

INDEX OF PLANS

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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA **SARRA-IM-005-3(043)E**
DEPARTMENT OF TRANSPORTATION

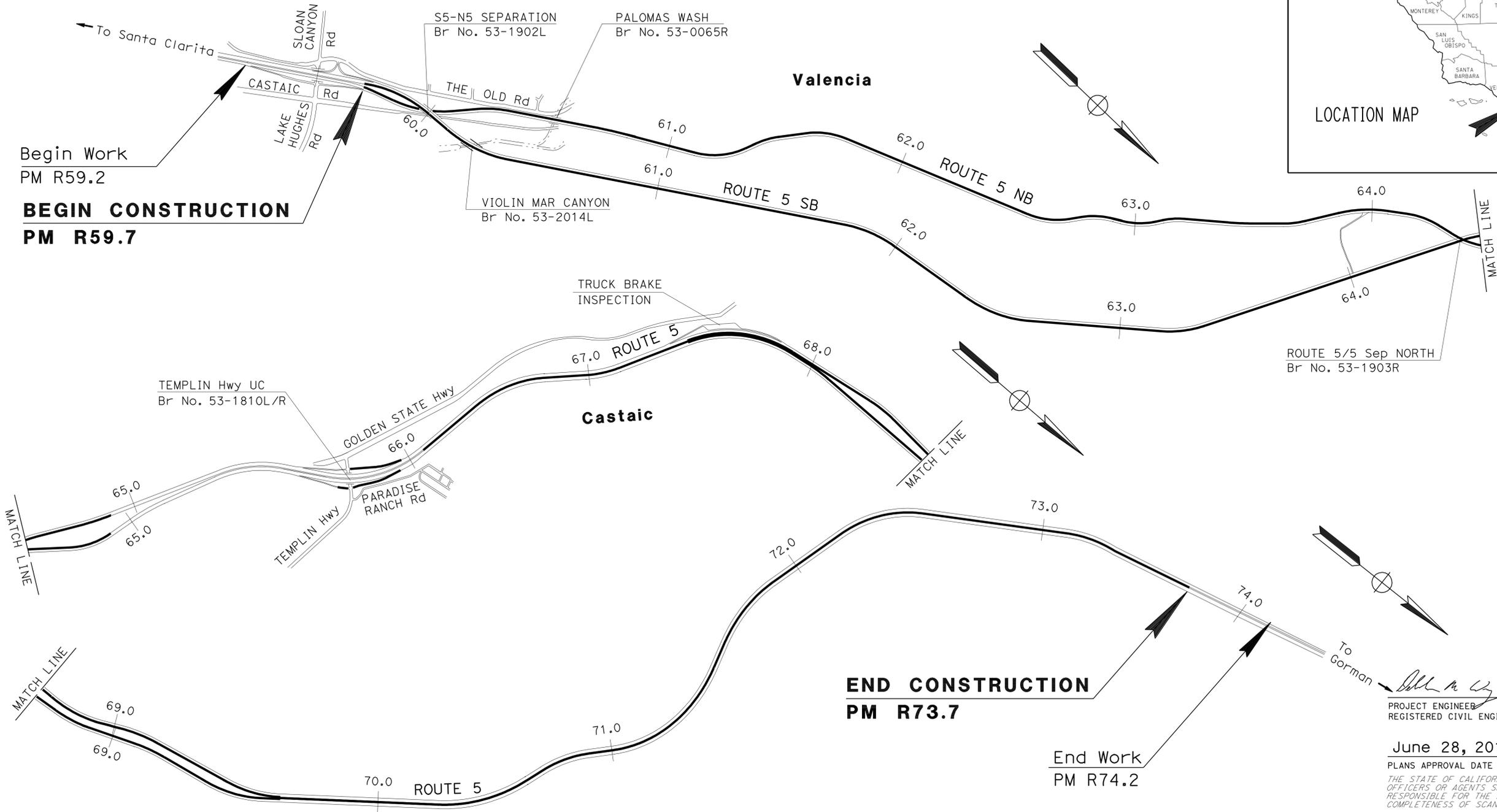
PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY
IN LOS ANGELES COUNTY
AT VALENCIA AND CASTAIC

FROM 0.2 MILE NORTH OF LAKE HUGHES ROAD UNDERCROSSING TO 0.7 MILE SOUTH OF VISTA DEL LAGO ROAD OVERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	1	50

Caltrans



Begin Work
PM R59.2
BEGIN CONSTRUCTION
PM R59.7

END CONSTRUCTION
PM R73.7
End Work
PM R74.2

NO SCALE

PROJECT MANAGER
DENNIS SNYDER
DESIGN ENGINEER
DEBORAH WONG

PROJECT ENGINEER *Deborah Wong* DATE 6-10-10
 REGISTERED CIVIL ENGINEER
June 28, 2010
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



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

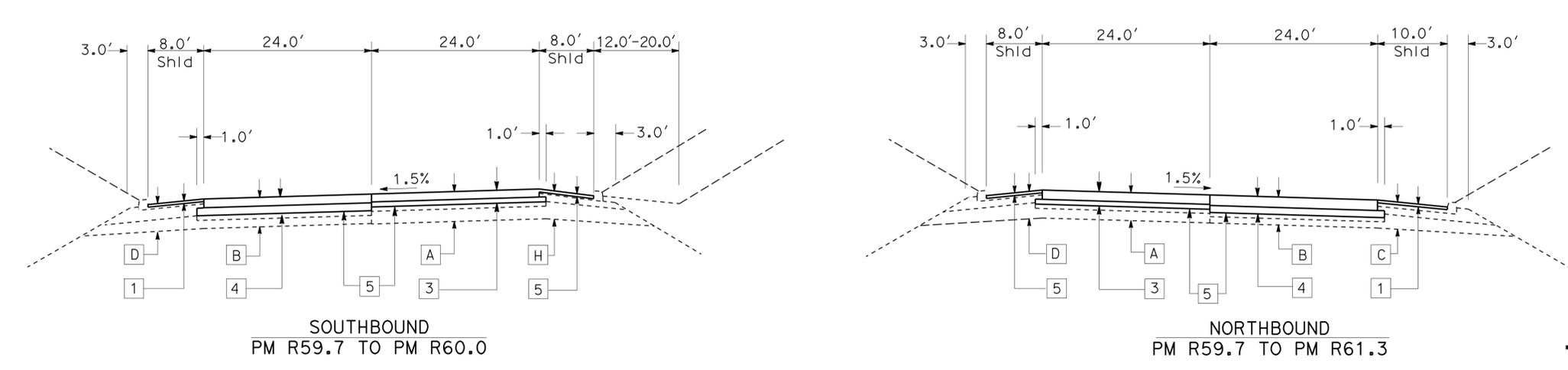
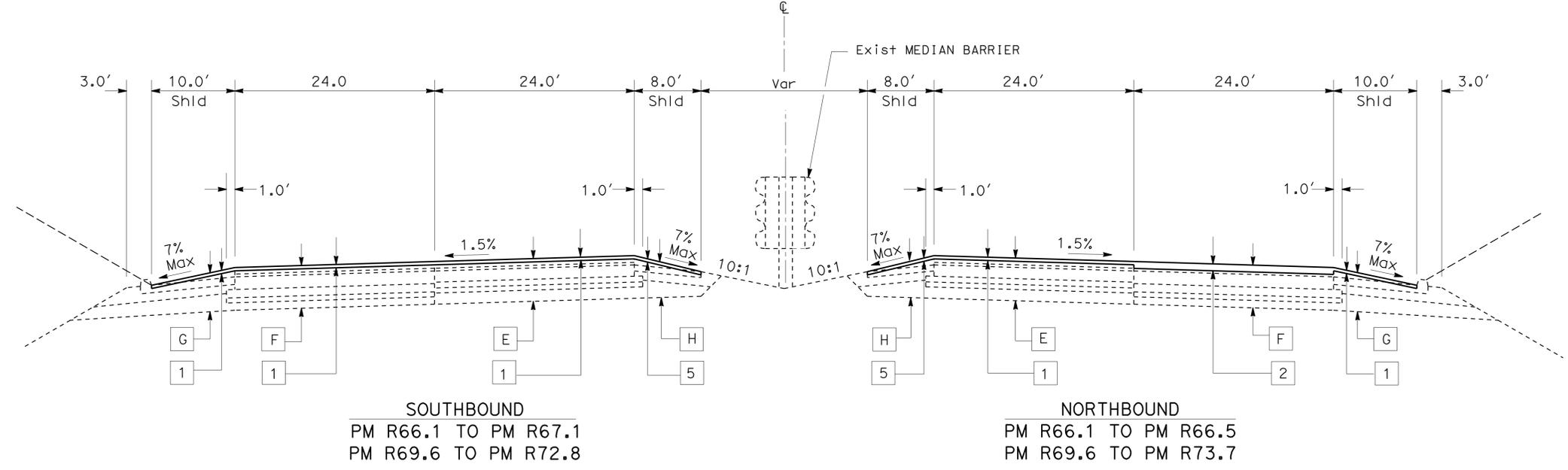
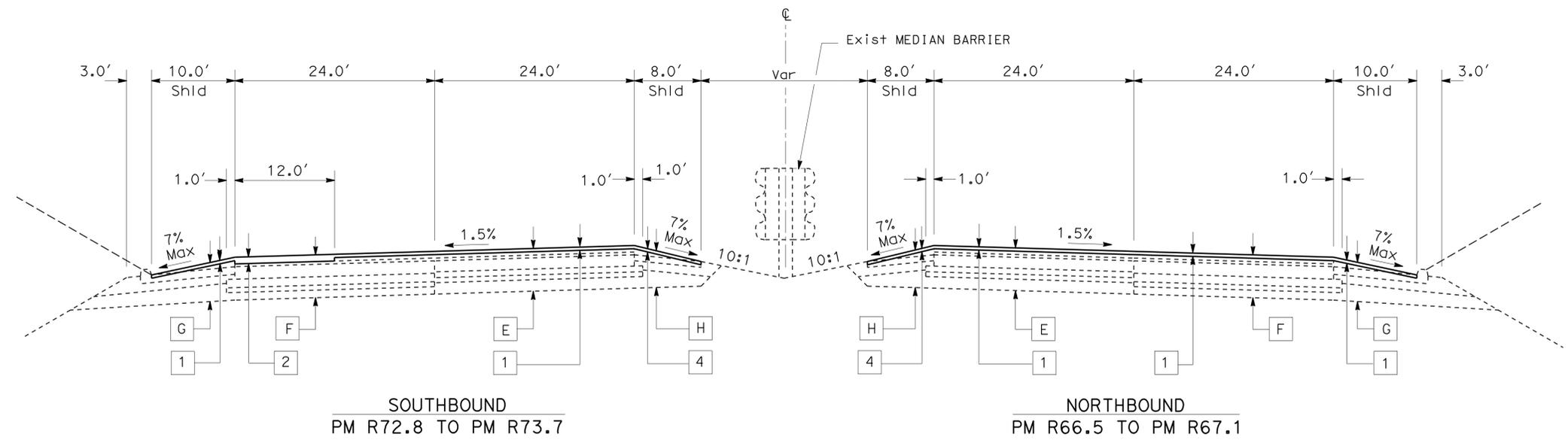
DATE PLOTTED => 13-AUG-2010 TIME PLOTTED => 12:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	3	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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TYPICAL CROSS SECTIONS
NO SCALE

ROUTE 5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans MAINTENANCE ENGINEERING

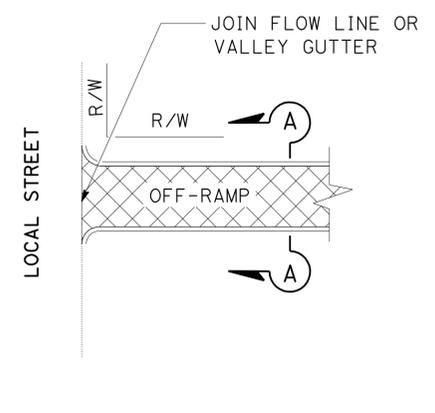
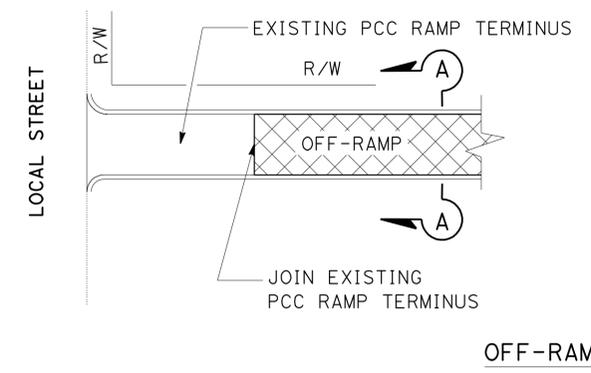
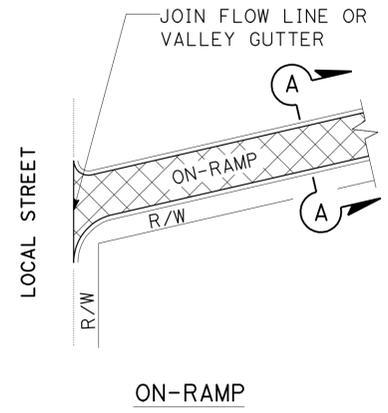
REVISIONS:
 REVISED BY: ROXANA DIANATI
 DATE: 6-28-10
 DESIGNED BY: MONIR IBRAHIM
 CHECKED BY: DEBORAH WONG

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	4	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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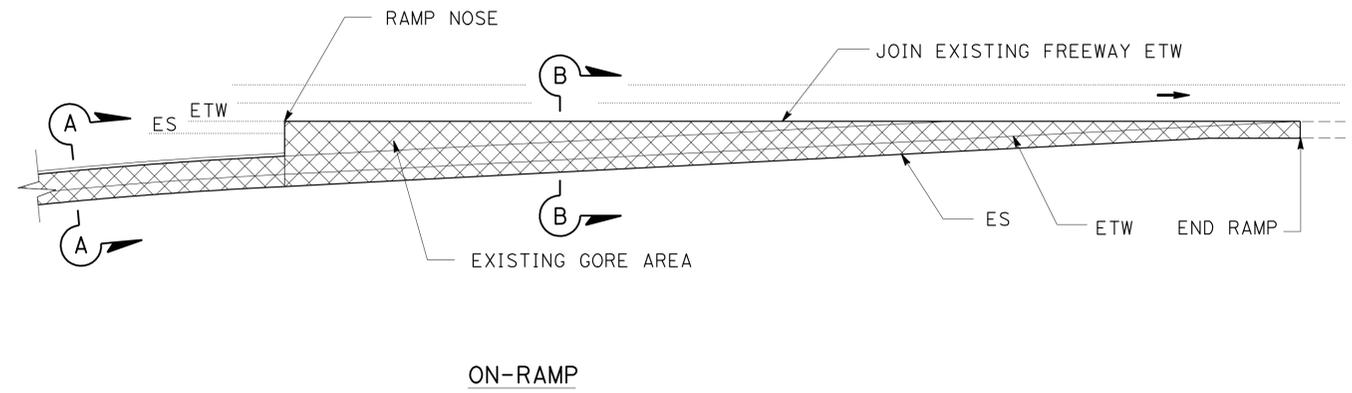
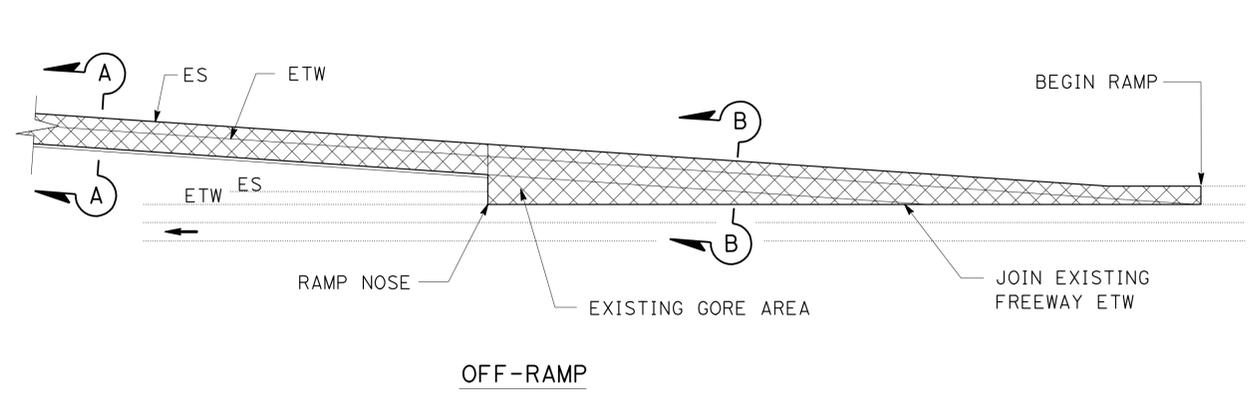
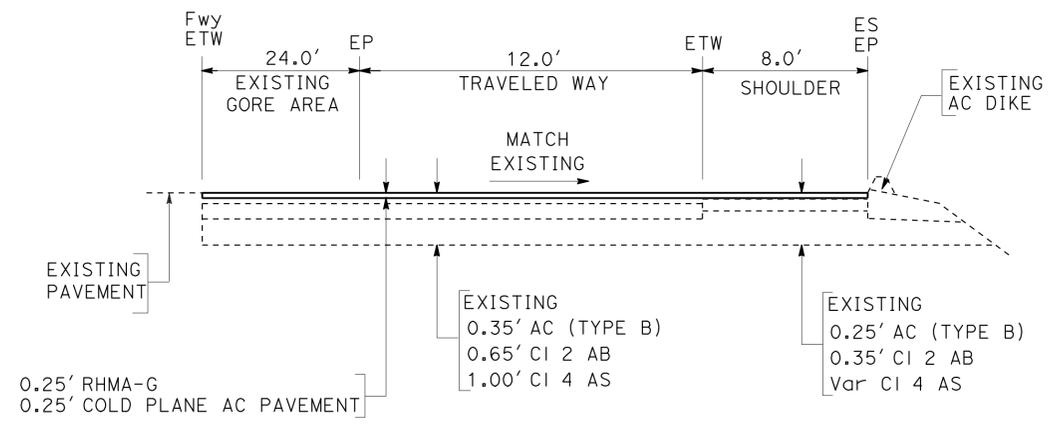
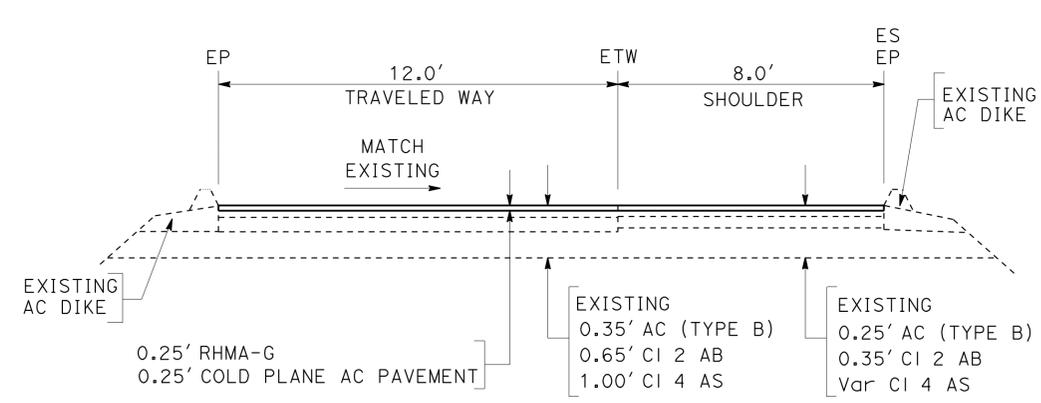
- NOTES:**
- FOR ACCURATE RIGHT OF WAY AND CONTACT ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT DISTRICT OFFICE.
 - EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
 - EXACT PAVING LIMITS WILL BE DETERMINED BY THE ENGINEER.
 - OMIT COLD PLANING AND AC ON BRIDGE DECKS, PCC RAMP TERMINI AND PCC PAVEMENT.
 - EXISTING DRAINAGE LIMITS HAVE NOT BEEN PLOTTED ON THESE PLANS.

ABBREVIATION:

RHMA = RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

LEGEND:

COLD PLANE AC PAVEMENT AND RHMA



TYPICAL RAMP PAVING DETAILS

CONSTRUCTION DETAILS
NO SCALE

C-1

REVISOR: ROXANA DIANATI, DEBORAH WONG
 CALCULATED/DESIGNED BY: MONIR IBRAHIM
 CHECKED BY:
 FUNCTIONAL SUPERVISOR:
 DEPARTMENT OF TRANSPORTATION - MAINTENANCE ENGINEERING
 STATE OF CALIFORNIA - CALTRANS

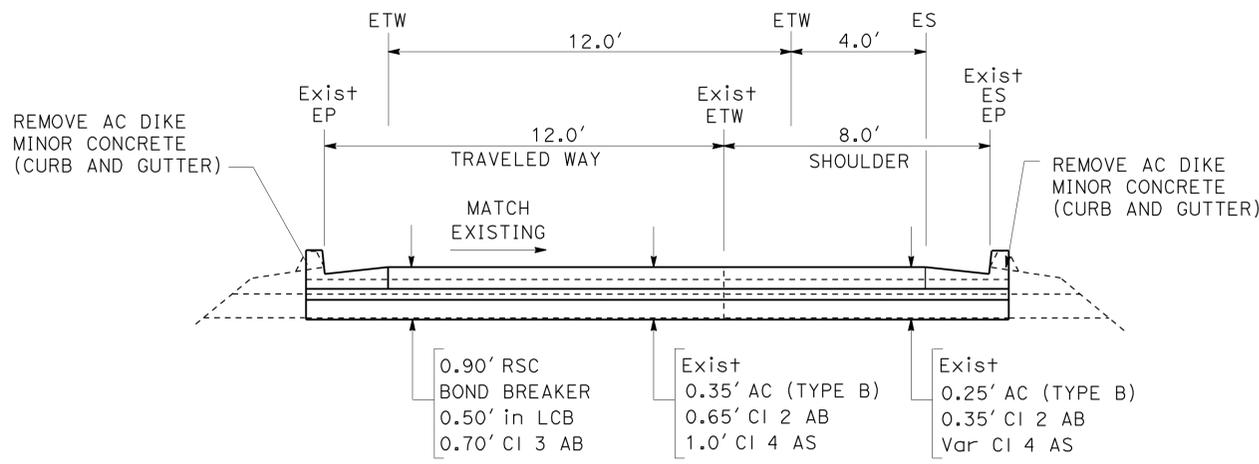
LAST REVISION DATE PLOTTED => 13-AUG-2010
 06-28-10 TIME PLOTTED => 12:14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	5	50

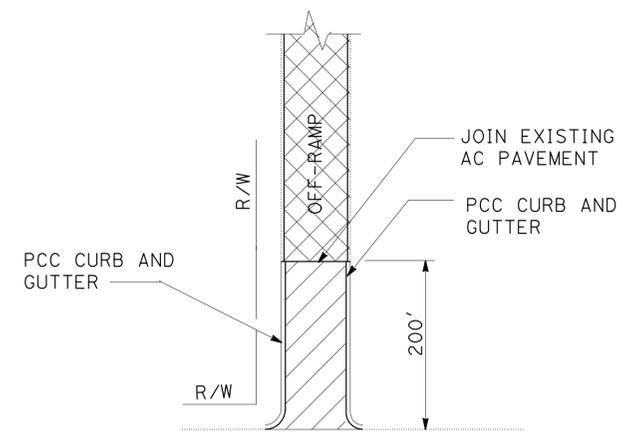
6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

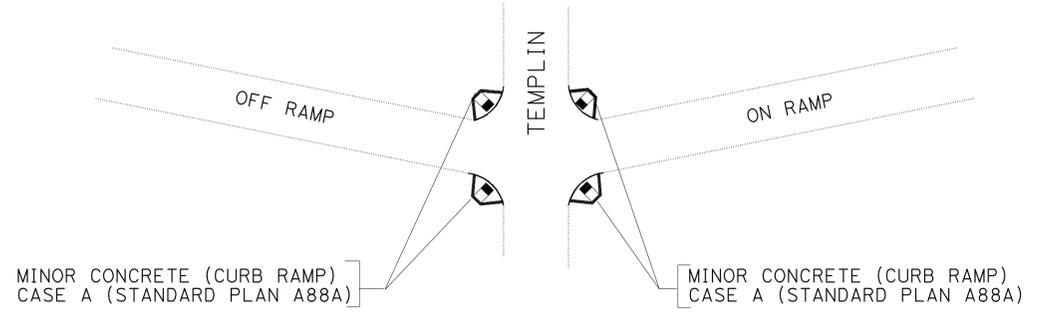
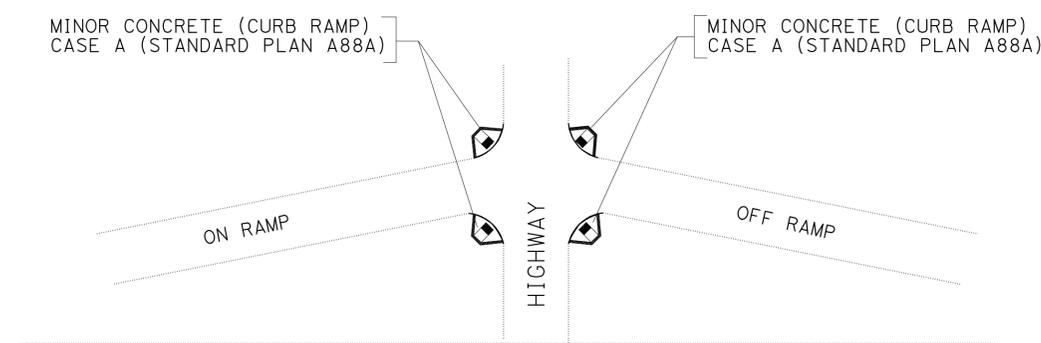
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TYPICAL CROSS-SECTION FOR RAMP TERMINI (RAPID STRENGTH CONCRETE)



TEMPLIN HIGHWAY
OFF-RAMP
SB/NB OFF-RAMPS TO TEMPLIN HIGHWAY
TYPICAL WORK LIMIT FOR CONCRETE PAVEMENT (RAMP TERMINI)



PLAN

- LEGEND:**
- 0.20' COLD PLANE AC PAVEMENT
0.20' RHMA (GAP GRADED)
 - RAMP TERMINI (RAPID STRENGTH CONCRETE)

CONSTRUCTION DETAILS
NO SCALE

C-2

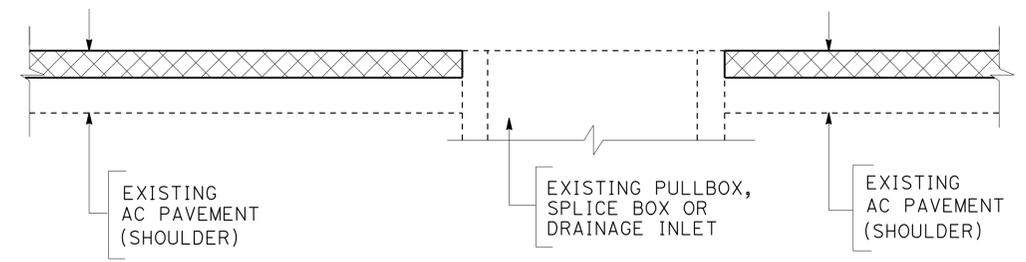
REVISOR: ROXANA DIANATI, DEBORAH WONG
 CHECKED BY: MONIR IBRAHIM
 FUNCTIONAL SUPERVISOR: MONIR IBRAHIM
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE ENGINEERING

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	6	50

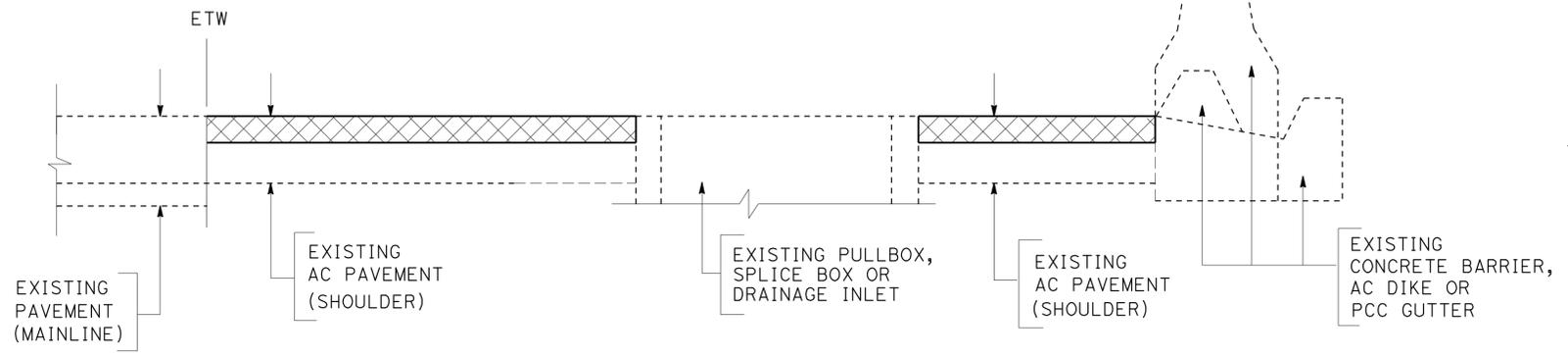
6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

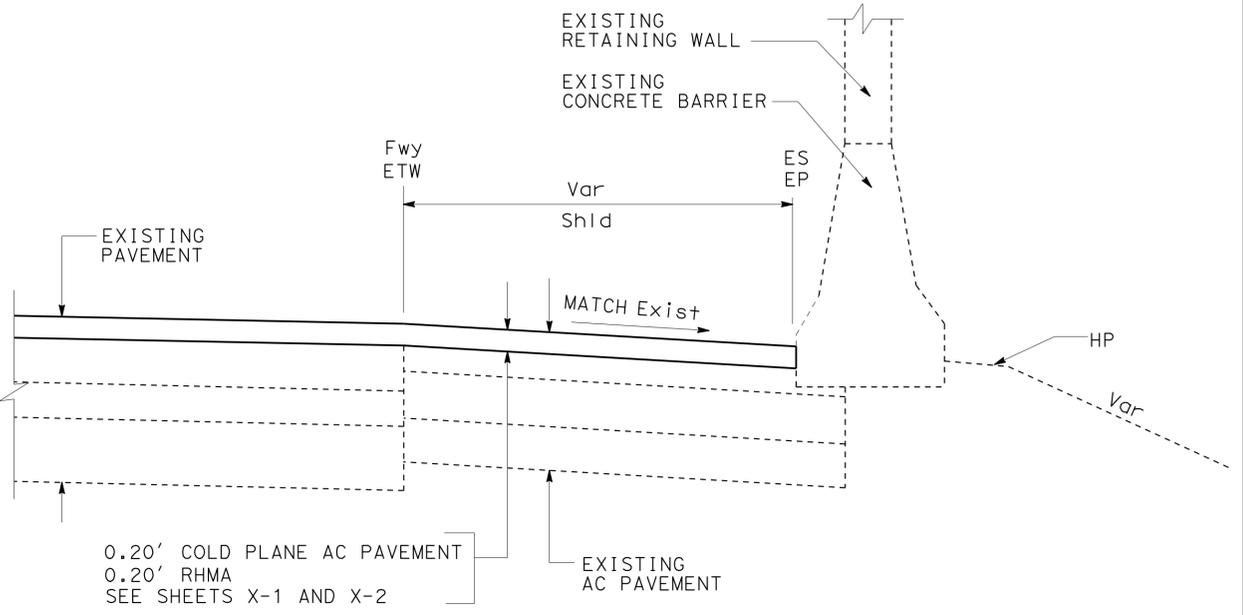
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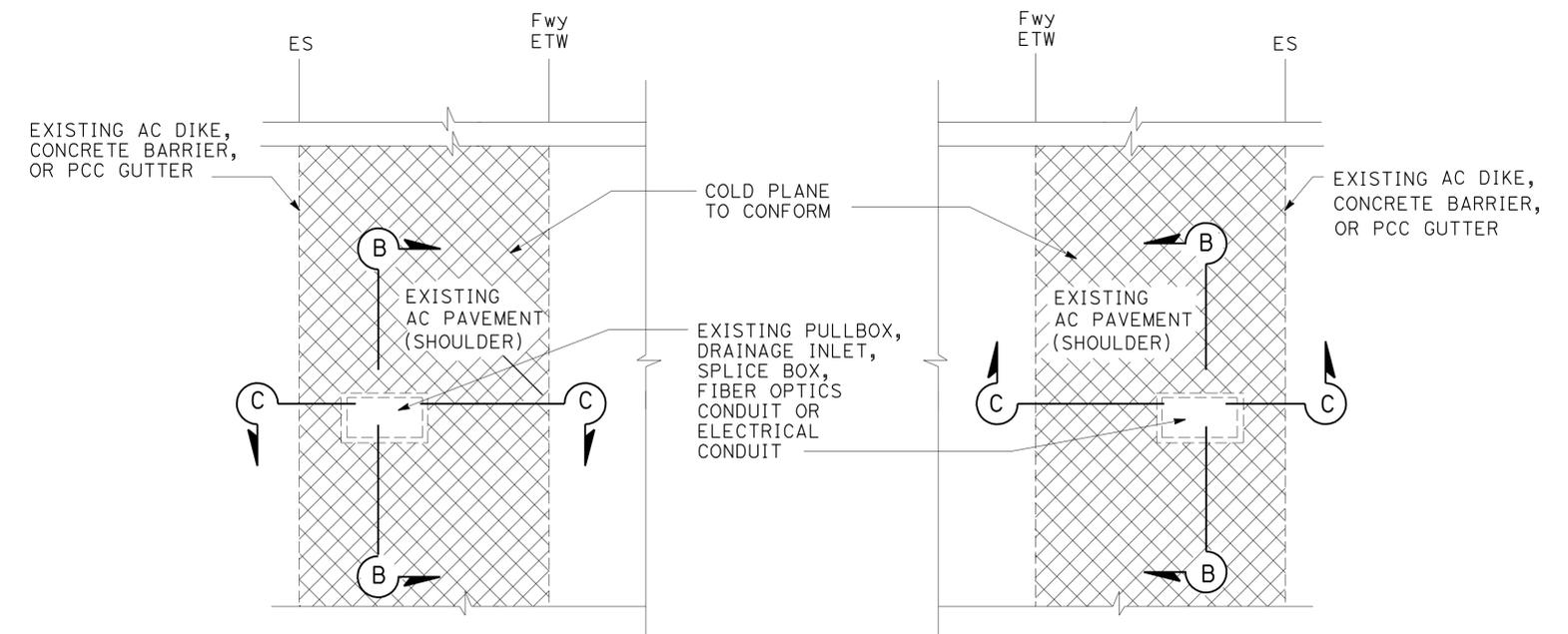
SECTION B-B



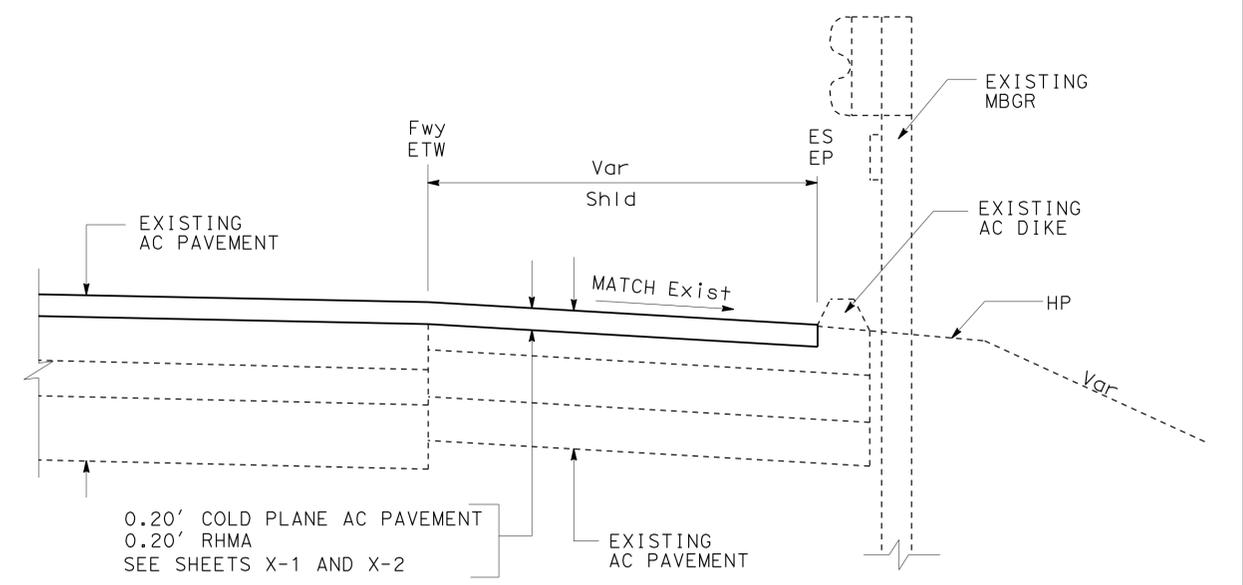
SECTION C-C



TYPICAL AT CONCRETE BARRIER OR RETAINING WALL



PLAN



TYPICAL AT METAL BEAM GUARD RAILING

FIBER OPTIC PULLBOX, DRAINAGE INLET OR SPLICEBOX (VARIOUS LOCATIONS)

CONSTRUCTION DETAILS NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MONIR IBRAHIM
 CALCULATED/DESIGNED BY: ROXANA DIANATI
 CHECKED BY: DEBORAH WONG
 REVISED BY: [] DATE: []
 REVISIONS: []

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	7	50

REGISTERED CIVIL ENGINEER	DATE
<i>Deborah Wong</i>	6-10-10
PLANS APPROVAL DATE	
6-28-10	

REGISTERED PROFESSIONAL ENGINEER
DEBORAH WONG
No. 58313
Exp. 6-30-12
CIVIL
STATE OF CALIFORNIA

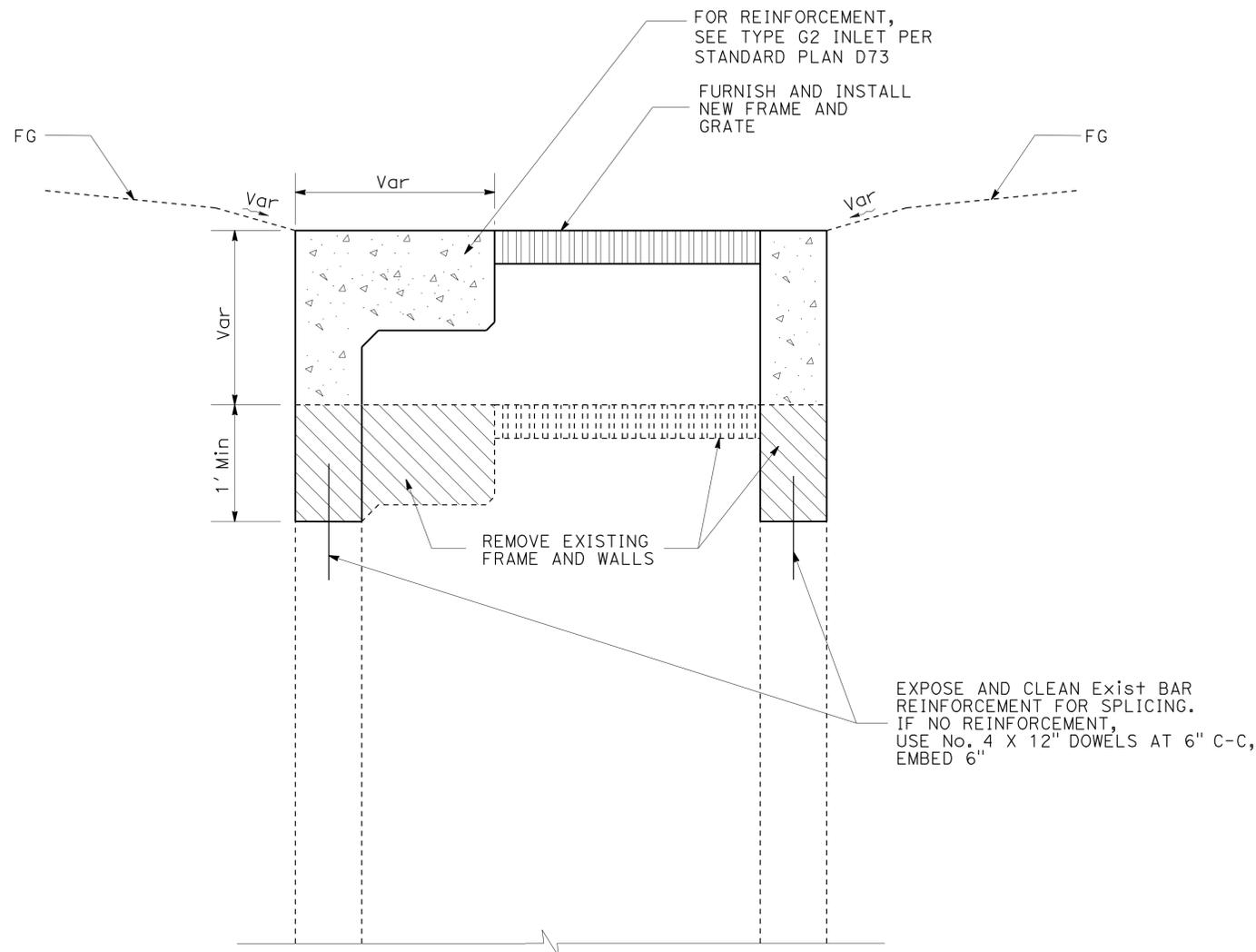
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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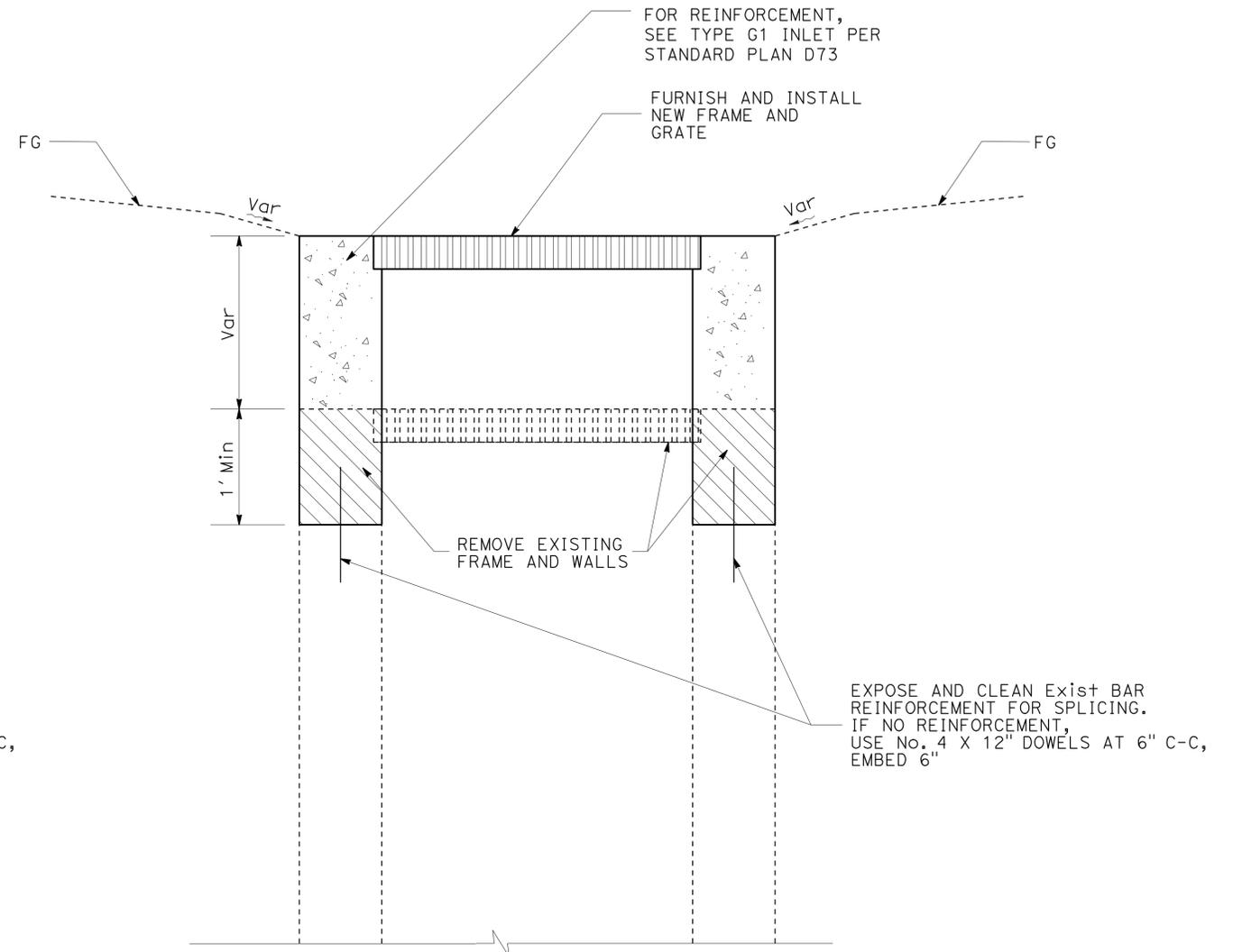
1. RAISE ALL INLETS TO TOP OF HMA OVERLAY UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
2. GROUT DOWELS INTO DRILLED HOLES.
3. THICKNESS OF WALLS SHALL BE EQUAL TO THE THICKNESS OF EXISTING WALLS.
4. FOR DETAILS AND INFORMATION NOT SHOWN, SEE STANDARD PLANS.

LEGEND:

 - REMOVE EXISTING WALLS



ADJUST INLET
(TYPE G2 INLET SHOWN)



ADJUST INLET
(TYPE G1 INLET SHOWN)

CONSTRUCTION DETAILS

NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
FUNCTIONAL SUPERVISOR
MONIR IBRAHIM
CALCULATED/DESIGNED BY
CHECKED BY
ROXANA DIANATI
DEBORAH WONG
REVISOR BY
DATE REVISED



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	8	50

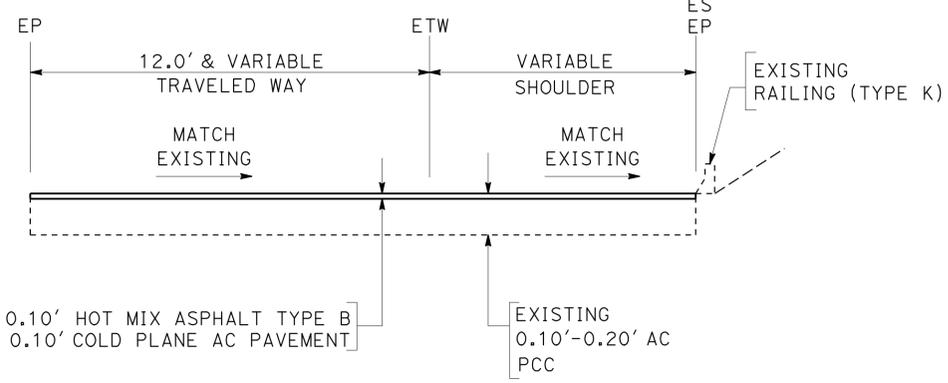
REGISTERED CIVIL ENGINEER DATE 6-10-10
 6-28-10
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL

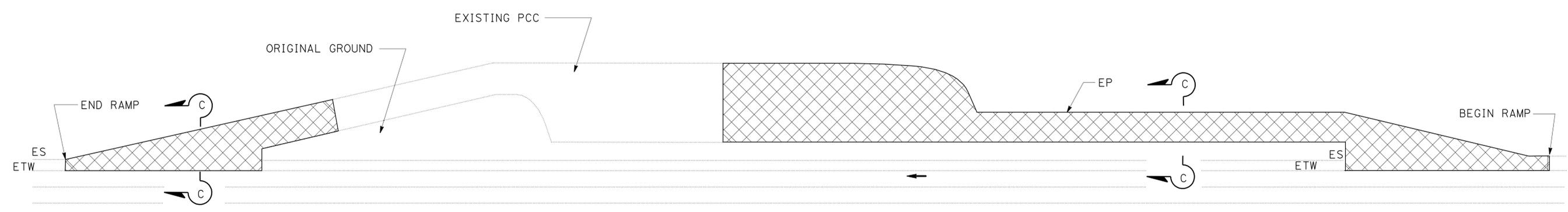
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:
EXACT PAVING LIMITS WILL BE DETERMINED BY THE ENGINEER.

LEGEND:
 0.10' COLD PLANE AC PAVEMENT
 0.10' HOT MIX ASPHALT (TYPE B)



SECTION C-C



SOUTHBOUND

PLAN

TRUCK BRAKE INSPECTION

PM R67.8

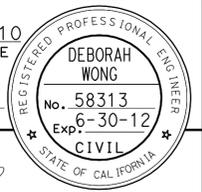
CONSTRUCTION DETAILS
NO SCALE

C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans MAINTENANCE ENGINEERING	MONIR IBRAHIM	ROXANA DIANATI	
		DEBORAH WONG	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	9	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

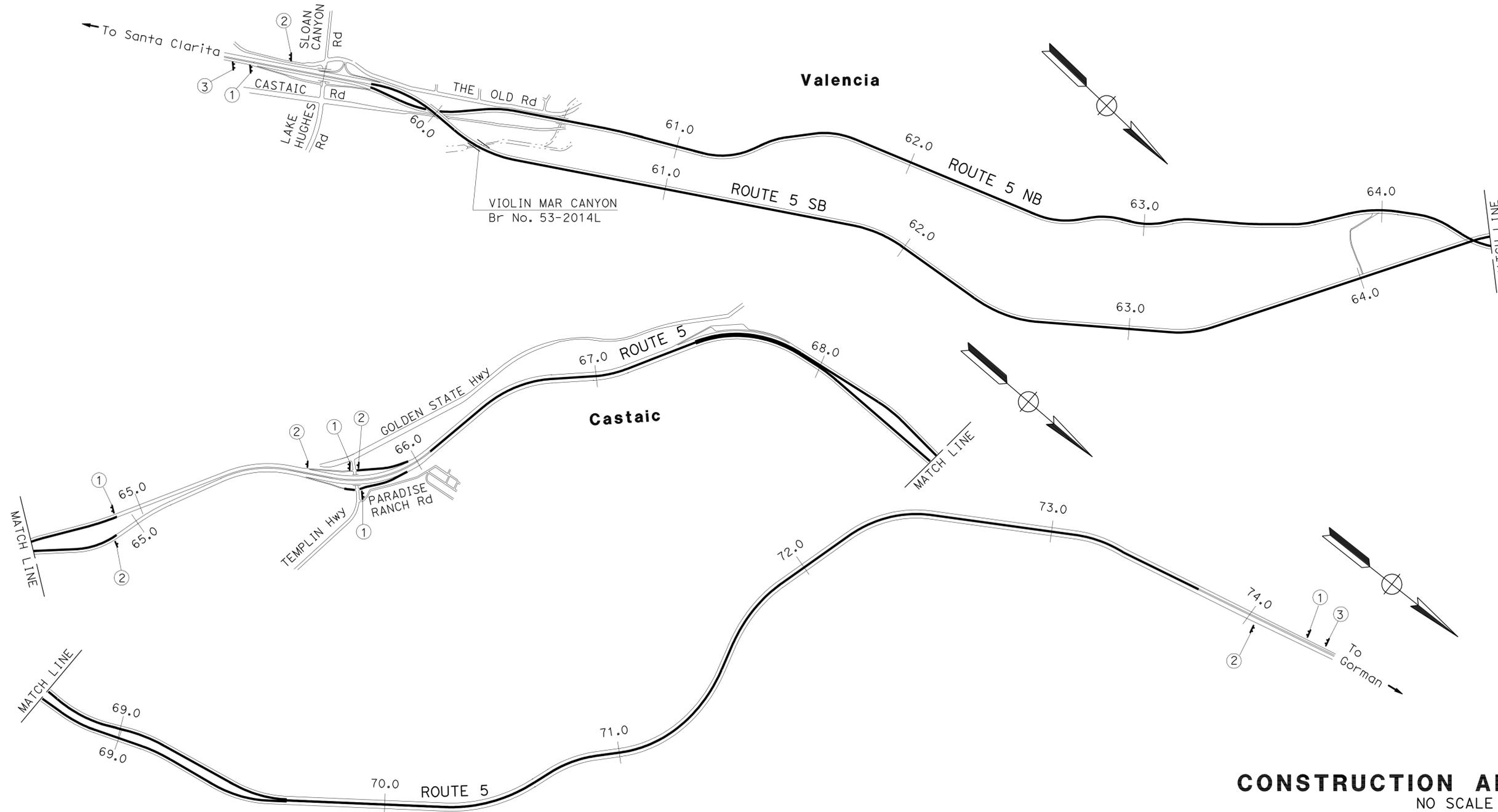


NOTES:

- SIGNS LOCATIONS SHOWN ARE APPROXIMATE.
- EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN NUMBER	SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
①	W20-1	48" X 48"	ROAD WORK AHEAD	2 - 4" X 6"	5
②	G20-2	48" X 24"	END ROAD WORK	2 - 4" X 4"	4
③	C40 (CA)	72" X 36"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 4" X 6"	2



CONSTRUCTION AREA SIGNS
NO SCALE

CS-1

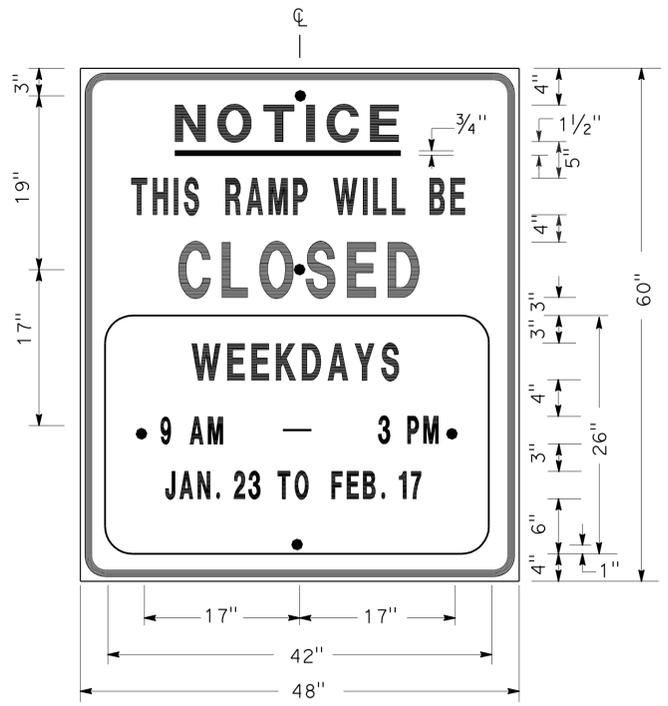
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MONIR IBRAHIM
 CALCULATED/DESIGNED BY: CHECKED BY:
 ROXANA DIANATI DEBORAH WONG
 REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	10	50

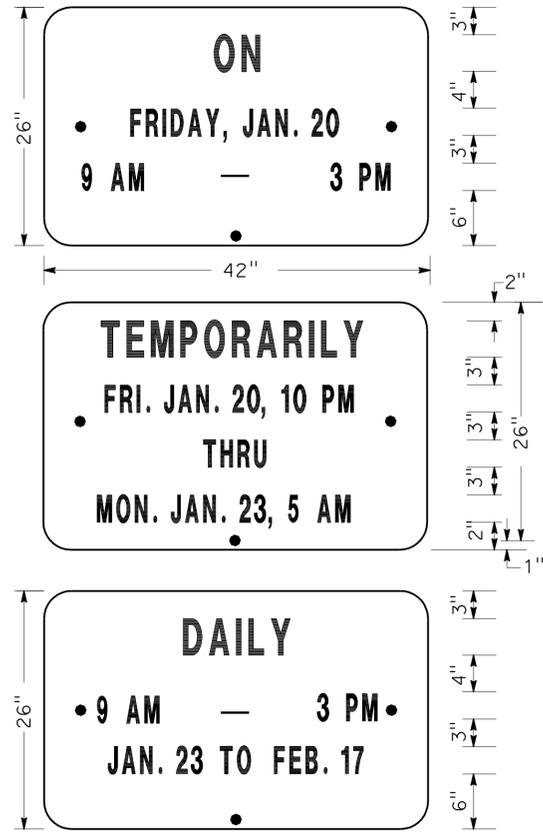
Martin Oregel
 REGISTERED CIVIL ENGINEER DATE 5-20-10
 6-28-10
 PLANS APPROVAL DATE

MARTIN OREGEL
 No. 56816
 Exp. 6-30-11
 CIVIL
 STATE OF CALIFORNIA

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SIGN SP-1



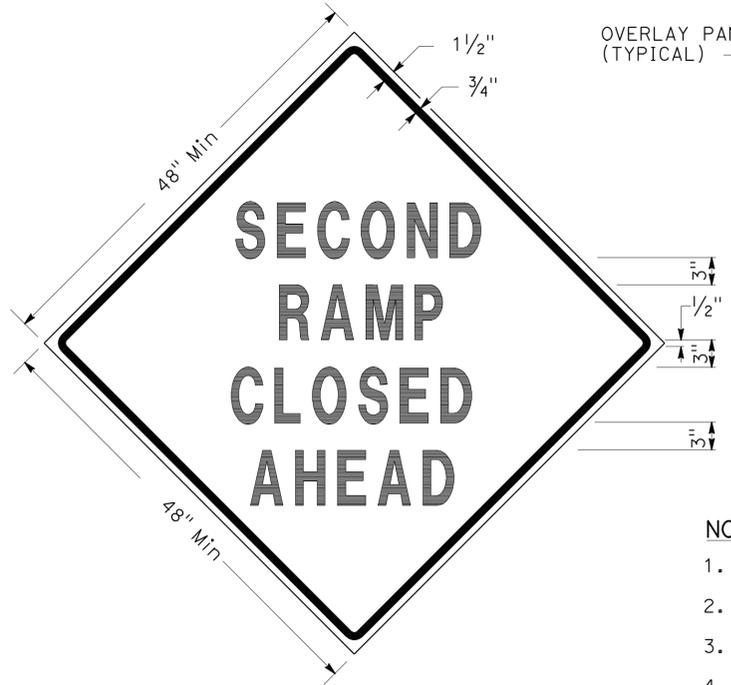
ALTERNATE OVERLAY PANELS (TYPICAL)

- NOTES: (SIGN SP-1)
- SIGNS SHALL HAVE ORANGE RETROREFLECTORIZED BACKGROUND WITH BLACK BORDER AND LETTERS.
 - BOLT HOLES SHALL BE 3/8" DIAMETER.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.

SIZE	BORDER	MARGIN	LETTER SIZE					CORNER RADIUS
	WIDTH	WIDTH	LINE 1	LINE 2*	LINE 3	LINE 4	LINE 5,6 & 7*	
48"x60"	1 1/4"	3/4"	4E	4D	6E	4D		3"
42"x26"	OVERLAY						3D	1 1/2"

* CONDENSED SPACING IF NECESSARY

SPECIAL ADVANCE NOTICE PUBLICITY SIGN



SIGN SP-3

SPECIAL SIGN FOR EXIT RAMP CLOSURES

- NOTES: (SIGNS SP-3 & SP-5)
- LETTERS - 6" SERIES D.
 - LETTERS AND BORDERS - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.



SIGN SP-5



SIGN SP-4

- NOTES: (SIGN SP-4)
- LETTERS - 6" SERIES C.
 - LETTERS AND BORDERS - BLACK ON RETROREFLECTORIZED WHITE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH STANDARD PLAN T14.

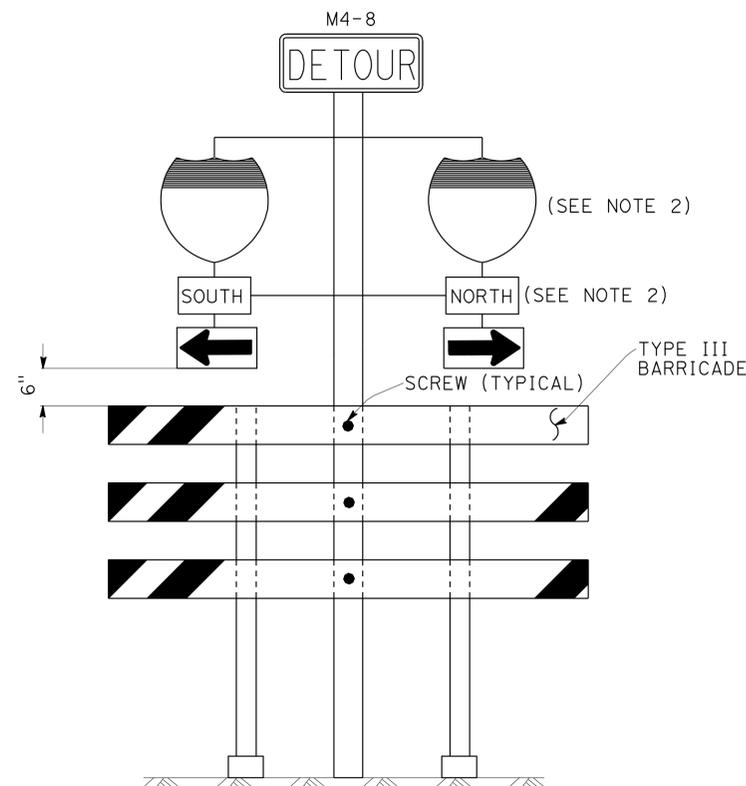
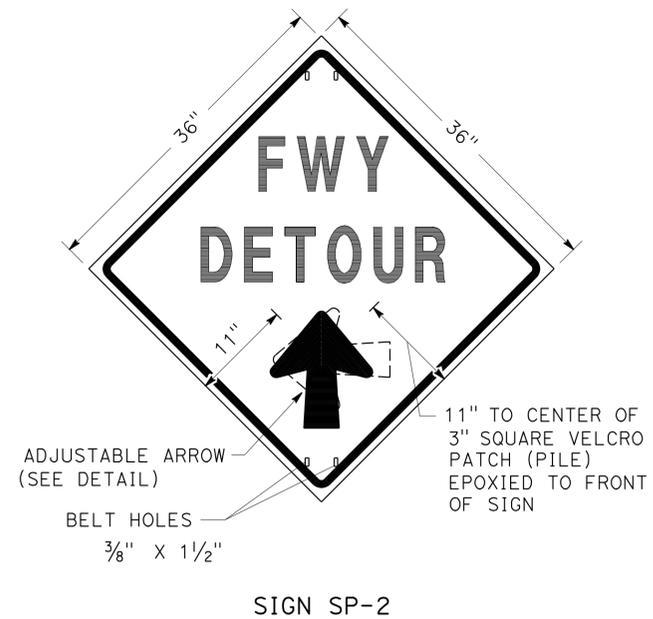
SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURES, DETOUR SIGNS
 AND MISCELLANEOUS DETAILS**

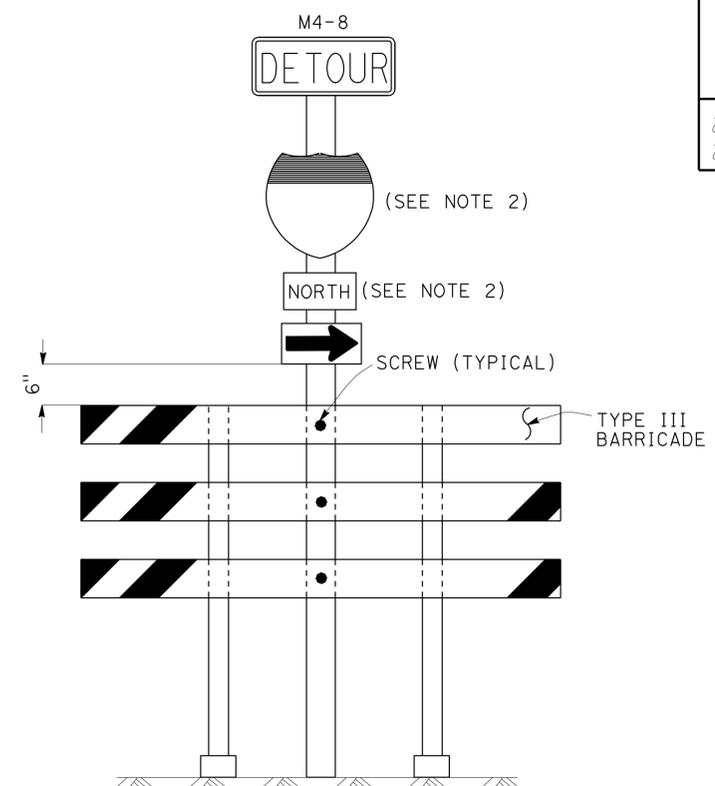
SHEET 1 OF 2

NO SCALE

THD-1



SIGN SP-6 (SEE NOTE 1)



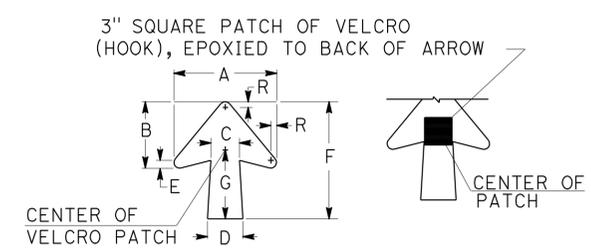
SIGN SP-7 (SEE NOTE 1)

- NOTES:** (SIGN SP-2)
- LETTERS -6" SERIES E.
 - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
 - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND EXCEPT AS OTHERWISE SHOWN ON OTHER TRAFFIC HANDLING DETAILS PLANS.

ABBREVIATION
(CA) CALIFORNIA CODE

- NOTES:** (SIGNS SP-6 & SP-7)
- IN LIEU OF PLACING SIGNS ON TYPE III BARRICADES, SIGNS, INCLUDING POSTS, MAY BE PLACED INTO THE GROUND OR FASTENED ONTO ELECTROLIERS.
 - USE APPROPRIATE ROUTE SHIELD [G26-2(CA), G27-2(CA), G28-2(CA)] AND CARDINAL DIRECTION [NORTH (M3-1), SOUTH (M3-3), EAST (M3-2), WEST (M3-4)]

SPECIAL PORTABLE FREEWAY DETOUR SIGNS



DIMENSIONS							
A	B	C	D	E	F	G	R
11 1/4"	7 1/4"	3 3/8"	4"	7/8"	13"	7 1/2"	5/8"

SPECIAL PORTABLE FREEWAY DETOUR SIGN

ADJUSTABLE ARROW DETAIL

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR RAMP CLOSURES, DETOUR SIGNS
AND MISCELLANEOUS DETAILS
SHEET 2 OF 2
 NO SCALE

THD-2

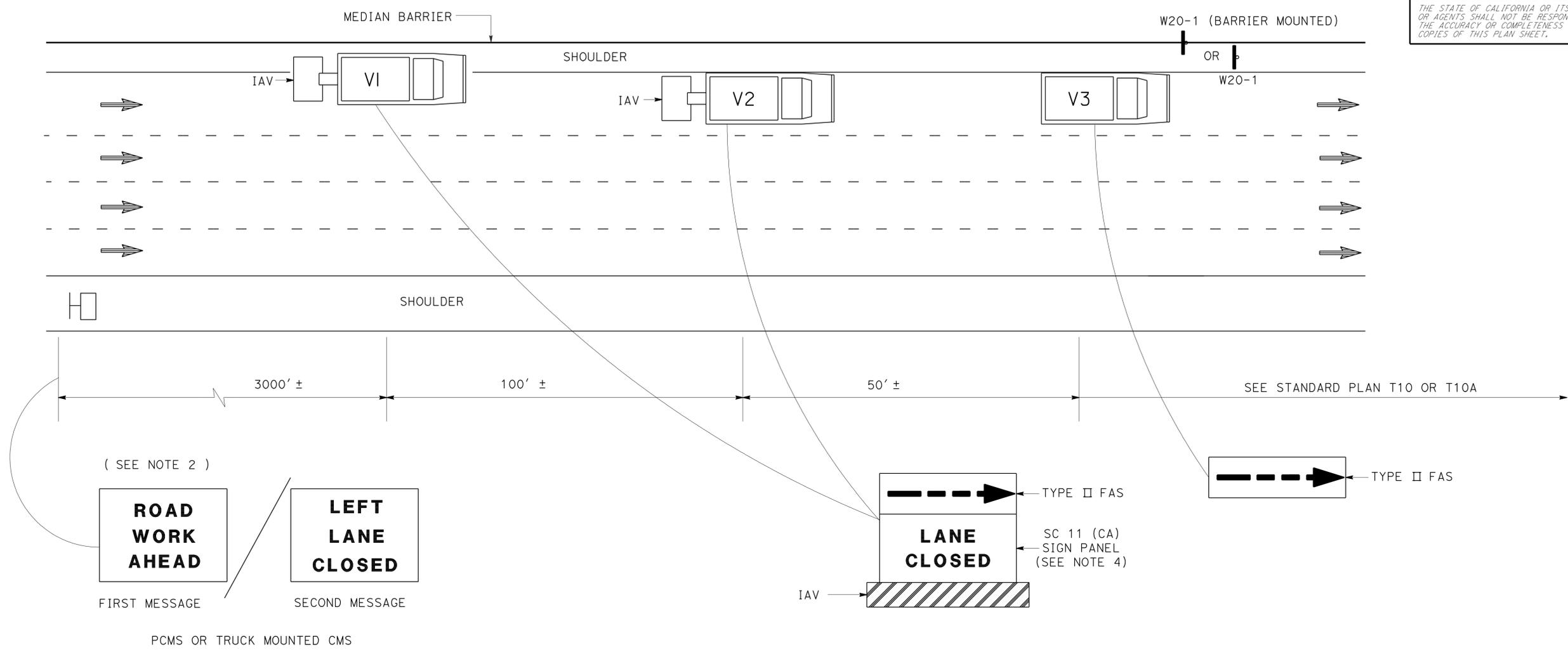
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DTIC
 FUNCTIONAL SUPERVISOR JOHN YANG
 CHECKED BY
 CALCULATED/DESIGNED BY
 REVISOR BY DATE REVISED
 JOCELYN C CHIANG
 7/08
 JC
 9/08
 JC

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	12	50

5-20-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MARTIN OREGEL
 No. C56816
 Exp. 6-30-11
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.



NOTES:

1. LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
2. PCMS SHALL BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE LANE.
3. A MINIMUM SIGHT DISTANCE OF 1500' SHALL BE PROVIDED IN ADVANCE OF PCMS.
4. VEHICLE-MOUNTED SIGN PANELS SHALL BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.

LEGEND

- V1, V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- DIRECTION OF TRAVEL
- ▬ CONSTRUCTION AREA SIGN

ABBREVIATIONS

- FAS FLASHING ARROW SIGN
- IAV IMPACT ATTENUATOR VEHICLE
- CMS CHANGEABLE MESSAGE SIGN
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- (CA) CALIFORNIA CODE

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR MEDIAN SHOULDERS LESS THAN 8 FEET
 NO SCALE

THD-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTM
 FUNCTIONAL SUPERVISOR JOHN YANG
 CHECKED BY JOCELYN C CHIANG
 REVISIONS:
 JC 9/08
 JC 7/08
 REVISOR BY DATE REVISED
 ALBERT K YU
 CALCULATED/DESIGNED BY
 CHECKED BY

LAST REVISION DATE PLOTTED => 13-AUG-2010
 06-28-10 TIME PLOTTED => 12:15

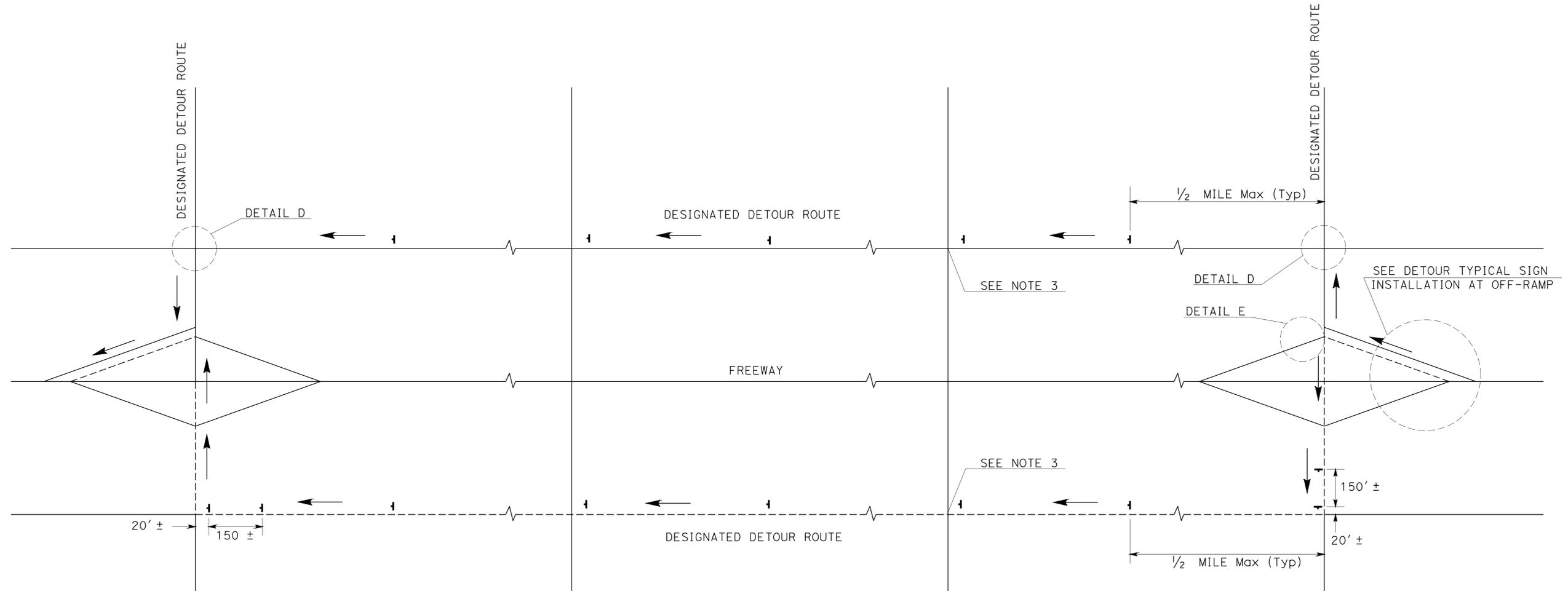
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	13	50

5-20-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MARTIN OREGEL
 No. 56816
 Exp. 6-30-11
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

ALBERT K YU	REVISOR	JC	7/08
JOCELYN C CHIANG	DATE REVISED	JC	9/08
JOHN YANG	CHECKED BY		
	DESIGNED BY		
	FUNCTIONAL SUPERVISOR		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			
DTM			
Caltrans			



TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

LEGEND

- ┆ SIGN SP-2
- AND/OR DESIGNATED DETOUR ROUTE
- DIRECTION OF TRAVEL

NOTES:

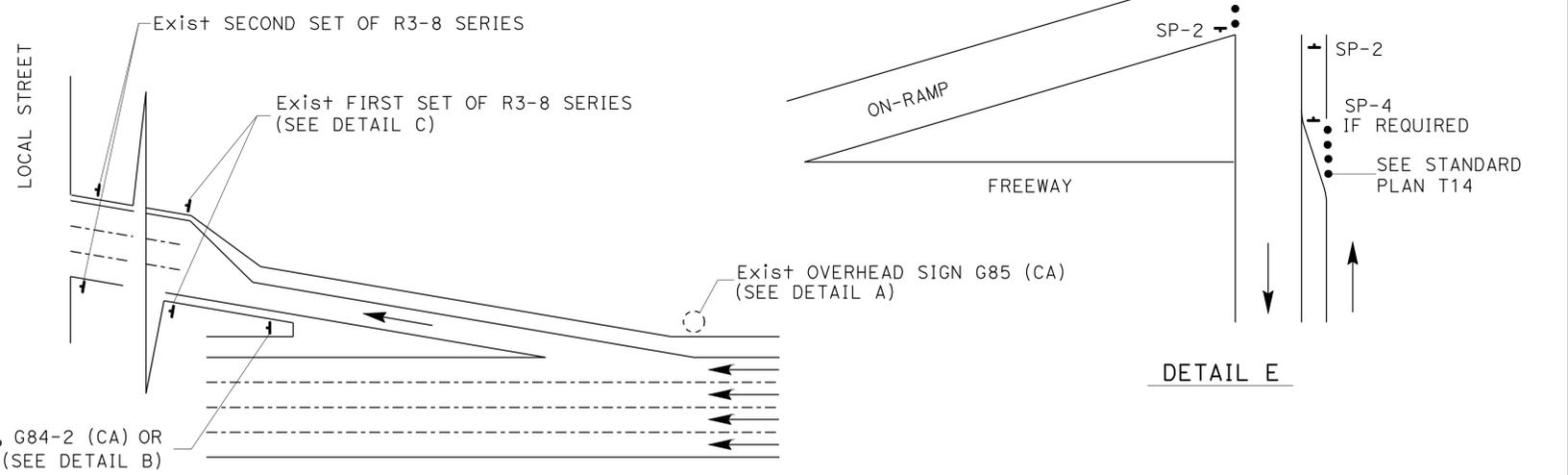
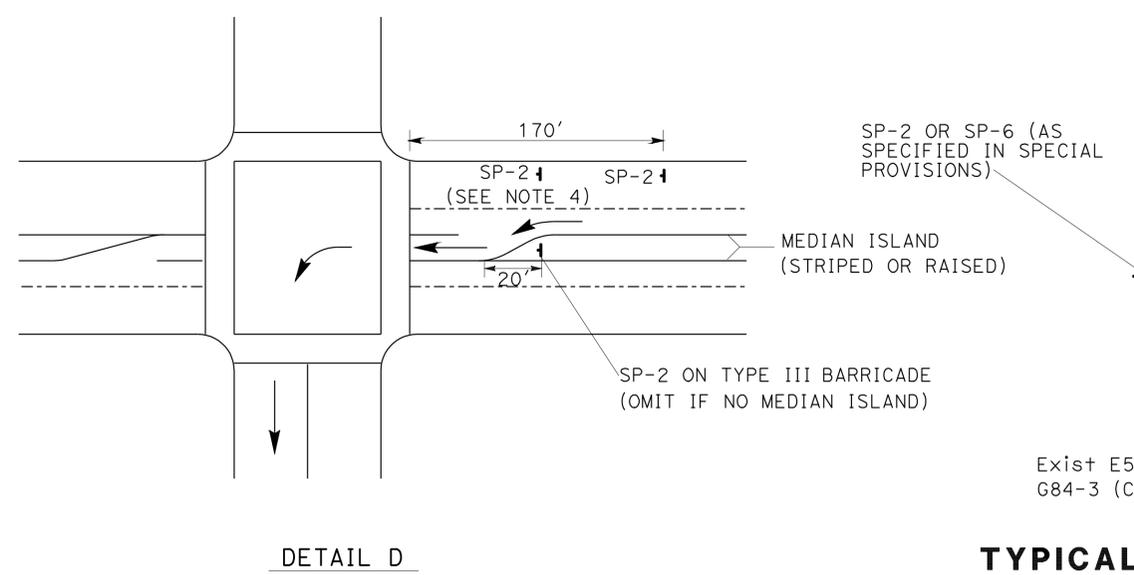
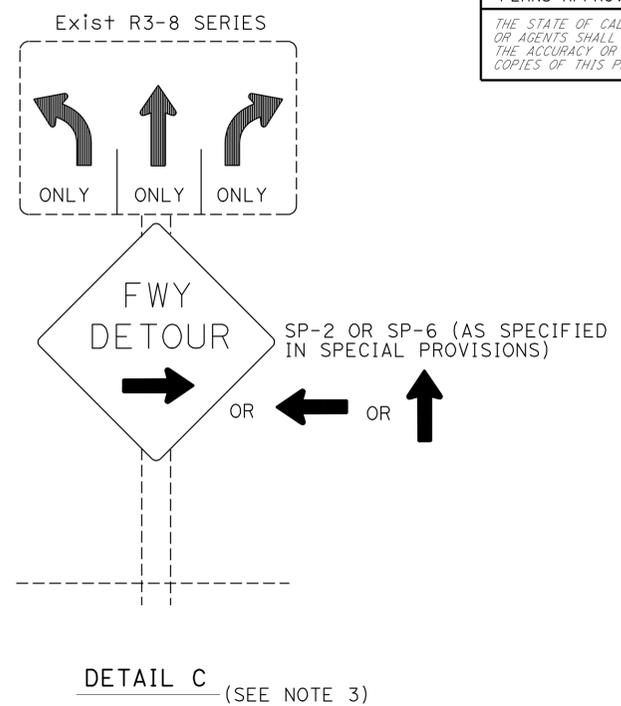
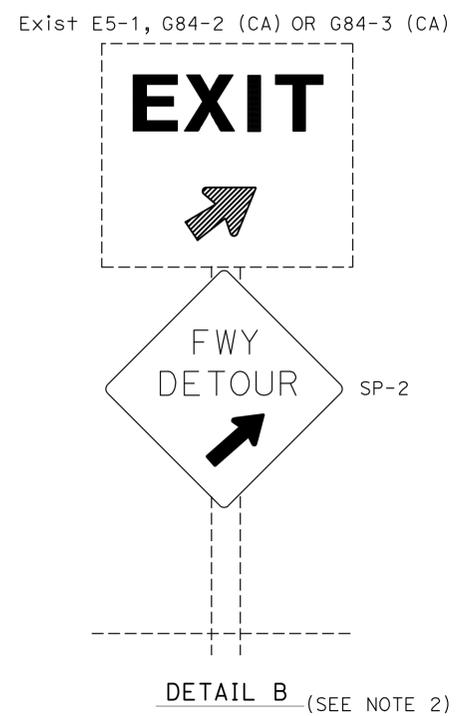
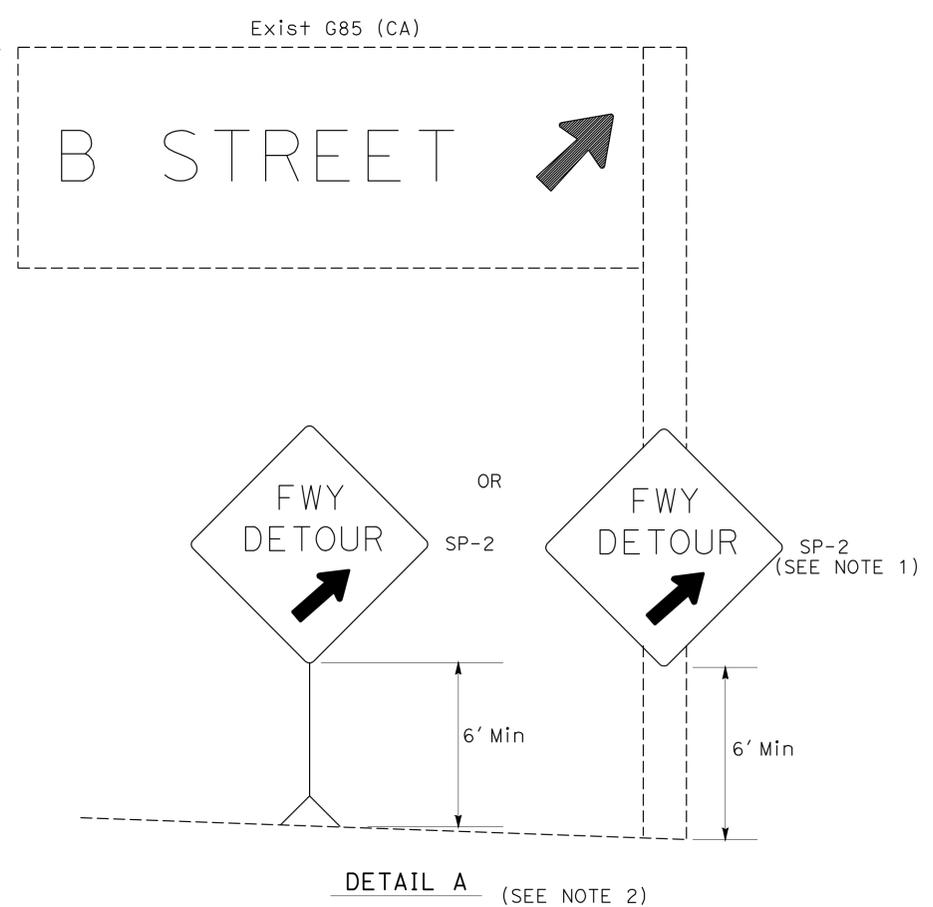
1. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
3. SP-2 SIGNS SHALL BE POSTED AT SIGNALIZED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE OR 1/2 MILE MAXIMUM APART.

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR DETOUR SIGN INSTALLATION
 ALONG DESIGNATED DETOUR ROUTE
 SHEET 1 OF 2
 NO SCALE**

THD-4



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	14	50
REGISTERED CIVIL ENGINEER <i>Martin Oregel</i> DATE 5-20-10			REGISTERED PROFESSIONAL ENGINEER MARTIN OREGEL No. 56816 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA		
PLANS APPROVAL DATE 6-28-10			THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.		



TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

- NOTES:**
1. SP-2 MAY BE STRAPPED ON EXISTING ELECTROLIER SIGNAL POSTS OR SIGN POSTS.
 2. OMIT DETAIL A AND DETAIL B FOR FULL FREEWAY CLOSURES.
 3. SEE TRAFFIC HANDLING DETAILS PLAN-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS AND MISCELLANEOUS DETAILS SHEET 2 OF 2 FOR SP-6.
 4. OMIT IF MEDIAN ISLAND EXIST.

ABBREVIATIONS

(CA) CALIFORNIA CODE

- LEGENDS**
- CONE
 - ⚡ PORTABLE SIGN
 - DIRECTION OF TRAVEL
 - EXISTING OVERHEAD SIGN

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 2 OF 2
NO SCALE**

THD-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans

DESIGNED BY	ALBERT K YU
CHECKED BY	JOCELYN C CHIANG
FUNCTIONAL SUPERVISOR	JOHN YANG
REVISOR	JC
DATE	7/08
REVISION	JC
DATE	9/08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	15	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE

6-28-10
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

PAVEMENT DELINEATION QUANTITIES FOR RAMPS										
DIRECTION	LOCATION	PAINT TRAFFIC STRIPE (2-COAT)				PAINT PAVEMENT MARKING (2-COAT)			PAVEMENT MARKER (RETROREFLECTIVE) -RECESSED)	
		4" SOLID WHITE	DETAIL 27B	DETAIL 25	DETAIL 36	CHEVRON	WORDS	ARROW	TYPE G	TYPE H
		LF	LF	LF	LF	SQFT	SQFT	SQFT	EA	EA
SB	TEMPLIN HIGHWAY OFF RAMP		1450	1140	600	360	53	60	83	79
NB	TEMPLIN HIGHWAY OFF RAMP		200	200		135				15
NB	TEMPLIN HIGHWAY ON RAMP		1350	900	600	360		31	83	62
SB	TRUCK BRAKE INSPECTION	640	2157	700	1200				165	49
SUBTOTAL		640	5157	2940	2400	855	53	91	331	205

PAVEMENT DELINEATION QUANTITIES FOR MAINLINES								
DIRECTION	LOCATION		PAINT TRAFFIC STRIPE (2-COAT)			PAVEMENT MARKER (RETROREFLECTIVE) -RECESSED)		
	FROM	TO	DETAIL 12/14A	DETAIL 27B	DETAIL 25	TYPE G	TYPE H	TYPE C
			LF	LF	LF			
	PM	PM	LF	LF	LF	EA	EA	EA
NB	59.7	64.9	82,368	27,456	27,456	573	573	
NB	66.1	73.7	120,384	40,128	40,128	837	837	28
SB	59.7	64.8	80,784	26,928	26,928	562	562	28
SB	66.1	73.7	120,384	40,128	40,128	837	837	
SUBTOTAL			403,920	134,640	134,640	2809	2809	56

TOTAL PAVEMENT DELINEATION QUANTITIES			
LOCATION	PAINT TRAFFIC STRIPE (2-COAT)	PAINT PAVEMENT MARKING (2-COAT)	PAVEMENT MARKER (RETROREFLECTIVE) -RECESSED)
	LF	SQFT	EA
MAINLINES	673,200		5674
RAMPS	11,137	999	536
TOTAL	684,337	999	6210

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MONIR IBRAHIM
 CALCULATED/DESIGNED BY: ROXANA DIANATI
 CHECKED BY: DEBORAH WONG
 REVISED BY: DATE REVISION:

LAST REVISION: DATE PLOTTED => 13-AUG-2010
 06-28-10 TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	16	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE

6-28-10
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

ABBREVIATION:

RSC - RAPID STRENGTH CONCRETE

SUMMARY OF QUANTITIES OF MAINLINES AND SHOULDERS

DIRECTION	POSTMILE		COLD PLANE ASPHALT CONCRETE PAVEMENT SQYD	ASPHALT RUBBER SEAL COAT		RUBBERIZED HOT MIX ASPHALT (GAP GRADED) TON	HOT MIX ASPHALT CONCRETE (TYPE C)		TACK COAT TON	REPLACE CONCRETE PAVEMENT (RSC) CY	DOWEL BAR EA	TIE BAR EA	SEAL PAVEMENT JOINT LF	SEAL ISOLATION JOINT LF	GRIND EXISTING AND REPLACEMENT CONCRETE PAVEMENT (RSC) SQYD	LEAN CONCRETE BASE (RAPID SETTING) CY
				ASPHALT- RUBBER BINDER TON	SCREENINGS (HOTAPPLIED) TON		LANE 3 TON	LANE 4 TON								
NB	R59.7	R61.3	24,405	28	191	3,295			44	2662	8,940	2928	17,880	14,304	45,056	1391
NB	R61.3	R64.9	156,288	317	2,154	21,099			99							
NB	R66.1	R66.5	17,365	35	239	2,344			11							
NB	R66.5	R66.9	17,365	35	239	2,344			11							
NB	R66.9	R67.6	30,389	62	419	4,103			19							
NB	R67.6	R71.8	182,336	296	2,011	24,615		3992	214							
NB	R71.8	R72.4	26,048	42	287	3,516	570		31							
NB	R72.4	R73.7	56,437	69	467	7,619	1236	1236	97							
SB	R59.7	R60.0	4,576	5	36	618			8	540	1,815	606	1,815	1,452	8,448	282
SB	R60.0	R62.9	125,899	255	1,735	16,996			79							
SB	R62.9	R63.2	13,024	21	144	1,758		285	15							
SB	R63.2	R64.8	69,461	141	957	9,377			44							
SB	R66.1	R72.8	290,869	590	4,009	39,267			183							
SB	R72.8	R73.0	8,683	14	96	1,172		190	10							
SB	R73.0	R73.7	30,389	62	419	4,103			19							
SUB TOTAL			1,053,534	1972	13,403	142,226	1806	5703	884	3202	10,755	3534	19,695	15,756	53,504	1673

SUMMARY OF QUANTITIES

Q-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	17	50

6-10-10
 REGISTERED CIVIL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

SUMMARY OF QUANTITIES OF RAMPS

DIRECTION	LOCATION	COLD PLANE CONCRETE PAVEMENT	ASPHALT RUBBER SEAL COAT		HOT MIX ASPHALT CONCRETE (TYPE B)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	RAMP TERMINI (RAPID STRENGTH CONCRETE)	LEAN CONCRETE BASE (RAPID SETTING)	CLASS 3 AGGREGATE BASE	REMOVE CONCRETE (CURB, GUTTER, AND SIDEWALK)	ROADWAY EXCAVATION	MINOR CONCRETE (CURB RAMP)	MINOR CONCRETE (CURB AND GUTTER)	REMOVE AC DIKE
			ASPHALT-RUBBER BINDER	SCREENINGS (HOTAPPLIED)										
		SQYD	TON	TON	TON	TON	CY	CY	CY	CY	CY	CY	CY	LF
SB	TEMPLIN HIGHWAY OFF RAMP	4,267	10.7	72.5		720	120	42	29.4	6.22	266.22	6.22	12.4	400
SB	TEMPLIN HIGHWAY ON RAMP									6.22	6.22	6.22		
NB	TEMPLIN HIGHWAY OFF RAMP						120	42	29.4	6.22	266.22	6.22	12.4	400
NB	TEMPLIN HIGHWAY ON RAMP	4,133	10.3	70.3		698				6.22	6.22	6.22		
SB	TRUCK BRAKE INSPECTION OFF RAMP	2,556				345								
SB	TRUCK BRAKE INSPECTION ON RAMP	7,778				1050								
SUB TOTAL		18,734	21	142.8	1395	1418	240	84	58.8	24.9	544.9	24.9	24.8	800

TOTAL QUANTITIES

LOCATION	COLD PLANE ASPHALT CONCRETE PAVEMENT	ASPHALT RUBBER SEAL COAT		HOT MIX ASPHALT CONCRETE (TYPE B)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	HOT MIX ASPHALT CONCRETE (TYPE C)	TACK COAT	REPLACE CONCRETE PAVEMENT (RSC)	RAMP TERMINI (RAPID STRENGTH CONCRETE)	DOWEL BAR	TIE BAR	SEAL PAVEMENT JOINT	SEAL ISOLATION JOINT	LEAN CONCRETE BASE (RAPID SETTING)	CLASS 3 AGGREGATE BASE	GRIND EXISTING AND REPLACEMENT CONCRETE PAVEMENT (RSC)	REMOVE CONCRETE	ROADWAY EXCAVATION	MINOR CONCRETE (CURB RAMP)	MINOR CONCRETE (CURB AND GUTTER)	REMOVE AC DIKE
		ASPHALT-RUBBER BINDER	SCREENINGS (HOT APPLIED)																		
	SQYD	TON	TON	TON	TON	TON	TON	CY	CY	EA	EA	LF	LF	CY	CY	SQYD	CY	CY	CY	CY	LF
MAINLINES	1,053,534	1972	13,403		142,226	7508	884	3202		10,755	3534	19,695	15,756	1673		53,504					
RAMPS	18,734	21	145	1395	1,418				240					84	58.8		24.9	544.9	24.9	24.8	800
TOTAL	1,072,268	1993	13,548	1395	143,644	7508	884	3202	240	10,755	3534	19,695	15,756	1757	58.8	53,504	24.9	544.9	24.9	24.8	800

SUMMARY OF QUANTITIES Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MONIR IBRAHIM
 CALCULATED/DESIGNED BY: ROXANA DIANATI
 CHECKED BY: DEBORAH WONG
 REVISED BY: DEBORAH WONG
 DATE REVISED:

LAST REVISION | DATE PLOTTED => 13-AUG-2010
 06-28-10 | TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	18	50

Deborah Wong 6-10-10
 REGISTERED CIVIL ENGINEER DATE

6-28-10
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
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ABBREVIATION:

(N): NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

DRAINAGE QUANTITIES

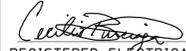
LOCATION (POSTMILE)	DIRECTION	DESCRIPTION	INLET TYPE (N)		TYPE 24-12 FRAME & GRATE (N)	TYPE 24-9 FRAME & GRATE (N)	ADJUST INLET	LOCATION (POSTMILE)	DIRECTION	DESCRIPTION	INLET TYPE (N)		TYPE 24-12 FRAME & GRATE (N)	TYPE 24-9 FRAME & GRATE (N)	ADJUST INLET
			GDO	G1/G2							GDO	G1/G2			
			EA	EA							EA	EA			
R62.30	NB	ADJUST INLET TO GRADE	1		1		1	R73.45	SB	ADJUST INLET TO GRADE		1		1	
R64.60	NB	ADJUST INLET TO GRADE		2		2	2	R73.35	SB	ADJUST INLET TO GRADE		1		1	
R64.80	NB	ADJUST INLET TO GRADE		1		1	1	R73.30	SB	ADJUST INLET TO GRADE		1		1	
R65.98	NB	ADJUST INLET TO GRADE		3		3	3	R73.25	SB	ADJUST INLET TO GRADE		1		1	
R66.40	NB	ADJUST INLET TO GRADE		1		1	1	R72.70	SB	ADJUST INLET TO GRADE		1		1	
R70.18	NB	ADJUST INLET TO GRADE		1		1	1	R72.55	SB	ADJUST INLET TO GRADE		3		3	
R71.00	NB	ADJUST INLET TO GRADE		1		1	1	R72.50	SB	ADJUST INLET TO GRADE		1		1	
R71.10	NB	ADJUST INLET TO GRADE		2		2	2	R72.42	SB	ADJUST INLET TO GRADE		1		1	
R71.20	NB	ADJUST INLET TO GRADE		1		1	1	R72.30	SB	ADJUST INLET TO GRADE		1		1	
R71.50	NB	ADJUST INLET TO GRADE		1		1	1	R72.00	SB	ADJUST INLET TO GRADE		1		1	
R73.50	NB	ADJUST INLET TO GRADE		1		1	1	R71.90	SB	ADJUST INLET TO GRADE		1		1	
R73.60	NB	ADJUST INLET TO GRADE		1		1	1	R71.85	SB	ADJUST INLET TO GRADE		1		1	
R73.70	NB	ADJUST INLET TO GRADE		1		1	1	R71.80	SB	ADJUST INLET TO GRADE		1		1	
								R71.70	SB	ADJUST INLET TO GRADE		1		1	
								R71.00	SB	ADJUST INLET TO GRADE		1		1	
								R70.90	SB	ADJUST INLET TO GRADE		1		1	
								R70.10	SB	ADJUST INLET TO GRADE		3		3	
								R68.00	SB	ADJUST INLET TO GRADE		1		1	
								R67.80	SB	ADJUST INLET TO GRADE		1		1	
								R67.30	SB	ADJUST INLET TO GRADE		1		1	
								R66.95	SB	ADJUST INLET TO GRADE		1		1	
								R66.70	SB	ADJUST INLET TO GRADE		1		1	
TOTAL			1	16	1	16	17	TOTAL				26		26	26

SUMMARY OF QUANTITIES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR
 MONIR IBRAHIM
 CALCULATED/DESIGNED BY
 ROXANA DIANATI
 CHECKED BY
 DEBORAH WONG
 REVISED BY
 DATE
 REVISOR
 DATE

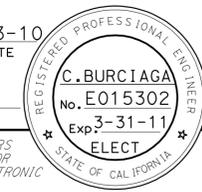
LAST REVISION DATE PLOTTED => 13-AUG-2010
 06-28-10 TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	19	50

 5-3-10
 REGISTERED ELECTRICAL ENGINEER DATE

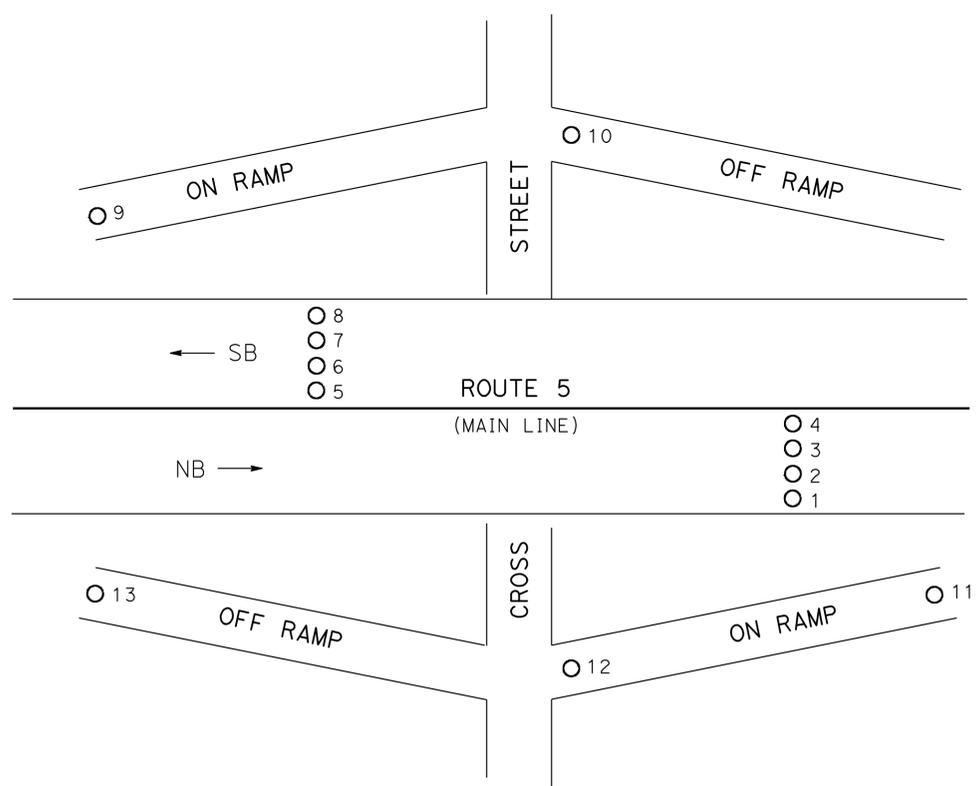
6-28-10
 PLANS APPROVAL DATE

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.



INDUCTIVE LOOP DETECTOR SCHEDULE (ROUTE 5)																
PM	LOCATION	CONTROLLER CABINET No.	SEE DETAIL "A" THIS SHEET FOR TYPICAL LOCATION OF INDUCTIVE LOOP DETECTORS													No. OF STUBOUTS (REPLACE)
			1	2	3	4	5	6	7	8	9	10	11	12	13	
R59.7	LAKE HUGHES ROAD UC	1617 NB	X	X	X	X								X		3
R66.2	TEMPLIN HIGHWAY UC	1618 NB/ 1630 SB	X	X	X	X	X	X	X	X	X	X		X	X	6

X - INSTALL TYPE E INDUCTIVE LOOP DETECTOR.



DETAIL "A"

TYPICAL DETAIL FOR LOOP DETECTOR INSTALLATION

GENERAL NOTES: (THIS SHEET)

1. ABANDON EXISTING STUBOUTS. INSTALL NEW 2" C STUBOUTS FOR NEW INDUCTIVE LOOP DETECTORS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE EXISTING INDUCTIVE LOOP DETECTORS.
3. NEW INDUCTIVE LOOP DETECTOR SHALL BE SPLICED TO EXISTING d/c IN ADJACENT PULL BOX.
4. TAG EXISTING d/c IN ADJACENT PULL BOX AND AT CONTROLLER CABINET.
5. ALL NEW HOME RUNS FOR NEW INDUCTIVE LOOP DETECTORS ON THE MAINLINE SHALL BE CUT TO THE RIGHT SHOULDER.
6. ABANDON EXISTING INDUCTIVE LOOP DETECTORS. INSTALL NEW INDUCTIVE LOOP DETECTORS AT SAME LOCATION.

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

MODIFY RAMP METERING SYSTEM
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 TRAFFIC DESIGN
 SUPERVISING ENGINEER: YI TSAU
 CHECKED BY: [blank]
 CALCULATED/DESIGNED BY: [blank]
 QUINCY TRAN
 CECILIO BURCIAGA
 REVISED BY: [blank]
 DATE REVISED: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	20	50

REGISTERED ELECTRICAL ENGINEER	DATE	5-3-10
C. BURCIAGA		
No. E015302		
Exp. 3/31/11		
ELECT		

6-28-10
PLANS APPROVAL DATE

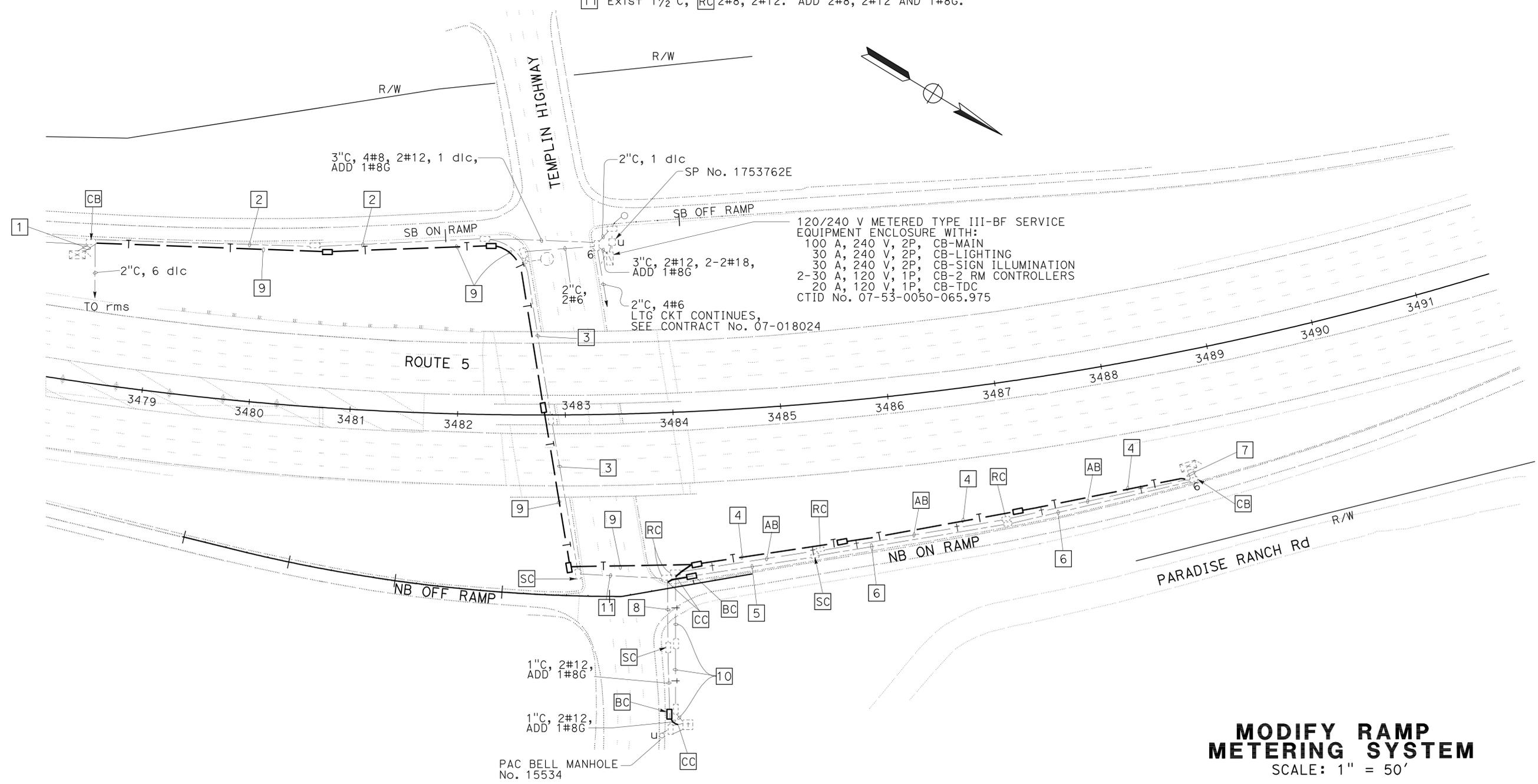
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

PROJECT NOTES: (THIS SHEET ONLY)

- 1 Exist 2-2"C, 7 dlc, 2#8, RC 1 Tel CABLE. ADD 4#19 TWISTED PAIR CABLE AND 1#8G.
- 2 Exist 2"C, 2#8, 1 dlc, RC 1 Tel CABLE. ADD 1#8G.
- 3 Exist 1/2"C, 2#8, 2#12, RC 1 Tel CABLE. ADD 1#8G.
- 4 INSTALL 2"C, 2-4#19 TWISTED PAIR CABLE.
- 5 Exist 1"C, RC 2#8, 1 dlc AND 1 Tel CABLE. ADD 2#8, 1#8G AND 1 DLC.
- 6 Exist 1"C, 2#8, RC 1 Tel CABLE AND 1 dlc. ADD 1 DLC AND 1#8G.
- 7 Exist 2-2"C, 4 dlc, 2#8, RC 2 Tel CABLE AND 1 dlc. ADD 2-4#19 TWISTED PAIR CABLE AND 1 DLC AND 1#8G.
- 8 Exist 2"C, RC 2#12, ADD 2#12 AND 1#8G.
- 9 INSTALL 2"C, 4#19 TWISTED PAIR CABLE.
- 10 Exist 1"C, RC 1 Tel CABLE. ADD 4#19 TWISTED PAIR CABLE.
- 11 Exist 1/2"C, RC 2#8, 2#12. ADD 2#8, 2#12 AND 1#8G.



THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

**MODIFY RAMP
METERING SYSTEM**
SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: YI TSAU
 CALCULATED/DESIGNED BY: CECILIO BURCIAGA
 CHECKED BY:
 QUINCIE TRAN
 REVISOR: CECILIO BURCIAGA
 REVISION DATE:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	21	50
			5-3-10 REGISTERED ELECTRICAL ENGINEER DATE 6-28-10 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTE:

FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (SHEETS E-3 & E-4)

- EXISTING PAVEMENT SURFACE SENSOR
- ⊗ EXISTING RPU
- ➡ SHOULDER TERMINATION (SEE STD PLAN ES-5D)
- PAVEMENT SURFACE SENSOR

ABBREVIATIONS:

- RPU - REMOTE PROCESSING UNIT
- SCE - SOUTHERN CALIFORNIA EDISION
- SLI - SENSOR LEAD-IN

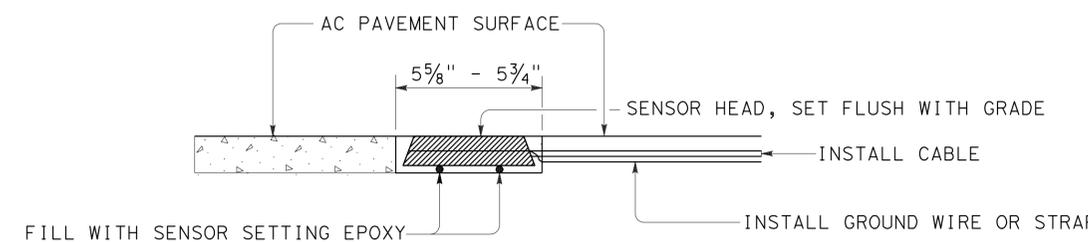
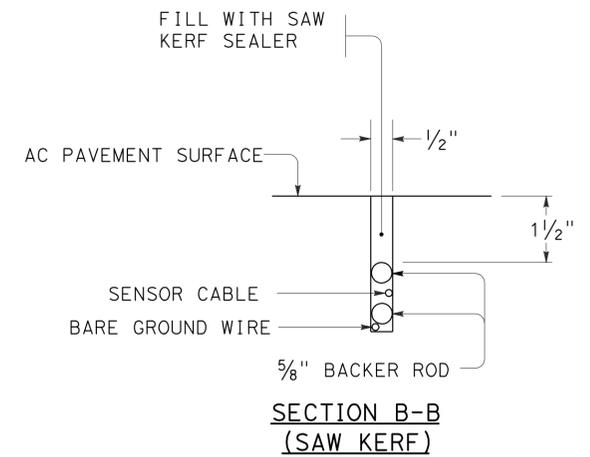
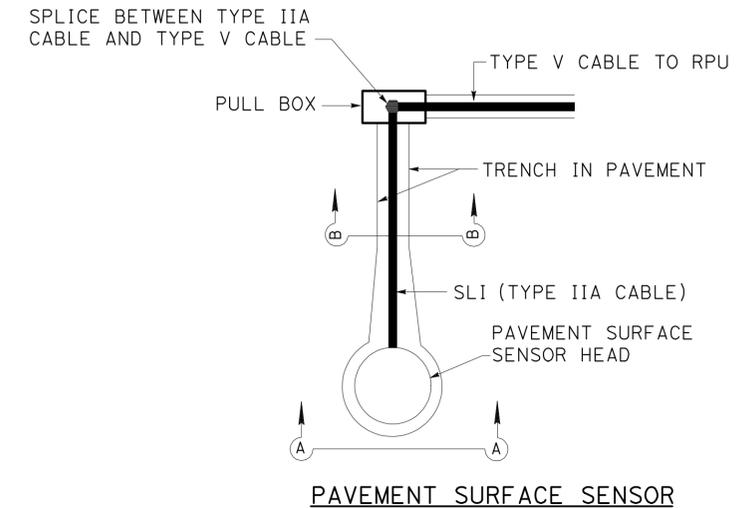
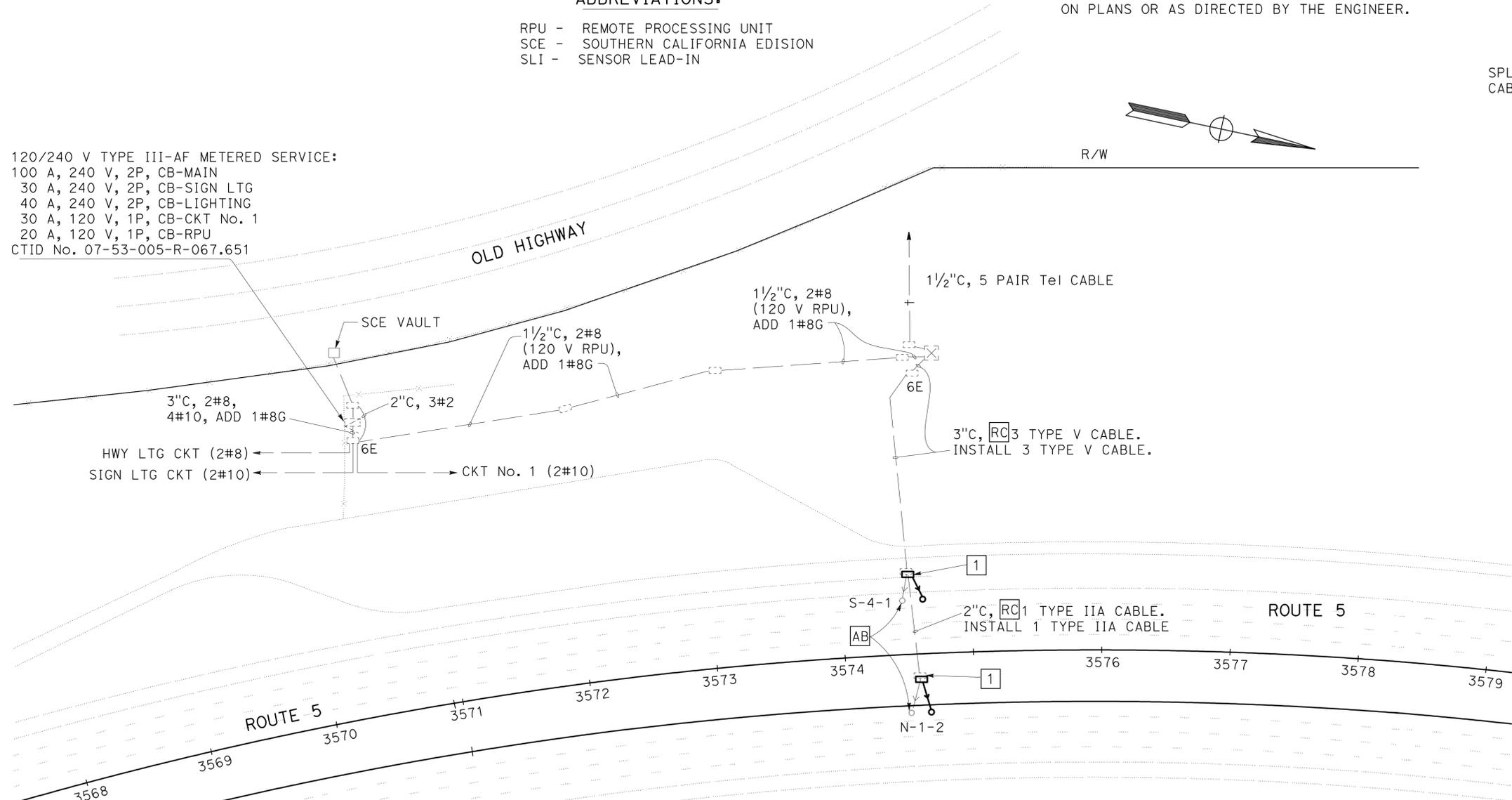
PROJECT NOTES: (SHEETS E-3 & E-4)

- 1 REPLACE EXISTING PULL BOX WITH NEW TYPE 5(T) PULL BOX.

GENERAL NOTE: (SHEETS E-3 & E-4)

- 1. ALL SENSORS TO BE LOCATED IN WHEEL PATH UNLESS NOTED OTHERWISE ON PLANS OR AS DIRECTED BY THE ENGINEER.

120/240 V TYPE III-AF METERED SERVICE:
 100 A, 240 V, 2P, CB-MAIN
 30 A, 240 V, 2P, CB-SIGN LTG
 40 A, 240 V, 2P, CB-LIGHTING
 30 A, 120 V, 1P, CB-CKT No. 1
 20 A, 120 V, 1P, CB-RPU
 CTID No. 07-53-005-R-067.651

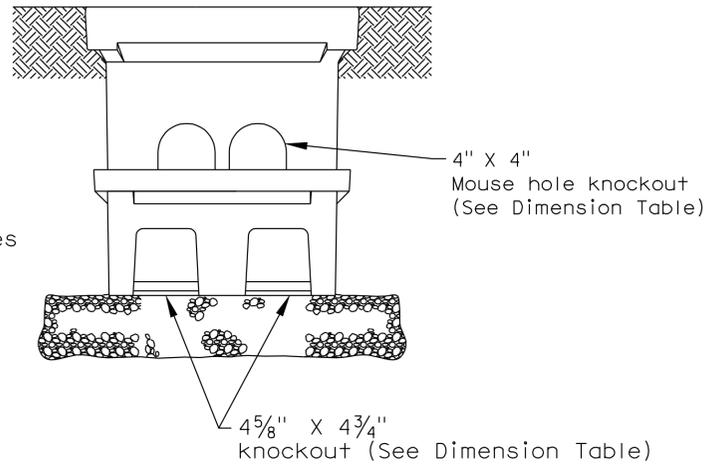
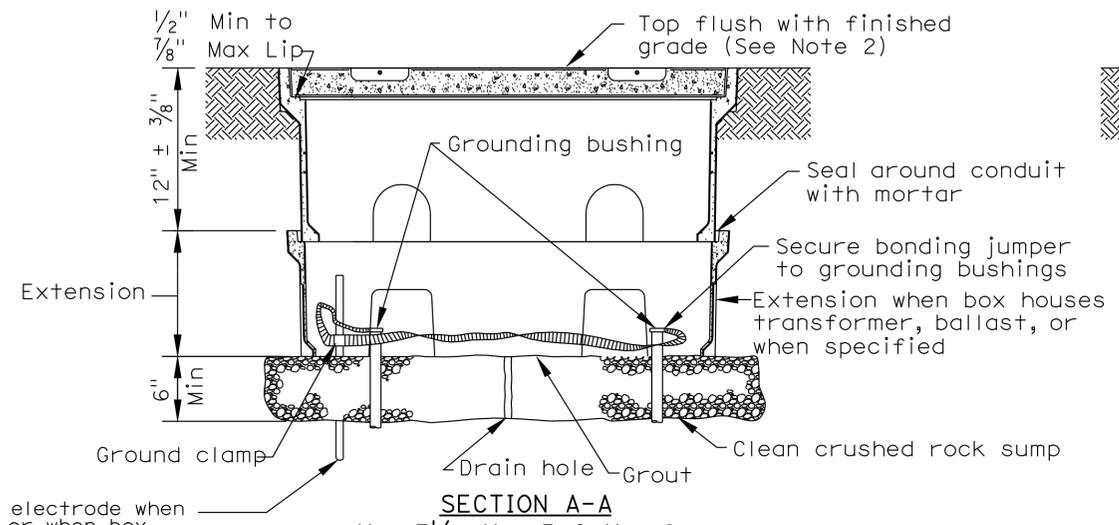
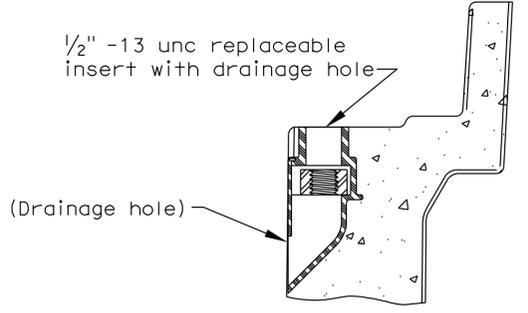
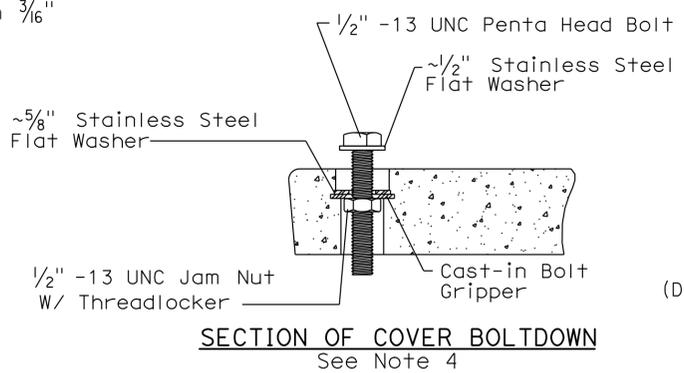
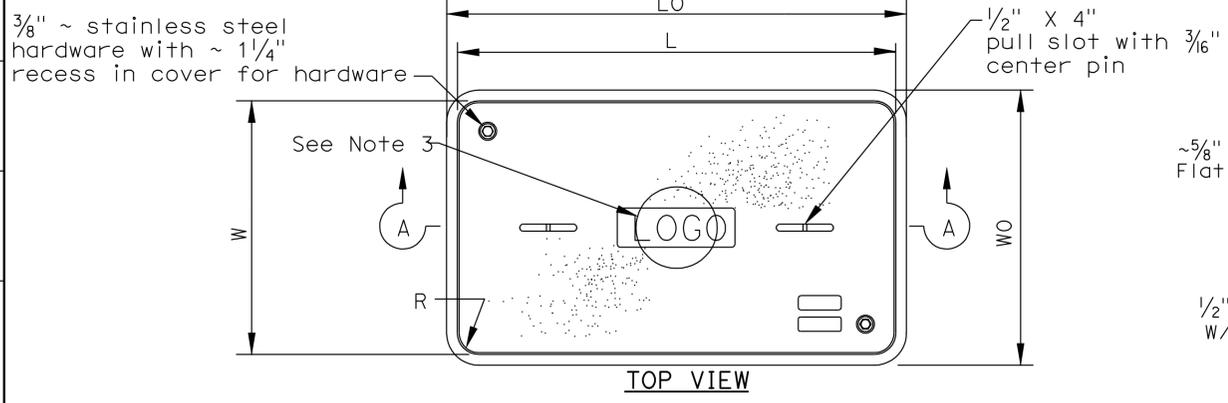


SENSOR IDENTIFICATION: (SHEETS E-3 & E-4)

- FREEWAY DETECTOR DESIGNATION
- N-NORTHBOUND LANES (NB)
- S-SOUTHBOUND LANES (SB)
- NUMBER OF SENSOR
- NUMBER OF LANE FROM LEFT WITH RESPECT TO DIRECTION OF TRAFFIC:
- 1=FIRST LANE FROM LEFT
- 2=SECOND LANE FROM LEFT
- 3=THIRD LANE FROM LEFT
- 4=FOURTH LANE FROM LEFT

MODIFY ROADWAY WEATHER INFORMATION SYSTEM (WHITAKER SUMMIT PM R67.7)
 SCALE: 1" = 50'

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY



- No. 3 1/2 pull box.
- "TRAFFIC SIGNAL" Traffic signal circuits with or without street or sign lighting circuits.
 - "STREET LIGHTING" Street or sign lighting circuits where voltage is under 600 V.
- No. 5 and No. 6 pull box.
- "STREET LIGHTING-HIGH VOLTAGE" Street or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" Circuits to irrigation controller 120 V or more. and must be purple in color.
 - "RAMP METER" Ramp meter circuits.
 - "COUNT STATION" Count or speed monitor circuits.
 - "COMMUNICATION" Communication circuits.
 - "TOS COMMUNICATIONS" TOS communication line.
 - "TOS POWER" TOS power.
 - "TDC POWER" Telephone demarcation cabinet power.
 - "CCTV" Closed circuit television circuits.
 - "TMS" Traffic monitoring station circuits.
 - "CMS" Changeable message sign circuits.
 - "HAR" Highway advisory radio circuits.

SECTION A-A
No. 3 1/2, No. 5 & No. 6
NON-DELIBERATE TRAFFIC PULL BOX
INSTALLATION DETAILS

DIMENSION TABLE

PULL BOX	CONCRETE BOX				NON-PCC BOX		CONCRETE OR NON-PCC BOX						Extension Knockouts		Pull Box Knockouts		
	Minimum * Thickness	Minimum Depth Box and Extension	LO	WO	Minimum ** Thickness	Minimum Depth Box and Extension	LO	WO	L **	W **	R	Edge Thickness	Edge Taper	Side	End	Side	End
No. 3 1/2	1"	No Extension	18"	13"	1"	No Extension	20 1/4"	13 5/16"	18 1/8"	11 1/4"	1 1/4"	1/2"	1/8"	n/a	n/a	n/a	n/a
No. 5	1"	22"	26 1/4"	16 3/4"	3/4"	20"	24 5/16"	15 7/16"	23 1/4"	13 3/4"	1 3/8"	5/8"	1/8"	2	1	2	1
No. 6	1 1/16"	24"	33 5/8"	20 5/8"	3/4"	20"	32 1/4"	19 1/4"	30 1/2"	17 1/2"	1 3/8"	5/8"	1/8"	2	2	2	2

* Excluding conduit web ** Top dimension

NOTES ON PULL BOXES:

- All non-deliberate traffic pull boxes and covers must be made of polymer concrete with fiberglass reinforcement. The box must have continuous fiberglass cloth reinforcement on the inside and outside perimeters. The covers must have a minimum of two layers of fiberglass cloth reinforcement.
- All non-deliberate traffic pull boxes and covers must comply with all test provisions of ANSI/SCTE 77 2007 "Specification for Underground Enclosure Integrity", and must meet the Tier 22 application. Markings showing the Tier 22 rating must be labeled or stenciled on the inside and outside of the box, and on the underside of the cover.
- Top of pull boxes must be flush with surrounding grade or top of adjacent curb, except that in unpaved areas where pull box is not immediately adjacent to and protected by a concrete foundation, pole or other surrounding grade. Where practicable, pull boxes shown in the vicinity of curbs must be placed adjacent to the back of curb, and pull boxes shown adjacent to standards must be placed on side of foundation facing away from traffic, unless otherwise noted. When a pull box is installed in sidewalk area, the depth of the pull box must be adjusted so that the top of the pull box is flush with the sidewalk.
- Electronic marker must be cast in cover.
- Covers must be secured to pull box using 1/2" -13 UNC S.S. penta head bolts. Bolts must be captive.
- Fasteners must be capable of withstanding a torque of 56 ft lbs and a pull-out strength of 750 lbs. The pull-out test must be performed with the cover in place and the fasteners torqued to 56 ft lbs. Fasteners, inserts and cover must not be damaged by the performance of this test.
- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions must be 1/8" or greater.

- Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within 1/8". Top outside edge of concrete covers and pull boxes must have a 1/8" minimum radius.
- Pull box must not be installed within the boundaries of new or existing curb ramps.
- Pull boxes for electroliers, post and signal standards must be located ± 5 feet from the station of the adjacent electrolier, post or signal standard. Pull boxes must be placed adjacent to back of curb or edge of shoulder except where this is impractical, a box maybe placed in another suitable protected and accessible location.
- Pull boxes must be furnished with replaceable insert and must have a drainage hole directly below the insert.

PULL BOX
(DETAILS)
 NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

QUINCIE TRAN CECILIO BURCIAGA
 YI TSAU
 DEPARTMENT OF TRANSPORTATION
 TRAFFIC DESIGN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	25	50

Jacqueline C. Tan 5-3-10
 REGISTERED ELECTRICAL ENGINEER DATE

6-28-10
 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.

ABBREVIATIONS

- 4P#22 — 4 PAIR 22 AWG CAT 6 CABLE
- AWG — AMERICAN WIRE GAUGE
- CB — CIRCUIT BREAKER
- LCU — LOCAL CONTROL UNIT
- CIA — CONTROLLER INTERFACE ASSEMBLY
- CTID — CALTRANS IDENTIFICATION
- DACCS — DIGITAL ACCESS AND CROSS CONNECTION SYSTEM
- DEMUX — DEMULTIPLEX
- LARTMC — LOS ANGELES REGIONAL TRAFFIC MANAGEMENT CENTER
- JKFD — JACKFIELD
- MUX — MULTIPLEX
- PDA — POWER DISTRIBUTION ASSEMBLY
- RCVR — RECEIVER
- RMS — RAMP METERING SYSTEM OR STATION
- TELCO — TELEPHONE COMPANY
- RX — RECEIVE
- SCE — SOUTHERN CALIFORNIA EDISON
- RPU — REMOTE POWER UNIT
- TX — TRANSMIT
- VMX — VIDEO MULTIPLEXER
- XMTR — TRANSMITTER
- # — NUMBER

GENERAL NOTES: (SHEETS E-8 TO E-13)

1. THE LOCATIONS OF EXISTING INDUCTIVE LOOP DETECTORS, CONTROLLER CABINETS, SERVICE EQUIPMENT ENCLOSURES, POWER POLES AND DEMARCATION CABINETS ARE APPROXIMATE.
2. THE LOCATIONS OF PROPOSED ELEMENTS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED OR APPROVED BY THE ENGINEER
3. BEFORE REMOVING OR MODIFYING ANY EXISTING ELECTRICAL OR TELEPHONE COMPANY FACILITIES, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE ENGINEER AND ALL AGENCIES CONCERNED 72 HOURS PRIOR TO COMMENCING WORK.
4. PULL ROPES SHALL BE INSTALLED IN ALL EMPTY CONDUITS.
5. CONDUITS SHALL BE INSTALLED WHERE SHOWN ON THE PLANS RELATIVE TO THE EXISTING SHOULDER.
6. MOISTURE, FROST AND ICE EARLY WARNING DETECTION SYSTEM LOCATED AT APPROXIMATE POST MILE R67.7 AND R73.6 IS TO BE PROTECTED. THIS IMMEDIATE AREA SHALL NOT BE COLD PLANED.
7. ALL PULL BOXES AND SPLICE VAULTS SHALL BE LOCATED IN UNPAVED AREA UNLESS OTHERWISE NOTED.

LEGEND

- NEW CCTV CAMERA CONTROLLER CABINET
- NEW CCTV CAMERA AND NEW POLE
- TELEPHONE CALL BOX

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans OFFICE OF ITS
 HOSAKERE ANANTH
 JACQUELINE TAN
 CALCULATED/DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 JACQUELINE C. TAN

**CLOSED CIRCUIT
 TELEVISION CAMERA SYSTEM
 (LEGEND AND NOTES)**

NO SCALE

E-7

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	26	50

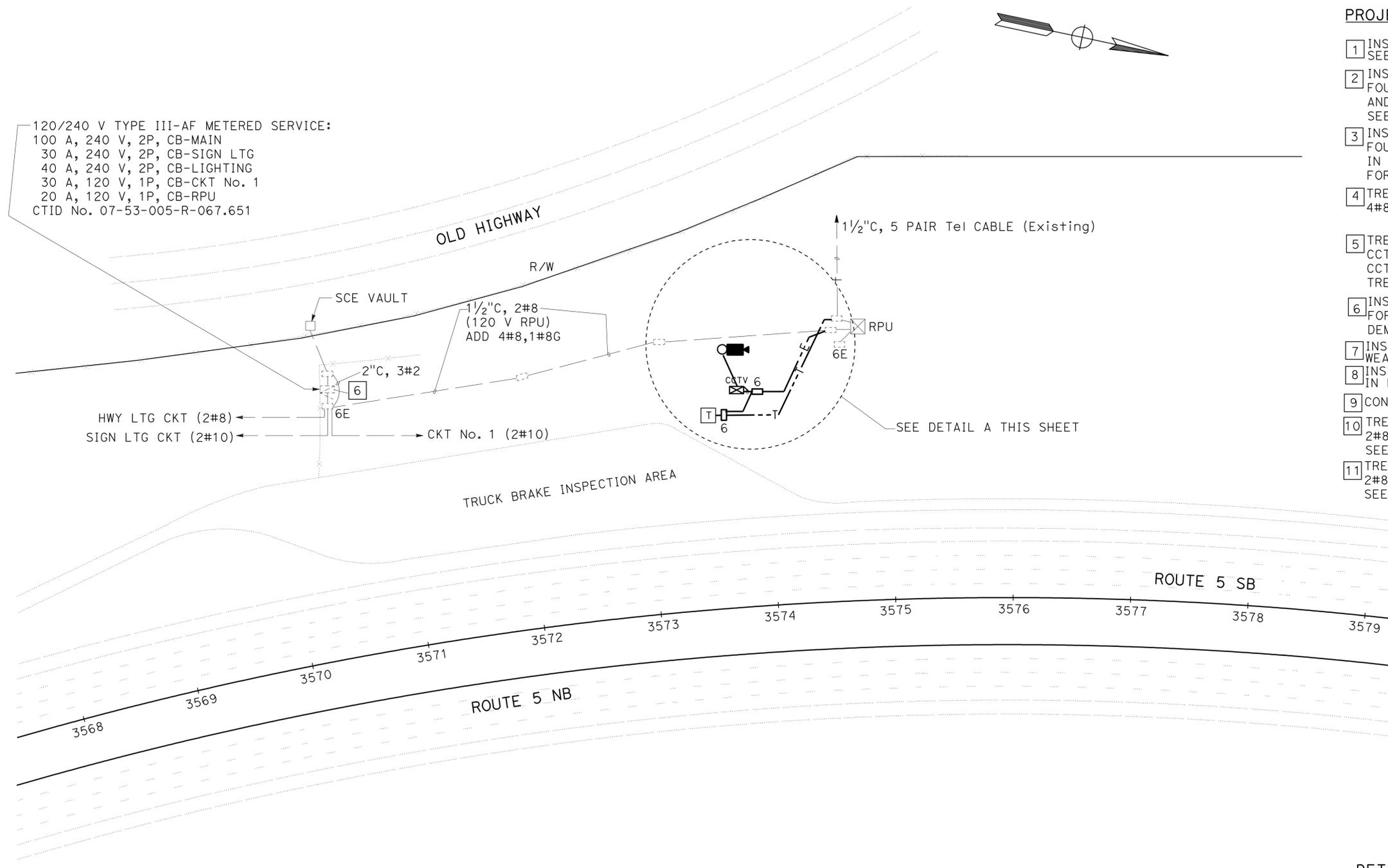
<i>Jacqueline C. Tan</i> 5-3-10 REGISTERED ELECTRICAL ENGINEER DATE	
6-28-10 PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER JACQUELINE TAN No. E015611 Exp. 12/31/11 ELECT
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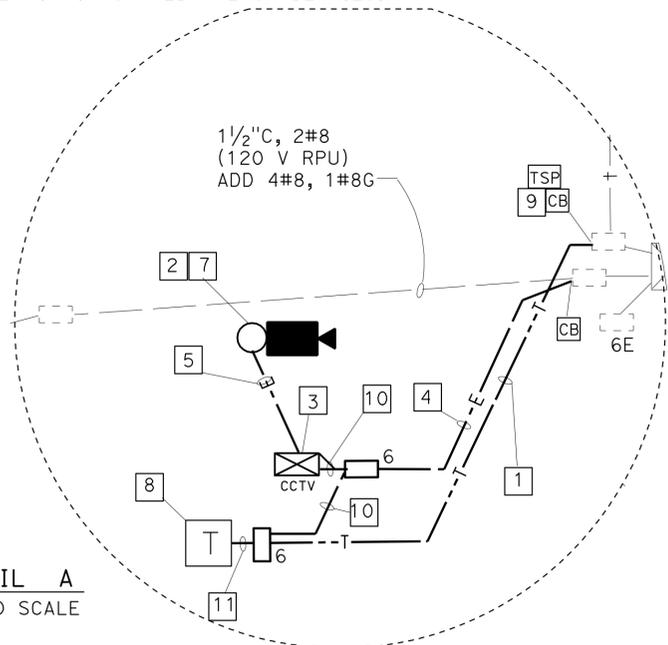
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NOTE:
 FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

120/240 V TYPE III-AF METERED SERVICE:
 100 A, 240 V, 2P, CB-MAIN
 30 A, 240 V, 2P, CB-SIGN LTG
 40 A, 240 V, 2P, CB-LIGHTING
 30 A, 120 V, 1P, CB-CKT No. 1
 20 A, 120 V, 1P, CB-RPU
 CTID No. 07-53-005-R-067.651



- PROJECT NOTES:(THIS SHEET ONLY)**
- INSTALL 2" C, 2-4P#22 AWG CAT 6 CABLE. SEE E-10 FOR TRENCHING DETAILS.
 - INSTALL POLE TYPE CCTV 35 ON NEW FOUNDATION. INSTALL CAMERA ASSEMBLY WITH PAN/TILT AND ZOOM UNIT ON THE POLE. SEE SHEET E-13 FOR DETAILS.
 - INSTALL MODEL 334-TV CONTROLLER CABINET ON NEW FOUNDATION. INSTALL LOCAL CONTROL UNIT, VIDEO ENCODER IN THE CCTV CONTROLLER CABINET. SEE SHEET E-12 FOR FOUNDATION DETAILS.
 - TRENCH AND INSTALL 2" C IN SOIL. INSTALL 4#8 AND 1#8G. SEE E-10 FOR SHARED TRENCH DETAILS.
 - TRENCH AND INSTALL 2" C IN SOIL. INSTALL CCTV CABLE ASSEMBLY. SEE E-13 FOR CCTV CABLE ASSEMBLY AND E-10 FOR TRENCHING DETAILS.
 - INSTALL 2-20A, 120V, 1P CIRCUIT BREAKERS, ONE FOR THE CCTV GS 677 AND ANOTHER FOR THE TELEPHONE DEMARCATION CABINET IN THE EXISTING SERVICE PANEL.
 - INSTALL POLE TYPE CCTV 35 50 FEET SOUTH OF EXISTING WEATHER STATION.
 - INSTALL TYPE C TELEPHONE DEMARCATION CABINET 10 FEET IN FRONT OF THE 334-TV CABINET.
 - CONNECT TO TELEPHONE SERVICE COMPANY(AT&T) SERVICE POINT.
 - TRENCH AND INSTALL 2" C IN SOIL. INSTALL 2#8, 1#8G AND 1-4P#22 CAT6 CABLES. SEE E-10 FOR TRENCHING DETAILS.
 - TRENCH AND INSTALL 2" C IN SOIL. INSTALL 2#8, 1#8G AND 3-4P#22 CAT6 CABLES. SEE E-10 FOR SHARED TRENCH DETAILS.



DETAIL A
 NOT TO SCALE

**CLOSED CIRCUIT TELEVISION CAMERA SYSTEM
 (LOCATION GS 677 PM R67.7)
 (WHITAKER SUMMIT PM R67.7)
 SCALE: 1" = 50'**

FOR LEGEND, GENERAL NOTES AND PROJECT NOTES, SEE ELECTRICAL SHEET E-7.
 THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 OFFICE OF ITS
 SUPERVISING ENGINEER
 JACQUELINE C. TAN
 CALCULATED/DESIGNED BY
 HOSAKERE ANANTH
 CHECKED BY
 JACQUELINE C. TAN
 REVISED BY
 DATE REVISED

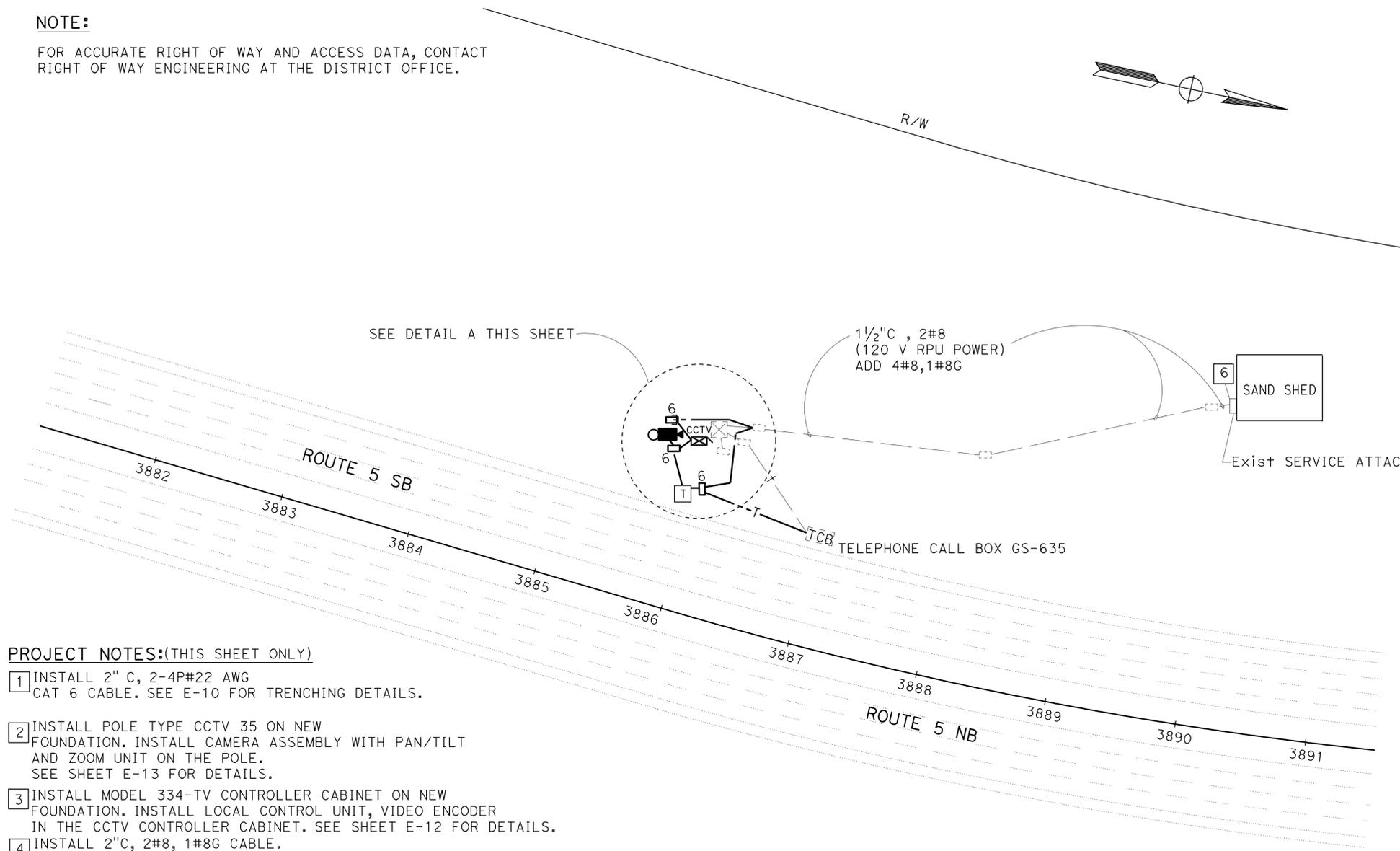
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	27	50

Jacqueline C. Tan 5-3-10
 REGISTERED ELECTRICAL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JACQUELINE TAN
 No. E015611
 Exp. 12/31/11
 ELECT
 STATE OF CALIFORNIA

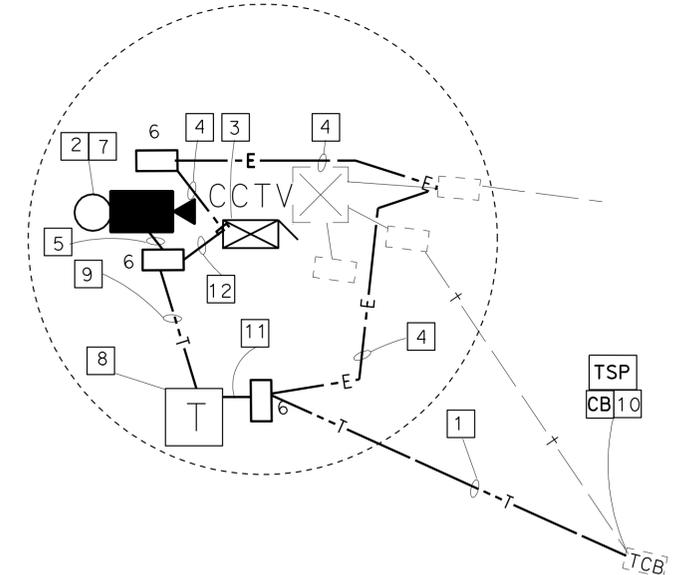
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NOTE:
 FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



PROJECT NOTES:(THIS SHEET ONLY)

- 1] INSTALL 2" C, 2-4P#22 AWG CAT 6 CABLE. SEE E-10 FOR TRENCHING DETAILS.
- 2] INSTALL POLE TYPE CCTV 35 ON NEW FOUNDATION. INSTALL CAMERA ASSEMBLY WITH PAN/TILT AND ZOOM UNIT ON THE POLE. SEE SHEET E-13 FOR DETAILS.
- 3] INSTALL MODEL 334-TV CONTROLLER CABINET ON NEW FOUNDATION. INSTALL LOCAL CONTROL UNIT, VIDEO ENCODER IN THE CCTV CONTROLLER CABINET. SEE SHEET E-12 FOR DETAILS.
- 4] INSTALL 2"C, 2#8, 1#8G CABLE. SEE E-10 FOR TRENCHING DETAILS.
- 5] INSTALL 2"C. INSTALL CCTV CABLE ASSEMBLY. SEE E-13 FOR CCTV CABLE ASSEMBLY AND E-10 FOR TRENCHING DETAILS.
- 6] INSTALL 2-20A, 120V, 1P CIRCUIT BREAKERS, ONE FOR THE CCTV GS 736 AND ANOTHER FOR THE TELEPHONE DEMARCATION CABINET IN THE EXISTING SERVICE PANEL.
- 7] INSTALL POLE TYPE CCTV 35 15 FEET SOUTH OF EXISTING WEATHER STATION.
- 8] INSTALL TYPE C TELEPHONE DEMARCATION CABINET 10 FEET FROM THE 334-TV CABINET.
- 9] INSTALL 2"C, INSTALL 1-4P#22 CAT 6 CABLE. SEE E-10 FOR TRENCHING DETAILS.
- 10] CONNECT TO TELEPHONE SERVICE COMPANY(AT&T) SERVICE POINT.
- 11] INSTALL 2"C, 2#8, 1#8G AND 2-4P#22 CAT 6 CABLE. SEE E-10 FOR TRENCHING DETAILS.
- 12] INSTALL 2"C, INSTALL CCTV CABLE ASSEMBLY AND 1-4P#22 CAT 6 CABLES. SEE E-10 FOR TRENCHING DETAILS AND E-13 FOR CCTV CABLE ASSEMBLY DETAILS.



DETAIL A
 NOT TO SCALE

CLOSED CIRCUIT TELEVISION CAMERA SYSTEM
(LOCATION GS 736 PM R73.6)
(LIEBRE SAND SHED AREA PM R73.6)
 SCALE: 1" = 50'

FOR LEGEND, GENERAL NOTES AND PROJECT NOTES, SEE ELECTRICAL SHEET E-7.
 THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans OFFICE OF ITS
 SUPERVISING ENGINEER JACQUELINE C. TAN
 CALCULATED/DESIGNED BY CHECKED BY
 HOSAKERE ANANTH JACQUELINE TAN
 REVISED BY DATE REVISION
 x
 x
 x
 x
 x

LAST REVISION DATE PLOTTED => 13-AUG-2010
 06-28-10 TIME PLOTTED => 12:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	28	50

REGISTERED ELECTRICAL ENGINEER	DATE
Jacqueline C. Tan	5-3-10
PLANS APPROVAL DATE	
6-28-10	

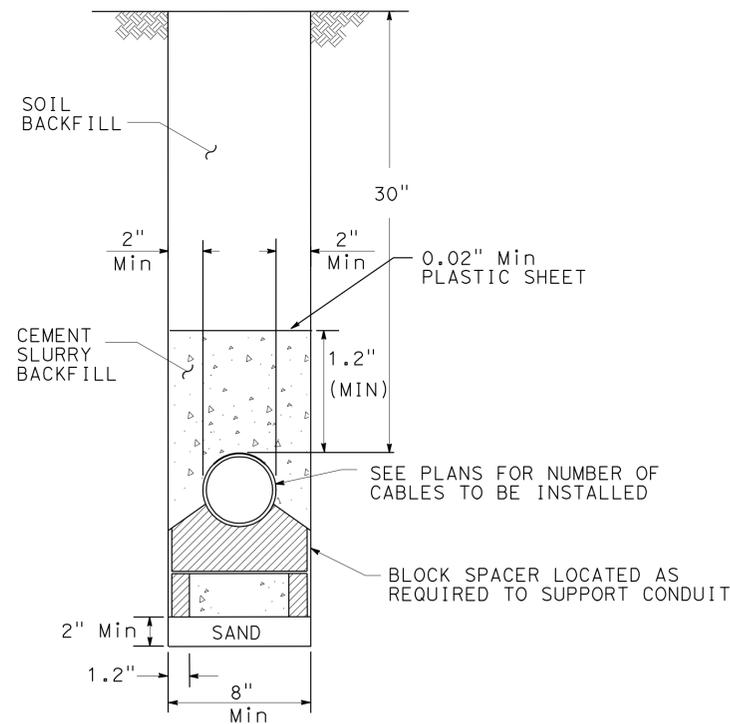
REGISTERED PROFESSIONAL ENGINEER
JACQUELINE TAN
No. E015611
Exp. 12/31/11
ELECTRICAL

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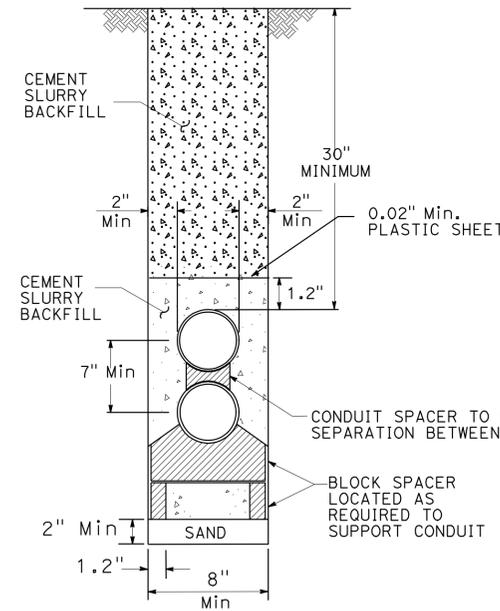
NOTES: (THIS SHEET ONLY)

- WHERE TRENCH TRANSITIONS FROM ASPHALT TO UNPAVED AREA, EXCEPT AT PULL BOXES, CONDUIT TO GRADUALLY TRANSITION FROM 24" MINIMUM DEPTH TO 30" MINIMUM DEPTH WITHIN THE ASPHALT AREA.
- 24" MINIMUM COVER MAY BE REDUCED TO 9" MINIMUM COVER IF NEEDED TO CLEAR A STORM DRAIN OR OTHER FIXED OBJECT AS DIRECTED BY RESIDENT ENGINEER.
- PROVIDE MINIMUM 4'-11" CLEARANCE BETWEEN ANY CONDUIT AND EXISTING STRUCTURE FOUNDATIONS.
- ANCHOR/RESTRAIN TOP CONDUIT FROM FLOATING DURING SLURRY CEMENT BACKFILL.

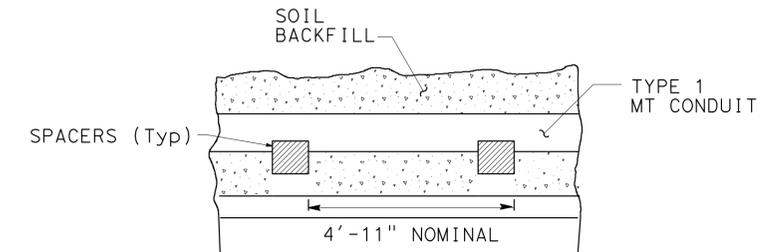
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans OFFICE OF ITS
 FUNCTIONAL SUPERVISOR
 JACQUELINE C. TAN
 CALCULATED/DESIGNED BY
 CHECKED BY
 HOSAKERE ANANTH
 JACQUELINE C. TAN
 REVISOR BY
 DATE REVISOR
 DATE REVISOR



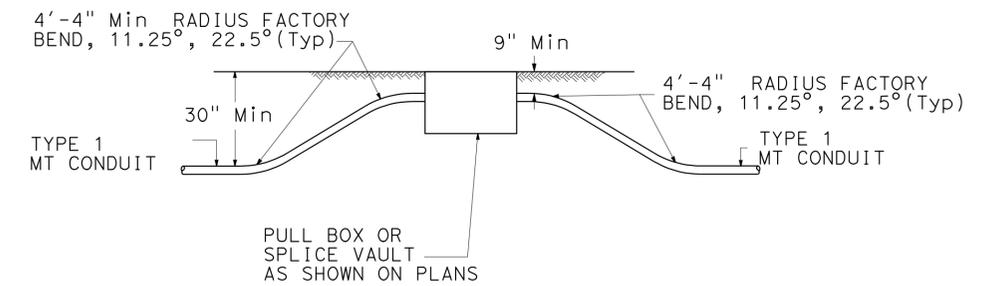
TRENCH IN SOIL WITH ONE TYPE 1 CONDUIT



TRENCH IN SOIL WITH TWO 2" CONDUITS



CONDUIT SPACER PLACEMENT (SIDE VIEW)



PULL BOX FOR SOIL AREA TRENCHING (ELEVATION)

**CLOSED CIRCUIT TELEVISION CAMERA SYSTEM
(TRENCH IN UNPAVED AREA DETAILS)**
NO SCALE

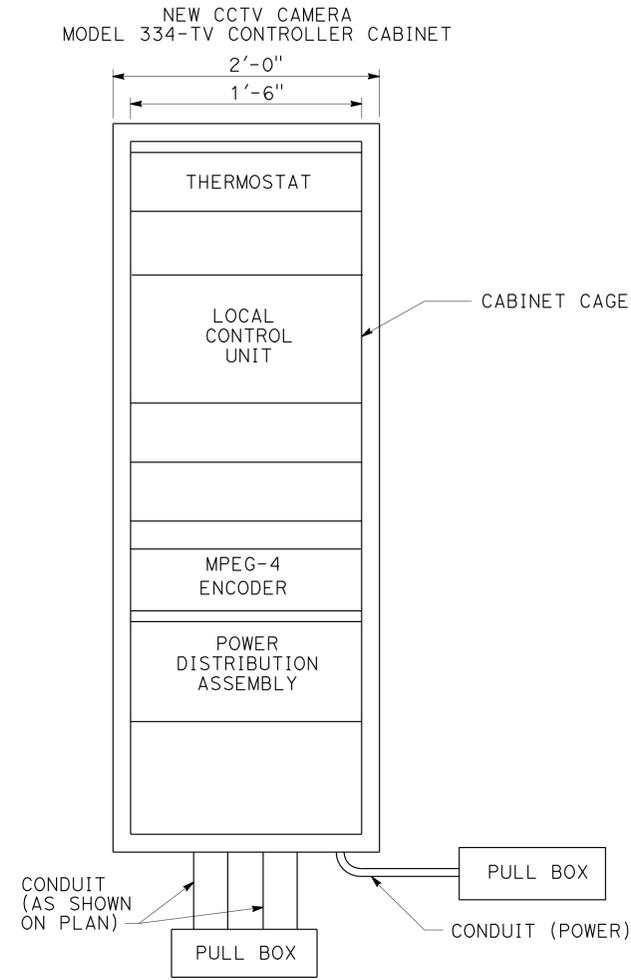
FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET E-7.
THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET E-7.

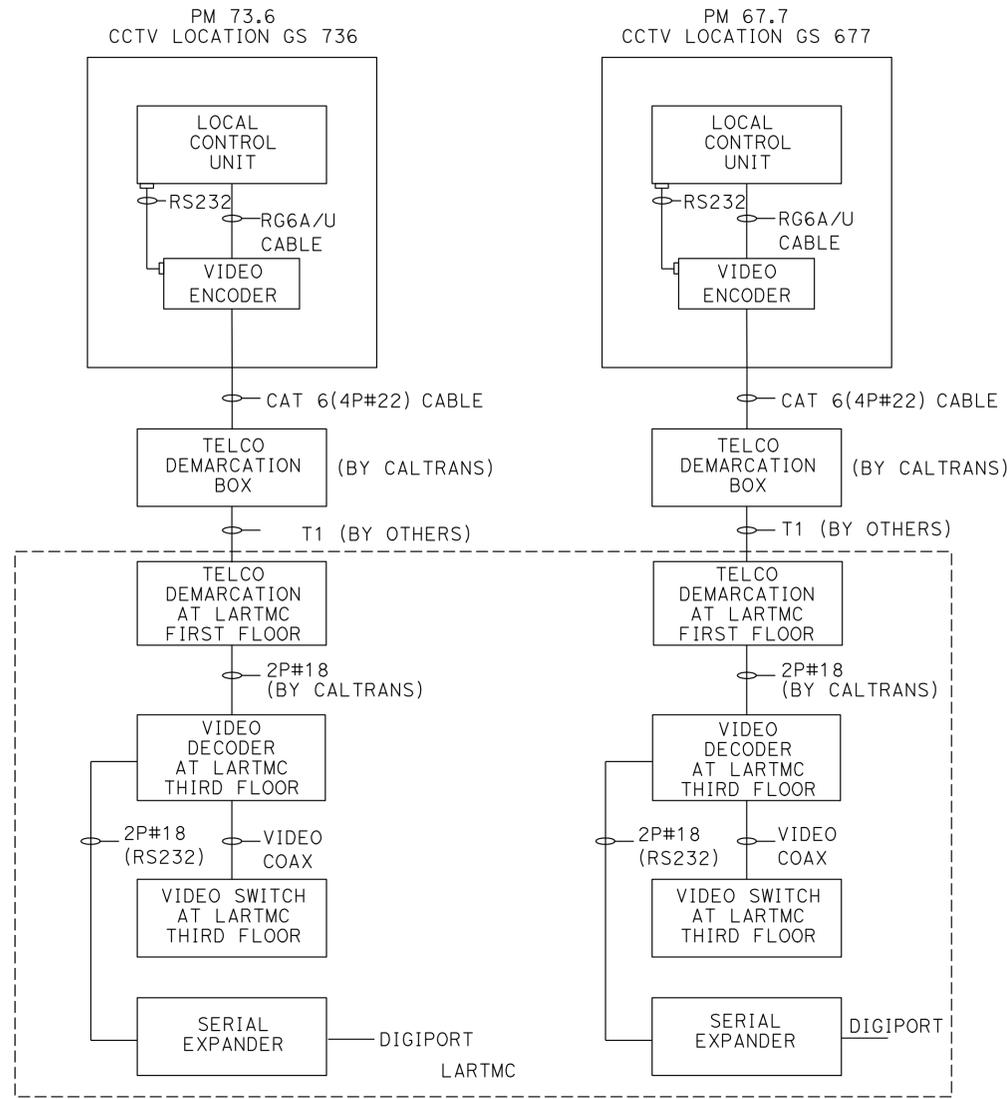
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	30	50

5-3-10
 REGISTERED ELECTRICAL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

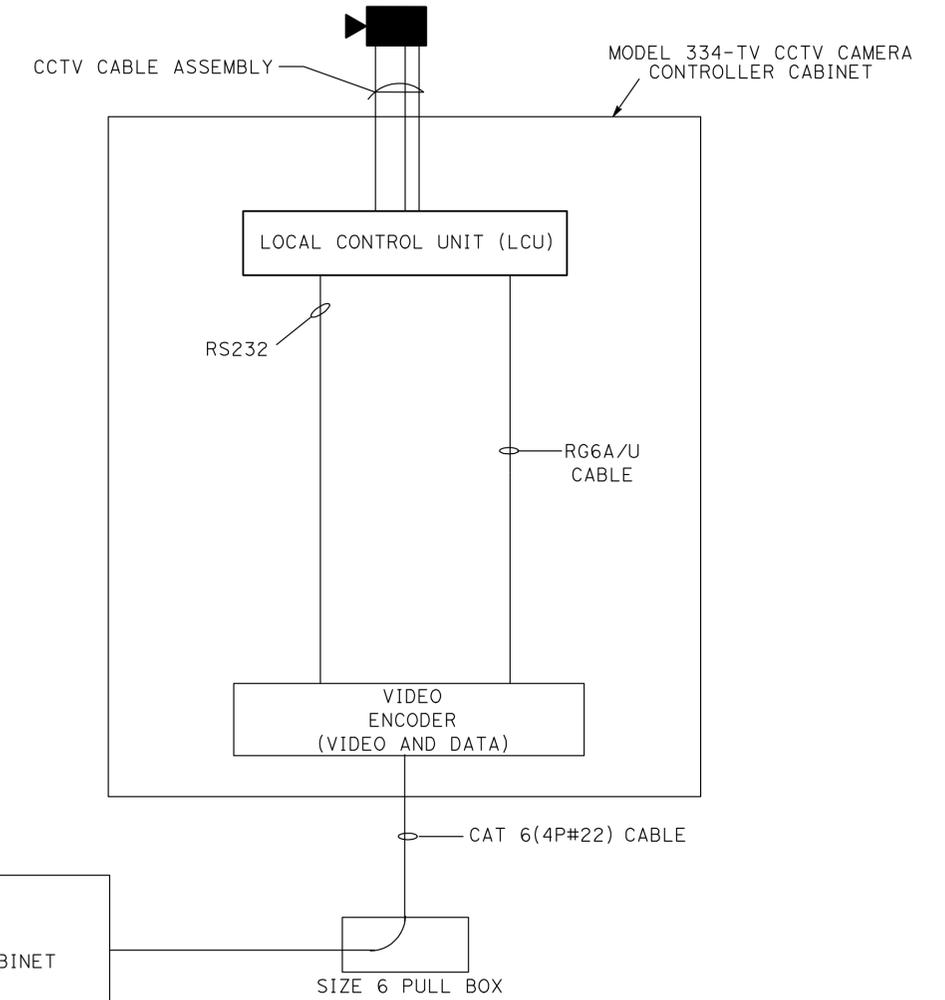
REGISTERED PROFESSIONAL ENGINEER
 JACQUELINE TAN
 No. E015611
 Exp. 12/31/11
 ELECTRICAL
 STATE OF CALIFORNIA



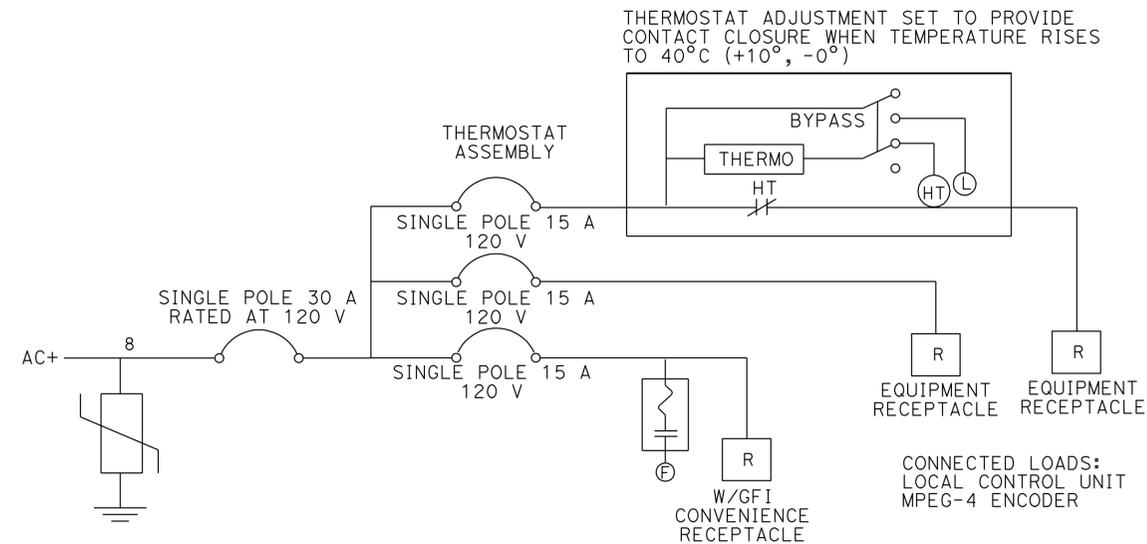
MODEL 334-TV CONTROLLER CABINET EQUIPMENT LAYOUT



DATA AND VIDEO PATH SCHEMATIC



MODEL 334-TV CONTROLLER CABINET WIRING DETAIL



POWER DISTRIBUTION ASSEMBLY SINGLE LINE DIAGRAM

- LEGEND:**
- SURGE PROTECTOR
 - CIRCUIT BREAKER
 - HIGH TEMPERATURE RELAY COIL
 - RELAY CONTACT NORMALLY CLOSED
 - BE #12 AWG FAN
 - INDICATOR LAMP
 - THERMOSTATIC CONTROL
 - ADJUSTABLE CALIBRATED THERMOSTAT
 - DUPLEX RECEPTACLE
 - EQUIPMENT GROUND

- ABBREVIATIONS:**
- CAB CABINET
 - EG EQUIPMENT GROUND
 - 1P 1-POLE
 - HT HIGH TEMPERATURE
 - W/GFI WITH GROUND FAULT INTERRUPTOR

CLOSED CIRCUIT TELEVISION CAMERA SYSTEM (MODEL 334-TV CONTROLLER CABINET DETAILS)

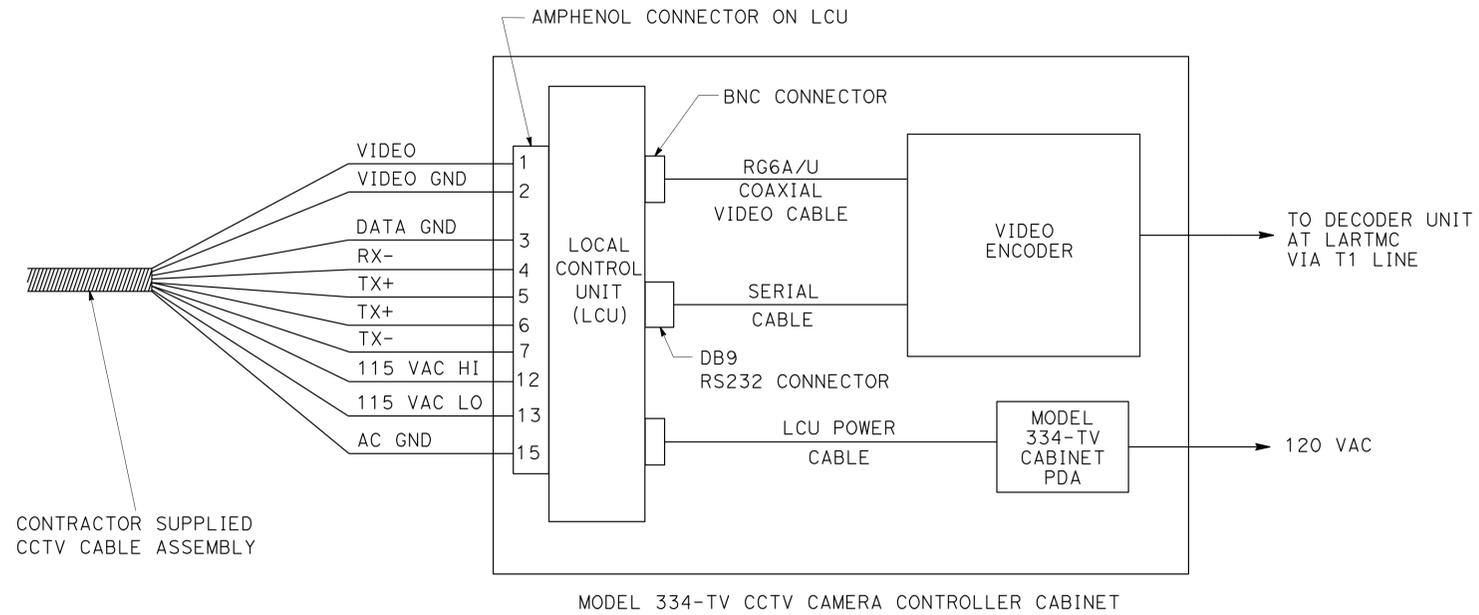
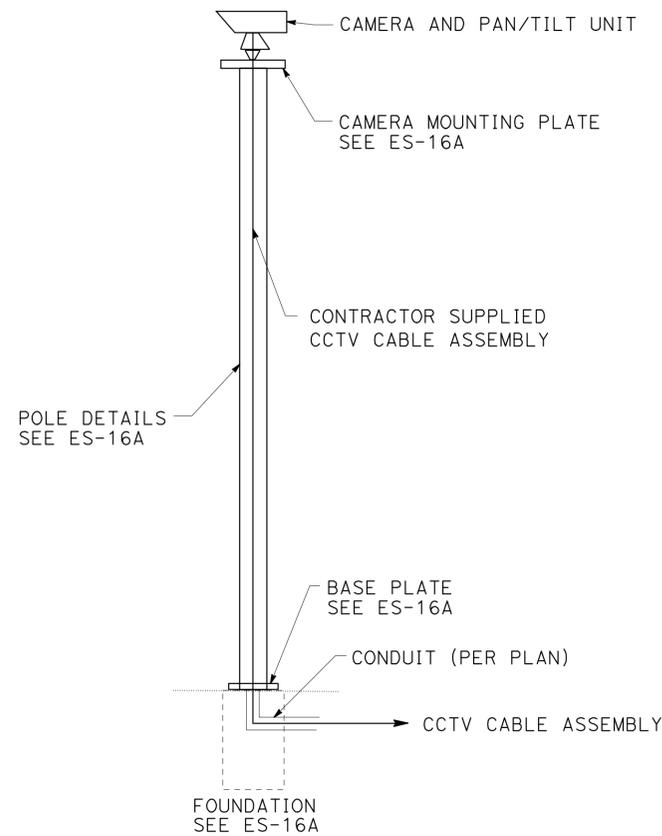
NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	31	50

5-3-10
 REGISTERED ELECTRICAL ENGINEER DATE
 6-28-10
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 JACQUELINE TAN
 No. E015611
 Exp. 12/31/11
 ELECTRICAL
 STATE OF CALIFORNIA

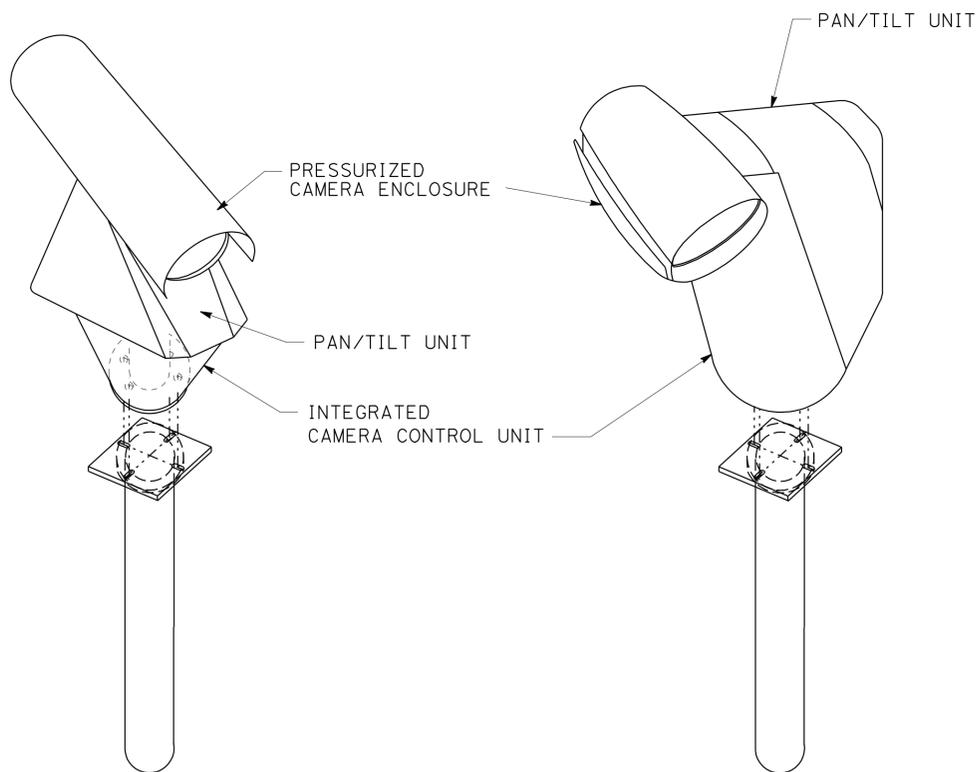
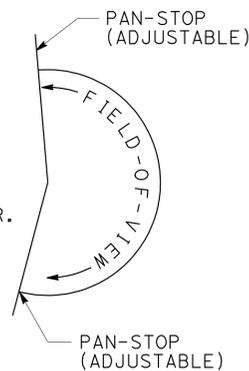


WIRING DIAGRAM

NOTES: (WIRING DIAGRAM)

1. THE CONTRACTOR TO PROVIDE CABLE LENGTH FROM THE CAMERA ASSEMBLY TO THE LCU INCLUDING AMPHENOL CONNECTOR AS SHOWN IN THIS SHEET.
2. THE CONTRACTOR SHALL PROVIDE ALL CABLES FROM THE LCU TO THE VIDEO TRANSMITTER, DATA TRANSCEIVER AND PDA.
3. ALL SIGNAL CABLES SHALL BE ALUMINUM SHIELDED TO PREVENT CROSS TALK.
4. IN THE CCTV CAMERA CABINET, THE NUMBER IDENTIFIES THE SPECIFIC CONDUCTOR TO BE USED FOR THE INDICATED FUNCTION.
5. CONNECT ALL DRAIN WIRES OF SHIELDED-CONDUCTORS TO CABINET GROUND AT THE LCU.
6. INSTALL CONNECTORS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. WATERPROOF ALL CONNECTORS AND CABLES USING WATER-TIGHT GROMMETS, SEALING COMPOUNDS, AND TAPE.
8. AS REQUIRED, CONTRACTOR SHALL INSTALL ADAPTER MOUNTING PLATES TO MOUNT CCTV CAMERA ON NEW POLE.

VIDEO BLANKING PRIVACY ZONES TO EXCLUDE NON-TRAFFIC FEATURES WHICH ARE NOT TO BE VIEWED (e.g., RESIDENTIAL HOUSING). THE PRIVACY ZONES SHALL BE ADJUSTED AS DIRECTED BY THE RESIDENT ENGINEER.



TYPICAL CAMERA WITH PAN/TILT UNIT (TYPE 1)

TYPICAL CAMERA WITH PAN/TILT UNIT (TYPE 2)

CLOSED CIRCUIT TELEVISION CAMERA SYSTEM (WIRING DIAGRAM WITH PAN/TILT UNIT)

NO SCALE

E-13

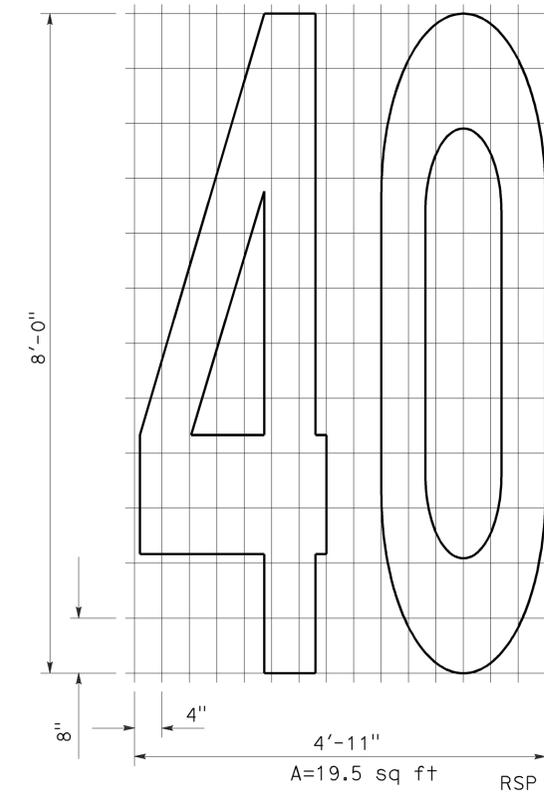
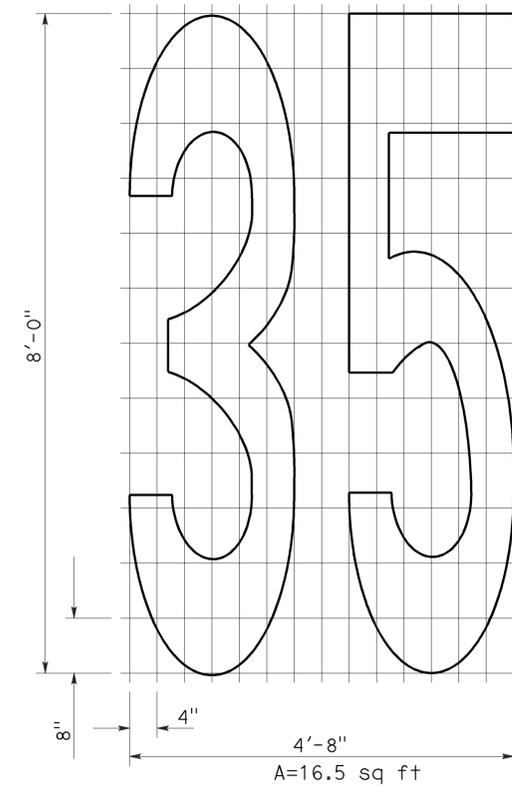
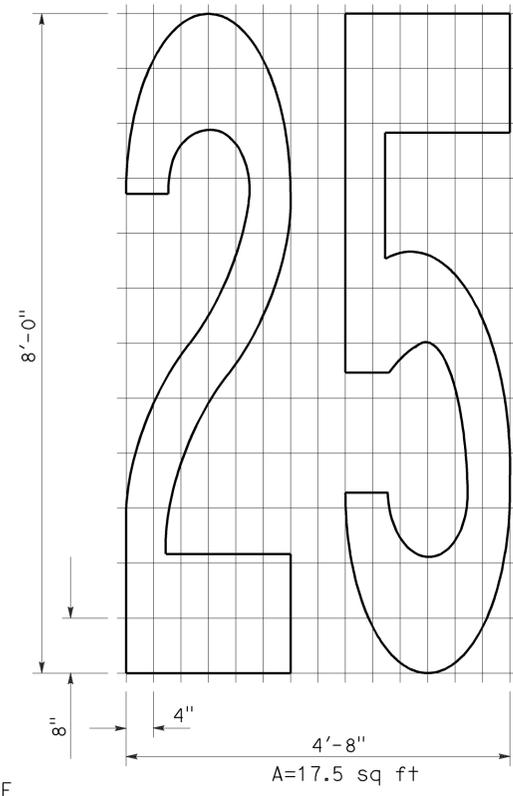
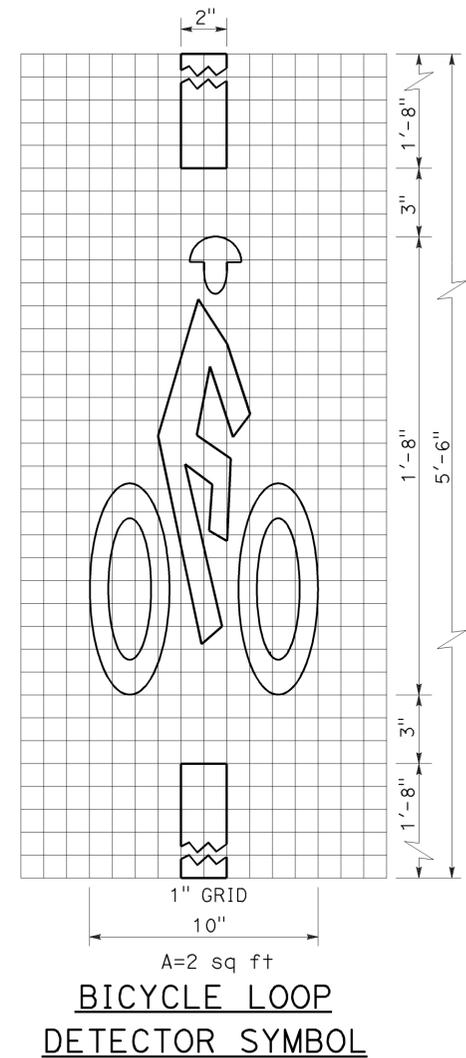
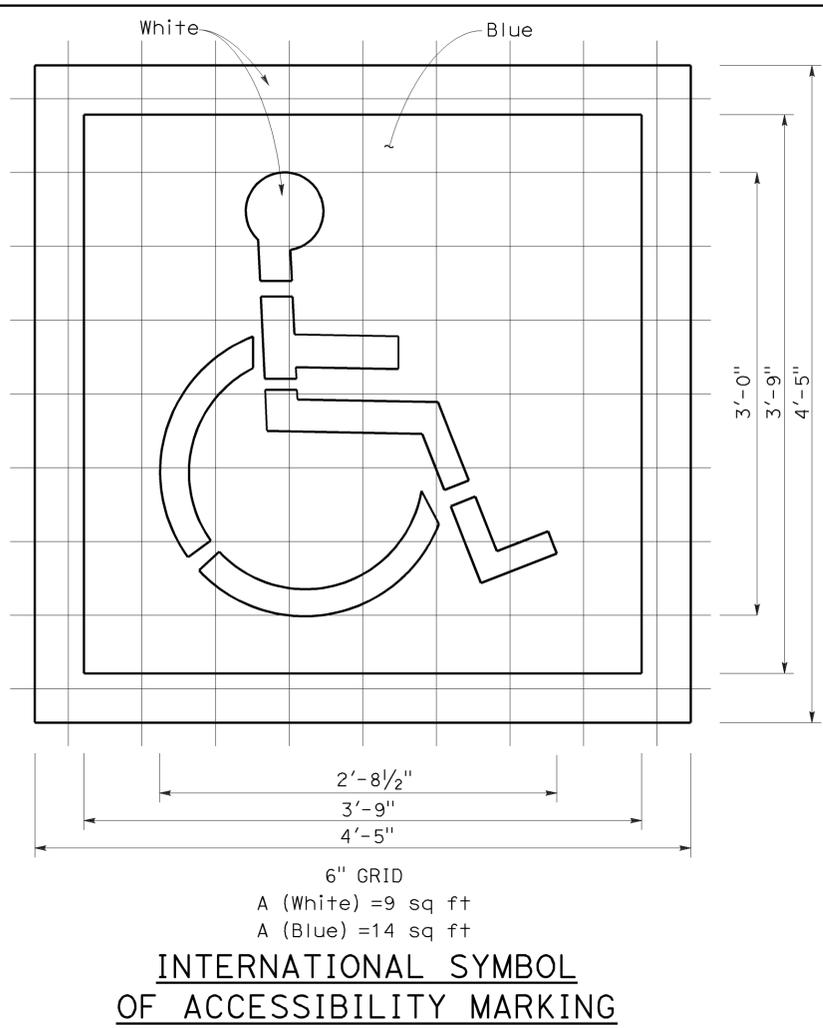
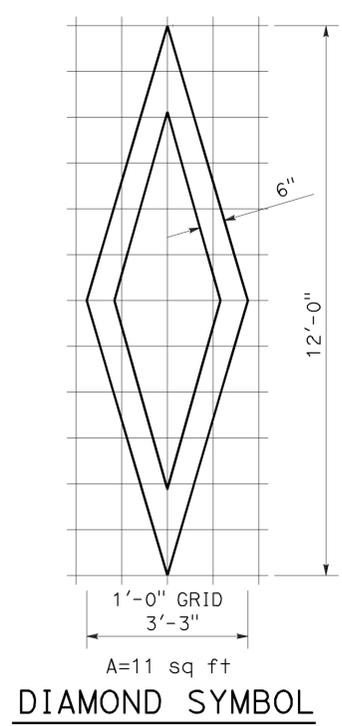
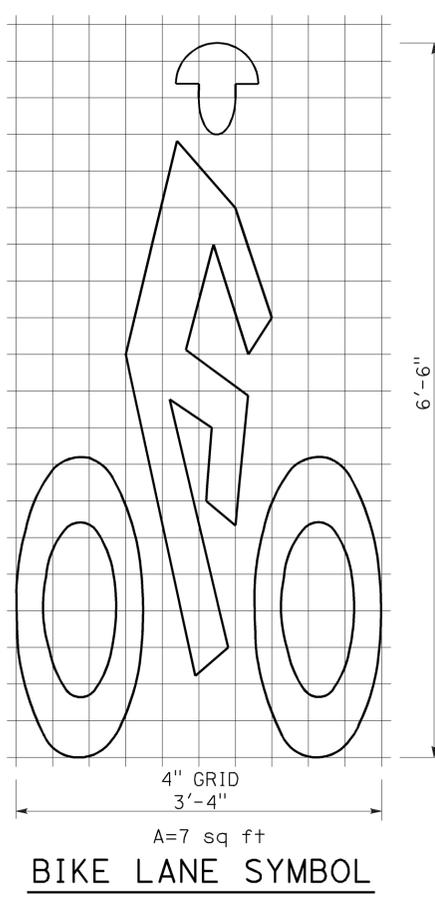
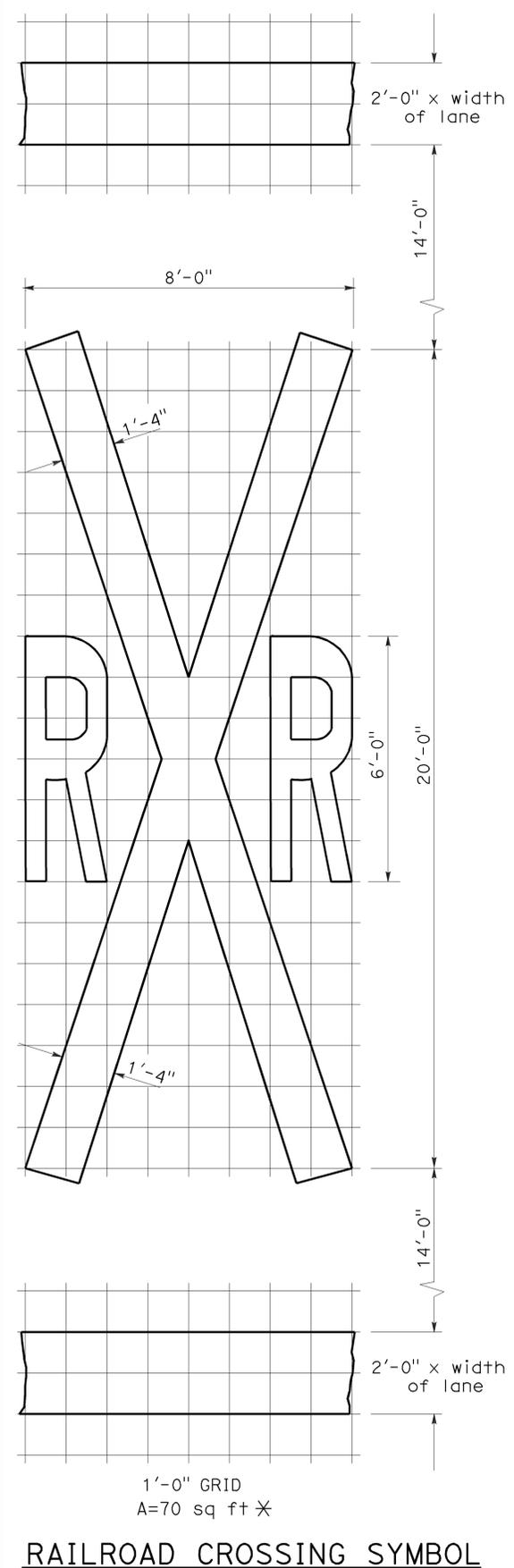
FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET E-7.
 THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans OFFICE OF ITS
 FUNCTIONAL SUPERVISOR JACQUELINE C. TAN
 CALCULATED/DESIGNED BY CHECKED BY
 HOSAKERE ANANTH JACQUELINE C. TAN
 REVISED BY DATE REVISED
 BORDER LAST REVISED 7/2/2010

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	32	50

Donald E. Howe
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 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 accompany plans dated 6-28-10



NUMERALS

NOTE:
1. Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS SYMBOLS AND NUMERALS
NO SCALE

*70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.

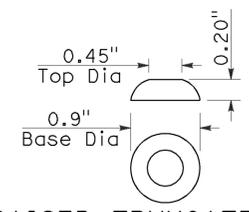
2006 REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	33	50

H. David Cordova
 REGISTERED CIVIL ENGINEER
 No. C41957
 Exp. 3-31-08
 STATE OF CALIFORNIA

September 1, 2006
 PLANS APPROVAL DATE

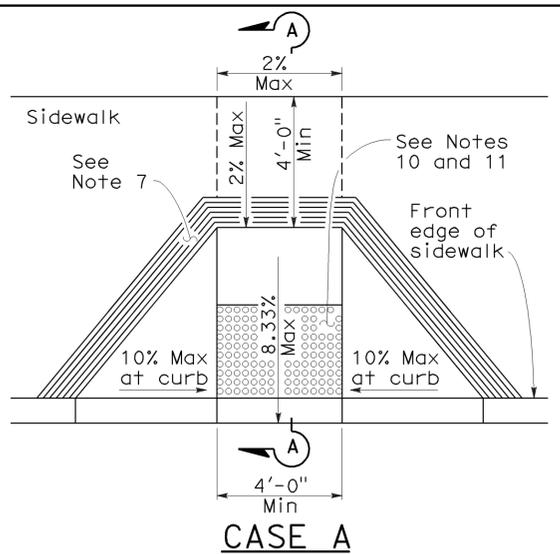
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



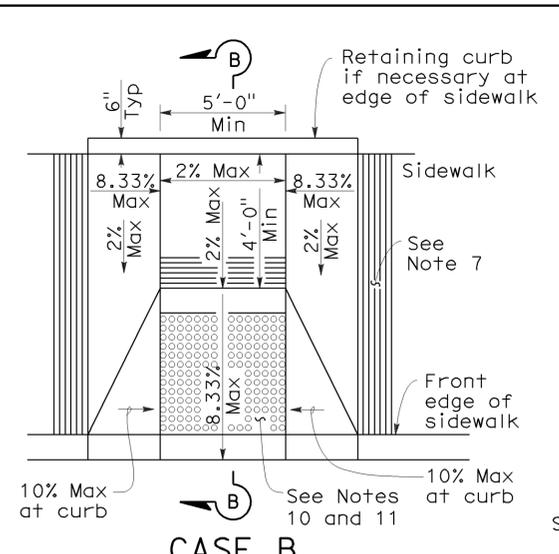
RAISED TRUNCATED DOME

NOTES:

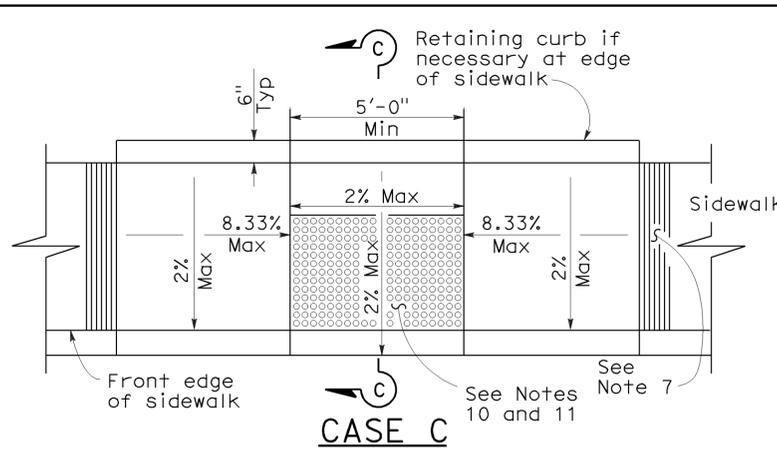
- As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate.
- If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-0" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B, or C or may be widened as in Case D.
- When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
- As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
- If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'-0".
- Side slope of ramp flares vary uniformly from a maximum of 10% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
- The curb ramp shall be outlined, as shown, with a 1'-0" wide border with 1/4" grooves approximately 3/4" on center. See grooving detail.
- Transitions from ramps and landing to walks, gutters or streets shall be flush and free of abrupt changes.
- Maximum slopes of adjoining gutters, the road surface immediately adjacent to the curb ramp or accessible route shall not exceed 5 percent within 4'-0" of the top and bottom of the curb ramp.
- Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable Warning Surfaces shall conform to the details on this plan and the requirements in the Special Provisions.
- The edge of the detectable warning surface nearest the street shall be between 6" and 8" from the gutter flowline.
- Sidewalk and ramp thickness, "T", shall be 3/2" minimum.
- Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
- For retrofit conditions, removal and replacement of curb apron will be at the Contractor's option, unless otherwise shown on project plans.



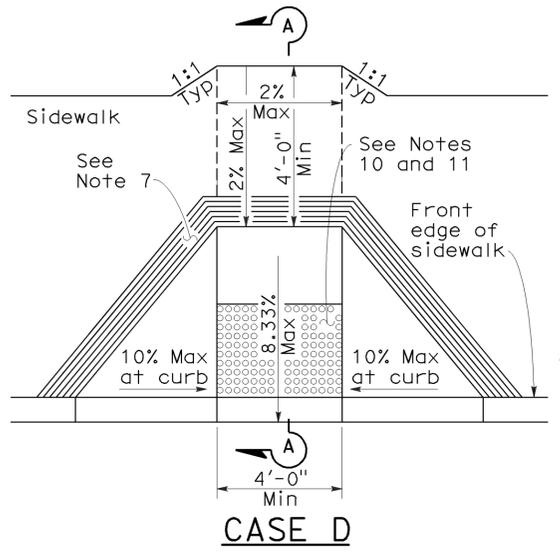
CASE A



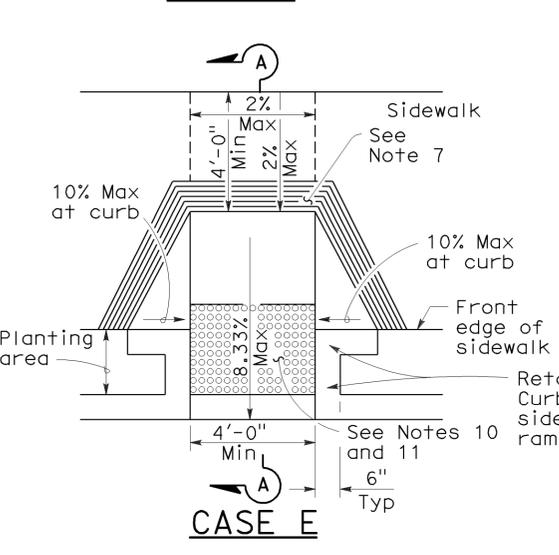
CASE B



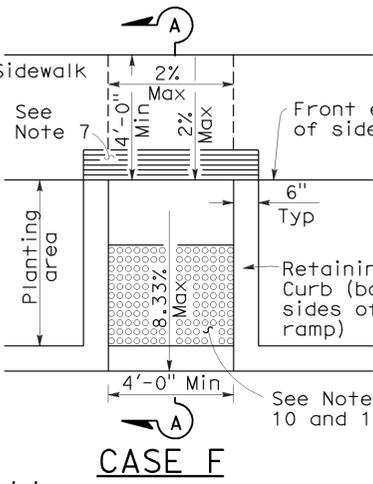
CASE C



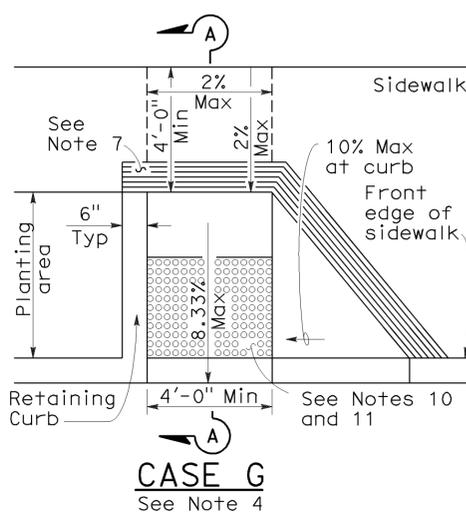
CASE D



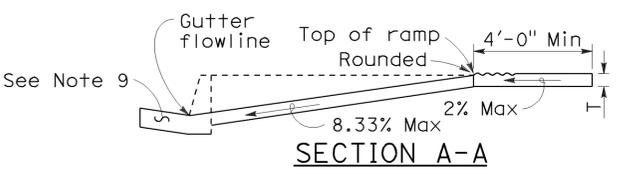
CASE E



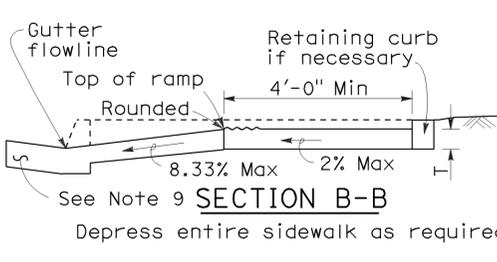
CASE F



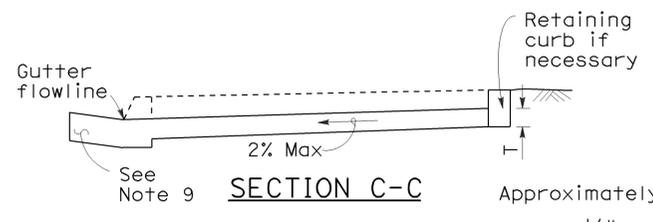
CASE G



SECTION A-A



SECTION B-B



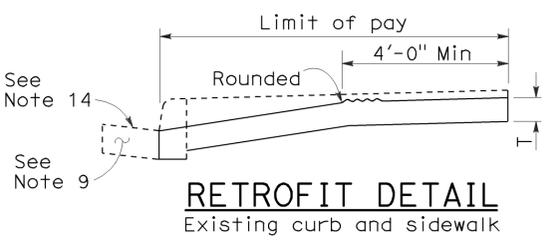
SECTION C-C



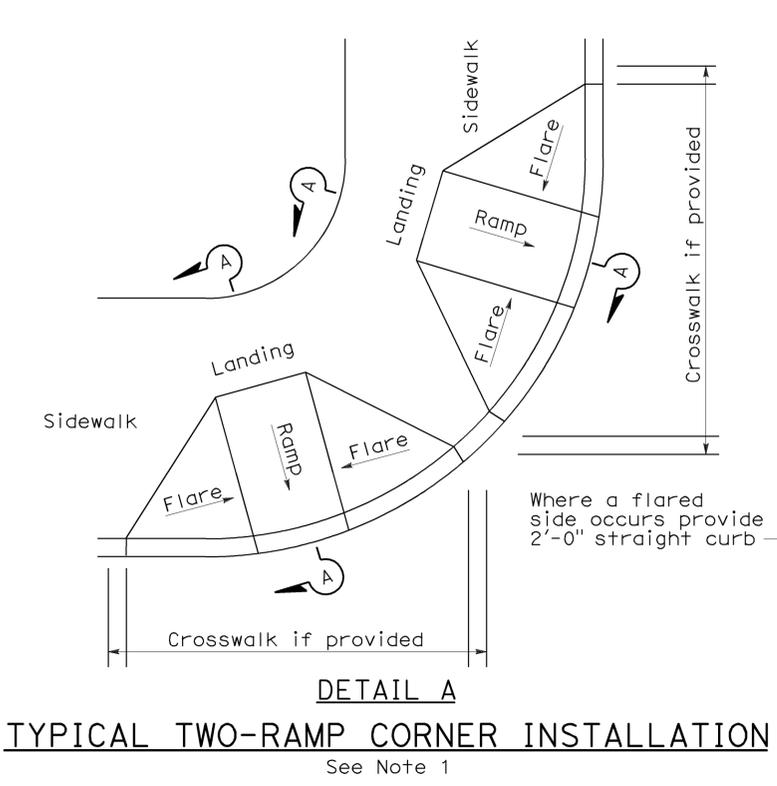
RAISED TRUNCATED DOME PATTERN (IN-LINE) DETECTABLE WARNING SURFACE



GROOVING DETAIL

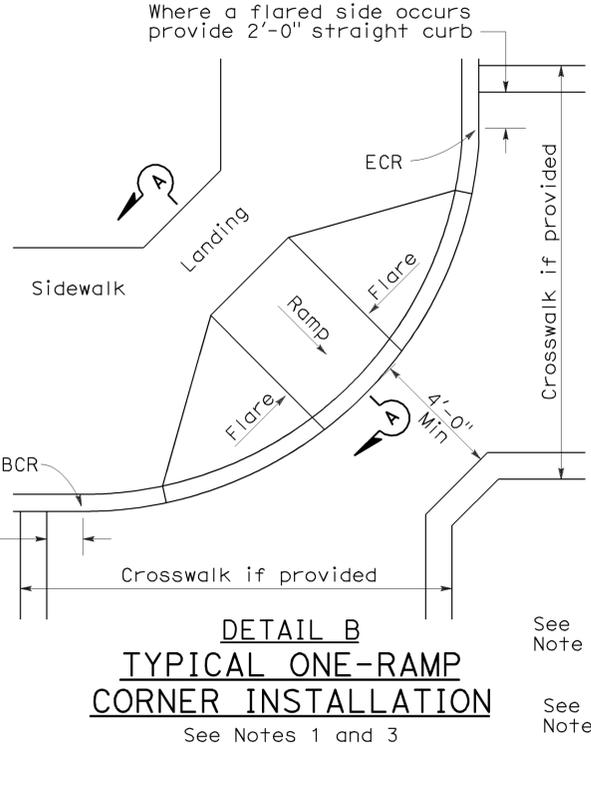


RETROFIT DETAIL



DETAIL A

TYPICAL TWO-RAMP CORNER INSTALLATION



DETAIL B

TYPICAL ONE-RAMP CORNER INSTALLATION

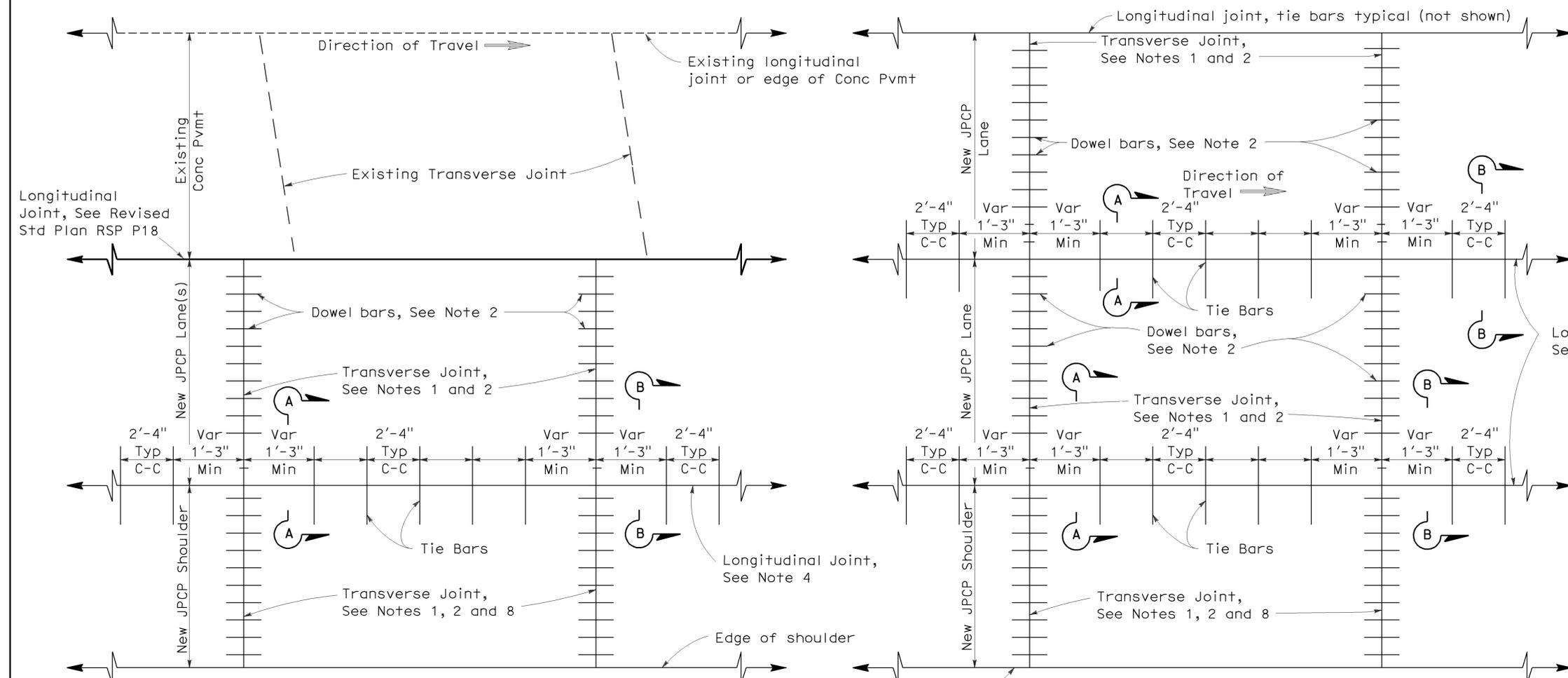
2006 REVISED STANDARD PLAN RSP A88A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	34	50

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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2006 REVISED STANDARD PLAN RSP P1

To accompany plans dated 6-28-10

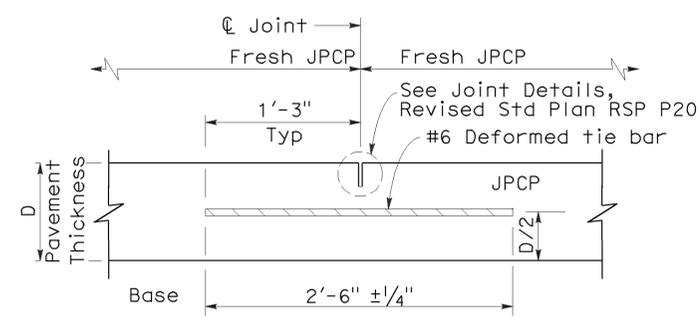


PLAN
LANE/SHOULDER ADDITION OR RECONSTRUCTION
 See Notes 6 and 7

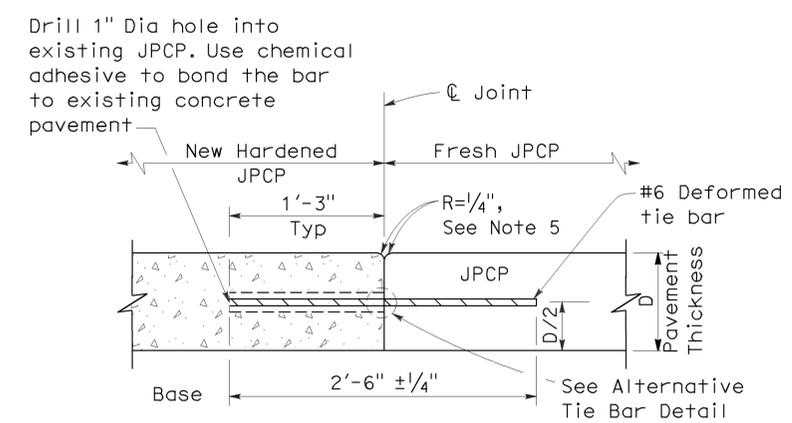
PLAN
NEW CONSTRUCTION
 See Notes 6 and 7

NOTES:

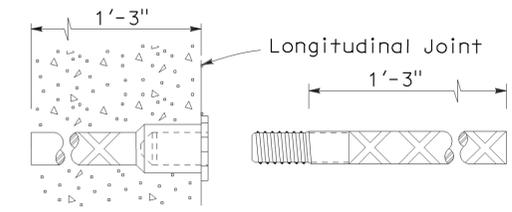
1. Transverse joints shall be constructed at right angles to the longitudinal pavement joints in new jointed plain concrete pavement and spaced at successive repeated intervals of 12', 15', 13' and 14'.
2. For transverse joint and dowel bar details not shown, See Revised Standard Plan RSP P10.
3. Construct longitudinal contraction joints as shown in Section A-A when more than one lane or shoulder widths are placed at one time. If constructing one lane at a time, use longitudinal construction joint, as shown in Section B-B.
4. For additional longitudinal joint details, see Revised Standard Plan RSP P18.
5. If fresh concrete is placed adjacent to existing concrete, the top corner of the new hardened concrete does not need to be rounded to the 1/4" radius as shown.
6. Joint spacing patterns do not apply to intersections.
7. Details can also apply to inside widening.
8. Dowel bars may be omitted from shoulders when the shoulder cross slope is not the same as the adjacent traffic lane.



SECTION A-A
LONGITUDINAL CONTRACTION JOINT



SECTION B-B
LONGITUDINAL CONSTRUCTION JOINT



ALTERNATIVE TIE BAR SPLICE DETAIL
 (Splice Coupler)

TIE BAR DETAILS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**JOINTED PLAIN
 CONCRETE PAVEMENT**

NO SCALE

RSP P1 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P1
 DATED MAY 1, 2006 - PAGE 119 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	35	50

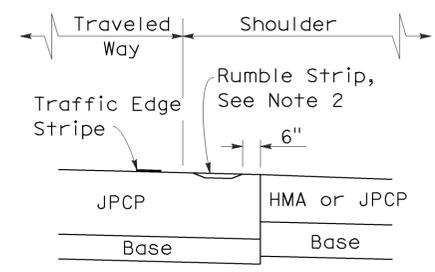
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

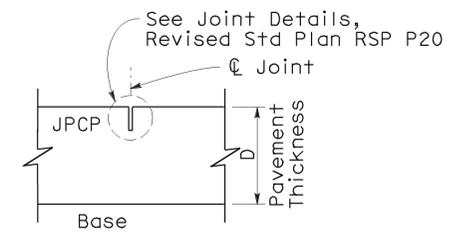
To accompany plans dated 6-28-10

NOTES:

1. Transverse joints shall be constructed at right angles to the longitudinal pavement joints in new Jointed Plain Concrete Pavement and spaced at successive repeated intervals of 12', 15', 13' and 14'.
2. For locations of rumble strips, see project plans. For rumble strip details not shown, see Standard Plans A40A and A40B.
3. Joint spacing patterns do not apply to intersections.



DETAIL "A"



**SECTION C-C
TRANSVERSE/LONGITUDINAL JOINT**
(no dowel bars/tie bars)

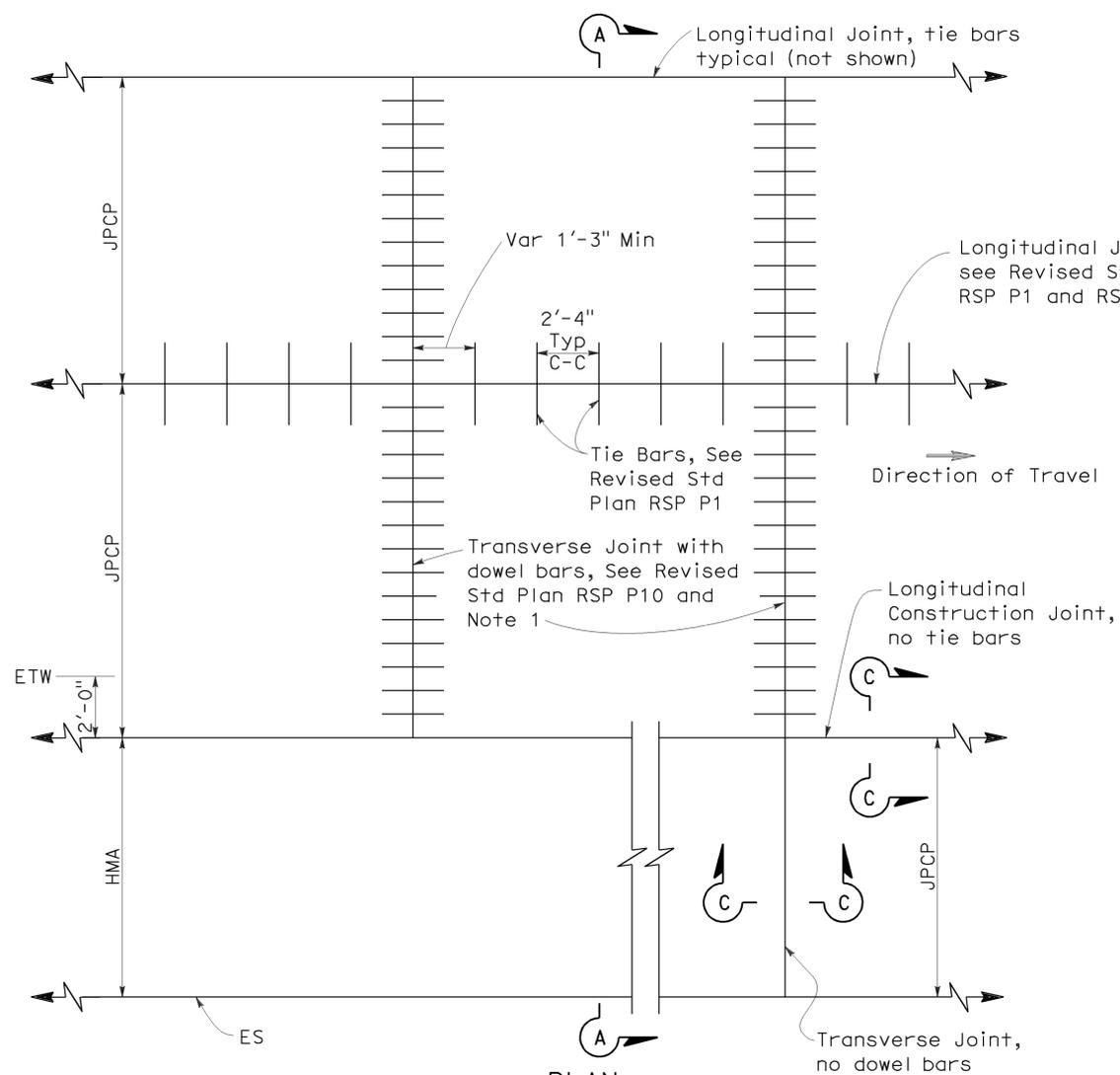
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**JOINTED PLAIN CONCRETE
PAVEMENT-WIDENED SLAB DETAILS**

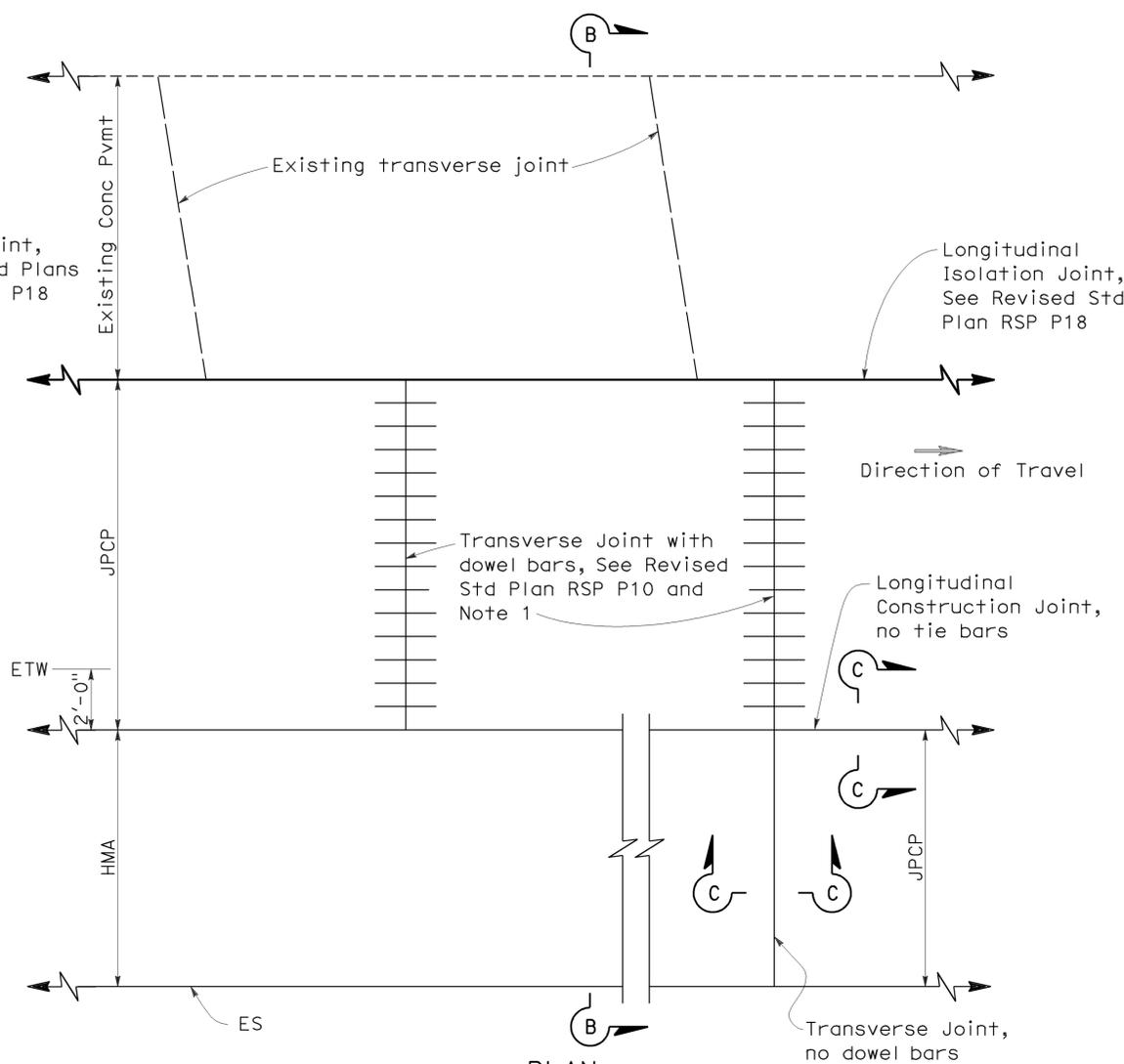
NO SCALE

RSP P2 DATED JUNE 5, 2009 SUPERCEDES STANDARD PLAN P2
DATED MAY 1, 2006 - PAGE 120 OF THE STANDARD PLANS BOOK DATED MAY 2006.

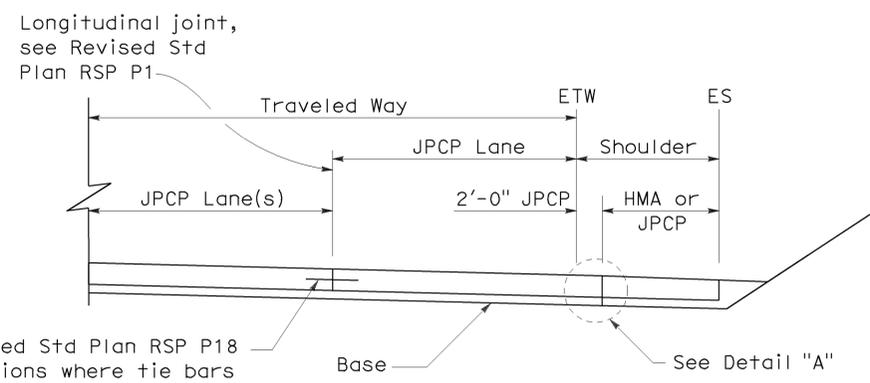
REVISED STANDARD PLAN RSP P2



**PLAN
NEW CONSTRUCTION**

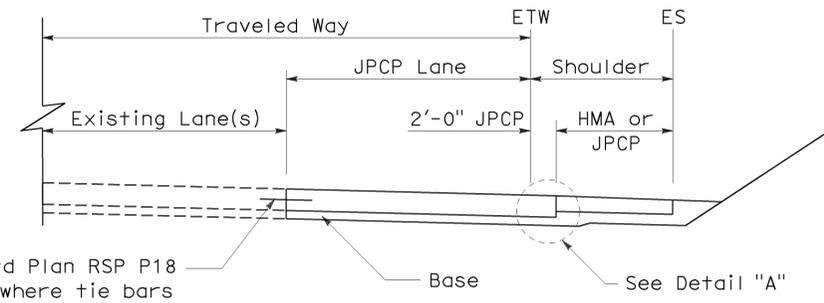


**PLAN
LANE/SHOULDER ADDITION OR RECONSTRUCTION**



SECTION A-A

See Revised Std Plan RSP P18 for locations where tie bars are used at longitudinal joint



SECTION B-B

See Revised Std Plan RSP P18 for locations where tie bars are used at longitudinal joint

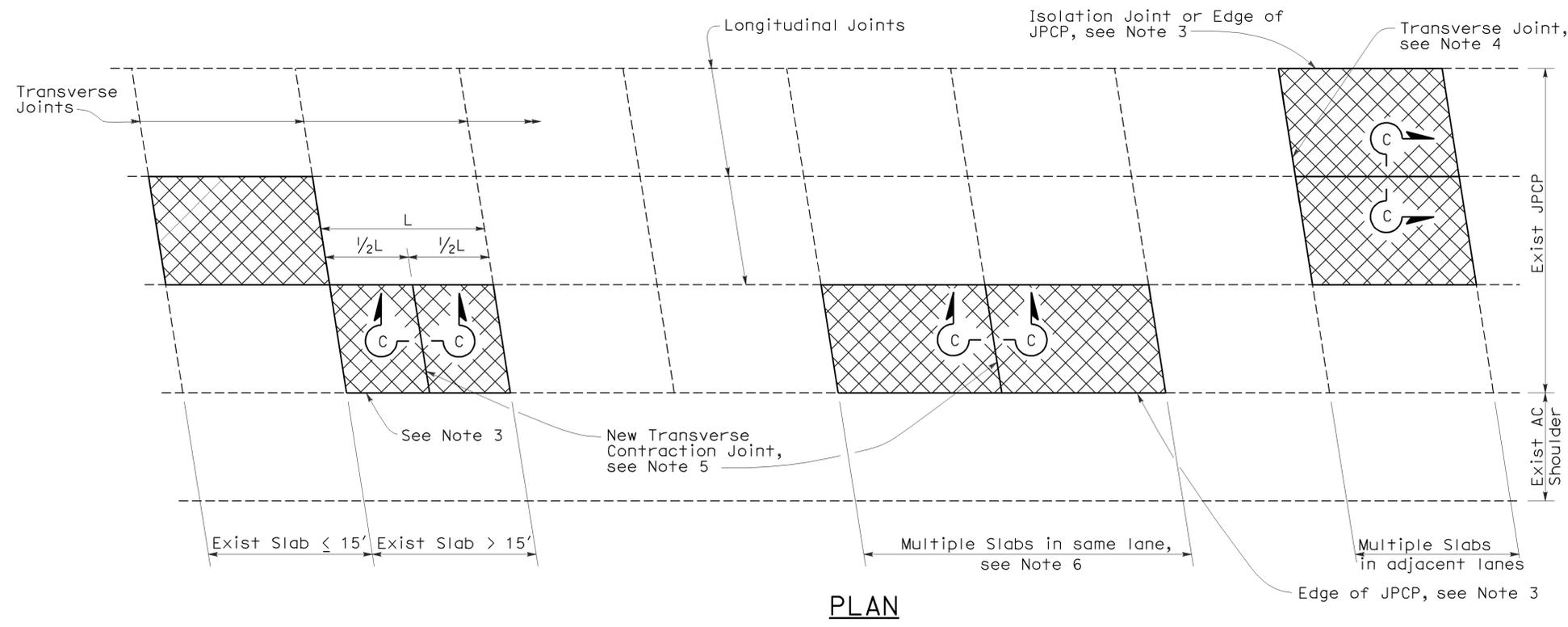
2006 REVISED STANDARD PLAN RSP P2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	36	50

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

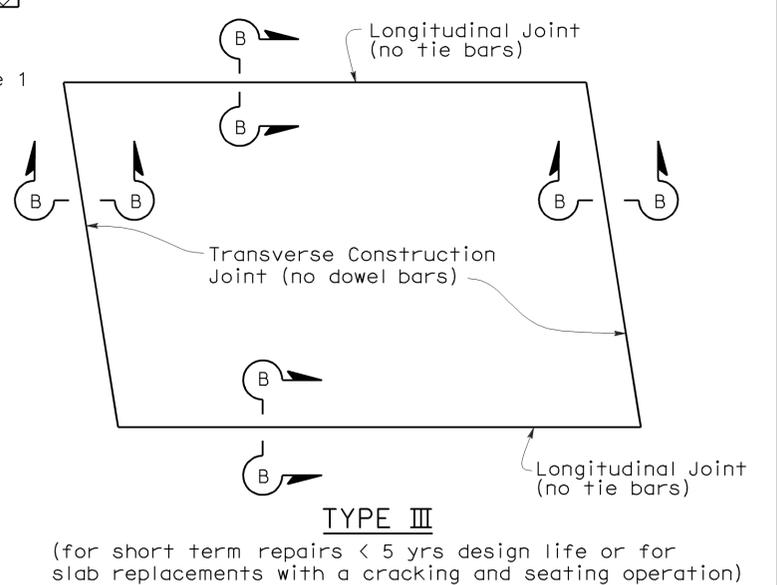
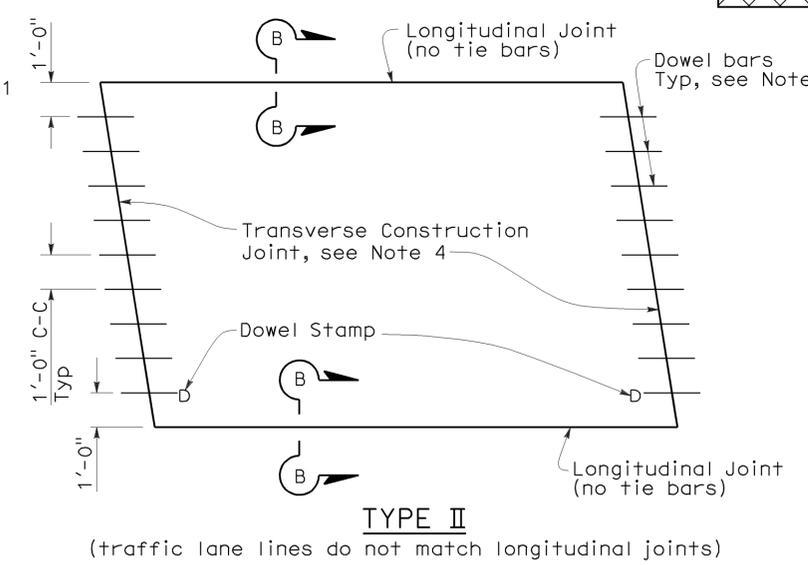
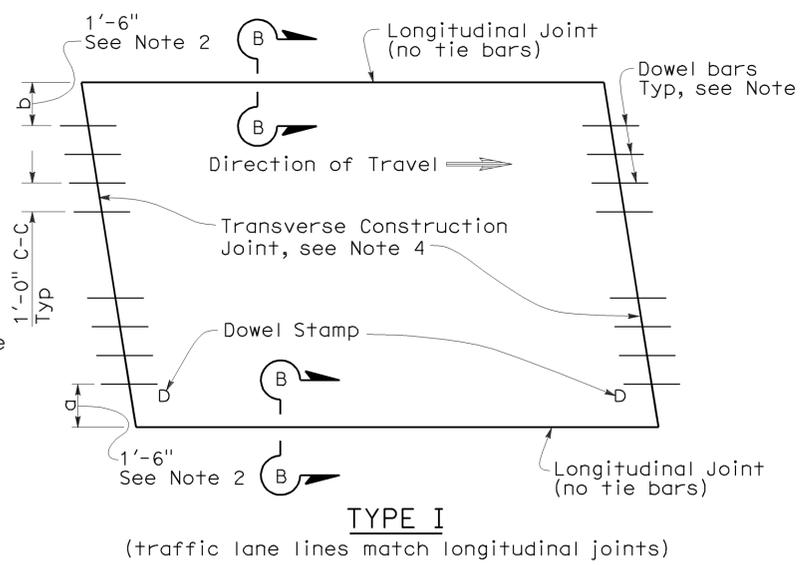
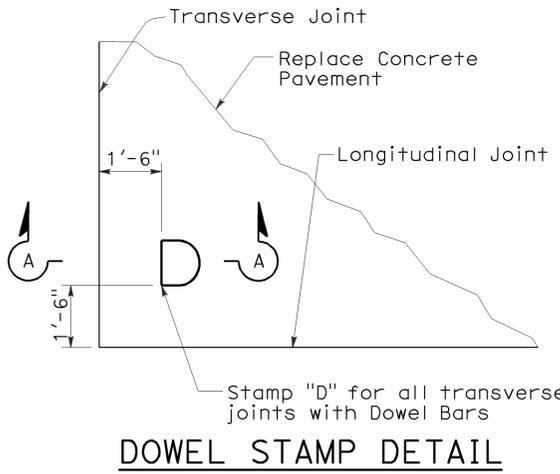
To accompany plans dated 6-28-10



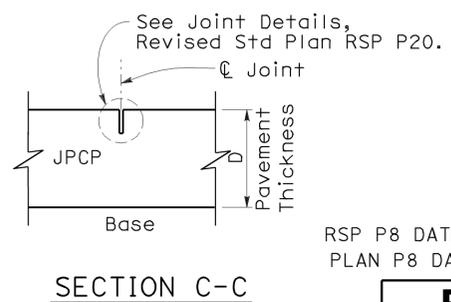
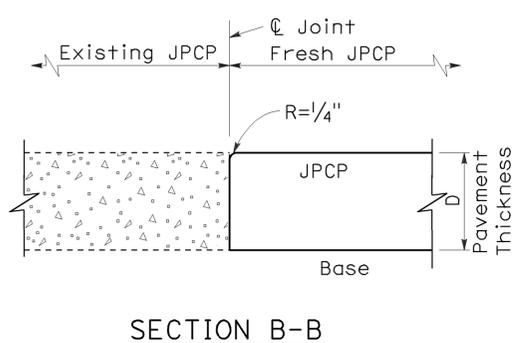
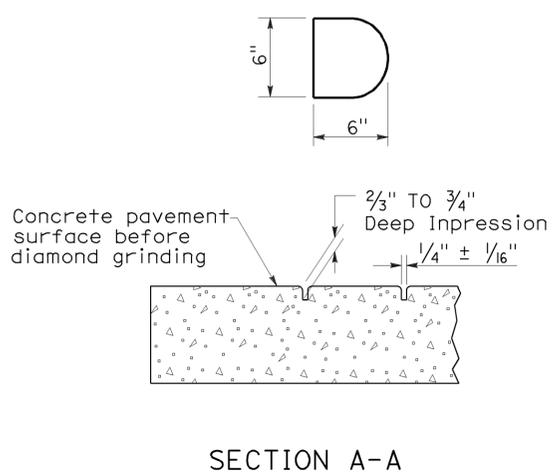
NOTES:

- For details not shown, see Revised Standard Plan RSP P10.
- Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1'-0" and the "b" dimension shall be 2'-0".
- Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
- For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
- Transverse joint to match skew of existing joint. Omit dowel bars.
- This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100'.

LEGEND



SLAB LAYOUT



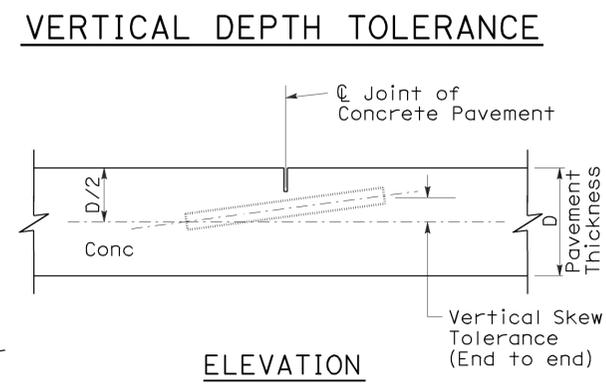
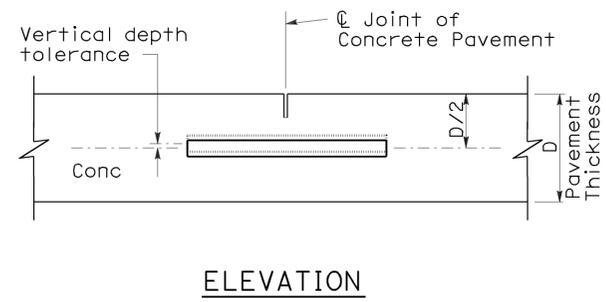
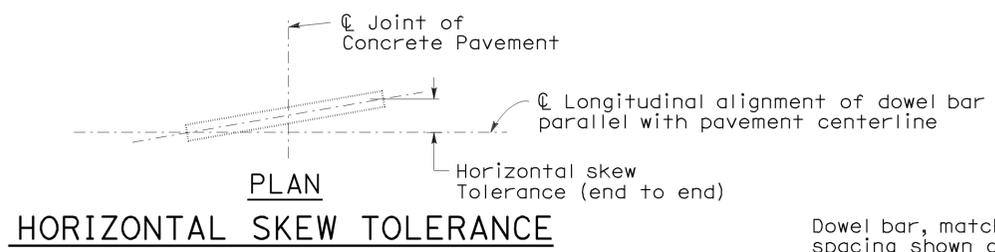
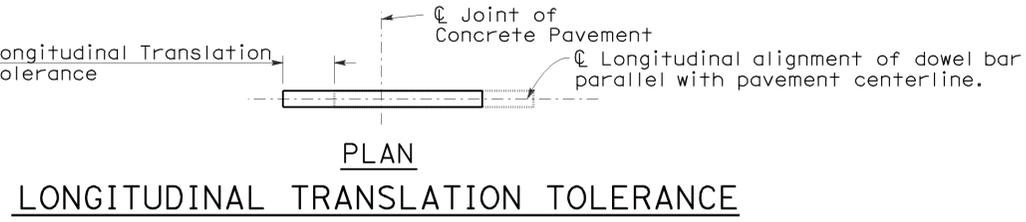
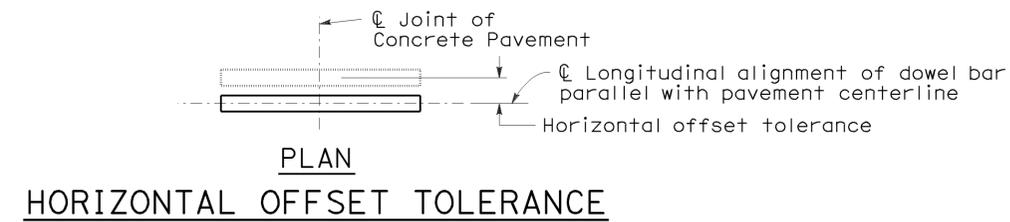
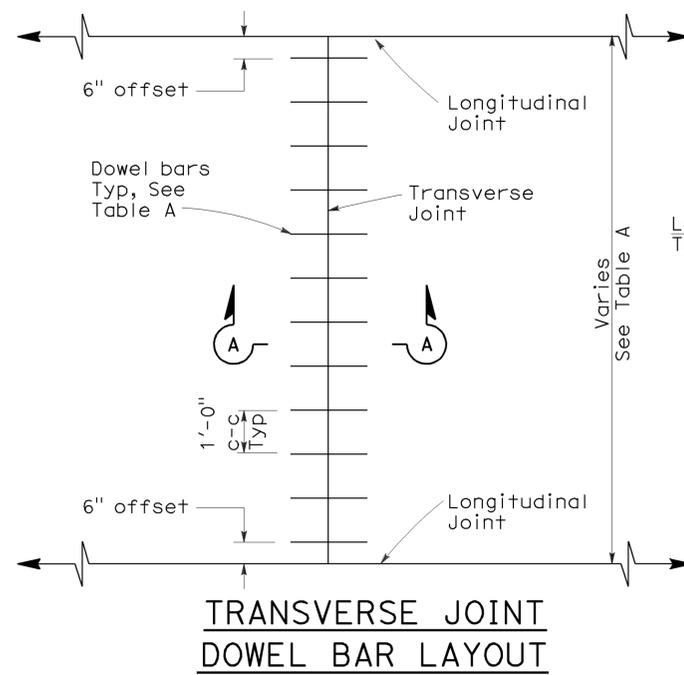
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT
 NO SCALE

RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

123

2006 REVISED STANDARD PLAN RSP P8



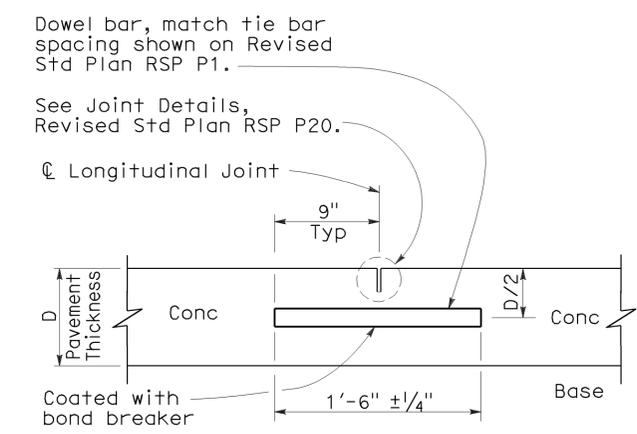
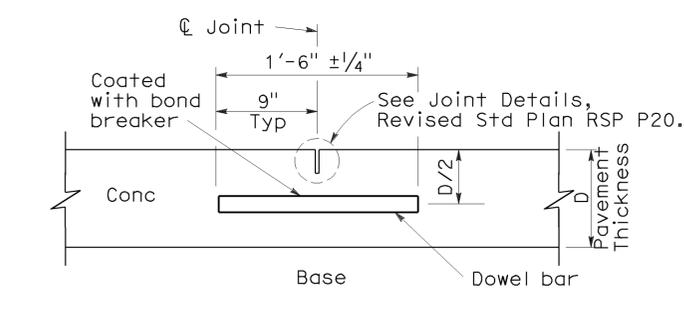
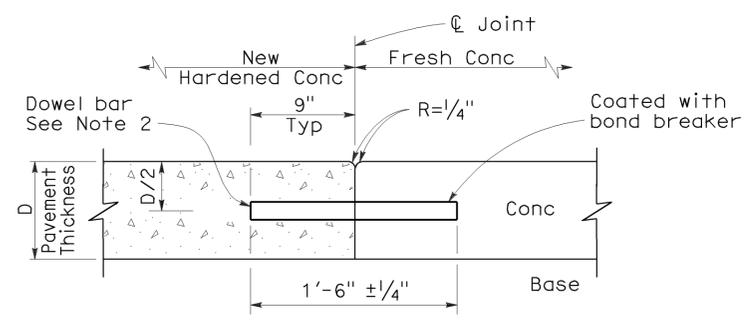
To accompany plans dated 6-28-10

- NOTES:**
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
 - 1 1/2" Dia smooth dowel bars are to be used with a pavement thickness, D, equal to or greater than 0.70 feet. For pavement thickness, D, less than 0.70 feet, use 1 1/4" Dia smooth dowel bars.
 - For widths not shown, see Project Plans.
 - If fresh concrete pavement is placed adjacent to existing concrete pavement, the top corner of the existing concrete pavement does not need to be rounded to the 1/4" radius, as shown.

TABLE A (See Note 3)

Dowel Bar Transverse Spacing Table

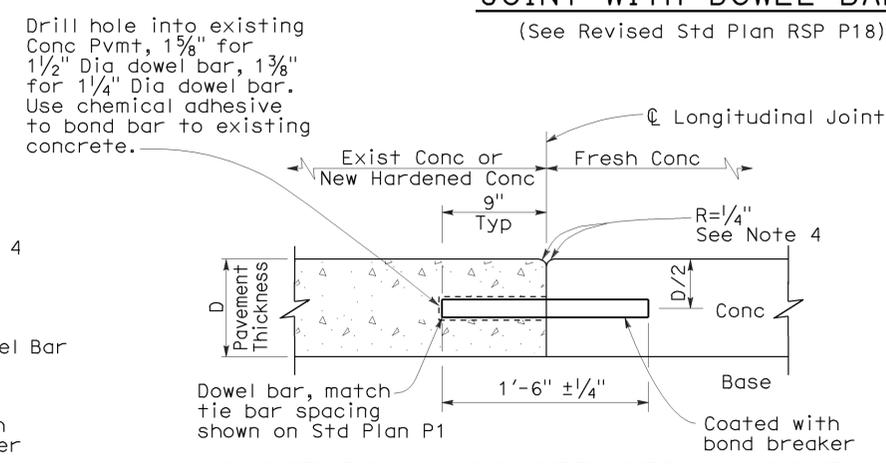
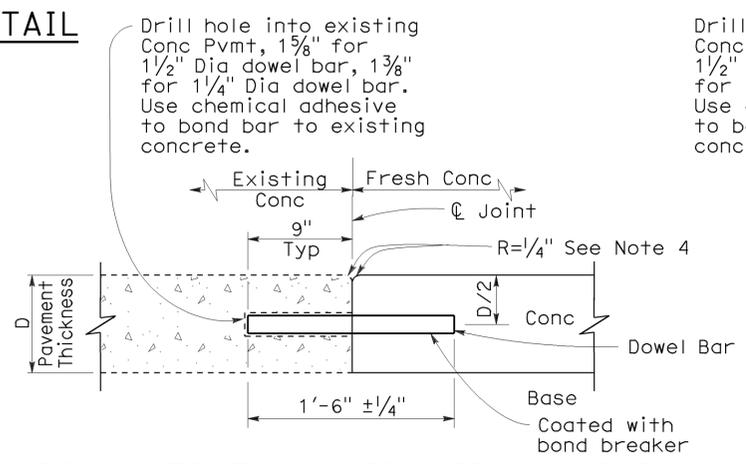
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4



**SECTION A-A
TRANSVERSE
CONSTRUCTION JOINT DETAIL**

TRANSVERSE CONTRACTION JOINT

**LONGITUDINAL CONTRACTION
JOINT WITH DOWEL BARS**
(See Revised Std Plan RSP P18)



**TRANSVERSE CONSTRUCTION JOINT
FOR EXISTING CONCRETE PAVEMENT**
(Drill and bond locations)

**LONGITUDINAL CONSTRUCTION JOINT
WITH DOWEL BARS**
(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT-
DOWEL BAR
DETAILS**
NO SCALE

RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10
DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

124

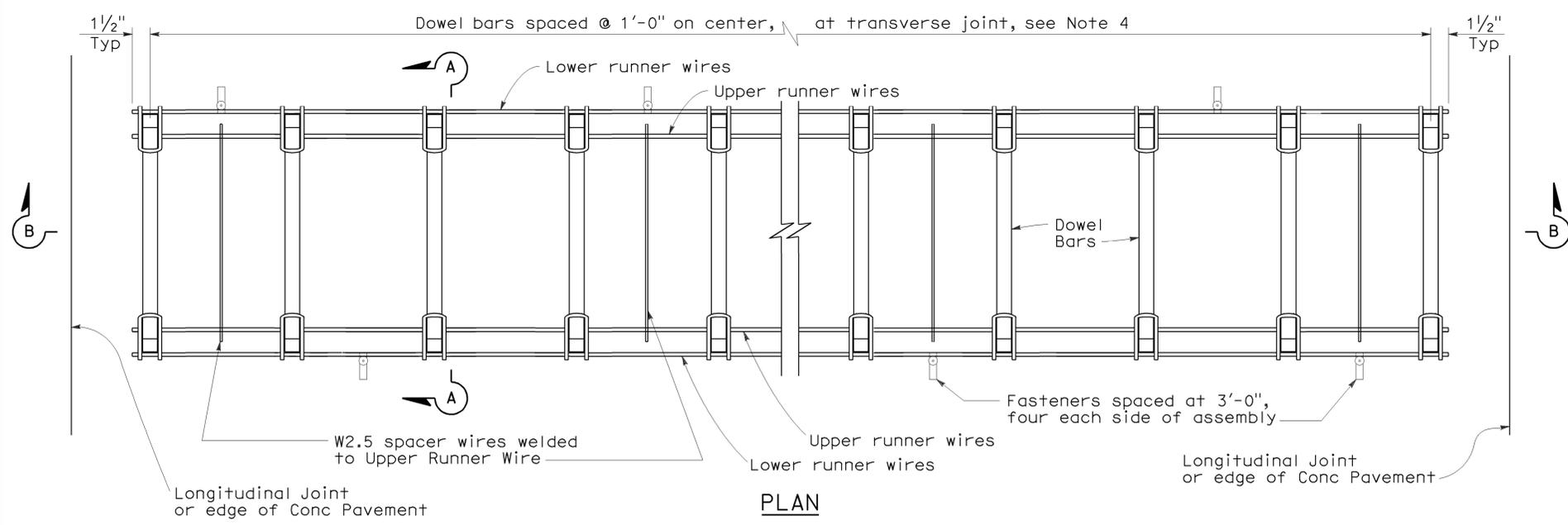
2006 REVISED STANDARD PLAN RSP P10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	38	50

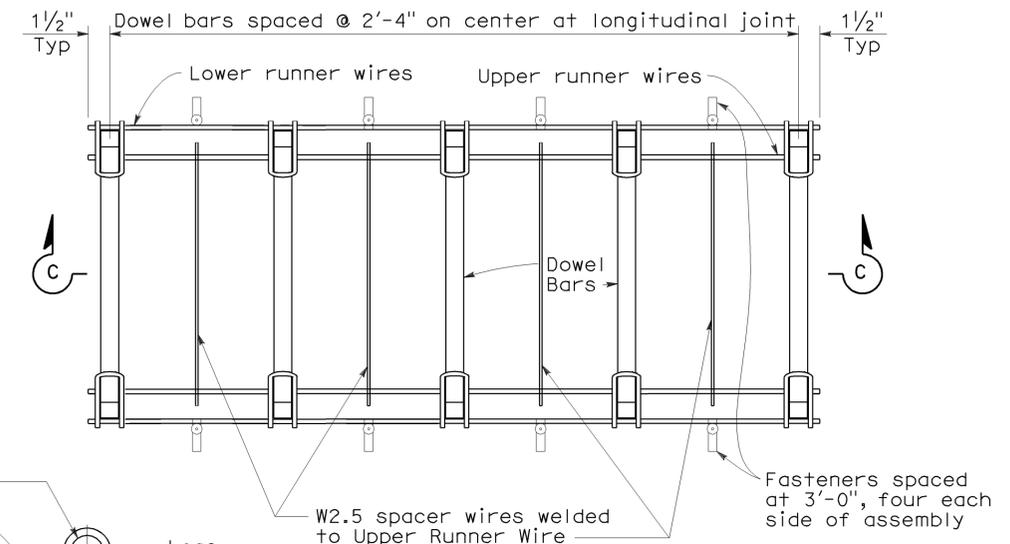
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

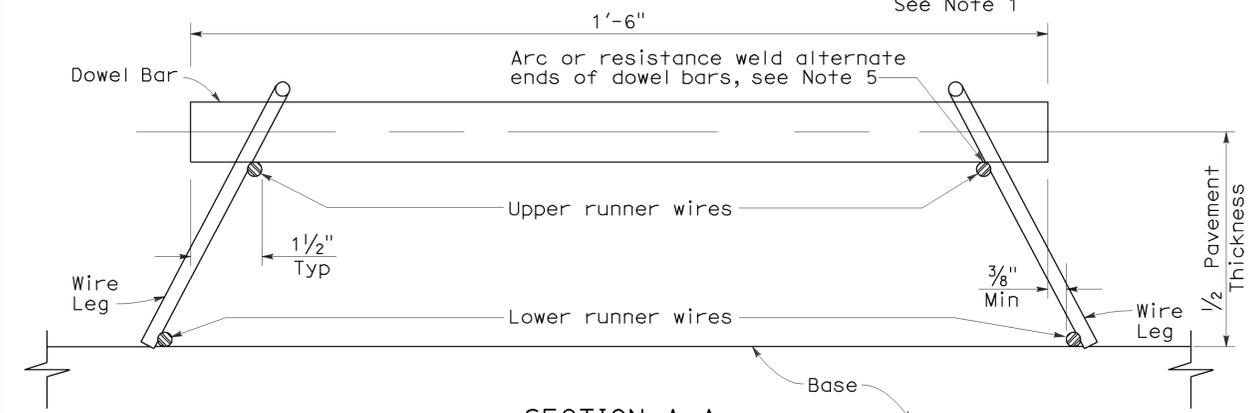
To accompany plans dated 6-28-10



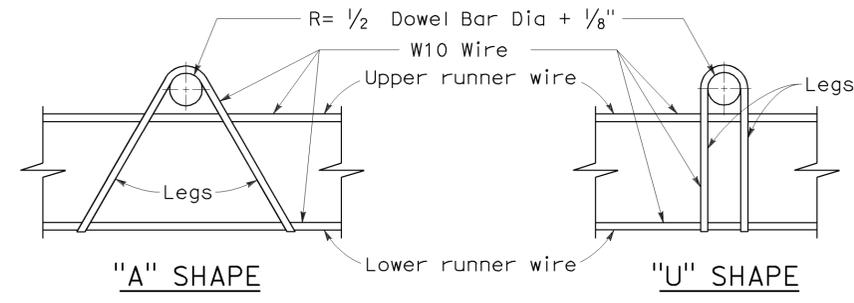
PLAN
DOWEL BAR BASKET
(TRANSVERSE JOINT)
 See Note 1



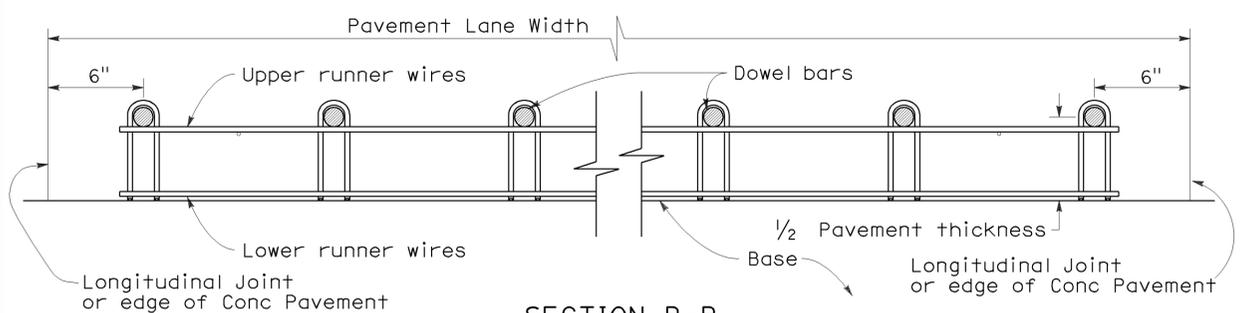
PLAN
DOWEL BAR BASKET
(LONGITUDINAL JOINT)
 See Note 1



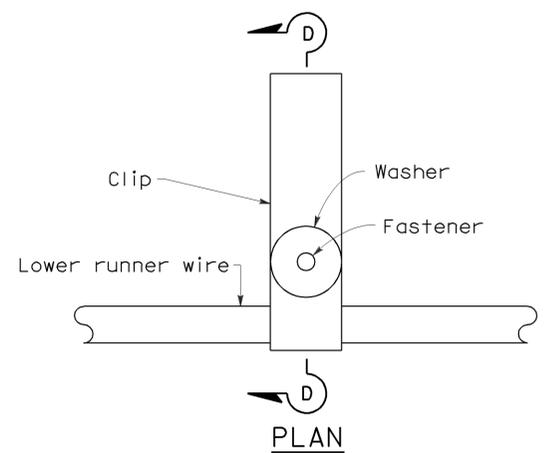
SECTION A-A



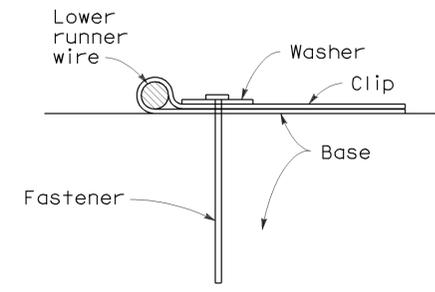
ASSEMBLY FRAME DETAILS



SECTION B-B
 See Note 1



FASTENER DETAIL



SECTION D-D

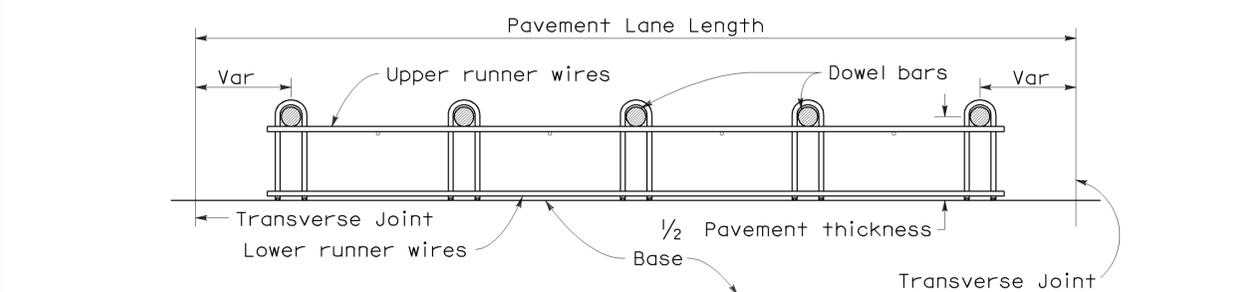
NOTES:

- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
- Wire sizes shown are minimum required.
- All wire intersections are to be resistance welded.
- Use tie bar spacing for longitudinal dowel bar locations. See Revised Std Plans RSPs P1, P2, and P3 for tie bar requirements.
- Weld may be at top or bottom of dowel bar.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-DOWEL BAR BASKET DETAILS

NO SCALE



SECTION C-C
 See Notes 1 and 4

RSP P12 DATED MAY 15, 2009 SUPERSEDES RSP P12 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P12 DATED MAY 1, 2006 - PAGE 125 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P12

2006 REVISED STANDARD PLAN RSP P12

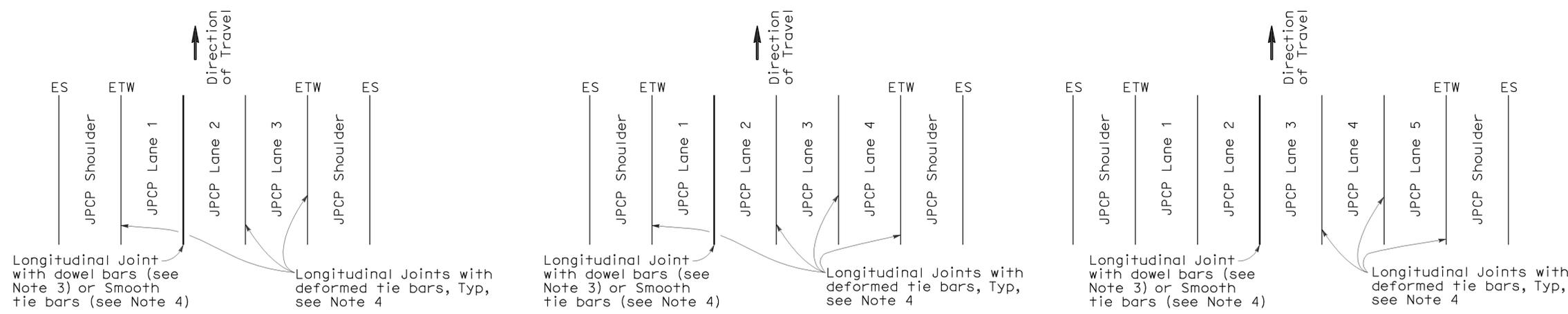
125

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	39	50

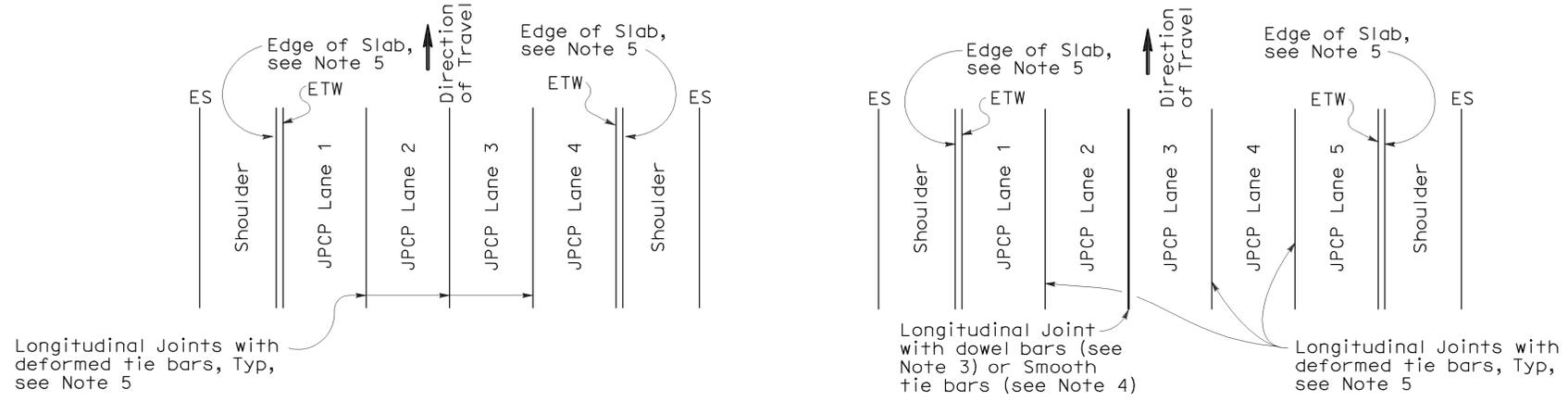
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

To accompany plans dated 6-28-10

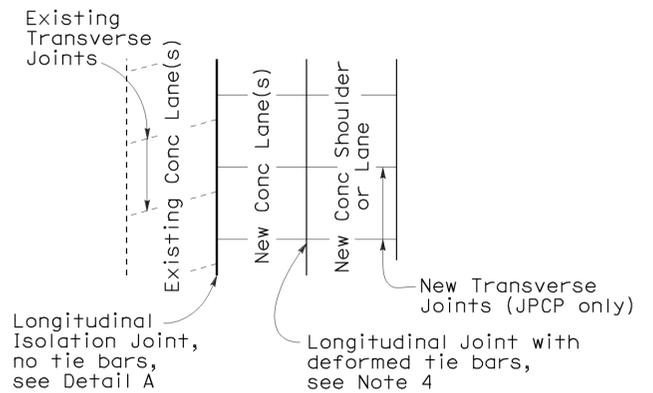


3 LANES WITH TIED CONCRETE SHOULDERS PLAN **4 LANES WITH TIED CONCRETE SHOULDERS PLAN** **5 LANES WITH TIED CONCRETE SHOULDERS PLAN**



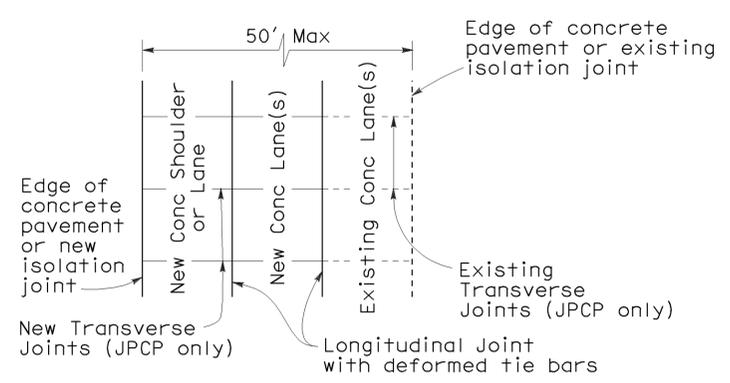
4 LANES OR LESS WITH WIDENED SLAB PLAN **5 LANES WITH WIDENED SLAB PLAN**

NEW CONSTRUCTION
Location of Longitudinal Joints (For JPCP)



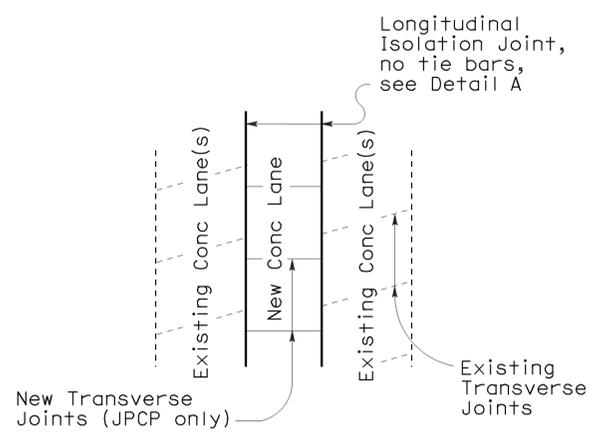
CASE 1 PLAN

Transverse Joints do not align between new and existing



CASE 2 PLAN

Transverse Joints align between new and existing



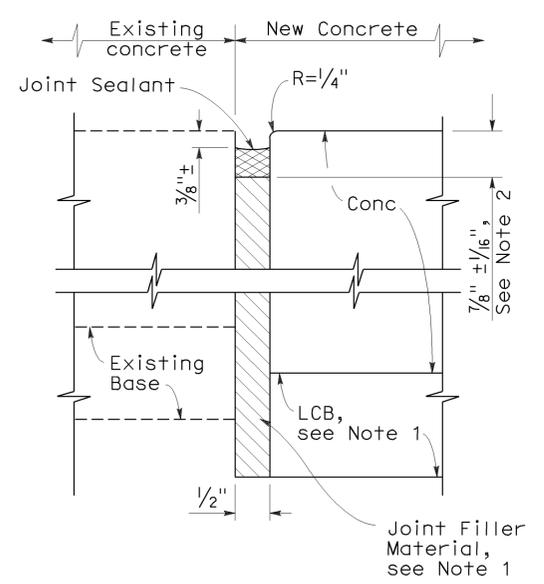
CASE 3 (INTERIOR LANE REPLACEMENT) PLAN

Transverse Joints do not align between new and existing

LANE/SHOULDER ADDITION OR RECONSTRUCTION
(For JPCP and CRCP)

NOTES:

- Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
- Use 5/8" ± 1/16" dimension for silicone sealant.
- See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
- See Revised Standard Plan RSP P1.
- See Revised Standard Plan RSP P2.



DETAIL A ISOLATION JOINT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CONCRETE PAVEMENT-LANE SCHEMATICS AND ISOLATION JOINT DETAIL
NO SCALE

RSP P18 DATED JUNE 5, 2009 SUPERSEDES RSP P18 DATED MAY 15, 2009, RSP P18 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P18 DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P18

2006 REVISED STANDARD PLAN RSP P18

NOTE

1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Std Plan RSP P1, New Std Plan NSP P3, Revised Std Plan RSP P10, Std Plan P35, Std Plan P45, or Std Plan P46 as applicable.

To accompany plans dated 6-28-10

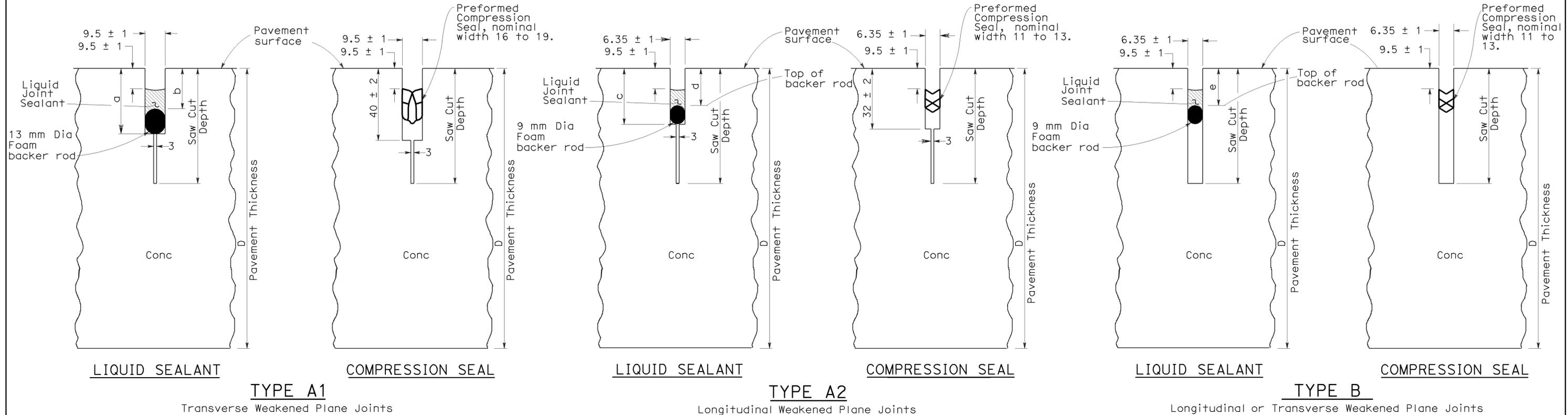


DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	40	50

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 November 17, 2006
 PLANS APPROVAL DATE

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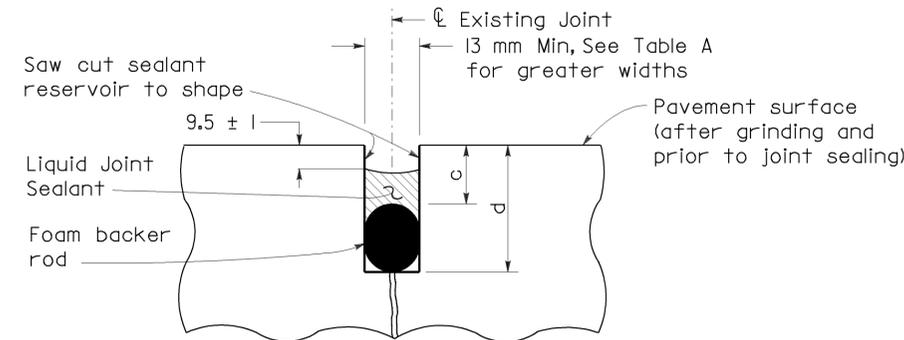


LIQUID SEALANT RESERVOIR DEPTH

LIQUID SEALANT MATERIAL	9.5 mm Joint Width Type A1		6.35 mm Joint Width Type A2		6.35 mm Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILICONE	26 ± 1	15 ± 1	23 ± 1	14 ± 1	14 ± 1
ASPHALT RUBBER	30 ± 1	19 ± 1	26 ± 1	17 ± 1	17 ± 1

TABLE A

Sawn Joint Width	Backer Rod Diameter	Dimension "c"	Dimension "d"
mm	mm ± 1	mm	mm
25	33	22	55
22	30	20	50
19	25	19	44
16	22	18	40
13	17	16	33



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CONCRETE PAVEMENT-JOINT DETAILS
NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
RSP P20 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN P20 DATED JULY 1, 2004-PAGE 129 OF THE STANDARD PLANS BOOK DATED JULY 2004.

NOTES:

1. Details for gore area paving are applicable to both exit and entrance ramps.
2. Transverse Joint Layouts are not shown. Refer to Revised Standard Plan RSP P1 or Project Plans for details regarding joint layouts, tie bars, and dowel bars not shown.
3. WWF 4 x 4 - W4.0 x W4.0 can be used in place of steel reinforcement for gore area paving only.
4. Omit longitudinal joint when concrete on ramp shoulder is less than 3'-0".
5. Place joint perpendicular to ramp longitudinal joints. Match location of joint with ramp transverse joints.
6. Place joint perpendicular to ramp longitudinal joints. Match location of joint with mainline transverse joints.
7. Isolation joint detail shown on Revised Standard Plan RSP P18.
8. For jointed plain concrete pavement, transverse joints to be spaced from fixed transverse joint and shall follow spacing pattern on Revised Standard Plan RSP P1. Minimum spacing shall be 6 feet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	41	50

William K. Farnbach
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 CIVIL
 STATE OF CALIFORNIA

May 15, 2009
 PLANS APPROVAL DATE

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To accompany plans dated 6-28-10

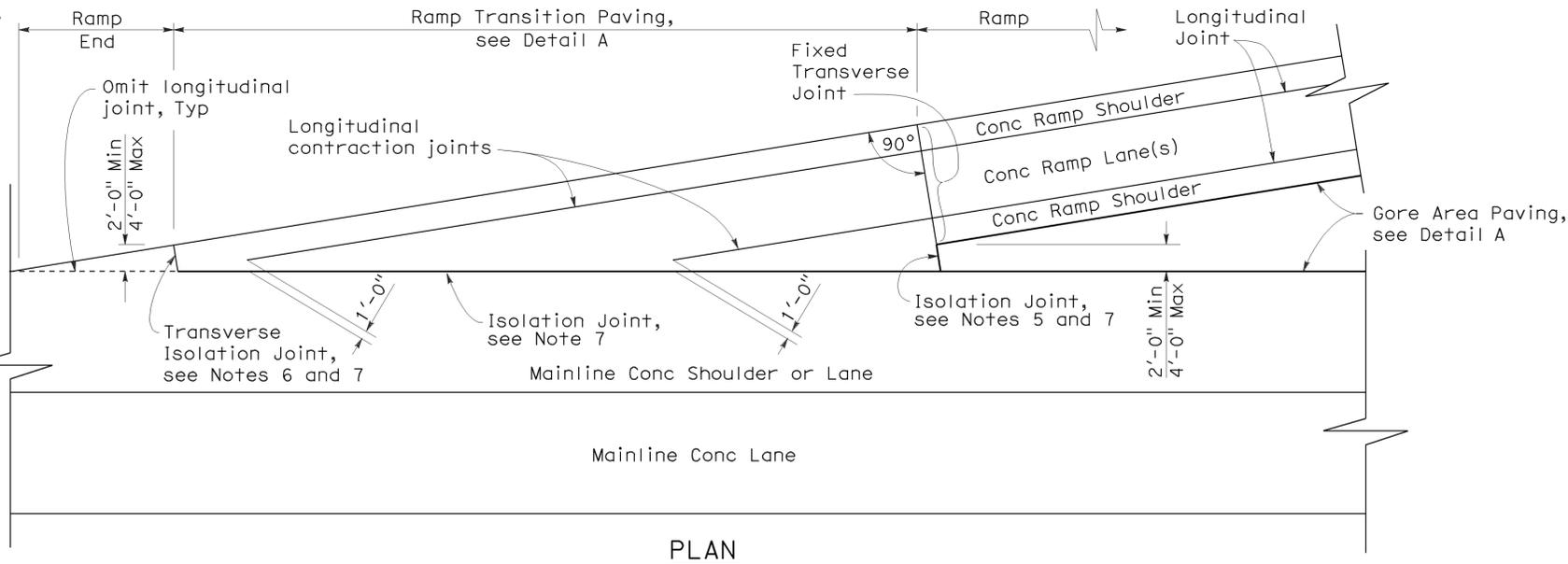
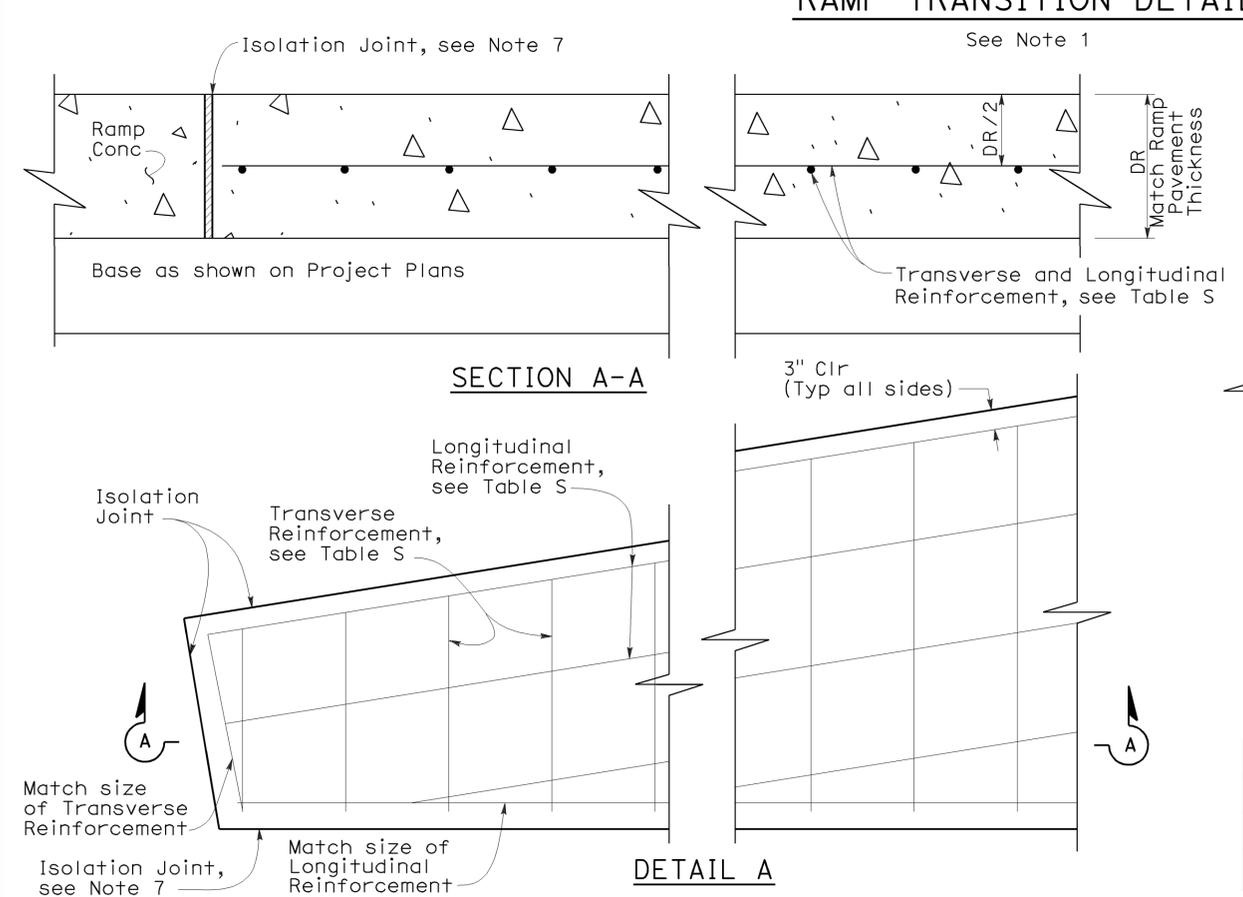
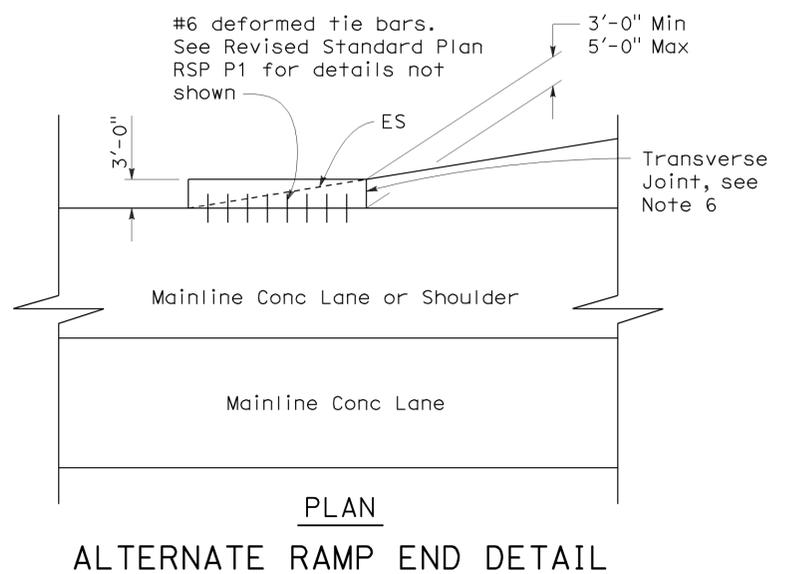
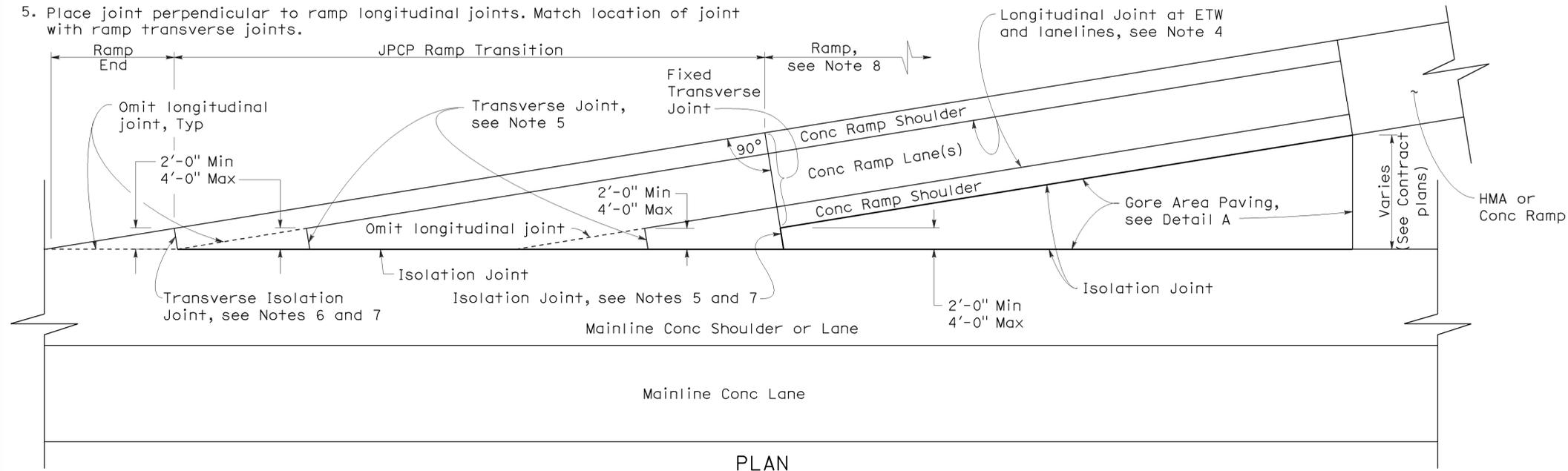


TABLE S
(For JPCP and CRCP)

Location	Transverse Reinf	Longitudinal Reinf
Gore Area Paving	#4 @ 1'-0" *	#4 @ 1'-0" *
Ramp Transition (JPCP)	#6 @ 1'-6"	#6 @ 9"
Ramp Transition (CRCP)	See NSP P4, Table No. 2	See NSP P4, Table No. 1

* See Note 3

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT - RAMP TRANSITION PAVING DETAILS

NO SCALE

RSP P35 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P35
DATED MAY 1, 2006 - PAGE 131 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P35

2006 REVISED STANDARD PLAN RSP P35

131

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	42	50

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

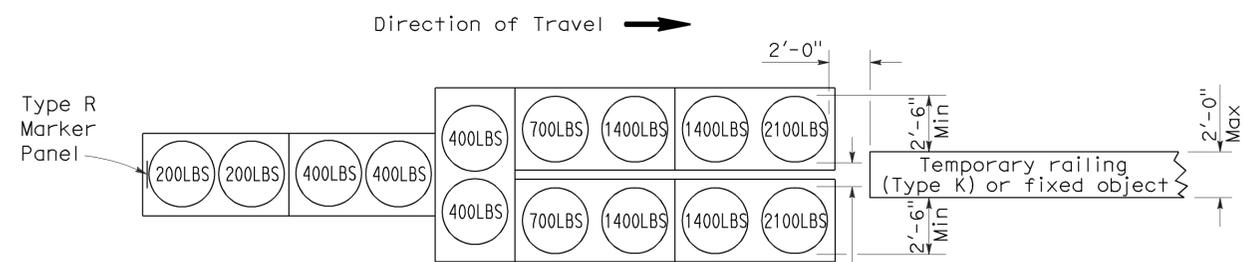
June 6, 2008
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
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Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

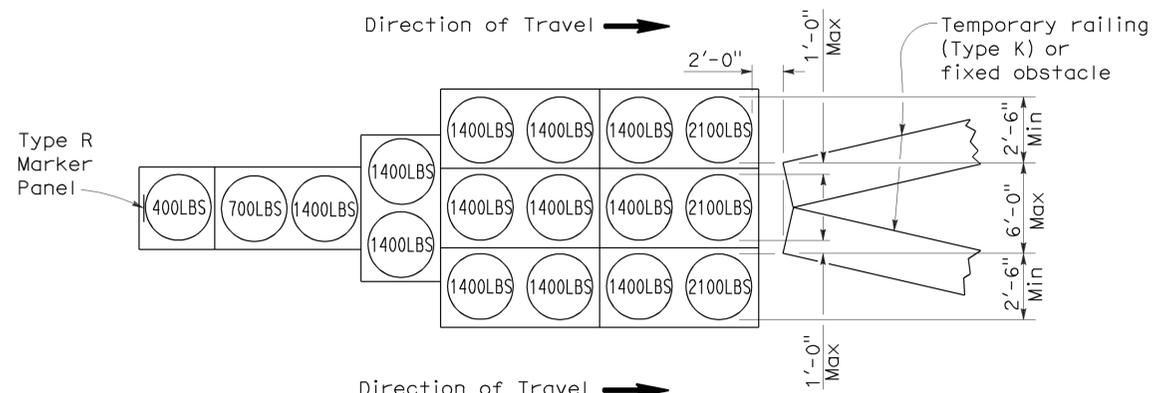
To accompany plans dated 6-28-10

2006 REVISED STANDARD PLAN RSP T1A



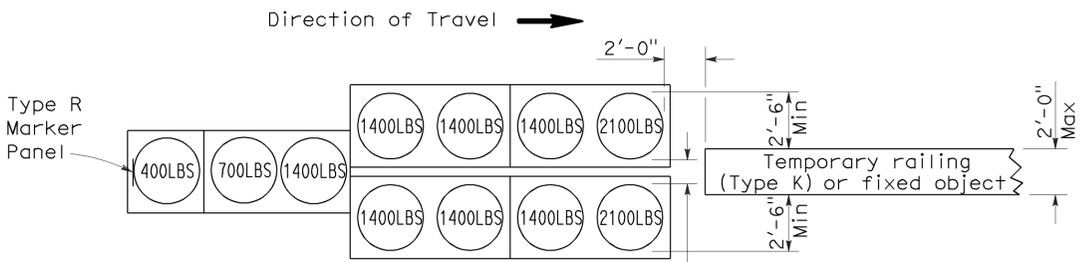
ARRAY 'TU14'

Approach speed 45 mph or more



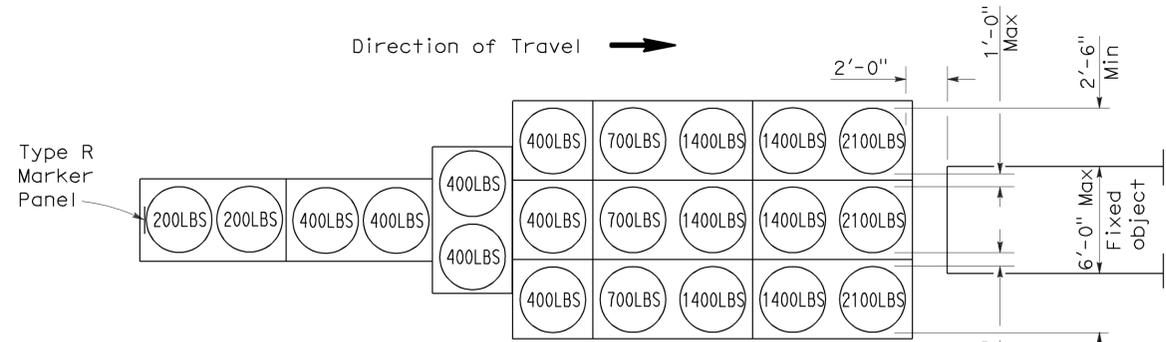
ARRAY 'TU17'

Approach speed less than 45 mph



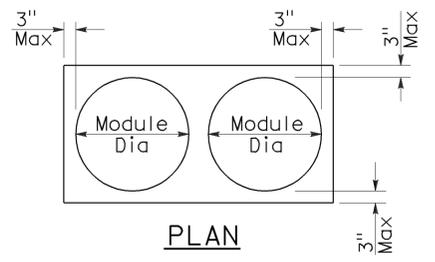
ARRAY 'TU11'

Approach speed less than 45 mph

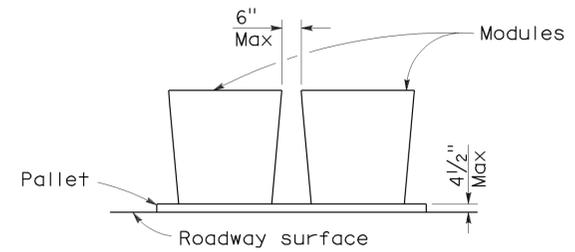


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

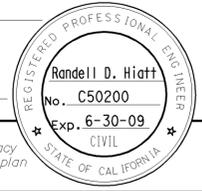
REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	43	50

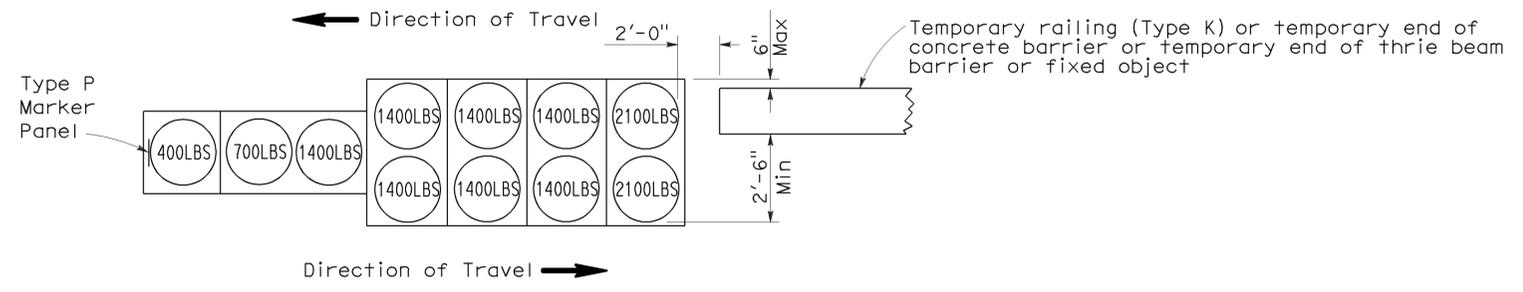
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

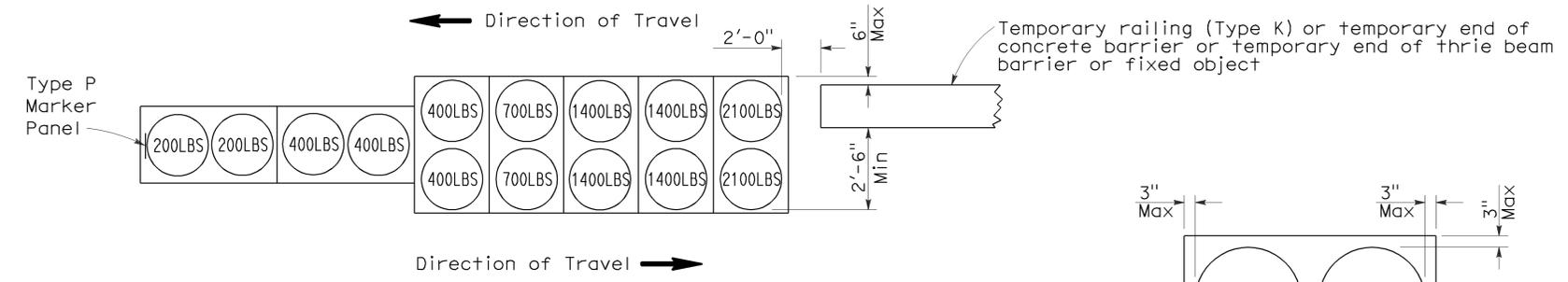
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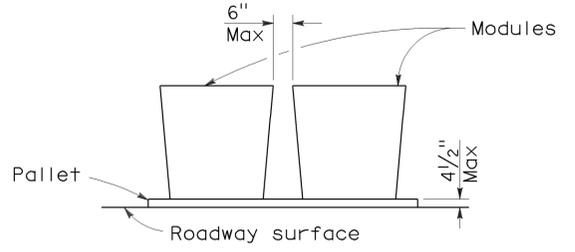
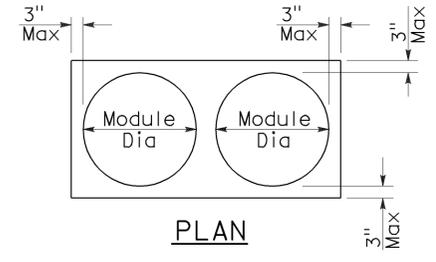
To accompany plans dated 6-28-10



ARRAY 'TB11'
Approach speed less than 45 mph



ARRAY 'TB14'
Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL
See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

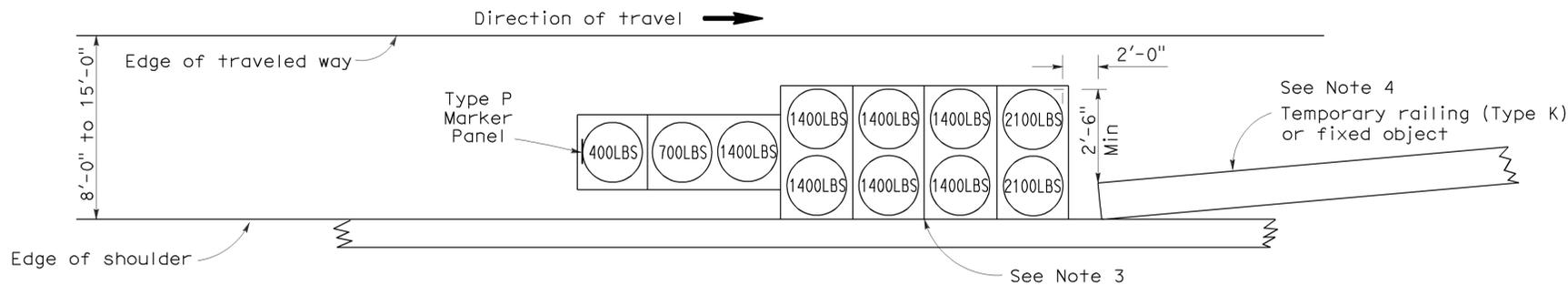
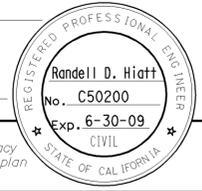
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	44	50

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

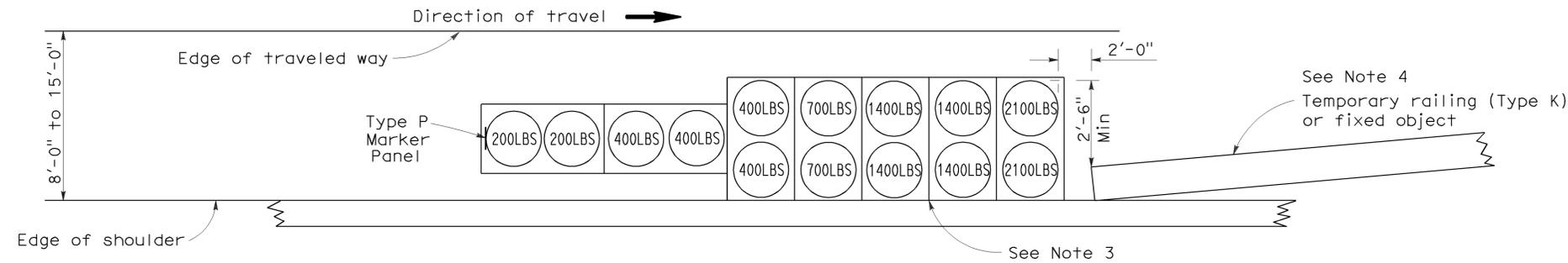
June 6, 2008
PLANS APPROVAL DATE

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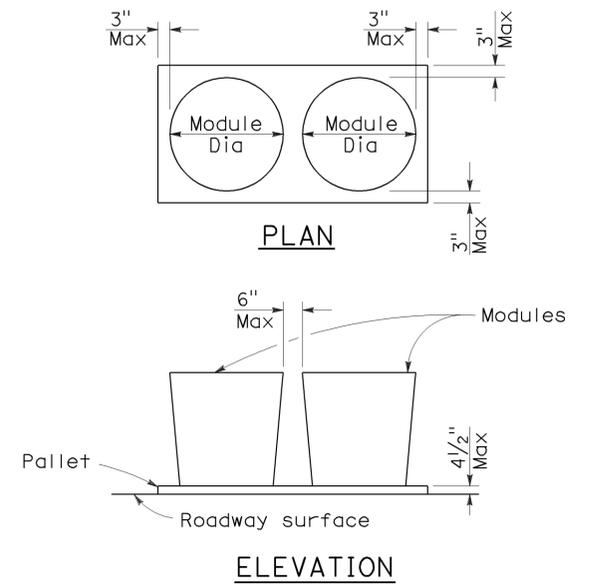
To accompany plans dated 6-28-10



ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

ELECTROLIERS

STANDARD TYPES	Symbol	Description
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		
32		
35		
36-20A		

NOTES:

- Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
- Variations noted adjacent to symbol on project plans.

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

PROPOSED	EXISTING	Description
BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4C	mas-4C	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
N	N	Mercury vapor lighting fixture
NC	NC	Neutral (Grounded Conductor)
NO	NO	Normally closed
PB	pb	Normally open
PEC	pec	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL	rl	Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	45	50

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Jeffery G. McRae
REGISTERED PROFESSIONAL ENGINEER
No. E14512
Exp. 6-30-08
ELECTRICAL
STATE OF CALIFORNIA

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To accompany plans dated 6-28-10

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

NOTE:
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	46	50

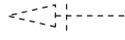
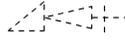
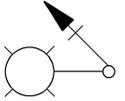
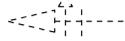
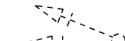
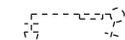
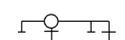
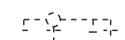
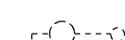
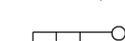
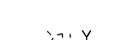
Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

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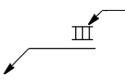
CONDUIT

PROPOSED	EXISTING	
---	---	Lighting Conduit, unless otherwise indicated or noted
---	---	Traffic signal conduit
-C-	-c-	Communication conduit
-T-	-t-	Telephone conduit
-F-	-f-	Fire alarm conduit
-FO-	-fo-	Fiber optic conduit
---	---	Conduit termination 
		Conduit riser in/on structure or service pole

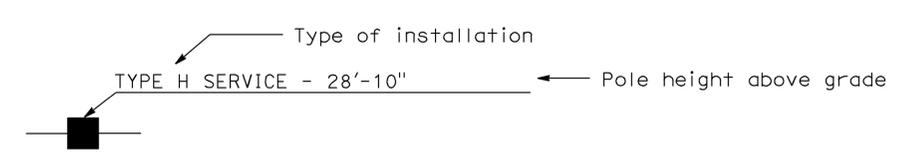
SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" Indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon, Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

SERVICE EQUIPMENT

PROPOSED	EXISTING	
---OH	---oh	Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

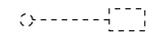
POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SYMBOLS AND ABBREVIATIONS)**
 NO SCALE

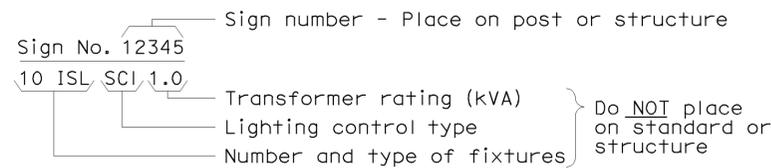
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

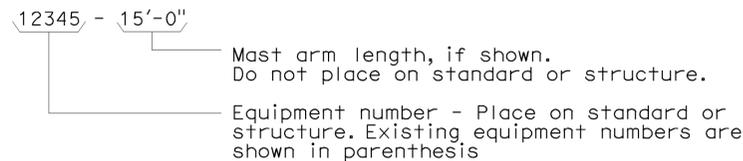
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

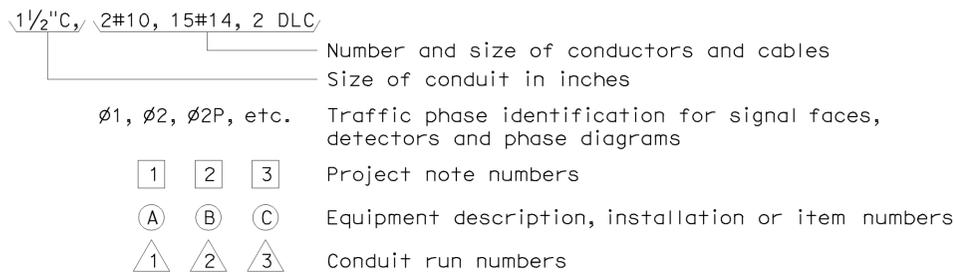
ILLUMINATED SIGN IDENTIFICATION NUMBER:



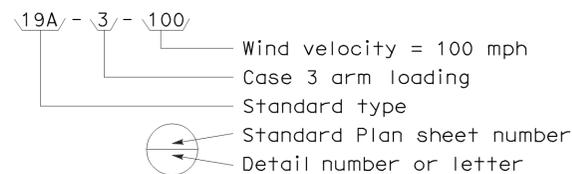
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



CONDUIT AND CONDUCTOR IDENTIFICATION:



SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
EMS	ems	Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

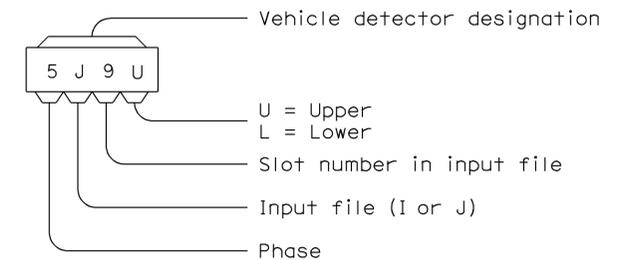
WIRING DIAGRAM LEGEND

P	Pole	----	External conductor
CB	Circuit breaker	—	Conductor or bus
A	Ampere	—●—	Tie point
V	Volt	—/—	Contactor coil
M	Metered	— —	Contactor, Contact NO
UM	Unmetered	— —	Contactor, Contact NC
NB	Neutral bus	⊗	Terminal blocks
GB	Ground bus	⊕	Enclosure bond
G	Equipment grounding conductor	⊕	Grounding electrode
N	Grounded conductor (Neutral)	⊕	Circuit breaker
		Ⓜ	Receptacle

PULL BOXES

PROPOSED	EXISTING	
		Pull box-No. 5 unless otherwise indicated or noted.
		Pull box-Additional designations or descriptions
3		(C) = Communications pull box
5		(E) = Pull box with extension
6		(S) = Sprinkler control pull box
7		(21) = Anchor bolts and conduit for future installation of Type 21 Standard
8		(T) = Traffic pull box
9		
9A		

VEHICLE DETECTORS



PROPOSED	EXISTING	
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
		Detector handhole
		Microwave or video detection zone

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C
DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

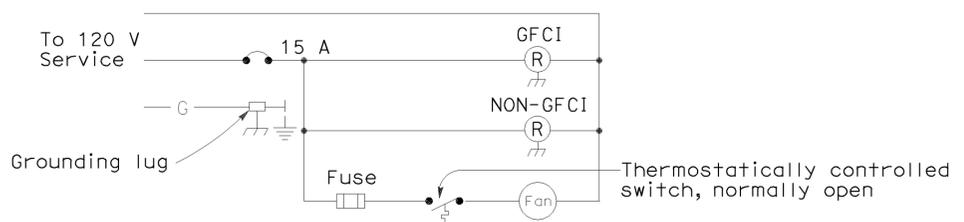
REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

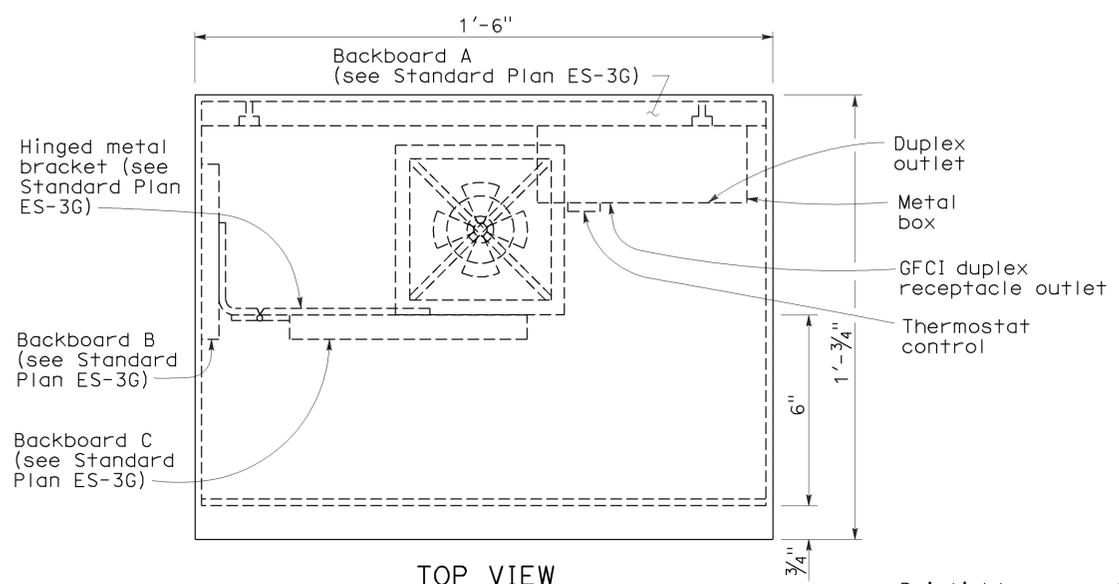
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	48	50

REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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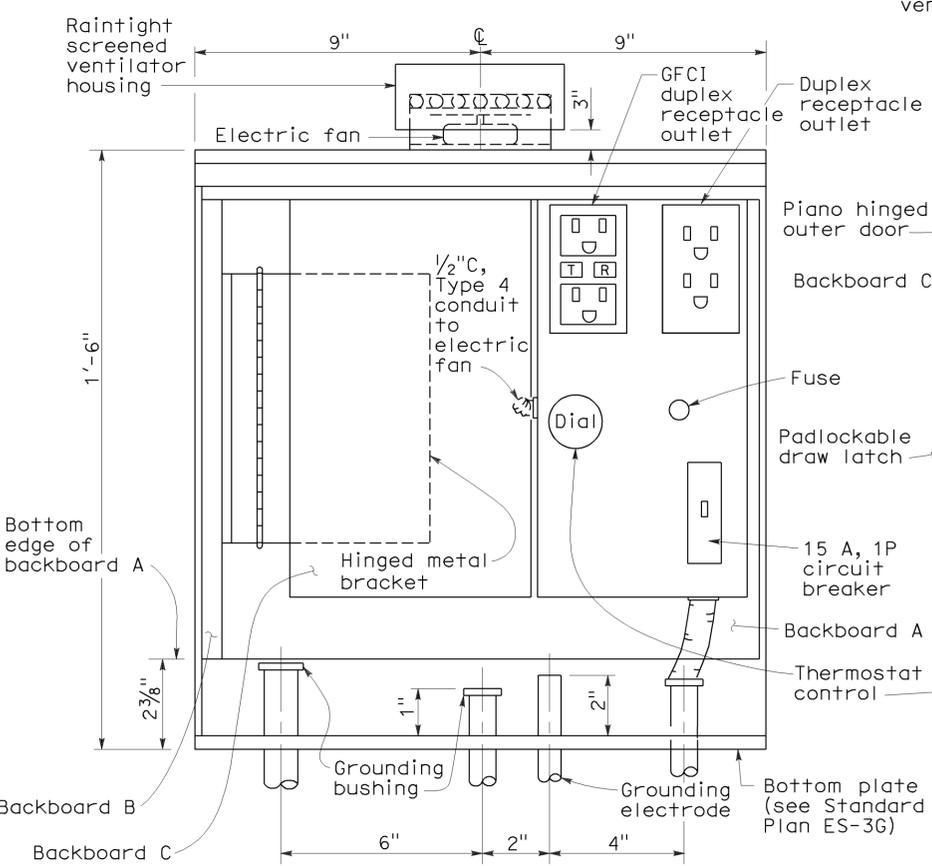
2006 REVISED STANDARD PLAN RSP ES-3F



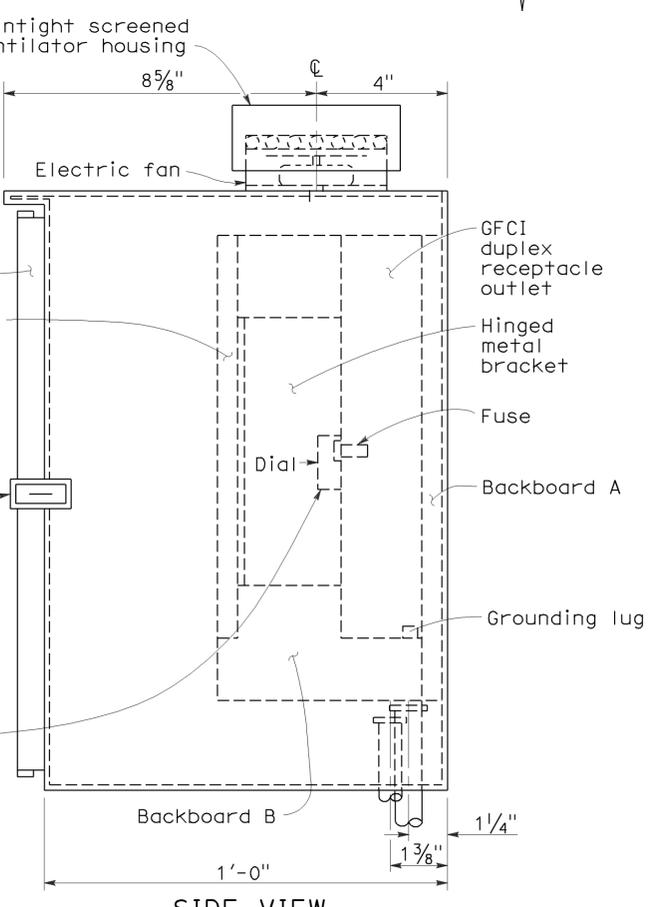
WIRING DIAGRAM



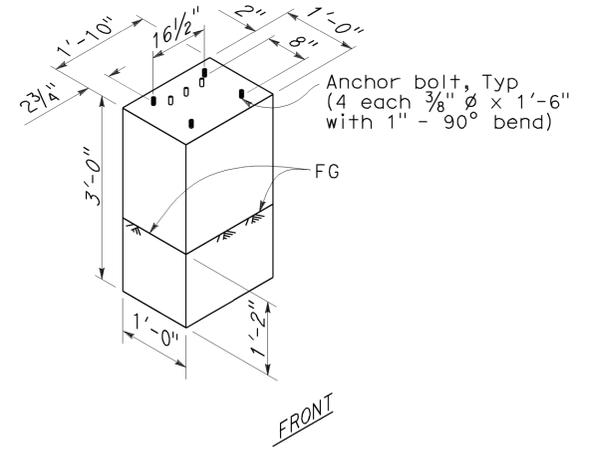
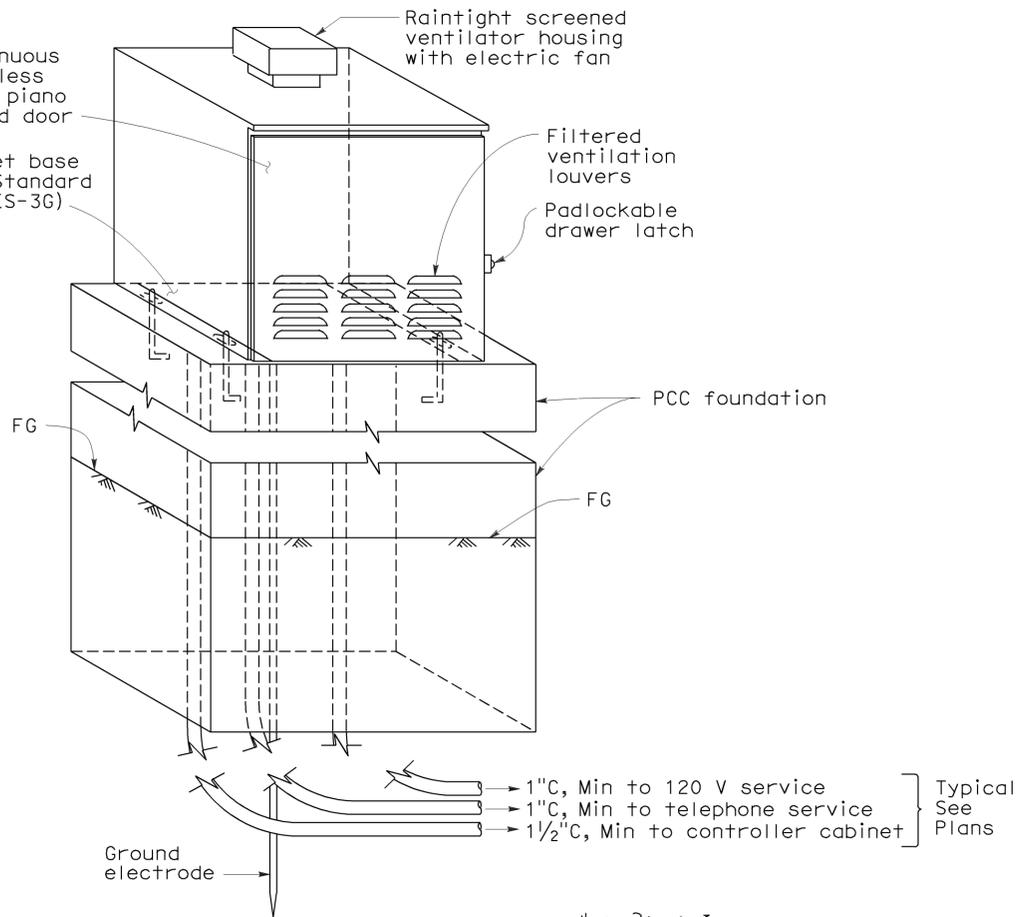
TOP VIEW



FRONT VIEW
(Outer door removed)



SIDE VIEW



FOUNDATION DETAILS

NOTES:

- Telephone demarcation cabinet shall be furnished with mounting boards, thermostat, fan, outlet box, circuit breaker and outlet plate. Dimensions are nominal.
- An approved mastic or caulking compound shall be placed on the foundation prior to placing the cabinet to seal openings between bottom of cabinet and foundation.
- In unpaved areas, a raised PCC pad shall be placed in front of the telephone demarcation cabinet. Pad shall be 1'-10" x 3'-0" x 4" thick, with 2" above the finished grade.
- All conduits shall be bonded to the enclosure.
- Telephone demarcation cabinet:
 - Material shall be anodized aluminum (1/8" thick).
 - Fabrication shall conform to the requirements of the Standard Specifications.
 - Ventilation louvers shall be located in door.
 - Door shall be lockable with padlock.
 - Fan shall be mounted in a ventilator housing.
 - Fan capacity shall be at least 25 cubic feet per minute.
 - Fan shall be thermostatically controlled and adjustable to turn on between 80°F and 130°F.
 - Fan circuit shall be fused at 175 percent of the fan motor capacity.
- Hardware for fastening of mounting boards:
 - Fasten backboard A and backboard B to telephone demarcation cabinet with 3/16" dia x 3/4" stainless steel carriage bolts (8 required).
 - Fasten hinged metal bracket to backboard B and backboard C to hinged metal bracket with number No. 10 x 3/4" wood screws (9 required).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(TELEPHONE DEMARICATION
CABINET, TYPE C)**

NO SCALE

RSP ES-3F DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-3F
DATED MAY 1, 2006 - PAGE 415 OF THE STANDARD PLANS BOOK DATED MAY 2006.

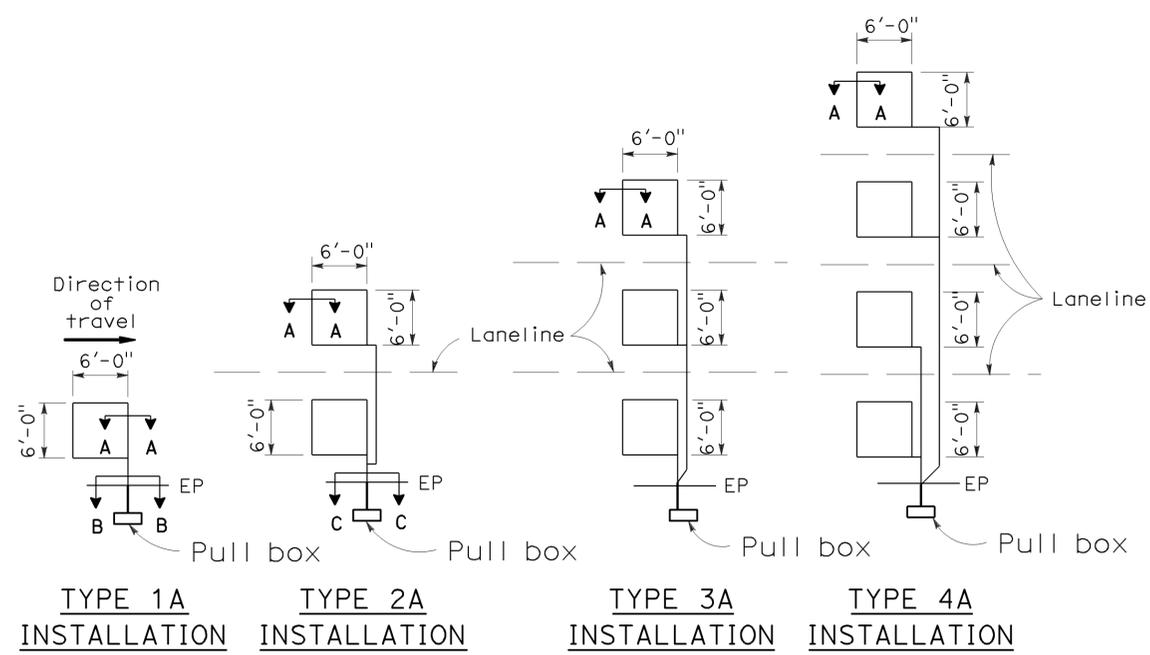
REVISED STANDARD PLAN RSP ES-3F

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	49	50

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



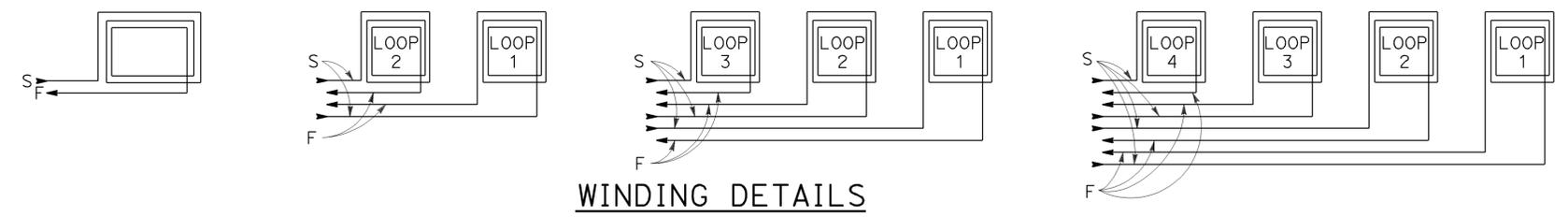
TYPE 1A INSTALLATION **TYPE 2A INSTALLATION** **TYPE 3A INSTALLATION** **TYPE 4A INSTALLATION**

SAWCUT DETAILS

- (Type A loop detector configurations illustrated)
- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)

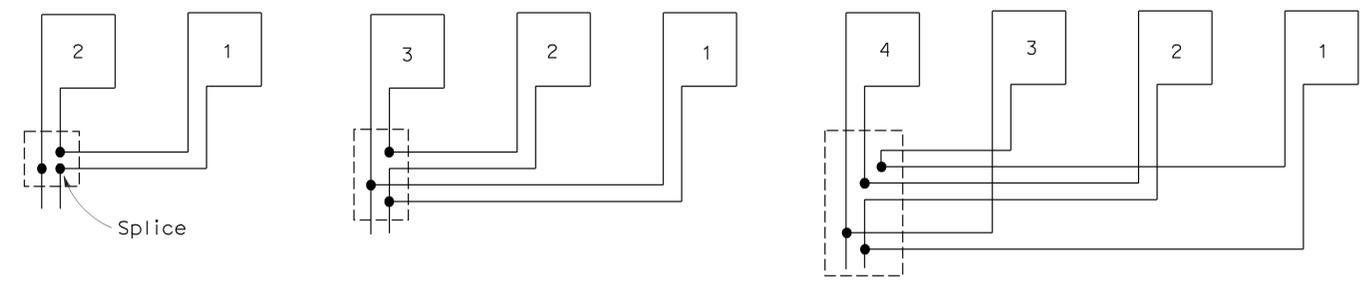
To accompany plans dated 6-28-10

2006 REVISED STANDARD PLAN RSP ES-5A



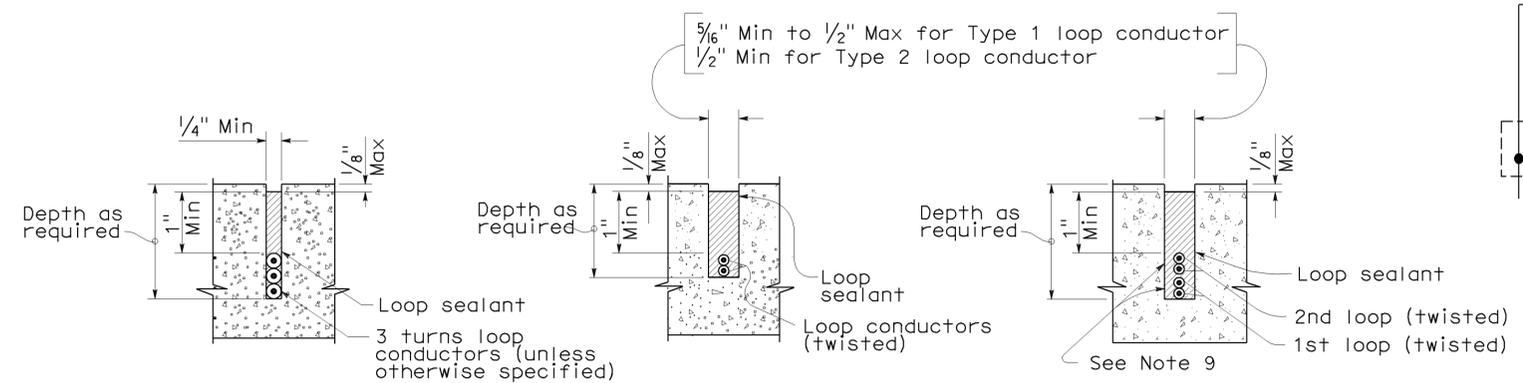
WINDING DETAILS

See Notes 6 and 7



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A **SECTION B-B** **SECTION C-C**
SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

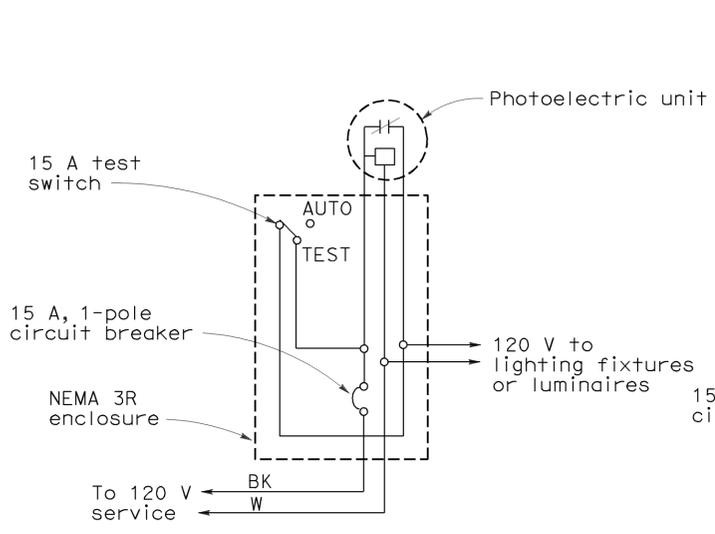
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	R59.7/R73.7	50	50

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
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To accompany plans dated 6-28-10

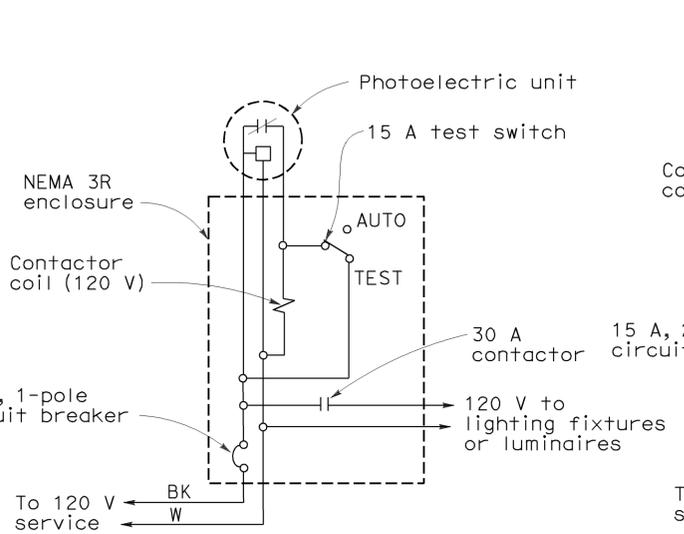
NOTES: (FOR LIGHTING AND SIGN ILLUMINATION CONTROL)

1. The ballast voltages of lighting fixtures and luminaires shall match line service voltages.
2. Voltage rating of photoelectric controls shall conform to the service voltage indicated on the plans.
3. Terminal strip shall be provided for wiring to fixtures.
4. Type SC1A, SC2A, SC3A controls are similar to Types SC1, SC2 and SC3 controls respectively except test switch and wiring are not required.



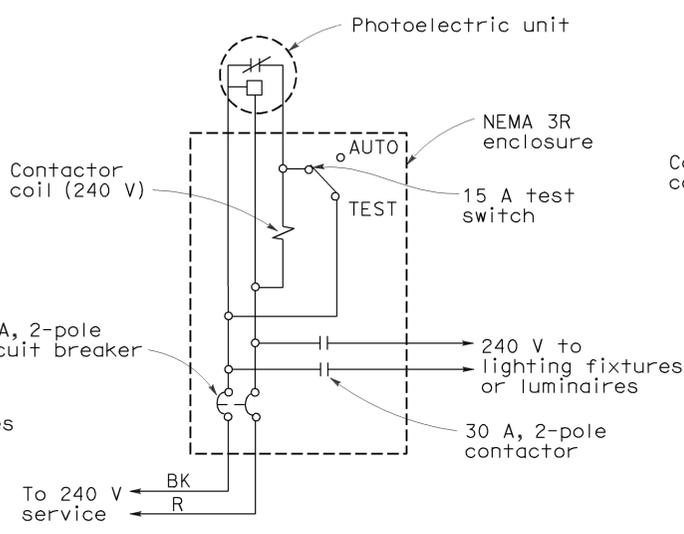
TYPE LC1 CONTROL

For 120 V unswitched circuit with no more than 800 W load.



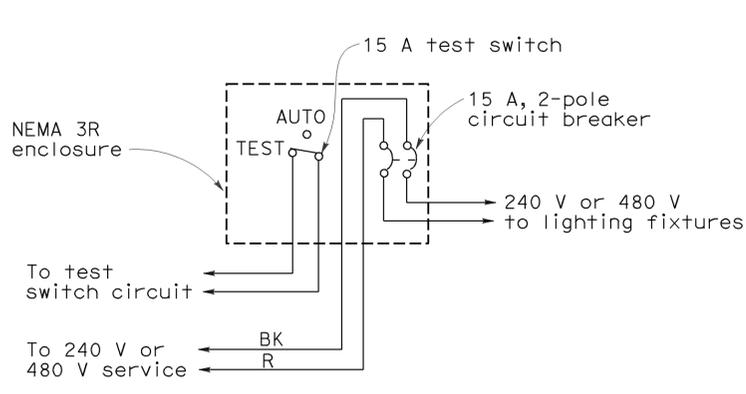
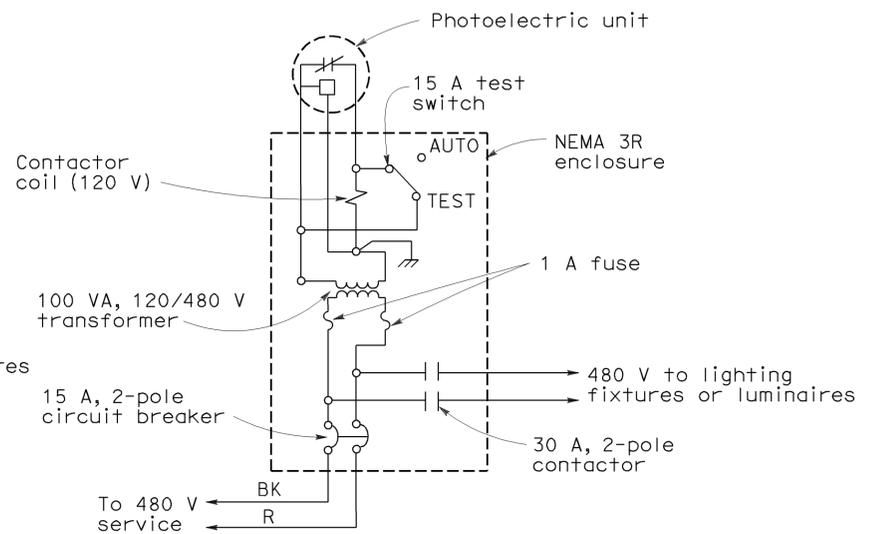
TYPE LC2 CONTROL

For 120 V unswitched circuit



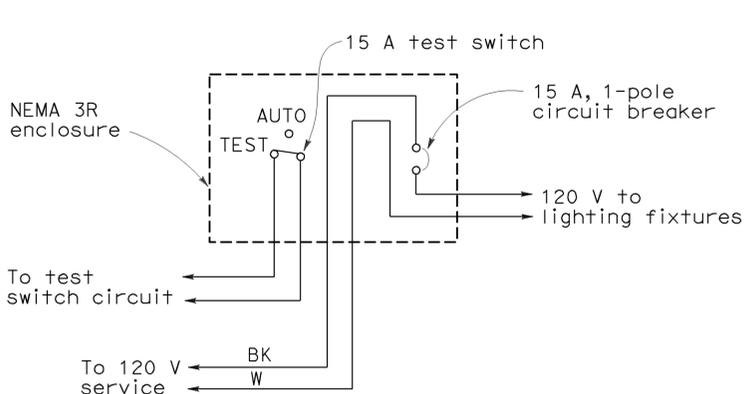
TYPE LC3 CONTROL

For 240 V and 480 V unswitched circuits



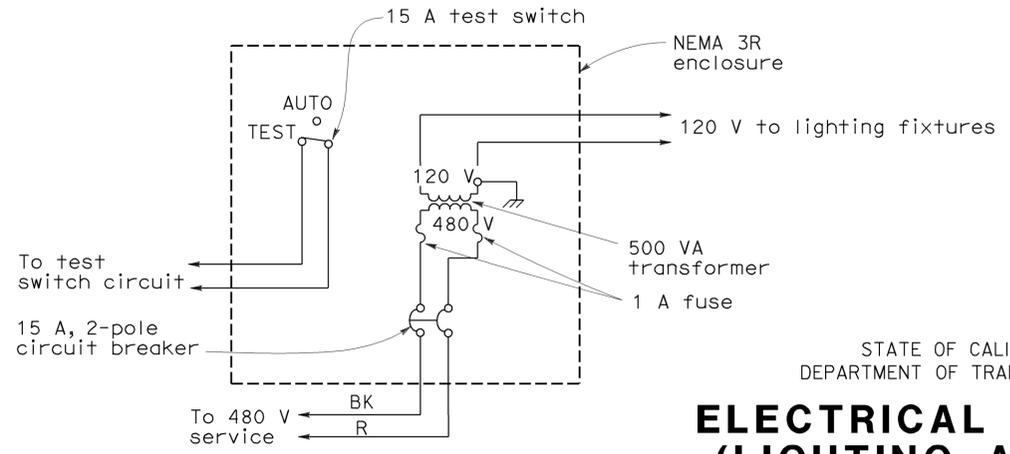
TYPE SC1 CONTROL

For 240 V or 480 V switched circuit, see Note 4 for Type SC1A



TYPE SC2 CONTROL

For 120 V switched circuit, see Note 4 for Type SC2A



TYPE SC3 CONTROL

For 480 V switched sign circuit, see Note 4 for Type SC3A

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LIGHTING AND SIGN
 ILLUMINATION CONTROL)**

NO SCALE

RSP ES-15D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-15D DATED MAY 1, 2006 - PAGE 472 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-15D

2006 REVISED STANDARD PLAN RSP ES-15D