INFORMATION HANDOUT

For Contract No. 07-1W7004
At 07-LA-66-PM 0.0/3.0

Identified by
Project ID 0713000050

As-Builts

Fiber Optic System As-Built Drawings

Modify Signal and Communication System Routing

FO from ITS

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	13	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

GENERAL NOTES: (FOR SHEETS E-2 THROUGH E-51)

1. ALL 12SMFO CABLES TERMINATING AT A No. 6(E) PULL BOX OR SPLICE VAULT SHALL BE SPLICED IN THE NEW FIBER OPTIC SPLICE CLOSURE.
2. THE CONTRACTOR SHALL PROTECT ALL UTILITY FACILITIES IN PLACE DURING CONSTRUCTION.
3. ALL EXISTING sic PULL BOXES AND 90 DEGREE CONDUIT BENDS SHALL BE RC AND INSTALL NEW No. 6 PULL BOXES AND 45 DEGREE BENDS PER DETAIL A, SHEET E-38. UNLESS OTHERWISE NOTED ON THE PLANS.
4. ALL NEW INDUCTIVE LOOP DETECTORS SHALL HAVE NEW STUB-OUT.
5. ALL NEW VEHICLE SIGNAL HEADS SHALL BE LED AND 300 mm. ALL NEW PEDESTRIAN SIGNAL HEADS SHALL BE LED TYPE.

ABBREVIATIONS: (FOR SHEETS E-2 THROUGH E-51)

#	- NUMBER
12SMFO	- 12 SINGLEMODE FIBER OPTIC CABLE
60SMFO	- 60 SINGLEMODE FIBER OPTIC CABLE
AR	- AS REQUIRED
AWG	- AMERICAN WIRE GAUGE
CCM	- CAMERA CONTROL MODEM
C-MIC	- CABINET MOUNT INTERFACE CENTER
COAX	- COAXIAL CABLE
DACCS	- DIGITAL DIVISION MULTIPLEXER
DS-1	- DIGITAL SIGNAL LEVEL 1
DSX-1	- DIGITAL SIGNAL CROSS-CONNECT LEVEL 1
FDU	- FIBER DISTRIBUTION UNIT
FOTM	- FIBER OPTIC TRAFFIC MODEM
FOCM	- FIBER OPTIC CONTROL MODEM
LARTMC	- LOS ANGELES REGIONAL TRAFFIC MANAGEMENT CENTER
LCU	- LOCAL CONTROL UNIT
MUX	- MULTIPLEXER
RX	- RECEIVER
SD XX	- SYSTEM INDUCTIVE LOOP DETECTOR
SONET	- SYNCHRONOUS OPTICAL NETWORK
TDM	- TIME DIVISION MULTIPLEXER
TSMOD#	- TRAFFIC SIGNAL MODEM NUMBER
TX	- TRANSMITTER
VMX	- VIDEO MULTIPLEXER
VRX	- VIDEO RECEIVER
V-RX or VRD	- VIDEO RECEIVER DATA
V-TX or VTD	- VIDEO TRANSMITTER DATA

LEGEND: (FOR SHEETS E-2 THROUGH E-51)

- MODEL 334-TV CABINET
- CCTV CAMERA POLE LOCATION
- OPTICAL FIBER CABLE
- SPLICE VAULT

AS-BUILT

Contract No. 07- 257604
Resident Engineer: W. YUE
Completion Date: 07/25/07

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING DATA NODE VIDEO NODE

(LEGEND AND NOTES)

NO SCALE

E-1

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

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

USERNAME => s124928
DGN FILE => 7257601ug001.dgn

CU 07382

EA 257601

DATE	REVISED BY
7/06	DATE REVISED

CALCULATED/ DESIGNED BY: ST
CHECKED BY: FM

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:26

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	66	0.0/8.3	14	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

EXISTING POLE AND EQUIPMENT SCHEDULE

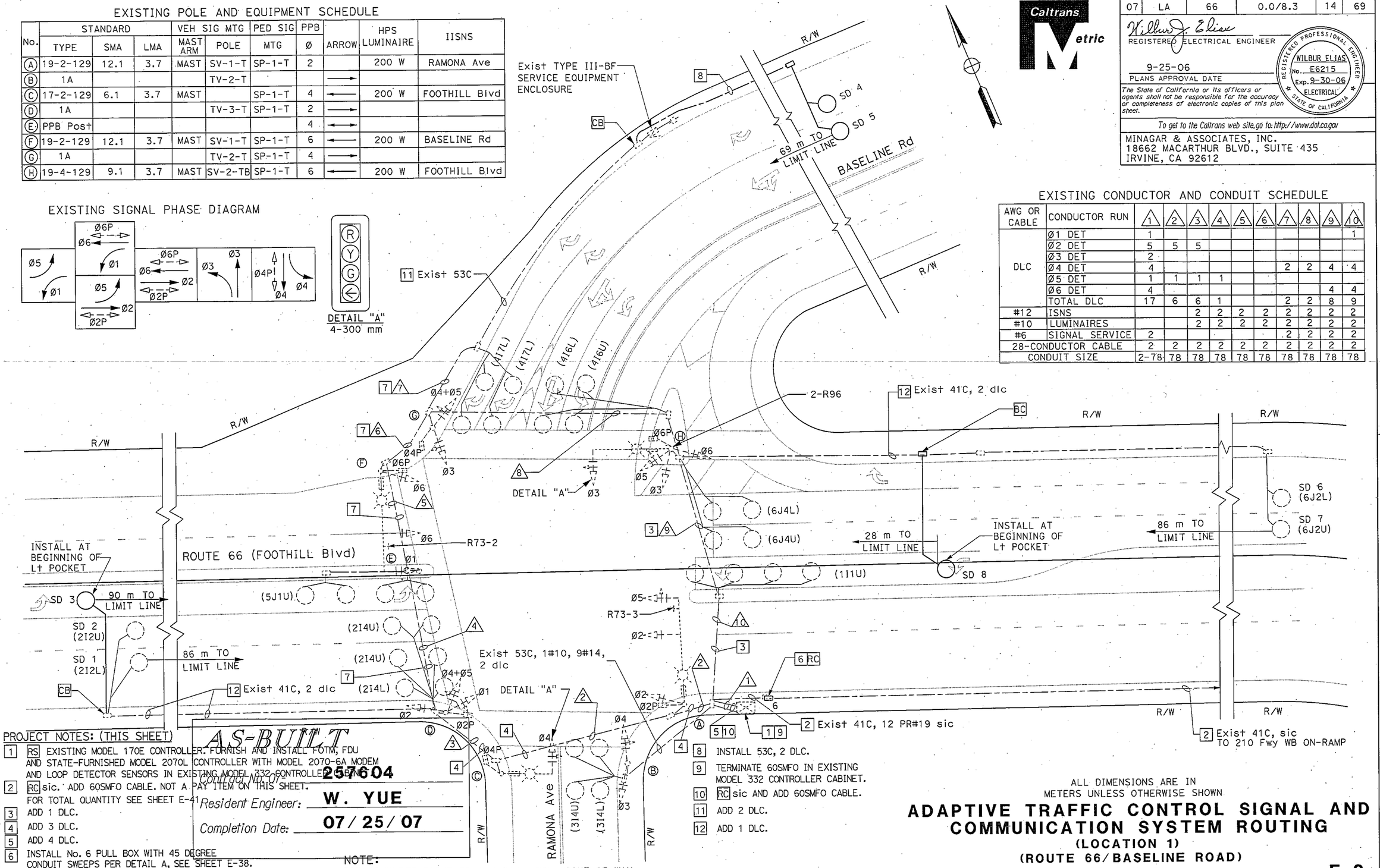
No.	STANDARD TYPE	SMA	LMA	VEH SIG MTG MAST ARM	VEH SIG MTG POLE	PED SIG MTG	PPB Ø	ARROW	HPS LUMINAIRE	IISNS
(A)	19-2-129	12.1	3.7	MAST	SV-1-T	SP-1-T	2		200 W	RAMONA Ave
(B)	1A				TV-2-T			→		
(C)	17-2-129	6.1	3.7	MAST		SP-1-T	4	←	200 W	FOOTHILL Blvd
(D)	1A				TV-3-T	SP-1-T	2	→		
(E)	PPB Post						4	←→		
(F)	19-2-129	12.1	3.7	MAST	SV-1-T	SP-1-T	6	←	200 W	BASELINE Rd
(G)	1A				TV-2-T	SP-1-T	4	→		
(H)	19-4-129	9.1	3.7	MAST	SV-2-TB	SP-1-T	6	←	200 W	FOOTHILL Blvd

EXISTING SIGNAL PHASE DIAGRAM

DETAIL "A"
4-300 mm

EXISTING CONDUCTOR AND CONDUIT SCHEDULE

AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10
DLC	Ø1 DET	1									1
	Ø2 DET	5	5	5							
	Ø3 DET	2									
	Ø4 DET	4						2	2	4	4
	Ø5 DET	1	1	1	1						
	Ø6 DET	4								4	4
	TOTAL DLC	17	6	6	1			2	2	8	9
#12	ISNS			2	2	2	2	2	2	2	2
#10	LUMINAIRES			2	2	2	2	2	2	2	2
#6	SIGNAL SERVICE	2						2	2	2	2
28-CONDUCTOR CABLE		2	2	2	2	2	2	2	2	2	2
CONDUIT SIZE		2-78	78	78	78	78	78	78	78	78	78



PROJECT NOTES: (THIS SHEET)

1. RS EXISTING MODEL 170E CONTROLLER. FURNISH AND INSTALL FOTM, FDU AND STATE-FURNISHED MODEL 2070L CONTROLLER WITH MODEL 2070-6A MODEM AND LOOP DETECTOR SENSORS IN EXISTING MODEL 332 CONTROLLER CABINET.
2. RC sic. ADD 60SMFO CABLE. NOT A PAY ITEM ON THIS SHEET. FOR TOTAL QUANTITY SEE SHEET E-41
3. ADD 1 DLC.
4. ADD 3 DLC.
5. ADD 4 DLC.
6. INSTALL No. 6 PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL A, SEE SHEET E-38.
7. ADD 2 DLC.
8. INSTALL 53C, 2 DLC.
9. TERMINATE 60SMFO IN EXISTING MODEL 332 CONTROLLER CABINET.
10. RC sic AND ADD 60SMFO CABLE.
11. ADD 2 DLC.
12. ADD 1 DLC.

AS-BUILT
Contract No. 07-257604
Resident Engineer: W. YUE
Completion Date: 07/25/07

NOTE:
FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING
(LOCATION 1)
(ROUTE 66/BASELINE ROAD)

SCALE: 1 : 200

E-2

RELATIVE BORDER SCALE IS IN MILLIMETERS
0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua002.dgn

CU 07382 | EA 257601

LAST REVISION 00-00-00 | DATE PLOTTED => 08-NOV-2007 | TIME PLOTTED => 10:26

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN OVERSIGHT: YEFIM ZABEZHINSKY
CALCULATED/DESIGNED BY: ST | CHECKED BY: FM
DATE REVISED: 7/06 | REVISED BY:
DATE REVISED: 7/06 | REVISED BY:

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	15	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER WILBUR ELIAS No. E6215 Exp. 9-30-06 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

Caltrans Metric

EXISTING SIGNAL PHASE DIAGRAM

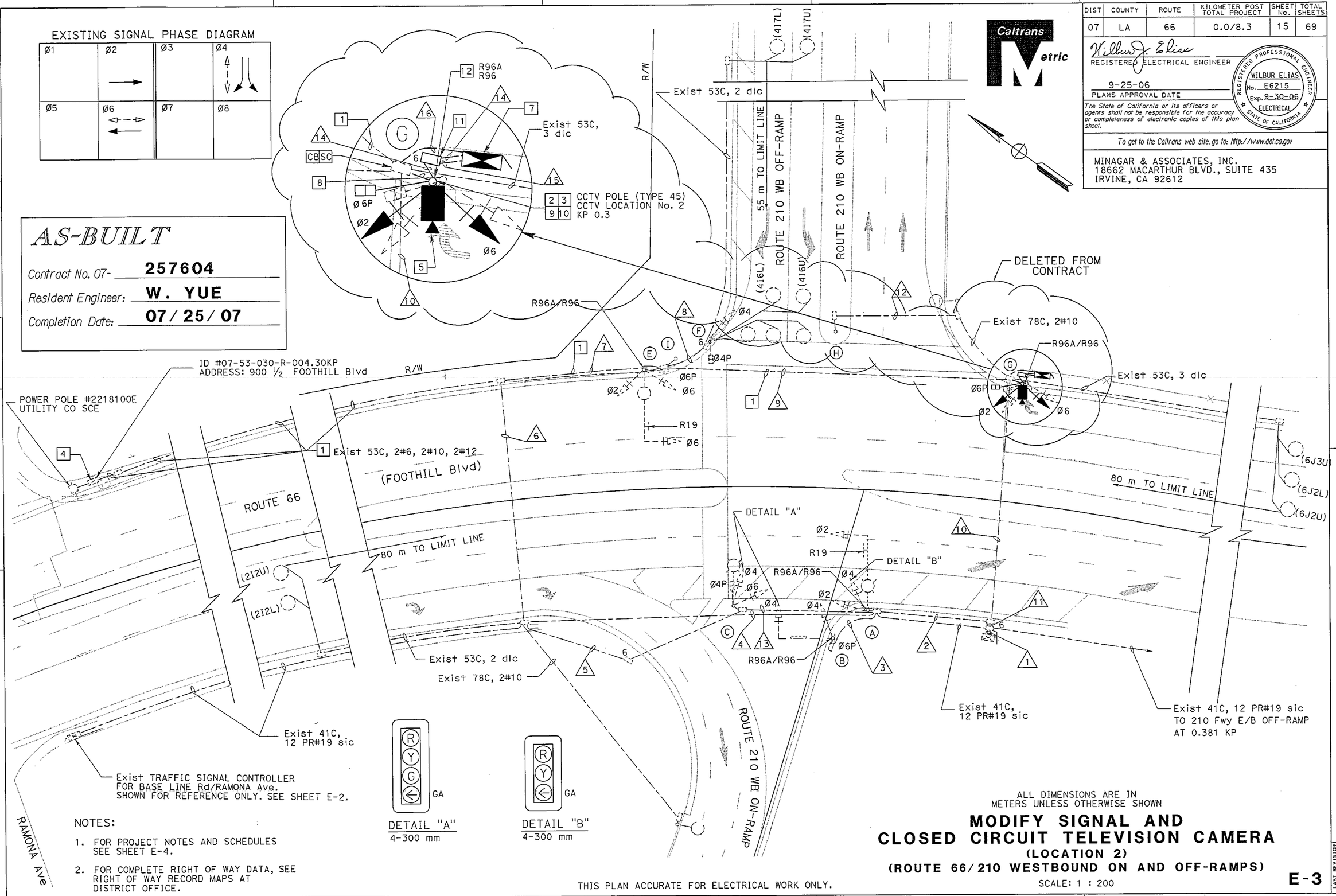
Ø1	Ø2	Ø3	Ø4
Ø5	Ø6	Ø7	Ø8

AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**



NOTES:

1. FOR PROJECT NOTES AND SCHEDULES SEE SHEET E-4.
2. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA
(LOCATION 2)
(ROUTE 66/210 WESTBOUND ON AND OFF-RAMPS)

SCALE: 1 : 200

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY
CALCULATED/DESIGNED BY: ST
CHECKED BY: FM
DATE 7/06 REVISED BY
7/06 DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:26

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80
USERNAME => s124928
DGN FILE => 7257601ua003.dgn
CU 07382
EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	16	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

EXISTING CONDUCTOR AND CONDUIT SCHEDULE

AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10	11	12	13
28-CONDUCTOR CABLE	C1 CABLE	2	1	1	1	1	1	1	1	1	1	1		1
	C2 CABLE	2	1		1		1	1		1	1	1		1
DLC	Ø2 DETECTOR	2	2		2									
	Ø4 DETECTOR	5							5	5	5	5		
	Ø6 DETECTOR	3									3	3		
12#19 SIC	EXISTING	2			1									
#6	SIGNAL SERVICE	2	2		2		2							
#12	IISNS			2	2		2							
#10	EXISTING LUMINAIRE		2		2		2	2		2	2			2
	CONDUIT SIZE	2-78 1-53	78	78	78	78	78	78	78	78	78	78	78	78

CONDUCTOR AND CONDUIT SCHEDULE (CCTV)

AWG OR CABLE	CONDUCTOR RUN	14	15	16
12 SMFO CABLE	DATA/VIDEO CABLE	-	1	-
SEE SHT E-35	COMPOSITE VIDEO CABLE	1	-	-
#6	CCTV SERVICE	-	-	3
	CONDUIT SIZE	78	78	53

DELETED FROM CONTRACT

POLE AND EQUIPMENT SCHEDULE (CCTV)

No.	STANDARD TYPE	SMA	LMA	VEH SIG MTG MAST ARM	VEH SIG MTG POLE	PED SIGNAL MTG	PPB Ø	PPB ARROW	HPS LUMINAIRE	SPECIAL REQUIREMENTS IISNS
(G)	CCTV TYPE 45	-	-	-	SV-2-T (N)	SP-1-T(N)	6	→	-	-

EXISTING POLE AND EQUIPMENT SCHEDULE

No.	STANDARD TYPE	SMA	LMA	VEH SIG MTG MAST ARM	VEH SIG MTG POLE	PED SIGNAL MTG	PPB Ø	PPB ARROW	HPS LUMINAIRE	SPECIAL REQUIREMENTS IISNS
(A)	19-2-129	9.1	3.7	MAS	SV-1-T				310 W	
(B)	17-2-129	6.1		MAS	SV-1-T					FOOTHILL Blvd
(C)	1-A				TV-1-T					
(E)	19-2-129	9.1	3.7	MAS	SV-2-T	SP-1-T			310 W	
(F)	1-A				TV-1-T		6	→		
(H)	PPB Post						6	→		
(I)	PPB Post						4	←		

PROJECT NOTES: (FOR SHEET E-3)

1. ADD 3#6 (CCTV) CONDUCTOR.
2. RG EXISTING TYPE 1-A STANDARD FOUNDATION.
3. RL EXISTING TYPE 1-A STANDARD WITH EXISTING SIGNAL HEADS TO MAINTAIN OPERATION DURING INSTALLATION OF CCTV 45 POLE. THE CONTRACTOR SHALL FURNISH A RELOCATION PLAN TO THE ENGINEER FOR APPROVAL.
4. EXISTING 120/240 V TYPE III-BF METERED SERVICE ID NO: 07-53-030-R-004.30 KP. ADDRESS: 900 ½ FOOTHILL BLVD. ADD 30 A, 120 V, 1P, CIRCUIT BREAKER FOR CCTV.
5. INSTALL CCTV CAMERA ASSEMBLY, SEE SHEET E-35.
7. INSTALL MODEL 334-TV CONTROLLER CABINET, LOCAL CONTROL UNIT, VIDEO TRANSMITTER, C-MIC, FOCM AND CABINET WIRING PER SHEET E-37.
8. INSTALL 78C, 12CSC (SIGNAL CONDUCTORS), 3CSC (PPB).
9. INSTALL STATE-FURNISHED CCTV 45 POLE AT EXACT LOCATION OF EXISTING TYPE 1-A STANDARD. SEE SHEET E-36.
10. RG TEMPORARY EXISTING TYPE 1-A STANDARD AFTER NEW CCTV 45 POLE WITH SIGNAL EQUIPMENT ARE INSTALLED AND OPERATIONAL.
11. INSTALL No. 6 PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL A. SEE SHEET E-38.
12. RL EXISTING R96A AND R96 SIGNS FROM TYPE 1-A STANDARD TO NEW STATE-FURNISHED CCTV 45 POLE.
13. FOR COMMUNICATION SYSTEM ROUTING SEE SHEET E-5.
14. FOR EXISTING UTILITIES SEE SHEET U-2.

AS-BUILT

Contract No. 07- 257604

Resident Engineer: W. YUE

Completion Date: 07/25/07

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA

(LOCATION 2)

(ROUTE 66/210 WESTBOUND ON AND OFF-RAMPS)

NO SCALE

E-4

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

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

USERNAME => s124828
DGN FILE => 7257601ua004.dgn

CU 07382 | EA 257601

LAST REVISION 00-00-00 | DATE PLOTTED => 08-NOV-2007 | TIME PLOTTED => 10:26

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

CALCULATED/DESIGNED BY: ST | CHECKED BY: FM

DATE REVISED: 7/06 | REVISED BY: DATE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	19	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

WILBUR ELIAS No. E6215 Exp. 9-30-06 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

9-25-06
PLANS APPROVAL DATE

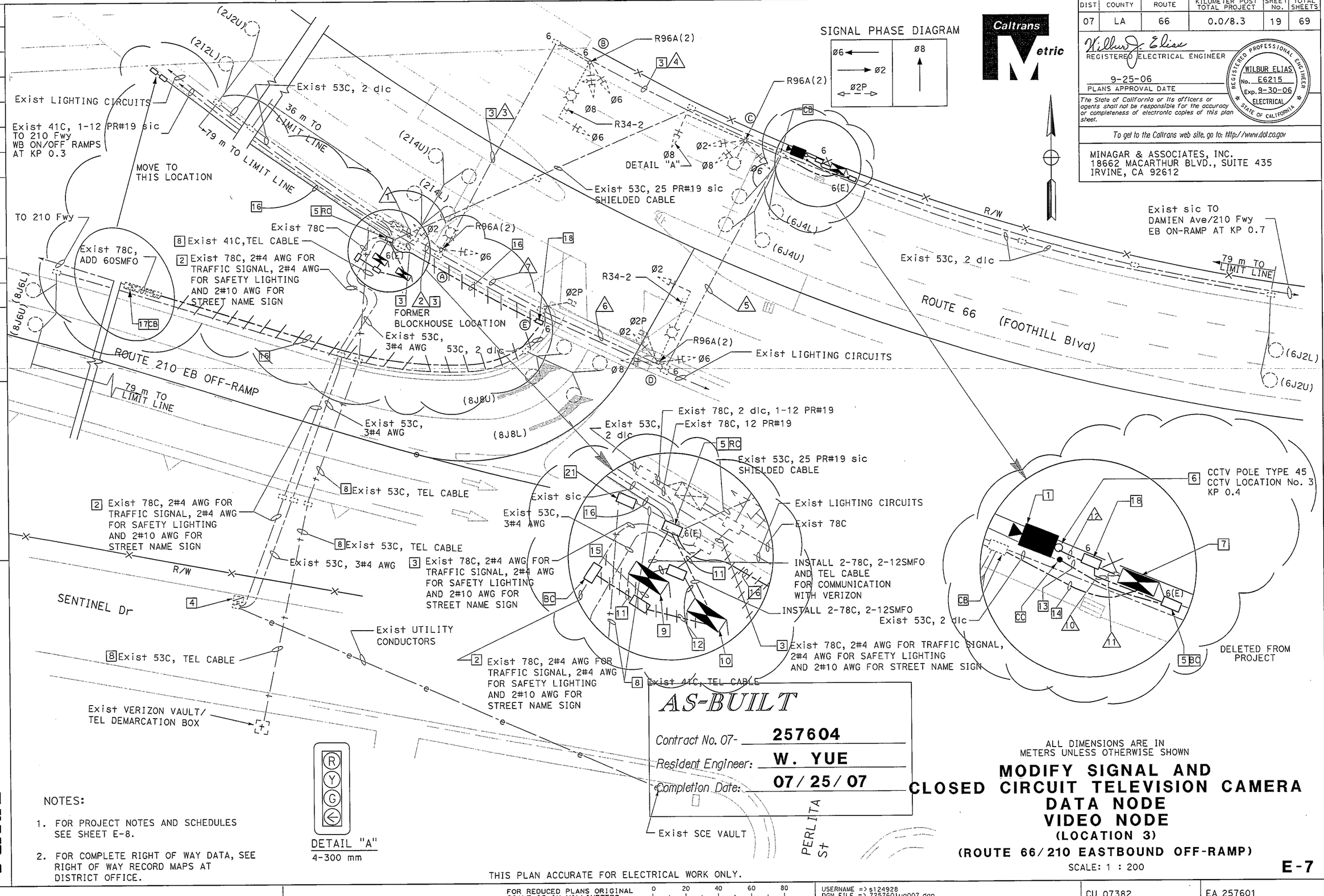
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

Caltrans Metric

SIGNAL PHASE DIAGRAM



AS-BUILT

Contract No. 07- 257604

Resident Engineer: W. YUE

Completion Date: 07/25/07

DETAIL "A"
4-300 mm

NOTES:

1. FOR PROJECT NOTES AND SCHEDULES SEE SHEET E-8.
2. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA DATA NODE VIDEO NODE

(LOCATION 3)

(ROUTE 66/210 EASTBOUND OFF-RAMP)

SCALE: 1 : 200

E-7

DATE	REVISED BY	DATE REVISED
ST 7/06	FM 7/06	

CALCULATED/ DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:26

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

USERNAME => s124928
DGN FILE => 7257601ua007.dgn

CU 07382

EA 257601

AWG	CIRCUIT	RUN		
		10	11	12
12SMFO CABLE	DATA/VIDEO CABLE	1	1	-
SEE Sht E-35	COMPOSITE VIDEO CABLE	-	1	1
	CONDUIT SIZE	53	2-78	53

No.	STANDARD TYPE	STANDARD SMA	STANDARD LMA	VEH SIG MTG MAST ARM	VEH SIG MTG POLE	PED SIGNAL MTG	PPB Ø	PPB ARROW	HPS LUMINAIRE	SPECIAL REQUIREMENTS
(A)	15		3.7		SV-2-TA				310W	
(B)	17-2-129	7.6	3.7	MAS	SV-2-TA				310W	
(C)	17-2-129	7.6	3.7	MAS	SV-3-TA				310W	(IISNS) FOOTHILL Blvd
(D)	19-3-129	9.2	3.7	MAS	SV-1-T SV-2-TA	SP-1-T	2	←	310W	
(E)	1-A					TP-1-T	2	→		

AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7
28-CONDUCTOR CABLE	C1 CABLE (*)	2	2	1	1	1	1	1
	C2 CABLE (*)	2	2	1	1	1	1	1
DLC	Ø2 DETECTOR (**)	2						
	Ø6 DETECTOR (**)	4	4			4	4	4
	Ø8 DETECTOR (**)	2	2					2
#4	SIGNAL SERVICE	2						
#10	LUMINAIRES		2	2	2		2	2
	IISNS		2	2	2			
	CONDUIT SIZE	2-78C	78C	78C	78C	78C	78C	78C

* 28 CONDUCTOR CABLE
** SHIELDED CABLE

PROJECT NOTES: (FOR SHEET E-7)

1. INSTALL CCTV CAMERA ASSEMBLY. SEE SHEET E-35.
2. ADD 3#4 (CCTV), 3#6 (DATA NODE), 3#6 (VIDEO NODE) CONDUCTOR IN EXISTING CONDUIT.
3. ADD 3#4 (CCTV) CONDUCTOR.
4. EXISTING 120/240 V TYPE III-CF METERED SERVICE WITH 2-100 A MAIN CIRCUIT BREAKER:
   2P-40 A FOR FREEWAY LIGHTING
   2P-30 A FOR SOFFIT LIGHTING
   1P-15 A FOR PE CONTROL FREEWAY LIGHTING
   1P-50 A FOR SIGNAL - NOT CONNECTED
   1P-15 A FOR TEL DEMARCATION - NOT CONNECTED
   (METERED):
   30 A-240 V-2P CIRCUIT BREAKER FOR SAFETY LIGHTING
   15 A-120 V-1P PHOTO ELECTRIC CONTROL FOR SAFETY LIGHTING
   15 A-120 V-1P CIRCUIT BREAKER FOR ILLUMINATED STREET NAME SIGN
   ADD 20 A-120 V-1P CIRCUIT BREAKER FOR DATA NODE.
   ADD 20 A-120 V-1P CIRCUIT BREAKER FOR VIDEO NODE.
   ADD 30 A-120 V-1P CIRCUIT BREAKER FOR CCTV LOCATION No. 2.
5. INSTALL No. 6(E) PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL C ON SHEET E-38, FIBER OPTIC SPLICE CLOSURE.
6. INSTALL STATE-FURNISHED CCTV 45 POLE.
7. INSTALL MODEL 334-TV CONTROLLER CABINET, LOCAL CONTROL UNIT, VIDEO TRANSMITTER, C-MIC, FOTM AND CABINET WIRING PER SHEET E-37.
8. RO EXISTING TELEPHONE CABLE, ADD NEW 6 PR#22 TEL CABLE.
9. INSTALL DATA NODE AS PER SHEET E-47.
10. INSTALL VIDEO NODE AS PER SHEET E-48.
11. INSTALL 78C, 3#6 (DATA NODE), 3#6 (VIDEO NODE).
12. INSTALL 53C, 3#6 (VIDEO NODE).
13. INSTALL 53C, 60SMFO.
14. INSTALL 53C, 3#4 (CCTV).
15. INSTALL 53C, 3#6 (DATA NODE).
16. INSTALL 78C, 60SMFO.
17. INSTALL NEW FDU IN EXISTING CABLE NODE AND TERMINATE 60SMFO FROM ROUTE 66 AT FOOTHILL Blvd.
18. INSTALL No. 6 PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL A, SEE SHEET E-38.
19. FOR COMMUNICATION SYSTEM ROUTING SEE SHEET E-9.
20. FOR EXISTING UTILITIES SEE SHEET U-3.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	20	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER
9-25-06
PLANS APPROVAL DATE
REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

AS-BUILT

Contract No. 07- 257604
Resident Engineer: W. YUE
Completion Date: 07/25/07

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA DATA NODE VIDEO NODE

(LOCATION 3)

(ROUTE 66/210 FWY EB OFF-RAMP)

NO SCALE

E-8

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

DATE	REVISED BY	DATE REVISED
7/06	ST	7/06 FM

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:26

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

USERNAME => s124928
DGN FILE => 7257601ua008.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	66	0.0/8.3	25	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

WILBUR ELIAS No. E6215 Exp. 9-30-06 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

9-25-06
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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

DATE	REVISED BY	DATE REVISED
7/06	ST	7/06

CALCULATED/DESIGNED BY: FM
CHECKED BY: ZHINSKY
DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

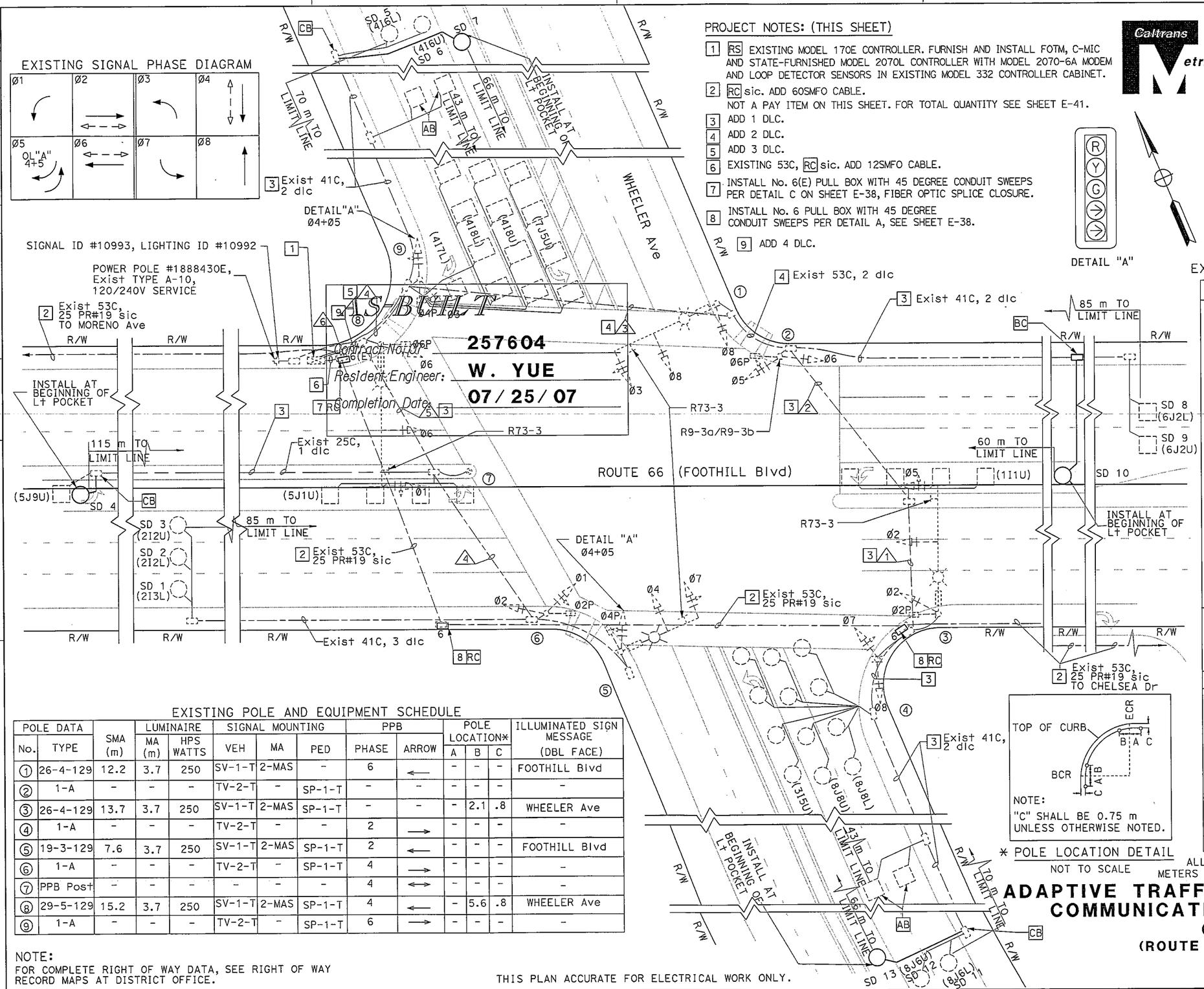
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

EXISTING SIGNAL PHASE DIAGRAM

PROJECT NOTES: (THIS SHEET)

1. RS EXISTING MODEL 170E CONTROLLER. FURNISH AND INSTALL FOTM, C-MIC AND STATE-FURNISHED MODEL 2070L CONTROLLER WITH MODEL 2070-6A MODEM AND LOOP DETECTOR SENSORS IN EXISTING MODEL 332 CONTROLLER CABINET.
2. RC sic. ADD 60SMFO CABLE. NOT A PAY ITEM ON THIS SHEET. FOR TOTAL QUANTITY SEE SHEET E-41.
3. ADD 1 DLC.
4. ADD 2 DLC.
5. ADD 3 DLC.
6. EXISTING 53C, RC sic. ADD 12SMFO CABLE.
7. INSTALL No. 6(E) PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL C ON SHEET E-38, FIBER OPTIC SPLICE CLOSURE.
8. INSTALL No. 6 PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL A, SEE SHEET E-38.
9. ADD 4 DLC.

DETAIL "A"



* POLE LOCATION DETAIL
NOT TO SCALE

EXISTING POLE AND EQUIPMENT SCHEDULE

POLE DATA No.	TYPE	SMA (m)	LUMINAIRE MA (m)	LUMINAIRE HPS WATTS	SIGNAL MOUNTING VEH	SIGNAL MOUNTING MA	SIGNAL MOUNTING PED	PPB PHASE	PPB ARROW	POLE LOCATION* A	B	C	ILLUMINATED SIGN MESSAGE (DBL FACE)
①	26-4-129	12.2	3.7	250	SV-1-T	2-MAS	-	6	←	-	-	-	FOOTHILL Blvd
②	1-A	-	-	-	TV-2-T	-	SP-1-T	-	-	-	-	-	-
③	26-4-129	13.7	3.7	250	SV-1-T	2-MAS	SP-1-T	-	-	-	2.1	.8	WHEELER Ave
④	1-A	-	-	-	TV-2-T	-	-	2	→	-	-	-	-
⑤	19-3-129	7.6	3.7	250	SV-1-T	2-MAS	SP-1-T	2	←	-	-	-	FOOTHILL Blvd
⑥	1-A	-	-	-	TV-2-T	-	SP-1-T	4	→	-	-	-	-
⑦	PPB Post	-	-	-	-	-	-	4	↔	-	-	-	-
⑧	29-5-129	15.2	3.7	250	SV-1-T	2-MAS	SP-1-T	4	←	-	5.6	.8	WHEELER Ave
⑨	1-A	-	-	-	TV-2-T	-	SP-1-T	6	→	-	-	-	-

EXISTING CONDUCTOR AND CONDUIT SCHEDULE

AWG	CIRCUIT	1	2	3	4	5	6
#14	Ø1	-	-	-	3	3	3
	Ø2	3	3	3	3	3	6
	Ø3	-	-	3	-	-	3
	Ø4	-	-	-	3	3	3
	Ø5	3	3	3	-	-	3
	Ø6	-	-	3	-	-	3
	Ø7	3	-	-	3	3	3
	Ø8	3	3	3	-	-	3
	ØLA	-	-	-	2	2	2
	Ø2P	2	2	2	2	2	4
	Ø4P	-	-	-	2	2	2
	Ø6P	-	-	2	-	-	2
	Ø2 PPB	1	1	1	1	1	2
	Ø4 PPB	-	-	-	1	1	1
	Ø6 PPB	-	-	1	-	-	1
	PPB COMMON	1	1	1	1	1	2
	SPARES	3	3	3	3	3	6
	TOTAL #14	19	19	25	24	24	49
#10	IISNS	2	2	2	2	2	-
	LUMINAIRES	2	2	2	2	2	-
	SIGNAL COMMON	1	1	1	1	1	2
	TOTAL #10	5	5	5	5	5	2
#8	SIGNAL SERVICE	-	-	-	-	-	-
DETECTOR LEAD IN CABLE (dlc)	Ø1	-	1	1	-	-	1
	Ø2	-	-	-	3	3	3
	Ø3	1	1	1	-	-	1
	Ø4	-	-	-	-	-	5
	Ø5	-	-	-	-	2	2
	Ø6	-	-	2	-	-	2
	Ø7	-	-	-	-	-	1
	Ø8	4	4	4	-	-	4
	TOTAL	5	6	8	3	5	19
CONDUIT SIZE		53	53	63	53	63	2-78

NOTE:
FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING

(LOCATION 6)
(ROUTE 66/ WHEELER AVENUE)

SCALE: 1 : 200

E-13

LAST REVISION: DATE PLOTTED => 08-NOV-2007; 00-00-00 TIME PLOTTED => 10:26

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua013.dgn

CU 07382 EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	29	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

WILBUR ELIAS No. E6215 Exp. 9-30-06 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

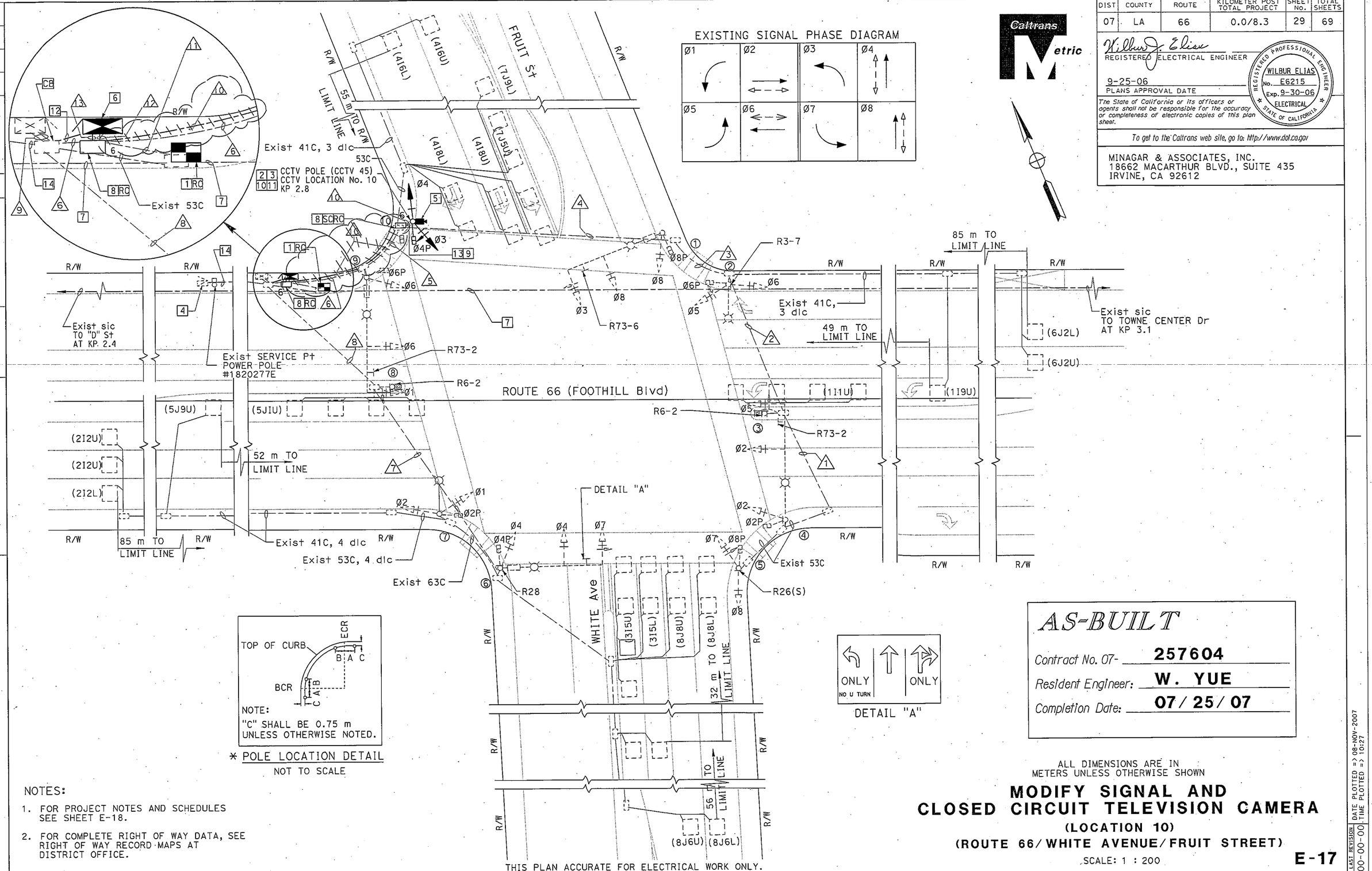
DATE	REVISED BY	DATE REVISED
7/06	ST	7/06

CALCULATED/DESIGNED BY: FM
CHECKED BY: ST

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

EXISTING SIGNAL PHASE DIAGRAM



NOTE:
"C" SHALL BE 0.75 m UNLESS OTHERWISE NOTED.

* POLE LOCATION DETAIL
NOT TO SCALE

DETAIL "A"

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

NOTES:

1. FOR PROJECT NOTES AND SCHEDULES SEE SHEET E-18.
2. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

AS-BUILT

Contract No. 07- 257604
Resident Engineer: W. YUE
Completion Date: 07/25/07

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA

(LOCATION 10)

(ROUTE 66/WHITE AVENUE/FRUIT STREET)

SCALE: 1 : 200

E-17

LAST REVISION: 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:27

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua017.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	30	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — ELECTRICAL — STATE OF CALIFORNIA

9-25-06
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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR BLVD., SUITE 435
IRVINE, CA 92612

CONDUCTOR AND CONDUIT SCHEDULE(CCTV)

AWG	CIRCUIT	RUN 10	11	12	13
12SMFO CABLE	DATA/VIDEO CABLE	-	1	-	1
SEE Sht E-35	COMPOSITE VIDEO CABLE	1	-	1	-
#6	CCTV WIRING	-	-	-	-
	CONDUIT SIZE	53	53	78	78

POLE AND EQUIPMENT SCHEDULE (CCTV)

POLE DATA No.	TYPE	SMA (m)	LUMINAIRE LMA (m)	LUMINAIRE HPS WATTS	SIGNAL MOUNTING VEH	SIGNAL MOUNTING MAST ARM (m)	SIGNAL MOUNTING PED	PPB PHASE	PPB ARROW	POLE LOCATION A	POLE LOCATION B	POLE LOCATION C	IISNS (DBL FACE)
(10)	CCTV TYPE 45	-	-	-	SV-2-T (N)	-	SP-1-T (N)	6 (N)	→(N)	-	-	-	-

EXISTING CONDUCTOR AND CONDUIT SCHEDULE

AWG	CIRCUIT	RUN 1	2	3	4	5	6	7	8	9
#14	Ø1	-	-	-	-	-	3	3	3	6
	Ø2	3	3	3	3	3	3	3	3	6
	Ø3	-	-	-	3	3	3	-	-	3
	Ø4	-	-	-	-	3	3	3	3	6
	Ø5	3	3	3	3	3	3	-	-	3
	Ø6	-	-	3	3	3	3	-	-	3
	Ø7	3	3	3	3	3	3	3	3	6
	Ø8	3	3	3	3	3	3	-	-	3
	Ø2P	2	2	2	2	2	2	2	2	4
	Ø4P	-	-	-	-	2	2	2	2	4
	Ø6P	-	-	2	2	2	2	-	-	2
	Ø8P	2	2	2	2	2	2	-	-	2
	2 PPB	1	1	1	1	1	1	1	1	2
	4 PPB	-	-	-	-	-	1	1	1	2
	6 PPB	-	-	-	1	1	1	-	-	1
	8 PPB	1	1	1	1	1	1	-	-	1
	PPB COMMON	1	1	1	1	1	1	1	1	2
	SPARES	3	3	3	3	3	3	3	3	6
	TOTAL	22	22	27	31	36	40	22	22	62
#10	IISNS	2	2	2	2	2	2	2	2	-
	LUMINAIRES	2	2	2	2	2	2	2	2	-
	SIGNAL COMMON	1	1	1	1	1	1	1	1	2
	TOTAL #10	5	5	5	5	5	5	5	5	2
#8	SIGNAL SERVICE	-	-	-	-	-	-	-	-	-
DETECTOR LEAD IN CABLE (DLC)	Ø1	-	1	2	2	2	2	-	-	2
	Ø2	-	-	-	-	-	-	3	3	3
	Ø3	-	-	-	-	-	-	2	2	2
	Ø4	-	-	-	-	4	4	-	-	4
	Ø5	-	-	-	-	-	-	1	2	2
	Ø6	-	-	2	2	2	2	-	-	2
	Ø7	-	-	-	-	2	2	-	-	2
	Ø8	-	-	-	-	-	-	4	4	4
	TOTAL	-	1	4	4	10	10	10	11	21
CONDUIT SIZE		53	41	63	53	63	89	53	63	89, 63

ADD INFO. BELOW TO SCHEDULE ON THE LEFT

AWG	CIRCUIT	RUN △
SEE SHEET E-35	COMPOSITE VIDEO CABLE	1
	CONDUIT SIZE	

6 & 5

EXISTING POLE AND EQUIPMENT SCHEDULE

POLE DATA No.	TYPE	SMA (m)	LUMINAIRE MA (m)	LUMINAIRE HPS WATTS	SIGNAL MOUNTING VEH	SIGNAL MOUNTING MA	SIGNAL MOUNTING PED	PPB PHASE	PPB ARROW	POLE LOCATION* A	B	C	ILLUMINATED SIGN MESSAGE (DBL FACE)
(1)	26-4-129	12.2	3.7	250	SV-1-T	2-MAS	SP-1-T	6	←	-	-	-	FOOTHILL BLVD
(2)	15	-	3.7	250	SV-2-T	-	SP-1-T	8	→	-	-	-	-
(3)	PPB Post	-	-	-	-	-	-	8	↔	-	-	-	-
(4)	26-4-129	13.7	3.7	250	SV-1-T	2-MAS	SP-1-T	8	←	SAME LOCATION			WHITE AVE →
(5)	1-A	-	-	-	TV-2-T	-	SP-1-T	2	→	-	-	-	-
(6)	26-4-129	12.2	3.7	250	SV-1-T	2-MAS	SP-1-T	2	←	-	-	-	FOOTHILL BLVD
(7)	15	-	3.7	250	SV-2-T	-	SP-1-T	4	→	-	-	-	-
(8)	PPB Post	-	-	-	-	-	-	4	↔	-	-	-	-
(9)	26-4-129	13.7	3.7	250	SV-1-T	2-MAS	SP-1-T	4	←	SAME LOCATION			FRUIT ST →

* FOR POLE LOCATION DETAIL SEE SHEET E-17

PROJECT NOTES: (FOR SHEET E-17)

1. RC EXISTING PULL BOX AND INSTALL SPLICE VAULT, SPLICE CLOSURE.
2. RC EXISTING TYPE 1-A STANDARD FOUNDATION.
3. RL EXISTING TYPE 1-A STANDARD WITH EXISTING SIGNAL HEADS TO MAINTAIN OPERATION DURING INSTALLATION OF CCTV 45 POLE. THE CONTRACTOR SHALL FURNISH A RELOCATION PLAN TO THE ENGINEER FOR APPROVAL.
4. EXISTING SERVICE EQUIPMENT ENCLOSURE WITH 100A, 120/240V, METERED. TYPE III-BF. ADD 30 A, 120 V, 1P, CIRCUIT BREAKER FOR CCTV.
5. INSTALL CCTV CAMERA ASSEMBLY. SEE SHEET E-35.
6. INSTALL MODEL 334-TV CONTROLLER CABINET, LOCAL CONTROL UNIT, VIDEO TRANSMITTER, C-MIC, FOCM AND CABINET WIRING PER SHEET E-37.
7. SHOWN FOR REFERENCE ONLY. SEE SHEET E-19.
8. INSTALL No. 6 PULL BOX WITH 45 DEGREE CONDUIT SWEEPS PER DETAIL A, SEE SHEET E-38.
9. RL EXISTING SIGN FROM TYPE 1-A STANDARD TO NEW STATE-FURNISHED CCTV 45 POLE.
10. INSTALL STATE-FURNISHED CCTV 45 POLE AT EXACT LOCATION OF EXISTING TYPE 1-A STANDARD. SEE SHEET E-36.
11. RC TEMPORARY EXISTING TYPE 1-A STANDARD AFTER NEW CCTV 45 POLE WITH SIGNAL EQUIPMENT ARE INSTALLED AND OPERATIONAL.
12. INSTALL 53C, 3#6(CCTV).
13. INSTALL 78C, 12CSC (SIGNAL CONDUCTORS), 3CSC (PPB).
14. ADD 3#6(CCTV).
15. FOR EXISTING UTILITIES SEE SHEET U-4.

AS-BUILT

Contract No. 07- 257604
Resident Engineer: W. YUE
Completion Date: 07/25/07

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA

(LOCATION 10)

(ROUTE 66/WHITE AVENUE/FRUIT STREET)

NO SCALE

E-18

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua018.dgn

CU 07382 | EA 257601

LAST REVISION 00-00-00 | DATE PLOTTED => 08-NOV-2007 | TIME PLOTTED => 10:27

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY
CALCULATED/DESIGNED BY: ST
CHECKED BY: FM
DATE: 7/06
REVISED BY: DATE REVISED: 7/06

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

COMMUNICATION CABLE 60SMFO ASSIGNMENT TABLE
KP 0.0 TO KP 8.3, 1-60

FIBER	USE	BASELINE Rd AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #1	210 Fwy WB ON/OFF RAMPS AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #2	210 Fwy WB ON/OFF RAMPS AND ROUTE 66 (FOOTHILL Blvd) CCTV #2	210 Fwy EB OFF RAMP AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #3	210 Fwy EB OFF RAMP AND ROUTE 66 (FOOTHILL Blvd) DATA NODE	210 Fwy EB OFF RAMP AND ROUTE 66 (FOOTHILL Blvd) VIDEO NODE	210 Fwy EB OFF RAMP AND ROUTE 66 (FOOTHILL Blvd) CCTV #3	DAMIEN Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #4	MORENO St AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #5	WHEELER Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #6	CHELSEA Dr AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #7	EMERALD Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL 8	'D' St AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #9	WHITE Ave/FRUIT St AND ROUTE 66 (FOOTHILL Blvd) CCTV #10	WHITE Ave/FRUIT St AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #10	TOWNE CENTER Dr AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #11	GAREY Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #12	TOWNE Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #13	TOWNE Ave AND ROUTE 66 (FOOTHILL Blvd) CCTV #13	MOUNTAIN Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #14	INDIAN HILL Blvd AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #15	DARTMOUTH Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #16	MILLS Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #17	CLAREMONT Ave AND ROUTE 66 (FOOTHILL Blvd) SIGNAL #18
KP		0.0	0.3	0.3	0.4	0.4	0.4	0.4	0.7	0.9	1.3	1.8	2.1	2.4	2.8	2.8	3.1	4.1	5.2	5.2	5.9	6.7	7.3	7.9	8.3
1	TSMOD044 TX	X	X		X	X																			O
2	TSMOD044 RX	X	X		X	X																			O
3	TSMOD045 TX	O				X			X	X	X	X													O
4	TSMOD045 RX	O				X			X	X	X	X													O
5	TSMOD046 TX	O				X							X	X		X	X								O
6	TSMOD046 RX	O				X							X	X		X	X								O
7	TSMOD047 TX	O				X											X	X	X		X				O
8	TSMOD047 RX	O				X											X	X	X		X				O
9	TSMOD048 TX	O				X																X	X	X	X
10	TSMOD048 RX	O				X																X	X	X	X
11		O																							O
12		O																							O
13		O																							O
14		O																							O
15		O																							O
16		O																							O
17		O																							O
18		O																							O
19		O																							O
20		O																							O
21		O																							O
22		O																							O
23		O																							O
24		O																							O
25	CCR-TX	O		X		X		X							X					X					O
26	CCR-TX	O		X		X		X							X					X					O
27		O																							O
28		O																							O
29		O																							O
30		O																							O
31		O																							O
32		O																							O
33		O																							O
34		O																							O
35		O																							O
36		O																							O
37	CCTV 2	O		X			X																		O
38	CCTV 3	O					X	X																	O
39	CCTV 10	O					X								X										O
40	CCTV 13	O					X													X					O
41		O																							O
41		O																							O
42		O																							O
43		O																							O
44		O																							O
45		O																							O
46		O																							O
47		O																							O
48		O																							O
49	DS-1 TX	O				X																			O
50	DS-1 RX	O				X																			O
51	VMX	O					X																		O
52		O																							O
53		O																							O
54		O																							O
55		O																							O
56		O																							O
57		O																							O
58		O																							O
59		O																							O
60		O																							O

LEGEND: (THIS SHEET)

X TERMINATED ACTIVE

O TERMINATED INACTIVE

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	55	69

REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

AS-BUILT

Contract No. 07- 257604

Resident Engineer: W. YUE

Completion Date: 07/25/07

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING DATA NODE VIDEO NODE

(FIBER OPTIC ASSIGNMENT TABLE)

NO SCALE

E-43

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

CALCULATED/DESIGNED BY: ST

CHECKED BY: FM

DATE REVISED BY: 7/06

DATE REVISED: 7/06

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION: 00-00-00 DATE PLOTTED => 08-NOV-2007 TIME PLOTTED => 10:28

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua043.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	56	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — ELECTRICAL — STATE OF CALIFORNIA

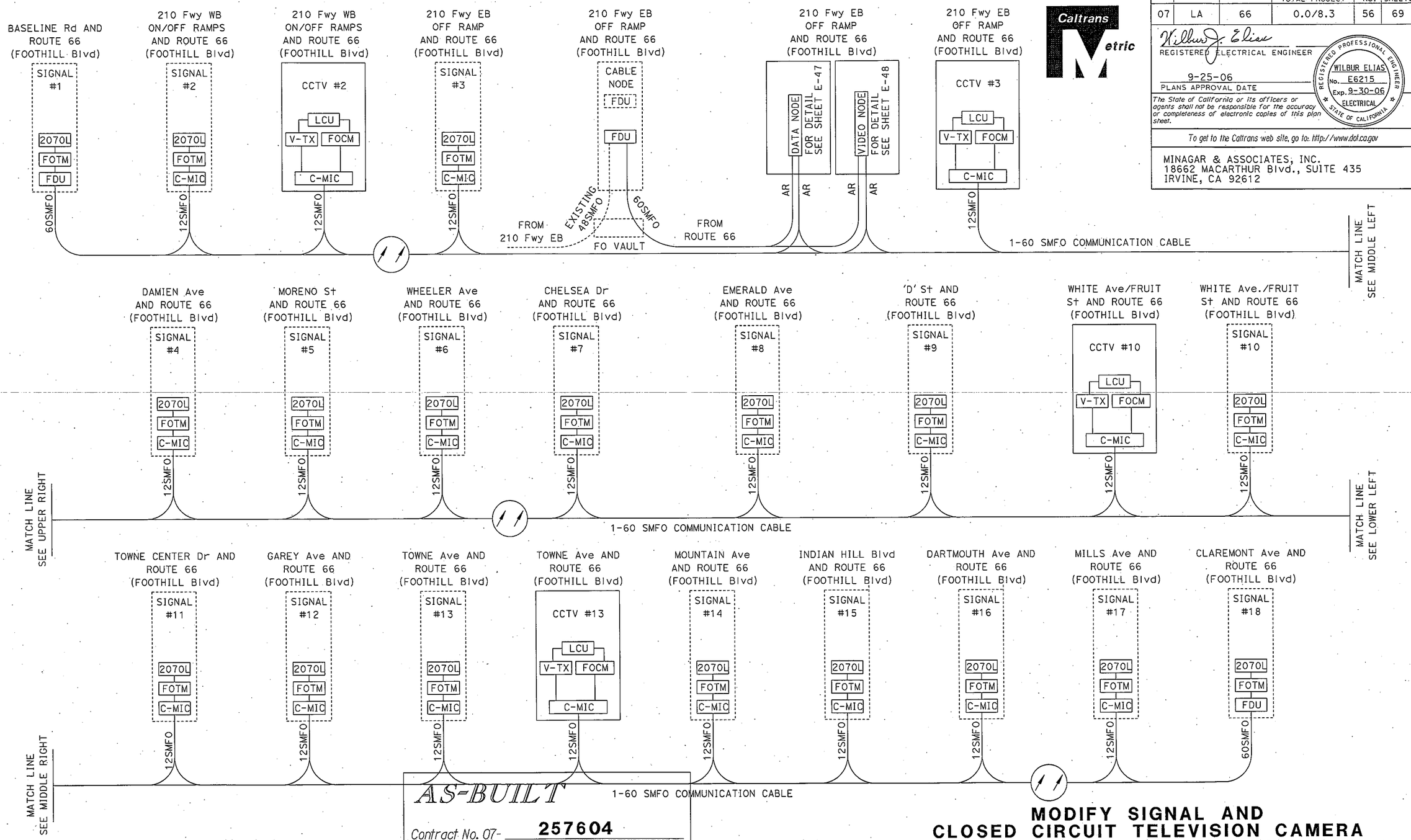
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

DATE	REVISED BY	DATE REVISED
7/06	ST	7/06

CALCULATED/DESIGNED BY: ST
CHECKED BY: FM
DESIGN OVERSIGHT: YEFIM ZABEZHINSKY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans



AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**

NOTE:

REFERENCE SHEETS E-2 THROUGH E-34 FOR PHYSICAL LOCATIONS.

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING DATA NODE VIDEO NODE

(SCHEMATIC)

NO SCALE

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

E-44

LAST REVISION 00-00-00 | DATE PLOTTED => 08-NOV-2007 | TIME PLOTTED => 10:28

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

USERNAME => s124928
DGN FILE => 7257601ua044.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	57	69

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
WILBUR ELIAS
No. E6215
Exp. 9-30-06
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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

ROUTE 66 (FOOTHILL Blvd)

DATA NODE
CIRCUIT ASSIGNMENT TABLE KP 0.3

DATA NODE LOCATION: ROUTE 66/210 Fwy E/B OFF RAMP

D4 CHANNEL NUMBER	EXISTING TMC INTERFACE	DATA NODE INTERFACE	TERMINATION CABLE FO-66 (0.0-0.3) PAIR NUMBER	FUNCTION	TERMINATION CABLE FO-66 (0.3-8.3) PAIR NUMBER
1	4WTO	4WTO	1,2	TSMOD0044	1,2
2	4WTO	4WTO	-,-	TSMOD0045	3,4
3	4WTO	4WTO	-,-	TSMOD0046	5,6
4	4WTO	4WTO	-,-	TSMOD0047	7,8
5	4WTO	4WTO	-,-	TSMOD0048	9,10
6	SPARE	SPARE	-,-	-	-,-
7	SPARE	-	-,-	-	-,-
8	SPARE	-	-,-	-	-,-
9	SPARE	-	-,-	-	-,-
10	SPARE	-	-,-	-	-,-
11	SPARE	-	-,-	-	-,-
12	SPARE	-	-,-	-	-,-
13	4WTO	4WTO	25,26	CCR	25,26
14	SPARE	-	-,-	-	-,-
15	SPARE	-	-,-	-	-,-
16	SPARE	-	-,-	-	-,-
17	SPARE	-	-,-	-	-,-
18	SPARE	-	-,-	-	-,-
19	SPARE	-	-,-	-	-,-
20	SPARE	-	-,-	-	-,-
21	SPARE	-	-,-	-	-,-
22	SPARE	-	-,-	-	-,-
23	SPARE	-	-,-	-	-,-
24	SPARE	-	-,-	-	-,-

4WTO = FOUR WIRE TRANSMIT ONLY

AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**

DATA NODE
(CIRCUIT ASSIGNMENT TABLE)

NO SCALE

E-45

DATE	REVISED BY
7/06	DATE REVISED

CALCULATED/DESIGNED BY: ST
CHECKED BY: FM

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua045.dgn

CU 07382 | EA 257601

LAST REVISION 00-00-00 | DATE PLOTTED => 08-NOV-2007 | TIME PLOTTED => 10:28

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	58	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
WILBUR ELIAS
No. E6215
Exp. 9-30-06
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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

ROUTE 66 (FOOTHILL Blvd)

VIDEO NODE
MULTIPLEXER CHANNEL ASSIGNMENT TABLE KP 0.3
VIDEO NODE LOCATION: ROUTE 66/210 Fwy E/B OFF RAMP

CHANNEL NUMBER	CAMERA LOCATION	CAMERA IDENTIFICATION
1	~~ROUTE 66/210 Fwy WB/ON/OFF RAMPS~~	~~CAMERA LOCATION 2~~
2	~~ROUTE 66/210 Fwy EB/OFF RAMP~~	~~CAMERA LOCATION 3~~
3	ROUTE 66/WHITE Ave FRUIT St	CAMERA LOCATION 10
4	ROUTE 66/TOWNE Ave	CAMERA LOCATION 13
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

AS-BUILT

Contract No. 07- **257604**
Resident Engineer: **W. YUE**
Completion Date: **07/25/07**

VIDEO NODE
(CIRCUIT ASSIGNMENT TABLE)
NO SCALE

E-46

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY
CALCULATED/DESIGNED BY: ST
CHECKED BY: FM
DATE: 7/06
REVISED BY:
DATE REVISED: 7/06

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:28

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80
USERNAME => s124928
DGN FILE => 7257601ua046.dgn
CU 07382
EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	61	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
WILBUR ELIAS
No. E6215
Exp. 9-30-06
ELECTRICAL
STATE OF CALIFORNIA

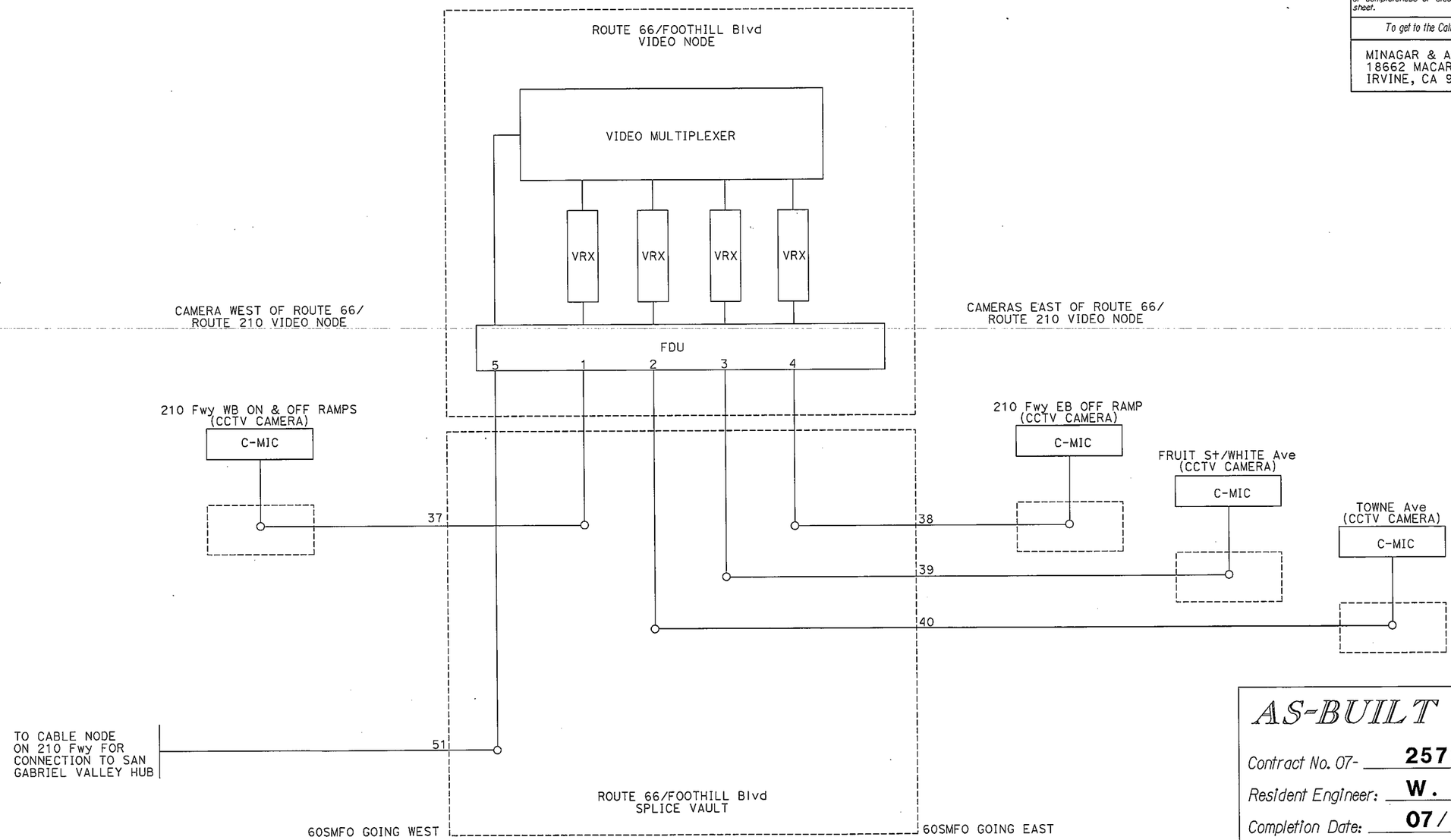
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

LEGEND: (THIS SHEET)

o FIBER OPTIC FUSION SPLICE



AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA COMMUNICATION SYSTEM ROUTING

(VIDEO NODE FIBER OPTIC SPLICING AND TERMINATION DIAGRAM)

NO SCALE

E-49

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

DATE	REVISED BY
7/06	DATE REVISED

CALCULATED/DESIGNED BY: ST
CHECKED BY: FM

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:29

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua049.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	62	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILBUR ELIAS — No. E6215 — Exp. 9-30-06 — 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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

DATE	REVISED BY	DATE REVISED
7/06	ST	7/06

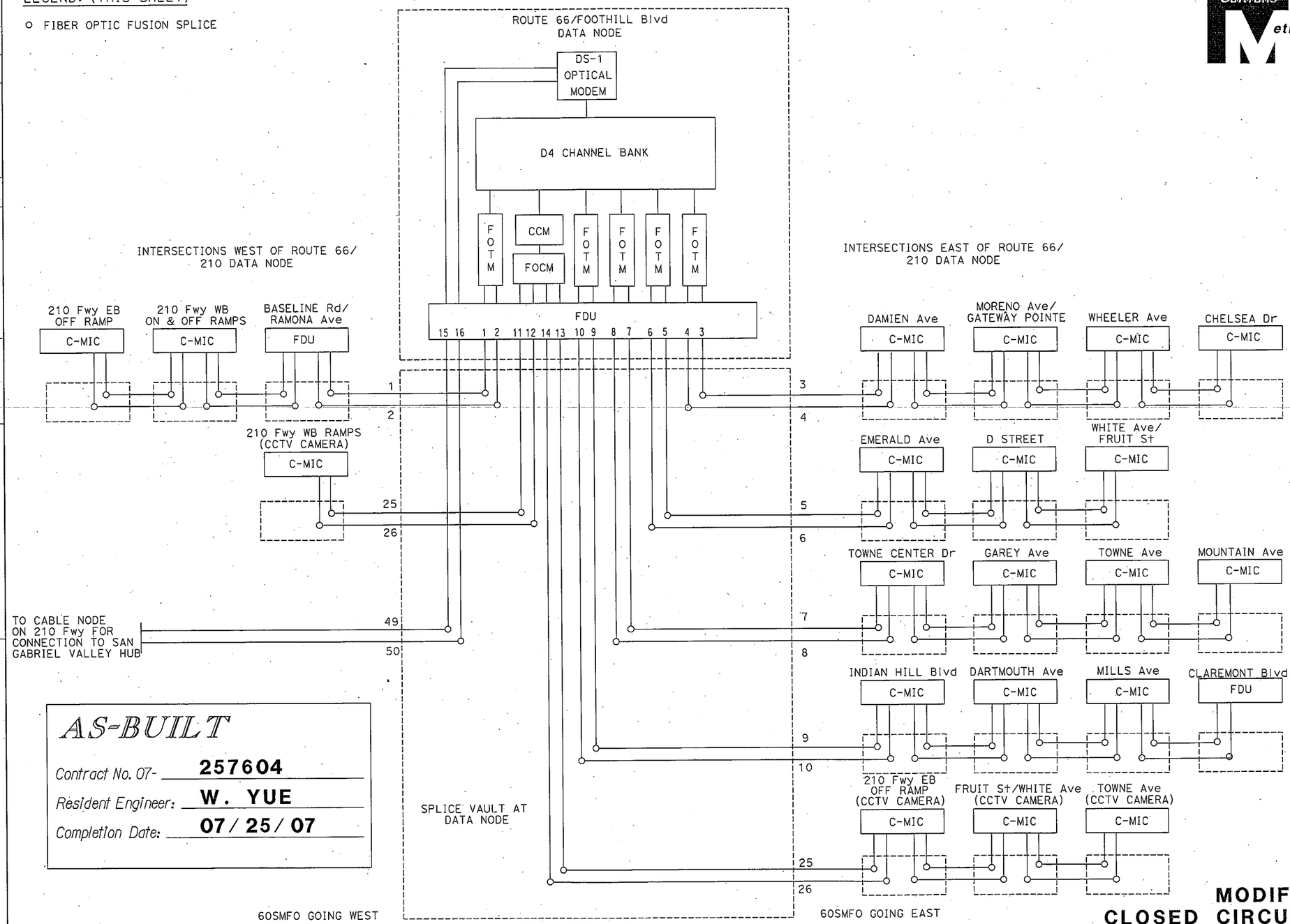
CALCULATED/DESIGNED BY: ST
CHECKED BY: FM

DESIGN OVERSIGHT: YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LEGEND: (THIS SHEET)

○ FIBER OPTIC FUSION SPLICE



AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**

MODIFY SIGNAL AND CLOSED CIRCUIT TELEVISION CAMERA ADAPTIVE TRAFFIC CONTROL SIGNAL AND COMMUNICATION SYSTEM ROUTING

(DATA NODE FIBER OPTIC SPLICING AND TERMINATION DIAGRAM)

NO SCALE

E-50

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

LAST REVISION 00-00-00
DATE PLOTTED => 08-NOV-2007
TIME PLOTTED => 10:29

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua050.dgn

CU 07382

EA 257601

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	66	0.0/8.3	63	69

Caltrans Metric

Wilbur J. Elias
REGISTERED ELECTRICAL ENGINEER

9-25-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
WILBUR ELIAS
No. E6215
Exp. 9-30-06
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.

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

MINAGAR & ASSOCIATES, INC.
18662 MACARTHUR Blvd., SUITE 435
IRVINE, CA 92612

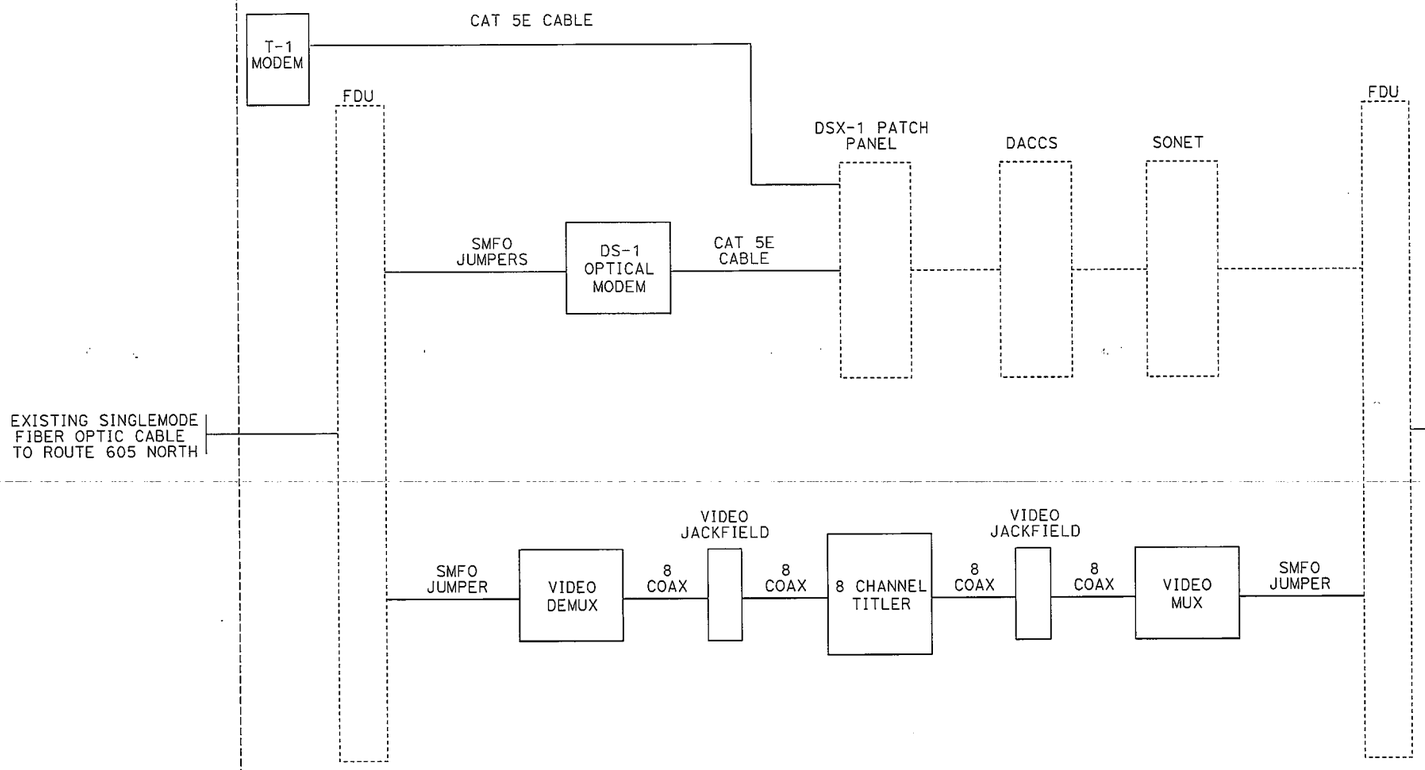
DATE 7/06 REVISED BY
7/06 DATE REVISED

CALCULATED/DESIGNED BY ST
CHECKED BY FM

DESIGN OVERSIGHT
YEFIM ZABEZHINSKY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

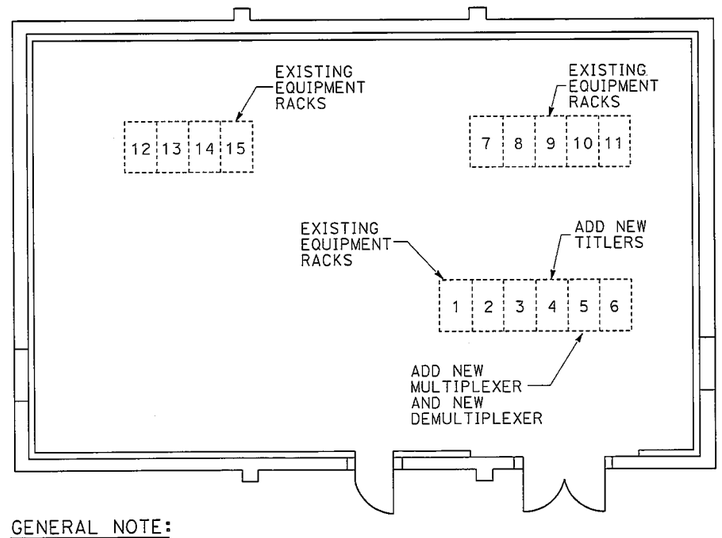
SAN GABRIEL VALLEY HUB BUILDING



NOTE:

IN ADDITION TO THE EQUIPMENT SHOWN ABOVE, PROVIDE ONE 32 CHANNEL VIDEO DEMULTIPLEXER TO BE INSTALLED AT THE LARTMC BY OTHERS.

SAN GABRIEL VALLEY HUB RACK LAYOUT



GENERAL NOTE:

1. EXACT LOCATION OF NEW HARDWARE TO BE CONFIRMED BY CALTRANS ENGINEER.

NO SCALE

AS-BUILT

Contract No. 07- **257604**

Resident Engineer: **W. YUE**

Completion Date: **07/25/07**

WORK AT SAN GABRIEL VALLEY HUB BUILDING

NO SCALE

E-51

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

LAST REVISION 00-00-00 DATE PLOTTED => 08-NOV-2007 TIME PLOTTED => 10:29

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s124928
DGN FILE => 7257601ua051.dgn

CU 07382

EA 257601