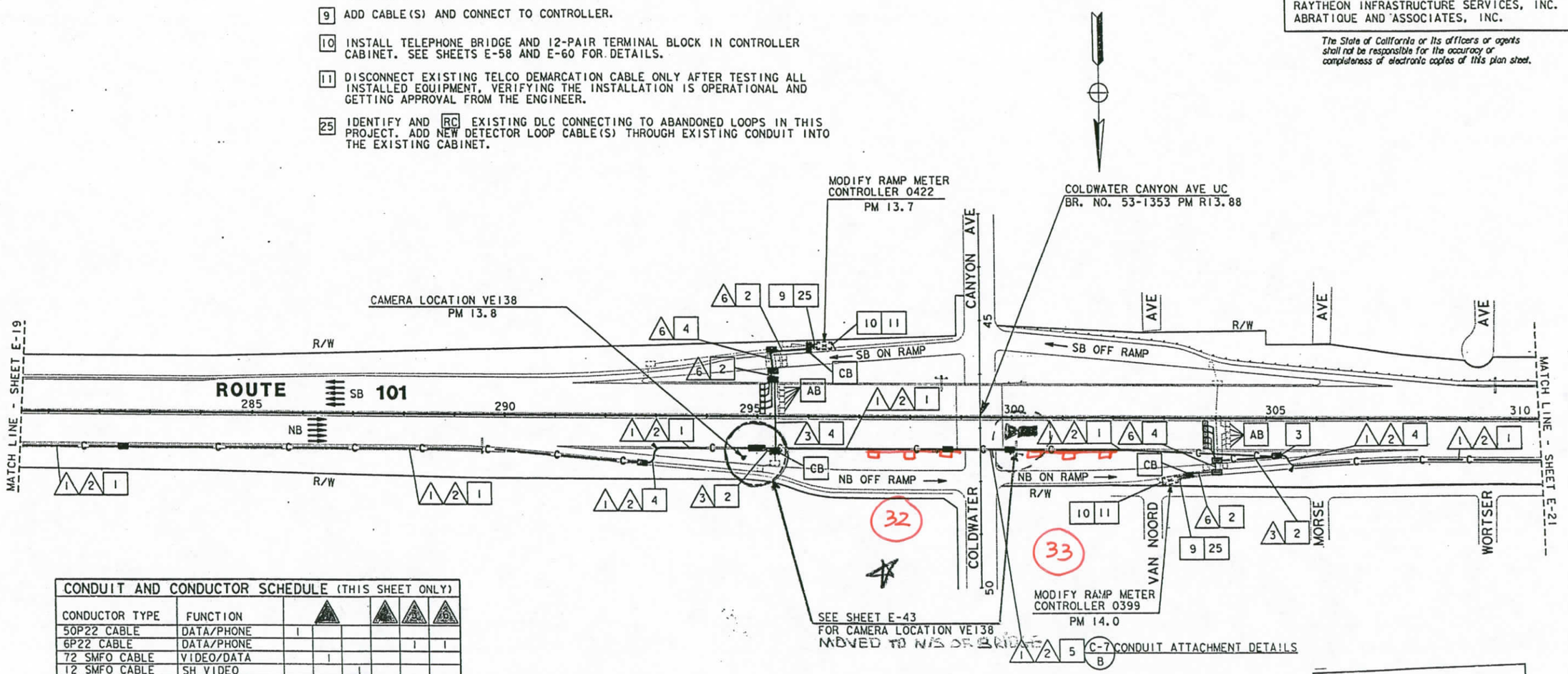
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.



CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

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

(E) = EXISTING CONDUIT OR CONDUCTOR

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-20

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: ES DATE 2/95 REVISED BY
CHECKED BY: JZ 5/95 DATE REVISED
LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 09:21

FORM DC-CE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => annda
DGN FILE => /usr/annda/P54/712072u20.dg
CU 07387
EA 120721

PROJECT NOTES (THIS SHEET ONLY):

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATON PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
19. INSTALL ON NEW FOUNDATION TYPE 111-BF 100A, 120/240V SERVICE WITH A 100A, 240V, 2P MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
32. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR TMS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	2A	3	4	5	6
50P22 CABLE	DATA /PHONE	1						
6P22 CABLE	DATA /PHONE				1			1
72 SMFO CABLE	VIDEO/DATA		1					
12 SMFO CABLE	SH VIDEO			1				
#8	POWER					2		2
DLC	TMS						5	10
	INNERDUCT	1¼"	1¼"					
CONDUIT	SIZE	4"		4"	2"	2"	2"	3"	3"

(E) - EXISTING CONDUIT OR CONDUCTOR

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	85	154

Elia G. Sachir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

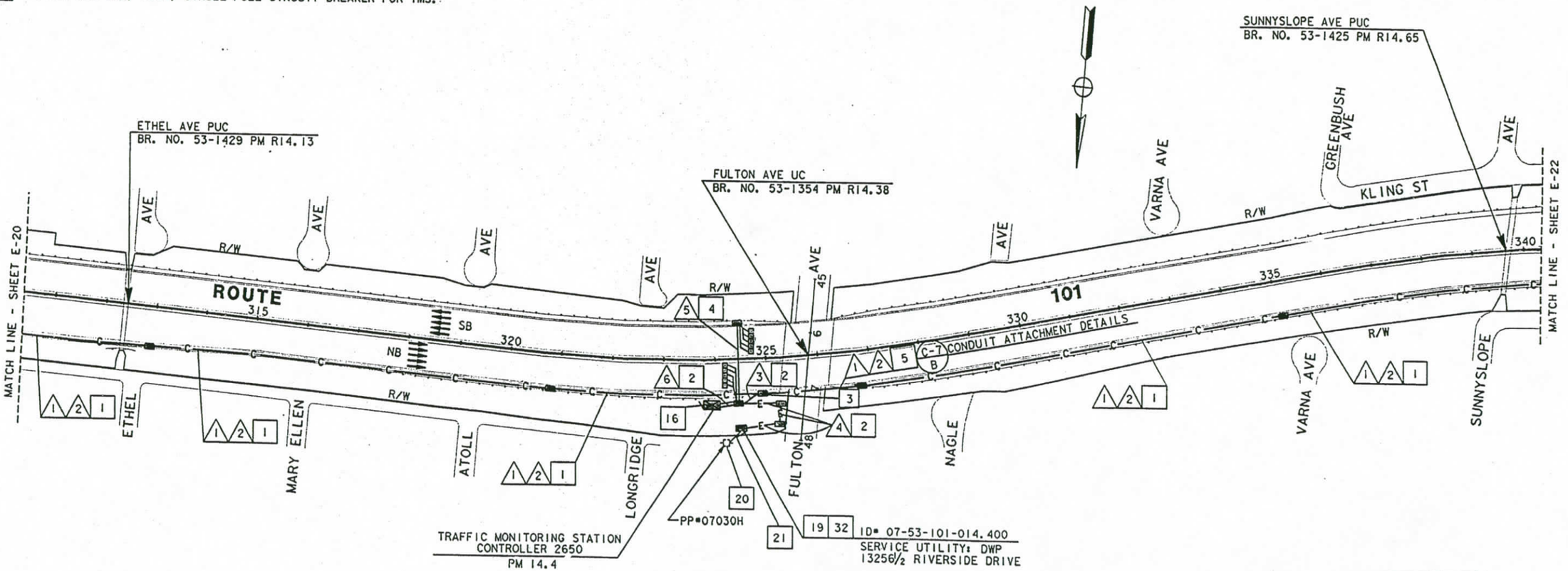
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SACHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-21

DATE REVISED	REVISED BY
5/95	JZ
DATE 2/95	ES

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 19-OCT-1995 15:36
LAST REVISION 00-00-00

FORM 05-07-92-PE (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PW/712072u21.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	86	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ELIA G. SAGHIR
No. E014922
Exp. 6/30/95
ELECTRICAL
STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

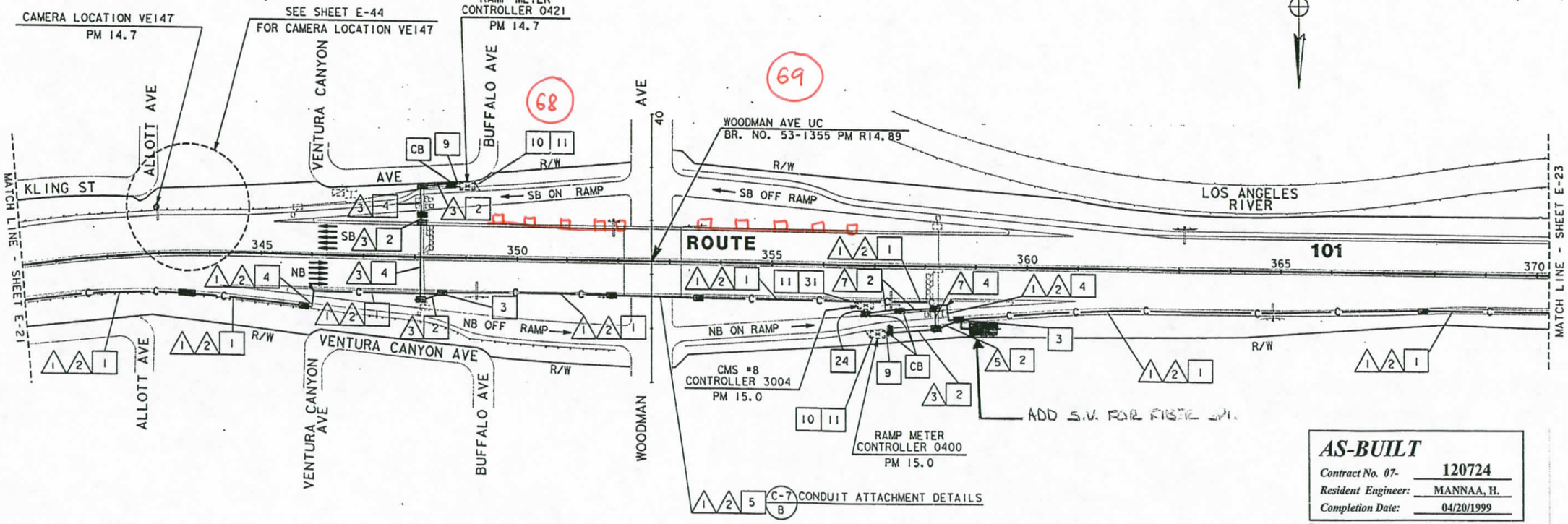
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
24. ADD CABLE TO EXISTING CONDUIT.
31. INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-60 AND SHEET E-71 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

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



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT ENGINEER: PAT SULLIVAN

CALCULATED/DESIGNED BY: ES DATE 2/95 REVISED BY
CHECKED BY: JZ 5/95 DATE REVISED

TIME PLOTTED => 17-OCT-1995 09:03
LAST REVISION 00-00-00

FORM DC-SE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => annda
DGN FILE => /usr/annda/P54/712072u22.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	87	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

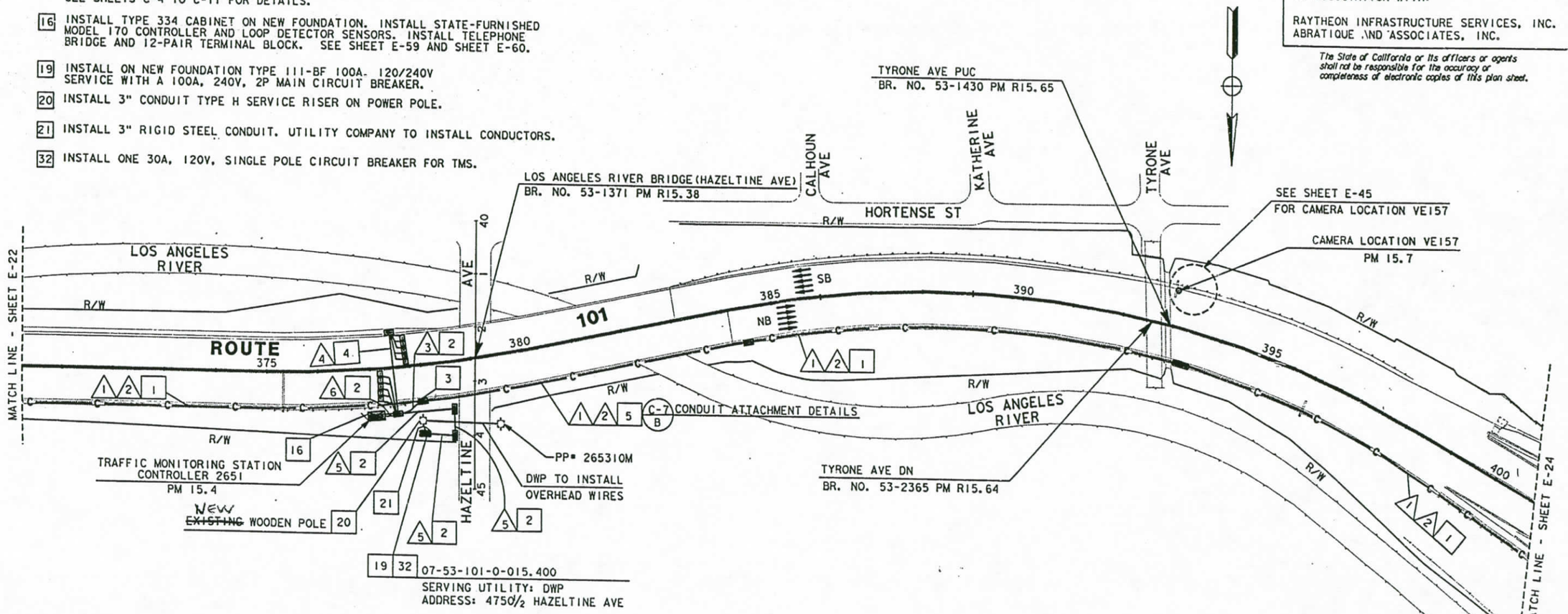
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 FOR DETAILS.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
19. INSTALL ON NEW FOUNDATION TYPE III-BF 100A. 120/240V SERVICE WITH A 100A, 240V, 2P MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
32. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR TMS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6
50P22 CABLE	DATA/PHONE	1					
6P22 CABLE	DATA/PHONE			1			1
72 SMFO CABLE	VIDEO/DATA		1				
12 SMFO CABLE	SM VIDEO		1				
#8	POWER					2	2
DLC	TMS				5		10
	INNERDUCT	1¼"	1¼"				
CONDUIT	SIZE	4"	4"	2"	2"	2"	3"	3"



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-23

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXX

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 10:09

FORM SC [illegible] REV. 3/88

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PO/712072u23.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	88	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. E014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

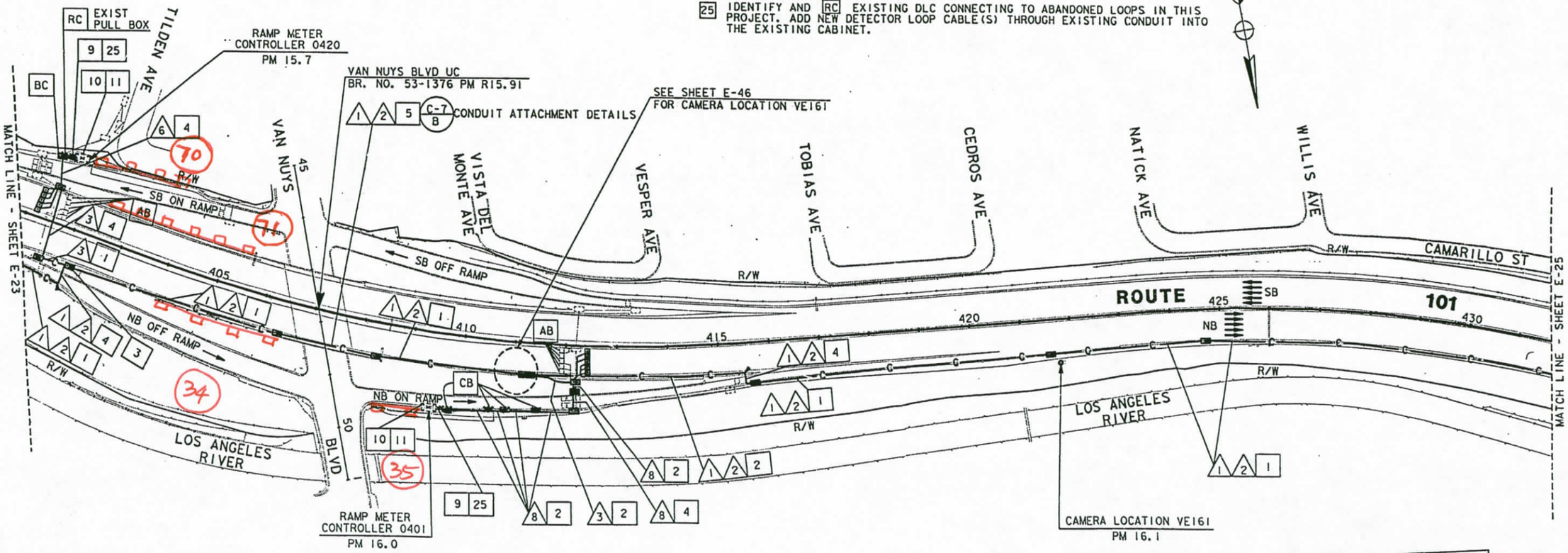
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1			2	3	6	8
50P22 CABLE	DATA/PHONE	1						
6P22 CABLE	DATA/PHONE					1	1	1
72 SMFO CABLE	VIDEO/DATA		1					
12 SMFO CABLE	SH VIDEO			1				
DLC	RAMP/COUNT						5	5
	INNERDUCT		1¼"	1¼"				
CONDUIT	SIZE	4"			4"	2"	2"	2"



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-24

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

CALCULATED/DESIGNED BY	ES	DATE 2/95	REVISED BY
CHECKED BY	JZ	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 10:09
LAST REVISION 00-00-00

FORM DC-CE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u24.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	89	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. E014922 — Exp. 6/30/95 ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE SHEETS C-4 TO C-11 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
16. INSTALL TYPE 334 CABINET ON NEW FOUNDATION. INSTALL STATE-FURNISHED MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK. SEE SHEET E-59 AND SHEET E-60.
19. INSTALL ON NEW FOUNDATION TYPE 111-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
32. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR TMS.
33. INSTALL GATE IN EXISTING SOUNDWALL. SEE SHEETS C-2 AND C-3 FOR DETAILS.

TRAFFIC MONITORING STATION
CONTROLLER 2652
PM 16.4

19 32 ID= 07-53-101-0-016.420
SERVICING UTILITY: DWP
4814½ KESTER AVE

KESTER AVE — CAMARILLO ST — R/W — DWP VAULT — 2"C. 7DLC — C-6 CONDUIT ATTACHMENT DETAILS — C-1 SOUND WALL CROSSING DETAIL

DETAIL A
NO SCALE

KESTER AVE UC
BR. NO. 53-1375 PM R16.43

SEE DETAIL A THIS SHEET

C-5 CONDUIT ATTACHMENT DETAILS

SALOMA AVE — LEMONA AVE — NORWICH AVE — NOBLE AVE

NOBLE AVE PUC
BR. NO. 53-1438 PM R16.70

C-1 SOUND WALL CROSSING DETAIL

MATCH LINE - SHEET E-24

2"C. 5DLC 435 — LA MAIDA ST — R/W — SB — NB — 440 — 445 — 450 — ROUTE 101

MORRISON ST — R/W — AVE

MATCH LINE - SHEET E-26

COLUMBUS AVE

RAMP METER CONTROLLER 0419
PM 16.7

SEPULVEDA BLVD UC
BR. NO. 53-1102R/L PM R16.94

SEE SHEET E-47 FOR CAMERA LOCATION VE169

CAMERA LOCATION VE169
PM 16.9

SEPULVEDA BLVD — 726 — 730

ON RAMP — OFF RAMP — CB — 455 — VIDEO NODE SEE SHEET E-47 — DATA NODE 110 SEE SHEET E-47

MORRISON ST

C-1 CONDUIT ATTACHMENT DETAILS

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8	9	10
50P22 CABLE	DATA /PHONE	1				1					
6P22 CABLE	DATA /PHONE			1							1
72 SMFO CABLE	VIDEO/DATA		1								
12 SMFO CABLE	SH VIDEO			1			1				
#8	POWER							2			2
DLC	TMS								3	10	10
	INNERDUCT	1¼"	1¼"			1¼"	1¼"				
CONDUIT	SIZE	4"		4"	2"	4"		2"	2"	2"	3"	3"

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

TRAFFIC MONITORING STATION, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-25

71B

DATE	REVISED BY	DATE REVISED
2/95	ES	5/95 JZ

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10:10

FORM CT-E-52-PF (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/P0/712072u25.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	90	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. E014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

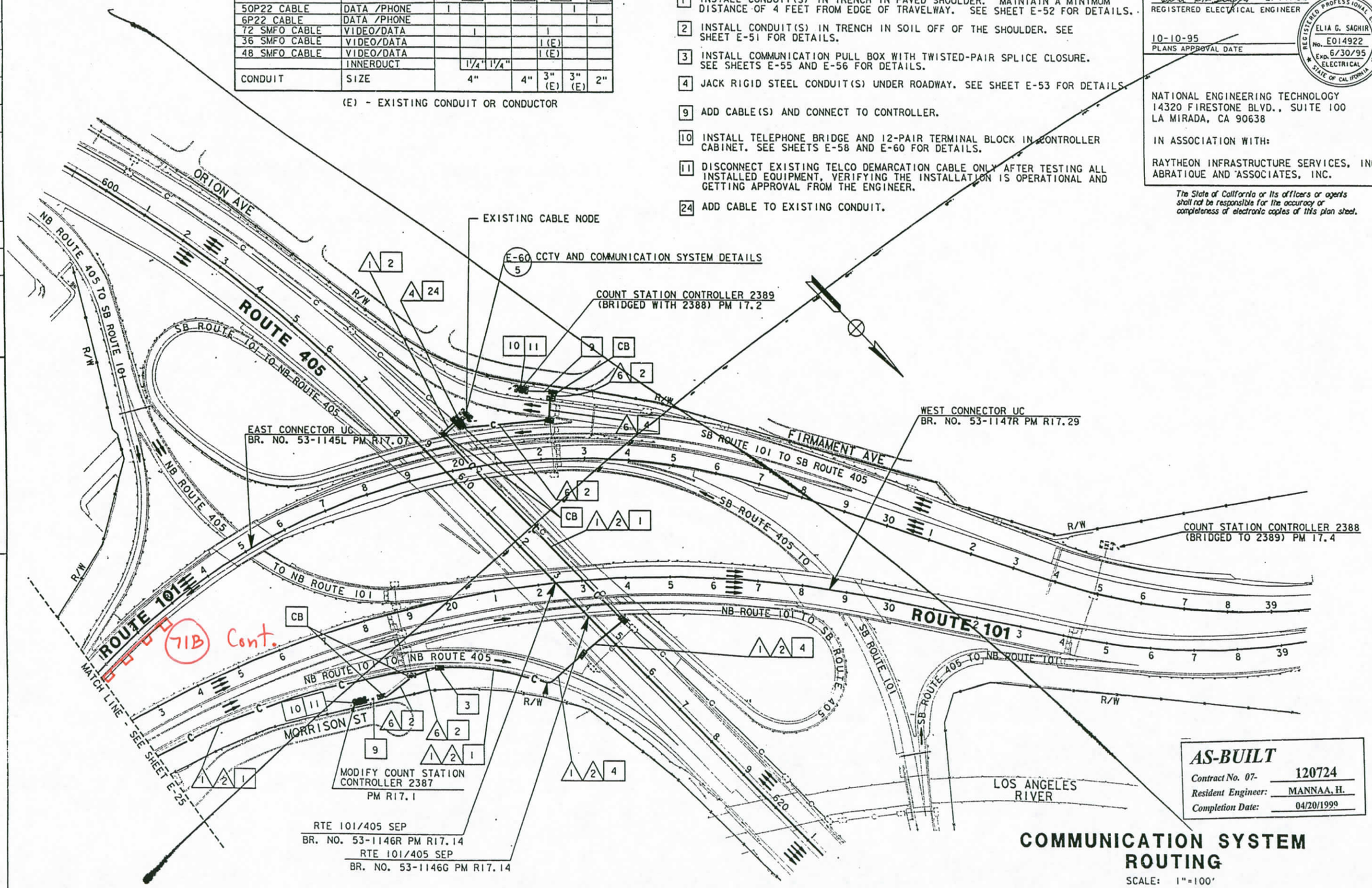
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1			2	4		6
50P22 CABLE	DATA /PHONE	1					1	
6P22 CABLE	DATA /PHONE							1
72 SMFO CABLE	VIDEO/DATA		1			1		
36 SMFO CABLE	VIDEO/DATA					1 (E)		
48 SMFO CABLE	VIDEO/DATA					1 (E)		
	INNERDUCT		1¼"	1¼"				
CONDUIT	SIZE	4"			4"	3" (E)	3" (E)	2"

(E) - EXISTING CONDUIT OR CONDUCTOR

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
3. INSTALL COMMUNICATION PULL BOX WITH TWISTED-PAIR SPLICE CLOSURE. SEE SHEETS E-55 AND E-56 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 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-58 AND E-60 FOR DETAILS.
11. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
24. ADD CABLE TO EXISTING CONDUIT.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

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

E-26

CALCULATED/DESIGNED BY	ES	DATE 2/95	REVISED BY
CHECKED BY	JZ	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 10:05
LAST REVISION 00-00-00

FORM DC-C-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => lenard
DGN FILE => /usr/lenard/P23/712072u26.d
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	91	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

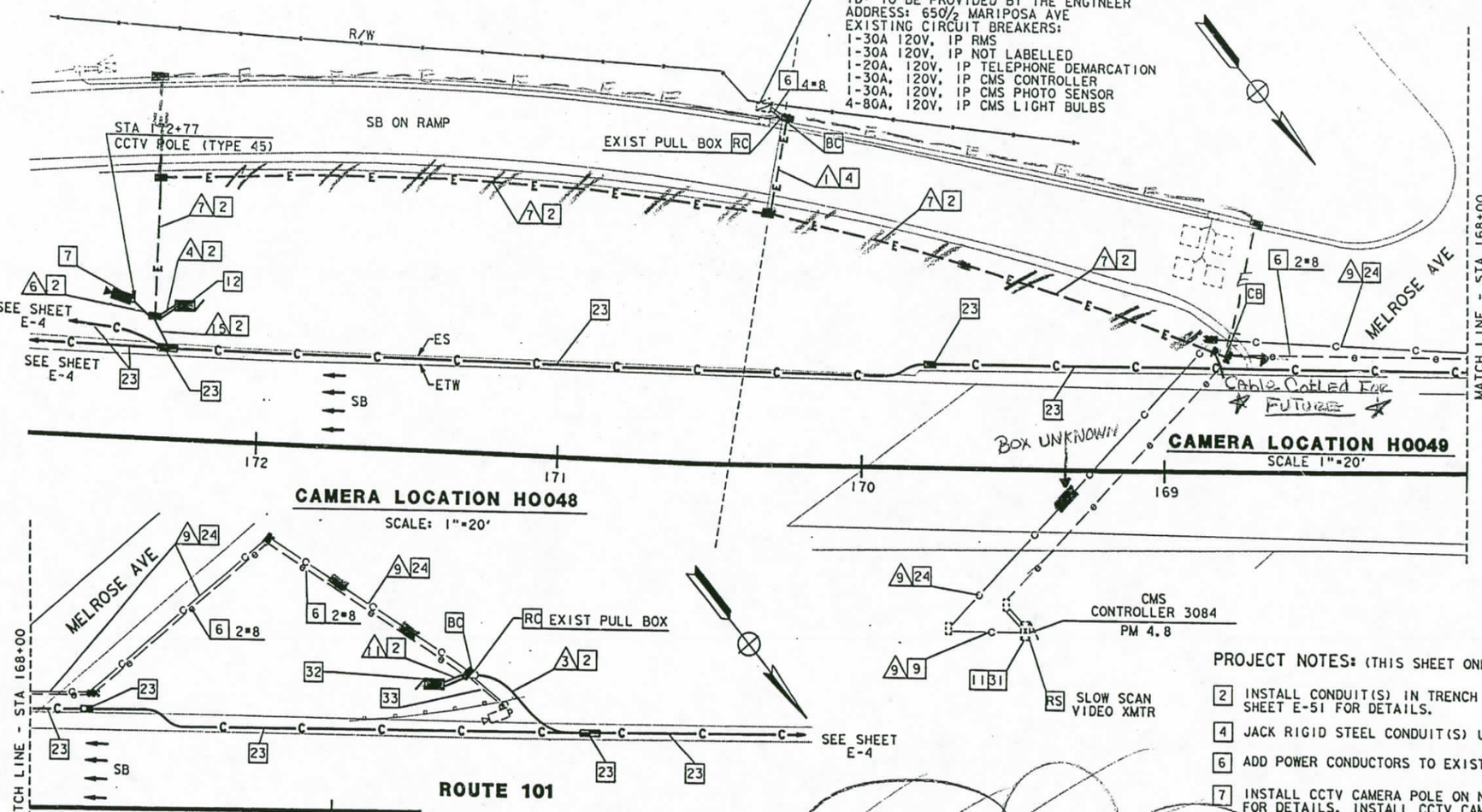
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTE: (THIS SHEET ONLY)
1. SEE SHEET L-1 FOR LAYOUT DETAILS.

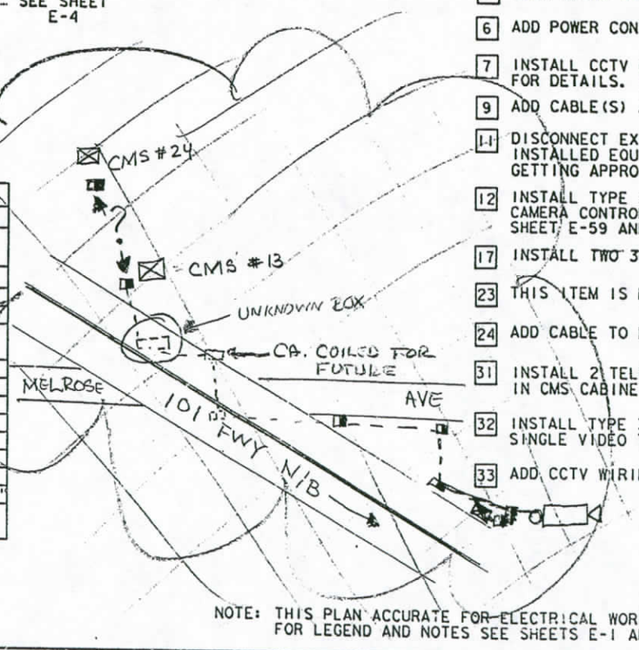
AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

17 EXISTING 120/240V SERVICE
SERVING UTILITY: DWP
ID# TO BE PROVIDED BY THE ENGINEER
ADDRESS: 650½ MARIPOSA AVE
EXISTING CIRCUIT BREAKERS:
1-30A 120V, IP RMS
1-30A 120V, IP NOT LABELLED
1-20A, 120V, IP TELEPHONE DEMARCATION
1-30A, 120V, IP CMS CONTROLLER
1-30A, 120V, IP CMS PHOTO SENSOR
4-80A, 120V, IP CMS LIGHT BULBS



CONDUCTOR TYPE	FUNCTION	CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY) RUN 1	2	3	4	5	6	7	8	9
6P22 CABLE	DATA /PHONE		1		1				1	1
12P22	DATA /PHONE		1							
2SMFO B/O CABLE	SH VIDEO			1	1			1	1	
SEE TABLE 1, SHEET E-1	CCTV WIRING				1		1		1	1
#8	POWER	4				2		2		2
2P18	TELCO				1					
								1 (E)		
	INNERDUCT		1¼"							1¼"
	CONDUIT SIZE	2"	3"	3"	3"	2"	2"	2" (E)	3"	3"

(E) - EXISTING CONDUIT OR CONDUCTOR



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

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
9 ADD CABLE(S) AND CONNECT TO CONTROLLER.
11 DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.
17 INSTALL TWO 30A, 120V SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV.
23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
24 ADD CABLE TO EXISTING CONDUIT.
31 INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN CMS CABINET. SEE DETAIL 2, SHEET E-60 AND SHEET E-71 FOR DETAILS.
32 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE SINGLE VIDEO TRANSMITTER. SEE DETAIL A SHEET E-59 AND DETAIL 3 SHEET E-60.
33 ADD CCTV WIRING TO EXISTING CONDUIT.

CCTV CAMERA (LOCATION H0048 AND LOCATION H0049)

SCALE: 1"=20'

E-27

PROJECT ENGINEER — PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans
XXXXXXXXXXXXXXXXXXXXXXXX

	DATE	REVISED BY
CALCULATED/DESIGNED BY	2/95	DM
CHECKED BY	5/95	ES

DATE REVISED

LAST REVISION 00-00-00 — TIME PLOTTED => 23-OCT-1995 12:45

FORM DC-E-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/P0/712072u27.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	92	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

15 TRANSITION CONDUIT UNDER SOUNDWALL. DIG WITH HAND TOOLS AS REQUIRED. SEE SHEET C-1 TO C-3 FOR DETAILS.

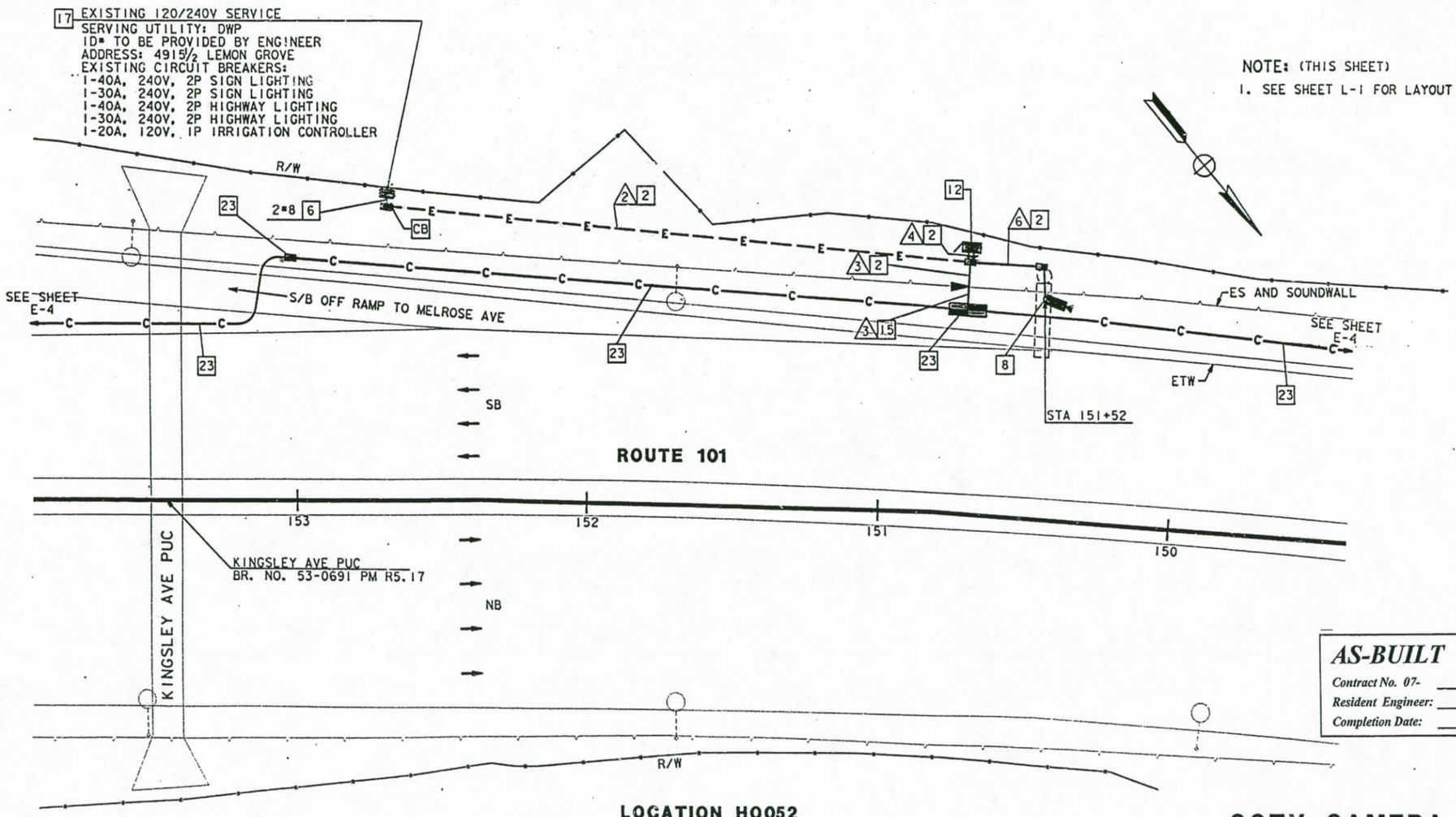
17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2	RUN 3	RUN 4	RUN 6
6P22 CABLE	DATA /PHONE		1	1	
2SMFO B/O CABLE	SH VIDEO		1	1	
SEE TABLE 1, SHEET E-1	CCTV WIRING			1	1
#8	POWER	2		2	
	INNERDUCT		1¼"		
	CONDUIT SIZE	2"	3"	3"	3" 2"

NOTE: (THIS SHEET)
1. SEE SHEET L-1 FOR LAYOUT DETAILS.



LOCATION H0052

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION H0052)

SCALE: 1"=20'

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

E-28

CALCULATED/DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 10:06
LAST REVISION 00-00-00

FORM DC-CE-92 PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => lenard /usr/lenard/P23/712072u28.d
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	93	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

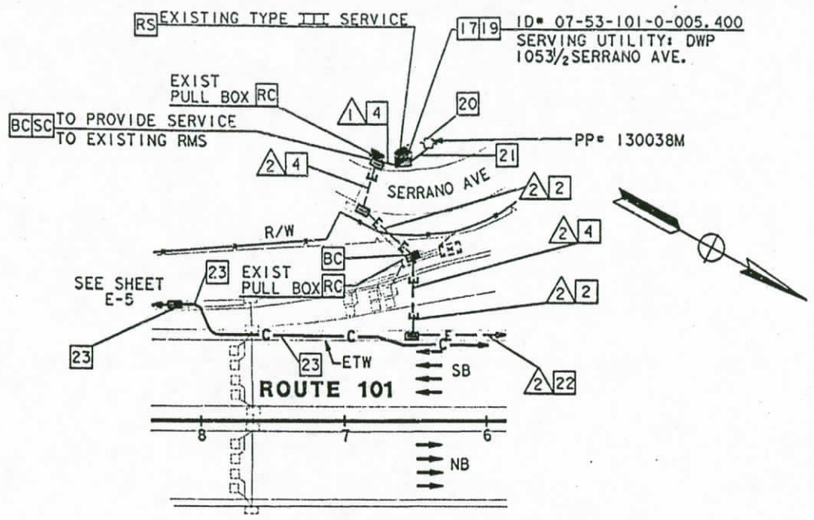
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

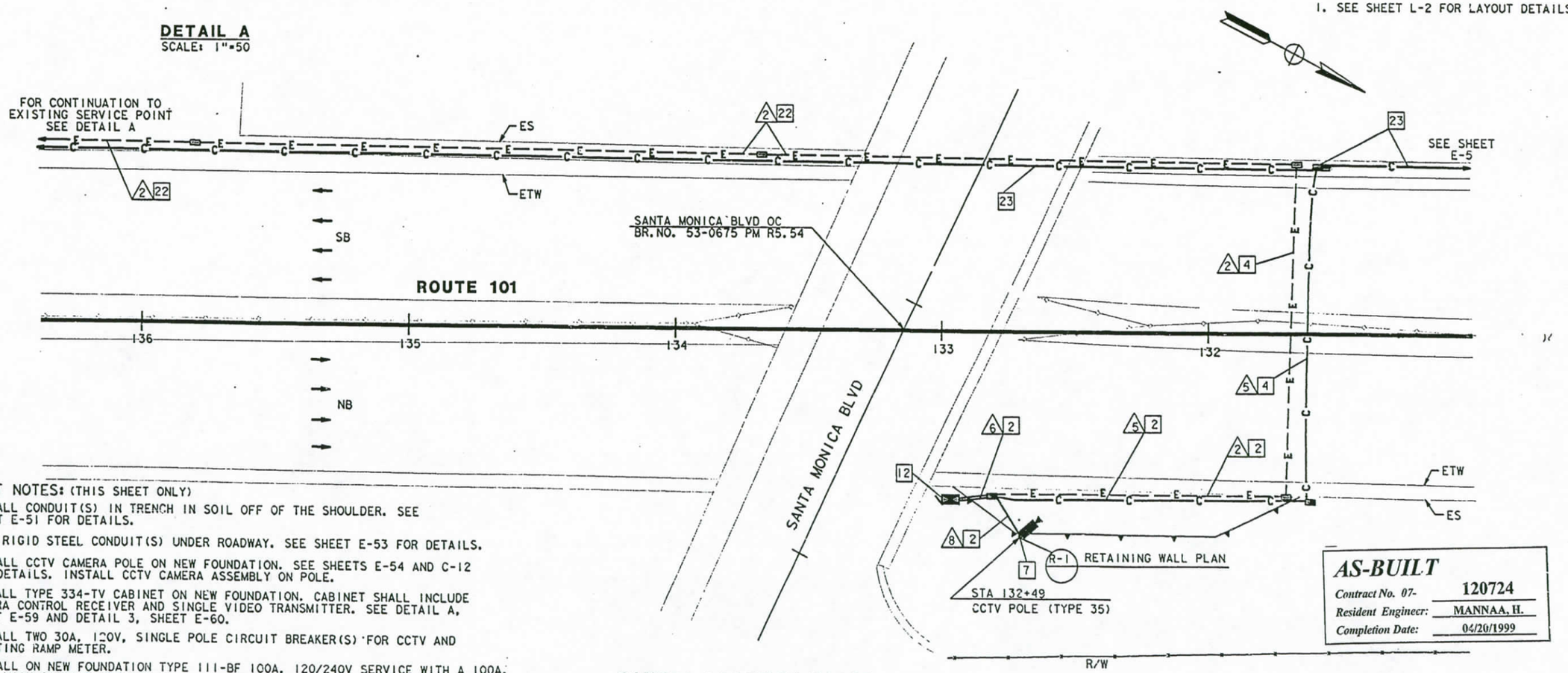
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



DETAIL A
SCALE: 1"=50

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 5	RUN 6	RUN 8	
6P22 CABLE	DATA /PHONE			1		1	
2SMFO B/O CABLE	SH VIDEO				1	1	
SEE TABLE I, SHEET E-1	CCTV WIRING					1	1
#8	POWER	2					
#4	POWER	2	2		2		
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"	2"	3"	3"	3"	2"

NOTE: (THIS SHEET)
1. SEE SHEET L-2 FOR LAYOUT DETAILS.



CAMERA LOCATION H0055
SCALE: 1"=20'

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL TWO 30A, 120V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV AND EXISTING RAMP METER.

19 INSTALL ON NEW FOUNDATION TYPE III-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.

20 INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.

21 INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION H0055)

AS NOTED

E-29

REVISED BY	DATE	DATE REVISED
DM	2/95	5/95
ES		

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER: PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 19-OCT-1995 15:36

FORM DC-CE-92-PE (REV. 3/86)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/P0/712072u29.dg
CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	94	154

Edlia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

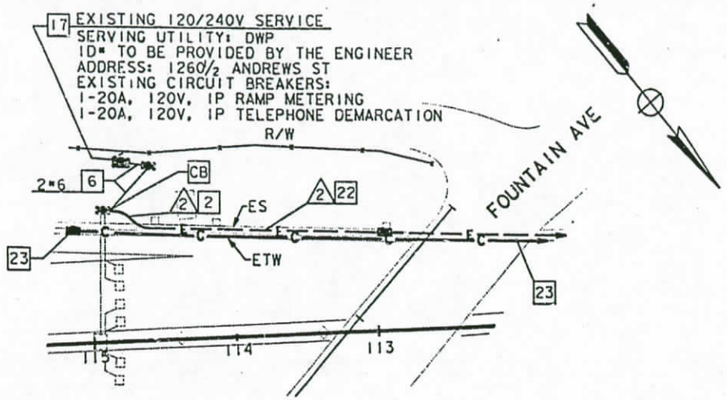
NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

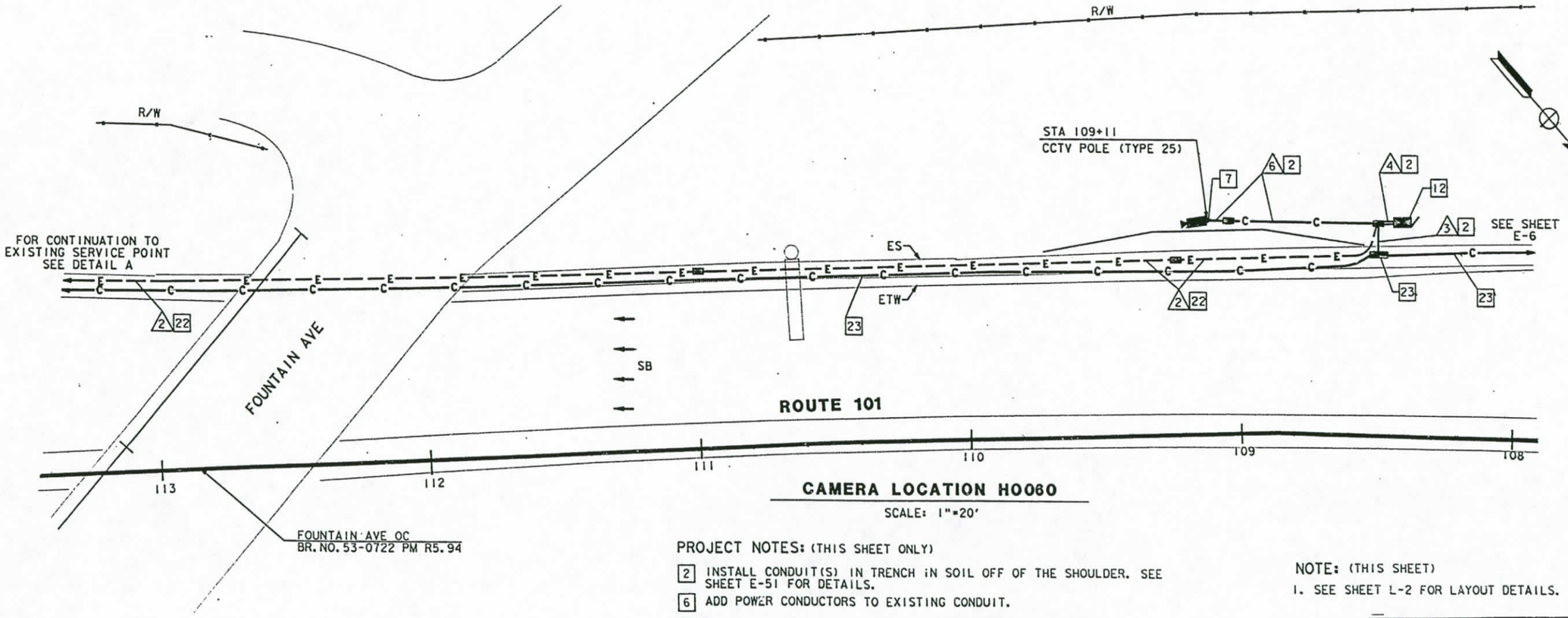
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN					
		A	B	C	D	E	
6P22 CABLE	DATA /PHONE		1			1	
2SMFO B/O CABLE	SH VIDEO			1		1	
SEE TABLE 1, SHEET E-1	CCTV WIRING					1	1
#6	POWER	2			2		
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"	3"		3"	3"	2"



DETAIL A
SCALE: 1"=50



CAMERA LOCATION H0060
SCALE: 1"=20'

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

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

NOTE: (THIS SHEET)
1. SEE SHEET L-2 FOR LAYOUT DETAILS.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION ~~H0060~~)

SCALE: AS NOTED

E-30

DATE	REVISED BY
2/95	DM
5/95	ES

DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 23-OCT-1995 12:19

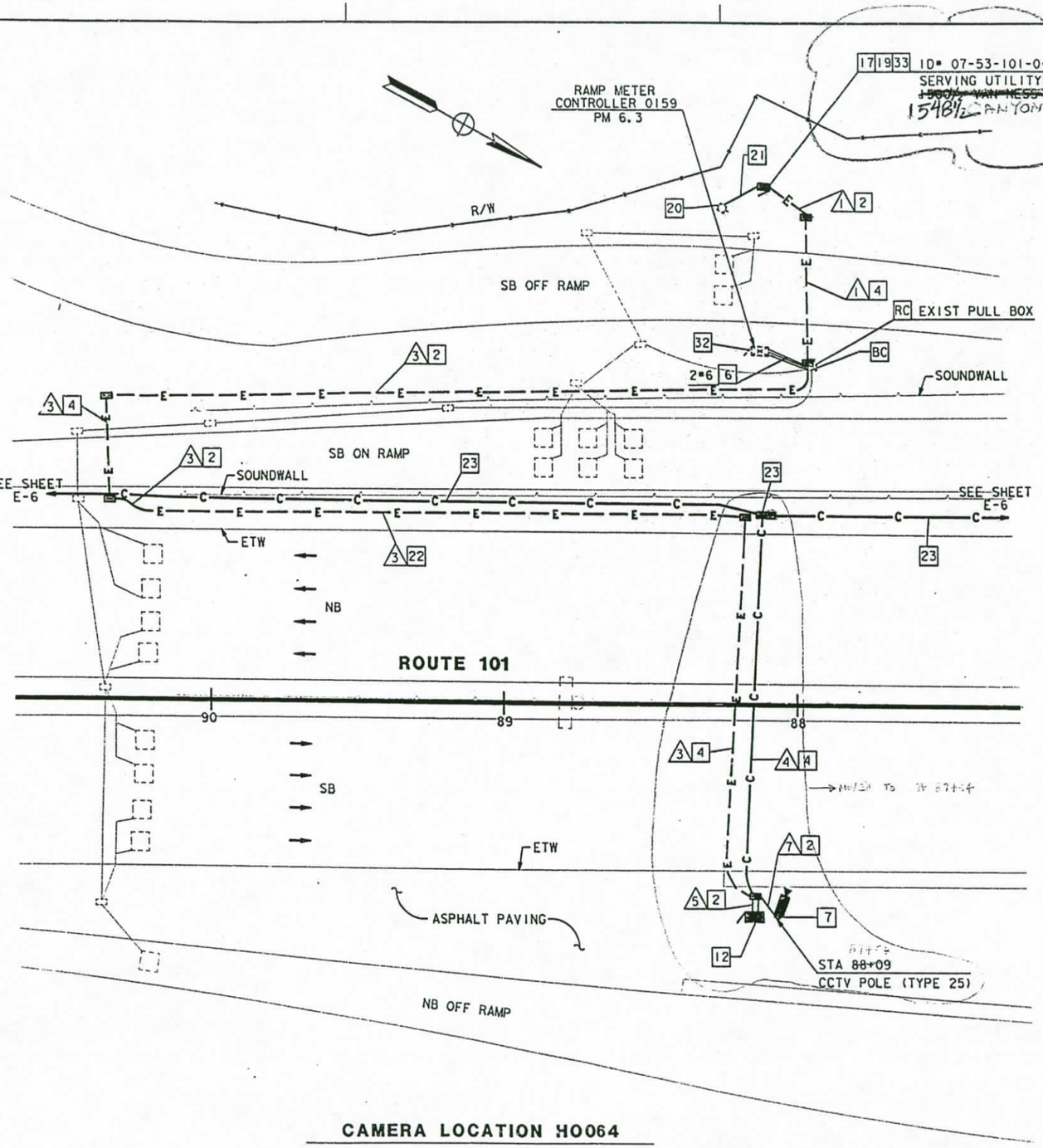
FORM DC-01-92-PE (REV. 3/88)

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

USERNAME => mikesl
/usr/mikesl/P0/712072u30.dg

CU 07387

EA 120721



CAMERA LOCATION H0064

SCALE: 1"=20'

NOTE: (THIS SHEET)

1. SEE SHEET L-3 FOR LAYOUT DETAILS.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	95	154

Elia E. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 4	RUN 3	RUN 4	RUN 5	RUN 1	
6P22 CABLE	DATA /PHONE			1		1	
2SMFO B/O CABLE	SH VIDEO			1		1	
SEE TABLE 1, SHEET E-1	CCTV WIRING					1	1
#6	POWER	4	2		2		
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"	2"	3"	3"	3"	2"

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

PROJECT NOTES: (THIS SHEET ONLY)

2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
12. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.
17. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.
19. INSTALL ON NEW FOUNDATION TYPE 111-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.
23. THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
32. DISCONNECT EXISTING SERVICE WIRES AND CONNECT NEW SERVICE WIRES. ONLY AFTER INSTALLING AND VERIFYING THAT THE NEW SERVICE IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
33. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR EXISTING RAMP METER.

CCTV CAMERA (LOCATION H0064)

SCALE: 1"=20'

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

E-31

PROJECT ENGINEER: PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Gibbons

	DATE	REVISED BY	DATE REVISED
CALCULATED/DESIGNED BY	DM	2/95	
CHECKED BY	ES	5/95	

FORM DC-E-92-FF (REV. 3/89)

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

USERNAME => tomd /usr/tomd/P39/712072u31.dgn

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 13:23

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2	3	4	3A	10	11	13	14 *
6P22 CABLE	DATA /PHONE				1				
2SMFO B/O CABLE	SH VIDEO				1		1		
SEE TABLE 1, SHEET E-1	CCTV WIRING						1	1	
#6	POWER	2	2			2	2		2
DLC	RAMP/COUNT		2	3		1			1
	INNERDUCT				1 1/4"				1 1/4"
	CONDUIT SIZE	2"	2"	2"	3"	2"	3"	2"	4"

* - CONDUIT RUN 14 INCLUDED IN THE QUANTITES FOR PAYMENT ON SHEET E-7

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
12. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.
17. INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.
23. THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
25. IDENTIFY AND RC EXISTING DLC CONNECTING TO ABANDONED LOOPS IN THIS PROJECT. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	96	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

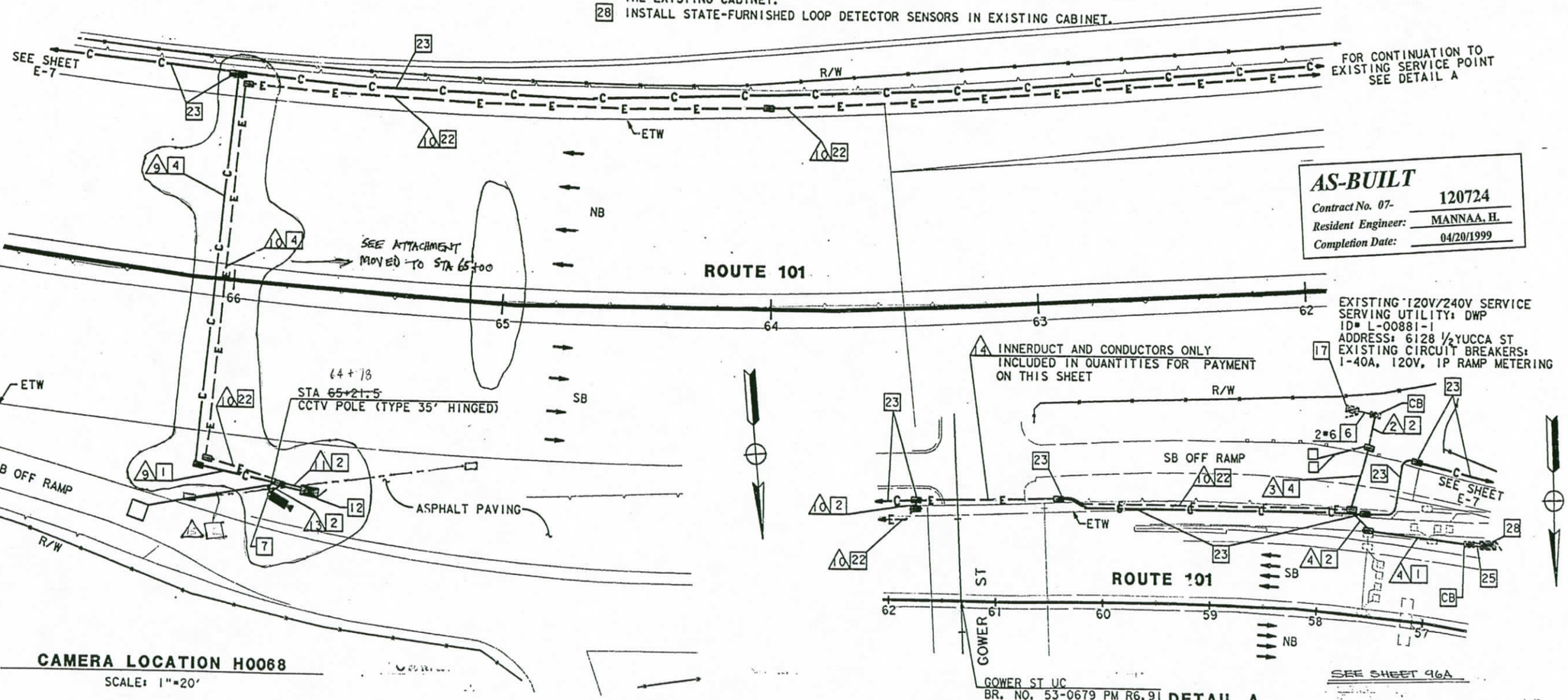
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

NOTE: (THIS SHEET)
1. SEE SHEET L-3 FOR LAYOUT DETAILS.

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

CCTV CAMERA (LOCATION H0068)

AS NOTED

E-32

CALCULATED/ DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 — TIME PLOTTED => 19-OCT-1995 15:37

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

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

USERNAME => mikesi
/usr/mikesi/PO/712072u32.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	97	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

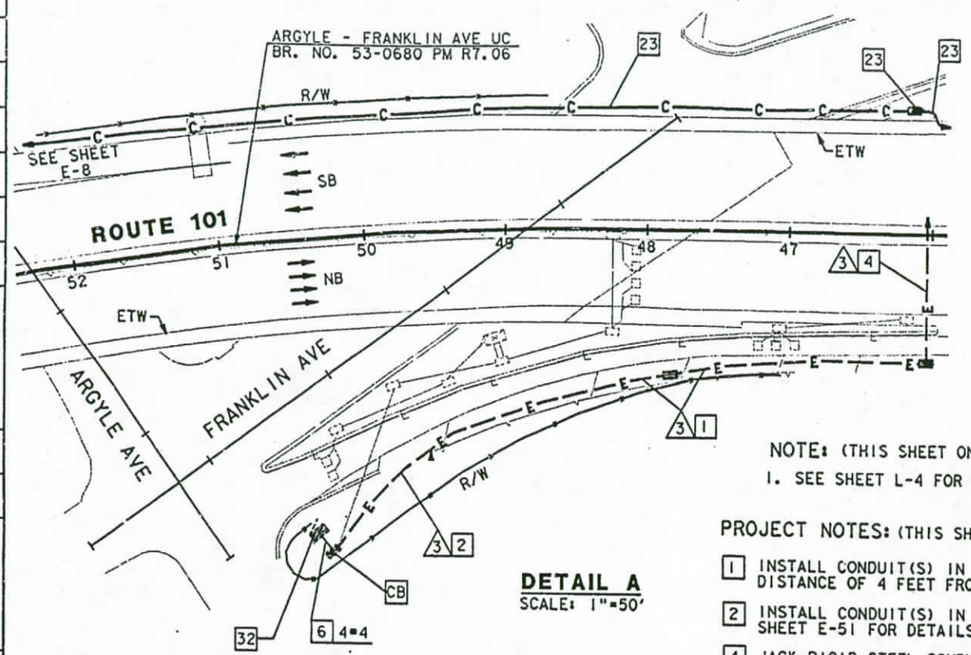
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 3	RUN 4	RUN 5	RUN 7	RUN 8
50P22 CABLE	DATA /PHONE		2			2
6P22 CABLE	DATA /PHONE					
12SMFO CABLE	SH VIDEO		2	2		
2SMFO B/O CABLE	SH VIDEO		1	1		
SEE TABLE 1, SHEET E-1	CCTV WIRING			1	1	
FO PATCH CORDS	DATA			2		2
#4	POWER	4				
	INNERDUCT		1 1/4"			
	CONDUIT SIZE	2"	4"	3"	2"	3"



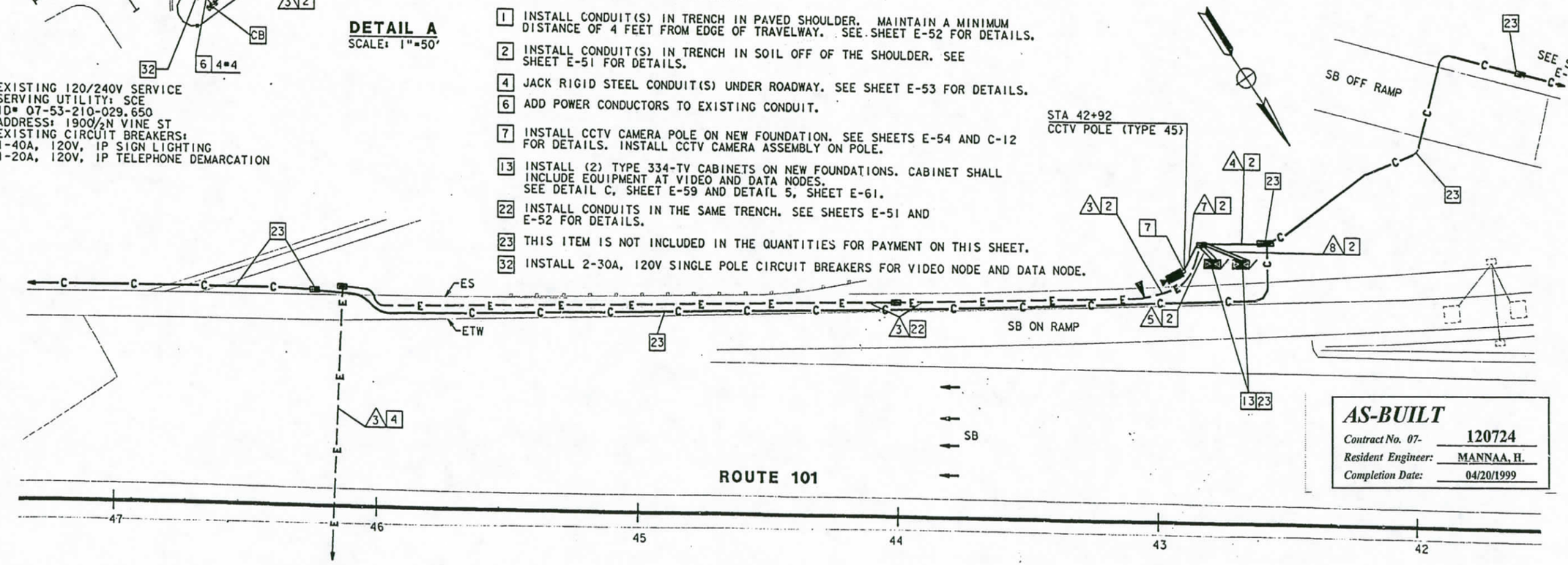
DETAIL A
SCALE: 1"=50'

EXISTING 120/240V SERVICE
SERVING UTILITY: SCE
ID# 07-53-210-029.650
ADDRESS: 1900/2N VINE ST
EXISTING CIRCUIT BREAKERS:
1-40A, 120V, IP SIGN LIGHTING
1-20A, 120V, IP TELEPHONE DEMARCATION

NOTE: (THIS SHEET ONLY)
1. SEE SHEET L-4 FOR LAYOUT DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
13. INSTALL (2) TYPE 334-TV CABINETS ON NEW FOUNDATIONS. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO AND DATA NODES. SEE DETAIL C, SHEET E-59 AND DETAIL 5, SHEET E-61.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.
23. THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
32. INSTALL 2-30A, 120V SINGLE POLE CIRCUIT BREAKERS FOR VIDEO NODE AND DATA NODE.



CAMERA LOCATION H0073
SCALE: 1"=20'

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA, EQUIPMENT AT DATA NODE AND EQUIPMENT AT VIDEO NODE (LOCATION H0073)

SCALE: AS NOTED

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

E-33

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95 ES

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 19-OCT-1995 15:37

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

USERNAME => mikesl
/usr/mikesl/P0/712072u33.dg

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R7.1	98	154

Elia El-Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

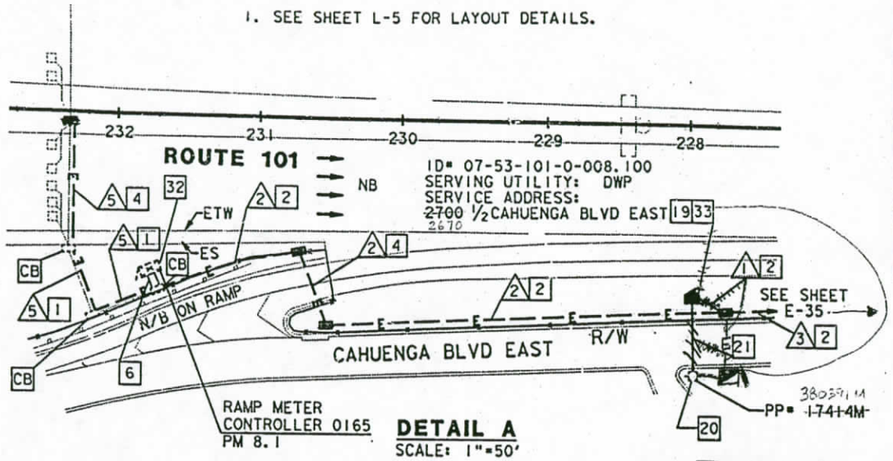
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTE: (THIS SHEET)

1. SEE SHEET L-5 FOR LAYOUT DETAILS.



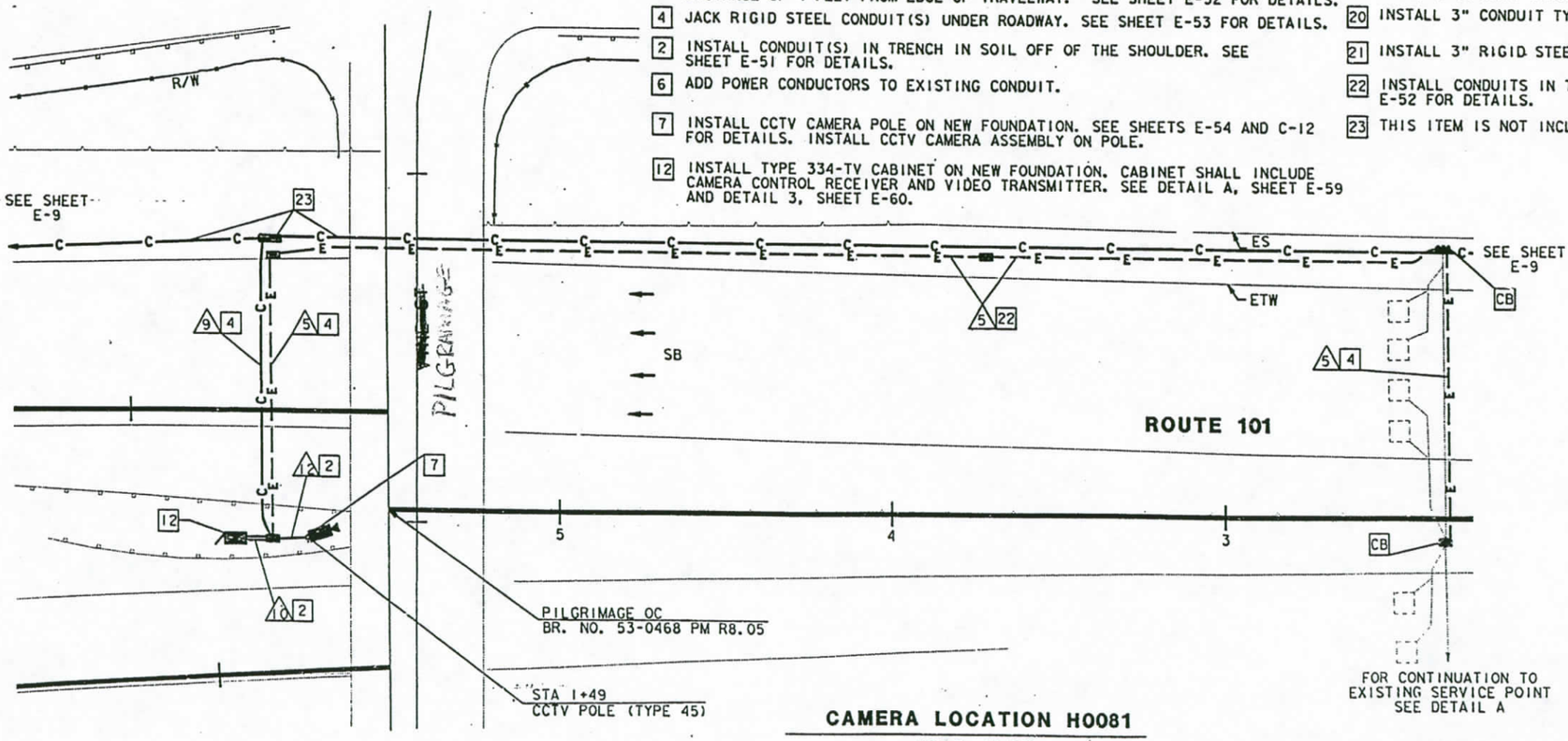
DETAIL A
SCALE: 1"=50'

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	5	6	7	10	12
6P22 CABLE	DATA /PHONE					1		1	
2SMFO B/O CABLE	SH VIDEO						1	1	
SEE TABLE 1, SHEET E-1	CCTV WIRING							1	1
#8	POWER	2	2						
#4	POWER	2	2		2			2	
#6	POWER	4		4					
	CONDUIT SIZE	2"	2"	2"	2"	1¼" 1¼" 1¼"		3"	3" 2"

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 TRAVELWAY. SEE SHEET E-52 FOR DETAILS.
4. JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
6. ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
12. INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.
19. INSTALL ON NEW FOUNDATION TYPE III-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
20. INSTALL 3" CONDUIT TYPE H SERVICE RISER ~~ON POWER POLE~~.
21. INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.
23. THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
32. DISCONNECT EXISTING SERVICE WIRES AND CONNECT NEW SERVICE WIRES, ONLY AFTER INSTALLING AND VERIFYING THAT THE NEW SERVICE IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
33. INSTALL 4-30A, 120V, SINGLE PHASE, CIRCUIT BREAKERS FOR CCTV, EXISTING RMS, AND TMS.



CAMERA LOCATION H0081
SCALE: 1"=20'

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION H0081)

AS NOTED

E-34

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95 ES

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER
PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 10:41

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => annda /usr/annda/P54/712072u34.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	99	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

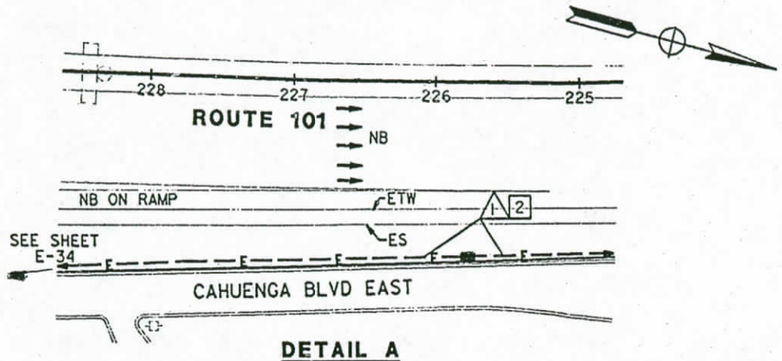
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 5	RUN 6	RUN 7
6P22 CABLE	DATA /PHONE		2		1		
12SMFO CABLE	SH VIDEO					1	
2SMFO B/O CABLE	SH VIDEO		1		1		
SEE TABLE 1, SHEET E-1	CCTV WIRING				1	1	
#6	POWER	4		2			2
	INNERDUCT		1 1/4"				
	CONDUIT SIZE	2"	3"	3"	3"	2"	2"	2"



DETAIL A
SCALE: 1"=50'

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

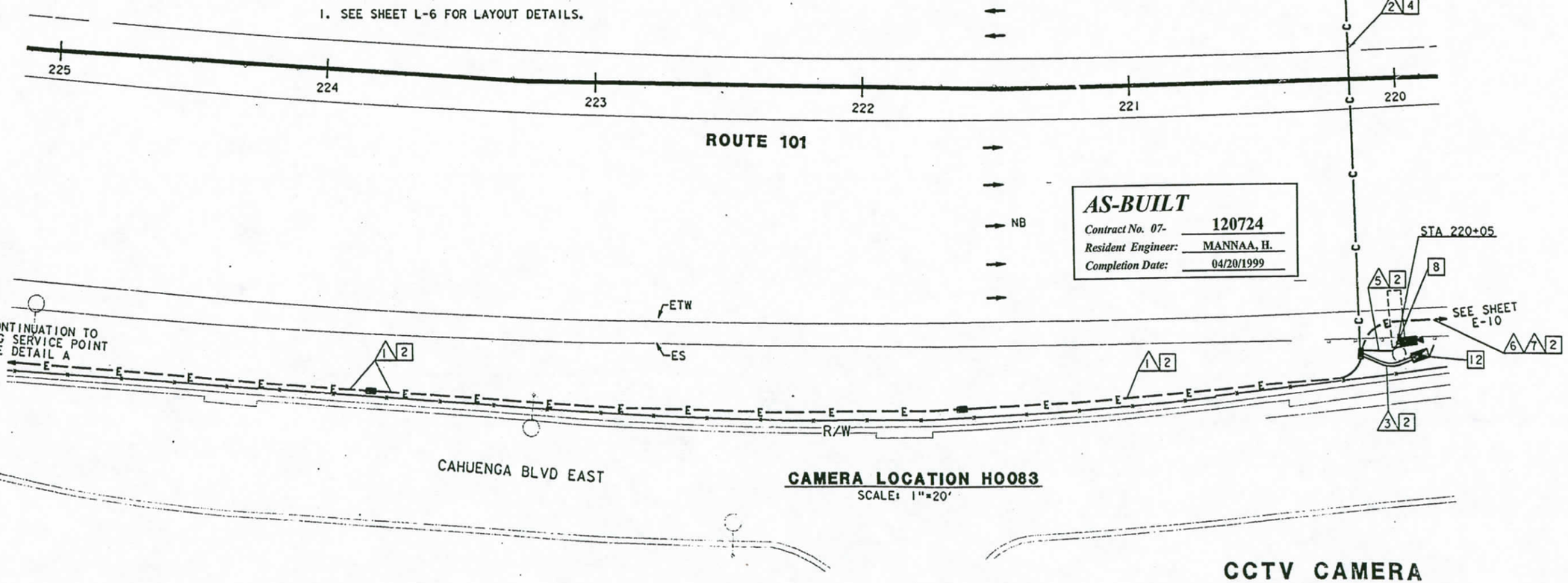
4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

NOTE: (THIS SHEET)
1. SEE SHEET L-6 FOR LAYOUT DETAILS.



CAMERA LOCATION H0083
SCALE: 1"=20'

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION H0083)

SCALE: AS NOTED

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

E-35

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95 ES

CALCULATED/ DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00

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

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

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	100	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

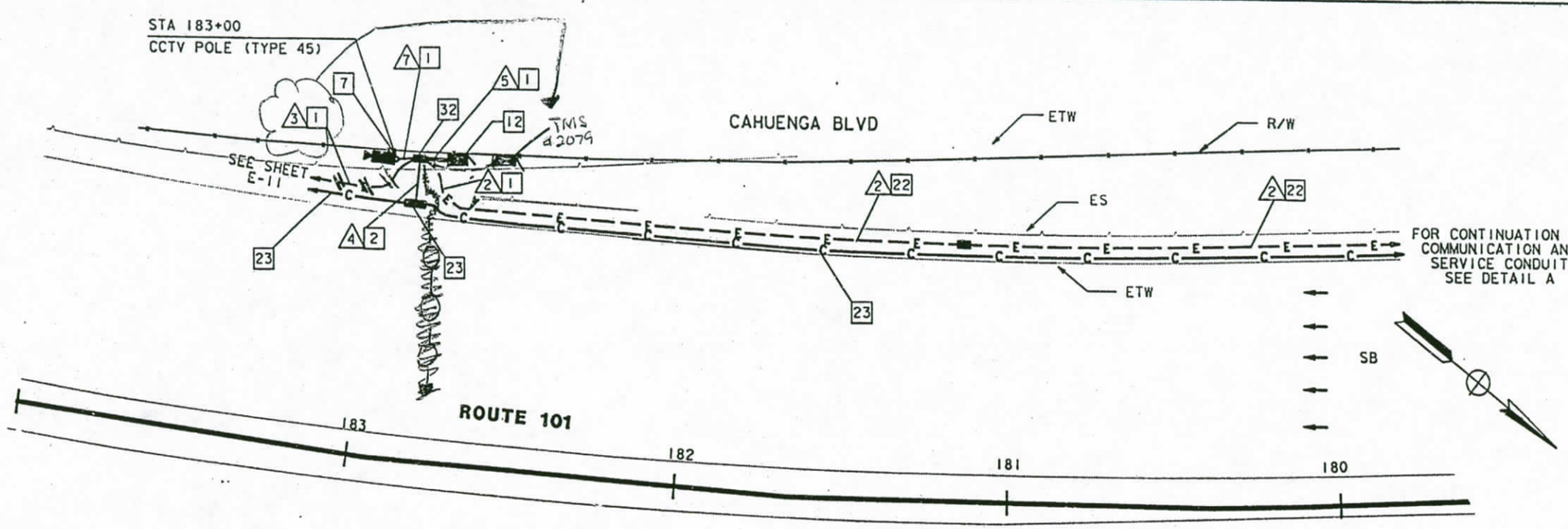
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CAMERA LOCATION H0090

SCALE: 1"=20'

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)								
	FUNCTION	RUN						
		A1	A2	A3		A4	A5	
6P22 CABLE	DATA /PHONE			1			1	
2SMFO B/O CABLE	SH VIDEO				1		1	
SEE TABLE 1, SHEET E-1	CCTV WIRING						1	1
#6	POWER	2				2		
#4	POWER	2	2					1
	INNERDUCT			1¼"				
	CONDUIT SIZE	2"	2"	3"	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 TRAVELWAY. SEE SHEET E-52 FOR DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

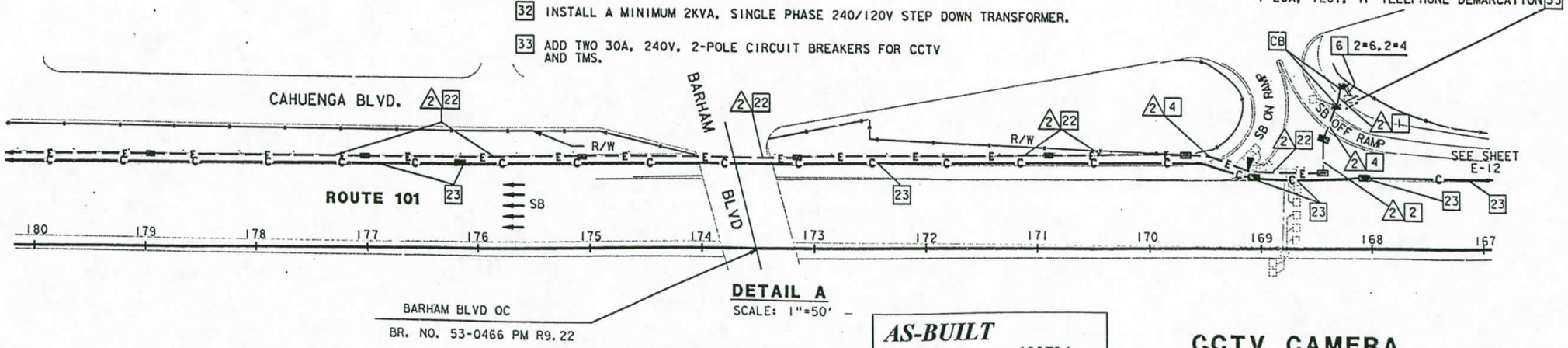
23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

32 INSTALL A MINIMUM 2KVA, SINGLE PHASE 240/120V STEP DOWN TRANSFORMER.

33 ADD TWO 30A, 240V, 2-POLE CIRCUIT BREAKERS FOR CCTV AND TMS.

NOTE: (THIS SHEET ONLY)
1. SEE SHEET L-6 FOR LAYOUT DETAILS.

EXISTING 120/240V SERVICE
SERVING UTILITY: DWP
ID# 712086
ADDRESS: 3216½ BARHAM BLVD
EXISTING CIRCUIT BREAKERS:
1-40A, 120V, IP RAMP METER
1-40A, 120V, IP RAMP METER
1-20A, 120V, IP TELEPHONE DEMARCATION 33



BARHAM BLVD OC
BR. NO. 53-0466 PM R9.22

DETAIL A

SCALE: 1"=50'

AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Maman
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION H0090)

SCALE: AS NOTED

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

E-36

DATE	REVISED BY
2/95	DM
5/95	ES

DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXX

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 10:52

FORM DC-OE-82-PF (REV. 3/88)

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

USERNAME => mikesl
DGN FILE => /usr/mikesl/PO/712072u36.dg

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	101	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

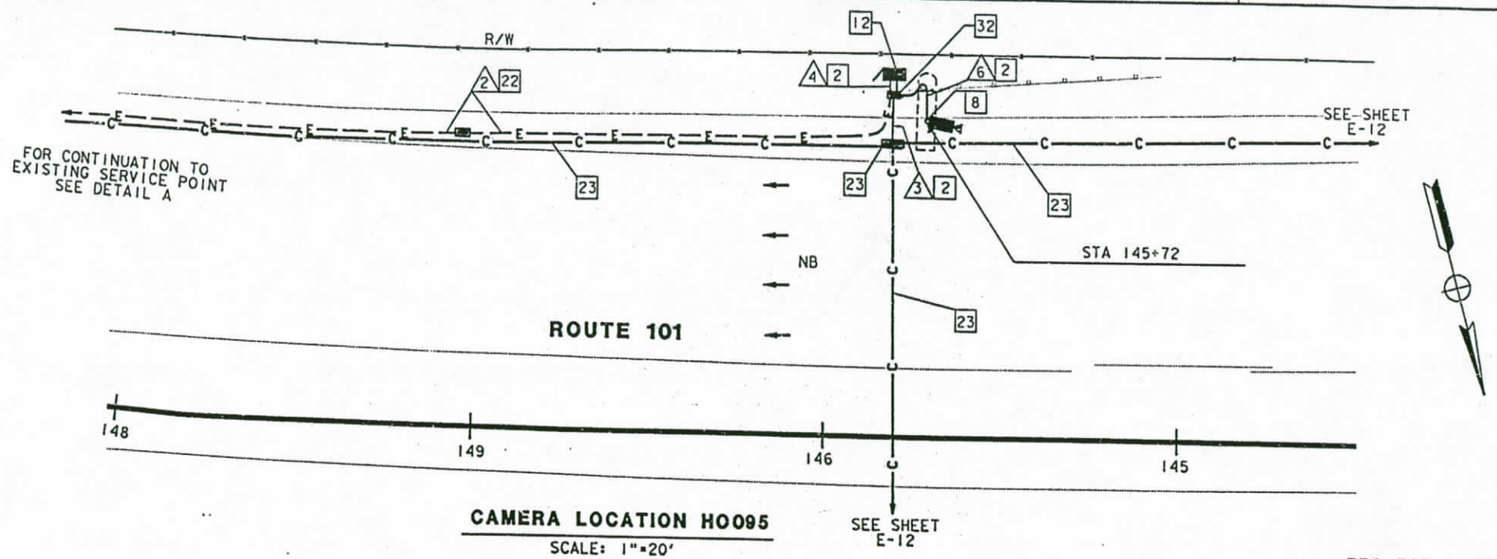
REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CAMERA LOCATION HO095
SCALE: 1"=20'

PROJECT NOTES (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

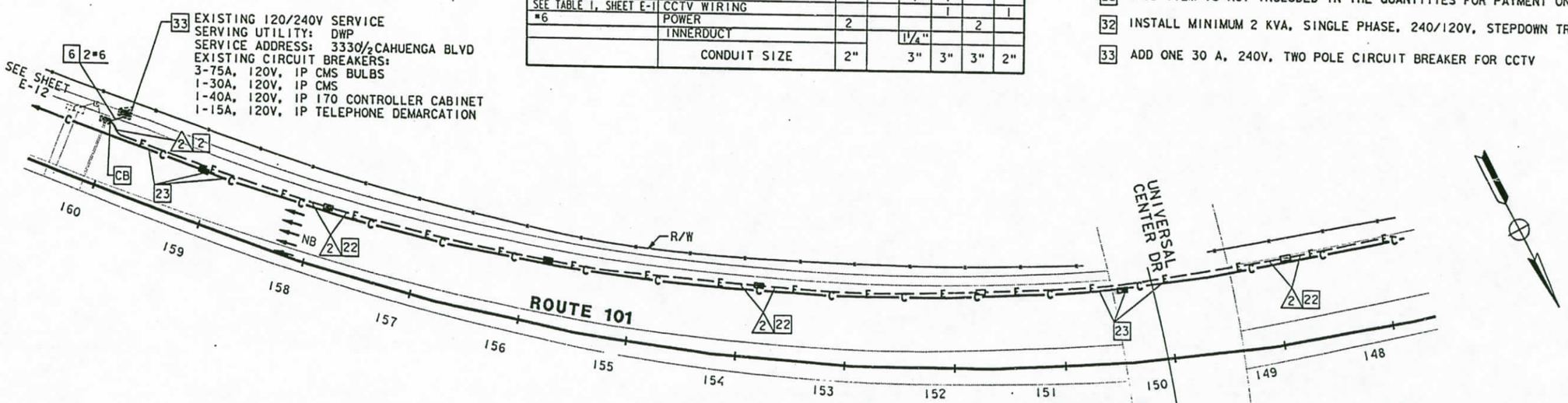
23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

32 INSTALL MINIMUM 2 KVA, SINGLE PHASE, 240/120V, STEPDOWN TRANSFORMER

33 ADD ONE 30 A, 240V, TWO POLE CIRCUIT BREAKER FOR CCTV

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN					
6P22 CABLE	DATA /PHONE		1		1		
12SMFO CABLE	SH VIDEO						
2SMFO B/O CABLE	SH VIDEO			1	1		
SEE TABLE 1, SHEET E-1	CCTV WIRING				1		1
#6	POWER	2				2	
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"		3"	3"	3"	2"



DETAIL A
SCALE: 1"=50'

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

NOTE: (THIS SHEET ONLY)
1. SEE SHEET L-7 FOR LAYOUT DETAILS.

CCTV CAMERA (LOCATION HO095)

AS NOTED

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

E-37

CALCULATED/DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 10:37
LAST REVISION 00-00-00

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikes1 /usr/mikes1/P0/712072u37.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	102	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTE: (THIS SHEET)

1. SEE SHEET L-7 FOR LAYOUT DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4	RUN 5	RUN 6
6P22 CABLE	DATA /PHONE		1		1		
12SMFO CABLE	SH VIDEO						
2SMFO B/O CABLE	SH VIDEO			1	1		
SEE TABLE 1, SHEET E-1	CCTV WIRING				1		1
#6	POWER	2				2	
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"	3"		3"	3"	2"

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

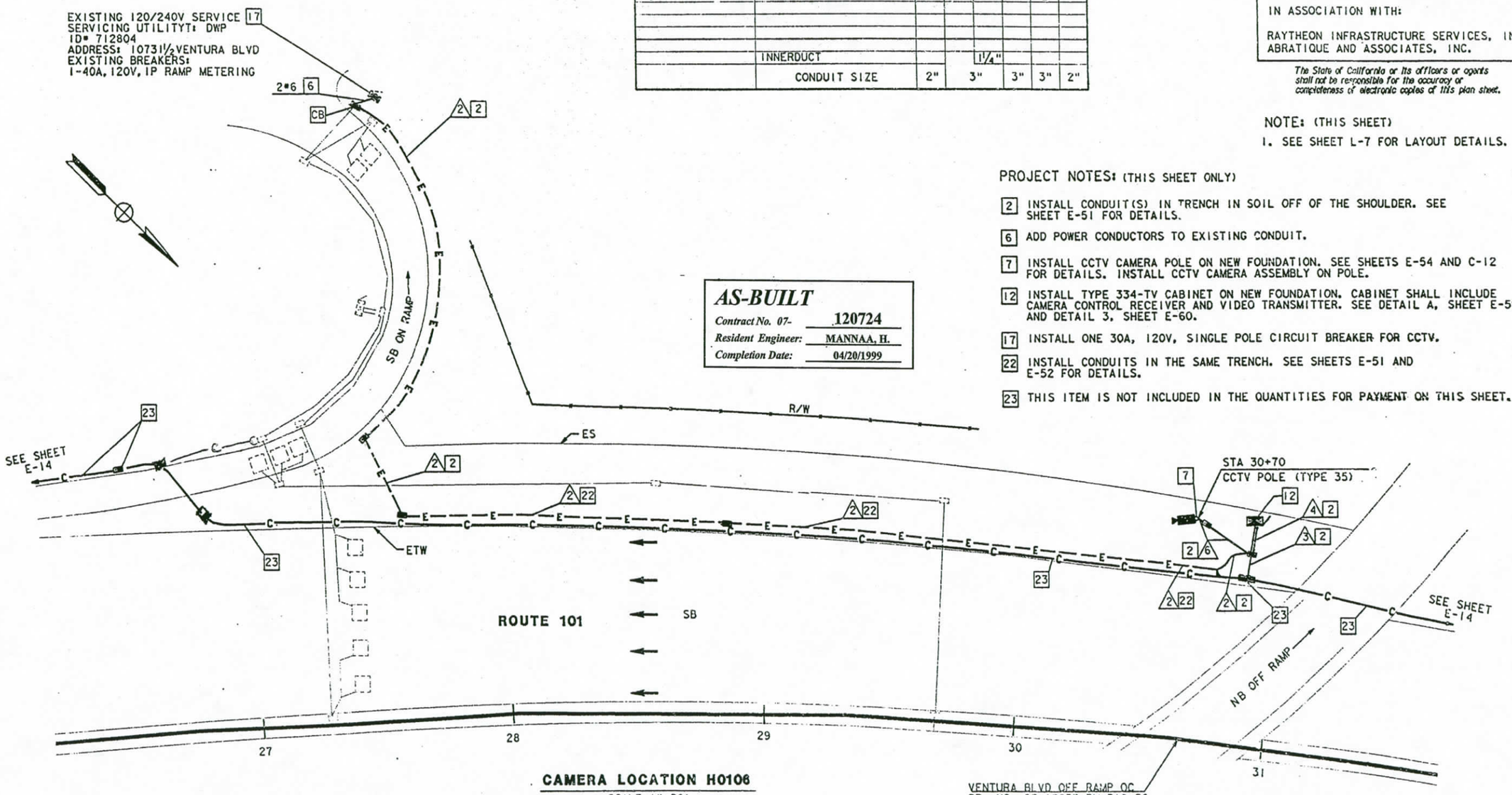
12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999



CAMERA LOCATION H0106
SCALE 1"=20'

CCTV CAMERA (LOCATION H0106)
SCALE: 1"=20'

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

E-38

CALCULATED/DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

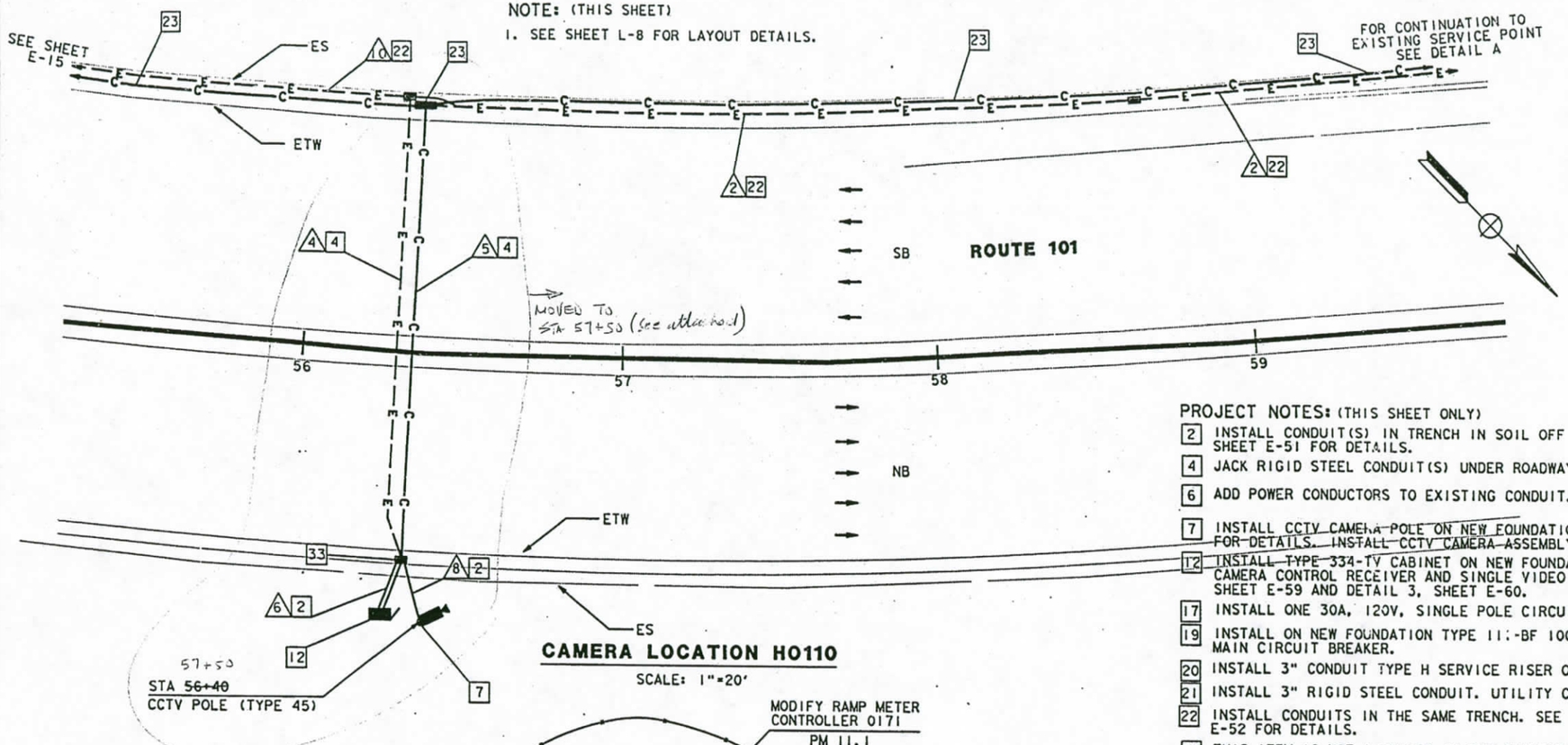
PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 19-OCT-1995 15:38
LAST REVISION 00-00-00

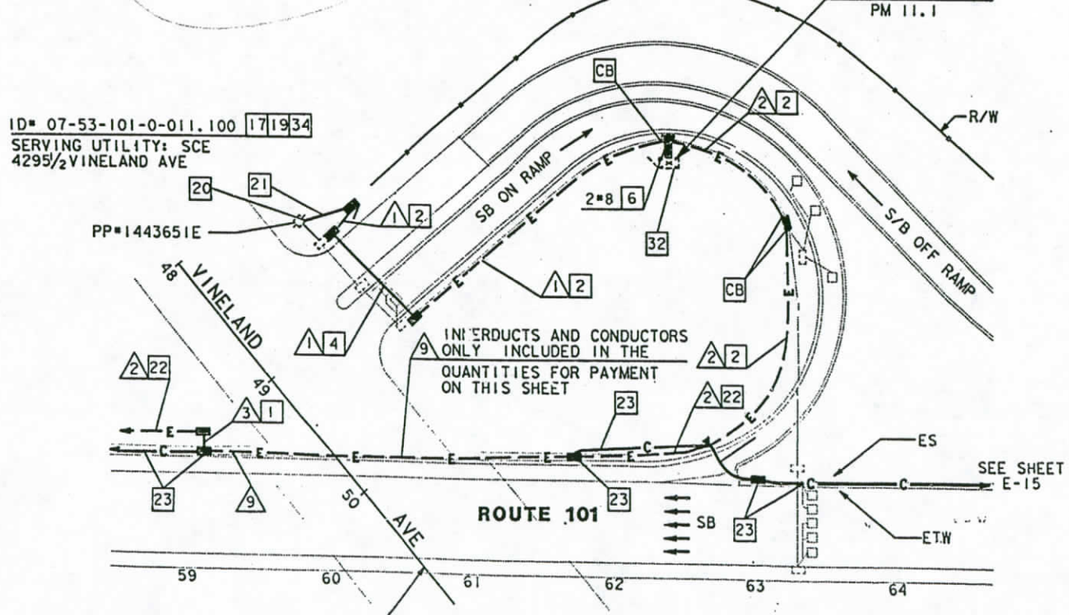
FORM DC-CT-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/P0/712072u38.dg
CU 07387
EA 120721

NOTE: (THIS SHEET)
1. SEE SHEET L-8 FOR LAYOUT DETAILS.



CAMERA LOCATION H0110

SCALE: 1"=20'



DETAIL A

SCALE: 1"=50'

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	103	154

Elia G. Sachir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ELIA G. SACHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.
4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.
6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.
7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.
12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND SINGLE VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.
17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR RMS.
19 INSTALL ON NEW FOUNDATION TYPE 11?-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.
20 INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.
21 INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.
22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.
23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.
32 DISCONNECT EXISTING SERVICE WIRES, ONLY AFTER INSTALLING AND VERIFYING THE NEW SERVICE IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
33 INSTALL A MINIMUM 2 KVA, SINGLE PHASE 240/120V STEP DOWN TRANSFORMER.
34 INSTALL TWO 30A, 240V (RATED 250V) TWO POLE CIRCUIT BREAKERS FOR CCTV AND TMS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	4	5	6	8	9*	10
6P22 CABLE	DATA /PHONE					1	1			
2SMFO B/O CABLE	SH VIDEO					1	1			
SEE TABLE 1, SHEET E-1	CCTV WIRING						1	1		
#8	POWER	2								
#6	POWER	2	2	2	2		2		2	
#6	POWER									
#4	POWER	2	2	2					2	2
	INNERDUCT			1¼"		1¼"			1¼" 1¼" 1¼"	
	CONDUIT SIZE	2"	2"	3"	2"	3"	3"	2"	4"	2"

* - CONDUIT RUN (9) INCLUDED IN THE QUANTITIES FOR PAYMENT ON SHEET E-15

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

SEE SHEET 103A

CCTV CAMERA (LOCATION H0110)

SCALE: AS NOTED

E-39

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95

CALCULATED/DESIGNED BY
CHECKED BY ES

PROJECT ENGINEER PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TIME PLOTTED => 17-OCT-1995 14:31
LAST REVISION 00-00-00

FORM DC-OE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/PO/712072u39.dg
CU 07387
EA 120721

NOTE: (THIS SHEET)

1. SEE SHEET L-8 FOR LAYOUT DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

1 INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

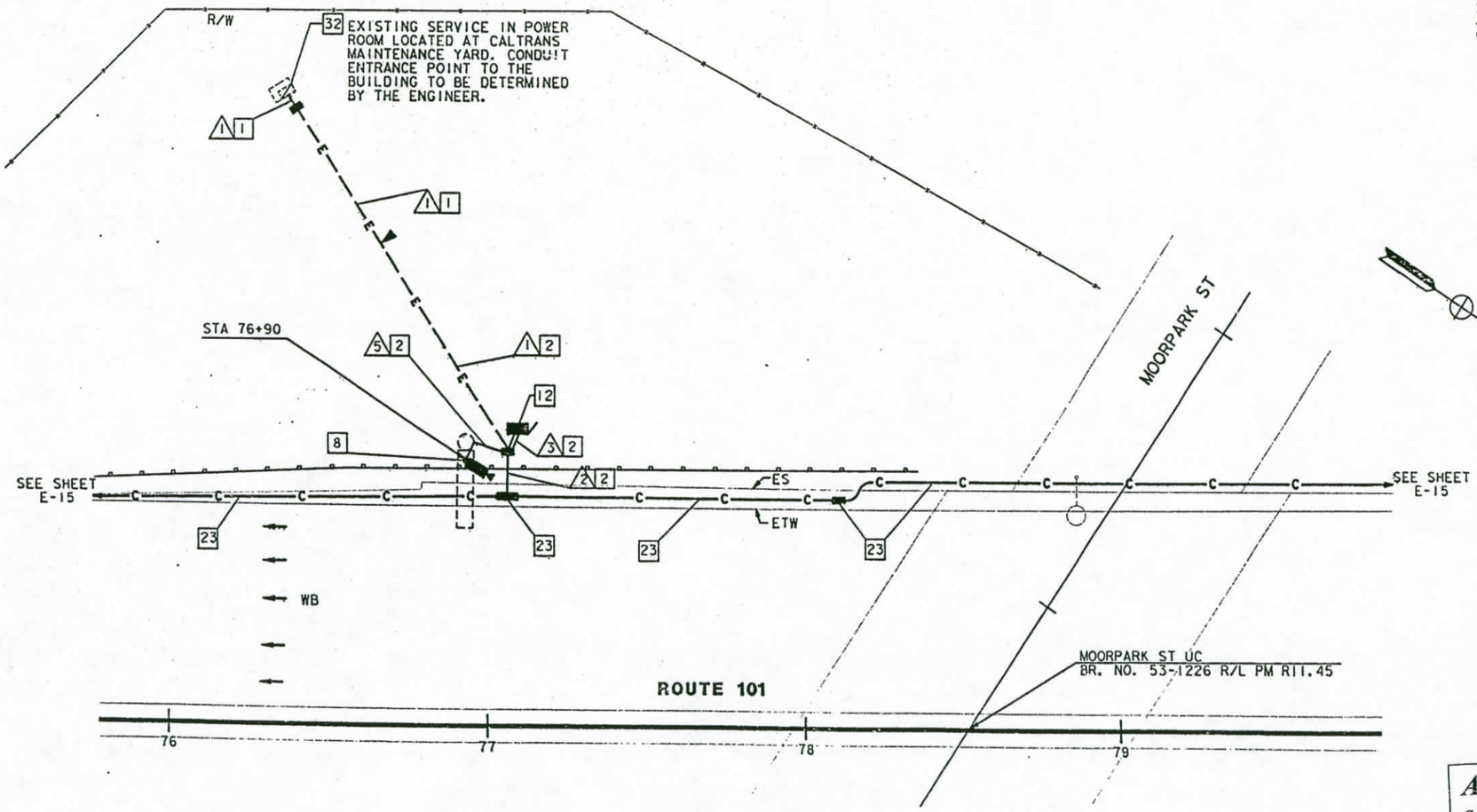
12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

32 ADD ONE 30A, 120V SINGLE POLE CIRCUIT BREAKER FOR CCTV.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4	RUN 5
6P22 CABLE	DATA /PHONE		1		1	
2SMFO D/O CABLE	SH VIDEO			1	1	
SEE TABLE 1, SHEET E-1	CCTV WIRING				1	1
*8	POWER	2		2		
	INNERDUCT		1 1/4"			
	CONDUIT SIZE	2"	3"	3"	3"	2"



CAMERA LOCATION VE114
SCALE: 1"=20'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	104	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION HO114)

SCALE: 1"=20'

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

E-40

REVISED BY	DATE	DATE REVISED
DM	2/95	5/95
ES		

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER: PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 14:31

FORM DC-CE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/P0/712072u40.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	105	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

[2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

[4] JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

[6] ADD POWER CONDUCTORS TO EXISTING CONDUIT.

[8] INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

[12] INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

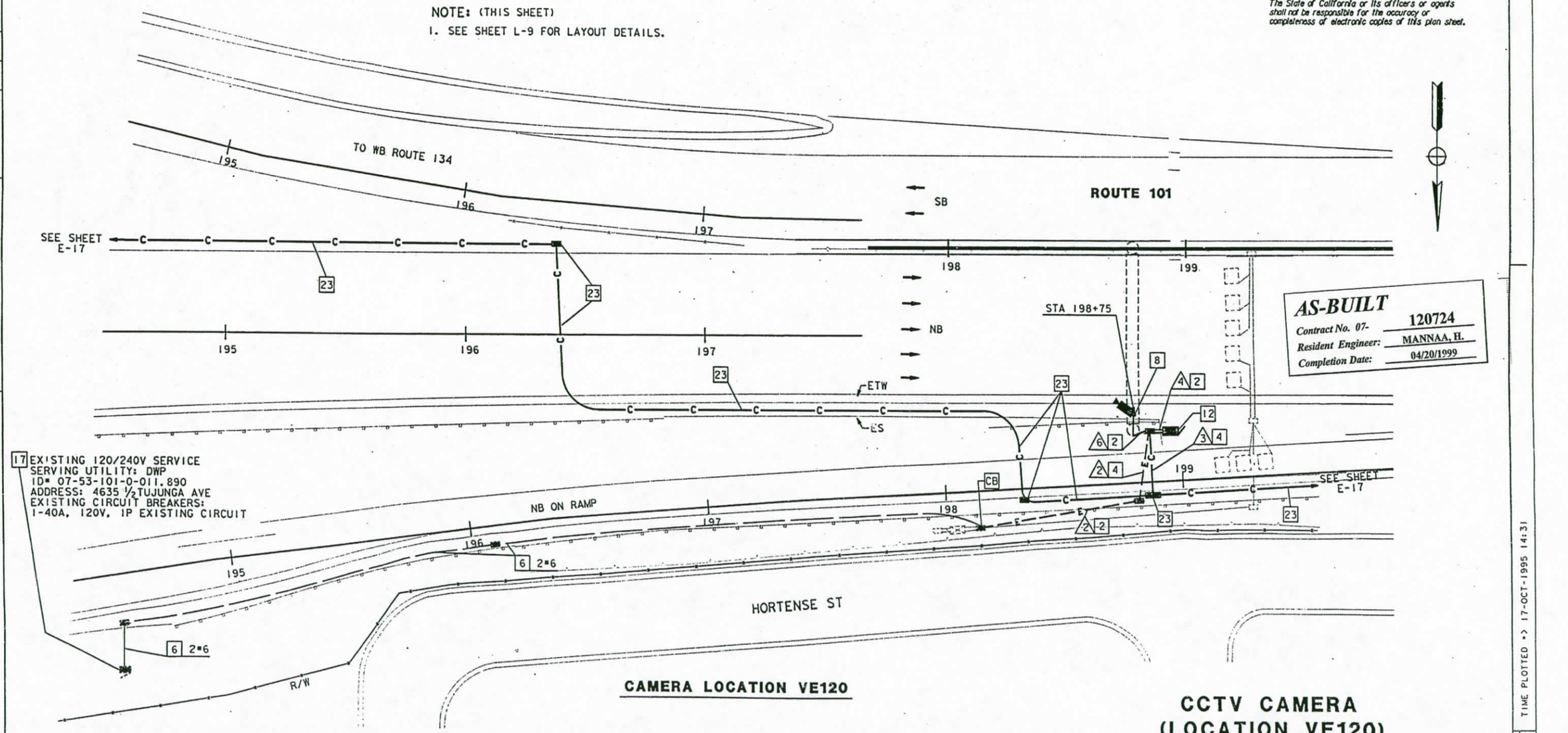
[17] INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

[23] THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN ①	RUN ②	RUN ③	RUN ④	RUN ⑤
6P22 CABLE	DATA /PHONE		1		1	
2SMFO B/O CABLE	SH VIDEO		1		1	
SEE TABLE 1, SHEET E-1	CCTV WIRING				1	1
#6	POWER	2		2		
	INNERDUCT		1¼"			
	CONDUIT SIZE	2"	3"	3"	3"	2"

NOTE: (THIS SHEET)
1. SEE SHEET L-9 FOR LAYOUT DETAILS.



CAMERA LOCATION VE120

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION VE120)

SCALE: 1"=20'

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

E-41

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95 ES

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 14:31

FORM DC-CE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesl /usr/mikesl/P0/712072u41.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	106	154

Elia Ed-Sachi 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

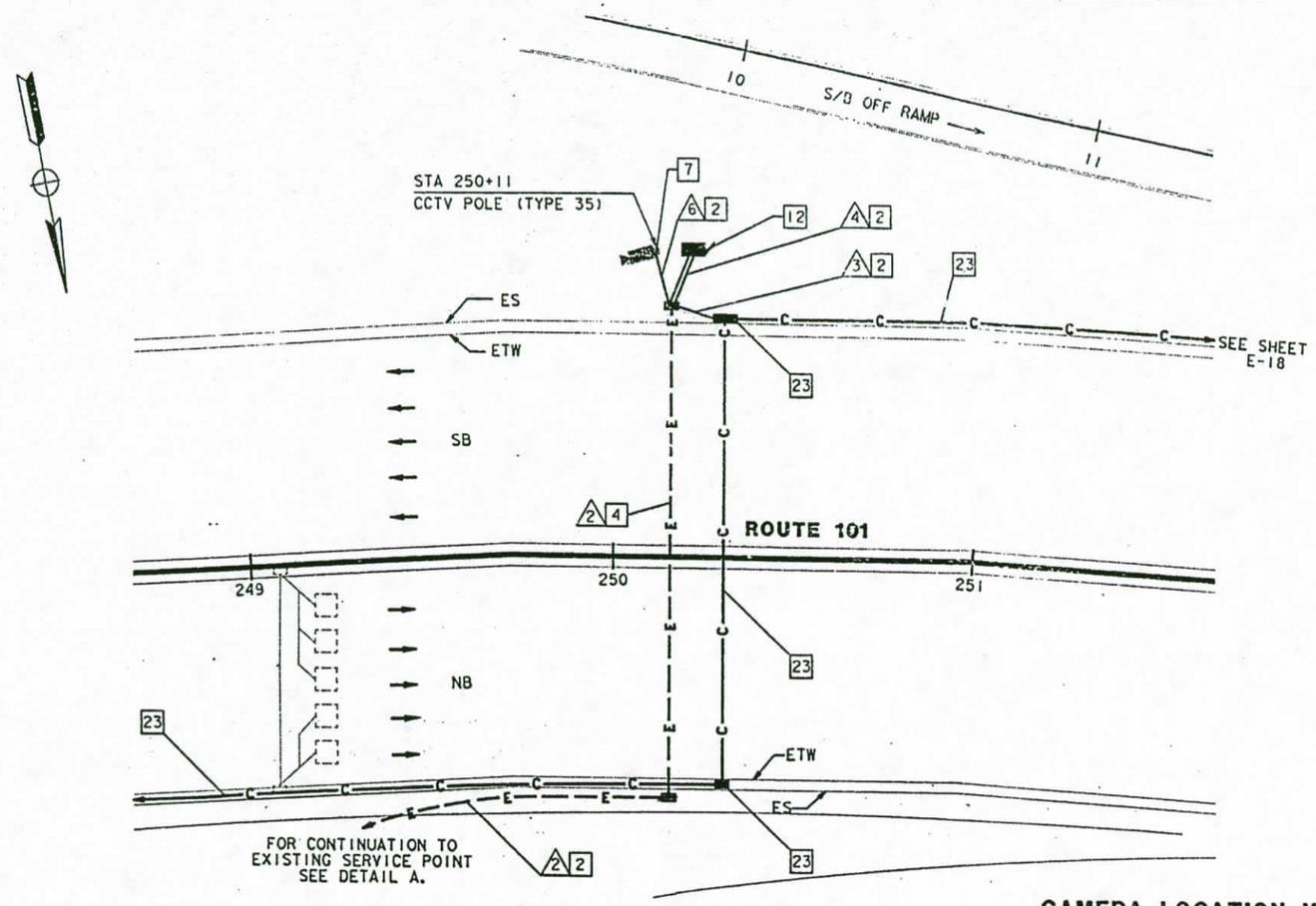
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SACHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

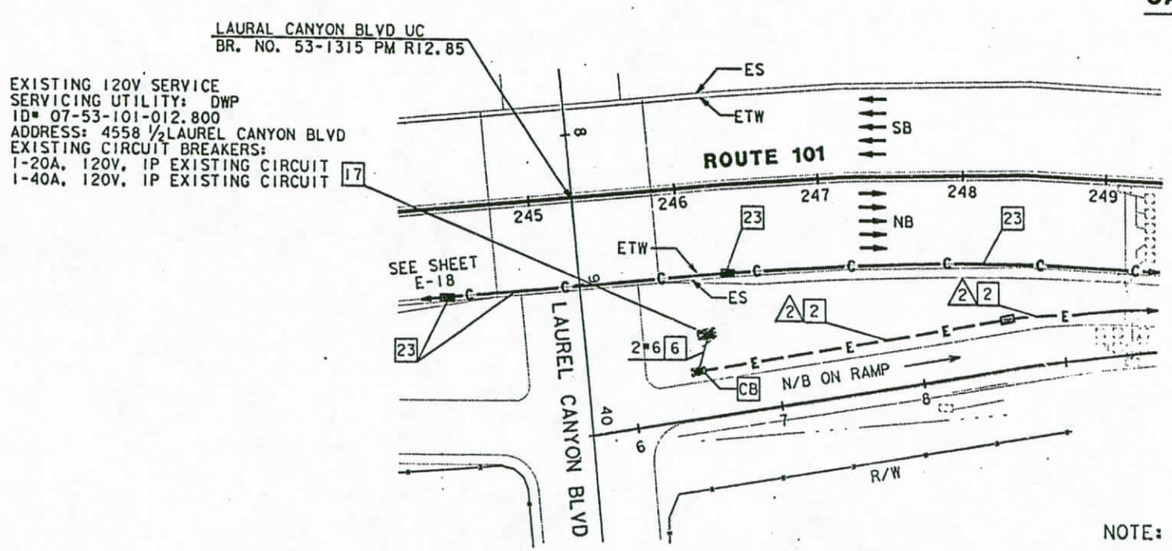
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CAMERA LOCATION VE129

SCALE: 1"=20'

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)						
CONDUCTOR TYPE	FUNCTION	RUN 2	RUN 3	RUN 4	RUN 5	RUN 6
6P22 CABLE	DATA /PHONE		1	1		
2SMFO B/O CABLE	SH VIDEO		1	1		
SEE TABLE 1, SHEET E-1	CCTV WIRING			1		1
#6	POWER	2			2	
	INNERDUCT		1 1/4"			
	CONDUIT SIZE	2"	3"	3"	3"	2"



DETAIL A

SCALE: 1"=50'

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

PROJECT NOTES: (THIS SHEET ONLY)

[2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

[4] JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

[6] ADD POWER CONDUCTORS TO EXISTING CONDUIT.

[7] INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

[12] INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

[17] INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

[23] THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

NOTE: (THIS SHEET)
1. SEE SHEET L-9 FOR LAYOUT DETAILS.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION VE129)

SCALE: AS NOTED

E-42

DATE	REVISED BY	DATE REVISED
2/95	DM	5/95 ES

CALCULATED/DESIGNED BY
CHECKED BY
PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 12:56

FORM OC-HE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => trmorlak /usr/trmorlak/P2/712072u42.
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	107	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

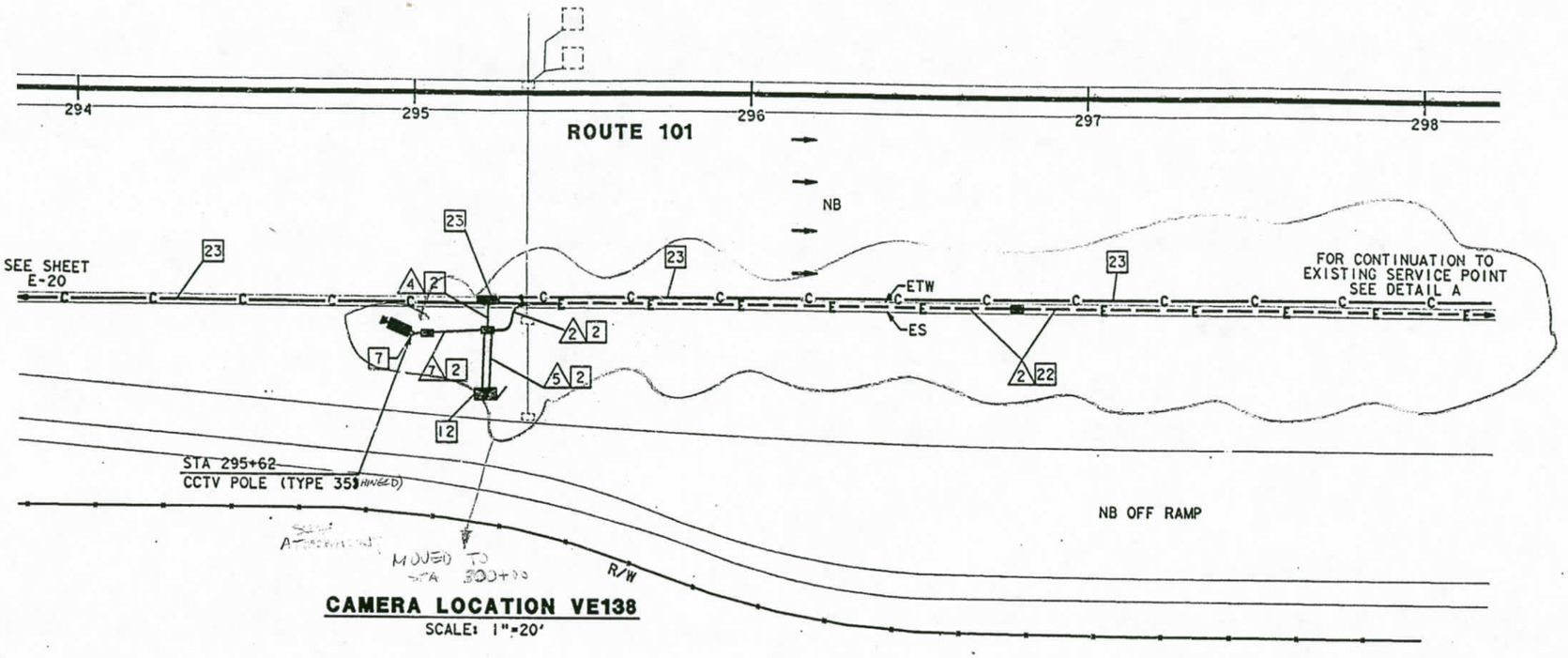
REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

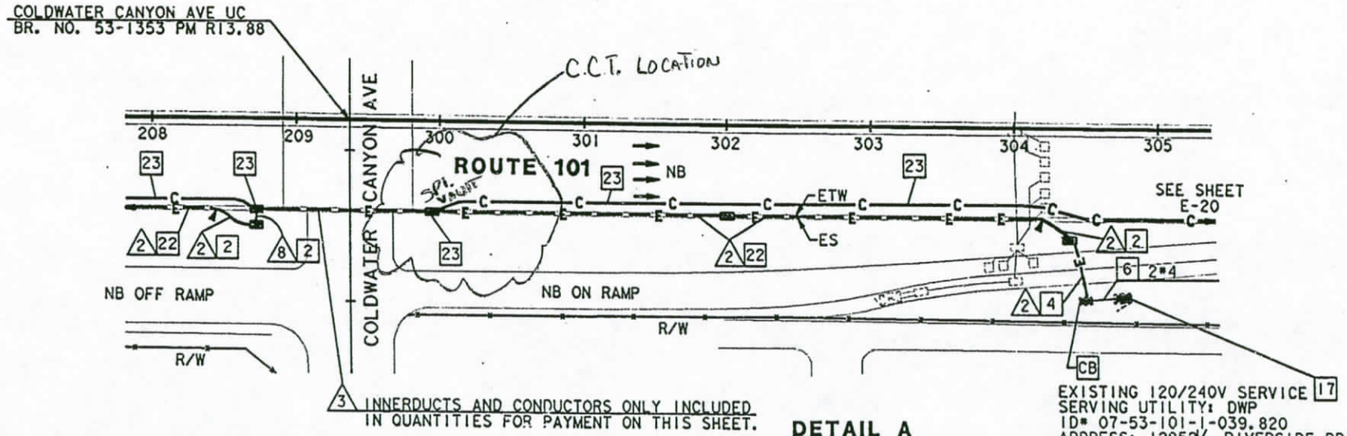
IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CAMERA LOCATION VE138
SCALE: 1"=20'



DETAIL A
SCALE: 1"=50'

EXISTING 120/240V SERVICE
SERVING UTILITY: DWP
ID# 07-53-101-1-039.820
ADDRESS: 12952½ RIVERSIDE DR
EXISTING CIRCUIT BREAKERS:
1-30A, 240V, 2P SIGN LIGHTING
1-20A, 120V, 1P RAMP METER

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 4	RUN 3*			RUN 4		RUN 4		RUN 4	RUN 8
6P22 CABLE	DATA /PHONE					1		1			
2SMFO B/O CABLE	SH VIDEO						1	1			
SEE TABLE 1, SHEET E-1	CCTV WIRING							1		1	
#4	POWER	2			2				2		2
	INNERDUCT		1¼"	1¼"	1¼"		1¼"				1¼"
	CONDUIT SIZE	2"	4"			3"		3"	3"	2"	2"

* - CONDUIT RUN 3 INCLUDED IN THE QUANTITIES FOR PAYMENT ON SHEET E-20

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

SEE SHEET 107A

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

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION VE138)

SCALE: AS NOTED

E-43

CALCULATED/DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 19-OCT-1995 15:3?
LAST REVISION 00-00-00

FORM DC-DE-92-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
USERNAME => mikesi /usr/mikesi/P0/712072u43.dg
CU 07387
EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	108	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

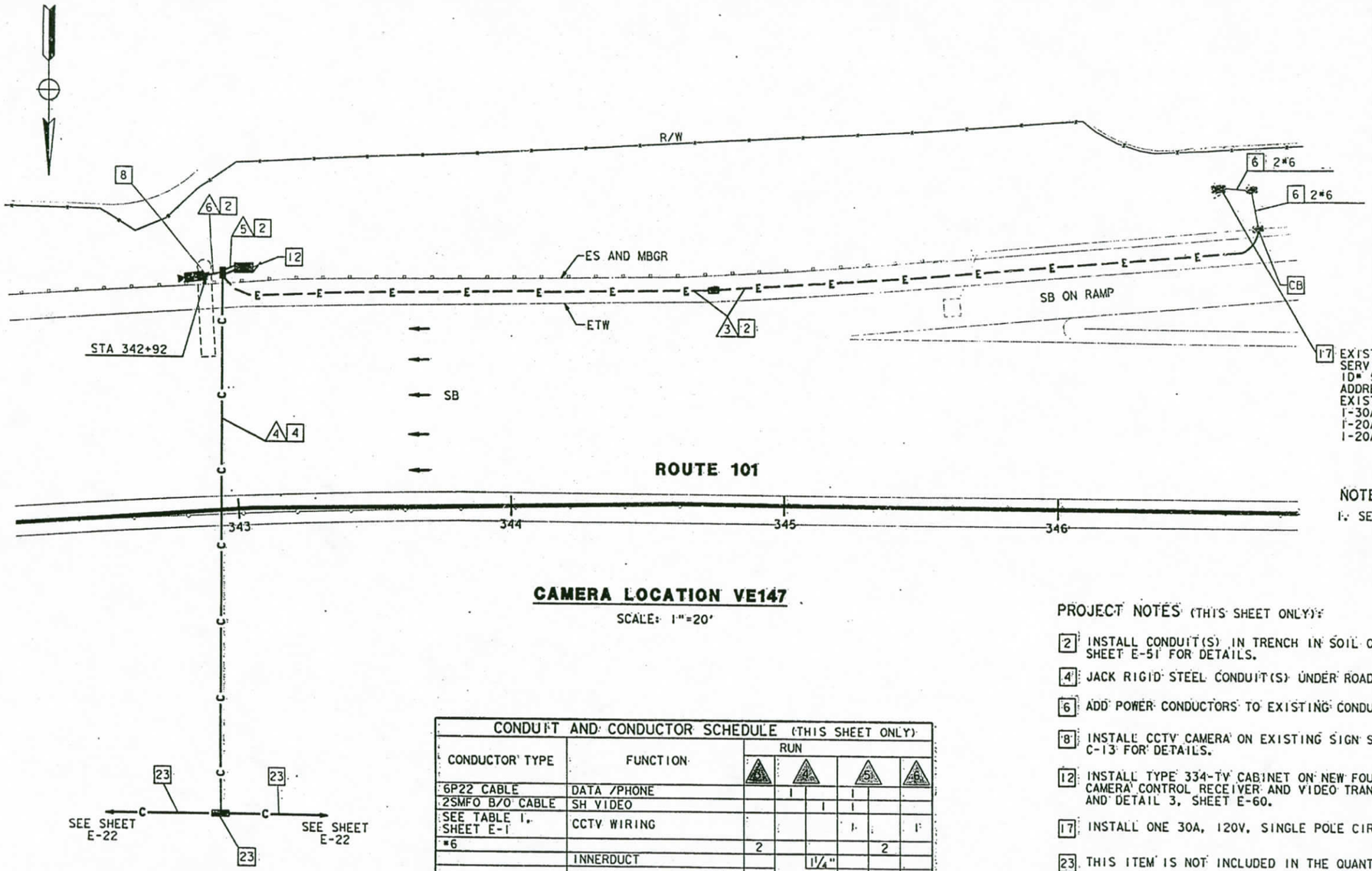
REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



17 EXISTING 120/240V SERVICE
SERVICING UTILITY: DWP
ID# 53-101-014.781
ADDRESS: 4635½ BUFFALO AVE
EXISTING CIRCUIT BREAKERS:
1-30A, 240V, 2P SIGN LIGHTING
1-20A, 120V, 1P RAMP METER
1-20A, 120V, 1P TELEPHONE DEMARCATION CABINET

NOTE: (THIS SHEET)
1. SEE SHEET L-10 FOR LAYOUT DETAILS.

CAMERA LOCATION VE147

SCALE: 1"=20'

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN 3	RUN 4		RUN 5		RUN 6
6P22 CABLE	DATA /PHONE		1		1		
2SMFO B/O CABLE	SH VIDEO			1	1		
SEE TABLE 1, SHEET E-1	CCTV WIRING				1		1
#6		2				2	
	INNERDUCT			1¼"			
	CONDUIT SIZE	2"	3"		3"	3"	2"

PROJECT NOTES (THIS SHEET ONLY):

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION VE147)

SCALE: 1"=20'

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

E-44

CALCULATED/DESIGNED BY	DATE	REVISED BY	DATE REVISED
DM	2/95		
CHECKED BY	ES	5/95	

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 12:56

FORM DC-02-92-PF (REV. 32881)

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

USERNAME => tmarluk /usr/tmarluk/P2/7120720445

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	109	154

Elia El-Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

8 INSTALL CCTV CAMERA ON EXISTING SIGN STRUCTURE. SEE SHEETS E-54 AND C-13 FOR DETAILS.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

19 INSTALL ON NEW FOUNDATION TYPE III-BF 100A, 120/240V SERVICE WITH A 100A, 240V MAIN CIRCUIT BREAKER.

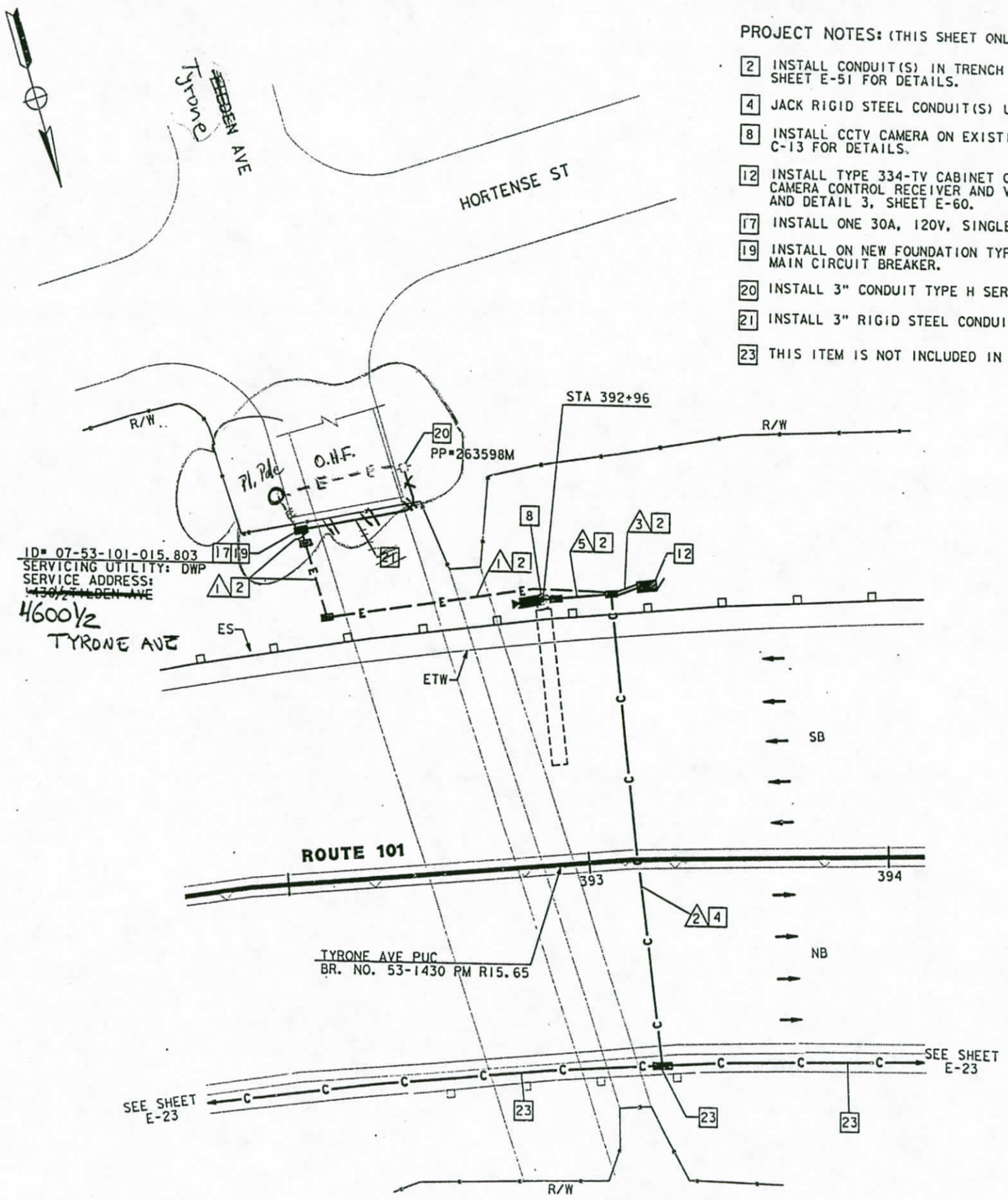
20 INSTALL 3" CONDUIT TYPE H SERVICE RISER ON POWER POLE.

21 INSTALL 3" RIGID STEEL CONDUIT. UTILITY COMPANY TO INSTALL CONDUCTORS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

NOTE: (THIS SHEET)

1. SEE SHEET L-11 FOR LAYOUT DETAILS.



CAMERA LOCATION VE157

SCALE: 1"=20'

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

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4	RUN 5
6P22 CABLE	DATA /PHONE		1		1	
2SMFO B/O CABLE	SH VIDEO			1	1	
SEE TABLE 1, SHEET E-1	CCTV WIRING				1	1
#8	POWER	2		2		
	INNERDUCT		1¼"			
	CONDUIT SIZE	2"	3"	3"	3"	2"

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

CCTV CAMERA (LOCATION VE157)

SCALE: 1"=20'

E-45

CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
DM	ES	2/95	5/95	

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

XXXXXXXXXXXXXXXXXXXXXXXXXX

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

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

USERNAME => mikesl
/usr/mikesl/PO/712072u45.dg

CU 07387

EA 120721

LAST REVISION 00-00-00

TIME PLOTTED => 17-OCT-1995 12:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	110	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

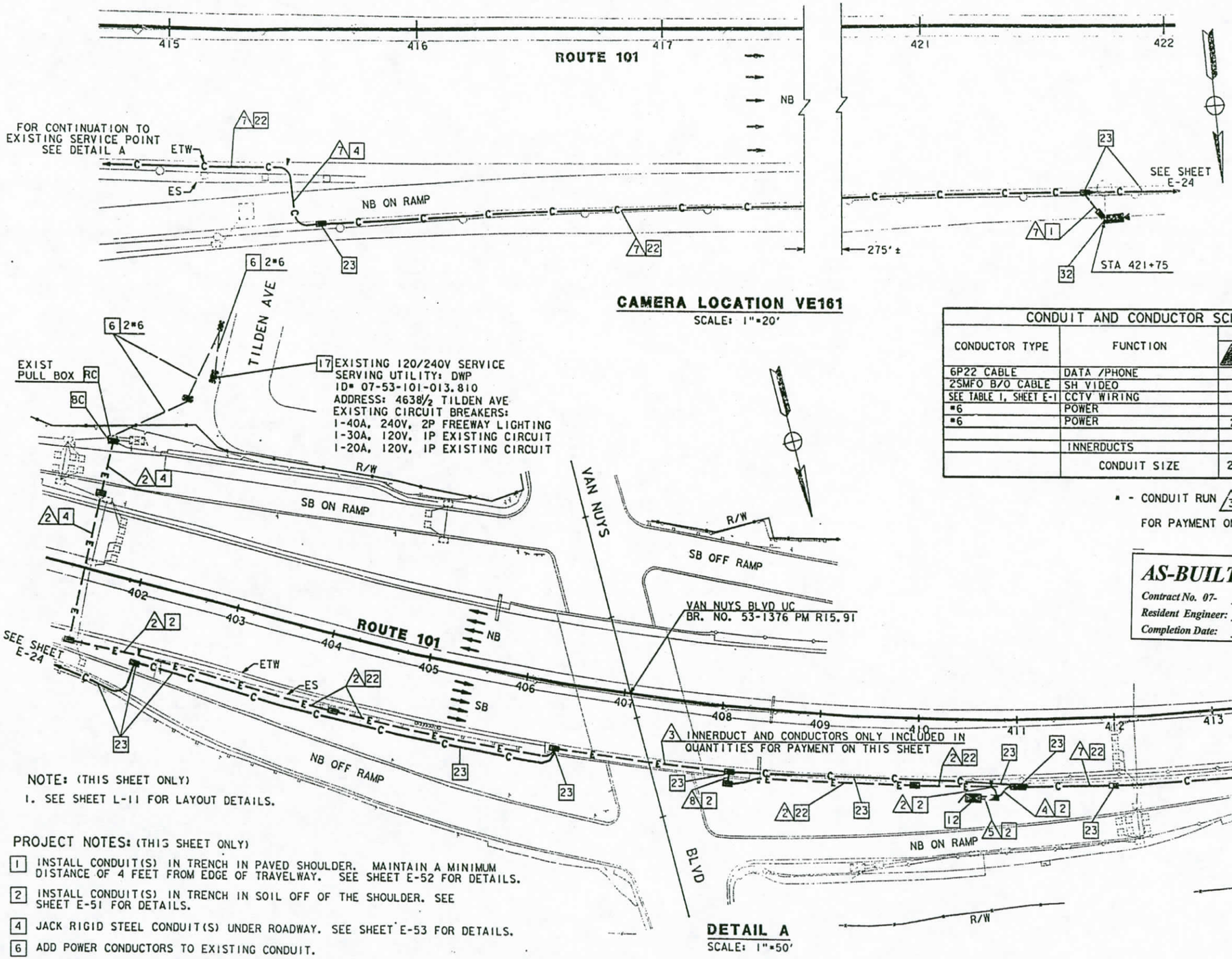
REGISTERED PROFESSIONAL ENGINEER — ELIA G. SAGHIR — No. 014922 — Exp. 6/30/95 — ELECTRICAL — STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



CAMERA LOCATION VE161
SCALE: 1"=20'

DETAIL A
SCALE: 1"=50'

CONDUCTOR SCHEDULE (THIS SHEET ONLY)									
CONDUCTOR TYPE	FUNCTION	RUN 2	RUN 3*	RUN 4	RUN 5	RUN 7	RUN 8		
6P22 CABLE	DATA /PHONE			1	1				
2SMFO B/O CABLE	SH VIDEO			1	1				
SEE TABLE 1, SHEET E-1	CCTV WIRING			1	1		1		
#6	POWER		2						
#6	POWER	2					2		2
	INNERDUCTS		1¼"	1¼"	1¼"	1¼"			1¼"
	CONDUIT SIZE	2"	4"	3"	3"	3"	2"	2"	

* - CONDUIT RUN 3 INCLUDED IN THE QUANTITIES FOR PAYMENT ON SHEET E-24

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

NOTE: (THIS SHEET ONLY)
1. SEE SHEET L-11 FOR LAYOUT DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

1 INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF TRAVELWAY. SEE SHEET E-52 FOR DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

12 INSTALL TYPE 334-TV CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE CAMERA CONTROL RECEIVER AND VIDEO TRANSMITTER. SEE DETAIL A, SHEET E-59 AND DETAIL 3, SHEET E-60.

17 INSTALL ONE 30A, 120V, SINGLE POLE CIRCUIT BREAKER FOR CCTV.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-51 AND E-52 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

32 INSTALL CCTV CAMERA ON EXISTING LUMINAIRE. SEE SHEETS E-54 AND C-14 FOR DETAILS.

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

CCTV CAMERA (LOCATION VE161)

SCALE: AS NOTED

E-46

REVISED BY	DATE REVISED
DM	2/95
ES	5/95

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 12:46

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

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

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

USERNAME => mikesl
/usr/mikesl/PO/712072u46.dg

CU 07387

EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	111	154

Elia G. Saghir 2/17/95
REGISTERED ELECTRICAL ENGINEER (Date)

10-10-95
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ELIA G. SAGHIR No. 014922 Exp. 6/30/95 ELECTRICAL STATE OF CALIFORNIA

NATIONAL ENGINEERING TECHNOLOGY
14320 FIRESTONE BLVD., SUITE 100
LA MIRADA, CA 90638

IN ASSOCIATION WITH:

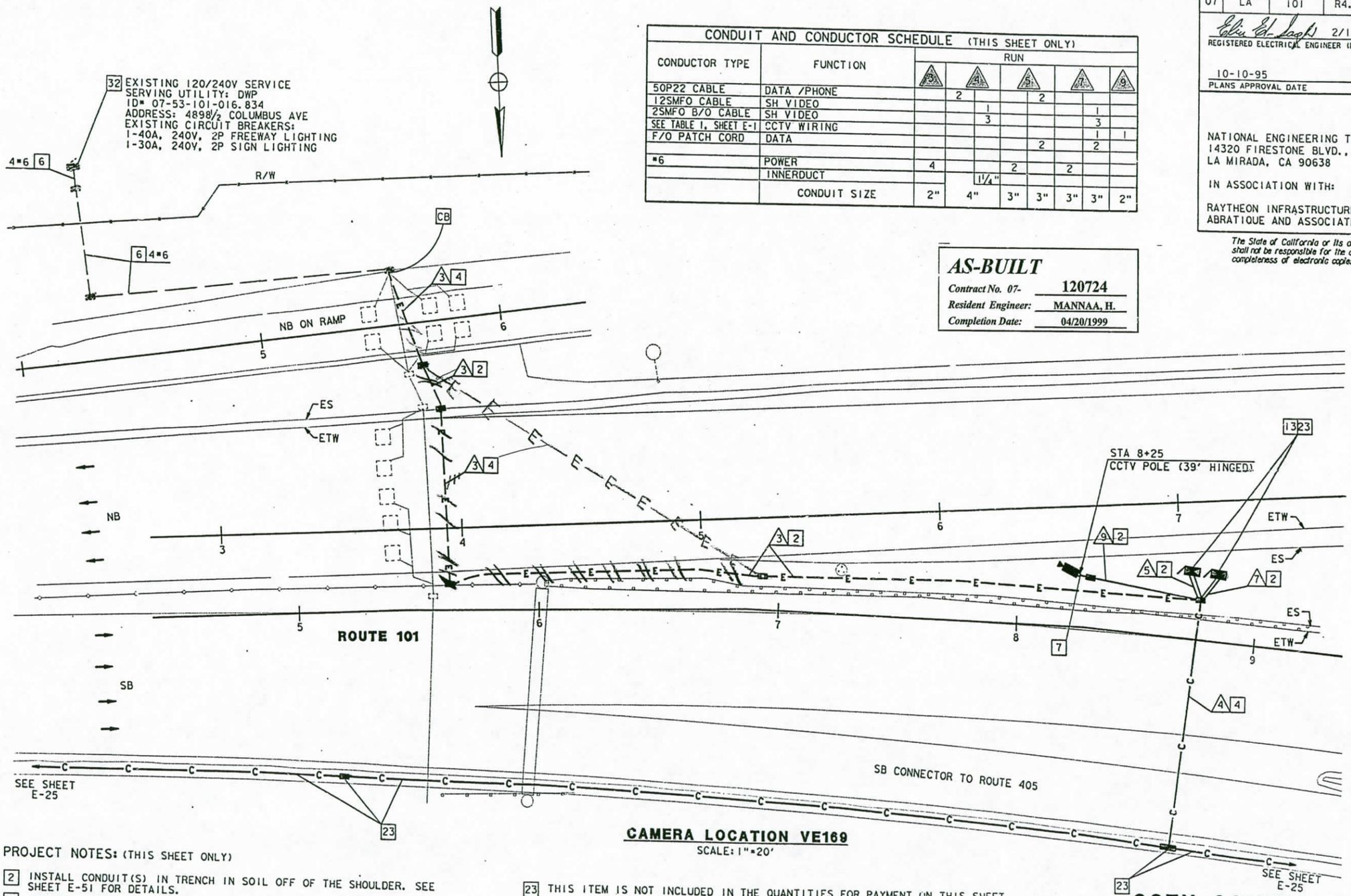
RAYTHEON INFRASTRUCTURE SERVICES, INC.
ABRATIQUE AND ASSOCIATES, INC.

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 3	4		5		7		9
50P22 CABLE	DATA /PHONE		2			2			
12SMFO CABLE	SH VIDEO			1				1	
2SMFO B/O CABLE	SH VIDEO			3				3	
SEE TABLE 1, SHEET E-1	CCTV WIRING							1	1
F/O PATCH CORD	DATA					2		2	
#6	POWER	4			2		2		
	INNERDUCT			1¼"					
	CONDUIT SIZE	2"	4"		3"	3"	3"	3"	2"

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999



CAMERA LOCATION VE169
SCALE: 1"=20'

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-51 FOR DETAILS.

4 JACK RIGID STEEL CONDUIT(S) UNDER ROADWAY. SEE SHEET E-53 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-54 AND C-12 FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY ON POLE.

13 INSTALL (2) TYPE 334-TV CABINETS ON NEW FOUNDATIONS. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO AND DATA NODES. SEE DETAIL D, SHEET E-59 AND DETAIL 6, SHEET E-62 FOR DETAILS.

23 THIS ITEM IS NOT INCLUDED IN THE QUANTITIES FOR PAYMENT ON THIS SHEET.

32 INSTALL TWO 30A, 120V SINGLE POLE CIRCUIT BREAKERS FOR VIDEO NODE AND DATA NODE.

NOTE: (THIS SHEET)

1. SEE SHEET L-12 FOR LAYOUT DETAILS.

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

CCTV CAMERA, EQUIPMENT AT VIDEO NODE AND EQUIPMENT AT DATA NODE (LOCATION VE169)

SCALE: 1"=20'

E-47

CALCULATED/DESIGNED BY	DM	DATE 2/95	REVISED BY
CHECKED BY	ES	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TIME PLOTTED => 17-OCT-1995 12:46
LAST REVISION 00-00-00

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

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

USERNAME => mikesl /usr/mikesl/P0/712072u47.dg

CU 07387 EA 120721

INDEX OF SHEETS

Sheet No.	Description
1	Title and Location Map
2-3	Layouts
4-12	Construction Details
13-32	Utility Plans
33-37	Traffic Handling Plans
38	Construction Area Signs
39	Summary of Quantities
40-51	Sign Plans, Details and Quantities
52-63	Retaining Wall Plans
64-132	Electrical Plans
133-142	Revised Standard Plans
STRUCTURE PLANS	
143-146	EB Connector Seperation UC Br No. 53-1147R
147-149	Haskell Avenue UC Br No. 53-1103R
150-153	Hayvenhurst Avenue UC Br No. 53-1104
154-156	Balboa Boulevard UC Br No. 53-1052
157-158	White Oak Avenue UC Br No. 53-1054
159-162	Lindley Avenue UC Br No. 53-1055
163-166	Burbank Boulevard UC Br No. 53-1056
167-169	Reseda Boulevard UC Br No. 53-1057
170-172	De Soto Avenue UC Br No. 53-1062
173-175	Canoga Avenue UC Br No. 53-1063
176-178	Route 101/27 Seperation Br No. 53-1064

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO CONTRACTORS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA **ACNH-P101(985)E**

DEPARTMENT OF TRANSPORTATION

Caltrans Metric

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN LOS ANGELES COUNTY IN LOS ANGELES FROM ROUTE 405/101 SEPARATION TO 0.2 km NORTH OF ROUTE 101/27 SEPARATION, AT NORTH HOLLYWOOD HUB BUILDING, AND AT TRAFFIC MANAGEMENT CENTER

To be supplemented by Standard Plans dated July, 1999

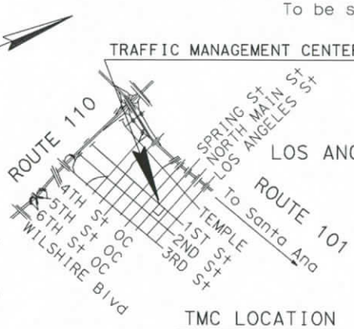
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	1	178

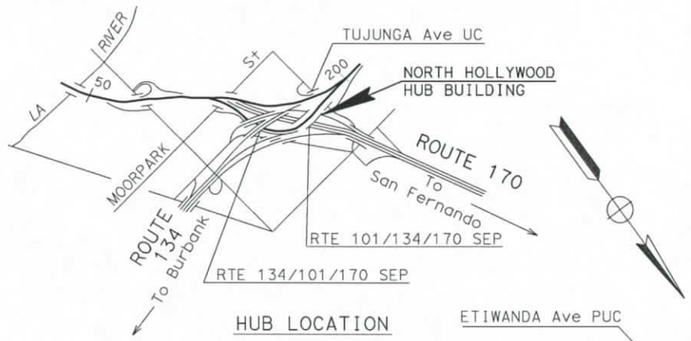
PM 17.3/25.4

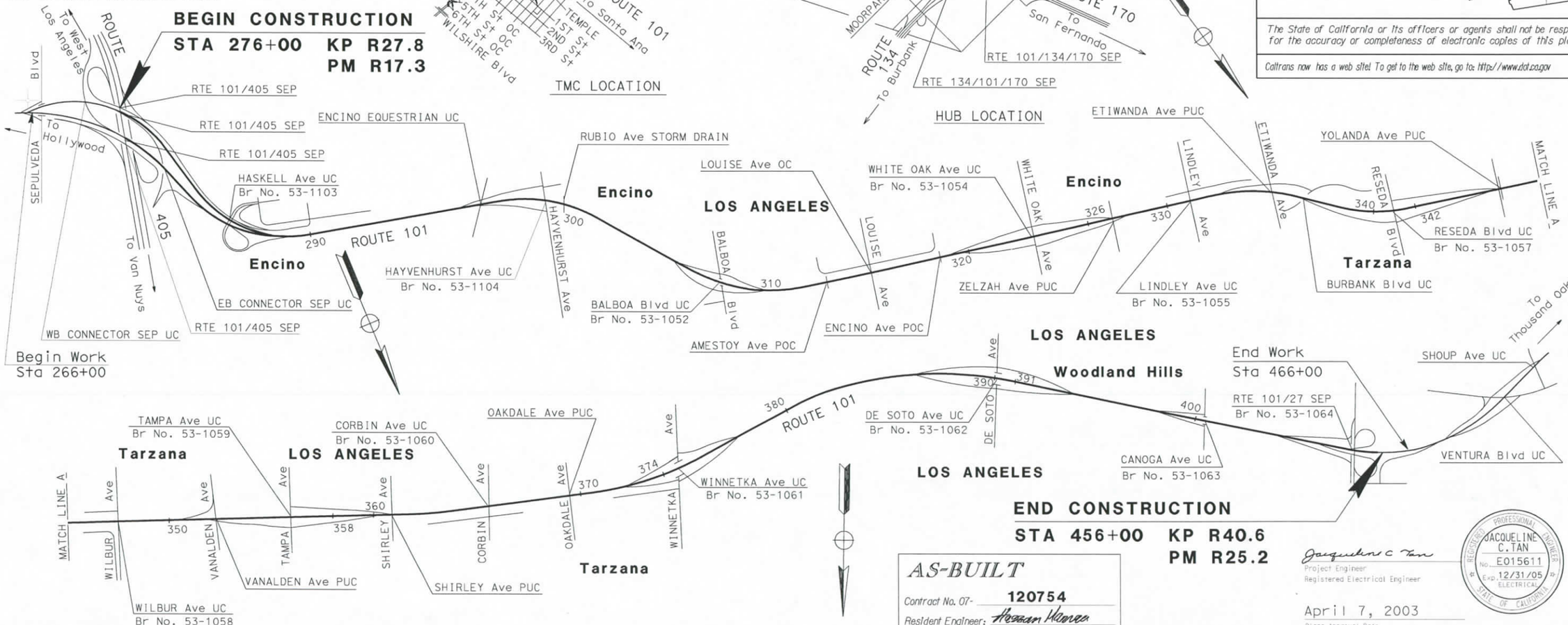
Caltrans

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov







The Contractor shall possess the Class (or classes) of license as specified in the ''Notice to Contractors''.

NO SCALE

END CONSTRUCTION
STA 456+00 KP R40.6
PM R25.2

AS-BUILT
Contract No. 07- 120754
Resident Engineer: Hossein Hamrea
Completion Date: 6/17/05

Jacqueline C Tan
Project Engineer
Registered Electrical Engineer

April 7, 2003
Plans Approval Date

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/05 ELECTRICAL
STATE OF CALIFORNIA

Contract No. **07-120754**

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
H. TRINH	2/03	J. TAN	2/03

LAST REVISION 00-00-00 TIME PLOTTED => 18-SEP-2007 15:30

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8-R40.6	64	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — EXP. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

TABLE OF CONTENTS - ELECTRICAL PLANS

E-1,E-2	COMMUNICATIONS SYSTEM ROUTING (LEGEND AND NOTES)
E-3 TO E-21	INDUCTIVE LOOP DETECTORS, CABLE NODE, VIDEO NODE DATA NODE AND COMMUNICATIONS SYSTEM ROUTING
E-22 TO E-30	CCTV CAMERA LOCATIONS
E-31 TO E-36	TMS LOCATIONS
E-37	CMS NO. 129
E-38 TO E-41	COMMUNICATIONS SYSTEM ROUTING (SCHEMATIC)
E-42	TRENCH IN SOIL DETAILS
E-43	TRENCH IN PAVEMENT DETAILS
E-44	JACKED CONDUITS DETAILS
E-45	ELECTRICAL DIAGRAM FOR CCTV AND PAN/TILT UNIT
E-46	COMMUNICATIONS PULL BOX DETAILS
E-47	NO. 5 AND COMMUNICATIONS PULL BOX DETAILS
E-48	SPLICE VAULT DETAILS
E-49	COMMUNICATIONS SYSTEM ROUTING (CONTROLLER CABINET DETAILS)
E-50	CCTV AND COMMUNICATIONS SYSTEM DETAILS (VIDEO/DATA/CABLE NODE DETAILS)
E-51	334-TV CABINET LAYOUTS
E-52	NORTH HOLLYWOOD COMMUNICATIONS HUB BUILDING (SCHEMATIC)
E-53 TO E-54	COMMUNICATIONS SYSTEM ROUTING (FIBER ASSIGNMENT TABLE)
E-55 TO E-58	COMMUNICATIONS SYSTEM ROUTING (FIBER ASSIGNMENT)
E-59	COMMUNICATIONS SYSTEM ROUTING (FIBER ASSIGNMENT TABLE)
E-60 TO E-61	COMMUNICATIONS SYSTEM ROUTING (FIBER ASSIGNMENT)
E-62	DATA NODE LOCATION VE213 (CIRCUIT ASSIGNMENT TABLE)
E-63	VIDEO NODE AND VIDEO SWITCH (CIRCUIT ASSIGNMENT TABLES)
E-64	NORTH HOLLYWOOD COMMUNICATIONS HUB BUILDING (EXISTING EQUIPMENT PLAN)
E-65	CCTV AND COMMUNICATIONS SYSTEM ROUTING (ELECTRICAL QUANTITIES)
E-66	TMS AND RMS (TYPICAL INDUCTIVE LOOP DETECTOR DETAILS FOR SINGLE & MULTILANE INSTALLATIONS)
E-67	334 CABINET PAD DETAILS
E-68	CMS (WIRING DETAILS)
E-69	SOUNDWALL CROSSING DETAIL

TABLE 1 - CMS CONTROL CABLE

CONDUCTOR TYPE	FUNCTION	QTY
24P18 AWG CABLE *	CMS CONTROL CABLE *	1
6P18 AWG CABLE *	CMS CONTROL CABLE *	1

* STATE-FURNISHED CABLES

ABBREVIATIONS

12SMFO	FIBER OPTIC CABLE, 12 SINGLE MODE FIBERS
48SMFO	FIBER OPTIC CABLE, 48 SINGLE MODE FIBERS
Ø	DIAMETER
BB	BASE BAND
B/O	BREAKOUT CABLE
CCK	CAMERA CONTROL KEYBOARD
CCR	CAMERA CONTROL RECEIVER
CCT	CAMERA CONTROL TRANSMITTER
CHAN #	CHANNEL NUMBER
CS	CONTROL STATION
DEMARC	DEMARCATION
DEMUX	DEMULTIPLEXER
DIST	DISTRIBUTION
DLC	DETECTOR LEAD-IN CABLE
DWP	DEPARTMENT OF WATER & POWER, CITY OF LOS ANGELES
DN	DATA NODE
FDF	FIBER DISTRIBUTION FRAME
FDU	FIBER DISTRIBUTION UNIT
FLEX	FLEXIBLE
F/O OR FO	FIBER OPTIC
FODM	FIBER OPTIC DATA MODEM
FRE	FIBERGLASS REINFORCED EPOXY
GRS	GALVANIZED RIGID STEEL
INTRFCE	INTERFACE
IRR	IRRIGATION
J-BOX	JUNCTION BOX
MOD	MODEM
MUX	MULTIPLEXER
NOM	NOMINAL
PDA	POWER DISTRIBUTION ASSEMBLY
PR	PAIR
PTZ	PAN, TILT AND ZOOM
REQ'D	REQUIRED
RMS	RAMP METERING SYSTEM OR STATION
RX	RECEIVER
SCE	SOUTHERN CALIFORNIA EDISON
SCHED	SCHEDULE
SH	SHORT HAUL
SM	SINGLE MODE
STL	STEEL
TDM	TIME DOMAIN MULTIPLEXER
TELCO	TELEPHONE COMPANY
TMC	TRANSPORTATION MANAGEMENT CENTER
TMS	TRAFFIC MONITORING STATION
TP	TWISTED PAIR
TS	TRAFFIC SIGNAL
TX	TRANSMITTER
VN	VIDEO NODE
VDX	VIDEO DEMULTIPLEXER
VMX	VIDEO MULTIPLEXER
VR	SINGLE VIDEO RECEIVER
VX	SINGLE VIDEO TRANSMITTER
#X	X AWG CONDUCTOR, ie #10 MEANS 10 AWG CONDUCTOR
YP	Y PAIRS OF CONDUCTORS, ie 2P MEANS 2 PAIRS

LEGEND

- SPLICE VAULT
- EXISTING SPLICE VAULT
- FIBER OPTIC PATCH CORD
- COMMUNICATIONS PULL BOX
- EXISTING COMMUNICATIONS PULL BOX
- —E— SERVICE CONDUIT
- —e— EXISTING SERVICE CONDUIT
- CONDUIT LINE DELIMITER FOR CONSTRUCTION NOTES
- TYPE 334-TV CABINET
- EXISTING TELEPHONE BRIDGE
- FIBER OPTIC CABLE
- COAXIAL CABLE

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
(LEGEND AND NOTES)

E-1

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER: HENRY H. TRINH

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	HT	DL
7/02	DATE REVISED		

LAST REVISION 00-00-00 DATE PLOTTED =>17-SEP-2007 TIME PLOTTED =>14:41

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80
USERNAME => s124928
DGN FILE => 712075u01.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8-R40.6	65	178

Caltrans Metric

Jacqueline C. Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/05
ELECTRICAL
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

GENERAL NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFFICE.
2. MODEM NUMBERS FOR SOME CONTROLLERS HAVE NOT YET BEEN ASSIGNED, AND THEREFORE SUCH LOCATIONS HAVE BEEN ASSIGNED TO MODEM ID. VERIFY MODEM NUMBERS BEFORE CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY PROPOSED CCTV POLE LOCATIONS WITH THE ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS. SEE L - SHEETS FOR EXACT LOCATION OF CCTV CAMERA .
4. THE LOCATIONS OF PROPOSED COMMUNICATIONS SYSTEM ELEMENTS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED OR APPROVED BY THE ENGINEER. SEE L-SHEETS FOR EXACT LOCATION OF CCTV CAMERAS.
5. TYPE 334-TV CONTROLLER CABINET DOOR INDICATES THE FRONT OF THE CABINET.
6. WHEN EXISTING DETECTOR LOOPS AND CONDUITS ARE SHOWN IN THE VICINITY OF PROPOSED CONDUIT TRENCHES THE CONTRACTOR SHALL AVOID DAMAGING THE EXISTING CONDUIT. TRENCHING WITH HAND TOOLS MAY BE REQUIRED.
7. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL OR TELCO FACILITIES, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO ALL AGENCIES CONCERNED, AND THE ENGINEER 72 HOURS PRIOR TO COMMENCING WORK.
8. IDENTIFICATION FORMAT OF TRAFFIC OPERATION SYSTEM (TOS) ELEMENTS:

FYXXX
- KILO METER POST (TO NEAREST 10TH)
- FREEWAY NAME SHORT FORM

9. UNLESS OTHERWISE NOTED, ALL COMMUNICATION CONDUIT BENDS SHALL BE 1.2 m RADIUS FACTORY BENDS. ALL OTHER CONDUITS SHALL HAVE A MINIMUM BEND RADIUS OF NO LESS THAN 6 TIMES THE CONDUIT DIAMETER.
10. CONDUITS AND CONDUCTORS IN CONDUIT AND CONDUCTOR SCHEDULE TABLES ARE NEW UNLESS MARKED (E) INDICATING EXISTING.
11. PVC, WHERE CALLED OUT IN THESE PLANS, SHALL MEAN RIGID NON-METALLIC CONDUIT AS DEFINED IN THE STANDARD SPECIFICATIONS.
12. CONDUIT(S) SHALL BE INSTALLED WHERE SHOWN ON THE PLANS RELATIVE TO THE EXISTING SHOULDER.

PROJECT NOTES: (FOR E-3 TO E-37)

[1] INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.

[2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

[4] JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

[5] INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.

[6] ADD POWER CONDUCTORS TO EXISTING CONDUIT.

[7] INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE. SEE SHEETS E-45 AND STD PLANS ES-16A FOR DETAILS.

[8] INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON EXISTING SIGN STRUCTURE. SEE SHEETS E-45 AND STD PLAN ES-16B FOR DETAILS.

[10] INSTALL FDU AND FIBER OPTIC DATA MODEM IN CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

[11] DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

[12] INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CONTROLLER CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

[13] INSTALL TYPE 334-TV CONTROLLER CABINETS ON NEW FOUNDATION. CONTROLLER CABINET SHALL INCLUDE EQUIPMENT AT VIDEO NODE. SEE DETAIL 3, SHEET E-50.

[14] INSTALL COMMUNICATIONS PULL BOX APPROXIMATELY 5 m FROM EDGE OF STRUCTURE.

[16] INSTALL FDU AND FIBER OPTIC MODEM IN CONTROLLER CABINET. SEE SHEETS E-49 AND E-68 FOR DETAILS.

[17] INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.

[18] COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER CABINET.

[19] INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

[20] INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.

[21] INSTALL 78C, TYPE 1. ELECTRIC COMPANY TO INSTALL CONDUCTORS.

[22] INSTALL TYPE 1 CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.

[23] SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

[25] IDENTIFY AND [RC] dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

[26] ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

[28] INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.

[29] COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR CONTROL STATION.

[30] INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CONTROLLER CABINET SHALL INCLUDE EQUIPMENT AT DATA NODE. SEE DETAIL 3, SHEET E-50 AND DETAIL B SHEET E-51.

[31] INSTALL TYPE I CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
(NOTES)

E-2

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	HT	DL
	CALCULATED/ DESIGNED BY	
	CHECKED BY	
	PROJECT ENGINEER	HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u02.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8-R40.6	66	178

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

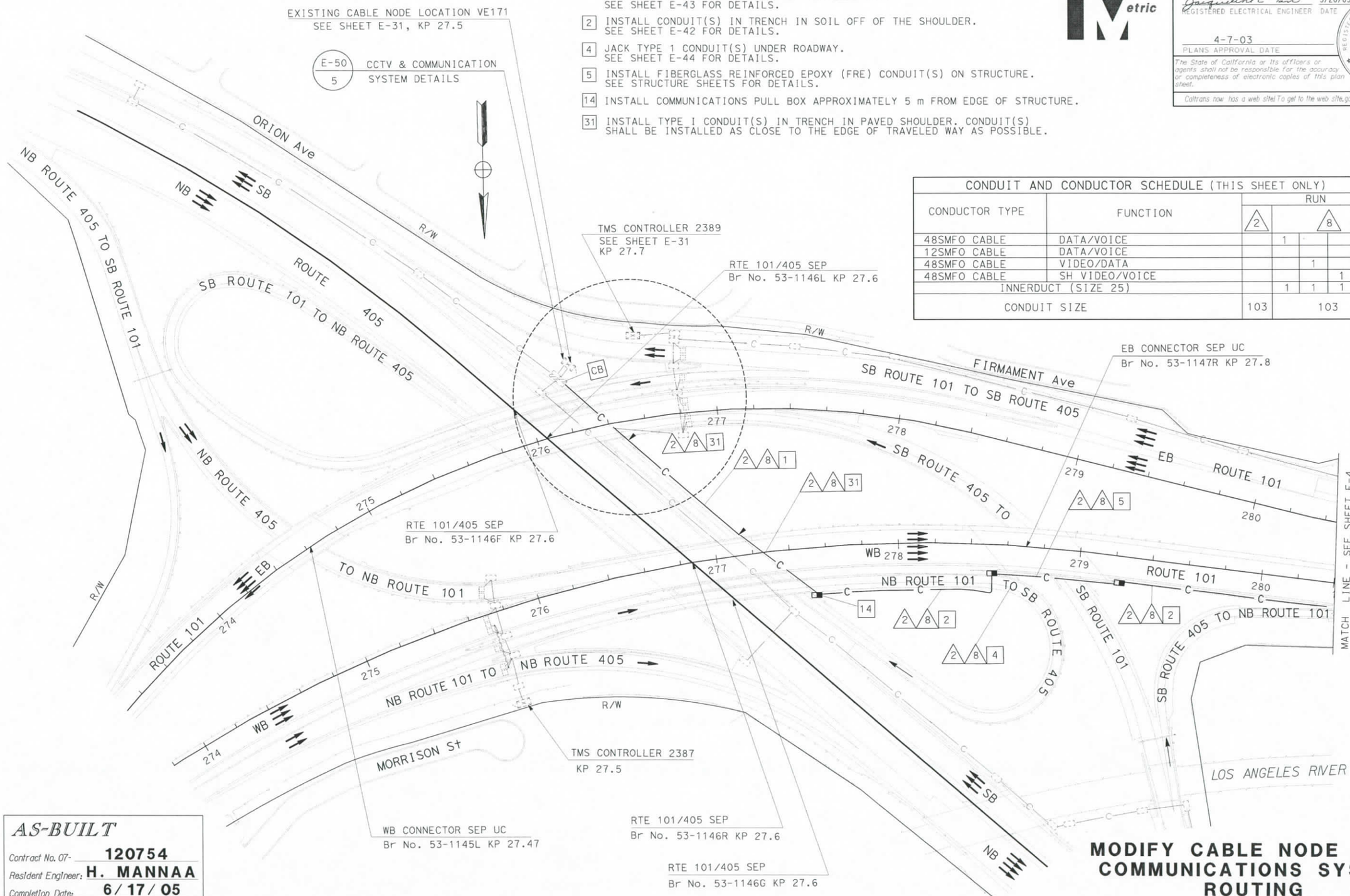
Caltrans Metric

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
14. INSTALL COMMUNICATIONS PULL BOX APPROXIMATELY 5 m FROM EDGE OF STRUCTURE.
31. INSTALL TYPE I CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2	RUN 8			
48SMFO CABLE	DATA/VOICE		1			
12SMFO CABLE	DATA/VOICE					
48SMFO CABLE	VIDEO/DATA			1		
48SMFO CABLE	SH VIDEO/VOICE				1	
INNERDUCT (SIZE 25)			1	1	1	1
CONDUIT SIZE		103	103			



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY CABLE NODE VE171 COMMUNICATIONS SYSTEM ROUTING

SCALE 1:1000

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER HENRY H. TRINH
CALCULATED/DESIGNED BY HT
CHECKED BY DL
DATE REVISED 7/02
DATE REVISED 7/02
REVISED BY CS

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u03.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00
DATE PLOTTED => 17-SEP-2007
TIME PLOTTED => 14:41

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8-R40.6	67	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

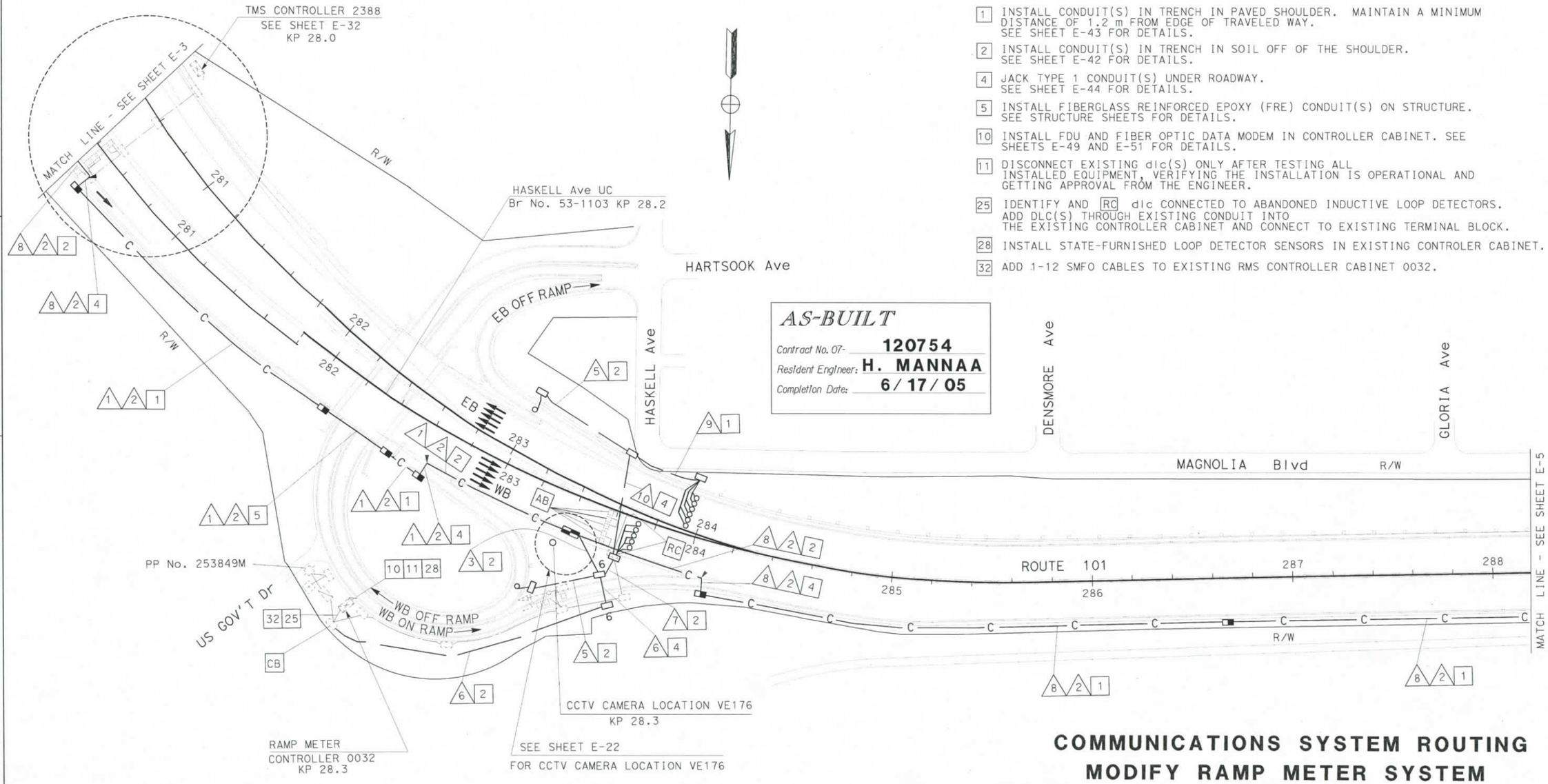
4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site,go to http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)																			
CONDUIT/ CONDUCTOR	FUNCTION	RUN																	
		1				2	3	5	6		7	8				9	10		
48SMFO CABLE	DATA/VOICE	1										1							
12SMFO CABLE	DATA/VOICE				1		1			1									
48SMFO CABLE	VIDEO/DATA		1										1						
48SMFO CABLE	SH VIDEO/VOICE			1										1					
DLC	RAMP/COUNT							1	13		12					6	7		
INNERDUCT (SIZE 25)		1	1	1	1							1	1	1	1				
INNERDUCT (SIZE 32)										1									
CONDUIT SIZE		103				103	53	53	78		53	103				53	53		



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(S) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLER CABINET.
32. ADD 1-12 SMFO CABLES TO EXISTING RMS CONTROLLER CABINET 0032.

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0032)

SCALE 1:1000

E-4

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u04.dgn

CU 07388 EA 120751

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER HENRY H. TRINH

DATE	REVISED BY	DATE REVISED
7/02	CS	7/02

CALCULATED/ DESIGNED BY HT
CHECKED BY DL

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8-R40.6	68	178

Caltrans Metric

Jacqueline C. Tan 12/31/05
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/05
ELECTRICAL
STATE OF CALIFORNIA

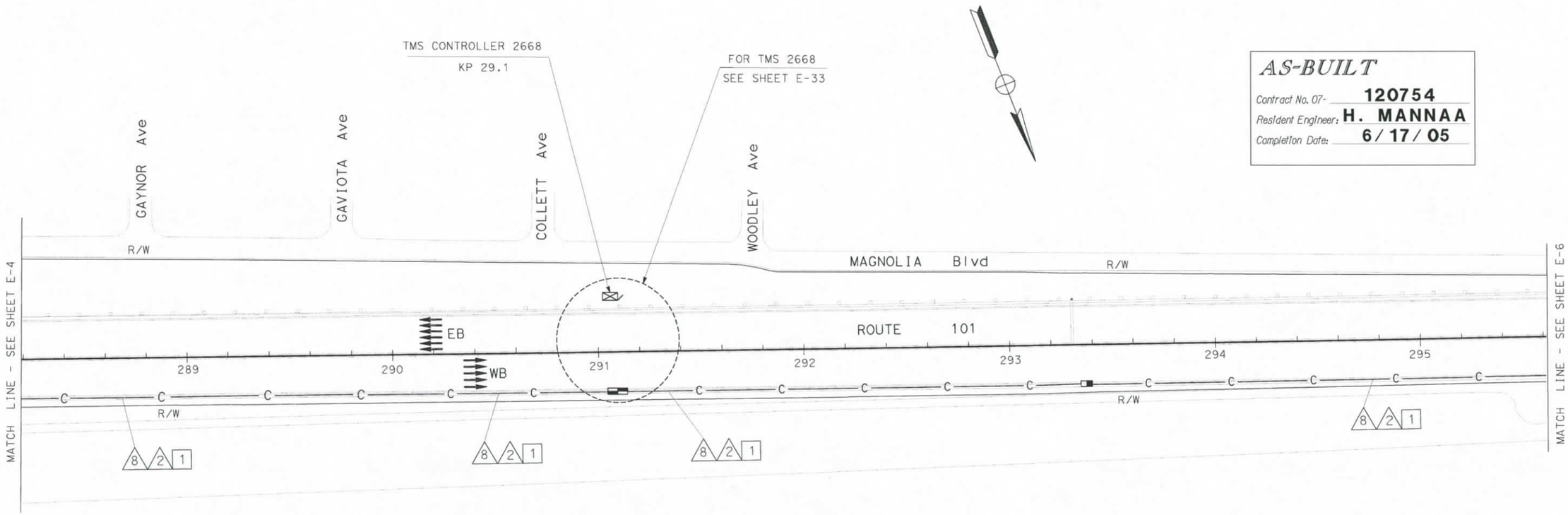
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)						
CONDUIT/CONDUCTOR	FUNCTION	RUN 8				2
48SMFO CABLE	DATA/VOICE	1				
12SMFO CABLE	DATA/VOICE					
48SMFO CABLE	VIDEO/DATA		1			
48SMFO CABLE	SH VIDEO/VOICE			1		
DLC	RAMP/COUNT					
INNERDUCT (SIZE 25)		1	1	1	1	
CONDUIT SIZE		103				103

PROJECT NOTES: (THIS SHEET ONLY)

[1] INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING

SCALE 1:1000

E-5

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u05.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

DATE	REVISED BY	CALCULATED/ DESIGNED BY
7/02	CS	HT
7/02	DATE REVISED	DL
		CHECKED BY

PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8-R40.6	69	178

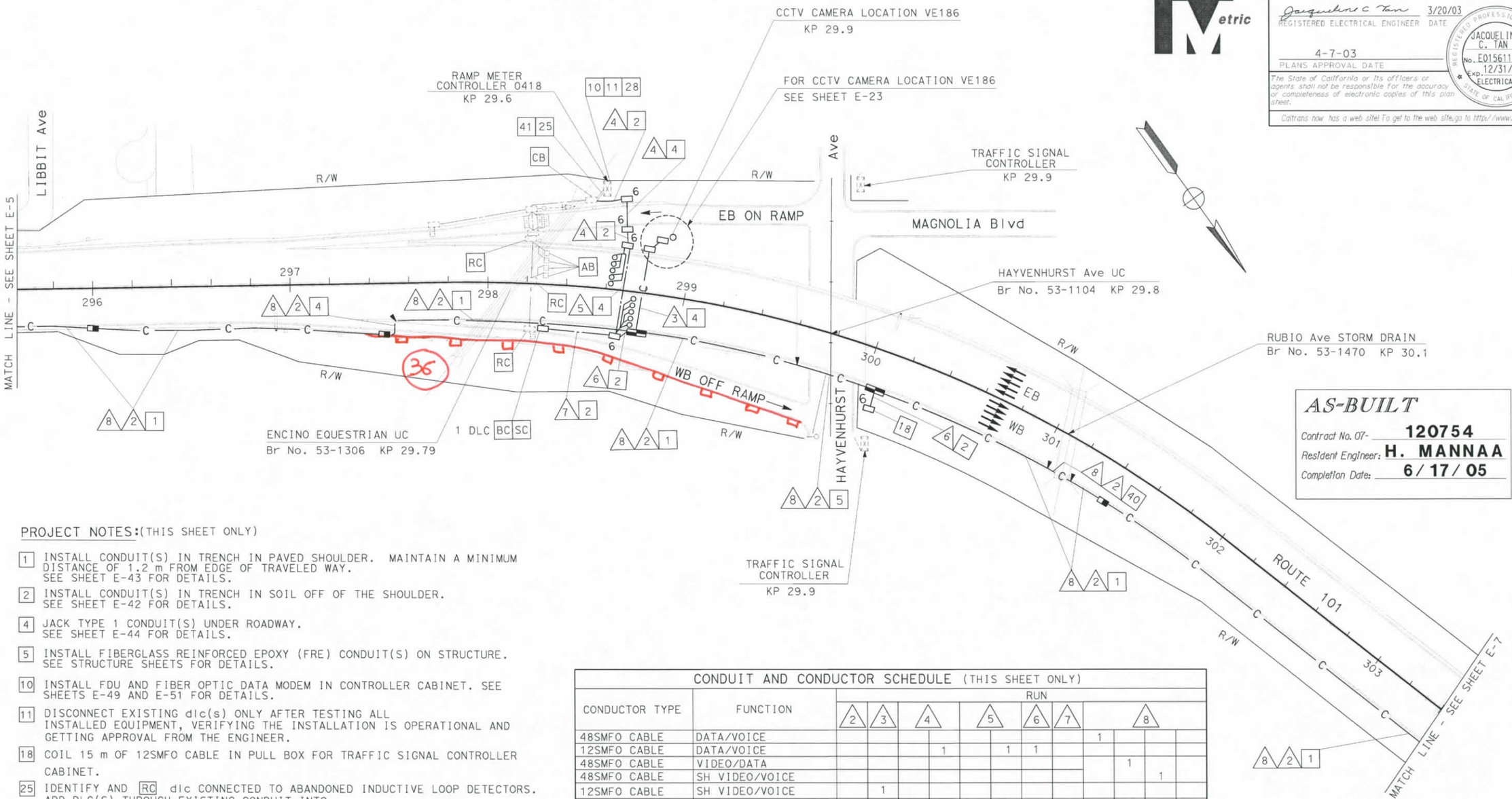
Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

PROJECT NOTES:(THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER CABINET.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
40. INSTALL CONDUIT(S) SIDE BY SIDE, IN TRENCH, IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
41. ADD 1-12 SMFO CABLES TO EXISTING RMS CONTROLLER CABINET 0418.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2	3	4		5		6	7	8			
48SMFO CABLE	DATA/VOICE									1			
12SMFO CABLE	DATA/VOICE				1		1	1					
48SMFO CABLE	VIDEO/DATA										1		
48SMFO CABLE	SH VIDEO/VOICE											1	
12SMFO CABLE	SH VIDEO/VOICE		1										
DLC	RAMP/COUNT			11		6			1				
INNERDUCT (SIZE 25)										1	1	1	1
INNERDUCT (SIZE 32)					1		1						
CONDUIT SIZE		103	53	78		103		53	53	103			

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0418)

SCALE 1:1000

E-6

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER HENRY H. TRINH

DATE	REVISED BY	CALCULATED/ DESIGNED BY
7/02	CS	HT
7/02	DATE REVISED	DL
		CHECKED BY

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u06.dgn

CU 07388

EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	R27.8-R40.6	70	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

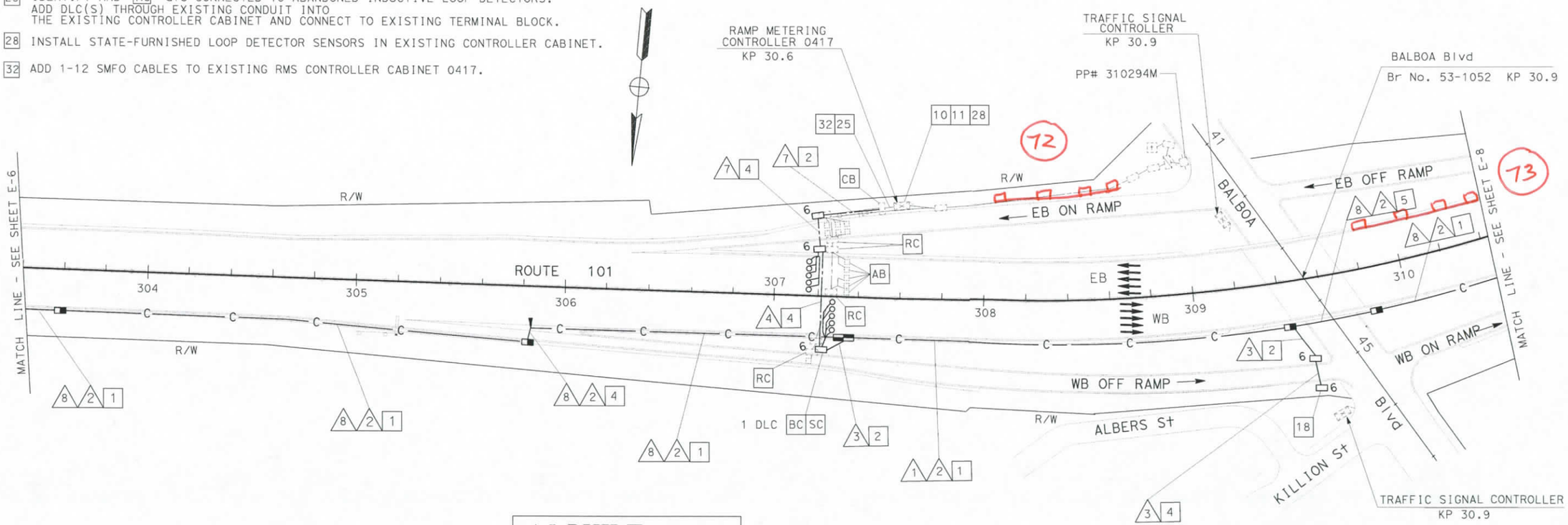
Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
32. ADD 1-12 SMFO CABLES TO EXISTING RMS CONTROLLER CABINET 0417.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	1	1	1	2	3	4	4	7	7	8	8	8	8
48SMFO CABLE	DATA/VOICE	1										1			
12SMFO CABLE	DATA/VOICE				1		1		1		1				
48SMFO CABLE	VIDEO/DATA		1										1		
48SMFO CABLE	SH VIDEO/VOICE			1										1	
DLC	RAMP/COUNT									11					
INNERDUCT (SIZE 25)		1	1	1	1			6				1	1	1	1
INNERDUCT (SIZE 32)									1		1				
CONDUIT SIZE		103				103	53	103		78		103			



AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0417)

SCALE 1:1000

E-7

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER HENRY H. TRINH

CALCULATED/DESIGNED BY HT
CHECKED BY DL

DATE REVISED BY CS
7/02 DATE REVISED 7/02
7/02

ASC REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u07.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	71	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

DATE	REVISED BY	DATE REVISED
7/02	CS	7/02
	HT	
7/02	DL	

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
HENRY H. TRINH

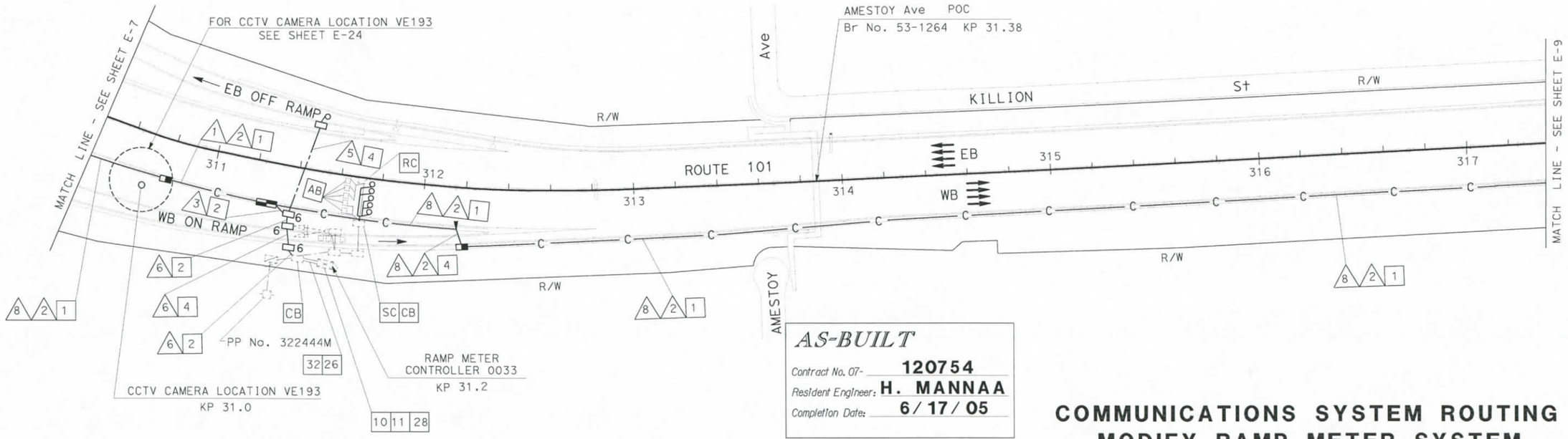
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVEL WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
26. ADD NEW DETECTOR LOOP CABLE(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
32. ADD 1-12 SMFO CABLES TO EXISTING RMS CONTROLLER CABINET 0033.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN												
		1				2	3	5	6		8			
48SMFO CABLE	DATA/VOICE	1									1			
12SMFO CABLE	DATA/VOICE				1		1			1				
48SMFO CABLE	VIDEO/DATA		1									1		
48SMFO CABLE	SH VIDEO/VOICE			1									1	
DLC	RAMP/COUNT							1	1					
INNERDUCT (SIZE 25)		1	1	1	1						1	1	1	1
INNERDUCT (SIZE 32)										1				
CONDUIT SIZE		103				103	53	53	78		103			



AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0033)

SCALE 1:1000

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

E-8

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u08.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	R27.8/R40.6	72	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

1 INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

6 ADD POWER CONDUCTORS TO EXISTING CONDUIT.

10 INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

11 DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

25 IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

29 COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR CONTROL STATION.

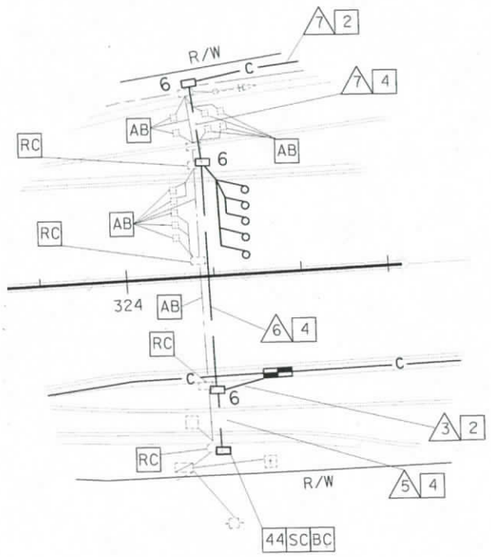
31 INSTALL TYPE I CONDUIT(S) IN TRENCH IN PAVED SHOULDER. CONDUIT(S) SHALL BE INSTALLED AS CLOSE TO THE EDGE OF TRAVELED WAY AS POSSIBLE.

44 ADD 1 DLC AND 2 # 8.

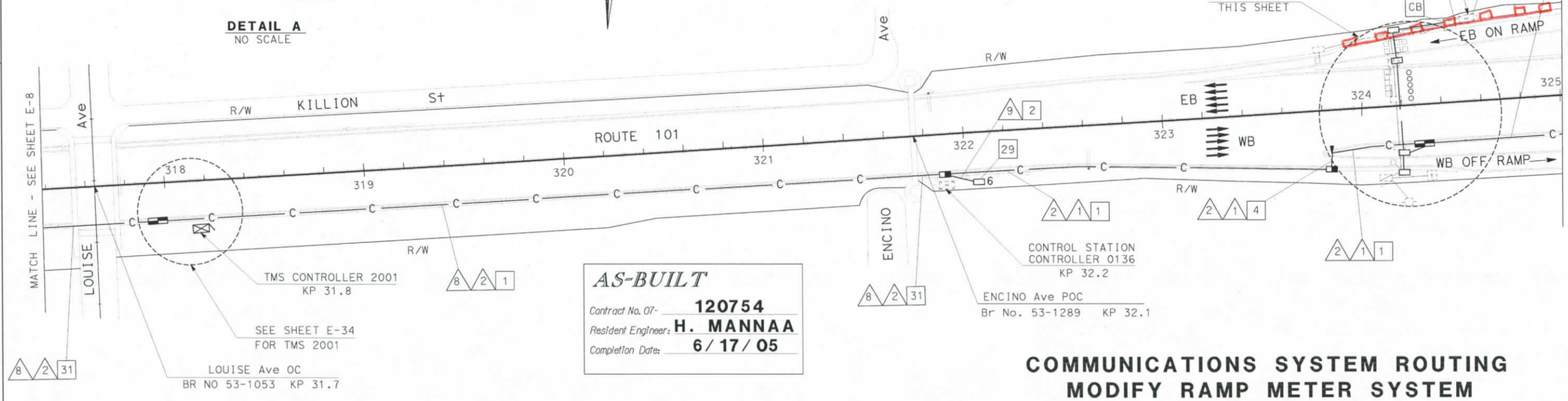
45 ADD 1-12 SMFO CABLES TO EXISTING RMS CONTROLLER CABINET 0416.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				2	3	5	6		7		8				9
48SMFO CABLE	DATA/VOICE	1											1				
12SMFO CABLE	DATA/VOICE				1		1			1		1					1
48SMFO CABLE	VIDEO/DATA		1											1			
48SMFO CABLE	SH VIDEO/VOICE			1											1		
DLC	RAMP/COUNT							1	1		6						
#8	POWER							2	2		2						
INNERDUCT (SIZE 25)		1	1	1	1								1	1	1	1	
INNERDUCT (SIZE 32)										1		1					
CONDUIT SIZE		103				103	53	53	103		78		103				53



DETAIL A
NO SCALE



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0416)

SCALE 1:1000

E-9

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	HT	DL
	CALCULATED/ DESIGNED BY	CHECKED BY
	PROJECT ENGINEER	HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:41

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u09.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	73	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

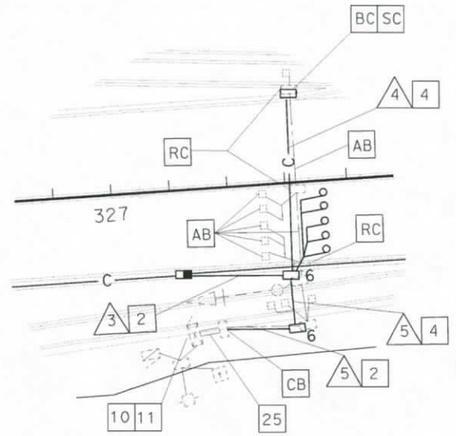
Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

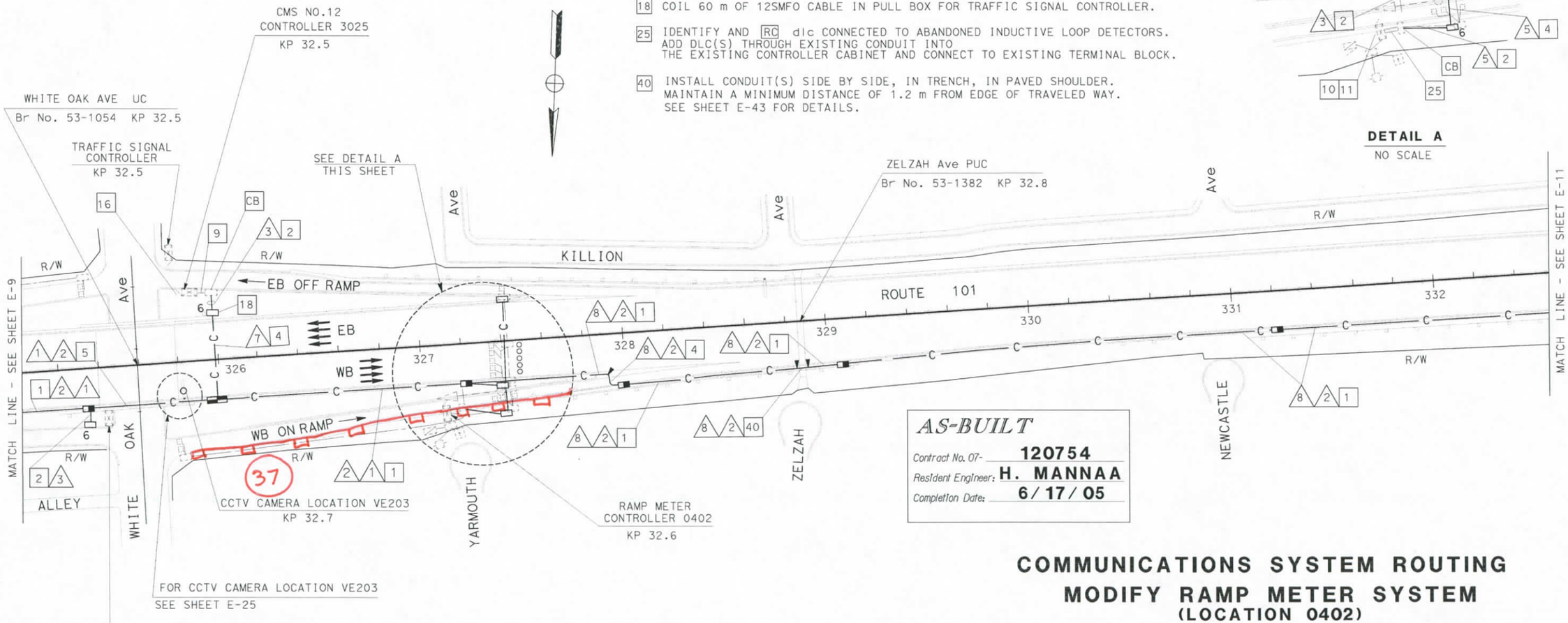
CONDUCTOR TYPE	FUNCTION	RUN 1				2	3	4	5		7		8			
48SMFO CABLE	DATA/VOICE	1											1			
12SMFO CABLE	DATA/VOICE				1		1			1	1	1				
48SMFO CABLE	VIDEO/DATA		1											1		
48SMFO CABLE	SH VIDEO/VOICE			1											1	
DLC	RAMP/COUNT							1	6							
INNERDUCT (SIZE 25)		1	1	1	1								1	1	1	1
INNERDUCT (SIZE 32)										1	1	1				
CONDUIT SIZE		103				103	53	53	78		103		103			

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
9. ADD 1-12 SMFO CABLES AND CONNECT TO EXISTING CMS CONTROLLER 3025
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
16. INSTALL FDU AND FIBER OPTIC MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-68 FOR DETAILS.
18. COIL 60 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
40. INSTALL CONDUIT(S) SIDE BY SIDE, IN TRENCH, IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.



DETAIL A
NO SCALE



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0402)

SCALE 1:1000

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

E-10

DATE	REVISED BY	CALCULATED/ DESIGNED BY	PROJECT ENGINEER
7/02	CS	HT	HENRY H. TRINH
7/02	DATE REVISED	DL	CHECKED BY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS (0 20 40 60 80)

USERNAME => s124928
DGN FILE => 712075u10.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	74	178

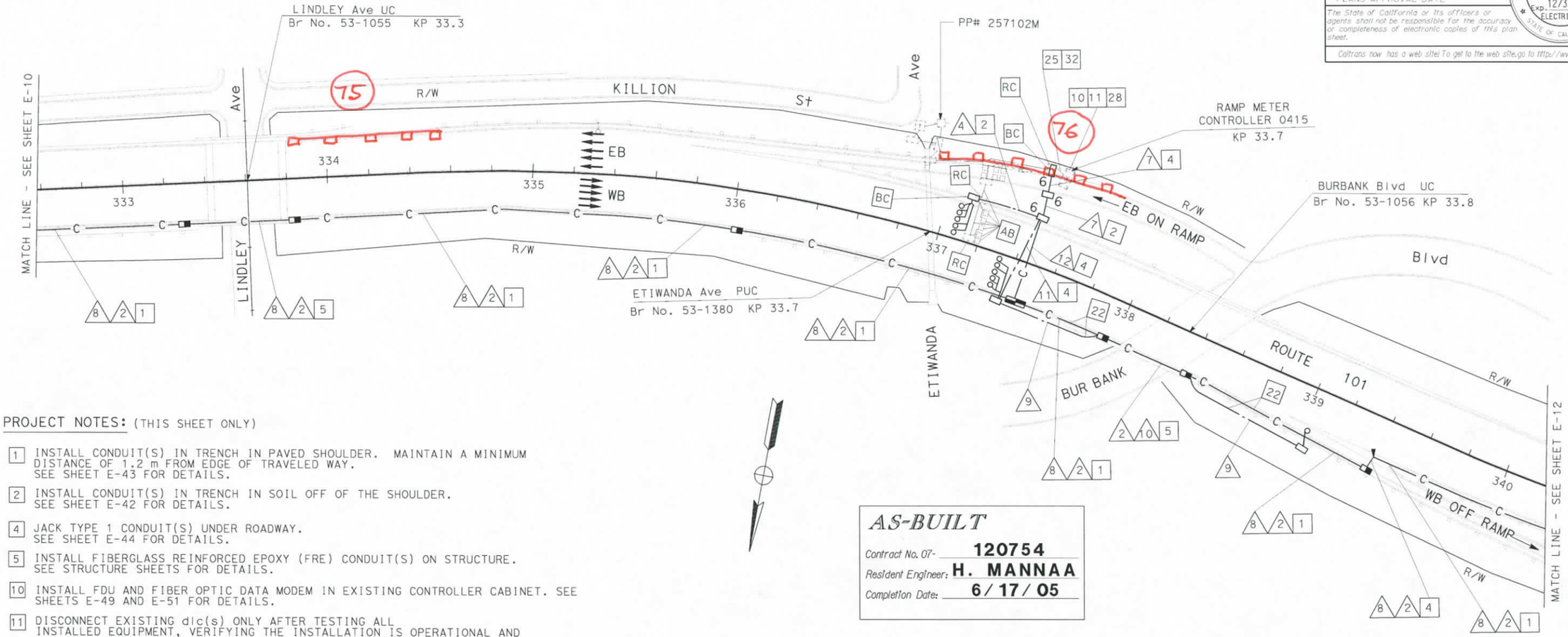
Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site go to http://www.dot.ca.gov



PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
22. INSTALL TYPE 1 CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
32. ADD 1-12 SMFO CABLES IN EXISTING CONDUITS AND CONNECT TO EXISTING RMS CONTROLLER 0415.

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	1	1	1	2	4	7	8	8	8	8	9	10	10	10	10	11	12
48SMFO CABLE	DATA/VOICE	1							1					1					
12SMFO CABLE	DATA/VOICE				1			1											1
48SMFO CABLE	VIDEO/DATA		1							1					1				
48SMFO CABLE	SH VIDEO/VOICE			1							1					1			
DLC	RAMP/COUNT						5	11					1				1	6	
INNERDUCT (SIZE 25)		1	1	1	1				1	1	1	1		1	1	1			
INNERDUCT (SIZE 32)								1											1
CONDUIT SIZE		103				103	53	78	103				53	103				53	78

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0415)

SCALE 1:1000

E-11

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7120750ul.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER HENRY H. TRINH
CALCULATED/DESIGNED BY HT
CHECKED BY DL
DATE REVISED 7/02
REVISED BY CS

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	75	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

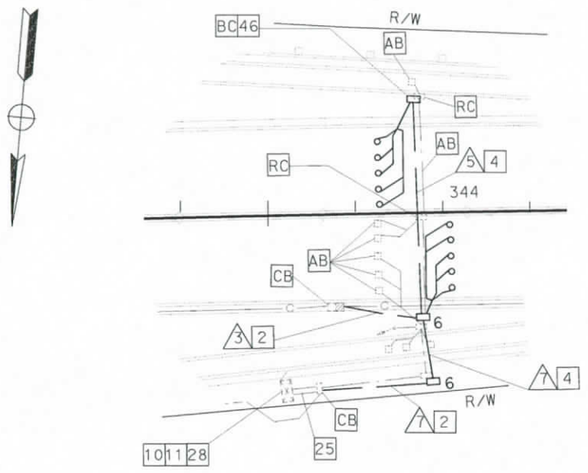
Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

AS-BUILT

Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE IN/OUT PAIRS TOGETHER USING A FIBER OPTIC SPLICE CLOSURE.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CABINET.
44. INSTALL CONDUCTORS AND INNERDUCTS IN EXISTING EMPTY CONDUIT.
45. INSTALL 1-12 SMFO TO RUN 9 FOR RMS CONTROLLER (KP 34.4)
46. INSTALL 1 DLC.

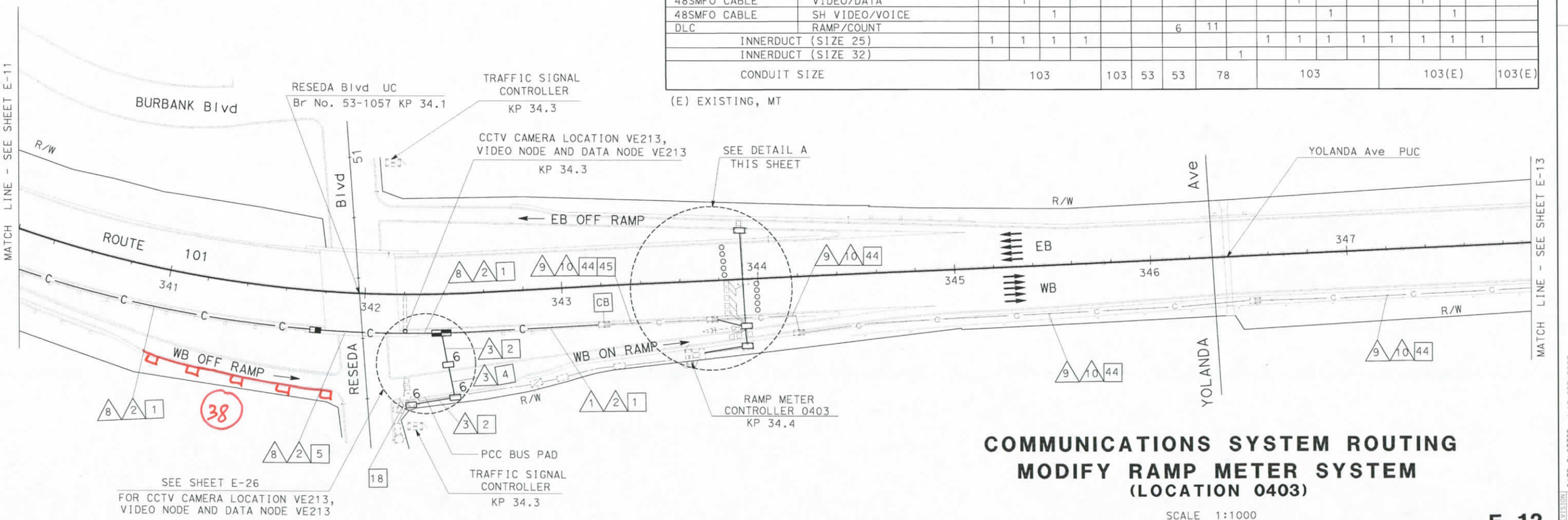


DETAIL A
NO SCALE

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				2	3	5	7		8				9				10
48SMFO CABLE	DATA/VOICE	1								1					1				
12SMFO CABLE	DATA/VOICE				1		1			1									
48SMFO CABLE	VIDEO/DATA		1								1					1			
48SMFO CABLE	SH VIDEO/VOICE			1								1					1		
DLC	RAMP/COUNT							6	11										
INNERDUCT (SIZE 25)		1	1	1	1					1	1	1	1		1	1	1	1	
INNERDUCT (SIZE 32)									1										
CONDUIT SIZE		103				103	53	53	78		103				103(E)				103(E)

(E) EXISTING, MT



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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0403)

SCALE 1:1000

E-12

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	CALCULATED/DESIGNED BY	HT
	CHECKED BY	DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u12.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	76	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

10 INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

11 DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

25 IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD 10 DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

28 INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.

29 INSTALL FIBER OPTIC SPLICE CLOSURE IN EXISTING SPLICE VAULT.

32 ADD 1-12 SMFO CABLES IN EXISTING CONDUITS AND CONNECT TO EXISTING RMS CONTROLLER 0414.

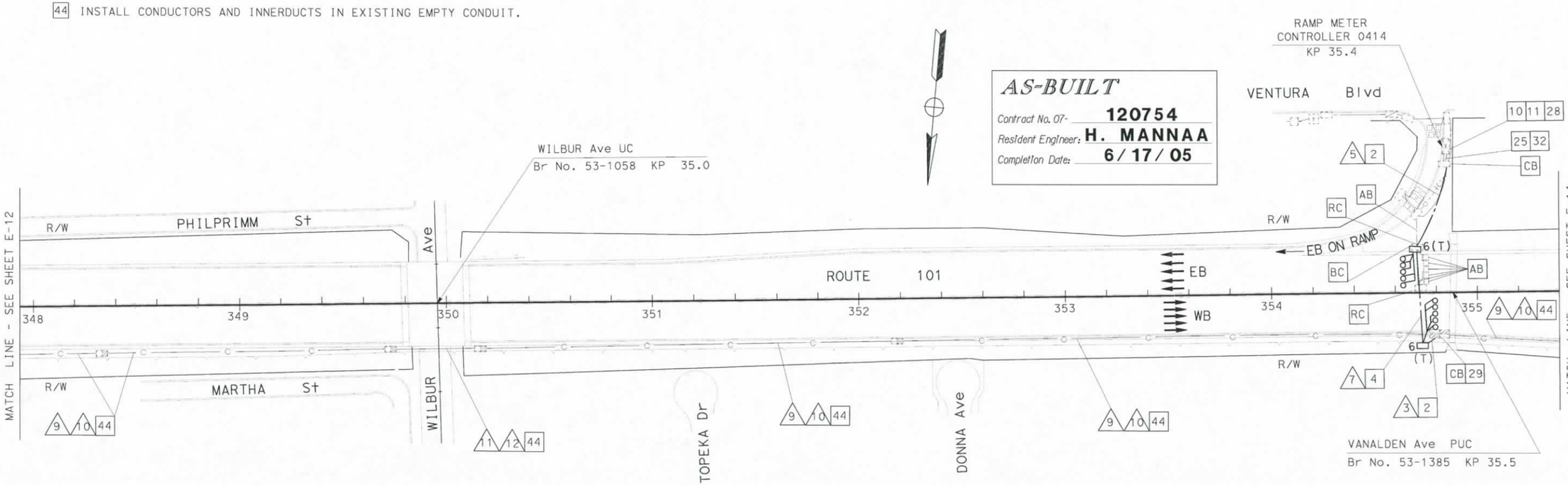
44 INSTALL CONDUCTORS AND INNERDUCTS IN EXISTING EMPTY CONDUIT.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 3	5		7		9				10	11				12
48SMFO CABLE	DATA/VOICE						1					1				
12SMFO CABLE	DATA/VOICE	1		1		1										
48SMFO CABLE	VIDEO/DATA							1					1			
48SMFO CABLE	SH VIDEO/VOICE								1					1		
DLC	RAMP/COUNT		10		5											
INNERDUCT (SIZE 25)							1	1	1	1		1	1	1	1	
INNERDUCT (SIZE 32)				1		1										
CONDUIT SIZE		53	78		103		103(E)				103(E)	78(E)				78(E)

(E) EXISTING, MT

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05



COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0414)

SCALE 1:1000

E-13

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u13.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	HT	
	DL	

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	77	178

Caltrans Metric

Jacqueline C. Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 EXP. 12/31/05 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

AS-BUILT

Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

10 INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

11 DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

18 COIL 15 m OF 12 SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.

25 IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.

29 INSTALL FIBER OPTIC SPLICE CLOSURE IN EXISTING SPLICE VAULT.

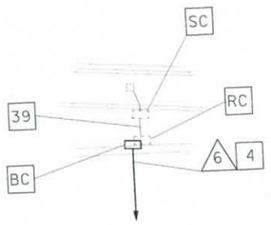
32 ADD 1-12 SMFO INTO EXISTING CONDUITS AND CONNECT TO EXISTING RMS CONTROLLER 0404.

39 RC dlc. INSTALL NEW DLC IN THE EXISTING CONDUIT.

42 SEE SHEET E-69 FOR SOUNDWALL CROSSING DETAILS.

44 INSTALL CONDUCTORS AND INNERDUCTS IN EXISTING EMPTY CONDUIT.

45 INSTALL 1-12 SMFO TO RUN (9) FOR TS CONTROLLER (KP 35.7).

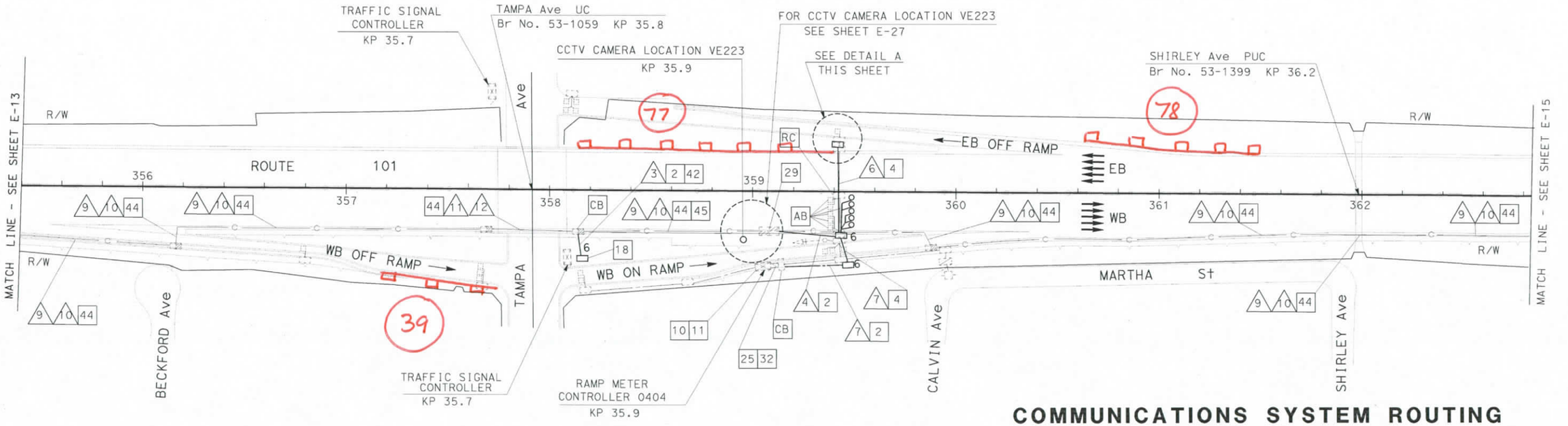


DETAIL A
NO SCALE

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN (3)	(4)	(6)	(7)	(9)				(10)	(11)				(12)
48SMFO CABLE	DATA/VOICE					1					1				
12SMFO CABLE	DATA/VOICE	1	1		1										
48SMFO CABLE	VIDEO/DATA						1					1			
48SMFO CABLE	SH VIDEO/VOICE							1					1		
DLC	RAMP/COUNT			1	6										
INNERDUCT (SIZE 25)						1	1	1	1		1	1	1	1	
INNERDUCT (SIZE 32)					1										
CONDUIT SIZE		53	53	53	78	103(E)				103(E)	78(E)				78(E)

(E) EXISTING, MT



COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0404)

SCALE 1:1000

E-14

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u14.dgn

CU 07388 EA 120751

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	HT	DL
	CALCULATED/ DESIGNED BY	CHECKED BY

PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	78	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site go to http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)												
CONDUCTOR TYPE	FUNCTION	RUN										
		9				10	11					12
48SMFO CABLE	DATA/VOICE	1					1					
12SMFO CABLE	DATA/VOICE											
48SMFO CABLE	VIDEO/DATA		1					1				
48SMFO CABLE	SH VIDEO/VOICE			1					1			
INNERDUCT (SIZE 25)		1	1	1	1		1	1	1	1		
CONDUIT SIZE		103(E)				103(E)	78(E)					78(E)

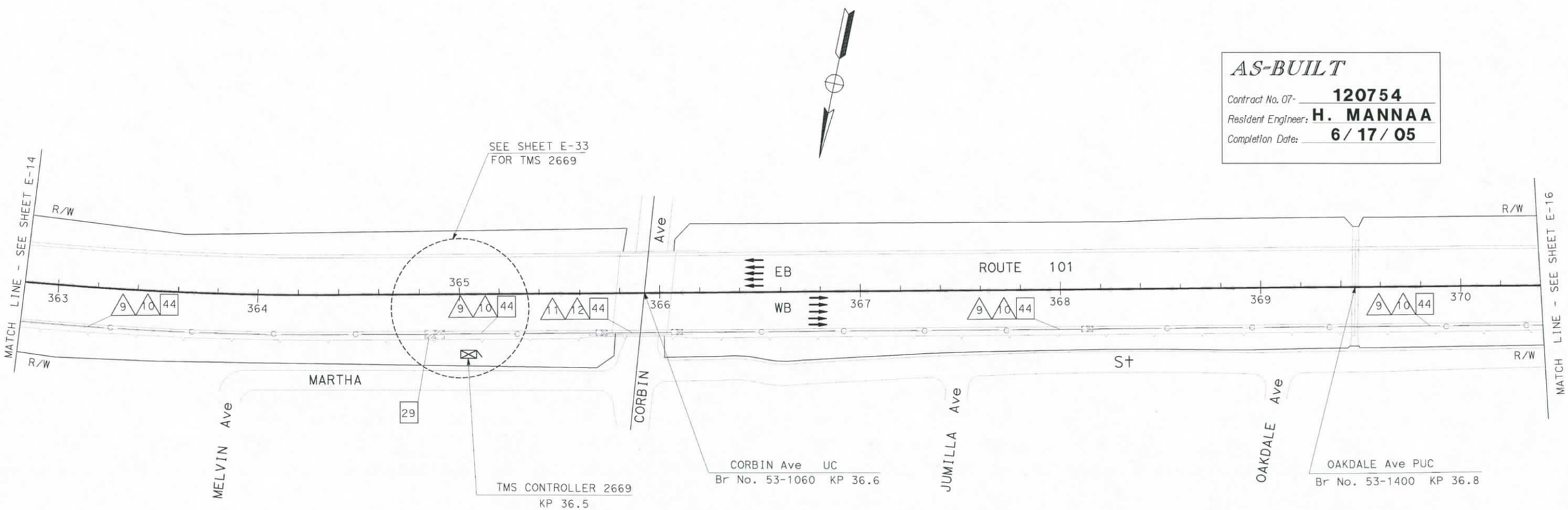
(E) EXISTING, MT

PROJECT NOTES: (THIS SHEET ONLY)

29 INSTALL FIBER OPTIC SPLICE CLOSURE IN EXISTING SPLICE VAULT.

44 INSTALL CONDUCTORS AND INNERDUCTS IN EXISTING EMPTY CONDUIT.

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05



COMMUNICATIONS SYSTEM ROUTING

SCALE 1:1000

E-15

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7120750115.dgn

CU 07388 EA 120751

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER HENRY H. TRINH

CALCULATED/DESIGNED BY HT
CHECKED BY DL

DATE REVISED BY
7/02 CS
7/02 DATE REVISED 7/02

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	79	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site go to http://www.dot.ca.gov

DATE	REVISED BY	DATE REVISED
7/02	CS	7/02
	HT	
	DL	

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

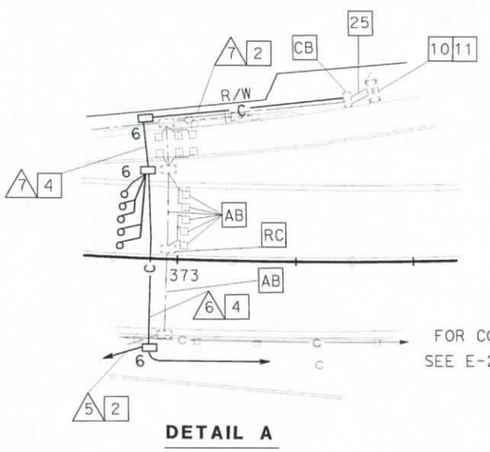
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
26. ADD 1 DLC
29. INSTALL FIBER OPTIC SPLICE CLOSURE IN EXISTING SPLICE VAULT.
32. ADD 1-12 SMFO INTO EXISTING CONDUIT AND CONNECT TO EXISTING RMS CONTROLLER 0405.
44. INSTALL CONDUCTORS AND INNERDUCTS IN EXISTING EMPTY CONDUIT.
45. INSTALL 1-12 SMFO TO RUN (9) FOR RMS 0405 (KP 37.6).

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

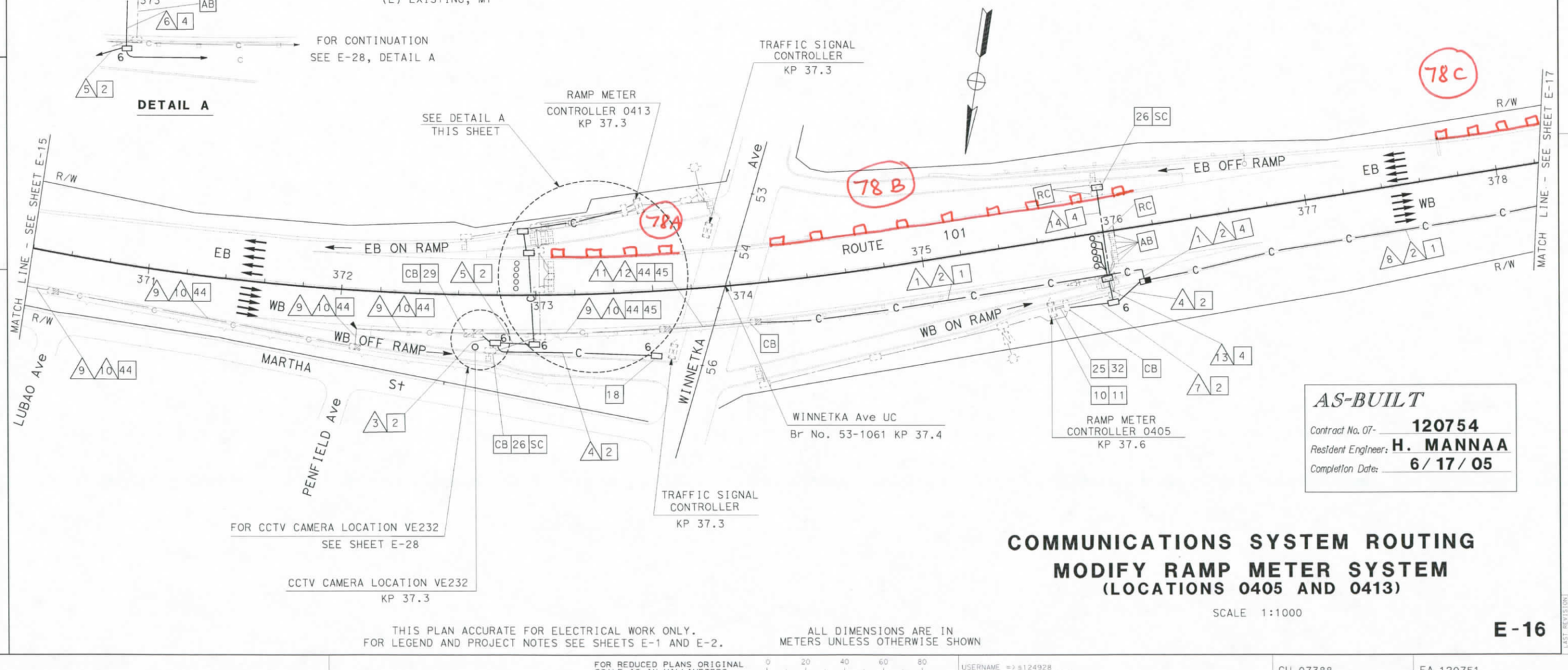
CONDUCTOR TYPE	FUNCTION	RUN (1)				(2)	(3)	(4)	(5)		(6)		(7)		(8)				(9)				(10)	(11)				(12)	(13)	(14)
48SMFO CABLE	DATA/VOICE	1													1				1					1						
12SMFO CABLE	DATA/VOICE				1		2	1		1		1		1																
48SMFO CABLE	VIDEO/DATA		1													1				1						1				
48SMFO CABLE	SH VIDEO/VOICE			1													1				1						1			
DLC	RAMP/COUNT								1		1		6																6	1
INNERDUCT (SIZE 25)		1	1	1	1										1	1	1	1	1	1	1	1		1	1	1	1			
INNERDUCT (SIZE 32)										1		1		1																
CONDUIT SIZE		103				103	53	53	78		103		78		103				103(E)				103(E)	78(E)				78(E)	53	53

(E) EXISTING, MT



FOR CONTINUATION SEE E-28, DETAIL A

DETAIL A



AS-BUILT
Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATIONS 0405 AND 0413)

SCALE 1:1000

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

E-16

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u16.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	80	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
EXP. 12/31/05
ELECTRICAL
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

DATE	REVISED BY
7/02	CS
7/02	DATE REVISED

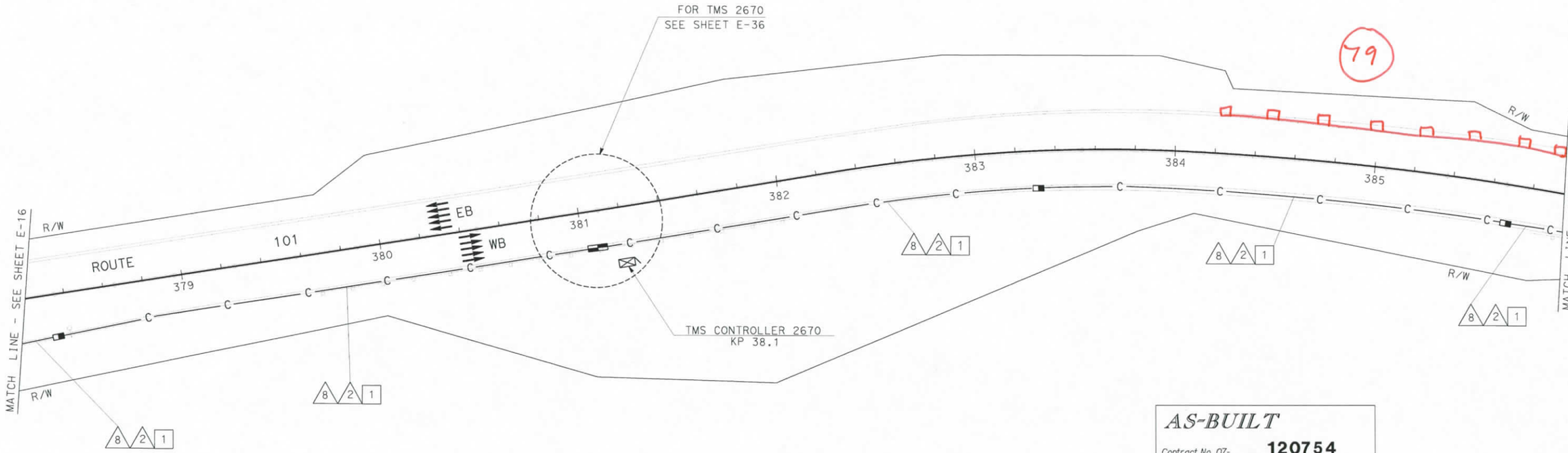
CALCULATED/DESIGNED BY: HT
CHECKED BY: DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN				
		△8				△2
48SMFO CABLE	DATA/VOICE	1				
12SMFO CABLE	DATA/VOICE					
48SMFO CABLE	VIDEO/DATA		1			
48SMFO CABLE	SH VIDEO/VOICE			1		
INNERDUCT (SIZE 25)		1	1	1	1	
CONDUIT SIZE		103				103



79

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

PROJECT NOTES: (THIS SHEET ONLY)

[1] INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.

COMMUNICATIONS SYSTEM ROUTING

SCALE 1:1000

E-17

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u17.dgn

CU 07388

EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	81	178

Caltrans Metric

Jacqueline C. Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — EXP. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING RMS CONTROLLER CABINETS 0406 & 0412. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
44. ADD 1 DLC
45. ADD 1-12 SMFO IN EXISTING CONDUITS AND CONNECT TO EXISTING RMS CONTROLLER CABINETS (0406& 0412)

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN															
		8				2	3	4		5	10		12		14	15	
48SMFO CABLE	DATA/VOICE	1															
12SMFO CABLE	DATA/VOICE						1		2			3		1	3		2
48SMFO CABLE	VIDEO/DATA		1														
48SMFO CABLE	SH VIDEO/VOICE			1													
12SMFO CABLE	SH VIDEO/VOICE											1			1		1
DLC	RAMP/COUNT							6		1	1		6			6	
INNERDUCT (SIZE 25)		1	1	1	1												
INNERDUCT (SIZE 32)									1			1		1			1
CONDUIT SIZE		103				103	53	78		78	103		78		53	78	

79 Cont.

80

CCTV CAMERA LOCATION VE243
KP 39.1

FOR CCTV CAMERA LOCATION VE243
SEE SHEET E-29

RAMP METER CONTROLLER 0412 (BRIDGED WITH 0406)
KP 38.7

TRAFFIC SIGNAL CONTROLLER
KP 39.1

TRAFFIC SIGNAL CONTROLLER
KP 39.1

SEE DETAIL A
THIS SHEET

ROUTE 101

EB ON RAMP FROM DE SOTO Ave

EB ON RAMP

EB OFF RAMP

WB OFF RAMP TO DE SOTO Ave

WB OFF RAMP

WB ON RAMP

EB

WB

392+90
CMS NO.129

CMS

DE SOTO Ave

DE SOTO Ave UC
Br No. 53-1062 KP 39.1

FOR CMS NO.129
SEE SHEET E-37

RAMP METER CONTROLLER 0406 (BRIDGED TO 0412)
KP 39.2

MATCH LINE - SEE SHEET E-17

MATCH LINE - SEE SHEET E-19

R/W

AB

RC

BC

CB

DETAIL A
NO SCALE

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATIONS 0412 & 0406)

SCALE 1:1000

E-18

DATE	REVISED BY	DATE REVISED
7/02	HT	7/02
	DL	
CALCULATED/ DESIGNED BY	CHECKED BY	

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u18.dgn

CU 07388 EA 120751

DIS	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	82	178

Caltrans Metric

Jacqueline C. Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

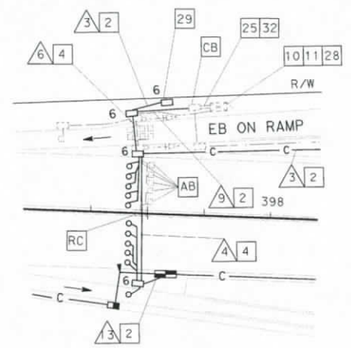
Caltrans now has a web site! To get to the web site go to http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

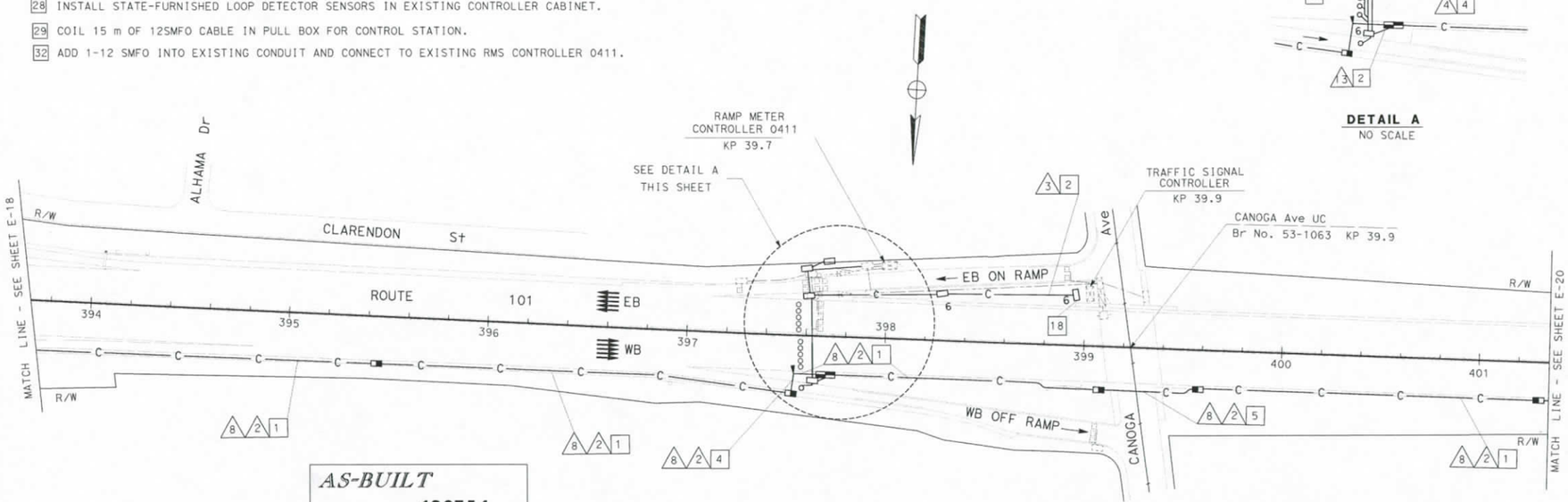
1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
18. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
29. COIL 15 m OF 12SMFO CABLE IN PULL BOX FOR CONTROL STATION.
32. ADD 1-12 SMFO INTO EXISTING CONDUIT AND CONNECT TO EXISTING RMS CONTROLLER 0411.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 8				2	3	4		6		9		13
48SMFO CABLE	DATA/VOICE	1												
12SMFO CABLE	DATA/VOICE						1		3		2		1	3
48SMFO CABLE	VIDEO/DATA		1											
48SMFO CABLE	SH VIDEO/VOICE			1										
DLC	RAMP/COUNT							6		11		11		
INNERDUCT (SIZE 25)		1	1	1	1									
INNERDUCT (SIZE 32)									1		1		1	
CONDUIT SIZE		103				103	53	103		103		78		53



DETAIL A
NO SCALE



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0411)

SCALE 1:1000

E-19

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER HENRY H. TRINH
CALCULATED/DESIGNED BY HT DATE 7/02 REVISED BY CS
CHECKED BY DL 7/02 DATE REVISED 7/02

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s24928
DGN FILE => 712075u19.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 11-SEP-2007 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	83	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
EXP. 12/31/05
ELECTRICAL
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

DATE	REVISED BY
7/02	HT
7/02	DATE REVISED
	DL
	CALCULATED/ DESIGNED BY
	CHECKED BY
7/02	CS

PROJECT ENGINEER
HENRY H. TRINH

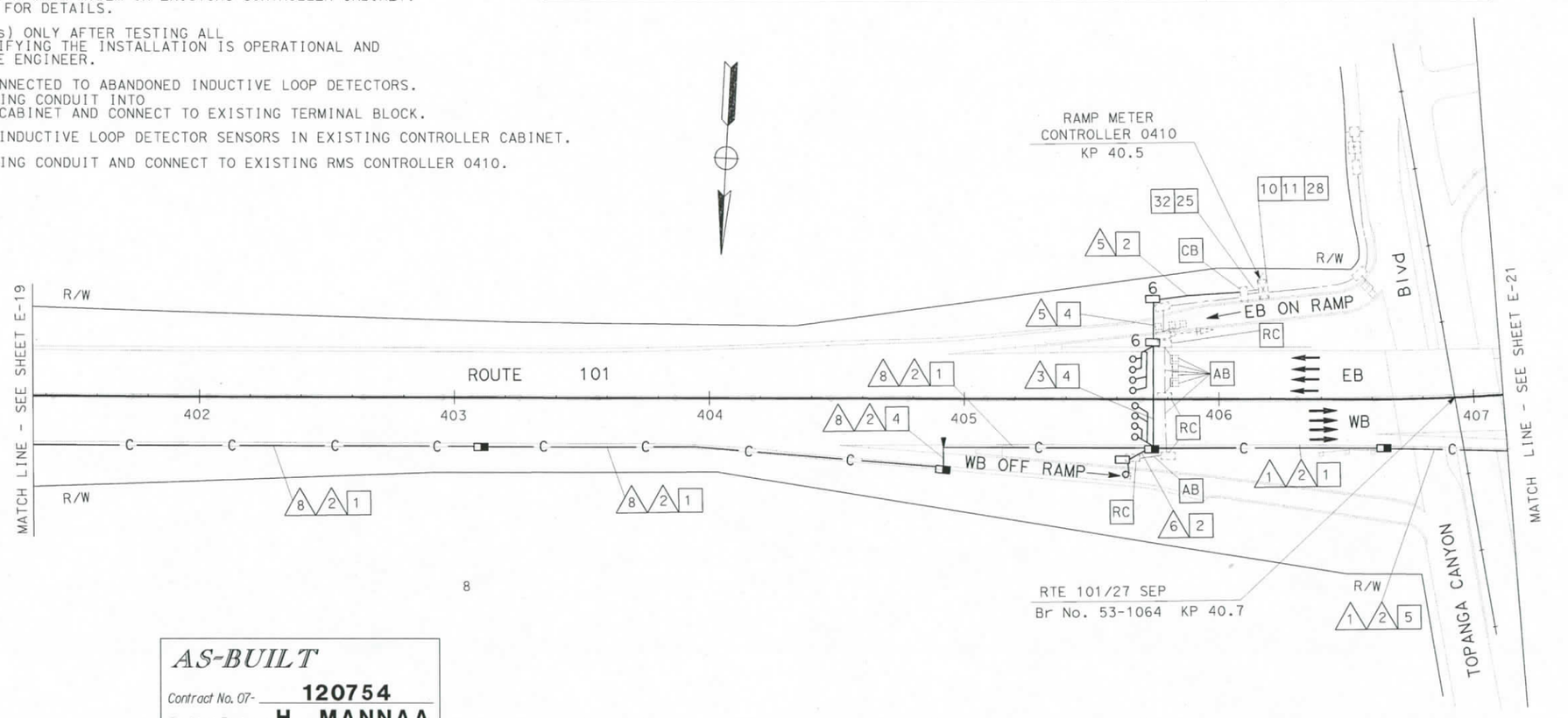
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **ITS DEVELOPMENT**

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
25. IDENTIFY AND RC dlc CONNECTED TO ABANDONED INDUCTIVE LOOP DETECTORS. ADD DLC(S) THROUGH EXISTING CONDUIT INTO THE EXISTING CONTROLLER CABINET AND CONNECT TO EXISTING TERMINAL BLOCK.
28. INSTALL STATE-FURNISHED INDUCTIVE LOOP DETECTOR SENSORS IN EXISTING CONTROLLER CABINET.
32. ADD 1-12 SMFO INTO EXISTING CONDUIT AND CONNECT TO EXISTING RMS CONTROLLER 0410.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				2	3		5		6	8			
48SMFO CABLE	DATA/VOICE	1										1			
12SMFO CABLE	DATA/VOICE				1			1		1					
48SMFO CABLE	VIDEO/DATA		1										1		
48SMFO CABLE	SH VIDEO/VOICE			1										1	
DLC	RAMP/COUNT						5		9		1				
INNERDUCT (SIZE 25)		1	1	1	1							1	1	1	1
INNERDUCT (SIZE 32)								1		1					
CONDUIT SIZE		103				103	78		78		53	103			



8

AS-BUILT
Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATION 0410)

SCALE 1:1000

E-20

DATE PLOTTED => 17-SEP-2007
TIME PLOTTED => 14:42
00-00-00 DATE REVISION

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u20.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	84	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

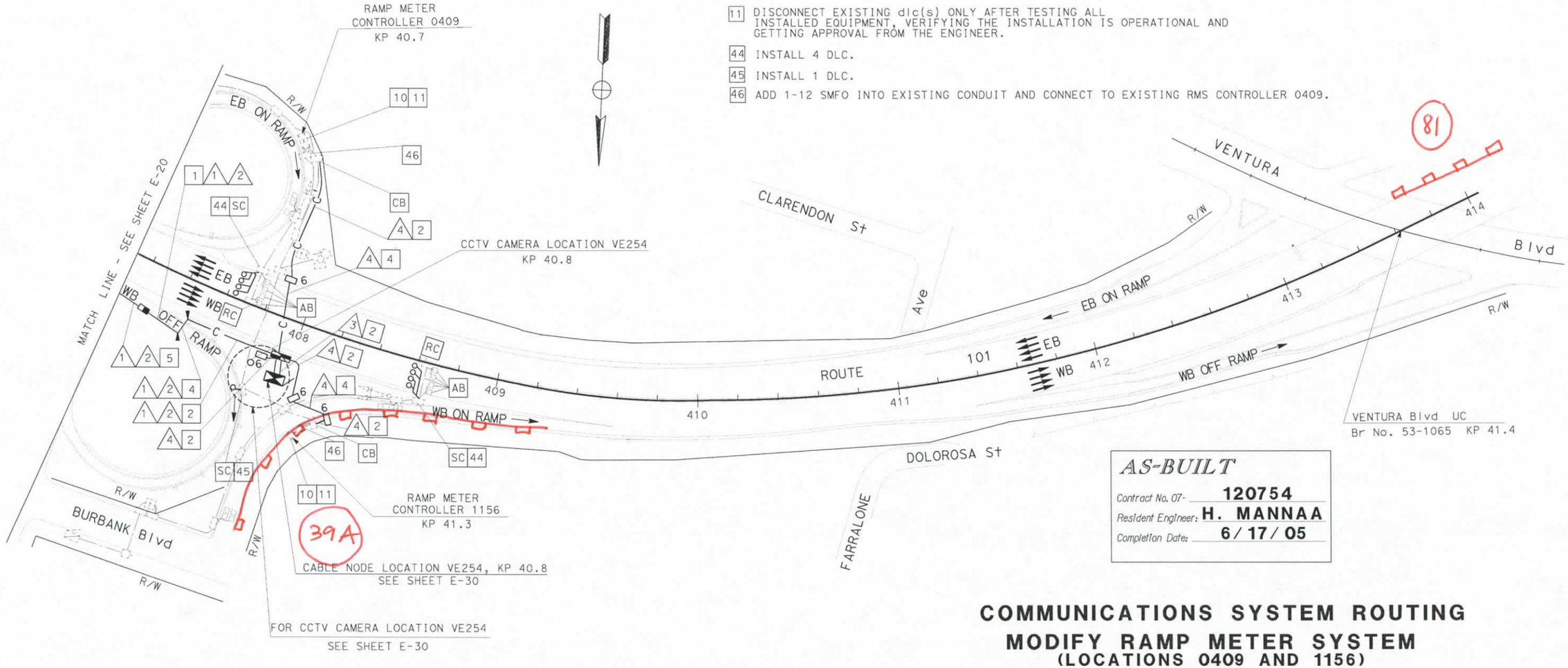
(82) North of shoup Ave. (Not on this As-built plan)
Exist. MBGR looks new & up to standard.
Recommend to drop this location.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				2	3		4
48SMFO CABLE	DATA/VOICE	1					1		
12SMFO CABLE	DATA/VOICE				1		2		1
48SMFO CABLE	VIDEO/DATA		1					1	
48SMFO CABLE	SH VIDEO/VOICE			1				1	
INNERDUCT (SIZE 25)		1	1	1	1				
CONDUIT SIZE		103				103	78	78	53

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY. SEE SHEET E-43 FOR DETAILS.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
5. INSTALL FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT(S) ON STRUCTURE. SEE STRUCTURE SHEETS FOR DETAILS.
10. INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.
11. DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.
44. INSTALL 4 DLC.
45. INSTALL 1 DLC.
46. ADD 1-12 SMFO INTO EXISTING CONDUIT AND CONNECT TO EXISTING RMS CONTROLLER 0409.



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY RAMP METER SYSTEM
(LOCATIONS 0409 AND 1156)

SCALE 1:1000

E-21

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER HENRY H. TRINH

CALCULATED/DESIGNED BY HT | CHECKED BY DL | DATE 7/02 | REVISED BY CS | DATE REVISED 7/02

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u21.dgn

CU 07388 | EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

7 INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.

12 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CONTROLLER CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

17 INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.

19 INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

20 INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.

21 INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

35 ADD 2#8 POWER CONDUCTORS TO EXISTING CONDUIT AND CONNECT TO EXISTING TERMINAL BLOCK IN THE EXISTING CONTROLLER CABINET.

36 IDENTIFY AND RC EXISTING 2#8 POWER CONDUCTORS FROM EXISTING TYPE SCE-1 SERVICE.

37 INSTALL ONE 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER FOR RMS AND ONE 20 A, 120 V, 1P CIRCUIT BREAKER FOR THE TELEPHONE DEMARCATION CABINET.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	4	5	6
12SMFO	SH VIDEO/VOICE		1		1		
RG-6A/U COAX	BB VIDEO				1		1	
#8	POWER	2		2		4		
#12	POWER					2		2
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1		1	
INNERDUCT (SIZE 32)								
CONDUIT SIZE		53	53	78	78	53	53	53

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	101	R27.8/R40.6	85	178

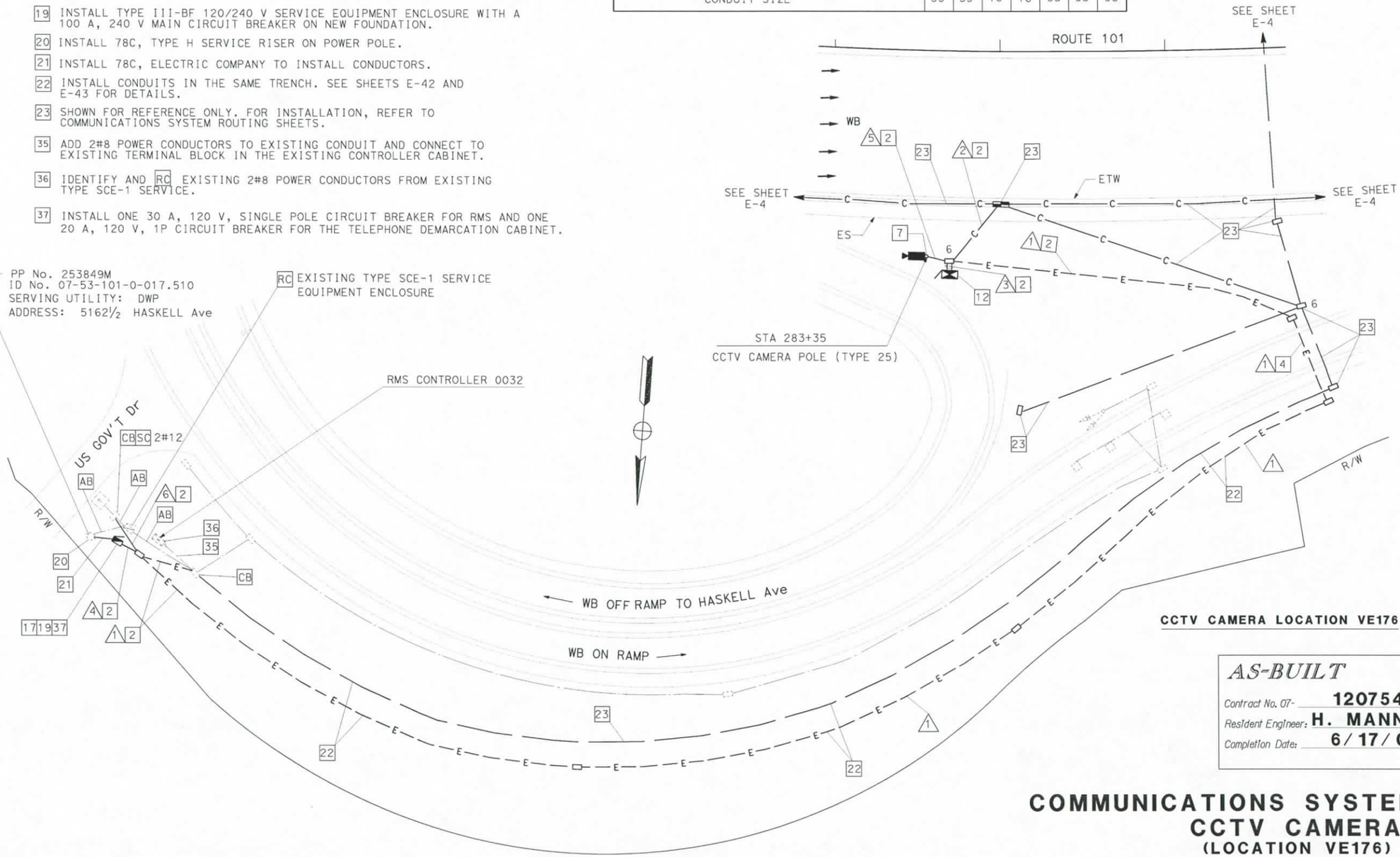
Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



CCTV CAMERA LOCATION VE176

PP No. 253849M
ID No. 07-53-101-0-017.510
SERVING UTILITY: DWP
ADDRESS: 5162½ HASKELL Ave

RC EXISTING TYPE SCE-1 SERVICE EQUIPMENT ENCLOSURE

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING CCTV CAMERA (LOCATION VE176)

SCALE 1:200

E-22

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

PROJECT ENGINEER: HENRY H. TRINH

CALCULATED/DESIGNED BY: HT
CHECKED BY: DL

DATE 7/02 REVISED BY CS
7/02 DATE REVISED 7/02

AS1 REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u22.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	86	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

REVISED BY	DATE REVISED
CS	7/02

CALCULATED/ DESIGNED BY	CHECKED BY
HT	DL

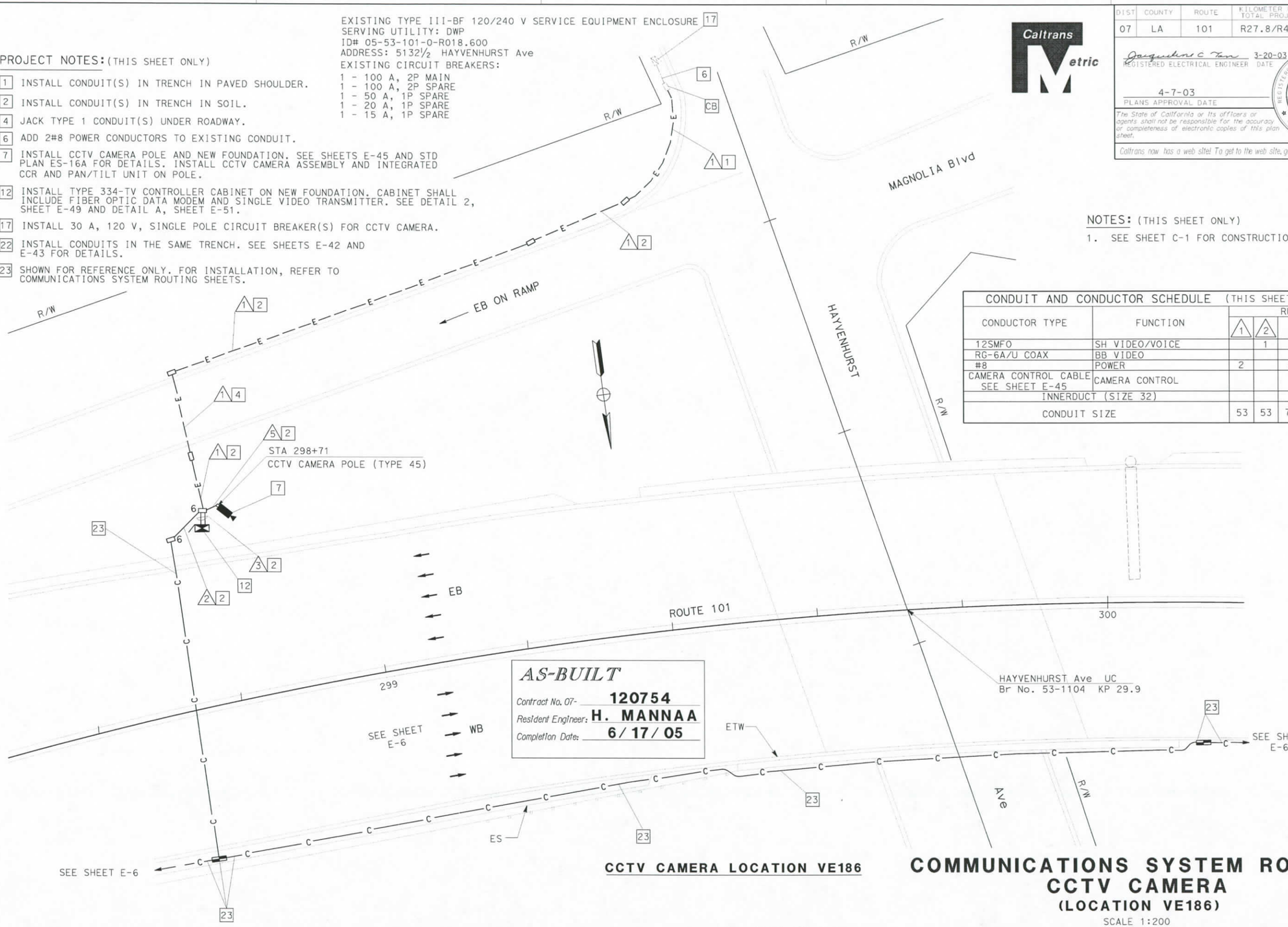
PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY.
6. ADD 2#8 POWER CONDUCTORS TO EXISTING CONDUIT.
7. INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.
12. INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.
17. INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.
22. INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.
23. SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

EXISTING TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE 17
SERVING UTILITY: DWP
ID# 05-53-101-0-R018.600
ADDRESS: 5132½ HAYVENHURST Ave
EXISTING CIRCUIT BREAKERS:
1 - 100 A, 2P MAIN
1 - 100 A, 2P SPARE
1 - 50 A, 1P SPARE
1 - 20 A, 1P SPARE
1 - 15 A, 1P SPARE



AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

NOTES: (THIS SHEET ONLY)
1. SEE SHEET C-1 FOR CONSTRUCTION DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 3	RUN 5
12SMFO	SH VIDEO/VOICE		1		1	
RG-6A/U COAX	BB VIDEO				1	1
#8	POWER	2		2		
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1	1
INNERDUCT (SIZE 32)						
CONDUIT SIZE		53	53	78	78	53

CCTV CAMERA LOCATION VE186

COMMUNICATIONS SYSTEM ROUTING CCTV CAMERA (LOCATION VE186)

SCALE 1:200

E-23

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712079a23.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	87	178

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)						
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 5	
12SMFO	SH VIDEO/VOICE		1		1	
RG-6A/U COAX	BB VIDEO				1	1
#8	POWER	2		2		
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1	1
INNERDUCT (SIZE 32)						
CONDUIT SIZE		53	53	78	78	53

NOTES: (THIS SHEET ONLY)

1. SEE SHEET C-2 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY.

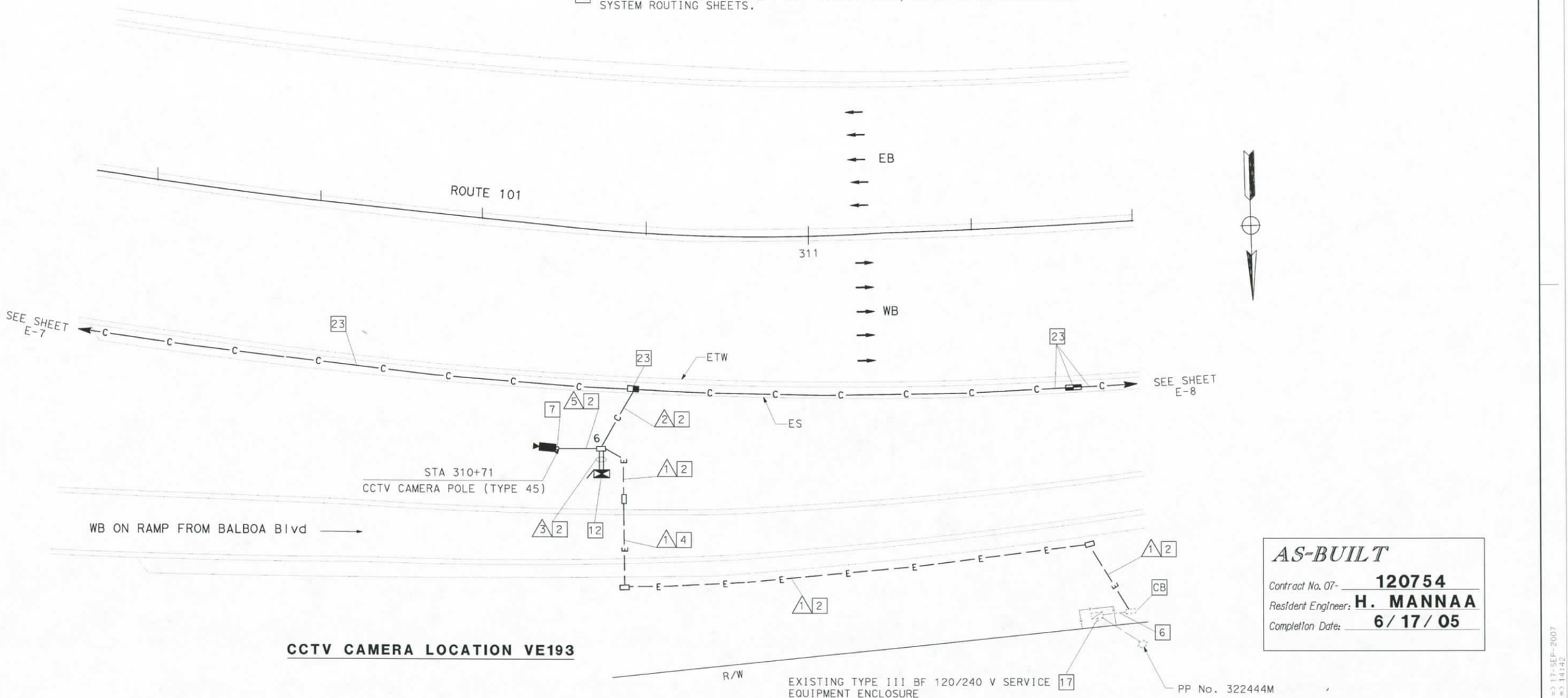
6 ADD 2#8 POWER CONDUCTORS TO EXISTING CONDUIT.

7 INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.

12 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

17 INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.



CCTV CAMERA LOCATION VE193

AS-BUILT

Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

COMMUNICATIONS SYSTEM ROUTING
CCTV CAMERA
(LOCATION VE193)

SCALE 1:200

E-24

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02

CALCULATED/DESIGNED BY: HT
CHECKED BY: DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u24.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	88	178

Caltrans Metric

Jacqueline C Tan 3-20-03
REGISTERED ELECTRICAL ENGINEER DATE

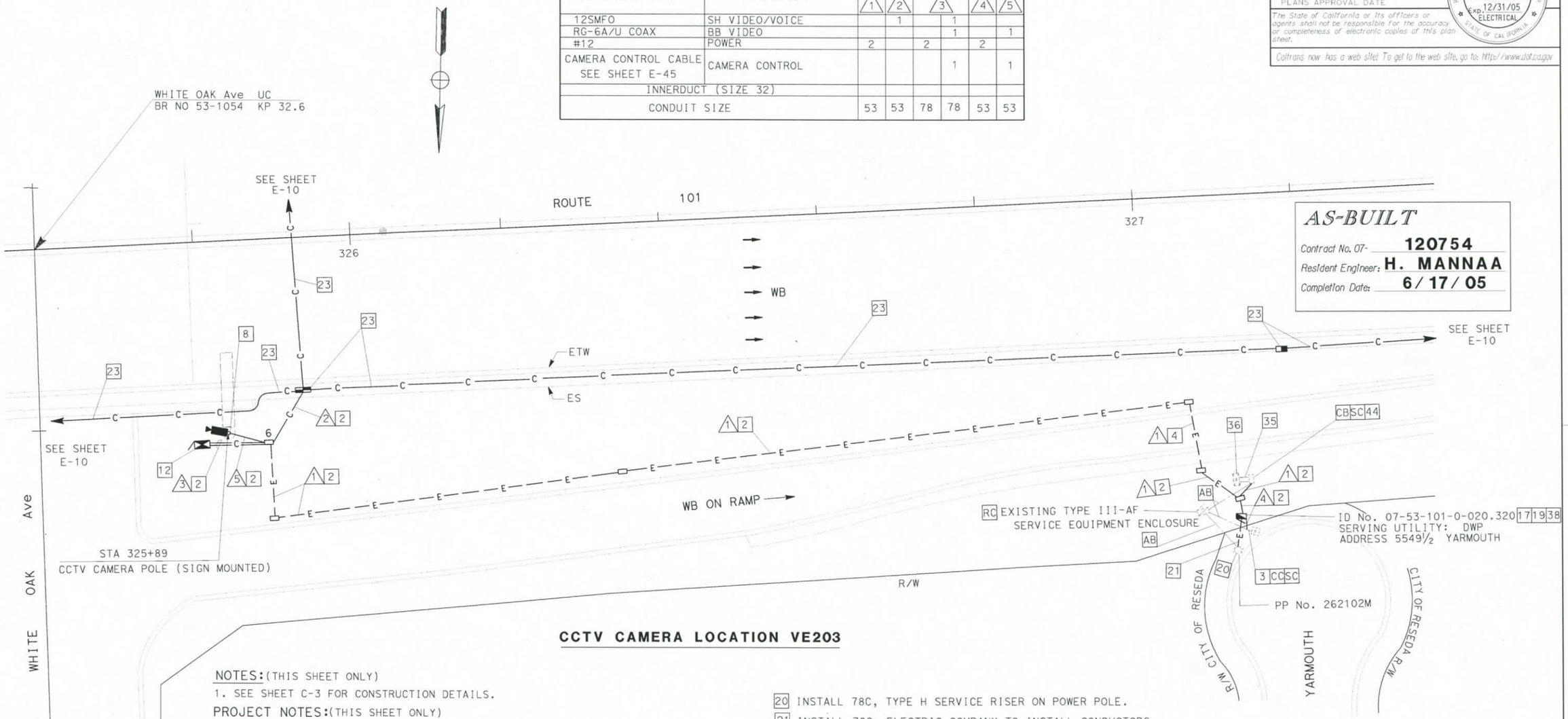
4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN No. E015611 EXP. 12/31/05 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 3	RUN 4	RUN 5
12SMFO	SH VIDEO/VOICE		1		1		
RG-6A/U COAX	BB VIDEO				1		1
#12	POWER	2		2		2	
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1		1
INNERDUCT (SIZE 32)							
CONDUIT SIZE		53	53	78	78	53	53



CCTV CAMERA LOCATION VE203

NOTES: (THIS SHEET ONLY)

1. SEE SHEET C-3 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

3 REMOVE EXISTING CONDUCTORS AND INSTALL 2#12 IN EXISTING CONDUIT.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

8 INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON EXISTING SIGN STRUCTURE. SEE SHEETS E-45 AND STD PLAN ES-16B FOR DETAILS.

12 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

17 INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.

19 INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

20 INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.

21 INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

35 ADD 2#12 POWER CONDUCTORS TO EXISTING CONDUIT.

36 IDENTIFY AND RC EXISTING 2#8 POWER CONDUCTORS FROM EXISTING TYPE II-A SERVICE EQUIPMENT ENCLOSURE.

38 INSTALL ONE 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER FOR RMS AND ONE 15 A, 120 V, 1P CIRCUIT BREAKER FOR THE TELEPHONE DEMARCATION CABINET.

44 INSTALL 2#12 CONDUCTORS.

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

AS-BUILT
Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**

COMMUNICATIONS SYSTEM ROUTING
CCTV CAMERA
(LOCATION VE203)

SCALE 1:200

E-25

DATE	REVISED BY
7/02	CS
7/02	DATE REVISED

CALCULATED/DESIGNED BY: HT
CHECKED BY: DL
PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

LAST REVISION: DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42
00-00-00

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u25.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	89	178

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

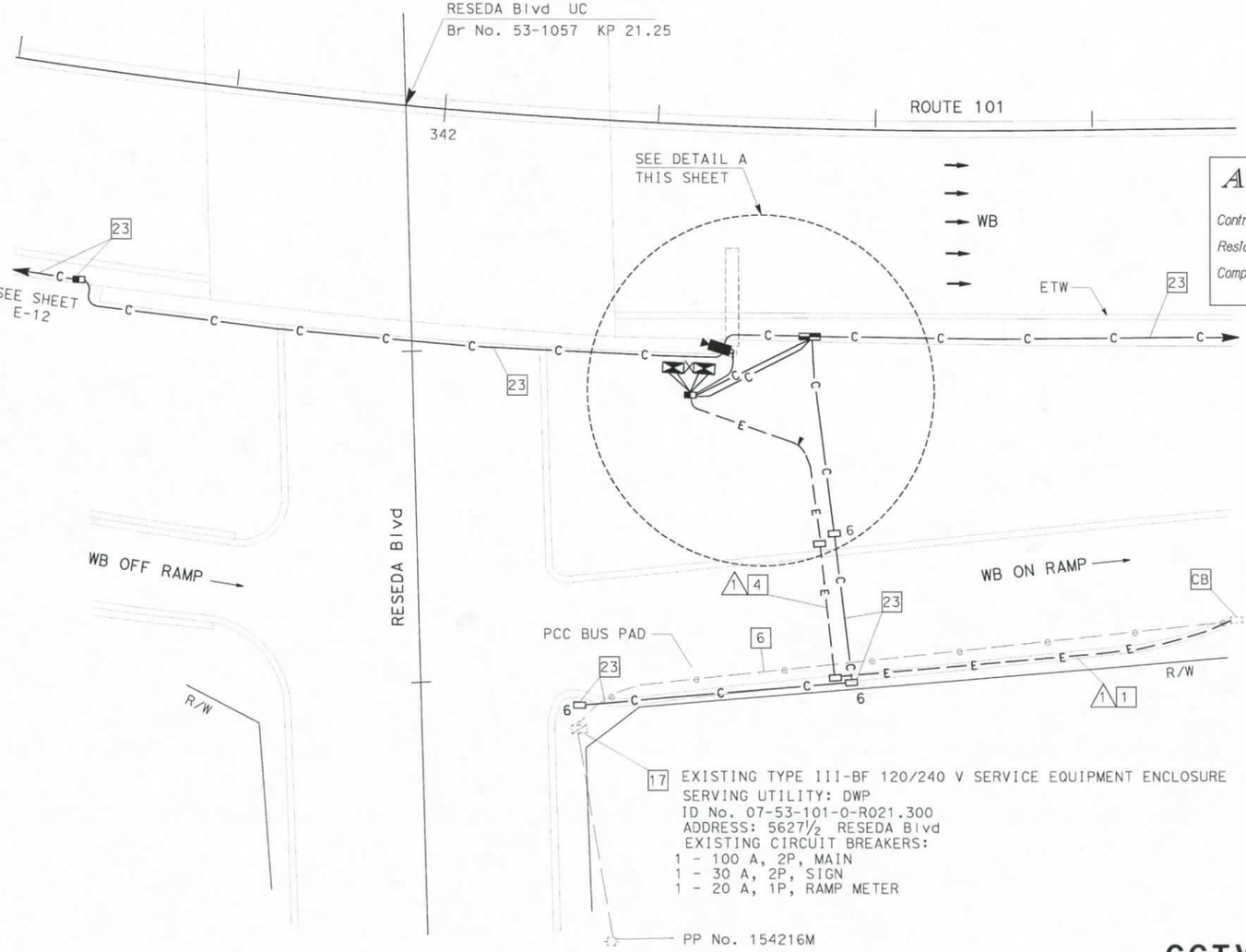
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

Caltrans Metric

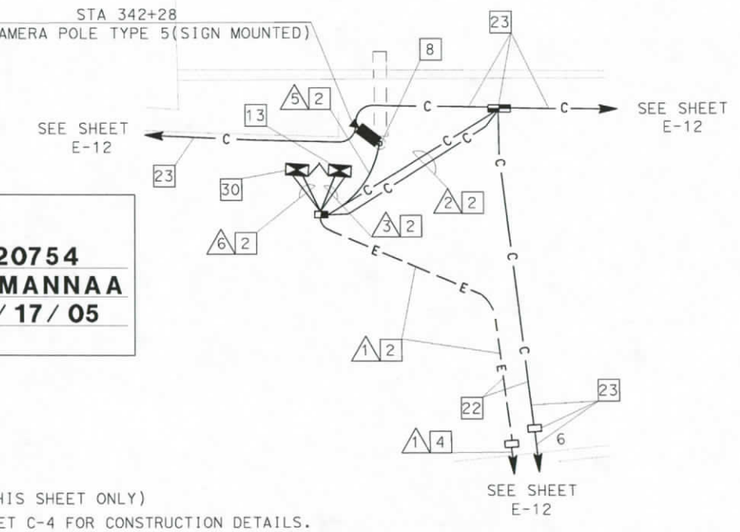
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	2	2	2	2	2	2	2	3	3	5	6	6
FO JUMPERS	DATA										6				6
48SMFO CABLE	DATA/VOICE		2												2
48SMFO CABLE	SH VIDEO/VOICE						2				2				
12SMFO CABLE	VIDEO/DATA				1						1				
RG-6A/U COAX	BB VIDEO										1	1			2
#8	POWER	4									2			2	
CAMERA CONTROL CABLE SHEET E-45	CAMERA CONTROL												1		1
INNERDUCT (SIZE 25)			1	1	1	1	1	1	1	1					
INNERDUCT (SIZE 32)															
CONDUIT SIZE		53	103				103				78	78	53	78	78



17 EXISTING TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE
SERVING UTILITY: DWP
ID No. 07-53-101-0-R021.300
ADDRESS: 5627½ RESEDA Blvd
EXISTING CIRCUIT BREAKERS:
1 - 100 A, 2P, MAIN
1 - 30 A, 2P, SIGN
1 - 20 A, 1P, RAMP METER

CCTV CAMERA LOCATION VE213



DETAIL A
NO SCALE

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

NOTES: (THIS SHEET ONLY)
1. SEE SHEET C-4 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

1 INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER.
2 INSTALL CONDUIT(S) IN TRENCH IN SOIL.
4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY.
6 ADD 4#8 POWER CONDUCTORS TO EXISTING CONDUIT.
8 INSTALL CCTV CAMERA ASSEMBLY WITH INTEGRATED CCR AND PAN/TILT UNIT ON EXISTING SIGN STRUCTURE. SEE STD PLAN ES-16B FOR DETAILS.
13 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT VIDEO NODE. SEE DETAIL 3, SHEET E-50.
17 INSTALL TWO 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR VIDEO AND DATA NODE.
22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.
23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.
30 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE EQUIPMENT AT DATA NODE. SEE DETAIL 3, SHEET E-50 AND DETAIL B SHEET E-51.

COMMUNICATIONS SYSTEM ROUTING
CCTV CAMERA, VIDEO NODE AND DATA NODE
(LOCATION VE213)

SCALE 1:200

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

E-26

DATE	REVISED BY	CS
7/02	DATE REVISED	7/02
	CALCULATED/DESIGNED BY	HT
	CHECKED BY	DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

ASE REVISION DATE PLOTTED => 17-SEP-2007
00-00-00 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u26.dgn

CU 07388 EA 120751

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN					
		1	2	3		5	6
12SMFO	SH VIDEO/VOICE		1		1		
RG-6A/U COAX	BB VIDEO				1	1	
#12	POWER	2		2			4
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1	1	
INNERDUCT (SIZE 32)							
CONDUIT SIZE		53	53	78	78	53	53

NOTES: (THIS SHEET ONLY)

1. SEE SHEET C-5 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

[2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

[3] REMOVE EXISTING CONDUCTORS AND INSTALL 2#12 POWER CONDUCTORS.

[4] JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

[7] INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.

[12] INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

[17] INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.

[19] INSTALL TYPE III-BF, 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

[20] INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.

[21] INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

[23] SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

[37] INSTALL ONE 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR RMS AND ONE 20 A, 120 V, 1P CIRCUIT BREAKER FOR THE TELEPHONE DEMARCATION CABINET.

[44] INSTALL 2#12 POWER CONDUCTORS

[45] REMOVE EXISTING POWER CONDUCTORS AND INSTALL 2#12 POWER CONDUCTORS IN EXISTING CONDUIT.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	90	178

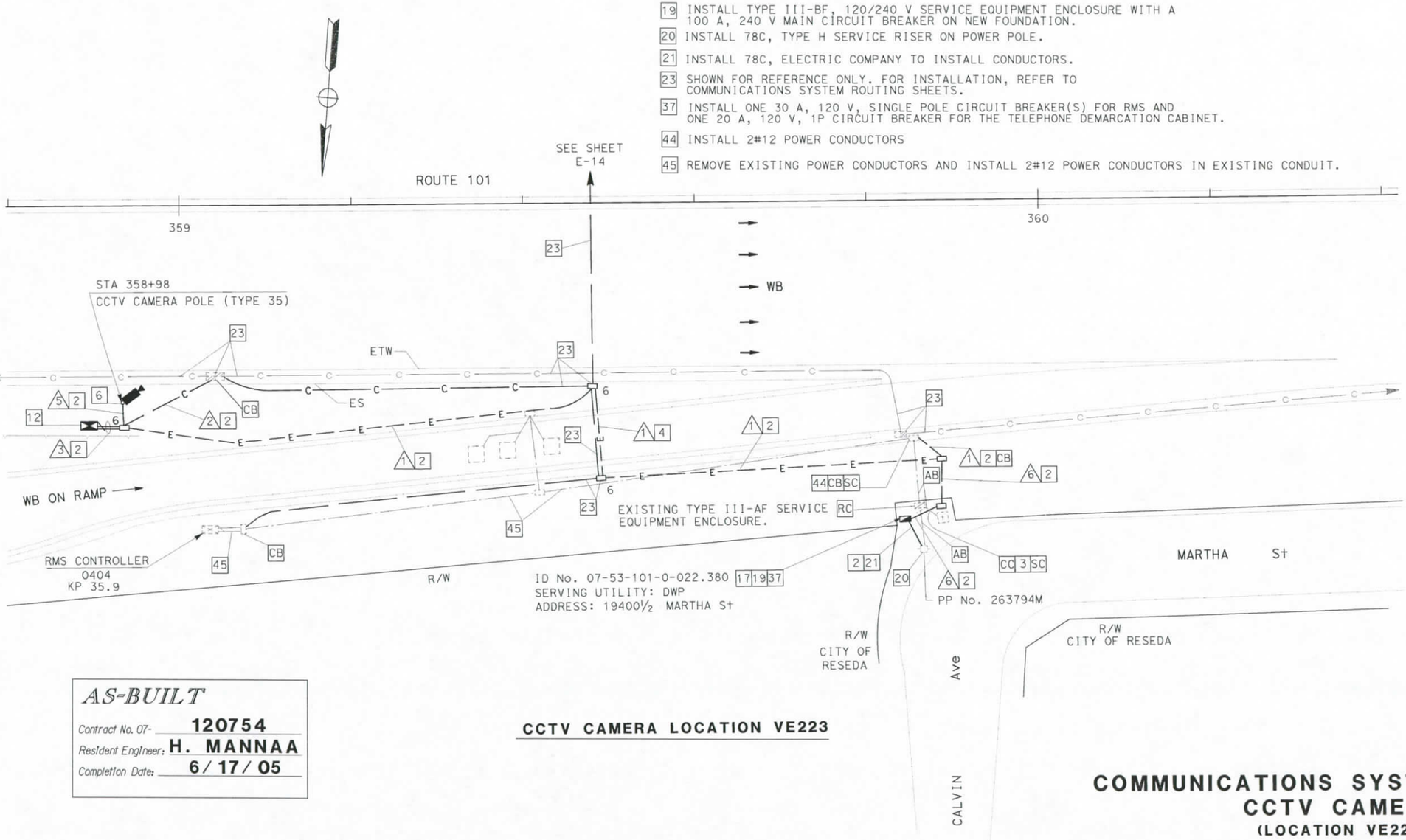
Jacqueline C. Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN No. E015611 EXP. 12/31/05 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

CCTV CAMERA LOCATION VE223

COMMUNICATIONS SYSTEM ROUTING
CCTV CAMERA
(LOCATION VE223)

SCALE 1:200

E-27

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

PROJECT ENGINEER: HENRY H. TRINH

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	HT	DL
	DATE REVISED 7/02		

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u27.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	91	178

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

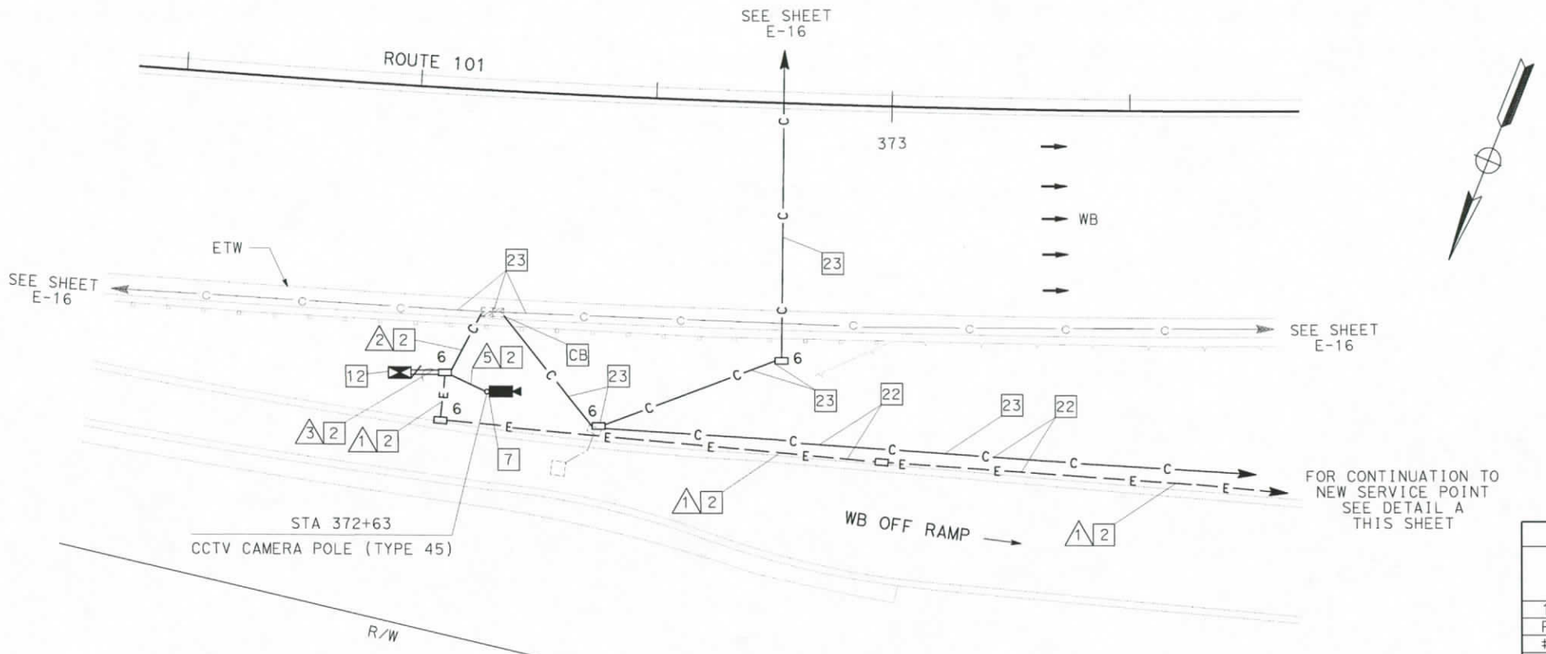
REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

AS-BUILT

Contract No. 07- **120754**
Resident Engineer: **H. MANNAA**
Completion Date: **6/17/05**



CCTV CAMERA LOCATION VE232
SCALE 1:200

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

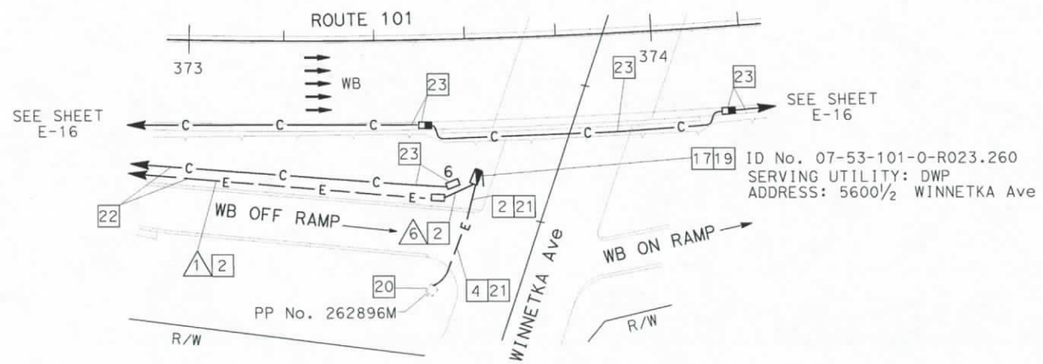
CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	3	5	6	6
12SMFO	SH VIDEO/VOICE		1		1			
RG-6A/U COAX	BB VIDEO				1	1		
#8	POWER	2		2			2	
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1	1		
INNERDUCT (SIZE 32)								
CONDUIT SIZE		53	53	78	78	53	78	78

NOTES: (THIS SHEET ONLY)

1. SEE SHEET C-6 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

- [2] INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
- [4] JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF SIZE SEE SHEET E-44 FOR DETAILS.
- [7] INSTALL CCTV CAMERA POLE AND NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.
- [12] INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.
- [17] INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV.
- [19] INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.
- [20] INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.
- [21] INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.
- [22] INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.
- [23] SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.



DETAIL A
SCALE 1:500

COMMUNICATIONS SYSTEM ROUTING CCTV CAMERA (LOCATION VE232)

SCALE AS NOTED

E-28

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	HT	DL
7/02	DATE REVISED		

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:42

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u28.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	92	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

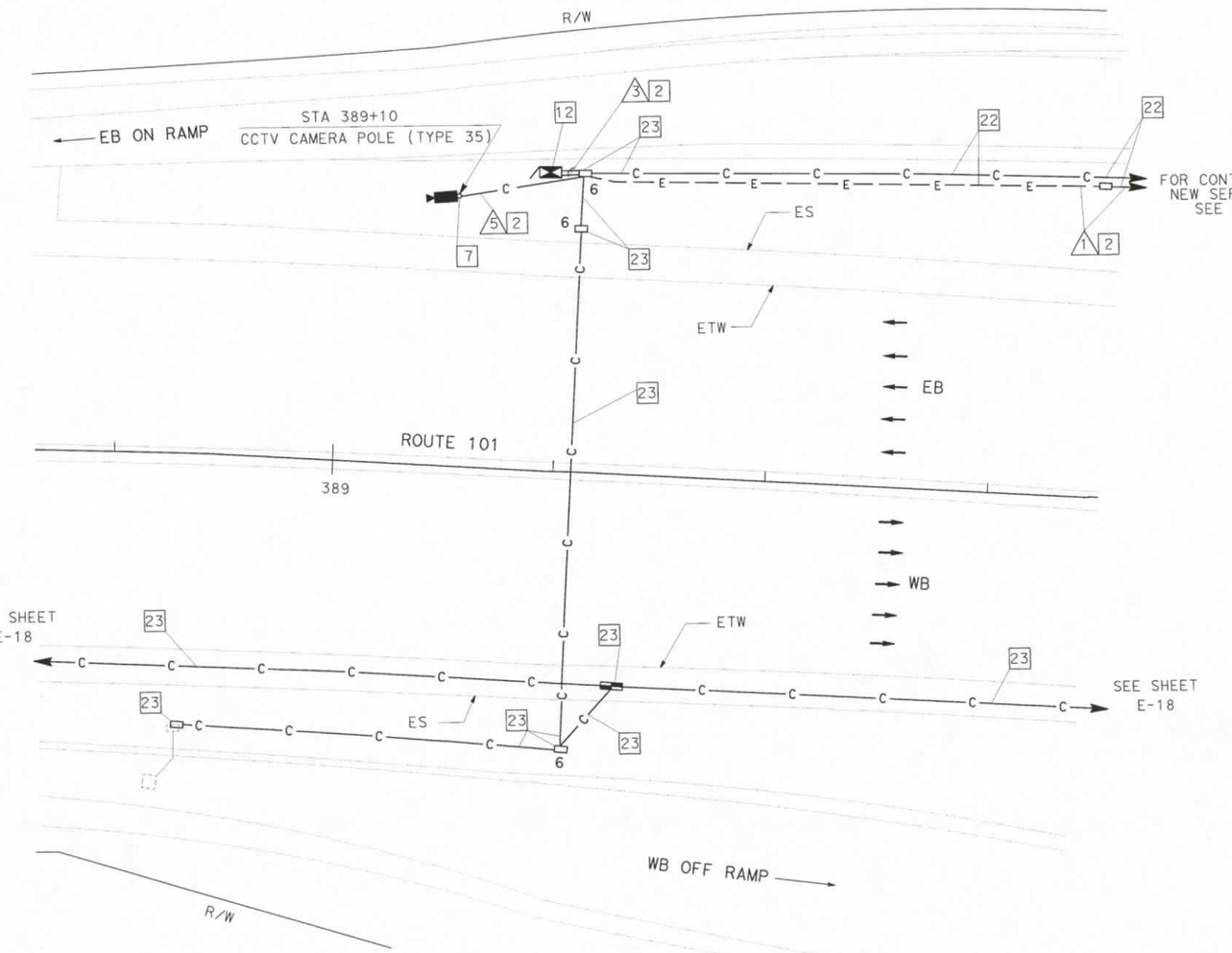
REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — EXP. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

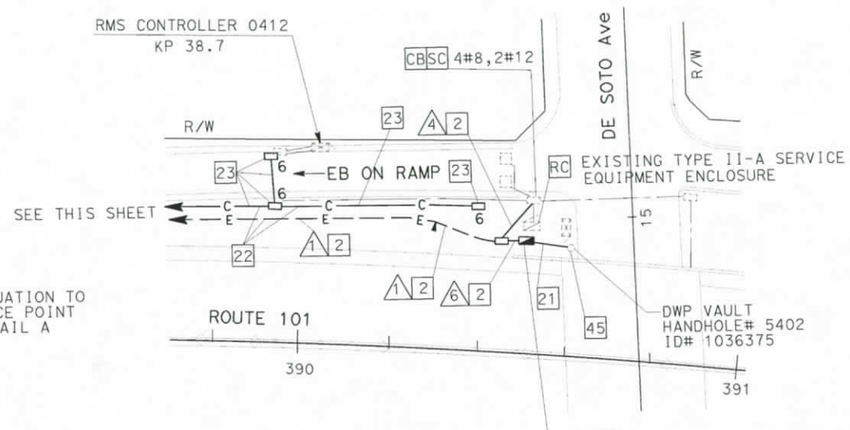
Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN					
		1	3		4	5	6
12SMFO	SH VIDEO/VOICE			1			
RG-6A/U COAX	BB VIDEO			1		1	
#8	POWER	2	2		4		6
#12	POWER				2		2
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL			1		1	
INNERDUCT (SIZE 32)							
CONDUIT SIZE		53	78	78	53	53	53

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05



CCTV CAMERA LOCATION VE243
SCALE 1:200



DETAIL A
NO SCALE

17 19 37 ID No. 07-53-101-0-R024.310
SERVING UTILTY: DWP
ADDRESS: 5326¾ DE SOTO Ave

NOTES: (THIS SHEET ONLY)
1. SEE SHEET C-7 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY AND INTEGRATED CCR AND PAN/TILT UNIT ON POLE.

12 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.

17 INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV.

19 INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

21 INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

37 INSTALL TWO 30 A, 120 V, 1P CIRCUIT BREAKER FOR RMS AND ONE 15 A, 120 V, 1P CIRCUIT BREAKER FOR THE TELEPHONE DEMARCATION CABINET.

45 CORE THROUGH EXISTING DWP VAULT, DWP REPRESENTATIVE TO BE PRESENT WHILE CORING.

COMMUNICATIONS SYSTEM ROUTING
CCTV CAMERA
(LOCATION VE243)

SCALE AS NOTED

E-29

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

DATE	REVISED BY	CS
7/02	HT	
7/02	DATE REVISED	7/02
	DL	
CALCULATED/ DESIGNED BY	CHECKED BY	

PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u29.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	93	178

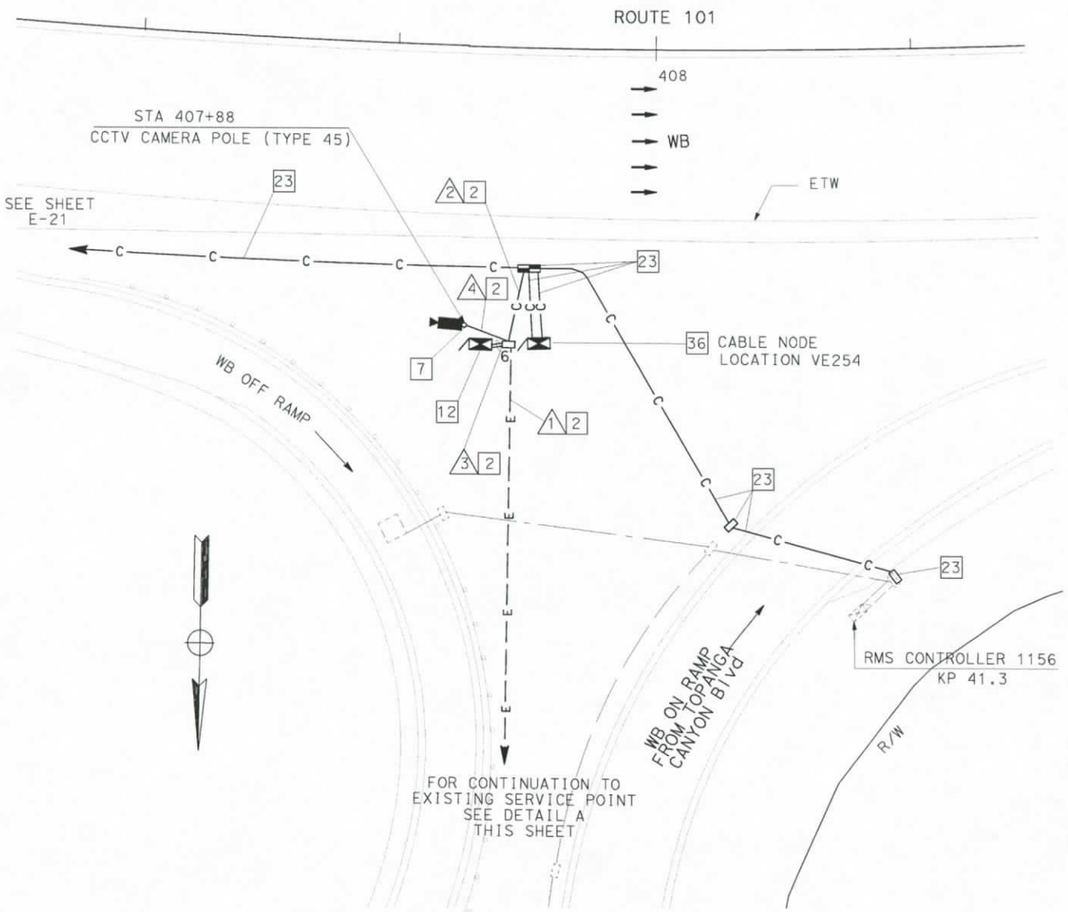
Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JACQUELINE C. TAN — No. E015611 — Exp. 12/31/05 — ELECTRICAL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



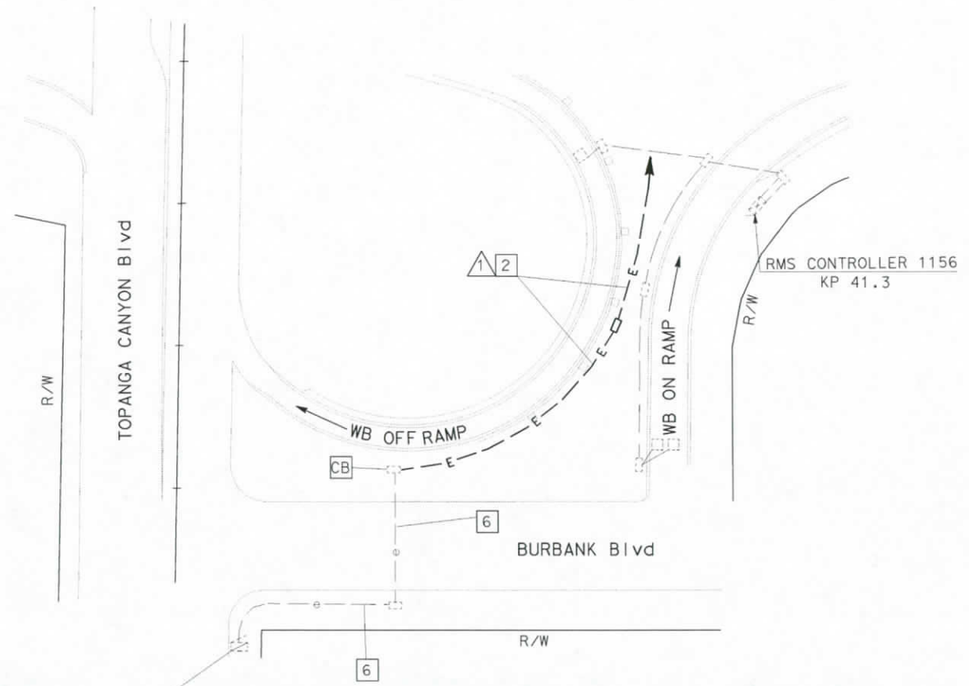
CCTV CAMERA AND CABLE NODE LOCATION VE254
SCALE 1:200

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)						
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3		RUN 4
12SMFO	SH VIDEO/VOICE		1		1	
RG-6A/U COAX	BB VIDEO				1	1
#8	POWER	2		2		
CAMERA CONTROL CABLE SEE SHEET E-45	CAMERA CONTROL				1	1
INNERDUCT (SIZE 32)						
CONDUIT SIZE		53	53	78	78	53

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

NOTES: (THIS SHEET ONLY)
1. SEE SHEET C-8 FOR CONSTRUCTION DETAILS.

PROJECT NOTES: (THIS SHEET ONLY)
2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.
6 ADD 2#8 POWER CONDUCTORS TO EXISTING CONDUIT.
7 INSTALL CCTV CAMERA POLE ON NEW FOUNDATION. SEE SHEETS E-45 AND STD PLAN ES-16A FOR DETAILS. INSTALL CCTV CAMERA ASSEMBLY WITH INTEGRATED CCR AND PAN/TILT UNIT ON POLE.
12 INSTALL TYPE 334-TV CONTROLLER CABINET ON NEW FOUNDATION. CABINET SHALL INCLUDE FIBER OPTIC DATA MODEM AND SINGLE VIDEO TRANSMITTER. SEE DETAIL 2, SHEET E-49 AND DETAIL A, SHEET E-51.
17 ADD 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR CCTV CAMERA.
23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.
36 INSTALL TYPE 334 CONTROLLER CABINET. SEE SHEET E-50, DETAIL 4.



DETAIL A
SCALE 1:200

COMMUNICATIONS SYSTEM ROUTING CCTV CAMERA AND CABLE NODE (LOCATION VE254)

SCALE AS NOTED

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

E-30

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	HT	DL
7/02	DATE REVISED		

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u30.dgn

CU 07388

EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	94	178

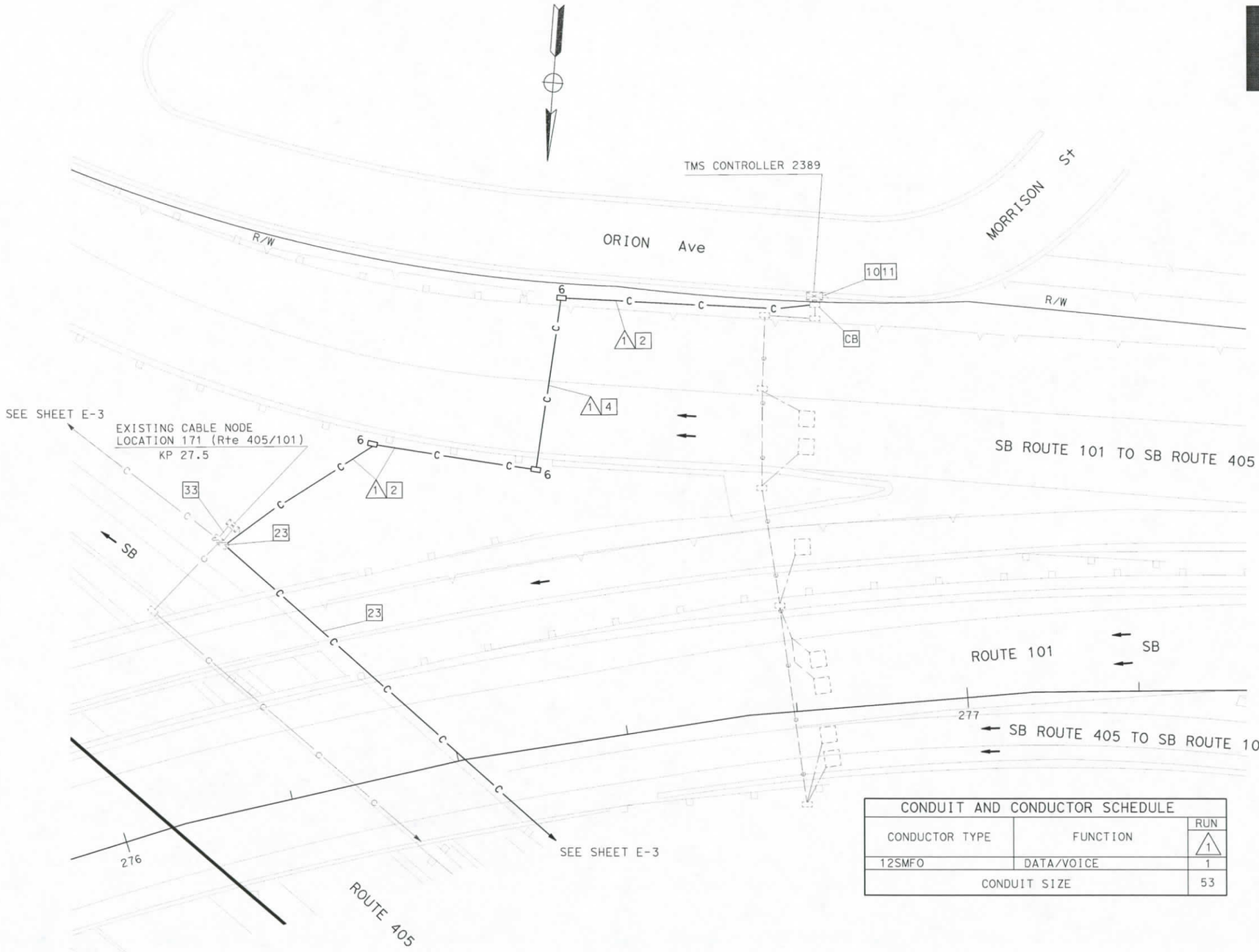
Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 EXP. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

10 INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING TMS 2389 CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

11 DISCONNECT EXISTING dlc(s) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

33 INSTALL 3-48SMFO IN EXISTING CONDUIT AND TERMINATE IN NEW FDU'S IN EXISTING CABLE NODE. SEE SHEET E-50 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE		
CONDUCTOR TYPE	FUNCTION	RUN 1
12SMFO	DATA/VOICE	1
CONDUIT SIZE		53

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

CABLE NODE LOCATION VE171 AND TMS LOCATION 2389

COMMUNICATIONS SYSTEM ROUTING
MODIFY CABLE NODE
(LOCATION VE171)
MODIFY TRAFFIC MONITORING STATION
(LOCATION 2389)

SCALE 1:200

E-31

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

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u31.dgn

CU 07388 EA 120751

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	CS	DL
7/02	DATE REVISED		

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

ASD REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	95	178

Caltrans Metric

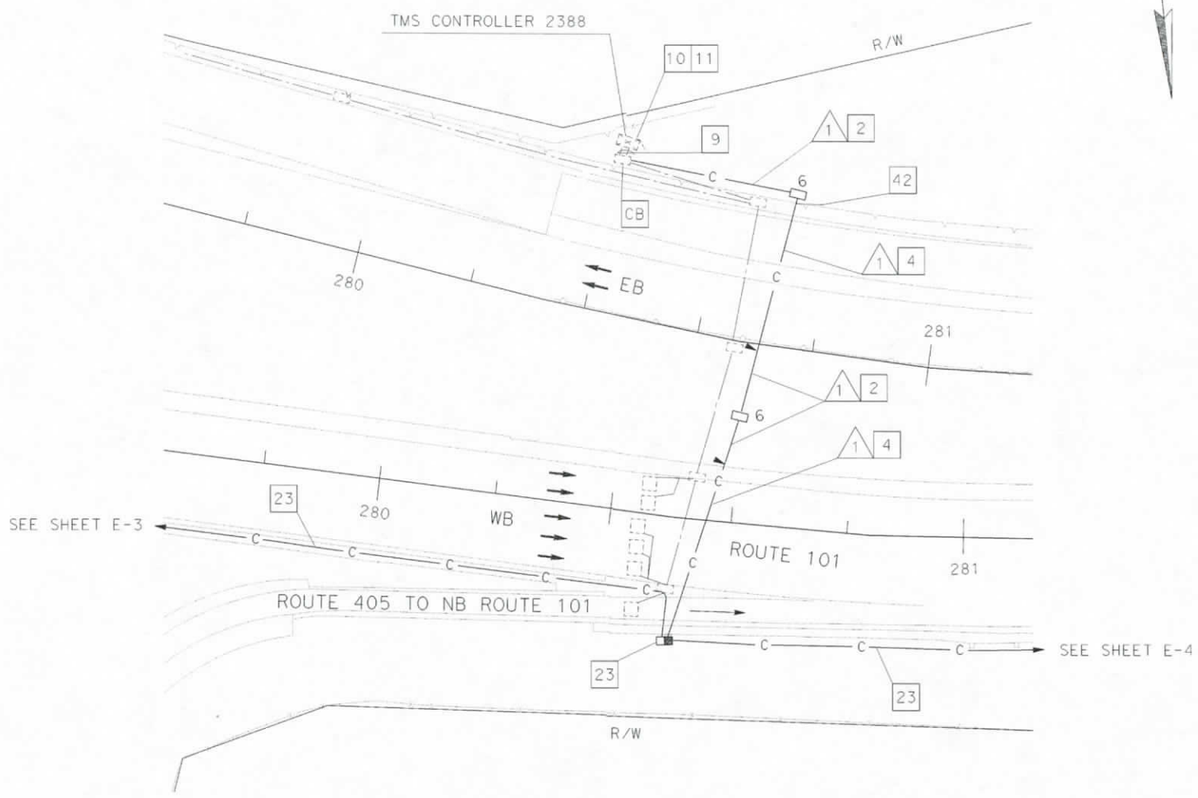
Jacqueline C Tan — 3/20/03
REGISTERED ELECTRICAL ENGINEER — DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



TMS LOCATION 2388

CONDUIT AND CONDUCTOR SCHEDULE		
CONDUCTOR TYPE	FUNCTION	RUN 1
12SMFO CABLE	DATA/VOICE	1
CONDUIT SIZE		53

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.

9 ADD COMMUNICATION CABLE(S) AND CONNECT TO EXISTING TMS CONTROLLER CABINET.

10 INSTALL FDU AND FIBER OPTIC DATA MODEM IN EXISTING TMS CONTROLLER CABINET. SEE SHEETS E-49 AND E-51 FOR DETAILS.

11 DISCONNECT EXISTING COMMUNICATIONS(S) ONLY AFTER TESTING ALL INSTALLED EQUIPMENT, VERIFYING THE INSTALLATION IS OPERATIONAL AND GETTING APPROVAL FROM THE ENGINEER.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

42 SEE SHEET E-69 FOR SOUNDWALL CROSSING DETAIL.

AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
MODIFY TRAFFIC MONITORING STATION
(LOCATION 2388)

SCALE 1:500

E-32

FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER H. TRINH

	DATE	REVISED BY
CALCULATED/DESIGNED BY	7/02	CS
CHECKED BY	7/02	DL
DATE REVISED	7/02	CS

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u32.dgn

CU 07388 EA 120751

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	96	178

Jacqueline C. Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

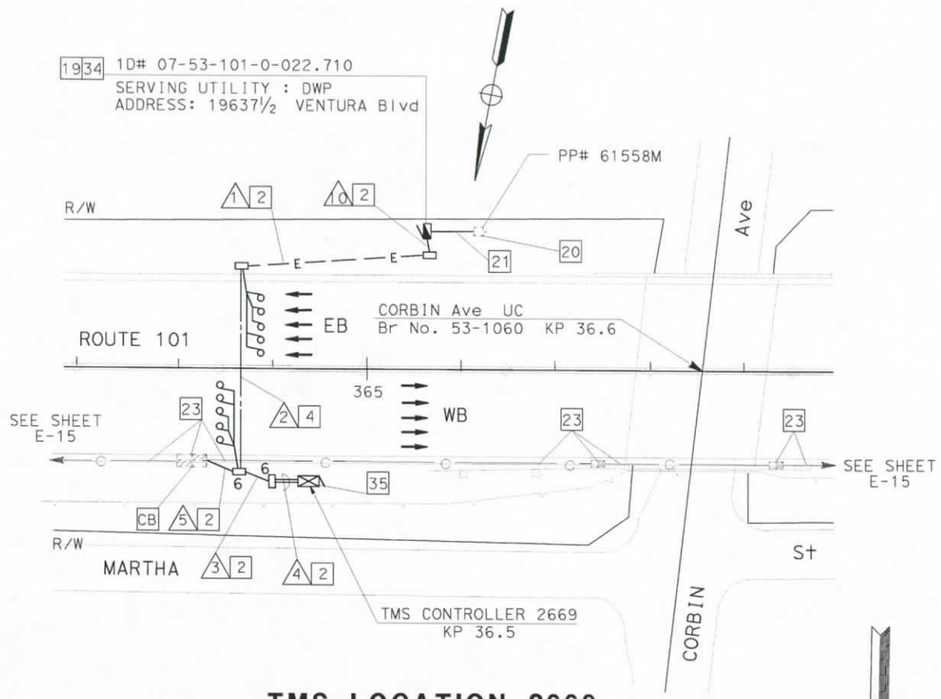
Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

DATE	REVISED BY
7/02	CS
7/02	DATE REVISED 7/02

CALCULATED/DESIGNED BY: CS
CHECKED BY: DL

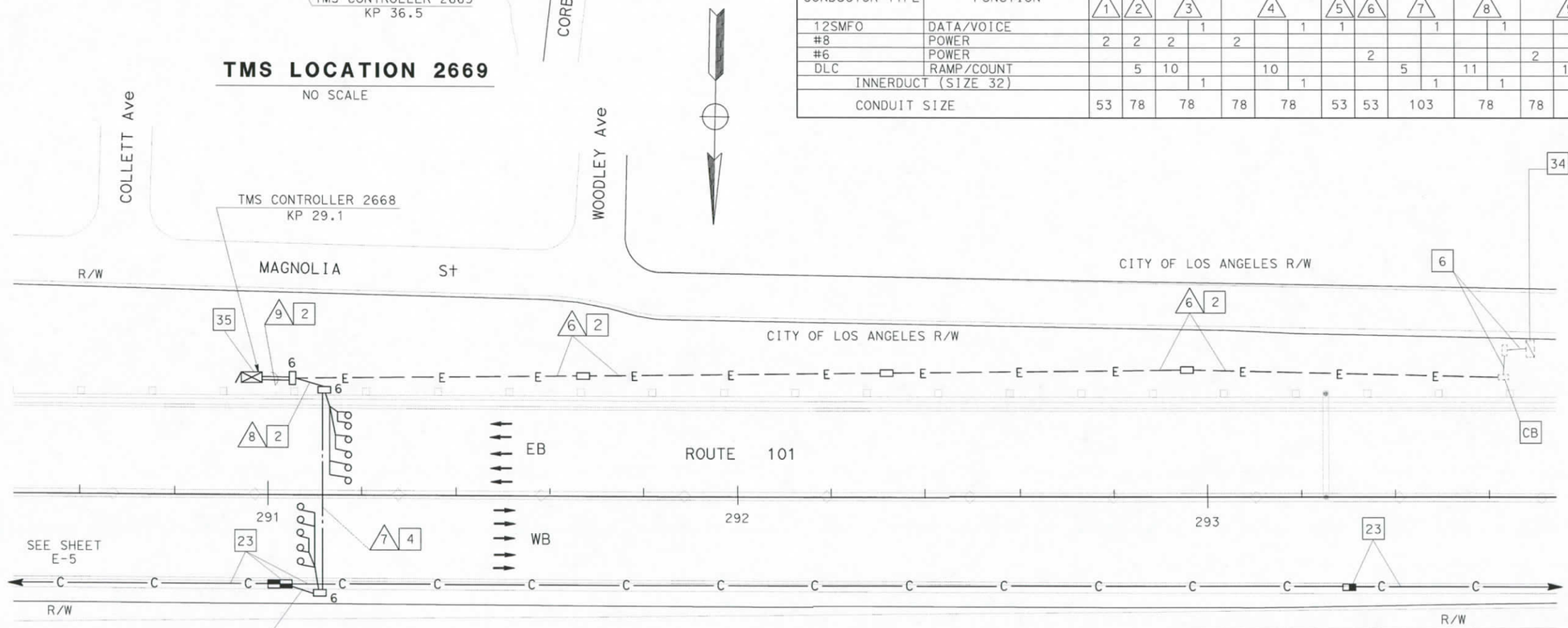
PROJECT ENGINEER
HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT



TMS LOCATION 2669

NO SCALE



TMS LOCATION 2668

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER.
2. INSTALL CONDUIT(S) IN TRENCH IN SOIL.
4. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. SEE SHEET E-44 FOR DETAILS.
6. ADD 2#6 POWER CONDUCTORS TO EXISTING CONDUIT.
19. INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.
20. INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.
21. INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.
23. SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.
34. ADD ONE 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER FOR TMS.
35. INSTALL STATE-FURNISHED MODEL 334 CONTROLLER CABINET ASSEMBLY WITH LOOP DETECTOR SENSOR ON NEW FOUNDATION. INSTALL FDU AND FIBER OPTIC DATA MODEM. SEE SHEET E-49 AND E-51.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3		4		5	6	7		8		9			10	
12SMFO	DATA/VOICE				1		1	1			1		1			1		
#8	POWER	2	2	2		2												
#6	POWER								2					2			2	
DLC	RAMP/COUNT		5	10			10			5		11			11			
INNERDUCT (SIZE 32)					1			1			1		1			1		
CONDUIT SIZE		53	78	78		78		78	53	103		78		78	78		78	78

34 EXISTING TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE, SERVING UTILITY: DWP
ID: 07-53-101-0-018.210
ADDRESS: 16170½ MAGNOLIA Blvd
EXISTING CIRCUIT BREAKERS;
1-40 A, 240 V, 2P LIGHTING
1-30 A, 240 V, 2P SIGN
1-15 A, 120 V, 10 PEU

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING TRAFFIC MONITORING STATION
(LOCATIONS 2668 AND 2669)

SCALE 1:500

E-33

FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

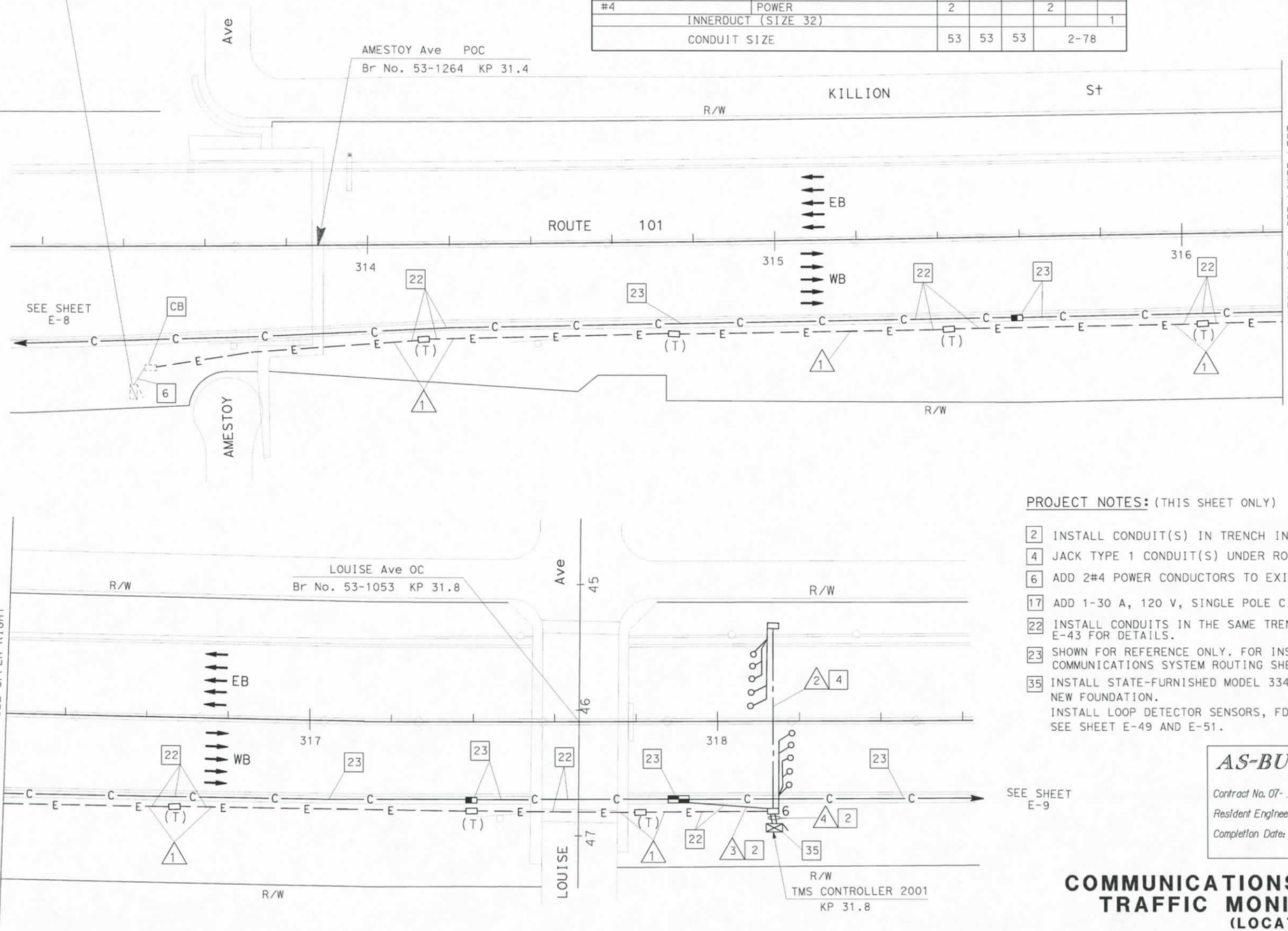
USERNAME => s124928
DGN FILE => 712075u33.dgn

CU 07388 EA 120751

17 EXISTING TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE
SERVING UTILITY: DWP
ID: 07-53-101-0-R019.472
ADDRESS: 5528½ EDWARD E HORTON LN
EXISTING CIRCUIT BREAKER:
1-30 A, 240 V, 2P-SIGN

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4		
12SMFO CABLE	DATA/VOICE			1			1
DLC	RAMP/COUNT		5			10	
#4	POWER	2			2		
INNERDUCT (SIZE 32)							1
CONDUIT SIZE		53	53	53	2-78		



PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL.
4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY.
6 ADD 2#4 POWER CONDUCTORS TO EXISTING CONDUIT.
17 ADD 1-30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR TMS 2001.
22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.
23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.
35 INSTALL STATE-FURNISHED MODEL 334 CONTROLLER CABINET ASSEMBLY ON NEW FOUNDATION.
INSTALL LOOP DETECTOR SENSORS, FDU AND FIBER OPTIC DATA MODEM.
SEE SHEET E-49 AND E-51.

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
TRAFFIC MONITORING STATION
(LOCATION 2001)

SCALE 1:500

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u34.dgn

CU 07388 EA 120751

E-34

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	97	178

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

DATE	REVISED BY
7/02	CS
7/02	DATE REVISED

CALCULATED/DESIGNED BY: CS
CHECKED BY: DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	98	178

Caltrans Metric

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-7-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

DATE	REVISED BY
7/02	CS
7/02	DATE REVISED 7/02

CALCULATED/DESIGNED BY: CS
CHECKED BY: DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2		RUN 3
12SMFO CABLE	DATA/VOICE				
#2	POWER	2		2	
DLC	RAMP/COUNT				
#8	POWER		2		2
CONDUIT SIZE		53	78	78	53

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL.

17 INSTALL 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR TMS.

19 INSTALL TYPE III-BF 120/240 V SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

20 INSTALL 78C, TYPE H SERVICE RISER ON POWER POLE.

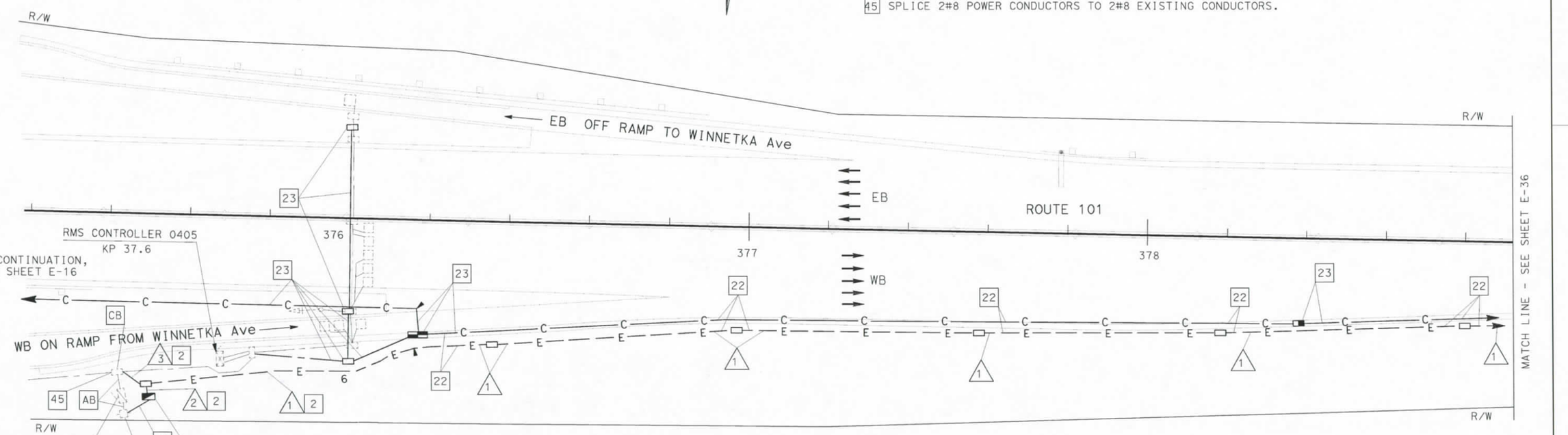
21 INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

37 INSTALL ONE 30 A, 120 V, SINGLE POLE CIRCUIT BREAKER(S) FOR RMS.

45 SPLICE 2#8 POWER CONDUCTORS TO 2#8 EXISTING CONDUCTORS.



AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
TRAFFIC MONITORING STATION
(LOCATION 2670)

SCALE 1:500

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.

E-35

AS-BUILT REVISION: 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u35.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R27.8/R40.6	99	178

Caltrans Metric

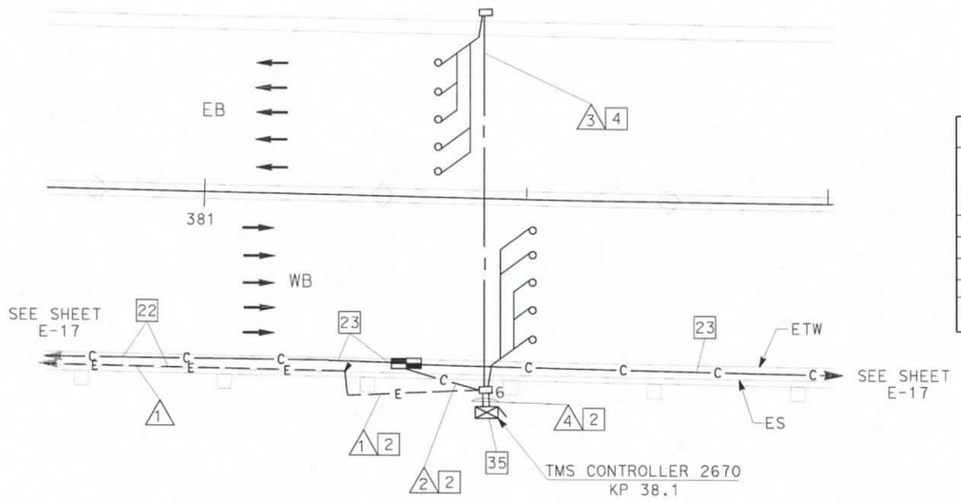
Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



DETAIL A

NO SCALE

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)							
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4		
12SMFO CABLE	DATA/VOICE		1				1
#2	POWER	2			2		
DLC	RAMP/COUNT			5		10	
INNERDUCT (SIZE 32)			1				1
CONDUIT SIZE		53	53	78	78	78	

PROJECT NOTES: (THIS SHEET ONLY)

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL.

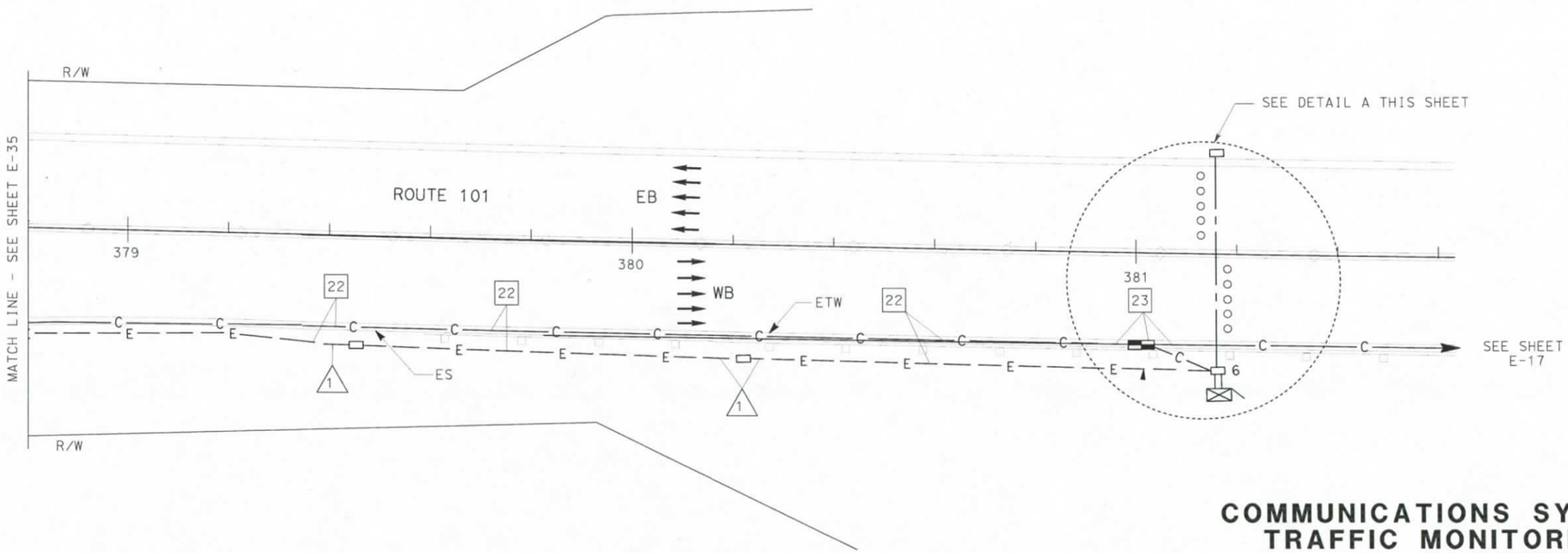
4 JACK TYPE 1 CONDUIT(S) UNDER ROADWAY.

22 INSTALL CONDUITS IN THE SAME TRENCH. SEE SHEETS E-42 AND E-43 FOR DETAILS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

35 INSTALL STATE-FURNISHED MODEL 334 CABNET ON NEW FOUNDATION. INSTALL STATE FURNISHED MODEL MODEL 170 CONTROLLER AND LOOP DETECTOR SENSORS. INSTALL FDU AND FIBER OPTIC DATA MODEM. SEE SHEET E-49 AND E-51.

36 INSTALL TYPE 334 TV CABINET. SEE SHEET E-48, DETAIL B.



AS-BUILT

Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

COMMUNICATIONS SYSTEM ROUTING
TRAFFIC MONITORING STATION
(LOCATION 2670)

SCALE 1:500

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.

E-36

DATE	REVISED BY	CALCULATED/ DESIGNED BY	CHECKED BY
7/02	CS	CS	DL
7/02	DATE REVISED		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER / H. TRINH

LAST REVISION 00-00-00 DATE PLOTTED => 17-SEP-2007 TIME PLOTTED => 14:43

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u36.dgn

CU 07388 EA 120751

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	101	R27.8/R40.6	100	178

Jacqueline C Tan 3/20/03
REGISTERED ELECTRICAL ENGINEER DATE

4-7-03
PLANS APPROVAL DATE

JACQUELINE C. TAN No. E015611 Exp. 12/31/05 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

PROJECT NOTES: (THIS SHEET ONLY)

SEE SHEET L-2 FOR CONSTRUCTION DETAILS.

2 INSTALL CONDUIT(S) IN TRENCH IN SOIL OFF OF THE SHOULDER. SEE SHEET E-42 FOR DETAILS.

19 INSTALL TYPE III-BF 120/240 V, SERVICE EQUIPMENT ENCLOSURE WITH A 100 A, 240 V MAIN CIRCUIT BREAKER ON NEW FOUNDATION.

20 RC EXISTING TYPE II-A SERVICE EQUIPMENT ENCLOSURE.

21 INSTALL 78C, ELECTRIC COMPANY TO INSTALL CONDUCTORS.

23 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION, REFER TO COMMUNICATIONS SYSTEM ROUTING SHEETS.

26 INSTALL STATE-FURNISHED MODEL 500-X CMS PANEL AND SUPPORTING HARDWARE.

27 TRENCH AND INSTALL 78C IN SOIL AREA. FOR WIRING SEE NOTE 1 ON SHEET E-68.

28 TRENCH AND INSTALL 2-78C, STATE-FURNISHED CMS CONTROL CABLES, (6P18, 24P18) IN SOIL AREA. SEE TABLE 1 - SHEET E-1.

29 TRENCH AND INSTALL 78C, 12#1/0, IN SOIL AREA.

30 TRENCH AND INSTALL 2-78C, 2#6, STATE-FURNISHED CMS CONTROL CABLE (6P18, 24P18) IN SOIL AREA.

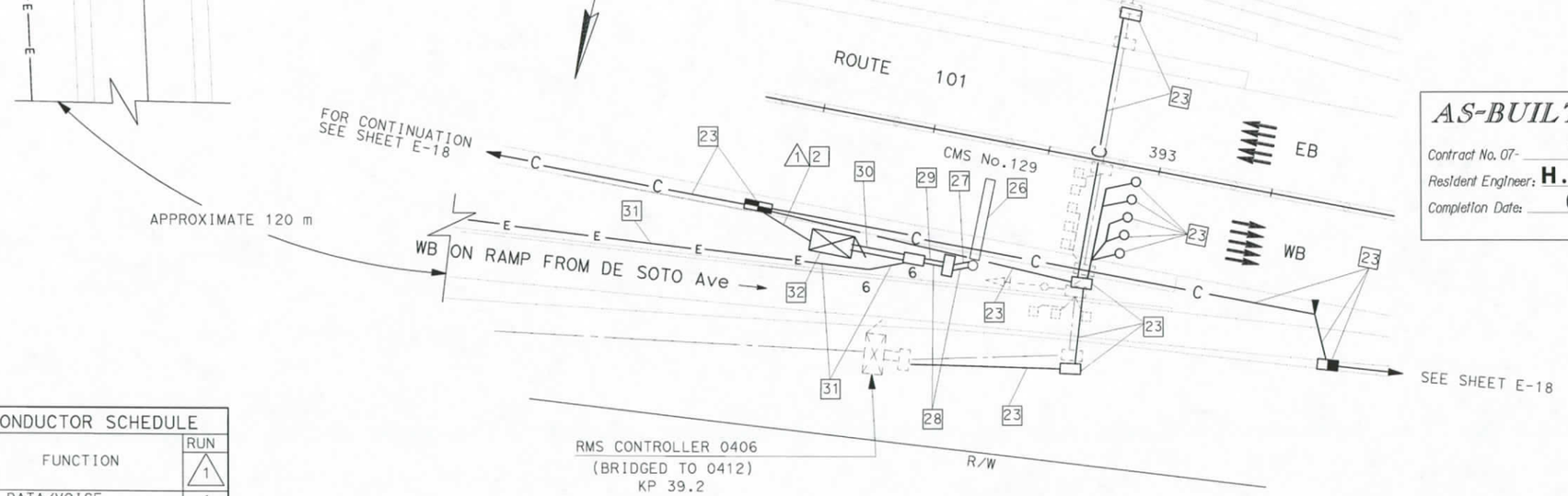
31 TRENCH AND INSTALL 2-78C, 2#6,12#1/0, IN SOIL AREA.

32 INSTALL STATE-FURNISHED TYPE 334 CMS CONTROLLER CABINET AND MODEL 170 CONTROLLER. CONSTRUCT CONCRETE PAD. INSTALL FDU AND FIBER OPTIC DATA MODEM, SEE SHEET E-68 AND E-49 FOR MORE DETAILS.

34 INSTALL ONE 120 V-1P-30 A CIRCUIT BREAKER FOR CMS CONTROLLER CABINET AND FOUR 120 V-1P-40 A CIRCUIT BREAKER FOR MODEL 500-X CMS PANEL.

45 CORE THROUGH EXISTING DWP VAULT, DWP REPRESENTATIVE TO BE PRESENT WHILE CORING.

DETAIL A
NO SCALE



CONDUIT AND CONDUCTOR SCHEDULE		
CONDUCTOR TYPE	FUNCTION	RUN △1
12SMFO CABLE	DATA/VOICE	1
INNERDUCT (SIZE 32)		
CONDUIT SIZE		53

CMS No. 129
NO SCALE

COMMUNICATIONS SYSTEM ROUTING CHANGEABLE MESSAGE SIGN (No.129)

NO SCALE

E-37

AS-BUILT
Contract No. 07- 120754
Resident Engineer: H. MANNAA
Completion Date: 6/17/05

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND NOTES SEE SHEETS E-1 AND E-2.

DATE	REVISED BY	DATE REVISED
7/02	CS	7/02

CALCULATED/DESIGNED BY: CS
CHECKED BY: DL

PROJECT ENGINEER: HENRY H. TRINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 712075u37.dgn

CU 07388

EA 120751

AST REVISION DATE PLOTTED => 17-SEP-2007
00-00-00 TIME PLOTTED => 14:43