

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION DETAILS
3-8	CONSTRUCTION AREA SIGNS
9-11	MOTORIST INFORMATION PLANS
12	PAVEMENT DELINEATION DETAILS
13	PAVEMENT DELINEATION QUANTITIES
14	SUMMARY OF QUANTITIES
15-23	REVISED STANDARD PLANS

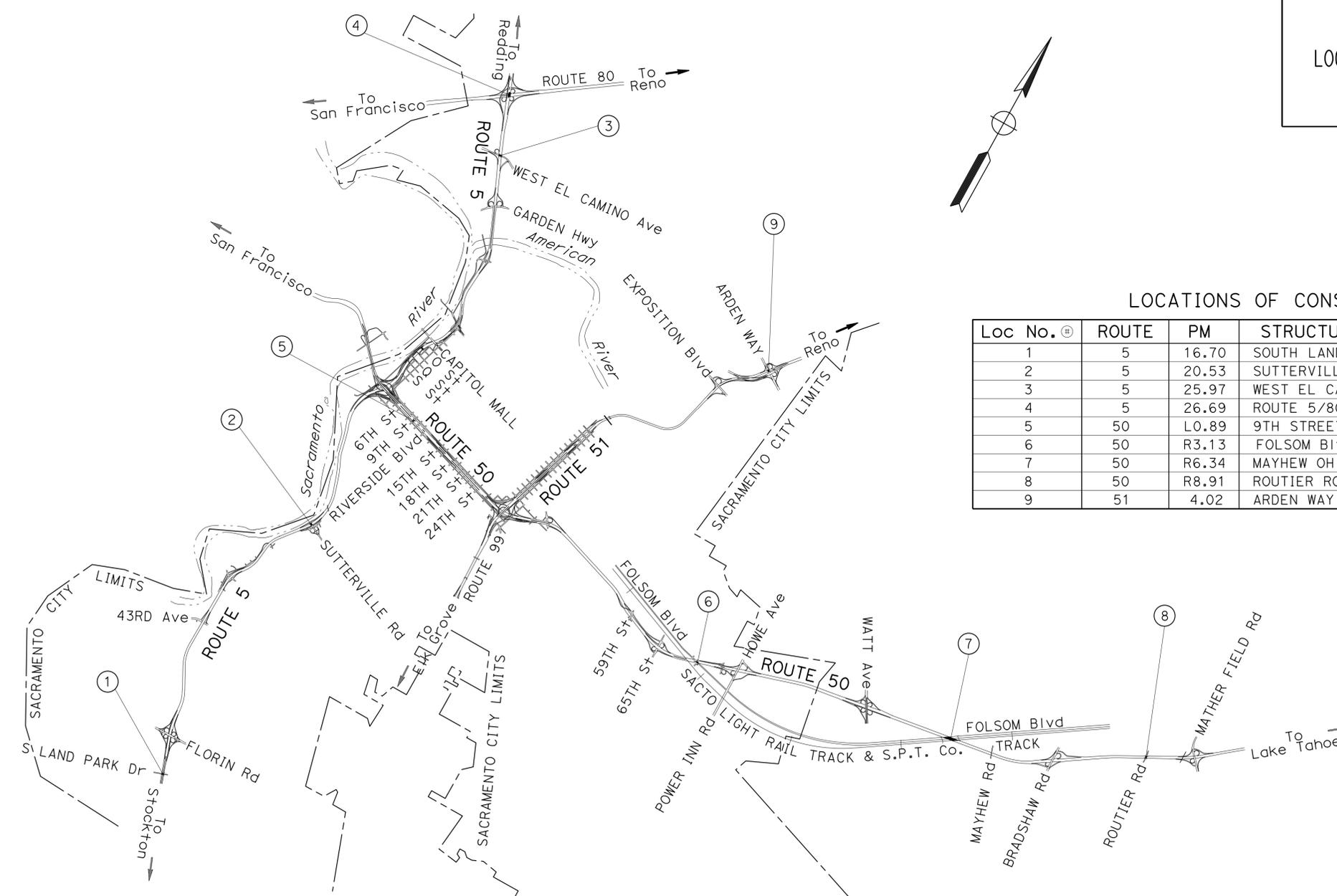
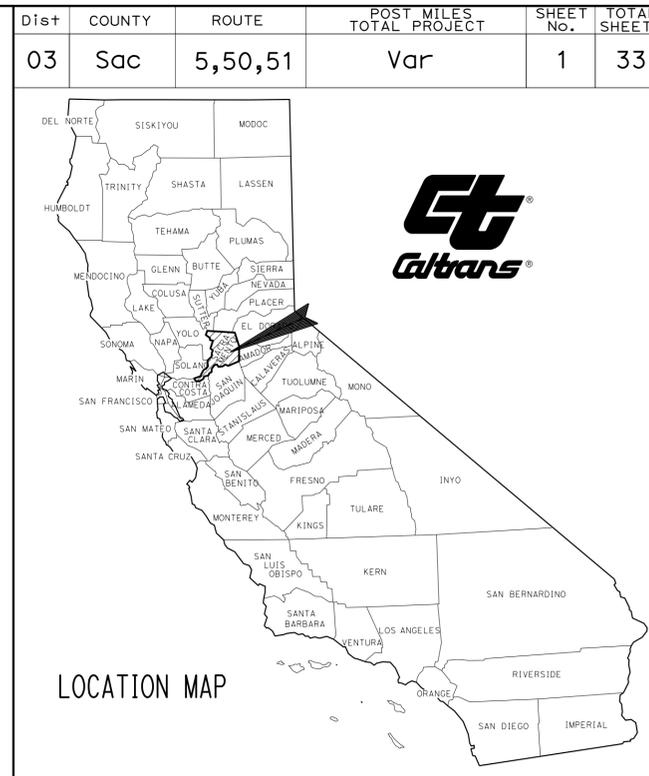
STRUCTURE PLANS

24-33 ROUTE 5, 50 AND 51 BRIDGES

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY**  
**IN SACRAMENTO COUNTY  
AT VARIOUS LOCATIONS**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION

Loc No. ①	ROUTE	PM	STRUCTURE NAME	Br No.
1	5	16.70	SOUTH LAND PARK DRIVE OC	24-0259
2	5	20.53	SUTTERVILLE ROAD OC	24-0256
3	5	25.97	WEST EL CAMINO Ave OC	24-0238
4	5	26.69	ROUTE 5/80 SEPARATION	24-0207R
5	50	L0.89	9TH STREET UC	24-0244R
6	50	R3.13	FOLSOM Blvd UC	24-0288R
7	50	R6.34	MAYHEW OH	24-0173
8	50	R8.91	ROUTIER ROAD OC	24-0213
9	51	4.02	ARDEN WAY UC	24-0115L

PROJECT MANAGER  
PATRICK D. BISHOP

DESIGN MANAGER  
PATRICK D. BISHOP

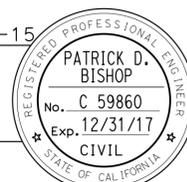
THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NO SCALE

*Patrick D. Bishop* 11-30-15  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER

**December 28, 2015**  
PLANS APPROVAL DATE

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



CONTRACT No.	<b>03-0G0404</b>
PROJECT ID	<b>0314000028</b>

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	2	33

<i>Patrick D. Bishop</i>	11-30-15
REGISTERED CIVIL ENGINEER	DATE
12-28-15	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	PATRICK D. BISHOP
No. C 59860	
Exp. 12/31/17	
CIVIL	

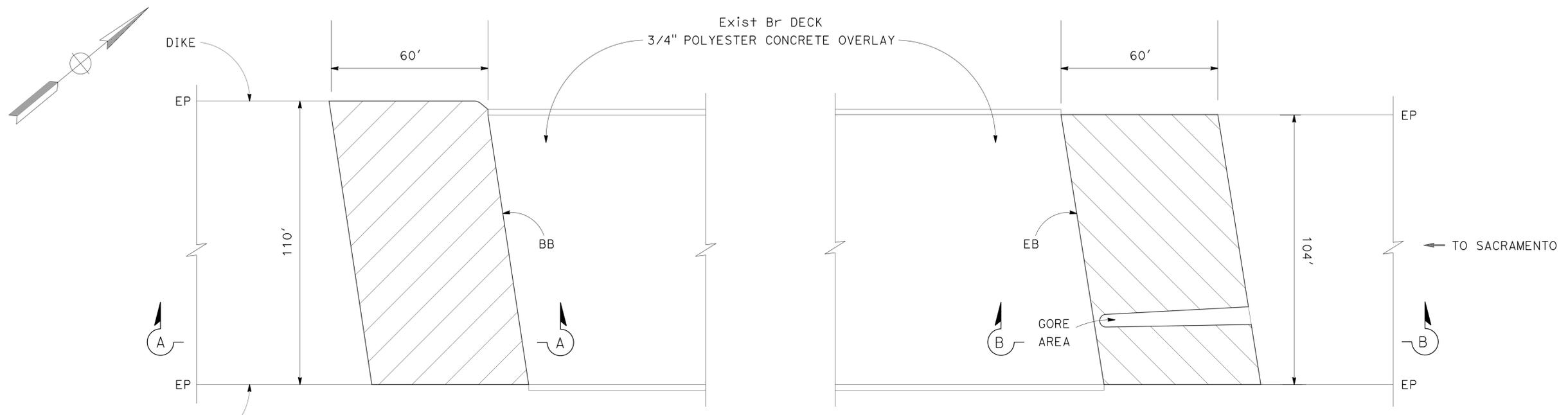
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTE:**

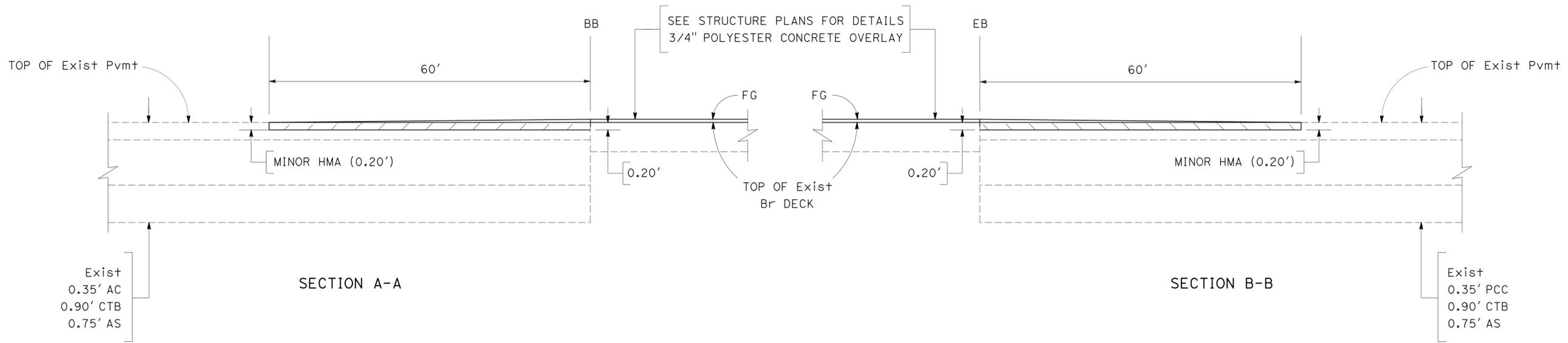
1. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

**LEGEND:**

-  COLD PLANE AC PAVEMENT (0.20' Max)
-  GRIND EXISTING CONCRETE PAVEMENT (0.20' Max)



PLAN  
**TRANSVERSE JOINT TAPER**  
 ARDEN WAY UC (Br No. 24-0115L)



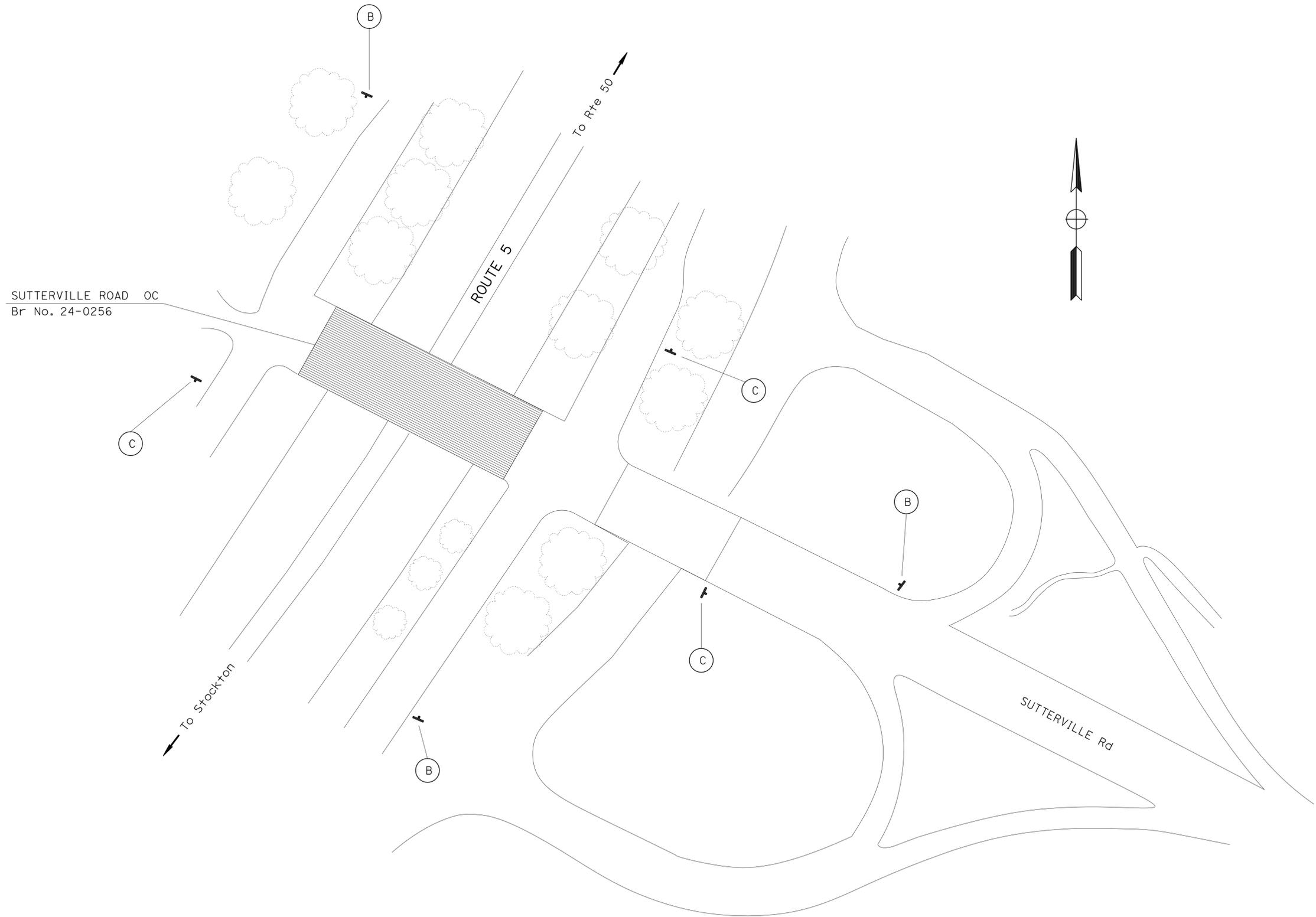
**CONSTRUCTION DETAILS**  
 NO SCALE  
**C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE DESIGN  
 FUNCTIONAL SUPERVISOR: PATRICK D. BISHOP  
 CALCULATED/DESIGNED BY: PATRICK D. BISHOP  
 CHECKED BY:  
 HARVEY GENEROSO  
 REVISED BY: PATRICK D. BISHOP  
 DATE REVISED:  
 Caltrans



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	4	33
			11-30-15		
REGISTERED CIVIL ENGINEER			DATE		
12-28-15			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>					

CHUCK COOK	REVISOR	DATE
ALEX WU	REVISOR	DATE
JOYCE K LOFTUS	DESIGNER	DATE
JOYCE K LOFTUS	CHECKED BY	DATE
JOYCE K LOFTUS	DESIGNED BY	DATE
JOYCE K LOFTUS	DESIGNED BY	DATE



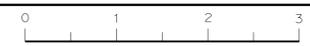
**LOCATION 2**  
**Sac Rte 5 PM 20.53**

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-2**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY



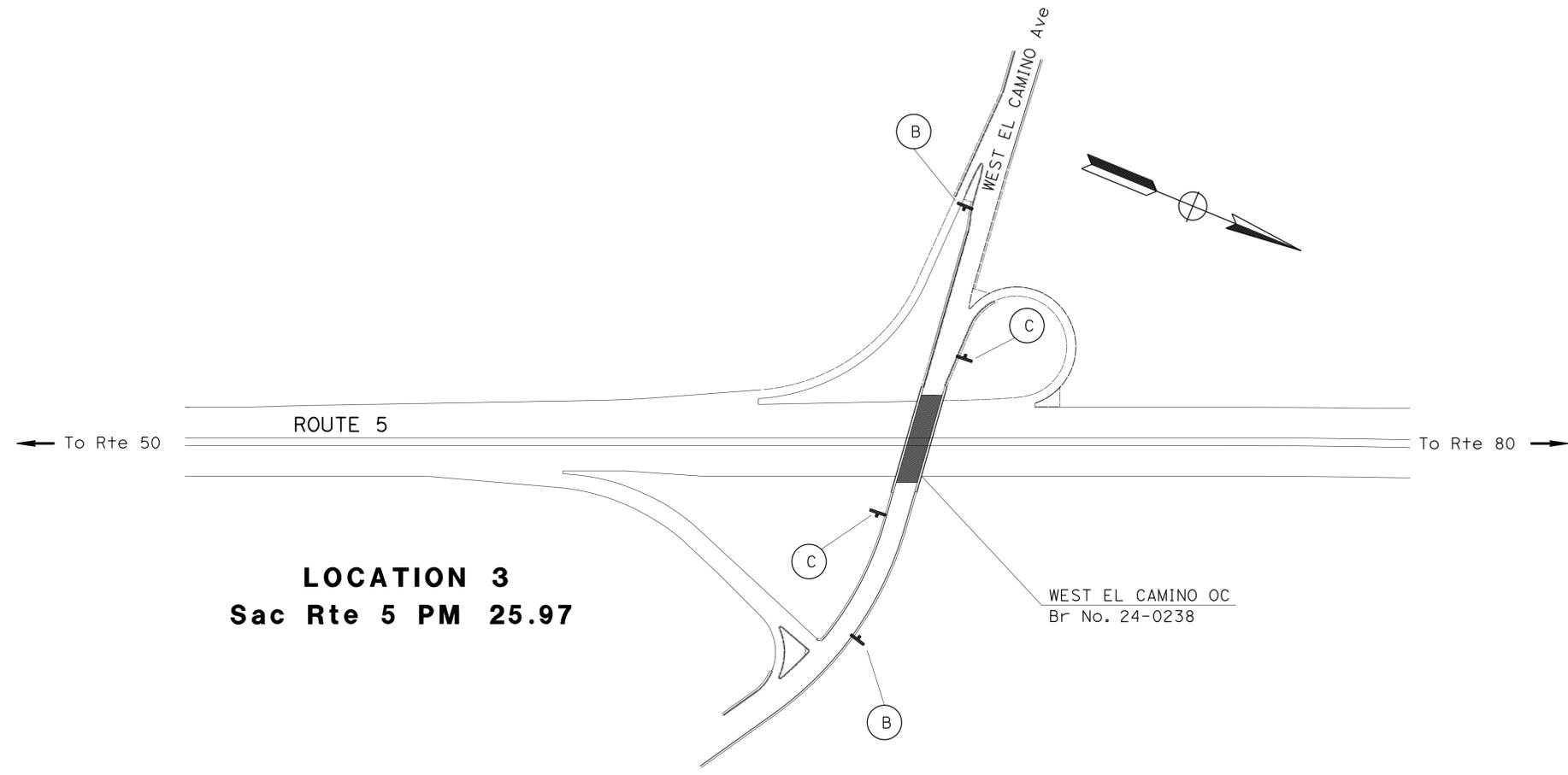
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	5	33

*W. g. l.* 11-30-15  
 REGISTERED CIVIL ENGINEER DATE

12-28-15  
 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  
**ALEX WIN WU**  
 No. C77266  
 Exp. 6-30-17  
 CIVIL  
 STATE OF CALIFORNIA



FUNCTIONAL SUPERVISOR	JOYCE K LOFTUS	CALCULATED-DESIGNED BY	CHUCK COOK	REVISED BY	
DEPARTMENT OF TRANSPORTATION		CHECKED BY	ALEX WU	DATE REVISED	
<b>Caltrans</b>	<b>TRAFFIC</b>				

**LOCATION 3**  
**Sac Rte 5 PM 25.97**

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

**CS-3**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

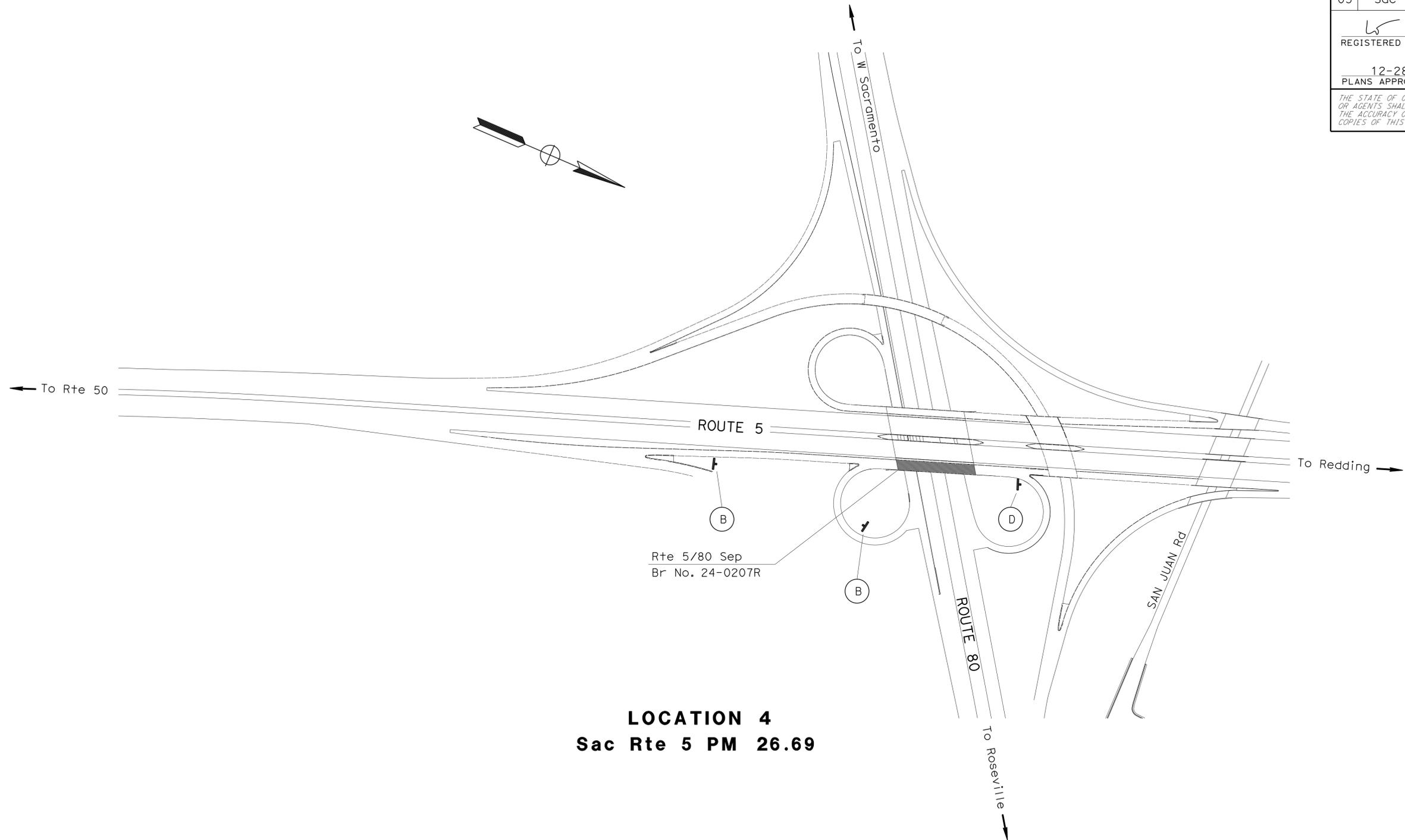


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	6	33

*W. gal* 11-30-15  
 REGISTERED CIVIL ENGINEER DATE  
 12-28-15  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**ALEX WIN WU**  
 No. C77266  
 Exp. 6-30-17  
 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.



**LOCATION 4**  
**Sac Rte 5 PM 26.69**

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

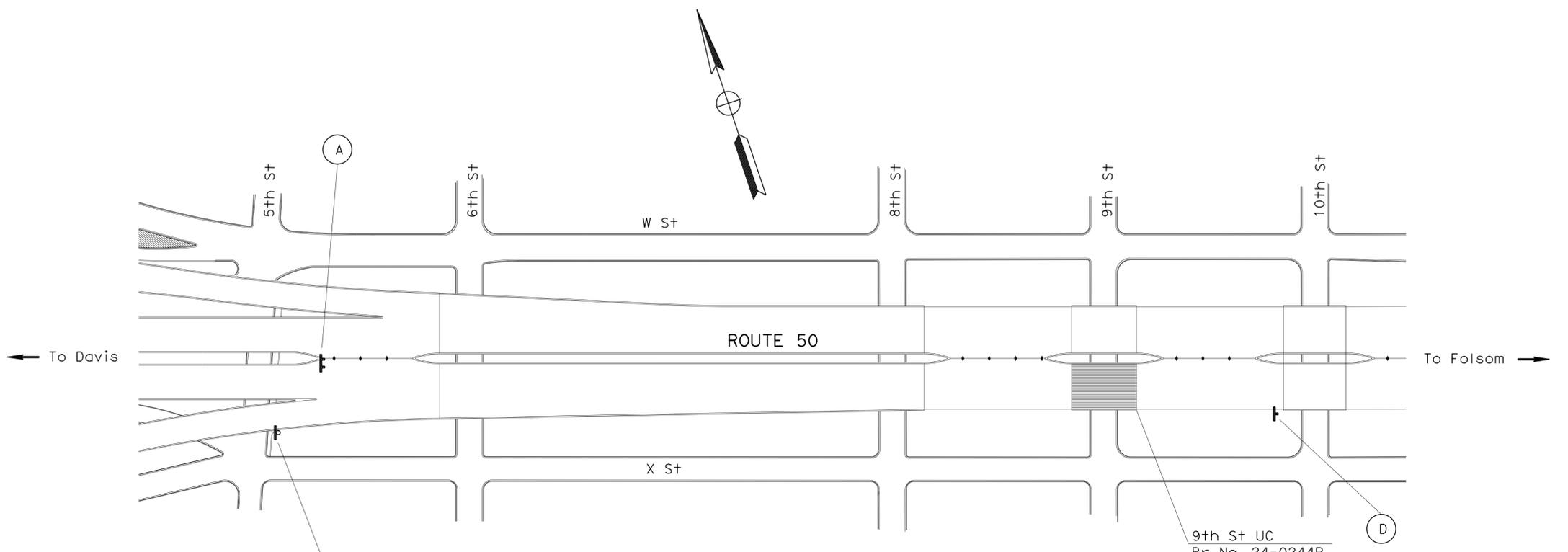
**CS-4**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

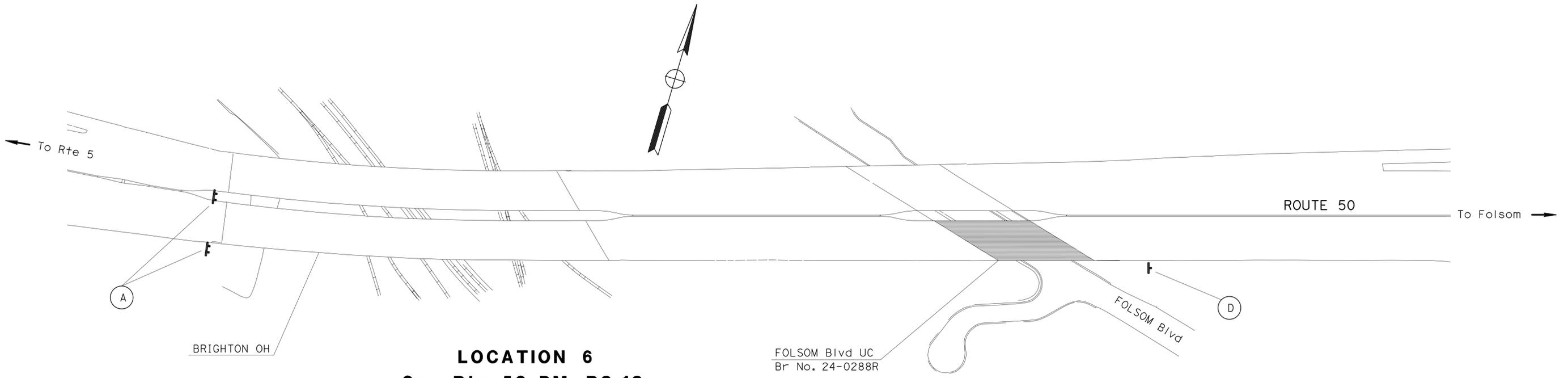
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	CHUCK COOK	REVISED BY
<b>Caltrans</b>	JOYCE K LOFTUS	CHECKED BY	ALEX WU	DATE REVISED
<b>TRAFFIC</b>				

LAST REVISION | DATE PLOTTED => 28-DEC-2015  
 11-18-15 | TIME PLOTTED => 10:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	7	33
			11-30-15		
REGISTERED CIVIL ENGINEER			DATE		
12-28-15			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>					



**LOCATION 5**  
Sac Rte 50 PM L0.89



**LOCATION 6**  
Sac Rte 50 PM R3.13

**CONSTRUCTION AREA SIGNS**  
NO SCALE

**CS-5**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

P:\proj5\03\09040\dratf\ing\03140000281a005.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC  
 JOYCE K LOFTUS  
 FUNCTIONAL SUPERVISOR  
 CHECKED BY  
 ALEX WU  
 CHUCK COOK  
 REVISED BY  
 DATE REVISD

LAST REVISION DATE PLOTTED => 28-DEC-2015  
 TIME PLOTTED => 10:45





Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	10	33

11-30-15  
 REGISTERED CIVIL ENGINEER DATE  
 12-28-15  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 ALEX WIN WU  
 No. C77266  
 Exp. 6-30-17  
 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.

LEGEND

— PCMS - PORTABLE CHANGEABLE MESSAGE SIGN

CONSTRUCTION AREA SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF SIGNS
M4-8	24" X 12"	DETOUR	1
M3-2 *	24" X 12"	EAST	2
G26-2(50)<CA>	24" X 24"	ROUTE 50	2
SC3<CA>	48" X 18"	↑DETOUR	1
G44<CA> *	21" X 15"	↗	1
M4-10R	48" X 18"	DETOUR →	2
M4-8a	24" X 18"	END DETOUR	1

\* PANELS ARE BLACK ON WHITE BACKGROUND

NOTES:

1. EXACT SIGN LOCATIONS, INCLUDING PCMS SIGNS, TO BE DETERMINED BY THE ENGINEER.
2. NUMBER OF SIGN PANELS REQUIRED PER DETOUR SHOWN DOES NOT INCLUDE SIGNS SHOWN IN STANDARD PLANS.
3. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS A CALIFORNIA SIGN CODE.
4. <CA> = CALIFORNIA SIGN CODE.

TRAFFIC DETOUR PLAN:

1. CLOSE THE NB ROUTE 5 CONNECTOR RAMP TO EB ROUTE 50
2. TAKE THE NB ROUTE 5 CONNECTOR RAMP TO WB ROUTE 50
3. TAKE THE WB ROUTE 50 EXIT RAMP TO SOUTH RIVER Rd
  - A. TURN RIGHT ONTO SOUTH RIVER Rd
  - B. TAKE ENTRANCE RAMP TO WB ROUTE 50

DETOUR FOR CLOSURE OF NB ROUTE 5 CONNECTOR TO EB ROUTE 50

MOTORIST INFORMATION PLAN

NO SCALE

MI-2

APPROVED FOR MOTORIST INFORMATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 CHUCK COOK  
 ALEX WU  
 JOYCE K LOFTUS  
 TRAFFIC  
 11-18-15 DATE PLOTTED => 28-DEC-2015  
 11-18-15 TIME PLOTTED => 10:45

USERNAME => s119538  
 DGN FILE => 03140000281b002.dgn

RELATIVE BORDER SCALE  
 1" = 15' IN INCHES

UNIT 0390

PROJECT NUMBER & PHASE

03140000281

BORDER LAST REVISED 7/2/2010

**LEGEND**

— PCMS - PORTABLE CHANGEABLE MESSAGE SIGN

**CONSTRUCTION AREA SIGNS**

SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF SIGNS
M4-8	24" X 12"	DETOUR	1
M3-2 *	24" X 12"	EAST	2
G26-2(50)<CA>	24" X 24"	ROUTE 50	2
SC3<CA>	48" X 18"	↑DETOUR	1
G44<CA> *	21" X 15"	↗	1
M4-10L	48" X 18"	DETOUR →	2
M4-8a	24" X 18"	END DETOUR	1

\* PANELS ARE BLACK ON WHITE BACKGROUND

**TRAFFIC DETOUR PLAN:**

- CLOSE THE SB ROUTE 5 CONNECTOR RAMP TO EB ROUTE 50
- TAKE THE SB ROUTE 5 EXIT RAMP TO SUTTERVILLE Rd
  - TURN LEFT ONTO SUTTERVILLE Rd
  - TAKE ENTRANCE RAMP TO NB ROUTE 5

**NOTES:**

- EXACT SIGN LOCATIONS, INCLUDING PCMS SIGNS, TO BE DETERMINED BY THE ENGINEER.
- NUMBER OF SIGN PANELS REQUIRED PER DETOUR SHOWN DOES NOT INCLUDE SIGNS SHOWN IN STANDARD PLANS.
- ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS A CALIFORNIA SIGN CODE.
- <CA> = CALIFORNIA SIGN CODE.

DETOUR FOR CLOSURE OF SB ROUTE 5 CONNECTOR TO EB ROUTE 50

**MOTORIST INFORMATION PLAN**

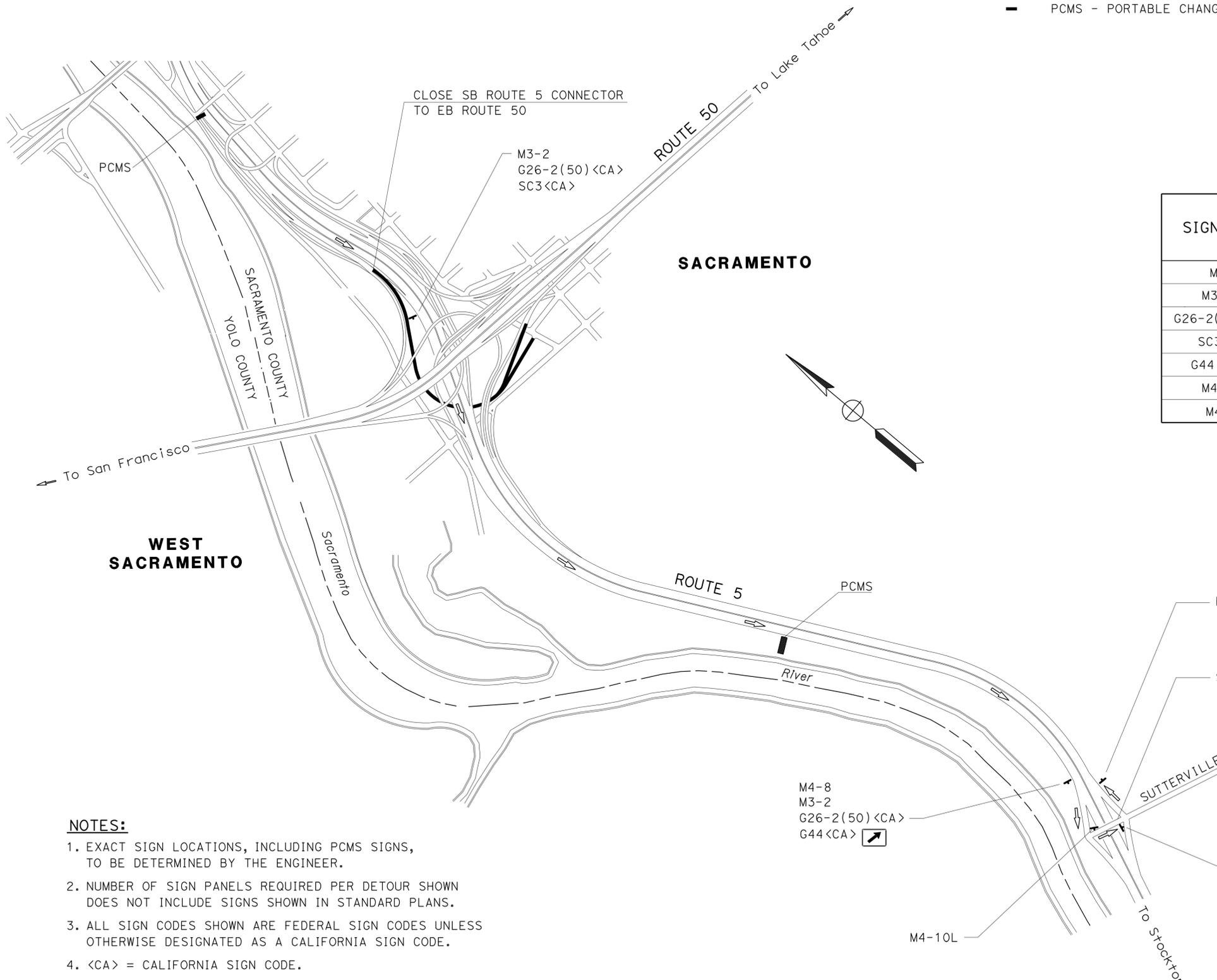
NO SCALE

**MI-3**

APPROVED FOR MOTORIST INFORMATION WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 CHUCK COOK  
 ALEX WU  
 JOYCE K LOFTUS  
 TRAFFIC  
 USERNAME => s119538  
 DGN FILE => 03140000281b003.dgn  
 BORDER LAST REVISED 7/2/2010  
 UNIT 0390  
 PROJECT NUMBER & PHASE 03140000281



**WEST SACRAMENTO**

**SACRAMENTO**

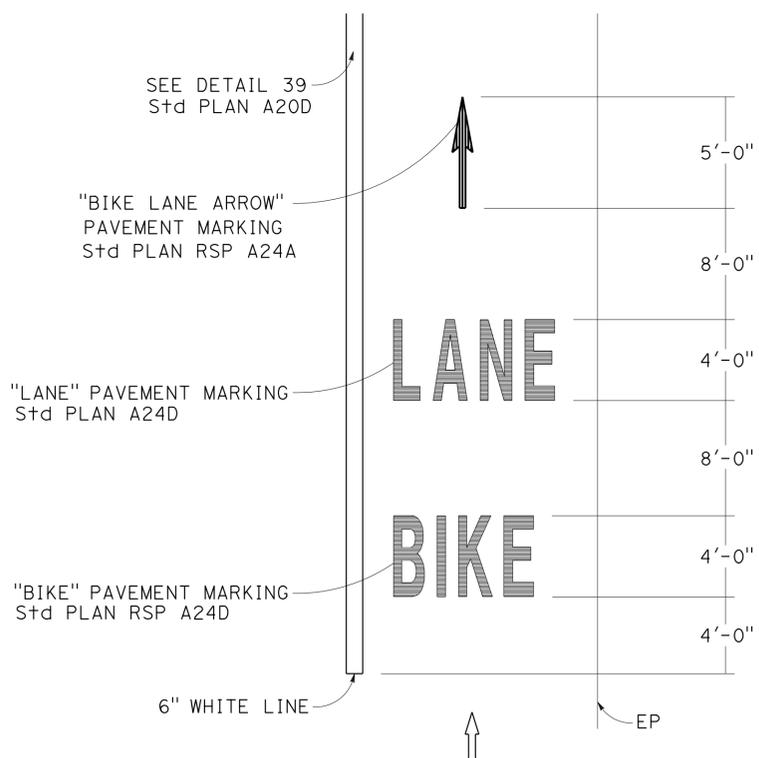
P:\proj5\03\09040\drat\ing\0314000028nb001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC  
 JOYCE K LOFTUS  
 CHUCK COOK  
 ALEX WU  
 REVISOR BY DATE  
 CHECKED BY  
 DESIGNED BY  
 CALCULATED BY  
 CHUCK COOK  
 ALEX WU  
 REVISOR BY DATE  
 CHECKED BY  
 DESIGNED BY  
 CALCULATED BY

**LEGEND**

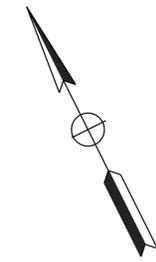
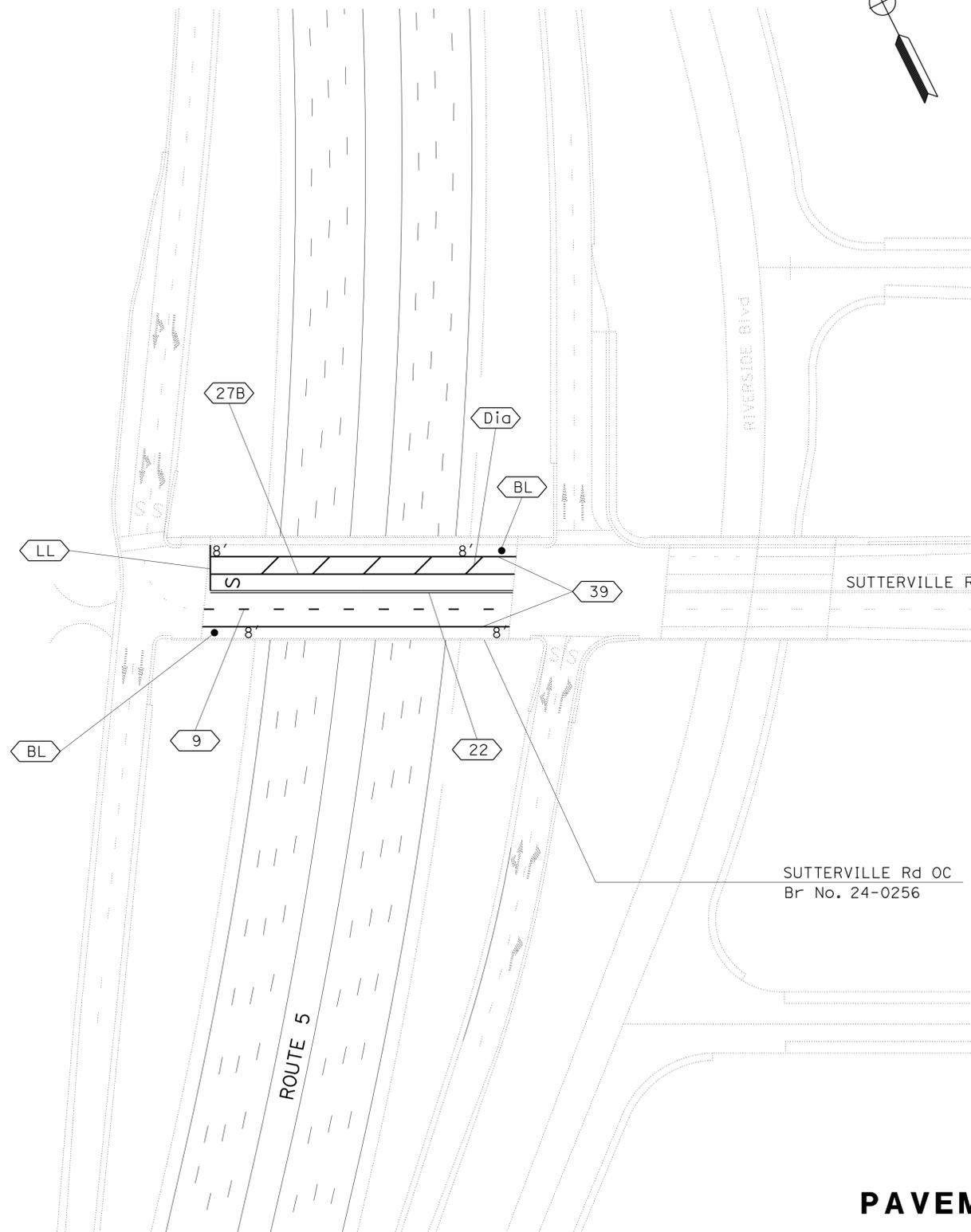
- No. PAVEMENT DELINEATION DETAIL NUMBER
- LL LIMIT LINE
- BL "BIKE LANE" PAVEMENT MARKING PACKAGE (SEE NOTE 3)
- Dia 12" WHITE DIAGONAL PAVEMENT MARKING
- S "STOP" PAVEMENT MARKING

**NOTES:**

1. ALL LANES SHALL BE 12' WIDE UNLESS OTHERWISE SHOWN.
2. DIAGONAL PAVEMENT MARKINGS SHALL BE SPACED 35' ON CENTER.
3. PACKAGE SHALL CONSIST OF THE FOLLOWING PAVEMENT MARKINGS:
  - 1 EA - "BIKE"
  - 1 EA - "LANE"
  - 1 EA - BIKE LANE ARROW



**BIKE LANE PAVEMENT MARKING PACKAGE DETAIL**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	12	33

11-30-15  
 REGISTERED CIVIL ENGINEER DATE  
 12-28-15  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**ALEX WIN WU**  
 No. C77266  
 Exp. 6-30-17  
 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.

**PAVEMENT DELINEATION  
 DETAILS**  
 LOCATION 2  
 NO SCALE

**PDD-1**

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



LAST REVISION | DATE PLOTTED => 28-DEC-2015  
 11-18-15 | TIME PLOTTED => 10:45



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	14	33

REGISTERED CIVIL ENGINEER: *Patrick D. Bishop* DATE: 11-30-15

PLANS APPROVAL DATE: 12-28-15

PROFESSIONAL ENGINEER: PATRICK D. BISHOP  
No. C 59860  
Exp. 12/31/17  
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.

**DIKE**

LOCATION No.	POST MILE	STRUCTURE NAME	Br No.	SIDE	REMOVE ASPHALT CONCRETE DIKE	PLACE HMA DIKE (TYPE A)	PLACE HMA DIKE (TYPE E)	MINOR HMA *
					LF	LF	LF	TON
9	4.02	ARDEN WAY UC	24-0115L	L+	60	60		1.6
9	4.02	ARDEN WAY UC	24-0115L	R+	60		60	1.5
SUBTOTAL					120	60	60	3.1
TOTAL					120	60	60	

\* = SEE ROADWAY QUANTITIES TABLE FOR PROJECT TOTALS

**TEMPORARY DRAINAGE INLET PROTECTION**

LOCATION No.	ROUTE	POST MILE	STRUCTURE NAME	Br No.	DRAINAGE INLET
					EA
1	5	16.70	SOUTH LAND PARK DRIVE OC	24-0259	6
2	5	20.53	SUTTERVILLE ROAD OC	24-0256	2
6	50	R3.13	FOLSOM Blvd UC	24-0288R	1
7	50	R6.34	MAYHEW OH	24-0173	2
8	50	R8.91	ROUTIER ROAD OC	24-0213	3
TOTAL					14

**ROADWAY QUANTITIES**

LOCATION No.	POST MILE	STRUCTURE NAME	Br No.	SIDE	COLD PLANE AC PAVEMENT	GRIND EXISTING CONCRETE PAVEMENT	MINOR HMA	TACK COAT
					BB/EB SQYD	SQYD	TON	TON
9	4.02	ARDEN WAY UC	24-0115L	BB	762		102.8	0.35
9	4.02	ARDEN WAY UC	24-0115L	EB		738	99.6	0.34
FROM DIKE TABLE							3.1	
SUBTOTAL					762	738	205.5	0.69
TOTAL					762	738	205.5	0.69

**SUMMARY OF QUANTITIES Q-1**



	<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
WWLLOL	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
03	Sac	5,50,51	Var	15	33

*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

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 12-28-15

**UNIT OF MEASUREMENT SYMBOLS:**

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

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:

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

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

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

2010 REVISED STANDARD PLAN RSP A10B

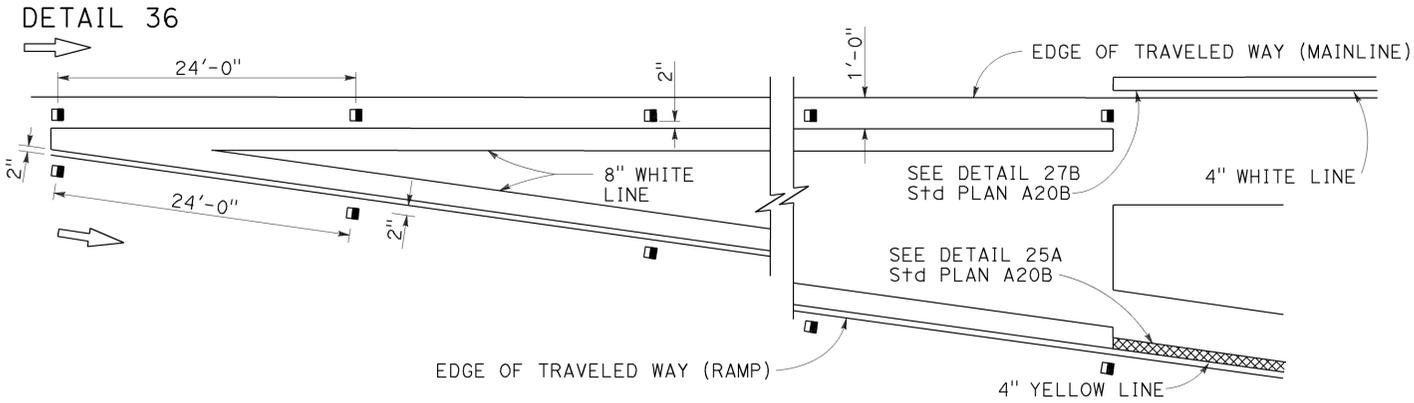
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	16	33

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

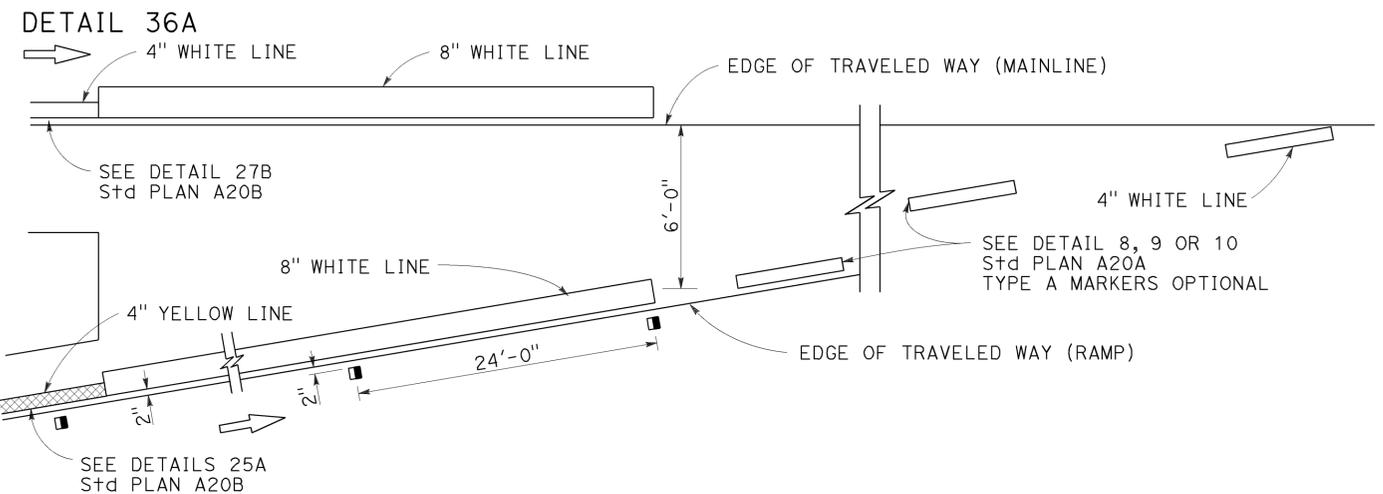
July 19, 2013  
 PLANS APPROVAL DATE

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.

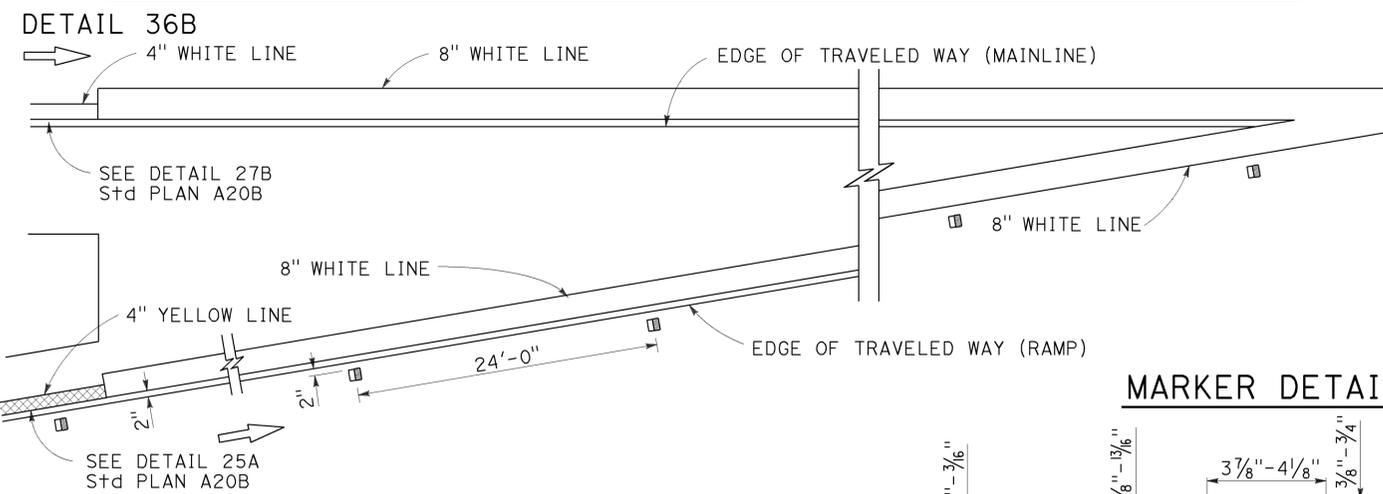
### EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT

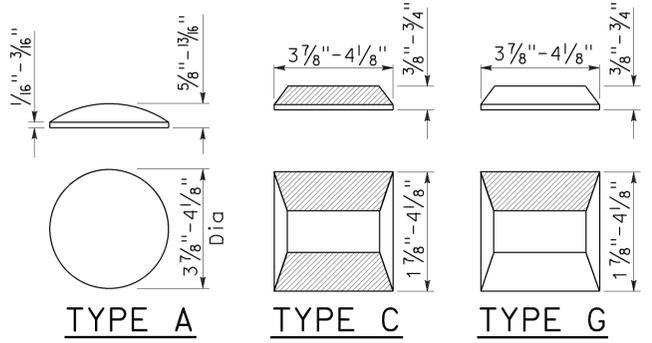


### ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

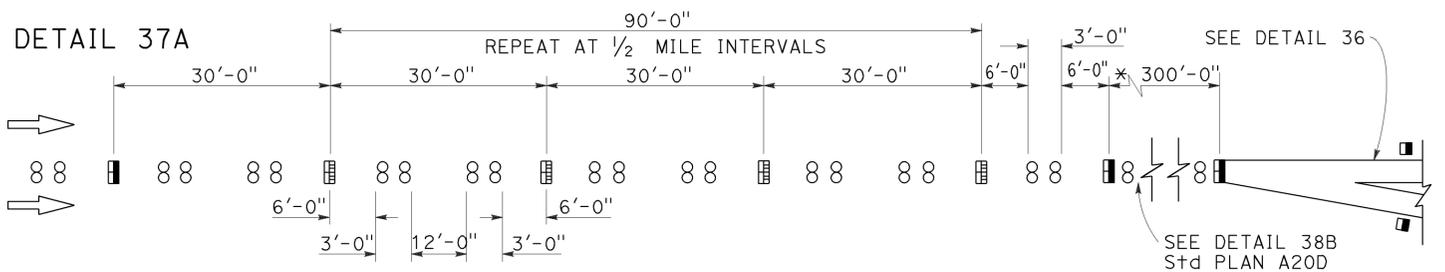
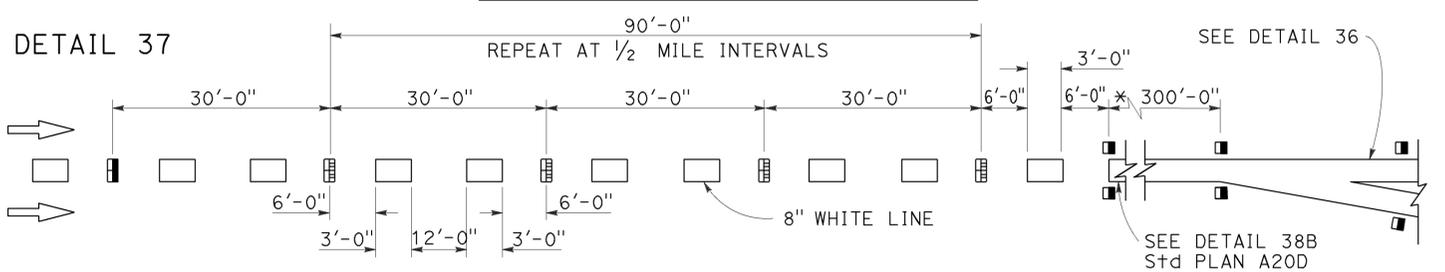


### MARKER DETAILS

- LEGEND:**
- MARKERS**
- TYPE A WHITE NON-REFLECTIVE
  - ◻ TYPE C RED-CLEAR RETROREFLECTIVE
  - TYPE G ONE-WAY CLEAR RETROREFLECTIVE

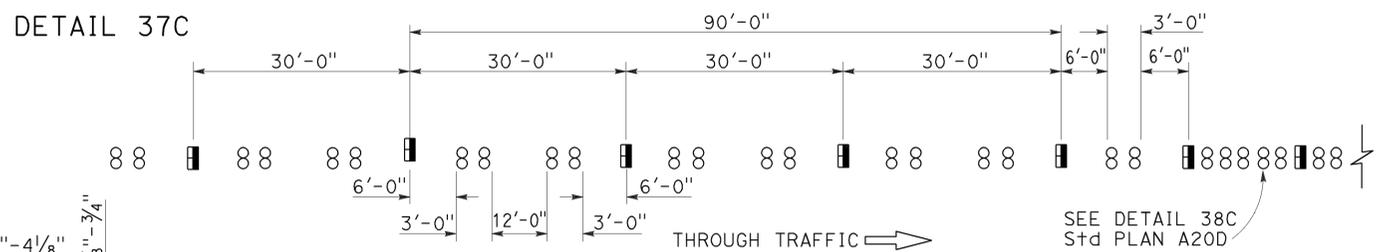
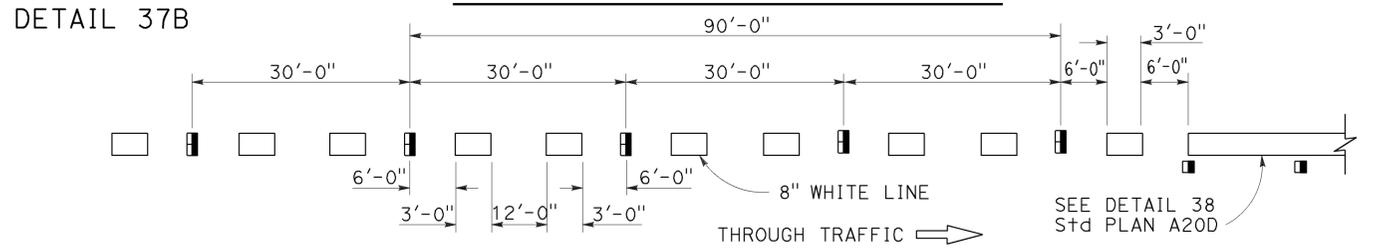


### LANE DROP AT EXIT RAMPS



\* 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

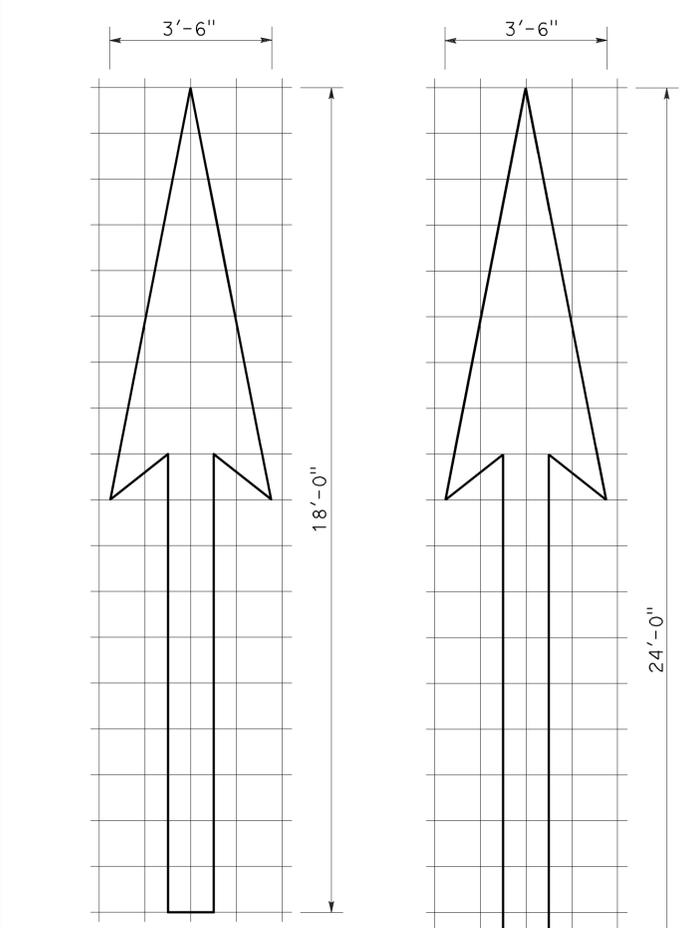
RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

## REVISED STANDARD PLAN RSP A20C

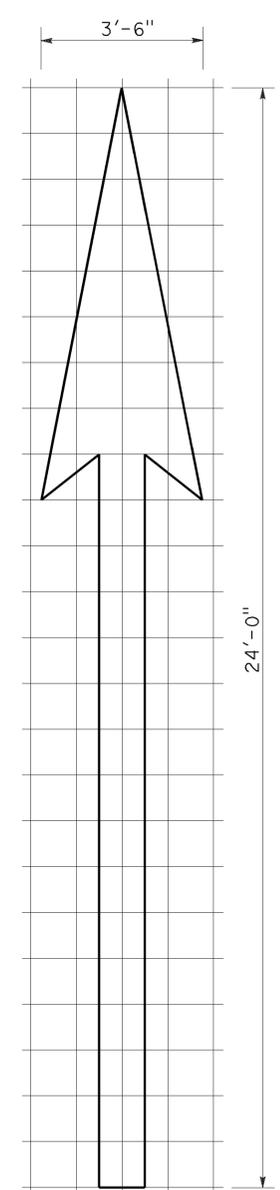
2010 REVISED STANDARD PLAN RSP A20C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	17	33
REGISTERED CIVIL ENGINEER April 20, 2012 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>					

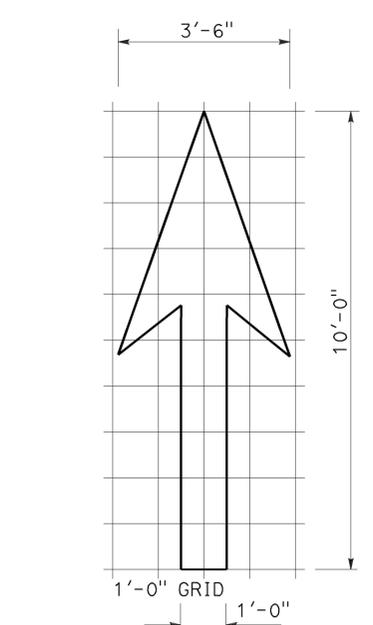
TO ACCOMPANY PLANS DATED 12-28-15



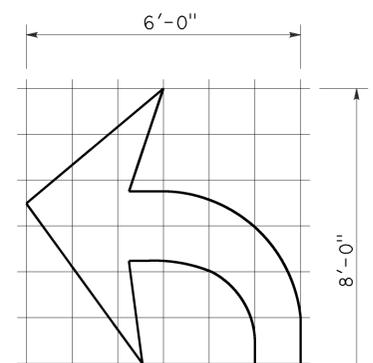
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



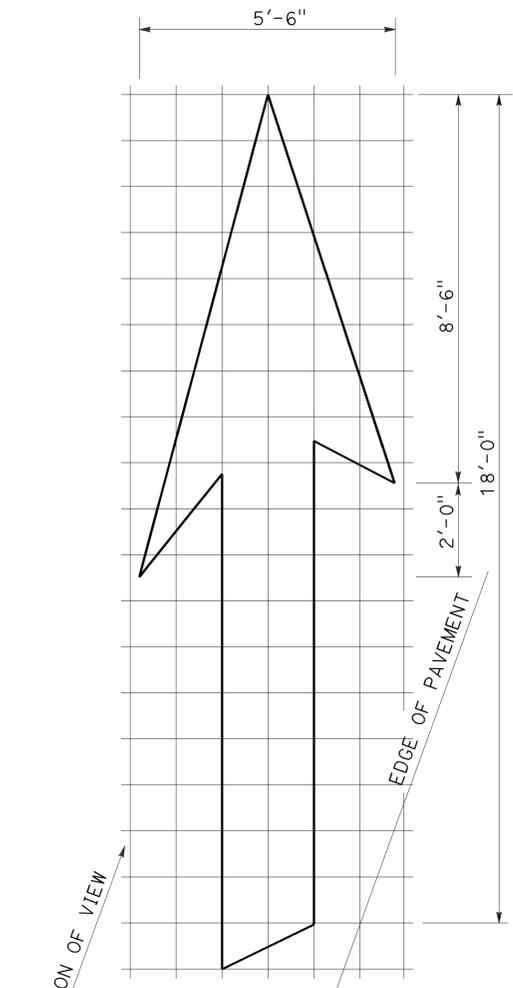
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



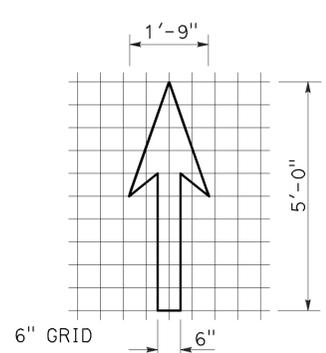
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



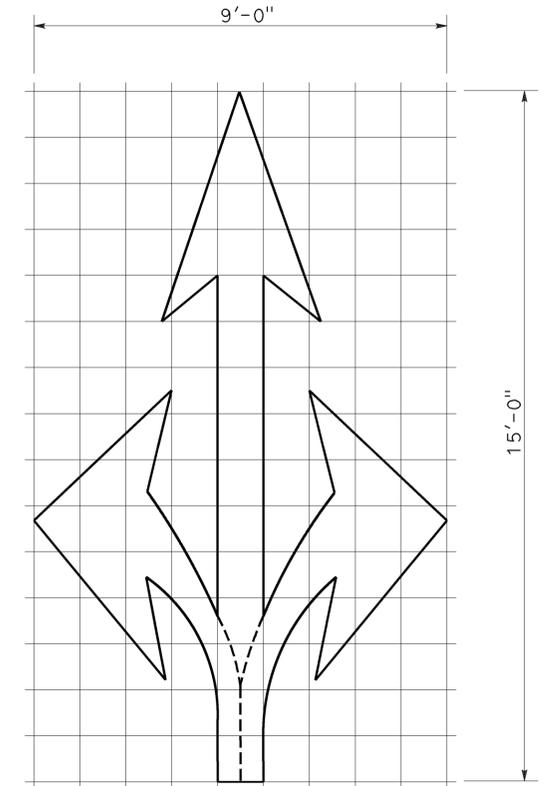
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
 (For Type IV (R) arrow, use mirror image)



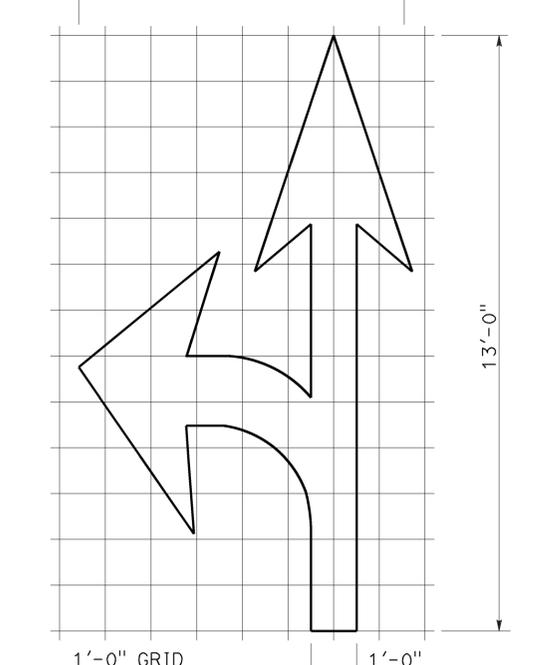
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
 Right lane drop arrow  
 (For left lane, use mirror image)



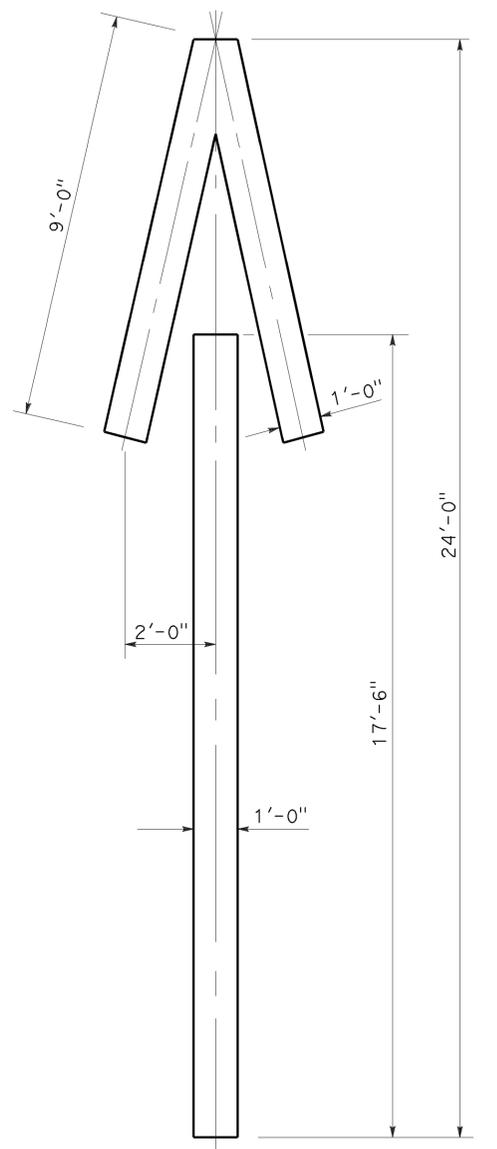
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



A=36 ft<sup>2</sup>  
**TYPE VIII ARROW**



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.

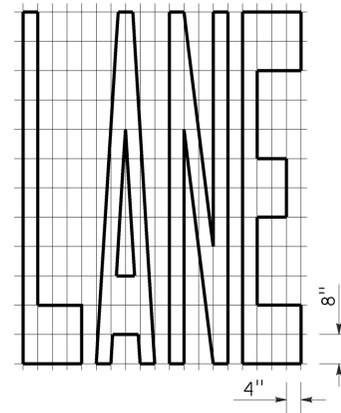
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 ARROWS**  
 NO SCALE

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

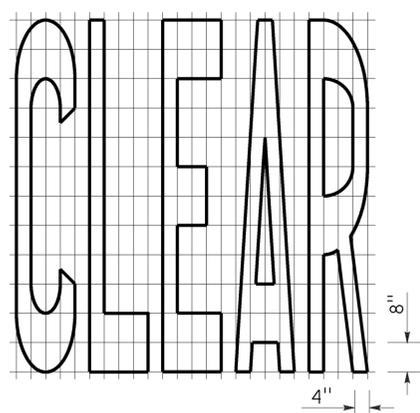
**REVISED STANDARD PLAN RSP A24A**

2010 REVISED STANDARD PLAN RSP A24A

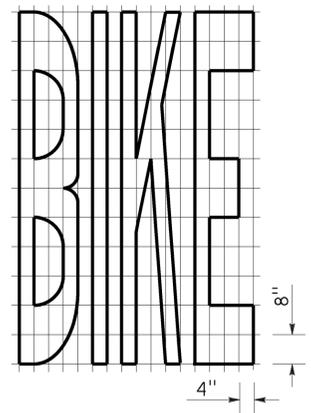
TO ACCOMPANY PLANS DATED 12-28-15



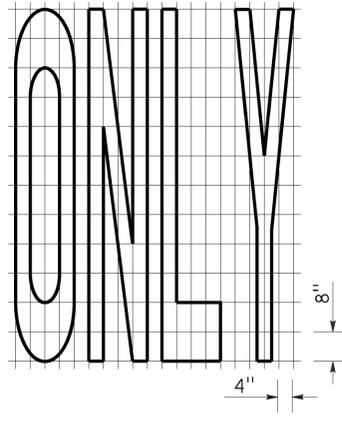
A=24 ft<sup>2</sup>



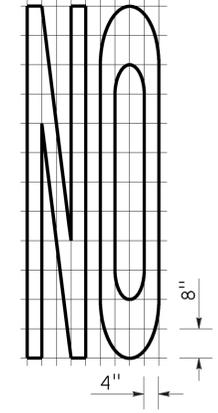
A=27 ft<sup>2</sup>



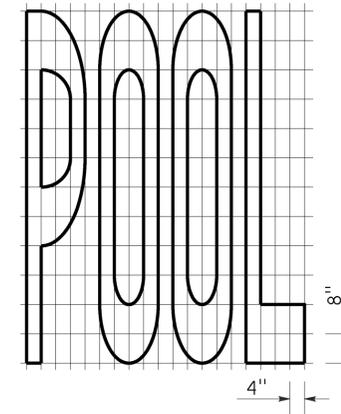
A=21 ft<sup>2</sup>



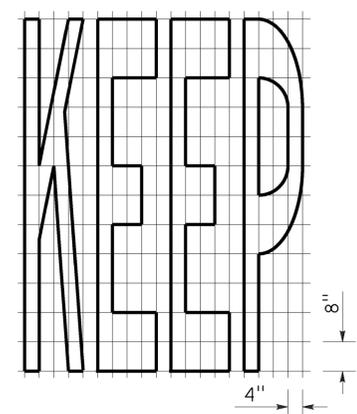
A=22 ft<sup>2</sup>



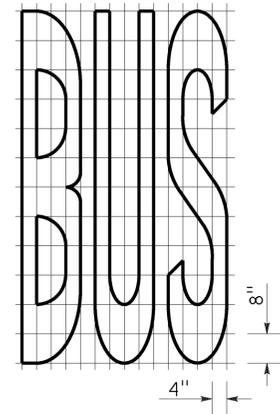
A=14 ft<sup>2</sup>



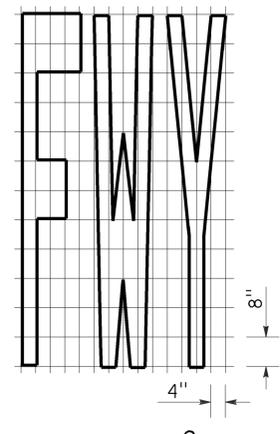
A=23 ft<sup>2</sup>



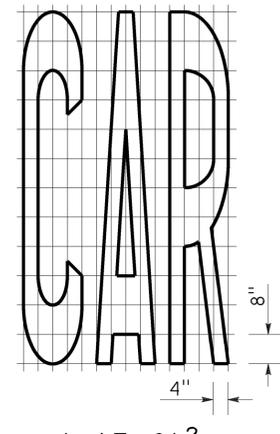
A=24 ft<sup>2</sup>



A=20 ft<sup>2</sup>

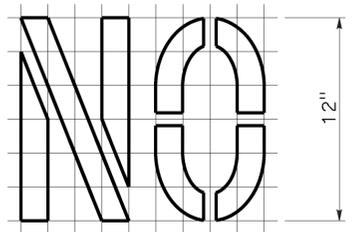


A=16 ft<sup>2</sup>



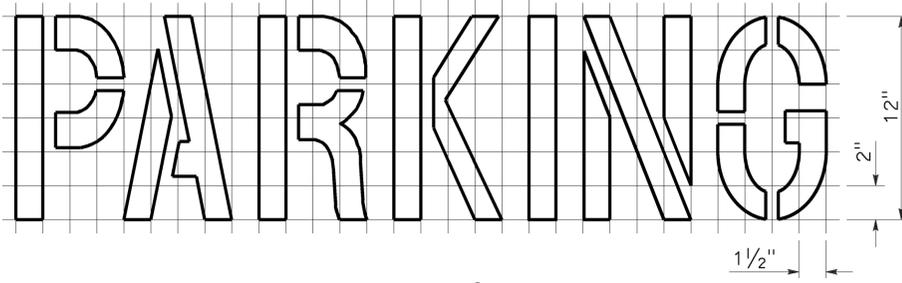
A=17 ft<sup>2</sup>

WORD MARKINGS			
ITEM	ft <sup>2</sup>	ITEM	ft <sup>2</sup>
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



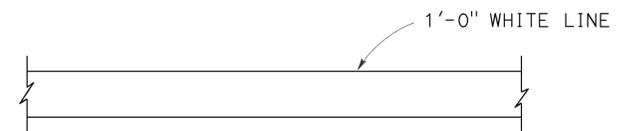
A=2 ft<sup>2</sup>

See Notes 6 and 7

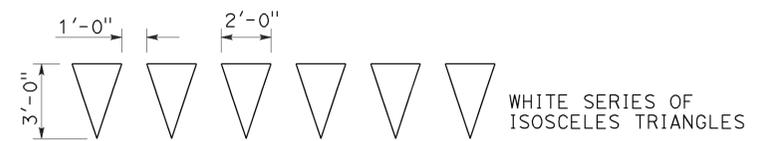


A=2 ft<sup>2</sup>

See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

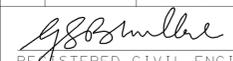
**NOTES:**

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 WORDS, LIMIT AND YIELD LINES**  
 NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E  
 DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	19	33

  
 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 12-28-15

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



**NOTES:**

See Revised Standard Plan RSP T9 for tables.

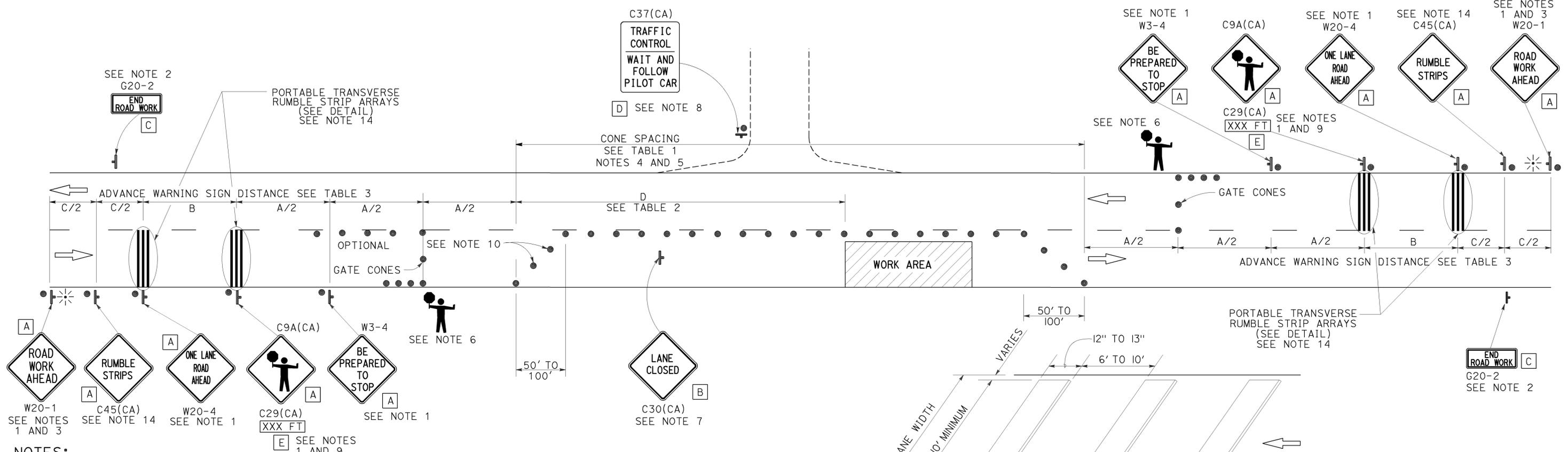
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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.

**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 12-28-15



- NOTES:**
- 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.
  - A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control 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 W20-4 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.
  - Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.

- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
  - Work duration occupies a location for four hours or less
  - Posted speed limit is below 45 MPH
  - Work is of emergency nature
  - Work zone is in snow or icy weather conditions

**PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL**

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

**LEGEND**

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS**

NO SCALE

RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES RSP T13 DATED OCTOBER 17, 2014, RSP T13 DATED JULY 18, 2014 AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP T13

# 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

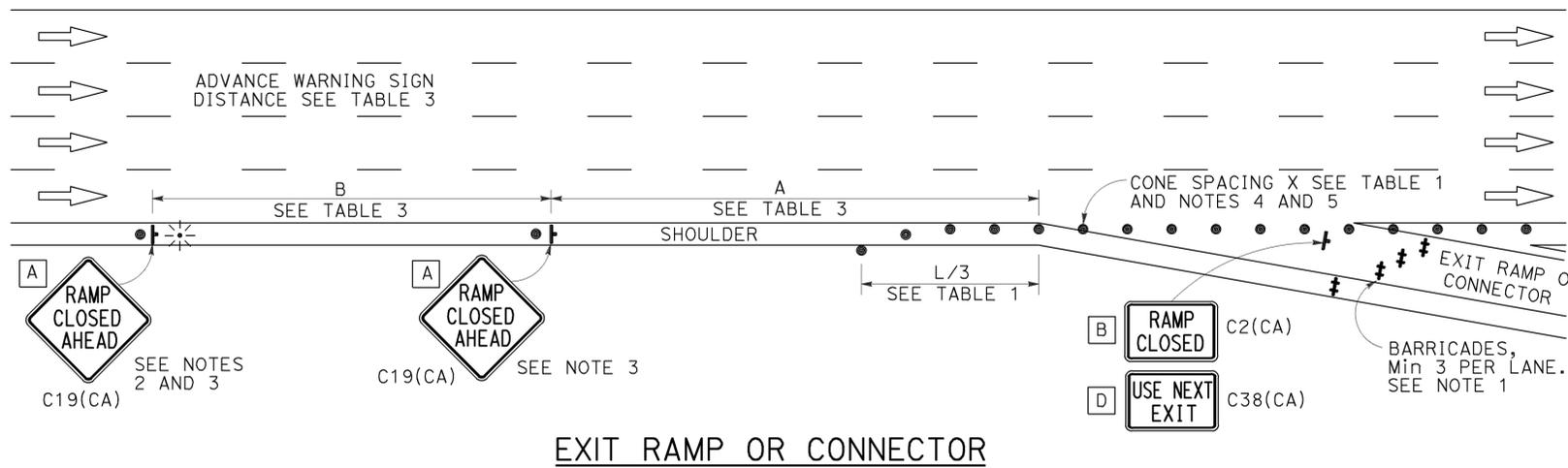
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	22	33

*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.

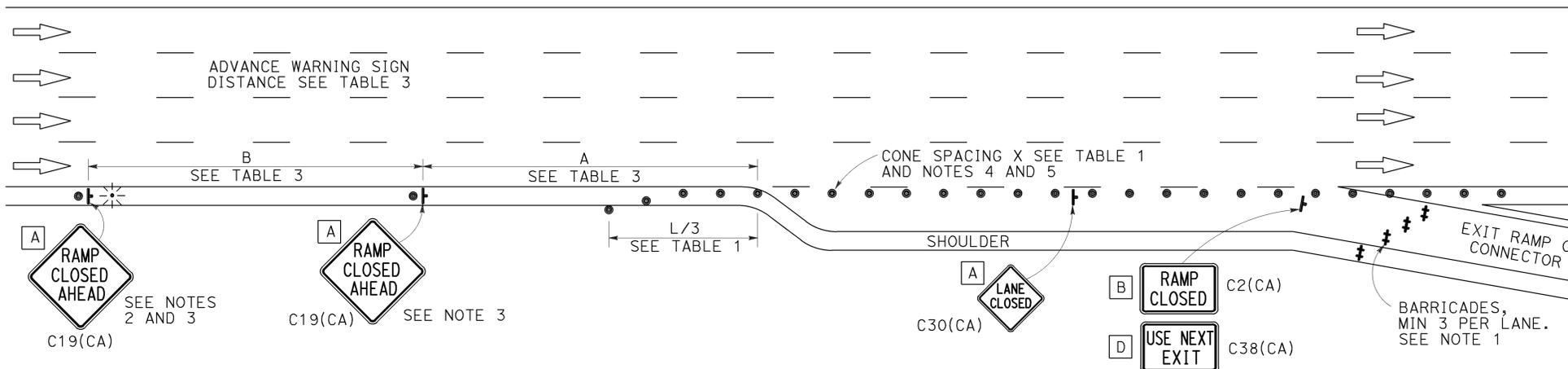
TO ACCOMPANY PLANS DATED 12-28-15

## NOTES:

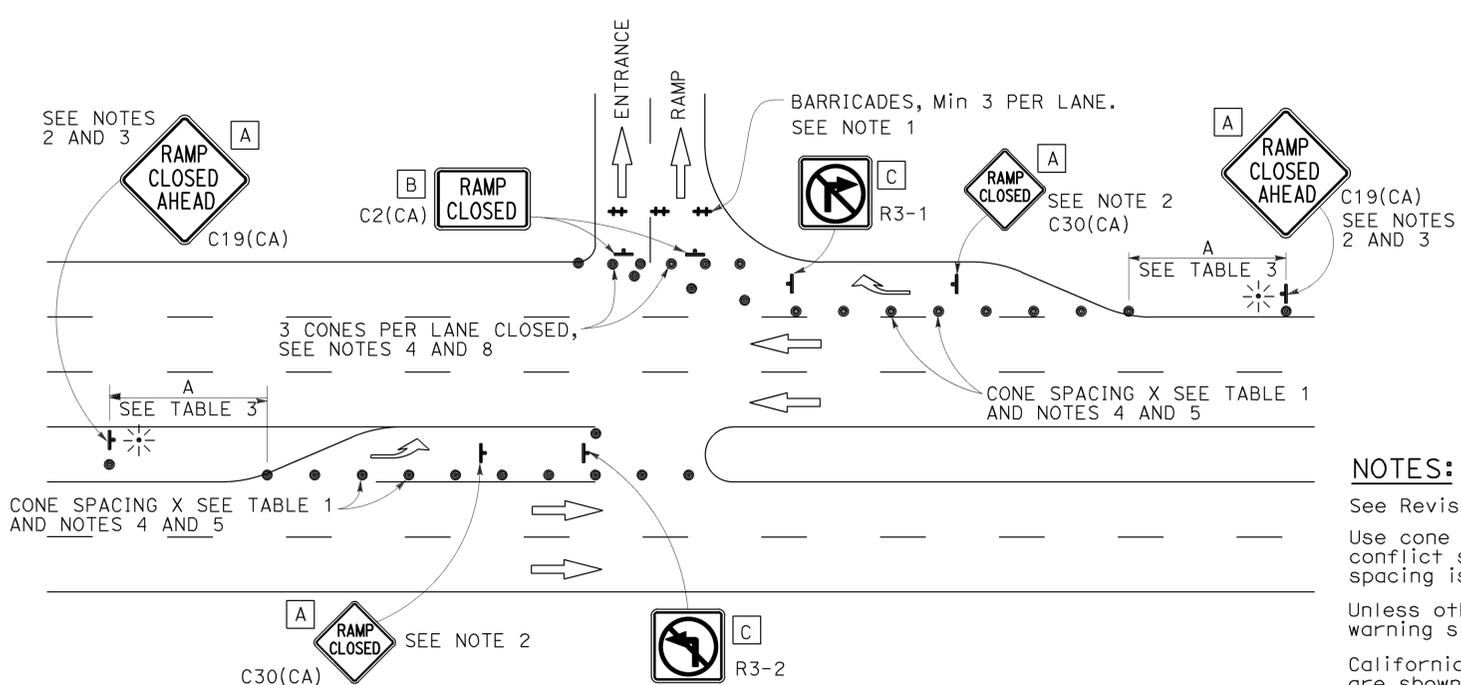
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed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



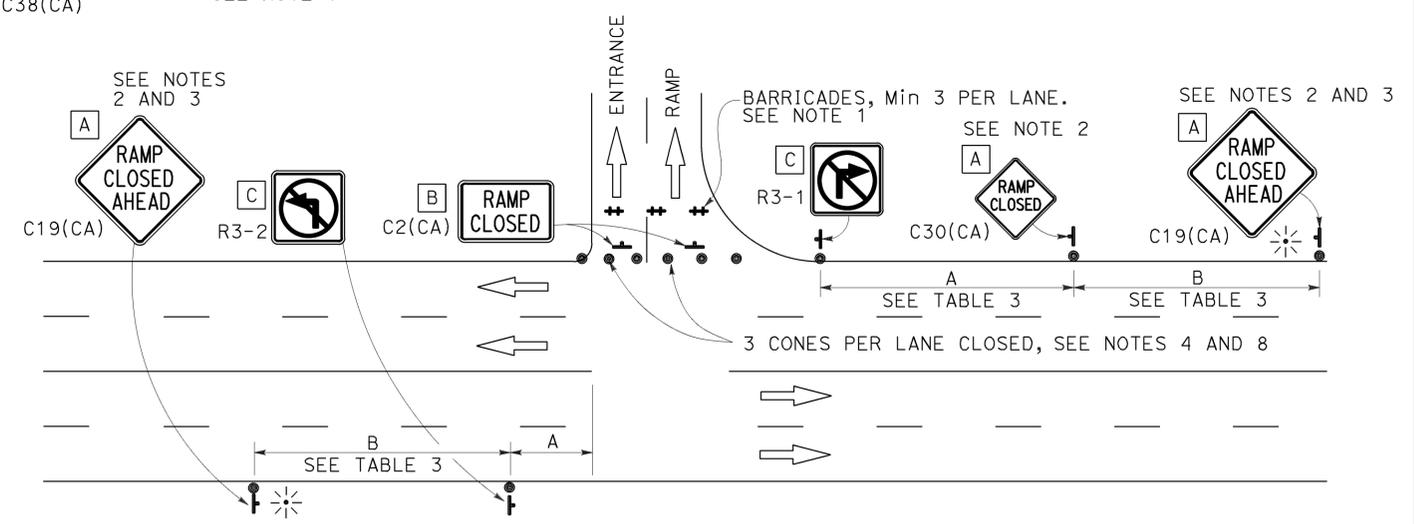
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

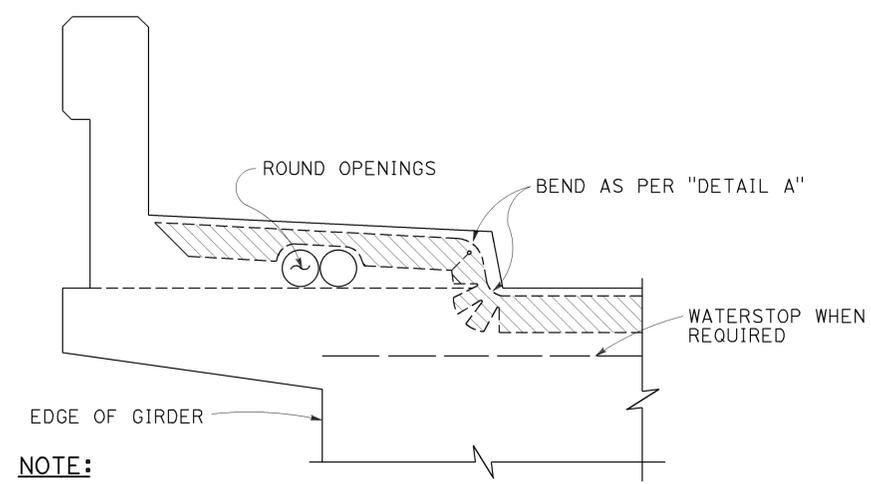
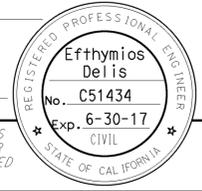
## NOTES:

- 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

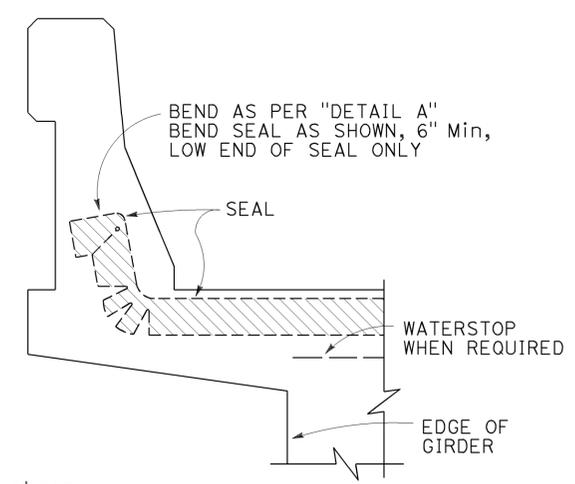
RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14  
 DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.  
**REVISED STANDARD PLAN RSP T14**

2010 REVISED STANDARD PLAN RSP T14

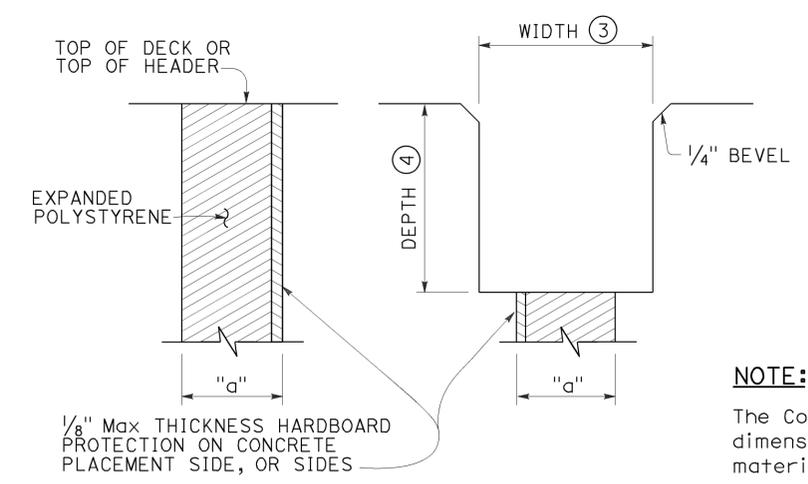


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



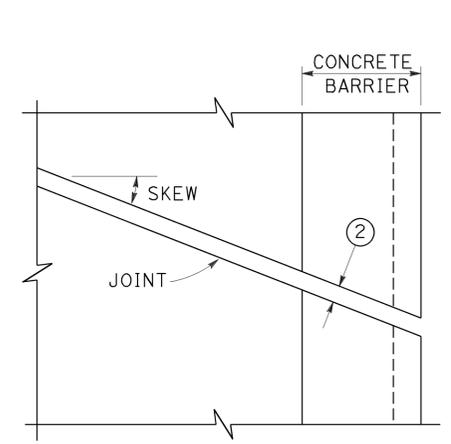
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

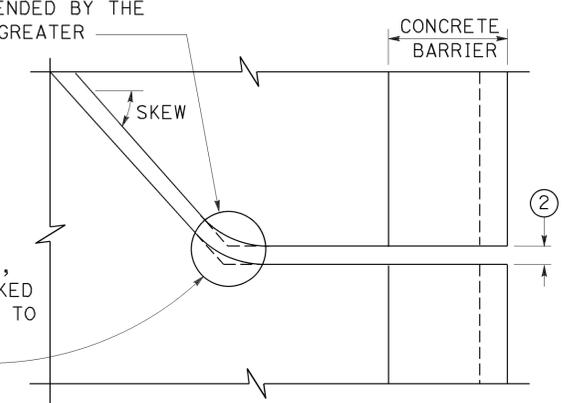
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



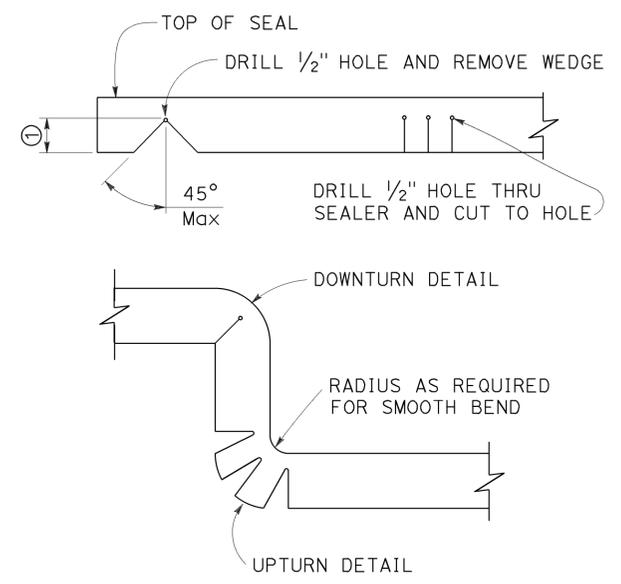
**PLAN OF JOINT (SKEW ≤ 20°)**

Min  $\phi$  RADIUS TO BE 4 TIMES UNCOMPRESSED WIDTH OF SEAL OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS GREATER



**PLAN OF JOINT (SKEW > 20°)**

IN LIEU OF SAW CUTTING, THIS AREA MAY BE BLOCKED OUT AND RECONSTRUCTED TO MATCH SAW CUTTING ON BOTH SIDES.

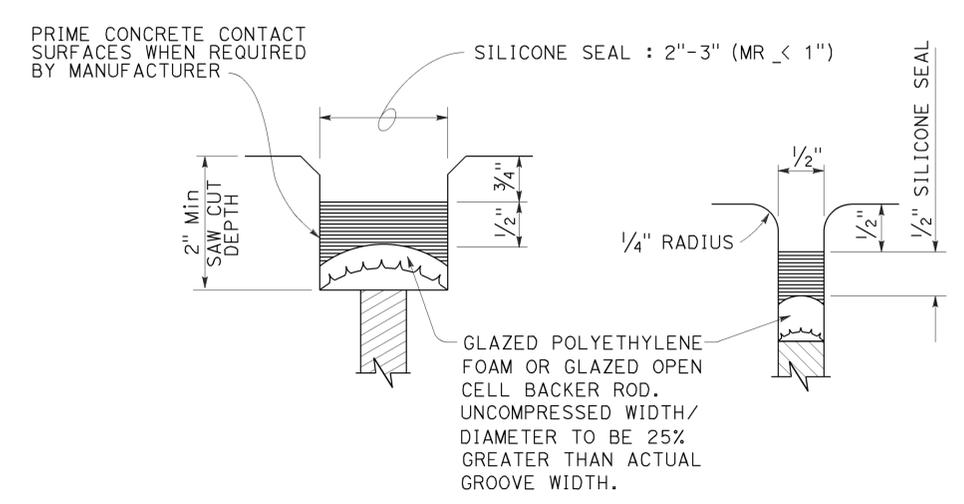


**DETAIL A**

- NOTES:**
- Make smooth cuts from the bottom of seal to 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
  - Opening in barrier to match width of sawn deck joint.
  - Sawcut groove widths shall be as ordered by the Engineer.
  - Depth of sawcut: Type A - Depth to be 2" minimum. Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
  - MR (movement rating) as shown on other plan sheets.
  - Other depths must be approved by the Engineer.
  - A sidewalk joint shall be covered by an expansion joint armor.

**DIMENSIONS "a" OF JOINT REQUIRED**

MOVEMENT RATING (MR) ⑤	BRIDGE TYPE	"a" DIMENSION		
		DECK CONCRETE PLACED		
		WINTER	FALL-SPRING	SUMMER
2"	ALL EXCEPT CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	ALL EXCEPT CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	ALL EXCEPT CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	ALL EXCEPT CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

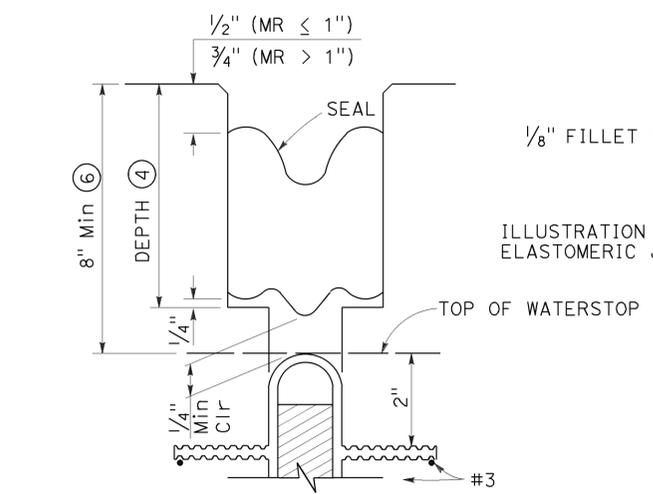


**TYPE A SEAL**

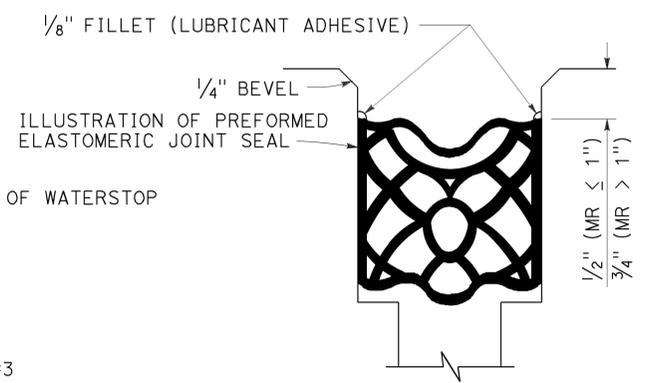
Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**



**TYPE B SEAL**

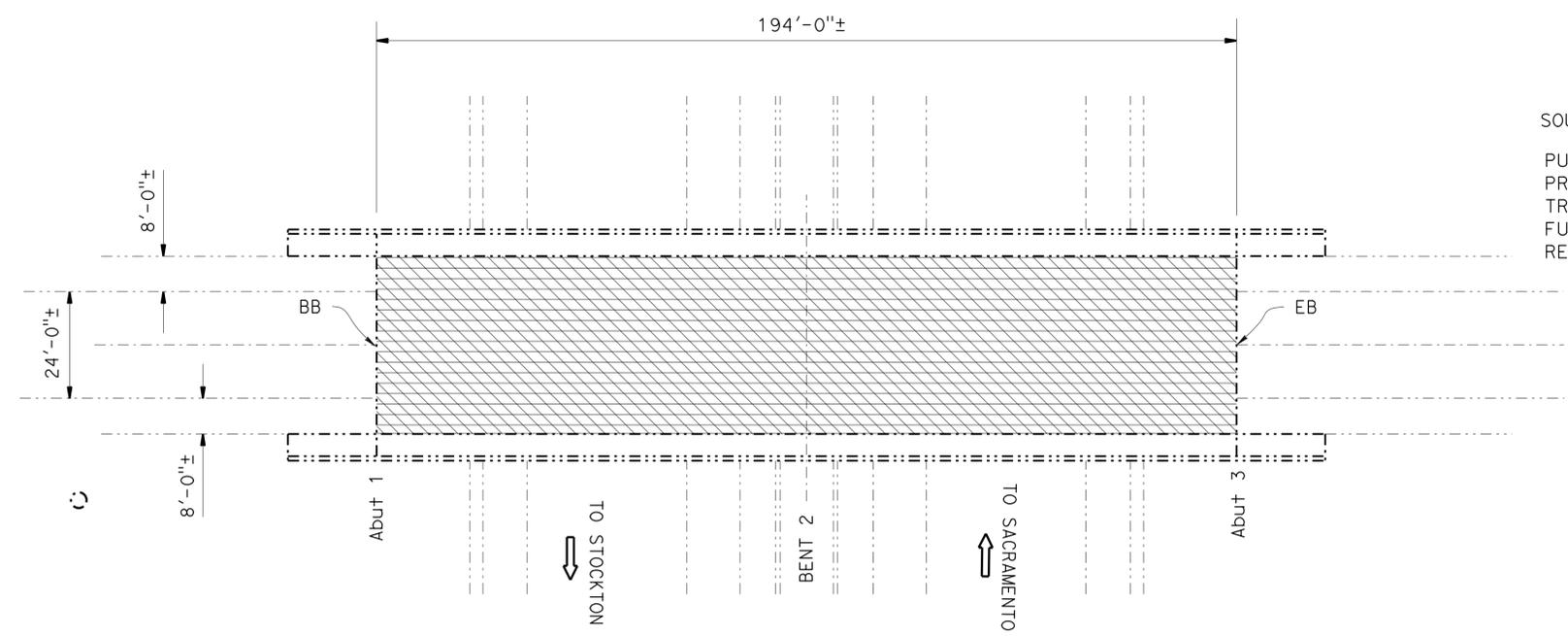
Movement Rating ≤ 2"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**

NO SCALE  
 RSP B6-21 DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 20, 2011 - PAGE 283 OF THE STANDARD PLANS BOOK DATED 2010.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	24	33

REGISTERED CIVIL ENGINEER DATE 12-22-15  
 PETER B. KANG  
 No. C 70336  
 Exp. 9-30-16  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER  
 12-28-15  
 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.



QUANTITIES

SOUTH LAND PARK DRIVE OVERCROSSING BRIDGE NO 24-0259

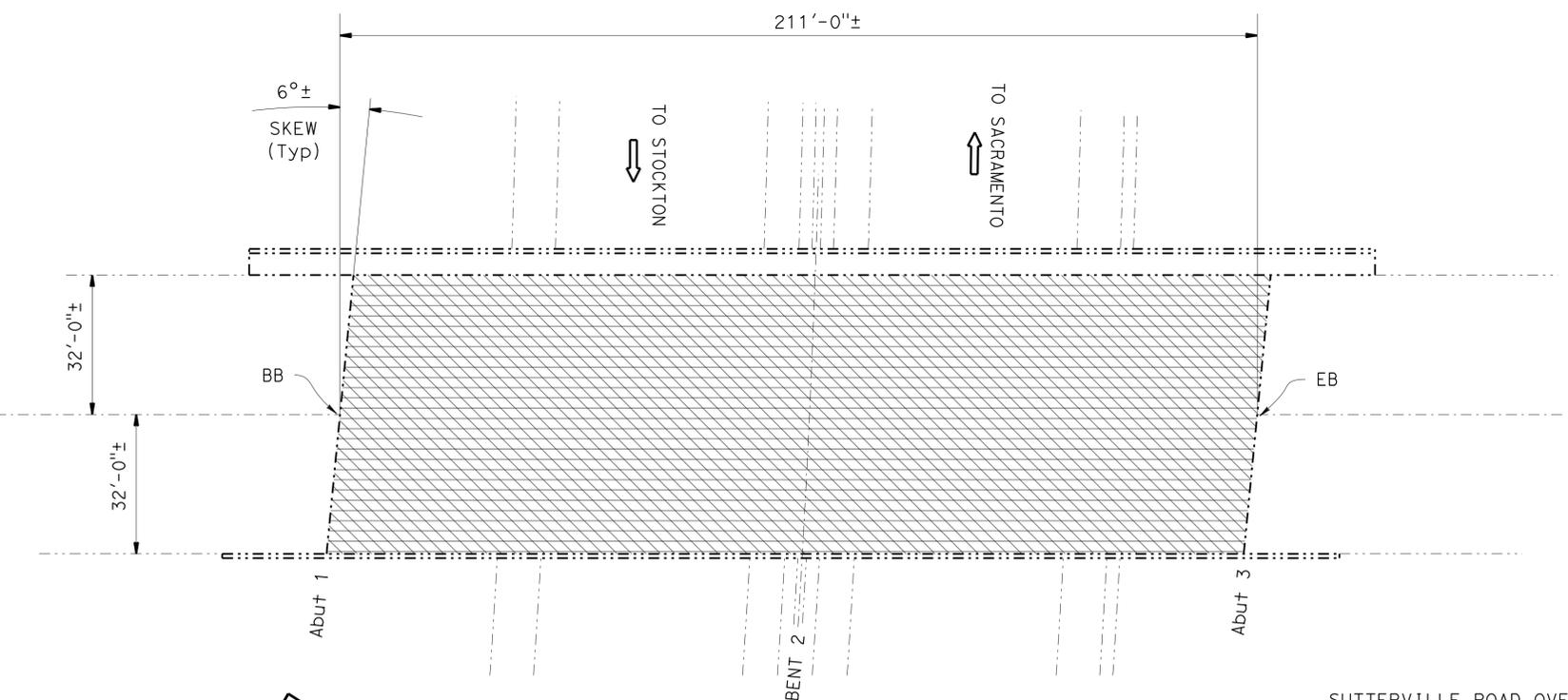
PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	7,760	SQFT
TREAT BRIDGE DECK	7,760	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	103	GAL
REMOVE CHIP SEAL	7,760	SQFT

- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.
  - Indicates limits of remove existing 1/4"± chip seal.
- NOTE: (APPLY TO ALL SHEETS)
- Indicates existing.

**SOUTH LAND PARK DRIVE OVERCROSSING**  
 Br No. 24-0259, Sac, ROUTE 5, PM 16.70  
 1"=20'

STANDARD PLANS DATED MAY 2010

SHEET NO.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



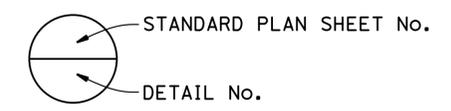
QUANTITIES

SUTTERVILLE ROAD OVERCROSSING BRIDGE NO 24-0256

PREPARE CONCRETE BRIDGE DECK SURFACE	13,504	SQFT
TREAT BRIDGE DECK	13,504	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	180	GAL
REMOVE CHIP SEAL	13,504	SQFT

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	JOINT SEAL DETAILS NO. 1
9	JOINT SEAL DETAILS NO. 2
10	STRUCTURE APPROACH TYPE R(30D)



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

**SUTTERVILLE ROAD OVERCROSSING**  
 Br No. 24-0256, Sac, ROUTE 5, PM 20.53  
 1"=20'

DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
 POST MILE VARIES

**ROUTE 5, 50 & 51 BRIDGES**  
**GENERAL PLAN NO. 1**

NOTES: (APPLY TO THIS SHEET ONLY)



Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.



Indicates limits of remove existing 1/4"± chip seal.

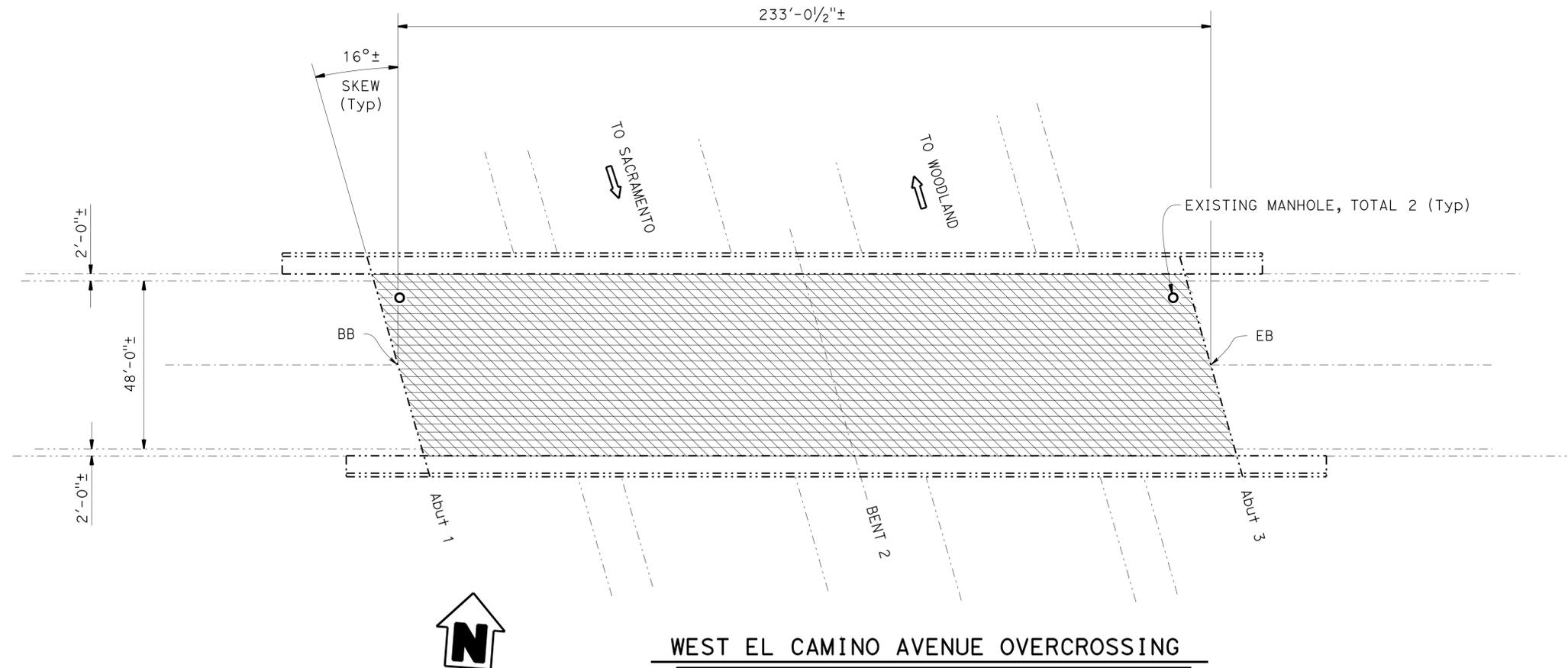
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	25	33

*Peter B. Kang* 12-22-15  
 REGISTERED CIVIL ENGINEER DATE

12-28-15  
 PLANS APPROVAL DATE

PETER B. KANG  
 No. C 70336  
 Exp. 9-30-16  
 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.



**WEST EL CAMINO AVENUE OVERCROSSING**

Br No. 24-0238, Sac, ROUTE 5, PM 25.97

1"=20'

QUANTITIES

WEST EL CAMINO AVENUE OVERCROSSING		BRIDGE NO 24-0238
PREPARE CONCRETE BRIDGE DECK SURFACE	12,118	SQFT
TREAT BRIDGE DECK	12,118	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	162	GAL
REMOVE CHIP SEAL	12,118	SQFT

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

<i>M. Hashimoto</i> DESIGN ENGINEER	DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
	QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

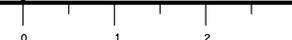
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
 POST MILE VARIES  
**ROUTE 5, 50 & 51 BRIDGES**  
**GENERAL PLAN NO. 2**

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT:3488  
 PROJECT NUMBER & PHASE: 0314000028

CONTRACT NO.: 03-0G0401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
9-02-15	2	10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	26	33

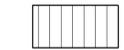
*Peter B. Kang* 12-22-15  
 REGISTERED CIVIL ENGINEER DATE

12-28-15  
 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  
 PETER B. KANG  
 No. C 70336  
 Exp. 9-30-16  
 CIVIL  
 STATE OF CALIFORNIA

NOTES: (APPLY TO THIS SHEET ONLY)



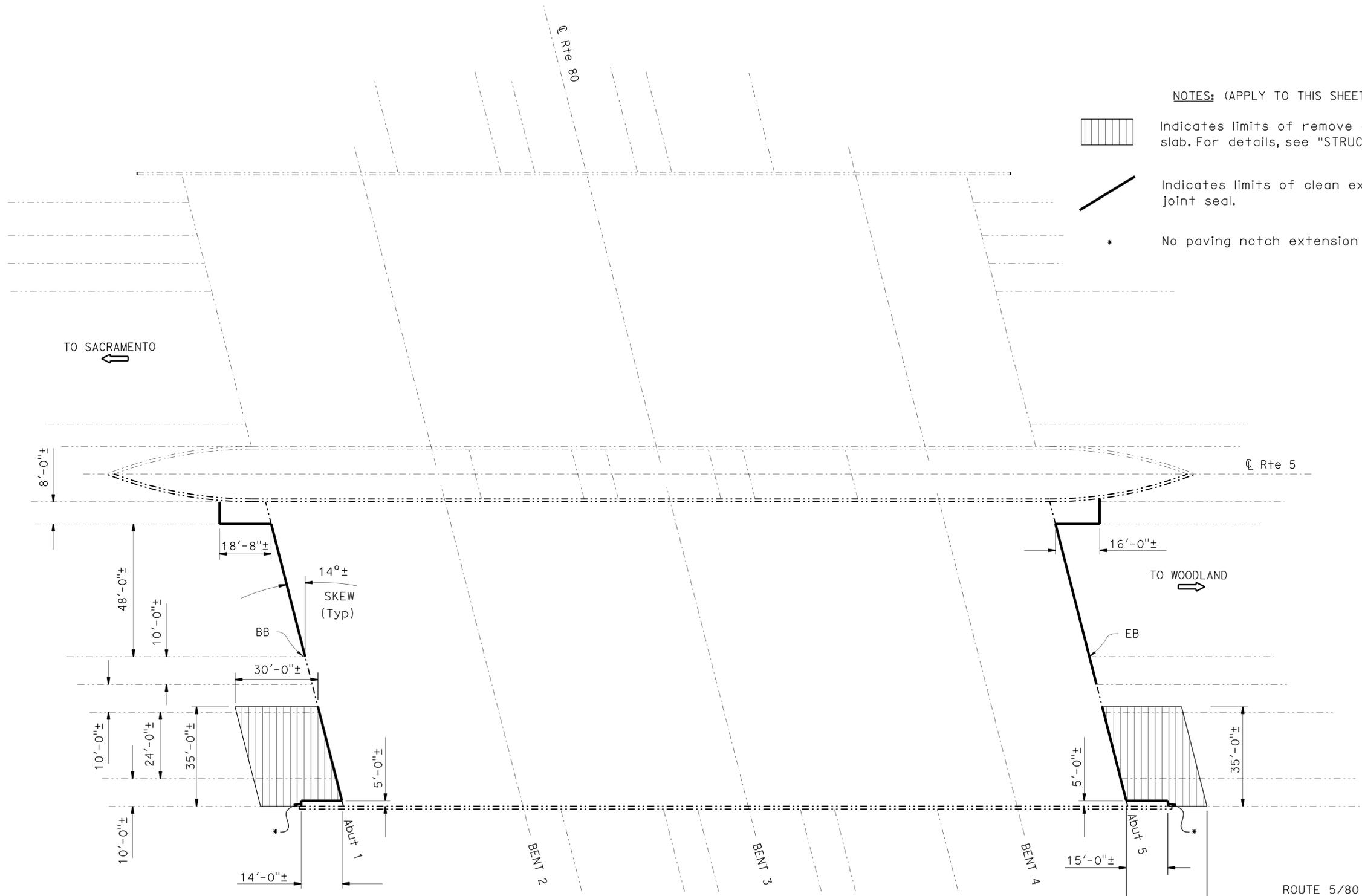
Indicates limits of remove existing pavement and construct new approach slab. For details, see "STRUCTURE APPROACH TYPE R (30D)" sheet.



Indicates limits of clean expansion joint and install new joint seal.

\*

No paving notch extension at these location as there is no backwall.



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



**ROUTE 5-80 SEPARATION**

Br No. 24-0207R, Sac, ROUTE 5, PM 26.69

1"=20'

QUANTITIES

ROUTE 5/80 SEPARATION	BRIDGE NO 24-0207R
AGGREGATE BASE (APPROACH SLAB)	11 CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	72 CY
PAVING NOTCH EXTENSION	47 CF
CLEAN EXPANSION JOINT	161 LF
JOINT SEAL (MR 1")	262 LF

*Matthew Cole* 12-22-15  
 DESIGN ENGINEER

DESIGN	BY M. HASHIMOTO	CHECKED P. KANG
DETAILS	BY D. KISH	CHECKED P. KANG
QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG

LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
LAYOUT	BY D. KISH CHECKED P. KANG
SPECIFICATIONS	BY JENNIFER RAMIREZ PLANS AND SPECS COMPARED JENNIFER RAMIREZ

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

**ROUTE 5, 50 & 51 BRIDGES  
 GENERAL PLAN NO. 3**

NOTES: (APPLY TO THIS SHEET ONLY)



Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.

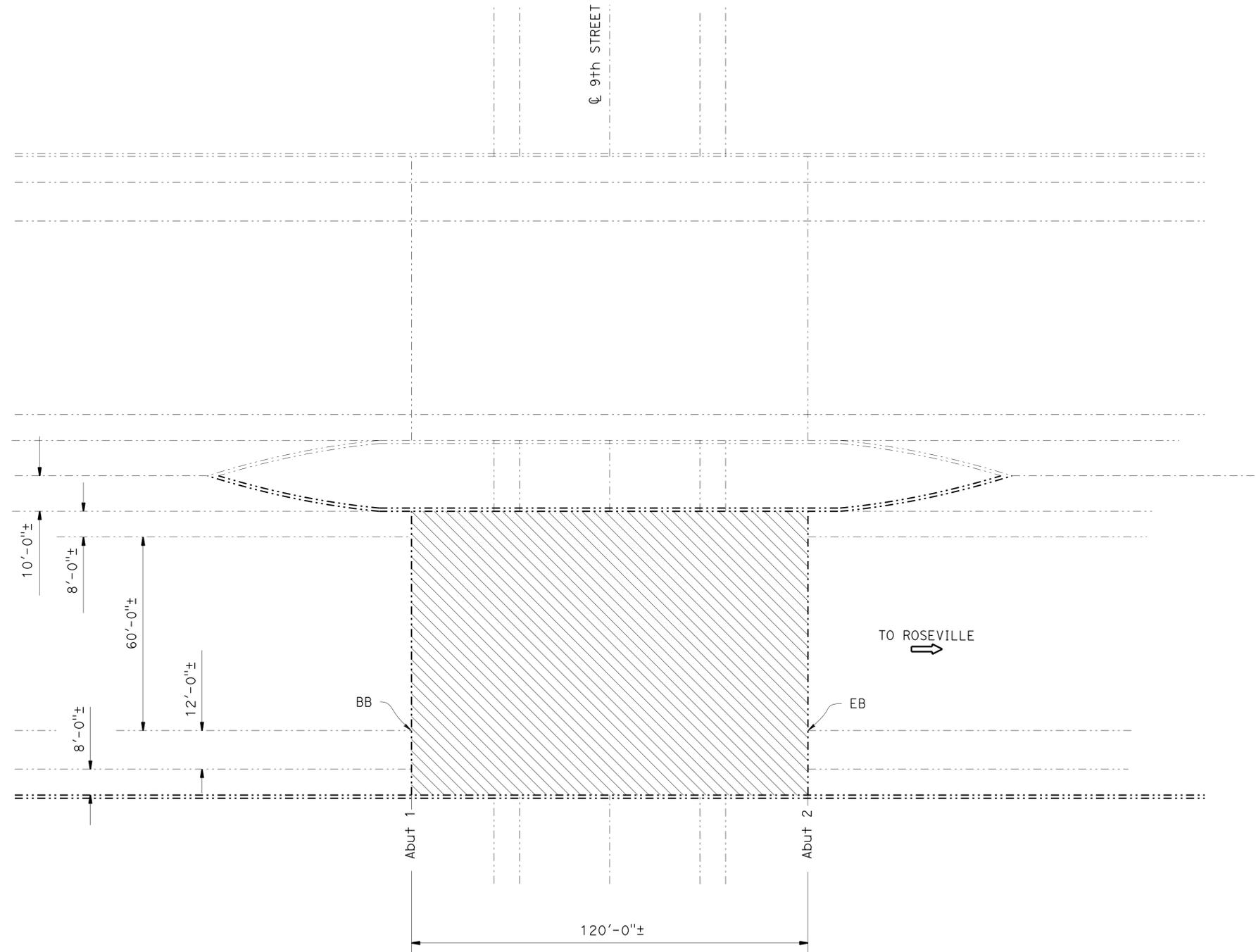
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	27	33

*Peter B. Kang* 12-22-15  
 REGISTERED CIVIL ENGINEER DATE

12-28-15  
 PLANS APPROVAL DATE

PETER B. KANG  
 No. C 70336  
 Exp. 9-30-16  
 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.



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



**9TH STREET UNDERCROSSING**

Br No. 24-0244R, Sac, ROUTE 50, PM L0.89  
 1"=20'

QUANTITIES

9TH STREET UNDERCROSSING	BRIDGE NO 24-0244R
PREPARE CONCRETE BRIDGE DECK SURFACE	10,582 SQFT
TREAT BRIDGE DECK	10,582 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	118 GAL

*Mattson* 12-22-15  
 DESIGN ENGINEER

DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

**ROUTE 5, 50 & 51 BRIDGES  
 GENERAL PLAN NO. 4**

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT:3488  
 PROJECT NUMBER & PHASE: 0314000028

CONTRACT NO.: 03-0G0401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
3-13-15	4	10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	28	33

*Peter B. Kang* 12-22-15  
REGISTERED CIVIL ENGINEER DATE

12-28-15  
PLANS APPROVAL DATE

PETER B. KANG  
No. C 70336  
Exp. 9-30-16  
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.

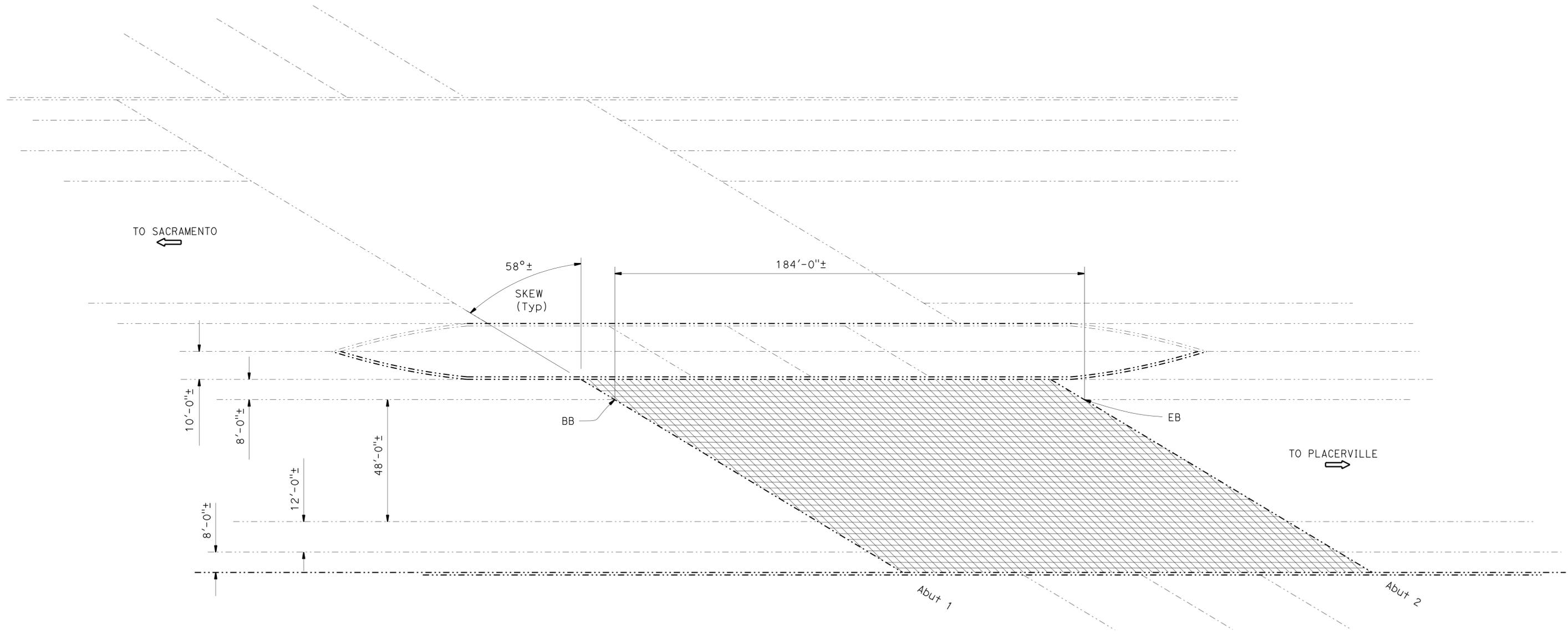
NOTES: (APPLY TO THIS SHEET ONLY)



Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.



Indicates limits of remove existing 1/2"± AC overlay.



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



**FOLSOM BOULEVARD UNDERCROSSING**

Br No. 24-0288R, Sac, ROUTE 50, PM R3.13  
1"=20'

FOLSOM BOULEVARD UNDERCROSSING	BRIDGE NO 24-0288R
REMOVE ASPHALT CONCRETE SURFACING	13,984 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	13,984 SQFT
TREAT BRIDGE DECK	13,984 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	156 GAL

QUANTITIES

<i>Mattson</i> DESIGN ENGINEER	DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
	QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
POST MILE VARIES

**ROUTE 5, 50 & 51 BRIDGES**  
**GENERAL PLAN NO. 5**

UNIT:3488  
PROJECT NUMBER & PHASE: 0314000028  
CONTRACT NO.: 03-0G0401

REVISION DATES  
3-13-15

SHEET 5 OF 10

USERNAME => s119538 DATE PLOTTED => 28-DEC-2015 TIME PLOTTED => 10:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	29	33

*Peter B. Kang* 12-22-15  
REGISTERED CIVIL ENGINEER DATE

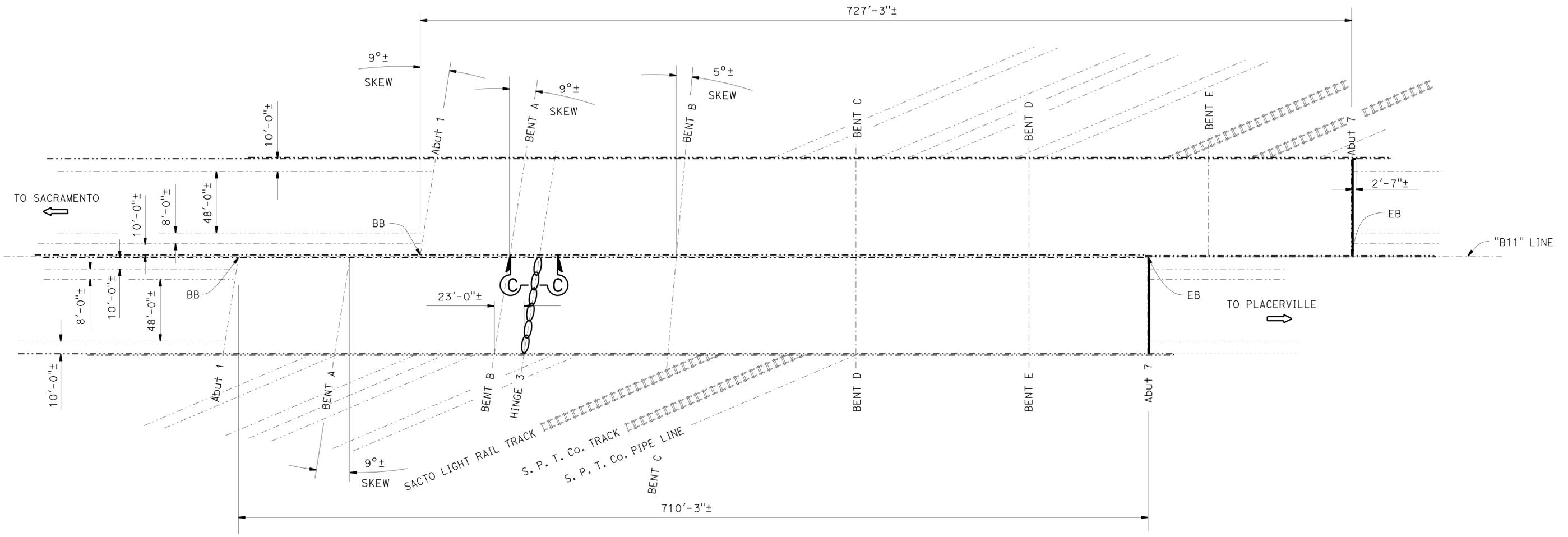
12-28-15  
PLANS APPROVAL DATE

PETER B. KANG  
No. C 70336  
Exp. 9-30-16  
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: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of clean expansion joint and install new joint seal.
-  Joint seal reconstruction
- For "SECTION C-C", see "JOINT SEAL DETAILS NO. 2" sheet.



**MAYHEW OVERHEAD**  
Br No. 24-0173, Sac, ROUTE 50, PM R6.34  
1"=40'

QUANTITIES

DESCRIPTION	QUANTITY	UNIT
MAYHEW OVERHEAD		
BRIDGE NO 24-0173		
BRIDGE REMOVAL (PORTION)		LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	3	CY
CLEAN EXPANSION JOINT	234	LF
JOINT SEAL (MR 1")	156	LF
JOINT SEAL (MR 2")	78	LF
BAR REINFORCING STEEL (BRIDGE)	323	LB

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

 DESIGN ENGINEER	DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
	QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

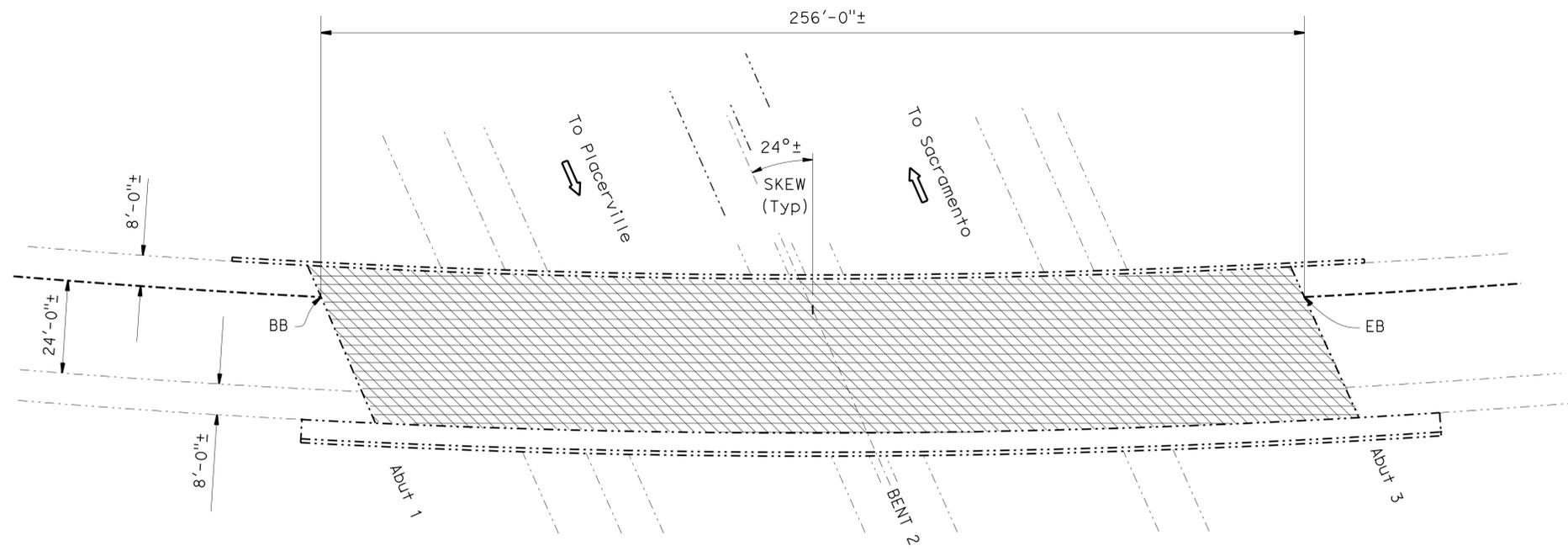
BRIDGE NO. VARIOUS  
POST MILE VARIES

**ROUTE 5, 50 & 51 BRIDGES**  
**GENERAL PLAN NO. 6**

USERNAME => s119538 DATE PLOTTED => 28-DEC-2015 TIME PLOTTED => 10:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	30	33

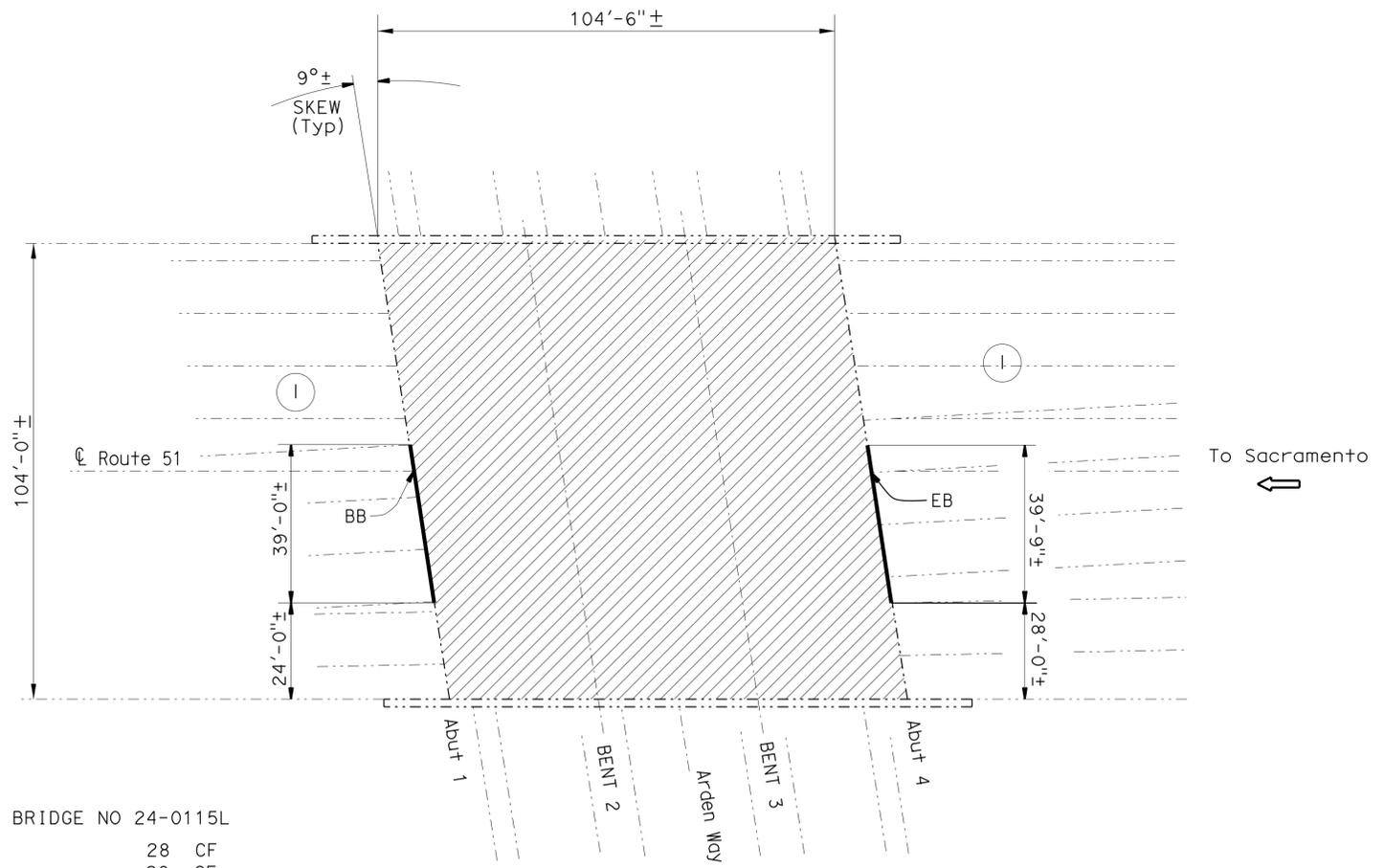
PETER B. KANG 12-22-15  
 REGISTERED CIVIL ENGINEER DATE  
 12-28-15  
 PLANS APPROVAL DATE  
 PETER B. KANG  
 No. C 70336  
 Exp. 9-30-16  
 CIVIL  
 STATE OF CALIFORNIA  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



QUANTITIES		BRIDGE NO 24-0213
ROUTIER ROAD OVERCROSSING		LUMP SUM
PUBLIC SAFETY PLAN	10,240	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	10,240	SQFT
TREAT BRIDGE DECK	114	GAL
FURNISH BRIDGE DECK TREATMENT MATERIAL	10,240	SQFT
REMOVE CHIP SEAL		

**ROUTIER ROAD OVERCROSSING**  
 Br No. 24-0213, Sac, ROUTE 50, PM R8.91  
 1"=20'

- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.
  - Indicates limits of remove existing 1/4"± chip seal
  - Indicates limits of prepare concrete bridge deck surface, furnish and place new 3/4" minimum depth polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete as shown on the "JOINT AND DECK REPAIR DETAIL" on "JOINT SEAL DETAILS NO. 1" sheet.
  - Indicates limits of clean expansion joint and install new joint seal.
  - Indicates location of road way taper, see "ROAD PLANS"



QUANTITIES

ARDEN WAY UNDERCROSSING		BRIDGE NO 24-0115L
RAPID SETTING CONCRETE (PATCH)	28	CF
REMOVE UNSOUND CONCRETE	28	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	10,868	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	815	CF
PLACE POLYESTER CONCRETE OVERLAY	10,868	SQFT
CLEAN EXPANSION JOINT	80	LF
JOINT SEAL (MR 1/2")	80	LF

**ARDEN WAY UNDERCROSSING**  
 Br No. 24-0115L, SAC, Route 51, PM 4.02  
 1"=20'

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

 DESIGN ENGINEER 12-22-15	DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY D. KISH	CHECKED P. KANG	LAYOUT	BY D. KISH
	QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG	SPECIFICATIONS	BY JENNIFER RAMIREZ

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE	BRIDGE NO. VARIOUS	<b>ROUTE 5, 50 &amp; 51 BRIDGES</b> <b>GENERAL PLAN NO. 7</b>
	STRUCTURE MAINTENANCE DESIGN	POST MILE VARIES	

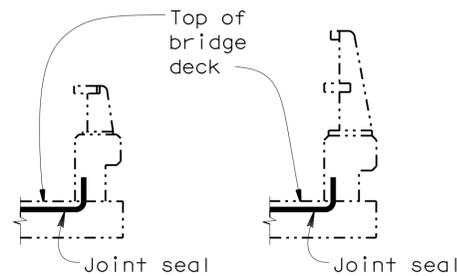
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	31	33
Peter B. Kang 12-22-15 REGISTERED CIVIL ENGINEER DATE					
12-28-15				PLANS APPROVAL DATE	
<i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</i>					

## JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (in)	APPROXIMATE LENGTH (Ft)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (in)	
ROUTE 5/80 SEPARATION	24-0207R	Abut 1 **	BB	1	127	No	12
		Abut 5 **	EB	1	135	No	12
MAYHEW OVERHEAD	24-0173	HINGE 3 *	H	2	78	No	8
		Abut 7 **	EB	1	156	No	12
ARDEN WAY UNDERCROSSING	24-0115L	Abut 1	BB	1/2	40	No	8
		Abut 4	EB	1/2	40	No	12

**LEGEND:**

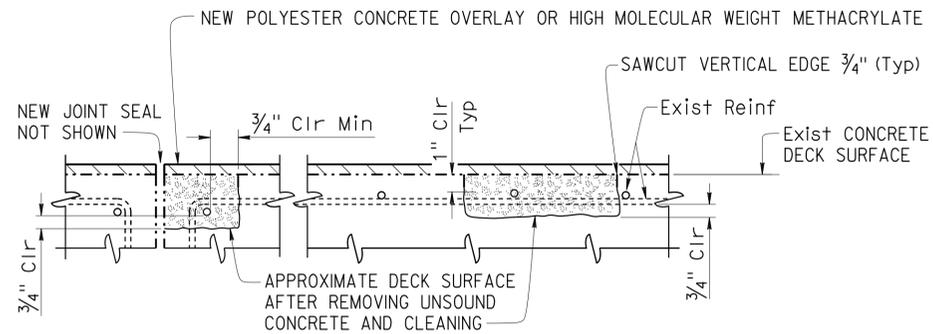
- BB - Paving notch at beginning of bridge
- EB - Paving notch at end of bridge
- H - Hinge
- \* - Use Type B Joint Seal only
- \*\* - Use Type A (Silicone) Joint Seal only



### BARRIER RAIL

## JOINT SEAL AT LOW SIDE OF DECK

Notes: Details shown for illustration purposes only. For use only where deck joint matches the sidewalk, curb or barrier rail joint.

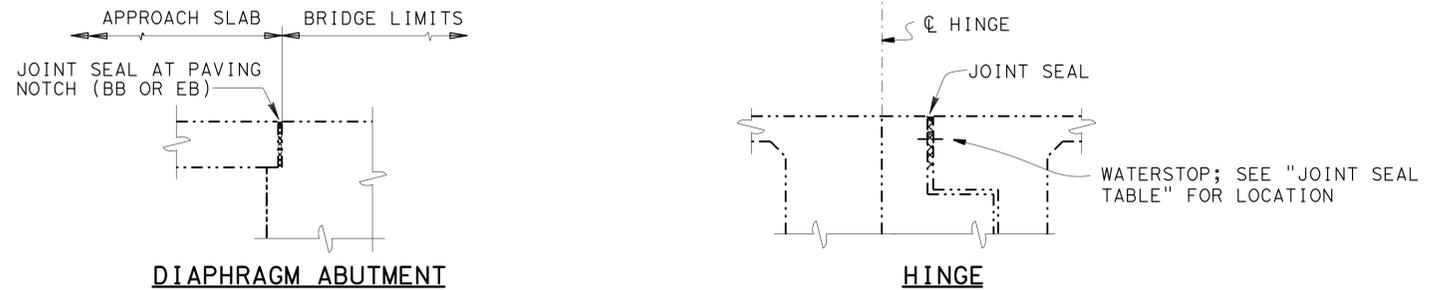


## JOINT AND DECK REPAIR DETAIL

Note: Locations to be determined by the Engineer. Reinforcement may be encountered during deck concrete removal.

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

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH TO CLEAN JOINT (INCHES)
ARDEN WAY UNDERCROSSING	24-0115L	1	3



## JOINT SEAL LOCATION

### GENERAL NOTES LOAD FACTOR DESIGN

(BRIDGE NUMBER: 24-0173)

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1996 AASHTO with Interims and Revisions by CALTRANS)

LIVE LOADING: HS20-44 and alternative and permit design load.

REINFORCED CONCRETE:  $f_y = 60,000$  psi  
 $f'_c = 3,600$  psi  
 $n = 8$

### TEMPORARY DECK PLATE LOAD CRITERIA

MOMENT DEMAND/FOOT (KIP-FT/FT)	BOLT SHEAR/FOOT (KIP/FT)	BOLT TENSION (KIP)
5.85	8.0	8.0

Notes:  
Plate thickness shall be  $\geq 7/8$ "  
Plate deflection shall not be greater than  $S/300$  (S = Span in feet)  
Maximum spacing of anchorages is 9"

DESIGN	BY M. HASHIMOTO	CHECKED P. KANG
DETAILS	BY D. KISH	CHECKED P. KANG
QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG

<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS POST MILE VARIES
--	--	--

<b>ROUTE 5, 50 &amp; 51 BRIDGES</b>
<b>JOINT SEAL DETAILS NO. 1</b>

USERNAME => s119538 DATE PLOTTED => 28-DEC-2015 TIME PLOTTED => 10:27

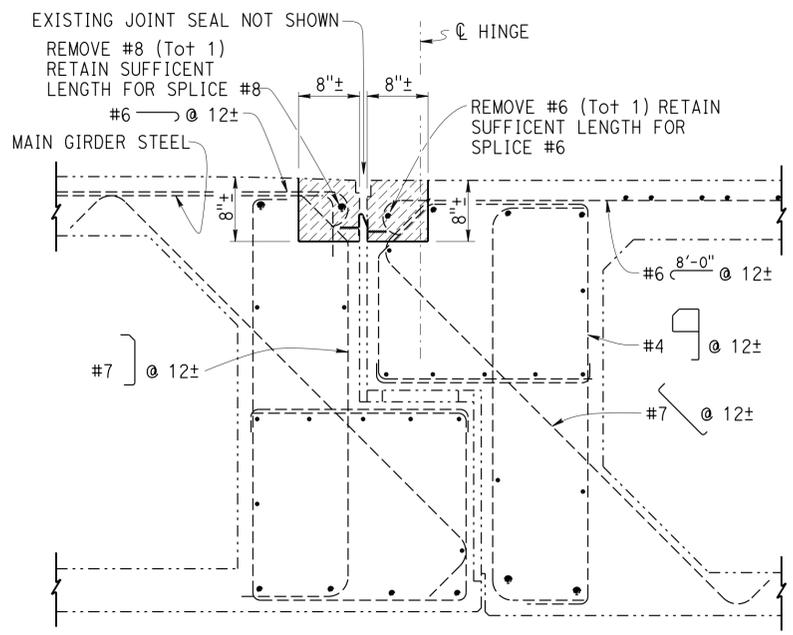
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5,50,51	Var	32	33

*Peter B. Kang* 12-22-15  
REGISTERED CIVIL ENGINEER DATE

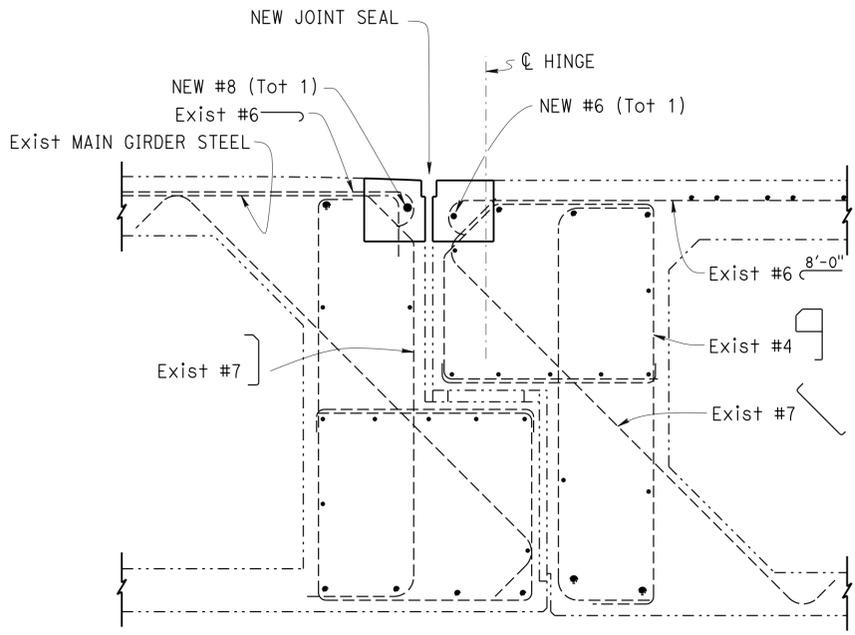
12-28-15  
PLANS APPROVAL DATE

**PETER B. KANG**  
No. C 70336  
Exp. 9-30-16  
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.



**EXISTING**



**RECONSTRUCTION**

**SECTION C-C**  
1" = 1'-0"  
(Br. No. 24-0173)

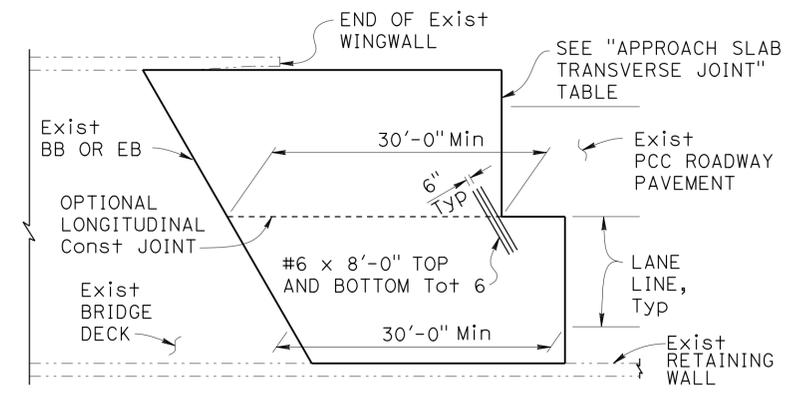
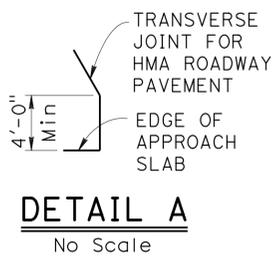
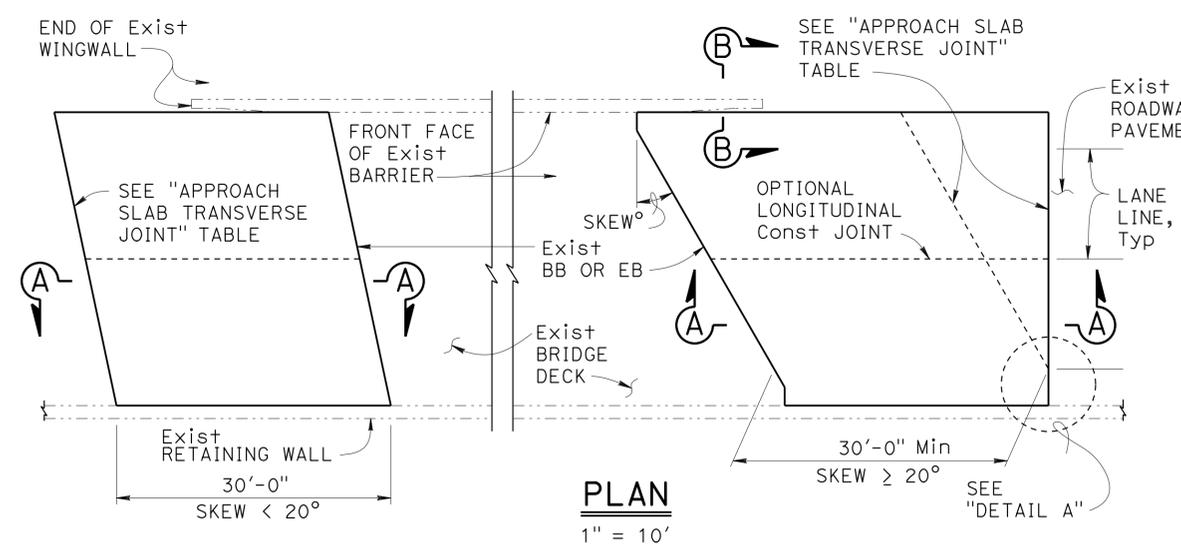
NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of bridge removal (portion) and placement of new concrete. Retain all existing reinforcement, except where noted otherwise.

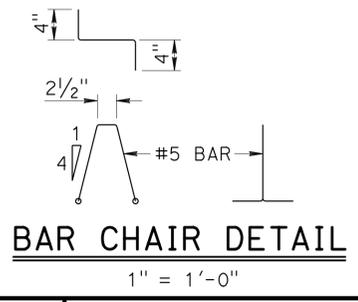
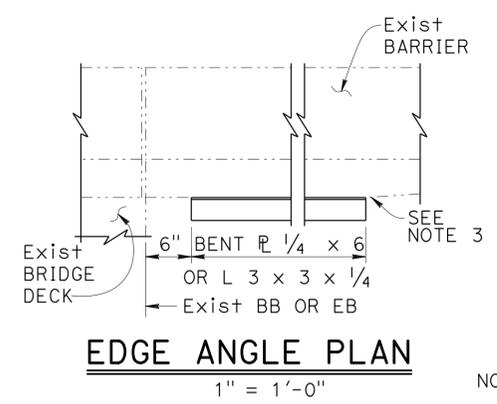
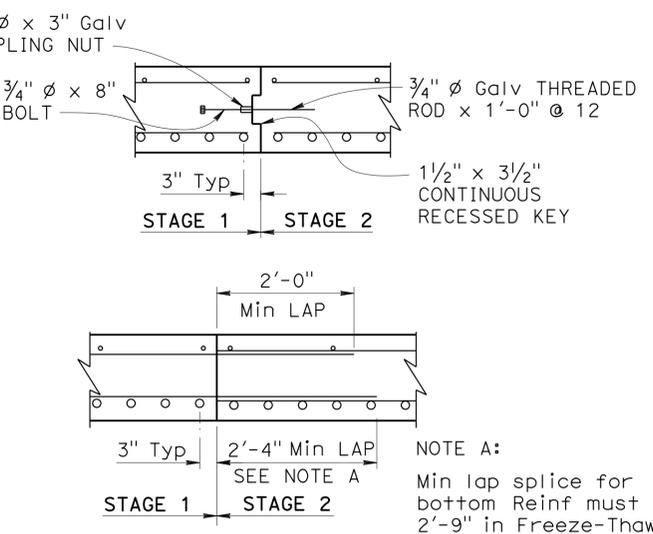
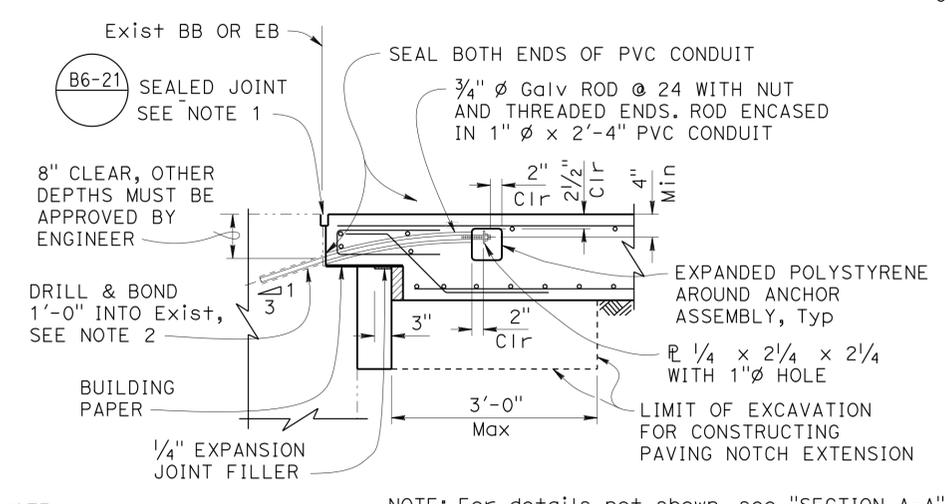
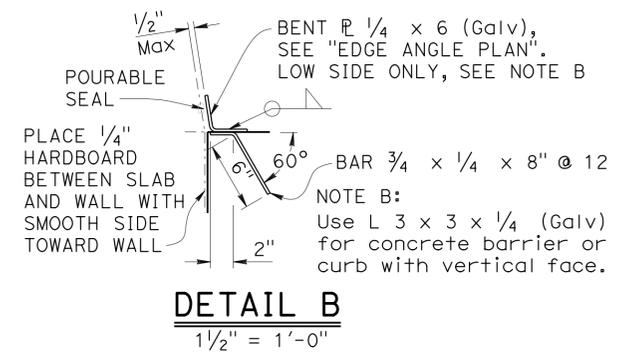
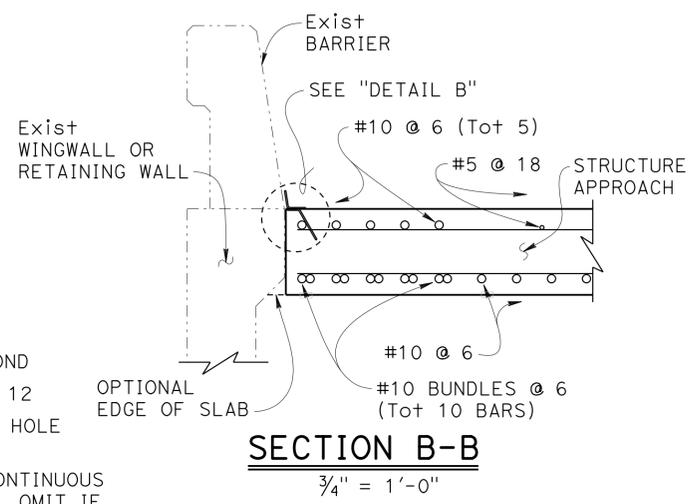
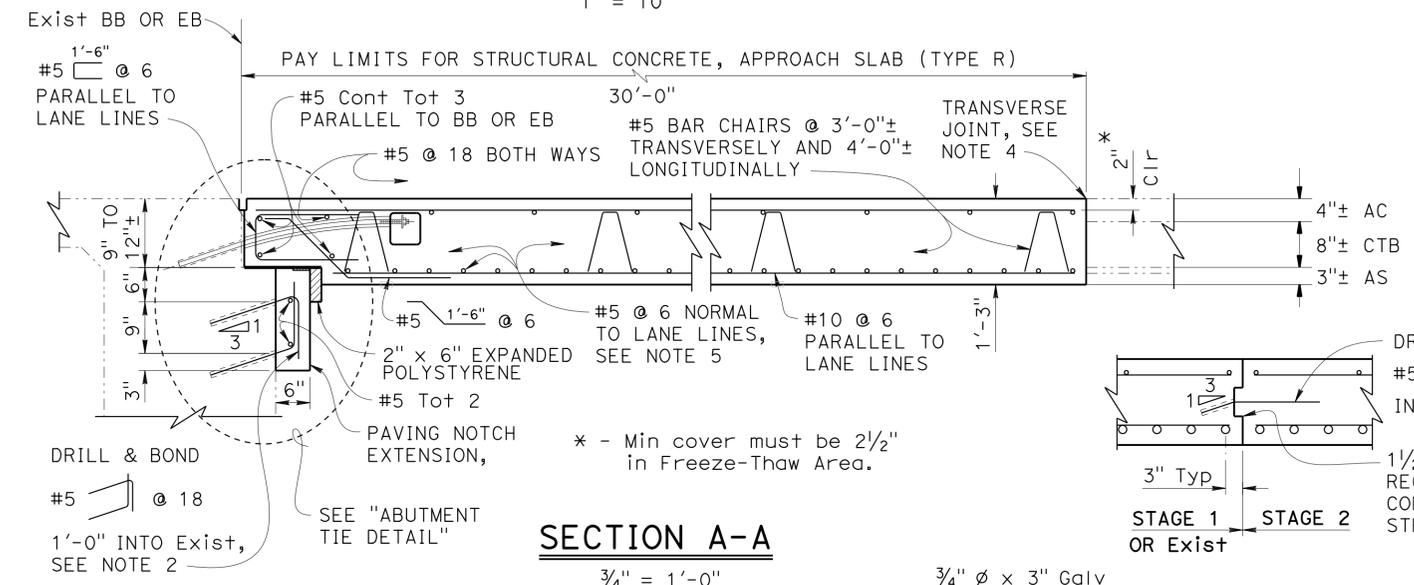
NOTE:  
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 5, 50 & 51 BRIDGES	
	DETAILS	BY D. KISH	CHECKED P. KANG			VARIOUS		JOINT SEAL DETAILS NO. 2
	QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG			VARIES		
UNIT:3488 PROJECT NUMBER & PHASE: 0314000028 CONTRACT NO.: 03-0G0401					DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 9 OF 10

FILE => 03-0g0401\_09det2.dgn  
USERNAME => s119538 DATE PLOTTED => 28-DEC-2015 TIME PLOTTED => 10:27



APPROACH SLAB TRANSVERSE JOINT		
APPROACH SKEW	WITH HMA ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO BB OR EB	PARALLEL TO BB OR EB
20° - 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT LANE LINES 24' TO 36' APART, SEE "END STAGGER DETAIL"
> 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT EACH LANE LINE, SEE "END STAGGER DETAIL"



**DESIGN NOTES**

DESIGN: AASHTO LRFD Bridge Design Specifications, 2012 Edition with Caltrans Amendments, preface dated January 2014  
 LIMIT STATES: Service I, Strength I & II, Extreme II and Fatigue I ( $\gamma_{FAT} = 1.0$ )  
 DEAD LOAD: Includes 35 psf for future wearing surface  
 LIVE LOAD: HL93 and permit design load  
 Equivalent strip width method:  $W_1 = 12$  ft  
 Slab span:  $L_1 = 24.5$  ft  
 REINFORCED CONCRETE:  
 $f_y = 60$  ksi  
 $f'_c = 3.6$  ksi  
 $n = 8$

- NOTES:
- For details not shown, see other plan sheets. Adjust reinforcement to clear sawcut for sealed joint.
  - Space reinforcement to avoid existing prestress anchorages and other abutment reinforcement.
  - End the plate or edge angle at beginning of barrier transition, end of wingwall, or end of structure approach as applicable.
  - Transverse joint must be a minimum of 5'-0" from an existing or constructed weakened plane joint in approach PCC roadway pavement. Refer to Standard Plans P10 and P14.
  - At the Contractor's option, approach slab transverse reinforcement may be placed parallel to BB or EB. Spacing of transverse reinforcement is measured along  $\perp$  roadway.
- Indicates Existing Structure

NOTE: The contractor must verify all controlling field dimensions before ordering or fabricating any material.

NOTE: For details not shown, see "SECTION A-A".

DESIGN	BY M. HASHIMOTO	CHECKED P. KANG	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 5, 50 &amp; 51 BRIDGES</b> <b>STRUCTURE APPROACH TYPE R (30D)</b>
DETAILS	BY D. KISH	CHECKED P. KANG			VARIOUS	
QUANTITIES	BY M. HASHIMOTO	CHECKED P. KANG			VARIES	