

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	1	18



**INDEX OF PLANS**

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION AREA SIGNS
3-7	DETOUR PLANS AND QUANTITIES
8	PAVEMENT DELINEATION QUANTITIES
9-10	SIGN DETAILS AND QUANTITIES
11-14	REVISED STANDARD PLANS

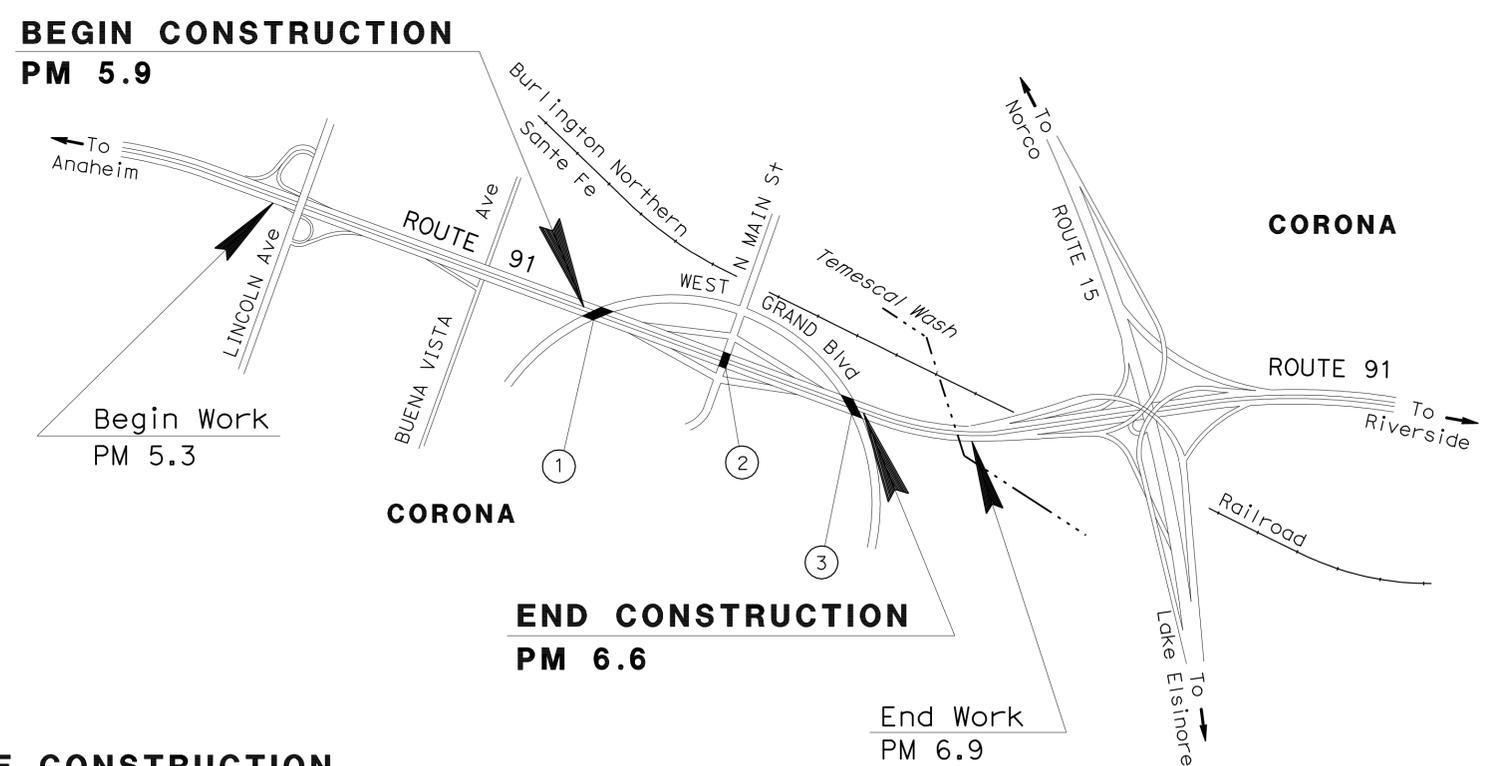
STRUCTURE PLANS

15-18	ROUTE 91 BRIDGES Br No's 56-0445, 56-0448 AND 56-0364
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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 RIVERSIDE COUNTY**  
**IN CORONA**  
**AT VARIOUS LOCATIONS**  
**FROM WEST GRAND BOULEVARD UNDERCROSSING**  
**TO EAST GRAND BOULEVARD UNDERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



**LOCATIONS OF CONSTRUCTION**

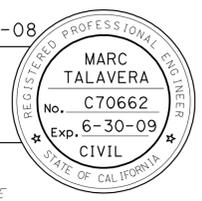
Loc	POST MILE	NAME OF BRIDGE	BRIDGE NUMBER
①	5.99	W. GRAND Blvd UC	56-0445
②	6.34	MAIN St UC	54-0448
③	6.65	E. GRAND Blvd UC	56-0364

NO SCALE

PROJECT MANAGER  
 CATALINO PINING III  
 DESIGN ENGINEER  
 MARC TALAVERA

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

 10-09-08  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER



January 5, 2009  
 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-OK7404**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	2	18

*Thanh Trinh* 10-09-08  
 REGISTERED CIVIL ENGINEER DATE

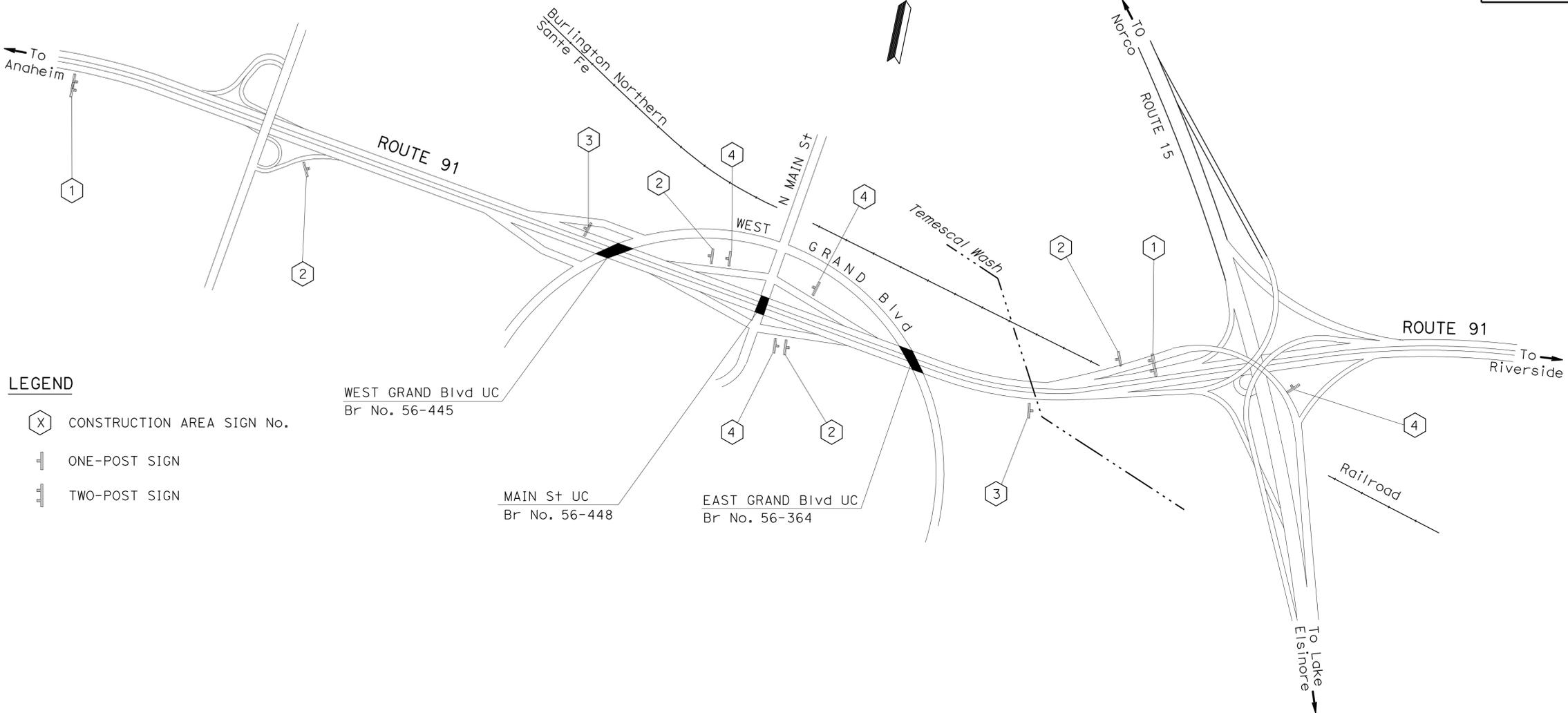
1-5-09  
 PLANS APPROVAL DATE

T. TRINH  
 No. C41189  
 Exp. 3-31-09  
 CIVIL

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

**NOTES:**

- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- USE STANDARD PLANS T10 AND T14 FOR TRAFFIC CONTROL SYSTEM.
- PORTABLE CMS LOCATIONS TO BE DETERMINED BY THE ENGINEER.



**LEGEND**

- X CONSTRUCTION AREA SIGN No.
- ONE-POST SIGN
- TWO-POST SIGN

WEST GRAND Blvd UC  
Br No. 56-445

MAIN St UC  
Br No. 56-448

EAST GRAND Blvd UC  
Br No. 56-364

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

<b>PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)</b>
(EA)
2

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST(S) AND SIZE	No. OF SIGNS (N) (EA)
1	W20-1	60" x 60"	ROAD WORK AHEAD	2 - 4" x 6"	2
2	W20-1	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	4
3	G20-2	48" x 18"	END ROAD WORK	1 - 4" x 4"	2
4	SC6-3(CA)	48" x 60"	RAMP CLOSED	1 - 6" x 6"	4

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

**CONSTRUCTION AREA SIGN**

NO SCALE

**CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.



USERNAME => trmikes1  
DGN FILE => 80k7401a001.dgn

CU 08380

EA 0K7401

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN A  
 FUNCTIONAL SUPERVISOR: BILL WASSER  
 CALCULATED/DESIGNED BY: KEVIN NGUYEN  
 CHECKED BY: THANH TRINH  
 REVISED BY: KEVIN NGUYEN  
 DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	3	18

<i>Thanh Trinh</i>	10-09-08
REGISTERED CIVIL ENGINEER	DATE
1-5-09	
PLANS APPROVAL DATE	

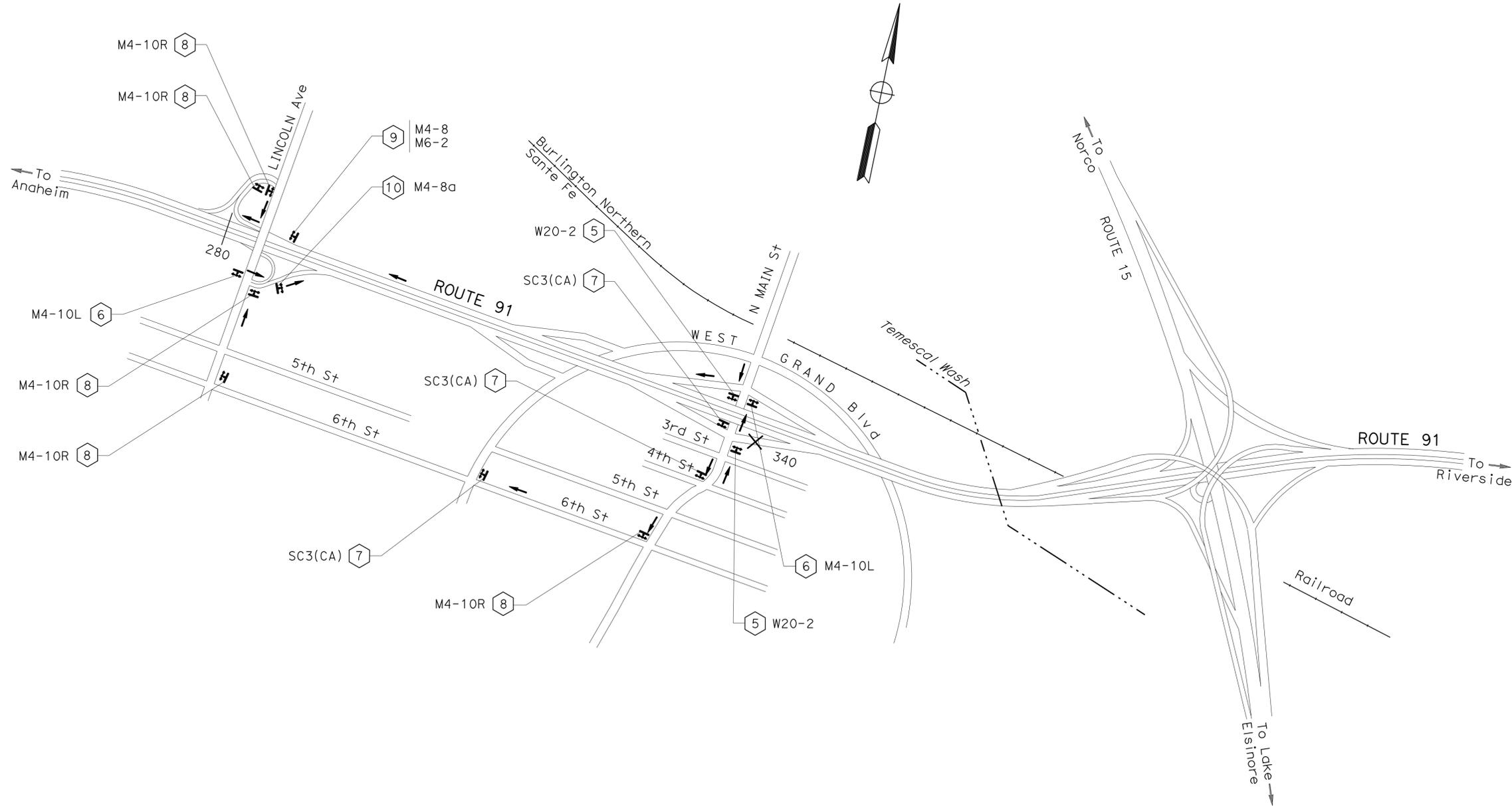
REGISTERED PROFESSIONAL ENGINEER
T. TRINH
No. C41189
Exp. 3-31-09
CIVIL

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.

**LEGEND**

- SIGN MOUNTED ON TYPE III BARRICADE
- RAMP/CONNECTOR CLOSED
- DIRECTION OF DETOUR
- ONE-POST SIGN
- TWO-POST SIGN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN A  
 FUNCTIONAL SUPERVISOR: BILL WASSER  
 CALCULATED/DESIGNED BY: KEVIN NGUYEN  
 CHECKED BY: THANH TRINH  
 REVISED BY: KEVIN NGUYEN  
 DATE REVISED: THANH TRINH



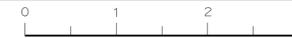
**MAIN St EB ENTRANCE RAMP DETOUR**

**DETOUR PLAN**

NO SCALE

THIS PLAN ACCURATE FOR DETOUR WORK ONLY.

**DE-1**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	4	18

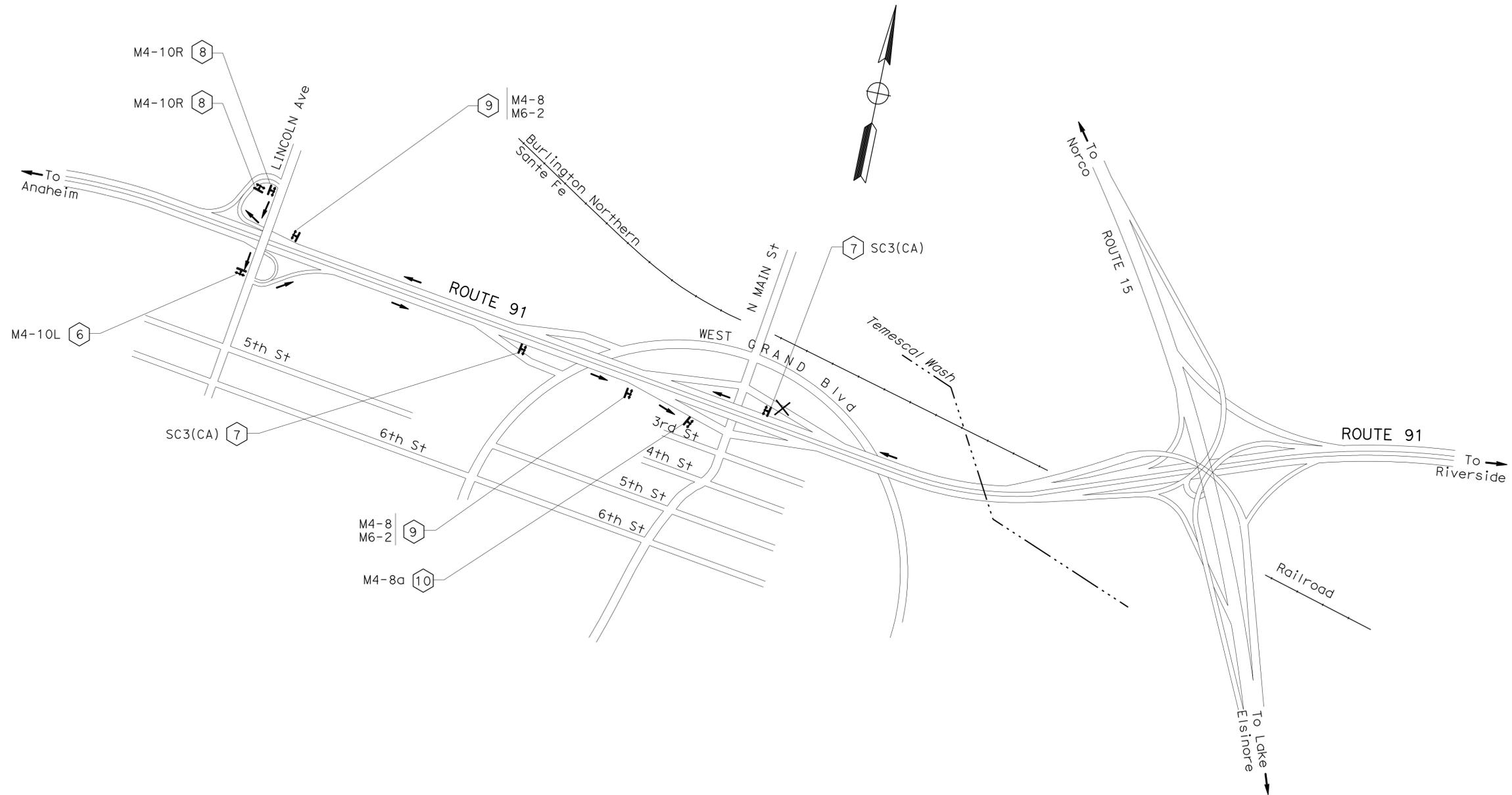
  

<i>Thanh Trinh</i>	10-09-08
REGISTERED CIVIL ENGINEER	DATE
1-5-09	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
T. TRINH
No. C41189
Exp. 3-31-09
CIVIL

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**MAIN ST WB OFF-RAMP DETOUR**

**DETOUR PLAN**

NO SCALE

**DE-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN A	BILL WASSER	CHECKED BY	KEVIN NGUYEN	10-09-08
			THANH TRINH	

THIS PLAN ACCURATE FOR DETOUR WORK ONLY.



USERNAME => trmikes1  
DGN FILE => 80k740mg002.dgn

CU 08380

EA 0K7401

BORDER LAST REVISED 4/11/2008

LAST REVISION | DATE PLOTTED => 22-JAN-2009  
10-09-08 | TIME PLOTTED => 06:06

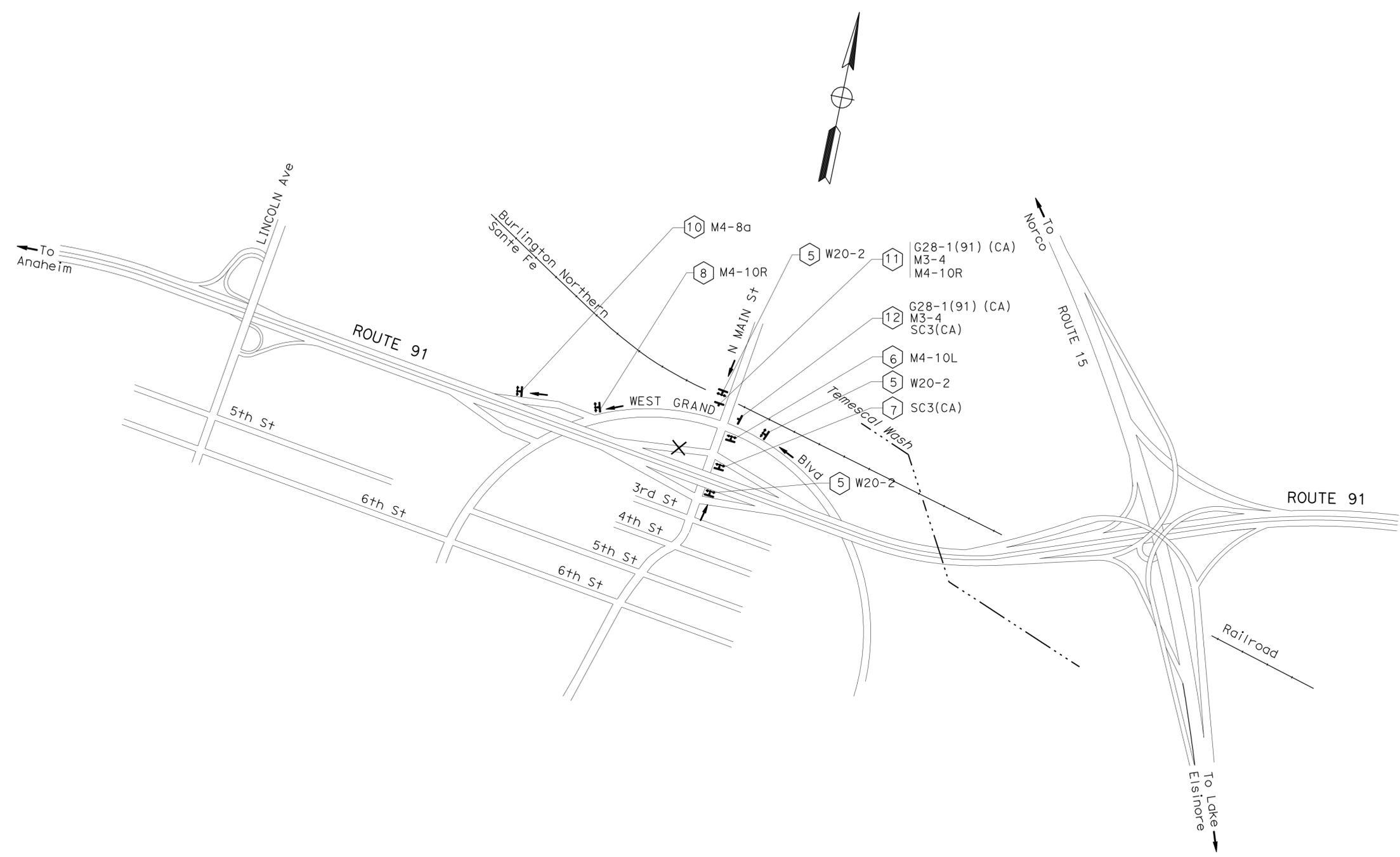
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	5	18

<i>Thanh Trinh</i>	10-09-08
REGISTERED CIVIL ENGINEER	DATE
1-5-09	
PLANS APPROVAL DATE	

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**MAIN St WB ENTRANCE RAMP DETOUR**

**DETOUR PLAN**

NO SCALE

**DE-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN A	BILL WASSER	CHECKED BY	THANH TRINH	

THIS PLAN ACCURATE FOR DETOUR WORK ONLY.



USERNAME => trmikes1  
DGN FILE => 80k740mg003.dgn

CU 08380

EA 0K7401

BORDER LAST REVISED 4/11/2008

LAST REVISION | DATE PLOTTED => 22-JAN-2009  
10-09-08 | TIME PLOTTED => 06:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	6	18

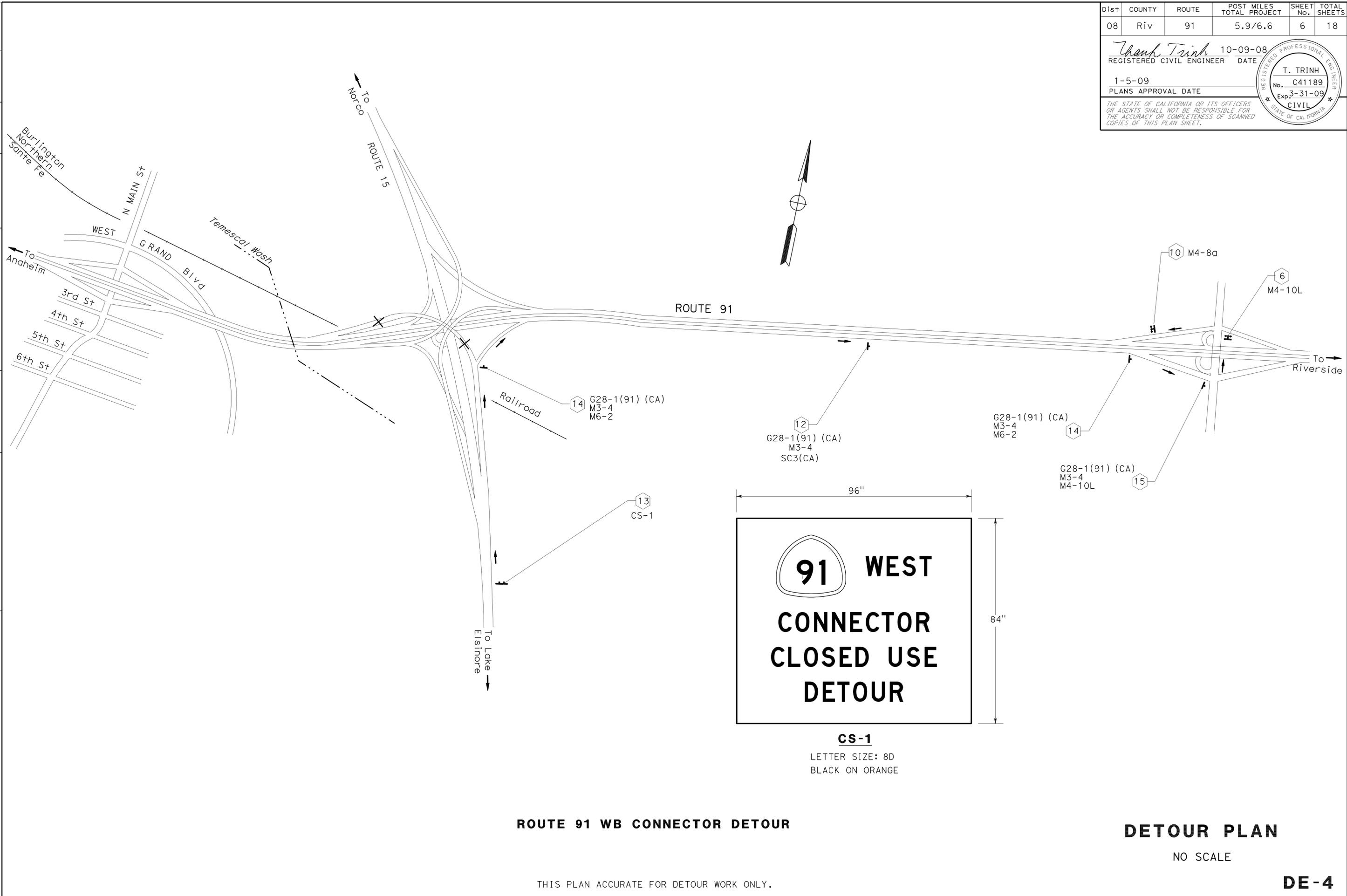
<i>Thanh Trinh</i>	10-09-08
REGISTERED CIVIL ENGINEER	DATE
1-5-09	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
T. TRINH
No. C41189
Exp. 3-31-09
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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
<b>Caltrans</b> TRAFFIC DESIGN A
FUNCTIONAL SUPERVISOR
BILL WASSER
CALCULATED/DESIGNED BY
CHECKED BY
KEVIN NGUYEN
THANH TRINH
REVISOR
DATE
REVISOR
DATE



**ROUTE 91 WB CONNECTOR DETOUR**

**DETOUR PLAN**

NO SCALE

THIS PLAN ACCURATE FOR DETOUR WORK ONLY.

**DE-4**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN A  
 FUNCTIONAL SUPERVISOR: BILL WASSER  
 CALCULATED/DESIGNED BY: KEVIN NGUYEN  
 CHECKED BY: THANH TRINH  
 REVISED BY: KEVIN NGUYEN  
 DATE REVISED: THANH TRINH

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	7	18

*Thanh Trinh* 10-09-08  
 REGISTERED CIVIL ENGINEER DATE

1-5-09  
 PLANS APPROVAL DATE

T. TRINH  
 No. C41189  
 Exp. 3-31-09  
 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.

**CONSTRUCTION AREA SIGNS**

SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE / SYMBOL	No. OF POST(S) AND SIZE	No. OF STATIONARY MOUNTED SIGNS (N)	TYPE III BARRICADE
						(EA)	(EA)
DE-1 & DE-3	5	W20-2	36" x 36"	DETOUR AHEAD			5
DE-1, DE-2, DE-3, & DE-4	6	M4-10L	48" x 18"	DETOUR LEFT			5
DE-1, DE-2 & DE-3	7	SC3(CA)	36" x 12"	↑ DETOUR			6
DE-1, DE-2 & DE-3	8	M4-10R	48" x 18"	DETOUR RIGHT			8
DE-1 & DE-2	9	M4-8	30" x 15"	DETOUR			3
		M6-2	21" x 15"	↘			
DE-1, DE-2, DE-3, & DE-4	10	M4-8a	24" x 18"	END DETOUR			4
DE-3	11	G28-1(91) (CA)	28" x 25"	STATE ROUTE 91 SHIELD	1-6" x 6"	1	
		M3-4	24" x 12"	WEST			
		M4-10R	48" x 18"	DETOUR RIGHT			
DE-3 & DE-4	12	G28-1(91) (CA)	36" x 36"	STATE ROUTE 91 SHIELD	1-6" x 6"	2	
		M3-4	30" x 15"	WEST			
		SC3(CA)	36" x 12"	↑ DETOUR			
DE-4	13	CS-1	96" x 84"	SEE SHEET DE-4	2-6" x 8"	1	
		G28-1(91) (CA)	36" x 36"	STATE ROUTE 91 SHIELD			
	14	M3-4	30" x 15"	WEST	1-6" x 6"	2	
		M6-2	21" x 15"	↘			
	15	G28-1(91) (CA)	36" x 36"	STATE ROUTE 91 SHIELD	1-6" x 6"	1	
		M3-4	30" x 15"	WEST			
		M4-10L	48" x 18"	DETOUR LEFT			
TOTAL							32

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

**DETOUR QUANTITIES**

**DEQ-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	8	18

*Thanh Trinh* 10-09-08  
REGISTERED CIVIL ENGINEER DATE

1-5-09  
PLANS APPROVAL DATE

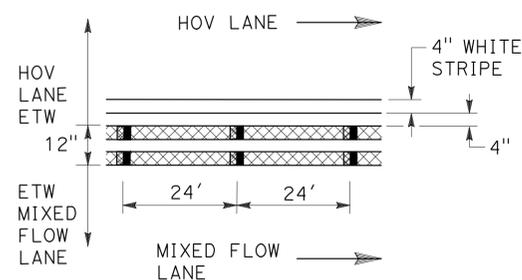
T. TRINH  
No. C41189  
Exp. 3-31-09  
CIVIL

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### PAVEMENT DELINEATION QUANTITIES

LOCATION	DETAIL No.	REMOVE THERMOPLASTIC TRAFFIC STRIPE			THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			REMOVE PAVEMENT MARKER	PAVEMENT MARKER (RETROREFLECTIVE)		PAVEMENT MARKER (NON-REFLECTIVE)	REMARKS
		4" WHITE	8" WHITE (BROKEN)	4" YELLOW	4" WHITE	4" YELLOW	8" WHITE (BROKEN)		TYPE G	TYPE H		
		LF			LF				EA	EA		
W. GRAND Blvd UC (BRIDGE No. 56-445)	DETAIL M-9 (Mod)	310		620	310	310		28		28		
	DETAIL M-10		170**					16	16			
	DETAIL 13M	480*			1920			200	40		160	
	DETAIL 25			645		645		8		8		
	DETAIL 27B	660			660							
MAIN St UC (BRIDGE No. 56-448)	DETAIL M-9 (Mod)	180		360	180	180		16		16		
	DETAIL M-10		90**					10	10			
	DETAIL 13M	270*			1080			114	24		90	
	DETAIL 25			360		360		5		5		
	DETAIL 27B	360			360							
E. GRAND Blvd UC (BRIDGE No. 56-364)											NO PAVEMENT DELINEATION WORK AT THIS BRIDGE	
SUBTOTAL		2250	260		4510	1495	520		90	57		
TOTAL		2510		1985	6525			397	147		250	

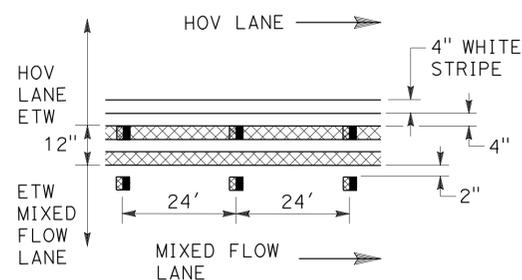
\*ADJUSTED FOR GAPS IN STRIPING DETAIL  
\*\*ADJUSTED FOR GAPS IN STRIPING DETAIL AND FOR 4" STRIPE WIDTH BASIS



**DETAIL M-9 (Mod)**

AT BRIDGE LOCATIONS ON ROUTE 91 EASTBOUND

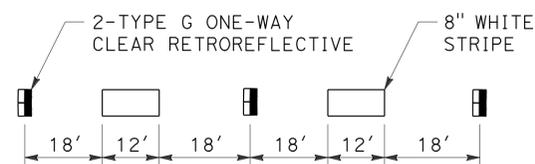
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
- ▨ 4" YELLOW STRIPE



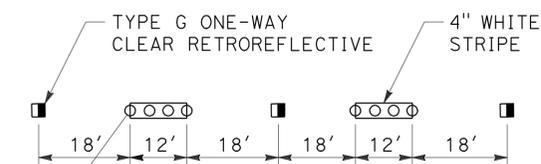
**DETAIL M-9 (Mod)**

AT BRIDGE LOCATIONS ON ROUTE 91 WESTBOUND

- TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
- ▨ 4" YELLOW STRIPE



**DETAIL M-10**  
INGRESS/EGRESS STRIPING DETAIL



**DETAIL 13M**

### PAVEMENT DELINEATION QUANTITIES

PDQ-1

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION QUANTITIES ONLY.

RELATIVE BORDER SCALE IS IN INCHES



USERNAME => frmikes1  
DGN FILE => 80k740nc001.dgn

CU 08380

EA 0K7401

BORDER LAST REVISED 4/11/2008

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
TRAFFIC DESIGN A  
LAST REVISION | DATE PLOTTED => 22-JAN-2009  
10-09-08 TIME PLOTTED => 06:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	9	18

<i>Thanh Trinh</i>	10-09-08
REGISTERED CIVIL ENGINEER	DATE
1-5-09	
PLANS APPROVAL DATE	

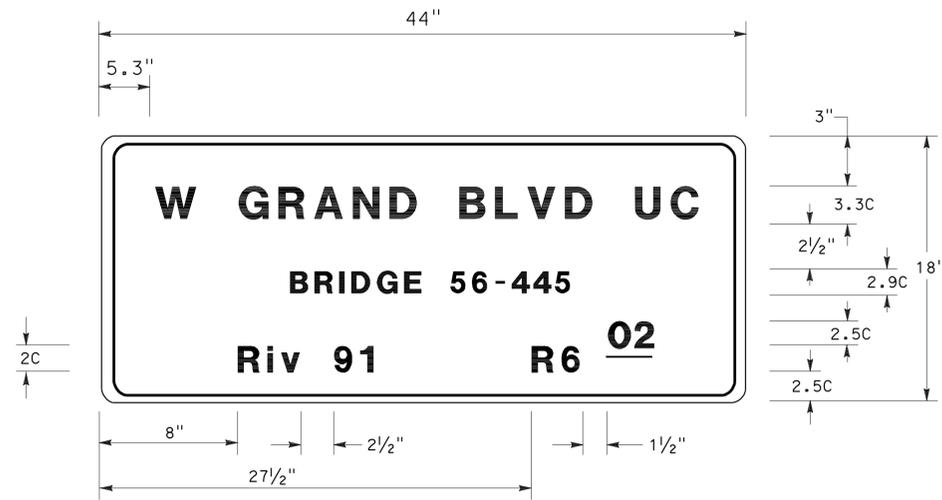
  

T. TRINH
No. C41189
Exp. 3-31-09
CIVIL

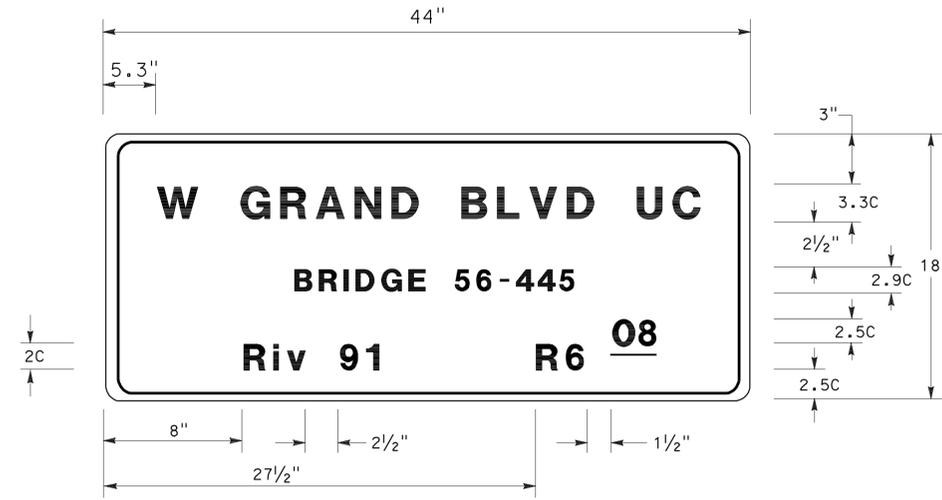
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

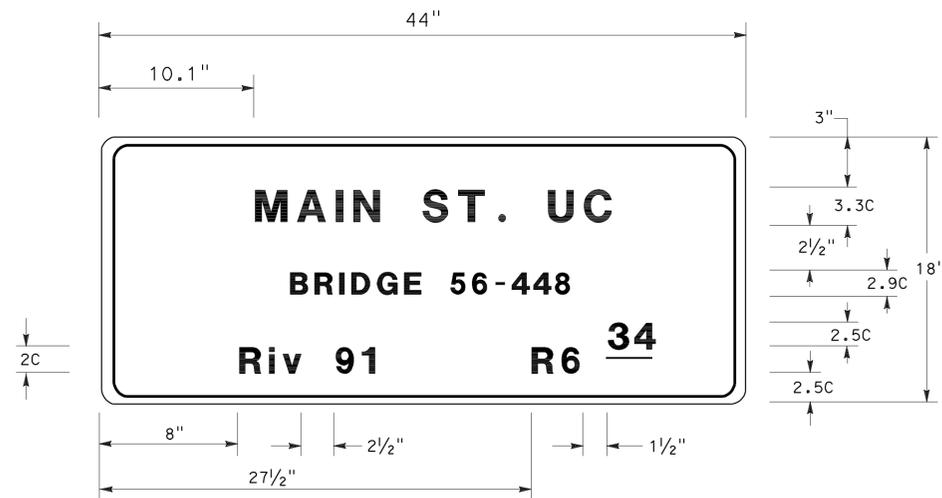
- NEW G11-4.1 SIGNS (44" X 18" X 0.016" THICK) SHALL BE FURNISHED AND INSTALLED AT THE BRIDGE BY THE CONTRACTOR AND SHALL COMPLY WITH CALTRANS STANDARD PLANS RS1, RS2 AND RS3 FOR GUIDE SIGNS INSTALLATION.



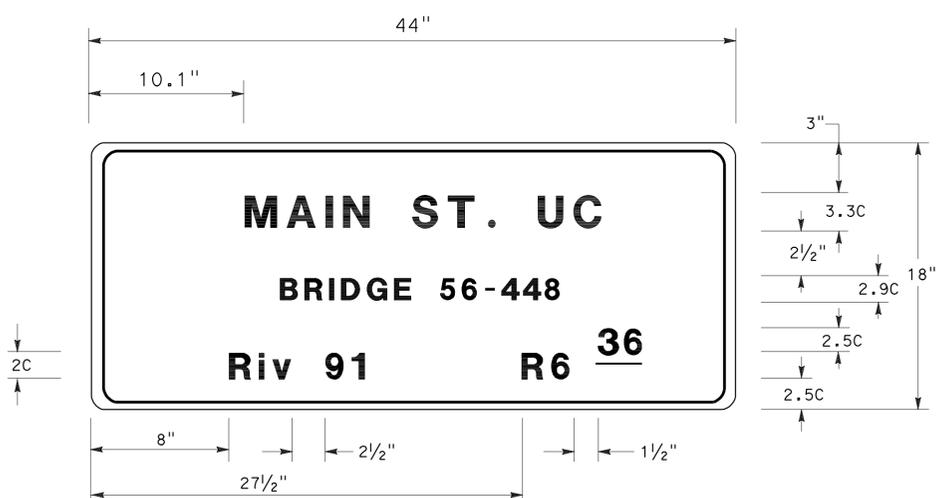
**G11-4.1(CA) SIGN DETAIL FOR EASTBOUND**



**G11-4.1(CA) SIGN DETAIL FOR WESTBOUND**

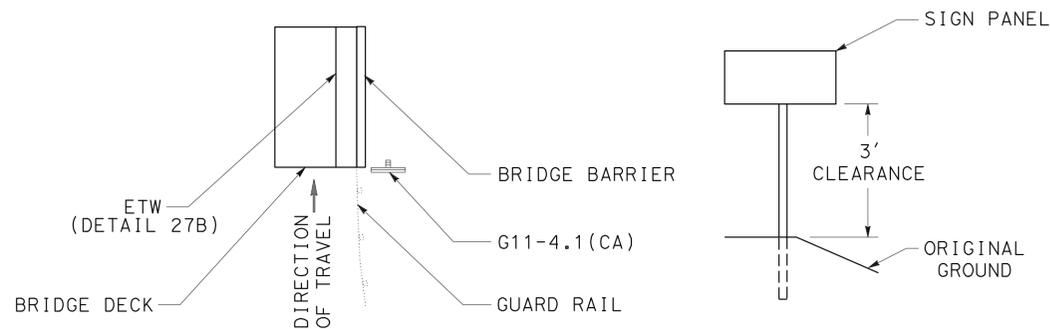


**G11-4.1(CA) SIGN DETAIL FOR EASTBOUND**



**G11-4.1(CA) SIGN DETAIL FOR WESTBOUND**

**TYPICAL LOCATION AND INSTALLATION OF G11-4.1(CA) SIGN**



THIS PLAN ACCURATE FOR DETOUR WORK ONLY.

**SIGN DETAILS**

NO SCALE

**SD-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	91	5.9/6.6	10	18

*Thanh Trinh* 10-09-08  
REGISTERED CIVIL ENGINEER DATE

1-5-09  
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T. TRINH  
No. C41189  
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**SIGN PANEL MATERIAL QUANTITIES**

SIGN CODE	SIGN SIZE L x D	FURNISH PANEL SIGN (SQFT)	SINGLE FACED	BACKGROUND	LEGEND	GRAFFITI FILM	ROADSIDE	REMARKS
		SINGLE SHEET ALUMINUM (0.063" UNFRAMED)		SHEETING COLOR	SHEETING COLOR	PREMIUM	SINGLE-SHEET	
							UNFRAMED ALUMINUM	
G11-4.1(CA)	44" x 18"	22.0	X	WHITE	BLACK	X	0.063"	BRIDGE INVENTORY SIGN PANEL; QUANTITY: 4 EA
TOTAL		22.0						

**ABBREVIATIONS:**

FRP = FIBERGLASS REINFORCED PLASTIC  
L = LENGTH OF SIGN  
D = DEPTH OF SIGN  
RSPF = REMOVABLE SIGN PANEL FRAME

**LEGEND**

X APPLICABLE

**NOTE:**

1. CALIFORNIA SIGN CODES ARE DESIGNATED BY (CA);  
OTHERWISE, FEDERAL SIGN CODES ARE SHOWN

**ROADSIDE SIGN QUANTITIES**

POST MILE	BRIDGE No.	BRIDGE NAME	DIRECTION		SIGN CODE	PANEL SIZE	WOODPOST SIZE AND LENGTH (N)	ROADSIDE SIGN ONE POST
			EASTBOUND	WESTBOUND				EA
R6.02	56-445	WEST GRAND Blvd UC	YES		G11-4.1(CA)	44" x 18"	4" x 4" - 10'	1
R6.08	54-445	WEST GRAND Blvd UC		YES	G11-4.1(CA)	44" x 18"	4" x 4" - 10'	1
R6.34	54-448	MAIN St UC	YES		G11-4.1(CA)	44" x 18"	4" x 4" - 10'	1
R6.36	54-448	MAIN St UC		YES	G11-4.1(CA)	44" x 18"	4" x 4" - 10'	1
TOTAL								4

**SIGN QUANTITIES**

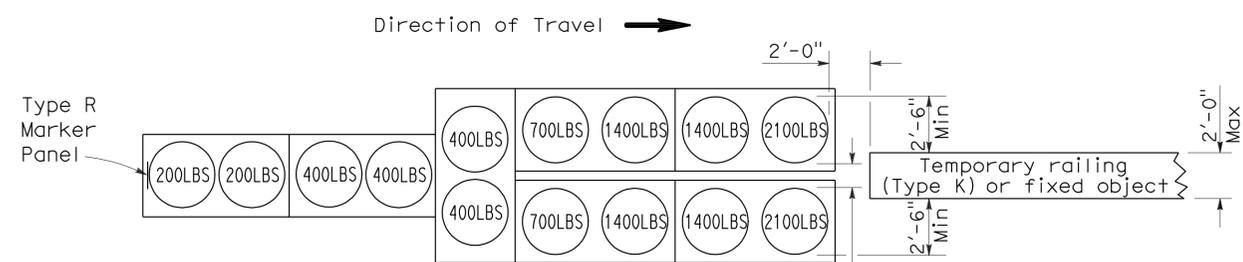
**SQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN A

FUNCTIONAL SUPERVISOR: BILL WASSER  
DESIGNED BY: KEVIN NGUYEN  
CHECKED BY: THANH TRINH  
REVISOR: KEVIN NGUYEN  
DATE: 10-09-08

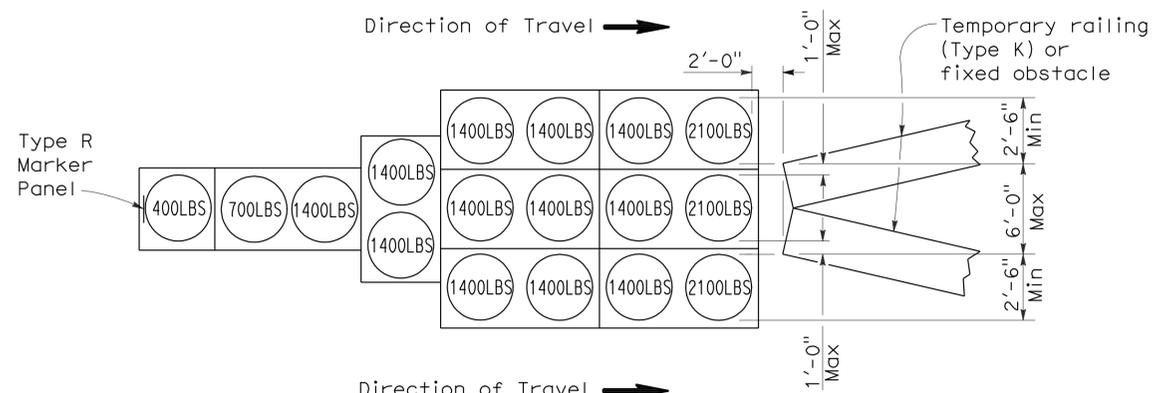
To accompany plans dated 1-5-09

2006 REVISED STANDARD PLAN RSP T1A



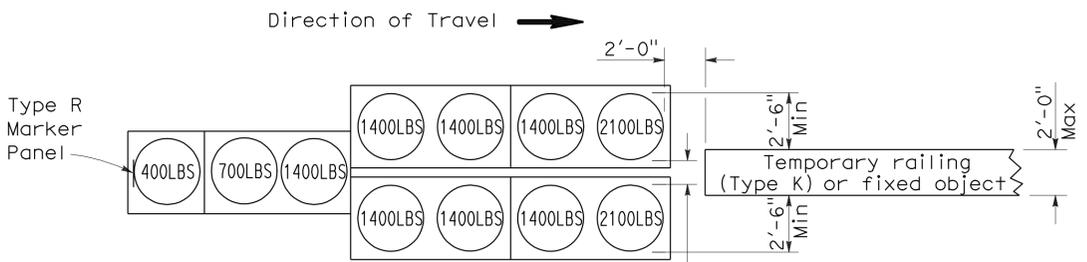
**ARRAY 'TU14'**

Approach speed 45 mph or more



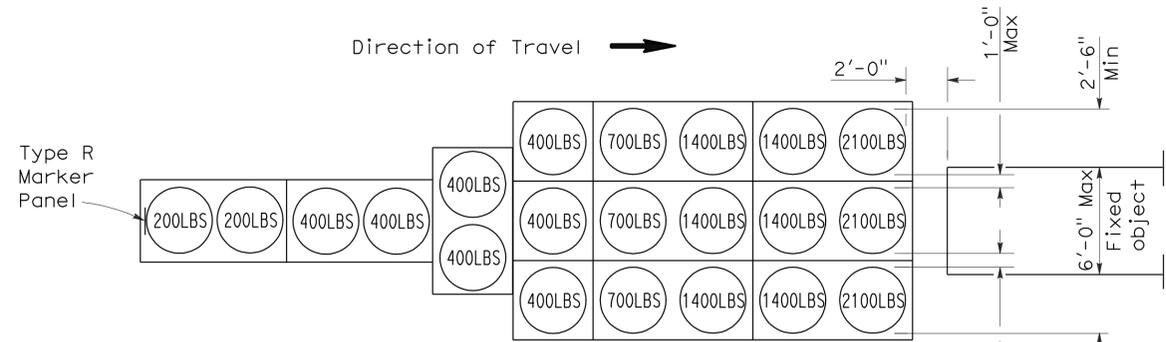
**ARRAY 'TU17'**

Approach speed less than 45 mph



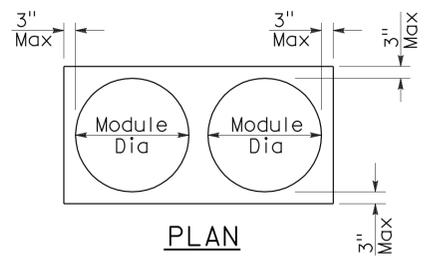
**ARRAY 'TU11'**

Approach speed less than 45 mph

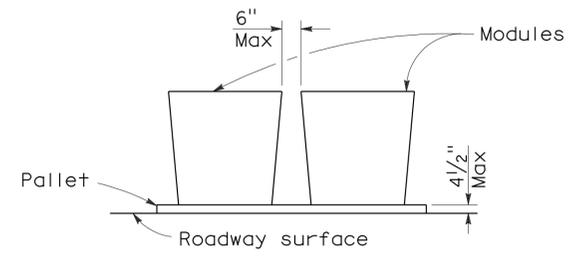


**ARRAY 'TU21'**

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**

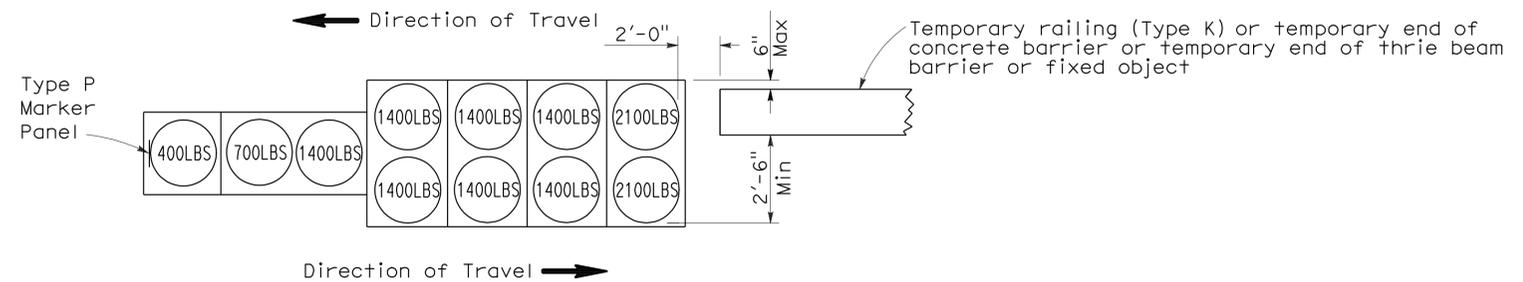
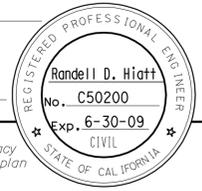
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	91	5.9/6.6	12	18

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

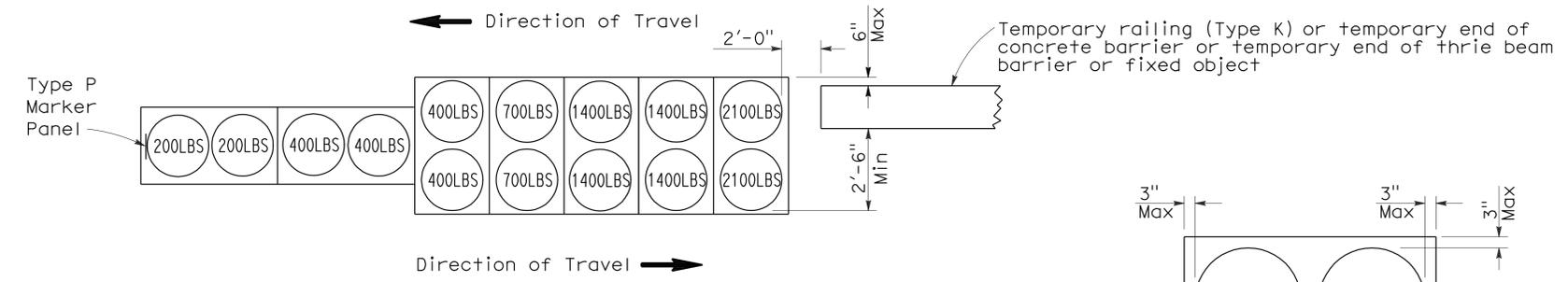
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 1-5-09



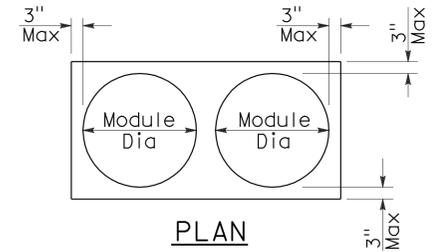
**ARRAY 'TB11'**

Approach speed less than 45 mph

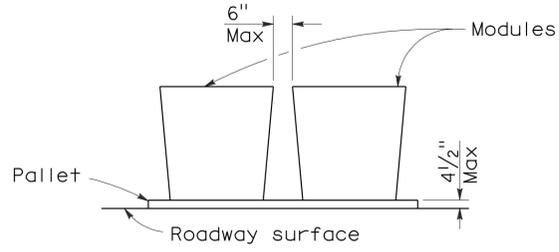


**ARRAY 'TB14'**

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	Riv	91	5.9/6.6	13	18

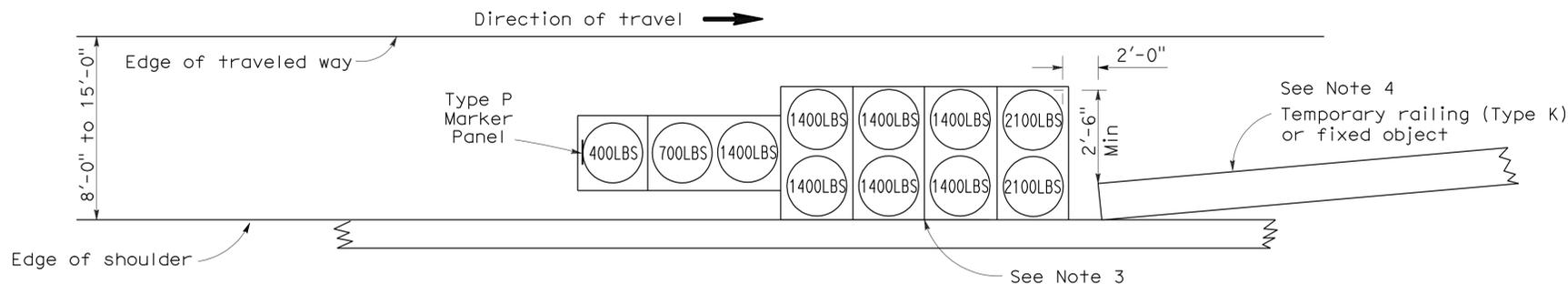
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

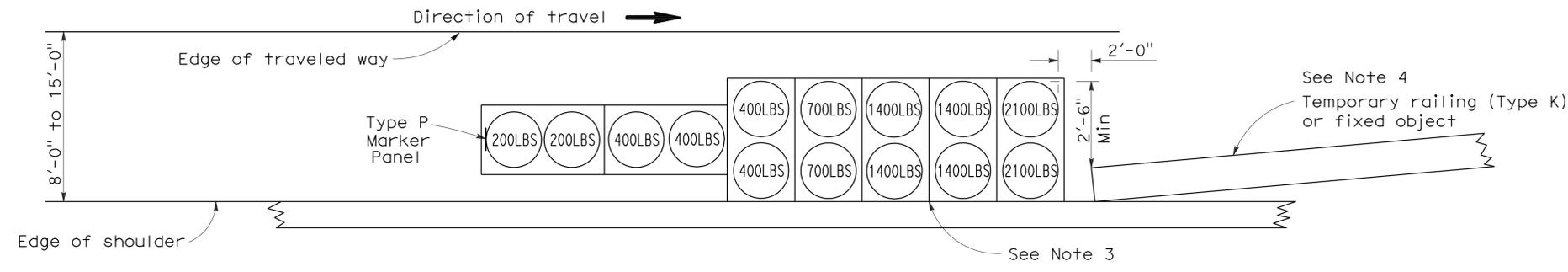
*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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.

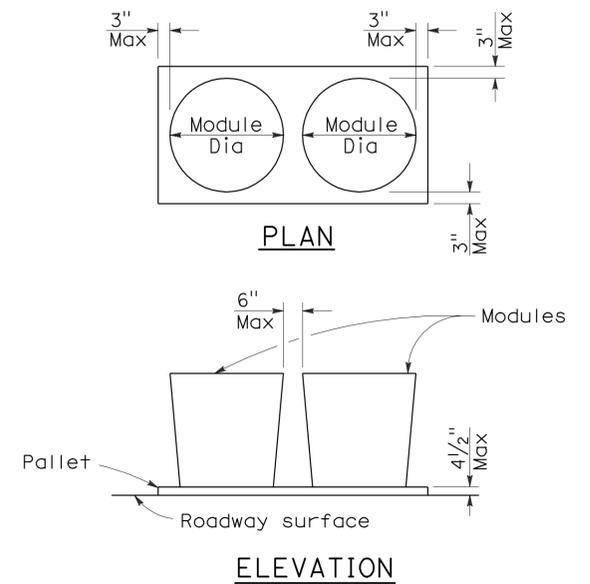
To accompany plans dated 1-5-09



**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:**

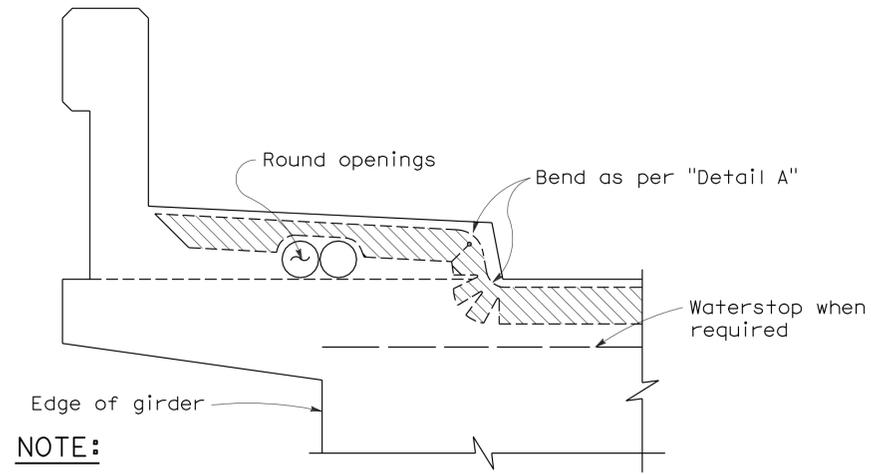
- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic 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.

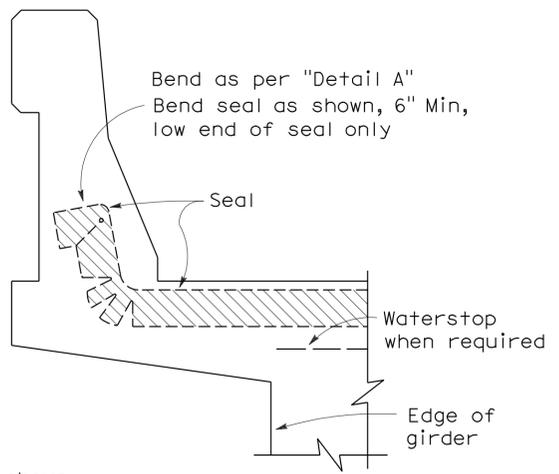
**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

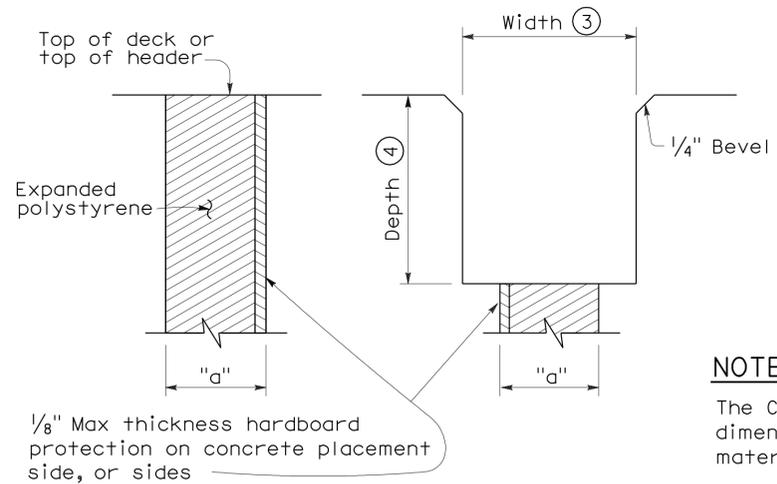


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



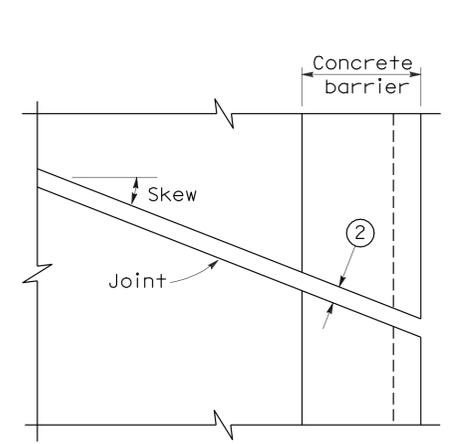
**CONCRETE BARRIER**



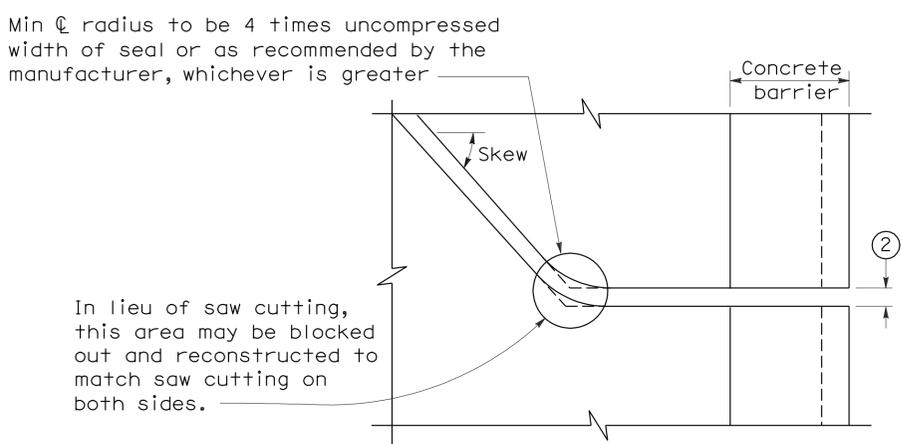
**FORMING DETAIL SAWCUT DETAIL**

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

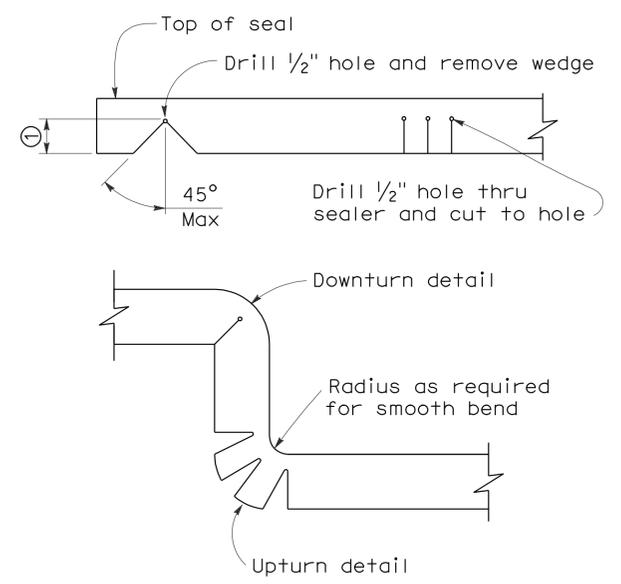
**JOINT SEALS DETAILS**



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



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



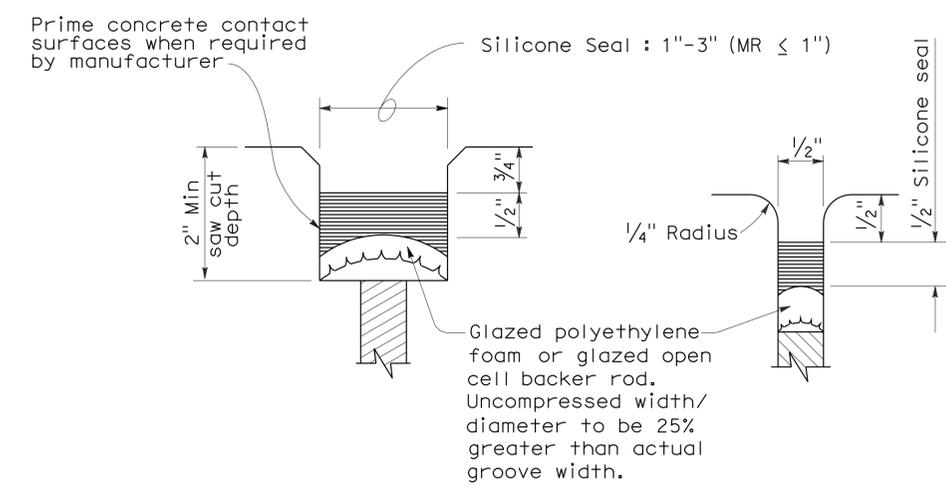
**DETAIL A**

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

**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

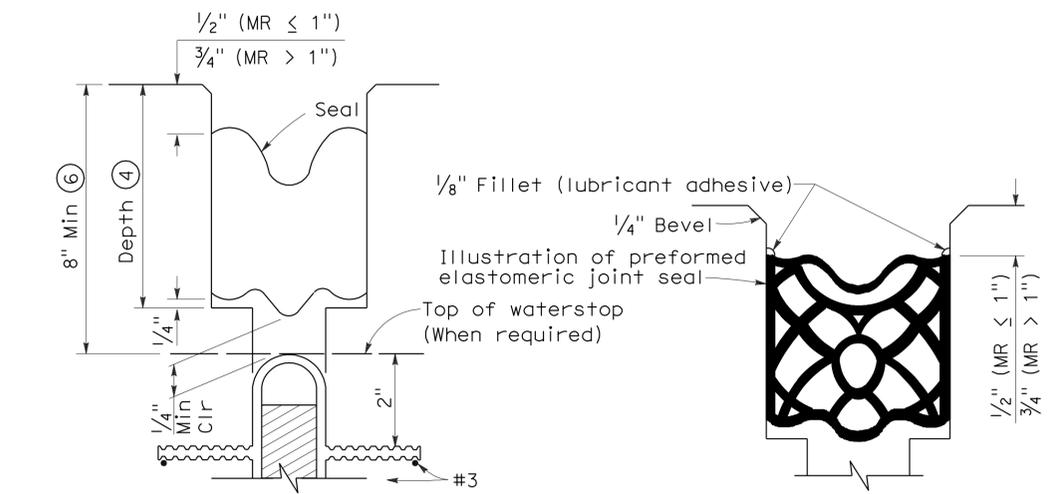


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



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

**TYPE B SEAL**

Movement Rating  $\leq 2''$

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	Riv	91	5.9/6.6	15	18
		Edward Li 06/20/08		REGISTERED CIVIL ENGINEER DATE	
		1-5-09		PLANS APPROVAL DATE	
		No. C56706		REGISTERED PROFESSIONAL ENGINEER	
		Exp. 06/30/09		EDWARD GUOJUN LI	
		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:**

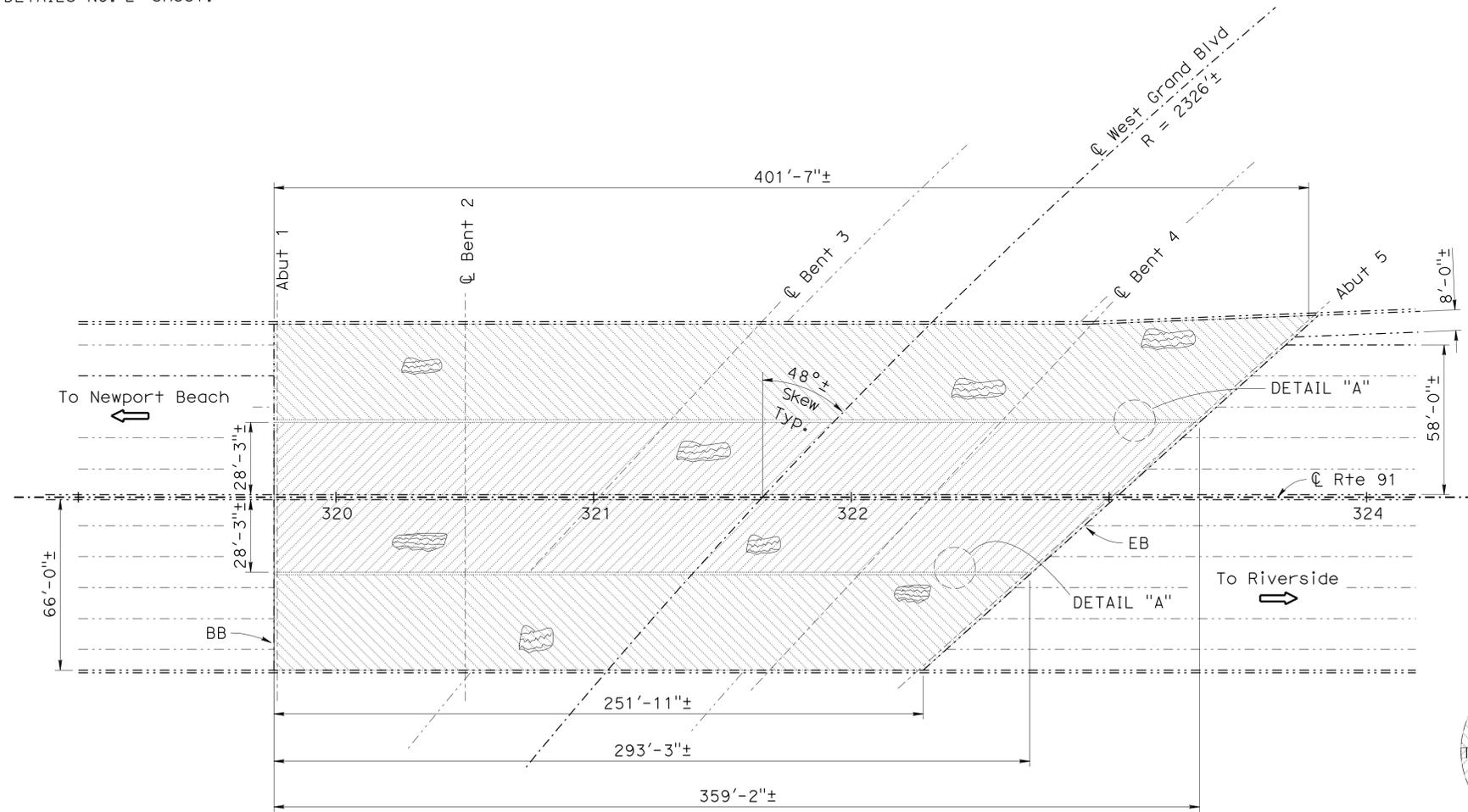
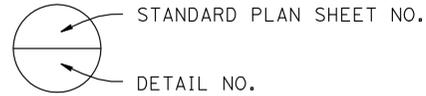
**STANDARD PLANS DATED MAY 2006**

**INDEX TO PLANS**

- Indicates existing.
- ➔ Indicates direction of traffic.
-  Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate and core treated bridge deck.
-  Indicates limits of prepare concrete deck surface and place 1 inch polyester concrete deck overlay.
-  Indicates limits of removal of existing 1" AC overlay.
-  Indicates removal of unsound concrete and place rapid setting concrete patch. Actual area may vary and will be determined by the Engineer. Deck Repair Table is located on the "MISCELLANEOUS DETAILS NO. 2" sheet.

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")

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



WEST GRAND BLVD UC	QUANTITIES	BRIDGE NO 56-0445
CORE TREATED BRIDGE DECK	8	EA
REMOVE ASPHALT CONCRETE SURFACING	1,292	SQFT
REMOVE UNSOUND CONCRETE	108	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	25,030	SQFT
CLEAN BRIDGE DECK	18,250	SQFT
RAPID SETTING CONCRETE (PATCH)	108	CF
FURNISH POLYESTER CONCRETE OVERLAY	2,086	CF
PLACE POLYESTER CONCRETE OVERLAY	25,030	SQFT
TREAT BRIDGE DECK	18,250	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	203	GAL

**WEST GRAND BLVD UC**  
 Br No. 56-0445, Rte 91, PM 5.99  
 1" = 30'

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

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

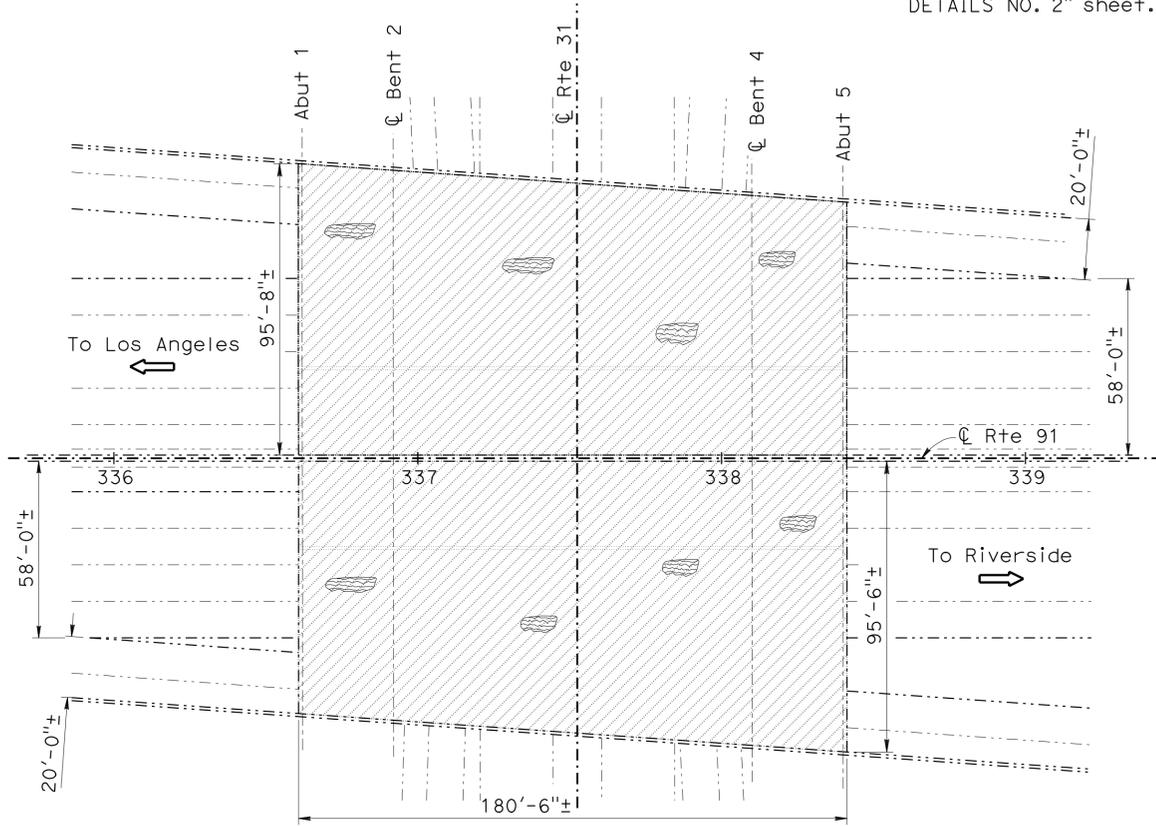
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various	<b>ROUTE 91 BRIDGES</b>
POST MILE	Varies	
		<b>GENERAL PLAN NO. 1</b>

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	Riv	91	5.9/6.6	16	18
		Edward Li 06/20/08		REGISTERED CIVIL ENGINEER DATE	
		1-5-09		PLANS APPROVAL DATE	
		No. C56706		Exp. 06/30/09	
		CIVIL		STATE OF CALIFORNIA	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

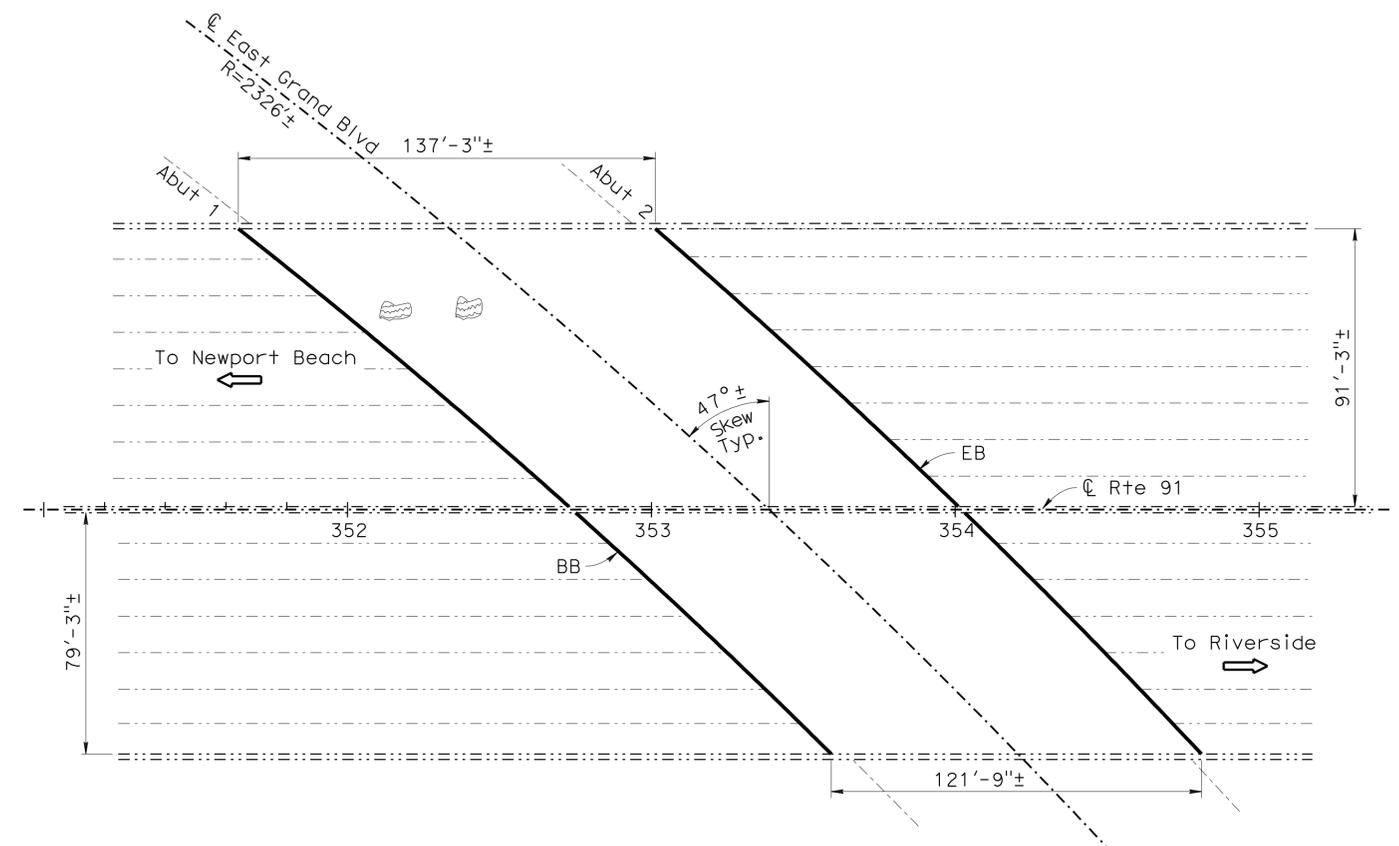
**LEGEND:**

- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate and core treated bridge deck.
- /— Indicates location of existing joint seal removal and placement of new joint seal.
- ▤ Indicates removal of unsound concrete and place rapid setting concrete patch. Actual area may vary and will be determined by the Engineer. Deck Repair Table is located on the "MISCELLANEOUS DETAILS NO. 2" sheet.



**MAIN STREET UC**

Br No. 56-0448, Rte 91, PM 6.34  
1" = 30'



**EAST GRAND BLVD UC**

Br No. 56-0364, Rte 91, PM 6.65  
1" = 30'



MAIN STREET UC BRIDGE NO 56-0448

QUANTITIES		
REMOVE UNSOUND CONCRETE	80	CF
CLEAN BRIDGE DECK	32,235	SQFT
RAPID SETTING CONCRETE (PATCH)	80	CF
CORE TREATED BRIDGE DECK	8	EA
TREAT BRIDGE DECK	32,235	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	358	GAL

EAST GRAND BLVD UC BRIDGE NO 56-0364

QUANTITIES		
REMOVE UNSOUND CONCRETE	17	CF
CLEAN EXPANSION JOINT	500	LF
RAPID SETTING CONCRETE (PATCH)	17	CF
JOINT SEAL (MR 1/2")	500	LF

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

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
POST MILE Varies

ROUTE 91 BRIDGES  
GENERAL PLAN NO. 2

CU 08  
EA OK7401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 11-08-07, 4-28-08, 5-08-08, 5-19-08

SHEET 02 OF 04

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	Riv	91	5.9/6.6	17	18
Edward Li			06/20/08		
REGISTERED CIVIL ENGINEER			DATE		
1-5-09			PLANS APPROVAL DATE		
No. C56706			Exp. 06/30/09		
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.					

JOINT SEAL TABLE						
BRIDGE LOCATION	BRIDGE NUMBER	JOINT SEAL LOCATION	MINIMUM "MR" (INCHES)	EXISTING WATERSTOP	APPROX LENGTH (FT)	APPROX DEPTH TO CLEAN EXP JT (INCHES)
EAST GRAND BLVD UC	56-0364	Abut 1, BW	1/2	NO	250	12
		Abut 2, BW	1/2	NO	250	12

- BW = Back Wall
- Type A Joint Seal, Silicone only.

**NOTES:**

The following notes apply to JOINT SEAL TYPE A:

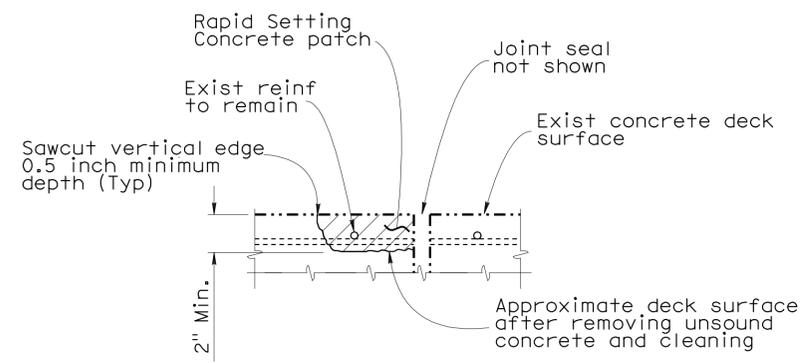
Install Joint Seal (MR = 1/2") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.

For details not shown see RSP B6-21 sheet.

The following notes apply to JOINT SEAL TYPE B:

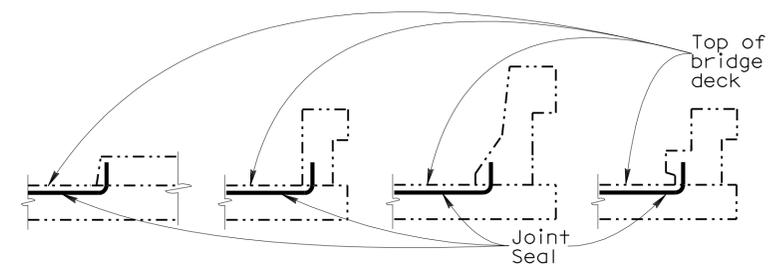
- Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
- Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
- W1 shall be the smaller of the values determined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

For details not shown see RSP B6-21 sheet.



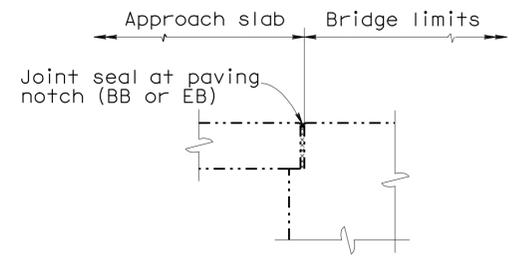
**JOINT SPALL REPAIR DETAIL**

Note: Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

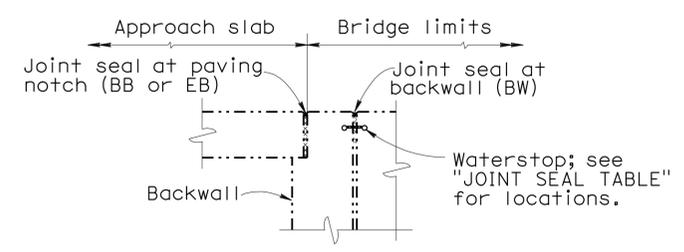


**JOINT SEAL AT LOW SIDE OF DECK**

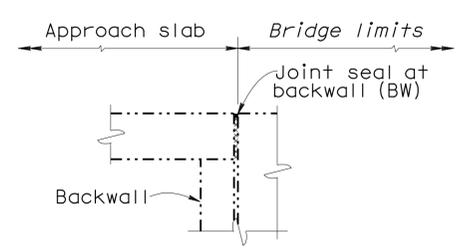
Note: Details shown for illustration purposes only.  
For use only where deck joint matches the sidewalk, curb or barrier rail joint.



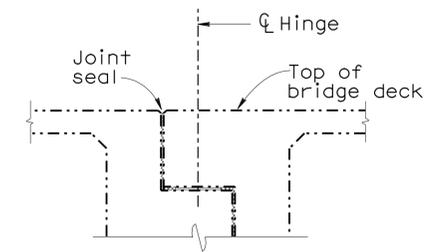
DIAPHRAGM ABUTMENT



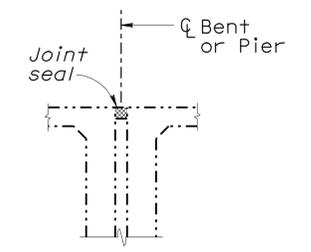
ABUTMENT WITH BACKWALL AND PAVING NOTCH



ABUTMENT WITH BACKWALL



HINGE



BENT OR PIER

**JOINT SEAL LOCATION**

NO SCALE

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

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Edward Li	CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 91 BRIDGES
	DETAILS	BY Tom Dang	CHECKED Edward Li			Various	
	QUANTITIES	BY Edward Li	CHECKED Ramesh Patel			Varies	
					CU 08 EA OK7401	MISCELLANEOUS DETAILS NO. 1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	REVISION DATES	
					11-08-07	SHEET 03	OF 04

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	Riv	91	5.9/6.6	18	18

Edward Li 06/20/08  
REGISTERED CIVIL ENGINEER DATE

1-5-09  
PLANS APPROVAL DATE

EDWARD GUOJUN LI  
REGISTERED PROFESSIONAL ENGINEER  
No. C56706  
Exp. 06/30/09  
CIVIL  
STATE OF CALIFORNIA

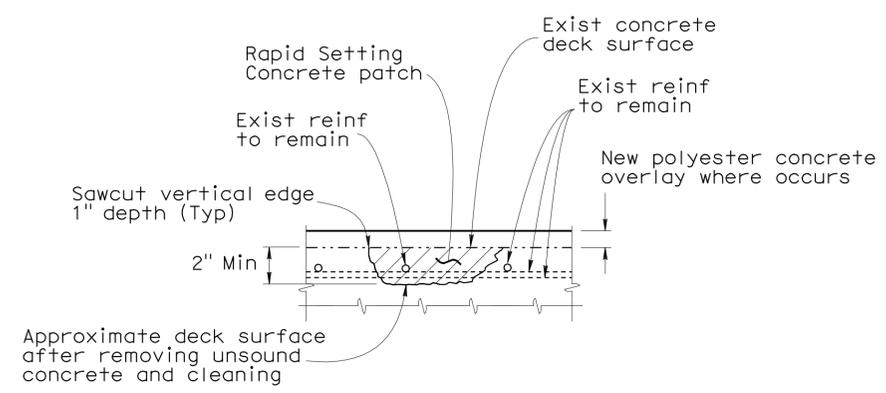
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### DECK REPAIR TABLE

BRIDGE NAME	BRIDGE NUMBER	TOTAL DECK AREA (SQFT)	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCHES)	REMOVE UNSOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
WEST GRAND BLVD. UC	56-0445	43282	2	1 1/2	108	108
MAIN ST. UC	56-0448	32235	2	1 1/2	80	80
EAST GRAND BLVD. UC	56-0364	-	-	-	17	17

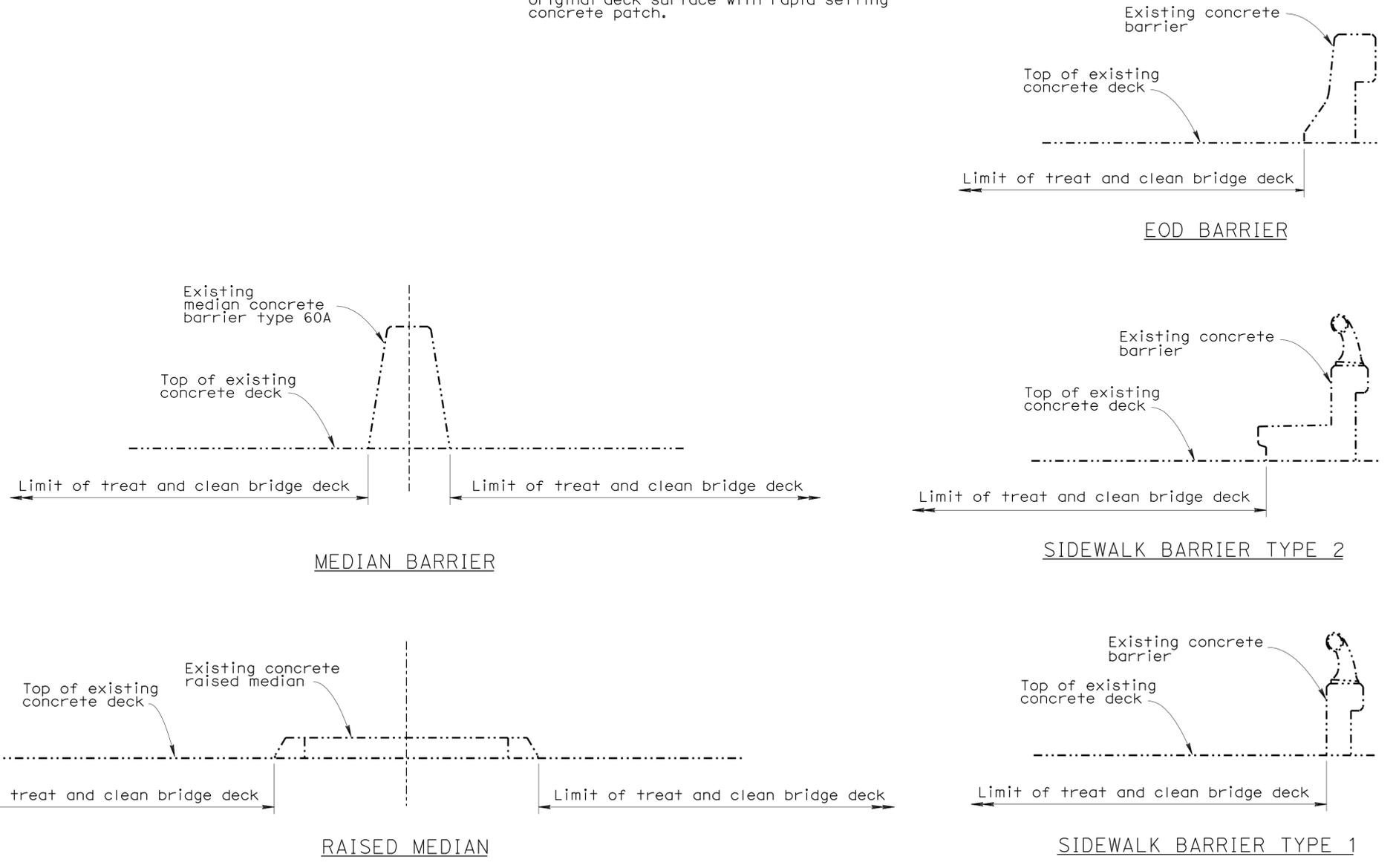
#### DECK REPAIR NOTES:

- 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 may be waived with the approval of the Engineer.
- The saw cut depth shall not exceed 1 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.



### DECK DAMAGE REPAIR AND OVERLAY DETAILS

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



### TYPICAL LIMITS OF DECK WORK

NO SCALE

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

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Edward Li	CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 91 BRIDGES		
	DETAILS	BY Tom Dang	CHECKED Edward Li			Various			
	QUANTITIES	BY Edward Li	CHECKED Ramesh Patel			Varies		MISCELLANEOUS DETAILS NO. 2	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	CU 08 EA 0K7401	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 04 OF 04

FILE => 08-0k7401-b-misc02.dgn  
TIME PLOTTED => 06:08  
USERNAME => hrmikes DATE PLOTTED => 22-JAN-2009