

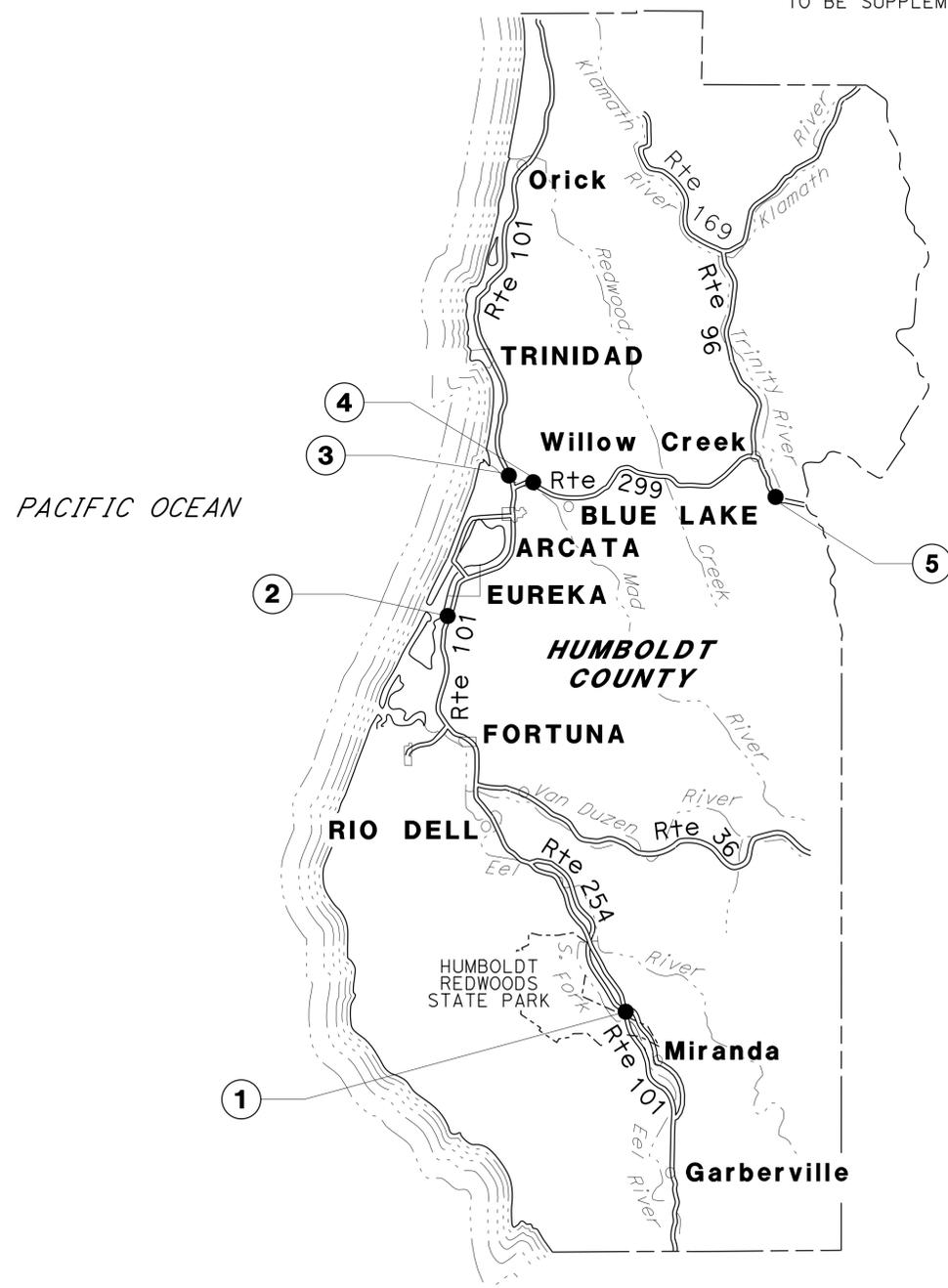
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	LAYOUT
3-4	CONSTRUCTION AREA SIGNS
5	TRAFFIC HANDLING PLAN, DETAILS AND QUANTITIES
6	SUMMARY OF QUANTITIES
7-11	REVISED STANDARD PLANS

STRUCTURE PLANS  
12-16 GENERAL PLAN AND DETAILS

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

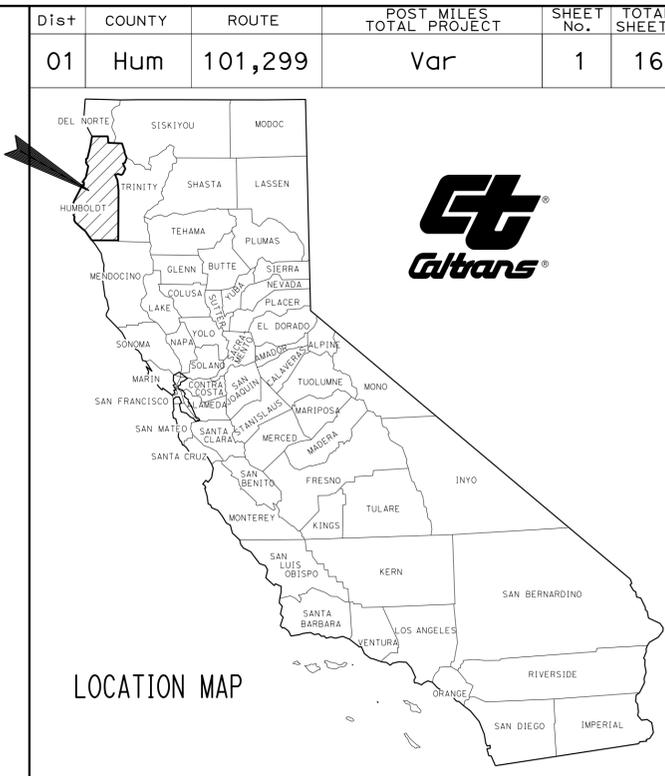
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN HUMBOLDT COUNTY  
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



**LOCATIONS OF CONSTRUCTION**

LOCATION	COUNTY	ROUTE	PM	BRIDGE NAME	BRIDGE No.
1	Hum	101	27.07	EAGLE POINT SIDEHILL VIADUCT	04-0072
2	Hum	101	70.61	TOMPKINS HILL ROAD OH	04-0121
3	Hum	101	89.63	MAD RIVER	04-0311L
4	Hum	299	R1.56	MAD RIVER	04-0036L
5	Hum	299	42.95	SOUTH FORK TRINITY RIVER	04-0050



PROJECT MANAGER  
TOM FITZGERALD

DESIGN MANAGER  
TOM FITZGERALD

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

NO SCALE

*Brenda Harwell* 3-11-16  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER



March 14, 2016  
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>01-0E5704</b>
PROJECT ID	<b>0114000102</b>

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101,299	Var	2	16

<i>Brenda Harwell</i>	3-11-16
REGISTERED CIVIL ENGINEER	DATE
March 14, 2016	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
BRENDA HARWELL
No. 64471
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.

- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
  - EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THIS SHEET.

- LEGEND**
- ACCESS TO ABUTMENTS
  - FOOT TRAFFIC ONLY
  - ESA

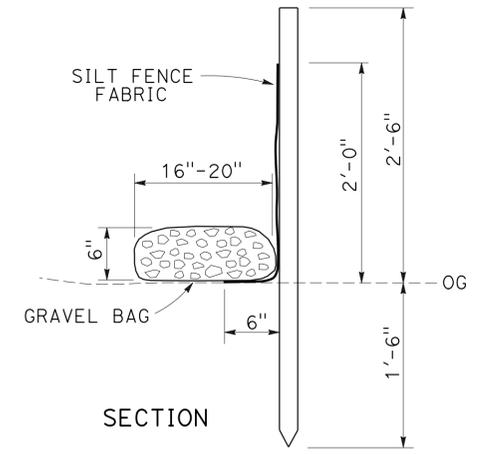
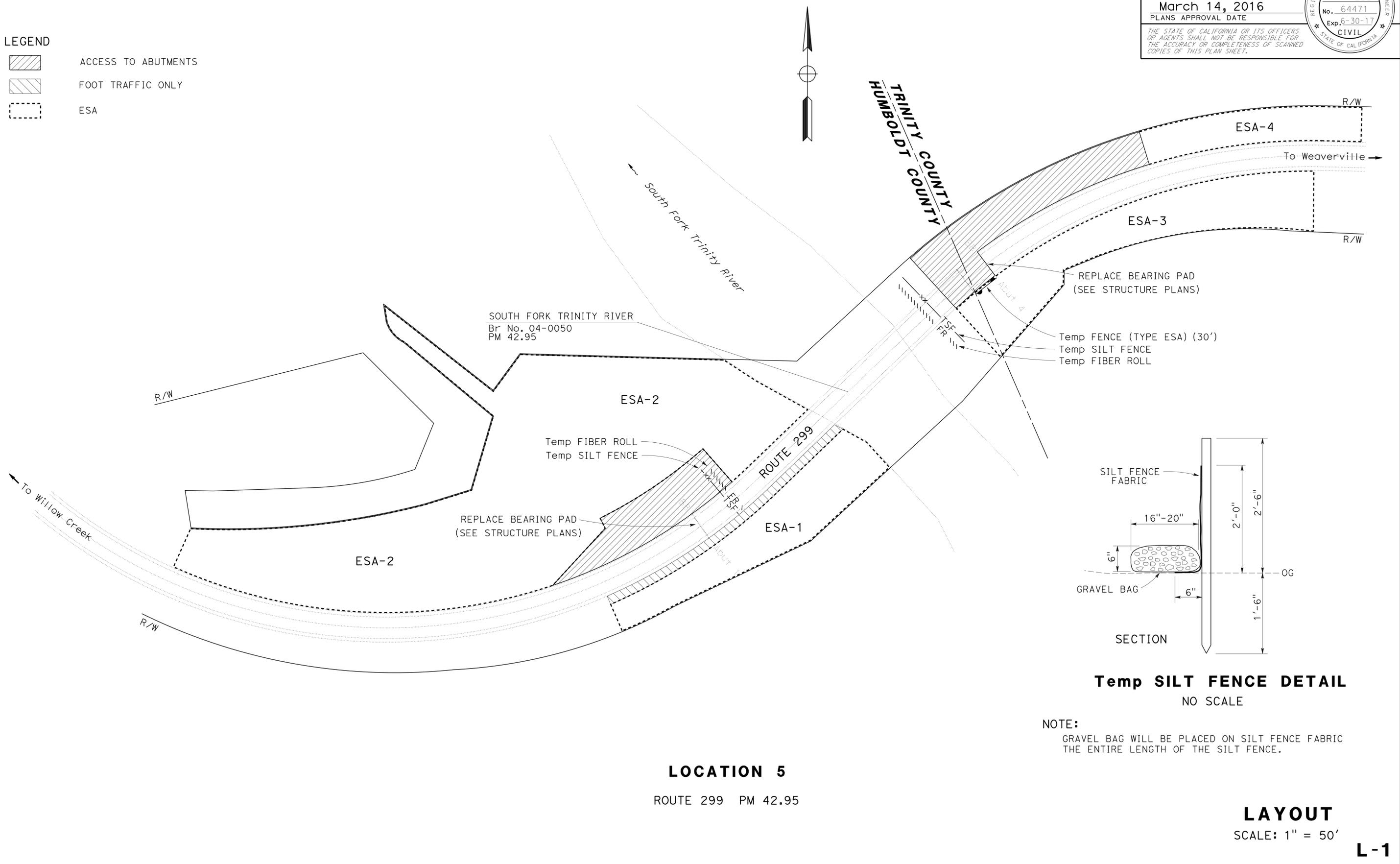
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR  
TOM FITZGERALD

CALCULATED/DESIGNED BY  
CHECKED BY

BRENDA HARWELL  
CHRIS GHIDINELLI

REVISED BY  
DATE REVISED

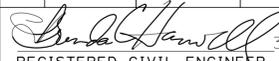
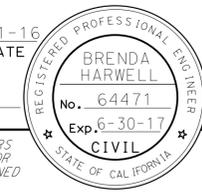


**NOTE:**  
GRAVEL BAG WILL BE PLACED ON SILT FENCE FABRIC THE ENTIRE LENGTH OF THE SILT FENCE.

**LOCATION 5**  
ROUTE 299 PM 42.95

**LAYOUT**  
SCALE: 1" = 50'

**L-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101, 299	Var	3	16
 REGISTERED CIVIL ENGINEER DATE 3-11-16					
March 14, 2016 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>					

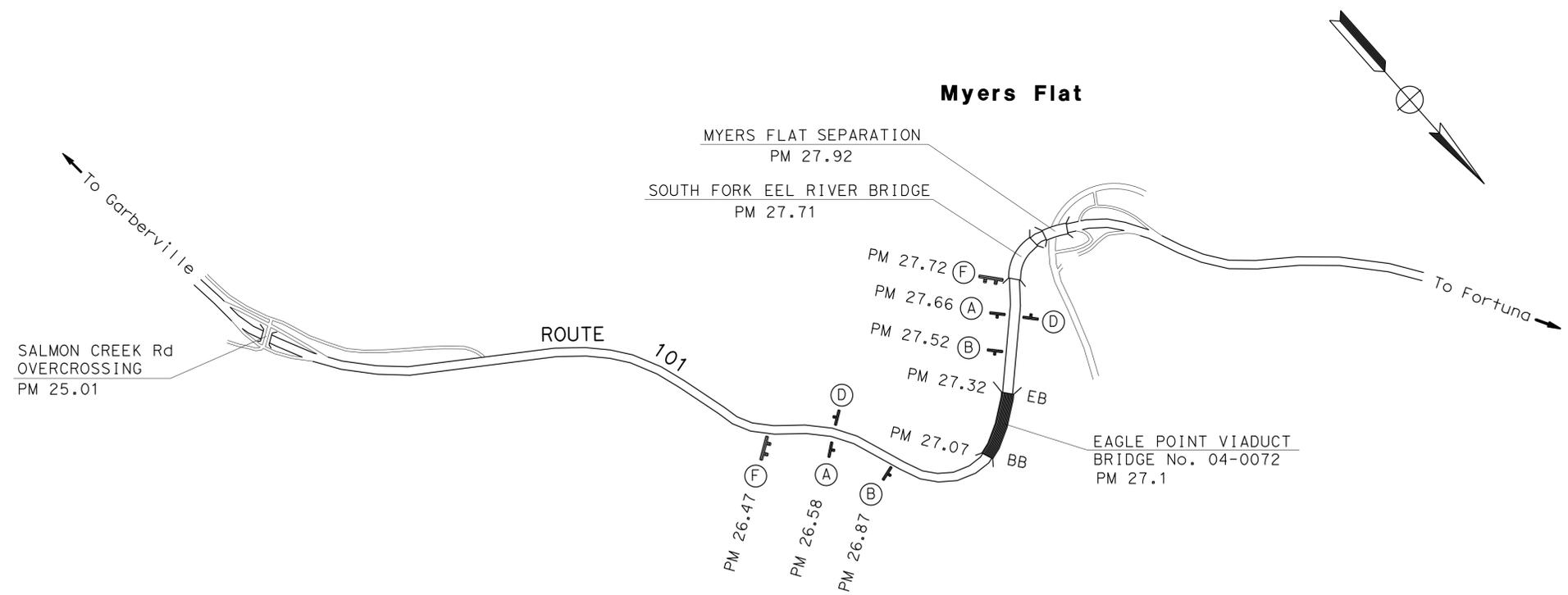
**NOTES:**

1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN NUMBER ○	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS (N)
	FEDERAL	CALIFORNIA				
A	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	4
		C23B(CA)	36" x 24"	BRIDGE REPAIR		
B	W11-1 W16-1		36" x 36"	BICYCLE SYMBOL	1 - 4" x 6"	4
			24" x 30"	SHARE THE ROAD		
C	G20-2		36" x 18"	END ROAD WORK	1 - 4" x 4"	1
D	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 6"	4
E	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	1
F		C40(CA)	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 8"	4

(N) NOT A SEPARATE PAY ITEM. FOR INFORMATION ONLY.



**LOCATION 1**

**CONSTRUCTION AREA SIGNS**  
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

**CS-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE DESIGN  
 FUNCTIONAL SUPERVISOR TOM FITZGERALD  
 CALCULATED/DESIGNED BY CHECKED BY  
 BREND A HARWELL CHRIS GHIDINELLI  
 REVISED BY DATE  
 x x x x x

LAST REVISION DATE PLOTTED => 16-MAR-2016  
 00-00-00 TIME PLOTTED => 06:45

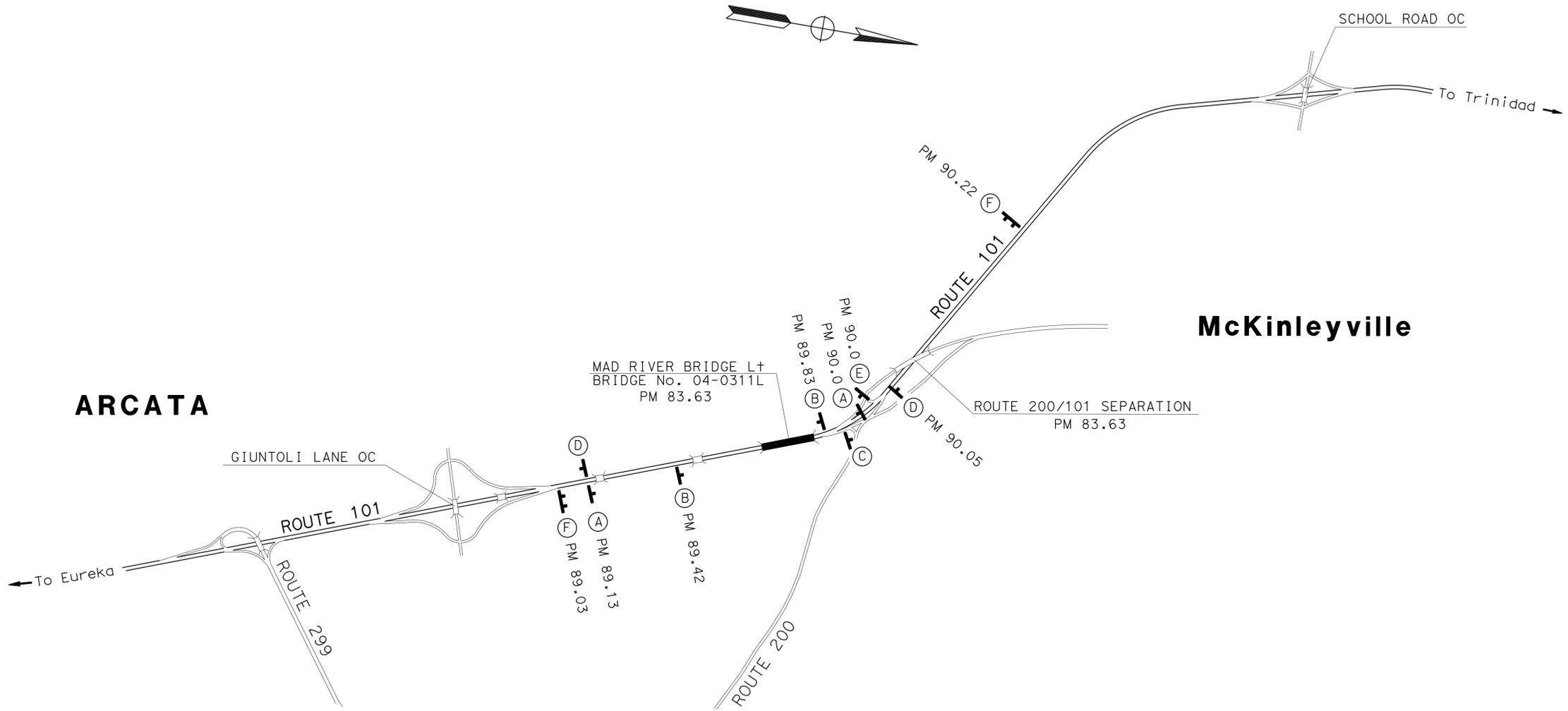
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101, 299	Var	4	16

*Brenda Harwell*  
 REGISTERED CIVIL ENGINEER DATE 3-11-16  
 March 14, 2016  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 BRENDA HARWELL  
 No. 64471  
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
<b>Caltrans</b> MAINTENANCE DESIGN	TOM FITZGERALD	CHRIS GHIDINELLI	BRENDA HARWELL
		CHECKED BY	DATE REVISED



**LOCATION 3 - MAD RIVER**

**CONSTRUCTION AREA SIGNS**  
NO SCALE

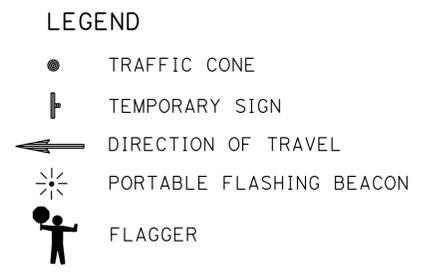
APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

**CS-2**

LAST REVISION | DATE PLOTTED => 16-MAR-2016  
 00-00-00 | TIME PLOTTED => 06:45

P:\PROJ\01\0e570\graf+ing\sheet\0114000102md001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC OPERATIONS  
 FUNCTIONAL SUPERVISOR RICHARD MULLEN  
 CALCULATED/DESIGNED BY CHECKED BY  
 SHERI M. RODRIGUEZ TROY A. ARSENEAU  
 REVISED BY DATE REVISED  
 SHERI M. RODRIGUEZ

- NOTES:**
- CALIFORNIA CODES ARE DESIGNATED BY (CA). OTHERWISE, FEDERAL (MUTCD) CODES ARE SHOWN.
  - ALL SIGNS SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND AND SHALL BE EQUIPPED WITH AT LEAST TWO 16" x 16" ORANGE FLAGS FOR DAYTIME CLOSURE OR FLASHING BEACONS FOR LANE CLOSURE DURING HOURS OF DARKNESS.
  - ALL CONES USED FOR LANE CLOSURES DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES.
  - WHEN A PILOT CAR IS USED, PLACE A C37 (CA) SIGN AT ALL INTERSECTIONS WITHIN TRAFFIC CONTROL AREA. WHERE VEHICULAR TRAFFIC CAN NOT EFFECTIVELY SELF-REGULATE, AT LEAST ONE FLAGGER SHALL BE USED AT EACH INTERSECTION WITHIN THE TRAFFIC CONTROL AREA.
  - FLAGGER SHOULD STAND IN A CONSPICUOUS PLACE, FACING TRAFFIC AT ALL TIMES, BE VISIBLE TO APPROACHING TRAFFIC AS WELL AS APPROACHING VEHICLES AFTER THE FIRST VEHICLE HAS STOPPED.
  - ADDITIONAL ADVANCE FLAGGERS ARE REQUIRED DURING HOURS OF DAYLIGHT. A FULL MATRIX PCMS IN PLACE OF EACH ADVANCE FLAGGER REQUIRED DURING HOURS OF DARKNESS.
  - WHEN FLAGGER IS NOT VISIBLE FROM THIS LOCATION PLACE A C29 (CA) SIGN BELOW THE C9A (CA) SIGN.



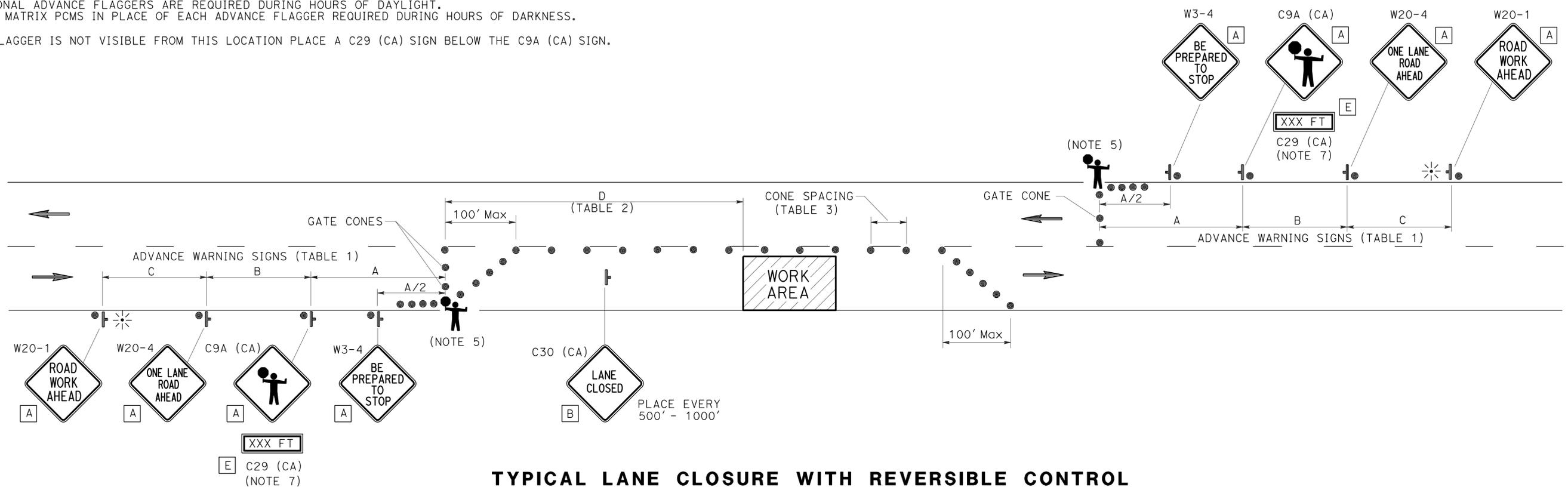
**SIGN PANEL SIZE (MINIMUM)**

A	48" x 48" - SPEED OF 45 mph OR MORE 36" x 36" - SPEED LESS THAN 45 mph
B	30" x 30"
C	UNUSED
D	UNUSED
E	20" x 7"

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101, 299	Var	5	16

Sheri M. Rodriguez 11-13-15  
 REGISTERED CIVIL ENGINEER DATE  
 No. C66861  
 Exp 9-30-16  
 CIVIL  
 STATE OF CALIFORNIA

Month Day, Year  
 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.



**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

**TABLE 1**  
ADVANCE WARNING SIGN SPACING

ROAD TYPE	Min A	Min B	Min C
	ft		
URBAN (25 mph OR LESS)	100	100	100
URBAN (30 mph TO 40 mph)	250	250	250
URBAN (MORE THAN 40 mph)	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

**TABLE 2**  
BUFFER SPACE

APPROACH SPEED	Min D	DOWNGRADE Min D		
		-3%*	-6%*	-9%*
mph	ft			
25 & BELOW	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

\* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

**TABLE 3**  
Max CONE SPACING

POSTED SPEED	TAPER	TANGENT	CONFLICT*
			ft
mph			
20	20	40	10
25	25	50	12
30	30	60	15
35	35	70	17
40	40	80	20
45	45	90	22
50	50	100	25
55	55	110	27
60	60	120	30
65	65	130	32

\* USE WHERE THERE IS A CONFLICT BETWEEN EXISTING PAVEMENT MARKINGS AND CHANNELIZERS.

**TRAFFIC HANDLING PLAN**  
NO SCALE

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TH-1**

LAST REVISION DATE PLOTTED => 16-MAR-2016  
 00-00-00 TIME PLOTTED => 06:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101,299	Var	6	16

*Brenda Harwell* 3-11-16  
 REGISTERED CIVIL ENGINEER DATE

**March 14, 2016**  
 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.

### TEMPORARY WATER POLLUTION CONTROL

LOCATION			Temp FIBER ROLL	Temp SILT FENCE	Temp FENCE (TYPE ESA)	REMARKS
No.	Rte	BRIDGE NAME AND NUMBER	LF	LF	LF	
5	299	SOUTH FORK TRINITY RIVER 04-0050		100		WEST APPROACH
			100			WEST APPROACH
			100			EAST APPROACH
				100		EAST APPROACH
					30	EAST APPROACH, RIGHT
TOTAL			200	200	30	

### THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKERS

LOCATION				BRIDGE LENGTH (N)	DETAIL NUMBER	DETAIL LENGTH (N)	THERMOPLASTIC TRAFFIC STRIPE					PAVEMENT MARKERS					REMARKS	
No.	Rte	PM					REMOVE		4" SOLID YELLOW	4" SOLID WHITE	4" (BROKEN 36-12) WHITE	REMOVE			(RETROREFLECTIVE)			
		FROM	TO				YELLOW (HAZARDOUS WASTE)	WHITE				TYPE D	TYPE G	TYPE H	TYPE D	TYPE G		TYPE H
LF	LF	LF	LF				LF	EA	EA	EA	EA	EA	EA					
1	101	27.07	27.32	1303.3'	27B	1303.3		1303.3		1303.3							EAGLE P+ SIDEHILL VIADUCT	
					12	1303.3		336.0			1303.3		29			29		
					29	1303.3	5213.2		5213.2			1303.3	112			112		
					12	1303.3		336.0			1303.3		29			29		
					27B	1303.3		1303.3			1303.3							
3	101	89.63	89.77	750'	27B	750		750		750						MAD RIVER (04-0025L)		
					12	750		192.0			750		17				17	
					12	750		192.0			750		17				17	
					25	750	750.0		750.0			17					17	
					SUBTOTAL		5963.2	4412.6	5963.2	3356.6	4106.6	112	92	17	112		92	17
TOTAL		5963.2	4412.6	9319.8		4106.6	204			204								

(N) NOT A SEPARATE PAY ITEM. FOR INFORMATION ONLY.

## 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>	
	<b>R</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
01	Hum	101,299	Var	7	16

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 3-14-16

**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

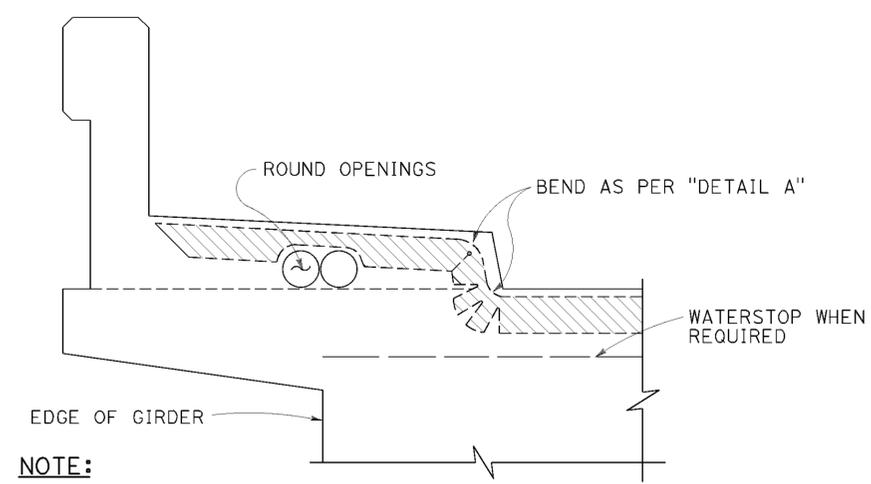
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

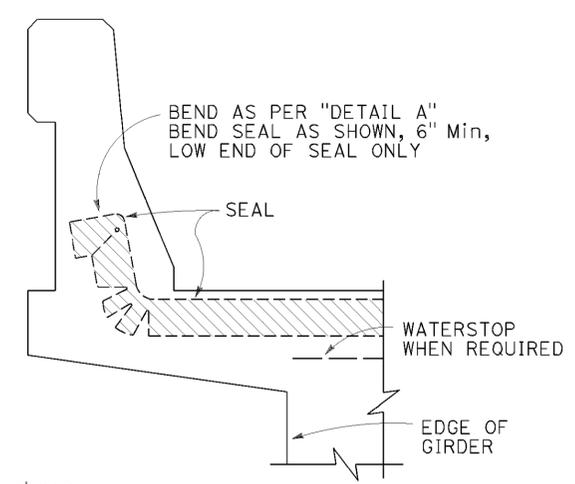
TO ACCOMPANY PLANS DATED 3-14-16

2010 REVISED STANDARD PLAN RSP B6-21

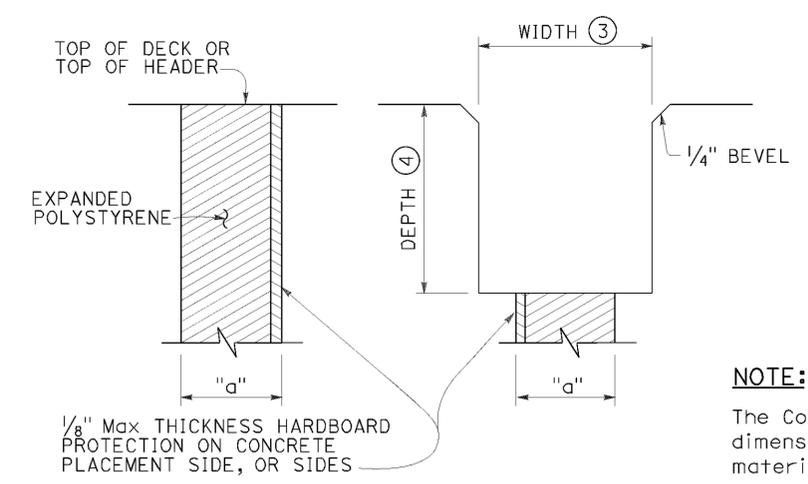


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



**CONCRETE BARRIER**

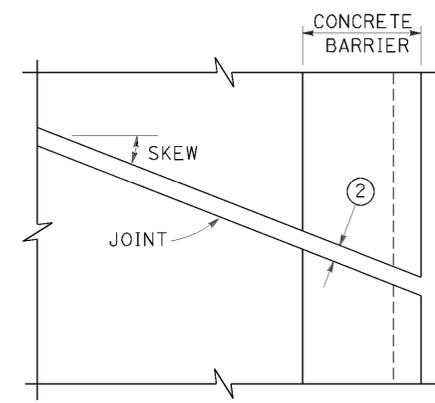


**FORMING DETAIL SAWCUT DETAIL**

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

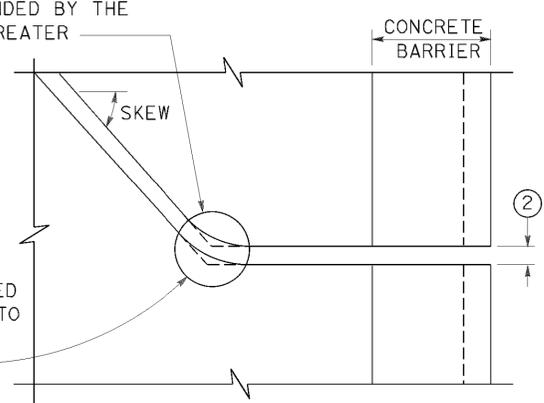
**JOINT SEALS DETAILS**

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

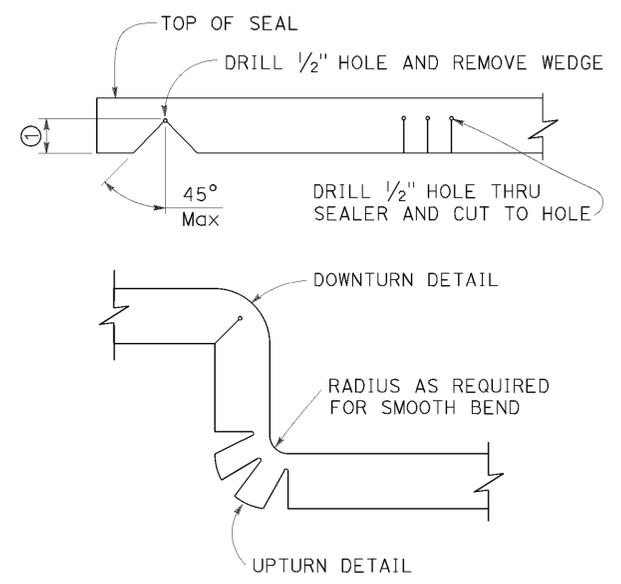


**PLAN OF JOINT (SKEW  $\leq 20^\circ$ )**

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



**PLAN OF JOINT (SKEW  $> 20^\circ$ )**

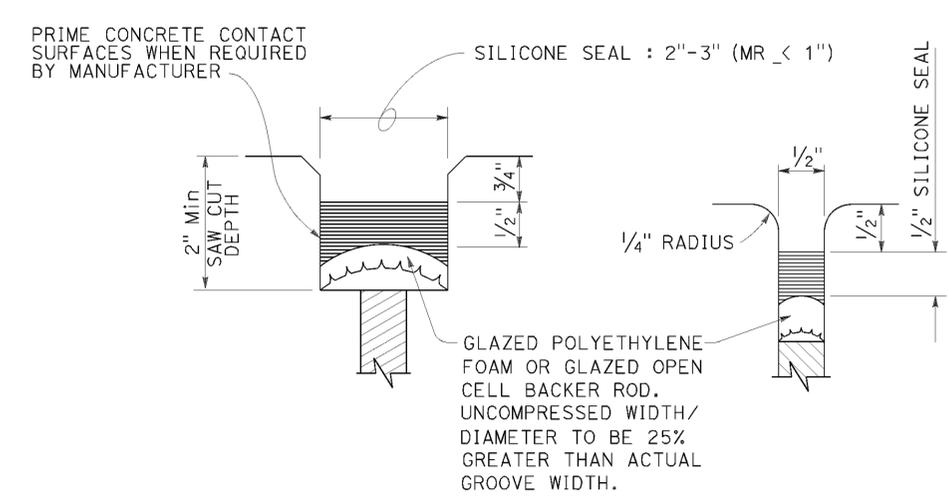


**DETAIL A**

- 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 ( $W_2$ ) 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"

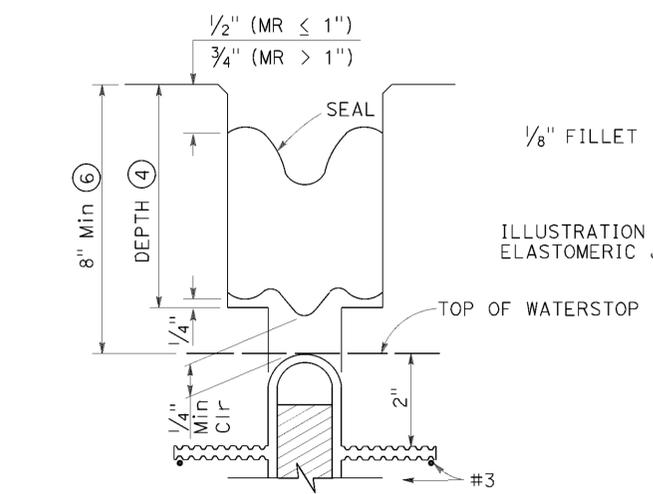


**TYPE A SEAL**

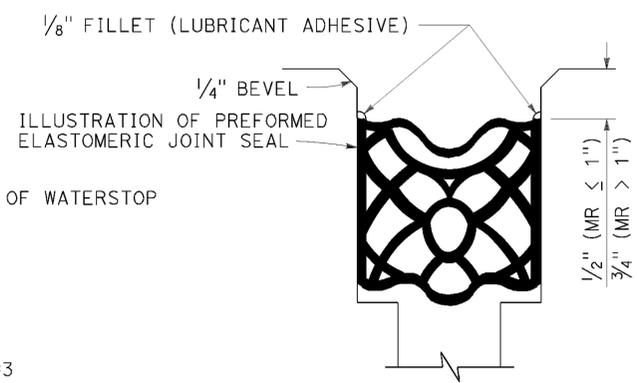
Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION ( $W_2$ )**



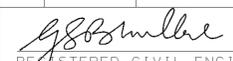
**TYPE B SEAL**

Movement Rating  $\leq 2"$

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
01	Hum	101,299	Var	9	16

  
 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 3-14-16

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
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
01	Hum	101,299	Var	10	16

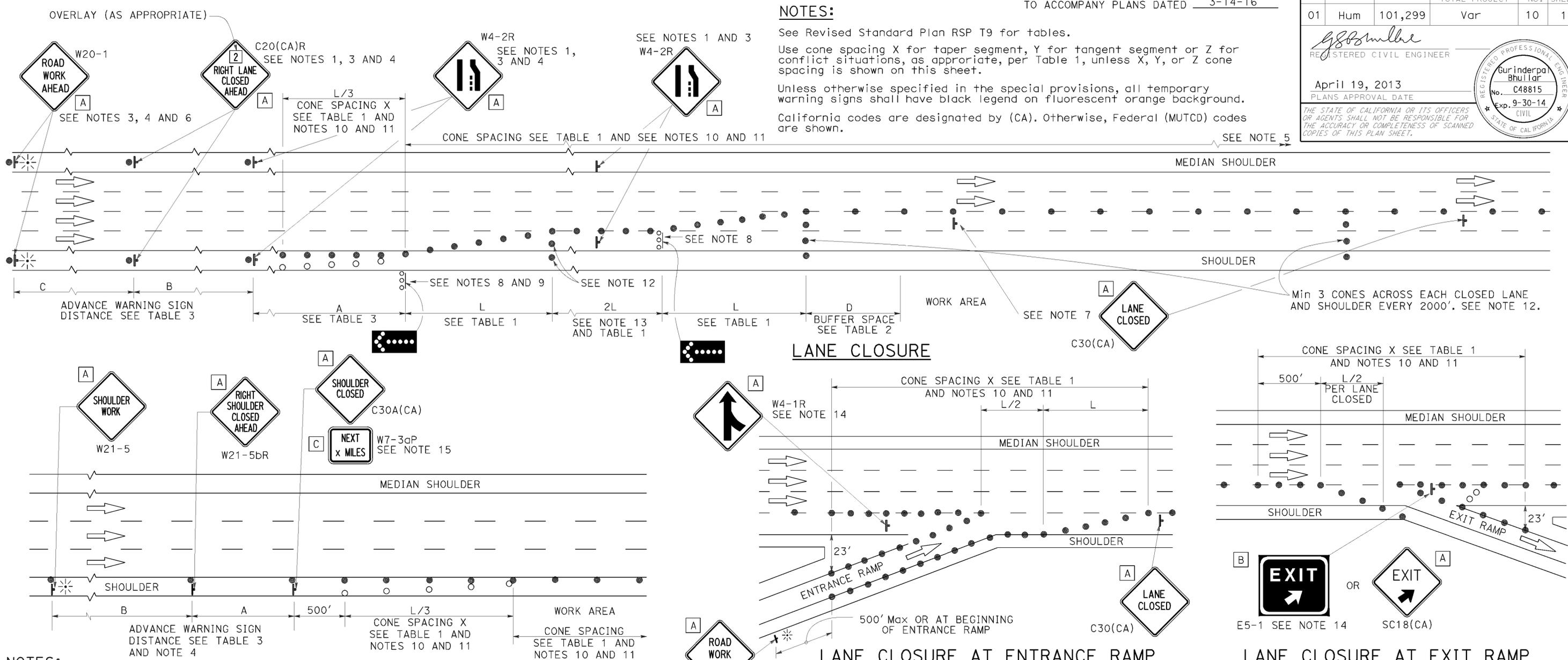
REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

TO ACCOMPANY PLANS DATED 3-14-16

**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.

**LANE CLOSURE AT ENTRANCE RAMP**

- 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.

**LANE CLOSURE AT EXIT RAMP**

**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**

P:\PROJ\01\0e570\drft\fig\sheet\sva004.dgn

2010 REVISED STANDARD PLAN RSP T10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101,299	Var	11	16

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.

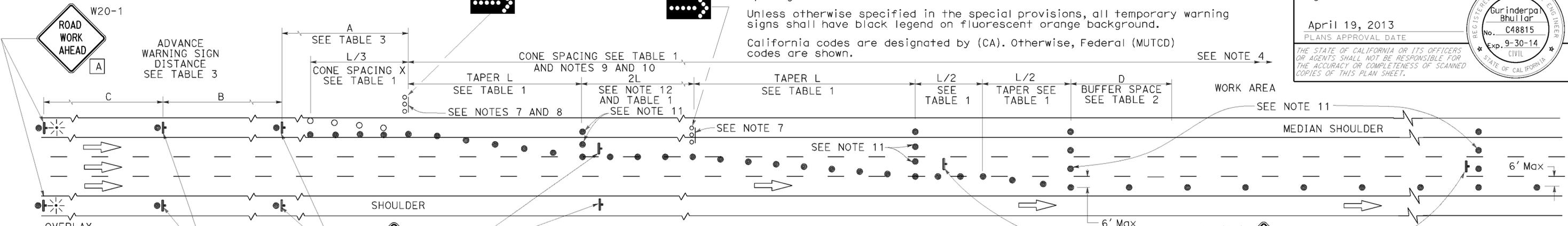
**NOTES:** See Revised Standard Plan RSP T9 for tables.

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.

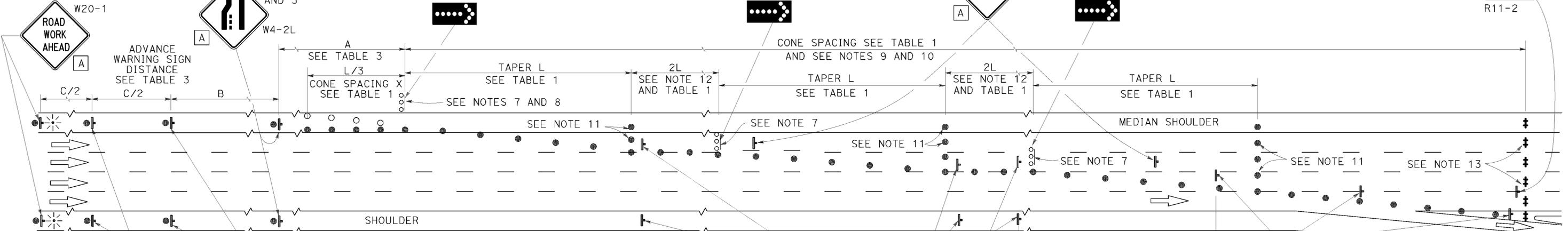
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

SEE NOTES 3 AND 5



**LANE CLOSURE WITH PARTIAL SHOULDER USE**

SEE NOTES 3 AND 5



**COMPLETE CLOSURE**

**NOTES:**

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

**SIGN PANEL SIZE (Min)**

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

**LEGEND**

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

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T10A**

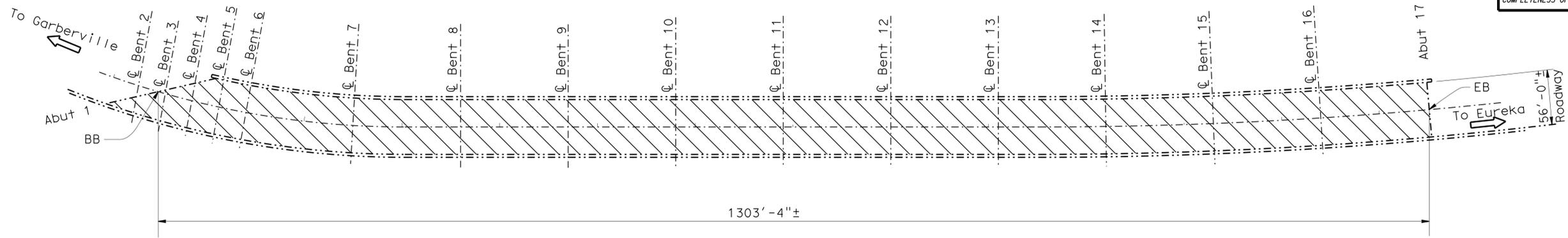
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	101, 299	Var	12	16

*Shaw* 2-11-16  
 REGISTERED CIVIL ENGINEER DATE

**March 14, 2016**  
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER  
 HUBERT DANG  
 No. C 69174  
 Exp. 6-30-16  
 CIVIL  
 STATE OF CALIFORNIA



EAGLE POINT VIADUCT BR. NO. 04-0072

**EAGLE POINT VIADUCT**

BR NO. 04-0072, RTE 101, PM 27.07  
 1"=20'

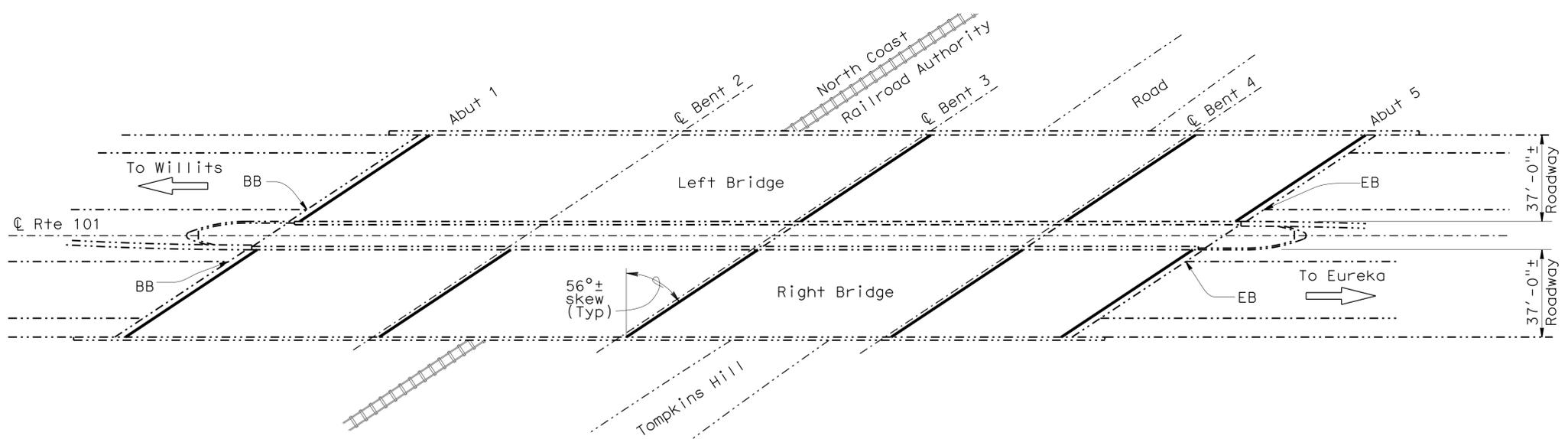


QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	72,987	SQFT
TREAT BRIDGE DECK	72,987	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	974	GAL
REMOVE CHIP SEAL	72,987	SQFT

Notes:

- Indicates existing structure
- Indicates location of clean expansion joint and replace joint seal. For details, see "JOINT SEAL DETAILS" sheet.
- ▨ Indicates limits of remove chip seal, prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.



**TOMPKINS HILL ROAD OVERHEAD**

BR NO. 04-0121, RTE 101, PM 70.61  
 1"=30'



TOMPKINS HILL ROAD OVERHEAD BR. NO. 04-0121

QUANTITIES

CLEAN EXPANSION JOINT	603	LF
JOINT SEAL (MR 1/2")	469	LF
JOINT SEAL (MR 1")	134	LF

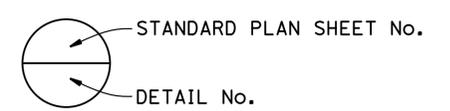
**INDEX TO PLANS**

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	JOINT SEAL DETAILS
5	MISCELLANEOUS DETAILS

**STANDARD PLANS DATED 2010**

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

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



 2-11-16 DESIGN ENGINEER	DESIGN	BY Hubert Dang	CHECKED Khanh Truong	LAYOUT	BY Trung Lam	CHECKED Hubert Dang	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	<b>ROUTES 101 &amp; 299 BRIDGES</b> GENERAL PLAN NO. 1
	DETAILS	BY Trung Lam	CHECKED Khanh Truong	SPECIFICATIONS	BY Jennifer Ramirez	CHECKED Jennifer Ramirez			VARIOUS	
	QUANTITIES	BY Hubert Dang	CHECKED Khanh Truong					VARIES		

STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)

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

UNIT: 3488  
 PROJECT NUMBER & PHASE: 0114000102 1  
 CONTRACT NUMBER: 01-0E5701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
9-04-15 11-13-15 11-30-15 02-11-16	1	5

FILE => za001.dgn

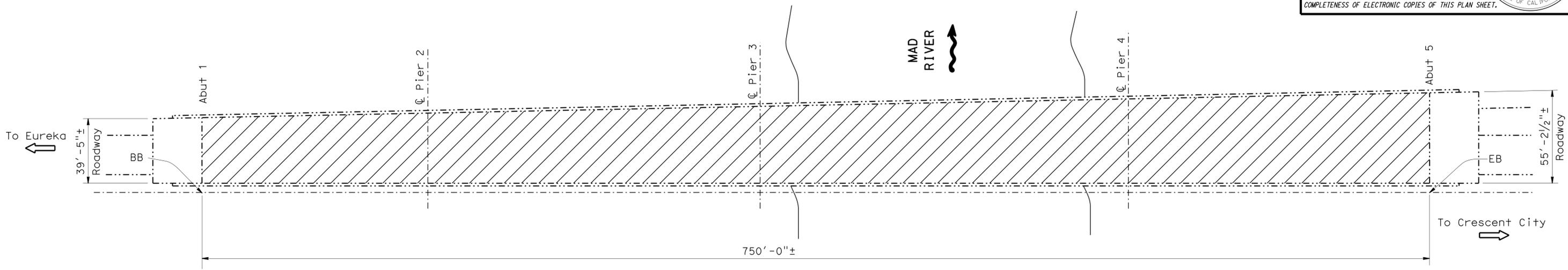
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	101, 299	Var	13	16

*Blase* 2-11-16  
REGISTERED CIVIL ENGINEER DATE

March 14, 2016  
PLANS APPROVAL DATE

HUBERT DANG  
No. C 69174  
Exp. 6-30-16  
CIVIL

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.



MAD RIVER BR. NO. 04-0311L

QUANTITIES

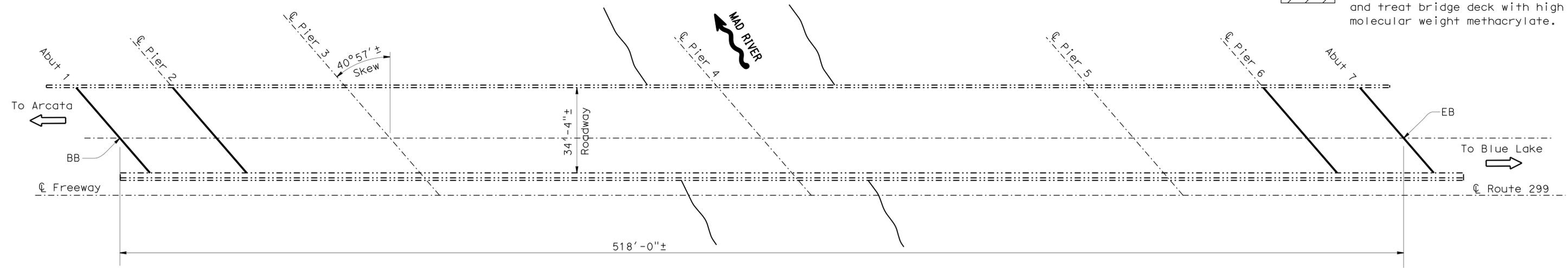
PREPARE CONCRETE BRIDGE DECK SURFACE	35,483	SQFT
TREAT BRIDGE DECK	35,483	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	394	GAL

**MAD RIVER**

BR No. 04-0311L, RTE 101, PM 89.63

1"=30'

- Notes:
- Indicates existing structure
  - Indicates location of clean expansion joint and replace joint seal. For details, see "JOINT SEAL DETAILS" sheet.
  - ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.



**MAD RIVER**

BR NO. 04-0036L, RTE 299, PM RI.56

1"=20'

MAD RIVER BR. NO. 04-0036L

QUANTITIES

CLEAN EXPANSION JOINT	184	LF
JOINT SEAL (MR 1/2")	92	LF
JOINT SEAL (MR 1")	92	LF

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

*Michael J. Lee* 2-11-16  
DESIGN ENGINEER

DESIGN	BY Hubert Dang	CHECKED Khanh Truong	LAYOUT	BY Trung Lam	CHECKED Hubert Dang
DETAILS	BY Trung Lam	CHECKED Khanh Truong	SPECIFICATIONS	BY Jennifer Ramirez	PLANS AND SPECIFICATIONS COMPARED Jennifer Ramirez
QUANTITIES	BY Hubert Dang	CHECKED Khanh Truong			

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
POST MILE VARIES

**ROUTES 101 & 299 BRIDGES**

GENERAL PLAN NO. 2

STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: 3488  
PROJECT NUMBER & PHASE: 0114000102 1  
CONTRACT NUMBER: 01-0E5701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
9-01-15 11-13-15 11-30-15 02-11-16	2	5

FILE => za002.dgn

USERNAME => s120115 DATE PLOTTED => 16-MAR-2016 TIME PLOTTED => 06:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	101, 299	Var	14	16

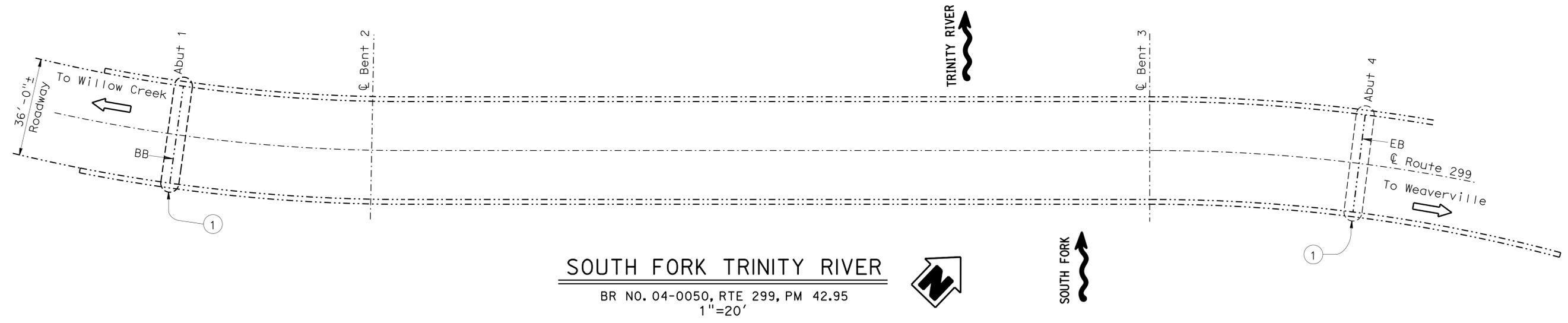
*Shore* 2-11-16  
REGISTERED CIVIL ENGINEER DATE

March 14, 2016  
PLANS APPROVAL DATE

HUBERT DANG  
No. C 69174  
Exp. 6-30-16  
CIVIL

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.

- Notes:
- Indicates existing structure
  - ① Indicates location of replace existing elastomeric bearing pads at both abutments, tot 6. For details, see "MISCELLANEOUS DETAILS" sheet.



**SOUTH FORK TRINITY RIVER**  
BR NO. 04-0050, RTE 299, PM 42.95  
1"=20'

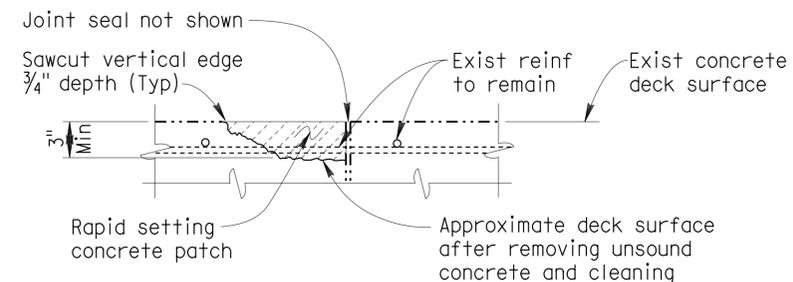
SOUTH FORK TRINITY RIVER BR. NO. 04-0050  
QUANTITIES  
TEMPORARY SUPPORT LUMP SUM  
REPACE BEARING PAD 6 EA

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

 Michael J. Lee 2-11-16 DESIGN ENGINEER	DESIGN	BY Hubert Dang	CHECKED Khanh Truong	LAYOUT	BY Trung Lam	CHECKED Hubert dang	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	VARIOUS	<b>ROUTES 101 &amp; 299 BRIDGES</b> GENERAL PLAN NO. 3		
	DETAILS	BY Trung Lam	CHECKED Khanh Truong	SPECIFICATIONS	BY Jennifer Ramirez	CHECKED Jennifer Ramirez			POST MILE	VARIES			
	QUANTITIES	BY Hubert Dang	CHECKED Khanh Truong										
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)							ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3488 PROJECT NUMBER & PHASE: 0114000102 1	CONTRACT NUMBER: 01-0E5701	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3 OF 5

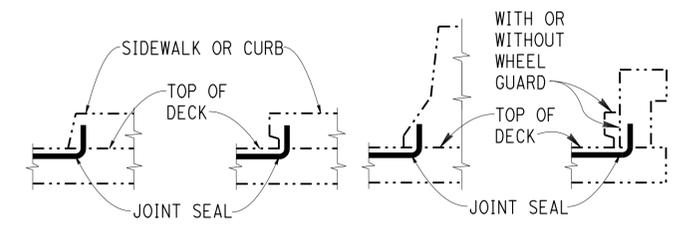
USERNAME => s120115 DATE PLOTTED => 16-MAR-2016 TIME PLOTTED => 06:46

JOINT SEAL TABLE							
BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (inches)	APPROXIMATE LENGTH (feet)	EXISTING WATERSTOP	APPROXIMATE DEPTH TO CLEAN EXPANSION JOINT (inches)	
MAD RIVER	04-0036L	Abut 1	BB	1/2*	45.8	No	12
		Pier 2	CL	1*	46.2	No	9
		Pier 6	CL	1*	46.2	No	9
		Abut 7	EB	1/2*	45.8	No	12
TOMKINS HILL ROAD OVERHEAD	04-0121	Abut 1R	BB	1*	67.1	No	12
		Abut 1L	BB	1*	67.1	No	12
		Bent 2R	CL	1/2*	66.6	No	36
		Bent 3R	CL	1/2*	66.6	No	36
		Bent 3L	CL	1/2*	66.6	Yes	8
		Bent 4R	CL	1/2*	66.6	No	36
		Bent 4L	CL	1/2*	66.6	No	36
		Abut 5R	EB	1/2*	66.6	No	12
Abut 5L	EB	1/2*	66.6	No	12		



**JOINT SPALL REPAIR DETAIL**

Location to be determined by the Engineer.  
 Reinforcement may be encountered during deck concrete removal and is to remain undamaged.  
 NO SCALE

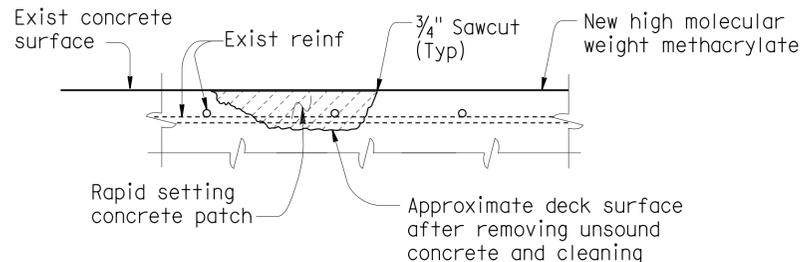


**JOINT SEAL AT LOW SIDE OF DECK**

Details shown for illustration purposes only. For use only where deck joint matches the barrier rail joint.  
 NO SCALE

**LEGEND:**

- BB = Paving notch at beginning of bridge
- EB = Paving notch at end of bridge
- CL = Centerline of Bent/Pier
- \* = Pourable Joint Seal

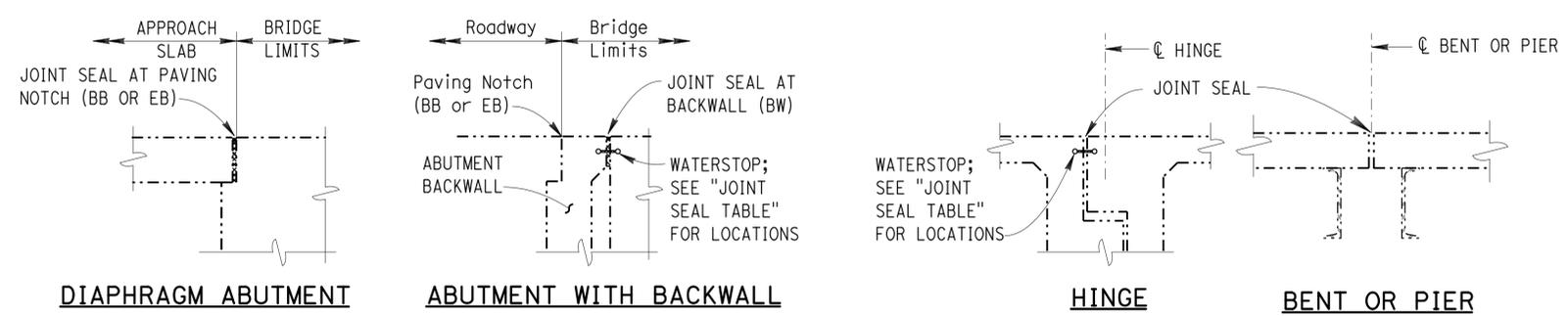


**DECK REPAIR DETAIL**

Location to be determined by the Engineer.  
 Reinforcement may be encountered during deck concrete removal.  
 NO SCALE

The following note applies to JOINT SEAL TYPE A:  
 Install Type A joint seal 3" up into curb or rail on the low side of the deck where joint matches curb or rail joint. For details not shown see (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 calculated by the Engineer.
  - W1 must be the smaller of the values determined as follows:
    - A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
    - B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
  - Bend Type B joint seal 6" 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 (B6-21)



**JOINT SEAL LOCATION**

NO SCALE

**NOTE:**  
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DESIGN	BY Hubert Dang	CHECKED Khanh Truong
DETAILS	BY Trung Lam	CHECKED Khanh Truong
QUANTITIES	BY Hubert Dang	CHECKED Khanh Truong

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

BRIDGE NO. VARIOUS  
 POST MILE VARIES  
**ROUTES 101 & 299 BRIDGES**  
**JOINT SEAL DETAILS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	101, 299	Var	16	16
<i>Shese</i> REGISTERED CIVIL ENGINEER			2-11-16 DATE	HUBERT DANG No. C. 69174 Exp. 6-30-16 CIVIL STATE OF CALIFORNIA	
March 14, 2016 PLANS APPROVAL DATE					
<small>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.</small>					

TEMPORARY SUPPORT TABLE					
BRIDGE NO.	LOCATION	DL (kip)	Minimum Design Load DL+LL+I (kip)	Minimum Lateral Design Load (kip)	Maximum Upward Deflection
04-0050	3.5' from $\phi$ bearing of Abutment	208	1,227	21	1/2"

### GENERAL NOTES LOAD FACTOR DESIGN

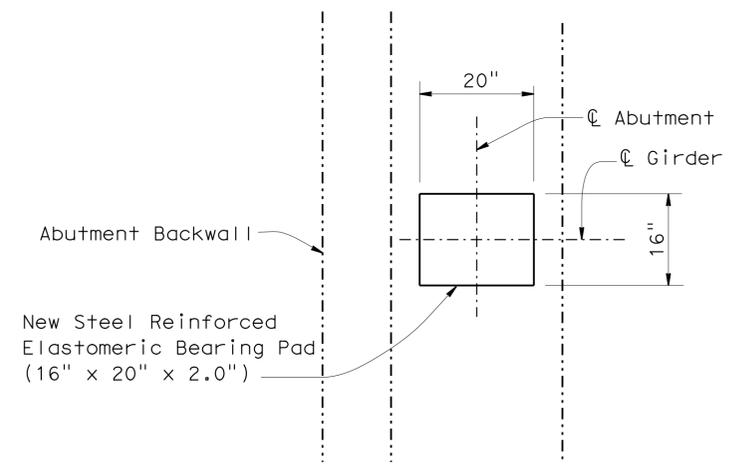
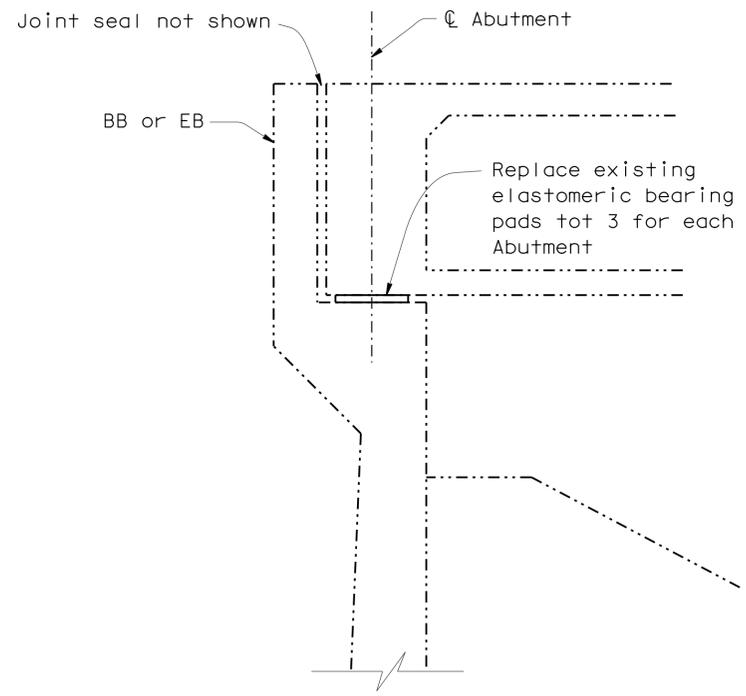
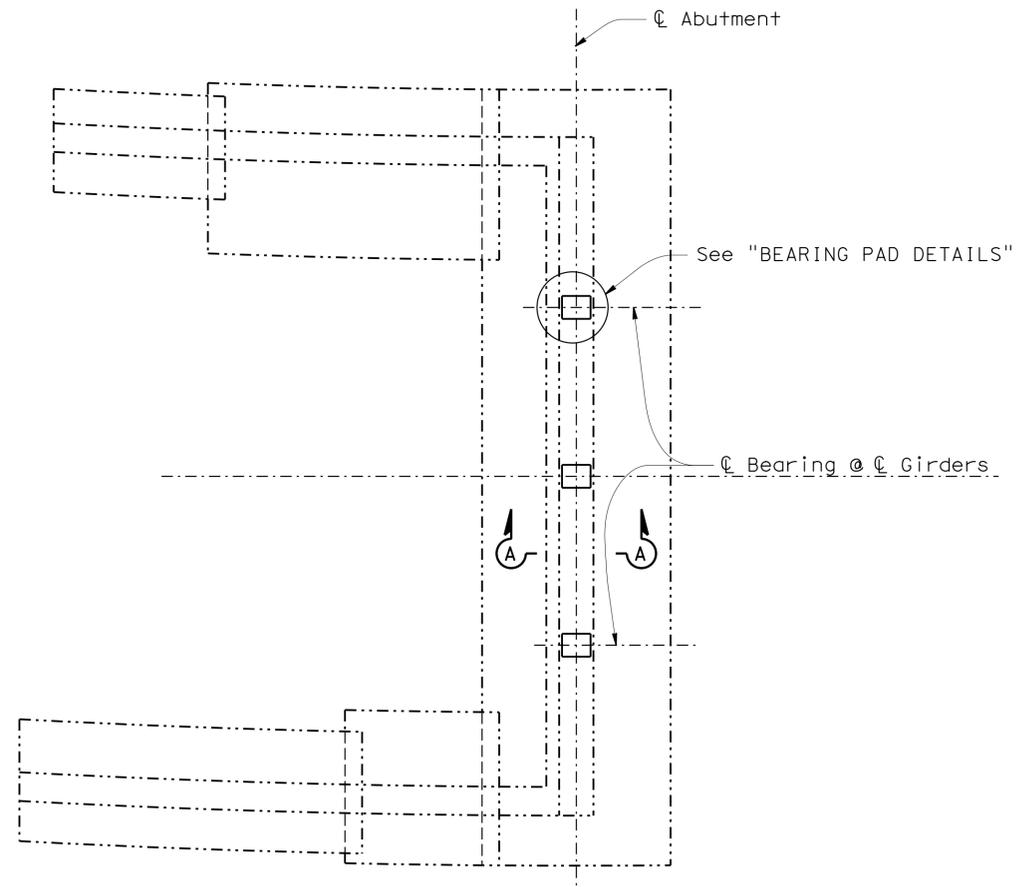
**DESIGN:** CALTRANS BRIDGE DESIGN SPECIFICATIONS, LFD Version April 2000 (1996 AASHTO with Interims and Revision by Caltrans)

**LIVE LOAD:** HS20-44 and Alternative.

**REINFORCED CONCRETE:**  $f_y = 60,000$  psi  
 $f'_c = 3,600$  psi  
 $n = 9$

#### JACKING NOTES:

- Jacking operation shall not exceed the DL or maximum upward deflections.
- The jacking force shall be applied to all jacks simultaneously across the entire width of the superstructure. The total vertical lift shall be enough to release existing elastomeric bearing pads and install new elastomeric bearing pads but no greater than 1/2" above final grade. The differential lift between jacks shall not exceed 1/16".
- Vertical deflection shall be maintained during repair operations.



#### PLAN

3/16" = 1'-0"

BR NO. 04-0050  
Abut 1 shown, Abut 4 similar

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STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Hubert Dang	CHECKED Khanh Truong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	VARIOUS	<b>ROUTES 101 &amp; 299 BRIDGES</b> <b>MISCELLANEOUS DETAILS</b>	
	DETAILS	BY Trung Lam	CHECKED Khanh Truong			POST MILE			
	QUANTITIES	BY Hubert Dang	CHECKED Khanh Truong			VARIES			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0	1	2	3	UNIT: 3488 PROJECT NUMBER & PHASE: 0114000102 1	CONTRACT NO.: 01-0E5701	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 9-04-15 11-13-15 02-11-16	SHEET 5 OF 5

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