

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-4	CONSTRUCTION DETAILS
5-6	CONSTRUCTION AREA SIGNS
7-8	TRAFFIC HANDLING PLANS, DETAILS AND QUANTITIES
9	PAVEMENT DELINEATION PLANS, DETAILS AND QUANTITIES
10	SUMMARY OF QUANTITIES
11-16	REVISED STANDARD PLANS

STRUCTURE PLANS

17-29 ROUTES 10, 210, 215 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 SAN BERNARDINO COUNTY
AT VARIOUS LOCATIONS

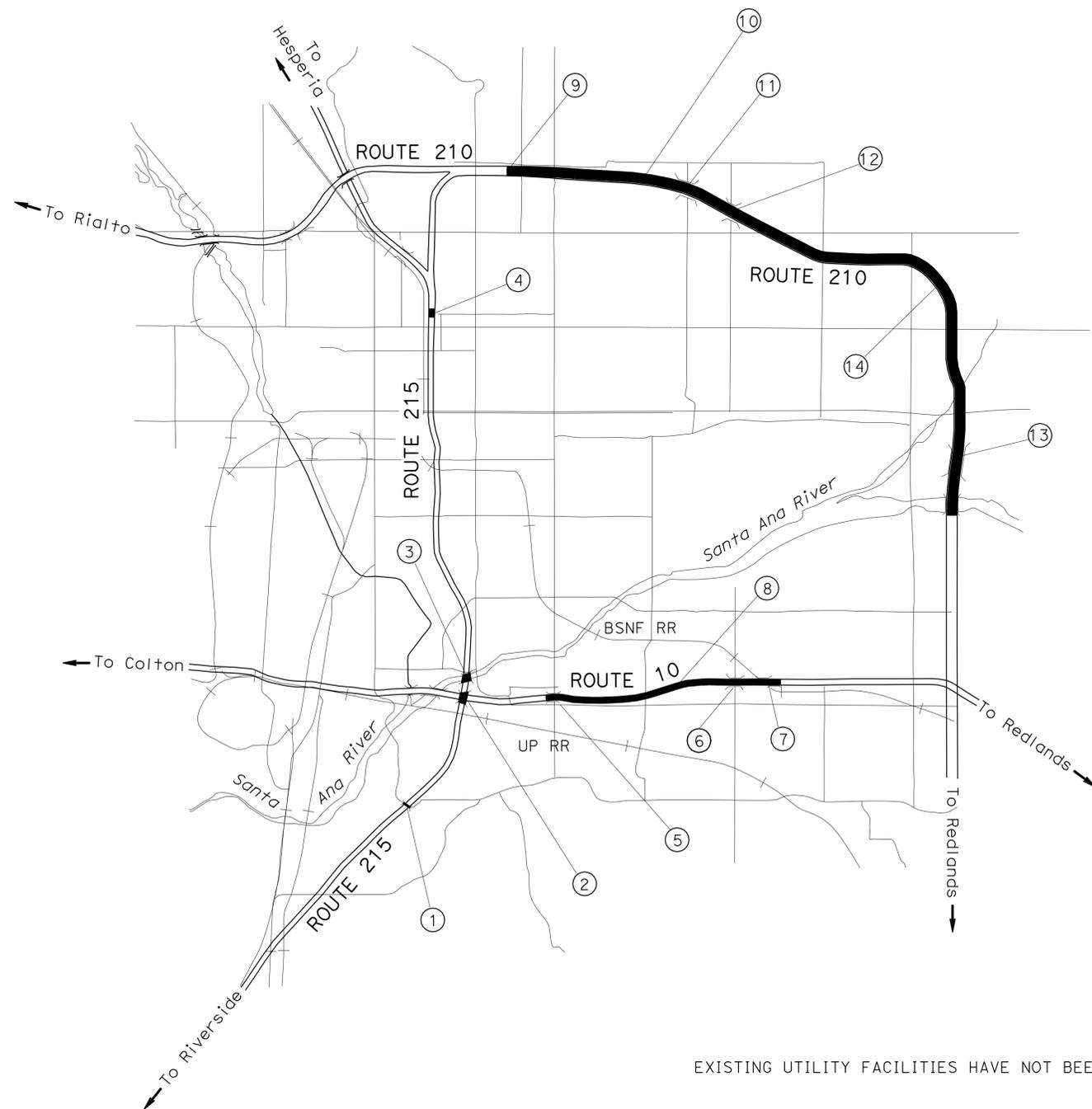
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210,215	Var	1	29





LOCATION MAP



LOCATION OF CONSTRUCTION

LOCATION	ROUTE	PM	DESCRIPTION
①	215	2.6	WASHINGTON AVENUE OC BRIDGE No. 54-0530
②	215	4.0	SOUTH 215 - EAST 10 CONNECTOR BRIDGE No. 54-0824F
③	215	4.2	SANTA ANA RIVER BRIDGE No. 54-0471F
④	215	8.2	SOUTH 215 - 13TH STREET/ NORTH 215 OFF RAMP BRIDGE No. 54-0521C
⑤	10	25.2	WATERMAN AVENUE UC BRIDGE No. 54-0600
⑥	10	27.3	MOUNTAIN VIEW AVENUE UC BRIDGE No. 54-0596
⑦	10	31.5	REDLANDS OH BRIDGE No. 54-0472
⑧	10	25.2/31.6	SLAB REPLACEMENT
⑨	210	R23.5	ARROWHEAD AVENUE OC BRIDGE No. 54-0766
⑩	210	R25.2	GOLDEN AVENUE UC BRIDGES No. 54-0792L/R
⑪	210	R25.7	DEL ROSA AVENUE UC BRIDGES No. 54-0793L/R
⑫	210	R26.2	STERLING AVENUE UC BRIDGES No. 54-0795L/R
⑬	210	R30.6	ACCESS ROAD UC BRIDGE No. 54-1058R
⑭	210	R23.5/R31.2	FOG SEAL SHOULDERS

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

NO SCALE

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

PROJECT MANAGER
CATALINO PINING
 DESIGN ENGINEER
RHEA VILLARAMA

 12-30-09
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER

February 22, 2010
 PLANS APPROVAL DATE

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



CONTRACT No. **08-0M3304**



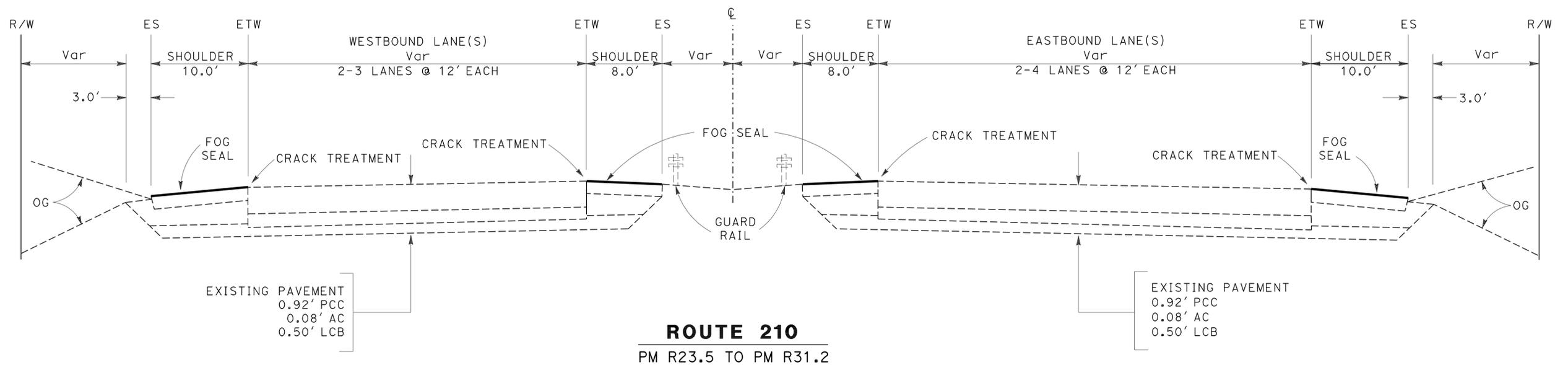
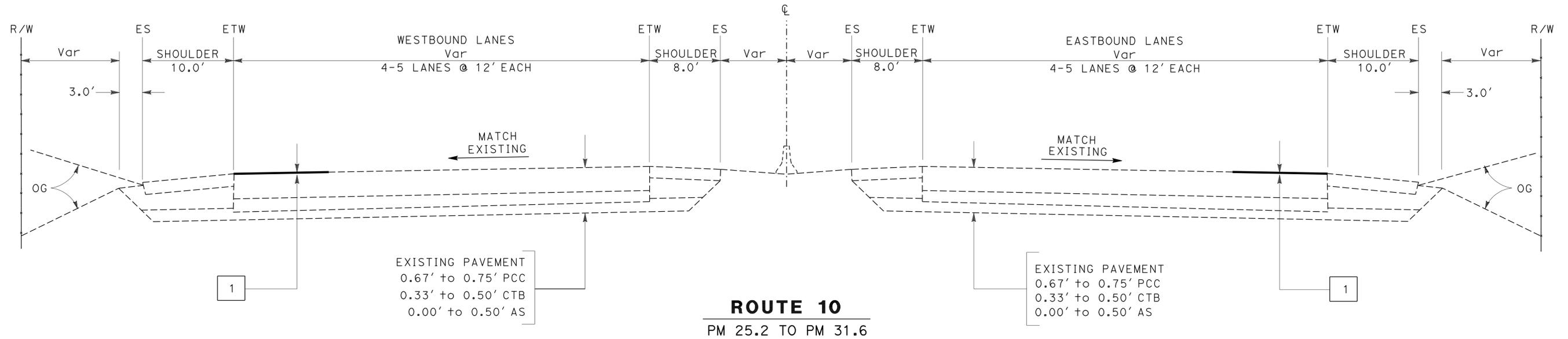
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	2	29
			12-30-09	DATE	
REGISTERED CIVIL ENGINEER			No. 69429 Exp. 6-30-10 CIVIL		
2-22-10 PLANS APPROVAL DATE			THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.		

NOTES:

1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. EXACT LOCATIONS FOR REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) ARE TO BE DETERMINED BY THE ENGINEER.
5. FOR CRACK TREATMENT DETAIL BETWEEN TRAVELED WAY AND SHOULDER, SEE SHEET C-2.

STRUCTURAL SECTION NOTE:

1 REPLACE CONCRETE PAVEMENT (INDIVIDUAL SLAB REPLACEMENT)



TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MICHAEL RISTIC
 CALCULATED/DESIGNED BY: MICHAEL RISTIC
 CHECKED BY: MICHAEL RISTIC
 REVISIONS: RHEA VILLARAMA, MICHAEL RISTIC
 REVISED BY: DATE REVISED

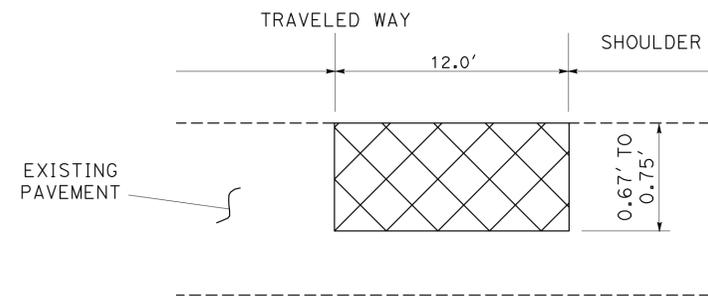
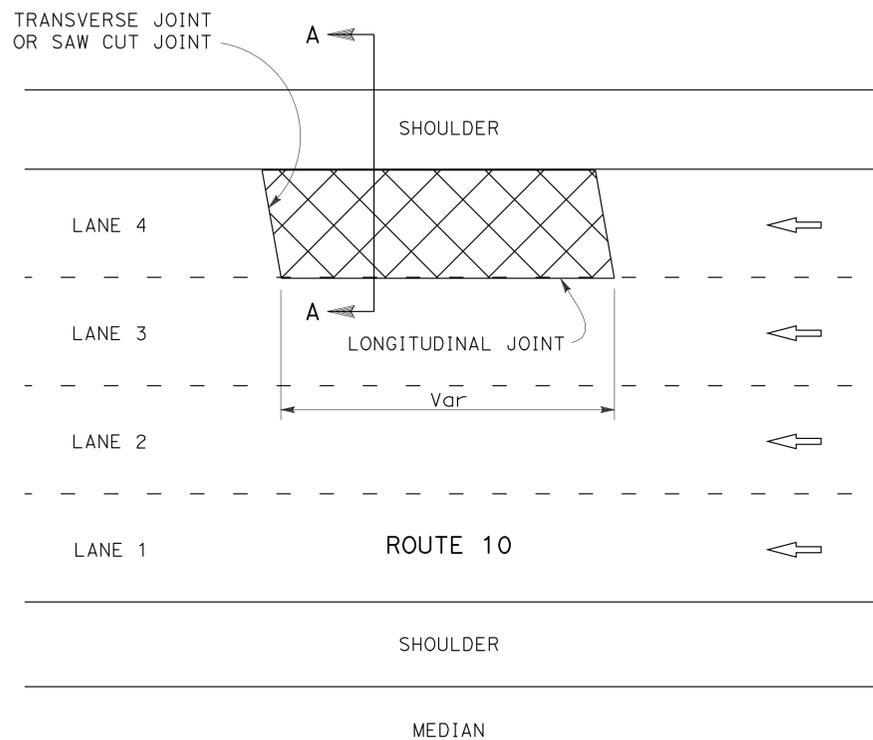
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	3	29
			12-30-09	DATE	
REGISTERED CIVIL ENGINEER			PLANS APPROVAL DATE		
2-22-10			2-22-10		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

NOTES:

1. EXACT LIMITS TO BE DETERMINED BY THE ENGINEER.
2. FOR LOCATIONS, DIMENSIONS OF SLABS AND SUMMARY OF QUANTITIES, SEE SHEET Q-1.

LEGEND:

-  REPLACE CONCRETE PAVEMENT
-  DIRECTION OF TRAVEL



SECTION A-A

**REPLACE CONCRETE PAVEMENT
(RAPID STRENGTH CONCRETE)**

TYPICAL PLAN

CONSTRUCTION DETAILS

NO SCALE

C-1

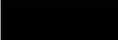
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans MAINTENANCE ENGINEERING	RHEA VILLARAMA	
FUNCTIONAL SUPERVISOR	REVISOR	DATE
MICHAEL RISTIC	MICHAEL RISTIC	
CALCULATED-DESIGNED BY	CHECKED BY	

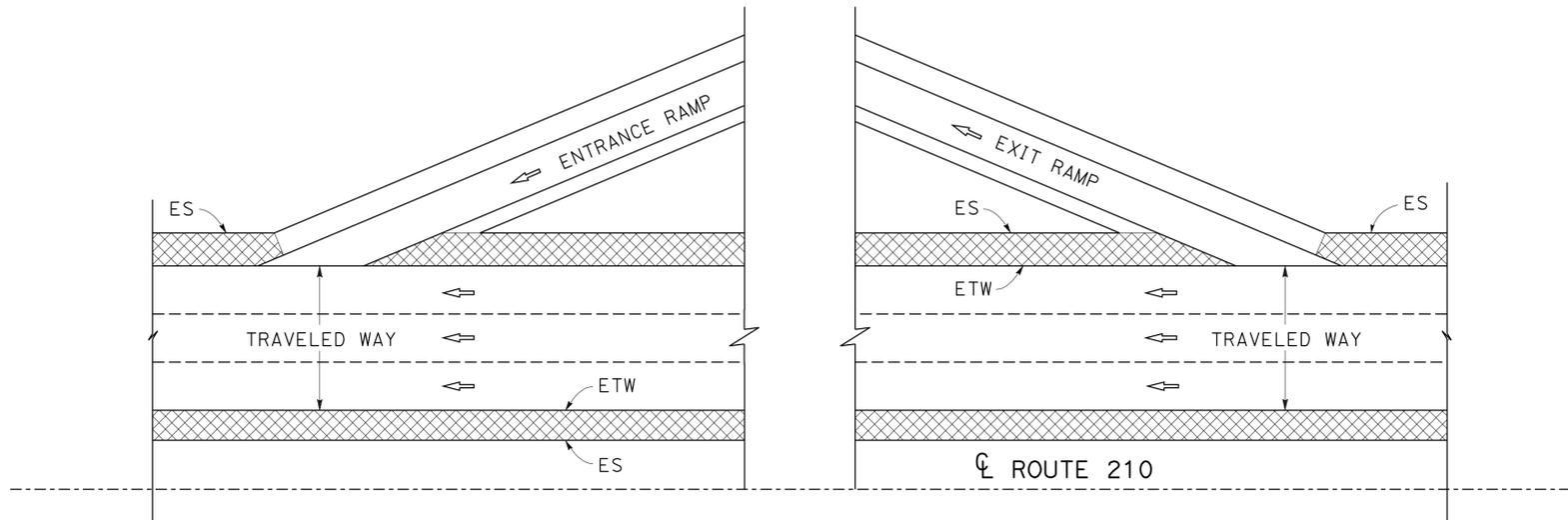
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08	SBd	10,210, 215	Var	4	29
 REGISTERED CIVIL ENGINEER DATE 12-30-09					
2-22-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTE:

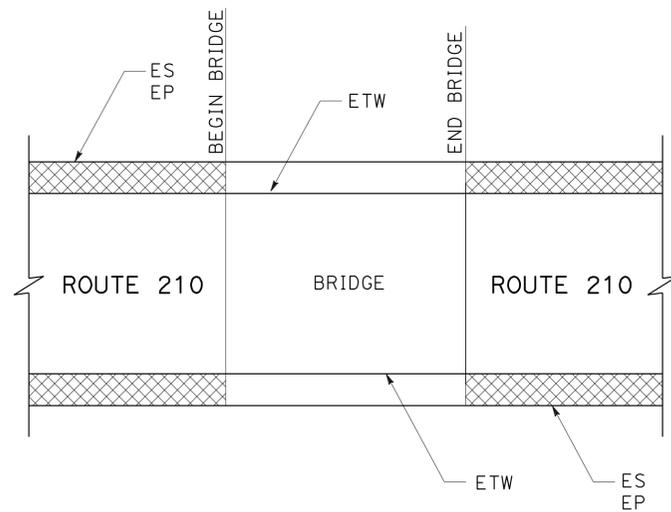
1. EXACT LIMITS OF FOG SEALING SHOULDER SHALL BE DETERMINED BY THE ENGINEER.

LEGEND:

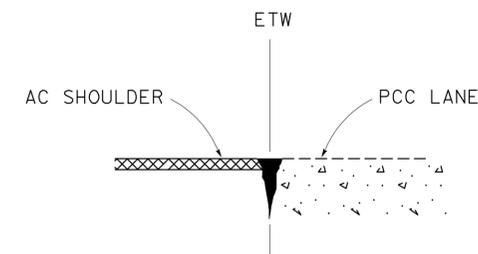
-  FOG SEAL
-  CRACK TREATMENT



LIMIT OF WORK AT GORE AREA



LIMIT OF WORK AT BRIDGE DECK AREA



CRACK TREATMENT DETAIL

FLUSHED FINISHED BETWEEN TRAVELED WAY AND SHOULDER

CONSTRUCTION DETAILS

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: MICHAEL RISTIC
 CALCULATED-DESIGNED BY: CHECKED BY:
 RHEA VILLARAMA
 MICHAEL RISTIC
 REVISED BY: DATE REVISED:
 REVISIONS:

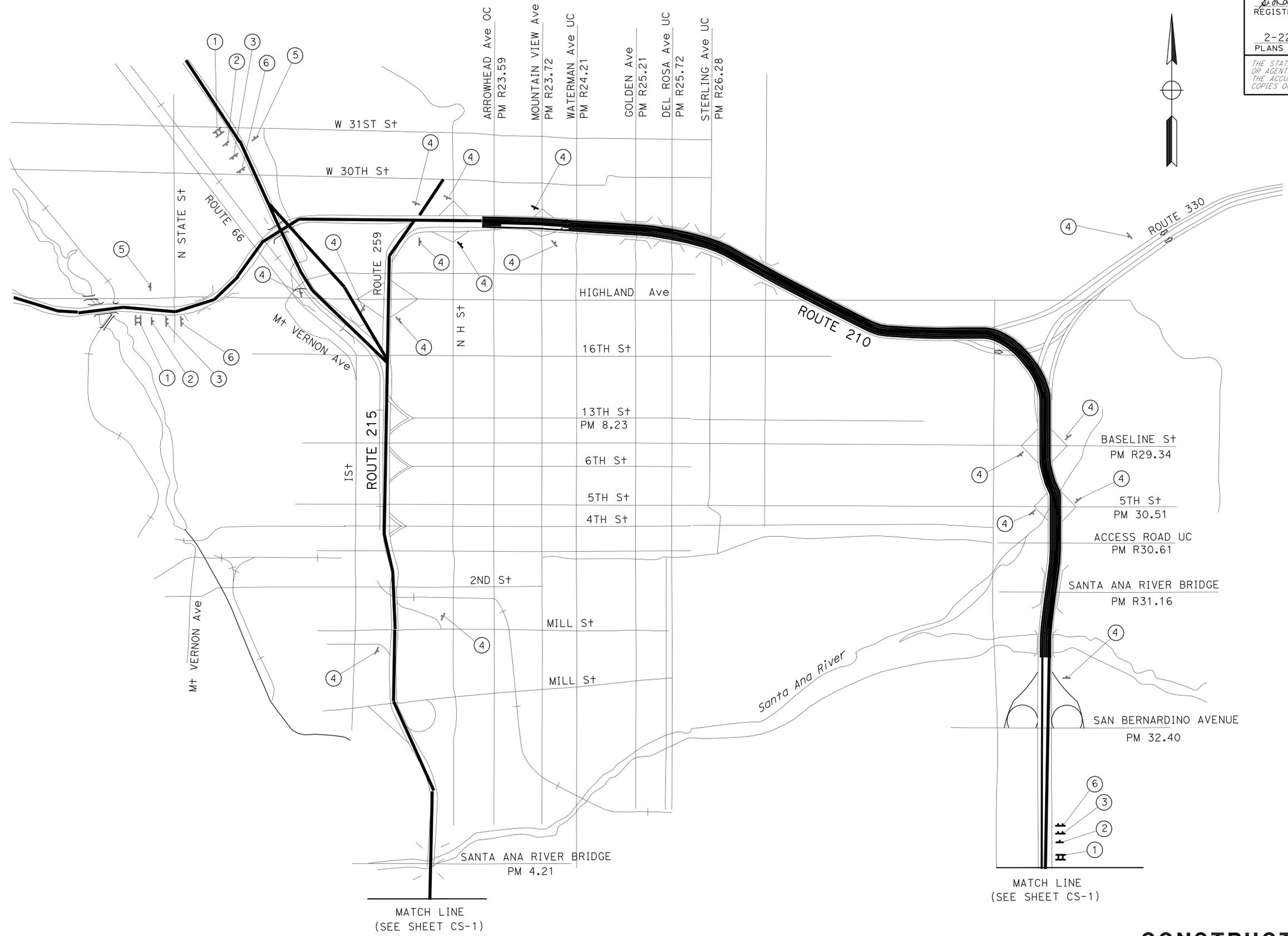
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: LARRY SARTORI
 CALCULATED/DESIGNED BY: SIDHARTHA CHOWDHURY
 CHECKED BY: CHRIS HARDIMON
 REVISED BY: _____ DATE REVISED: _____

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	6	29

12-30-09
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

S. CHOWDHURY
 No. C-55418
 Exp. 12-31-10
 CIVIL
 STATE OF CALIFORNIA

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



CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

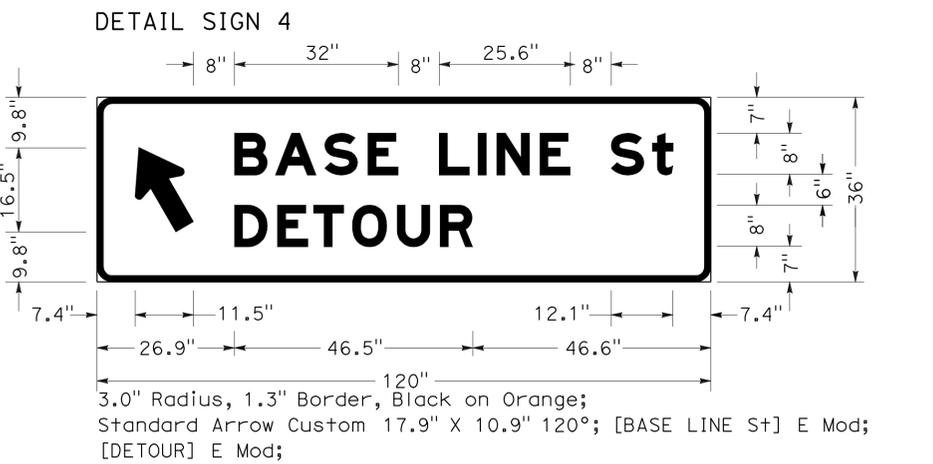
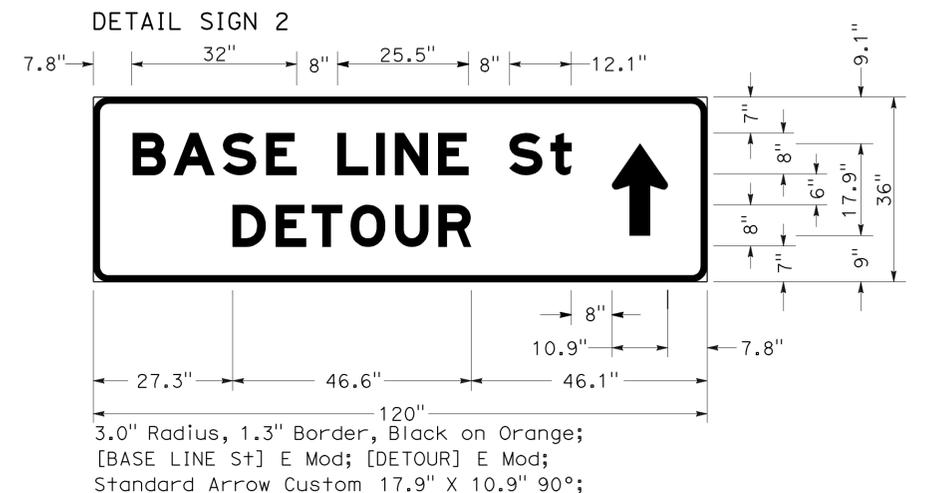
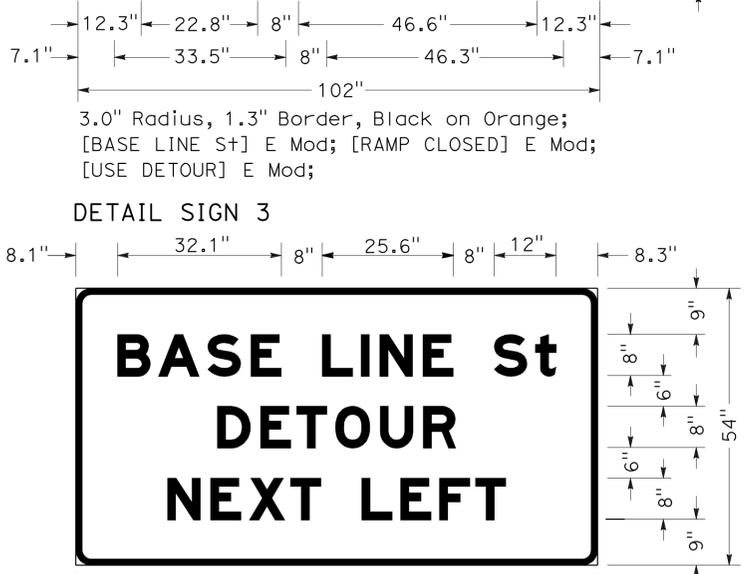
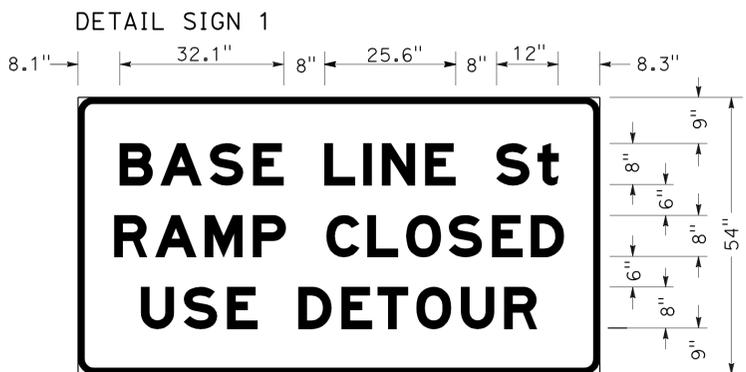
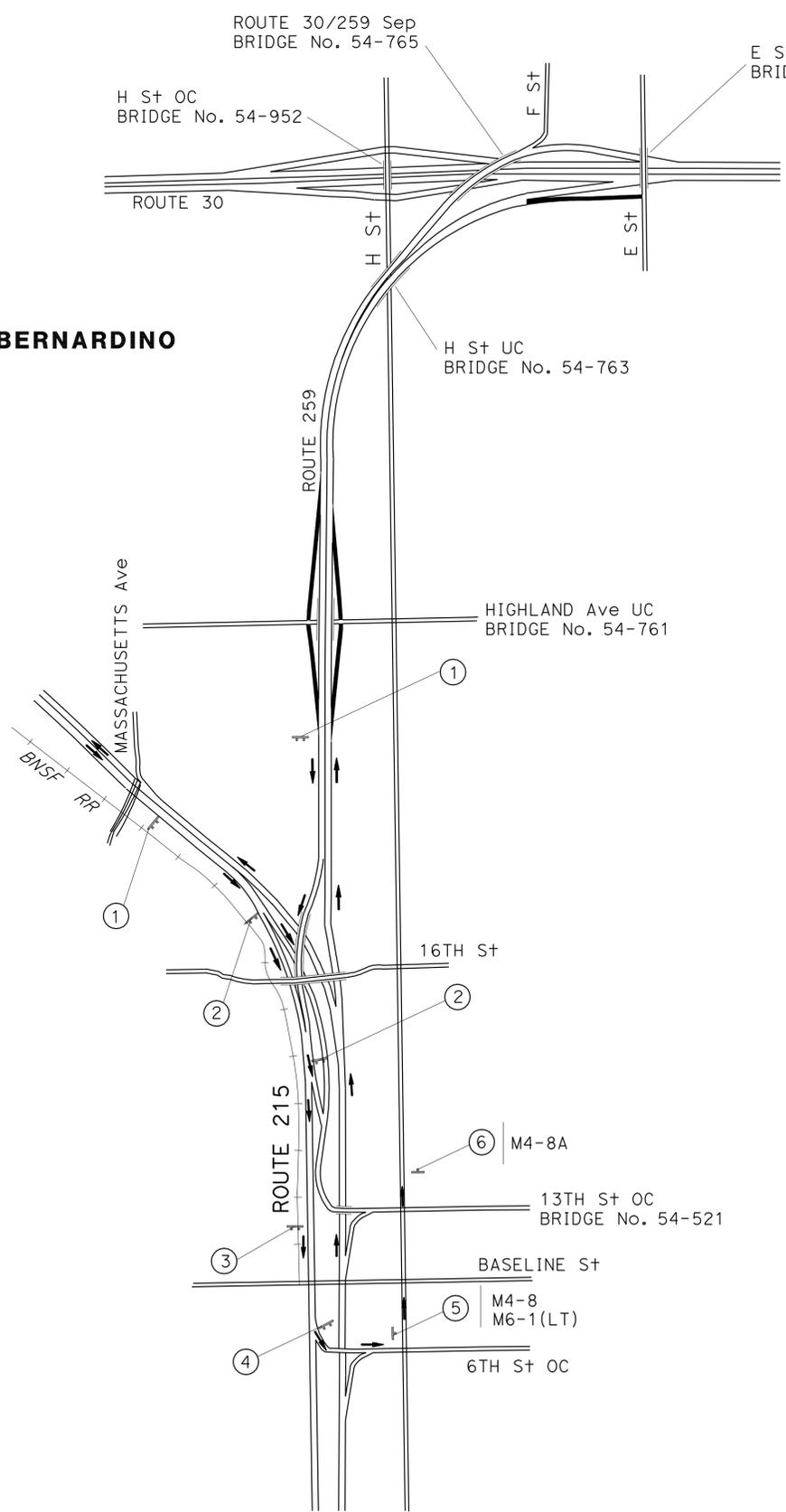
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: LARRY SARTORI
 CALCULATED-DESIGNED BY: SIDHARTHA CHOWDHURY
 CHECKED BY: CHRIS HARDIMON
 REVISED BY: DATE REVISION
 DATE REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	7	29

REGISTERED CIVIL ENGINEER: *Sidhartha Chowdhury* 12-30-09
 REGISTERED CIVIL ENGINEER DATE: 12-30-09
 PLANS APPROVAL DATE: 2-22-10
 REGISTERED PROFESSIONAL ENGINEER: S. CHOWDHURY
 No. C-55418
 Exp. 12-31-10
 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.



SAN BERNARDINO



TRAFFIC HANDLING PLAN

NO SCALE

TH-1

THIS PLAN ACCURATE FOR TRAFFIC DETOUR ONLY



USERNAME => trlenard
 DGN FILE => 80m330mg001.dgn

CU 08381

EA 0M3301

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	8	29

Sidhartha Chowdhury 12-30-09
 REGISTERED CIVIL ENGINEER DATE

2-22-10
 PLANS APPROVAL DATE

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR LARRY SARTORI
 CALCULATED-DESIGNED BY CHECKED BY
 SIDHARTHA CHOWDHURY CHRIS HARDIMON
 REVISED BY DATE REVISED

TRAFFIC HANDLING SIGN QUANTITIES

SHEET No.	SIGN No.	SIGN CODE	PANEL SIGN	SIGN MESSAGE	No. OF POST(S) AND SIZE	No. OF SIGNS	
						(EA)	
TH-1	①	C-SPECIAL	102" x 54"	BASE LINE S+ RAMP CLOSED USE DETOUR	2 - 6" x 8"	2	
	②	C-SPECIAL	120" x 36"	BASE LINE S+ DETOUR (ARROW)	2 - 6" x 6"	2	
	③	C-SPECIAL	102" x 54"	BASE LINE S+ DETOUR NEXT LEFT	2 - 6" x 8"	1	
	④	C-SPECIAL	120" x 36"	BASE LINE S+ DETOUR (ARROW)	2 - 6" x 6"	1	
	⑤		M4-8	30" x 15"	DETOUR	1 - 6" x 6"	1
			M6-1 (LT)	48" x 18"	←		
⑥		M4-8A	24" x 18"	END DETOUR	1 - 4" x 4"	1	

ADDITIONAL CONSTRUCTION AREA SIGNS ON SHEET CS-1.

TRAFFIC HANDLING QUANTITIES

THQ-1

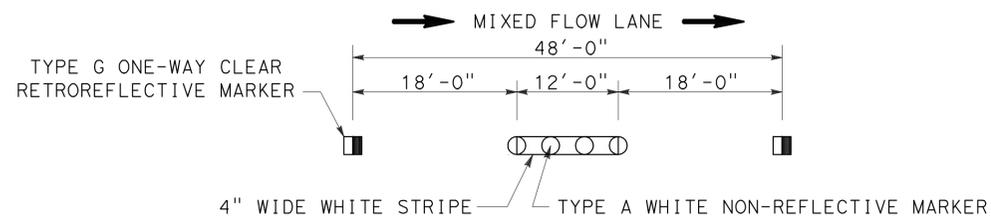
LAST REVISION | DATE PLOTTED => 26-FEB-2010
 12-30-09 | TIME PLOTTED => 10:26

NOTE:

1. PAVEMENT MARKERS SHALL BE PLACED BEFORE SPRAYABLE THERMOPLASTIC STRIPE IS APPLIED.

PAVEMENT DELINEATION QUANTITIES

LOCATION	ROUTE	PM	DESCRIPTION	DETAIL No.	REMOVE THERMOPLASTIC TRAFFIC STRIPE		REMOVE THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)		THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		REMOVE PAVEMENT MARKER			PAVEMENT MARKER				
					4" WHITE	8" WHITE	4" YELLOW	4" WHITE	4" YELLOW	8" WHITE	NON-RETRO-REFLECTIVE		RETRO-REFLECTIVE		(NON-REFLECTIVE)		(RETRO-REFLECTIVE)	
					(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	TYPE A	TYPE G	TYPE H	TYPE A	TYPE G	TYPE H	TYPE A	TYPE G
1	215	2.69	WASHINGTON Ave OC BRIDGE No. 54-0530	11	164	-	-	164	-	-	-	-	-	-	-	-	-	
				21	-	-	408	-	408	-	-	-	-	-	-	-	-	-
				38A	-	150	-	-	75	-	-	-	-	-	-	-	-	-
2	215	4.02	SOUTH 215 - EAST 10 CONNECTOR BRIDGE No. 54-0824F	13M	389	-	-	-	1556	-	132	33	-	132	33	-		
				24	-	-	1556	-	1556	-	-	-	-	-	-	-	-	
				27B	408	-	-	408	-	-	-	-	-	-	-	-	-	-
3	215	4.21	SANTA ANA RIVER BRIDGE No. 54-0471F	13M	772	-	-	3088	-	-	260	65	-	260	65	-		
				25	-	-	1544	-	1544	-	-	-	33	-	-	33	-	
				27B	1544	-	-	1544	-	-	-	-	-	-	-	-	-	-
4	215	8.23	SOUTH 215 - 13TH STREET/NORTH 215 OFF RAMP BRIDGE No. 54-0521C	25	-	-	128	-	128	-	-	-	3	-	-	3		
				27B	128	-	-	128	-	-	-	-	-	-	-	-	-	
5	10	25.26	WATERMAN AVENUE UC BRIDGE No. 54-0600	13M	240	-	-	240	-	-	84	21	-	84	21	-		
				25	-	-	320	-	320	-	-	-	7	-	-	7	-	
				27B	320	-	-	320	-	-	-	-	-	-	-	-	-	
6	10	27.30	MOUNTAIN VIEW AVENUE UC BRIDGE No. 54-0596	13M	293	-	-	1170	-	-	100	25	-	100	25	-		
				25	-	-	390	-	390	-	-	-	-	-	-	-	-	
				27B	390	-	-	390	-	-	-	-	9	-	-	-	9	
7	10	31.52	REDLANDS OH BRIDGE No. 54-0472L	13M	654	-	-	2616	-	-	220	55	-	220	55	-		
				25	-	-	872	-	872	-	-	-	20	-	-	20	-	
				27B	872	-	-	872	-	-	-	-	-	-	-	-	-	
8	210	R23.59	ARROWHEAD AVENUE OC BRIDGE No. 54-0766	11	200	-	-	498	-	-	-	-	-	-	-	-		
				21	-	-	498	-	498	-	-	-	-	-	-	-	-	
10	210	R25.21	GOLDEN AVENUE UC BRIDGES No. 54-0792L/R	13M	118	-	-	472	-	-	40	10	-	40	10	-		
				25	-	-	236	-	236	-	-	-	5	-	-	5	-	
				27B	236	-	-	236	-	-	-	-	-	-	-	-	-	
11	210	R25.72	DEL ROSA AVENUE UC BRIDGES No. 0793L/R	13M	161	-	-	644	-	-	60	15	-	60	15	-		
				25	-	-	322	-	322	-	-	-	7	-	-	7	-	
				27B	322	-	-	322	-	-	-	-	-	-	-	-	-	
12	210	R26.28	STERLING AVENUE UC BRIDGES No. 54-0795L/R	13M	151	-	-	604	-	-	52	13	-	52	13	-		
				25	-	-	302	-	302	-	-	-	7	-	-	7	-	
				27B	302	-	-	302	-	-	-	-	-	-	-	-	-	
13	210	R30.61	ACCESS ROAD UC BRIDGE No. 54-1058R	13M	90	-	-	360	-	-	32	8	-	32	8	-		
				25	-	-	180	-	180	-	-	-	4	-	-	4	-	
				27B	180	-	-	180	-	-	-	-	-	-	-	-	-	
SUBTOTAL					7934	150	6756	14558	8312	75	980	245	95	980	245	95		
TOTAL					8084		6756	22870		75	1320		980	340				



13M STRIPING DETAIL

PAVEMENT DELINEATION QUANTITIES

PDQ-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10,210, 215	Var	10	29

12-30-09
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

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

FOG SEAL COAT AND CRACK TREATMENT

ROUTE	PM	LENGTH (N)	EASTBOUND SHOULDER		WESTBOUND SHOULDER		TOTAL WIDTH * (N)	TOTAL AREA (N)	ASPHALTIC EMULSION (FOG SEAL COAT) (TON)	CRACK TREATMENT (LNMI)
			INSIDE WIDTH * (N)	OUTSIDE WIDTH * (N)	INSIDE WIDTH * (N)	OUTSIDE WIDTH * (N)				
			(FT)	(FT)	(FT)	(FT)				
210	R23.5/31.2	39,970	8	10	8	10	36	159,878	67	30

* WIDTH DIMENSIONS ARE NOMINAL; MATCH EXISTING WIDTHS IN THE FIELD.
 (N) - NOT A SEPARATE PAY ITEM; FOR INFORMATION ONLY

REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

ROUTE	PM	DIRECTION	NUMBER OF SLABS	LANE No.	AVERAGE LENGTH PER SLAB (N)	AVERAGE WIDTH PER SLAB (N)	AVERAGE DEPTH PER SLAB (N)	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) (CY)
					(FT)	(FT)	(FT)	
10	25.2/31.6	EB	14	4	14	12	0.75	65.8

EXACT LOCATIONS OF SLAB SHALL BE DETERMINED BY THE ENGINEER.
 DIMENSIONS ARE NOMINAL; MATCH EXISTING DIMENSIONS IN THE FIELD.
 (N) - NOT A SEPARATE PAY ITEM; FOR INFORMATION ONLY

SUMMARY OF QUANTITIES

Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR
 MICHAEL RISTIC
 CALCULATED-DESIGNED BY
 CHECKED BY
 RHEA VILLARAMA
 MICHAEL RISTIC
 REVISED BY
 DATE REVISED

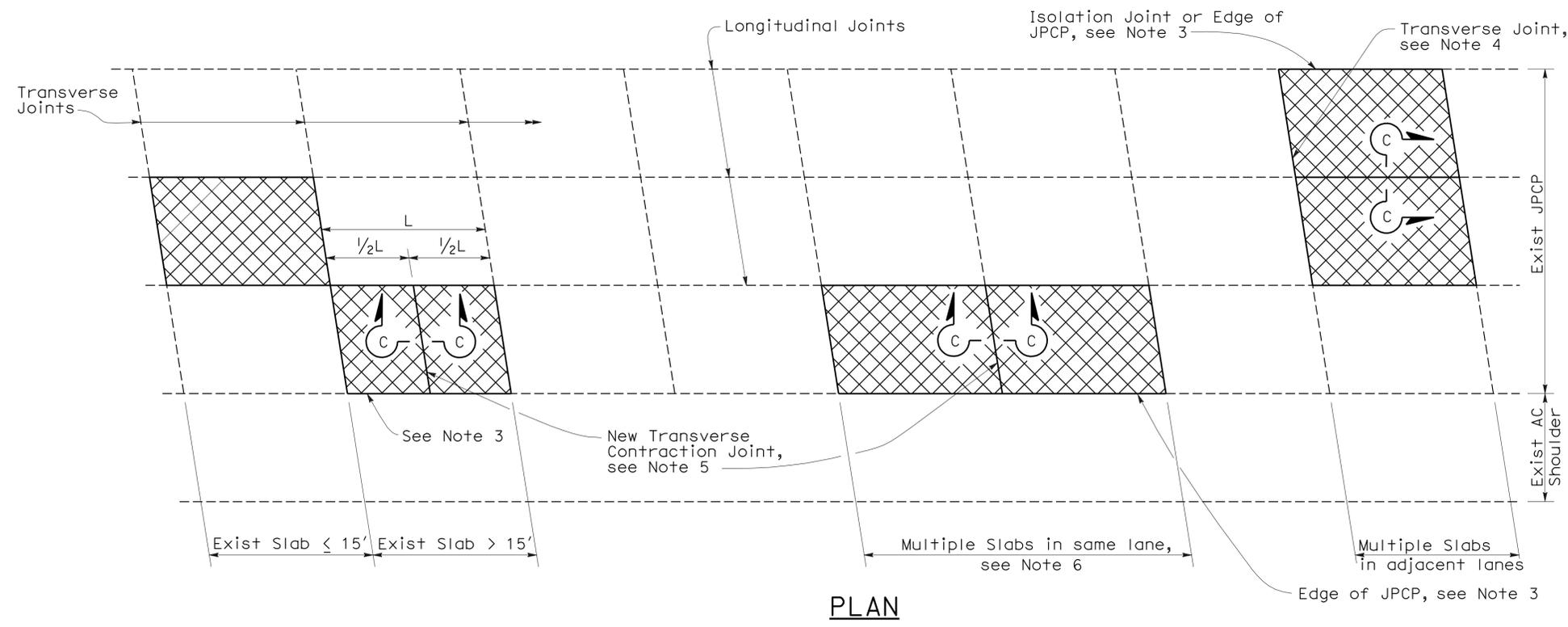


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10,210, 215	Var	11	29

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

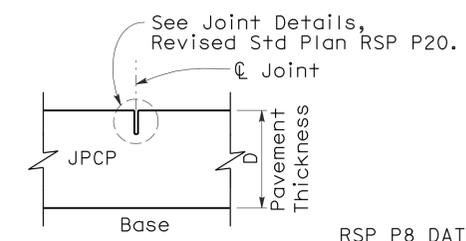
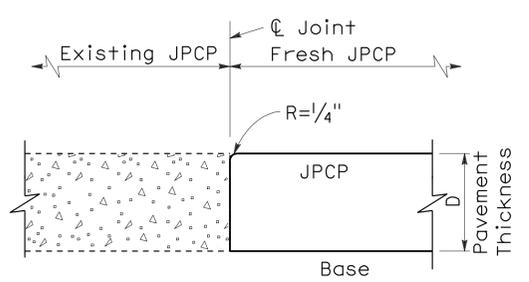
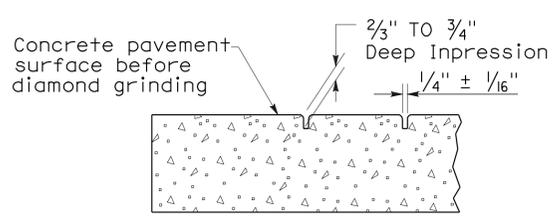
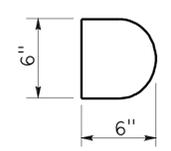
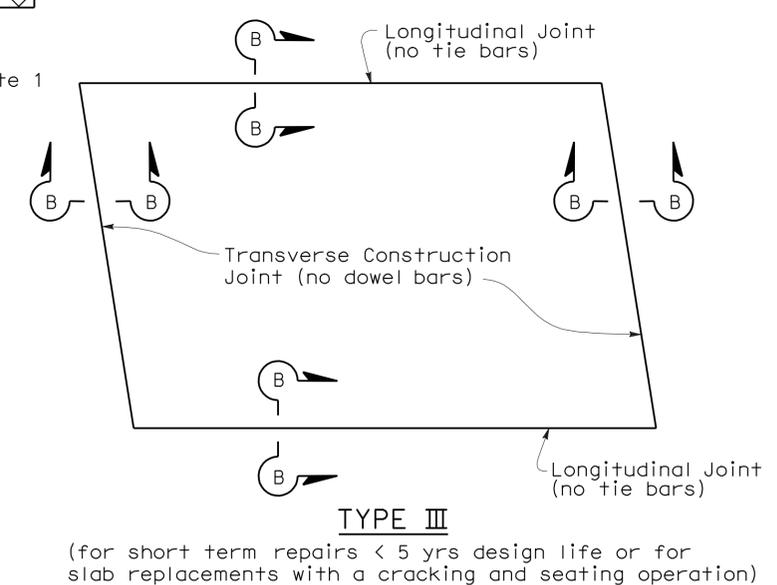
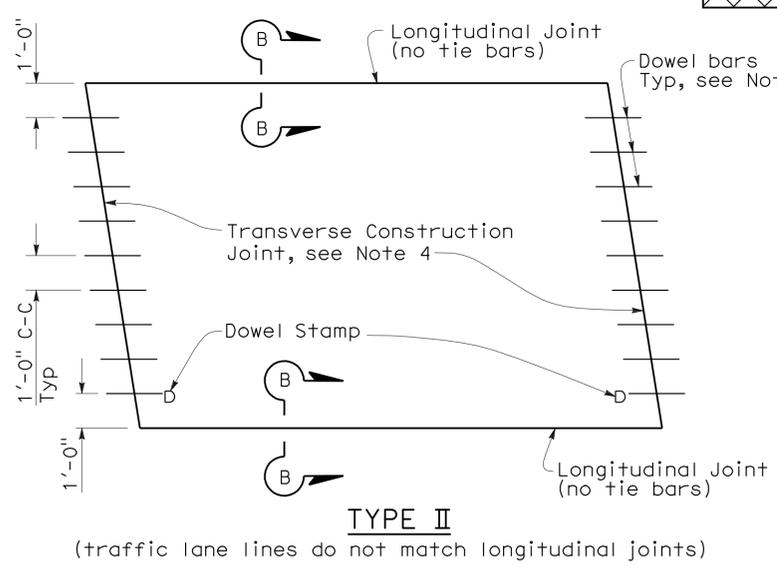
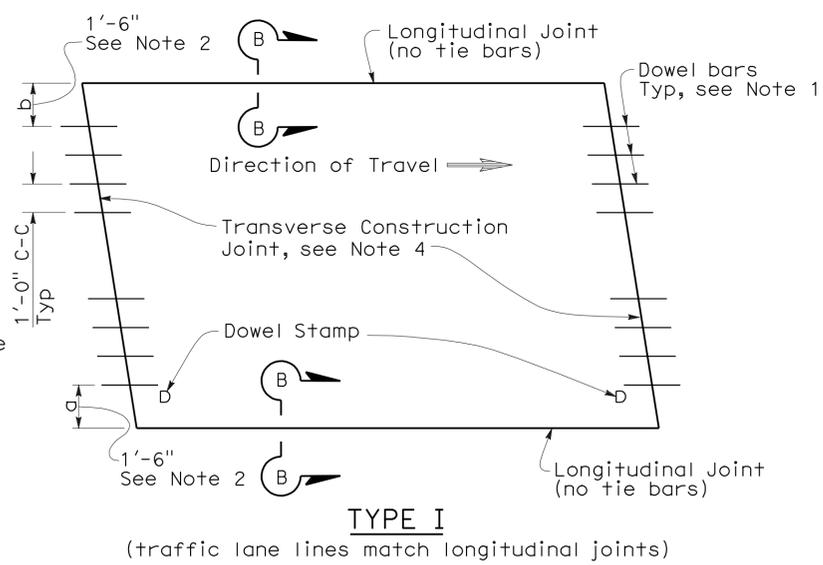
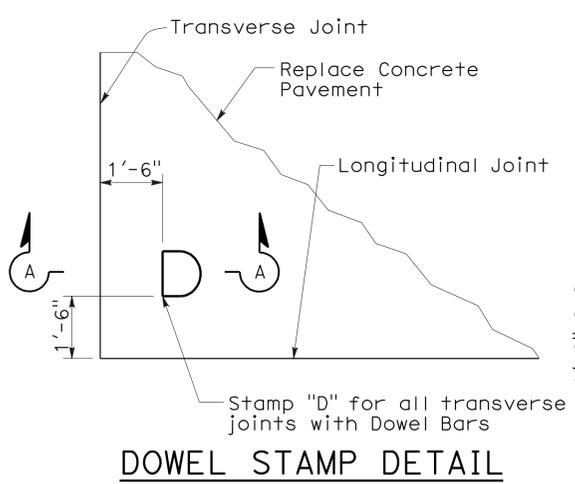
To accompany plans dated 2-22-10



NOTES:

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

LEGEND



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

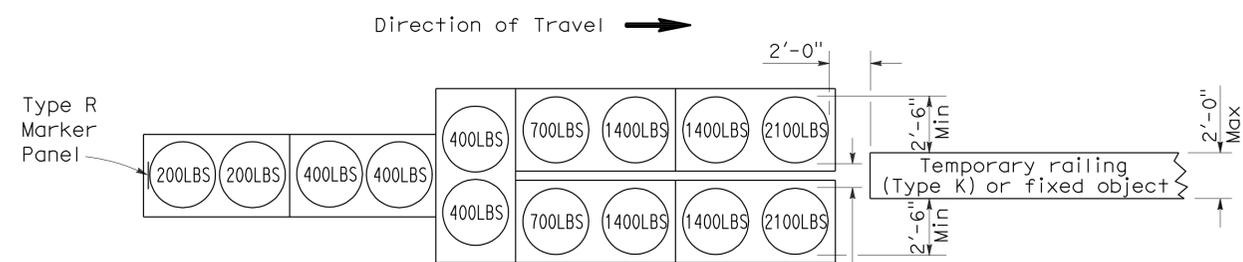
RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

2006 REVISED STANDARD PLAN RSP P8

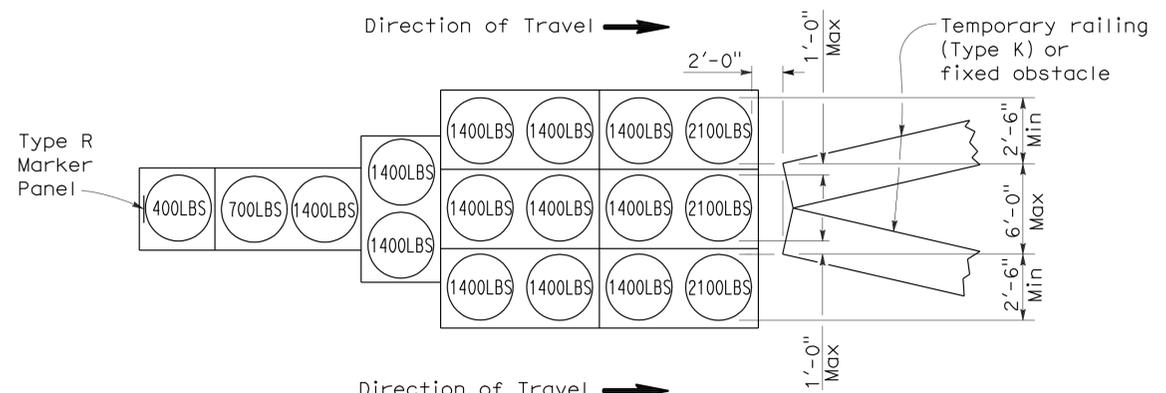
To accompany plans dated 2-22-10

2006 REVISED STANDARD PLAN RSP T1A



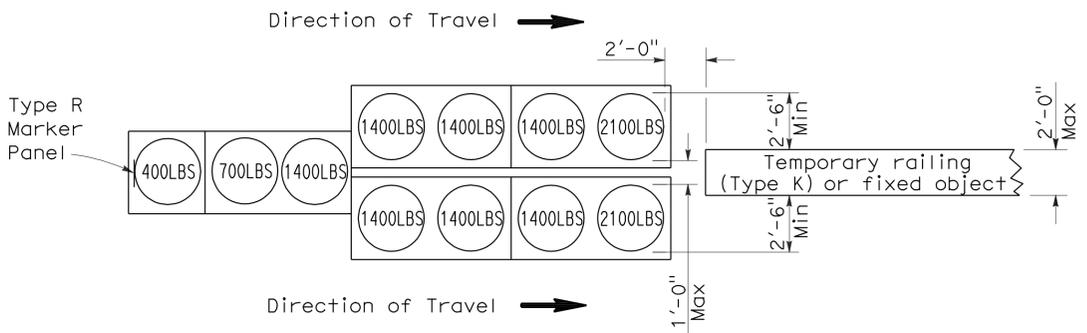
ARRAY 'TU14'

Approach speed 45 mph or more



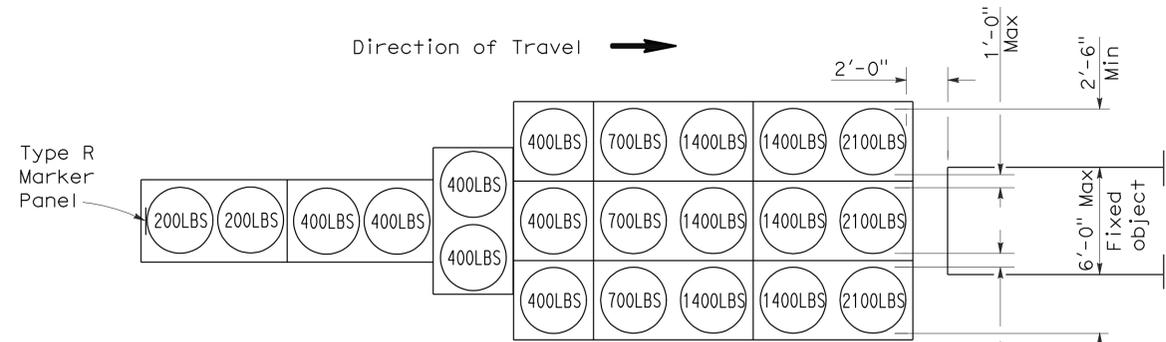
ARRAY 'TU17'

Approach speed less than 45 mph



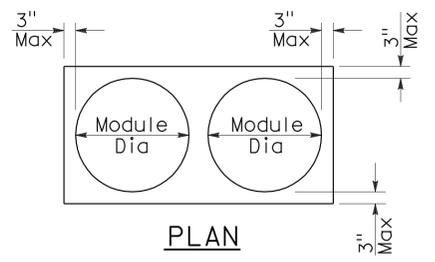
ARRAY 'TU11'

Approach speed less than 45 mph

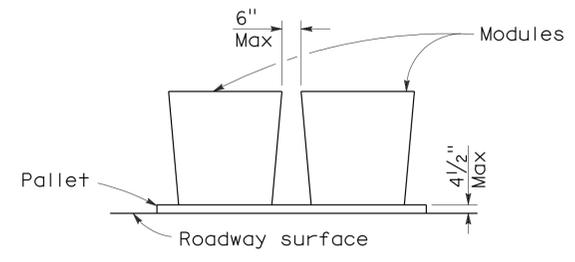


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10,210, 215	Var	13	29

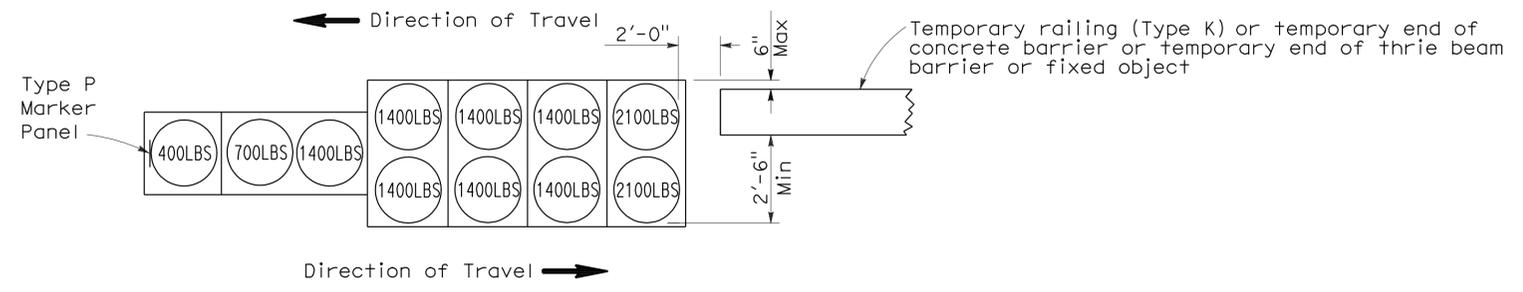
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

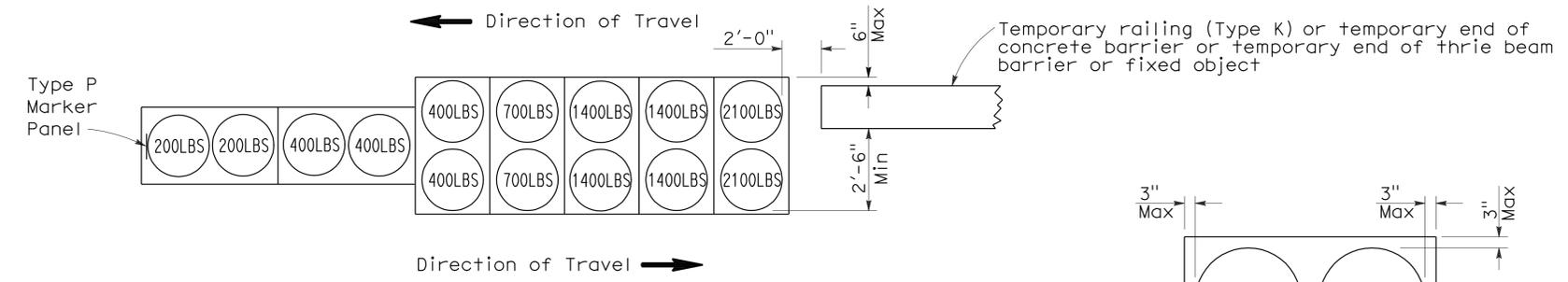
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 2-22-10



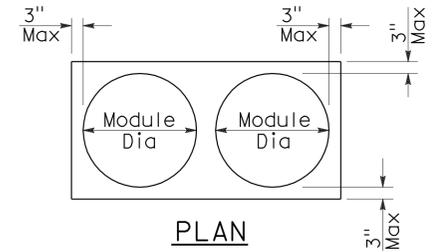
ARRAY 'TB11'

Approach speed less than 45 mph

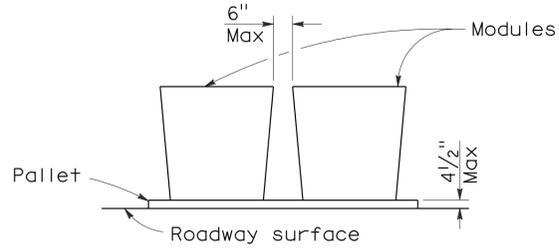


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10,210, 215	Var	14	29

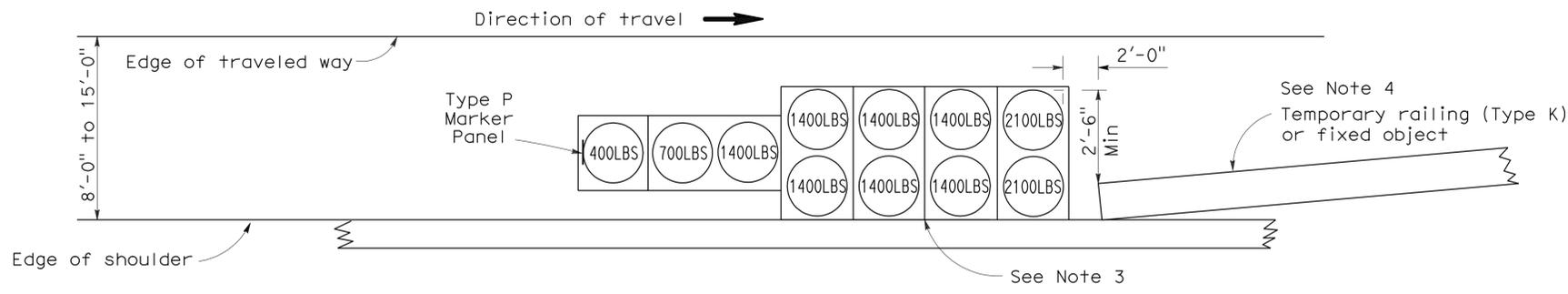
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

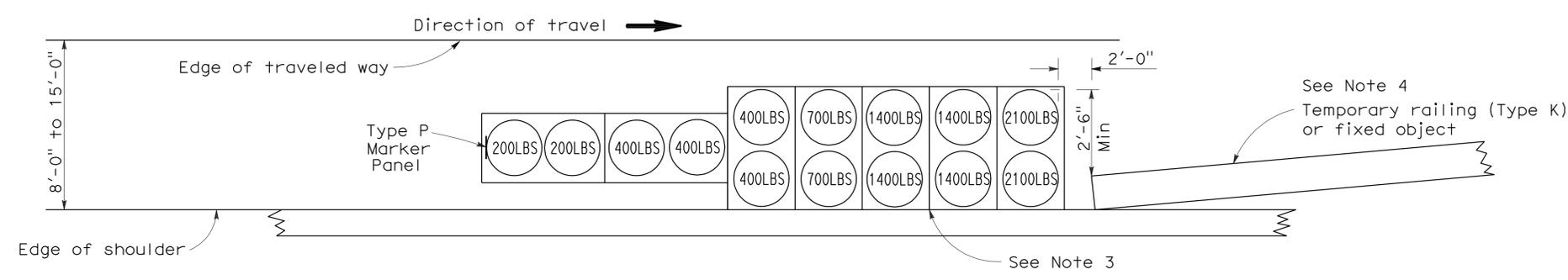
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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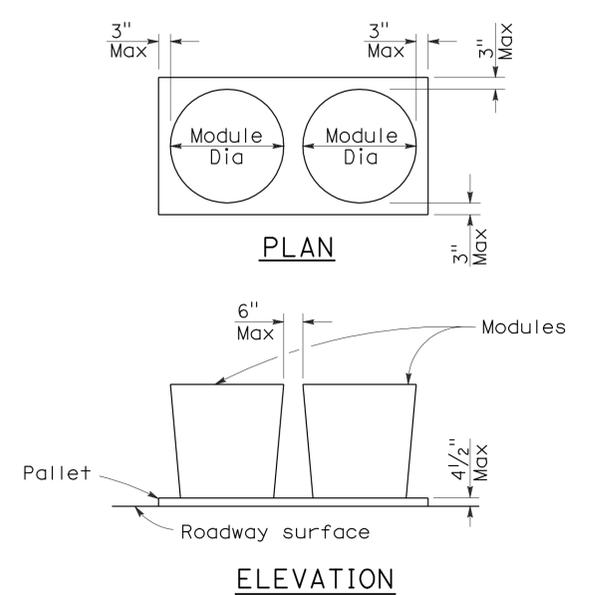
To accompany plans dated 2-22-10



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

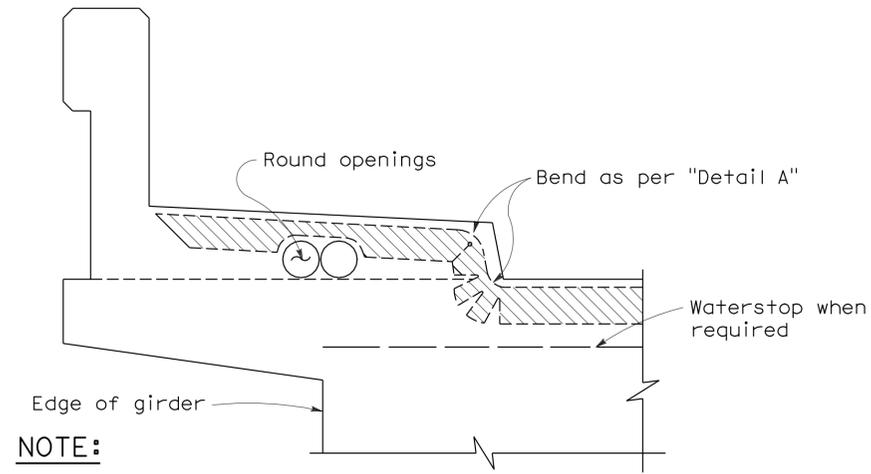
- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic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

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

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

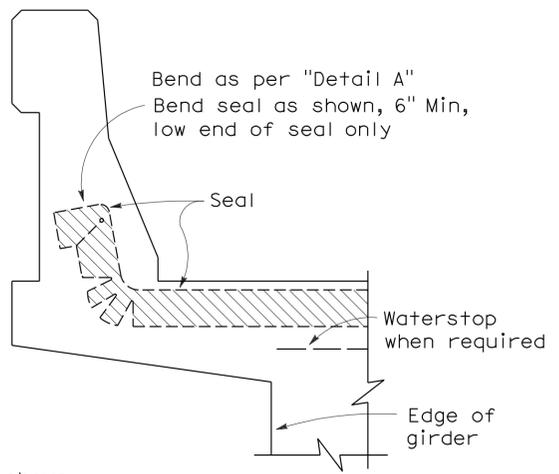
REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

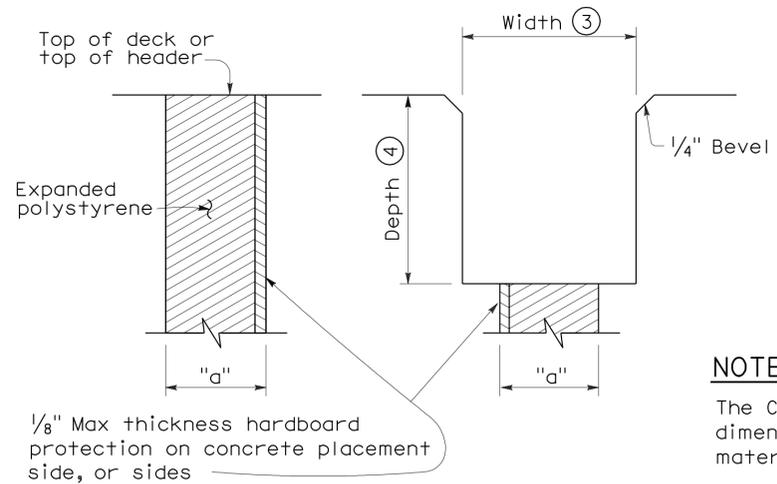


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



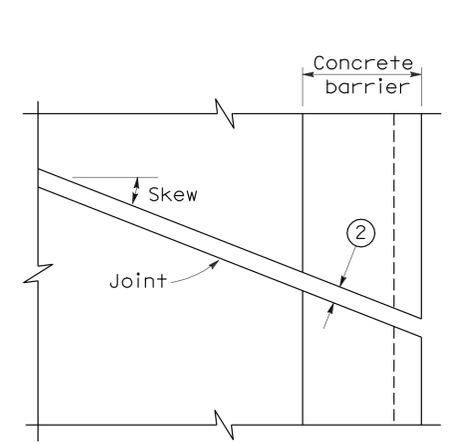
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

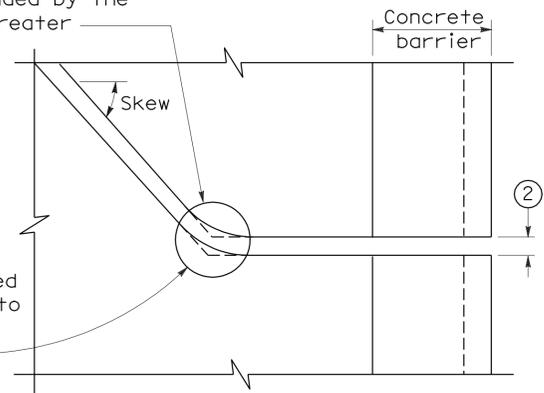
NOTE:
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



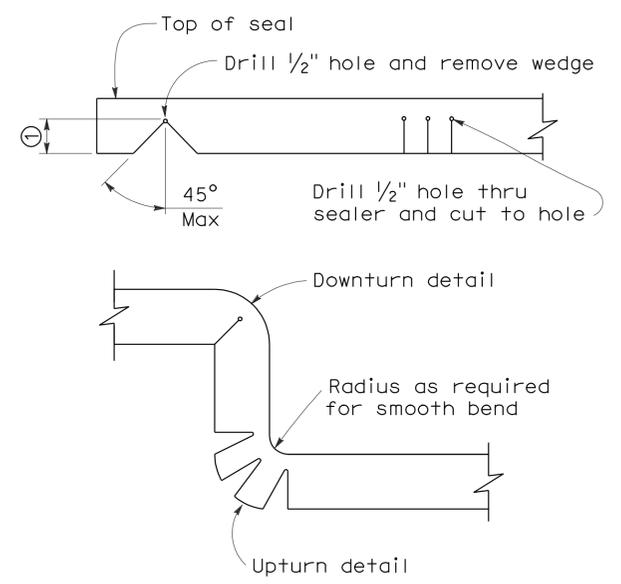
PLAN OF JOINT (SKEW ≤ 20°)

Min ϕ 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

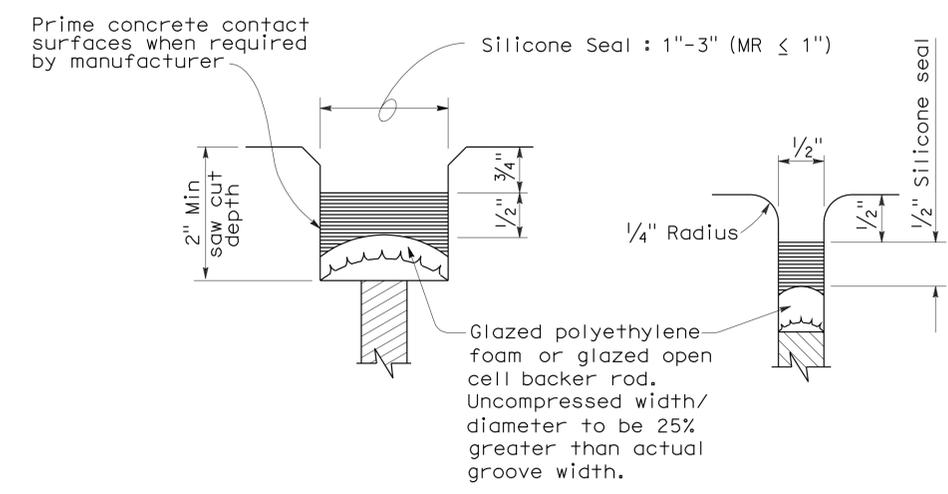
NOTES:

- 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 (W₂) plus dimensions shown.
- MR (movement rating) as shown on other plan sheets.
- Other depths must be approved by the Engineer.

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"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
JOINT SEALS
(MAXIMUM MOVEMENT RATING = 2")
 NO SCALE

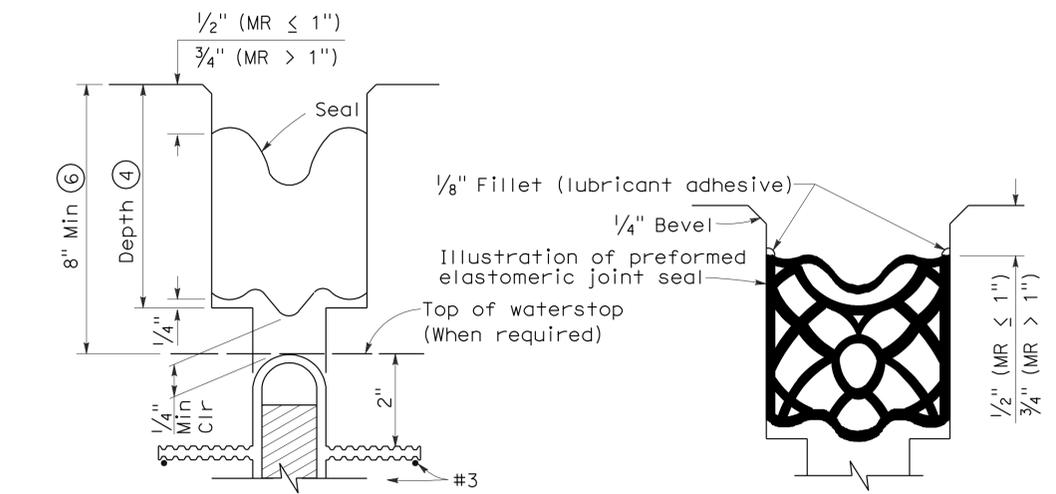


TYPE A SEAL

Movement rating : Silicone = 1" Max

TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W₂)

TYPE B SEAL

Movement Rating ≤ 2"

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP B6-21

2006 REVISED STANDARD PLAN RSP B6-21

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	17	29

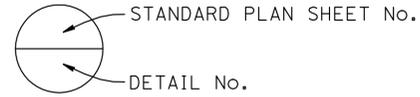
REGISTERED CIVIL ENGINEER DATE 10-27-09
 PLANS APPROVAL DATE 2-22-10
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 MAZIN S. IBRAHIM
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LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
-  Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.

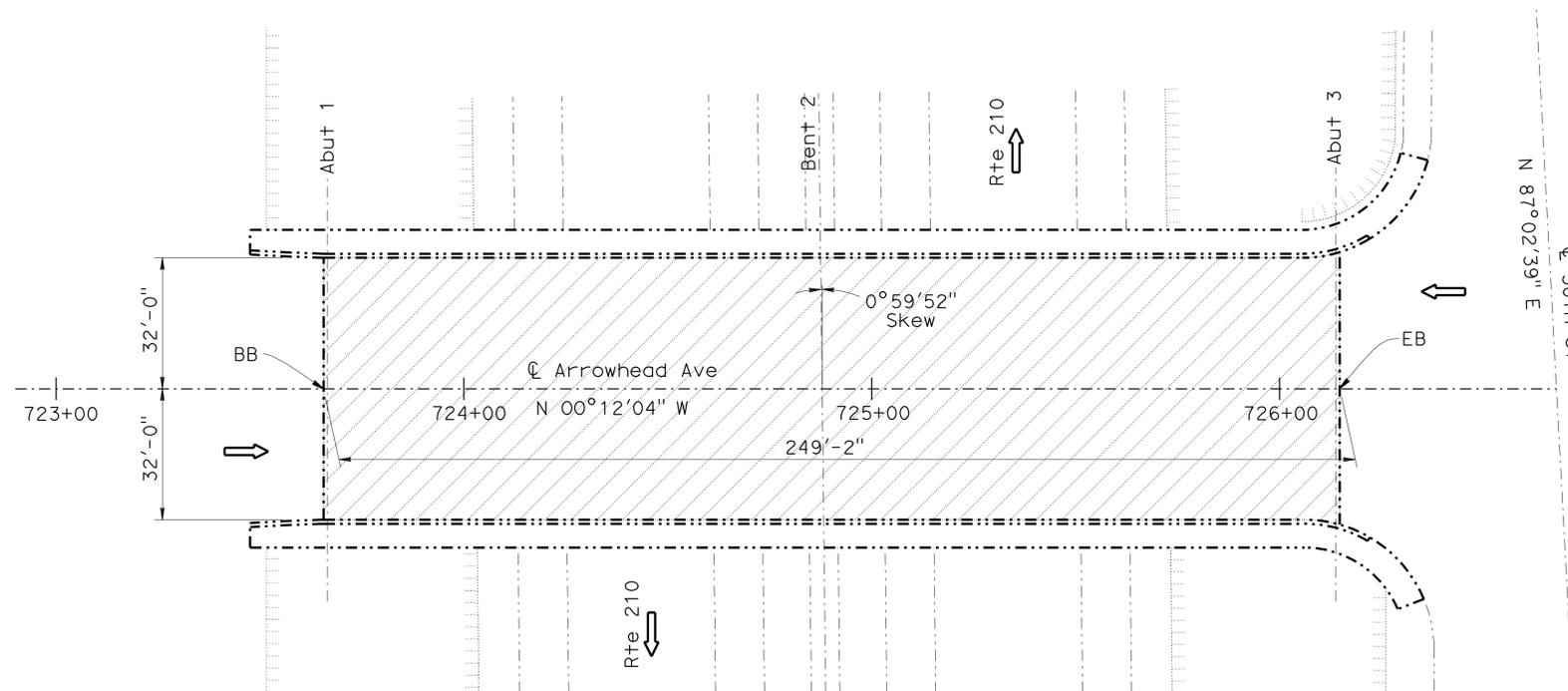
STANDARD PLANS DATED MAY 2006

SHEET NO.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	GENERAL PLAN No. 3
4	GENERAL PLAN No. 4
5	GENERAL PLAN No. 5
6	GENERAL PLAN No. 6
7	GENERAL PLAN No. 7
8	GENERAL PLAN No. 8
9	GENERAL PLAN No. 9
10	MISCELLANEOUS DETAILS No. 1
11	MISCELLANEOUS DETAILS No. 2
12	MISCELLANEOUS DETAILS No. 3
13	JOINT SEAL ASSEMBLY MAXIMUM MR=4"



ARROWHEAD AVENUE OC

Br No. 54-0766, Rte 210, PM R23.59
Scale: 1" = 20'



ARROWHEAD AVENUE UC #54-0766
QUANTITIES

REMOVE UNSOUND CONCRETE	40 CF
CLEAN BRIDGE DECK	18,430 SQFT
RAPID SETTING CONCRETE (PATCH)	40 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	18,430 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	231 GAL

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

TONY D. BRAKE
DESIGN ENGINEER

DESIGN	BY	CHECKED	LOAD FACTOR DESIGN	LIVE LOADING: AND PERMIT DESIGN LOAD
DESIGN	Mazin Ibrahim	Ramesh Patel	HS20-44 AND ALTERNATIVE	HS20-44 AND ALTERNATIVE
DETAILS	Clayton Tom	Ramesh Patel	LAYOUT	BY Clayton Tom
QUANTITIES	Mazin Ibrahim	Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.
Various
POST MILE
Varies

ROUTES 10,210,215 BRIDGES
GENERAL PLAN NO. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



CU 08
EA 0M3301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

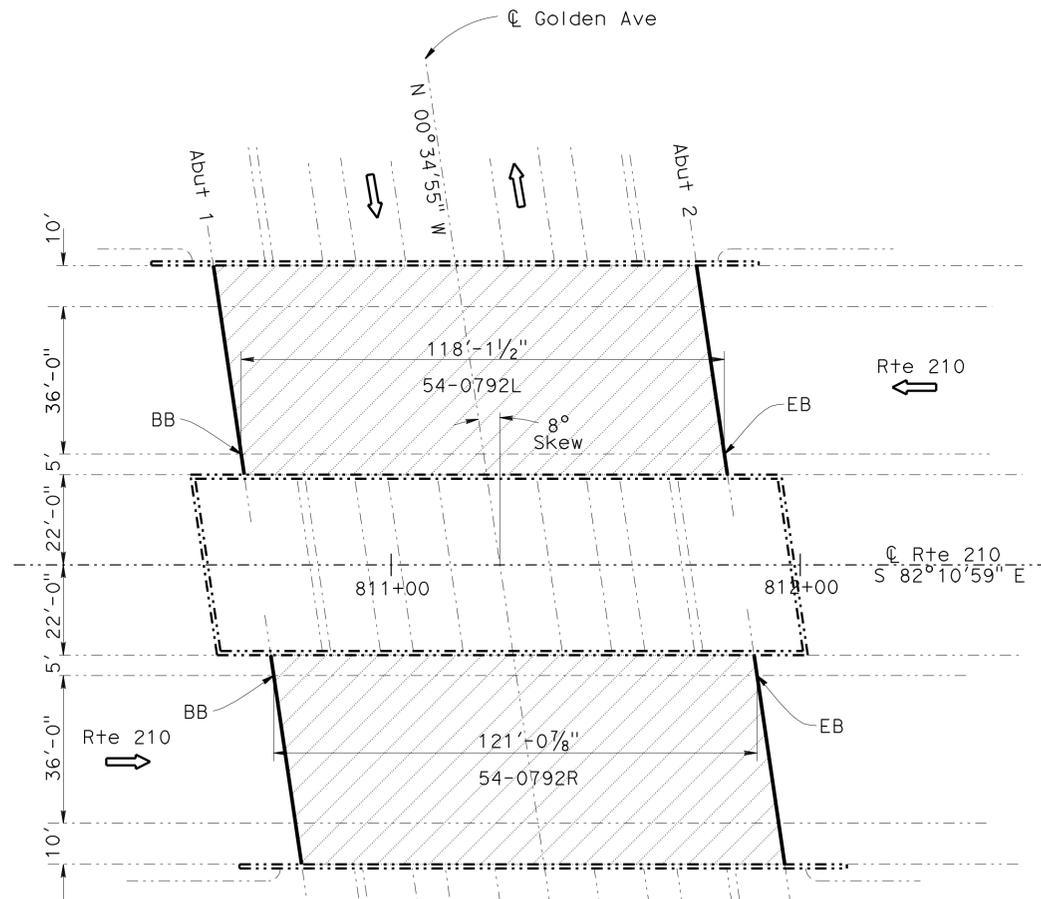
REVISION DATES	SHEET	OF
03-09-09 03-18-09 04-02-09 04-07-09 04-16-09 04-17-09 04-20-09 08-04-09 08-27-09 10-27-09	1	13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10, 210, 215	Var	18	29

REGISTERED CIVIL ENGINEER DATE 10-27-09
 PLANS APPROVAL DATE 2-22-10
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 MAZIN S. IBRAHIM
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND:

- Indicates existing.
- Indicates direction of traffic.
-  Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
-  Indicates limits of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal, repair joint spalls.

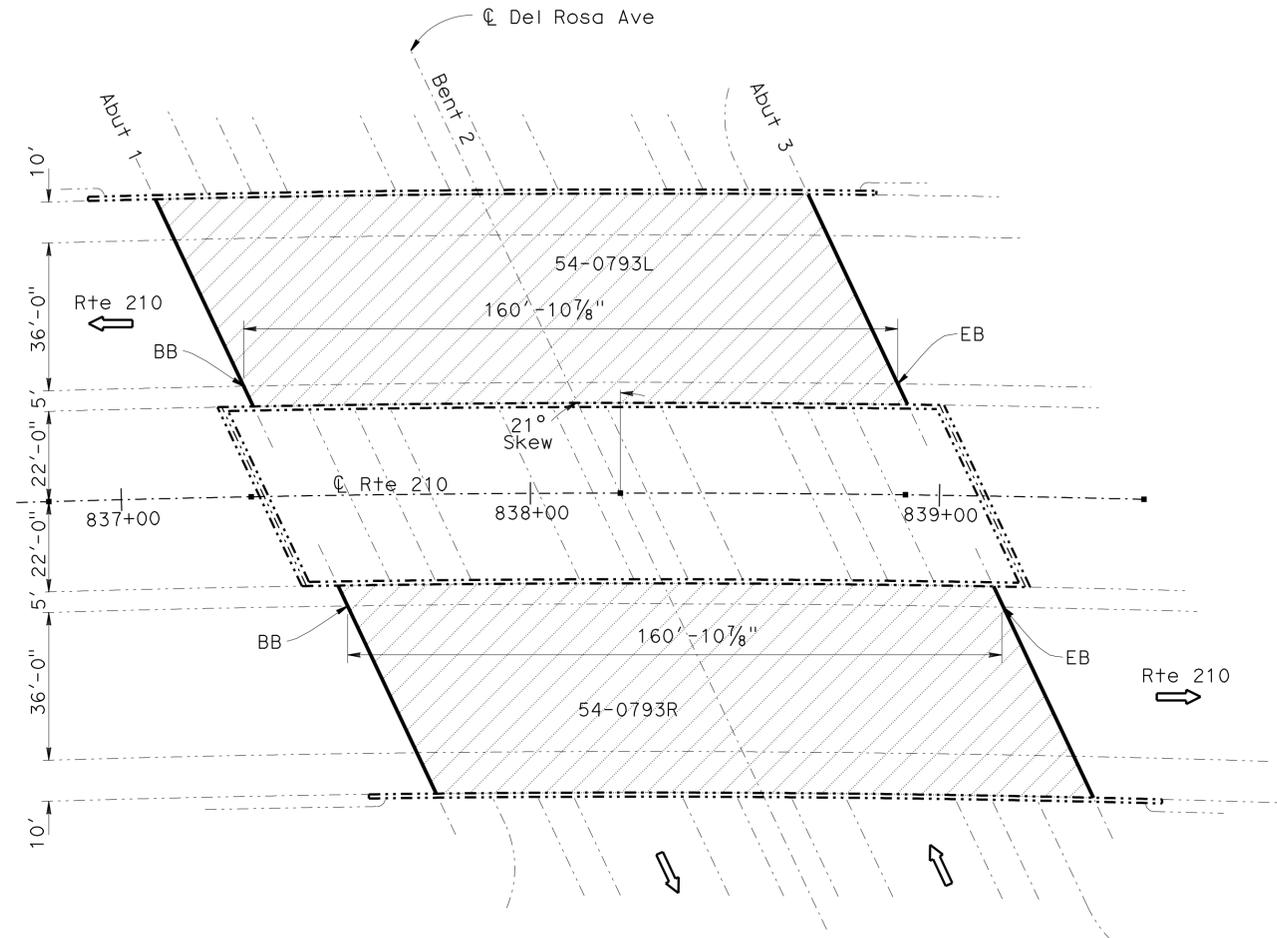


GOLDEN AVENUE UC

Br No. 54-0792R/L, Rte 210, PM R25.21
Scale: 1" = 20'

**GOLDEN AVENUE UC #54-0792L/R
QUANTITIES**

- REMOVE UNSOUND CONCRETE 31 CF
- CLEAN BRIDGE DECK 12,200 SQFT
- CLEAN EXPANSION JOINT 208 LF
- RAPID SETTING CONCRETE (PATCH) 31 CF
- JOINT SEAL (MR 1") 208 LF
- PUBLIC SAFETY PLAN LUMP SUM
- TREAT BRIDGE DECK 12,200 SQFT
- FURNISH BRIDGE DECK TREATMENT MATERIAL 154 GAL



DEL ROSA UC

Br No. 54-0793R/L, Rte 210, PM R25.72
Scale: 1" = 20'

**DEL ROSA AVENUE UC #54-0793L/R
QUANTITIES**

- REMOVE UNSOUND CONCRETE 42 CF
- CLEAN BRIDGE DECK 16,420 SQFT
- CLEAN EXPANSION JOINT 220 LF
- RAPID SETTING CONCRETE (PATCH) 42 CF
- JOINT SEAL (MR 1") 220 LF
- PUBLIC SAFETY PLAN LUMP SUM
- TREAT BRIDGE DECK 16,420 SQFT
- FURNISH BRIDGE DECK TREATMENT MATERIAL 206 GAL

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

TONY D. BRAKE
DESIGN ENGINEER

DESIGN	By Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	By Clayton Tom	CHECKED Ramesh Patel	LAYOUT	By Clayton Tom
QUANTITIES	By Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	By Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

**ROUTES 10, 210, 215 BRIDGES
GENERAL PLAN NO. 2**

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



CU 08
EA 0M3301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

03-09-09	03-16-09	04-07-09	04-07-09	04-16-09	04-17-09	04-20-09	08-04-09	08-27-09	10-27-09
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SHEET 2 OF 13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	19	29

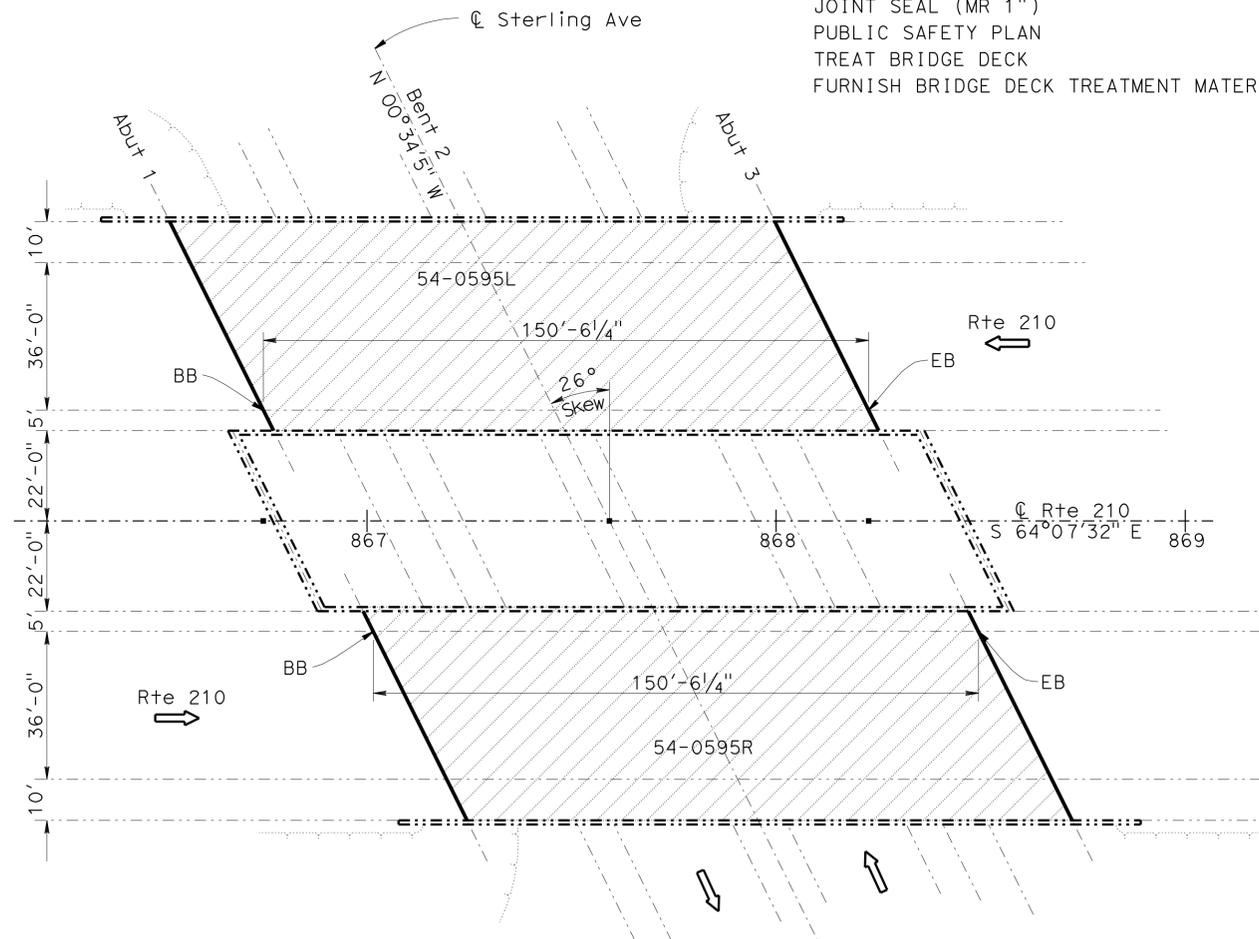
REGISTERED CIVIL ENGINEER DATE 10-27-09
 PLANS APPROVAL DATE 2-22-10
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA

LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
-  Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
-  Indicates limits of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal, repair joint spalls.

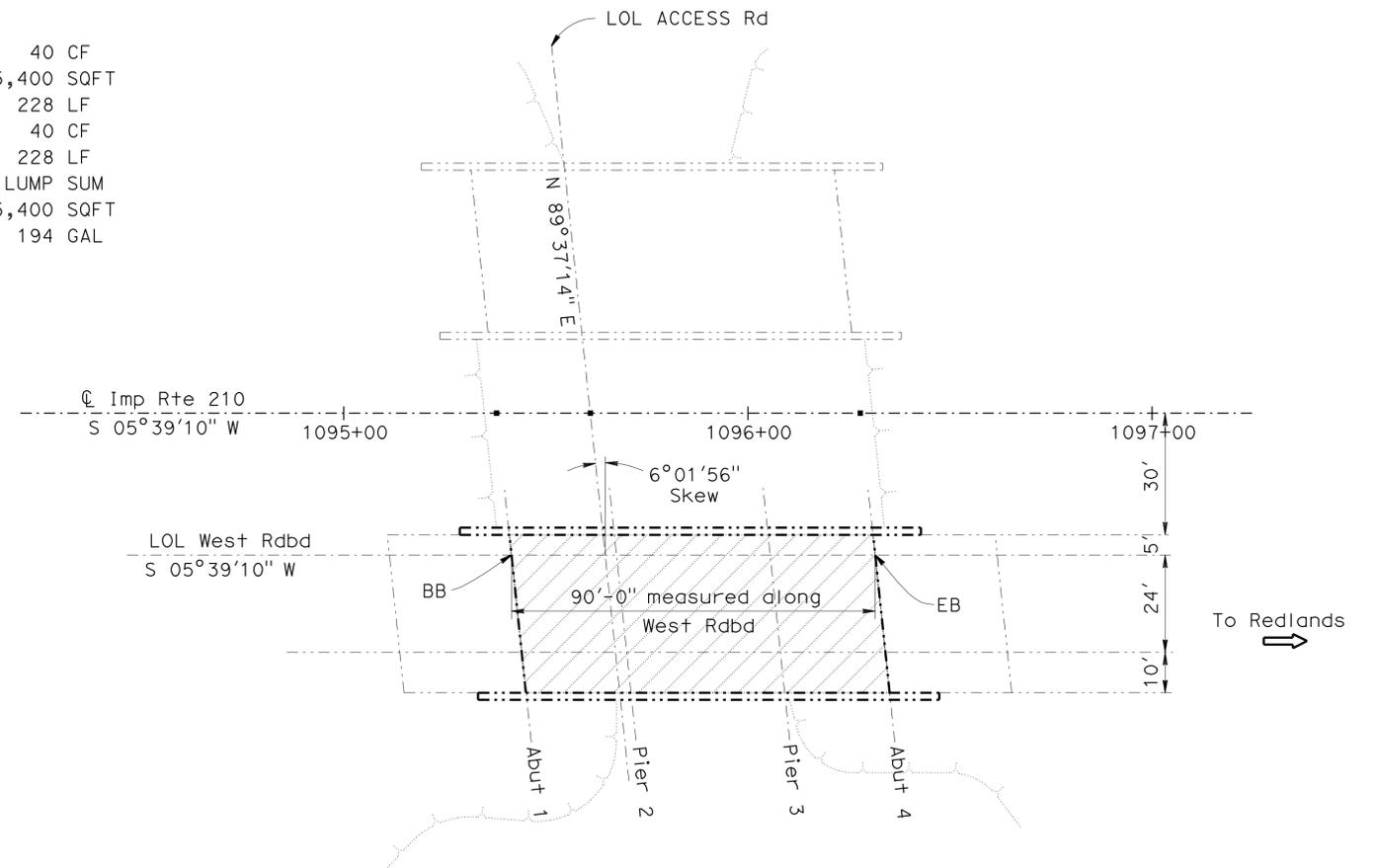
STERLING AVENUE UC #54-0595L/R
QUANTITIES

REMOVE UNSOUND CONCRETE	40 CF
CLEAN BRIDGE DECK	15,400 SQFT
CLEAN EXPANSION JOINT	228 LF
RAPID SETTING CONCRETE (PATCH)	40 CF
JOINT SEAL (MR 1")	228 LF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	15,400 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	194 GAL



STERLING AVENUE UC
Br No. 54-0795R/L, Rte 210, PM R26.28
Scale: 1" = 20'

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



ACCESS ROAD UC

Br No. 54-1058R, Rte 210, PM R30.61
Scale: 1" = 20'

ACCESS ROAD UC #54-1058R
QUANTITIES

REMOVE UNSOUND CONCRETE	9 CF
CLEAN BRIDGE DECK	3,510 SQFT
RAPID SETTING CONCRETE (PATCH)	9 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	3,510 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	44 GAL

TONY D. BRAKE DESIGN ENGINEER	DESIGN	By Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	By Clayton Tom	CHECKED Ramesh Patel	LAYOUT	By Clayton Tom
	QUANTITIES	By Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	By Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

**ROUTE 10,210,215 BRIDGES
GENERAL PLAN NO. 3**

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

CU 08
EA 0M3301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

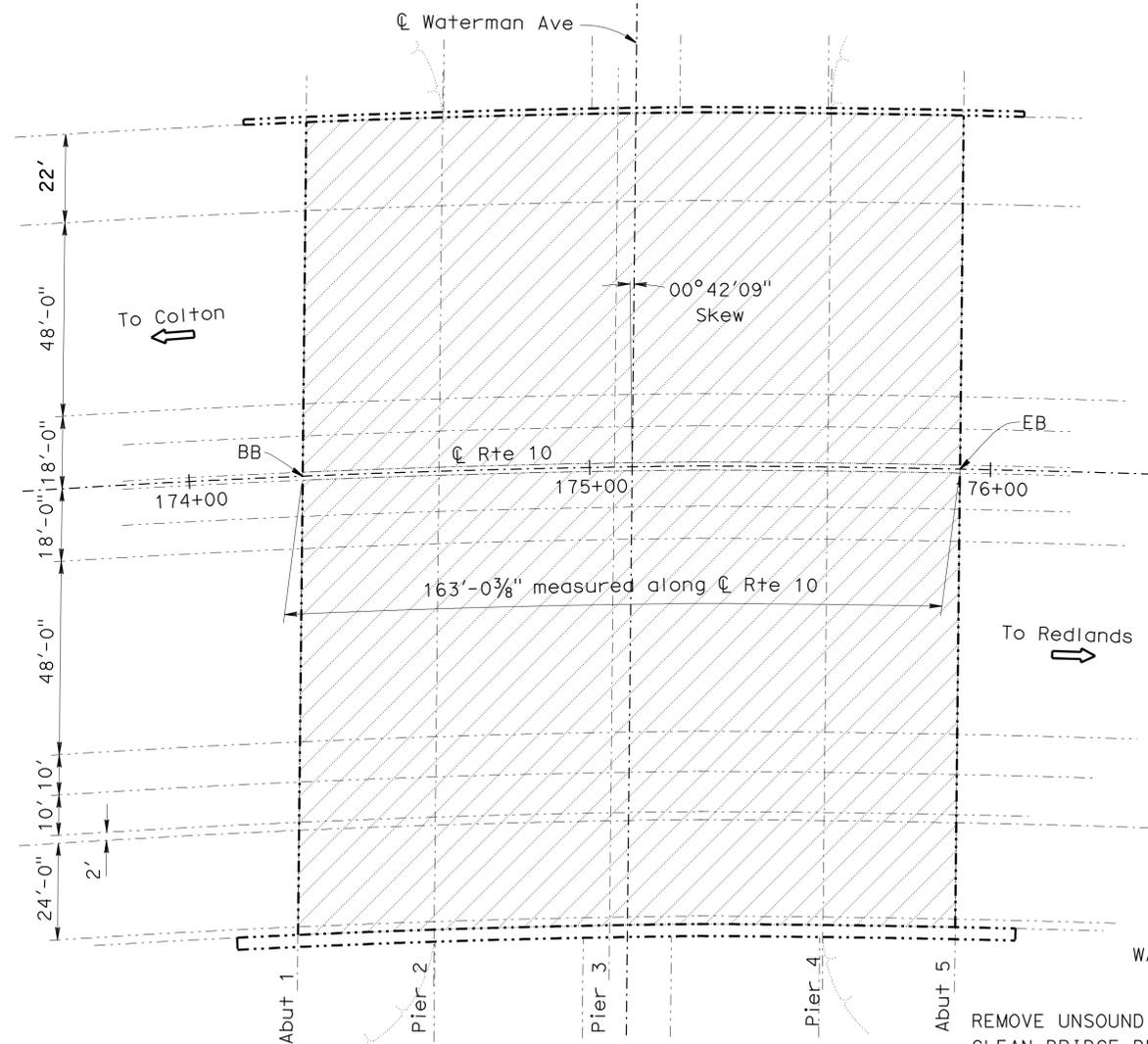
REVISION DATES
01-16-09 04-16-09 04-17-09 04-20-09 06-27-09 10-27-09

SHEET 3 OF 13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	20	29
			10-27-09	REGISTERED CIVIL ENGINEER DATE	
2-22-10			PLANS APPROVAL DATE		
No. C69896			Exp. 09/30/10		
CIVIL			STATE OF CALIFORNIA		
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LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
-  Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
-  Indicates limits of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal, repair joint spalls.



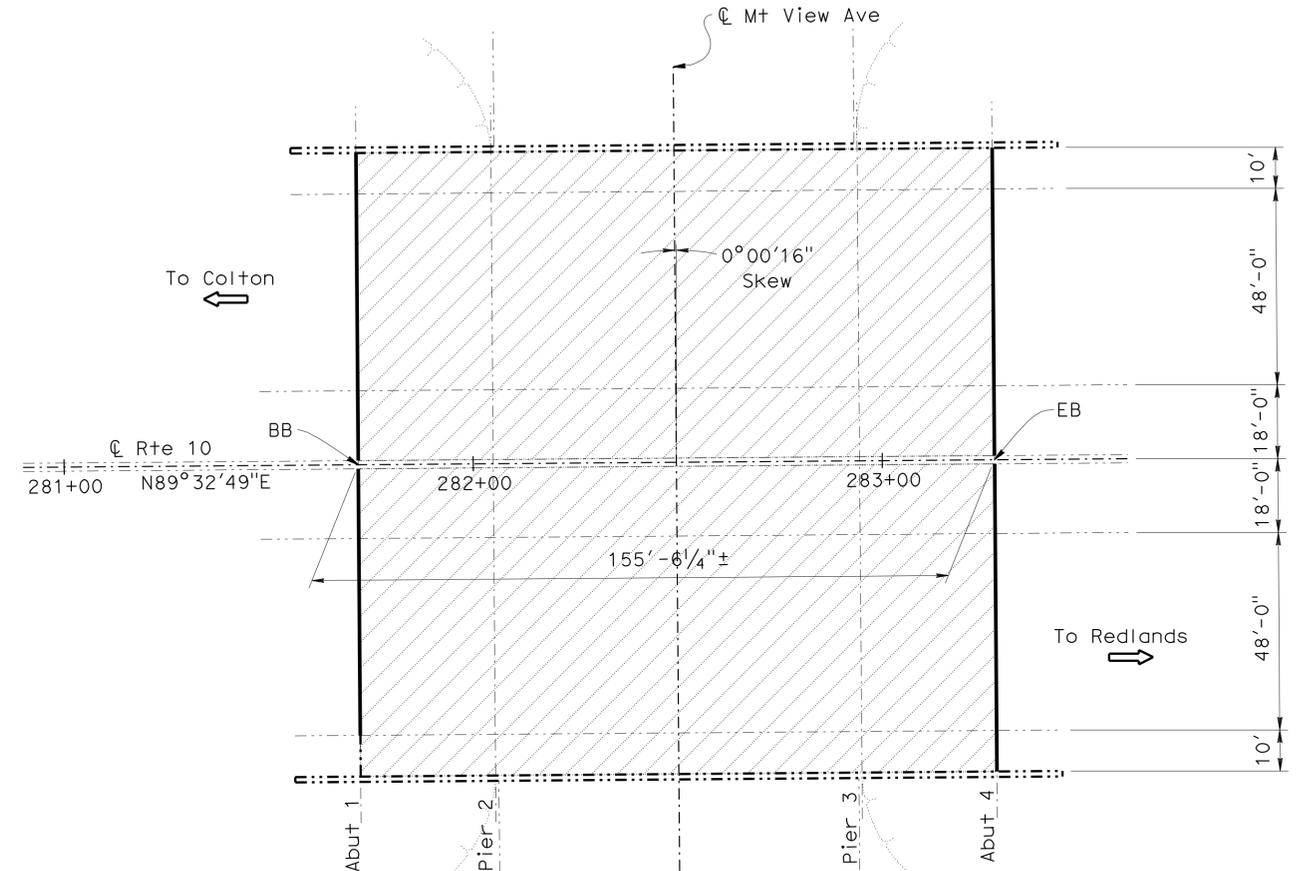
WATERMAN AVENUE UC

Br No. 54-0600, Rte 10, PM 25.26
Scale 1" = 20'



WATERMAN AVENUE UC #54-0600
QUANTITIES

REMOVE UNSOUND CONCRETE	80 CF
CLEAN BRIDGE DECK	32,110 SQFT
RAPID SETTING CONCRETE (PATCH)	80 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	32,110 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	404 GAL



MOUNTAIN VIEW AVENUE UC

Br No. 54-0596, Rte 10, PM 27.3
Scale: 1" = 20'



MOUNTAIN VIEW AVENUE UC #54-0596
QUANTITIES

REMOVE UNSOUND CONCRETE	60 CF
CLEAN BRIDGE DECK	23,480 SQFT
CLEAN EXPANSION JOINT	300 LF
RAPID SETTING CONCRETE (PATCH)	60 CF
JOINT SEAL (MR 1/2")	300 LF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	23,480 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	294 GAL

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

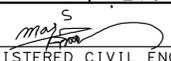
 DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Ramesh Patel	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

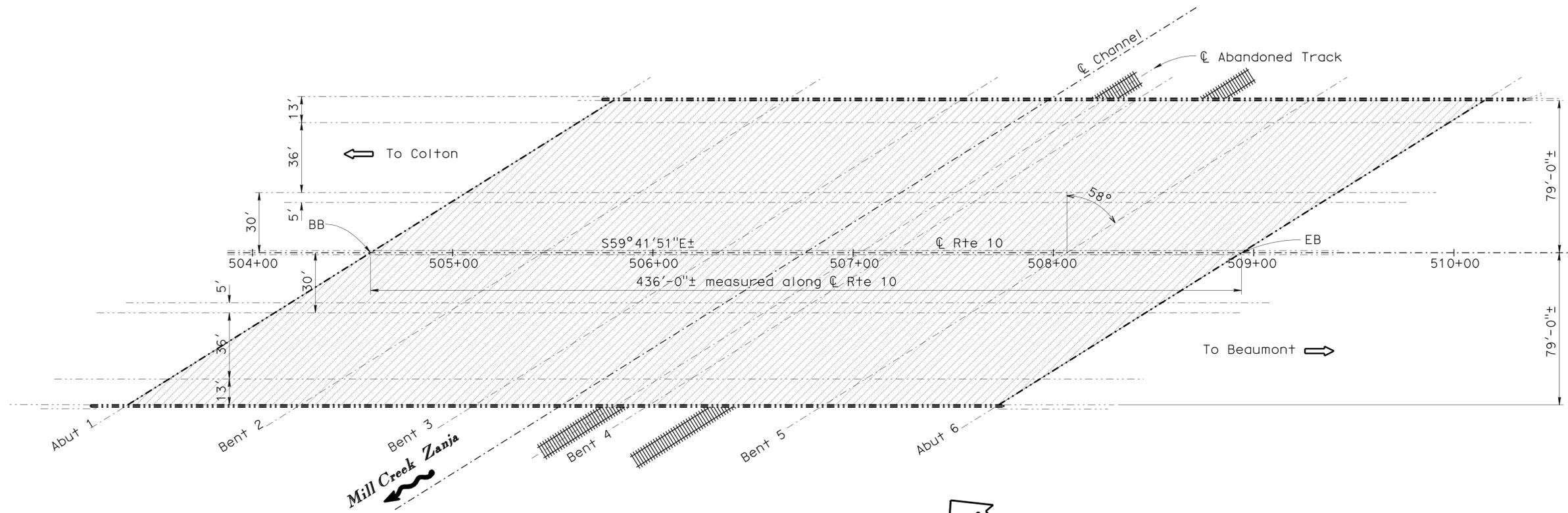
BRIDGE NO. Various
POST MILE Varies

ROUTE 10,210,215 BRIDGES
GENERAL PLAN NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	21	29
			10-27-09	REGISTERED CIVIL ENGINEER DATE	
2-22-10			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>					

LEGEND:

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REDLANDS OH

Br No. 54-0472, Rte 10, PM 31.52
Scale: 1" = 30'



REDLANDS OH #54-0472
QUANTITIES

REMOVE UNSOUND CONCRETE	165 CF
CLEAN BRIDGE DECK	65,800 SQFT
RAPID SETTING CONCRETE (PATCH)	165 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	65,800 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	825 GAL

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTES 10,210,215 BRIDGES GENERAL PLAN NO. 5																					
	DETAILS	BY Clayton Tom	CHECKED Ramesh Patel	LAYOUT	BY Clayton Tom			CHECKED Mazin Ibrahim		POST MILE																				
	QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell			PLANS AND SPECS COMPARED Tanya Kershell		VARIES																				
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 08 EA OM3301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <th colspan="10">REVISION DATES</th> </tr> <tr> <td>03-08-09</td> <td>03-18-09</td> <td>04-02-09</td> <td>04-07-09</td> <td>04-16-09</td> <td>04-17-09</td> <td>04-20-09</td> <td>08-04-09</td> <td>08-27-09</td> <td>10-27-09</td> </tr> </table>	REVISION DATES										03-08-09	03-18-09	04-02-09	04-07-09	04-16-09	04-17-09	04-20-09	08-04-09	08-27-09	10-27-09	SHEET 5 OF 13
REVISION DATES																														
03-08-09	03-18-09	04-02-09	04-07-09	04-16-09	04-17-09	04-20-09	08-04-09	08-27-09	10-27-09																					

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210, 215	Var	22	29

10-27-09
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MAZIN S. IBRAHIM
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA

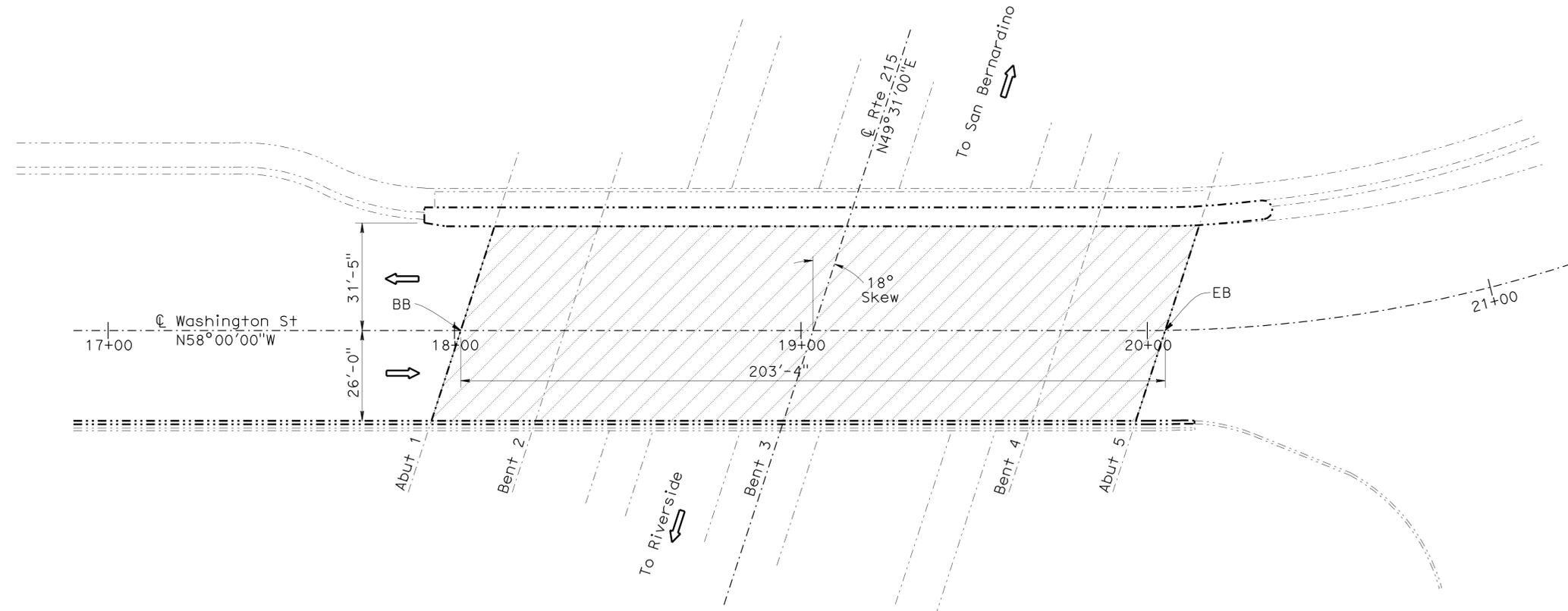
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WASHINGTON AVENUE OC #54-0530
QUANTITIES

REMOVE UNSOUND CONCRETE	30 CF
CLEAN BRIDGE DECK	11,680 SQFT
RAPID SETTING CONCRETE (PATCH)	30 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	11,680 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	146 GAL



WASHINGTON AVENUE OC

Br No. 54-0530, Rte 215, PM 2.69
Scale: 1" = 20'

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	BY Clayton Tom	CHECKED Ramesh Patel	LAYOUT	BY Clayton Tom
	QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various	ROUTES 10,210,215 BRIDGES GENERAL PLAN NO. 6
POST MILE	Varies	
BRIDGE NO.	Various	

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10, 210, 215	Var	23	29

10-27-09
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MAZIN S. IBRAHIM
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA

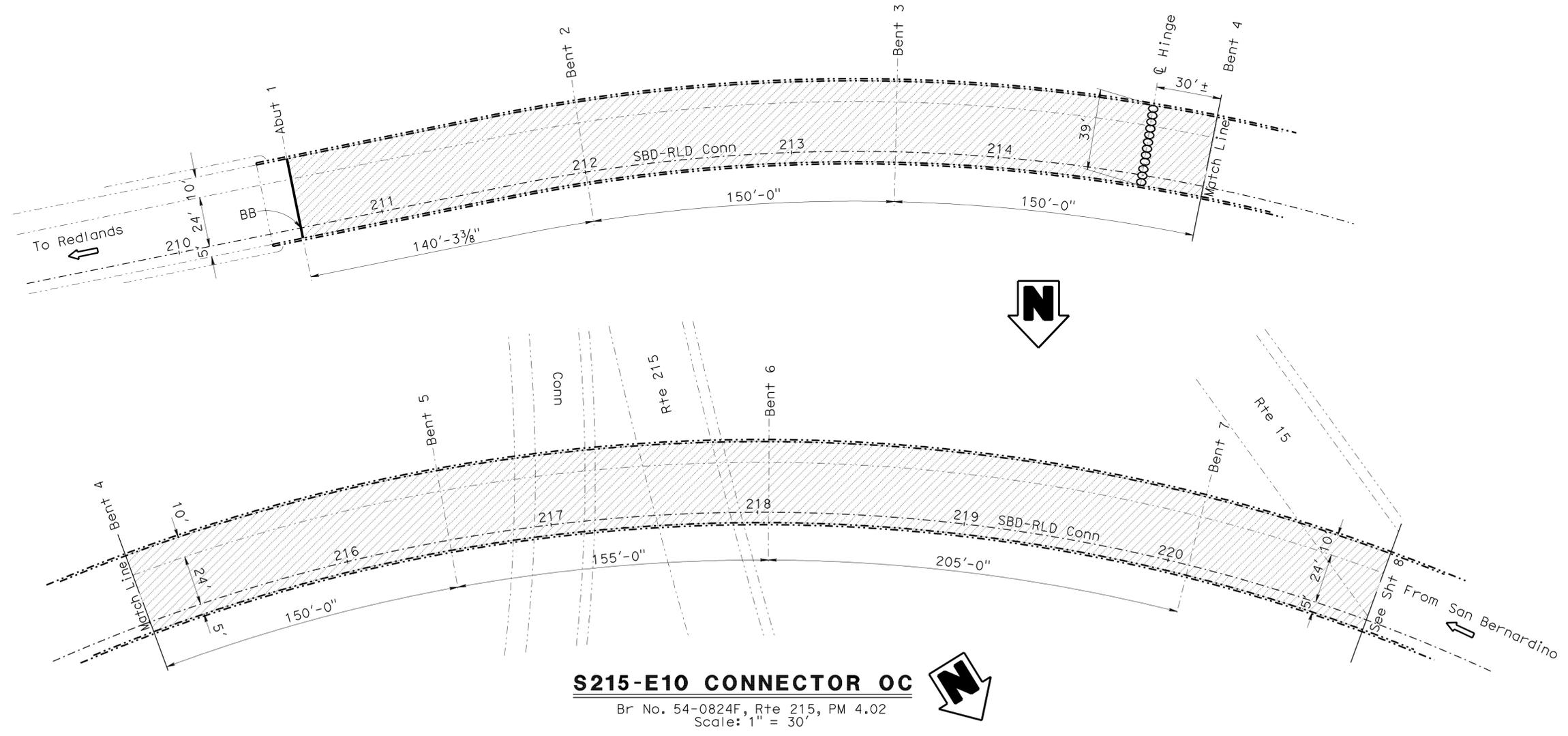
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND:

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- ▧ Indicates limits of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal, repair joint spalls.
- ▨ Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
- Indicates location of existing modular joint seal assembly removal and placement with new joint seal.

S215-E10 CONNECTOR OC #54-0824F
QUANTITIES

REMOVE UNSOUND CONCRETE	152 CF
CLEAN BRIDGE DECK	60,644 SQFT
BRIDGE REMOVAL (PORTION)	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	4 CY
CLEAN EXPANSION JOINT	78 LF
RAPID SETTING CONCRETE (PATCH)	152 CF
JOINT SEAL (MR 1 1/2")	78 LF
JOINT SEAL ASSEMBLY (MR 4")	39 LF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	60,644 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	758 GAL



S215-E10 CONNECTOR OC
 Br No. 54-0824F, Rte 215, PM 4.02
 Scale: 1" = 30'

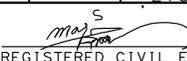
NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

TONY D. BRAKE
 DESIGN ENGINEER

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	BY Clayton Tom	LIVE LOADING: AND PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Ramesh Patel	LAYOUT	BY Clayton Tom	CHECKED Mazin Ibrahim
QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell	PLANS AND SPECS COMPARED Tanya Kershell

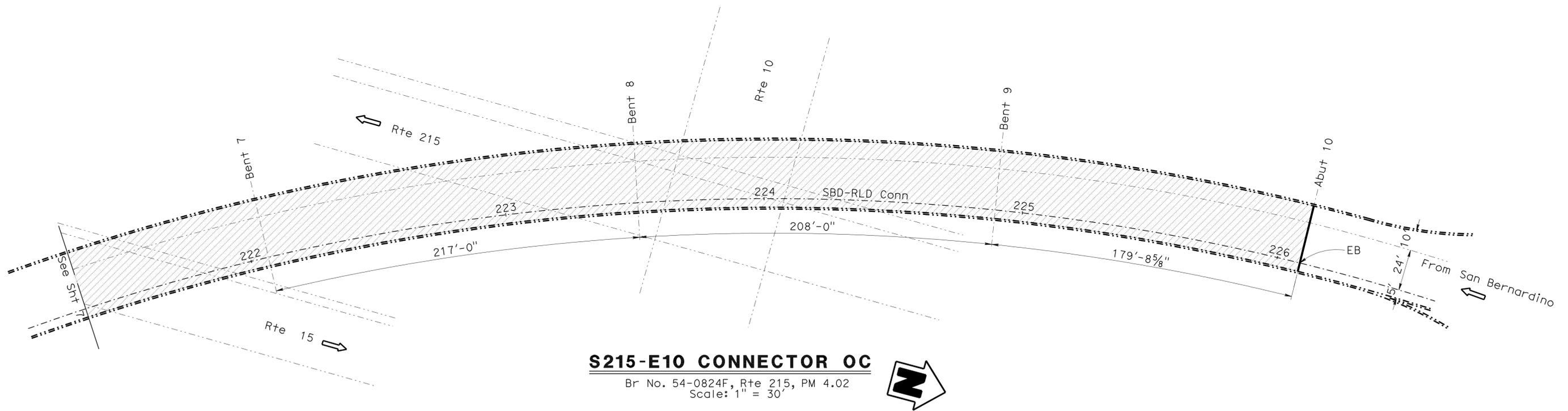
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies
ROUTES 10, 210, 215 BRIDGES
GENERAL PLAN NO. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	24	29
			10-27-09	REGISTERED CIVIL ENGINEER DATE	
2-22-10			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>		

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TONY D. BRAKE
 DESIGN ENGINEER

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: AND HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Ramesh Patel	LAYOUT	BY Clayton Tom
QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	BY Tanya Kershell
				CHECKED Mazin Ibrahim
				PLANS AND SPECS COMPARED Tanya Kershell

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various	ROUTES 10,210,215 BRIDGES GENERAL PLAN NO. 8
POST MILE	Varies	
BRIDGE NO.	Various	

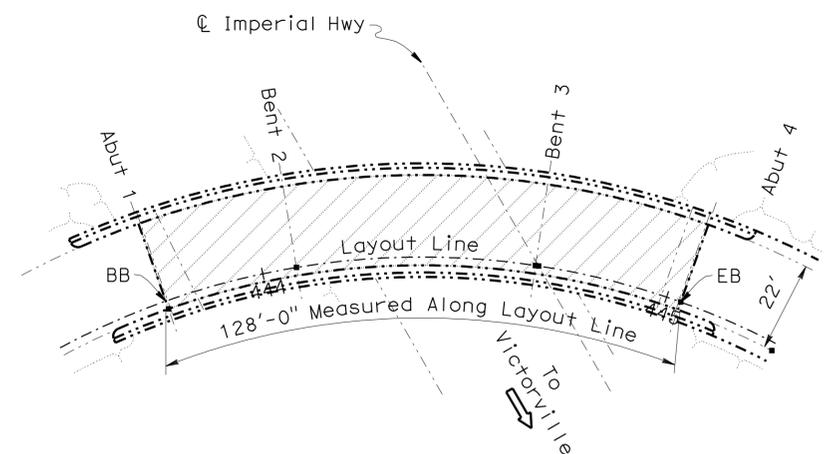
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210, 215	Var	25	29

REGISTERED CIVIL ENGINEER DATE 10-27-09
 PLANS APPROVAL DATE 2-22-10
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA

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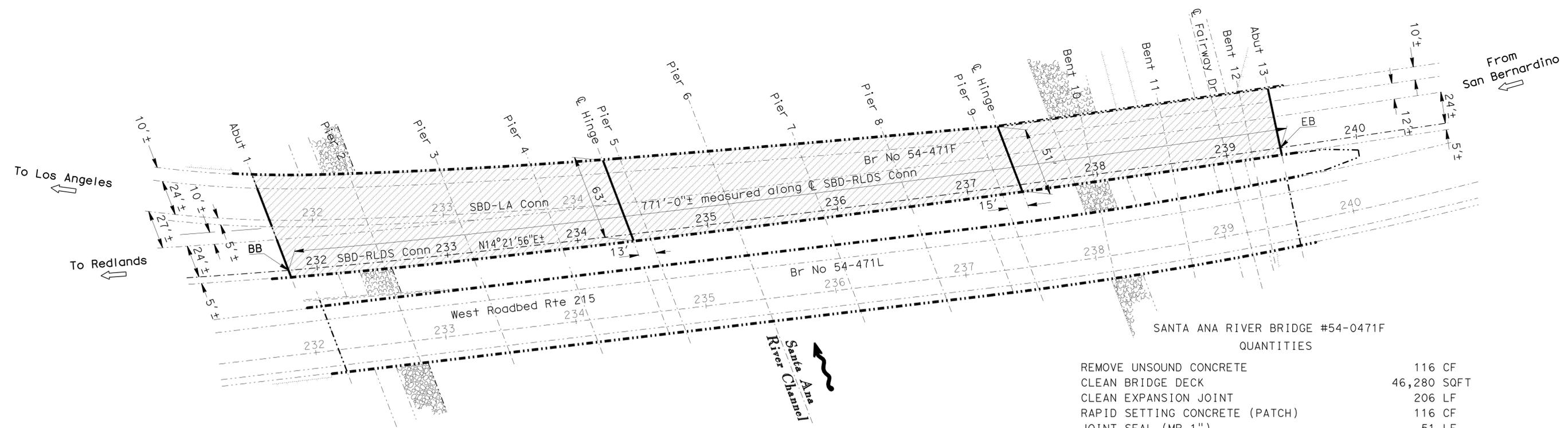


S215-13TH ST/N215 OFF-RAMP #54-0521C
 QUANTITIES

REMOVE UNSOUND CONCRETE	7 CF
CLEAN BRIDGE DECK	2,815 SQFT
RAPID SETTING CONCRETE (PATCH)	7 CF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	2,815 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	35 GAL

S215-13TH St/N215 OFF-RAMP

Br No. 54-0521C, Rte 215, PM 8.23
 No Scale



SANTA ANA RIVER BRIDGE #54-0471F
 QUANTITIES

REMOVE UNSOUND CONCRETE	116 CF
CLEAN BRIDGE DECK	46,280 SQFT
CLEAN EXPANSION JOINT	206 LF
RAPID SETTING CONCRETE (PATCH)	116 CF
JOINT SEAL (MR 1")	51 LF
BONDED JOINT SEAL (MR 3")	51 LF
BONDED JOINT SEAL (MR 4")	104 LF
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	46,280 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	580 GAL

SANTA ANA RIVER BRIDGE

Br No. 54-0471F, Rte 215, PM 4.21
 No Scale



NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	By Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	By Clayton Tom	CHECKED Ramesh Patel	LAYOUT	By Clayton Tom
	QUANTITIES	By Mazin Ibrahim	CHECKED Ramesh Patel	SPECIFICATIONS	By Tanya Kershell

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

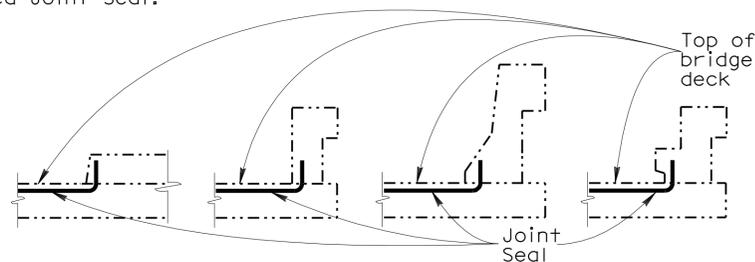
BRIDGE NO. Various
 POST MILE Varies

ROUTES 10,210,215 BRIDGES
GENERAL PLAN NO. 9

JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	JOINT SEAL LOCATION	MINIMUM "MR" (inches)	EXISTING WATERSTOP	APPROX LENGTH (feet)	APPROX DEPTH TO CLEAN EXP JOINT (inches)	APPROX DEPTH OF JOINT SPALLS (inches)	APPROX WIDTH OF JOINT SPALLS (inches)	APPROX LENGTH OF JOINT SPALLS (feet)
GOLDEN AVENUE UC	54-0792R	ABUTMENT 1 PN	1"	NO	52	6	3	6	5
		ABUTMENT 2 PN	1"	NO	52	6	3	6	5
GOLDEN AVENUE UC	54-0792L	ABUTMENT 1 PN	1"	NO	52	6	3	6	5
		ABUTMENT 2 PN	1"	NO	52	6	3	6	5
DEL ROSA UC	54-0793R	ABUTMENT 1 PN	1"	NO	55	6	3	6	5
		ABUTMENT 3 PN	1"	NO	55	6	3	6	5
DEL ROSA UC	54-0795R	ABUTMENT 1 PN	1"	NO	55	6	3	6	5
		ABUTMENT 3 PN	1"	NO	55	6	3	6	5
STERLING AVENUE UC	54-0795L	ABUTMENT 1 PN	1"	NO	57	6	3	6	5
		ABUTMENT 2 PN	1"	NO	57	6	3	6	5
STERLING AVENUE UC	54-0595L	ABUTMENT 1 PN	1"	NO	57	6	3	6	5
		ABUTMENT 2 PN	1"	NO	57	6	3	6	5
MOUNTAIN VIEW AVENUE UC	54-0596	ABUTMENT 1	1/2"	NO	150	6	3	6	5
		ABUTMENT 4	1/2"	NO	150	6	3	6	5
S215-E10 CONNECTOR OC	54-0824F	ABUTMENT 1	1 1/2"	NO	39	6	3	6	5
		HINGE 3	4"	NO	39	12	3	6	5
		ABUTMENT 10	1 1/2"	NO	39	6	3	6	5
SANTA ANA RIVER BRIDGE	54-0471F	ABUTMENT 1	*4"	NO	41	12	3	6	5
		HINGE 4	*4"	YES	63	12	3	6	5
		HINGE 9	*3"	YES	51	12	3	6	5
		ABUTMENT 13	1"	NO	51	6	3	6	5

* Use Bonded Joint Seal.

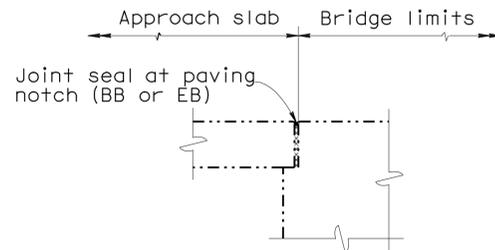


BARRIER RAIL

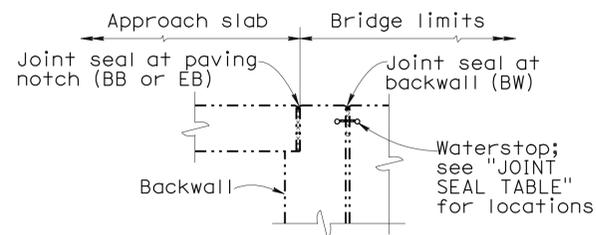
JOINT SEAL AT LOW SIDE OF DECK

Note: Details shown for illustration purposes only.

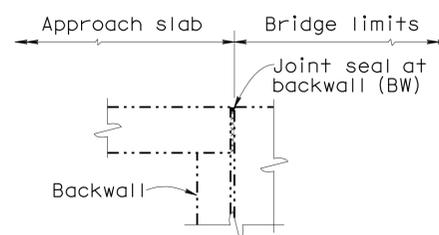
For use only where deck joint matches the sidewalk, curb or barrier rail joint.



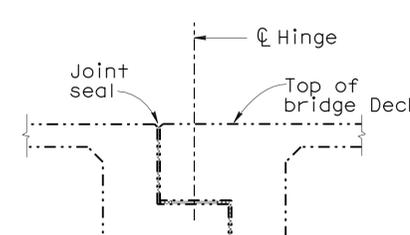
DIAPHRAGM ABUTMENT



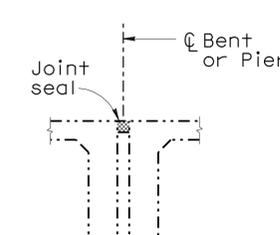
ABUTMENT WITH BACKWALL AND PAVING NOTCH



ABUTMENT WITH BACKWALL



HINGE



BENT OR PIER

JOINT SEAL LOCATION

NO SCALE

NOTE:
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DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel
DETAILS	BY Clayton Tom	CHECKED Ramesh Patel
QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTES 10,210,215 BRIDGES
MISCELLANEOUS DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	26	29

10-27-09
REGISTERED CIVIL ENGINEER DATE

2-22-10
PLANS APPROVAL DATE

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NOTES:

The following notes apply to **JOINT SEAL TYPE A:**

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

For details not shown see RSP B6-21.

The following notes apply to **JOINT SEAL TYPE B:**

1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.

2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.

3) W1 shall 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 3.0 PSI.

4) Bend Type B joint seal 6 inches up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.

For details not shown see RSP B6-21.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	27	29

REGISTERED CIVIL ENGINEER		DATE
10-27-09		
PLANS APPROVAL DATE		
2-22-10		

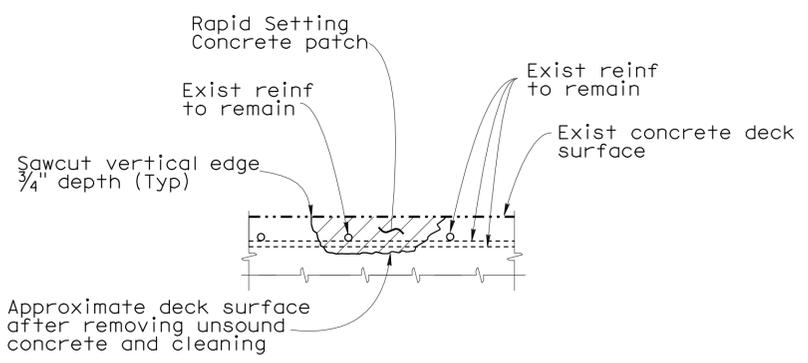
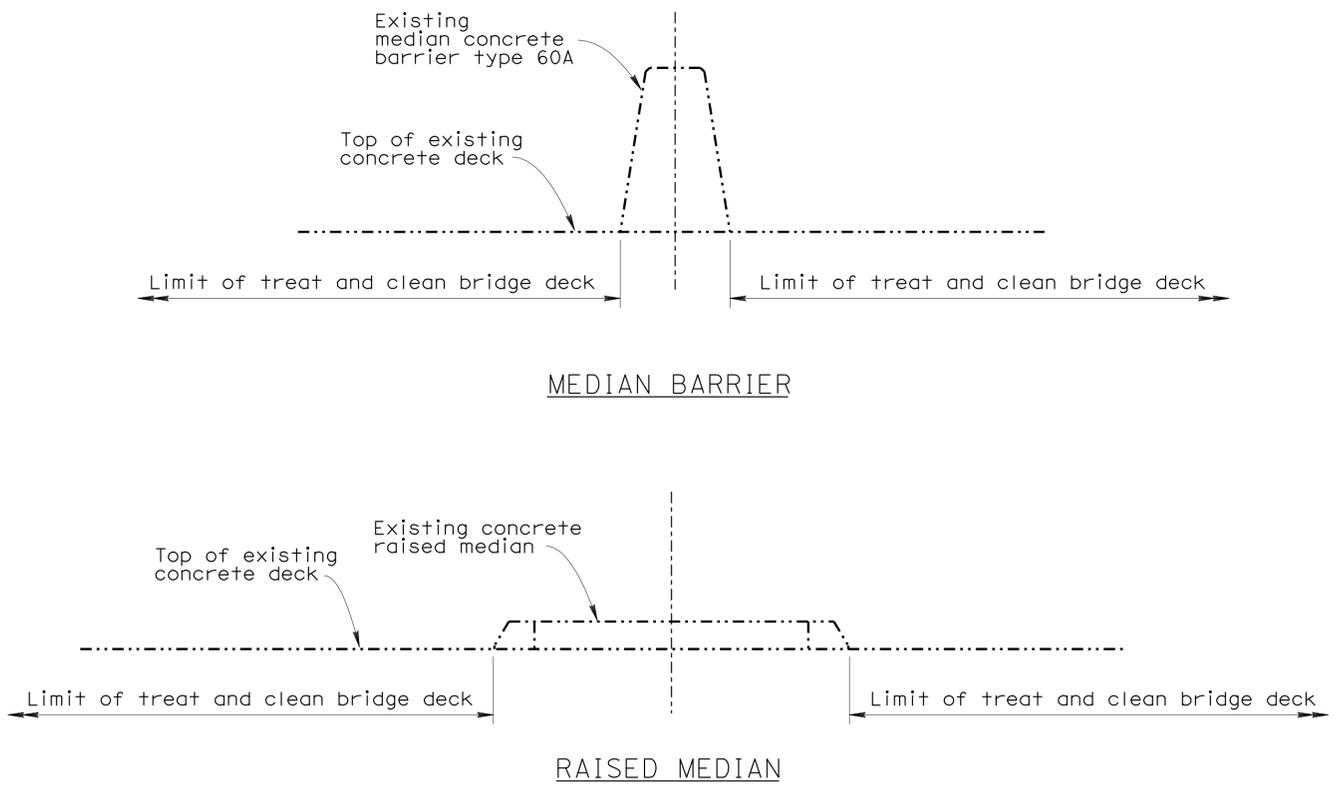
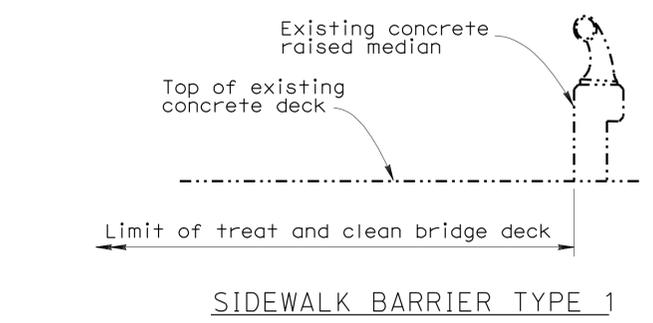
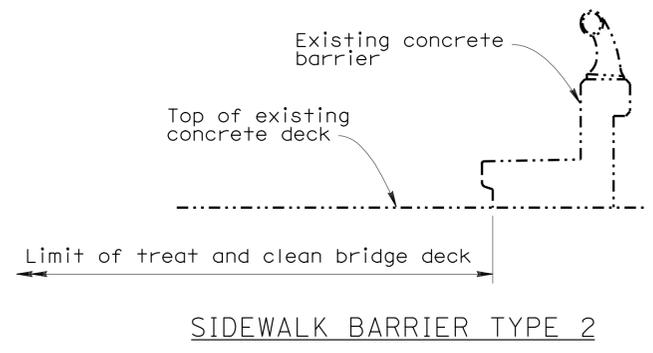
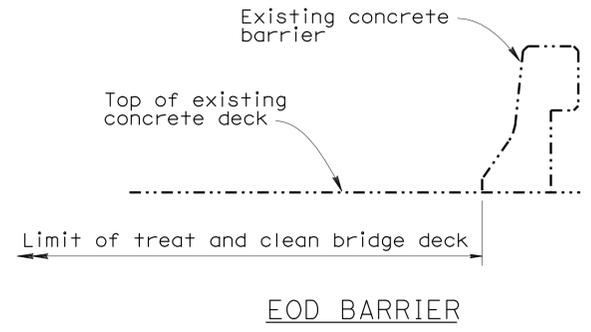
REGISTERED PROFESSIONAL ENGINEER
MAZIN S. IBRAHIM
 No. C69896
 Exp. 09/30/10
 CIVIL
 STATE OF CALIFORNIA

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DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)

BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCHES)
ARROWHEAD AVENUE OC	54-0766	1	3
GOLDEN AVENUE UC	54-0792R	1	3
GOLDEN AVENUE UC	54-0792L	1	3
DEL ROSA UC	54-0793R	1	3
DEL ROSA UC	54-0793L	1	3
STERLING AVENUE UC	54-0795R	1	3
STERLING AVENUE UC	54-0795L	1	3
ACCESS ROAD UC	54-1058R	1	3
WATERMAN AVENUE UC	54-0600	1	3
MOUNTAIN VIEW AVENUE UC	54-0596	1	3
REDLAND OH	54-0472	1	3
WASHINGTON AVENUE OC	54-0530	1	3
S215-E10 CONNECTOR OC	54-0824F	1	3
SANTA ANA RIVER BRIDGE	54-0471F	1	3
S215-13TH St/N215 OFF-RAMP	54-0521C	1	3

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



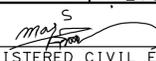
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

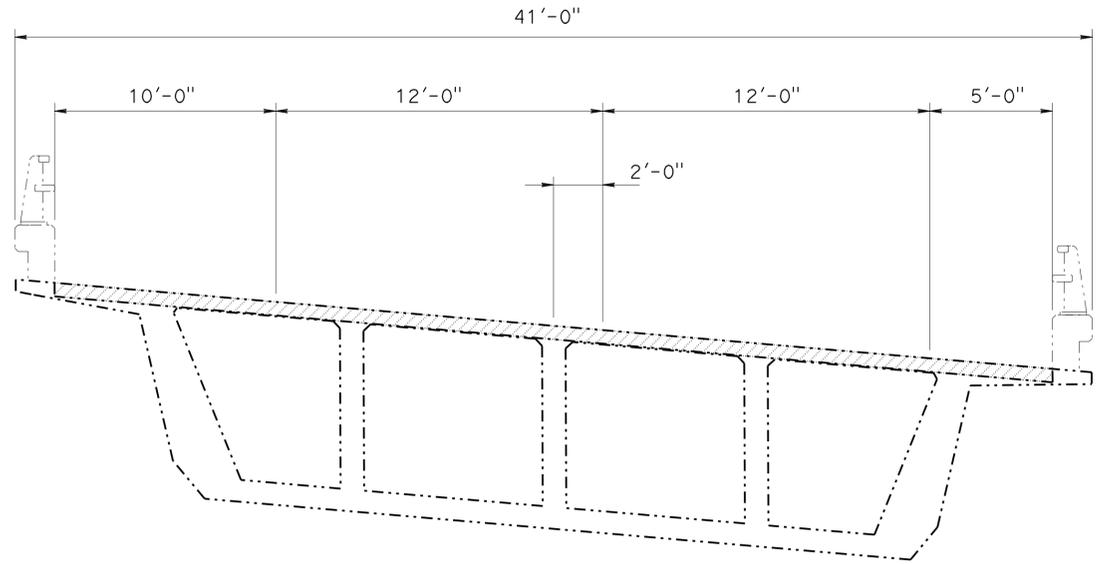
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

TYPICAL LIMITS OF DECK WORK NO SCALE

DESIGN BY Mazin Ibrahim CHECKED Ramesh Patel DETAILS BY Clayton Tom CHECKED Ramesh Patel QUANTITIES BY Mazin Ibrahim CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various POST MILE Varies	ROUTES 10,210,215 BRIDGES MISCELLANEOUS DETAILS NO. 2
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3		CU 08 EA 0M3301	REVISION DATES 02-17-09 04-02-09 04-07-09 04-08-09 04-16-09 04-17-09 04-28-09 05-04-09 08-27-09 10-27-09
	STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 2/4/05)		DISREGARD PRINTS BEARING EARLIER REVISION DATES	

FILE => 08-0M3301-u-miscd+02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	10,210,215	Var	28	29
 REGISTERED CIVIL ENGINEER			10-27-09	DATE	
PLANS APPROVAL DATE 2-22-10					
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.					



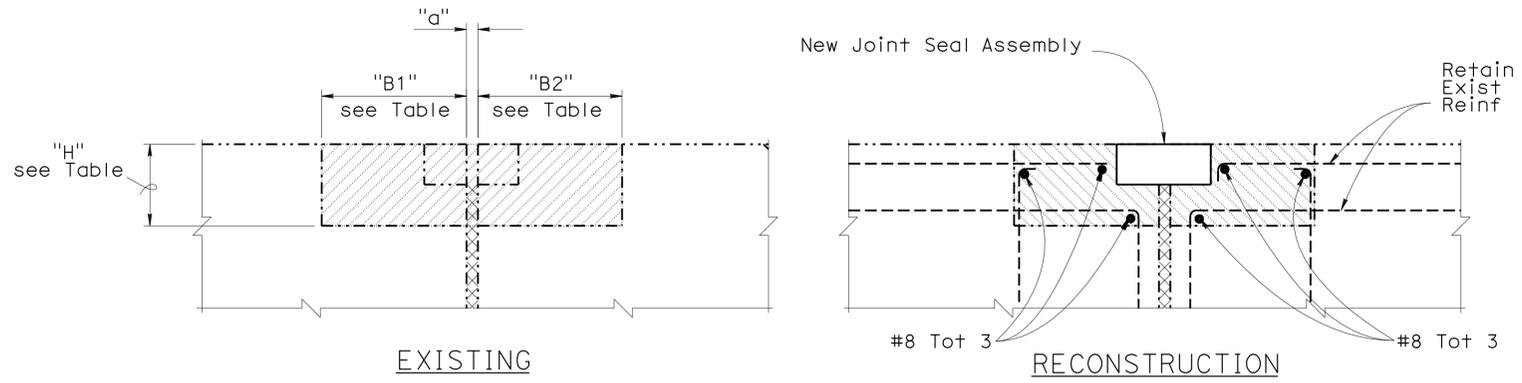
TYPICAL SECTION
 Br No. 54-0824F
 NO SCALE

TEMPORARY DECKING DESIGN LOADING

1. Movement demand per foot = 3800 lbs-ft/ft
2. For steel plate systems:
 - a. anchor bolt shear per foot = 2700 lbs/ft
 - b. anchor bolt tension = 4225 lbs
 - c. maximum anchor bolt spacing = 1.0 ft

LEGEND:

- Indicates existing.
- Indicates new structure.
-  Indicates concrete removal limits. Preserve existing reinf.
-  Indicates new PCC



JOINT SEAL ASSEMBLY REPLACEMENT
 (AT HINGE)
 NO SCALE

JOINT SEAL ASSEMBLY DIMENSIONS				
BRIDGE NUMBER	JOINT SEAL LOCATION	"B1"	"B2"	"H"
54-0824F	Hinge	16"	17"	10"

For "a" dimensions, see "JOINT SEAL ASSEMBLY" sheet.

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

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel
DETAILS	BY Clayton Tom	CHECKED Ramesh Patel
QUANTITIES	BY Mazin Ibrahim	CHECKED Ramesh Patel

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTES 10,210,215 BRIDGES
 MISCELLANEOUS DETAILS NO. 3

