For Contract No. 07-302104
At 07-LA-27,118-18.6/20.1, R0.0/R14.4

Identified by
Project ID 0713000486

MATERIALS INFORMATION

Fiber Optic System As-Built Drawings

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	Ven,LA	23,118	Var	374	667

Leesunghwan 08-30-06
REGISTERED ELECTRICAL ENGINEER

10-2-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SUNG LEE No. E16249 Exp 12/31/06 ELECTRICAL STATE OF CALIFORNIA

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Caltrans Metric

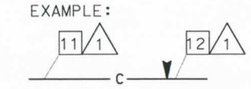
GENERAL NOTES

1. THE LOCATION OF EXISTING CONTROLLER CABINETS, EXISTING SERVICE ENCLOSURES, AND POWER POLES ARE APPROXIMATE. THE LOCATION OF PROPOSED PULL BOXES AND SPLICE VAULTS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
2. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL FACILITIES, THE CONTRACTOR SHALL PROVIDE 72 HOUR ADVANCE WRITTEN NOTICE TO ALL AGENCIES CONCERNED.
3. UNLESS OTHERWISE NOTED, ALL COMMUNICATION CONDUIT BENDS SHALL BE 1.3 m RADIUS FACTORY BENDS.
4. TRENCHING IN PAVEMENT ALLOWED ONLY WHERE SHOWN ON PLANS.
5. ALL PULL BOXES AND SPLICE VAULTS SHALL BE INSTALLED IN UNPAVED AREA UNLESS NOTED OTHERWISE.
6. INSTALL PULL ROPE AND PLUG ENDS EACH UNUSED INNERDUCTS AND CONDUITS.

LEGEND

- PROPOSED CCTV CAMERA AND POLE
- TYPE 334-TV CABINET FOR CCTV CAMERA, DATA NODE, CABLE NODE, VIDEO NODE, TMS AND CMS CONTROLLER
- SPLICE VAULT
- COMMUNICATION PULL BOX, SEE SHEET E-52
- EXISTING COMMUNICATION PULL BOX
- —C— COMMUNICATION CONDUIT
- EXISTING TYPE 334 CABINET
- EXISTING SPLICE VAULT
- DELIMITER FOR PROJECT NOTES
- TYPE E INDUCTIVE LOOP DETECTOR
- EXISTING TYPE E INDUCTIVE LOOP DETECTOR
- —E— SERVICE CONDUIT
- —e— EXISTING SERVICE CONDUIT
- CONDUIT FOR LOOP DETECTOR AND SIGNAL CONDUCTORS

EXAMPLE:



ABBREVIATIONS

1C	INTERCONNECT
1P	1-POLE
48SMFO	FIBER OPTIC CABLE, 48 SINGLE-MODE FIBERS
36SMFO	FIBER OPTIC CABLE, 36 SINGLE-MODE FIBERS
12SMFO	FIBER OPTIC CABLE, 12 SINGLE-MODE FIBERS
B/O	BREAKOUT
CCR	CAMERA CONTROL RECEIVER
F/O	FIBER OPTIC
GRS	GALVANIZED RIGID STEEL
OHS	OVERHEAD SIGN
SCE	SOUTHERN CALIFORNIA EDISON
RMS	RAMP METERING SYSTEM
FDU	FIBER DISTRIBUTION UNIT
SH	SHORT HAUL
UPRR	UNION PACIFIC RAIL ROAD
CS	COUNT STATION
FOCM	FIBER OPTIC CONTROL MODEM
FOTM	FIBER OPTIC TRAFFIC MODEM
CCM	CAMERA CONTROL MODEM

TABLE 1 - CCTV WIRING

CONDUCTOR TYPE	FUNCTION	QUANTITY
RG-6A/U COAX CABLE	CAMERA VIDEO INTERFACE CABLE	1
RS232 (5#22) CABLE	CAMERA CONTROL CABLE	1
3#18	POWER CABLE	1

AS-BUILT
Contract No. 07- 116794
Resident Engineer: M. TOUTOUNCHIAN
Completion Date: 01/14/2010

COMMUNICATION SYSTEM ROUTING
(LEGEND AND NOTES)
(SHEETS E-2 TO E-45)

E-1

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER SUNG LEE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

LAST REVISION 00-00-00
DATE PLOTTED => 29-JUN-2010
TIME PLOTTED => 09:44

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	Ven,LA	23,118	Var	406	667

Leesunghwan 08-30-06
REGISTERED ELECTRICAL ENGINEER

10-2-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SUNG LEE No. E16249 EXP 12/31/06 ELECTRICAL STATE OF CALIFORNIA

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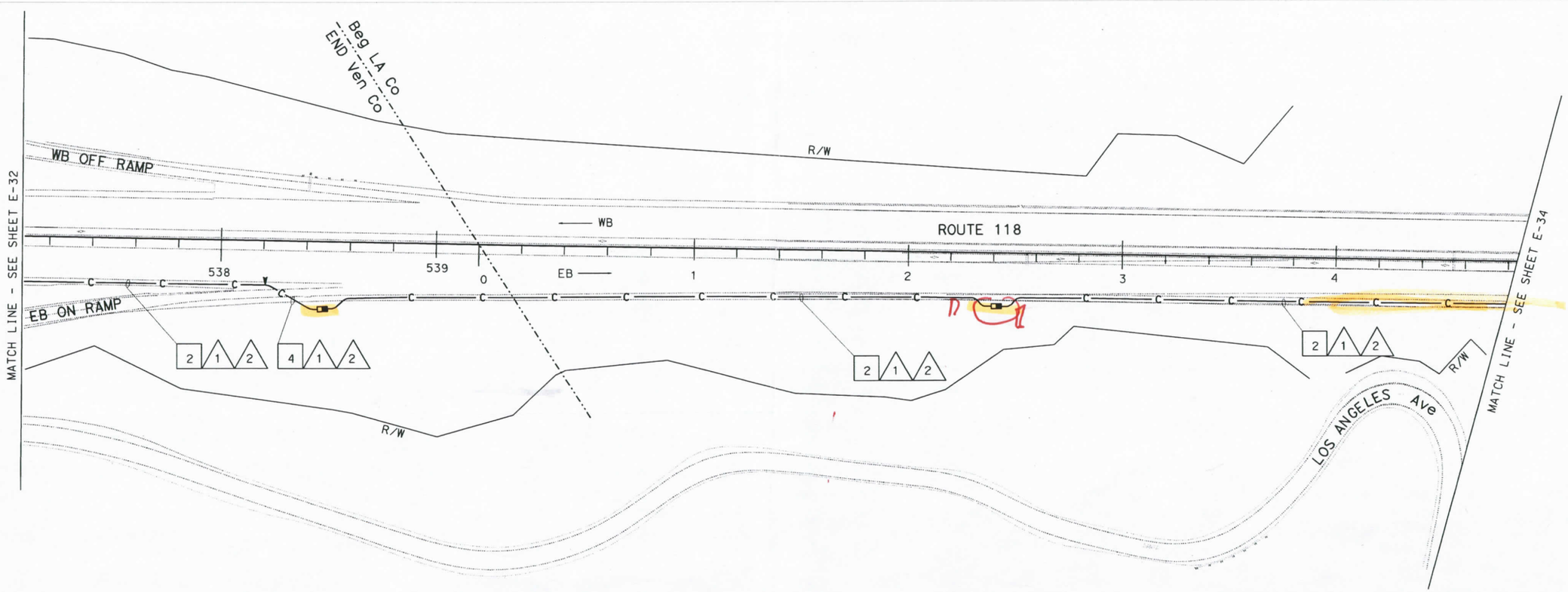
CONSTRUCTION NOTES:(THIS SHEET ONLY)

2 TRENCH AND INSTALL CONDUIT IN PAVED AREA. SEE SHEET E-47 FOR DETAILS.

4 JACK TYPE 1 CONDUIT BENEATH ROADWAY. SEE SHEET E-49 FOR DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUIT AND CONDUCTOR TYPE	FUNCTION	RUN 1				RUN 2
48SMFO CABLE	DATA/VOICE	1				
36SMFO CABLE	VIDEO/VOICE		1			
48SMFO CABLE	VIDEO/DATA			1		
12SMFO CABLE	DATA/VOICE					
INNERDUCT (SIZE 25)		1	1	1	1	4
CONDUIT SIZE		103				103



THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND GENERAL NOTES SEE SHEET E-1.
ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SHOWN.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-33

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER SUNG LEE

CALCULATED/DESIGNED BY
CHECKED BY

DATE REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 07-OCT-2006
TIME PLOTTED => 09:05

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CU 07388

EA 116791

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	Ven,LA	23,118	Var	407	667

Leesunghwan 08-30-06
REGISTERED ELECTRICAL ENGINEER

10-2-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SUNG LEE No. E16249 Exp. 12/31/06 ELECTRICAL STATE OF CALIFORNIA

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Caltrans Metric

CONSTRUCTION NOTES: (THIS SHEET ONLY)

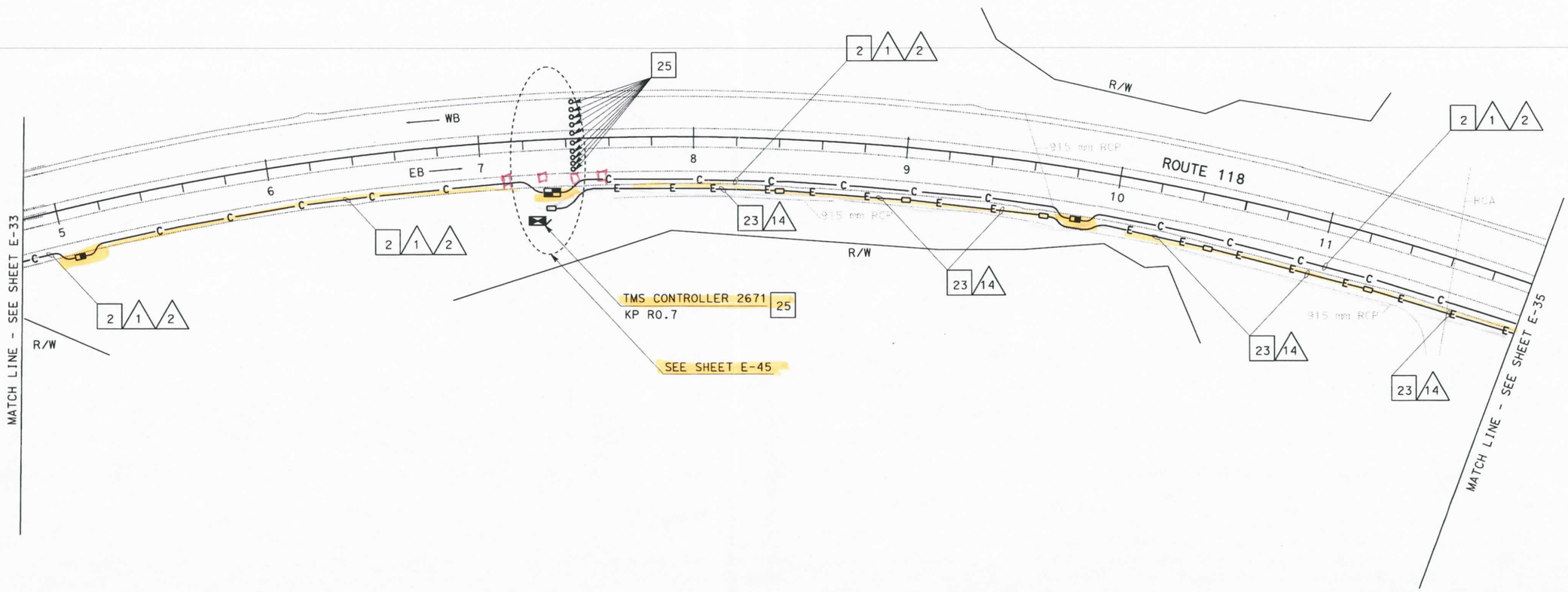
2 TRENCH AND INSTALL CONDUIT IN PAVED AREA. SEE SHEET E-47 FOR DETAILS.

23 INSTALL CONDUIT IN COMMUNICATION CONDUIT TRENCH. SEE SHEET E-47 FOR DETAILS.

25 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION REFER TO SITE DESIGN.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUIT AND CONDUCTOR TYPE	FUNCTION	RUN 1				RUN 2	RUN 14
48SMFO CABLE	DATA/VOICE	1					
36SMFO CABLE	VIDEO/VOICE		1				
48SMFO CABLE	VIDEO/DATA			1			
12SMFO CABLE	DATA/VOICE						
#1/0	POWER						2
INNERDUCT (SIZE 25)		1	1	1	1	4	
CONDUIT SIZE		103				103	53



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

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

E-34

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER: SUNG LEE
CALCULATED/DESIGNED BY
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DATE REVISED BY
DATE REVISED

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DATE PLOTTED => 07-OCT-2006
TIME PLOTTED => 09:05

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DGN FILE => 711679ua034.dgn

CU 07388

EA 116791

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	Ven,LA	23,118	Var	408	667

REGISTERED ELECTRICAL ENGINEER 08-30-06

10-2-06
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SUNG LEE No. E16249 Exp. 12/31/06 ELECTRICAL STATE OF CALIFORNIA

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Caltrans Metric

CONSTRUCTION NOTES (THIS SHEET ONLY)

2 TRENCH AND INSTALL CONDUIT IN PAVED AREA. SEE SHEET E-47 FOR DETAILS.

5 SHOWN FOR REFERENCE ONLY. SEE BRIDGE STRUCTURE PLANS FOR CONDUIT INSTALLATION TYPE AND DETAIL.

12 ADD 2#1/0 IN EXISTING CONDUIT.

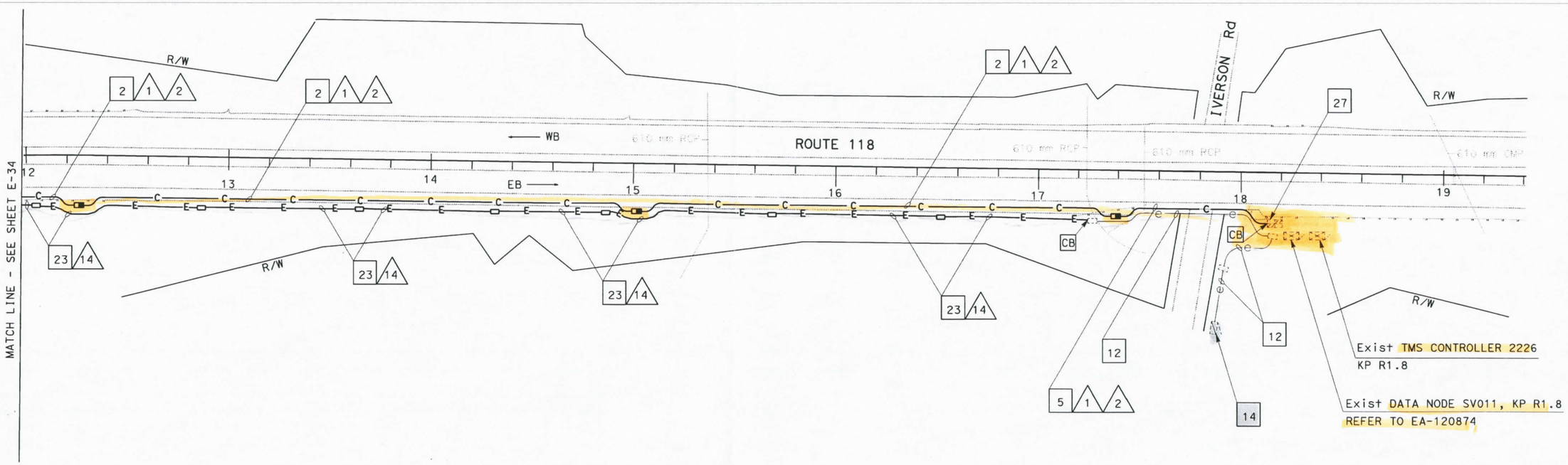
14 Exist TYPE III-BF SERVICE EQUIPMENT ENCLOSURE
120/240 V, 1 PHASE, 3 W
11159 ½ IVERSON Rd
1-30 A, FOR DATA NODE TO REMAIN
1-20 A, FOR TMS TO REMAIN
1-20 A, FOR HAR TO REMAIN
ADD 1-30A FOR TMS

23 INSTALL CONDUIT IN COMMUNICATION CONDUIT TRENCH. SEE SHEET E-47 FOR DETAILS.

27 COIL 20 m OF 36SMFO CABLE AND 48SMFO CABLE IN SPLICE VAULT. SPLICE THE OTHER 48SMFO CABLE (TRUNK CABLE) WITH EXISTING 24SMFO CABLE.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUIT AND CONDUCTOR TYPE	FUNCTION	RUN					
		1				2	14
48SMFO CABLE	DATA/VOICE	1					
36SMFO CABLE	VIDEO/VOICE		1				
48SMFO CABLE	VIDEO/DATA			1			
12SMFO CABLE	DATA/VOICE						
#1/0	POWER						2
INNERDUCT (SIZE 25)		1	1	1	1	4	
CONDUIT SIZE		103				103	53



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

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

E-35

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

PROJECT ENGINEER SUNG LEE

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DATE REVISED

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CU 07388

EA 116791

ACNHG-P118(048)E

DIST.	COUNTY	ROUTE	TOTAL PROJECT	NO.	SHEETS
07	LA	118	R0.0/R14.0	1	125

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

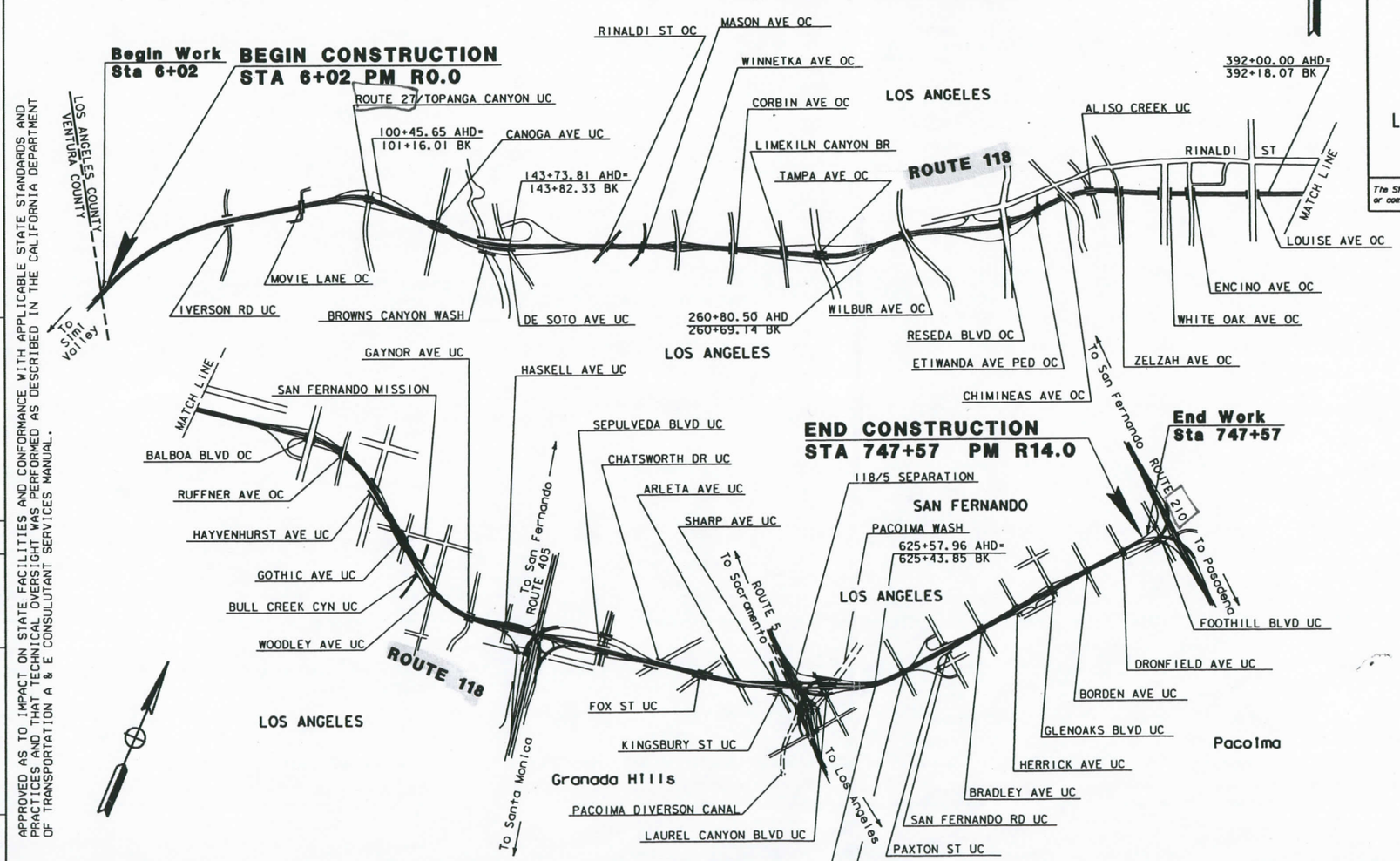
STATE HIGHWAY

IN LOS ANGELES COUNTY
IN LOS ANGELES
FROM VENTURA COUNTY LINE
TO ROUTE 118/210 SEPARATION

To be supplemented by Standard Plans dated July, 1992

INDEX OF SHEETS

Sheet No. 1		Title and Location Map
" " 2-3		Standard Plans List
" " 4-5		Key Map and Line Index
" " 6-11		Layouts
" " 12-22		Construction Details
" " 23-36		Utility Plans
" " 37-39		Traffic Handling Plans
" " 40-41		Construction Area Signs
" " 42		Summary of Quantities
" " 43		Sign Details
" " 44-116		Electrical Plans
" " 117-122		Revised Standard Plans
" " 123-124		New Standard Plans
" " 125		Revised New Standard Plan



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APPROVED AS TO IMPACT ON STATE FACILITIES AND CONFORMANCE WITH APPLICABLE STATE STANDARDS AND PRACTICES AND THAT TECHNICAL OVERSIGHT WAS PERFORMED AS DESCRIBED IN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION A & E CONSULTANT SERVICES MANUAL.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE ''NOTICE TO CONTRACTORS''.

PROJECT ENGINEER	DESIGN OVERSIGHT APPROVAL	REGISTRATION NO.	DATE
LEO K. LEE	PAT SULLIVAN	C30912	3/31/96

8/15/94
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
NO. C42445
EXP. 3/31/96
STATE OF CALIFORNIA

July 22, 1996
PLANS APPROVAL DATE

DKS Associates
1055 West 7th Street, Suite 2850
Los Angeles, CA 90017

Contract No. 07-120874

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

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

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DGN FILE => $REQUEST

CU 07374

EA 120871

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	44	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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PROJECT NOTES: (SHEETS E-2 TO E-15)

1. TRENCH AND INSTALL CONDUIT IN ASPHALT.
2. TRENCH AND INSTALL CONDUIT IN CONCRETE.
3. TRENCH AND INSTALL CONDUIT IN SOIL.
4. ATTACH CONDUIT TO STRUCTURE. SEE SHEET C-8 FOR BRIDGE ATTACHMENT TYPE AND DETAILS.
5. JACK RIGID STEEL CONDUIT BENEATH ROADWAY.
6. CONNECT 6P22 TO CONTROLLER. USE CONDUIT FROM PB INTO CABINET. IF A NEW TELEPHONE BRIDGE IS TO BE INSTALLED, CONNECT BRIDGING 6P22 FROM ELEMENT TO BLOCK. SEE SHEETS E-2 THROUGH E-15 FOR NEW TELEPHONE BRIDGES AND E-54 FOR BLOCK DIAGRAM.
7. COIL 25 FEET OF 6P22 CABLE FOR TRAFFIC SIGNAL CONTROLLER.
8. COIL 25 FEET OF 6P22 CABLE FOR STATE CONTROLLER EQUIPMENT.
9. COIL 25 FEET OF 6P22 CABLE FOR IRRIGATION CONTROLLER.

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 REQUIREMENTS OF EITHER SOUTHERN CALIFORNIA EDISON COMPANY (SCE) OR LOS ANGELES DEPARTMENT OF WATER AND POWER (DWP).
4. CONDUCTORS FROM POWER POLE (OR VAULT) TO SERVICE ENCLOSURE WILL BE INSTALLED BY UTILITY COMPANY.
5. 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 BACKFILL.
6. STENCIL CAMERA IDENTIFICATION NUMBER ON POLE IN 3" CHARACTERS 10 FEET ABOVE BASE. SEE SHEETS K-1 AND K-2.
7. STATIONS GIVEN ARE APPROXIMATE, EXACT EQUIPMENT AND POLE LOCATIONS TO BE DETERMINED BY ENGINEER.
8. PULL AND COIL AN EXTRA 50 FEET OF SMFO AND TWISTED PAIR CABLES IN EACH SPLICE VAULT UNLESS OTHERWISE NOTED.

ABBREVIATIONS:

CCTV	- CLOSED CIRCUIT TELEVISION
CIA	- CONTROLLER INTERPHASE ASSEMBLY
COMM	- COMMUNICATION
DACCS	- DIGITAL ACCESS CROSS CONNECTION SYSTEM
DEMARC	- DEMARCATION
DEMUX	- DEMULTIPLEX
DWP	- LA DEPARTMENT OF WATER AND POWER
FDF	- FIBER DISTRIBUTION FRAME
GTE	- GENERAL TELEPHONE AND ELECTRIC
JKFD	- JACKFIELD
MUX	- MULTIPLEX
OW	- ORDER WIRE (MULTIPLE VOICE CIRCUIT)
PAC BELL	- PACIFIC BELL TELEPHONE COMPANY
PDA	- POWER DISTRIBUTION ASSEMBLY
PT&T	- PACIFIC TELEPHONE AND TELEGRAPH
RMS	- RAMP METERING SYSTEM
RX	- RECEIVER
SV	- SIMI VALLEY
SCE	- SOUTHERN CALIFORNIA EDISON
SCGAS	- SOUTHERN CALIFORNIA GAS COMPANY
SCWC	- SOUTHERN CALIFORNIA WATER COMPANY
SMFO	- SINGLEMODE FIBER OPTIC
TMS	- TRAFFIC MONITORING STATION
TX	- TRANSMITTER
VMX	- VIDEO MULTIPLEXER

TABLE 1 - CCTV WIRING

CONDUCTOR TYPE	FUNCTION	QTY
RG-6A/U	CAMERA VIDEO INTERFACE CABLE	1
9*18 CABLE	PAN/TILT CONTROL CABLE	1
12*18 CABLE	LENS CONTROL CABLE	1

LEGEND (SHEETS E-2 TO E-34)

- CCTV ASSEMBLY CAMERA AND POLE
- CCTV CAMERA POLE LOCATION
- PROPOSED CMS
- HAR ANTENNA LOCATION
- COMMUNICATION PULL BOX
- EXISTING SPLICE VAULT
- SPLICE VAULT SEE SHEET E-36
- EXISTING TV 334 CABINET
- EXISTING TELETPHONE BRIDGE
- TELEPHONE BRIDGE
- NEW 334 CABINET (CCTV/HAR/CMS)
- —— E —— PROPOSED POWER SERVICE CONDUIT
- —— e —— EXISTING POWER SERVICE CONDUIT
- PP*XXX POWER POLE NUMBER
- XXSMFO SINGLEMODE FIBER OPTIC CABLE SEE SHEET E-70 FOR ASSIGNMENT
- XXP22 XX TWISTED PAIR TELEPHONE CABLE SEE SHEET E-66 THROUGH E-68 FOR ASSIGNMENT
- SVXXX (XXX = POST MILE DESIGNATOR TO ONE DECIMAL PLACE) CCTV IDENTIFICATION NUMBER: (SV = SIMI VALLEY FREEWAY)

CCTV AND COMMUNICATION SYSTEM (LEGEND AND NOTES)

E-1

DESIGN OVERSIGHT	PAT SULLIVAN	CALCULATED/DESIGNED BY	RL
		CHECKED BY	CF
		DATE	5/94
		REVISED BY	KP
		DATE REVISED	2/96

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	45	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS • ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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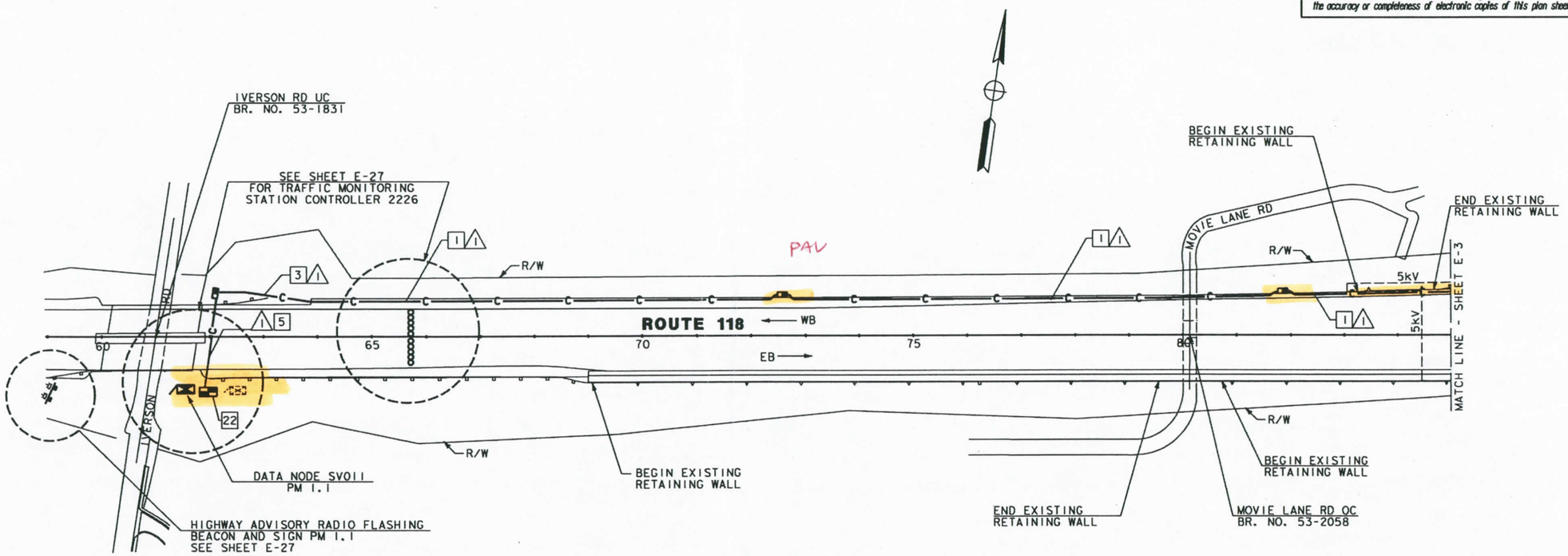
NOTES: (THIS SHEET ONLY)

22 PULL AND COIL AN EXTRA 50 FEET OF 24SMFO AND 50P22 CABLE IN SPLICE VAULT.

33. HIGH VOLTAGE ELECTRICAL LINES SHOWN. TAKEN FROM CALTRANS WIRING DIAGRAM.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1		
50P22 CABLE	COMMUNICATION DATA	1		
6P22 CABLE	CONTROLLER DATA			
24SMFO CABLE	NODE LINE		1	
	INNERDUCT		1¼"	1¼"
	CONDUIT SIZE	4"		



WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

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

COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN

CALCULATED/DESIGNED BY: RL DATE 5/94 REVISED BY: KP
CHECKED BY: CF 5/94 DATE REVISED: 2/96

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

$REQUEST $DATE $USER

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

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DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	46	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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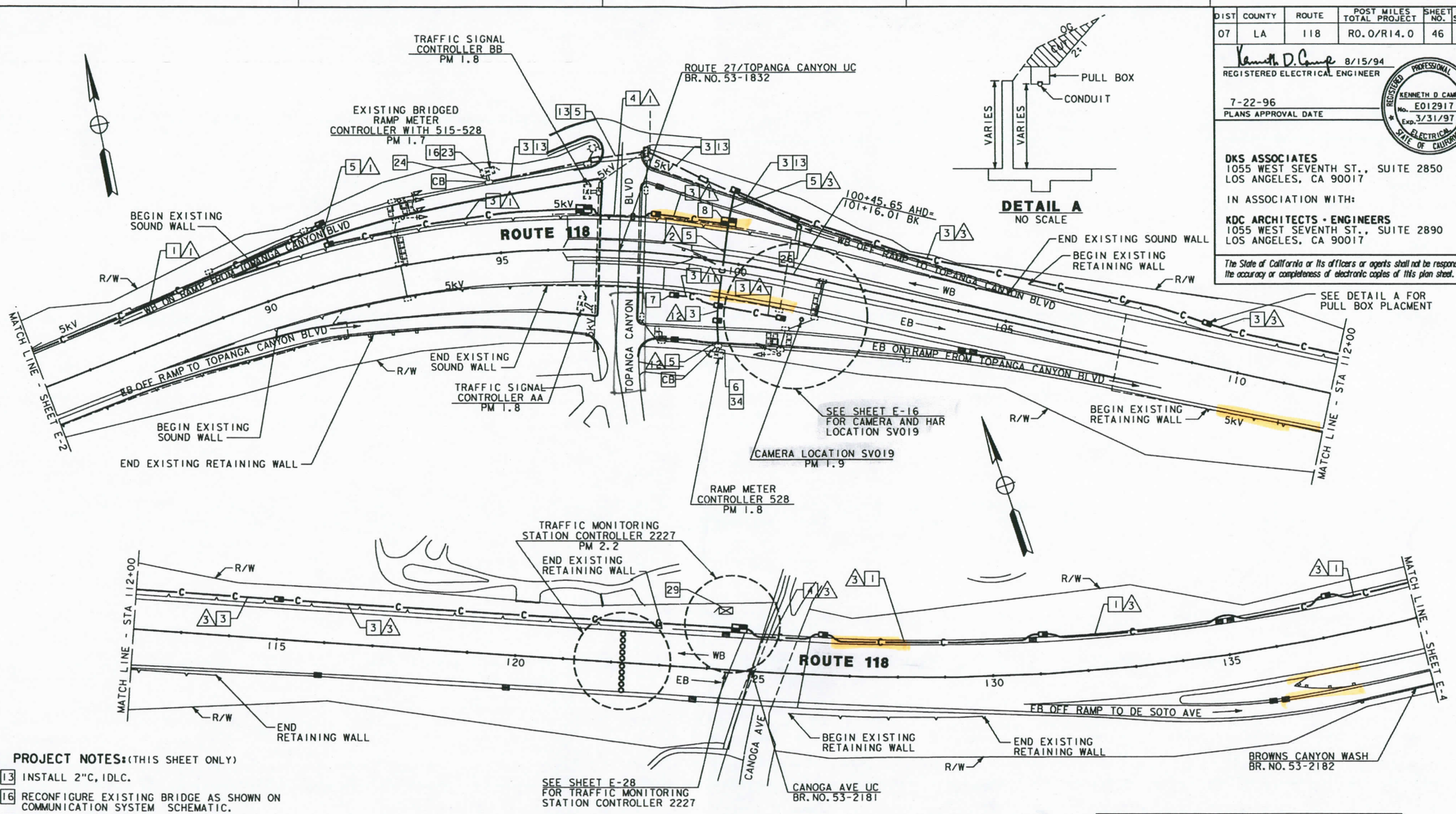

PROJECT NOTES: (THIS SHEET ONLY)

13 INSTALL 2"C, IDLC.

16 RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.

23 INSTALL STATE-FURNISHED LOOP SENSOR/DC ISOLATION UNIT IN EXISTING CABINET AND CONNECT DLC CABLES.

24 INSTALL DLC CABLES IN EXISTING CONDUIT.

26 SEE STANDARD PLAN ES-5B FOR LOOP INSTALLATION.

29 SPLICE 6P22 CABLE(S) WITH THE 50P22 CABLE. SEE TWISTED PAIR ASSIGNMENT TABLE, SHEETS E-66 THROUGH E-68.

34 INSTALL TELEPHONE BRIDGE AND 12 PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-54 AND E-59 FOR DETAILS.

33. HIGH VOLTAGE ELECTRICAL LINES SHOWN, TAKEN FROM CALTRANS WIRING DIAGRAM.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET OINLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2			RUN 3			4	11	12
50P22 CABLE	COMMUNICATION DATA	1						1					
6P22 CABLE	CONTROLLER DATA				4						2	1	1
24SMFO	NODE LINE		1						1				
12SMFO CABLE	CCTV CAMERA TO VIDEO DISTRIBUTION									1			
2SMFO B/O CABLE	SHORT HAUL VIDEO					1					1		
	INNERDUCT		1¼"	1¼"		1¼"	1¼"		1¼"	1¼"			
	CONDUIT SIZE		4"			4"			4"		3"	2"	2"

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

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

LOOP DETECTOR AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-3

REVISED BY	KP	
DATE REVISED	2/96	
DATE	5/94	
RL	CF	
CALCULATED/DESIGNED BY	CHECKED BY	

DESIGN OVERSIGHT
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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DATE PLOTTED => $DATE
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DKS ASSOCIATES | /PROJECTS/POT/CDMA/ 120871103.DGN
FORM DC-OE-92-PF (REV. 3/88)

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USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	47	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS • ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 3			RUN 5	RUN 11
50P22 CABLE	COMMUNICATION DATA	1				
6P22 CABLE	CONTROLLER DATA				1	1
24SMFO CABLE	NODE LINE		1			
12SMFO CABLE	CCTV CAMERA TO VIDEO DISTRIBUTION			1		
	INNERDUCT		1¼"	1¼"		
	CONDUIT SIZE	4"			4"	2"

PROJECT NOTES: (THIS SHEET ONLY)

23 INSTALL STATE-FURNISHED LOOP SENSOR/DC ISOLATION UNIT IN EXISTING CABINET AND CONNECT DLC CABLE.

24 INSTALL CABLES IN EXISTING CONDUIT.

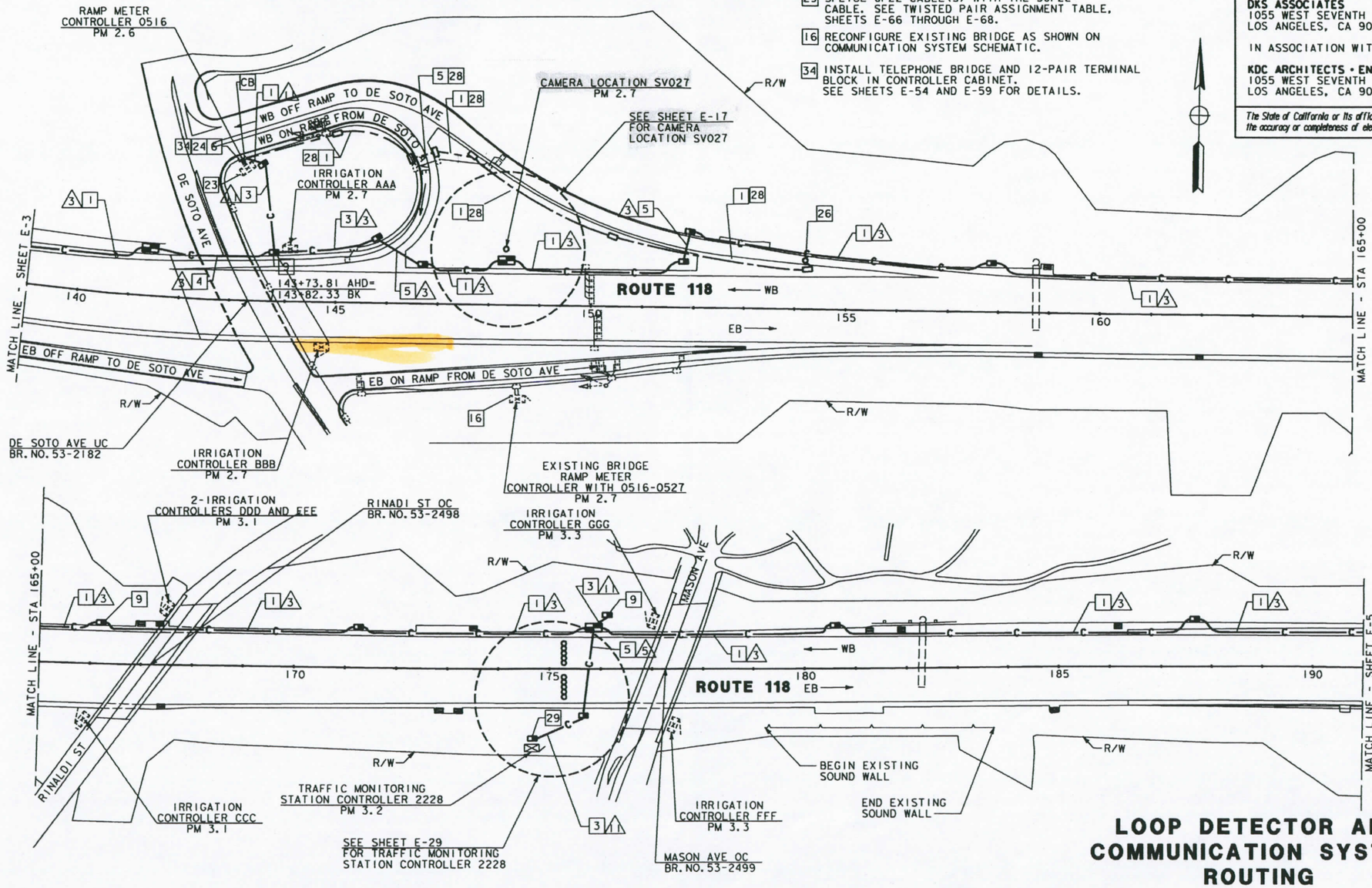
26 SEE STANDARD PLAN ES-5B FOR LOOP INSTALLATION.

28 INSTALL 2"C,1 DLC.

29 SPLICE 6P22 CABLE(S) WITH THE 50P22 CABLE. SEE TWISTED PAIR ASSIGNMENT TABLE, SHEETS E-66 THROUGH E-68.

16 RECONFIGURE EXISTING BRIDGE AS SHOWN ON COMMUNICATION SYSTEM SCHEMATIC.

34 INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-54 AND E-59 FOR DETAILS.



LOOP DETECTOR AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-4

CALCULATED/DESIGNED BY	DATE	REVISED BY	DATE REVISED
RL	5/94	KP	2/96
CHECKED BY	CF 5/94		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

$REQUEST $DATE $USER

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

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	53	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS • ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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WARNING

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

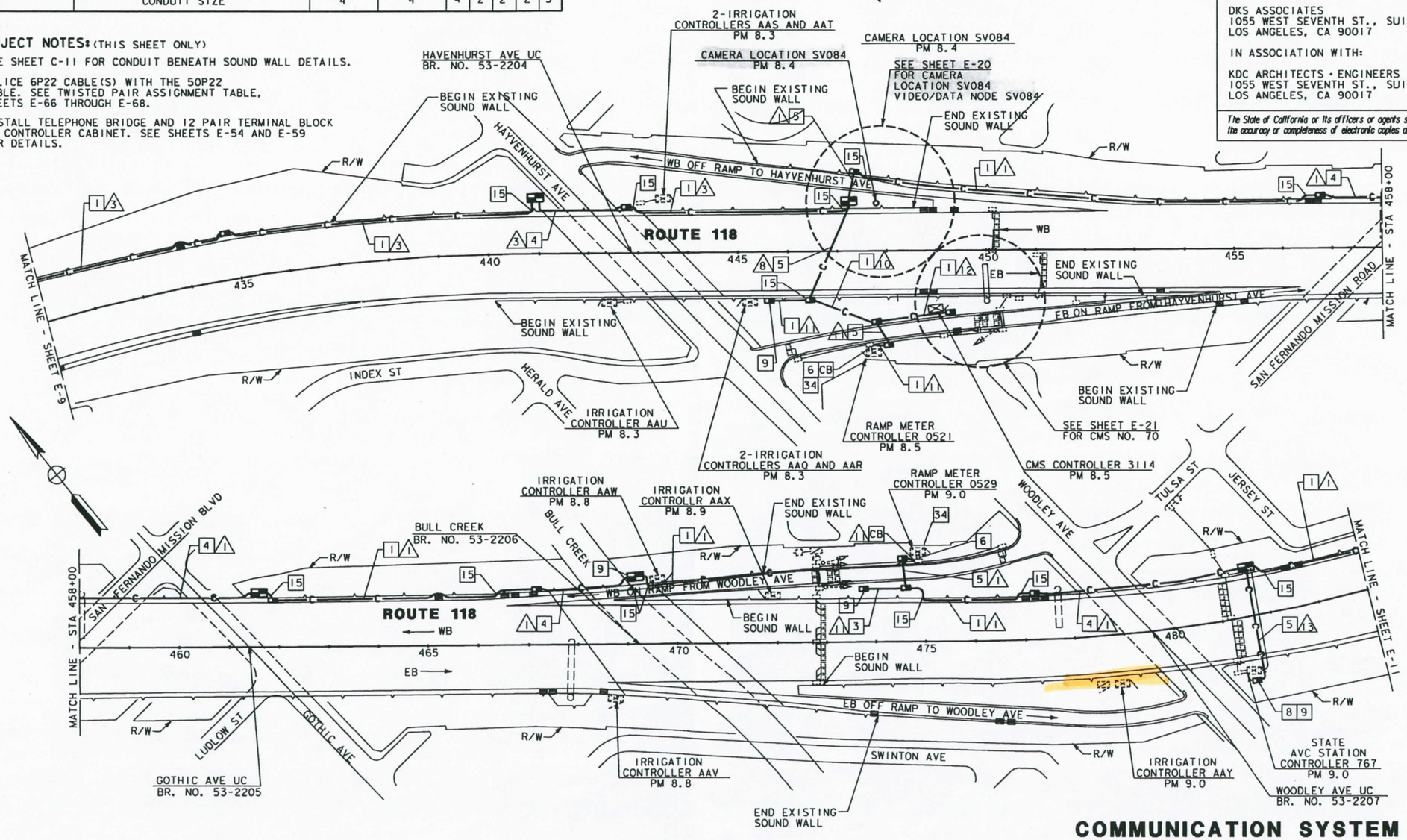
CONDUCTOR TYPE	FUNCTION	RUN 1			3			8	10	11	12	13
50P22 CABLE	COMMUNICATION DATA	1			1							
6P22 CABLE	CONTROLLER DATA							4	3	1	2	2
24SMFO CABLE	NODE LINE		1			1						
12SMFO CABLE	CCTV CAMERA TO VIDEO DISTRIBUTION						1					
	INNERDUCT		1¼"	1¼"		1¼"	1¼"					
	CONDUIT SIZE	4"			4"			4"	2"	2"	2"	3"

PROJECT NOTES: (THIS SHEET ONLY)

15 SEE SHEET C-11 FOR CONDUIT BENEATH SOUND WALL DETAILS.

29 SPLICE 6P22 CABLE(S) WITH THE 50P22 CABLE. SEE TWISTED PAIR ASSIGNMENT TABLE, SHEETS E-66 THROUGH E-68.

34 INSTALL TELEPHONE BRIDGE AND 12 PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEETS E-54 AND E-59 FOR DETAILS.



COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-10

	DATE	REVISED BY	DATE REVISED
	5/94	KP	2/96

CALCULATED/DESIGNED BY: RL — CHECKED BY: CF

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	54	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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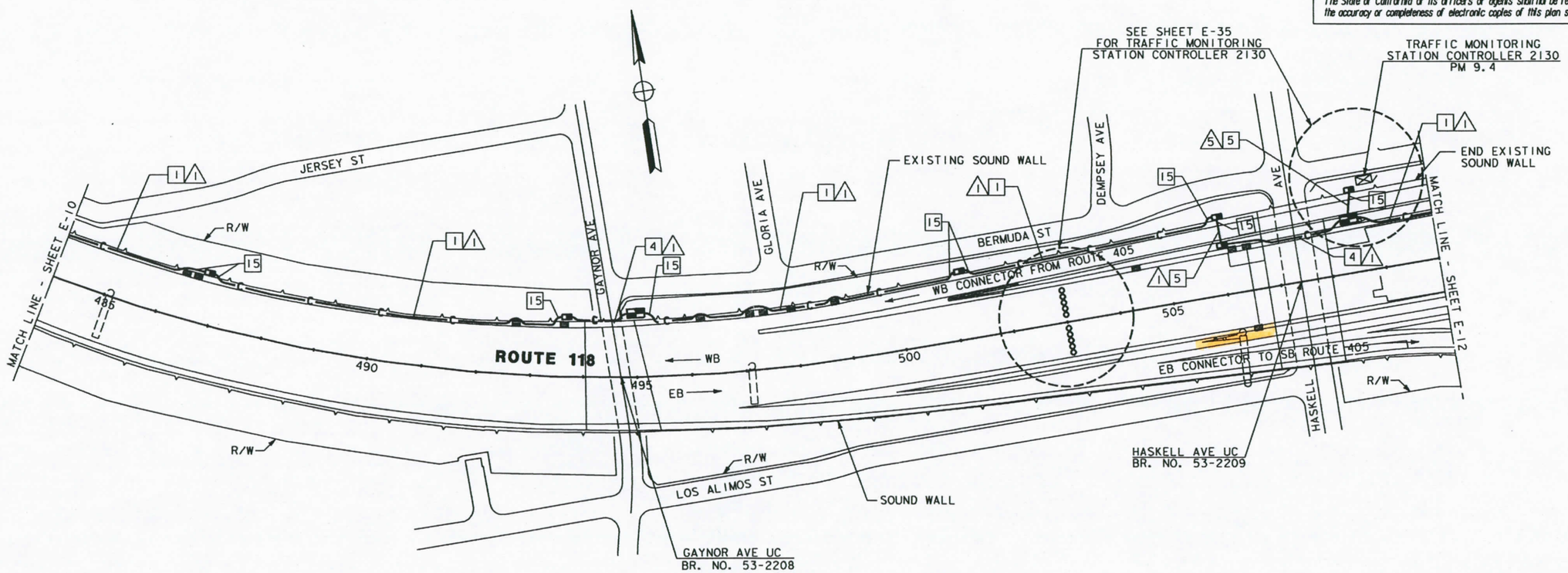
WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 5
50P22 CABLE	COMMUNICATION DATA	1			
6P22 CABLE	CONTROLLER DATA				1
24SMFO CABLE	NODE LINE		1		
	INNERDUCT		1 1/4"	1 1/4"	
	CONDUIT SIZE		4"		4"



PROJECT NOTES: (THIS SHEET ONLY)

15 SEE SHEET C-11 FOR CONDUIT BENEATH SOUND WALL DETAILS.

COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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CALCULATED/DESIGNED BY: RL DATE 5/94 REVISED BY
CHECKED BY: CF 5/94 DATE REVISED

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DKS ASSOCIATES | /PROJECTS/PM/COMM/120871ULDGN
FORM DC-OE-92-PF (REV. 3/88)

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

$REQUEST $DATE $USER

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	55	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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PROJECT NOTES: (THIS SHEET ONLY)

11 COIL 50 FEET OF 24SMFO CABLE IN EXISTING SPLICE VAULT.

14 INSTALL 24SMFO CABLE IN EXISTING COMMUNICATIONS CONDUIT. ROUTE 24SMFO IN SAME INNERDUCT AS EXISTING FIBER OPTIC CABLES.

22 PULL AND COIL AN EXTRA 50 FEET OF 24SMFO AND 50P22 CABLE IN SPLICE VAULT.

33. HIGH VOLTAGE ELECTRICAL LINES SHOWN, TAKEN FROM CALTRANS WIRING DIAGRAM.

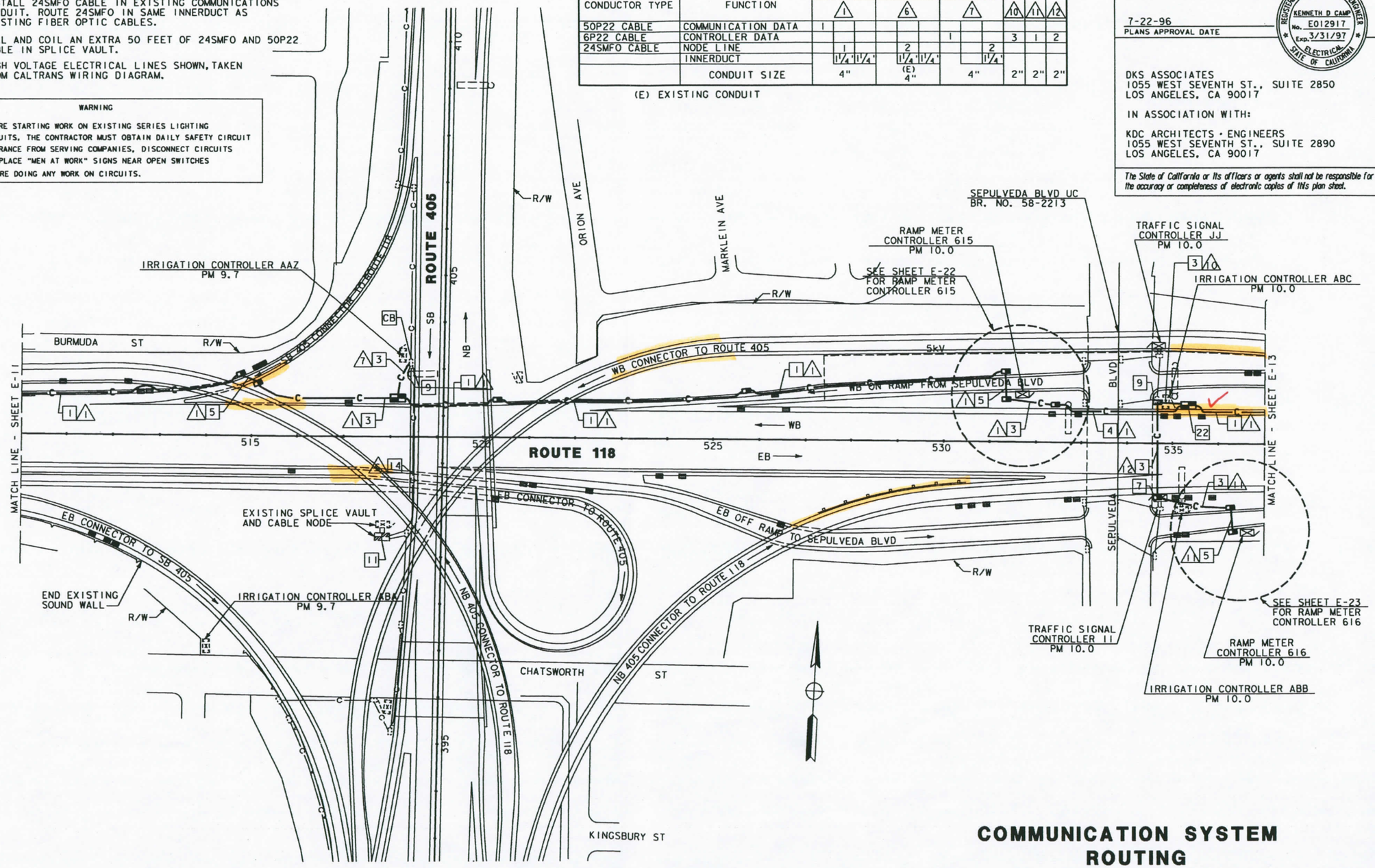
WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 6	RUN 7	RUN 10	RUN 11	RUN 12
50P22 CABLE	COMMUNICATION DATA	1					
6P22 CABLE	CONTROLLER DATA			1	3	1	2
24SMFO CABLE	NODE LINE	1	2	2			
	INNERDUCT	1¼" 1¼"	1¼" 1¼"	1¼"			
	CONDUIT SIZE	4"	(E) 4"	4"	2"	2"	2"

(E) EXISTING CONDUIT



COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-12

CALCULATED/DESIGNED BY	RL	DATE 5/94	REVISED BY	KP
CHECKED BY	CF	5/94	DATE REVISED	2/96

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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DKS ASSOCIATES | /PROJECTS/POT/COMM/120871X2.DGN
FORM DC-OE-92-PF (REV. 3/88)

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

CU 07374 | EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	56	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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WARNING

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE		RUN 1			5	9	12
50P22 CABLE	COMMUNICATION DATA	1					
6P22 CABLE	CONTROLLER DATA				1	2	2
24SMFO CABLE	NODE LINE		1				
	INNERDUCT		1 1/4"	1 1/4"			
	CONDUIT SIZE		4"		4"	4"	2"

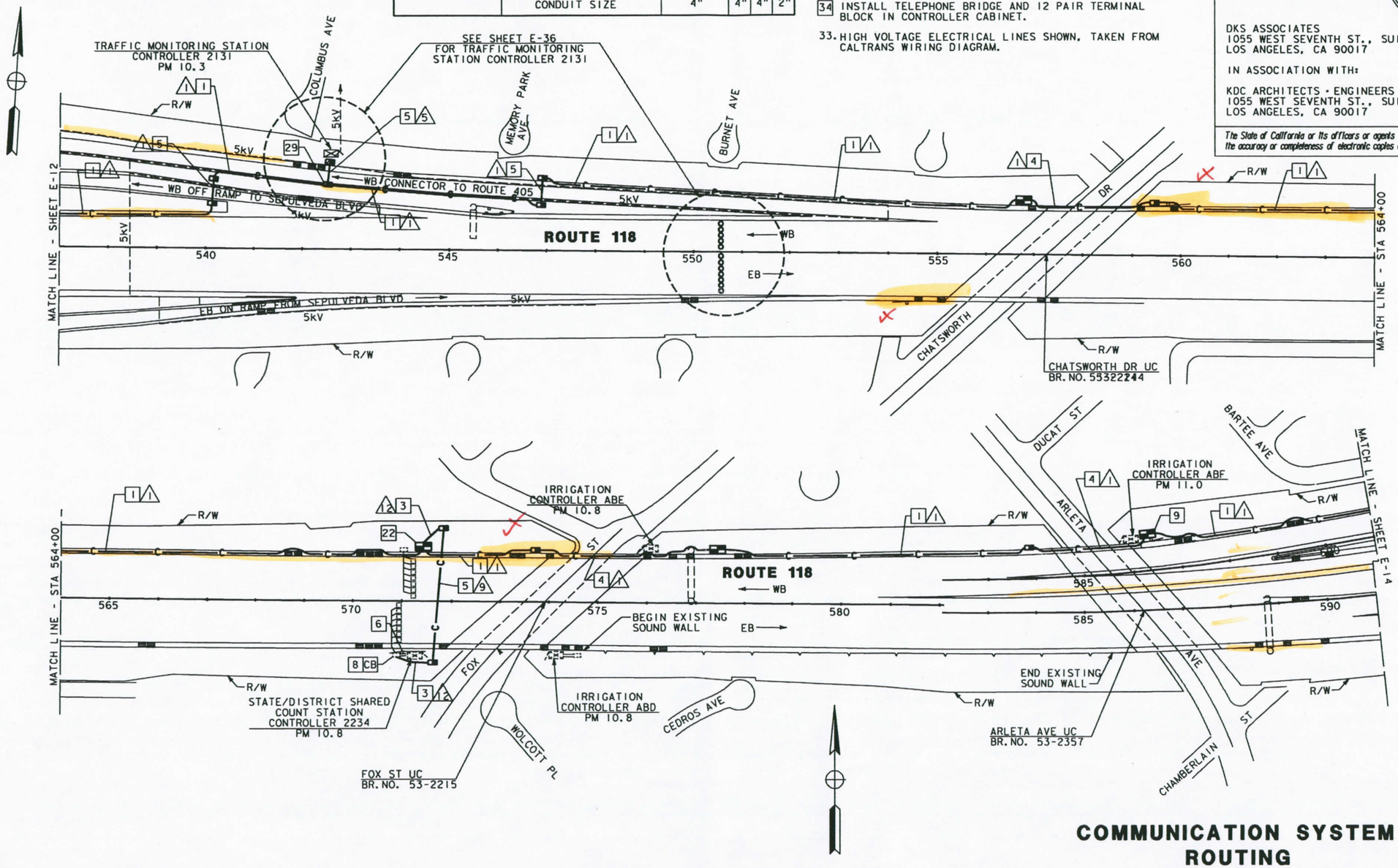
PROJECT NOTES: (THIS SHEET ONLY)

22 PULL AND COIL AN EXTRA 50 FEET OF 24SMFO AND 50P22 CABLE IN SPLICE VAULT.

29 SPLICE 6P22 CABLE(S) WITH THE 50P22 CABLE. SEE TWISTED PAIR ASSIGNMENT TABLE, SHEETS E-66 THROUGH E-68.

34 INSTALL TELEPHONE BRIDGE AND 12 PAIR TERMINAL BLOCK IN CONTROLLER CABINET.

33. HIGH VOLTAGE ELECTRICAL LINES SHOWN, TAKEN FROM CALTRANS WIRING DIAGRAM.



COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-13

CALCULATED/DESIGNED BY	RL	DATE 5/94	REVISED BY	KP
CHECKED BY	CF	5/94	DATE REVISED	2/96

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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

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USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	57	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KENNETH D CAMP
No. E012917
Exp. 3/31/97
ELECTRICAL
STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

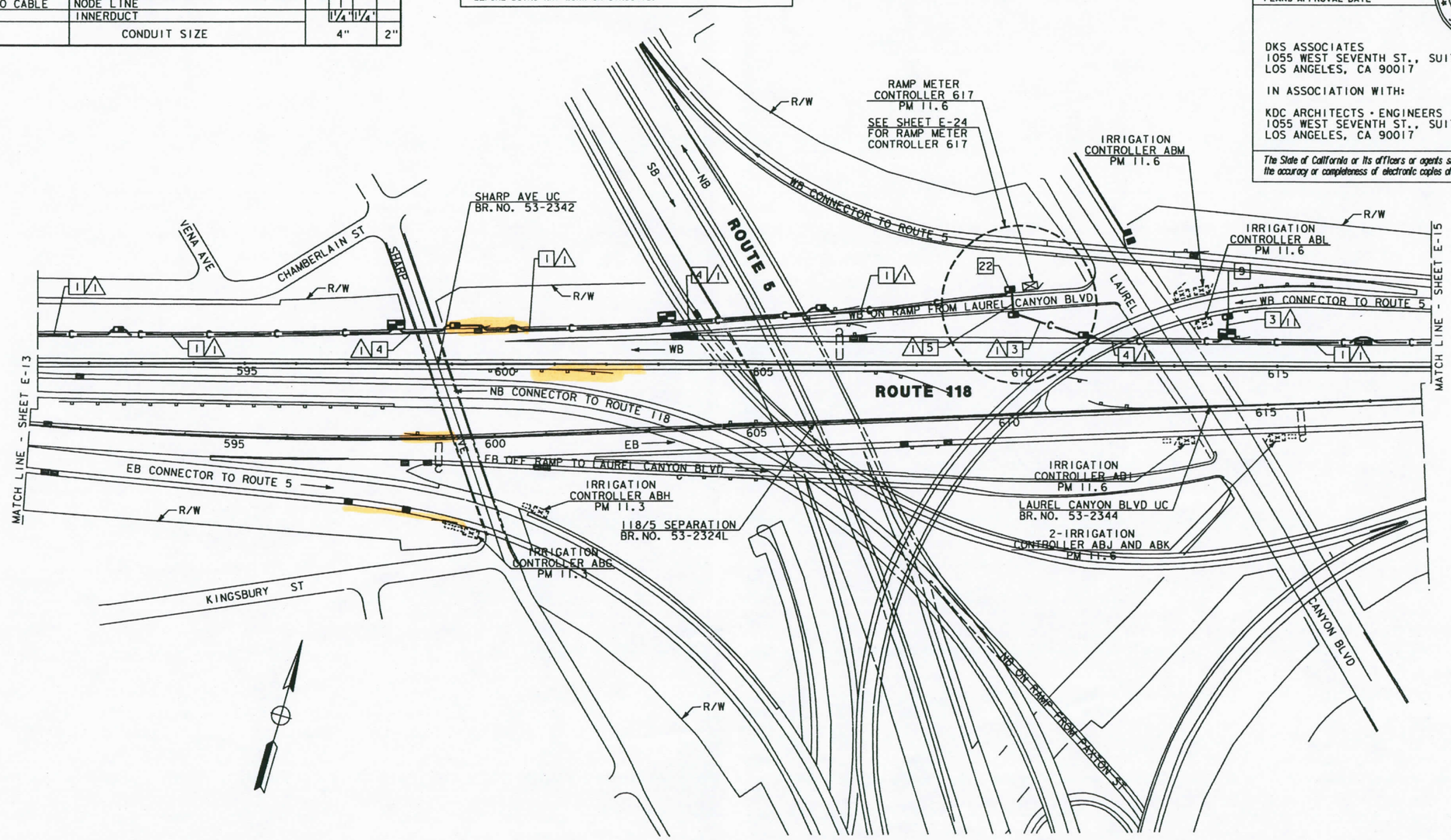
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 1	RUN 1	RUN 1/1
50P22 CABLE	COMMUNICATION DATA	1			
6P22 CABLE	CONTROLLER DATA				1
24SMFO CABLE	NODE LINE		1		
	INNERDUCT		1 1/4"	1 1/4"	
	CONDUIT SIZE	4"			2"

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

PROJECT NOTES: (THIS SHEET ONLY)

22 PULL AND COIL AN EXTRA 50 FEET OF 24SMFO AND 50P22 CABLE IN SPLICE VAULT.



COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

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

E-14

CALCULATED/DESIGNED BY	RL	DATE 5/94	REVISED BY KP
CHECKED BY	CF	5/94	DATE REVISED 2/96

DESIGN OVERSIGHT
PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

$REQUEST $DATE $USER

DKS ASSOCIATES | /PROJECTS/POT/COMM/120871M.DGN
FORM DC-OE-92-PF (REV. 3/88)

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	58	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL — STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

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LOS ANGELES, CA 90017

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			10	11	12
50P22 CABLE	COMMUNICATION DATA	1					
6P22 CABLE	CONTROLLER DATA				3	1	2
24SMFO CABLE	NODE LINE		1				
	INNERDUCT		1 1/4"	1 1/4"			
	CONDUIT SIZE		4"		2"	2"	3"

WARNING

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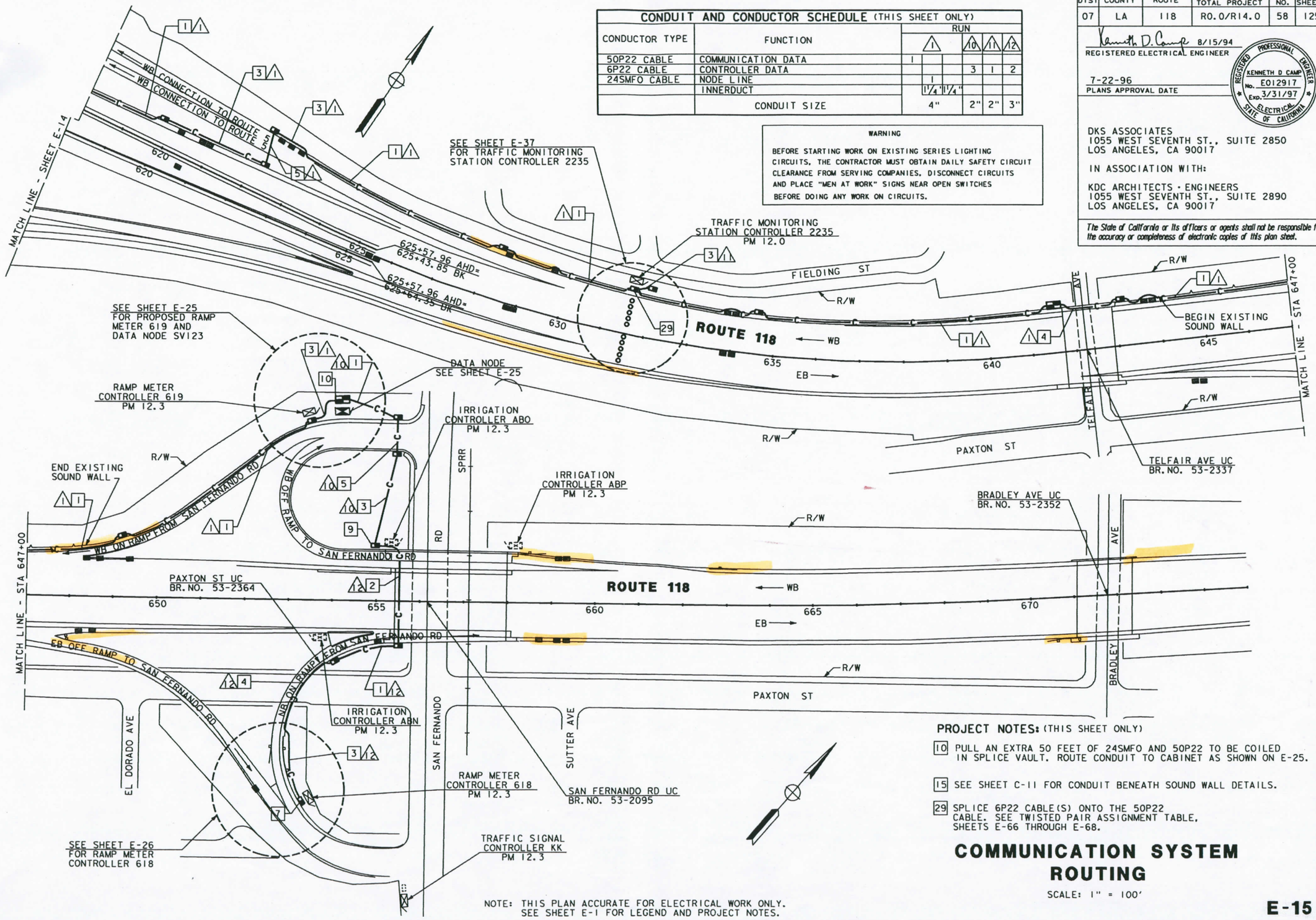

PROJECT NOTES: (THIS SHEET ONLY)

10 PULL AN EXTRA 50 FEET OF 24SMFO AND 50P22 TO BE COILED IN SPLICE VAULT. ROUTE CONDUIT TO CABINET AS SHOWN ON E-25.

15 SEE SHEET C-11 FOR CONDUIT BENEATH SOUND WALL DETAILS.

29 SPLICE 6P22 CABLE(S) ONTO THE 50P22 CABLE. SEE TWISTED PAIR ASSIGNMENT TABLE, SHEETS E-66 THROUGH E-68.

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

COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-15

DATE	REVISED BY	CALCULATED/ DESIGNED BY	DATE	DESIGN OVERSIGHT
5/94	KP	RL	5/94	PAT SULLIVAN
5/94	DATE REVISED	CHECKED BY	2/96	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DKS ASSOCIATES | /PROJECTS/POT/COMM/208TUS.DGN
FORM DC-OE-92-PF (REV. 3/88)

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

USERNAME => $USER
DGN FILE => $REQUEST

CU 07374

EA 120871

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	59	125

Kenneth D. Camp 8/15/94
REGISTERED ELECTRICAL ENGINEER

7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS · ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017

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NOTES: (THIS SHEET ONLY)

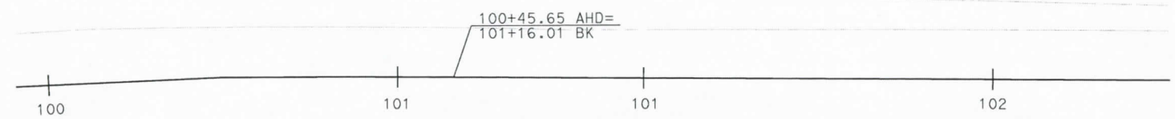
1. REMOVE EXISTING 120/240V, 3 WIRE, METERED, TYPE III-BF SERVICE EQUIPMENT ENCLOSURE ID#07-53-118-0-001.500 CONTRACTOR SHALL CONTACT CALTRANS ENGINEER IN ADVANCE OF REMOVING EXISTING SERVICE EQUIPMENT ENCLOSURE, AND CONTACT SCE 48 HOURS IN ADVANCE TO TURN OFF POWER FROM POWER POLE.
2. INSTALL 120/240V, 3 WIRE, DUAL METER, TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH 100A,240V,2P MAIN CIRCUIT BREAKER AND (METER #1) (2) 30A,120V,1P CIRCUIT BREAKERS FOR CCTV CAMERA AND HAR, AND (METER #2) (3) 40A,240V,2P CIRCUIT BREAKERS FOR EXISTING LIGHTING AND SIGN CIRCUITS.
3. TRENCH AND INSTALL CONDUIT IN SOIL.
4. JACK RIGID STEEL CONDUIT BENEATH ROADWAY.
5. INSTALL 3"C,MT (CONDUCTORS BY OTHERS).
6. INSTALL 2"C,4#4 AND 2"C,(EMPTY).
7. INSTALL 2"C,4#4.
8. INSTALL 1½"C,2#4.
12. INSTALL CAMERA ASSEMBLY AND PAN/TILT UNIT.
13. FOR INSTALLATION AND MOUNTING DETAILS SEE POLE MOUNTING DETAIL SHEET E-51.
14. INSTALL TYPE 334-TV CABINET. CABINET TO INCLUDE VIDEO TRANSMITTER AND CAMERA CONTROL RECEIVER. SEE SHEET E-49, DETAIL A.
15. INSTALL TYPE 334 CABINET. CABINET TO INCLUDE DIGITAL VOICE RECORDER AND AMTRANSMITTER ASSEMBLY. SEE SHEET E-49 FOR DETAILS.
16. INSTALL HAR ANTENNA POLE, AND HAR ANTENNA, SEE SHEET E-47.
17. INSTALL CONDUITS IN THE SAME TRENCH.
18. INSTALL 2"C,6#4.
19. CONNECT EXISTING CIRCUITS TO NEW SERVICE EQUIPMENT ENCLOSURE.
20. SEE SHEET L-1 FOR LAYOUT DETAILS.
21. THIS ITEM NOT INCLUDED IN THE QUANTITIES PAYMENT ON THIS SHEET.

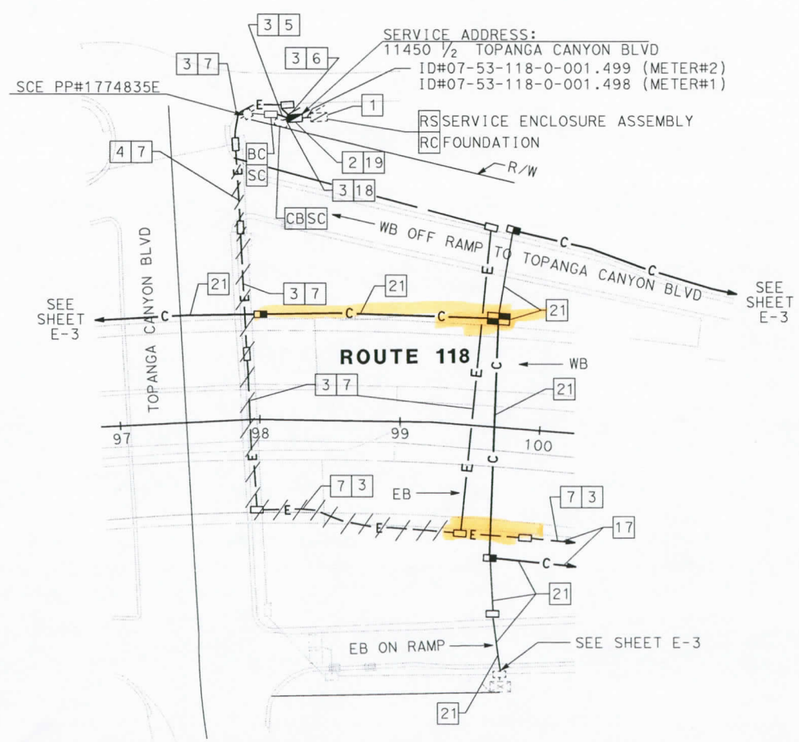
CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 2	RUN 3	RUN 4	RUN 5	RUN 7
6P22 CABLE	CONTROLLER DATA	1	1	1				
2SMFO B/O CABLE	SHORT HAUL VIDEO		1	1				
SEE TABLE 1, SHEET E-1	CCTV WIRING					1	1	
COAX CABLE	AUDIO TRANSMISSION DATA	1						1
	CONDUIT SIZE	2-4	4"	2"	2"	2"	4"	2"

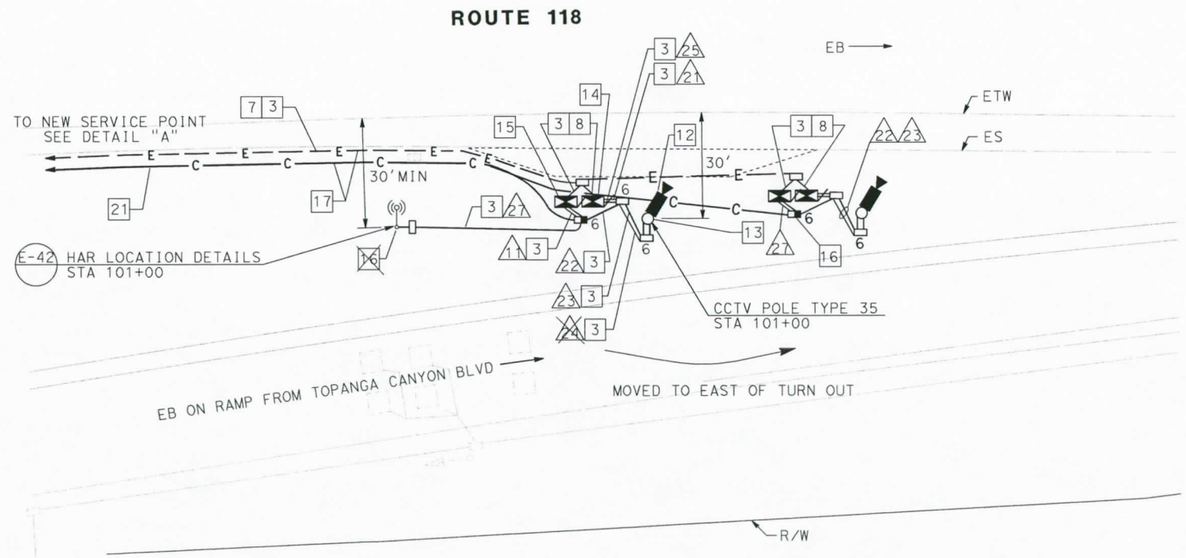
WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.





DETAIL "A"
SCALE: 1" = 50'



CAMERA & HAR LOCATION SV019, PM 1.9
SCALE: 1"=20'

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

CCTV CAMERA AND HAR (LOCATION SV019)

SCALE AS SHOWN

E-16

CALCULATED/DESIGNED BY	DP	DATE 5/94	REVISED BY
CHECKED BY	RL	5/94	DATE REVISED

DESIGN OVERSIGHT: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

712087u16.dgn 19-MAR-2009 s129183

LAST REVISION 00-00-00 DATE PLOTTED => 19-MAR-2009 TIME PLOTTED => 15:16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	118	R0.0/R14.0	70	125

REGISTERED CIVIL ENGINEER 8/15/94

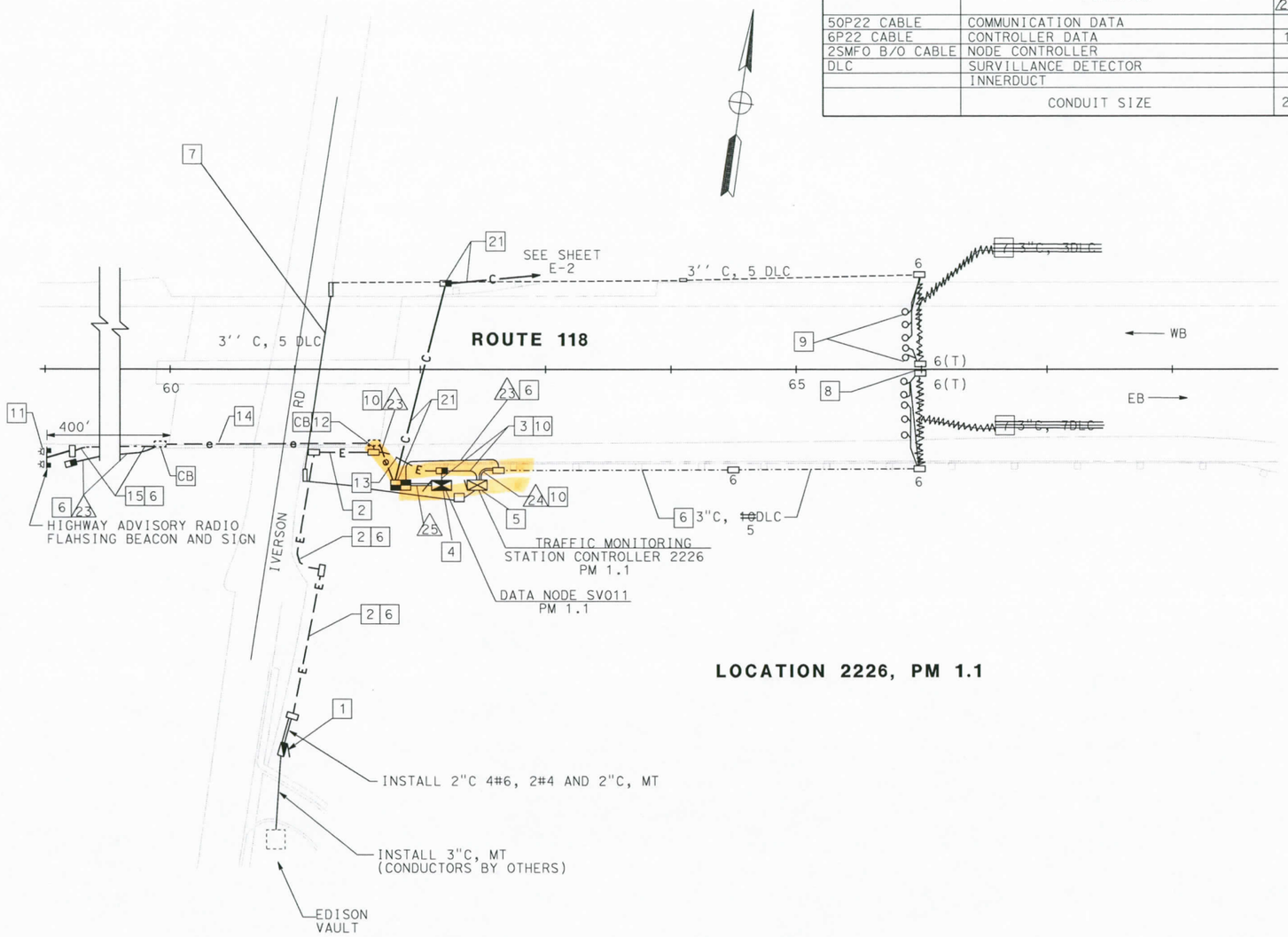
7-22-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ROBERT J CLOSE No. C41403 Exp. 9/30/99 CIVIL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

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

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)					
CONDUCTOR TYPE	FUNCTION	RUN			
		23	24	25	
50P22 CABLE	COMMUNICATION DATA			1	
6P22 CABLE	CONTROLLER DATA	1	1		
2SMFO B/O CABLE	NODE CONTROLLER			2	
DLC	SURVILLANCE DETECTOR		10		
	INNERDUCT			1¼"	1¼"
	CONDUIT SIZE	2"	2-3"	2-3"	



LOCATION 2226, PM 1.1

NOTES: (THIS SHEET ONLY)

1. INSTALL 120/240V,3 WIRE,METERED TYPE III-BF SERVICE EQUIPMENT ENCLOSURE WITH 100A,240V,2P MAIN CIRCUIT BREAKER,AND 30A,120V,1P CIRCUIT BREAKER FOR DATA NODE, 20A, 120V IP CIRCUIT BREAKER FOR TRAFFIC MONITORING STATION AND 20A, 120 1P CIRCUIT BREAKER FOR HIGHWAY ADVISORY RADIO BEACON AND SIGN.
2. INSTALL 2"C,4#6,2#4.
3. INSTALL 1½"C,2#6.
4. INSTALL TYPE 334-TV CABINET FOR DATA NODE. DATA NODE CABINET TO INCLUDE ONE D4 CHANNEL BANK SEE SHEET E-50 DETAIL A.
5. INSTALL STATE-FURNISHED TYPE 334 CABINET. CABINET TO INCLUDE STATE FURNISHED 170 CONTROLLER AND LOOP DETECTOR SENSOR. INSTALLL TELEPHONE BRIDGE AND 12 PAIR TERMINAL BLOCK IN CONTROLLER CABINET. SEE SHEET E-54 FOR DETAILS.
6. TRENCH AND INSTALL CONDUIT IN ASPHALT.
7. JACK RIGID STEEL CONDUIT BENEATH ROADWAY.
8. SEE SHEET E-46 FOR DLC INSTALLATION DETAIL.
9. SEE SHEET E-46, FOR TMS LOOP CONFIGURATION.
10. TRENCH AND INSTALL CONDUIT IN SOIL.
11. INSTALL HIGHWAY ADVISORY RADIO FLASHING BEACON AND SIGN. SEE SHEET S-1 FOR DETAILS.
12. INSTALL 1½"C,2#4.
13. INSTALL 2"C,4#6.
14. ADD 2#4 AND 6P22 CABLE IN EXISTING CONDUIT INSIDE BRIDGE RAIL.
15. INSTALL 2"C,2#4.
16. LOCATION OF PULL BOXES, CONTROLLER CABINET AND POSITIONING OF DETECTORS ARE SCHEMATIC UNLESS OTHERWISE NOTED. BEFORE BEGINNING ANY CONSTRUCTION,THE LOCATIONS SHALL BE VERIFIED BY ENGINEER.

21 THIS ITEM NOT INCLUDED IN THE QUANITITES PAYMENT ON THIS SHEET.

WARNING

BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, THE CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANIES, DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

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

EQUIPMENT AT DATA NODE, HIGHWAY ADVISORY RADIO FLASHING BEACON AND SIGN (LOCATION SV011) TRAFFIC MONITORING STATION (LOCATION 2226)

SCALE: 1" = 50'

E-27

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: PAT SULLIVAN

CALCULATED/DESIGNED BY | CHECKED BY | DATE REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 13-MAR-2009 | TIME PLOTTED => 15:22

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

USERNAME => s129183
DGN FILE => 712087u27.dgn

CU 07374 | EA 120871