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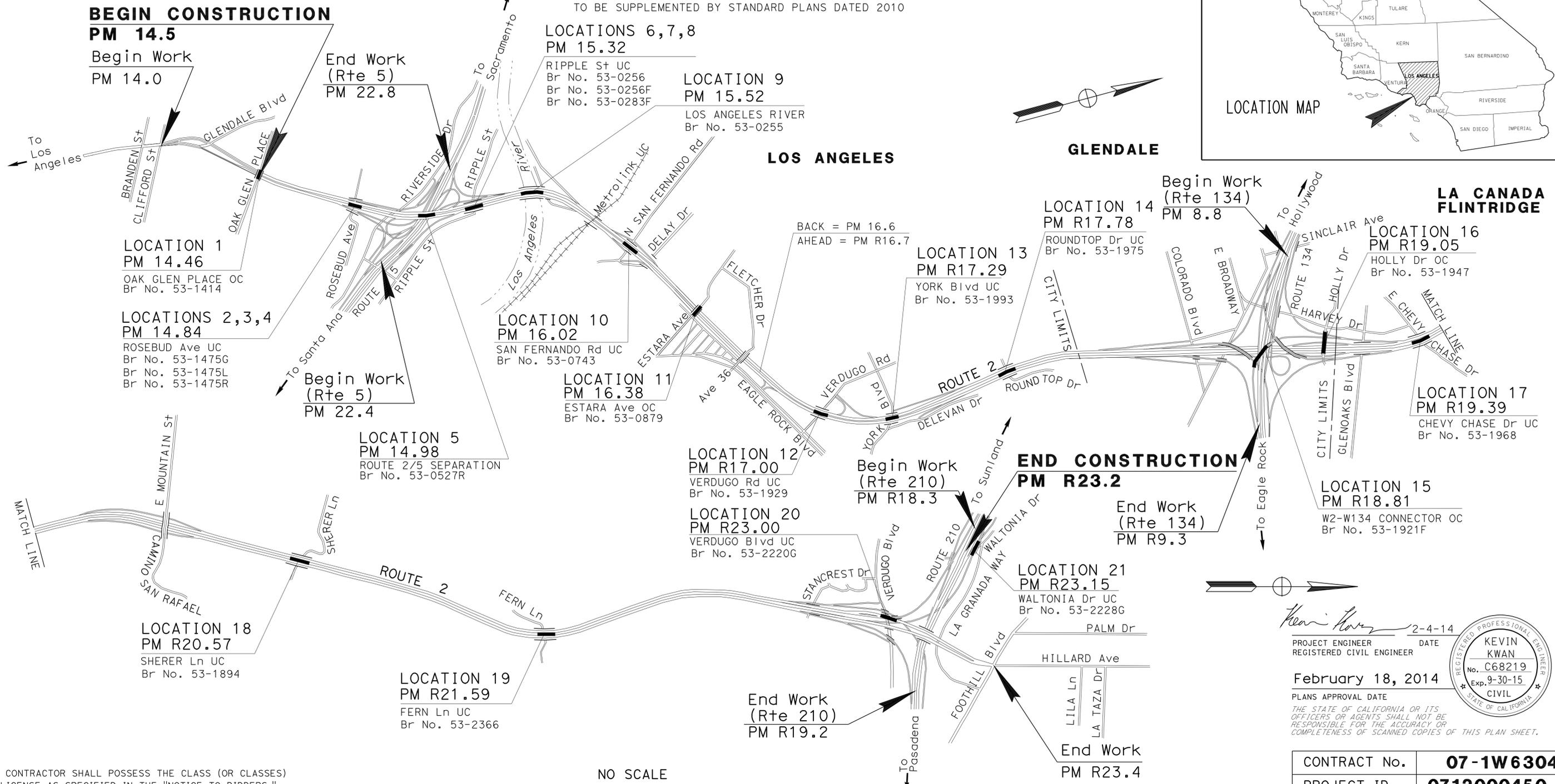
STRUCTURE PLANS  
23-36 ROUTE 2 BRIDGES

THE STANDARD PLANS LIST APPLICABLE TO THE 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 LOS ANGELES, GLENDALE AND LA CANADA FLINTRIDGE  
FROM OAK GLEN PLACE OVERCROSSING  
TO WALTONIA DRIVE UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER  
CHRISTIAN SAM

DESIGN ENGINEER  
HAMID SAADATNEJADI

*Kevin Kwan* 2-4-14  
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. **07-1W6304**  
PROJECT ID **0712000450**

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

NO SCALE



USERNAME => s122436  
DGN FILE => 71w6300b001.dgn

UNIT 1964 PROJECT NUMBER & PHASE 07120004501

DATE PLOTTED => 28-FEB-2014  
TIME PLOTTED => 12:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	2	36

Kevin Kwan  
 REGISTERED CIVIL ENGINEER DATE 2-4-14  
 2-18-14  
 PLANS APPROVAL DATE

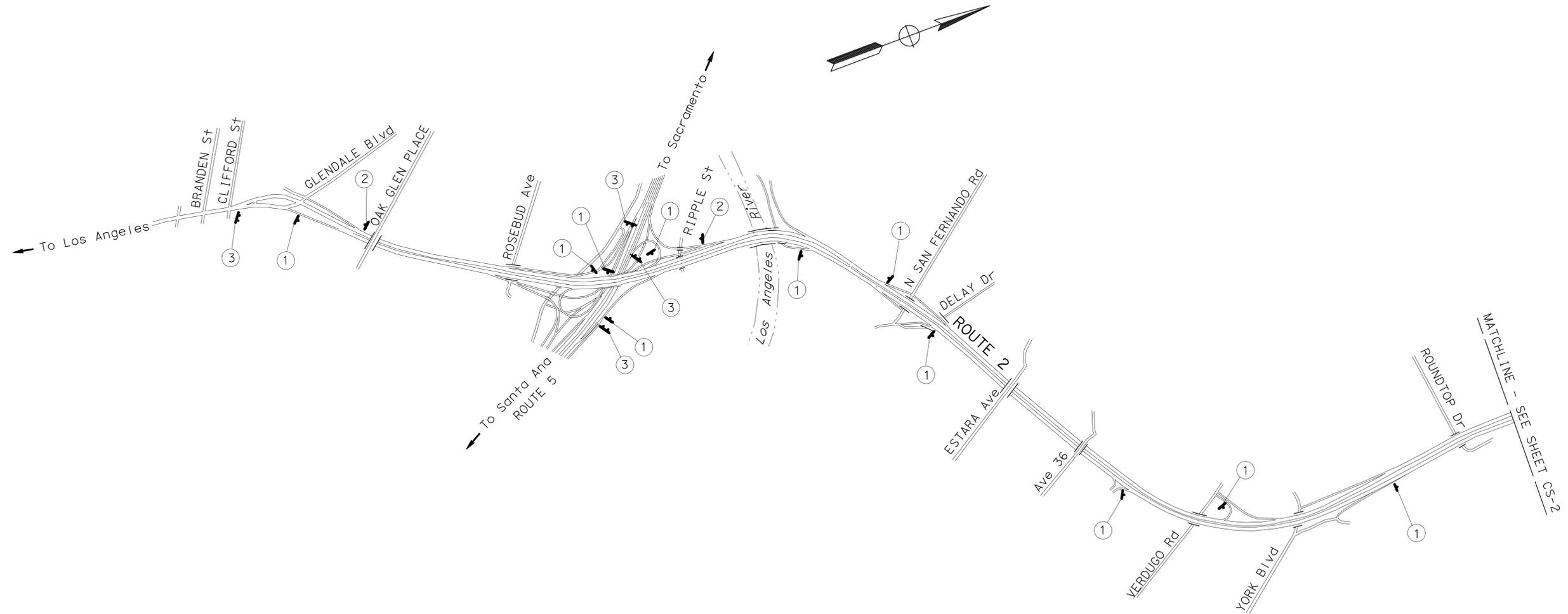
REGISTERED PROFESSIONAL ENGINEER  
 KEVIN KWAN  
 No. C68219  
 Exp 9-30-15  
 CIVIL  
 STATE OF CALIFORNIA

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

**NOTES:**

1. EXACT LOCATION AND POSITION OF SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE SHEET CS-2.

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
1	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	22
2	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	9
3		C40	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 8"	9



**CONSTRUCTION AREA SIGNS**  
NO SCALE

**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

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

FUNCTIONAL SUPERVISOR  
 HAMID SAADATNEJADI

CALCULATED/DESIGNED BY  
 CHECKED BY

AMBACHEW YIRGU  
 KEVIN KWAN

REVISED BY  
 DATE REVISED

REVISIONS

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

FUNCTIONAL SUPERVISOR: HAMID SAADATNEJADI  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 REVISIONS:  
 REVISED BY: DATE REVISED:  
 AMBACHEW YIRGU  
 KEVIN KWAN

USERNAME => s122436  
 DGN FILE => 71w6301a002.dgn

BORDER LAST REVISED 7/2/2010

RELATIVE BORDER SCALE IS IN INCHES

UNIT 1964

PROJECT NUMBER & PHASE

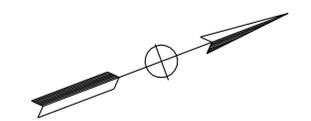
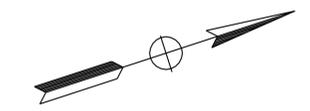
07120004501

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	3	36

2-4-14  
 REGISTERED CIVIL ENGINEER DATE  
 2-18-14  
 PLANS APPROVAL DATE

KEVIN KWAN  
 No. C68219  
 Exp 9-30-15  
 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.



**CONSTRUCTION AREA SIGNS**  
 NO SCALE

**CS-2**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

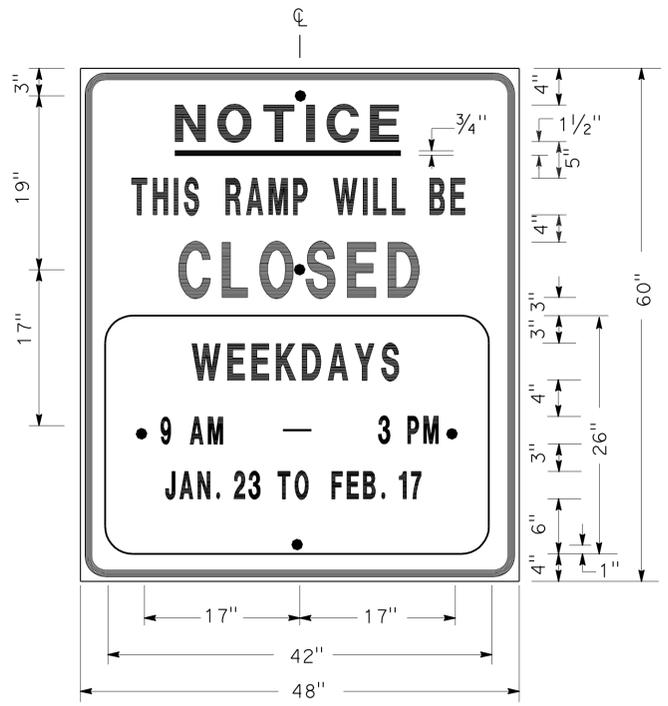
LAST REVISION: DATE PLOTTED => 28-FEB-2014  
 02-18-14 TIME PLOTTED => 12:01

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	4	36

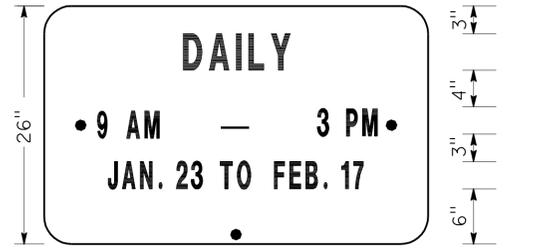
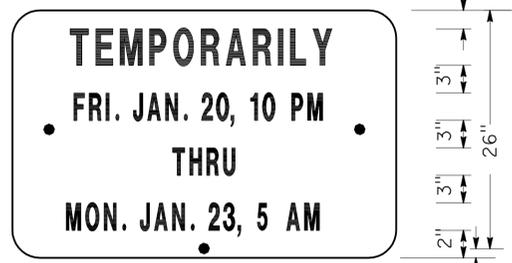
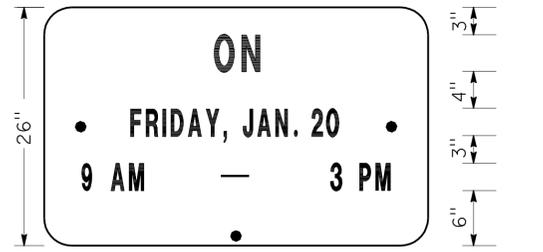
REGISTERED CIVIL ENGINEER DATE 9-4-13  
 2-18-14  
 PLANS APPROVAL DATE

Martin Oregel  
 No. 56816  
 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)

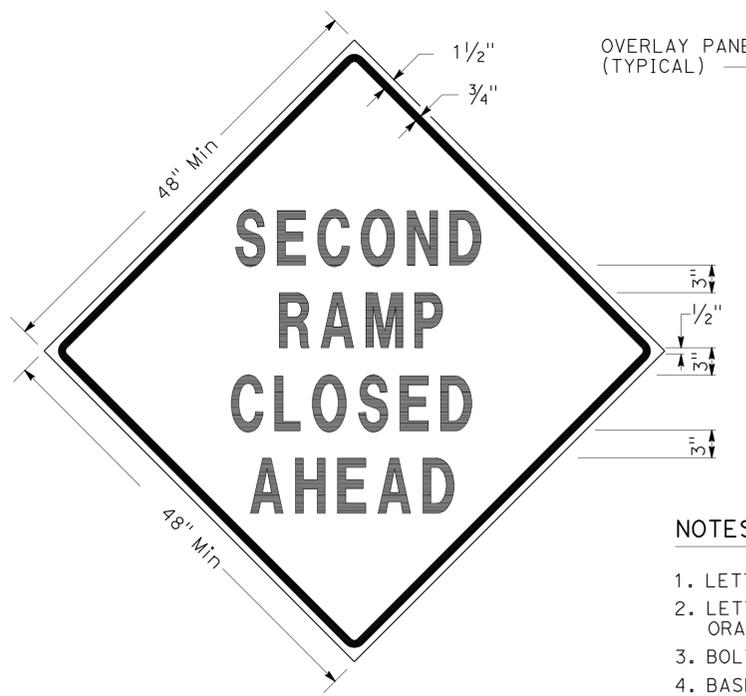
NOTES: SIGN SP-1

- 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

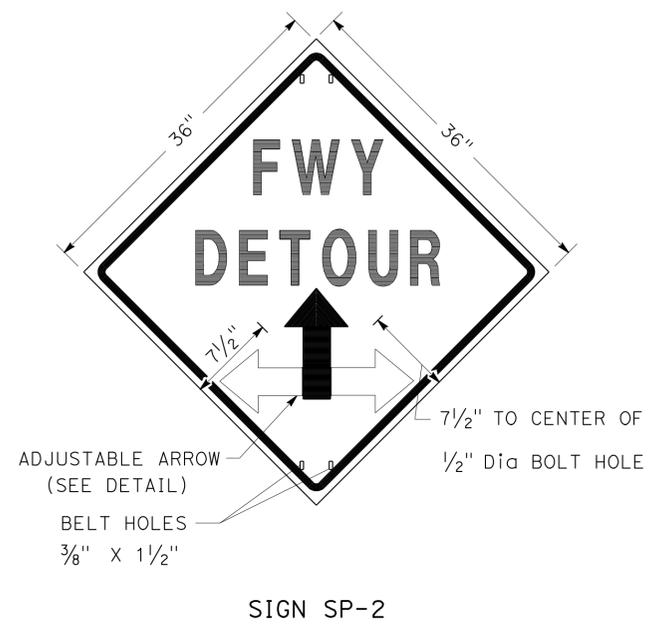
TRAFFIC HANDLING DETAILS  
 TRAFFIC CONTROL SYSTEM  
 FOR RAMP CLOSURES, DETOUR SIGNS,  
 AND MISCELLANEOUS DETAILS

SHEET 1 OF 2

NO SCALE

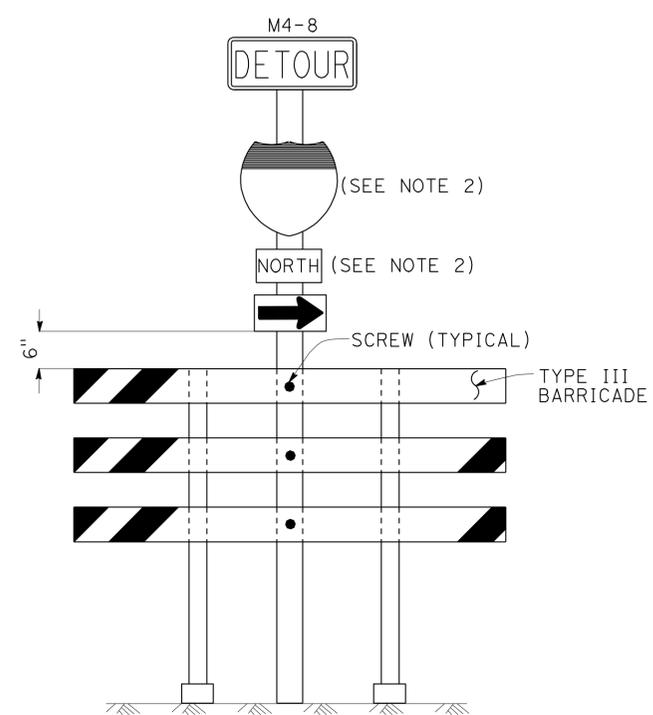
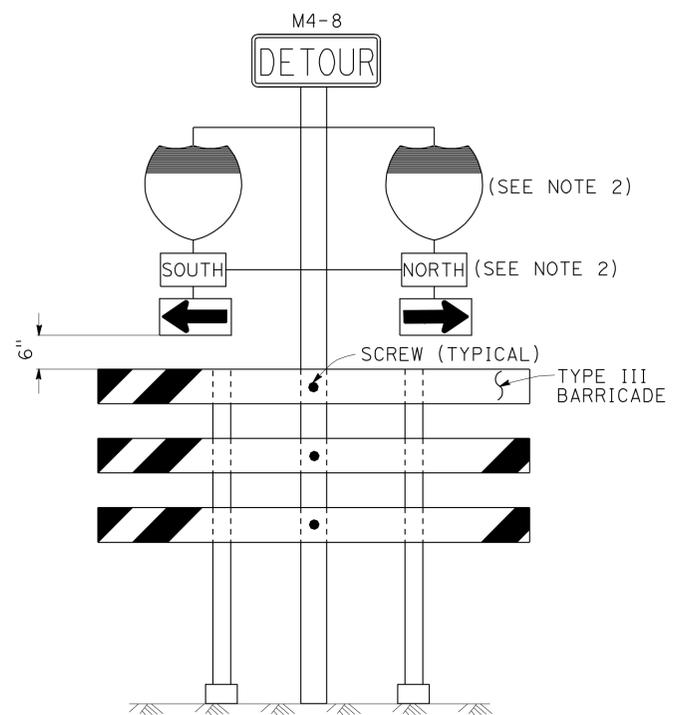
THD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DTM  
 FUNCTIONAL SUPERVISOR JOHN YANG  
 CHECKED BY MARTIN OREGEL  
 REVISIONS BY JC DATE 3/12  
 REVISIONS BY DATE



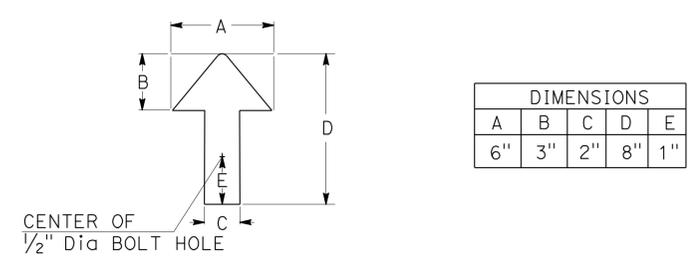
- NOTES:** SIGN SP-2
- LETTERS - 6" SERIES E.
  - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
  - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
  - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
  - 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



- 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)].

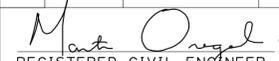
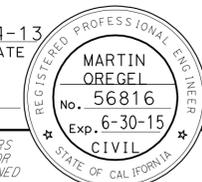
**SPECIAL PORTABLE FREEWAY DETOUR SIGNS**



**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**

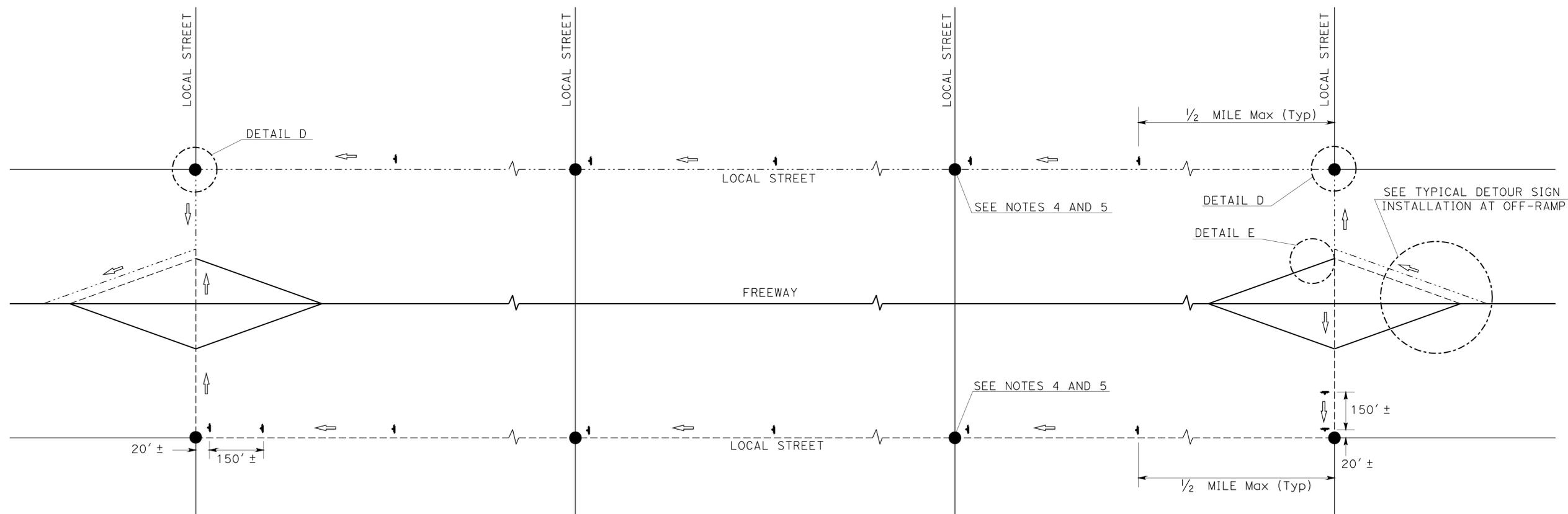
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	6	36
 REGISTERED CIVIL ENGINEER DATE 9-4-13					
2-18-14 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

**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.



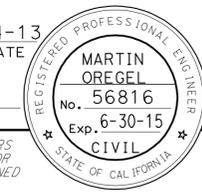
**TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE**

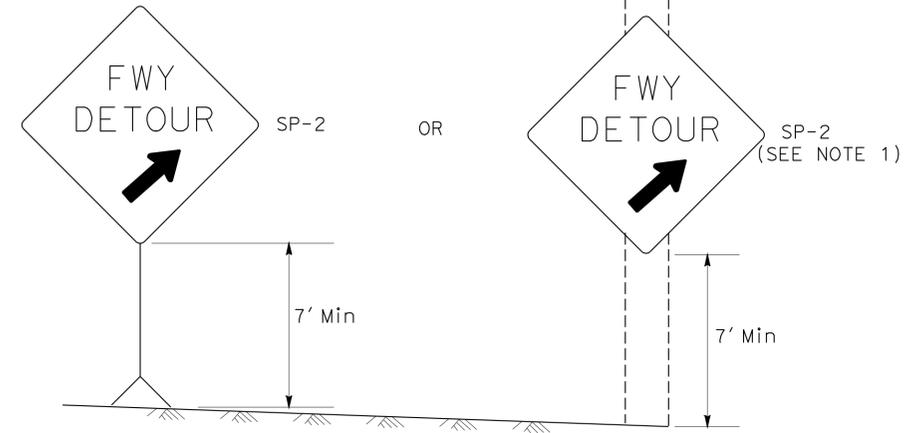
**TRAFFIC HANDLING DETAILS  
TRAFFIC CONTROL SYSTEM  
FOR DETOUR SIGN INSTALLATION  
ALONG DESIGNATED DETOUR ROUTE  
SHEET 1 OF 3**

NO SCALE

**THD-3**

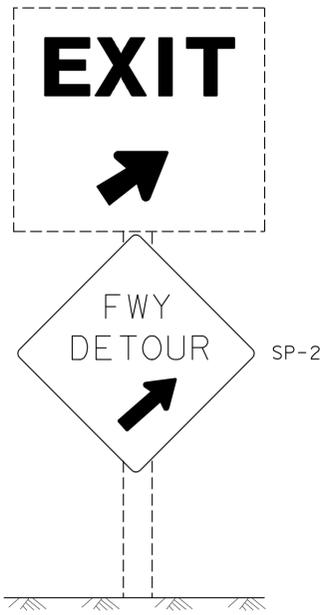
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DTM  
 FUNCTIONAL SUPERVISOR: JOHN YANG  
 CALCULATED/DESIGNED BY: ALBERT K YU  
 CHECKED BY: MARTIN OREGEL  
 REVISED BY: JC  
 DATE REVISED: 3/12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	7	36
 REGISTERED CIVIL ENGINEER DATE 9-4-13					
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>					



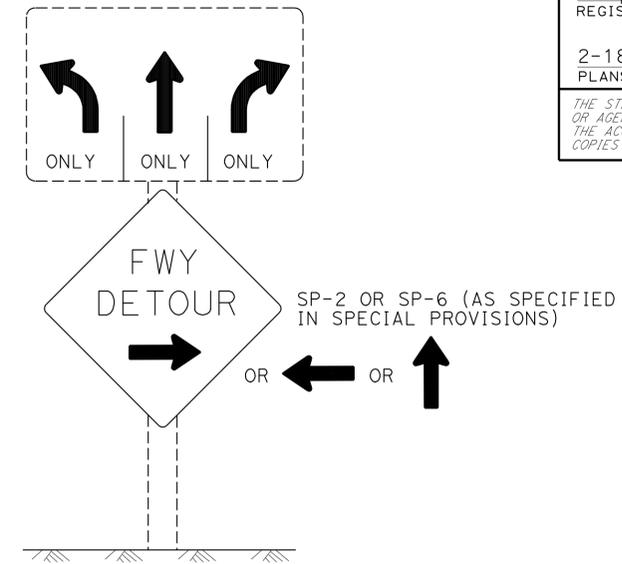
DETAIL A (SEE NOTE 3)

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

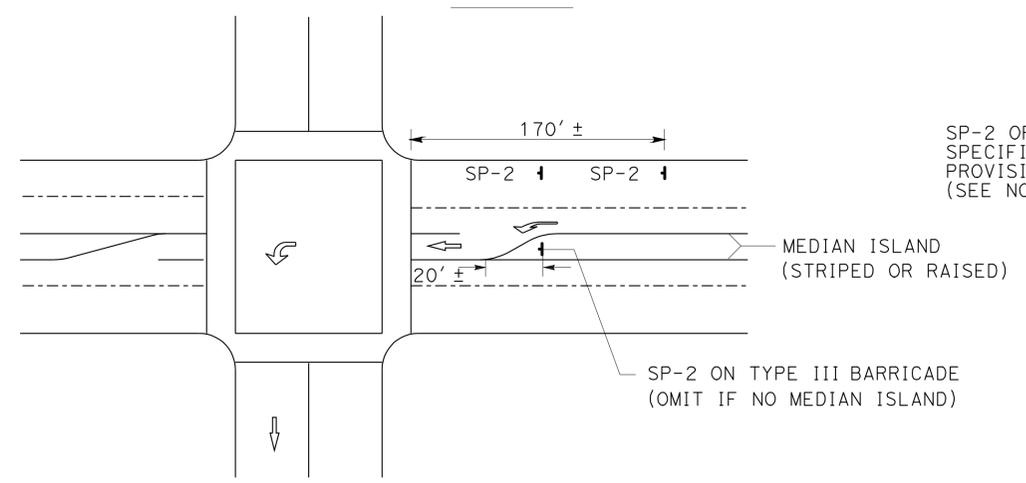


DETAIL B (SEE NOTE 3)

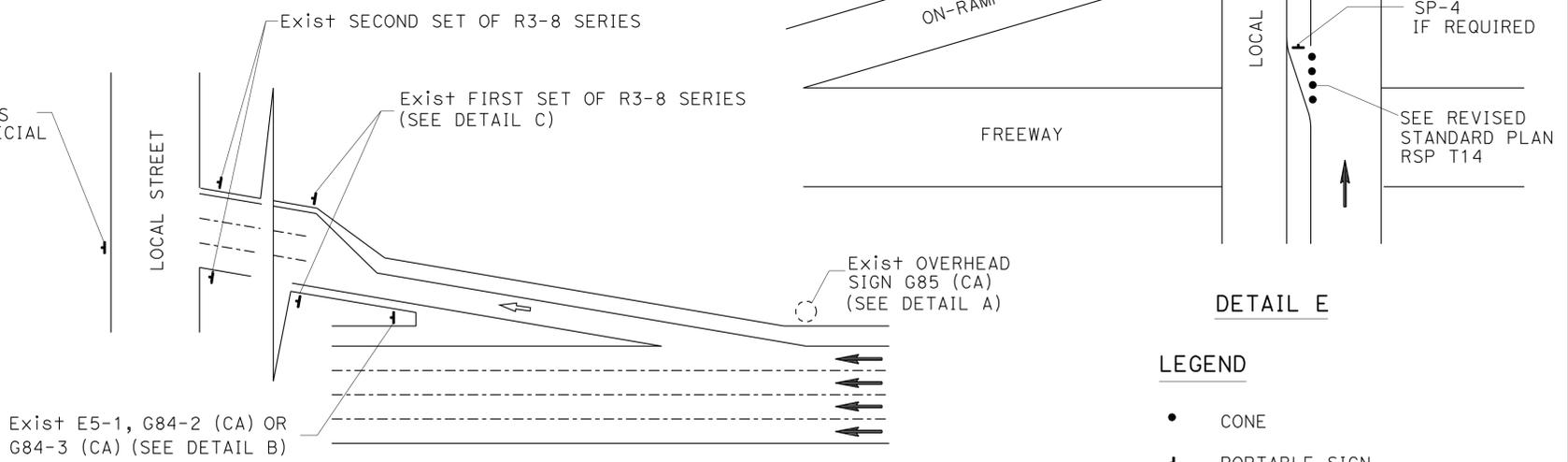
Exist R3-8 SERIES



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**

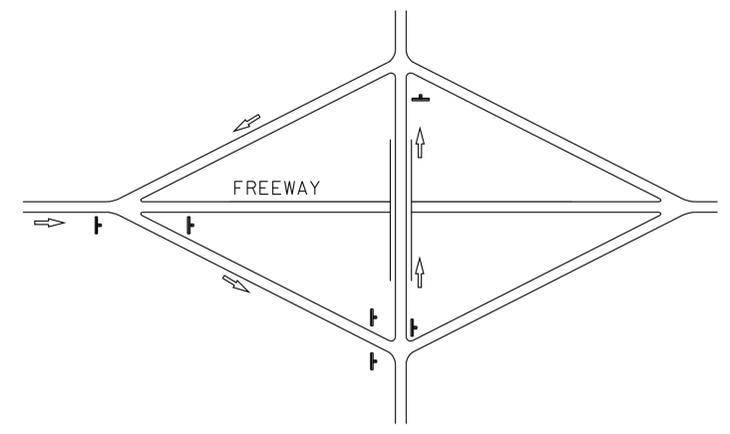
NO SCALE **THD-4**

**NOTES: SIGN SP-2**

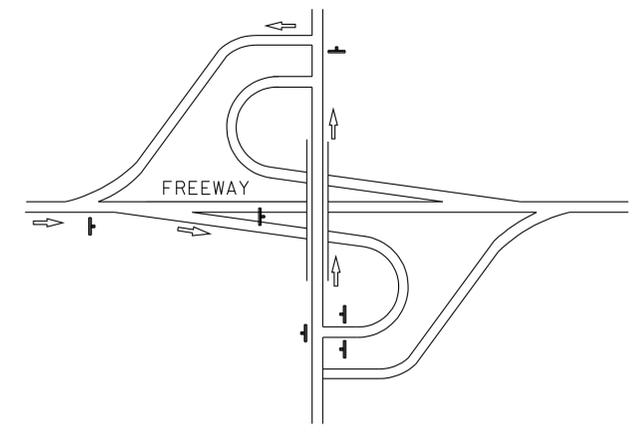
1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. OMIT DETAILS A AND B FOR FULL FREEWAY CLOSURES.
4. SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND 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 MARTIN OREGEL  
 REVISOR BY JC  
 DATE REVISED 3/12  
 CALCULATED/DESIGNED BY ALBERT K YU  
 CHECKED BY MARTIN OREGEL

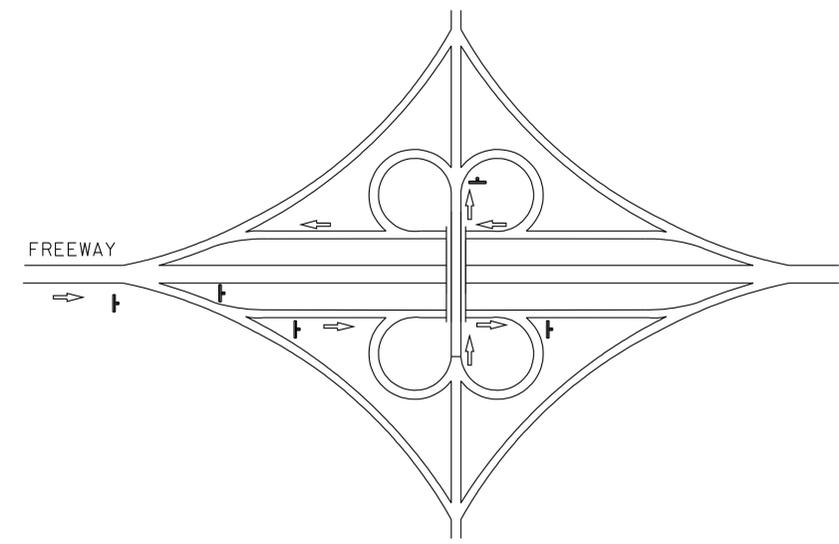
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DTM  
 FUNCTIONAL SUPERVISOR: JOHN YANG  
 CHECKED BY: MARTIN OREGEL  
 REVISIONS: JC 3/12  
 REVISIONS: ALBERT K YU  
 REVISIONS: MARTIN OREGEL



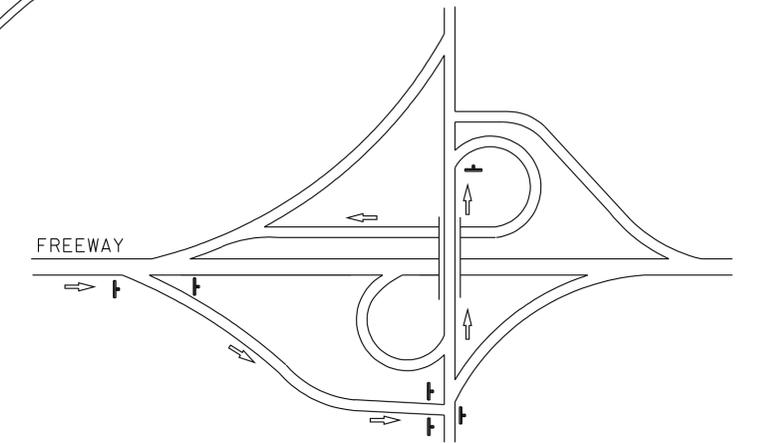
TYPE I



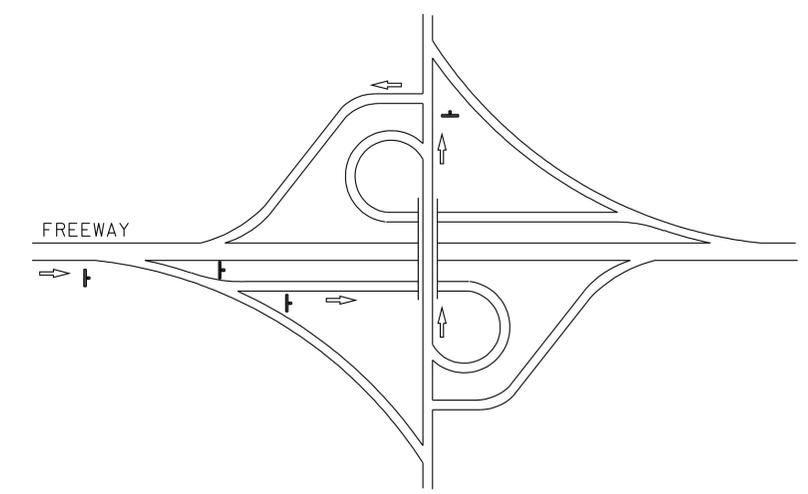
TYPE II



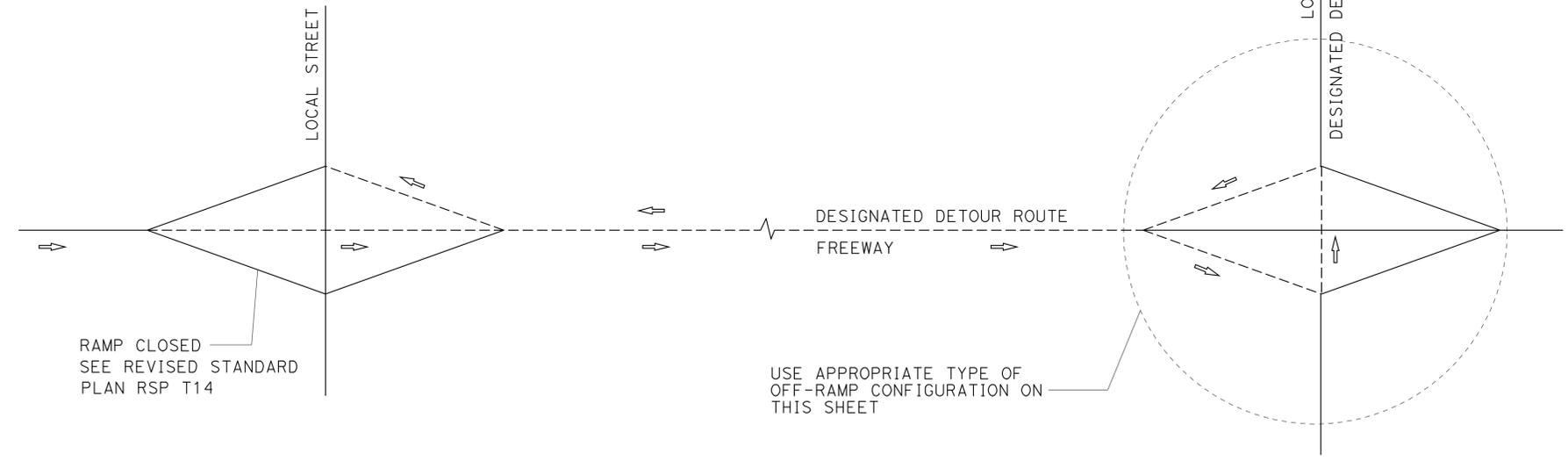
TYPE III



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**

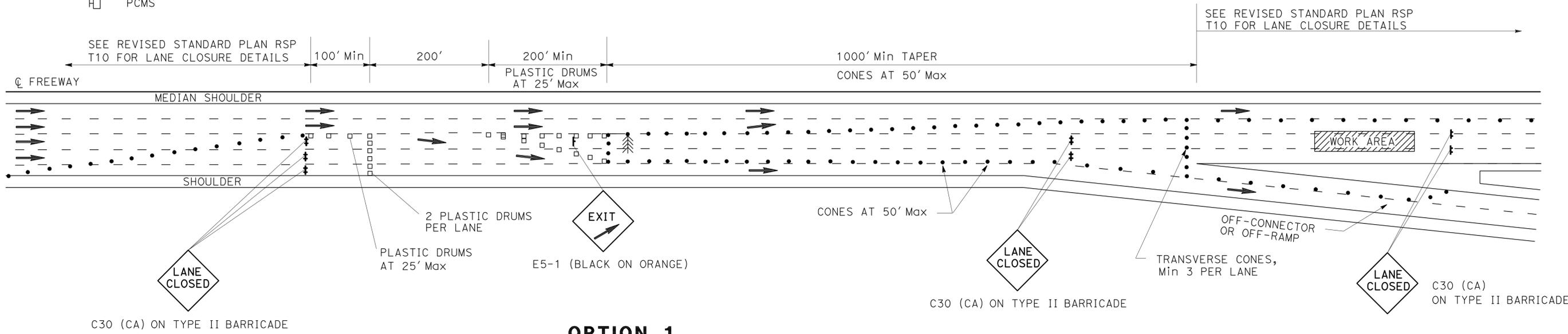
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	9	36
 REGISTERED CIVIL ENGINEER DATE 9-4-13					
2-18-14 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

**LEGEND**

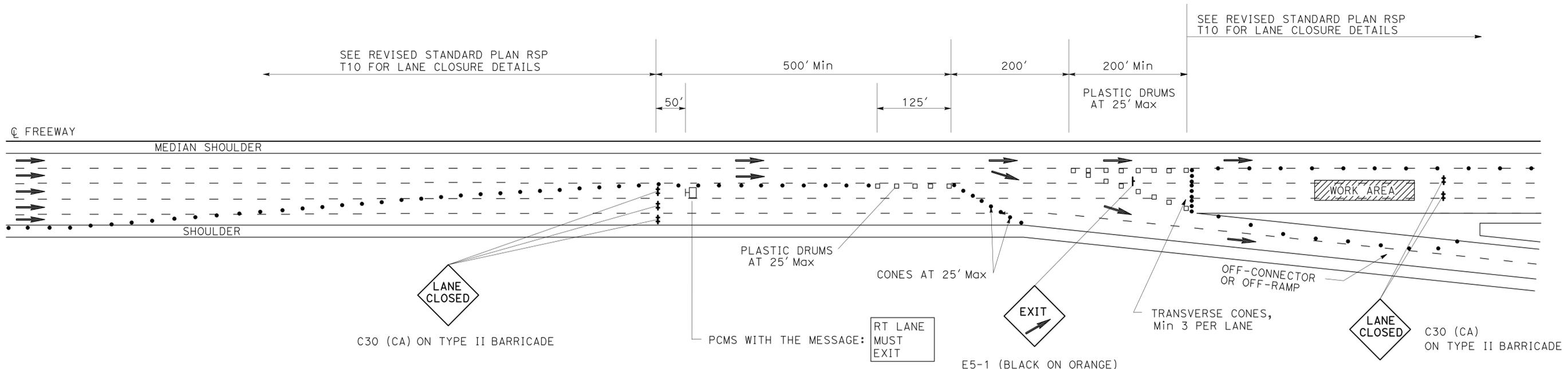
- CONE
- TRAFFIC PLASTIC DRUM
- ⚡ FLASHING ARROW SIGN
- ⊥ PORTABLE SIGN
- ➔ DIRECTION OF TRAVEL
- ⊞ PCMS

**ABBREVIATIONS**

- (CA) CALIFORNIA CODE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN



**OPTION 1**



**OPTION 2**

**TRAFFIC HANDLING DETAILS  
TRAFFIC CONTROL SYSTEM  
FOR SLIP-RAMP AT  
OFF-CONNECTOR OR OFF-RAMP**

NO SCALE

**THD-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DT M  
 FUNCTIONAL SUPERVISOR JOHN YANG  
 CALCULATED/DESIGNED BY ALBERT K YU  
 CHECKED BY MARTIN OREGEL  
 REVISOR JC  
 DATE REVISED 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.

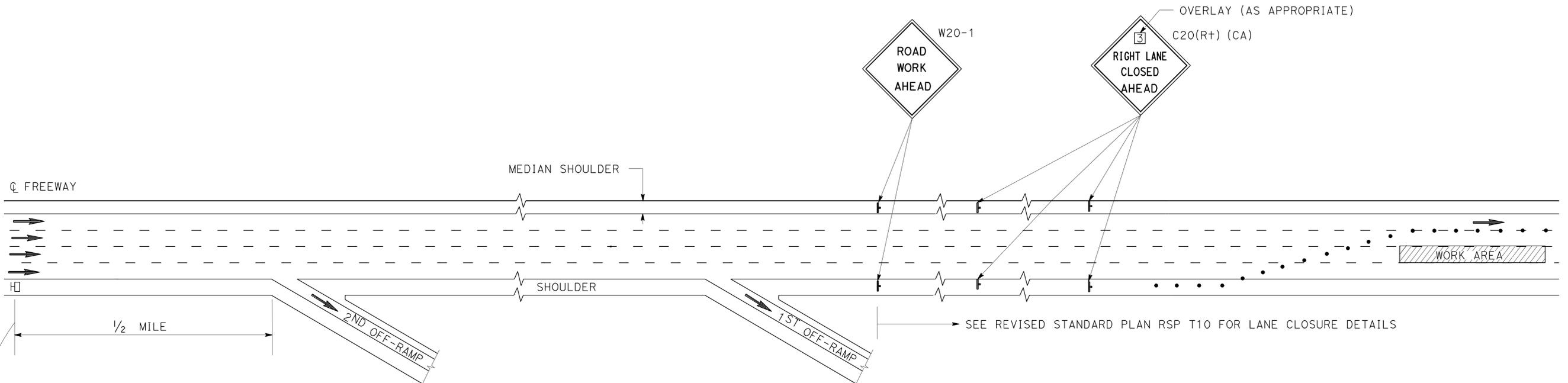
**ABBREVIATIONS**

PCMS PORTABLE CHANGEABLE MESSAGE SIGN  
 (CA) CALIFORNIA CODE

**LEGEND**

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DT M  
 FUNCTIONAL SUPERVISOR JOHN YANG  
 CALCULATED/DESIGNED BY CHECKED BY  
 ALBERT K YU MARTIN OREGEL  
 REVISED BY DATE REVISED  
 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-8**

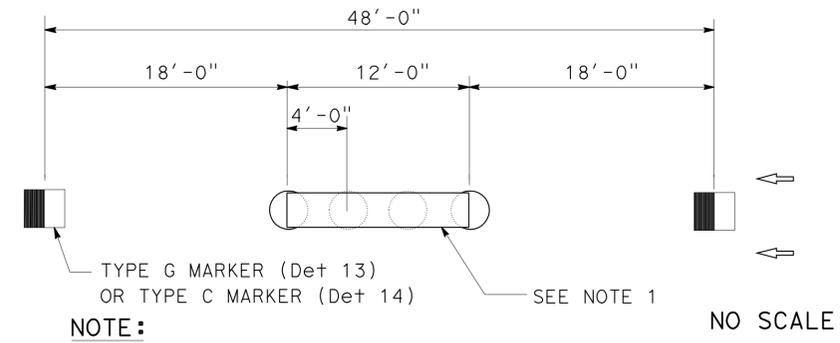
LAST REVISION DATE PLOTTED => 28-FEB-2014  
 02-18-14 TIME PLOTTED => 12:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	12	36

2-4-14  
 REGISTERED CIVIL ENGINEER DATE  
 2-18-14  
 PLANS APPROVAL DATE

KEVIN KWAN  
 No. C68219  
 Exp. 9-30-15  
 CIVIL

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**DETAIL 13/14 (MODIFIED)**

- NOTE:**
- PLACE 4" WIDE THERMOPLASTIC TRAFFIC STRIPE ON TOP OF TYPE A NON-REFLECTIVE MARKERS.

**PAVEMENT DELINEATION QUANTITIES**

LOCATION	THERMOPLASTIC TRAFFIC STRIPE											PAINT TRAFFIC STRIPE (2-COAT) (3" SOLID BLACK)	THERMOPLASTIC PAVEMENT MARKING		PAVEMENT MARKER			REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE PAINTED TRAFFIC STRIPE	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER		
	DETAIL 8	DETAIL 13/14 (Mod)	DETAIL 21	DETAIL 25A	DETAIL 27B	DETAIL 36	DETAIL 36A	DETAIL 36B	DETAIL 38A	DETAIL 38B	DETAIL 37		TYPE IV, V, VI, III, ARROWS	CHEVRON LINE/DIAGONAL LINE	RETROREFLECTIVE		NON-REFLECTIVE TYPE A							
	4" WHITE (BROKEN 17-7)	4" WHITE (BROKEN 36-12)	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID WHITE	8" WHITE (BROKEN 12-3)				C/G	H							EA	EA					
BRIDGE No.	NAME	PM	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	EA	EA	EA	LF	LF	LF	SQFT	EA	
53-1475R	ROSEBUD AVENUE UC	14.84		196		98	98							98		8	5	16	343	98	98		29	
53-0527R	ROUTE 2/5 SEPARATION	14.98		1,183		1,183	2,033							1,183	42	220	29	50	99	4,029	1,183	1,183	262	178
53-0256	RIPPLE STREET UC	15.32		216		108	162							108		9	6	18	324	108	108		33	
53-0256F	RIPPLE STREET UC	15.32		114		114	114							114		6	6	10	143	114	114		22	
53-0283F	RIPPLE STREET UC	15.32				54	54							54		4	3		54	54	54		7	
53-1929	VERDUGO ROAD UC	R17.00		1,169		334	531		197					334	84	41	15	97	1,217	334	334	84	153	
53-1993	YORK Blvd UC	R17.29		1,113		318	318							318	45	27	14	93	596	318	318	45	134	
53-1975	ROUNDTOP DRIVE UC	R17.78		90		30	30					30	30			6	2	8	113	30	30		16	
53-1947	HOLLY DRIVE OC	R19.05	200		400								400	200	114		21			1,000	400	200	114	21
53-1968	CHEVY CHASE DRIVE UC	R19.39		2,888		798	798	320						798		64	34	241	3,538	798	798		339	
53-2366	FERN LANE UC	R21.59		1,057		302	302							302		26	14	88	566	302	302		128	
53-2220G	VERDUGO Blvd UC	R23.00		1,046		523	523							523		26	23	87	785	523	523		136	
53-2228G	WALTONIA DRIVE UC	R23.15		428		214	214							214		13	10	36	321	214	214		59	
SUBTOTAL			200	9,500	400	4,076	5,177	320	197	904	400	290	429	4,276	156	349	280	182	793	13,029	4,476	4,276	505	1,255
TOTAL			200	9,500		9,653							429	4,276	505		462	793	13,029	4,476	4,276	505	1,255	

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 MAINTENANCE ENGINEERING  
 FUNCTIONAL SUPERVISOR: HAMID SAADATNEJADI  
 CALCULATED/DESIGNED BY: KEVIN KWAN  
 CHECKED BY: KEVIN KWAN  
 REVISED BY: AMBACHEW YIRGU  
 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	2	14.5/R23.2	13	36

*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

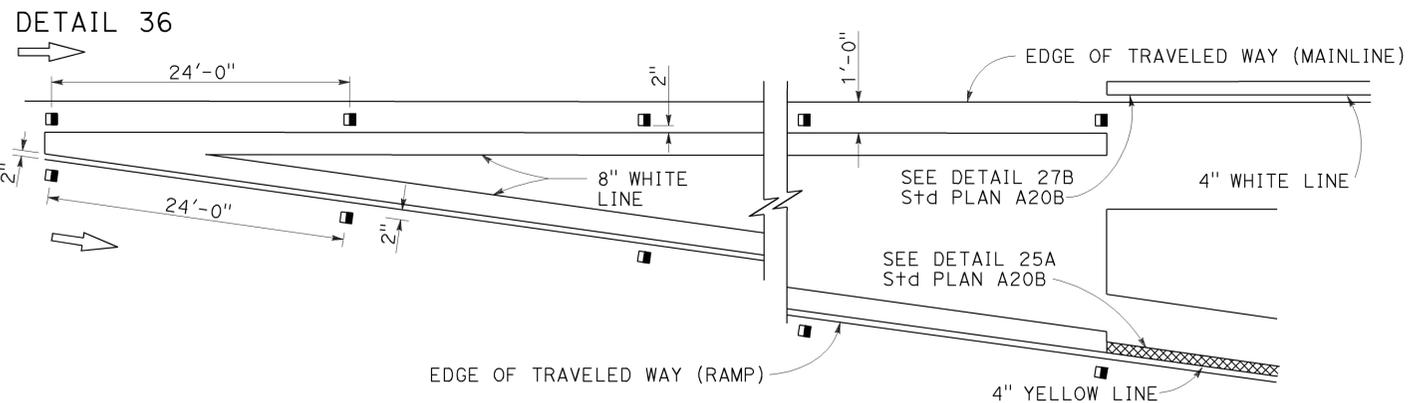
**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

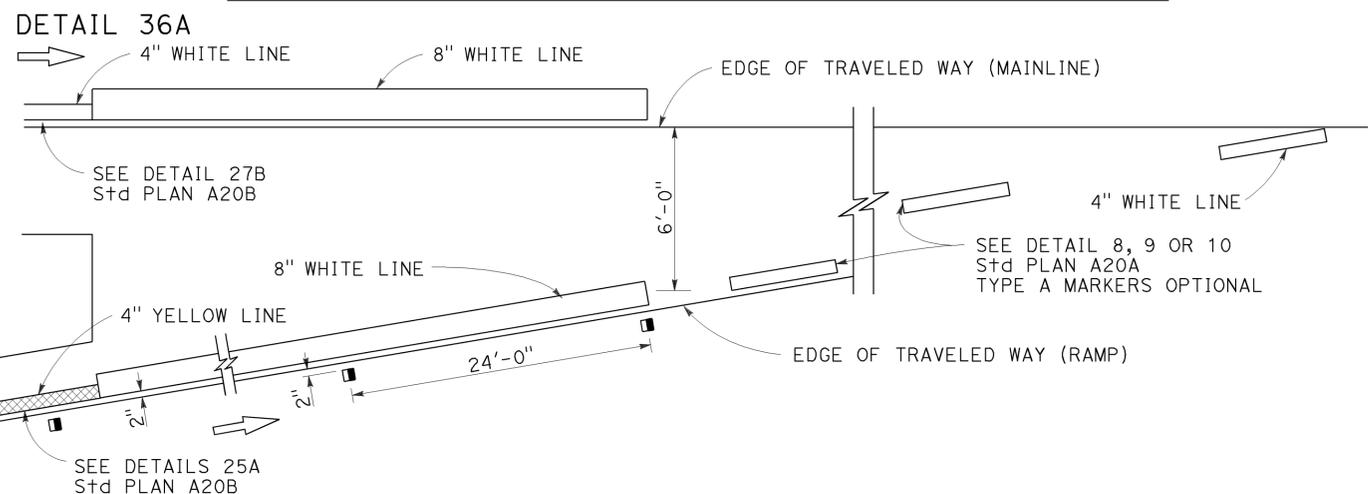
RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B  
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A10B

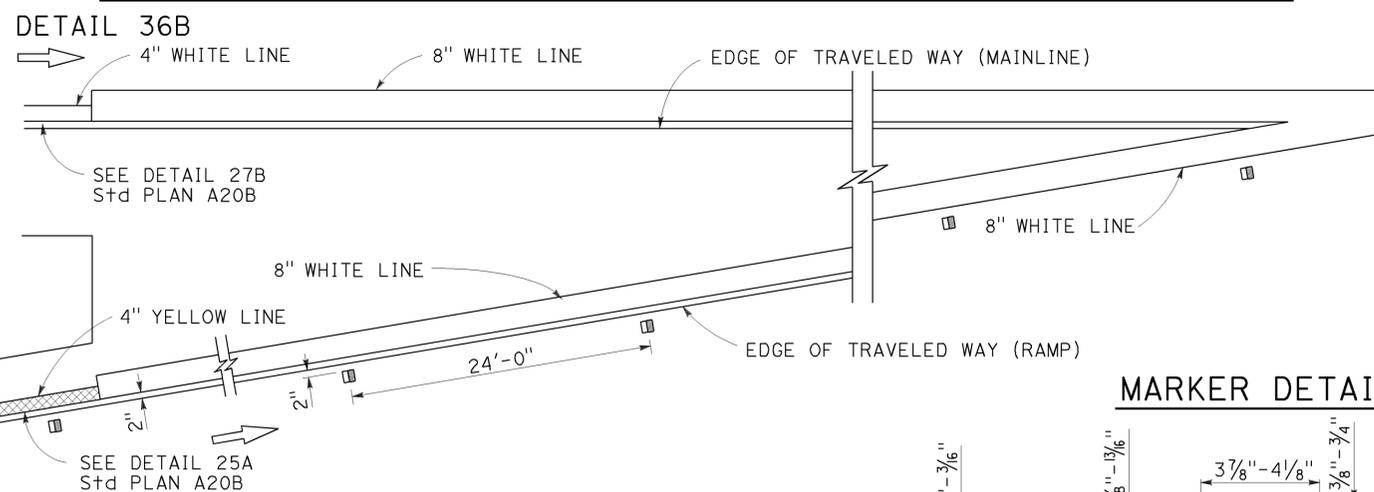
### EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

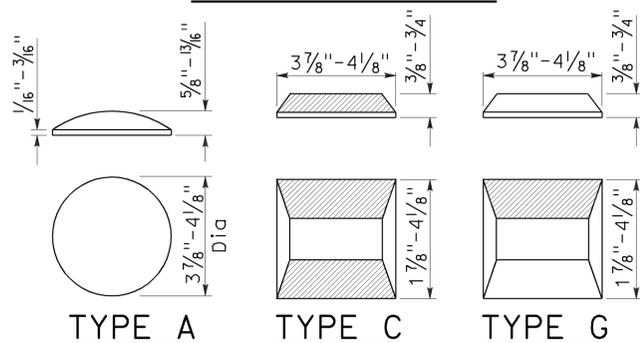


### MARKER DETAILS

#### LEGEND:

#### MARKERS

- TYPE A WHITE NON-REFLECTIVE
- ◻ TYPE C RED-CLEAR RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE



RETROREFLECTIVE FACE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	14	36

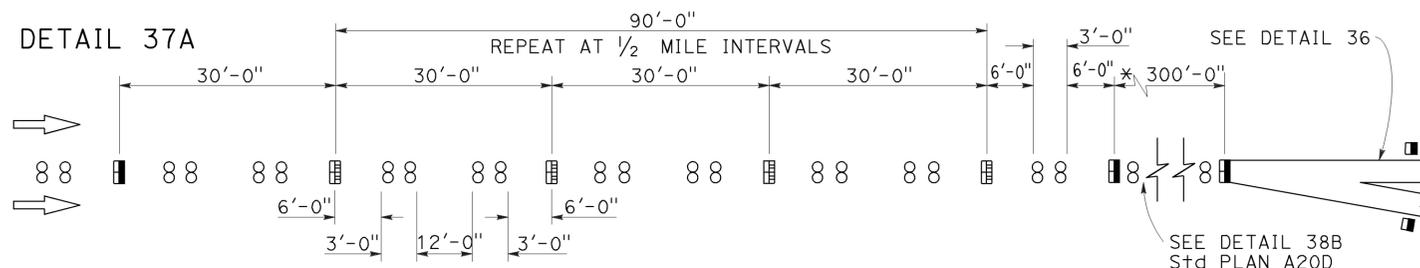
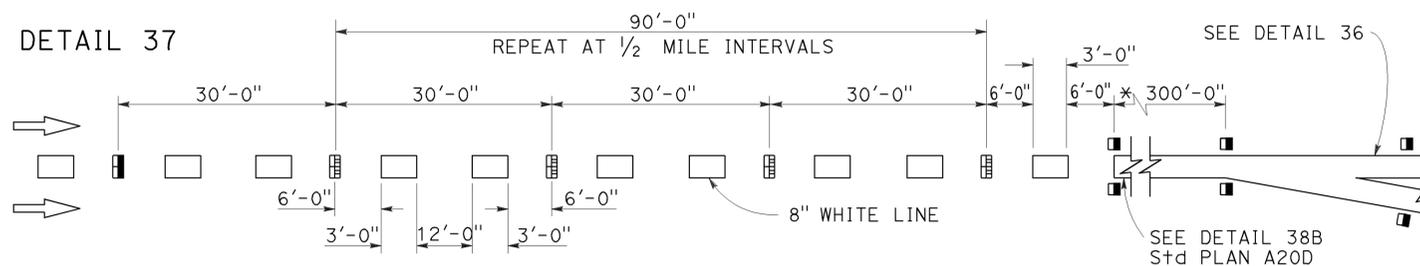
*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 No. C40375  
 Exp. 3-31-15  
 CIVIL  
 STATE OF CALIFORNIA

July 19, 2013  
 PLANS APPROVAL DATE

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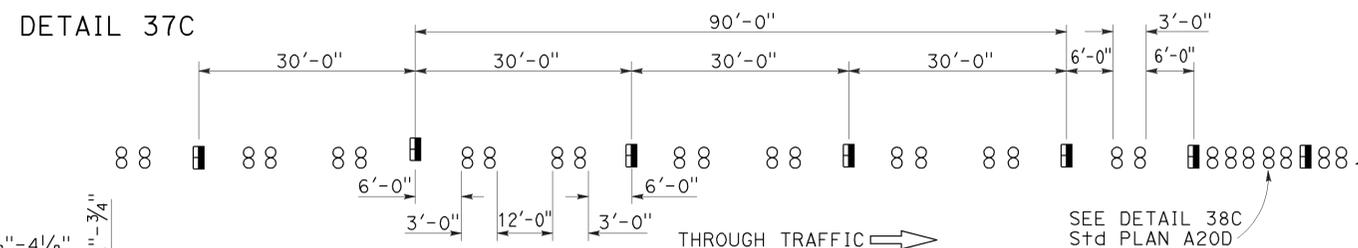
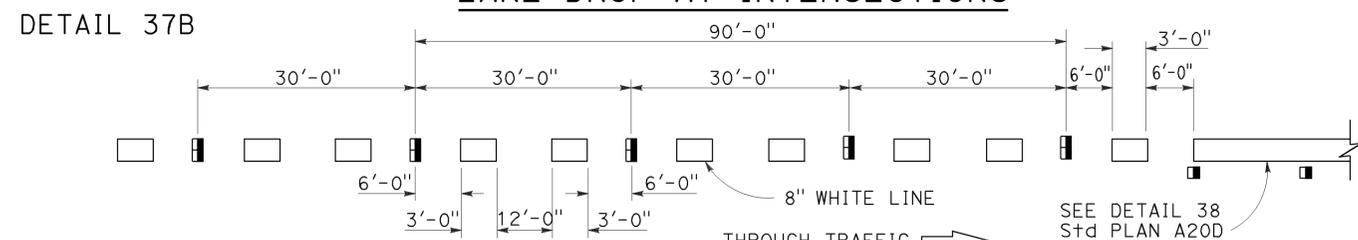
TO ACCOMPANY PLANS DATED 2-18-14

### LANE DROP AT EXIT RAMP



\* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

### LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

### PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

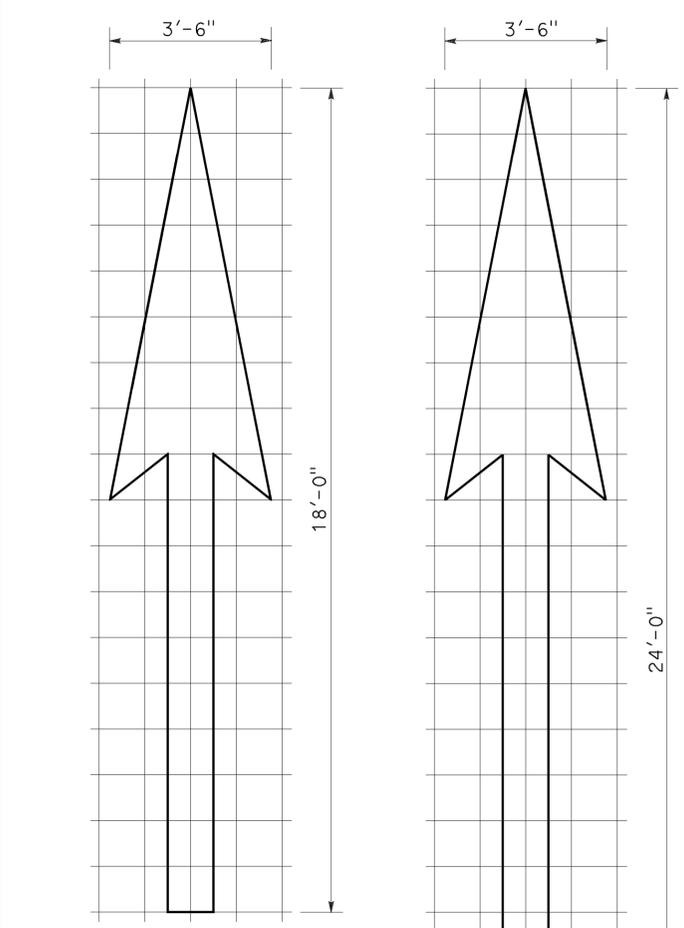
RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

### REVISED STANDARD PLAN RSP A20C

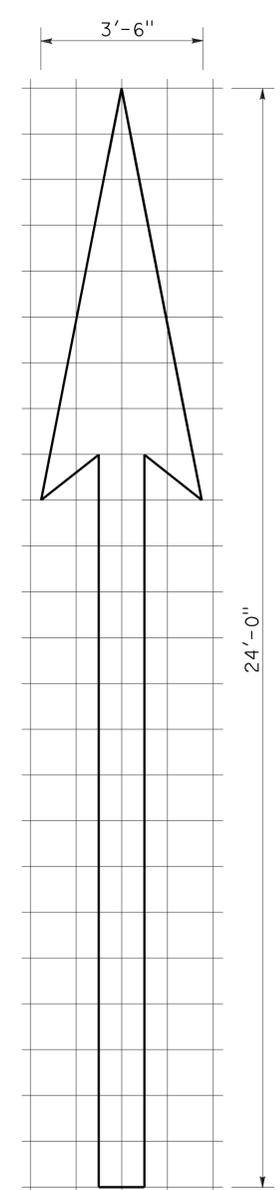
2010 REVISED STANDARD PLAN RSP A20C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	15	36
<i>Roberta L. McLaughlin</i> REGISTERED CIVIL ENGINEER April 20, 2012 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 Roberta L. McLaughlin No. C40375 Exp. 3-31-13 CIVIL STATE OF CALIFORNIA					

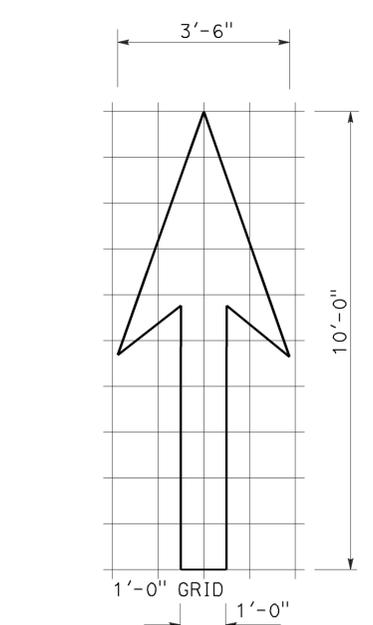
TO ACCOMPANY PLANS DATED 2-18-14



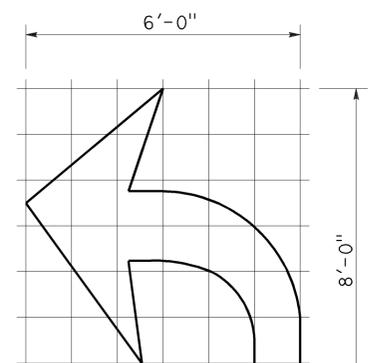
1'-0" GRID  
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



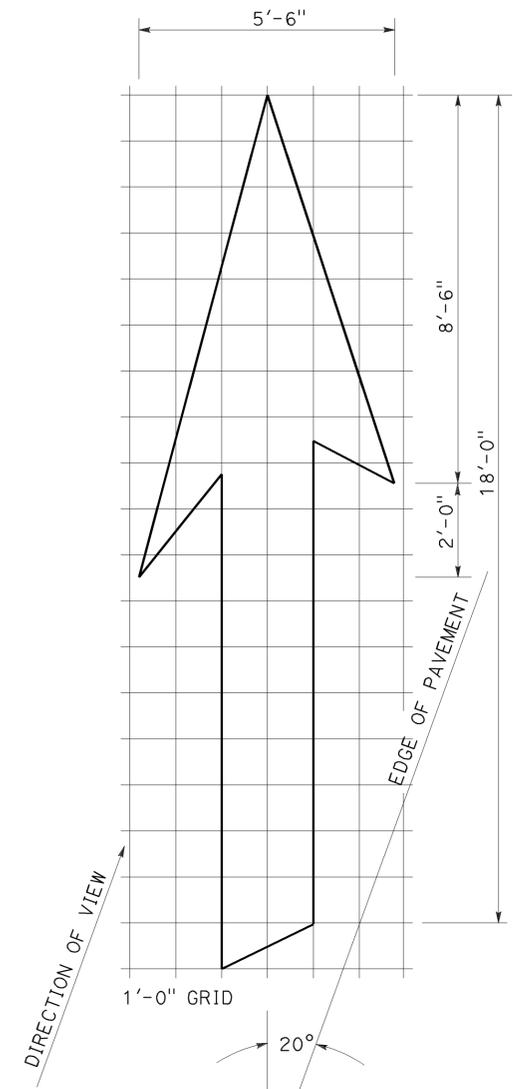
1'-0" GRID  
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



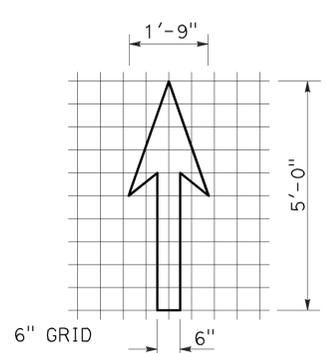
1'-0" GRID  
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



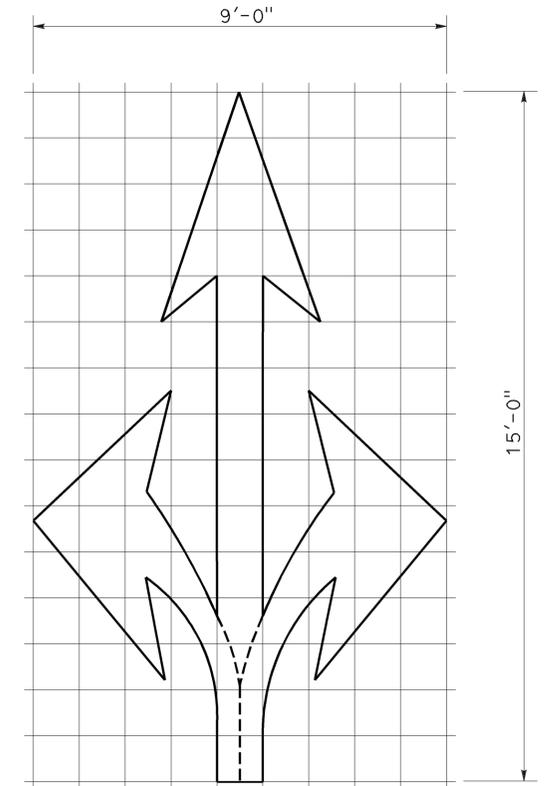
1'-0" GRID  
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
(For Type IV (R) arrow, use mirror image)



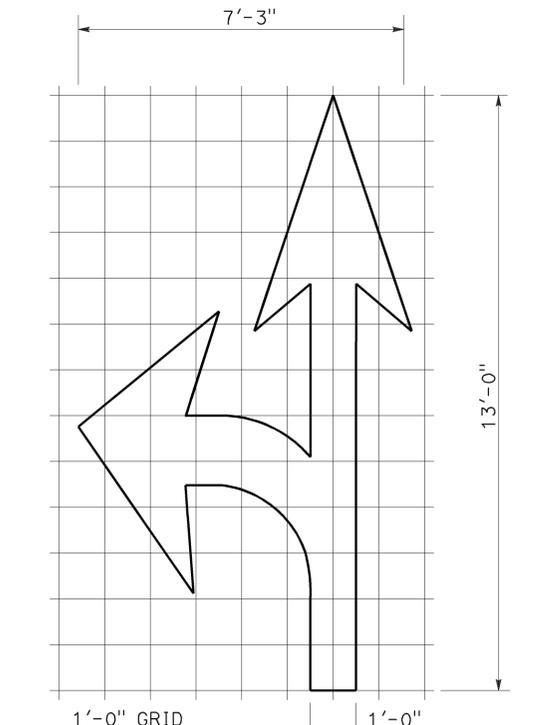
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
Right lane drop arrow  
(For left lane, use mirror image)



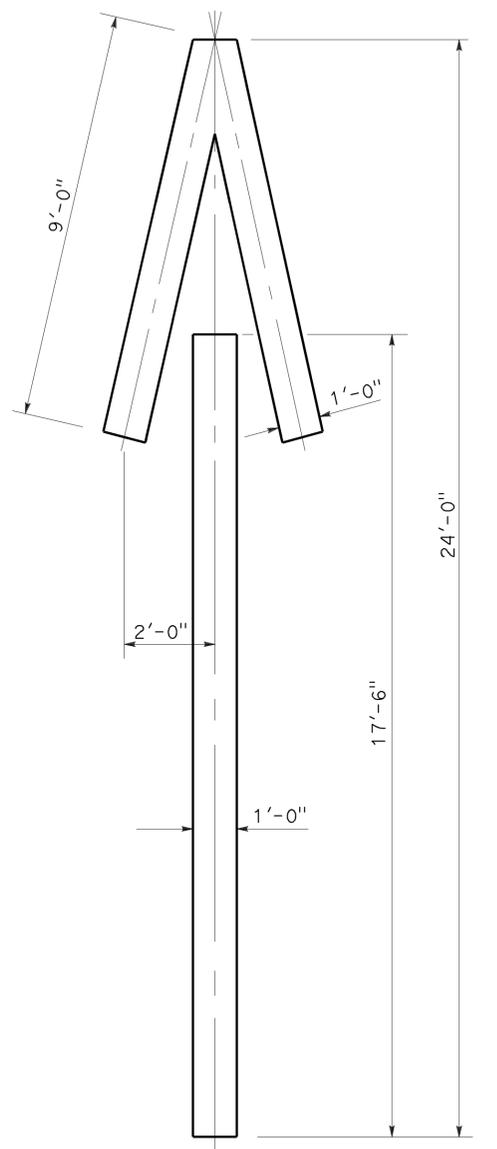
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



1'-0" GRID  
A=36 ft<sup>2</sup>  
**TYPE VIII ARROW**



1'-0" GRID  
A=27 ft<sup>2</sup>  
**TYPE VII (L) ARROW**  
(For Type VII (R) arrow, use mirror image)



A=33 ft<sup>2</sup>  
**TYPE V ARROW**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
ARROWS**  
NO SCALE

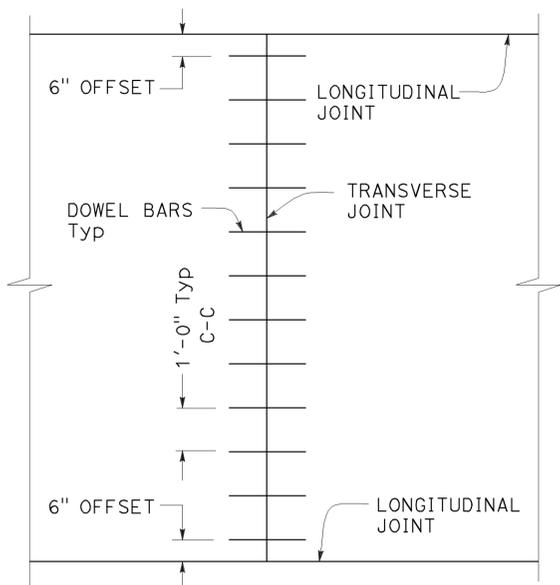
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A24A**

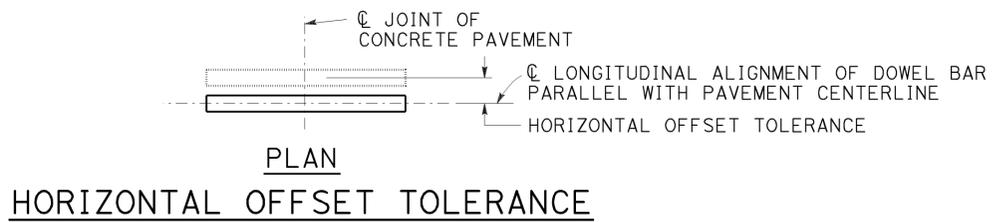
**2010 REVISED STANDARD PLAN RSP A24A**

TO ACCOMPANY PLANS DATED 2-18-14

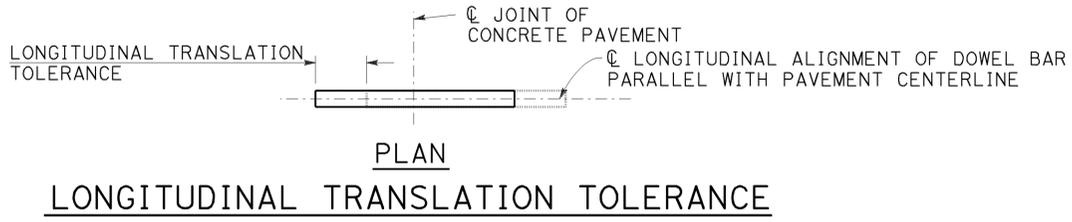
- NOTES:**
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
  - Where fresh concrete pavement is placed against new concrete or existing concrete pavement, rounding the corner of the existing concrete pavement is not required.
  - May also use 3/4" Dia dowel bars 2'-4"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



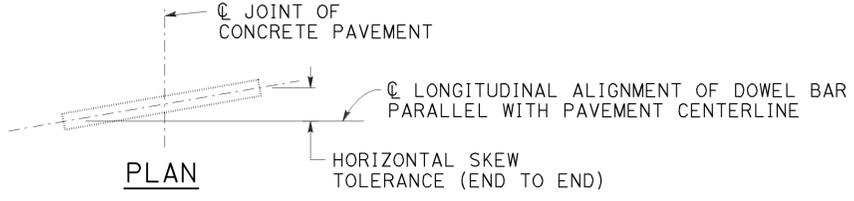
**TRANSVERSE JOINT  
DOWEL BAR LAYOUT**



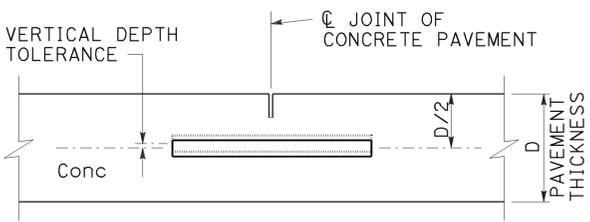
**HORIZONTAL OFFSET TOLERANCE**



**LONGITUDINAL TRANSLATION TOLERANCE**

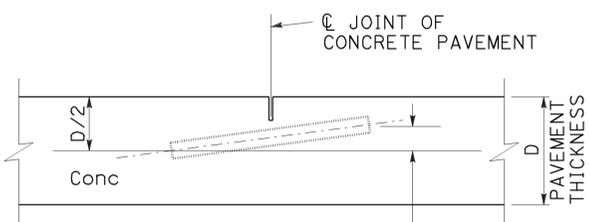


**HORIZONTAL SKEW TOLERANCE**



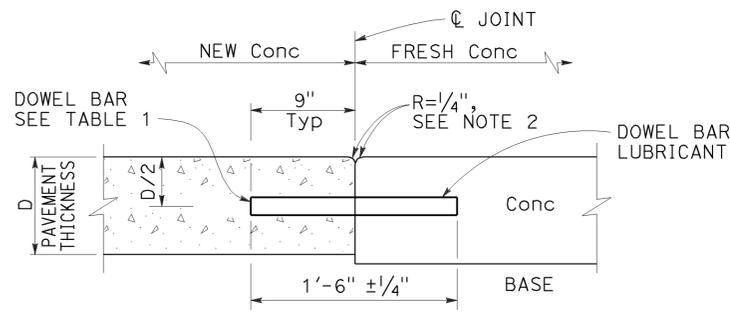
**ELEVATION**

**VERTICAL DEPTH TOLERANCE**

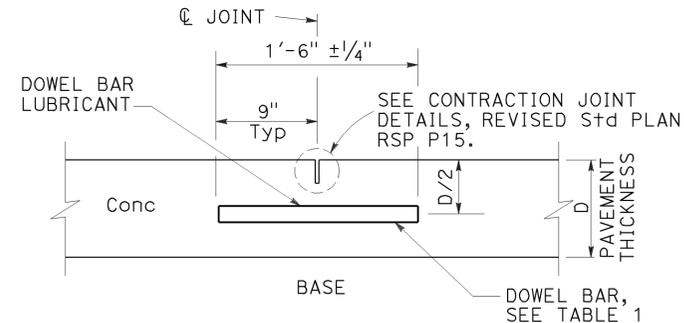


**ELEVATION**

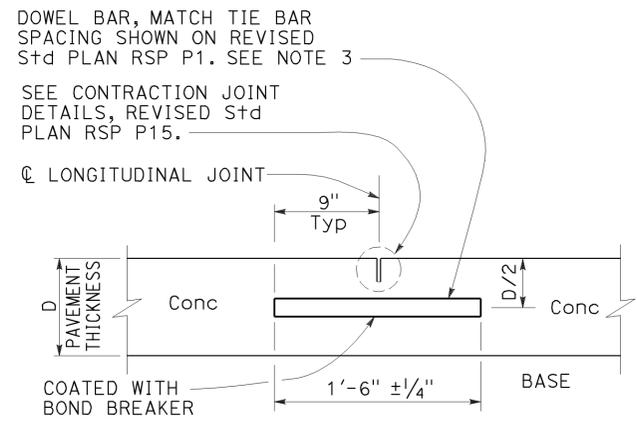
**VERTICAL SKEW TOLERANCE**



**TRANSVERSE  
CONSTRUCTION JOINT DETAIL**



**TRANSVERSE CONTRACTION JOINT**



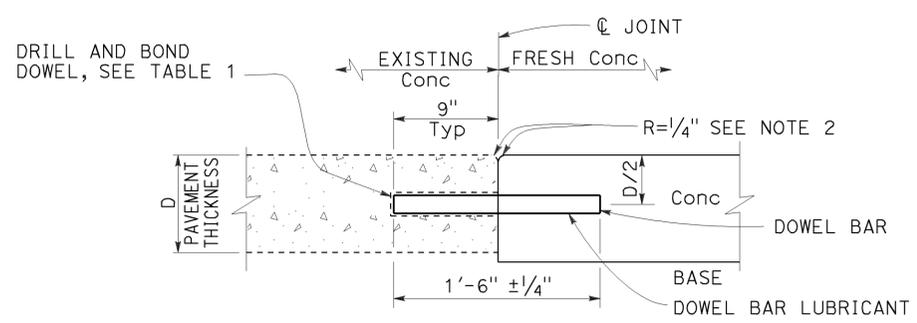
**LONGITUDINAL CONTRACTION  
JOINT WITH DOWEL BARS**

See Revised Std Plan RSP P18

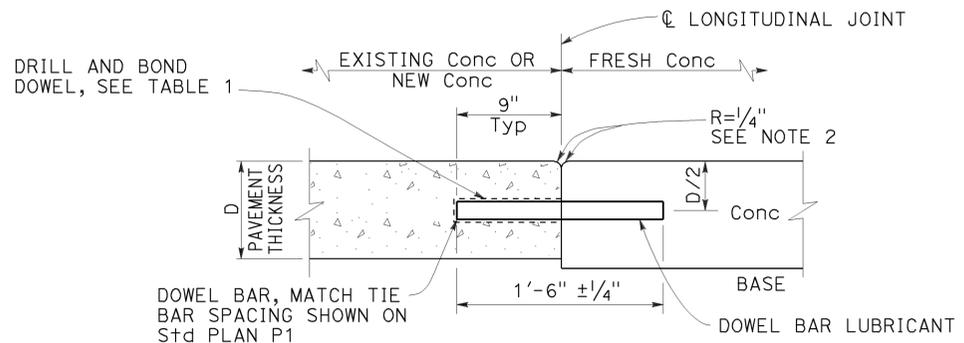
**TABLE 1**  
DOWEL BAR DIAMETER TABLE

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

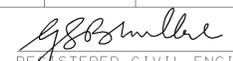
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT  
DOWEL BAR  
DETAILS**

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	2	14.5/R23.2	17	36

  
 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.

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**

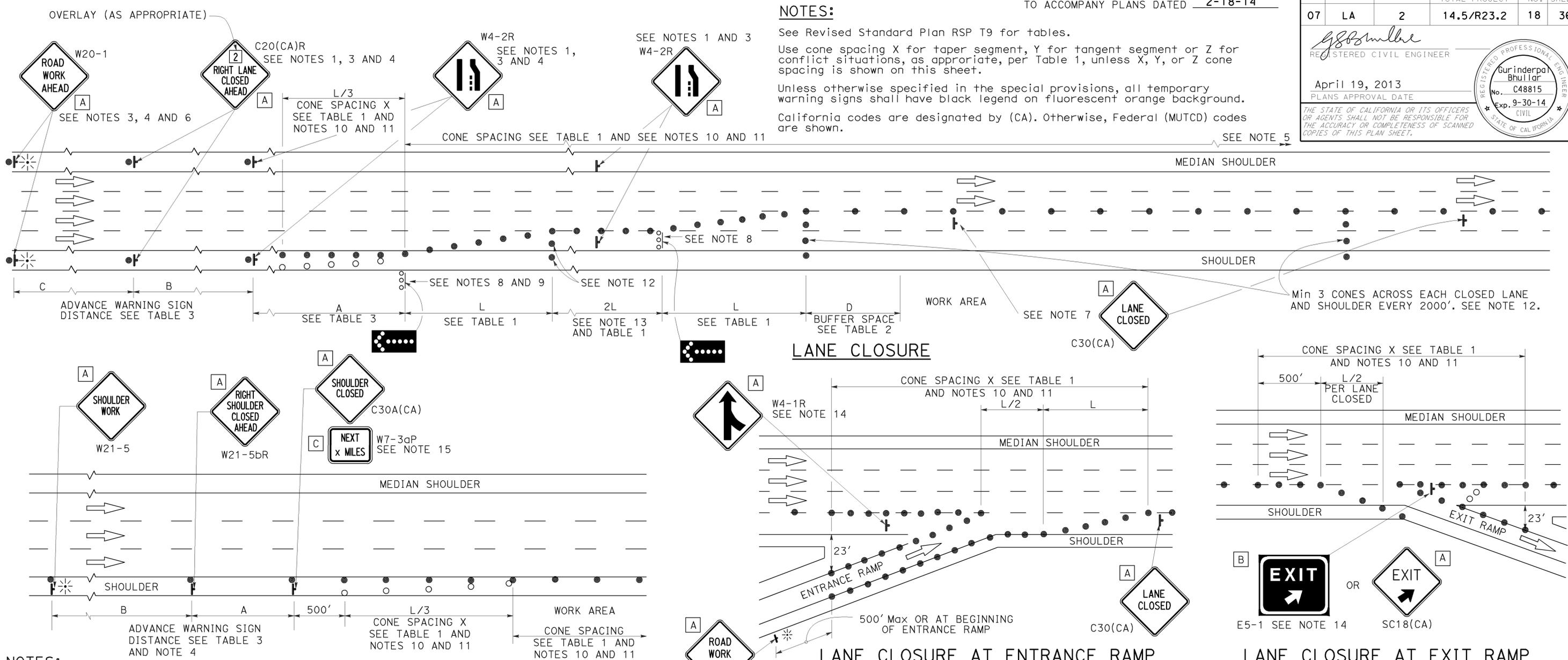
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	18	36

REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 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:**

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 \_\_\_\_\_ 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 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 \_\_\_\_\_ 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"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**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

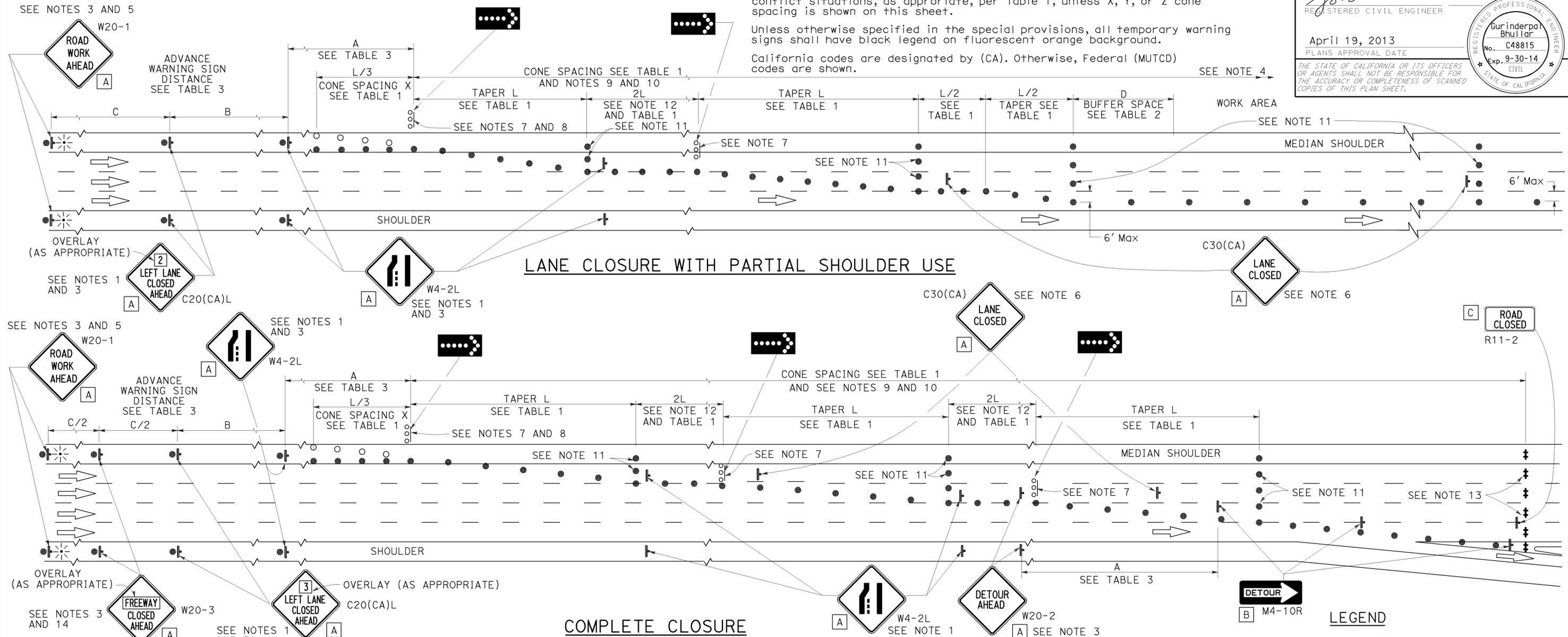
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	19	36

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.



- 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

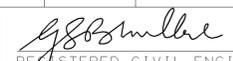
NO SCALE

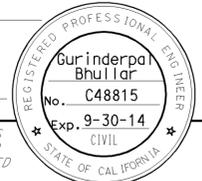
RSP T10A DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10A DATED MAY 20, 2011 - PAGE 238 OF THE STANDARD PLANS BOOK DATED 2010.

### REVISED STANDARD PLAN RSP T10A

2010 REVISED STANDARD PLAN RSP T10A

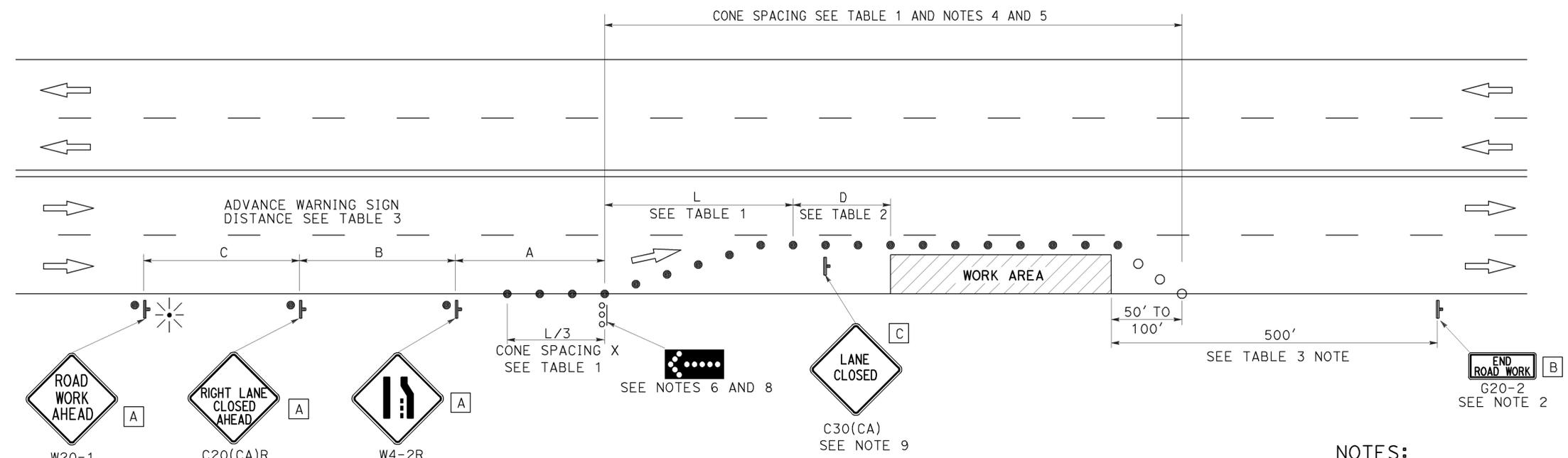
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	20	36

  
 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.

TO ACCOMPANY PLANS DATED 2-18-14



**TYPICAL LANE CLOSURE**

**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:**

- Each advance warning 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. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, 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.
- 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.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- 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.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- 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 closure unless, otherwise directed by the Engineer.

**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** 36" x 18"
- C** 30" x 30"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11 DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T11**

2010 REVISED STANDARD PLAN RSP T11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	21	36

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.

**LEGEND**

- TRAFFIC CONE
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⦿ FAS SUPPORT OR TRAILER
- ☀ PORTABLE FLASHING BEACON

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

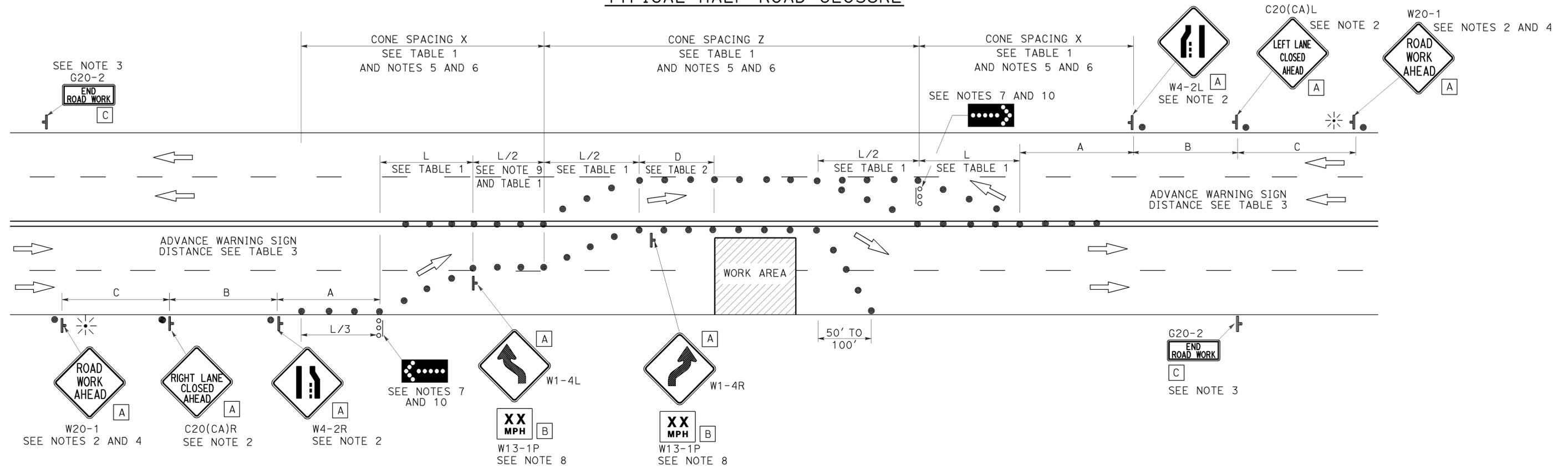
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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.

TO ACCOMPANY PLANS DATED 2-18-14

**TYPICAL HALF ROAD CLOSURE**



**NOTES:**

1. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.
2. Each advance warning sign in each direction of travel 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.
3. A G20-2 "END ROAD WORK" sign, 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.
4. 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.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow signs shall be either Type I or Type II.
8. Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
9. Unless otherwise specified in the special provisions, the tangent (L/2) shall be used.
10. 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.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR HALF ROAD CLOSURE ON  
MULTILANE CONVENTIONAL  
HIGHWAYS AND EXPRESSWAYS**

NO SCALE

RSP T12 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T12  
DATED MAY 20, 2011 - PAGE 240 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T12**

2010 REVISED STANDARD PLAN RSP T12

# 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

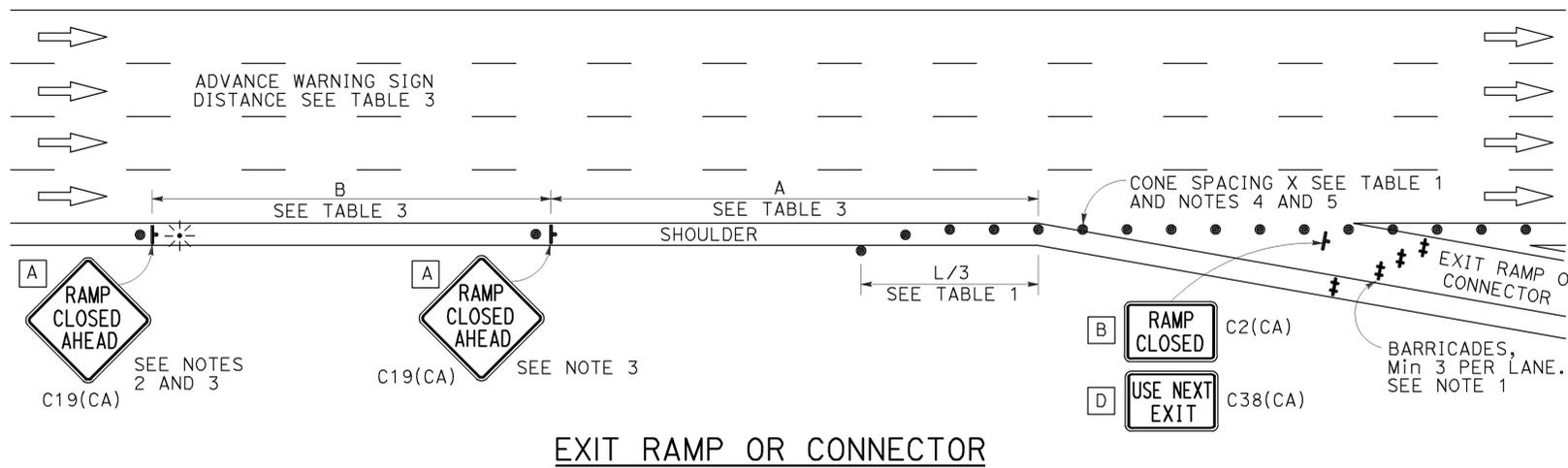
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	22	36

*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.

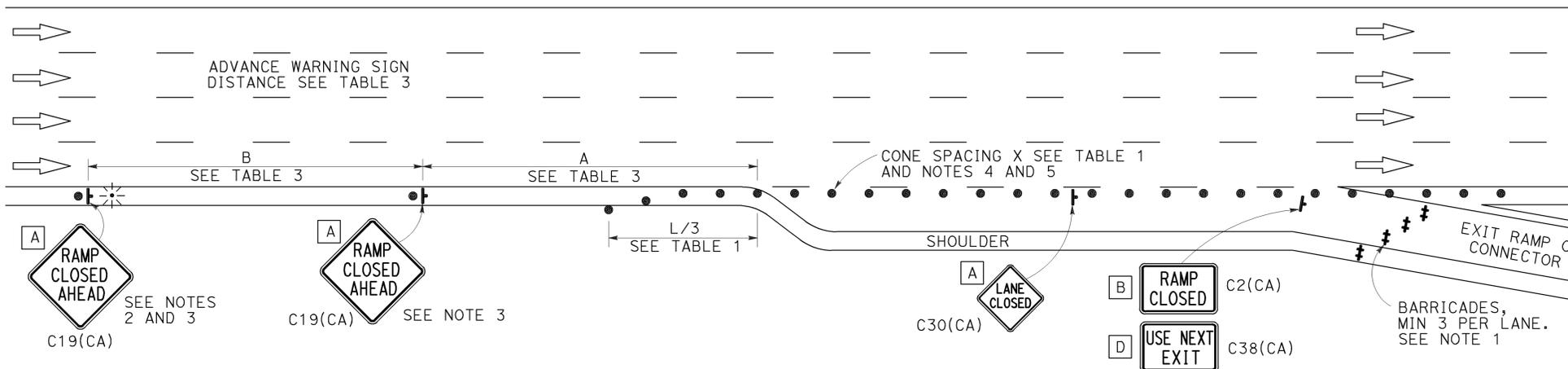
TO ACCOMPANY PLANS DATED 2-18-14

## NOTES:

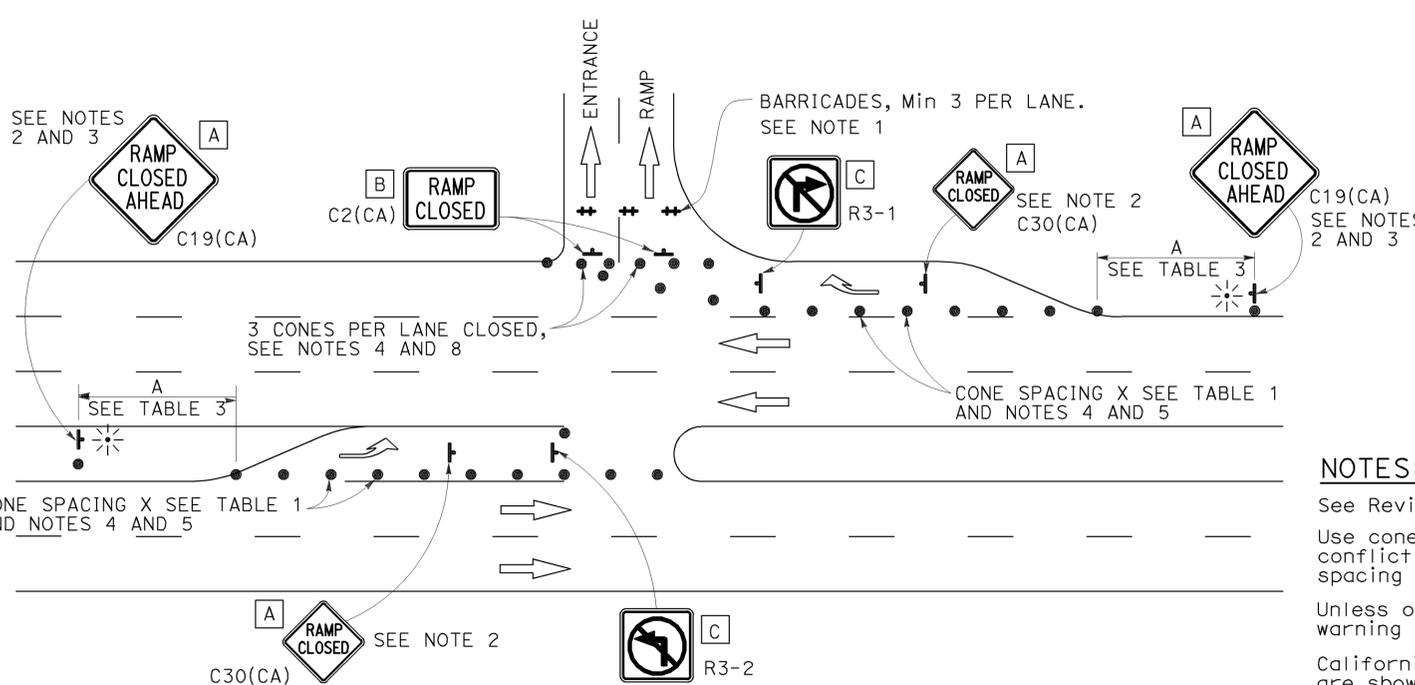
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed 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.



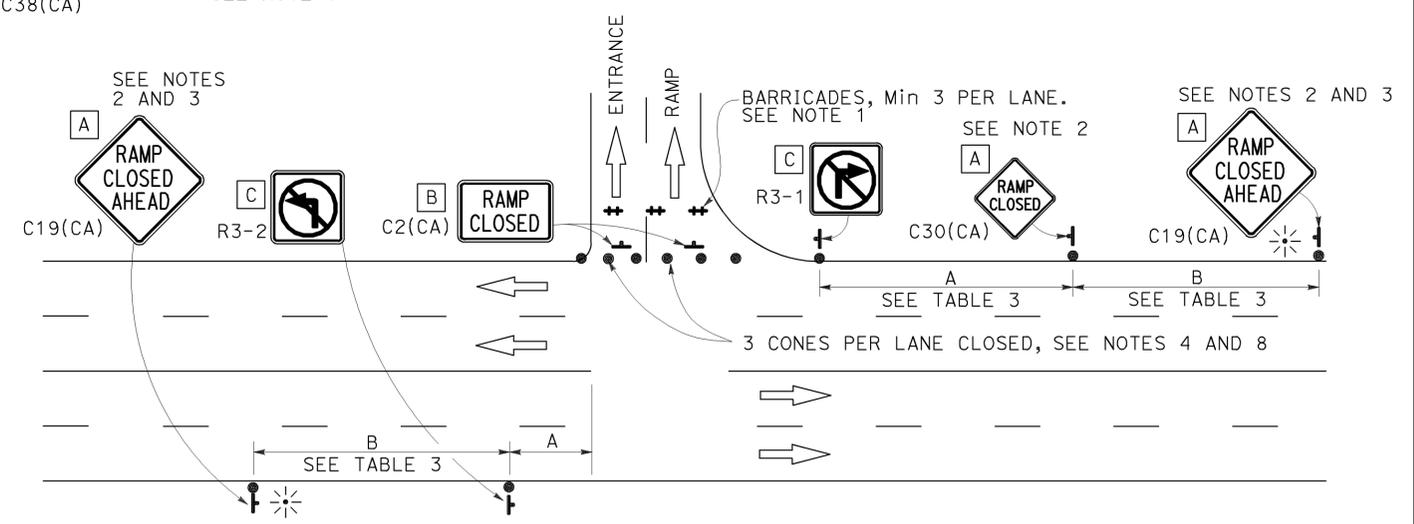
EXIT RAMP OR CONNECTOR



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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	23	36

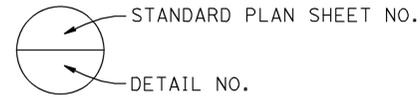
REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

### INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	GENERAL PLAN NO. 4
5	GENERAL PLAN NO. 5
6	GENERAL PLAN NO. 6
7	GENERAL PLAN NO. 7
8	GENERAL PLAN NO. 8
9	GENERAL PLAN NO. 9
10	GENERAL PLAN NO. 10
11	GENERAL PLAN NO. 11
12	MISCELLANEOUS DETAILS NO. 1
13	MISCELLANEOUS DETAILS NO. 2
14	STRUCTURE APPROACH TYPE R(30D)

### STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP P10	CONCRETE PAVEMENT - DOWEL BAR DETAILS

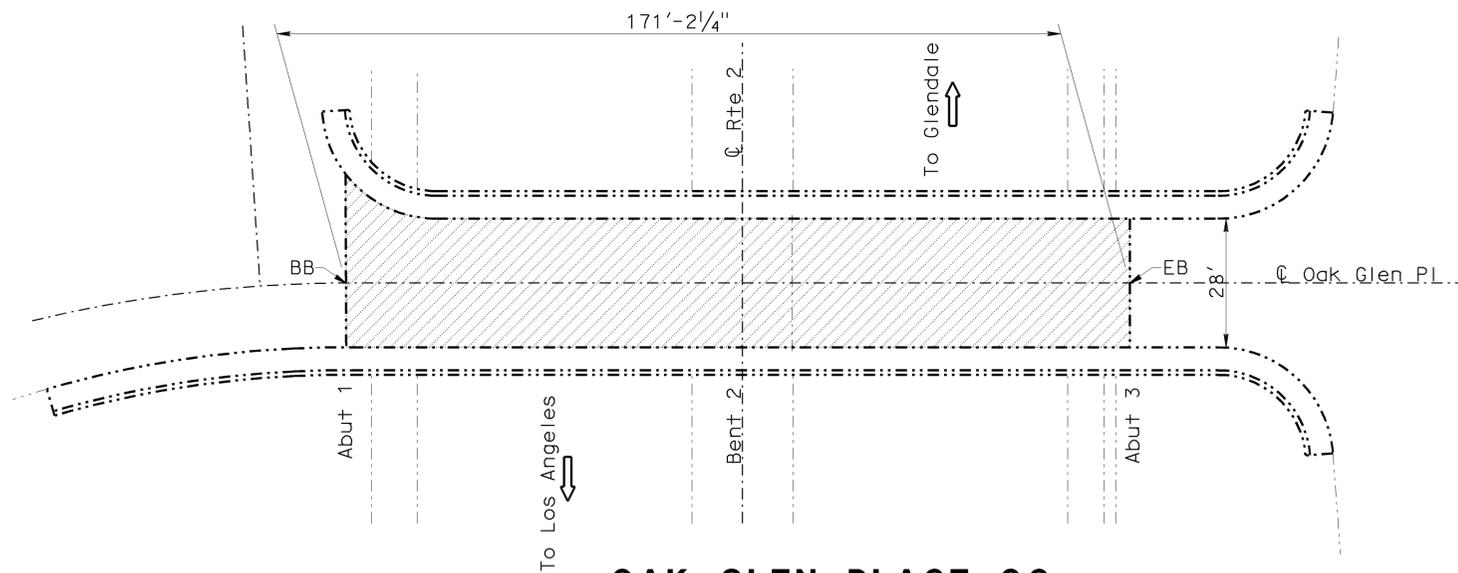


### LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.

### NOTE

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

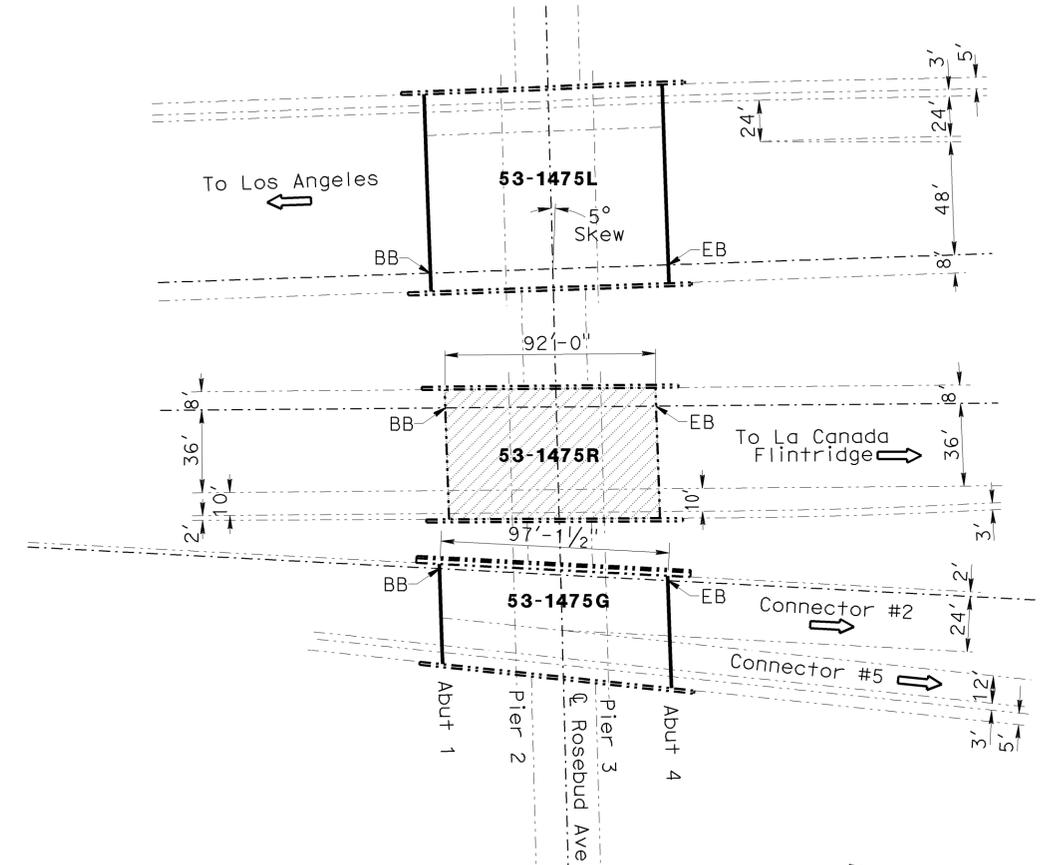


### OAK GLEN PLACE OC

Br No. 53-1414, Rte 2, PM 14.46  
No Scale

OAK GLEN PLACE OC #53-1414  
QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	4,800 SQFT
TREAT BRIDGE DECK	4,800 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	60 GAL



### ROSEBUD AVENUE UC

Br No. 53-1475L/R,G, Rte 2, PM 14.84  
1" = 40'

ROSEBUD AVENUE UC #53-1475L/R/G  
QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	5,490 SQFT
TREAT BRIDGE DECK	5,490 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	69 GAL
CLEAN EXPANSION JOINT	268 LF
JOINT SEAL (MR 1/2")	268 LF

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

TONY D. BRAKE  
DESIGN ENGINEER

DESIGN	BY	CHECKED	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DESIGN	Mazin Ibrahim	Hong Tien Tran	LAYOUT	Clayton Tom
DETAILS	Clayton Tom	Mazin Ibrahim	SPECIFICATIONS	Karen Doll
QUANTITIES	Mazin Ibrahim	Hong Tien Tran		

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.  
Varies  
POST MILE  
Varies

ROUTE 2 BRIDGES  
GENERAL PLAN NO. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3489  
PROJECT NUMBER & PHASE: 0712000450 1 CONTRACT NO.: 07-1W6304

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
05-28-13	01	14

FILE => 07-1w6301-a-gp01.dgn

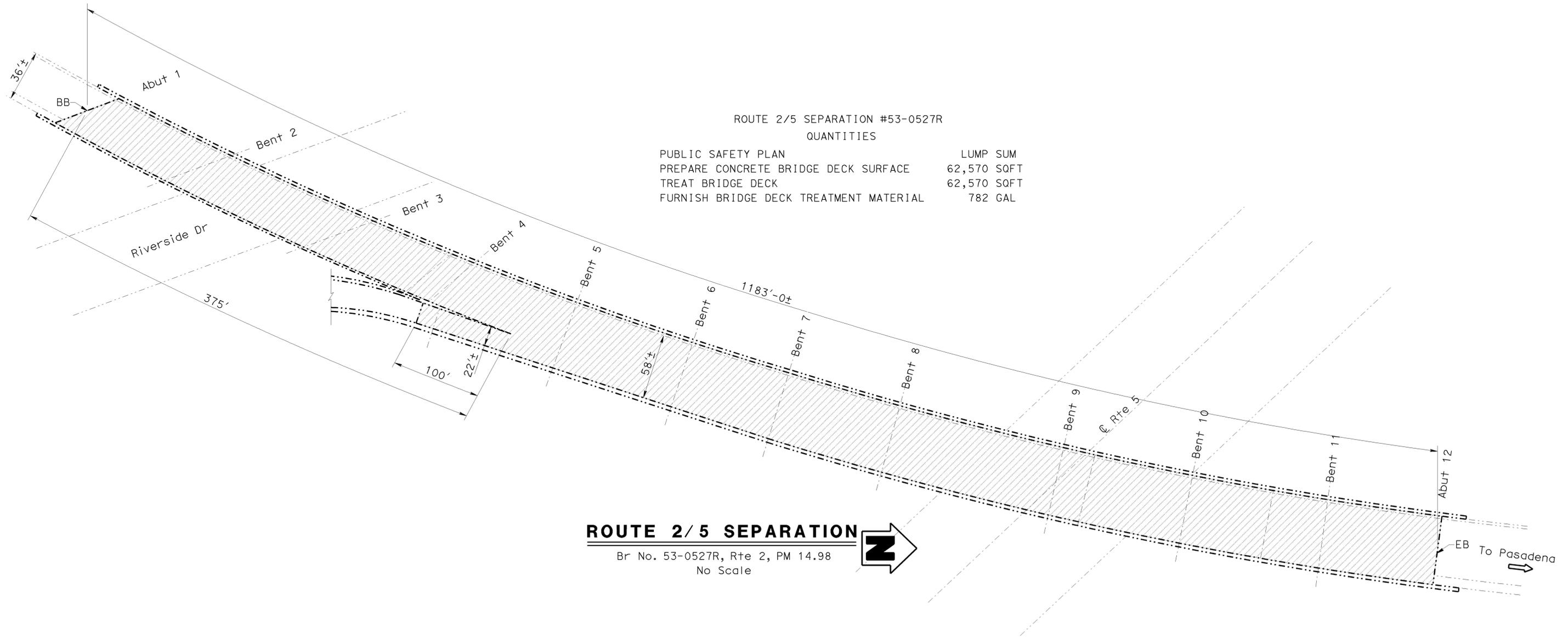
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	24	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 REGISTERED PROFESSIONAL ENGINEER  
 MAZIN S. IBRAHIM  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 2-18-14  
 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.

**LEGEND:**

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- ➔ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.



**ROUTE 2/5 SEPARATION**

Br No. 53-0527R, Rte 2, PM 14.98  
No Scale

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	<b>ROUTE 2 BRIDGES</b> <b>GENERAL PLAN NO. 2</b>					
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom		CHECKED Mazin Ibrahim		POST MILE				
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll		CHECKED Karen Doll		PLANS AND SPECS COMPARED	Varies			
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489	PROJECT NUMBER & PHASE: 0712000450 1	CONTRACT NO.: 07-1W6304	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 02	OF 14

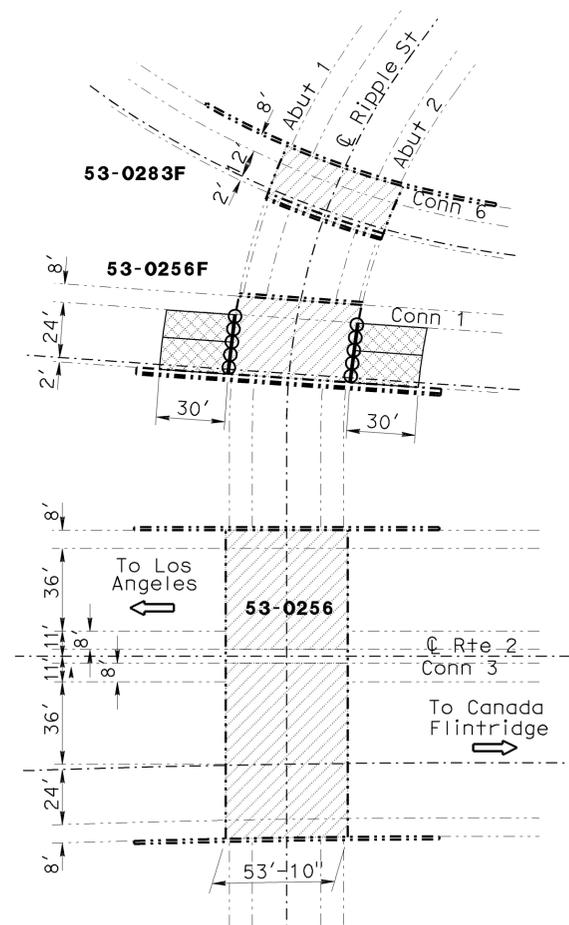
USERNAME => s117283 DATE PLOTTED => 16-JAN-2014 TIME PLOTTED => 06:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	25	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
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**LEGEND:**

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- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
- ▩ Indicates limits of remove existing PCC and AC approach and place new Structure Approach Type R(30D). For details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.
- ⊗⊗⊗⊗ Indicates location of new paving notch and placement of new joint seal.



**QUANTITIES**

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	10,230 SQFT
TREAT BRIDGE DECK	10,230 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	128 GAL
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	65 CY
PAVING NOTCH EXTENSION	36 CF
JOINT SEAL (MR 1/2")	48 LF



**QUANTITIES**

CLEAN EXPANSION JOINT	1,184 LF
JOINT SEAL (MR 1/2")	582 LF
JOINT SEAL (MR 1 1/2")	602 LF

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**TONY D. BRAKE**  
 DESIGN ENGINEER

DESIGN BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT BY Clayton Tom	CHECKED Mazin Ibrahim
QUANTITIES BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS BY Karen Doll	PLANS AND SPECS COMPARED Karen Doll

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
 POST MILE Varies

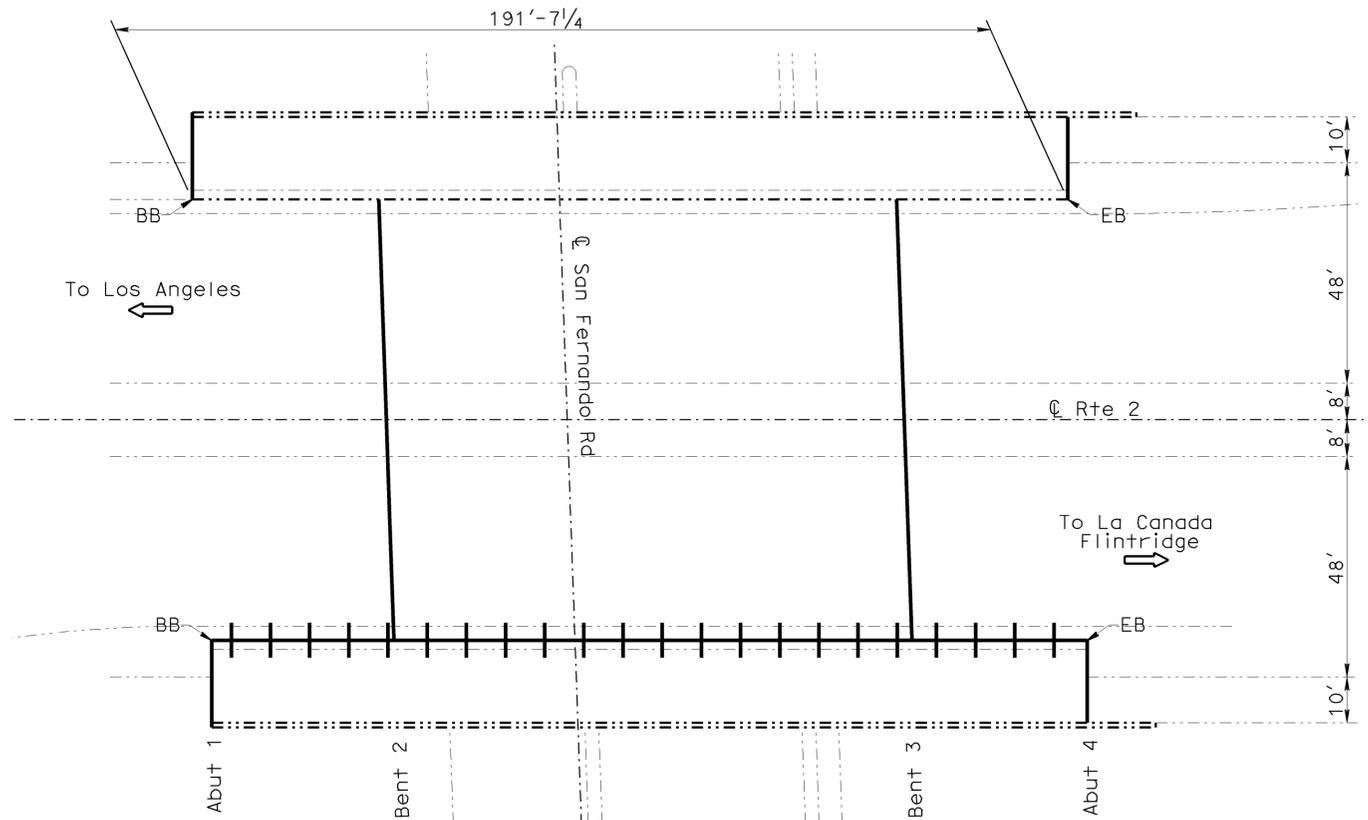
**ROUTE 2 BRIDGES  
 GENERAL PLAN NO. 3**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	26	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 REGISTERED CIVIL ENGINEER No. C69896 Exp. 09/30/14  
 PLANS APPROVAL DATE 2-18-14  
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**LEGEND:**

- Indicates existing.
- ⇒ Indicates direction of traffic.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.
- +++ Indicates location of existing longitudinal joint seal removal clean expansion joint, and placement of new joint seal.



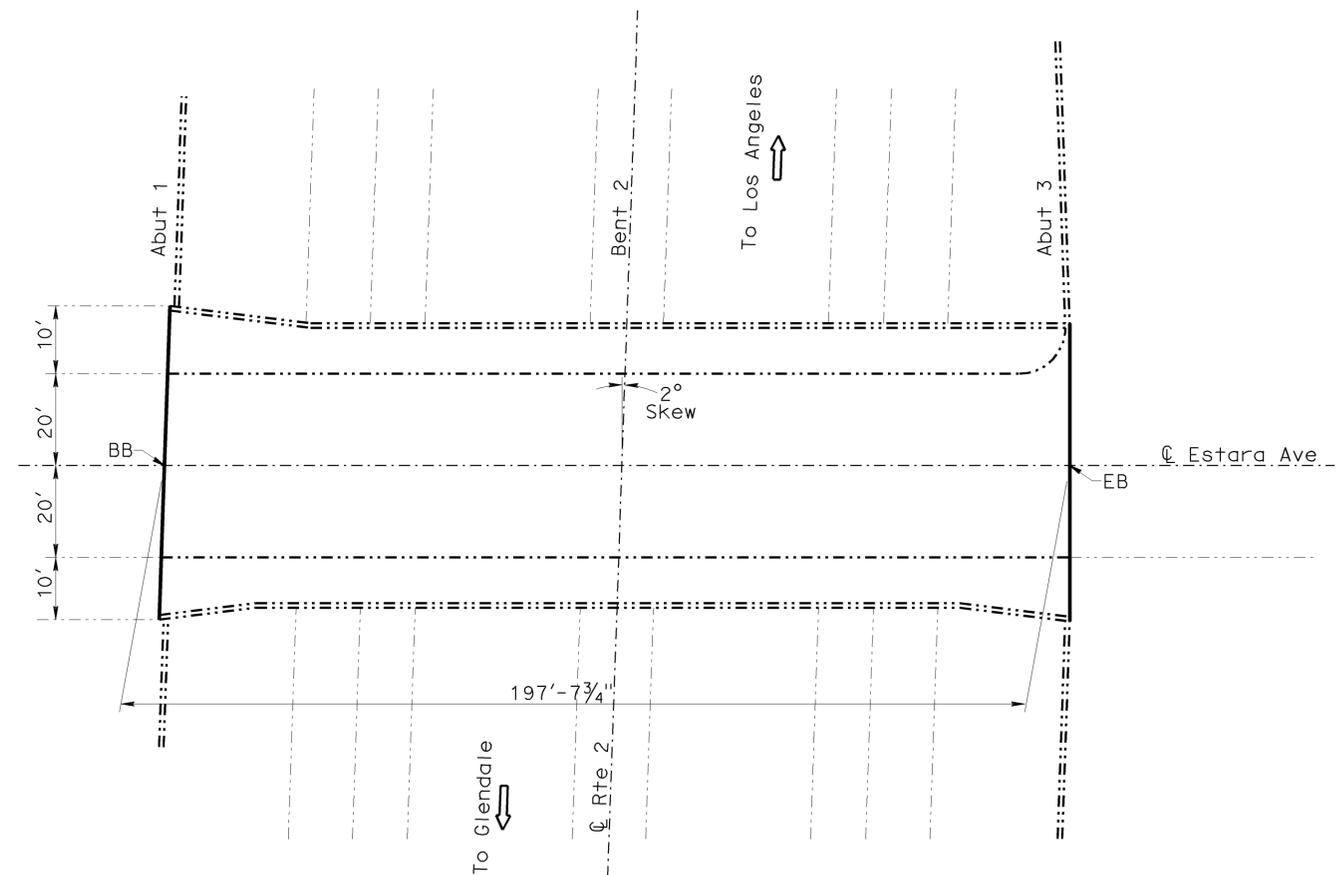
**SAN FERNANDO ROAD UC**

Br No. 53-0743, Rte 2, PM 16.02  
No Scale

SAN FERNANDO ROAD UC #53-0743  
QUANTITIES

CLEAN EXPANSION JOINT	528 LF
JOINT SEAL (MR 1")	528 LF
JOINT SEAL (TYPE AL)	192 LF

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



**ESTARA AVENUE OC**

Br No. 53-0879, Rte 2, PM 16.38  
No Scale

ESTARA AVENUE OC #53-0879  
QUANTITIES

CLEAN EXPANSION JOINT	80 LF
JOINT SEAL (MR 1")	80 LF

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE	BRIDGE NO.
	STRUCTURE MAINTENANCE DESIGN	Various
		POST MILE

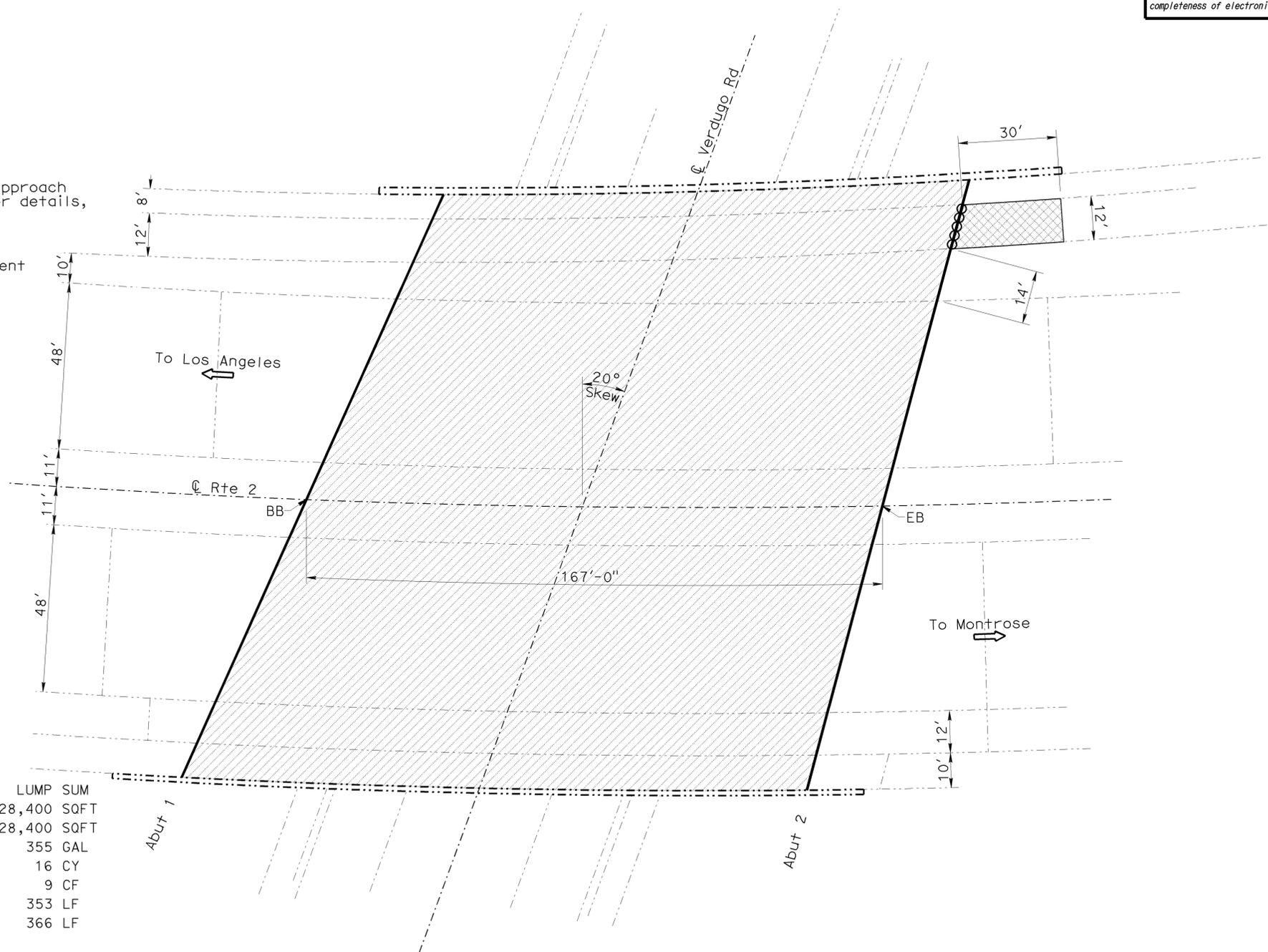
ROUTE 2 BRIDGES	
GENERAL PLAN NO. 4	
REVISION DATES	SHEET OF
05-28-13 03-16-13 10-01-13 10-23-13	04 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	27	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 REGISTERED PROFESSIONAL ENGINEER  
 MAZIN S. IBRAHIM  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 2-18-14  
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**LEGEND:**

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- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.
- ▩ Indicates limits of remove existing PCC and AC approach and place new Structure Approach Type R(30D). For details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.
- ⊖⊖⊖⊖⊖⊖ Indicates location of new paving notch and placement of new joint seal.



VERDUGO ROAD UC #53-1929  
QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	28,400 SQFT
TREAT BRIDGE DECK	28,400 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	355 GAL
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	16 CY
PAVING NOTCH EXTENSION	9 CF
CLEAN EXPANSION JOINT	353 LF
JOINT SEAL (MR 1")	366 LF

**VERDUGO ROAD UC**

Br No. 53-1929, Rte 2, PM R17.0  
No Scale



NOTE:  
THE CONTRACTOR SHALL VERIFY ALL  
CONTROLLING FIELD DIMENSIONS  
BEFORE ORDERING OR FABRICATING  
ANY MATERIAL.

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	Various
	POST MILE	Varies
	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	

ROUTE 2 BRIDGES GENERAL PLAN NO. 5	
REVISION DATES	SHEET 05 OF 14

USERNAME => s117283 DATE PLOTTED => 16-JAN-2014 TIME PLOTTED => 06:09  
 FILE => 07-1w6301-a-gp05.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	28	36

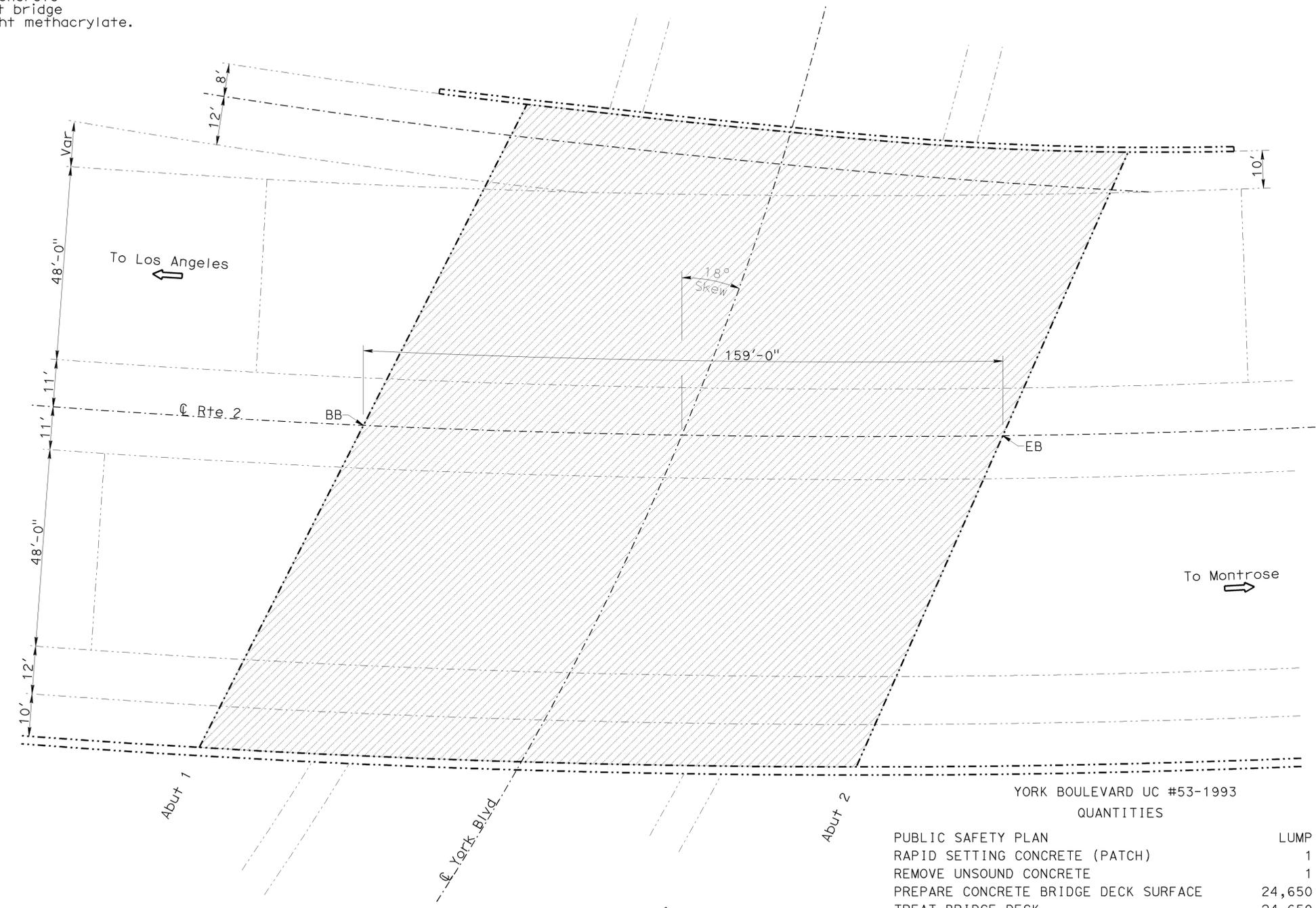

 REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
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**LEGEND:**

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**NOTE:**

1. For joint spall repair details, see "MISCELLANEOUS DETAILS NO. 2" sheet.



**YORK BOULEVARD UC**  
 Br No. 53-1993, Rte 2, PM R17.29  
 No Scale

PUBLIC SAFETY PLAN	LUMP SUM
RAPID SETTING CONCRETE (PATCH)	1 CF
REMOVE UNSOUND CONCRETE	1 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	24,650 SQFT
TREAT BRIDGE DECK	24,650 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	308 GAL

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

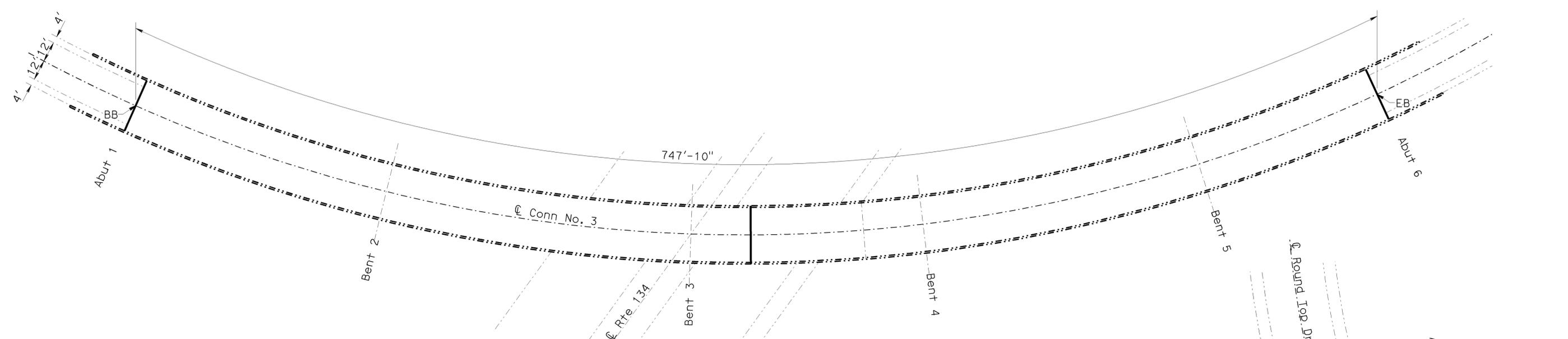
**DIVISION OF MAINTENANCE**  
**STRUCTURE MAINTENANCE DESIGN**

BRIDGE NO. Various  
 POST MILE Varies

**ROUTE 2 BRIDGES**  
**GENERAL PLAN NO. 6**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	29	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 REGISTERED PROFESSIONAL ENGINEER  
 MAZIN S. IBRAHIM  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
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**W2-W134 CONNECTOR OC**

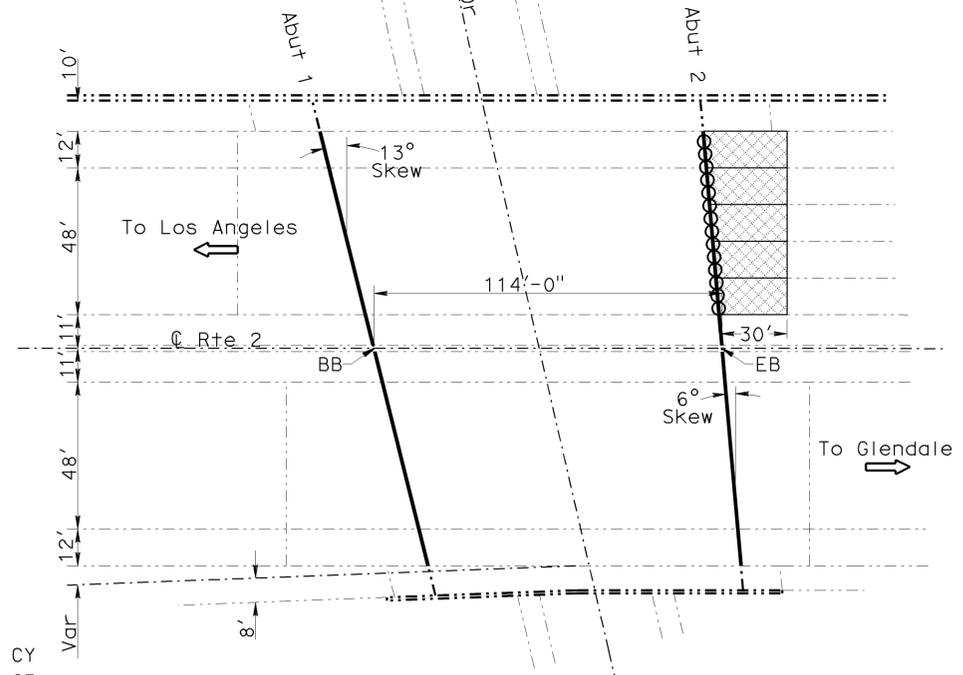
Br No. 53-1921F, Rte 2, PM R18.81  
No Scale

W2-W134 CONNECTOR OC #53-1921F  
QUANTITIES

CLEAN EXPANSION JOINT 96 LF  
JOINT SEAL (MR 1/2") 96 LF

ROUND TOP DRIVE UC #53-1975  
QUANTITIES

STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) 81 CY  
PAVING NOTCH EXTENSION 45 CF  
CLEAN EXPANSION JOINT 236 LF  
JOINT SEAL (MR 1/2") 296 LF



**ROUND TOP DRIVE UC**

Br No. 53-1975, Rte 2, PM R17.78  
No Scale

**LEGEND:**

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- Indicates limits of remove existing PCC and AC approach and place new Structure Approach Type R(30D). For details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.
- Indicates location of new paving notch and placement of new joint seal.

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies	<b>ROUTE 2 BRIDGES</b> <b>GENERAL PLAN NO. 7</b>	
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom			CHECKED Mazin Ibrahim	POST MILE		Varies
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll			CHECKED Karen Doll	PLANS AND SPECS COMPARED		Karen Doll

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3  
 UNIT: 3489 PROJECT NUMBER & PHASE: 0712000450 1 CONTRACT NO.: 07-1W6304  
 DISREGARD PRINTS BEARING EARLIER REVISION DATES  
 REVISION DATES: 05-28-13, 09-16-13, 10-01-13, 10-23-13  
 SHEET 07 OF 14  
 USERNAME => s117283 DATE PLOTTED => 16-JAN-2014 TIME PLOTTED => 06:10  
 FILE => 07-1w6301-a-gp07.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	30	36

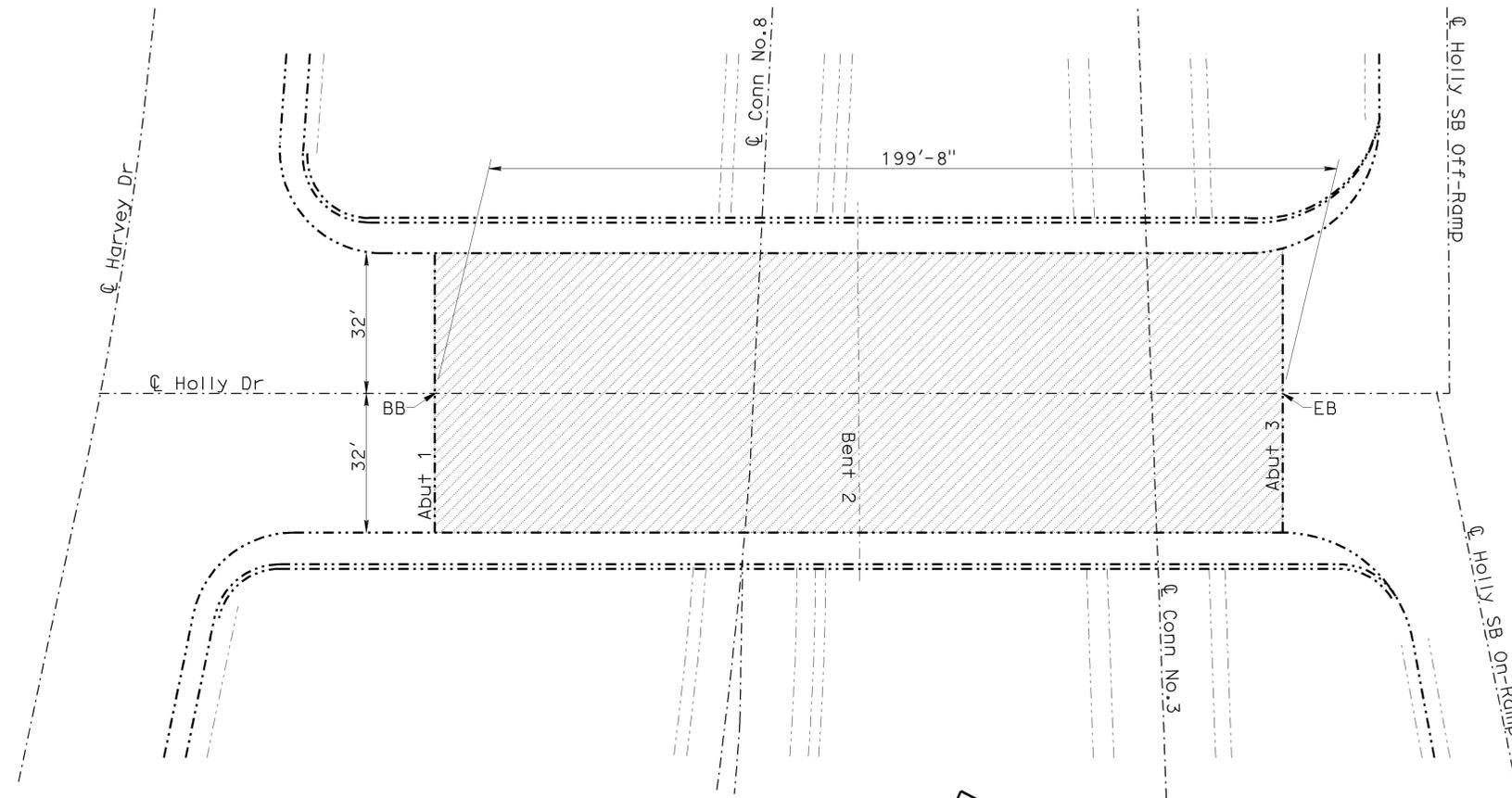
REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 No. C69896 Exp. 09/30/14  
 REGISTERED PROFESSIONAL ENGINEER MAZIN S. IBRAHIM CIVIL STATE OF CALIFORNIA  
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**LEGEND:**

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- ⇒ Indicates direction of traffic.
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**NOTE:**

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



**HOLLY DRIVE OC**  
 Br No. 53-1947, Rte 2, PM R19.05  
 No Scale

HOLLY DRIVE OC #53-1947  
 QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	12,780 SQFT
TREAT BRIDGE DECK	12,780 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	160 GAL

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 2 BRIDGES</b> <b>GENERAL PLAN NO. 8</b>		
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom			CHECKED Mazin Ibrahim		POST MILE	
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll			CHECKED Karen Doll		PLANS AND SPECS COMPARED	Varies
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3489 PROJECT NUMBER & PHASE: 0712000450 1 CONTRACT NO.: 07-1W6304	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 08 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	31	36

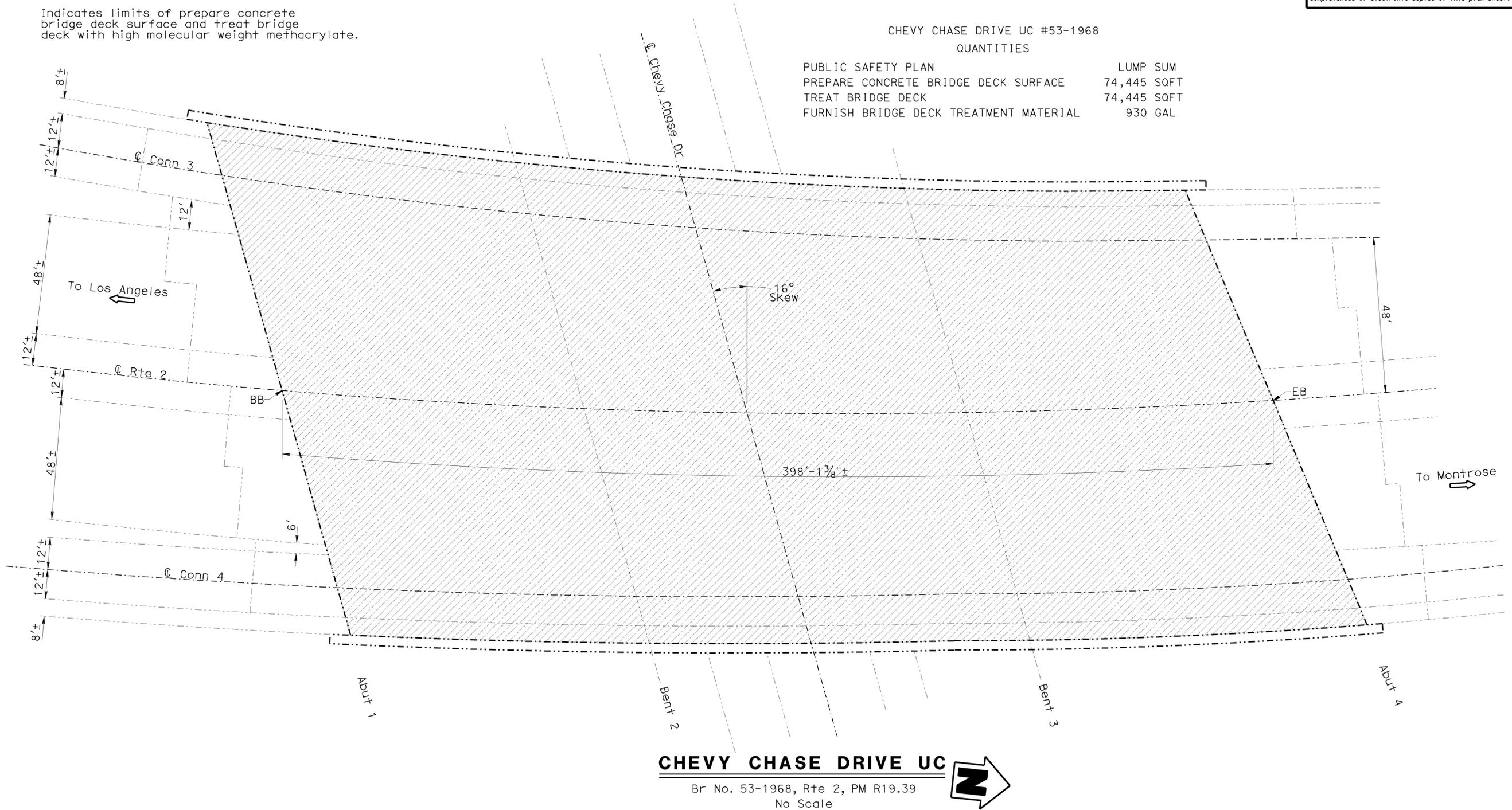
REGISTERED CIVIL ENGINEER DATE 10-16-13  
 REGISTERED PROFESSIONAL ENGINEER  
 MAZIN S. IBRAHIM  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 2-18-14  
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**LEGEND:**

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- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.

CHEVY CHASE DRIVE UC #53-1968  
 QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	74,445 SQFT
TREAT BRIDGE DECK	74,445 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	930 GAL



**CHEVY CHASE DRIVE UC**

Br No. 53-1968, Rte 2, PM R19.39  
 No Scale

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

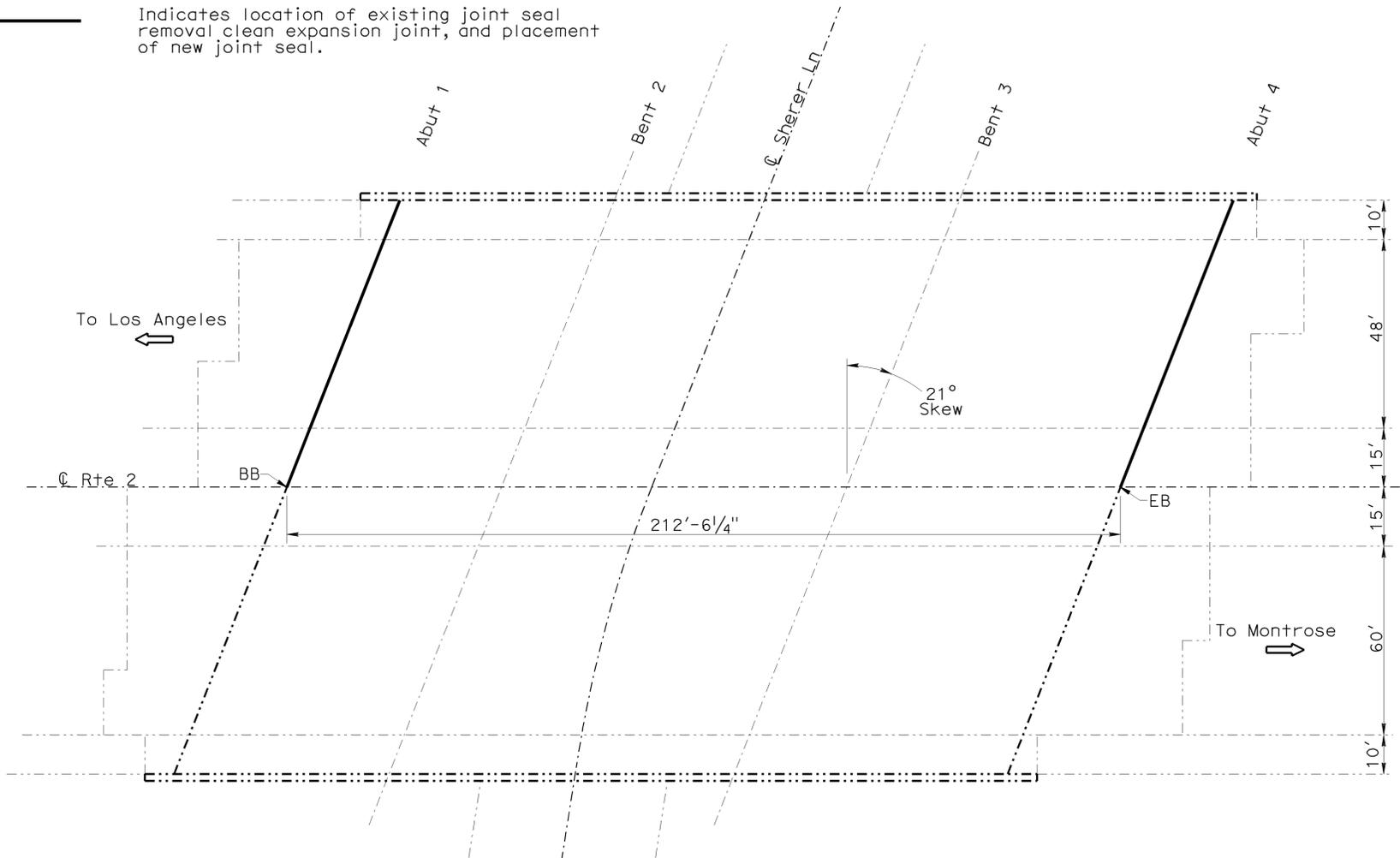
<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 2 BRIDGES</b> <b>GENERAL PLAN NO. 9</b>	
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom			CHECKED Mazin Ibrahim		POST MILE
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll			CHECKED Karen Doll		PLANS AND SPECS COMPARED
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)										
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3489 PROJECT NUMBER & PHASE: 0712000450 1		CONTRACT NO.: 07-1W6304		
DISREGARD PRINTS BEARING EARLIER REVISION DATES								REVISION DATES: 05-28-13, 09-16-13, 10-01-13, 10-23-13		
								SHEET 09 OF 14		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	32	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 REGISTERED PROFESSIONAL ENGINEER  
 MAZIN S. IBRAHIM  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 PLANS APPROVAL DATE 2-18-14  
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**LEGEND:**

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- ➔ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.



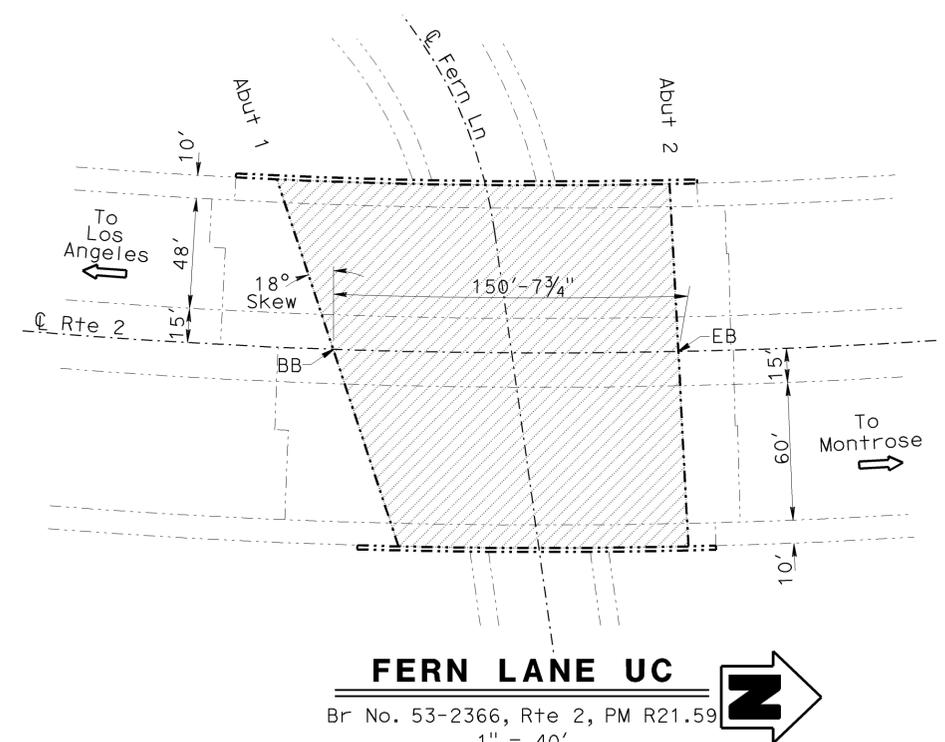
**SHERER LANE UC**

Br No. 53-1894, Rte 2, PM R20.57  
No Scale

SHERER LANE UC #53-1894  
QUANTITIES

CLEAN EXPANSION JOINT	158 LF
JOINT SEAL (MR 1")	158 LF

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



**FERN LANE UC**

Br No. 53-2366, Rte 2, PM R21.59  
1" = 40'

FERN LANE UC #53-2366  
QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	23,500 SQFT
TREAT BRIDGE DECK	23,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	294 GAL

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	Various
	POST MILE	Varies
	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	

ROUTE 2 BRIDGES GENERAL PLAN NO. 10	
REVISION DATES	SHEET 10 OF 14

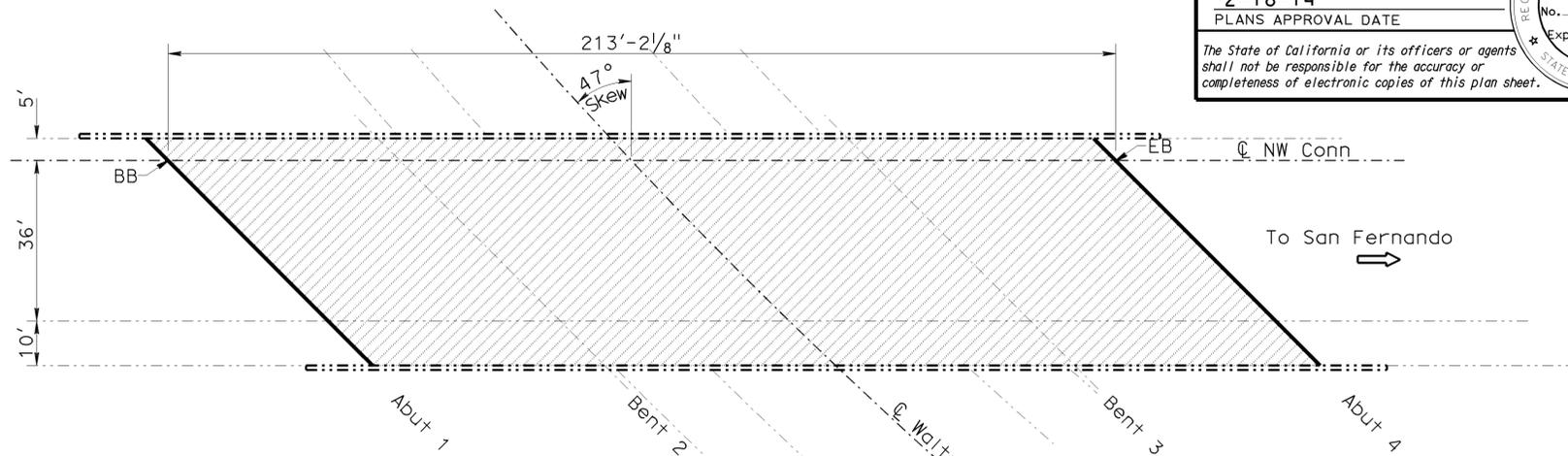
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	33	36

REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 No. C69896 Exp. 09/30/14  
 REGISTERED PROFESSIONAL ENGINEER MAZIN S. IBRAHIM CIVIL STATE OF CALIFORNIA  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**LEGEND:**

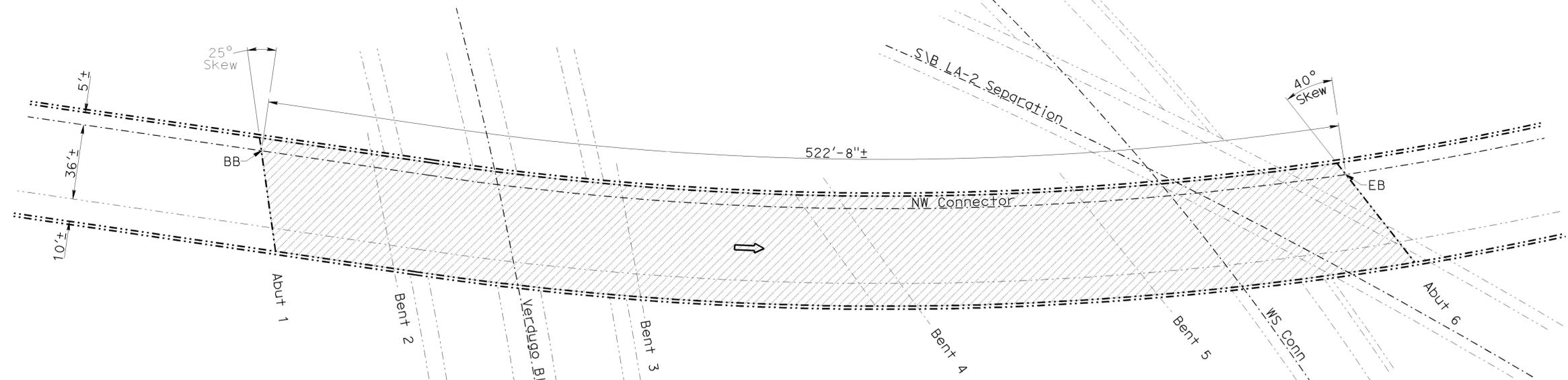
- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
- Indicates location of existing joint seal removal clean expansion joint, and placement of new joint seal.



WALTONIA DRIVE UC #53-2228G  
 QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	10,880 SQFT
TREAT BRIDGE DECK	10,880 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	136 GAL
CLEAN EXPANSION JOINT	150 LF
JOINT SEAL (MR 1 1/2")	150 LF

**WALTONIA DRIVE UC**  
 Br No. 53-2228G, Rte 2, PM R23.15  
 No Scale



**VERDUGO BOULEVARD UC**  
 Br No. 53-2220G, Rte 2, PM R23.0  
 No Scale

PUBLIC SAFETY PLAN	LUMP SUM
RAPID SETTING CONCRETE (PATCH)	1 CF
REMOVE UNSOUND CONCRETE	1 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	26,660 SQFT
TREAT BRIDGE DECK	26,660 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	334 GAL

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran	SPECIFICATIONS	BY Karen Doll

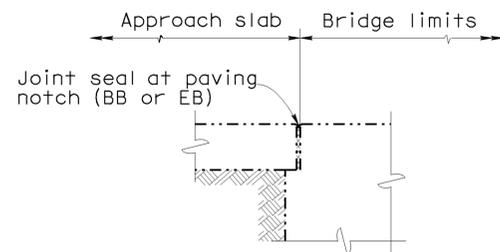
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
 POST MILE Varies  
**ROUTE 2 BRIDGES**  
**GENERAL PLAN NO. 11**

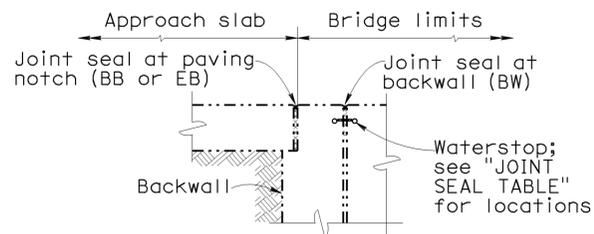
**JOINT SEAL TABLE**

BRIDGE NAME	BRIDGE NUMBER	JOINT SEAL LOCATION	MINIMUM "MR" (INCHES)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	APPROX JOINT LENGTH (ft)
Rosebud Ave UC	53-1475L	Abut 1	0.5	No	6	88
		Abut 4	0.5	No	6	88
Rosebud Ave UC	53-1475G	Abut 1	0.5	No	6	46
		Abut 4	0.5	No	6	46
Ripple Street UC	53-0256F	Abut 1	0.5	No	-	24
		Abut 2	0.5	No	-	24
Los Angeles River	53-0255	Abut 1	0.5	No	6	142
		Abut 1	0.5	No	6	154
		Pier 3	1.5	Yes	12	156
		Pier 4	1.5	Yes	12	142
		Pier 5	1.5	Yes	12	152
		Pier 6	1.5	Yes	12	152
		Abut 8	0.5	No	6	144
		Abut 8	0.5	No	6	142
San Fernando Road UC	53-0743	Abut 1	1	No	6	264
		Abut 2	1	No	6	264
		N/B Lane 4 **	0.5	Yes	12	192
Estara Ave OC	53-0879	Abut 1	1	No	6	40
		Abut 3	1	No	6	40
Verdugo Road UC	53-1929	Abut 1	1	No	6	183
		Abut 2	1	No	6	183
Round Top Drive UC	53-1975	Abut 1	0.5	No	6	156
		Abut 2	0.5	No	6	140
W2-W134 Conn OC	53-1921F	Abut 1	1.5	Yes	12	32
		Hinge	1.5	Yes	12	32
		Abut 6	1.5	Yes	12	32
Sherer Lane UC	53-1894	Abut 1	1	No	6	79
		Abut 4	1	No	6	79
Waltonia Drive UC	53-2228	Abut 1	1.5	No	6	75
		Abut 4	1.5	No	6	75

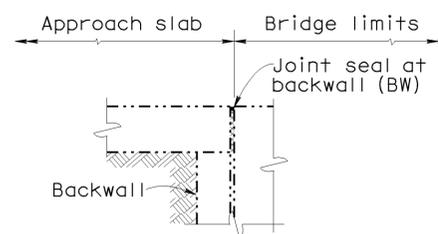
BW = Backwall  
 \*\* = Longitudinal Joint Seal



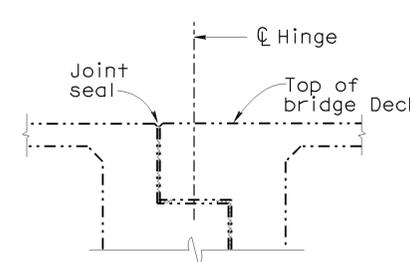
DIAPHRAGM ABUTMENT



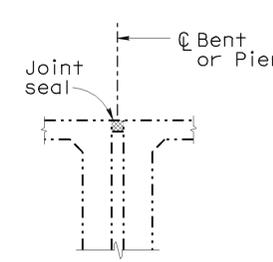
ABUTMENT WITH BACKWALL AND PAVING NOTCH



ABUTMENT WITH BACKWALL



HINGE



BENT OR PIER

**JOINT SEAL LOCATION**

Abutment joint is not required with AC roadway pavement transverse contact joint.

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**NOTES:**

The following notes apply to JOINT SEAL TYPE A:

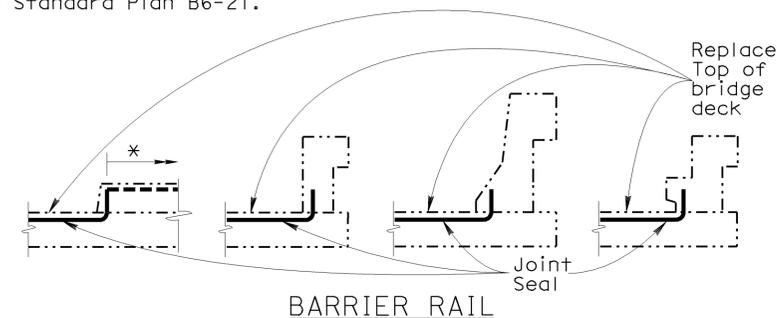
Install Joint Seal (MR = 1/2") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.

For details not shown see Standard Plan B6-21.

The following notes apply to JOINT SEAL TYPE B:

- Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
- Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
- W1 shall be the smaller of the values determined as follows:
  - 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
  - The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3.0 PSI.
- Bend Type B joint seal 6 inches up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.

For details not shown see Standard Plan B6-21.



**JOINT SEAL AT LOW SIDE OF DECK**

Details shown for illustration purposes only.  
 For use only where deck joint matches the sidewalk, curb or barrier rail joint.  
 \* Extension of joint will be determined by the Engineer if necessary.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	34	36

REGISTERED CIVIL ENGINEER  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA

10-16-13  
 DATE

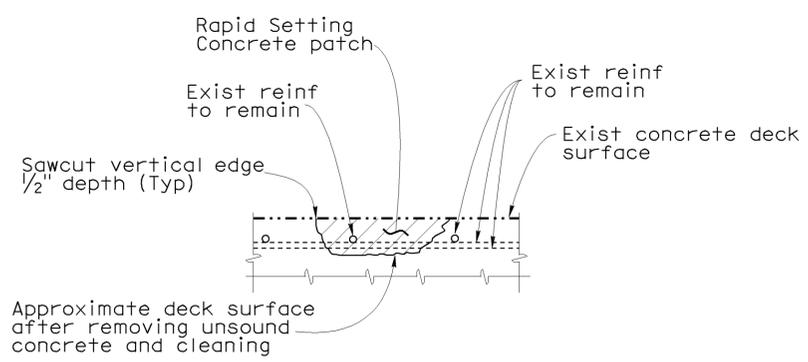
2-18-14  
 PLANS APPROVAL DATE

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2	14.5/R23.2	35	36

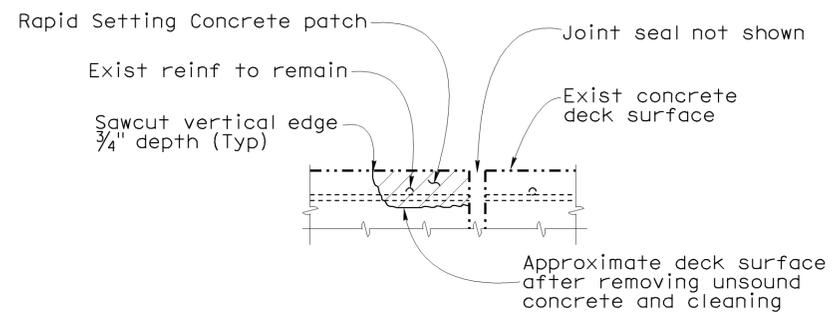
REGISTERED CIVIL ENGINEER DATE 10-16-13  
 PLANS APPROVAL DATE 2-18-14  
 No. C69896  
 Exp. 09/30/14  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER MAZIN S. IBRAHIM

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**DECK DAMAGE REPAIR DETAIL**

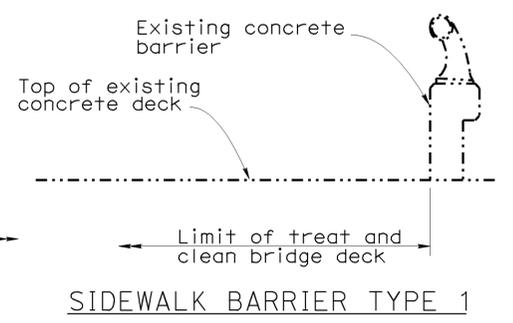
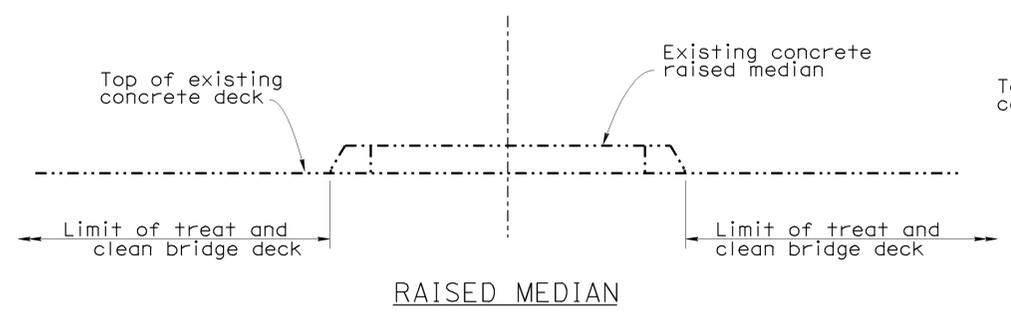
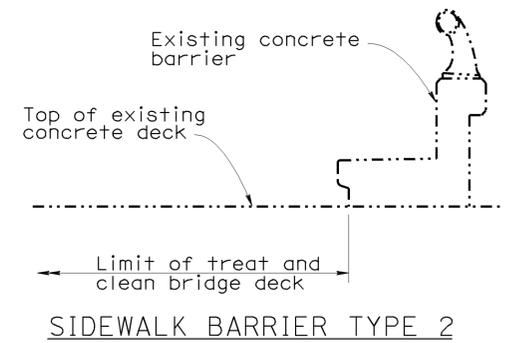
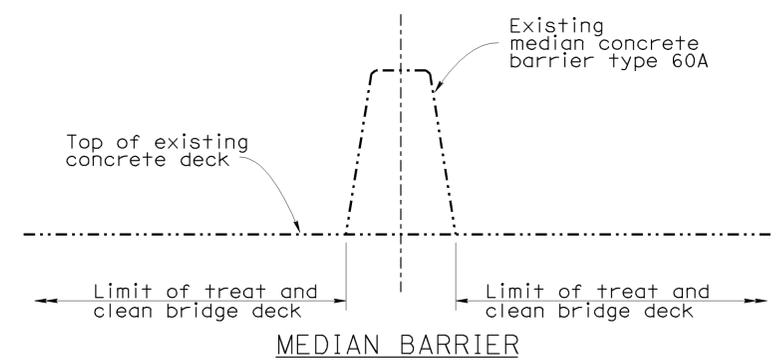
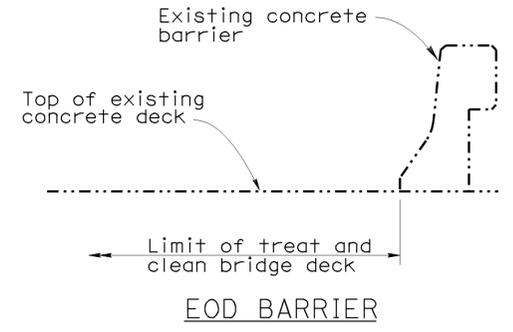
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



**JOINT SPALL REPAIR DETAIL**

Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

- DECK SPALL REPAIR:**
- Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
  - It is responsibility of the Contractor to repair any reinforcement that is accidentally cut by saw cutting operations.
  - When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
  - The saw cut depth shall not exceed 3/4 inch or the concrete cover over the top steel reinforcing bars, whichever is less.
  - Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original deck surface with rapid setting concrete patch.



**TYPICAL LIMITS OF DECK WORK**

NO SCALE

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

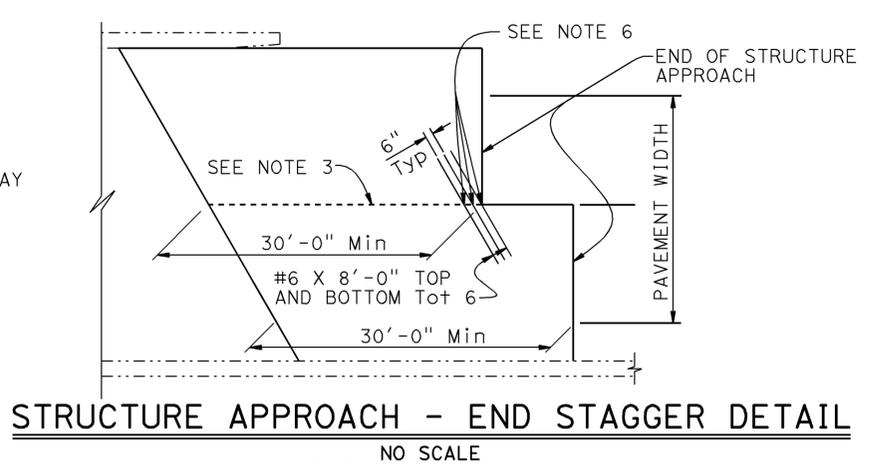
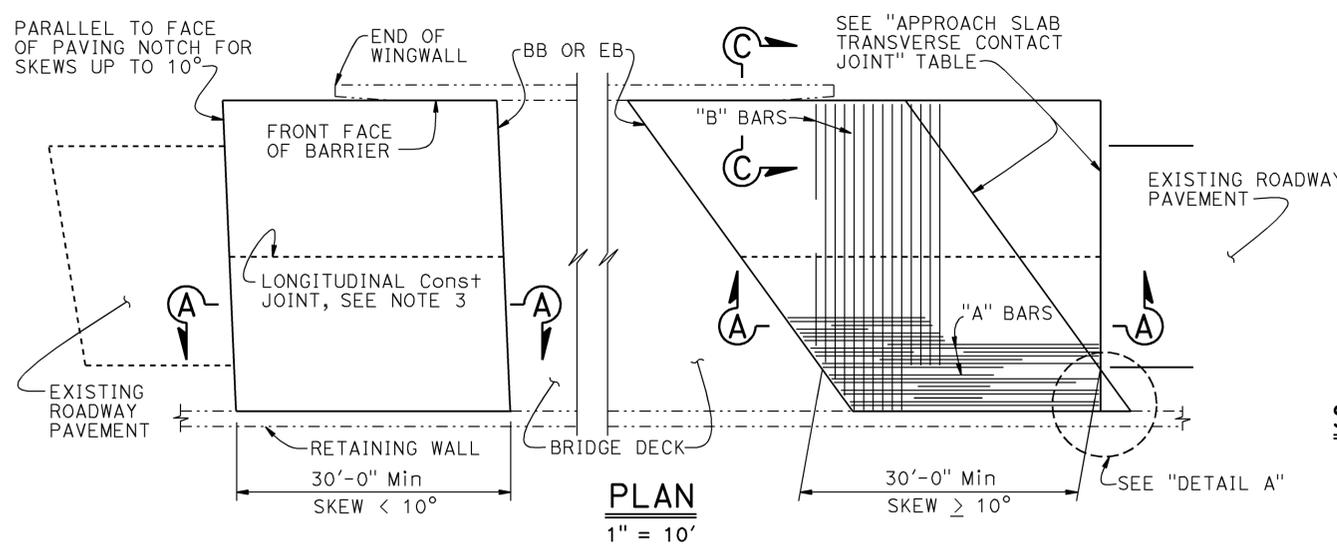
DESIGN	BY Mazin Ibrahim	CHECKED Hong Tien Tran
DETAILS	BY Clayton Tom	CHECKED Mazin Ibrahim
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong Tien Tran

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

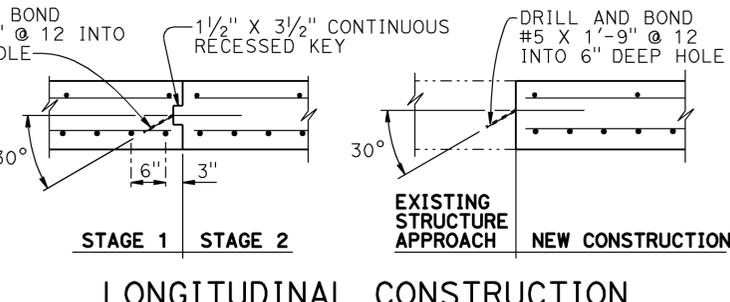
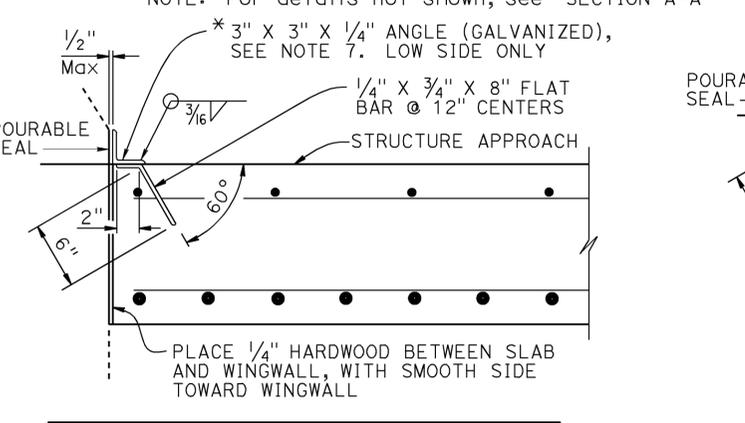
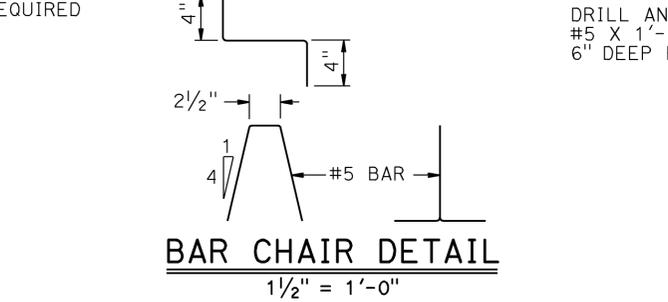
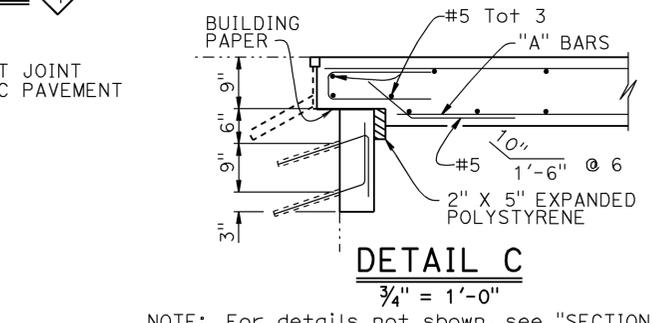
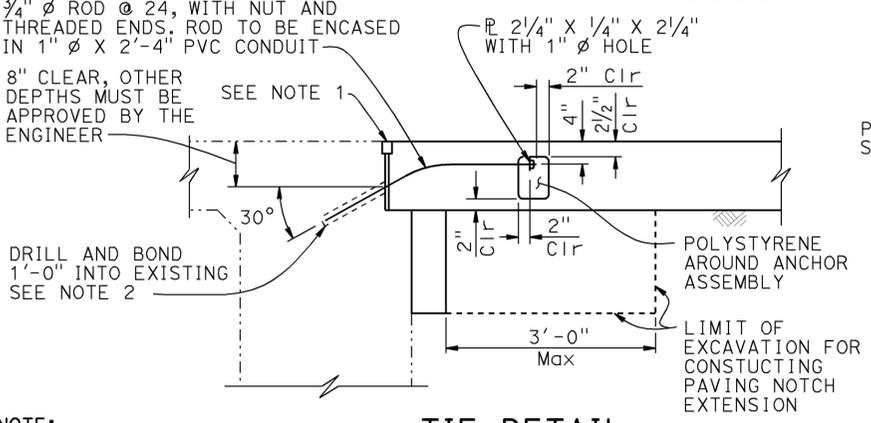
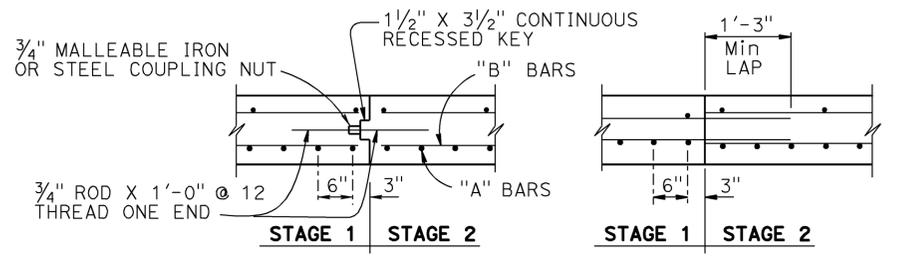
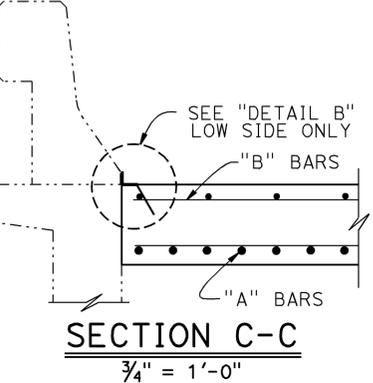
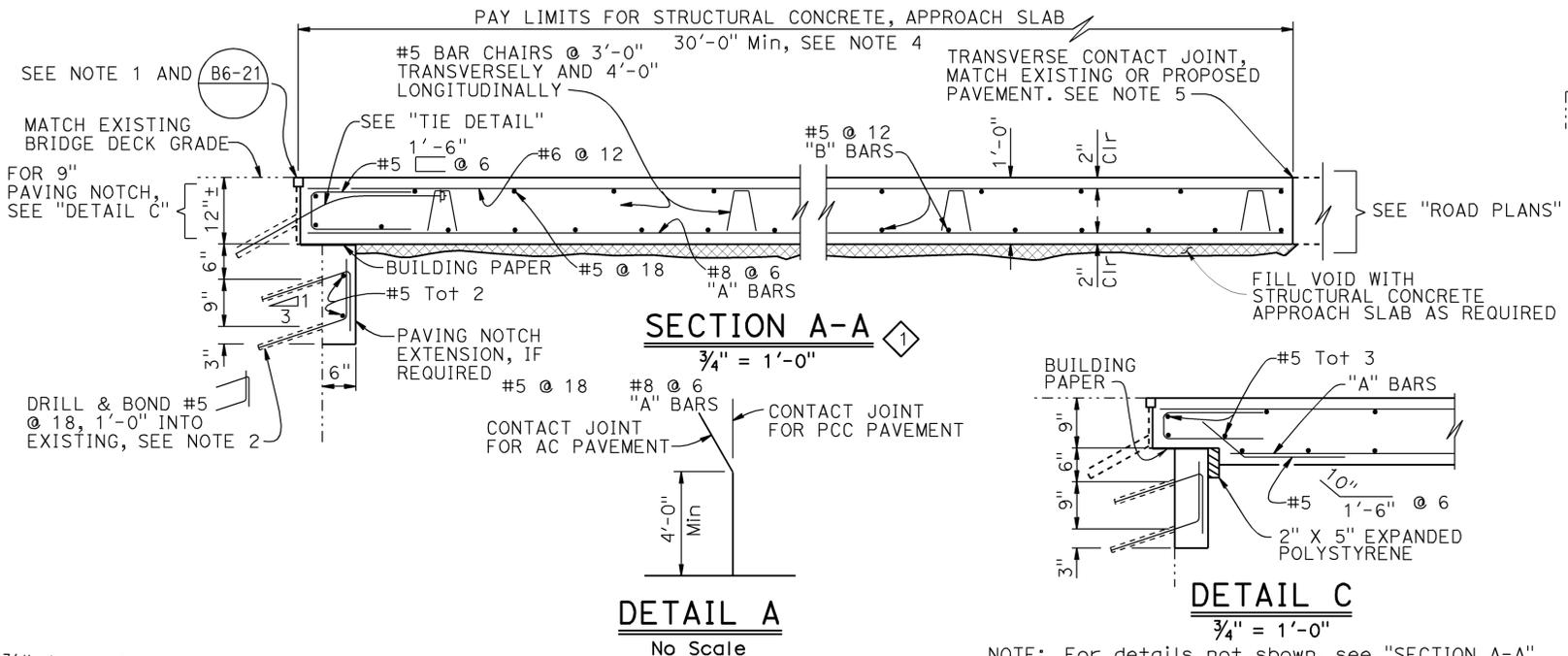
DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTE 2 BRIDGES  
MISCELLANEOUS DETAILS NO. 2



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
  - Space to avoid existing prestress anchorages and main reinforcement
  - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
  - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
  - For transverse contact joint with new PCC paving, refer to Revised Standard Plan P10
  - Couplers are required for stage construction
  - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

REVISED STANDARD DRAWING  
 FILE NO. **xs3-150**  
 APPROVAL DATE July 2011

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF ENGINEERING SERVICES

**SPECIAL DETAILS**  
**ROUTE 2 BRIDGES**  
**STRUCTURE APPROACH TYPE R(30D)**