

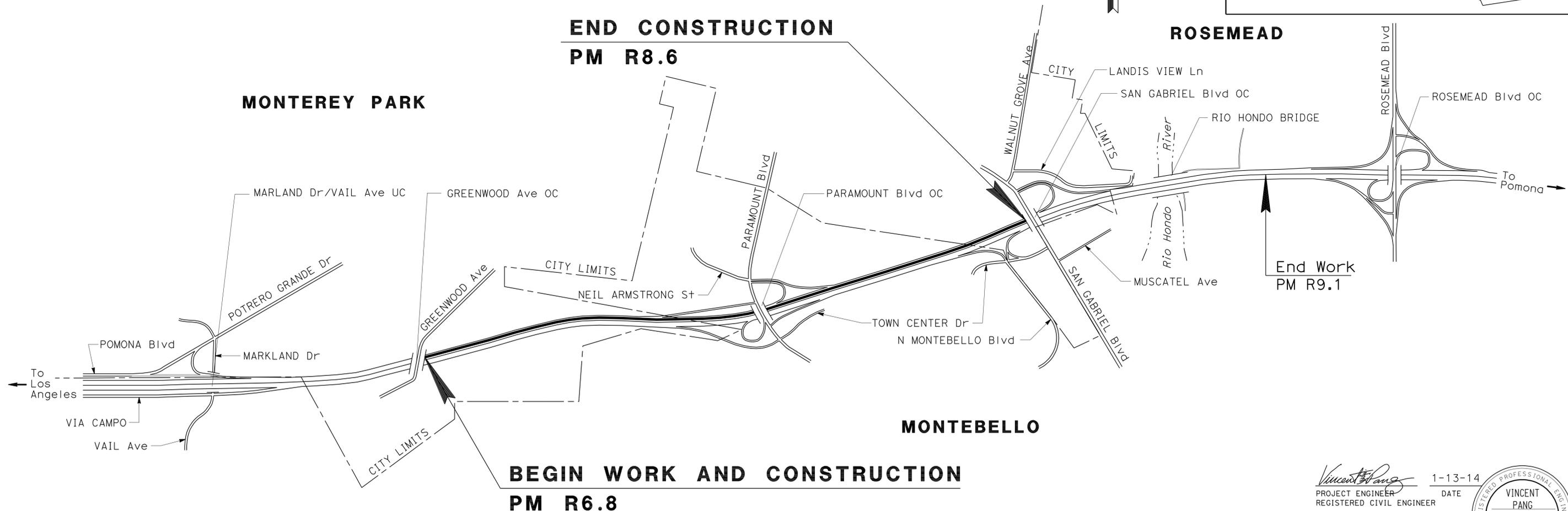
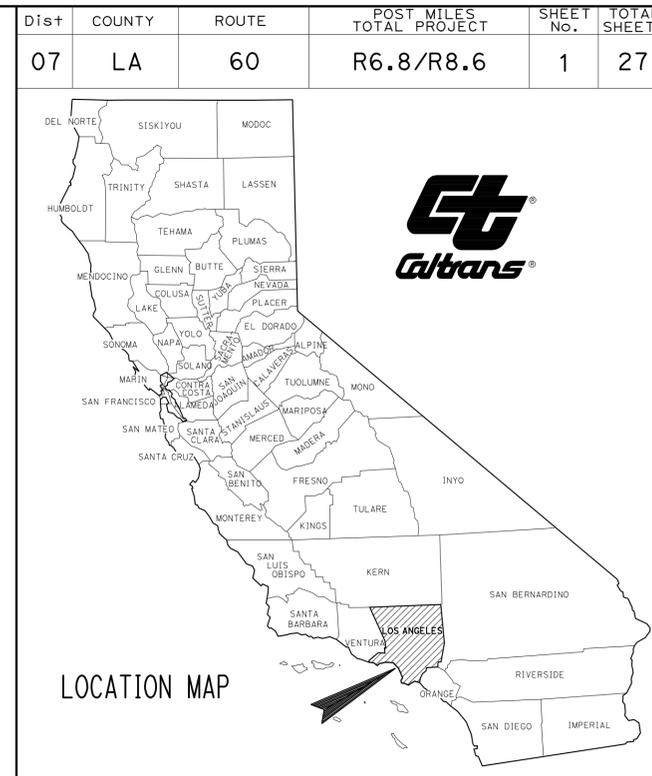
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	TYPICAL CROSS SECTIONS
4	CONSTRUCTION AREA SIGNS
5-11	TRAFFIC HANDLING DETAILS
12	PAVEMENT DELINEATION DETAILS
13	SUMMARY OF QUANTITIES
14-27	REVISED STANDARD PLANS

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

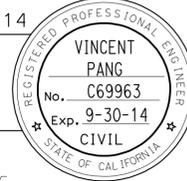
STATE OF CALIFORNIA  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN LOS ANGELES COUNTY**  
**IN MONTEREY PARK AND MONTEBELLO**  
**FROM GREENWOOD AVENUE OVERCROSSING**  
**TO SAN GABRIEL BOULEVARD OVERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER  
**ERIC WANG**  
 DESIGN ENGINEER  
**LARRY WIERING**

*Vincent P. Pang* 1-13-14  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
**February 18, 2014**  
 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.



CONTRACT No.	<b>07-4T6904</b>
PROJECT ID	<b>0713000410</b>

NO SCALE

DATE PLOTTED => 11-FEB-2014  
 TIME PLOTTED => 00:15  
 LAST REVISION  
 02-18-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	2	27

1-13-14  
 REGISTERED CIVIL ENGINEER DATE  
 2-18-14  
 PLANS APPROVAL DATE

BIPIN PATEL  
 No. C60082  
 Exp. 6-30-14  
 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.

**NOTES:**

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED.
- FOR REPLACE CONCRETE PAVEMENT INDIVIDUAL SLAB REPLACEMENT (RSC) LOCATIONS AND QUANTITIES SEE "SUMMARY OF QUANTITIES" SHEET. THE ENGINEER WILL DETERMINE THE EXACT LOCATIONS.

**ABBREVIATION:**

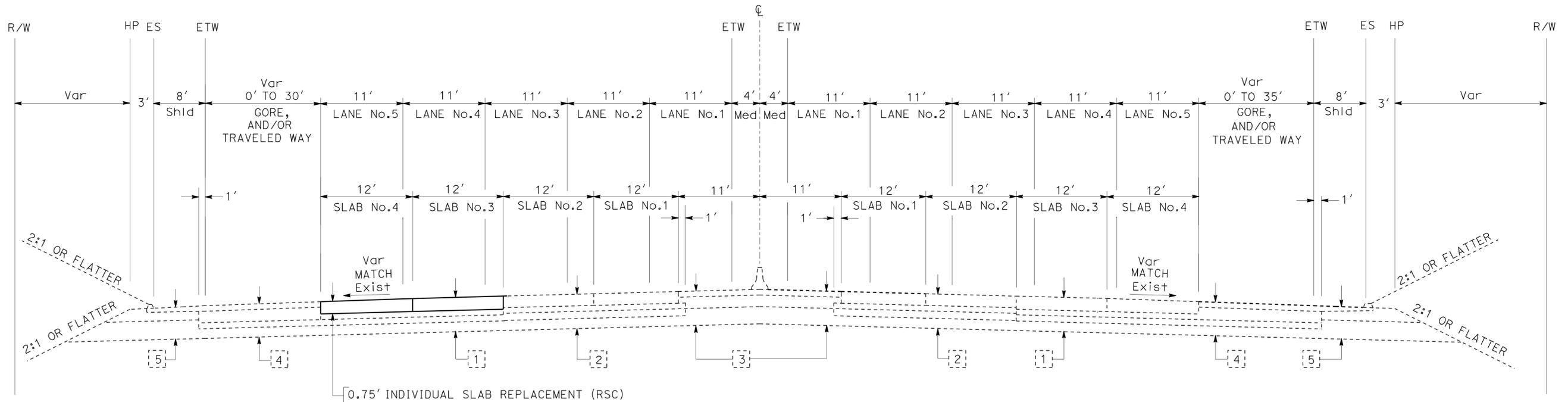
RSC = RAPID STRENGTH CONCRETE

**PAVEMENT CLIMATE REGION**

SOUTH COAST

**EXISTING STRUCTURAL SECTIONS**

- [1] 0.75' PORTLAND CEMENT CONCRETE  
0.35' CEMENT TREATED BASE  
0.35' AGGREGATE BASE  
0.60' AGGREGATE SUBBASE
- [2] 0.67' PORTLAND CEMENT CONCRETE  
0.35' CEMENT TREATED BASE  
0.40' ROAD MIXED CEMENT TREATED BASE  
0.55' AGGREGATE SUBBASE
- [3] 0.35' ASPHALT CONCRETE  
0.50' ROAD MIXED CEMENT TREATED BASE  
1.15' AND VARIABLE AGGREGATE SUBBASE
- [4] 0.35' ASPHALT CONCRETE  
0.65' CEMENT TREATED BASE  
0.40' ROAD MIXED CEMENT TREATED BASE  
0.60' AGGREGATE SUBBASE
- [5] 0.15' TO 0.35' ASPHALT CONCRETE  
0.50' ROAD MIXED CEMENT TREATED BASE  
1.15' AND VARIABLE AGGREGATE SUBBASE



**WESTBOUND**

PM R6.8/R7.8  
PM R8.5/R8.6

**EASTBOUND**

PM R6.8/R7.6

**TYPICAL CROSS SECTIONS**

NO SCALE

**X-1**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	4	27

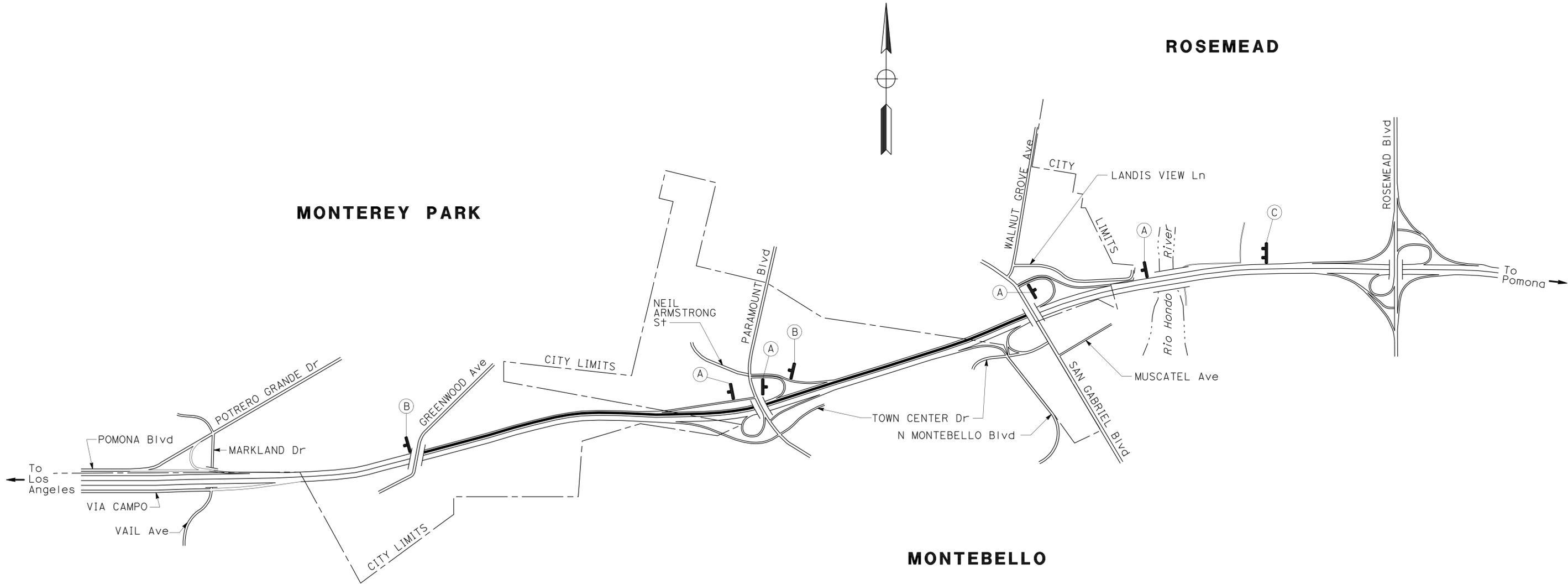
1-13-14  
 REGISTERED CIVIL ENGINEER DATE  
 2-18-14  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**BIPIN PATEL**  
 No. C60082  
 Exp. 6-30-14  
 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:**
- EXACT LOCATIONS AND POSITION OF THE SIGNS WILL BE DETERMINED BY THE ENGINEER.
  - EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED.

SIGN NUMBER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	4
(B)	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	2
(C)		C40 (CA)	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 8"	1



**CONSTRUCTION AREA SIGNS**  
NO SCALE

**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING  
 LARRY WIERING  
 FUNCTIONAL SUPERVISOR  
 LARRY WIERING  
 CHECKED BY  
 BIPIN PATEL  
 BIPIN PATEL  
 DESIGNED BY  
 LARRY WIERING  
 REVISOR  
 DATE  
 REVISION

LAST REVISION DATE PLOTTED => 11-FEB-2014  
 02-18-14 TIME PLOTTED => 00:15

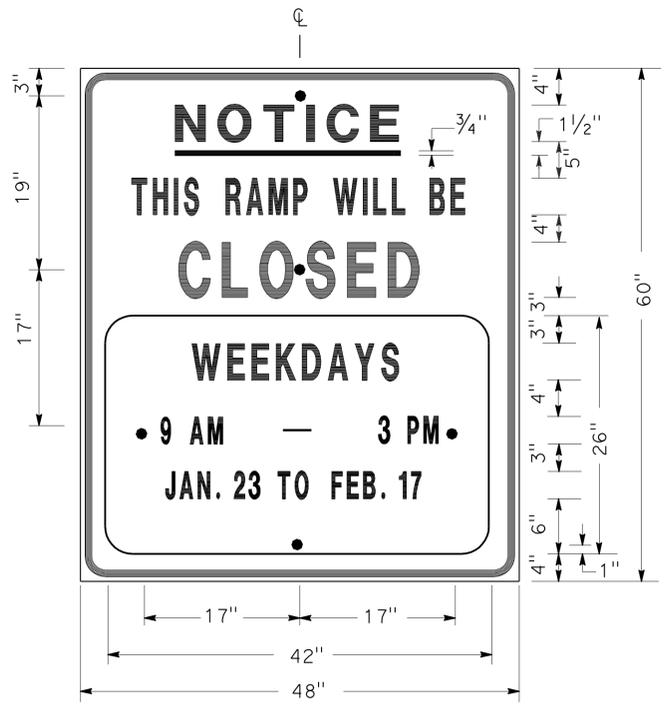
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	5	27

Martin Oregel 1-6-14  
 REGISTERED CIVIL ENGINEER DATE

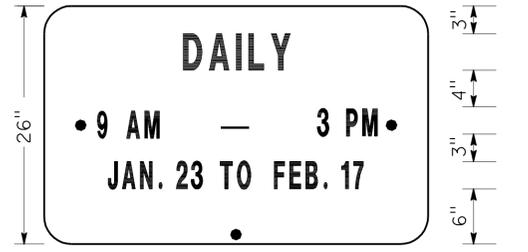
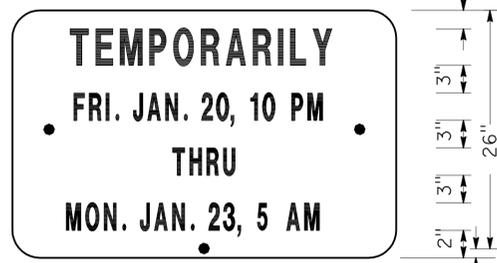
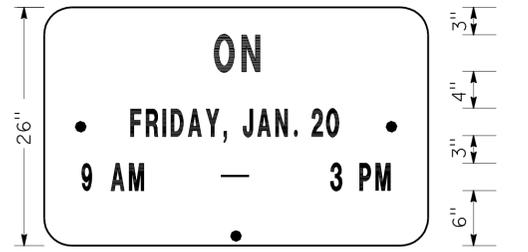
2-18-14  
 PLANS APPROVAL DATE

MARTIN OREGEL  
 No. C56816  
 Exp. 6-30-15  
 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.



SIGN SP-1



ALTERNATE OVERLAY PANELS (TYPICAL)

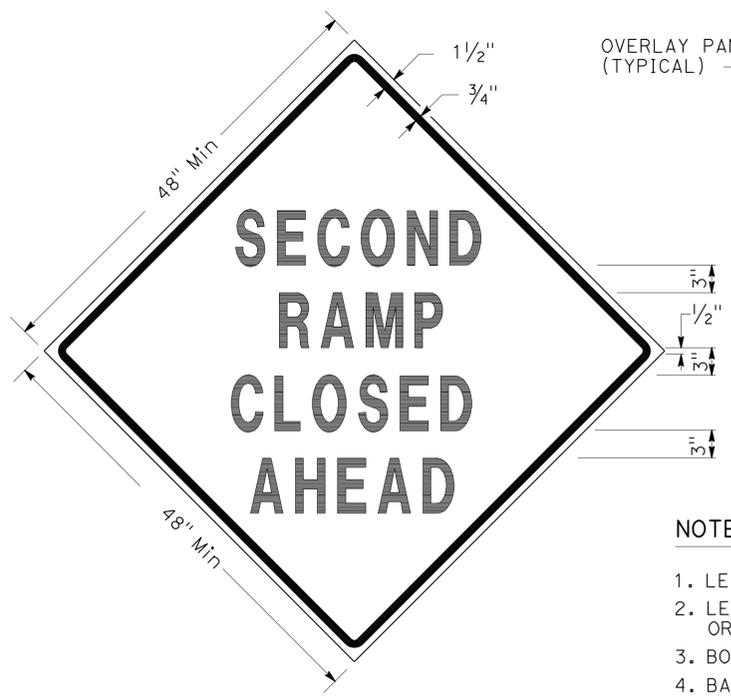
NOTES: (SIGN SP-1)

- LETTERS AND BORDER SHALL BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
- 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 7' ABOVE GROUND.

SIZE	BORDER WIDTH	MARGIN WIDTH	LETTER SIZE					CORNER RADIUS
			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



SIGN SP-5

NOTES: (SIGNS SP-3 & SP-5)

- LETTERS - 6" SERIES D.
- LETTERS AND BORDER SHALL BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
- 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 7' ABOVE GROUND.
- SIGN SP-5 SHALL BE USED IF THE OFF-RAMP TO BE CLOSED FOLLOWS A FREEWAY OFF-CONNECTOR.

SPECIAL SIGNS FOR EXIT RAMP CLOSURES



SIGN SP-4

NOTES: (SIGN SP-4)

- LETTERS - 6" SERIES C.
- LETTERS AND BORDER SHALL BE BLACK ON REFLECTORIZED WHITE BACKGROUND.
- BOLT HOLES SHALL BE 3/8" DIAMETER.
- BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
- SIGNS SHALL BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH REVISED STANDARD PLAN RSP T14.

SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

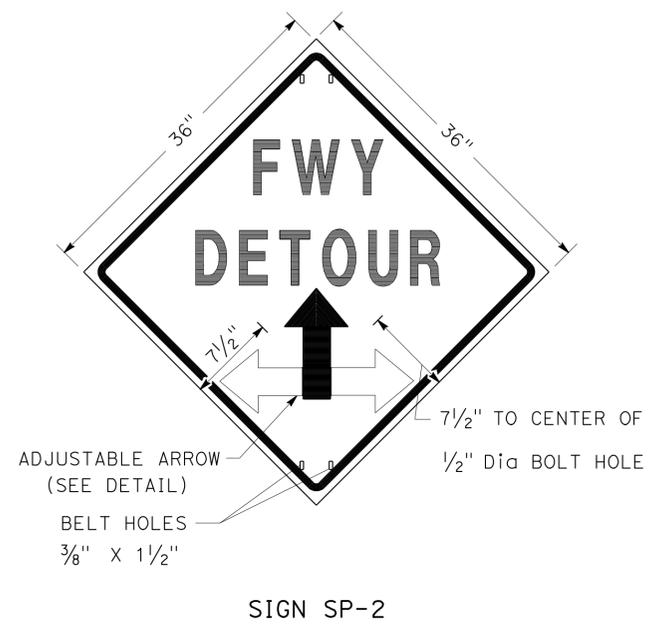
TRAFFIC HANDLING DETAILS  
 TRAFFIC CONTROL SYSTEM  
 FOR RAMP CLOSURES, DETOUR SIGNS,  
 AND MISCELLANEOUS DETAILS

SHEET 1 OF 2

NO SCALE

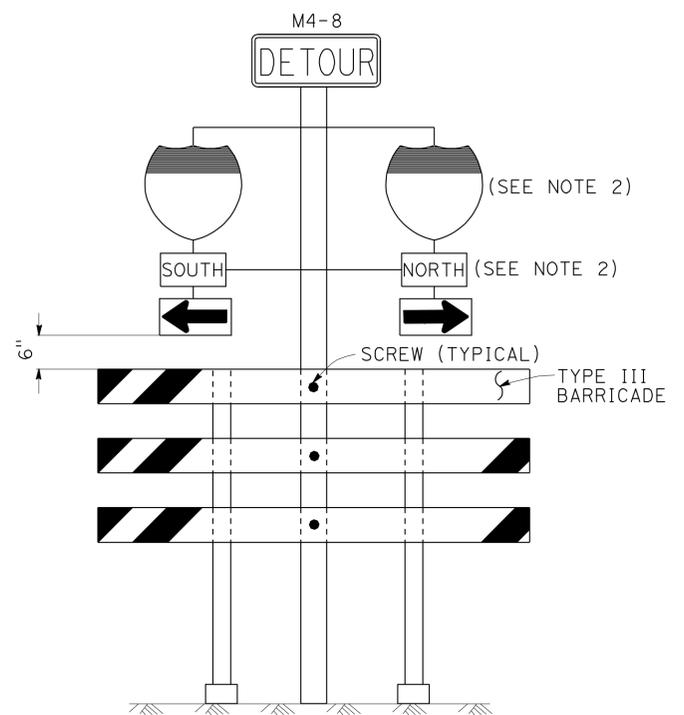
THD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DTM  
 FUNCTIONAL SUPERVISOR JOHN YANG  
 CALCULATED/DESIGNED BY JOCELYN C CHIANG  
 CHECKED BY ALBERT K YU  
 REVISED BY JC  
 DATE REVISED 3/12

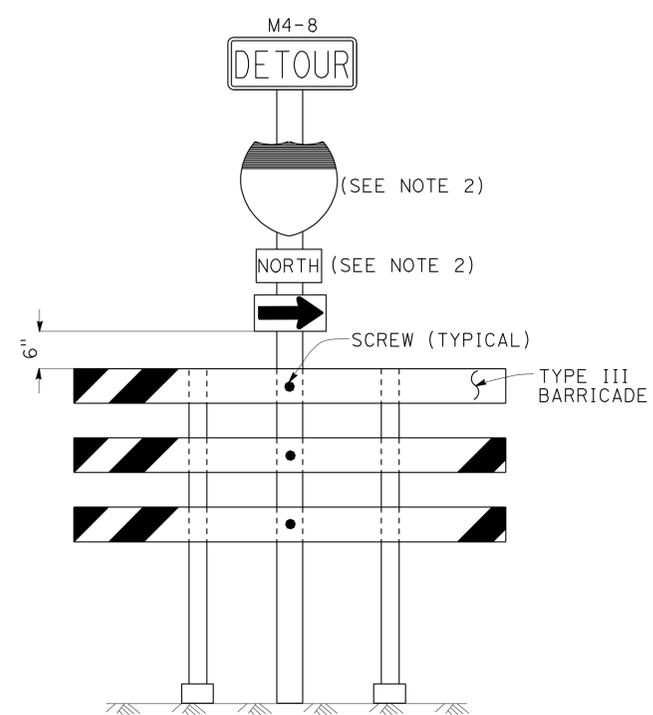


- NOTES:** SIGN SP-2
- LETTERS - 6" SERIES E.
  - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
  - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
  - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
  - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND EXCEPT AS OTHERWISE SHOWN ON OTHER TRAFFIC HANDLING DETAILS PLANS.

**ABBREVIATION**  
(CA) CALIFORNIA CODE



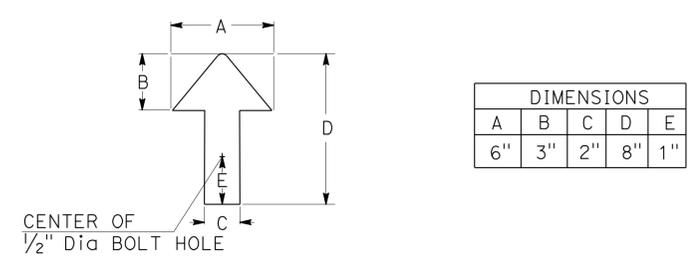
**SIGN SP-6 (SEE NOTE 1)**



**SIGN SP-7 (SEE NOTE 1)**

- 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 MARKER [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**



**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**

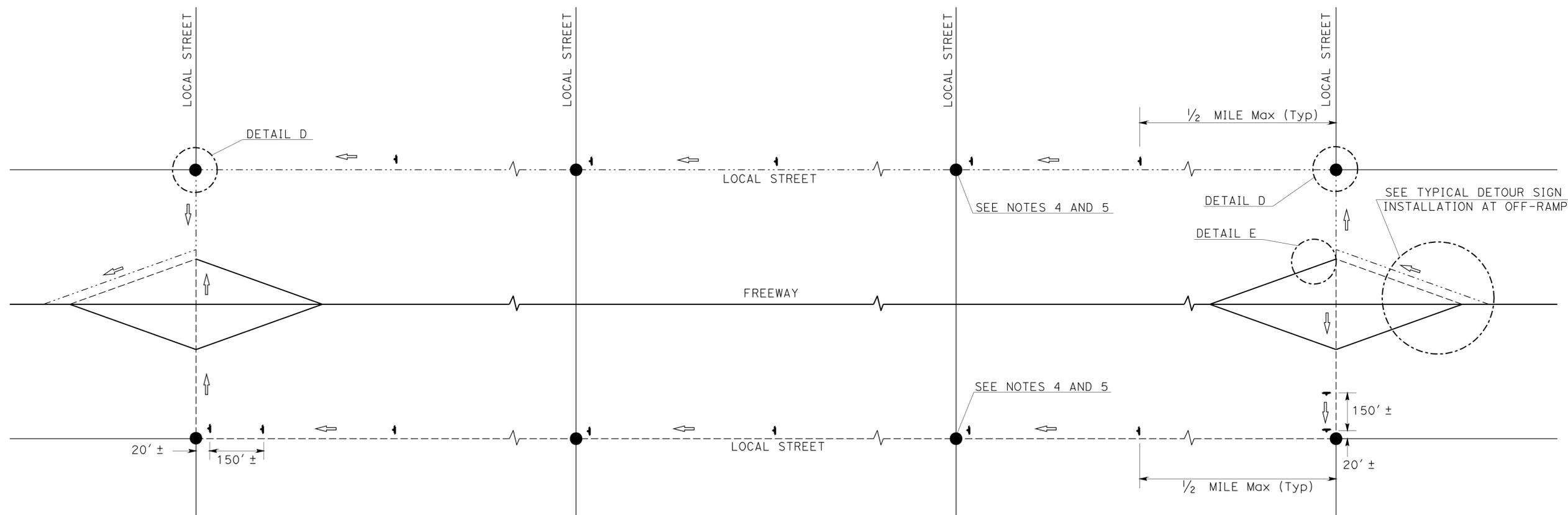
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	7	27
<i>Martin Oregel</i> 42-16-13 REGISTERED CIVIL ENGINEER DATE			2-18-14 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

**LEGEND:**

- ↑ SIGN SP-2
- AND/OR DESIGNATED DETOUR ROUTE
- ⇨ DETOUR DIRECTION
- CONTROLLED INTERSECTION

**NOTES:**

1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
4. SP-2 SIGNS SHALL BE POSTED AT EACH CONTROLLED INTERSECTION (EXCEPT AT COMMERCIAL PROPERTY, RESIDENTIAL COMPLEX OR T-INTERSECTION FROM ONE-WAY STREET) ALONG THE DESIGNATED DETOUR ROUTE.
5. UNLESS OTHERWISE SHOWN ON OTHER THD PLANS, WHEN CONTROLLED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE ARE CLOSELY SPACED, PLACE SP-2 SIGNS AT CONTROLLED INTERSECTIONS AT A DISTANCE NOT TO EXCEED 1/4 MILE FROM THE PRECEDING DETOUR SIGN.
6. EXCEPT AS OTHERWISE SHOWN ON OTHER PLANS OR SPECIFIED IN THE SPECIAL PROVISIONS, SP-2 SIGNS SHALL BE PLACED AS SHOWN ON THIS PLAN.



**TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE**

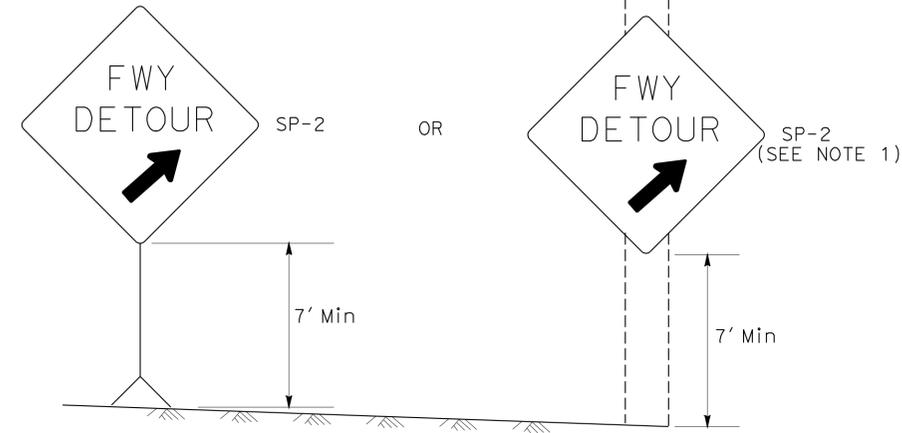
**TRAFFIC HANDLING DETAILS  
TRAFFIC CONTROL SYSTEM  
FOR DETOUR SIGN INSTALLATION  
ALONG DESIGNATED DETOUR ROUTE  
SHEET 1 OF 3**

NO SCALE

**THD-3**

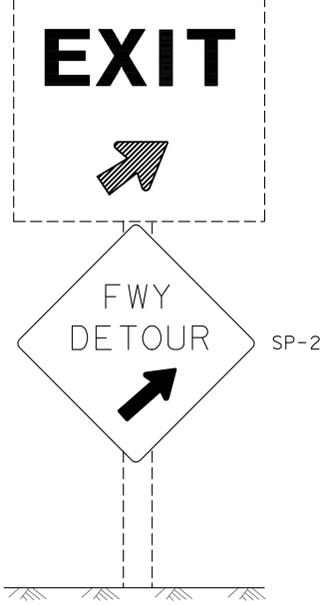
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DT M  
 FUNCTIONAL SUPERVISOR: JOHN YANG  
 CALCULATED/DESIGNED BY: ALBERT K YU  
 CHECKED BY: JOCELYN C CHIANG  
 REVISED BY: JC  
 DATE REVISED: 3/12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	8	27
			1-6-14 REGISTERED CIVIL ENGINEER DATE 2-18-14 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>					



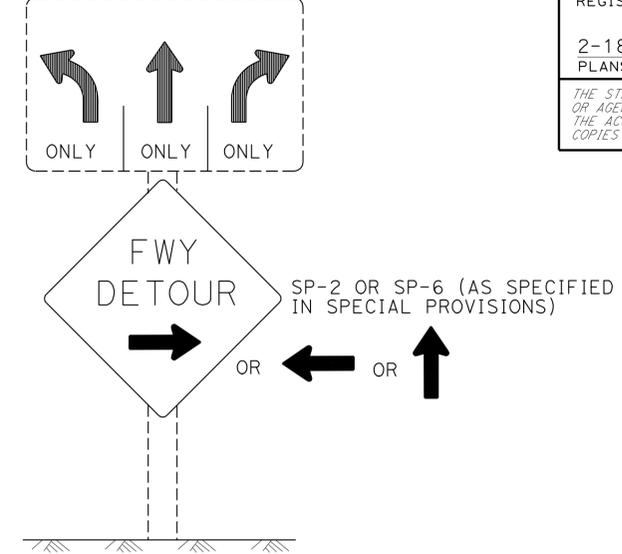
DETAIL A (SEE NOTE 3)

Exist E5-1, G84-2 (CA) OR G84-3 (CA)

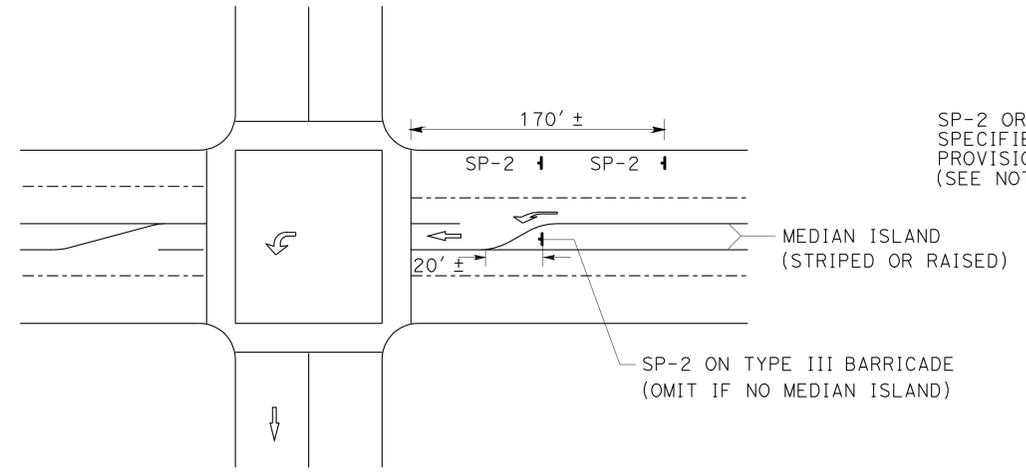


DETAIL B (SEE NOTE 3)

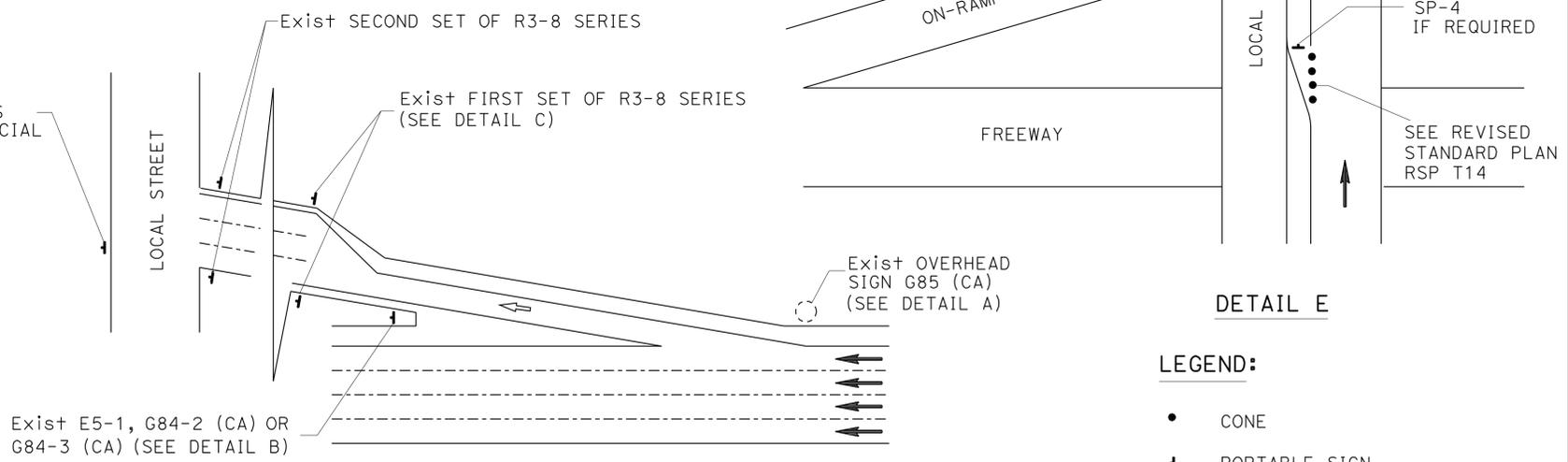
Exist R3-8 SERIES



DETAIL C (SEE NOTES 4, 5, AND 6)



DETAIL D



DETAIL E

- LEGEND:**
- CONE
  - ⊠ PORTABLE SIGN
  - ➔ DIRECTION OF TRAVEL
  - ➞ DETOUR DIRECTION
  - EXISTING OVERHEAD SIGN

**TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP**

**SIGN CODE LEGEND:**

XXYY-Y: FEDERAL SIGN CODE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)  
 XXYY-Y (CA): CALIFORNIA SIGN CODE PER CALIFORNIA MUTCD

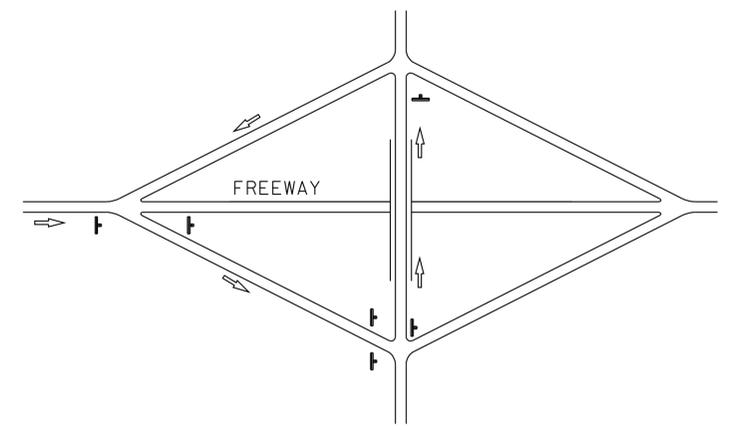
**TRAFFIC HANDLING DETAILS  
 TRAFFIC CONTROL SYSTEM  
 FOR DETOUR SIGN INSTALLATION  
 ALONG DESIGNATED DETOUR ROUTE  
 SHEET 2 OF 3**

NO SCALE **THD-4**

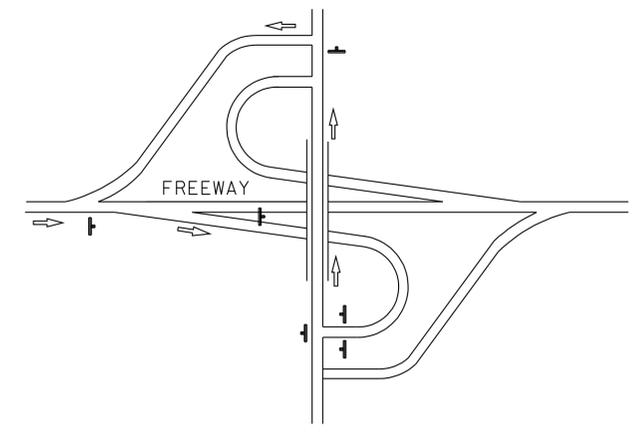
**NOTES: SIGN SP-2**

1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. OMIT DETAILS A AND B FOR FULL FREEWAY CLOSURES.
4. SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-6 SIGN DETAILS.
5. IF R3-8 SERIES SIGNS ARE NOT PRESENT AT THE OFF-RAMP, SP-2 OR SP-6 SIGNS SHALL BE FASTENED ONTO EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
6. EXCEPT FOR DETAILS A & B, OMIT SP-2 SIGNS IF RAMP HAS MANDATORY SINGLE MOVE.

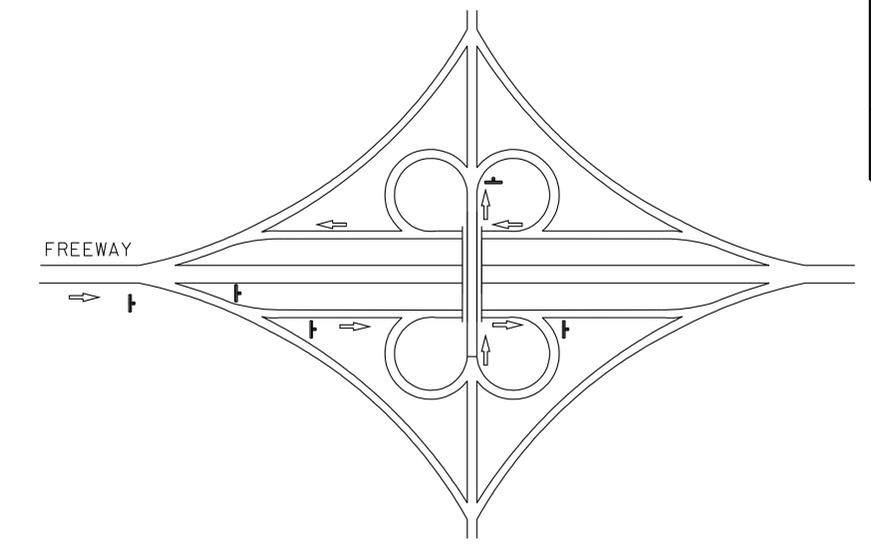
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**DTM**  
 FUNCTIONAL SUPERVISOR: JOHN YANG  
 CHECKED BY: JOCELYN C CHIANG  
 REVISIONS: 3/12  
 DESIGNED BY: ALBERT K YU  
 DESIGNED BY: ALBERT K YU



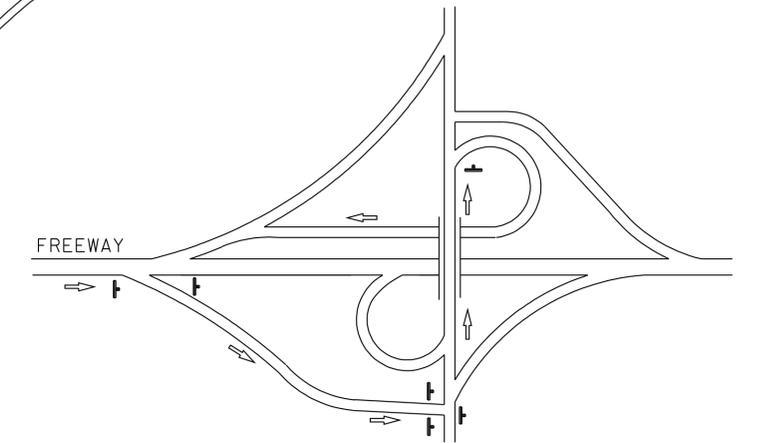
TYPE I



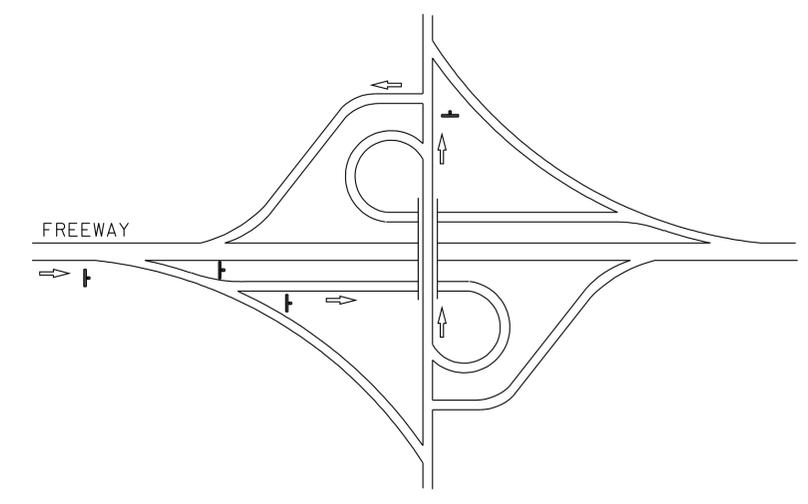
TYPE II



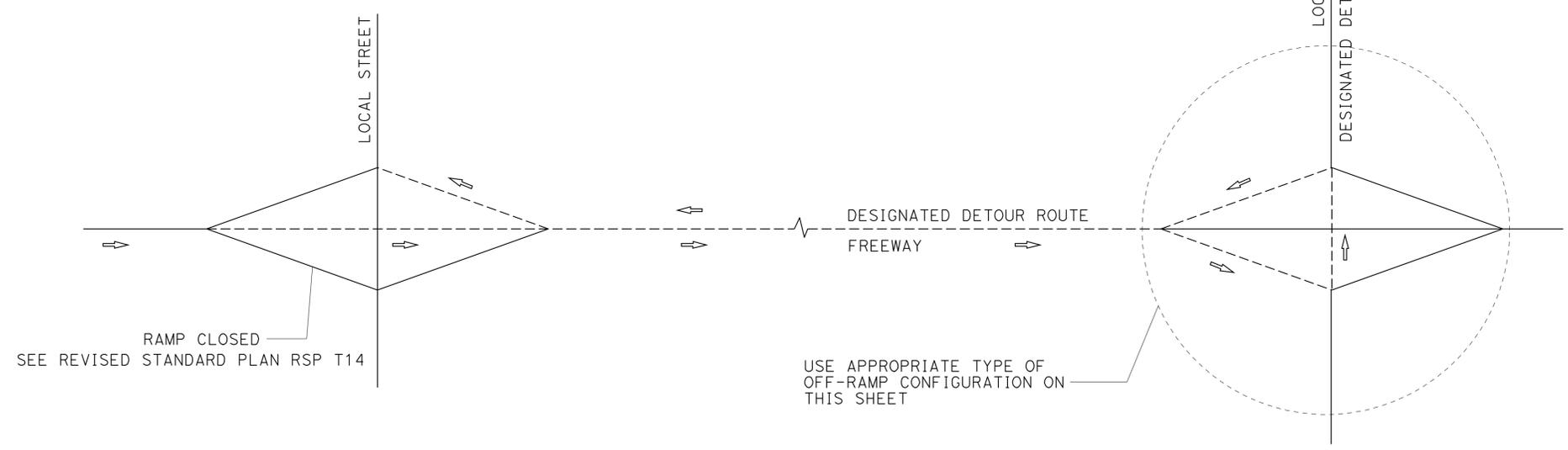
TYPE III



TYPE IV



TYPE V



TYPE OF OFF-RAMP CONFIGURATION	MINIMUM No. OF SP-2
TYPE I	6
TYPE II	6
TYPE III	5
TYPE IV	6
TYPE V	4

**TYPICAL DETOUR SIGN INSTALLATION FOR OFF-RAMP CLOSURE**

**NOTES:**

- FOR RAMP CONFIGURATIONS NOT SHOWN, THE EXACT LOCATIONS AND MINIMUM NUMBER OF SP-2 SIGNS SHALL BE DETERMINED BY THE ENGINEER.
- SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-2 SIGN DETAILS.

**LEGEND:**

- ↑ SIGN SP-2
- ⇒ DETOUR DIRECTION
- DESIGNATED DETOUR ROUTE

**TRAFFIC HANDLING DETAILS  
TRAFFIC CONTROL SYSTEM  
FOR DETOUR SIGN INSTALLATION  
ALONG DESIGNATED DETOUR ROUTE  
SHEET 3 OF 3**

NO SCALE

**THD-5**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DT M  
 FUNCTIONAL SUPERVISOR: JOHN YANG  
 CHECKED BY: JOCELYN C CHIANG  
 DESIGNED BY: ALBERT K YU  
 REVISIONS: JC 3/12  
 REVISIONS: DATE REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	10	27

42-16-13  
 REGISTERED CIVIL ENGINEER DATE  
 2-18-14  
 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:**

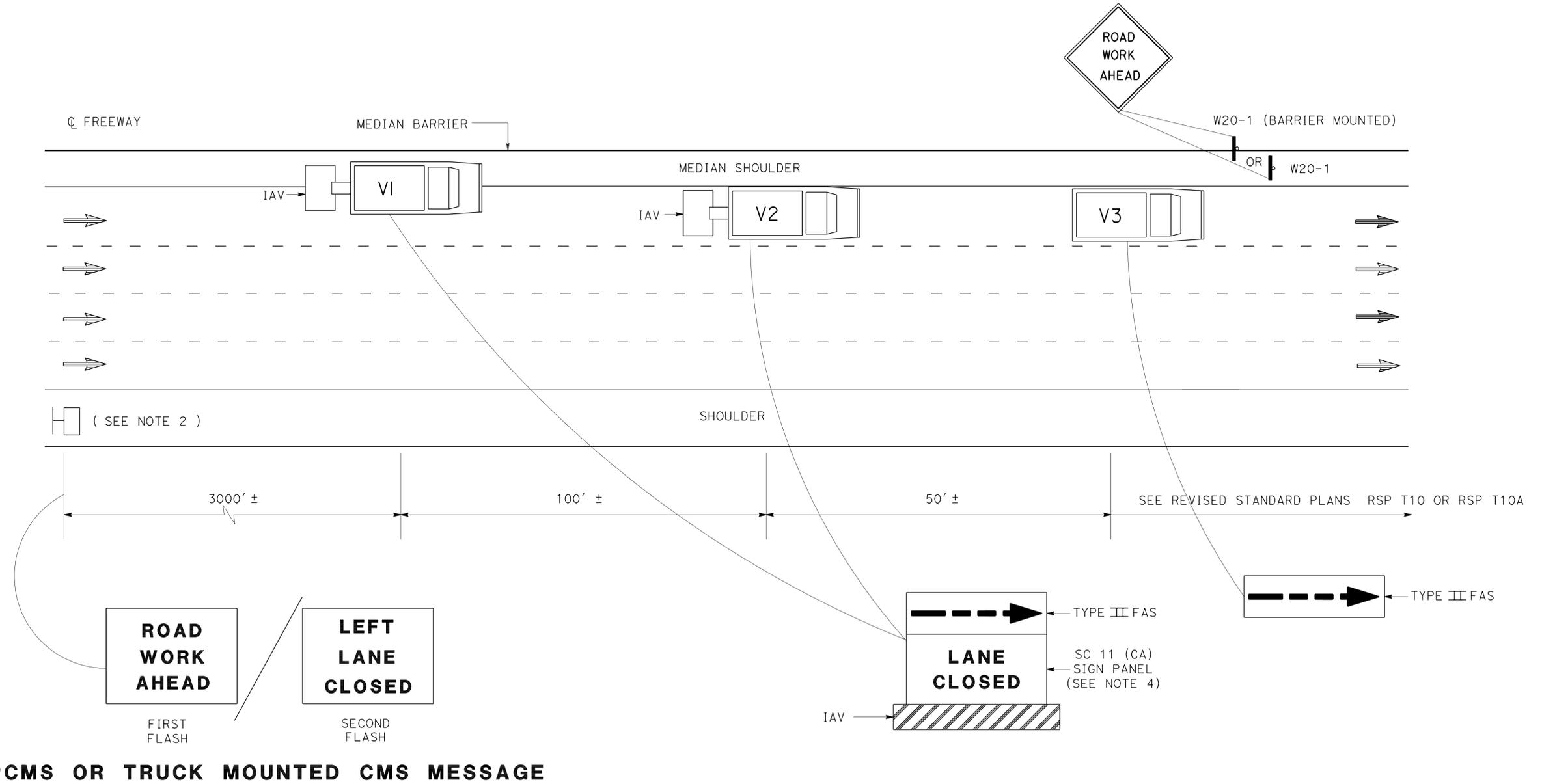
- LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PCMS SHALL BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE LANE.
- A MINIMUM SIGHT DISTANCE OF 1500' SHALL BE PROVIDED IN ADVANCE OF PCMS.
- VEHICLE-MOUNTED SIGN PANELS SHALL BE TYPE III OR IV RETROREFLECTORIZED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

**LEGEND:**

- V1, V2 SHADOW VEHICLES
- V3 WORK/APPLICATION VEHICLE
- 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-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DTM  
 ALBERT K YU  
 JOCELYN C CHIANG  
 JOHN YANG  
 3/12

**NOTES:**

- EXACT LOCATION OF PCMS WILL BE DETERMINED BY THE ENGINEER TO PROVIDE ADEQUATE VISIBILITY.
- PCMS MESSAGE DISPLAYED WILL BE APPROVED BY THE ENGINEER.
- PCMS MESSAGE SHALL BE CHANGED AT THE BEGINNING OF CURE PERIOD TO REFLECT NUMBER OF CLOSED LANES.

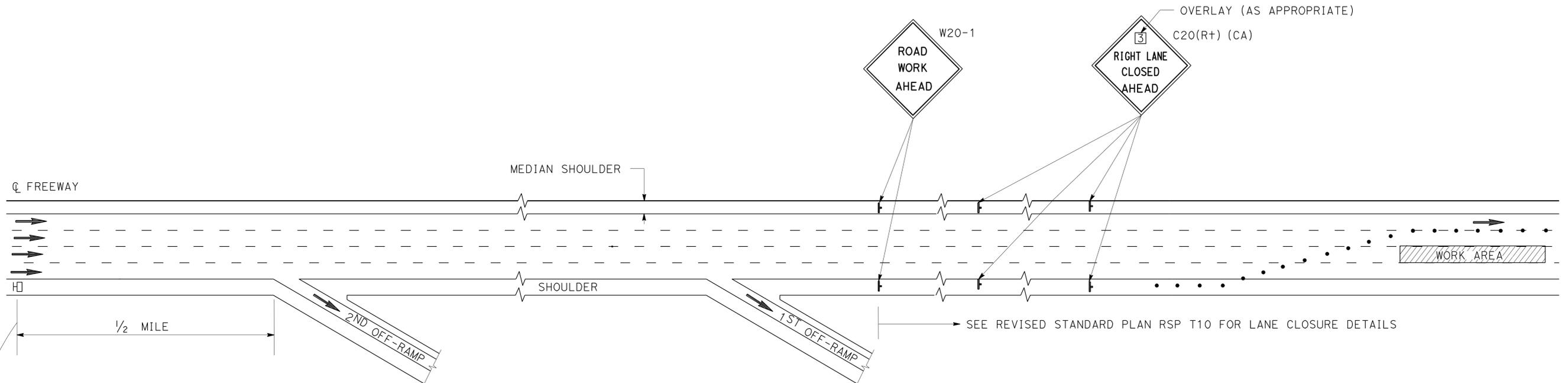
**ABBREVIATIONS:**

PCMS PORTABLE CHANGEABLE MESSAGE SIGN  
 (CA) CALIFORNIA CODE

**LEGEND:**

- CONE
- ↑ PORTABLE SIGN
- DIRECTION OF TRAVEL
- PCMS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DTMM  
 FUNCTIONAL SUPERVISOR JOHN YANG  
 CHECKED BY JOCELYN C CHIANG  
 REVISIONS: JC 3/12



FIRST FLASH	<b>X (NO OF LANES) RIGHT / LEFT</b>	← 1ST LINE (TYPICAL)
	<b>LANES</b>	← 2ND LINE (TYPICAL)
	<b>CLOSED</b>	← 3RD LINE (TYPICAL)
SECOND FLASH	<b>A ST</b>	← LIMIT OF CLOSURE (TYPICAL)
	<b>TO B DR</b>	← LIMIT OF CLOSURE (TYPICAL)

**WORDING FORMAT FOR PCMS MESSAGE**

**TRAFFIC HANDLING DETAILS  
 TRAFFIC CONTROL SYSTEM  
 FOR CONCRETE PAVEMENT AND  
 APPROACH SLAB REPLACEMENT**

NO SCALE

**THD-7**

LAST REVISION: DATE PLOTTED => 11-FEB-2014  
 02-18-14 TIME PLOTTED => 00:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	12	27

*Vincent Pang* 1-13-14  
 REGISTERED CIVIL ENGINEER DATE

2-18-14  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 VINCENT PANG  
 No. C69963  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

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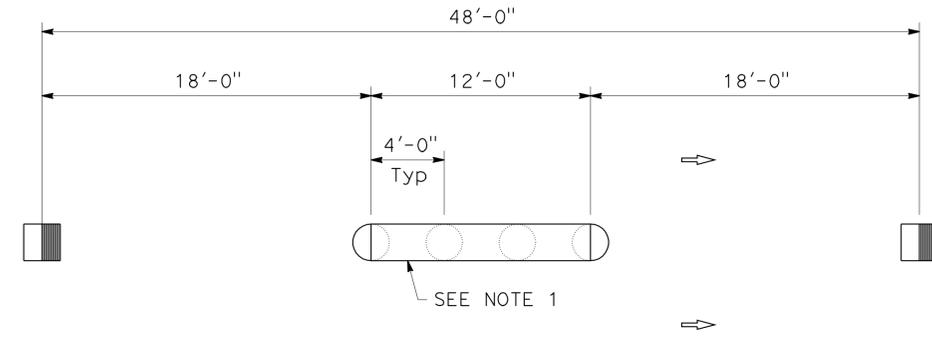
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR  
 LARRY WIERING

CALCULATED/DESIGNED BY  
 CHECKED BY

VINCENT PANG  
 LARRY WIERING

REVISED BY  
 DATE REVISED



**NOTE:**  
 1. APPLY A 4" WIDE THERMOPLASTIC STRIPE ON TOP OF TYPE A MARKERS

**DETAIL 13 (MODIFIED)**  
 NO SCALE

PAVEMENT DELINEATION QUANTITIES							
POST MILE	DESCRIPTION	THERMOPLASTIC TRAFFIC STRIPE		PAVEMENT MARKER			
		DETAIL 13 (Mod)	DETAIL 27B	DETAIL 13 (Mod)			
		4" WHITE (BROKEN 36-12)	4" SOLID WHITE	NON-REFLECTIVE	RETRO-REFLECTIVE		
				TYPE A	TYPE G		
FROM	TO	WESTBOUND ROUTE 60		LF	LF	EA	EA
R6.86	R7.77	GREENWOOD Ave OC TO PARAMOUNT Blvd OC		525		140	12
R7.77	R8.55	PARAMOUNT Blvd OC TO SAN GABRIEL Blvd OC		960	330	256	21
		TOTAL		1485	330	396	33

**PAVEMENT DELINEATION QUANTITIES**  
**PDQ-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	13	27

*Vincent Pang* 1-13-14  
 REGISTERED CIVIL ENGINEER DATE

2-18-14  
 PLANS APPROVAL DATE

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**NOTE:**

- WEAKENED PLANE JOINT TO WEAKENED PLANE JOINT CONSTITUTES ONE SLAB.

**ABBREVIATION:**

RSC - RAPID STRENGTH CONCRETE

ROADWAY QUANTITIES							
WESTBOUND - APPROXIMATE SLAB LOCATION			NUMBER OF SLABS (N)		INDIVIDUAL SLAB REPLACEMENT (RSC)	JOINT SEAL (PREFORMED COMPRESSION)	ISOLATION JOINT SEAL (PREFORMED COMPRESSION)
POST MILE		DESCRIPTION	LANE No. 4	LANE No. 5			
FROM	TO			EA	EA	CY	LF
R6.86	R7.77	GREENWOOD Ave OC TO PARAMOUNT Blvd OC	35		175	1050	840
R7.77	R8.55	PARAMOUNT Blvd OC TO SAN GABRIEL Blvd OC	42	22	320	1920	1536
SUBTOTAL			77	22	495	2970	2376
TOTAL			99		495	2970	2376

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

**SUMMARY OF QUANTITIES**

**Q-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING  
 FUNCTIONAL SUPERVISOR  
 LARRY WIERING  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 VINCENT PANG  
 LARRY WIERING  
 REVISED BY  
 DATE REVISED



	<b>M</b>	
Maint	MAINTENANCE	
Max	MAXIMUM	
MB	METAL BEAM	
MBB	METAL BEAM BARRIER	
MBGR	METAL BEAM GUARD RAILING	
Med	MEDIAN	
MGS	MIDWEST GUARDRAIL SYSTEM	
MH	MANHOLE	
Min	MINIMUM	
Misc	MISCELLANEOUS	
Misc I & S	MISCELLANEOUS IRON AND STEEL	
Mkr	MARKER	
Mod	MODIFIED, MODIFY	
Mon	MONUMENT	
MP	METAL PLATE	
MPGR	METAL PLATE GUARD RAILING	
MR	MOVEMENT RATING	
MSE	MECHANICALLY STABILIZED EMBANKMENT	
Mt	MOUNTAIN, MOUNT	
MtI	MATERIAL	
MVP	MAINTENANCE VEHICLE PULLOUT	
	<b>N</b>	
N	NORTH	
NB	NORTHBOUND	
No.	NUMBER (MUST HAVE PERIOD)	
Nos.	NUMBERS (MUST HAVE PERIOD)	
NPS	NOMINAL PIPE SIZE	
NS	NEAR SIDE	
NSP	NEW STANDARD PLAN	
NTS	NOT TO SCALE	
	<b>O</b>	
Obir	OBLITERATE	
OC	OVERCROSSING	
OD	OUTSIDE DIAMETER	
OF	OUTSIDE FACE	
OG	ORIGINAL GROUND	
OGAC	OPEN GRADED ASPHALT CONCRETE	
OGFC	OPEN GRADED FRICTION COURSE	
OH	OVERHEAD	
OHWM	ORDINARY HIGH WATER MARK	
O-O	OUT TO OUT	
Opp	OPPOSITE	
OSD	OVERSIDE DRAIN	
	<b>P</b>	
p	PAGE	
PAP	PERFORATED ALUMINUM PIPE	
PB	PULL BOX	
PC	POINT OF CURVATURE, PRECAST	
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE	
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN	
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE	
PCVC	POINT OF COMPOUND VERTICAL CURVE	
PEC	PERMIT TO ENTER AND CONSTRUCT	
Ped	PEDESTRIAN	
Ped OC	PEDESTRIAN OVERCROSSING	
Ped UC	PEDESTRIAN UNDERCROSSING	
Perm MtI	PERMEABLE MATERIAL	

	<b>P continued</b>	
PG	PROFILE GRADE	
PI	POINT OF INTERSECTION	
PJP	PARTIAL JOINT PENETRATION	
Pkwy	PARKWAY	
PL, PL	PLATE	
P/L	PROPERTY LINE	
PM	POST MILE, TIME FROM NOON TO MIDNIGHT	
PN	PAVING NOTCH	
POC	POINT OF HORIZONTAL CURVE	
POT	POINT OF TANGENT	
POVC	POINT OF VERTICAL CURVE	
PP	PIPE PILE, PLASTIC PIPE, POWER POLE	
PPL	PREFORMED PERMEABLE LINER	
PPP	PERFORATED PLASTIC PIPE	
PRC	POINT OF REVERSE CURVE	
PRF	PAVEMENT REINFORCING FABRIC	
PRVC	POINT OF REVERSE VERTICAL CURVE	
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES	
PS, P/S	PRESTRESSED	
PSP	PERFORATED STEEL PIPE	
PT	POINT OF TANGENCY	
PVC	POLYVINYL CHLORIDE	
Pvmt	PAVEMENT	
	<b>Q</b>	
Qty	QUANTITY	
	<b>R</b>	
R	RADIUS	
R & D	REMOVE AND DISPOSE	
R & S	REMOVE AND SALVAGE	
R/C	RATE OF CHANGE	
RCA	REINFORCED CONCRETE ARCH	
RCB	REINFORCED CONCRETE BOX	
RCP	REINFORCED CONCRETE PIPE	
RCPA	REINFORCED CONCRETE PIPE ARCH	
Rd	ROAD	
Reinf	REINFORCED, REINFORCEMENT, REINFORCING	
Rel	RELOCATE	
Repl	REPLACEMENT	
Ret	RETAINING	
Rev	REVISED, REVISION	
Rdwy	ROADWAY	
RHMA	RUBBERIZED HOT MIX ASPHALT	
Riv	RIVER	
RM	ROAD-MIXED	
RP	RADIUS POINT, REFERENCE POINT	
RR	RAILROAD	
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN	
Rt	RIGHT	
Rte	ROUTE	
RW	REDWOOD, RETAINING WALL	
R/W	RIGHT OF WAY	
Rwy	RAILWAY	

	<b>S</b>	
S	SOUTH, SUPPLEMENT	
SAE	STRUCTURE APPROACH EMBANKMENT	
Salv	SALVAGE	
SAPP	STRUCTURAL ALUMINUM PLATE PIPE	
SB	SOUTHBOUND	
SC	SAND CUSHION	
SCSP	SLOTTED CORRUGATED STEEL PIPE	
SD	STORM DRAIN	
Sec	SECOND, SECTION	
Sep	SEPARATION	
SG	SUBGRADE	
Shld	SHOULDER	
Sht	SHEET	
Sim	SIMILAR	
SL	STATION LINE	
SM	SELECTED MATERIAL	
Spec	SPECIAL, SPECIFICATIONS	
SPP	SLOTTED PLASTIC PIPE	
SS	SLOPE STAKE	
SSBM	STRAP AND SADDLE BRACKET METHOD	
SSD	STRUCTURAL SECTION DRAIN	
SSPA	STRUCTURAL STEEL PLATE ARCH	
SSPP	STRUCTURAL STEEL PLATE PIPE	
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH	
SSRP	STEEL SPIRAL RIB PIPE	
St	STREET	
Sta	STATION	
STBB	SINGLE THRIE BEAM BARRIER	
Std	STANDARD	
Str	STRUCTURE	
Surf	SURFACING	
SW	SIDEWALK, SOUND WALL	
Swr	SEWER	
Sym	SYMMETRICAL	
S4S	SURFACE 4 SIDES	
	<b>T</b>	
T	SEMI-TANGENT	
Tan	TANGENT	
TBB	THRIE BEAM BARRIER	
Tbr	TIMBER	
TC	TOP OF CURB	
TCB	TRAFFIC CONTROL BOX	
TCE	TEMPORARY CONSTRUCTION EASEMENT	
TeI	TELEPHONE	
Temp	TEMPORARY	
TG	TOP OF GRADE	
Tot	TOTAL	
TP	TELEPHONE POLE	
TPB	TREATED PERMEABLE BASE	
TPM	TREATED PERMEABLE MATERIAL	
Trans	TRANSITION	

	<b>T continued</b>	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	<b>U</b>
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	<b>V</b>
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	<b>W</b>
W	WEST, WIDTH	
WB	WESTBOUND	
WH	WEEP HOLE	
WM	WIRE MESH	
WS	WATER SURFACE	
WSP	WELDED STEEL PIPE	
Wt	WEIGHT	
WV	WATER VALVE	
WW	WINGWALL	
WWLOL	WINGWALL LAYOUT LINE	<b>X</b>
X Sec	CROSS SECTION	
Xing	CROSSING	<b>Y</b>
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	14	27

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Grace M. Tsushima  
 No. C49814  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 2-18-14

**UNIT OF MEASUREMENT SYMBOLS:**

Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

**TABLE A**

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

**TABLE B**

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

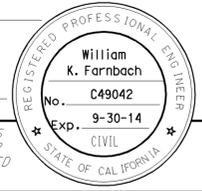
NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B  
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

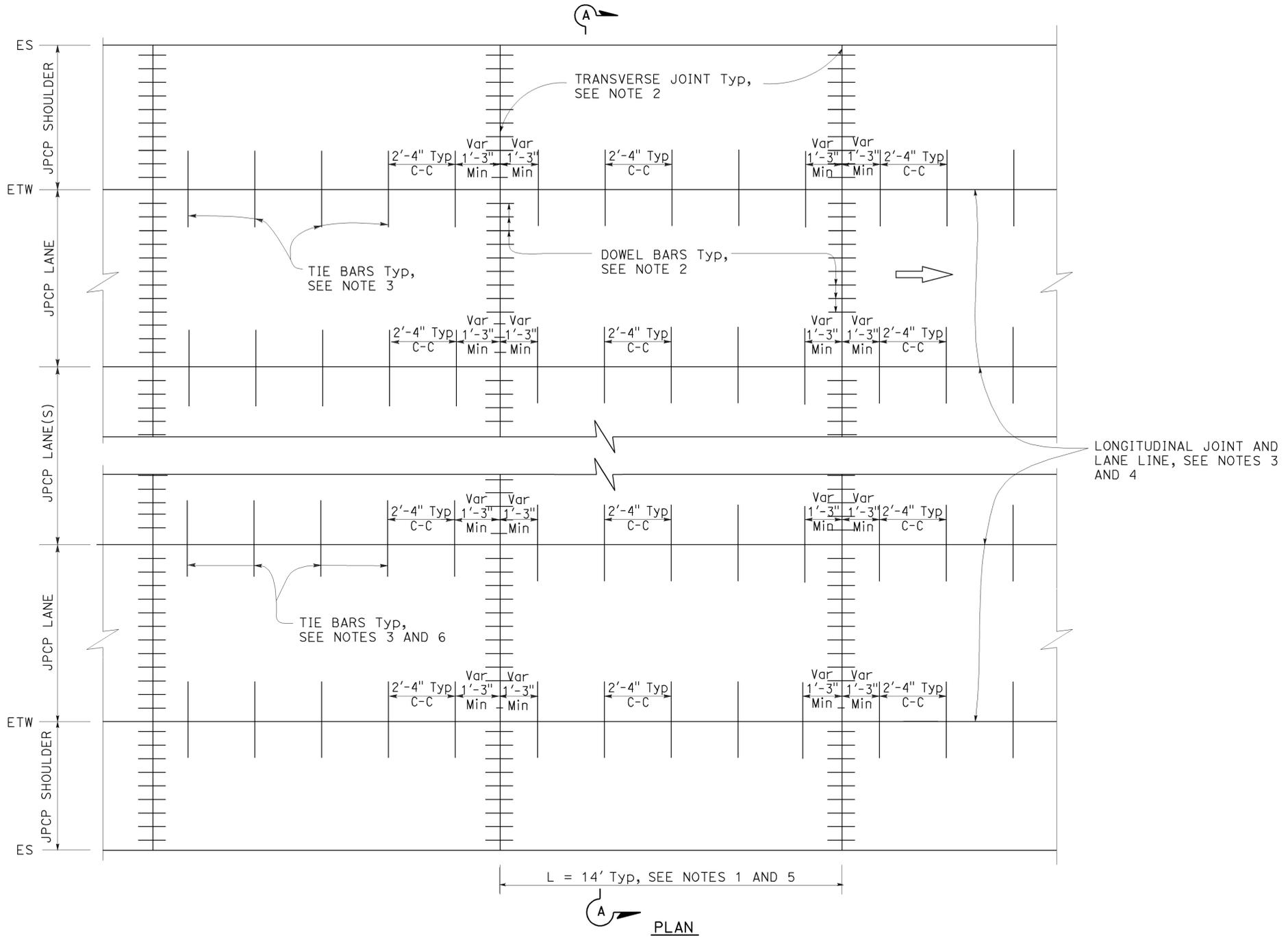
2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	15	27

*William K. Farnbach*  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 PLANS APPROVAL DATE  
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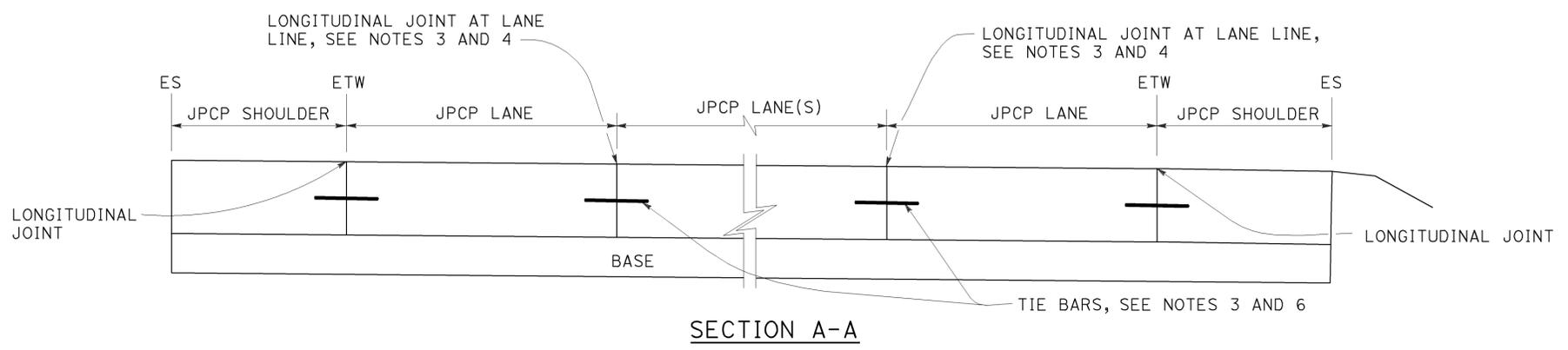


TO ACCOMPANY PLANS DATED 2-18-14



**NOTES:**

1. Transverse joint spacing may be adjusted to no less than 10' and no more than 14' to conform to bridges, change in pavement type, and hardened concrete pavement.
2. For transverse joint and dowel bar details not shown, see Revised Standard Plan RSP P10.
3. For longitudinal joint and tie bar details not shown, see Revised Standard Plan RSP P15.
4. For additional longitudinal joint layout details, see Revised Standard Plan RSP P18.
5. For joint layout at intersections, see Project Plans.
6. For dowel bars at longitudinal joint. see Revised Standard Plan RSP P18.

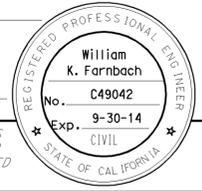


STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINTED PLAIN  
 CONCRETE PAVEMENT  
 NEW CONSTRUCTION**  
 NO SCALE

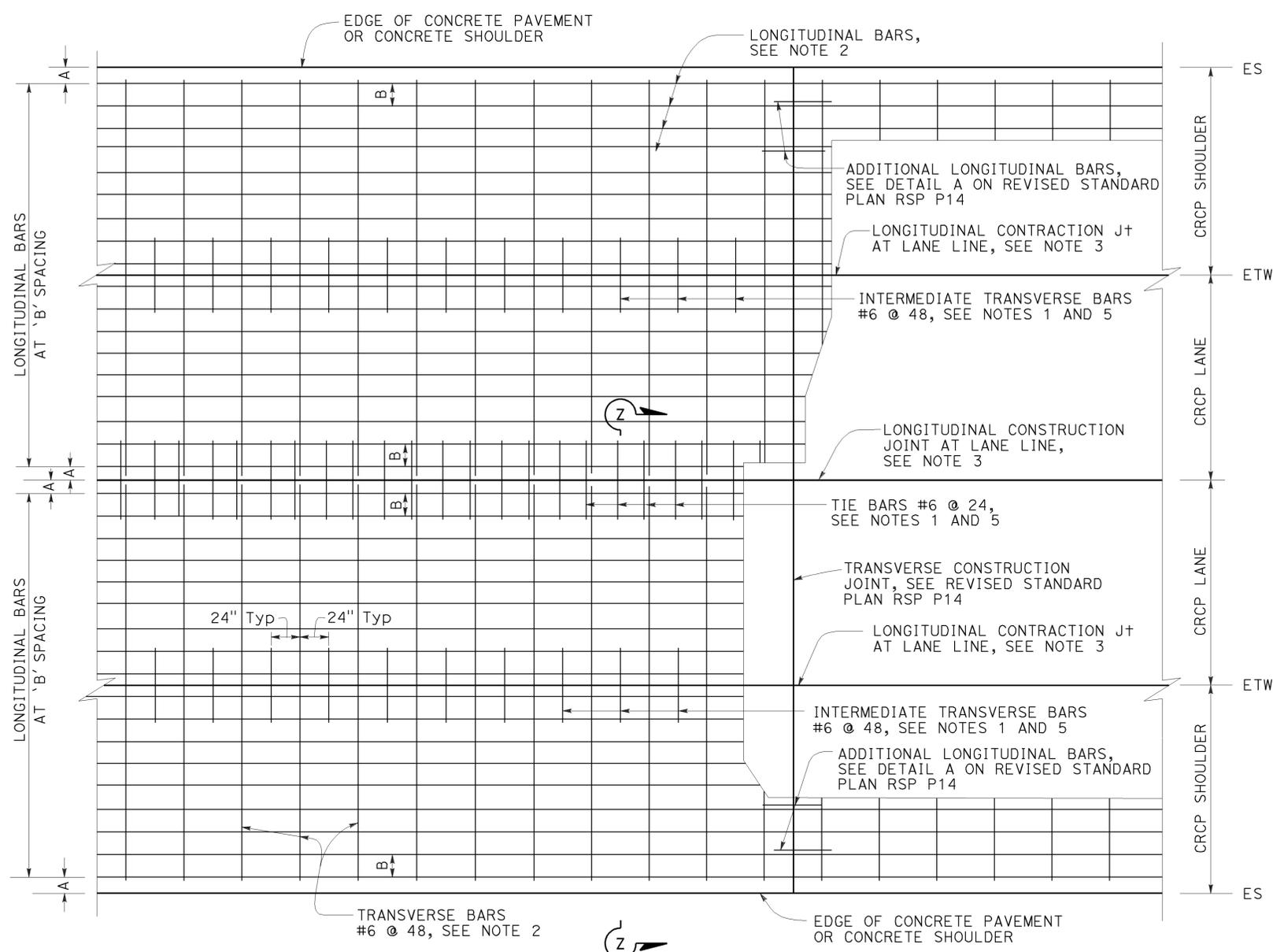
RSP P1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P1  
 DATED MAY 20, 2011 - PAGE 125 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P1**

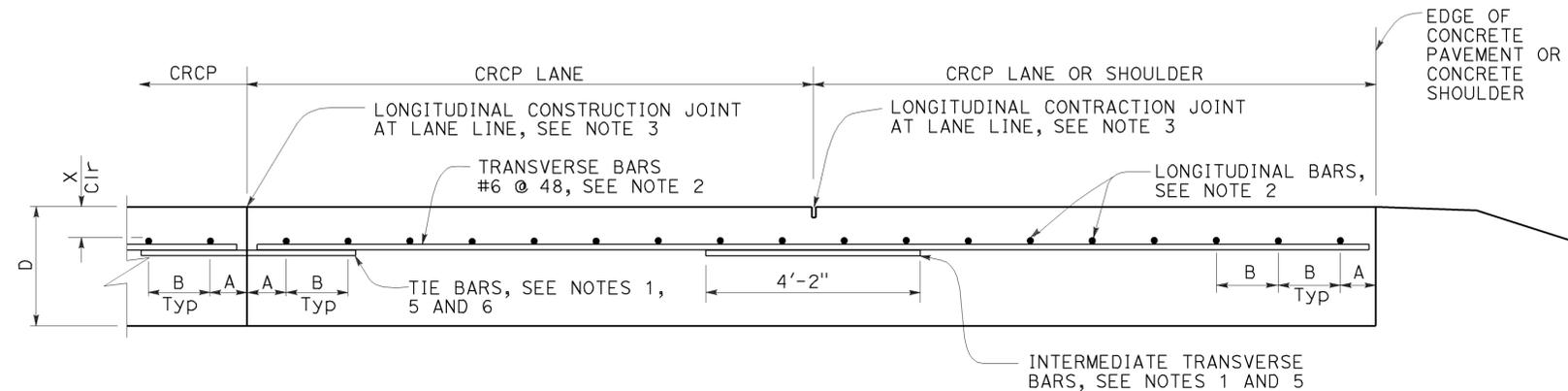
2010 REVISED STANDARD PLAN RSP P1



TO ACCOMPANY PLANS DATED 2-18-14



**PLAN**  
See Note 4



**SECTION Z-Z**

**TABLE No. 1 LONGITUDINAL BAR REINFORCEMENT**

SLAB THICKNESS AND BAR SIZE		FIRST SPACING AT EDGE OR JOINT	REGULAR BARS	ADDITIONAL BARS AT TRANSVERSE CONSTRUCTION JOINT	Clr
D	BAR SIZE	SPACING A	SPACING B	SPACING 2 x B	x
.75'	#6	3" TO 4"	8.0"	16"	4"
.80'	#6	3" TO 4"	7.5"	15"	4"
.85'	#6	3" TO 4"	7.0"	14"	4"
.90'	#6	3" TO 4"	6.5"	13"	4"
.95'	#6	3" TO 4"	6.25"	12.5"	4"
1.00'	#6	3" TO 4"	6.0"	12"	5"
1.05'	#6	3" TO 4"	5.75"	11.5"	5"
1.10'	#6	3" TO 4"	5.5"	11"	5.5"

**NOTES:**

1. Place transverse tie bars and intermediate transverse bars parallel to and in the same plane as transverse bars.
2. The length of lap splices for bar reinforcement must be at least 25".
3. For longitudinal contraction and construction joint details, see Revised Standard Plan RSP P16.
4. For curved lane layout see Revised Standard Plan RSP P16.
5. For tie bar and intermediate transverse bar details see Revised Standard Plan RSP P16.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CONTINUOUSLY REINFORCED  
 CONCRETE PAVEMENT**  
 NO SCALE

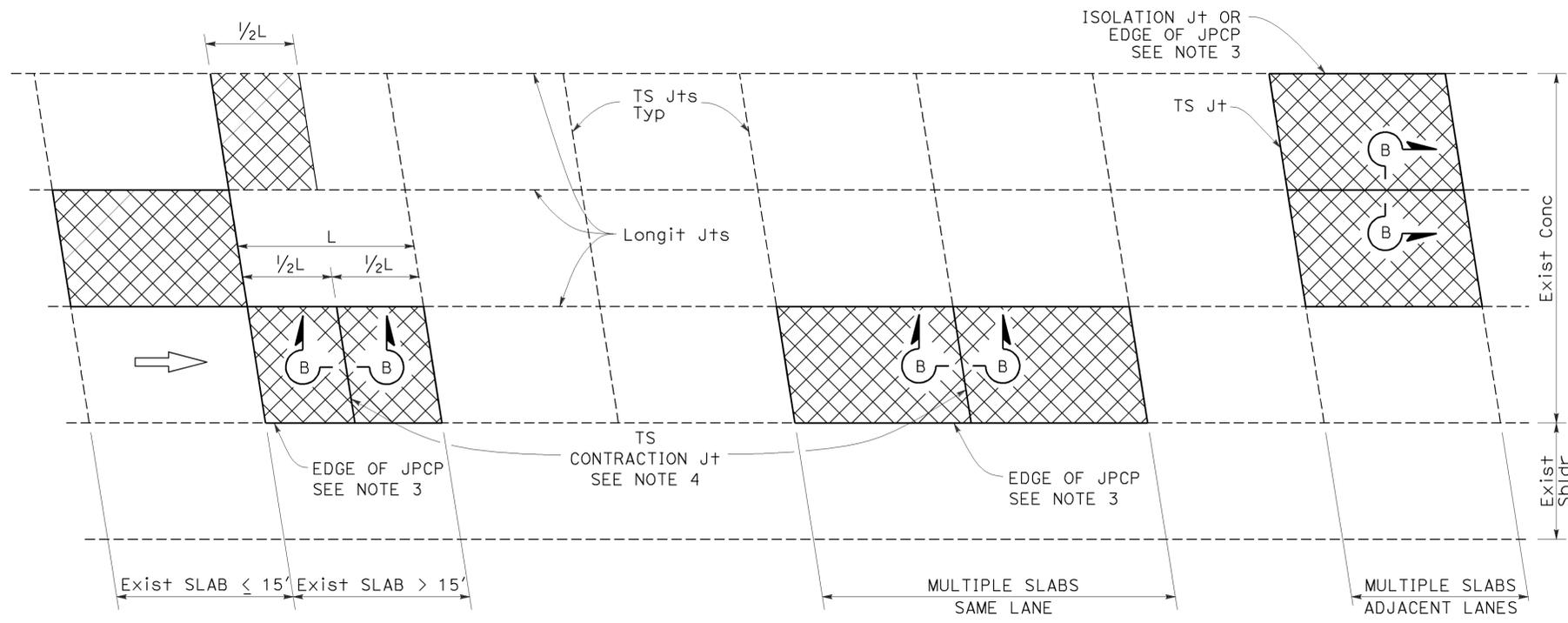
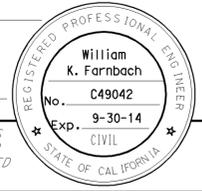
RSP P4 DATED JULY 19, 2013 SUPERSEDES RSP P4 DATED APRIL 20, 2012 AND STANDARD PLAN P4 DATED MAY 20, 2011 - PAGE 128 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P4**

2010 REVISED STANDARD PLAN RSP P4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	17	27

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 PLANS APPROVAL DATE  
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**PLAN**

**LEGEND:**

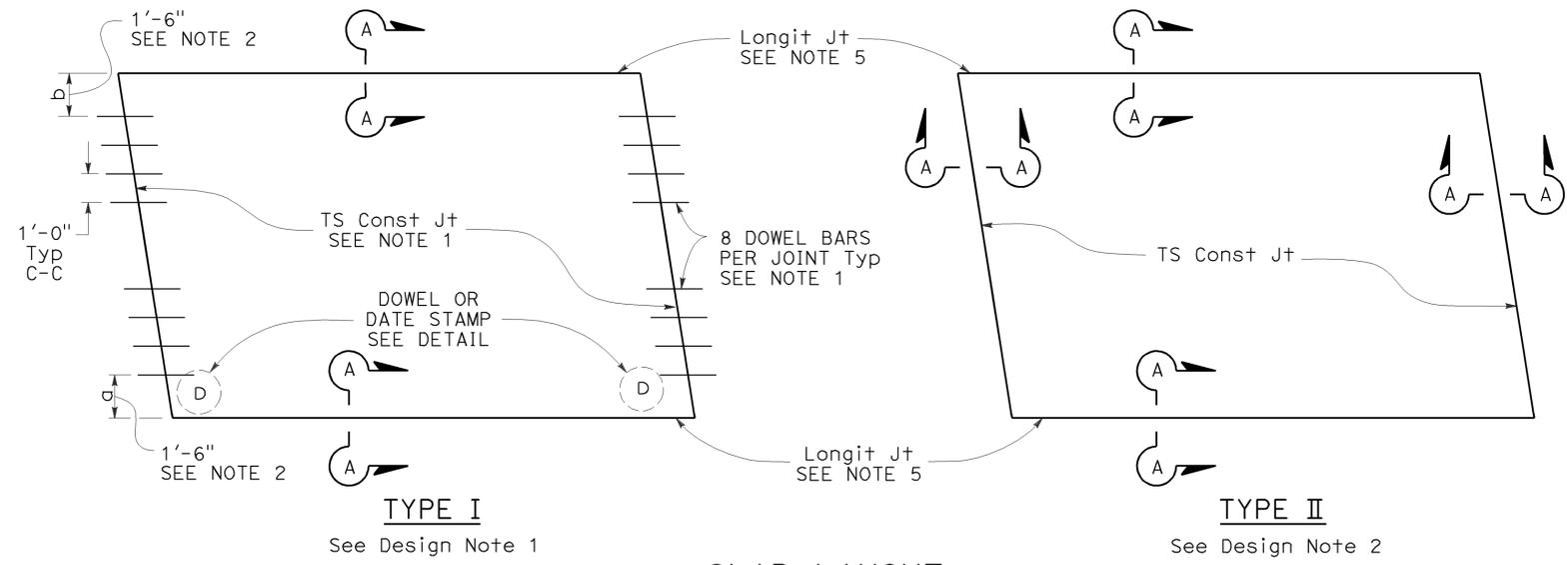
- RSC RAPID STRENGTH CONCRETE
- INDIVIDUAL SLAB REPLACEMENT WITH RSC

**NOTES:**

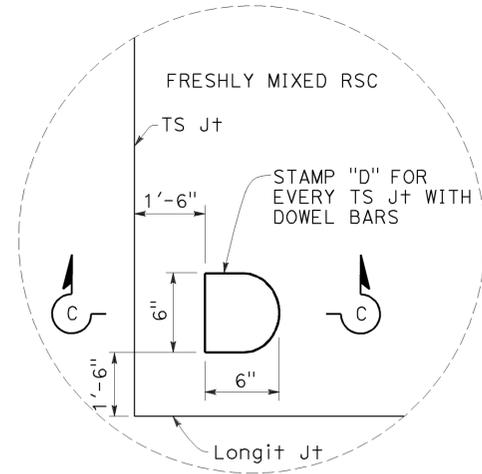
- For details not shown, see Revised Standard Plan RSP P10.
- Where the existing outside shoulder is asphalt concrete pavement, "a" = 1'-0" and "b" = 2'-0".
- Use side forms where edge of RSC pavement is adjacent to asphalt concrete.
- Transverse contraction joint to match skew of existing joint. Omit dowel bars.
- Do not place tie bars at longitudinal joints.

**DESIGN NOTES:**

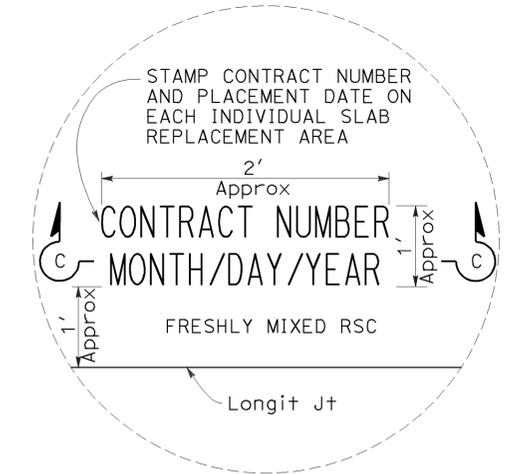
- For concrete slab repair with at least 5 years design life.
- For short term repairs < 5 yrs design life or for slab replacements with cracking and seating.



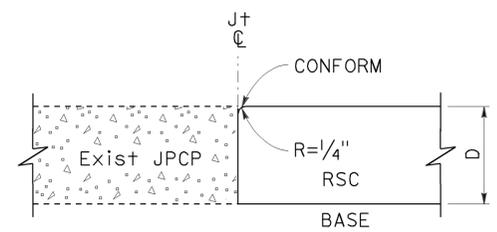
**SLAB LAYOUT**



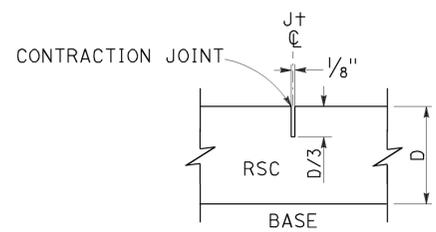
**DOWEL STAMP DETAIL**



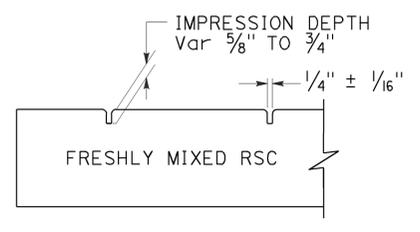
**DATE STAMP DETAIL**



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

**INDIVIDUAL SLAB REPLACEMENT WITH RAPID STRENGTH CONCRETE**

NO SCALE

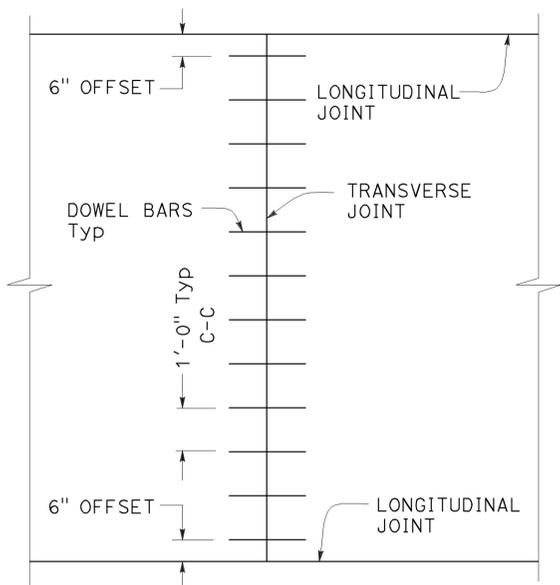
RSP P8 DATED JULY 19, 2013 SUPERSEDES RSP P8 DATED APRIL 20, 2012 AND STANDARD PLAN P8 DATED MAY 20, 2011 - PAGE 130 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P8**

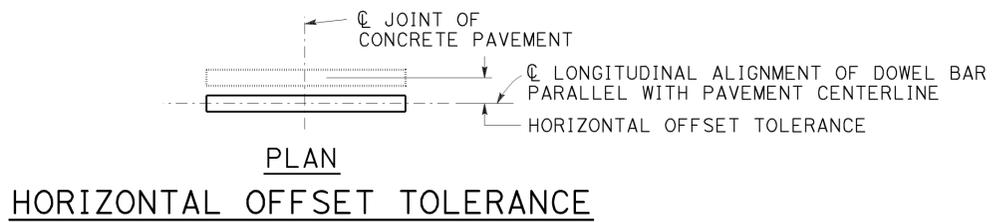
2010 REVISED STANDARD PLAN RSP P8

TO ACCOMPANY PLANS DATED 2-18-14

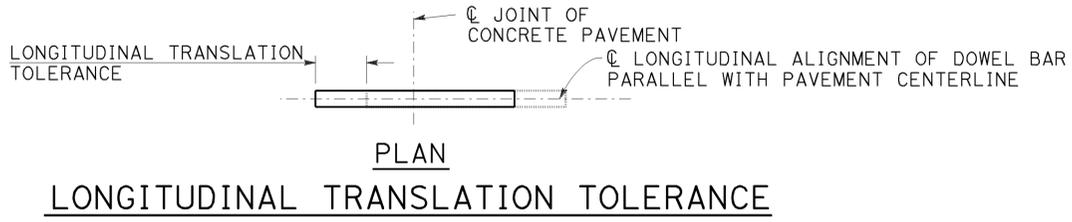
- NOTES:**
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
  - Where fresh concrete pavement is placed against new concrete or existing concrete pavement, rounding the corner of the existing concrete pavement is not required.
  - May also use 3/4" Dia dowel bars 2'-4" ± 1/4" in length. Center the length of dowel bars at the centerline of longitudinal joint.



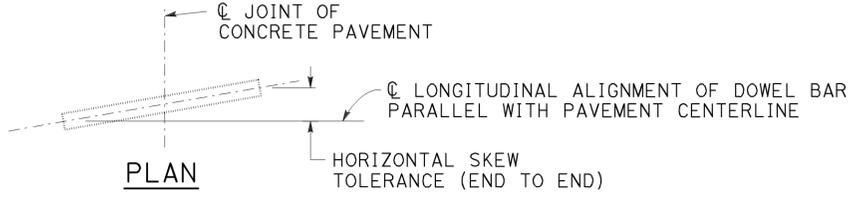
**TRANSVERSE JOINT  
DOWEL BAR LAYOUT**



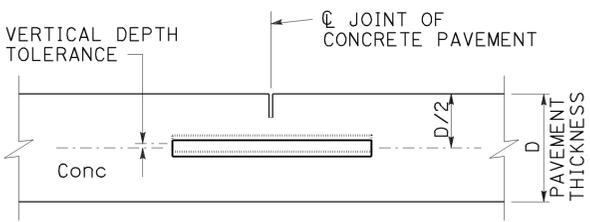
**PLAN  
HORIZONTAL OFFSET TOLERANCE**



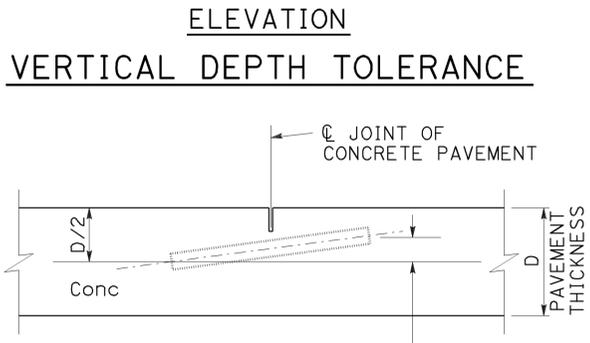
**PLAN  
LONGITUDINAL TRANSLATION TOLERANCE**



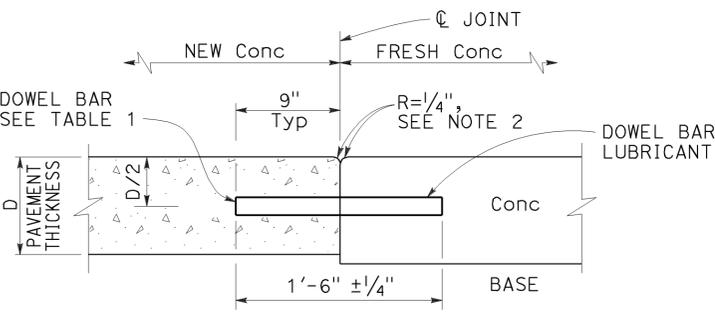
**PLAN  
HORIZONTAL SKEW TOLERANCE**



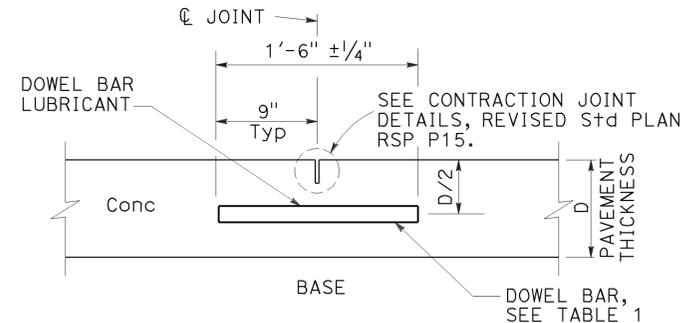
**ELEVATION  
VERTICAL DEPTH TOLERANCE**



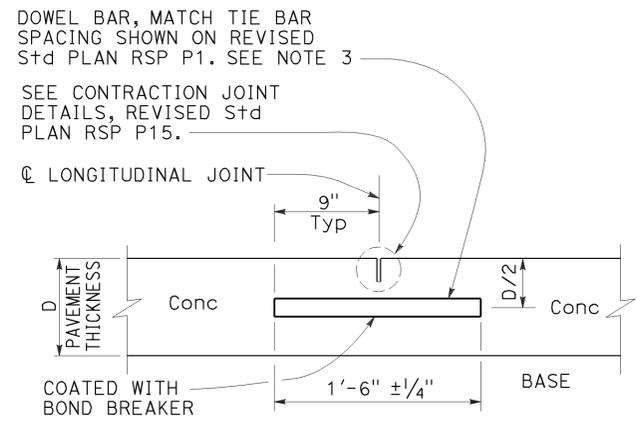
**ELEVATION  
VERTICAL SKEW TOLERANCE**



**TRANSVERSE  
CONSTRUCTION JOINT DETAIL**



**TRANSVERSE CONTRACTION JOINT**



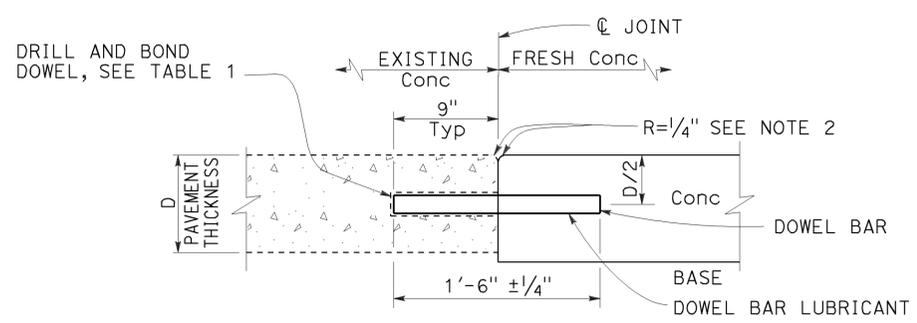
**LONGITUDINAL CONTRACTION  
JOINT WITH DOWEL BARS**  
See Revised Std Plan RSP P18

**TABLE 1**

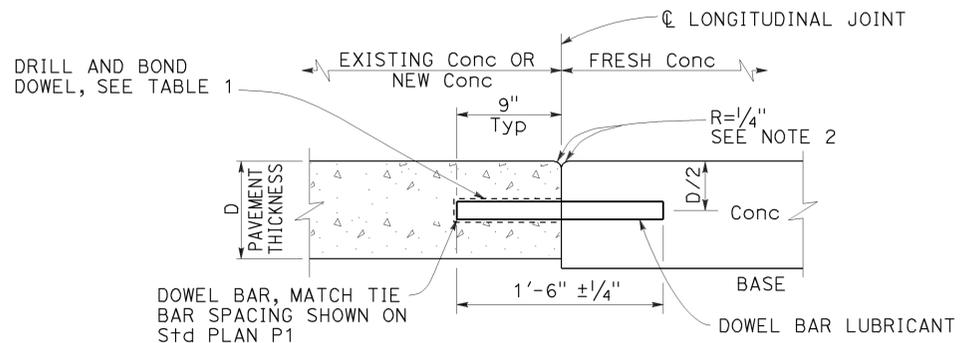
DOWEL BAR DIAMETER TABLE

PAVEMENT THICKNESS	0.65'	> 0.65' - 0.85'	> 0.85'
MINIMUM DOWEL * BAR DIAMETER	1"	1 1/4"	1 1/2"

\* The drilled hole diameter must be 1/8" to 3/16" larger than the bar diameter.



**TRANSVERSE CONSTRUCTION JOINT  
FOR EXISTING CONCRETE PAVEMENT**



**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 JULY 19, 2013 SUPERSEDES RSP P10 DATED APRIL 20, 2012 AND STANDARD PLAN P10 DATED MAY 20, 2011 - PAGE 131 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP P10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	19	27

*William K. Farnbach*  
 REGISTERED CIVIL ENGINEER

July 19, 2013  
 PLANS APPROVAL DATE

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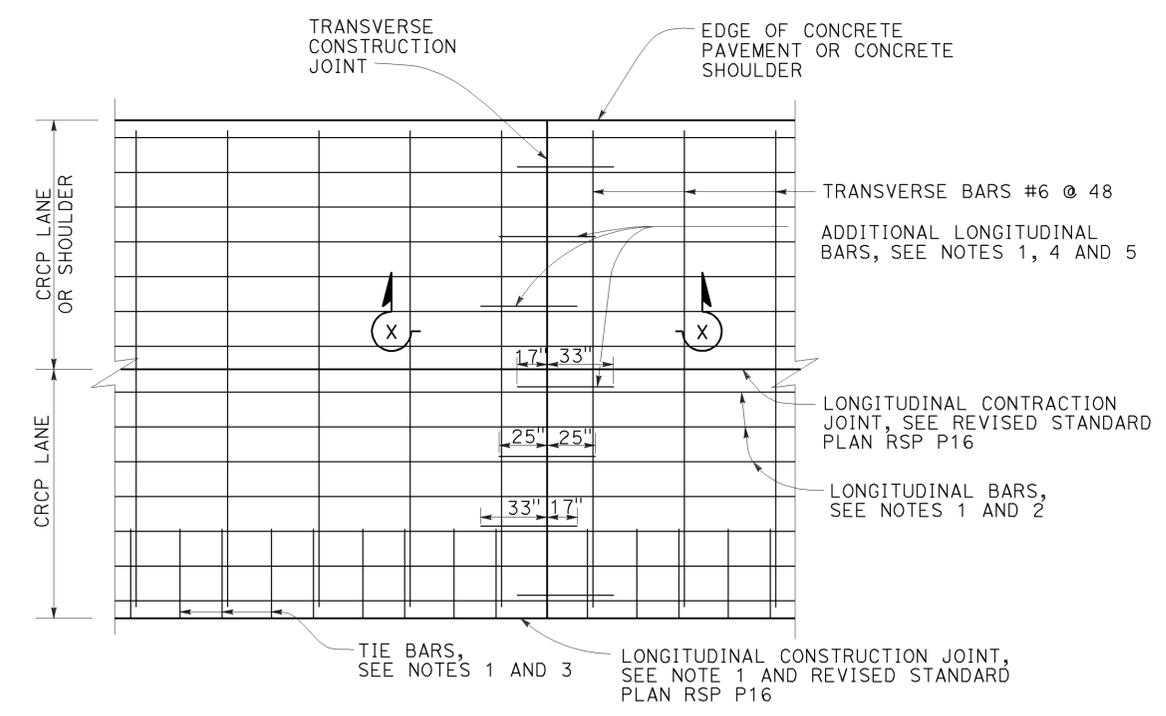
TO ACCOMPANY PLANS DATED 2-18-14

**NOTES:**

1. For longitudinal bar size, spacing and clearances, see Table 1 on Revised Standard Plan RSP P4.
2. The length of lap splices for bar reinforcement must be at least 25".
3. For tie bars in longitudinal construction joint, see Revised Standard Plan RSP P16.
4. Place additional longitudinal bars parallel to and in the same plane as the longitudinal bars.
5. Place additional longitudinal bars symmetrically about longitudinal construction joint.

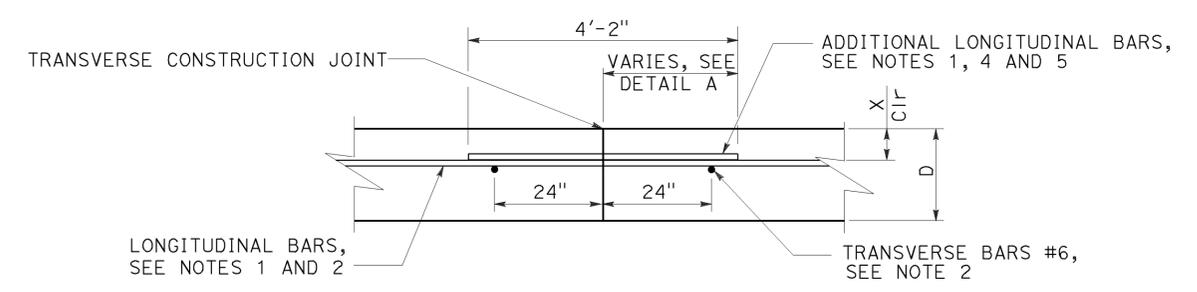
**ABBREVIATION**

D = Thickness of CRCP



**DETAIL A**

Additional longitudinal bars at transverse construction joint



**SECTION X-X**  
**TRANSVERSE CONSTRUCTION JOINT**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONTINUOUSLY REINFORCED  
CONCRETE PAVEMENT  
TRANSVERSE CONSTRUCTION JOINT**

NO SCALE

RSP P14 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

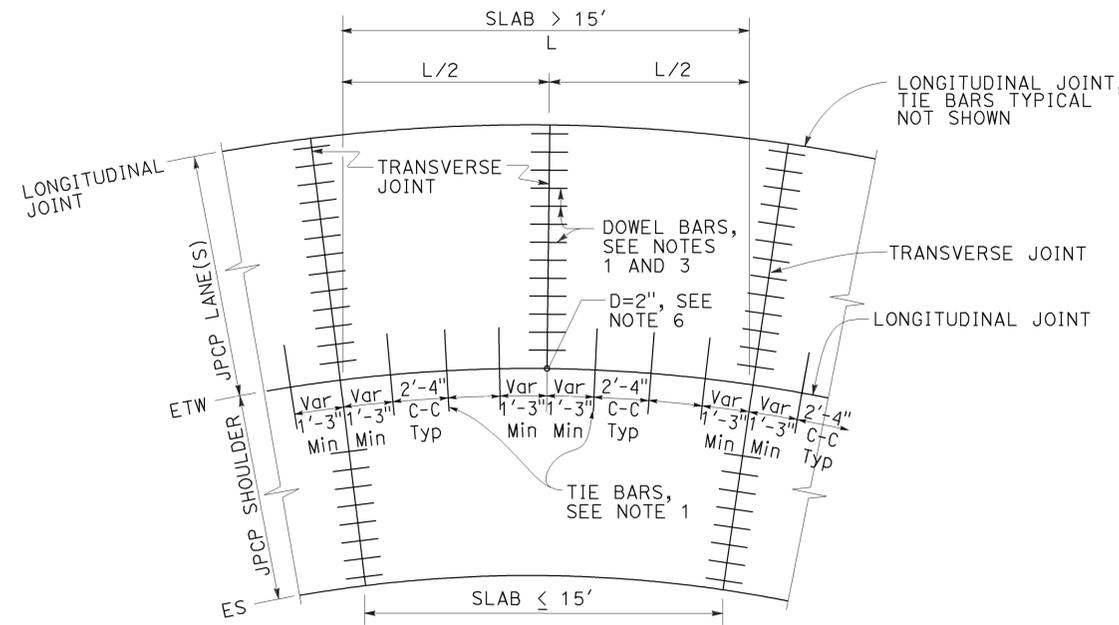
**REVISED STANDARD PLAN RSP P14**

2010 REVISED STANDARD PLAN RSP P14

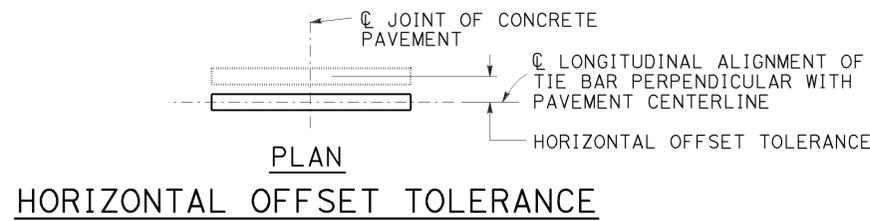
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	20	27

William K. Farnbach  
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 July 19, 2013  
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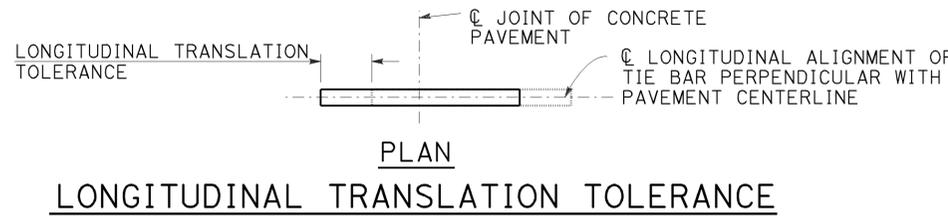
REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA



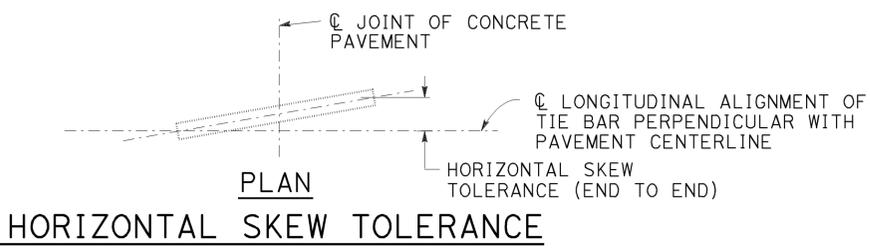
**TIE BAR LAYOUT IN CURVED LANES**



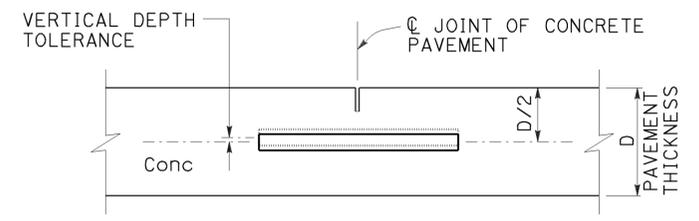
**HORIZONTAL OFFSET TOLERANCE**



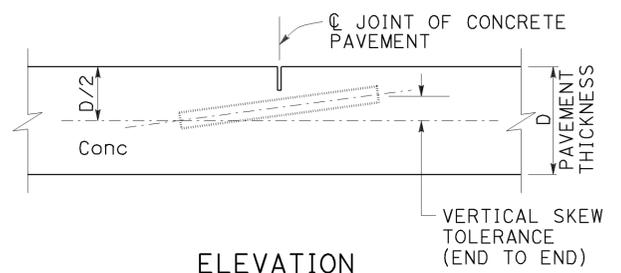
**LONGITUDINAL TRANSLATION TOLERANCE**



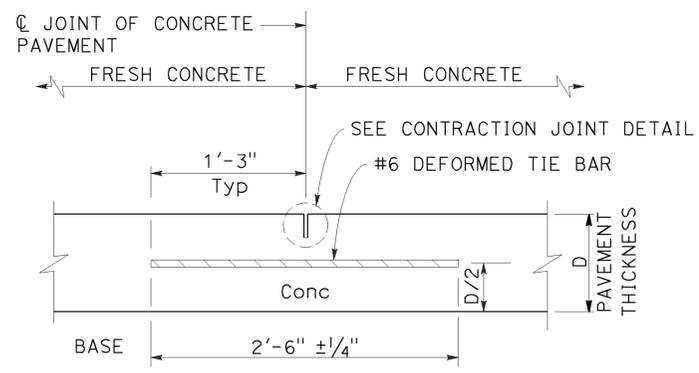
**HORIZONTAL SKEW TOLERANCE**



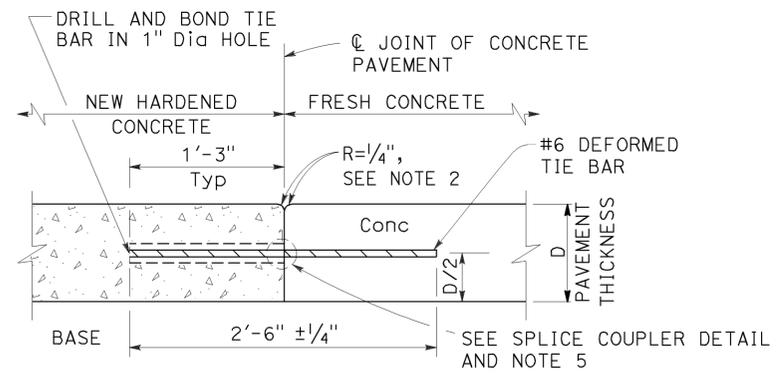
**VERTICAL DEPTH TOLERANCE**



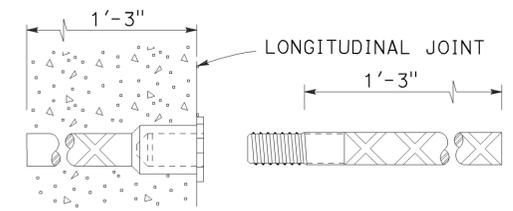
**VERTICAL SKEW TOLERANCE**



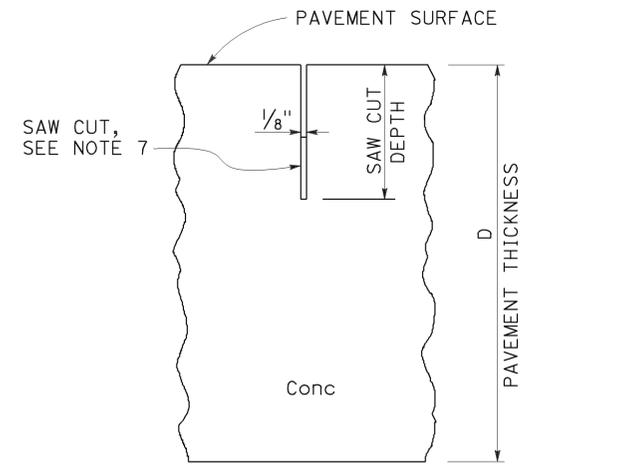
**LONGITUDINAL CONTRACTION JOINT**



**LONGITUDINAL CONSTRUCTION JOINT**



**ALTERNATIVE SPLICE COUPLER**



**CONTRACTION JOINT DETAIL**

- NOTES:**
1. See Revised Standard Plan RSP P1 for typical dowel bar and tie bar placement and locations.
  2. Where new pavement is placed against existing concrete pavement, rounding the corner is not required.
  3. For dowel bar sizes, See Revised Standard Plan RSP P10.
  4. Tie bar details apply to inside widenings.
  5. Use either drill and bond or splice couplers.
  6. Full depth drilled hole. Fill hole with filler material.
  7. The bottom of the saw cut must be at least 0.5" clear of any dowel bar, tie bar and bar reinforcement.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-TIE BAR DETAILS**  
 NO SCALE

RSP P15 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P15**

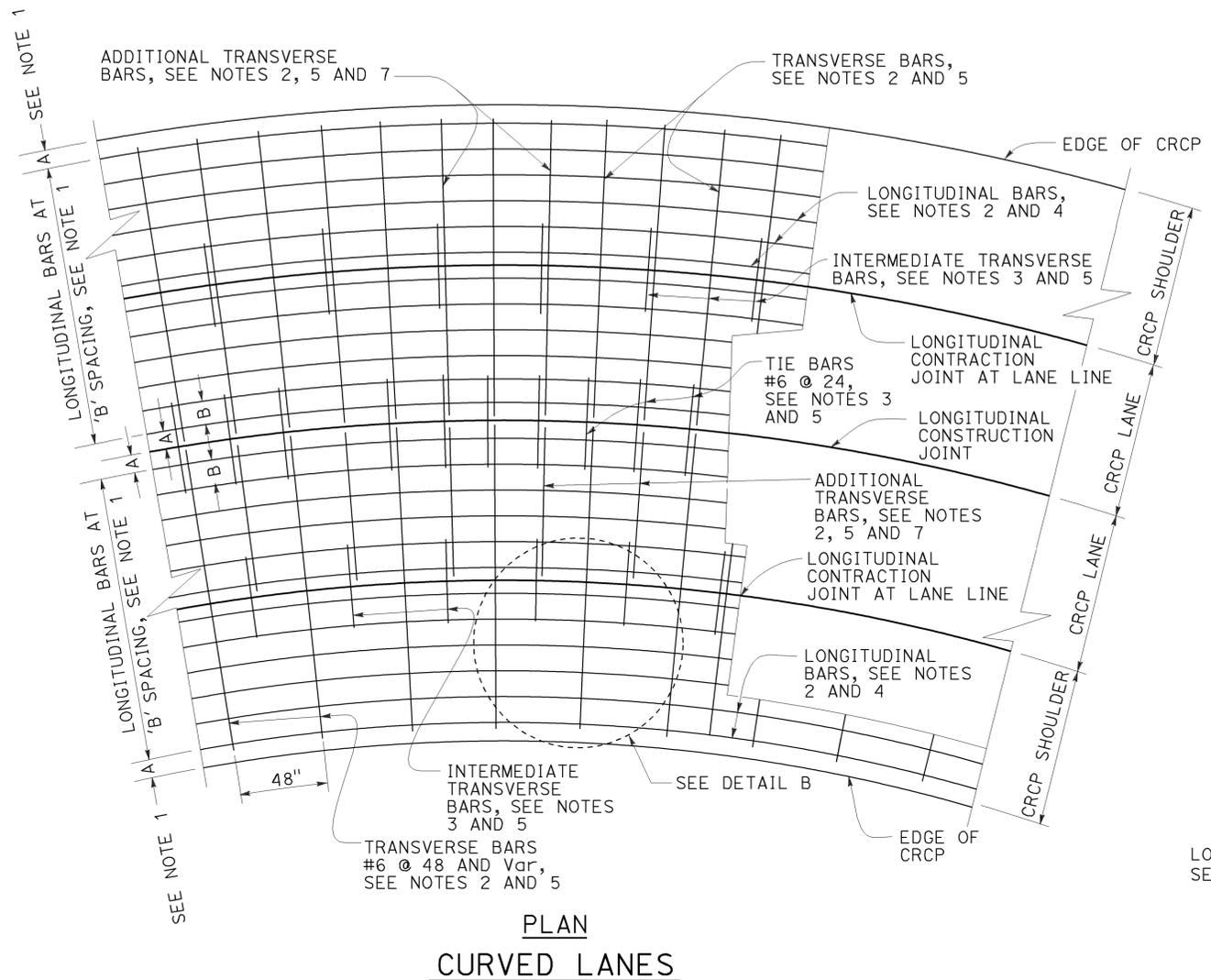
2010 REVISED STANDARD PLAN RSP P15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	21	27

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 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.

REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

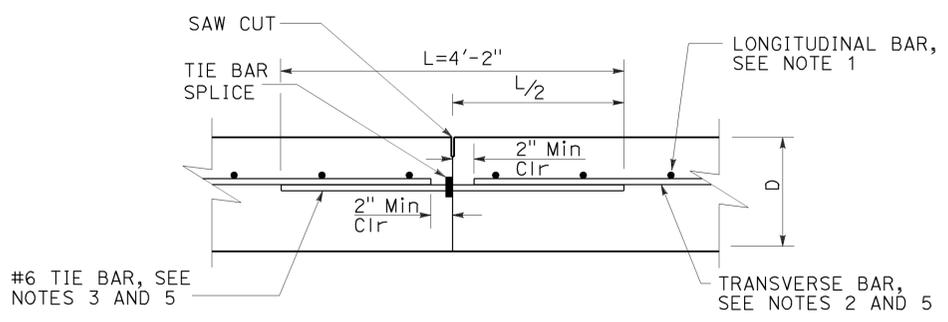
TO ACCOMPANY PLANS DATED 2-18-14



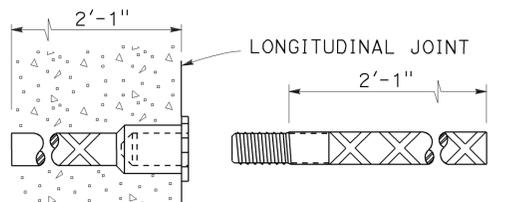
**PLAN  
CURVED LANES**

- NOTES:**
1. For longitudinal bar spacing and clearances, see Table 1 on Revised Standard Plan RSP P4.
  2. The length of lap splices for bar reinforcement must be at least 25".
  3. Place tie bars and intermediate transverse bars parallel to and in the same plane as the transverse bars.
  4. Place longitudinal bars parallel to roadway curvature.
  5. Place transverse bars, additional transverse bars, tie bars and intermediate transverse bars perpendicular to the pavement curvature.
  6. For additional longitudinal bars detail, see Detail A on Revised Standard Plans RSP P14.
  7. Place additional transverse bars where required, see Detail B.
  8. The bottom of the saw cut must be at least 0.5" clear of any dowel bar, tie bar and bar reinforcement.

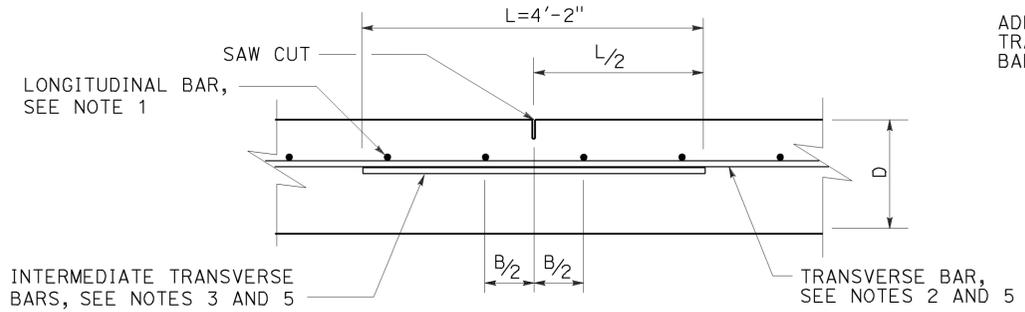
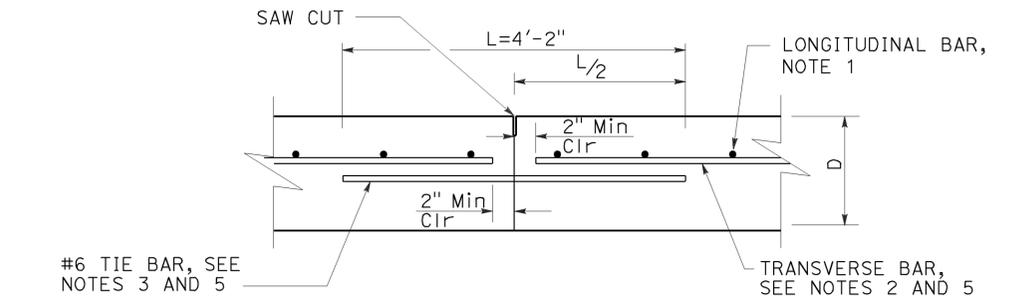
**ABBREVIATION:**  
D = Thickness of CRCP



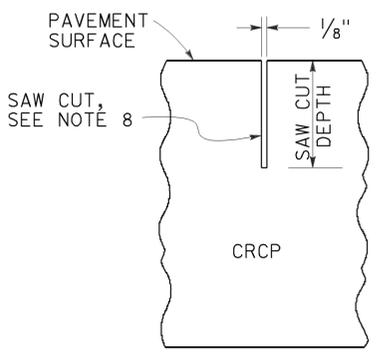
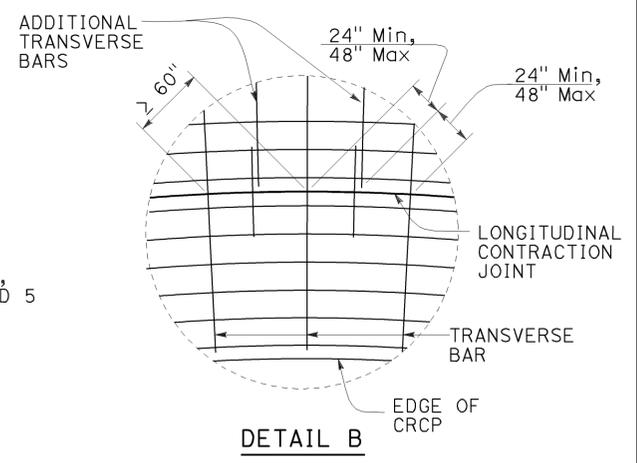
**ALTERNATE  
LONGITUDINAL CONSTRUCTION JOINT**



**TIE BAR SPLICE COUPLER DETAIL**



**LONGITUDINAL CONTRACTION JOINT**



**CONTRACTION JOINT SAW CUT DETAIL**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONTINUOUSLY REINFORCED  
CONCRETE PAVEMENT  
TIE BARS AND JOINT DETAILS**  
NO SCALE

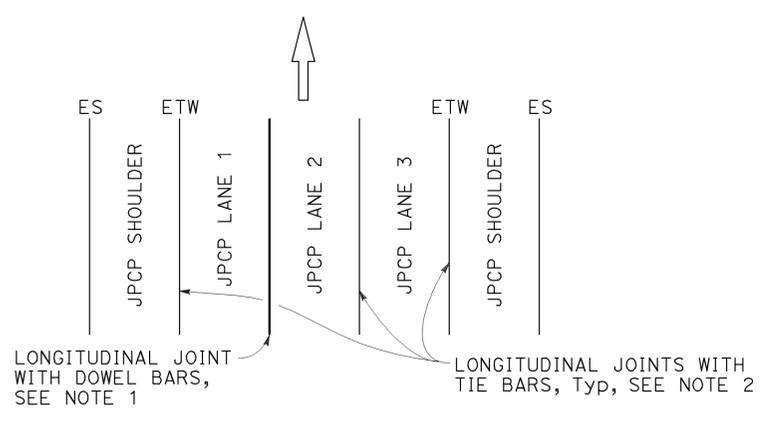
2010 REVISED STANDARD PLAN RSP P16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	22	27

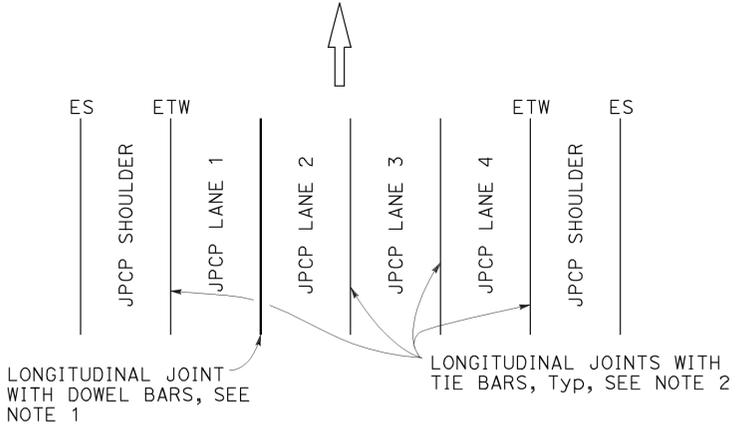
William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-14  
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 STATE OF CALIFORNIA

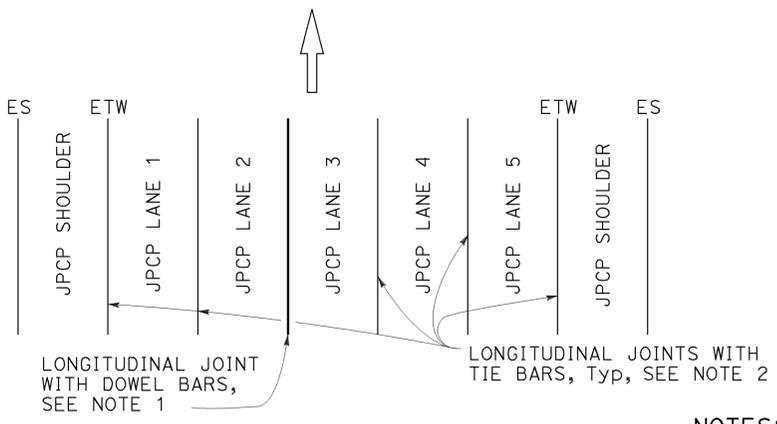
TO ACCOMPANY PLANS DATED 2-18-14



**3 LANES WITH CONCRETE SHOULDERS**  
**PLAN**



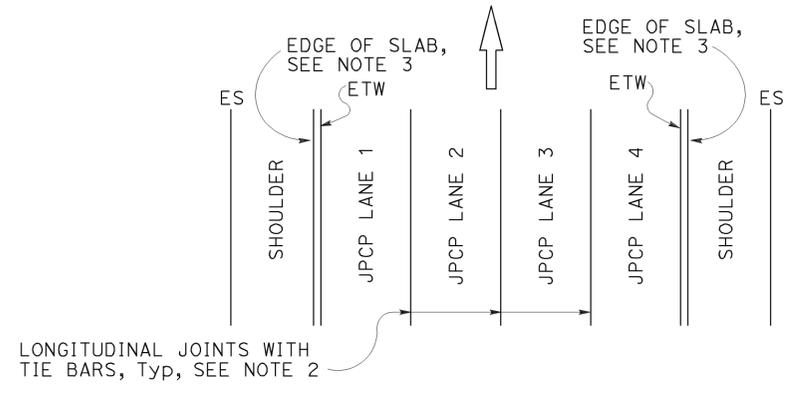
**4 LANES WITH CONCRETE SHOULDERS**  
**PLAN**



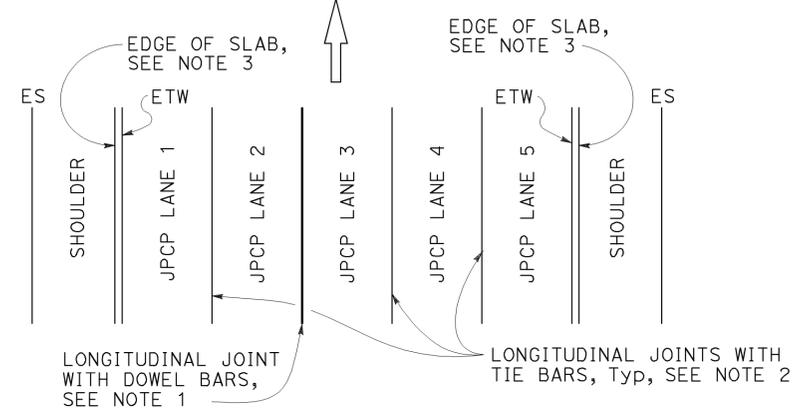
**5 LANES WITH CONCRETE SHOULDERS**  
**PLAN**

**NOTES:**

- See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
- See Revised Standard Plan RSP P15 for longitudinal joint with tie bars.
- S = Reservoir depth.  
 $S = \frac{7}{8} \pm \frac{1}{16}$ " for asphalt rubber seals  
 $S = \frac{9}{16} \pm \frac{1}{16}$ " for silicone seals  
 Preformed compression seals must be  $\frac{13}{16}$ " wide and  $S = 1\frac{1}{16} \pm \frac{1}{16}$ "

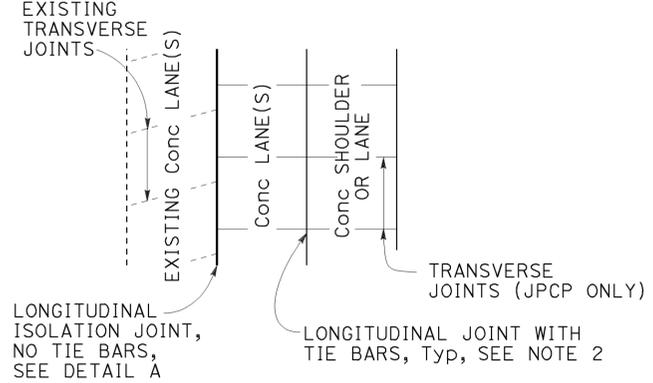


**4 LANES OR LESS WITH AC SHOULDERS**  
**PLAN**



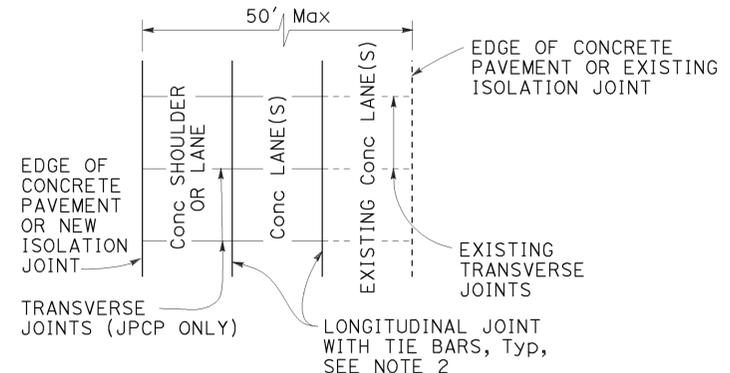
**5 LANES WITH AC SHOULDERS**  
**PLAN**

**NEW CONSTRUCTION**  
Location of Longitudinal Joints For JPCP



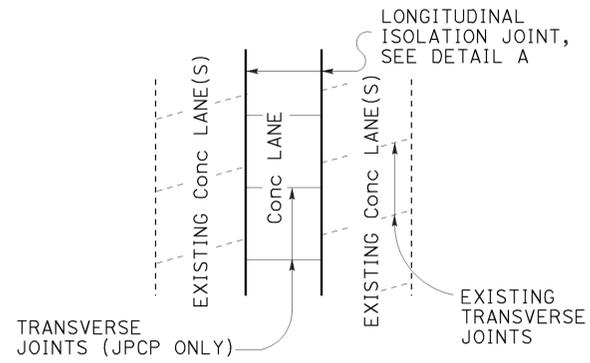
**CASE 1**  
**PLAN**

Transverse joints do not align between new and existing.



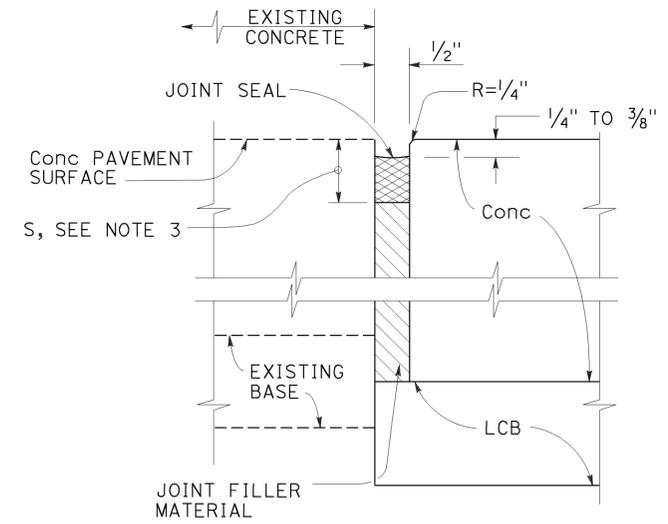
**CASE 2**  
**PLAN**

Transverse joints align between new and existing. (For JPCP only)



**CASE 3 (INTERIOR LANE REPLACEMENT)**  
**PLAN**

Transverse joints do not align between new and existing.



**DETAIL "A"**  
**ISOLATION JOINT**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT LANE SCHEMATICS AND ISOLATION JOINT DETAIL**

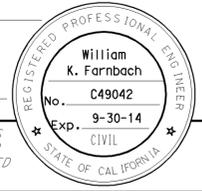
NO SCALE

**LANE/SHOULDER ADDITION OR RECONSTRUCTION**  
For JPCP and CRCP

RSP P18 DATED JULY 19, 2013 SUPERSEDES RSP P18 DATED APRIL 20, 2012 AND STANDARD PLAN P18 DATED MAY 20, 2011 - PAGE 135 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P18**

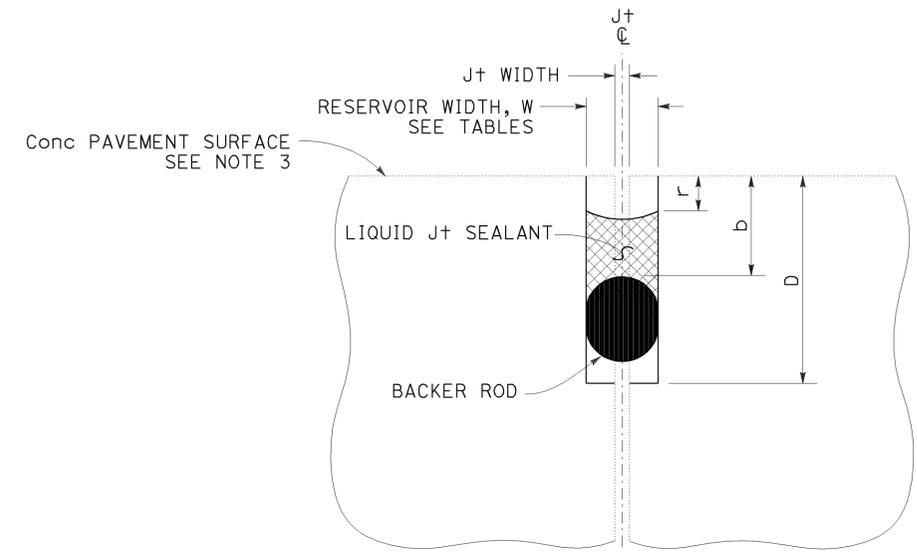
2010 REVISED STANDARD PLAN RSP P18



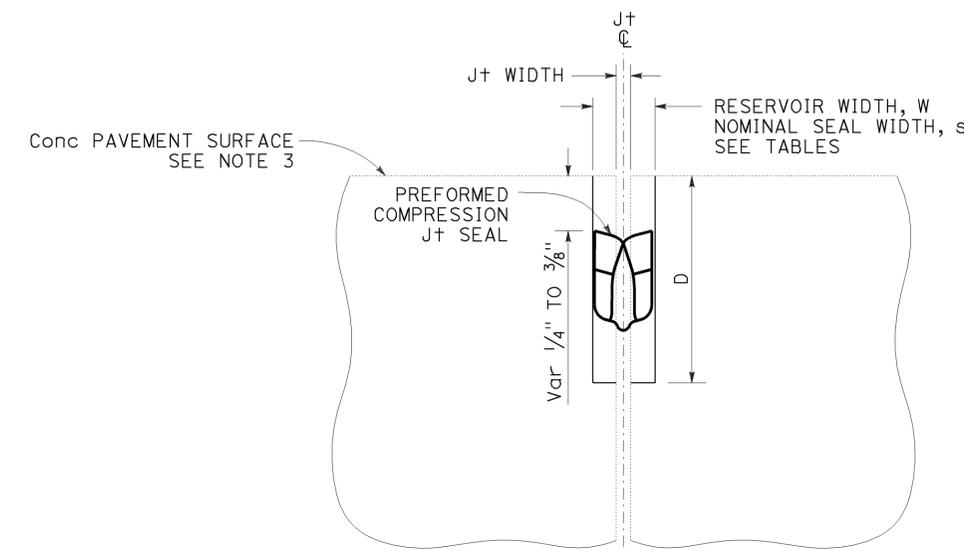
TO ACCOMPANY PLANS DATED 2-18-14

**NOTES:**

1. Details do not apply to isolation joints and longitudinal construction joints.
2. Tie bars, dowel bars, and bar reinforcement are not shown.
3. Depths are measured from the final concrete pavement surface elevation after any grinding.



**LIQUID JOINT SEALANT**



**PREFORMED COMPRESSION JOINT SEAL**

Const SEASON	Min RESERVOIR WIDTH * W ± 1/16"
WINTER	1/4"
SPRING	3/8"
SUMMER	
FALL	

\* Minimum reservoir width for replace joint seal = existing joint width + 1/8"

RESERVOIR WIDTH W ± 1/16"	LIQUID JOINT SEALANT DIMENSIONS					
	BACKER ROD NOMINAL Dia *	DEPTHS (ASPHALT RUBBER) **		DEPTHS (SILICONE)		
		RESERVOIR D ± 1/4"	BACKER ROD b ± 1/16"	RESERVOIR D ± 1/4"	BACKER ROD b ± 1/16"	RECESS r ± 1/16"
1/4"	3/8"	1 3/4"	7/8"	1 3/8"	1/2"	1/4"
3/8"	1/2"	1 7/8"	7/8"	1 1/2"	1/2"	1/4"
1/2"	3/4"	2"	7/8"	1 3/4"	9/16"	5/16"
5/8"	7/8"	2 1/4"	1"	2"	5/8"	5/16"
3/4"	1"	2 3/4"	1 1/8"	2 1/4"	3/4"	3/8"
7/8"	1 1/4"	3"	1 1/4"	2 1/2"	13/16"	3/8"
1"	1 1/2"	3 1/4"	1 3/8"	2 5/8"	7/8"	3/8"
1 1/8"	1 1/2"	3 1/2"	1 1/2"	2 13/16"	1"	1/2"

\* Larger diameter backer rods may be substituted according to manufacturer recommendations if reservoir depth is increased equivalently.

\*\* Asphalt rubber sealant recess depth "r" varies from 1/4" to 3/8"

RESERVOIR WIDTH W ± 1/16"	PREFORMED COMPRESSION JOINT SEAL DIMENSIONS	
	NOMINAL SEAL WIDTH s	RESERVOIR DEPTH D ± 1/4"
1/4"	7/16"	1 1/4"
3/8"	11/16"	1 1/16"
1/2"	13/16"	1 1/16"
5/8"	1"	1 7/8"
3/4"	1 1/4"	2 1/8"
7/8"	1 5/8"	2 5/8"
1"	1 7/8"	2 7/8"
1 1/8"	2"	2 7/8"

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

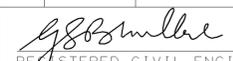
**JOINT SEALS**

NO SCALE

RSP P20 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P20  
DATED MAY 20, 2011 - PAGE 136 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP P20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	24	27

  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 2-18-14

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

\* - For other offsets, use the following merging taper length formula for L:  
 For speed of 40 mph or less,  $L = WS^2/60$   
 For speed of 45 mph or more,  $L = WS$

Where: L = Taper length in feet  
 W = Width of offset in feet  
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

\*\* - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

\* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

\*\* - Longitudinal buffer space or flagger station spacing

\*\*\* - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

\* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM TABLES  
 FOR LANE AND RAMP CLOSURES**

NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T9**

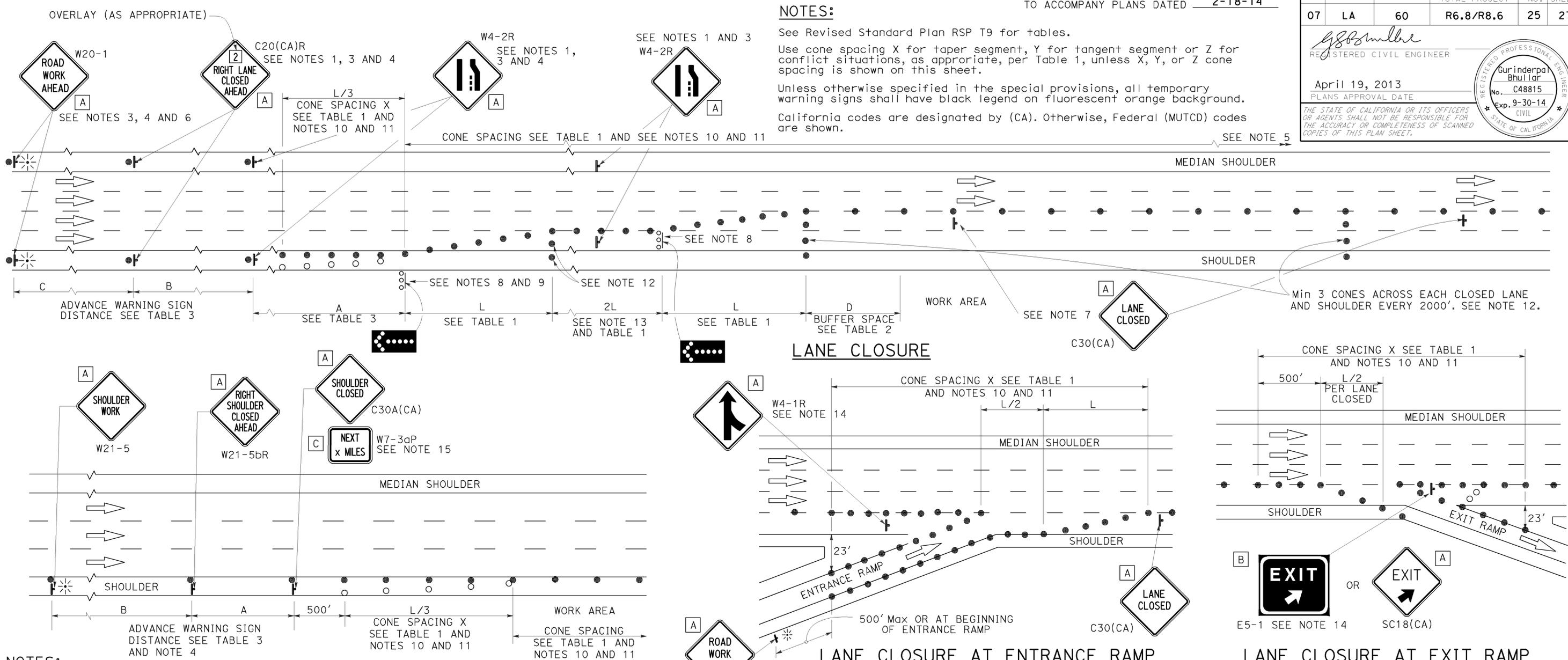
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	25	27

REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

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**NOTES:**

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

**NOTES:**

- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Duplicate sign installations are not required:
  - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
  - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
- Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

**SHOULDER CLOSURE**

- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT x MILES", use a C20(CA)L and W4-2L signs shall be used.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
- A W7-3aP "NEXT x MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

**LEGEND**

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 72" x 60"
- C 36" x 30"

**TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T10**

2010 REVISED STANDARD PLAN RSP T10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	26	27

REGISTERED CIVIL ENGINEER  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

April 19, 2013  
 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.

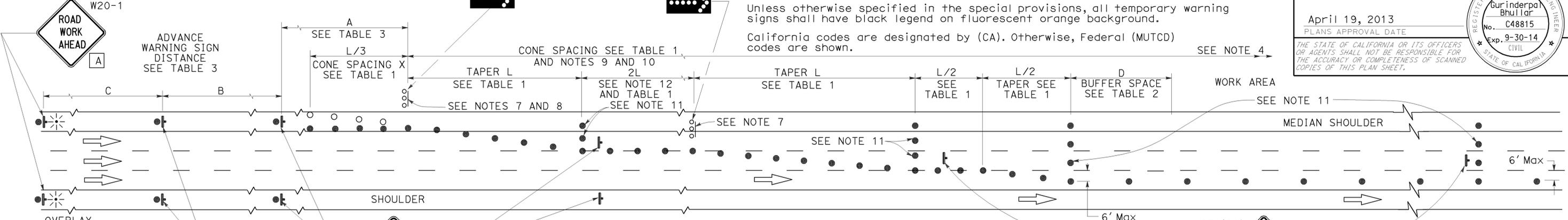
**NOTES:** See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

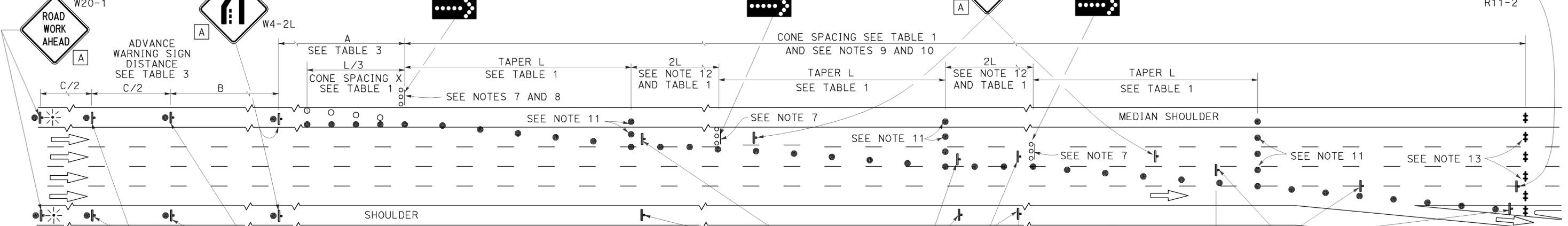
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

SEE NOTES 3 AND 5



**LANE CLOSURE WITH PARTIAL SHOULDER USE**

SEE NOTES 3 AND 5



**COMPLETE CLOSURE**

**NOTES:**

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details as shown except that C20(CA)R and W4-2R signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" X 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_ MILES", use a C20(CA) sign for the first advance warning sign.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure With Partial Shoulder Use" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

**LEGEND**

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ⊛ PORTABLE FLASHING BEACON

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURES ON  
 FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T10A DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10A DATED MAY 20, 2011 - PAGE 238 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T10A**

2010 REVISED STANDARD PLAN RSP T10A

# TYPICAL RAMP CLOSURES

## SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 36" x 36"
- D 48" x 36"

## LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⚡ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	60	R6.8/R8.6	27	27

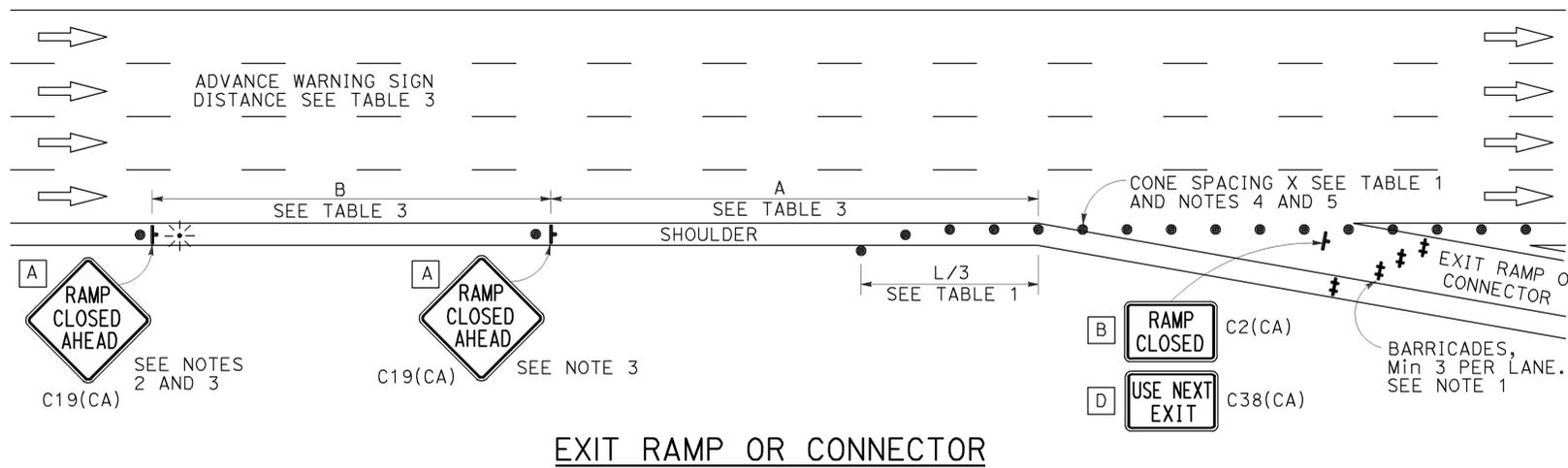
*Gurinderpal Bhullar*  
 REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

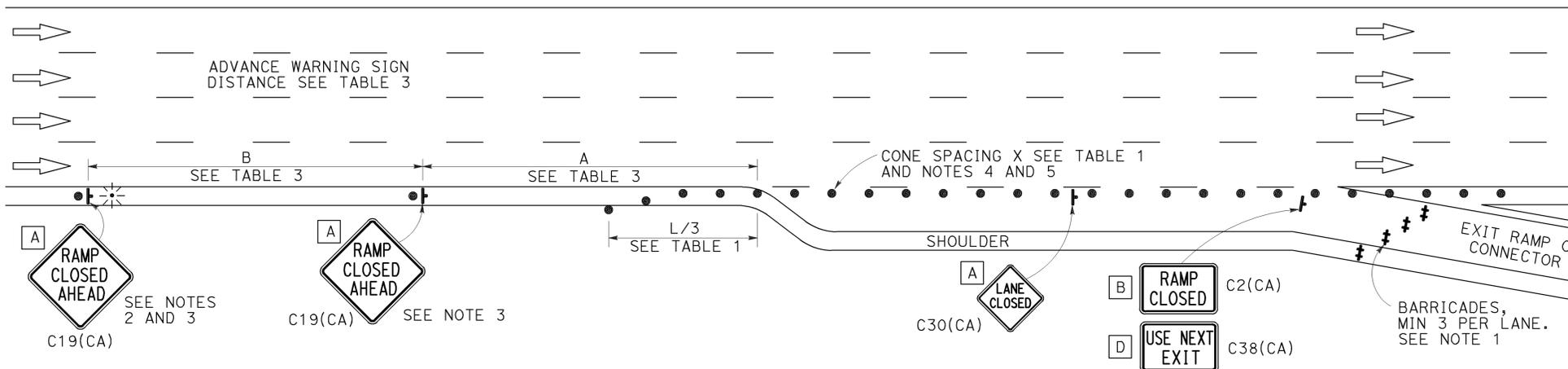
TO ACCOMPANY PLANS DATED 2-18-14

## NOTES:

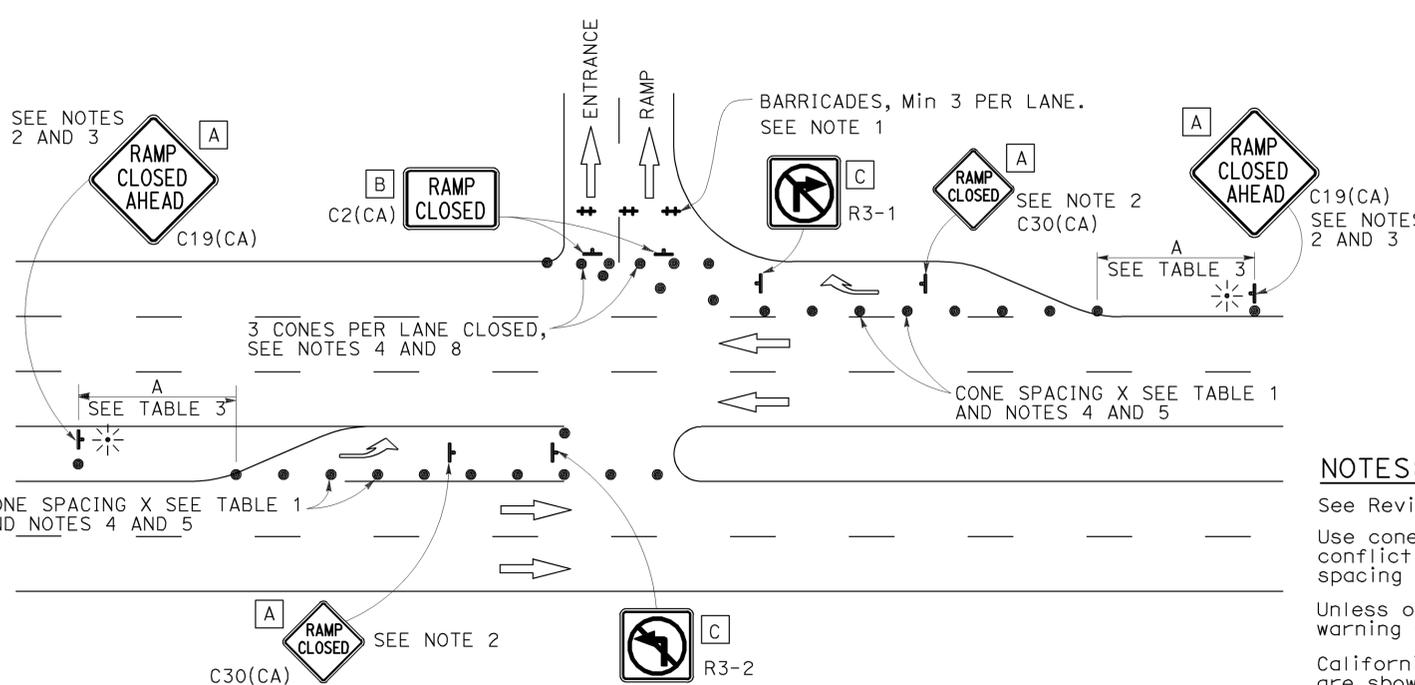
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- Each advance C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
- All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
- At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
- The existing "EXIT" signs shall be covered during ramp closures.
- A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.



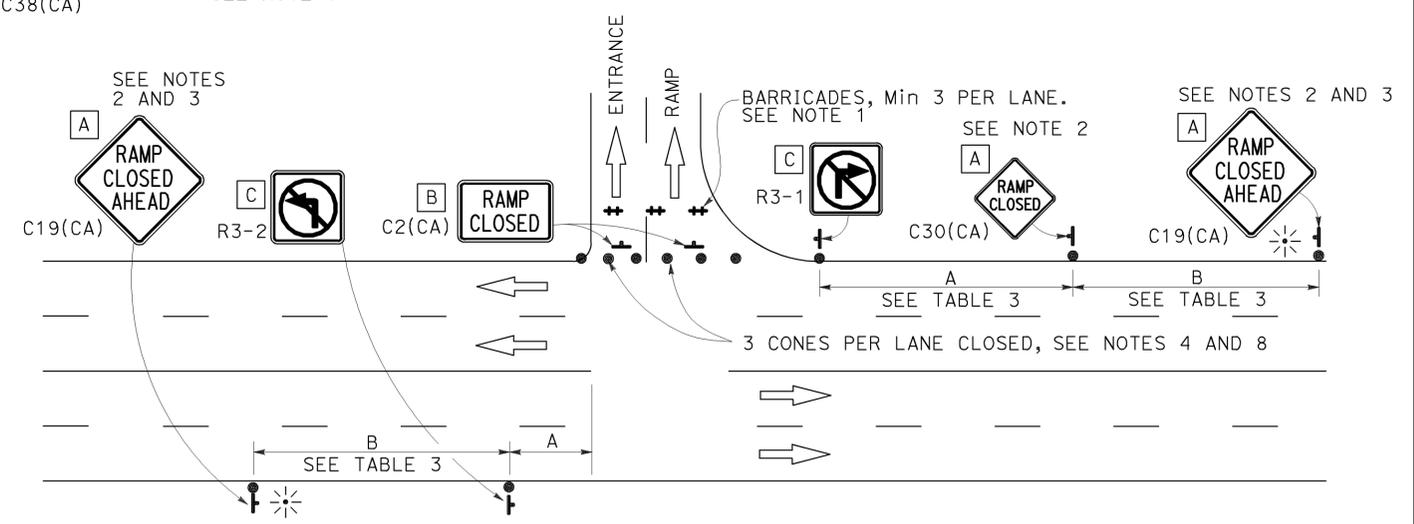
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

## NOTES:

- See Revised Standard Plan RSP T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
- California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR RAMP CLOSURE**  
 NO SCALE

RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14  
 DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T14**

2010 REVISED STANDARD PLAN RSP T14