INFORMATION HANDOUT

For Contract No. 07-2838U4
At 07-LA-2,101,134,210-Var

Identified by
Project ID 0714000094

MATERIALS INFORMATION

Lead Investigation Report

Fiber Optic System As Built Drawings

HOLGUIN, FAHAN & ASSOCIATES, INC.
ENVIRONMENTAL MANAGEMENT CONSULTANTS

LEAD INVESTIGATION REPORT

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ROUTE 210 FREEWAY BETWEEN ROUTE 134 AND ROUTE 605
LOS ANGELES COUNTY, CALIFORNIA
CONTRACT #43Y097
TASK ORDER #07-129911-01

NOVEMBER 18, 1996

Client:	California Department of Transportation, District 17 Environmental Planning Branch 120 South Spring Street Los Angeles, California 90012
Contract Manager:	Mr. George Ghebranious, PE (213) 897-0693
Consultant:	Holguin, Fahan & Associates, Inc. 16570 Aston Street Irvine, California 92606
Project Manager:	James M. Haslett, RG, REA (RG #5641) (714) 442-6665 e-mail address: Jim_Haslett@hfa.com

REGISTERED GEOLOGIST
JAMES M. HASLETT
No. 5641
STATE OF CALIFORNIA

Patrice L. Martin, REA
Senior Project Manager
Holguin, Fahan & Associates, Inc.

James M. Haslett, RG, REA
Senior Geologist
Holguin, Fahan & Associates, Inc.

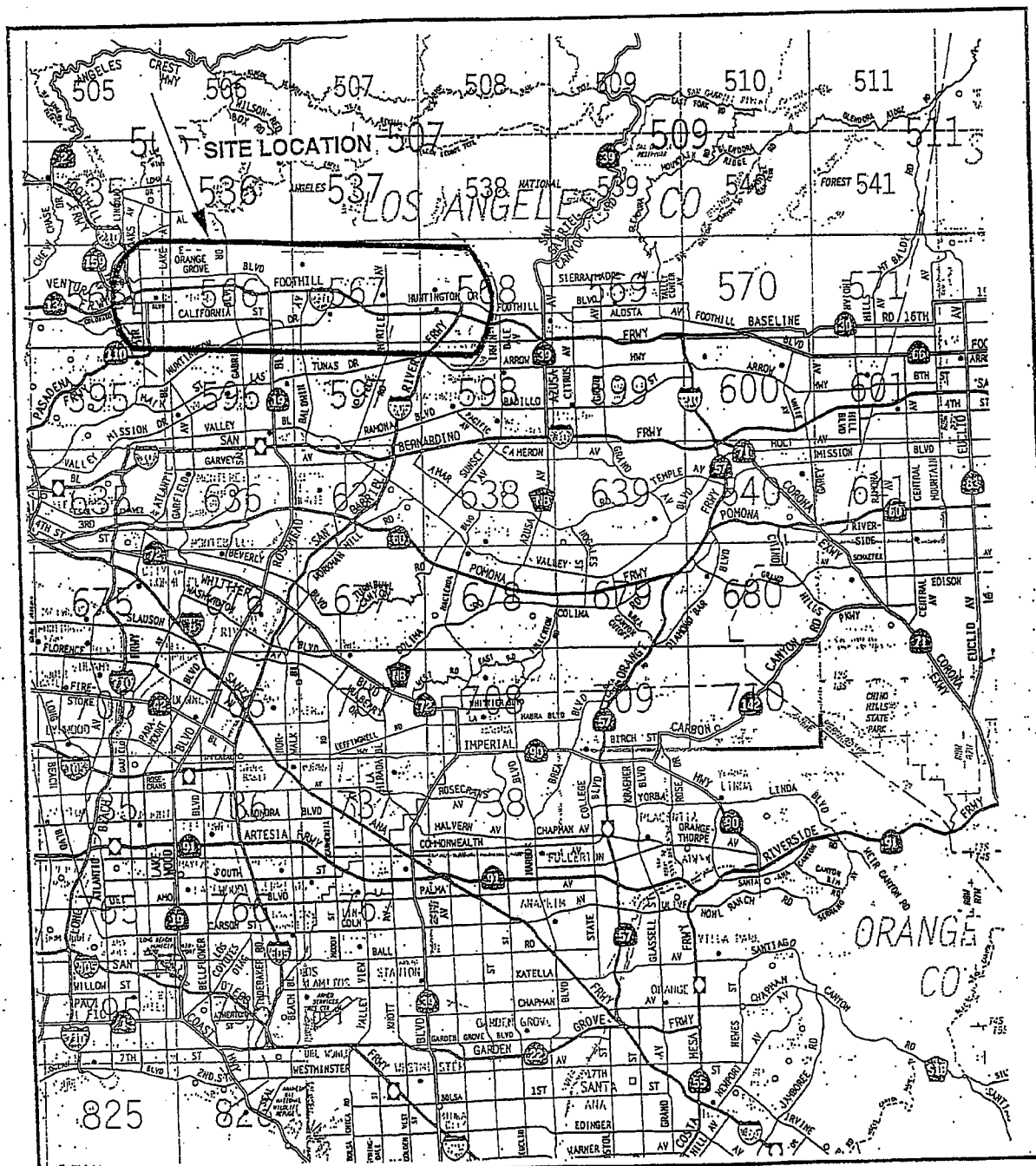
SITE LOCATION
LOS ANGELES CO
ORANGE CO
LEGEND
Key Map Scale
1 Inch to 5 Miles
0 2.5 5 7.5 10
Miles
0 5 10
Kilometers
N
THOMAS BROS. 1995
CALTRANS
ROUTE 210 FREEWAY
BETWEEN ROUTES 134 AND 605,
LOS ANGELES COUNTY, CALIFORNIA
FIGURE 1- SITE LOCATION MAP
HOLGUIN, FAHAN & ASSOCIATES, INC.

TABLE 1.
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CALTRANS- ROUTE 210 FREEWAY
FROM ROUTE 134 TO ROUTE 605
LOS ANGELES COUNTY, CALIFORNIA

BORING NUMBER	SAMPLE NUMBER	TOTAL LEAD (mg/kg)	SOLUBLE LEAD WET (mg/L)	SOLUBLE LEAD WET-DI (mg/L)	FLAT (f) OR SLOPING (s)	DISTANCE FROM EDGE OF PAVEMENT (meters)	GENERAL WIND DIRECTION
EPA ANALYTICAL METHOD			6010				
METHOD REPORTING LIMIT		1.0	0.050	0.15			
B1	B1-S	1000	← OFF IT	–	f	1.5	W
	B1-1.5 m	18	–	–	f	1.5	W
B2	B2-S	600	32	ND	f	1.5	W
	B2-1.5	37	–	–	f	1.5	W
B3	B3-S	450	20	–	f	1.5	W
	B3-1.5	9.6	–	–	f	1.5	W
B4	B4-S	560	30	–	f	1.5	W
	B4-1.5	8.0	–	–	f	1.5	W
B5	B5-S	68	3.5	–	f	1.5	W
	B5-1.5	77	3.6	–	f	1.5	W
B6	B6-S	180	8.3	–	f	1.5	W
	B6-1.5	16	–	–	f	1.5	W
B7	B7-S	560	38	–	f	1.5	W
	B7-1.5	34	–	–	f	1.5	W
B8	B8-S	1500	← OFF IT	–	f	1.5	W
	B8-1.5	200	13	0.31	f	1.5	W
B9	B9-S	42	– 0.5	–	f	1.5	W
	B9-1.5	25	–	–	f	1.5	W
B10	B10-S	390	26	–	f	1.5	W
	B10-1.5	29	–	–	f	1.5	W
B11	B11-S	470	26	–	f	1.5	W
	B11-1.5	11	–	–	f	1.5	W
B12	B12-S	810	25	–	f	1.5	W
	B12-1.5 (0.5 m)	190	11	–	f	1.5	W
B13	B13-S	61	2.9	–	s	1.5	W
	B13-2 (0.6 m)	6.0	–	–	s	1.5	W
	B13-4.5	(6.8)	–	–	s	1.5	W
B14	B14-S	170	9.9	0.33	s	1.5	W
	B14-2	23	–	–	s	1.5	W
	B14-4.5 (1.37 m)	(14)	–	–	s	1.5	W
B15	B15-S	550	32	–	s	1.5	W
	B15-1.5	11	–	–	s	1.5	W

TABLE 1.
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CALTRANS- ROUTE 210 FREEWAY
FROM ROUTE 134 TO ROUTE 605
LOS ANGELES COUNTY, CALIFORNIA

BORING NUMBER	SAMPLE NUMBER	TOTAL LEAD (mg/kg)	SOLUBLE LEAD WET (mg/L)	SOLUBLE LEAD WET-DI (mg/L)	FLAT (f) OR SLOPING (s)	DISTANCE FROM EDGE OF PAVEMENT (meters)	GENERAL WIND DIRECTION
EPA ANALYTICAL METHOD			6010				
METHOD REPORTING LIMIT		1.0	0.050	0.15			
B16	B16-S	690	42	--	f	1.5	W
	B16-1.5	100	4.9	--	f	1.5	W
B17	B17-S	13	-- 0.5	--	f	1.5	W
	B17-1.5	22	--	--	f	1.5	W
B18	B18-S	440	39	--	f	1.5	W
	B18-1.5	11	--	--	f	1.5	W
B19	B19-S	160	56	--	f	1.5	W
	B19-1.5	25	--	--	f	1.5	W
B20	B20-S	30	-- 0.5	--	f	1.5	W
	B20-1.5	6.4	--	--	f	1.5	W
B21	B21-S	1400	-- 0.11T	--	s	1.5	W
	B21-1.5	6.9	--	--	s	1.5	W
B22	B22-S	510	38	0.60	f	1.5	W
	B22-1.5	200	7.8	--	f	1.5	W
B23	B23-S	520	32	--	f	1.5	W
	B23-1.5	36	--	--	f	1.5	W

-- = Not analyzed, ND = Not detected.

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

REGISTERED ELECTRICAL ENGINEER

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

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.

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 X1.

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
	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)
xW	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
5/94	DATE REVISED

CALCULATED/ DESIGNED BY	PW
	AC
CHECKED BY	5/94

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

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EA1186C1

< 24

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

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

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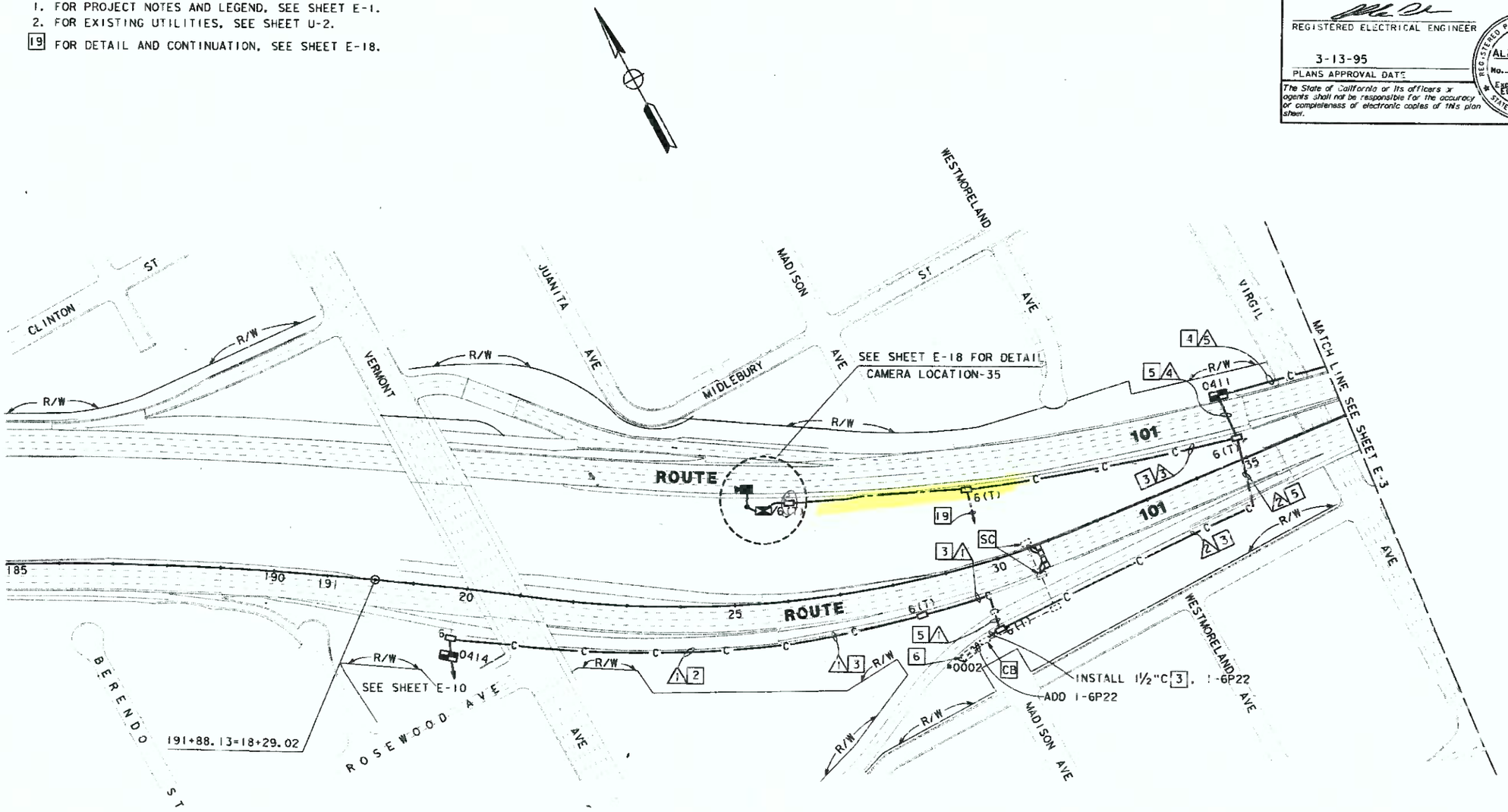

CONDUCTOR SCHEDULE

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"	4"	4"

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1"=100'

E-2

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY

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

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CU 07396

EA 1186C1

LAST REVISION 08-31-94

TIME PLOTTED => 18-MAR-1995 14:34

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans IVHS DEVELOPMENT

PROJECT ENGINEER: ALLEN CHEN

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

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

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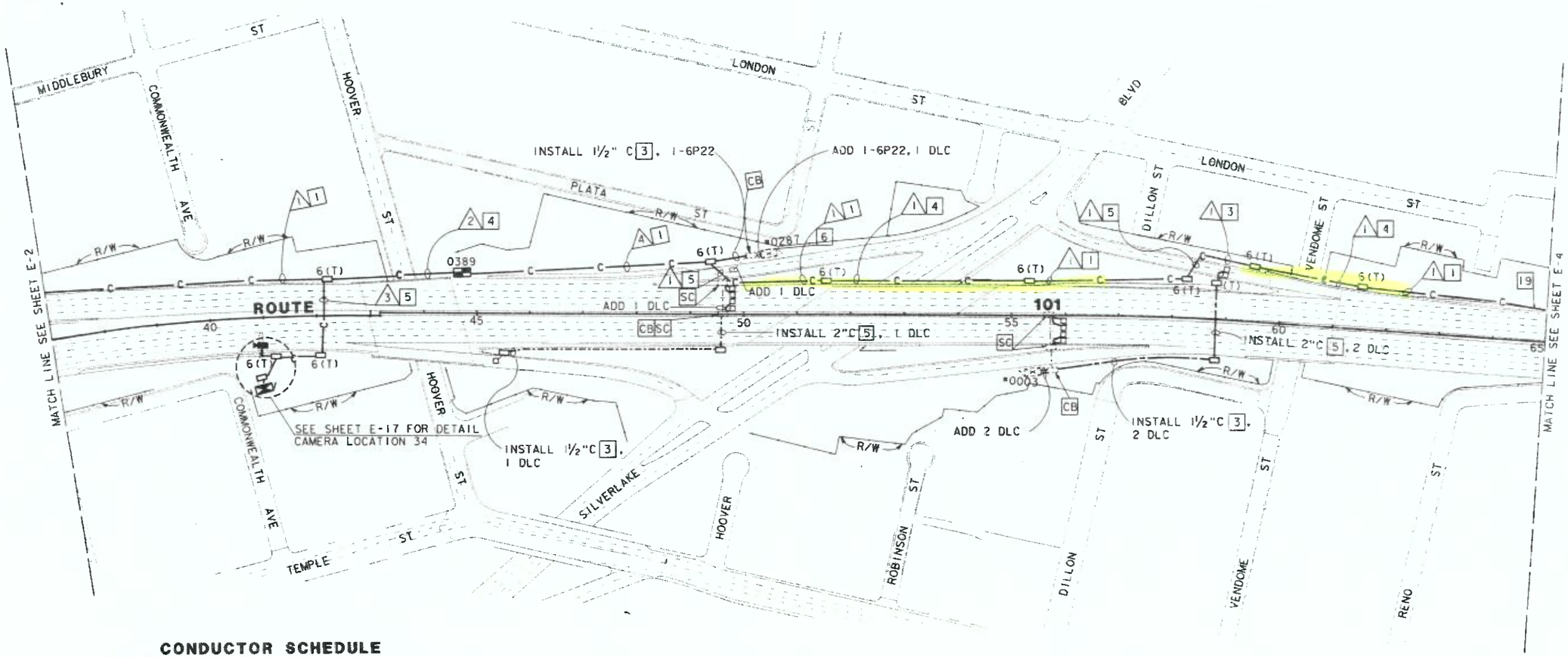
NOTES (FOR THIS SHEET ONLY):

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"

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE : 1" = 100'

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: AL 5/94 — REVISED BY
CHECKED BY: AC 6/94 — DATE REVISED
LAST REVISION: 08-31-94 TIME PLOTTED => 18-MAR-1995 11:53

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

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DGN FILE => ZH3:[3300043711186CU03.DGN

CU 07396

EA 1186C1

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

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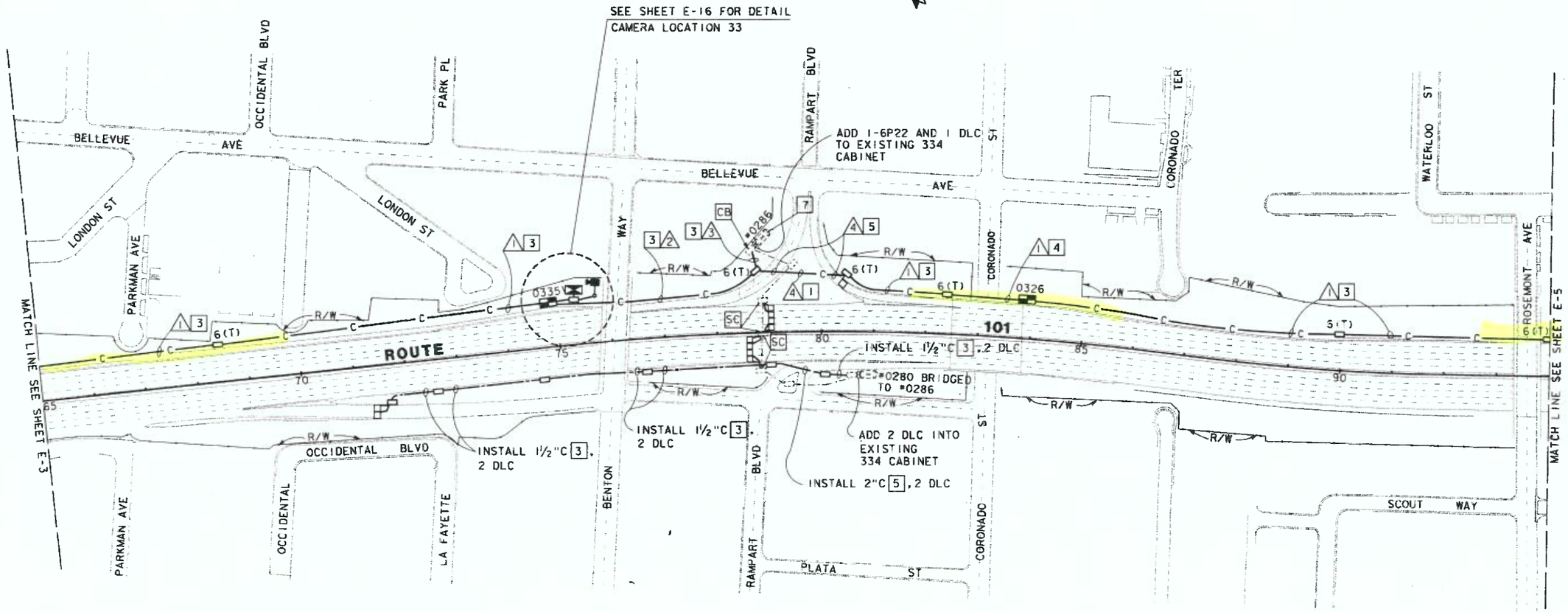
NOTES (FOR THIS SHEET ONLY):

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	4"			4"			2"			4"		

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-4

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 11:53

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

CU 07396

EA 71186C1

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

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

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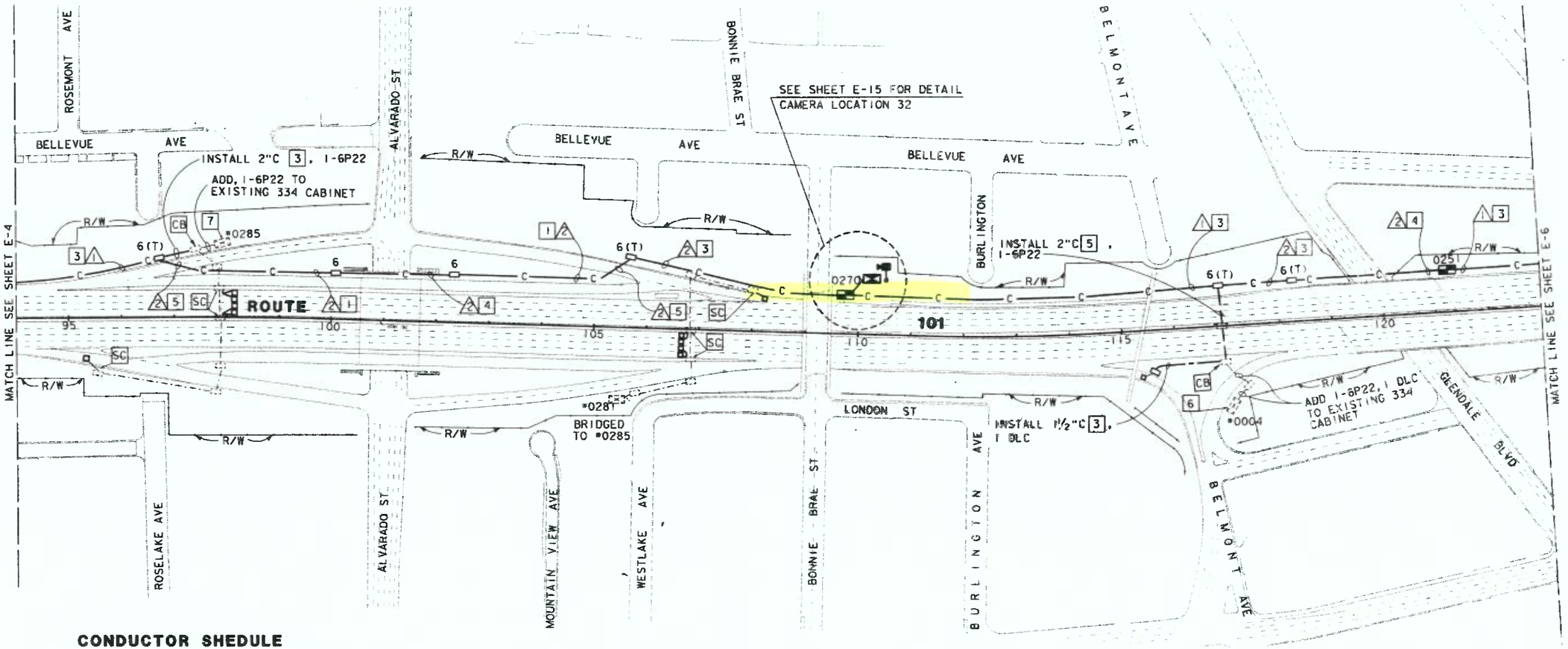
NOTES (FOR THIS SHEET ONLY):

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



CONDUCTOR SHEDULE

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

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL ONLY.

CCTV AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1" = 100'

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
IVHS DEVELOPMENT
PROJECT ENGINEER: ALLEN CHEN
CALCULATED/DESIGNED BY: AL
CHECKED BY: AC
DATE REVISED: 6/94
REVISED BY: DATE 5/94

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

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

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

CU 07396

EA 11886C1

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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
- COMMUNICATIONS CONDUIT(S) (—C—)
- SERVICE CONDUIT(S) (—E—)
- CONDUIT LINE DELIMITER FOR CONSTRUCTION NOTES (1, 2)
- 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

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.

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AS-BUILT
Contract No. 07- 120724
Resident Engineer: Hasan Maruf
Completion Date: 04/20/1999

CCTV AND COMMUNICATIONS SYSTEM
(LEGEND AND NOTES)

E-1

DESIGN OVERSIGHT: PAT SULLIVAN
CALCULATED/DESIGNED BY: ES 2/95
CHECKED BY: JZ 5/95
REVISED BY / DATE REVISED
DEPARTMENT OF TRANSPORTATION - STATE OF CALIFORNIA
Gibbs

TIME PLOTTED => 19-OCT-1999 15:32
USE SCALE FOR PLOTS 00-00-00

FORM CC-DE-52-PF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
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DGN FILE => /usr/mikes1/PO/712072u01.dg
CU 07387
EA 120721

< 24
< 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	66	154

Elia El-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 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.
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 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.
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.

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

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LAST REVISION 00-00-00
TIME PLOTTED => 19-OCT-1995 15:32

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

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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

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.

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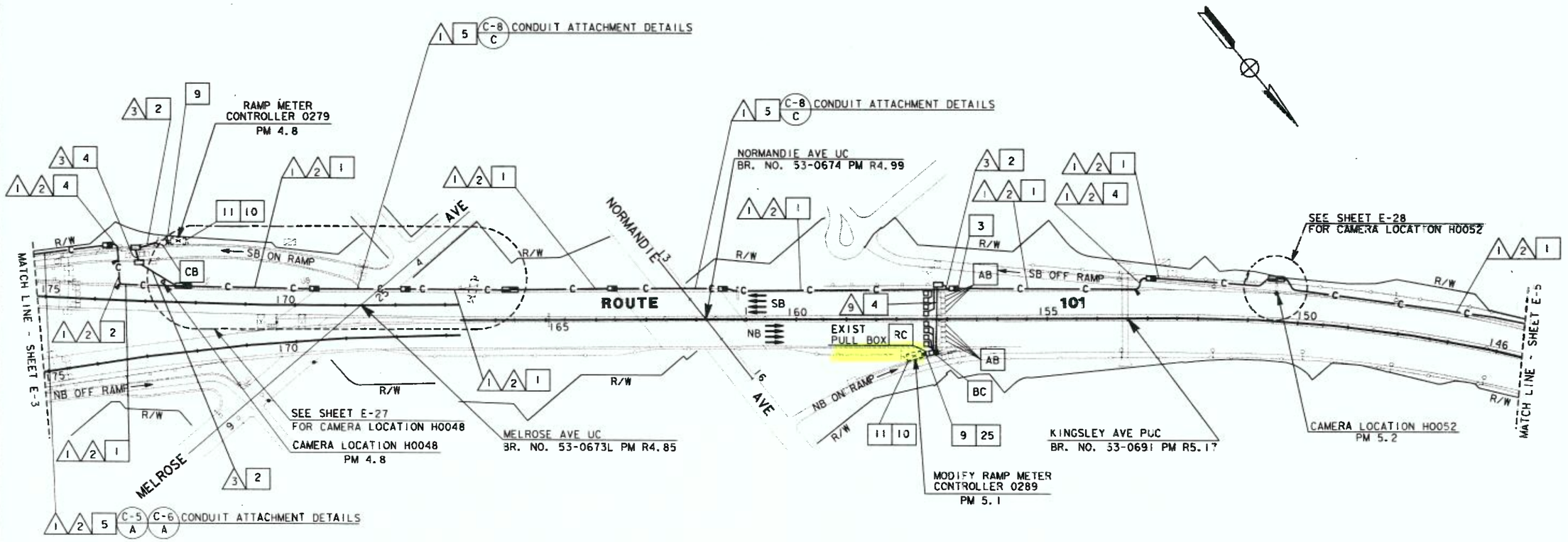
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF 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	9
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						4
	INNERDUCT		1¼"	1¼"			
CONDUIT	SIZE		4"		4"	2"	2"



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

REVISED BY	DATE REVISED
ES	2/95
JZ	5/95

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER
PAT SULLIVAN

XXXXXXXXXXXXXXXXXXXXXXXX
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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FORM DC-OE-92-PE (REV. 3/88)
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CU 07387
EA 12072I

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	69	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.

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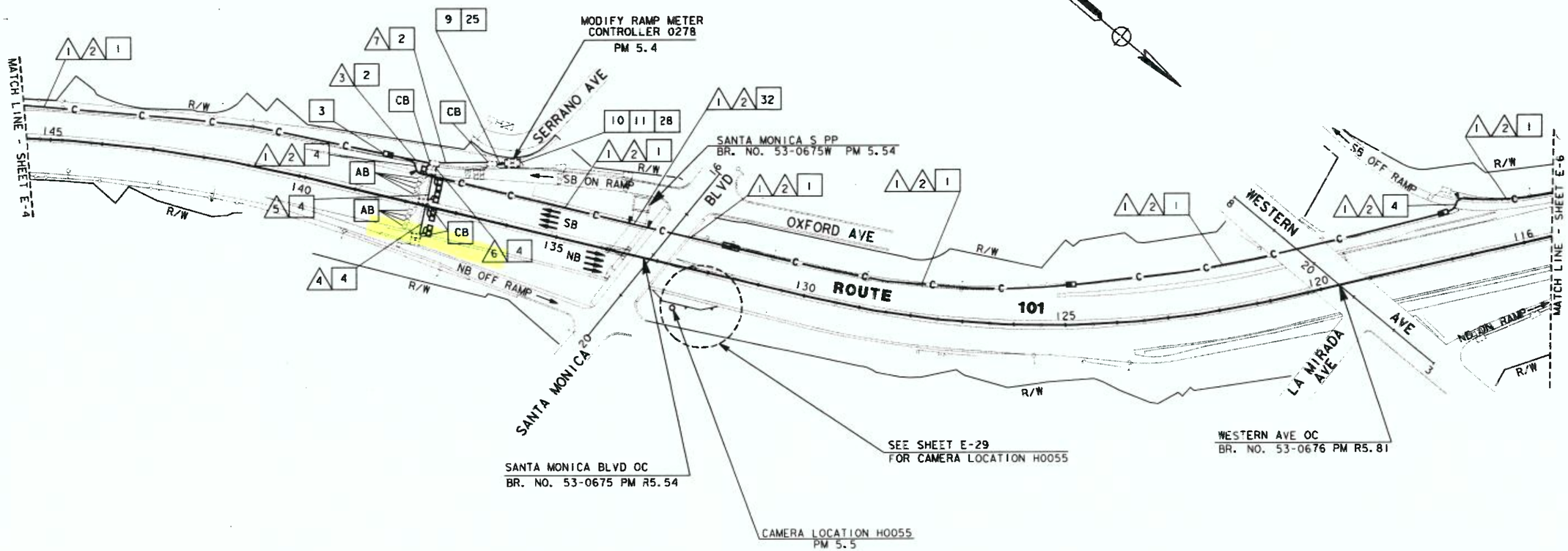
PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CONDUIT(S) IN TRENCH IN PAVED SHOULDER. MAINTAIN A MINIMUM DISTANCE OF 4 FEET FROM EDGE OF 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
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				2	6	8	9
	INNERDUCT	1¼" 1¼"						
CONDUIT	SIZE	4"	4"	2"	2"	2"	2"	2"



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-5

CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
ES	JZ	2/95		5/95

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10.17

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

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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.
ABRAHAM AND ASSOCIATES, INC.

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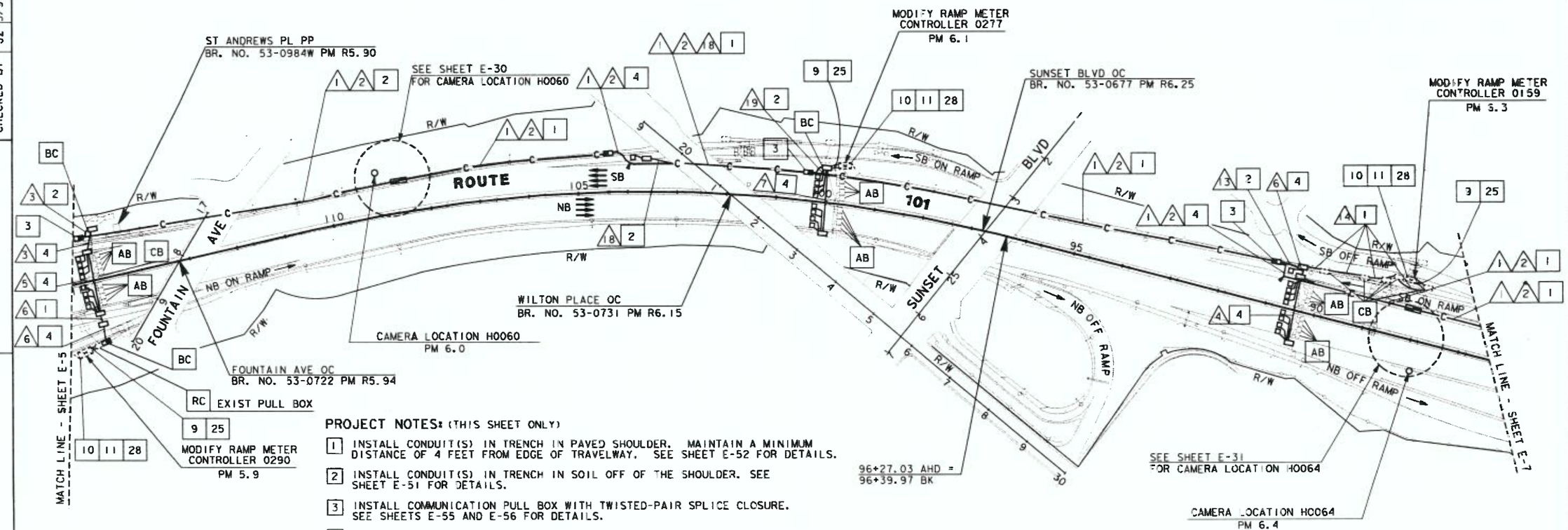
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

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		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.

LOOP DETECTOR, CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1"=100'

E-6

CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
ES	JZ	2/95		5/95

PROJECT ENGINEER — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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TIME PLOTTED => 17-OCT-1995 08:29
LAST REVISION 00-00-00

FORM DOT 12-92-PF (REV. 3/88)

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DGN FILE => /usr/mikesl/PO/712072e06.dg

CU 07387 EA 120721

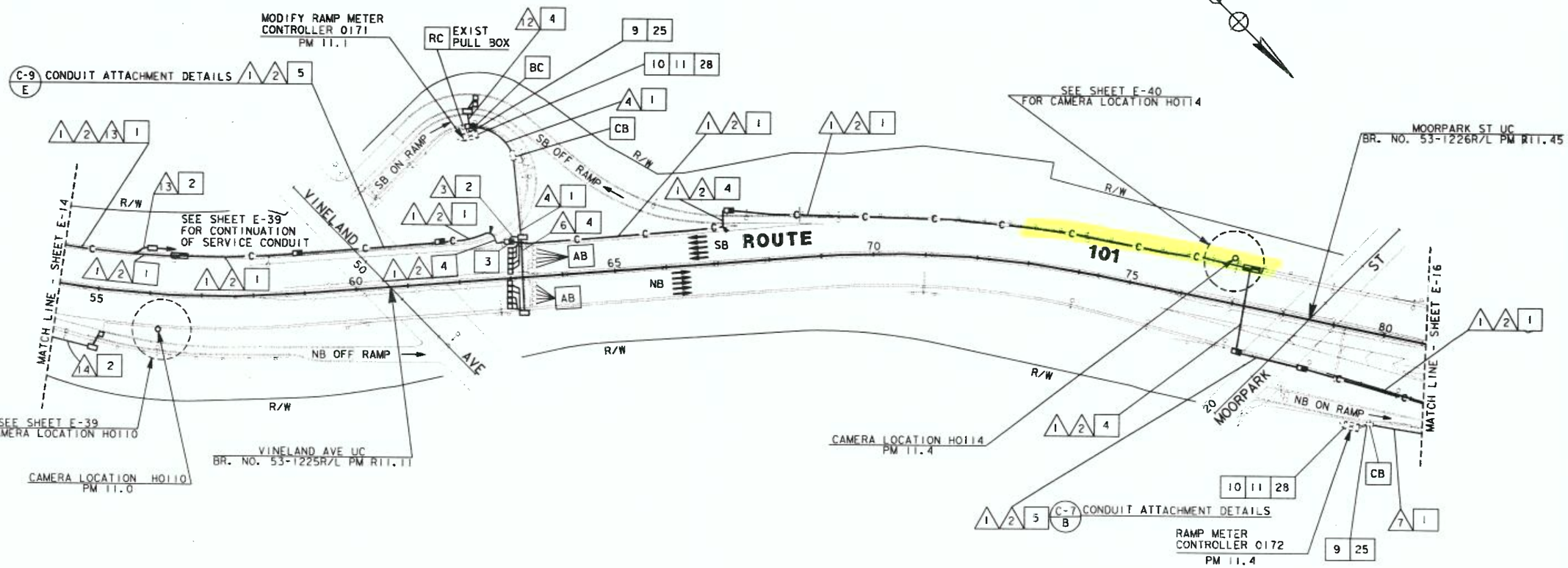
PROJECT NOTES: (THIS SHEET ONLY)

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 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	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		1
	INNERDUCT	1¼" 1¼"								
CONDUIT	SIZE	4"	4"	2"	2"	2"	2"	2"	2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



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

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

ELIA G. SAGHIR 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.

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DATE	REVISED BY
2/95	ES
5/95	JZ

DATE REVISED
CHECKED BY
CALCULATED/ DESIGNED BY

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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FORM 05-08-32 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

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	210	40.0 / 61.8	74	179

Caltrans Metric

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER H. EVERETT — No. C52217 — EXP. 06/30/98 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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GENERAL NOTES:

1- ALL IRRIGATION CONTROLLERS ARE EXISTING UNLESS OTHERWISE NOTED ON THE PLANS.

2- PULL BOXES SHALL NOT BE USED TO CHANGE THE ALIGNMENT OF CONDUIT.

3- ALL PULL BOXES AND SPLICE VAULTS SHALL BE INSTALLED IN THE UNPAVED AREA IMMEDIATELY ADJACENT TO THE PAVED SHOULDER OR BEHIND MBGR. CONDUIT SHALL BE DIRECTED FROM THE SHOULDER TO THE BOXES WITH 22 ½ DEGREE BENDS.

4- ALL NEW SERVICE EQUIPMENT ENCLOSURES SHALL ALSO HAVE:
(1) 1P, 20 A BREAKER (SPARE)
(1) 1P, 30 A BREAKER (SPARE)
(1) 2P, (SPACE FOR FUTURE)

5. SIZE 103 CONDUITS TO BE INSTALLED IN PAVEMENT SHALL MAINTAIN 100 mm MINIMUM DISTANCE FROM EDGE OF TRAVELED WAY UNLESS OTHERWISE NOTED.

6. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL FACILITIES, THE CONTRACTOR SHALL GIVE 72 HOURS ADVANCE NOTICE IN WRITING TO THE ENGINEER AND ALL CONCERNED AGENCIES.

7. SERVICE EQUIPMENT ENCLOSURE SHALL BE LOCATED 3 m MINIMUM FROM THE POWER POLE OR VAULT.

8. ELECTRICAL SERVICE INSTALLATION SHALL MEET THE REQUIREMENTS OF EITHER SOUTHERN CALIFORNIA EDISON COMPANY(SCE) OR LOS ANGELES DEPARTMENT OF WATER AND POWER(DWP).

9. CONDUCTORS FROM POWER POLE(OR VAULT) TO SERVICE ENCLOSURE WILL BE INSTALLED BY UTILITY COMPANY.

10. TRENCH FOR CONDUIT INSTALLATION BETWEEN POWER POLE(OR VAULT) AND SERVICE ENCLOSURE SHALL BE LEFT OPEN FOR INSPECTION AND APPROVAL BY SCE OR DWP INSPECTOR BEFORE IT IS BACKFILLED.

11. STATIONS GIVEN ARE APPROXIMATE, EXACT EQUIPMENT AND POLE LOCATIONS TO BE DETERMINED BY ENGINEER.

ABBREVIATIONS:

2SMFO B/O	-	2 SINGLEMODE FIBER OPTIC BREAKOUT CABLE
24SMFO	-	24 SINGLEMODE FIBER OPTIC CABLE
6P22	-	6 TWISTED PAIR 22 CABLE
50P22	-	50 TWISTED PAIR 22 CABLE
AT & SF	-	ATCHISON TOPEKA AND SOUTHERN PACIFIC
AVC	-	AUTOMATIC VEHICLE CLASSIFICATION STATION
B/O	-	BREAKOUT
CCR	-	CAMERA CONTROL RECEIVER
CIA	-	CONTROLLER INTERFACE ASSEMBLY
COMM	-	COMMUNICATION
DACCS	-	DIGITAL ACCESS AND CROSS CONNECTION SYSTEM
DEMARC	-	DEMARCATION
DEMUX	-	DEMULTIPLEX
(E)	-	EXISTING
FDF	-	FIBER DISTRIBUTION FRAME
FDU	-	FIBER DISTRIBUTION UNIT
F/O, FO	-	FIBER OPTIC
FT	-	FOOTHILL FREEWAY
HAR	-	HIGHWAY ADVISORY RADIO
JKFD	-	JACKFIELD
LB	-	L-SHAPED CONDUIT OUTLET BODY
MUX	-	MULTIPLEX
OW	-	ORDER WIRE (MULTIPLE VOICE CIRCUIT)
PAC BELL	-	PACIFIC BELL TELEPHONE COMPANY
PCMS	-	PASADENA CITY MUNICIPAL SERVICES
PDA	-	POWER DISTRIBUTION ASSEMBLY
P	-	PAIR
RCVR	-	RECEIVER
RMS	-	RAMP METERING SYSTEM
RX	-	RECEIVE
SCE	-	SOUTHERN CALIFORNIA EDISON
SCGAS	-	SOUTHERN CALIFORNIA GAS COMPANY
SCWC	-	SOUTHERN CALIFORNIA WATER COMPANY
SMFO	-	SINGLEMODE FIBER OPTIC
STC	-	SCREENED TRANSMISSION CABLE
TMS	-	TRAFFIC MONITORING STATION
TWP	-	TWISTED WIRE PAIR
TX	-	TRANSMIT
VMX	-	VIDEO MULTIPLEXER
XMTR	-	TRANSMITTER

LEGEND: (NOT LISTED IN CALTRANS STANDARD PLANS)

- EXISTING SPLICE VAULT
- SPLICE VAULT
- EXISTING CABLE NODE
- DATA, VIDEO OR CABLE NODE TYPE 334-TV CABINET
- TYPE 334 - TV CABINET
- COMMUNICATION PULL BOX
- CCTV CAMERA ASSEMBLY AND POLE
- SIGN AND FLASHING BEACON
- EXISTING VAULT (UTILITY)
- —E— E— POWER CONDUIT(S)
- —e— e— EXISTING POWER CONDUIT(S)
- OPTICAL FIBER CABLE
- EXISTING IRRIGATION CONTROLLER

TABLE I - CCTV CONTROL CABLE		
CONDUCTOR TYPE	FUNCTION	QUANTITY
9P18 CABLE	PAN/TILT CONTROL CABLE	1
12P18 CABLE	LENS CONTROL CABLE	1
RG-6A/U	CAMERA VIDEO INTERFACE CABLE	1

AS-BUILT
Contract No. 07- 129914
Resident Engineer: MANNAA, H.
Completion Date: 09/27/2000

CCTV AND COMMUNICATION SYSTEM
(LEGEND AND NOTES)

NO SCALE

E-1

CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
SH	PE	5/96		

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 — TIME PLOTTED => 13-MAR-1997

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CU 7396 — EA 129911

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)								
CONDUCTOR TYPE	FUNCTION	RUN						
		1					2	3
50P22 CABLE	VOICE/DATA	1						
6P22 CABLE	VOICE/DATA						1	2
24SMFO CABLE	VIDEO DISTRIBUTION		1					
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1				
	SIZE 32 INNERDUCT		1	1				
	CONDUIT SIZE		103		103		53	53

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
4. JACK CONDUIT BENEATH ROADWAY. SEE SHEET C-7 FOR DETAILS.
5. TRENCH AND INSTALL CONDUIT IN SIDEWALK, SEE SHEET C-2 FOR DETAILS.
8. CORE THROUGH CONCRETE RETAINING/WING WALL, SEE SHEET C-3 FOR DETAILS.
10. COIL 10 m OF 6P22 CABLE IN PULL BOX FOR FUTURE CONNECTION TO IRRIGATION CONTROLLER.
11. INSTALL TELEPHONE BRIDGE AND A 12-PAIR TERMINAL BLOCK IN EXISTING CABINET. SEE SHEET E-73 FOR DETAILS.
12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
13. RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	210	40.0/61.8	78	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER R. EVERETT — No. C53217 — EXP. 06/30/99 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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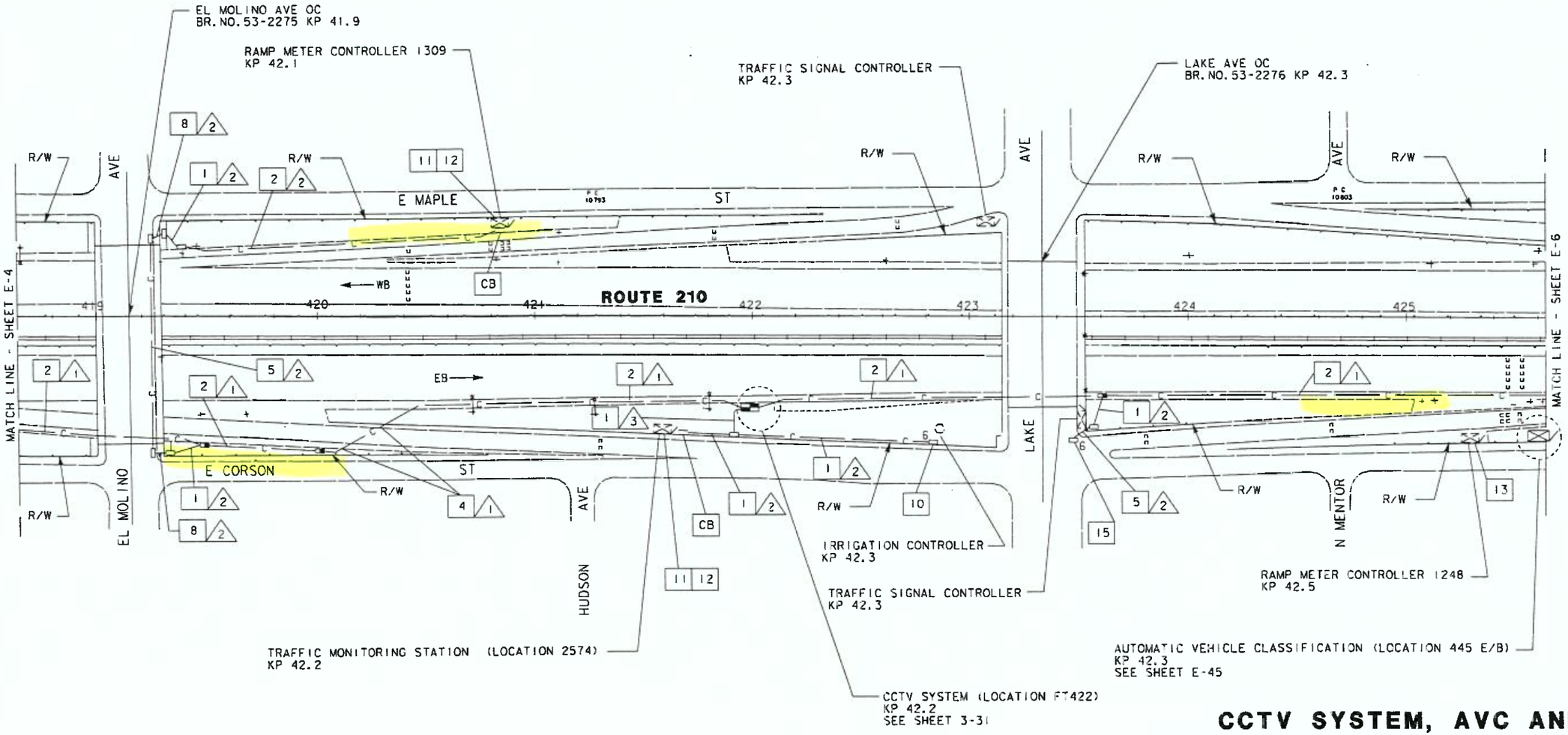

CCTV SYSTEM, AVC AND COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

E-5

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

REVISED BY | DATE REVISED
DATE 5/96 | 5/96
SH | PE
CALCULATED/DESIGNED BY | CHECKED BY

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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

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DGN FILE => $REQUEST

CU 7396 | EA 129911

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	210	40.0/61.8	79	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

REGISTERED PROFESSIONAL ENGINEER PETER R. EVERETT No. C53217 Exp. 06/30/99 CIVIL STATE OF CALIFORNIA

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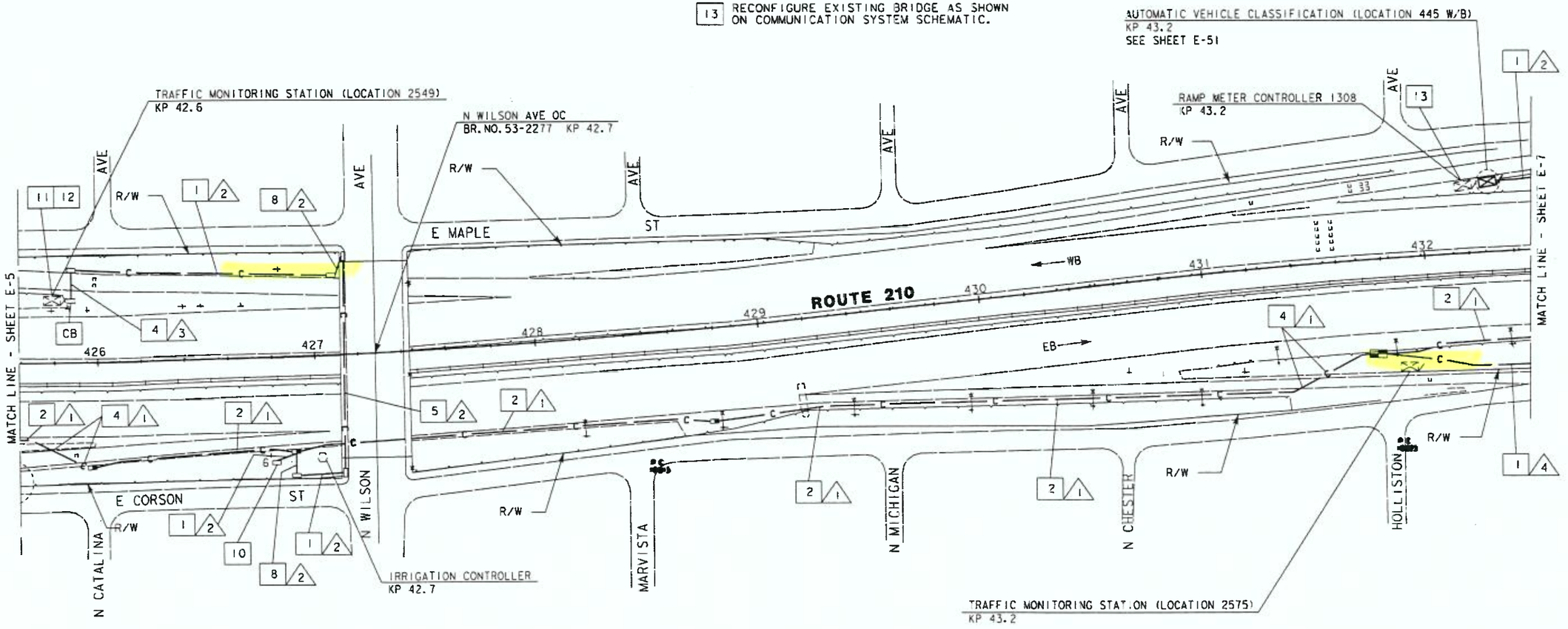
Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				2	3	4
50P22 CABLE	VOICE/DATA	1						
6P22 CABLE	VOICE/DATA					1	1	2
24SMFO CABLE	VIDEO DISTRIBUTION		1					
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1				
	SIZE 32 INNERDUCT		1	1				
	CONDUIT SIZE		103		103	53	78	53

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
4. JACK CONDUIT BENEATH ROADWAY. SEE SHEET C-7 FOR DETAILS.
5. TRENCH AND INSTALL CONDUIT IN SIDEWALK. SEE SHEET C-2 FOR DETAILS.
8. CORE THROUGH CONCRETE RETAINING/WING WALL, SEE SHEET C-3 FOR DETAILS.
10. COIL 10 m OF 6P22 CABLE IN PULL BOX FOR FUTURE CONNECTION TO IRRIGATION CONTROLLER.
11. INSTALL TELEPHONE BRIDGE AND A 12-PAIR TERMINAL BLOCK EXISTING IN CABINET. SEE SHEET E-73 FOR DETAILS.
12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
13. RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.



AVC AND COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

E-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT ENGINEER: PAT SULLIVAN

CALCULATED/DESIGNED BY: SH DATE 5/96 REVISED BY
CHECKED BY: PE 5/96 DATE REVISED

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

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80 USERNAME => $USER

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)									
CONDUCTOR TYPE	FUNCTION	RUN							
		1				2	3	4	
50P22 CABLE	VOICE/DATA	1							
6P22 CABLE	VOICE/DATA					1	2	2	
24SMFO CABLE	VIDEO DISTRIBUTION		1						
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1					
	SIZE 32 INNERDUCT		1	1					
	CONDUIT SIZE	103			103	53	78	53	

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
3. ATTACH CONDUIT TO BRIDGE. SEE SHEET C-2 FOR DETAILS.
4. JACK CONDUIT BENEATH ROADWAY. SEE SHEET C-7 FOR DETAILS.
6. JACK CONDUIT BENEATH SLOPE PROTECTION. SEE SHEET C-7 FOR DETAILS.
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12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
15. COIL 10 m OF 6P22 CABLE IN PULL BOX FOR FUTURE CONNECTION TO TRAFFIC SIGNAL.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	210	40.0 / 61.8	80	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER R. EVERETT — No. C53217 — EXP. 06/30/99 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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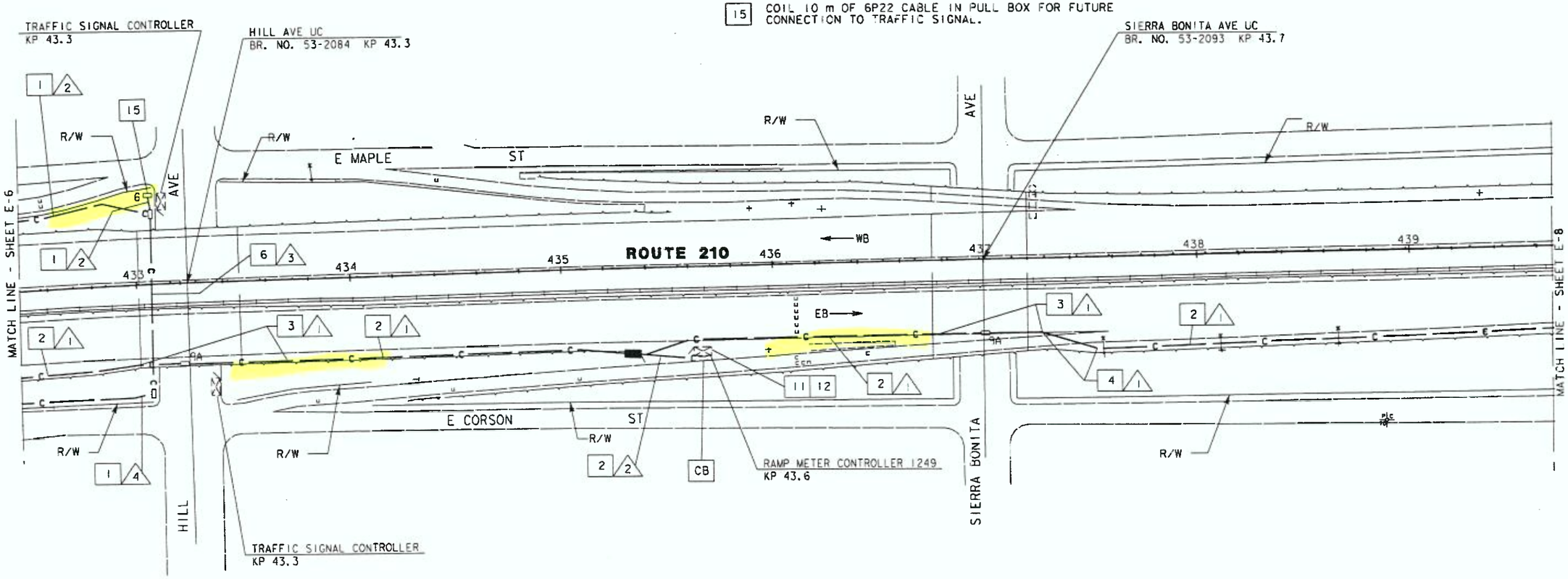

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

E-7

DATE	REVISED BY	DATE REVISED
5/96	SH	5/96
CALCULATED/ DESIGNED BY	CHECKED BY	
PE		

PROJECT E.
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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DGN FILE => $REQUEST

CU 7396

EA 12991

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	210	40.0 / 61.8	81	179

Caltrans Metric

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER R. EVERETT — No. C53217 — EXP. 06/30/99 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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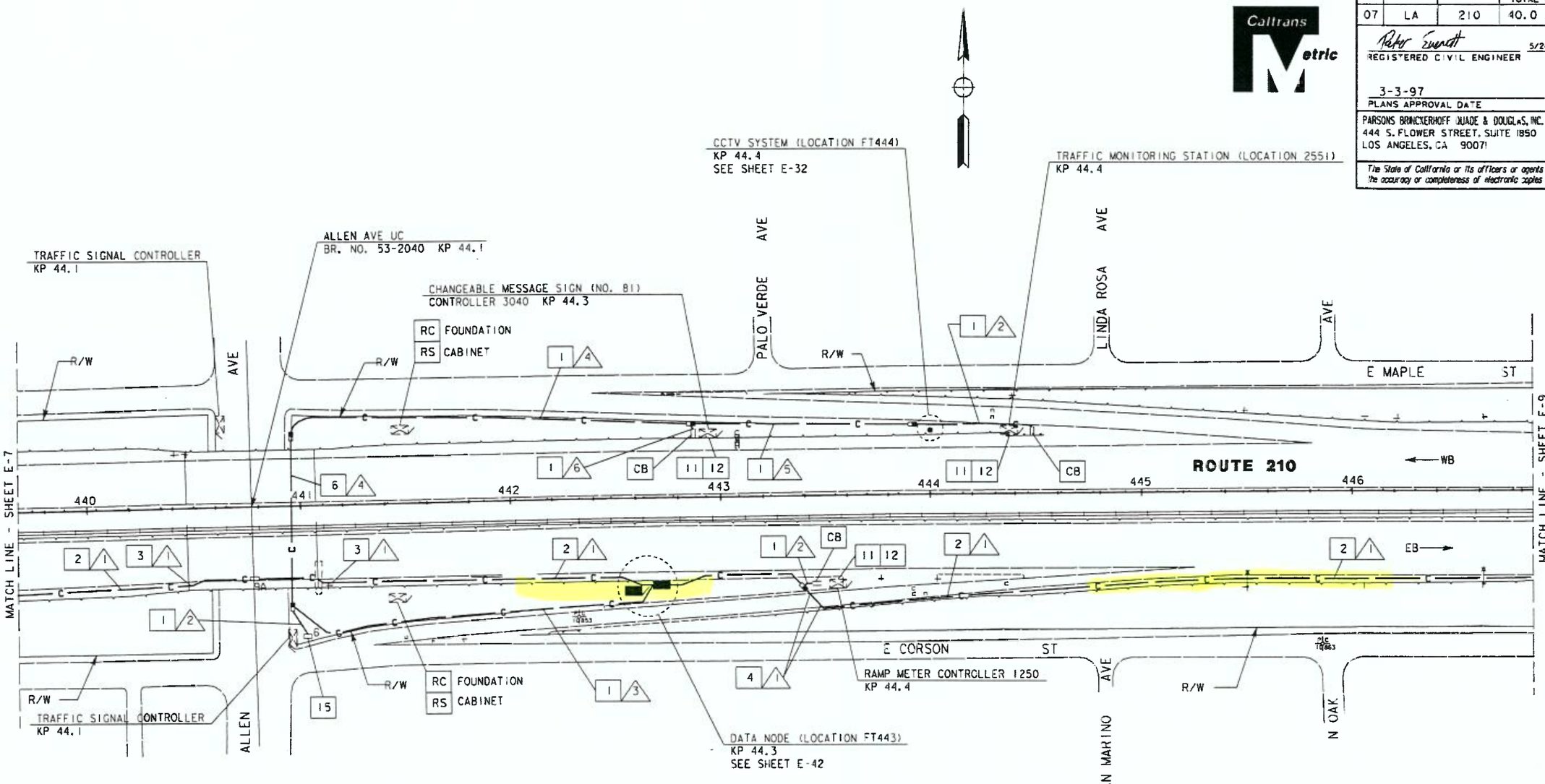

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)													
CONDUCTOR TYPE	FUNCTION	RUN											
		1				2	3		4		5		6
50P22 CABLE	VOICE/DATA	1											
6P22 CABLE	VOICE/DATA					1		5		4		2	2
24SMFO CABLE	VIDEO DISTRIBUTION		1										
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1									
2SMFO B/O CABLE	SHORT HAUL VIDEO						1		1		1		
	SIZE 32 INNERDUCT		1	1			1		1		1		
	CONDUIT SIZE	103			103	53	103		10		103		53

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
3. ATTACH CONDUIT TO BRIDGE. SEE SHEET C-2 FOR DETAILS.
4. JACK CONDUIT BENEATH ROADWAY. SEE SHEET C-7 FOR DETAILS.
6. JACK CONDUIT BENEATH SLOPE PROTECTION. SEE SHEET C-7 FOR DETAILS.
11. INSTALL TELEPHONE BRIDGE AND A 12-PAIR TERMINAL BLOCK IN EXISTING CABINET. SEE SHEET E-73 FOR DETAILS.
12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
15. COIL 10 m OF 6P22 CABLE IN PULL BOX FOR FUTURE CONNECTION TO TRAFFIC SIGNAL.

CCTV SYSTEM, DATA NODE AND COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

E-8

DATE | SH | REVISED BY
5/96 | PE | DATE REVISED
CALCULATED/ DESIGNED BY
CHECKED BY
PROJECT E
PAT SULLIVAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
LAST REVISION 00-00-00
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USERNAME => $USER

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	210	40.0 / 61.8	82	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER R. EVERETT — No. C53217 — EXP. 06/30/99 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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DATE	REVISED BY
5/96	DATE REVISED
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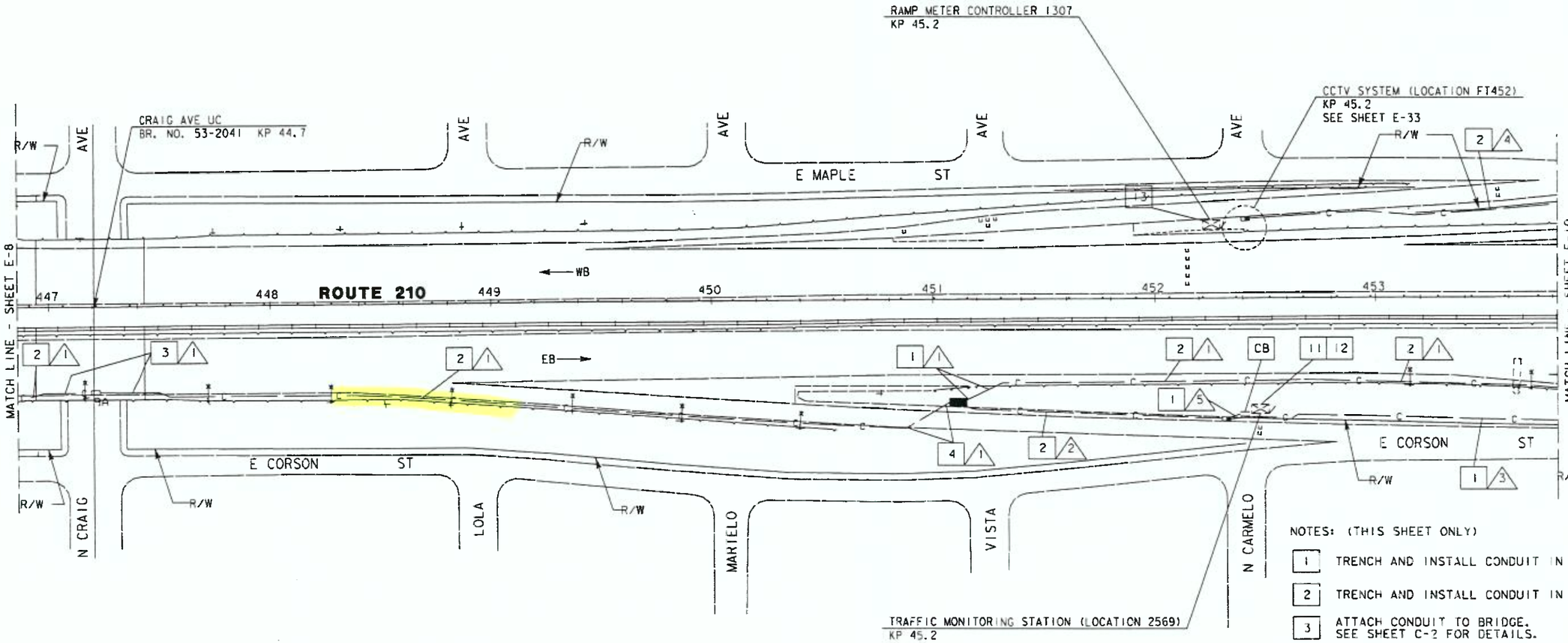
CALCULATED/ DESIGNED BY	CHECKED BY

PROJECT I — PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans



NOTES: (THIS SHEET ONLY)

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12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
13. RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2	RUN 3	RUN 4	RUN 5
50P22 CABLE	VOICE/DATA	1						
6P22 CABLE	VOICE/DATA				3	2	1	1
24SMFO CABLE	VIDEO DISTRIBUTION		1					
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1				
2SMFO B/O CABLE	SHORT HAUL VIDEO				1	1	1	
	SIZE 32 INNERDUCT		1	1	1	1	1	
	CONDUIT SIZE	103		103	103	103	103	53

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

CCTV SYSTEM AND COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

E-9

LAST REVISION 00-00-00 — TIME PLOTTED => $DATE

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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	210	40.0 / 61.8	83	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PETER R. EVERETT — No. C53217 — Exp. 06/30/99 — CIVIL — STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 850
LOS ANGELES, CA 90071

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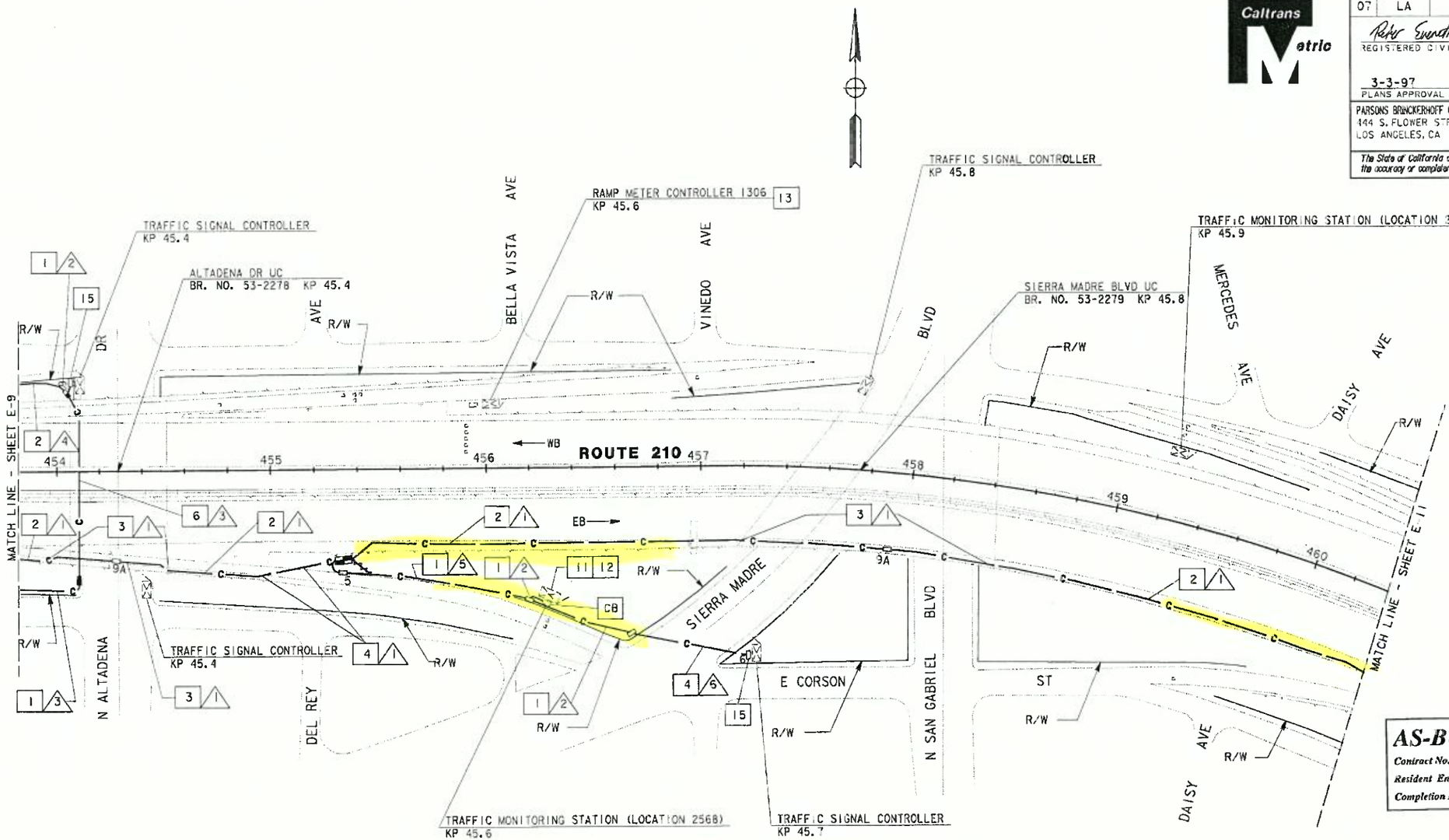

AS-BUILT
Contract No. 07- 129914
Resident Engineer: MANNAA, H.
Completion Date: 09/27/2000

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)											
CONDUCTOR TYPE	FUNCTION	RUN									
		1				2	3		4		5	6
50P22 CABLE	VOICE/DATA	1										
6P22 CABLE	VOICE/DATA					1	2		1		2	1
24SMFO CABLE	VIDEO DISTRIBUTION		1									
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1								
2SMFO B/O CABLE	SHORT HAUL VIDEO							1		1		
	SIZE 32 NNERDUCT		1	1				1		1		
	CONDUIT SIZE		103		103	53	103		103		53	78

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
3. ATTACH CONDUIT TO BRIDGE. SEE SHEET C-2 FOR DETAILS.
4. JACK CONDUIT BENEATH ROADWAY. SEE SHEET C-7 FOR DETAILS.
6. JACK CONDUIT BENEATH SLOPE PROTECTION. SEE SHEET C-7 FOR DETAILS.
11. INSTALL TELEPHONE BRIDGE AND A 12-PAIR TERMINAL BLOCK IN EXISTING CABINET. SEE SHEET E-73 FOR DETAILS.
12. CONNECT 6P22 TO EXISTING BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
13. RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.
15. COIL 10 m OF 6P22 CABLE IN PULL BOX FOR FUTURE CONNECTION TO TRAFFIC SIGNAL.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

E-10

DATE	BY	DESCRIPTION
5/96	SH	REVISED
5/96	PE	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FILE NAME: F:\PDSDWGN\DIEGN DATE: 15MAY96 1454 BB

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DGN FILE => 712991u10260713 42

CU 7396

EA 129911

LAST REVISION 00-00-00

TIME PLOTTED => 26-Feb-2001

USERID: HHuynh@T7NT6044 FILE: f:\projects\129911_ua\ab\712991u10.dgn DATE: Mon Feb 26 2001 TIME: 07:14

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	210	40.0 / 61.8	84	179

Peter Everett 5/24/96
REGISTERED CIVIL ENGINEER

3-3-97
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER PETER R. EVERETT No. C53217 Exp. 06/30/99 CIVIL STATE OF CALIFORNIA

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
444 S. FLOWER STREET, SUITE 1850
LOS ANGELES, CA 90071

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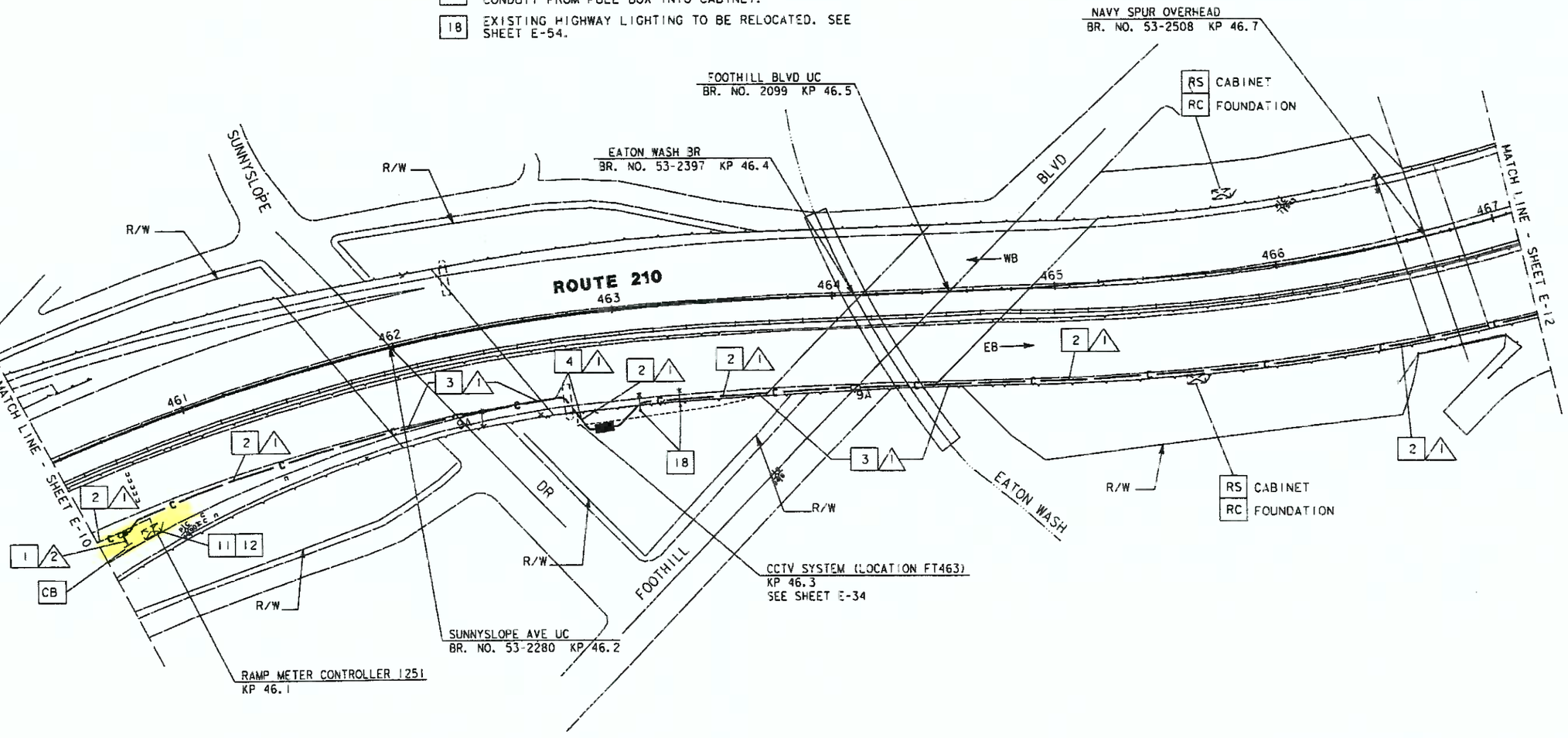
Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1				RUN 2
50P22 CABLE	VOICE/DATA	1				
6P22 CABLE	VOICE/DATA					1
24SMFO CABLE	VIDEO DISTRIBUTION		1			
24SMFO CABLE	MULTIPLEXED VIDEO AND DATA			1		
	SIZE 32 INNERDUCT		1	1		
	CONDUIT SIZE		103		103	53

NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT IN SOIL.
2. TRENCH AND INSTALL CONDUIT IN ASPHALT.
3. ATTACH CONDUIT TO BRIDGE. SEE SHEET C-2 FOR DETAILS.
4. JACK CONDUIT BENEATH ROADWAY SEE SHEET C-7 FOR DETAILS.
11. INSTALL TELEPHONE BRIDGE AND A 12-PAIR TERMINAL BLOCK IN EXISTING CABINET. SEE SHEET E-73 FOR DETAILS.
12. CONNECT 6P22 TO BRIDGE/CONTROLLER. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET.
18. EXISTING HIGHWAY LIGHTING TO BE RELOCATED. SEE SHEET E-54.



NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.

CCTV SYSTEM AND COMMUNICATION SYSTEM ROUTING

SCALE: 1:1000

E-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT E
PAT SULLIVAN

CALCULATED/DESIGNED BY SH DATE 5/96 REVISED BY
CHECKED BY PE 5/96 DATE REVISED

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

FILE NAME: T:\TOS\DWGN\IDEN.DGN DATE: 15MAY96 1528 BB

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 7396

EA 129911