INFORMATION HANDOUT

For Contract No. 07-4Y9704
At 07-LA-101-8.0/11.5

Identified by
Project ID 0700020808

As-Builts

Fiber Optic System As-Built Drawings

Traffic Monitoring Station, Loop Detector, CCTV and Communication System Routing

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	73	154

REGISTERED ELECTRICAL ENGINEER 2/17/95

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.

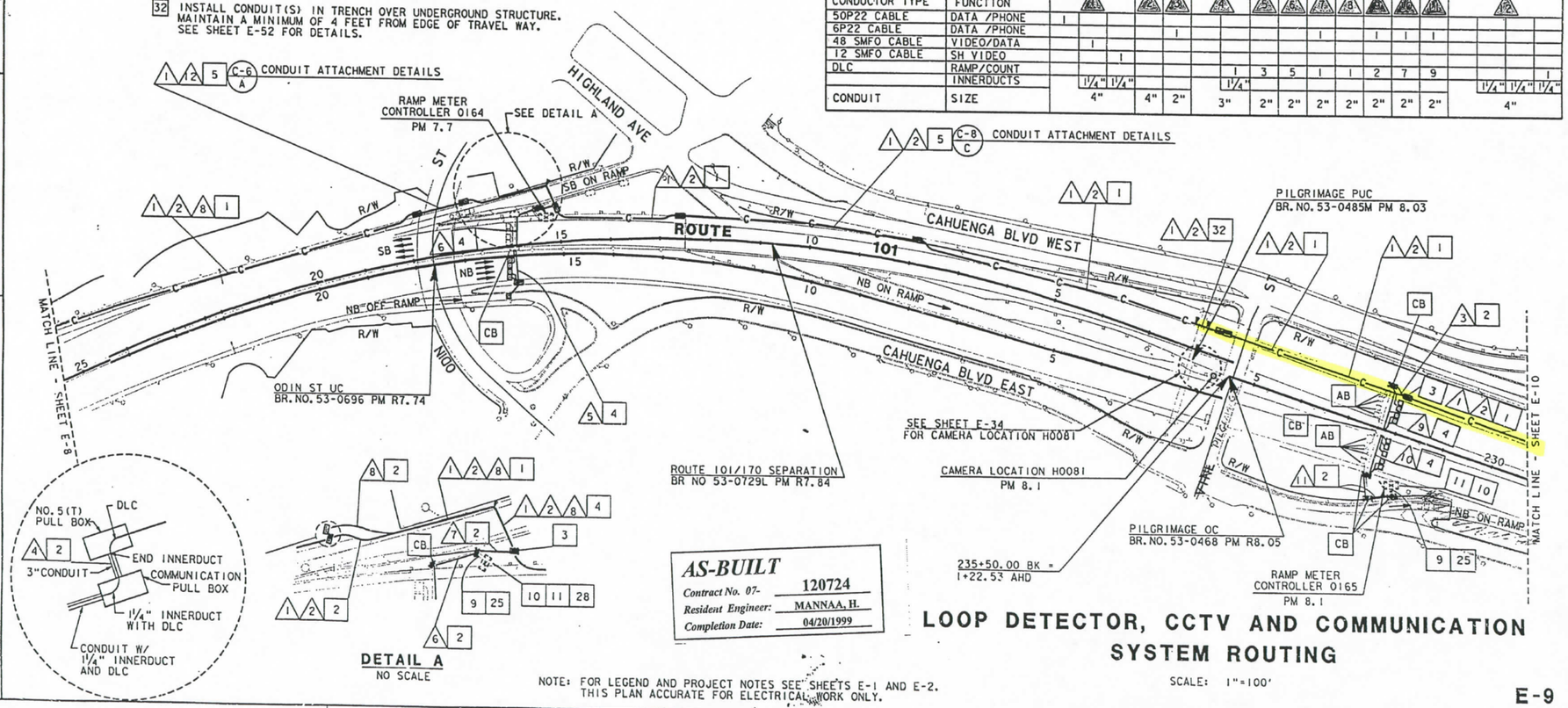
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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"	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'

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

E-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROJECT ENGINEER PAT SULLIVAN
CALCULATED/DESIGNED BY ES DATE 2/95
CHECKED BY JZ 5/95
REVISED BY DATE REVISED

FCRM DC-OE-92-PE (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0' 1 2 3
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DGN FILE => /usr/tomd/P39/712072u09.dgn
CU 07387 EA 120721
LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 09:07

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							1		1
48 SMFO CABLE	VIDEO/DATA		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

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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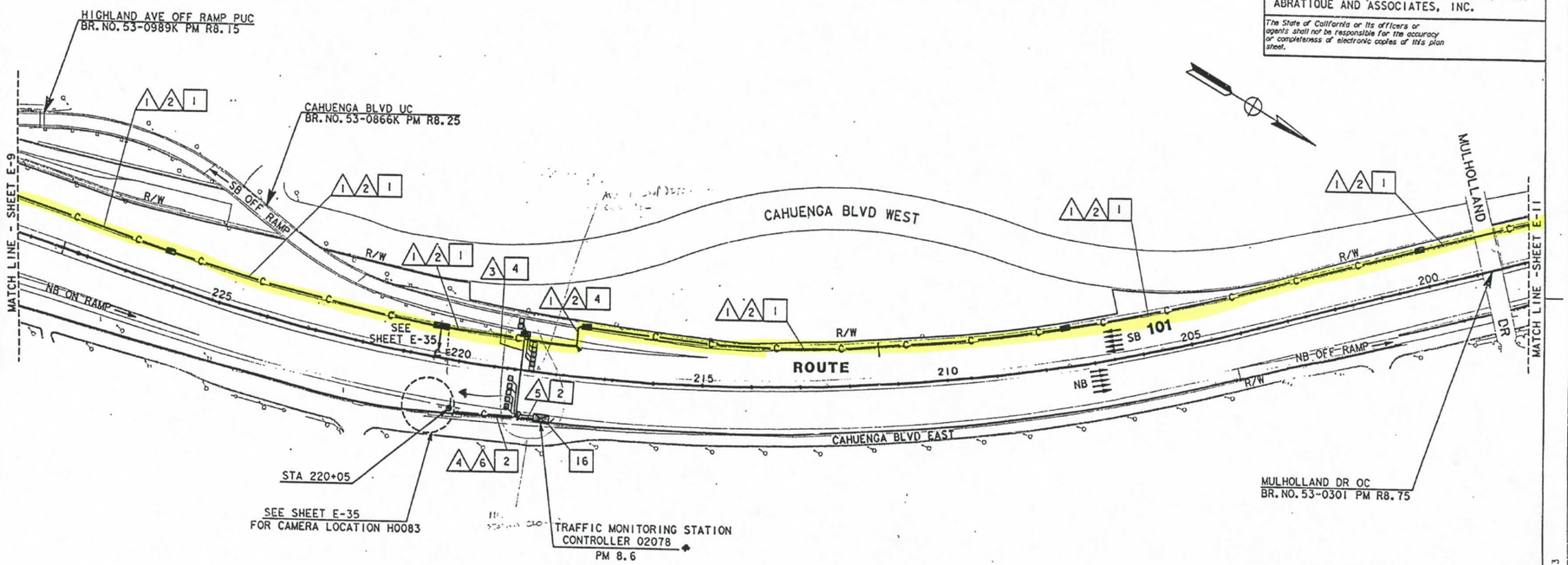

AS-BUILT
Contract No. 07- 120724
Resident Engineer: MANNAA, H.
Completion Date: 04/20/1999

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: ES DATE 2/95
CHECKED BY: JZ 5/95
REVISED BY
DATE REVISED

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

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

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DGN FILE => /usr/mikesi/P0/712072u10.dg

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 19-OCT-1995 15:33

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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.

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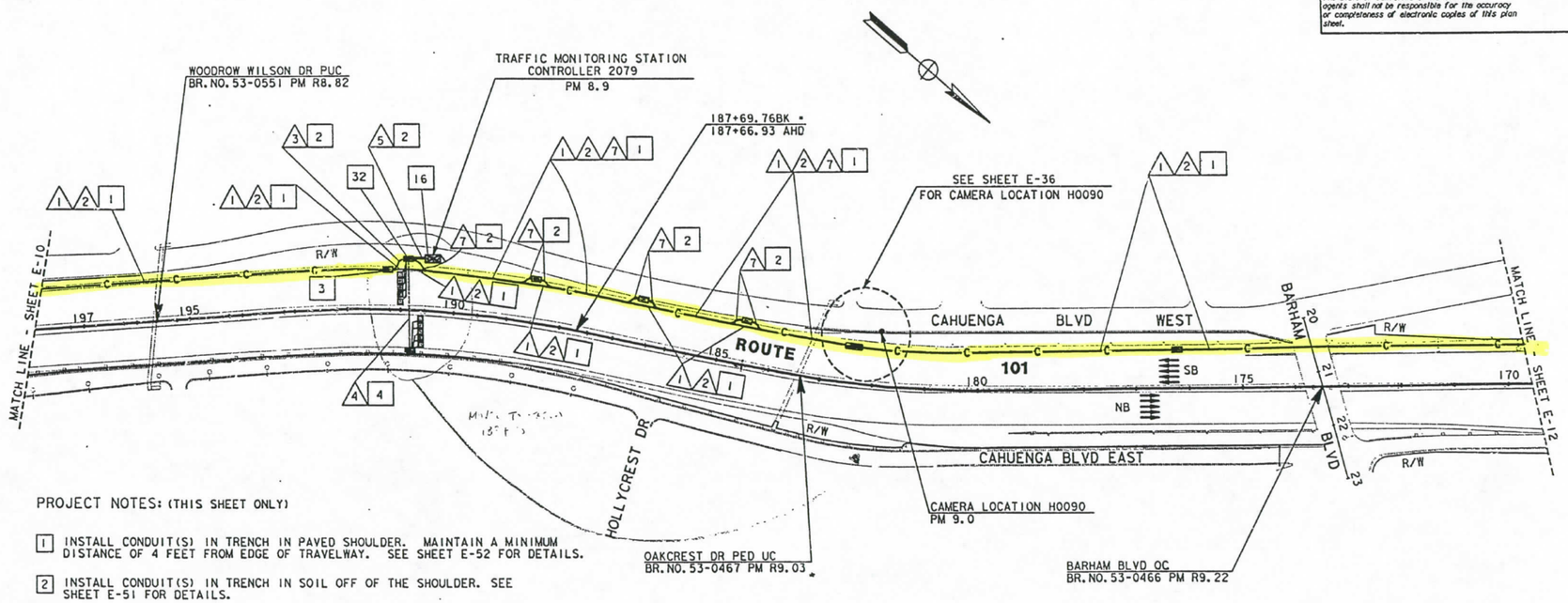
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

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.

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-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

PROJECT ENGINEER: PAT SULLIVAN

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

LAST REVISION 00-00-00
TIME PLOTTED => 17-OCT-1995 12:39

FORM DC-CE-92-FF (REV. 3/88)
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3
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DGN FILE => /usr/tomd/P39/712072u11.dgn
CU 07387
EA 120721

< 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	76	154

REGISTERED ELECTRICAL ENGINEER 2/17/95

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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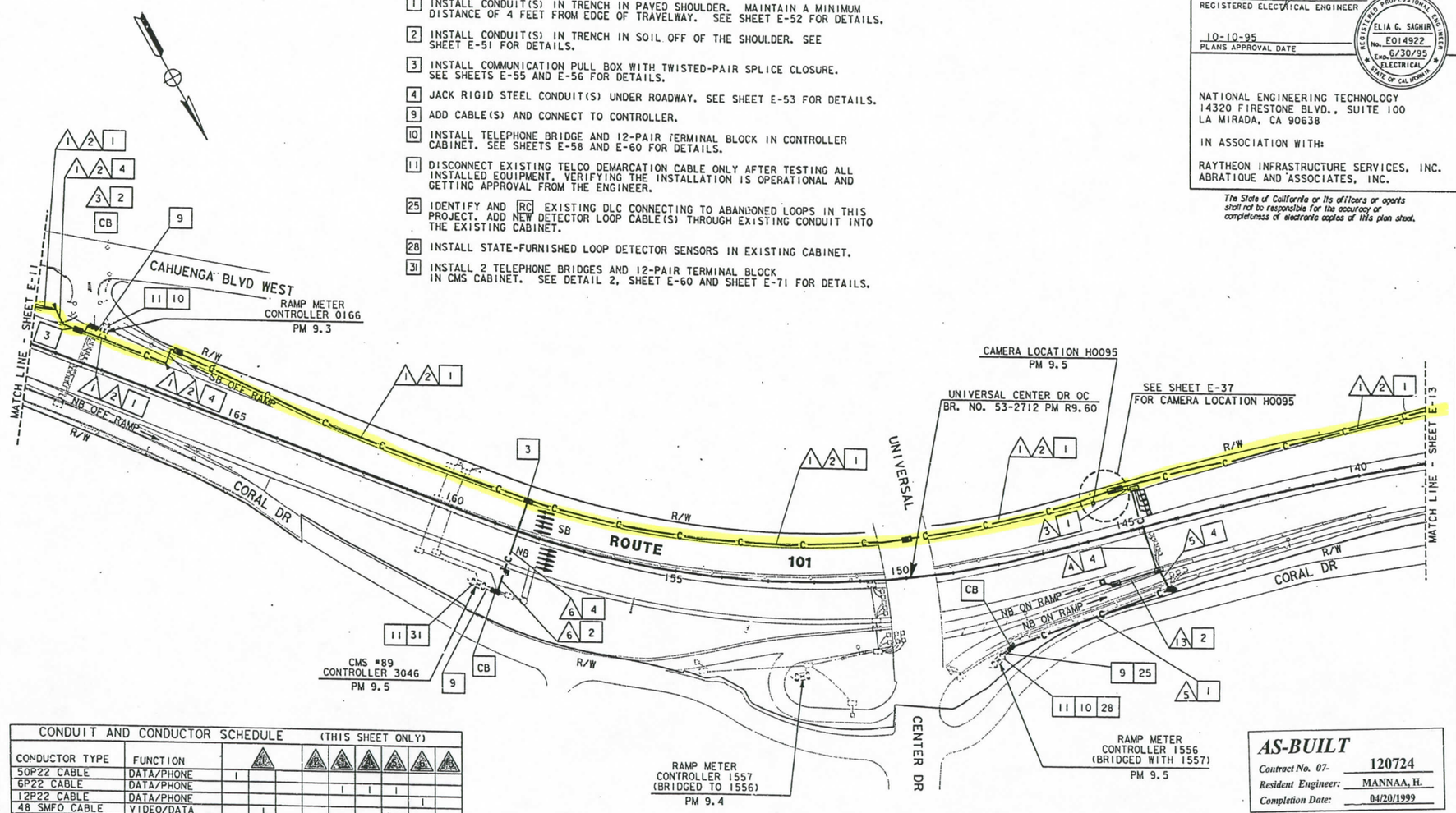
PROJECT NOTES: (THIS SHEET ONLY)

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. 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								
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			1		
DLC	RAMP/COUNT					5	6		
	INNERDUCT		1 1/4"	1 1/4"					
CONDUIT	SIZE		4"		4"	2"	2"	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'

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

E-12

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

PROJECT ENGINEER: PAT SULLIVAN

XXXXXXXXXXXXXXXXXXXXXXXX STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FORM DC-1E-96 OF (REV. 3/88)

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

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DGN FILE => /usr/richard/P11/712072u12.

CU 07387 EA 120721

LAST REVISION 00-00-00 TIME PLOTTED => 17-OCT-1995 10:52

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.

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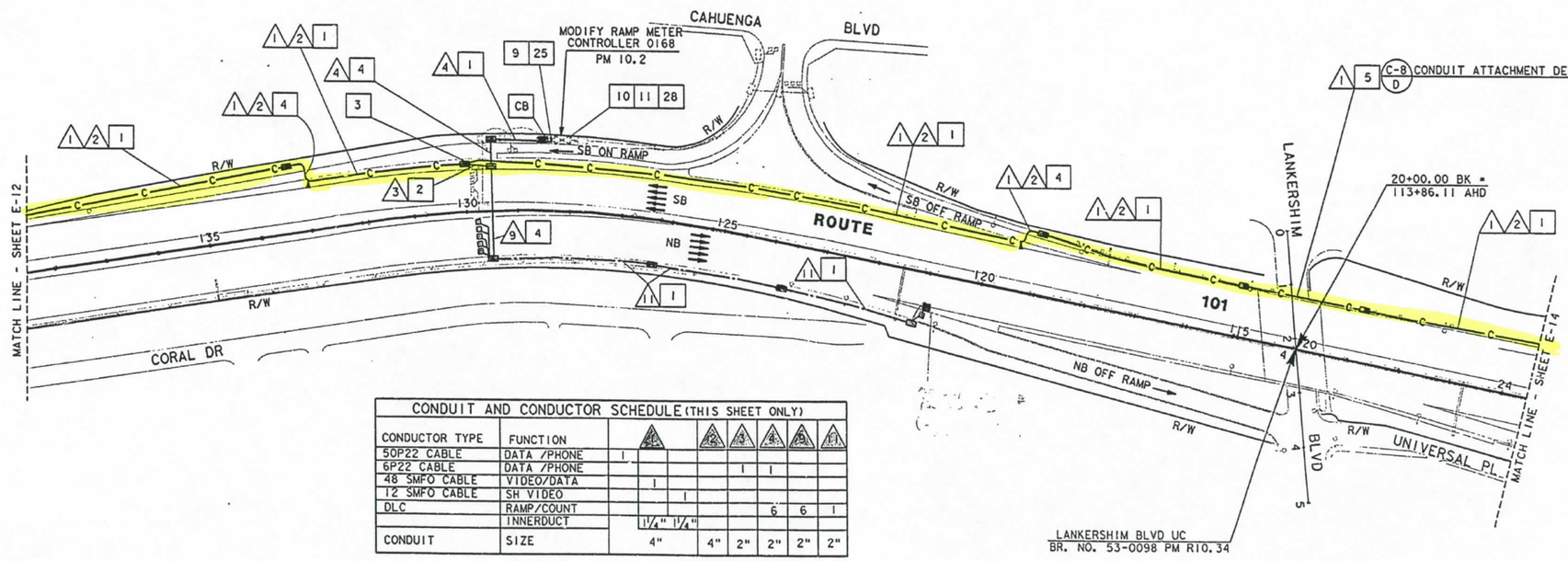
PROJECT NOTES: (THIS SHEET ONLY)

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. 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	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

FORM CS-SE-92-PF (REV. 3/88)

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

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DGN FILE => /usr/mikesi/PO/712072ui3.dg

CU 07387 EA 120721

TIME PLOTTED => 19-OCT-1995 15:33

LAST REVISION 00-00-00

< 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	78	154

REGISTERED ELECTRICAL ENGINEER 2/17/95

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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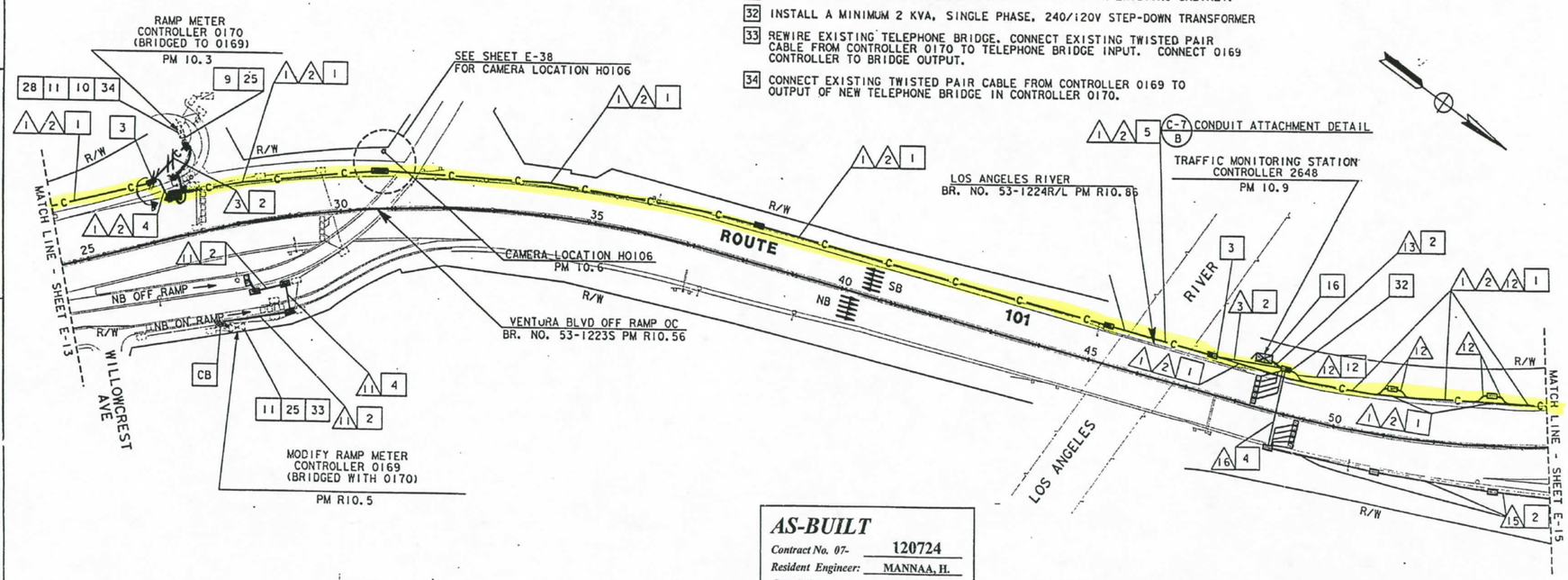
PROJECT NOTES: (THIS SHEET ONLY)

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 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	11	12	13	15	16
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	1 1/4"	1 1/4"						
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	5/95	

CALCULATED/DESIGNED BY ES
CHECKED BY JZ

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/PII/712072ui4.

CU 07387 EA 120721

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	79	154

REGISTERED ELECTRICAL ENGINEER 2/17/95

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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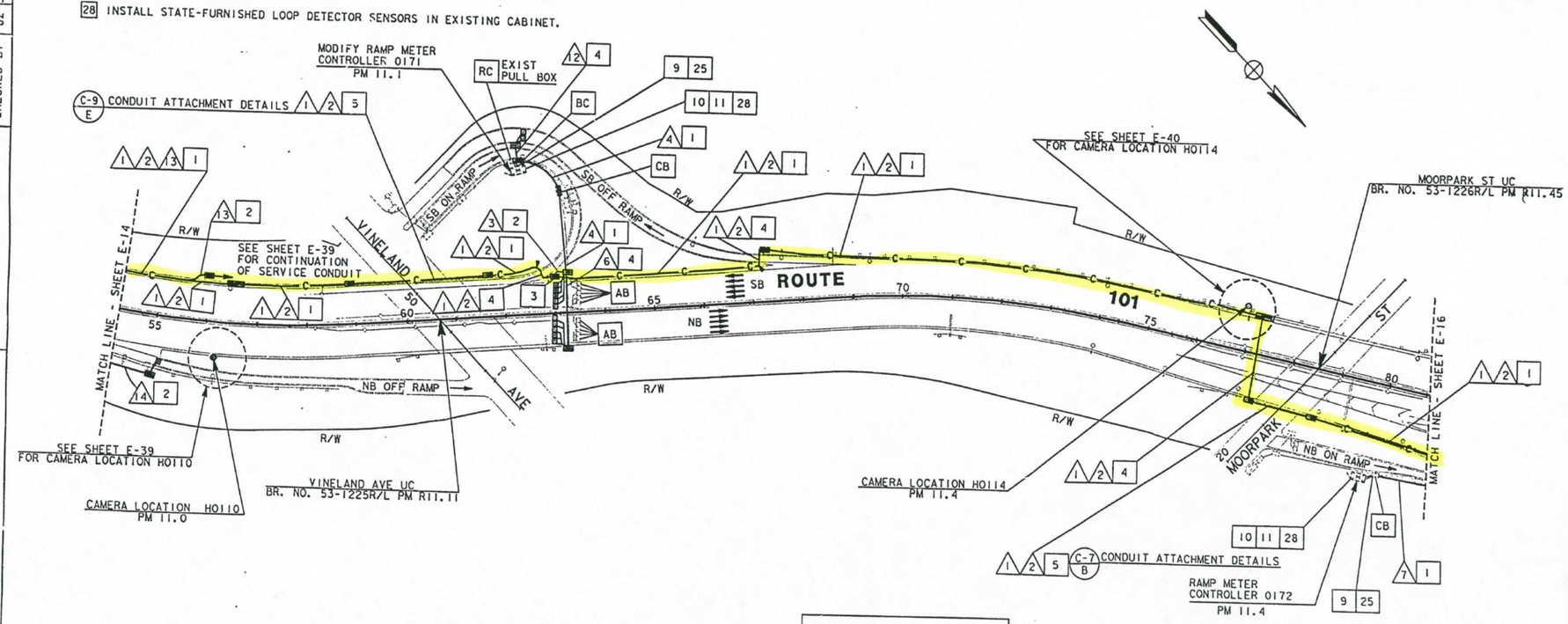
PROJECT NOTES: (THIS SHEET ONLY)

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.
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	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		1 1/4"	1 1/4"							
CONDUIT	SIZE		4"	4"	2"	2"	2"	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, 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	ES	DATE 2/95	REVISED BY
CHECKED BY	JZ	5/95	DATE REVISED

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FORM DT-CE-92-44 (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	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	101	R4.4/R17.1	80	154

REGISTERED ELECTRICAL ENGINEER 2/17/95

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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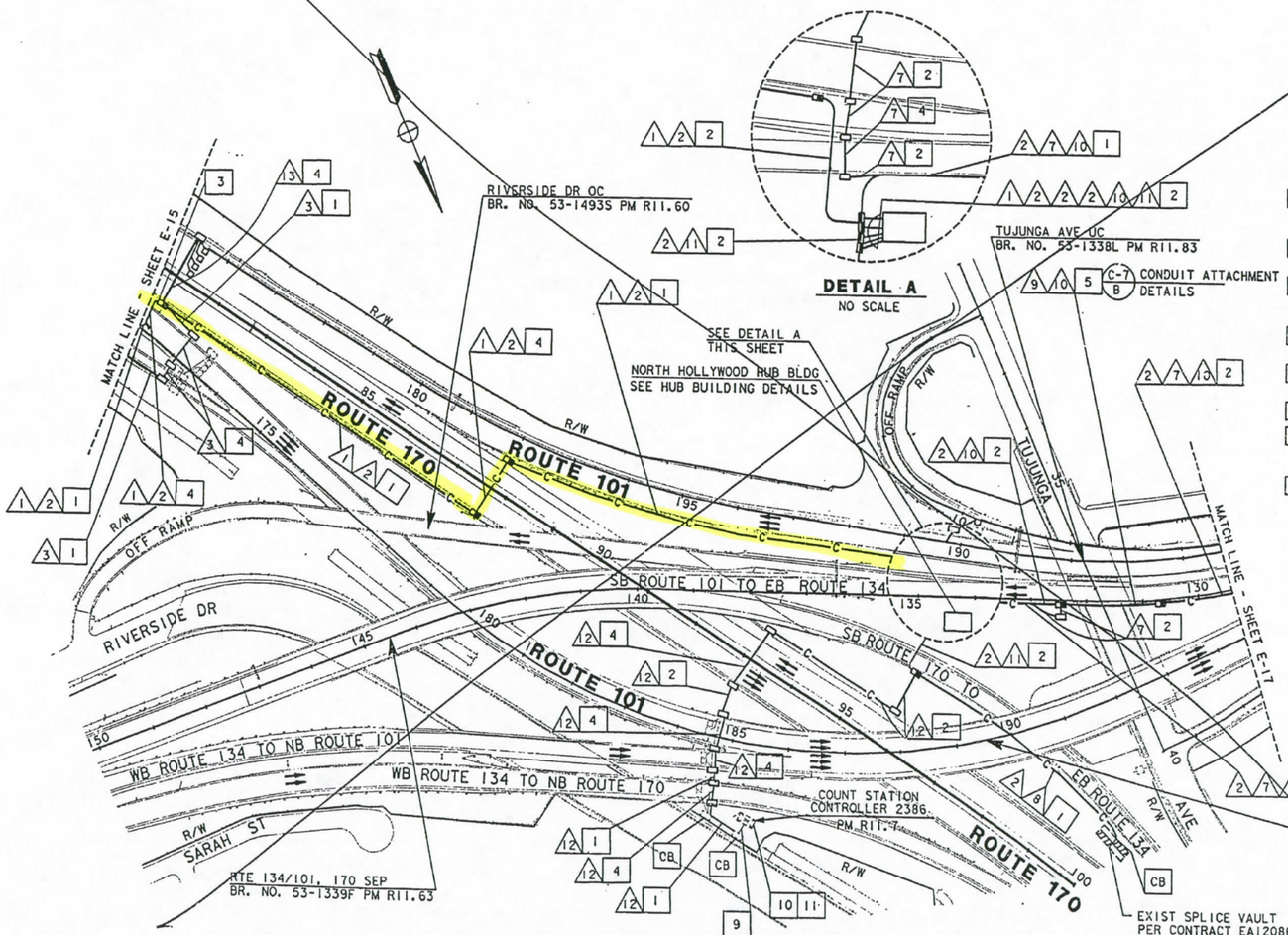
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	1		2	3	5	7	8		9		10		11		12	13
50P22 CABLE	DATA/PHONE	1															
6P22 CABLE	DATA/PHONE											1					
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					1				
DLC	RAMP COUNT				4	7	1			1				1			
	INNERDUCT	1 1/4"	1 1/4"					1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"		4
CONDUIT	SIZE	4"		4"	2"	2"	2"	4"		4"		4"		4"		2"	2"

(E) - EXISTING CONDUIT OR CONDUCTOR



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.
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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

REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY	ES	DATE 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

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DGN FILE => /usr/mikesl/P0/712072ul6.dg

CU 07387 EA 120721

LAST REVISION 00-00-00

TIME PLOTTED => 19-OCT-1995 15:33