Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	1	22

INDEX OF PLANS

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

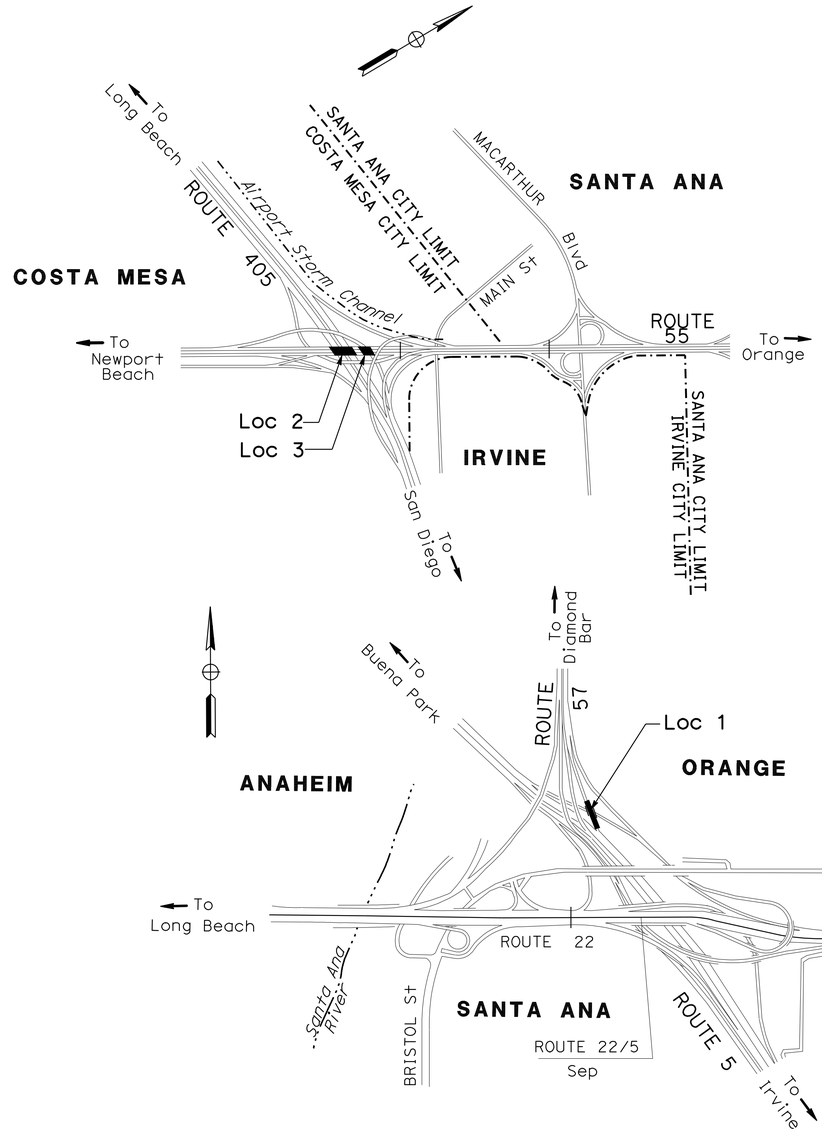
IN ORANGE COUNTY

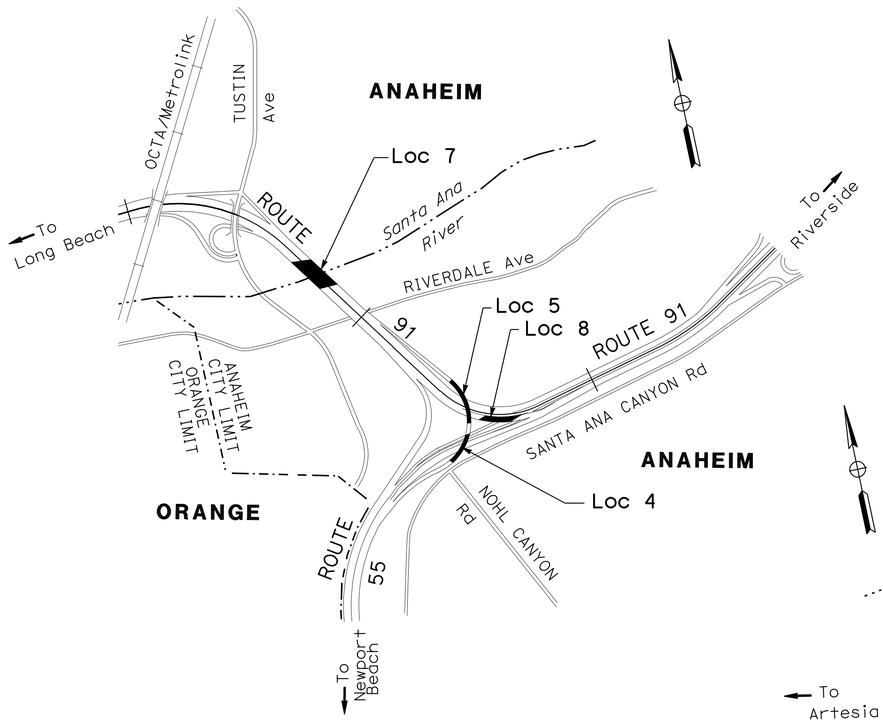
IN ORANGE, COSTA MESA, AND ANAHEIM

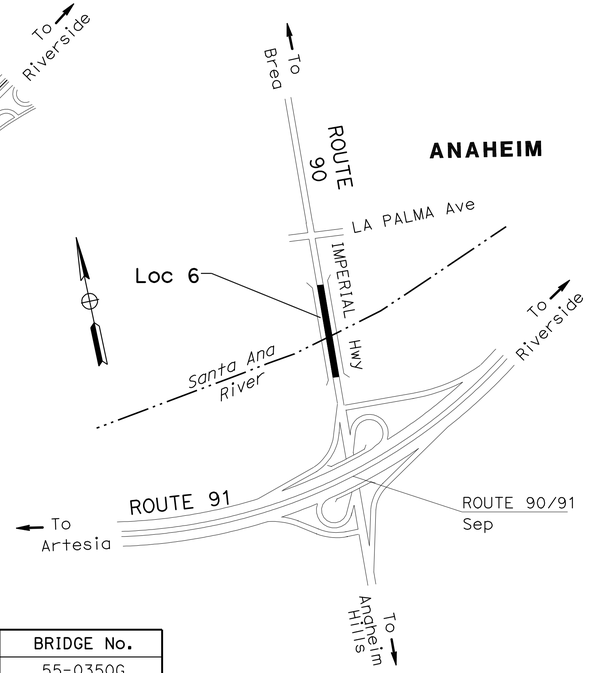
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

LOCATION MAP







NO SCALE

LOCATION OF CONSTRUCTION

LOC	RTE	PM	NAME OF STRUCTURE	BRIDGE No.
1	5	34.40	N5-N57/22-N5 Conn Sep	55-0350G
2	55	R5.99	RT 55/405 Sep	55-0252
3	55	R6.06	55/N405-S55 Conn Sep	55-0424
4	55	17.71	N55-W91/55 Conn Sep	55-0321G
5	55	17.90	N55-W91/91 Conn Sep	55-0329G
6	90	12.59	SANTA ANA RIVER	55-0079
7	91	8.57	SANTA ANA RIVER	55-0106
8	91	R9.19	E91/91-55 FASTK Sep	55-0493R

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

PROJECT MANAGER: BOB BAZARGAN

DESIGN ENGINEER: JOSEPH TRAN

Joseph Tran 05-26-09
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

July 20, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JOSEPH TRAN No. C59283 Exp. 6/30/11 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.

CONTRACT No. 12-0F3404

LAST REVISION 05-13-09

DATE PLOTTED => 27-JUL-2009
TIME PLOTTED => 06:40

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	2	22

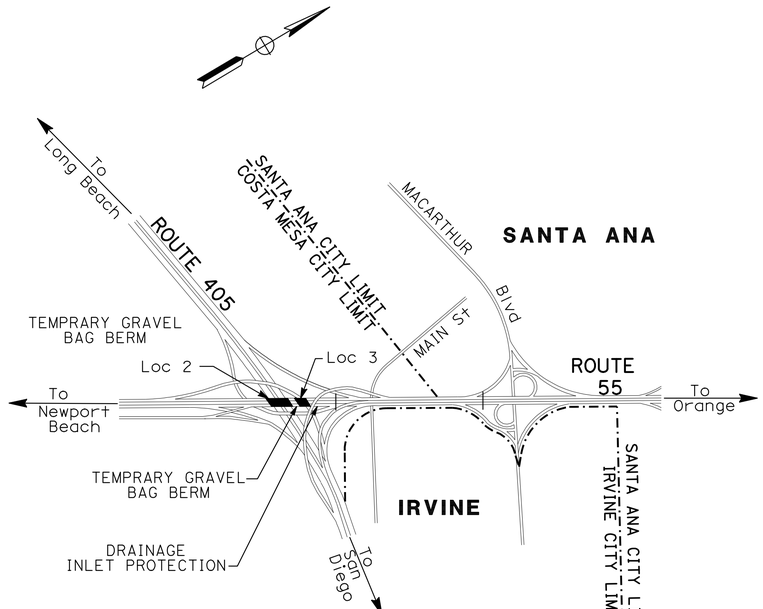
REGISTERED CIVIL ENGINEER — DATE: 05-26-09

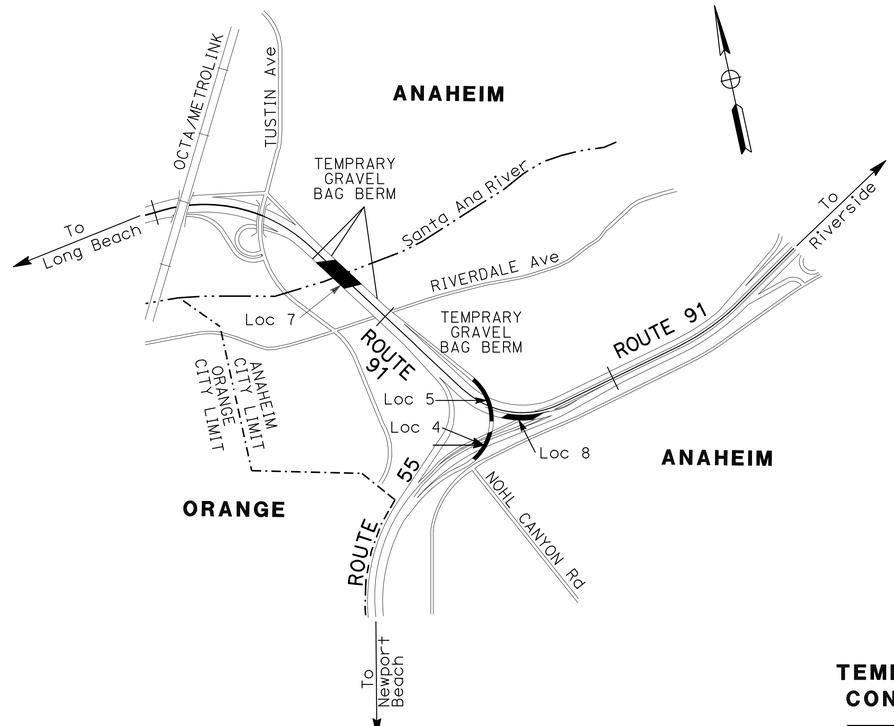
PLANS APPROVAL DATE: 7-20-09

REGISTERED PROFESSIONAL ENGINEER — JOSEPH TRAN No. C59283 Exp. 6/30/11 CIVIL — STATE OF CALIFORNIA

NOTES:

1. LOCATION OF INLETS AND OVERSIDE DRAIN SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTTED ON THESE PLANS.





TEMPORARY WATER POLLUTION CONTROL QUANTITY SUMMARY

	TEMPORARY GRAVEL BAG BERM	TEMPORARY DRAINAGE INLET PROTECTION
	LF	EA
Loc 2 & 3	90	1
Loc 4,5 & 8	50	
Loc 6	90	
Loc 7		7
TOTAL	230	8

TEMPORARY WATER POLLUTION CONTROL PLAN

NO SCALE

WPC-1

THIS PLAN ACCURATE FOR TEMPORARY WATER POLLUTION CONTROL PLAN ONLY

REVISED BY	DATE REVISED
JOSEPH TRAN	JOSEPH TRAN

CALCULATED-DESIGNED BY: JOSEPH TRAN
CHECKED BY:

FUNCTIONAL SUPERVISOR: TONY ENCINARES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **DESIGN BRANCH B**

LAST REVISION | DATE PLOTTED => 27-JUL-2009 | TIME PLOTTED => 06:40
05-19-09

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0f340gb001.dgn

CU 12221

EA 0F3401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	3	22

REGISTERED CIVIL ENGINEER — 05-26-09 DATE

7-20-09 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — JOSEPH TRAN No. C59283 Exp. 6/30/11 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.

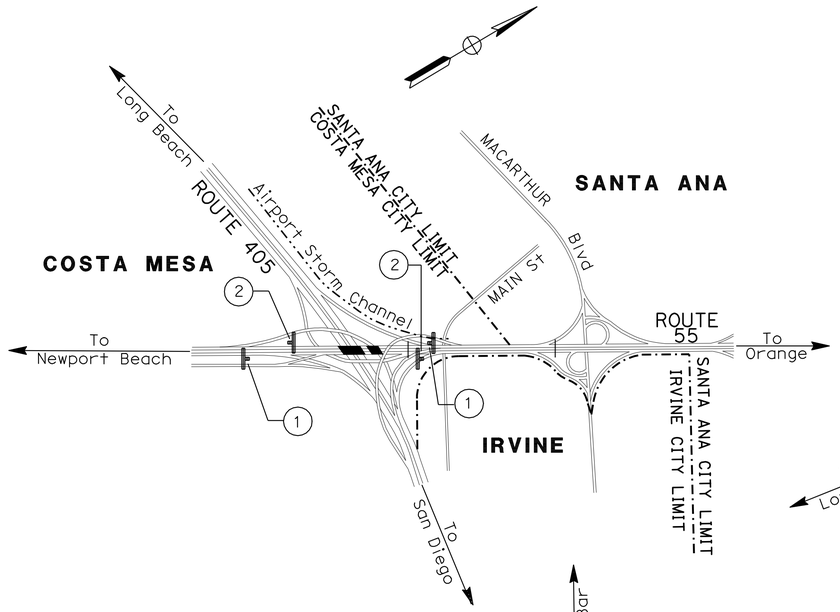
NOTES:

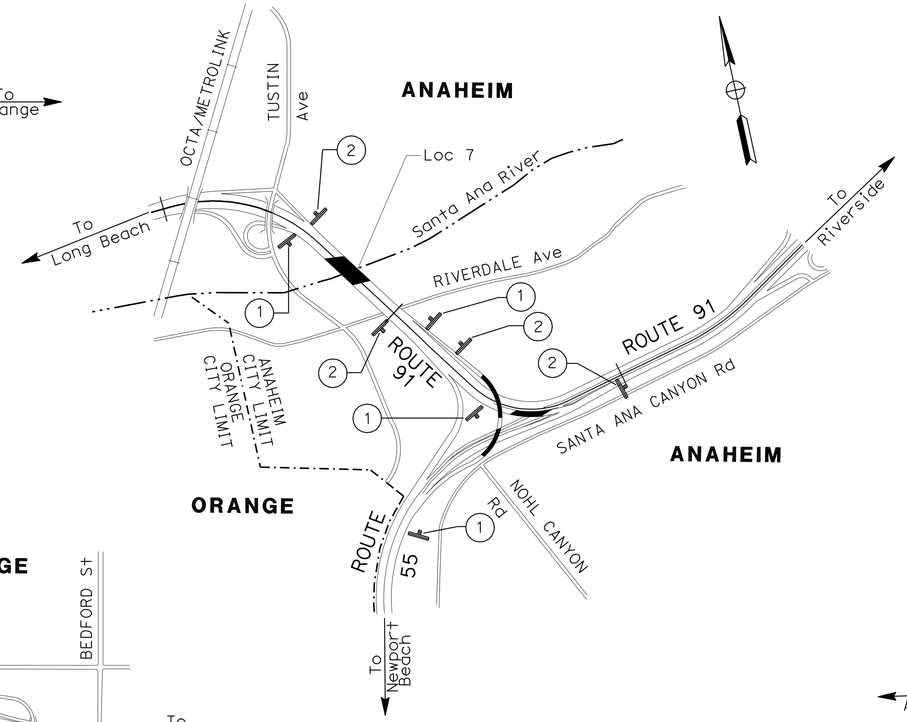
1. LOCATION OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTTED ON THESE PLANS.

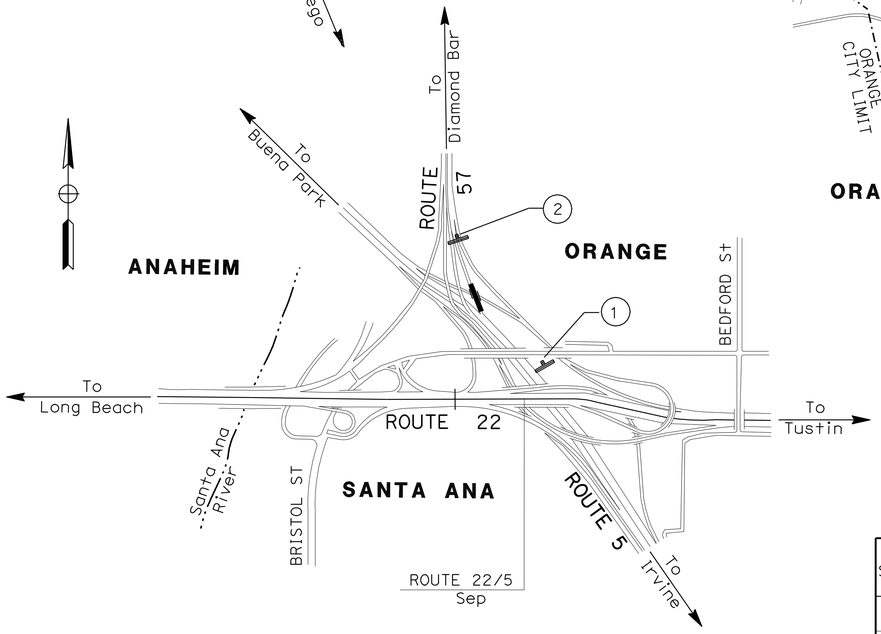
LEGEND:

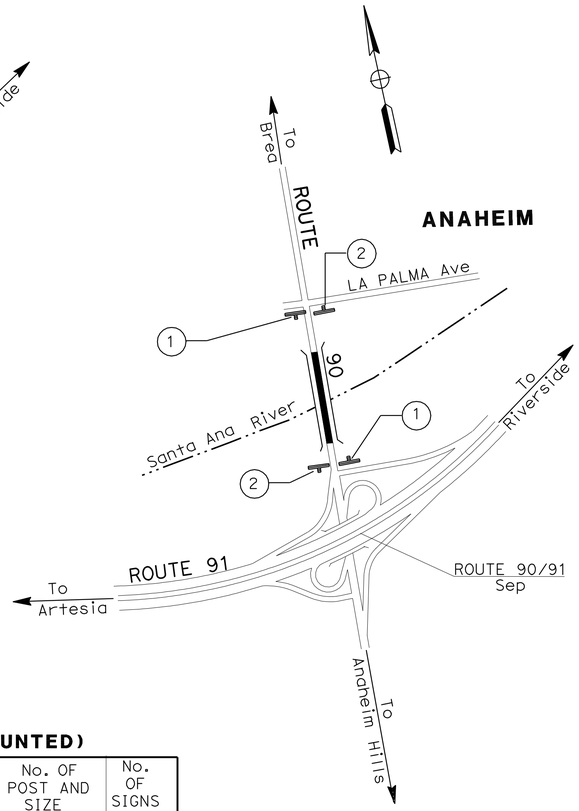
CONSTRUCTION AREA SIGN, 1-POST

(X) CONSTRUCTION AREA SIGN









CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN	SIGN CODE	PANEL SIZE	SIGN MESSAGE	LENGTH OF POST	No. OF POST AND SIZE	No. OF SIGNS
(1)	W20-1	30" x 30"	ROAD WORK AHEAD	15′	1- 4"x 4"	9
(2)	G20-2	36" x 18"	END ROAD WORK	13′	1- 4"x 4"	9

* FOR ADDITIONAL QUANTITIES OF CONSTRUCTION AREA SIGNS, SEE SHEET TH-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

REVISED BY	DATE REVISED
JOSEPH TRAN	JOSEPH TRAN

CALCULATED-DESIGNED BY — CHECKED BY

FUNCTIONAL SUPERVISOR — TONY ENCINARES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN BRANCH B

Caltrans

LAST REVISION 05-13-09 | DATE PLOTTED => 27-JUL-2009 | TIME PLOTTED => 06:40

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0f3401a001.dgn | CU 12221 | EA 0F3401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	4	22

REGISTERED CIVIL ENGINEER — DATE: 05-26-09

PLANS APPROVAL DATE: 7-20-09

REGISTERED PROFESSIONAL ENGINEER — JOSEPH TRAN No. C59283 Exp. 6/30/11 CIVIL — STATE OF CALIFORNIA

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS (DETOUR) AND PCMS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. MESSAGE TO BE DISPLAYED ON THE PCMS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTTED ON THESE PLANS.
4. FOR ADDITIONAL QUANTITIES OF CONSTRUCTION AREA SIGNS, SEE SHEET CS-1.

LEGEND:

→ DIRECTION OF TRAVEL

▬ RAMP CLOSED

PCMS-X PORTABLE CHANGEABLE MESSAGE SIGN

M4-10 (Rt)
G28-2
M3-4

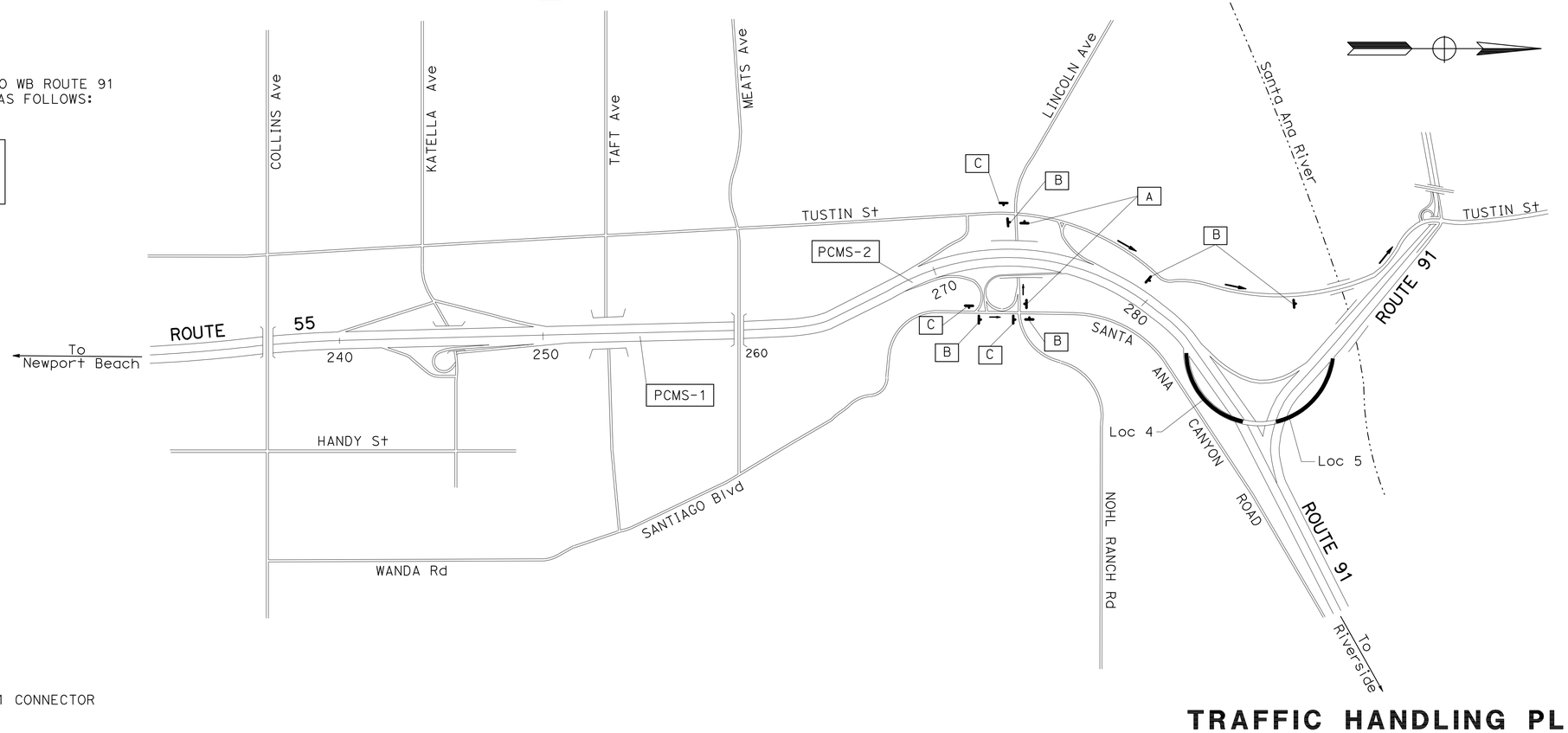
SC3
G28-2
M3-4

M4-10 (Lt)
G28-2
M3-4

NOTES:

DURING CONNECTOR NB ROUTE 55 TO WB ROUTE 91 CLOSURE, THE PCMS SHOULD READ AS FOLLOWS:

CONNECTOR TO WEST 91 CLOSED USE LINCOLN	DETOUR WEST 91 EXIT HERE
PCMS-1	PCMS-2



CLOSURE :

NB ROUTE 55 TO WB ROUTE 91 CONNECTOR

DETOUR :

NB RTE 55 LINCOLN AVE OFF RAMP, LEFT ON SANTIAGO BVLD, LEFT ON LINCOLN AVE AND RIGHT ON TUSTIN ST

TRAFFIC HANDLING PLAN (DETOUR) LOCATION 4

NO SCALE

THIS PLAN ACCURATE FOR TRAFFIC HANDLING DETOUR ONLY

TH-1

CALCULATED-DESIGNED BY: JOSEPH TRAN
CHECKED BY: JOSEPH TRAN
REVISED BY:
DATE REVISED:
FUNCTIONAL SUPERVISOR: TONY ENCINARES
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN BRANCH B

LAST REVISION | DATE PLOTTED => 27-JUL-2009 | TIME PLOTTED => 06:41 | 05-18-09

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	5	22

REGISTERED CIVIL ENGINEER — DATE: 05-26-09

JOSEPH TRAN No. C59283 Exp. 6/30/11 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

7-20-09
PLANS APPROVAL DATE

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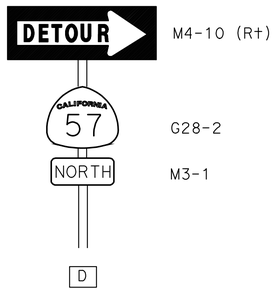
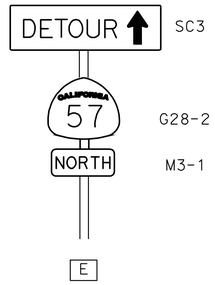
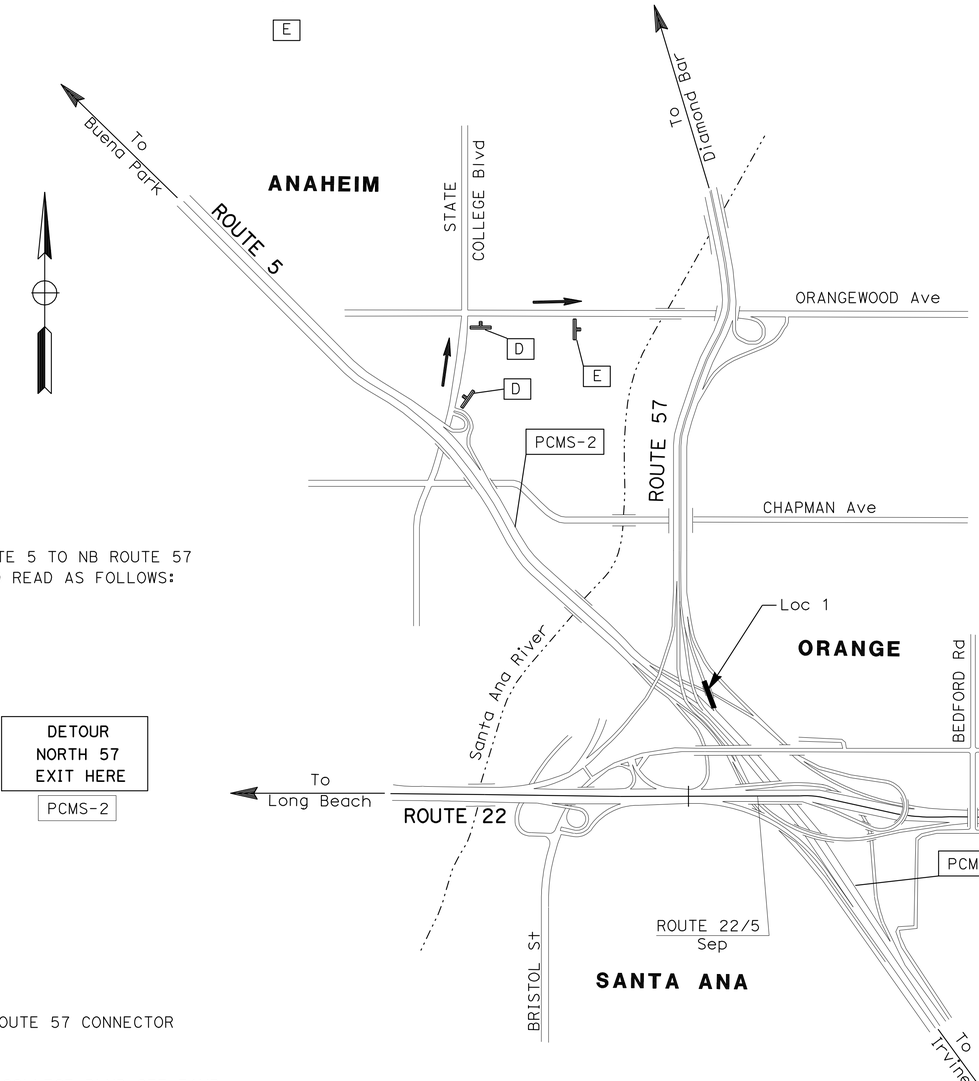




PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

PCMS	No. OF SIGNS
PCMS-1	1
PCMS-2	1
TOTAL	2



NOTES:

DURING CONNECTOR NB ROUTE 5 TO NB ROUTE 57 CLOSURE, THE PCMS SHOULD READ AS FOLLOWS:

CONNECTOR TO NORTH 57 CLOSED
PCMS-1
FIRST PANEL

USE STATE COLLEGE EXIT
PCMS-1
SECOND PANEL

DETOUR NORTH 57 EXIT HERE
PCMS-2

CLOSURE :

NB ROUTE 5 TO NB ROUTE 57 CONNECTOR

DETOUR :

NB ROUTE 5 STATE COLLEGE BLVD OFF-RAMP, RIGHT ON ORANGEWOOD AVE

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SHEET No.	SIGN	SIGN CODE	PANEL SIZE	SIGN MESSAGE	LENGTH OF POST	No. OF POST AND SIZE	QTY
TH-1	A	M4-10 (R†)	48" x 18"	DETOUR	13′	1- 4" x 4"	2
		G28-2	21" x 18"	ROUTE 91			
		M3-4	21" x 9"	WEST			
TH-1	B	SC3	48" x 18"	DETOUR	13′	1- 4" x 4"	5
		G28-2	21" x 18"	ROUTE 91			
		M3-1	21" x 9"	WEST			
TH-1	C	M4-10 (L†)	48" x 18"	DETOUR	13′	1- 4" x 4"	3
		G28-2	21" x 18"	ROUTE 91			
		M3-4	21" x 9"	WEST			
TH-2	D	M4-10 (R†)	48" x 18"	DETOUR	13′	1- 4" x 4"	2
		G28-2	21" x 18"	ROUTE 57			
		M3-1	21" x 9"	NORTH			
TH-2	E	SC3	48" x 18"	DETOUR	13′	1- 4" x 4"	1
		G28-2	21" x 18"	ROUTE 57			
		M3-1	21" x 9"	NORTH			

TRAFFIC HANDLING PLAN (DETOUR) LOCATION 1

THIS PLAN ACCURATE FOR TRAFFIC HANDLING DETOUR ONLY

NO SCALE

TH-2

REVISED BY | DATE REVISED
JOSEPH TRAN | JOSEPH TRAN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: TONY ENCINARES
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN BRANCH B

LAST REVISION | DATE PLOTTED => 27-JUL-2009
05-14-09 | TIME PLOTTED => 06:41

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl DGN FILE => c0f340md002.dgn | CU 12221 | EA 0F3401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	6	22

Bang Q. Hua 5-26-09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

BANG Q. HUA No. C 71273 Exp. 12/31/09 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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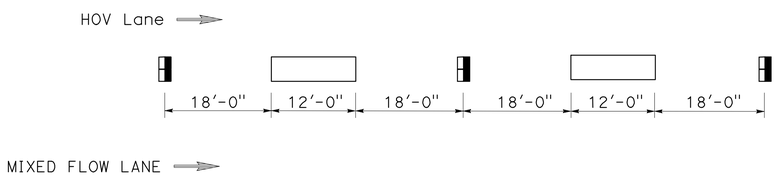
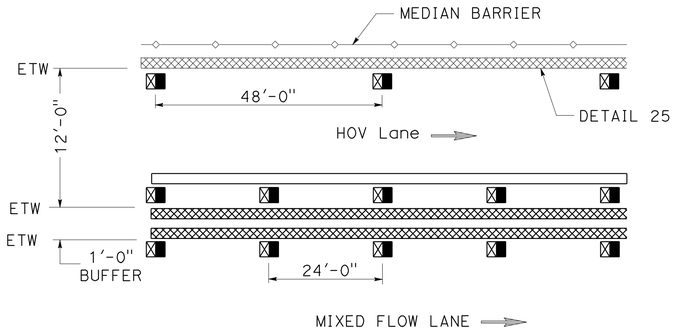


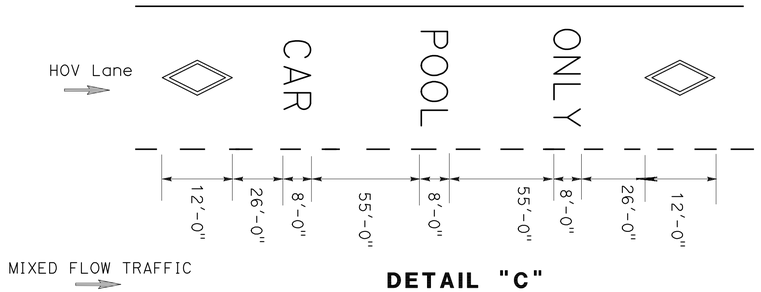
DETAIL "A"

HOV LANE INGRESS/EGRESS STRIPING DETAIL



DETAIL "B"

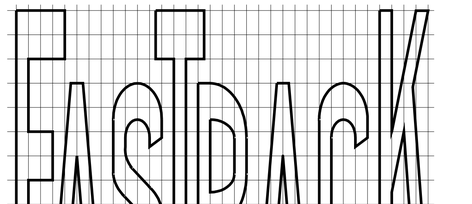
HOV LANE BUFFER STRIPING DETAIL
BUFFER WIDTH - 1 FOOT



DETAIL "C"

TYPICAL HOV LANE PAVEMENT MARKING
AT INGRESS/EGRESS

LOCATION 2-NB



DETAIL "E"

LOCATION 7-EB

LEGEND

- TYPE A WHITE NON-REFLECTIVE MARKER
- TYPE C RED-CLEAR RETROREFLECTIVE MARKER
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
- 4" YELLOW THERMOPLASTIC TRAFFIC STRIPE
- 4" WHITE THERMOPLASTIC TRAFFIC STRIPE
- 8" WHITE THERMOPLASTIC TRAFFIC STRIPE
- DIRECTION OF TRAFFIC

NOTE:

SEE STANDARD PLANS FOR PAVEMENT MARKING SYMBOL AND WORD DETAILS NOT SHOWN.

DETAIL 13 Mod

DETAIL 14 Mod

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-1

CALCULATED-DESIGNED BY	BH	REVISED BY	
CHECKED BY	ADEL MALEK	DATE REVISED	
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR		
Caltrans® PROJECT DELIVERY	ADEL MALEK		

LAST REVISION 05-18-09
DATE PLOTTED => 27-JUL-2009
TIME PLOTTED => 06:41

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0f340nb001.dgn

CU 12241

EA 0F3401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	7	22

Bang Q. Hua 5-26-09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — BANG Q. HUA — No. C 71273 — Exp. 12/31/09 — CIVIL — STATE OF CALIFORNIA

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

PAVEMENT DELINEATION QUANTITIES

LOCATION - DESCRIPTION					THERMOPLASTIC TRAFFIC STRIPE										THERMOPLASTIC PAVEMENT MARKING						PAVEMENT MARKER				REMOVE			
					DETAIL "A" 8" WHITE BROKEN (36-12)	DETAIL "B" 4" SOLID WHITE	DETAIL "B" 4" SOLID YELLOW	DETAIL 25 4" SOLID YELLOW	DETAIL 27B 4" SOLID WHITE	DETAIL 13 Mod 4" WHITE BROKEN (36-12)	DETAIL 14 Mod 4" WHITE BROKEN (36-12)	DETAIL 37 8" WHITE BROKEN (12-3)	DETAIL 37B 8" WHITE BROKEN (12-3)	DETAIL 38 8" SOLID WHITE	12" DIAGONAL STRIPE	DIAMOND SYMBOL	WORDS	ARROW			NON-REFLECTIVE	RETRO-REFLECTIVE			YELLOW THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER
																		TYPE IV(R)	TYPE VI	TYPE VII(R)	TYPE A	TYPE C	TYPE G	TYPE H				
Loc	Rte	PM	STRUCTURE NAME & BRIDGE No.	Dir	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	EA	EA	EA	EA	LF	LF	SQFT	EA
(1)	5	34.40	N5-N57/22-N5 Conn SEPARATION Br No. 55-0350G	NB				206	206	206											16		5	5	206	258		26
(2)	55	R5.99	ROUTE 55/405 SEPARATION Br No. 55-0252	NB	288			288	288	864						22	62		42		72		21	7	288	504	126	100
				SB				288	288	432	432										72	8	12	7	288	504		100
(3)	55	R6.06	55/N405-S55 Conn SEPARATION Br No. 55-0424	NB		128	256	128	128	256											24		6	13	384	320		43
				SB				128	128	384											36		9	3	128	224		48
(4)	55	17.71	N55-W91/55 Conn SEPARATION Br No. 55-0321G	NB				389	389	389											32		9	9	389	487		50
(5)	55	17.90	N55-W91/91 Conn SEPARATION Br No. 55-0329G	NB				350	350	350											29		8	8	350	438		45
(6)	90	12.59	SANTA ANA RIVER Br No. 55-0079	NB				368	368	368			368		200				168		32		34	8	368	534	368	74
				SB					40	736			75	190				30		54	32		16			224	84	48
(7)	91	8.57	SANTA ANA RIVER Br No. 55-0106	WB		869	1738	869	869	1450	288	789		80							144	60	38	90	2607	2331		286
				EB	869			869	869	1738		869					37				144	66	64	18	869	1912	40	292
(8)	91	R9.19	E91/91-55 FASTTRACK SEPARATION Br No. 55-0493R	EB				135	135	270											24		8	4	135	203		36
SUB-TOTAL						997	1994	4018	4058	7443	720	1658	443		200	22	99	30	210	54		134	230	172				
TOTAL					1157	11067				8163		2101		270	615						657	536			6012	7939	618	1148

CALCULATED-DESIGNED BY: BH
CHECKED BY: ADEL MALEK
FUNCTIONAL SUPERVISOR: ADEL MALEK
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DELIVERY

REVISED BY | DATE REVISED

PAVEMENT DELINEATION QUANTITIES

PDQ-1

LAST REVISION 05-18-09 | DATE PLOTTED => 27-JUL-2009 | TIME PLOTTED => 06:41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	8	22

Donald E. Howe
REGISTERED CIVIL ENGINEER

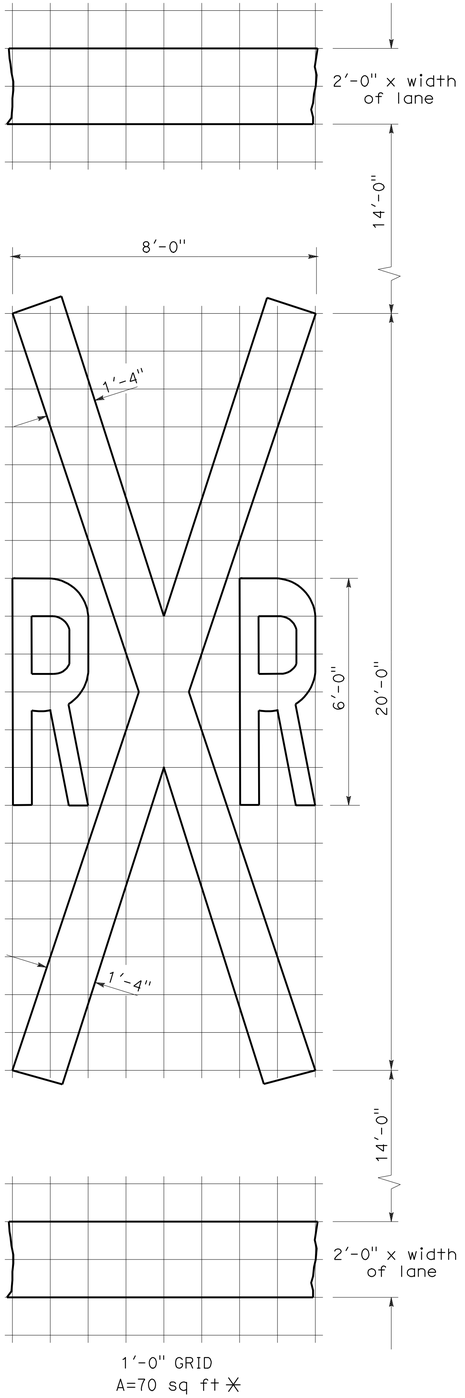
REGISTERED PROFESSIONAL ENGINEER
Donald E. Howe
No. C46402
Exp. 3-31-09
CIVIL
STATE OF CALIFORNIA

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.

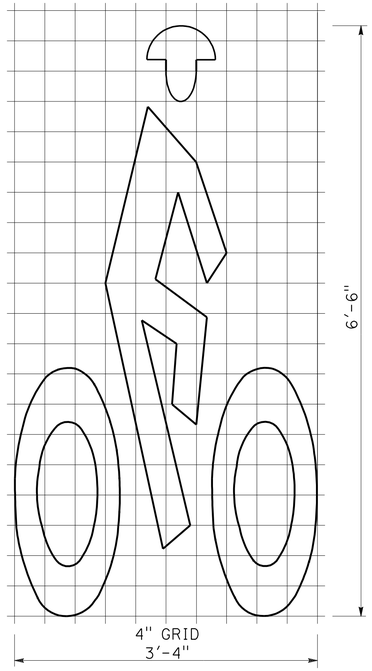
To accompany plans dated 7-20-09

2006 REVISED STANDARD PLAN RSP A24C



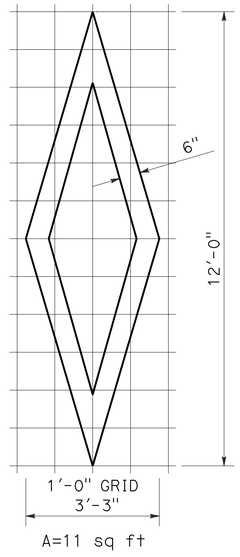
RAILROAD CROSSING SYMBOL

✳70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



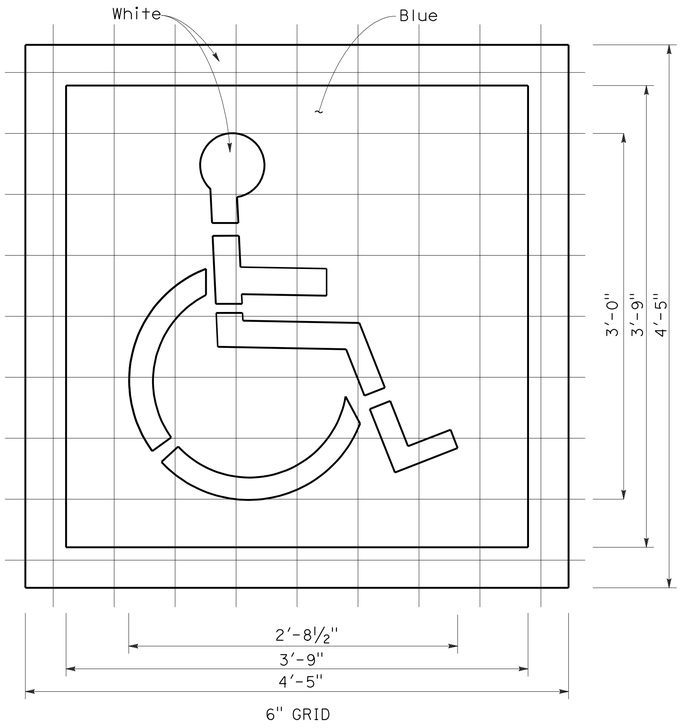
A=7 sq ft

BIKE LANE SYMBOL



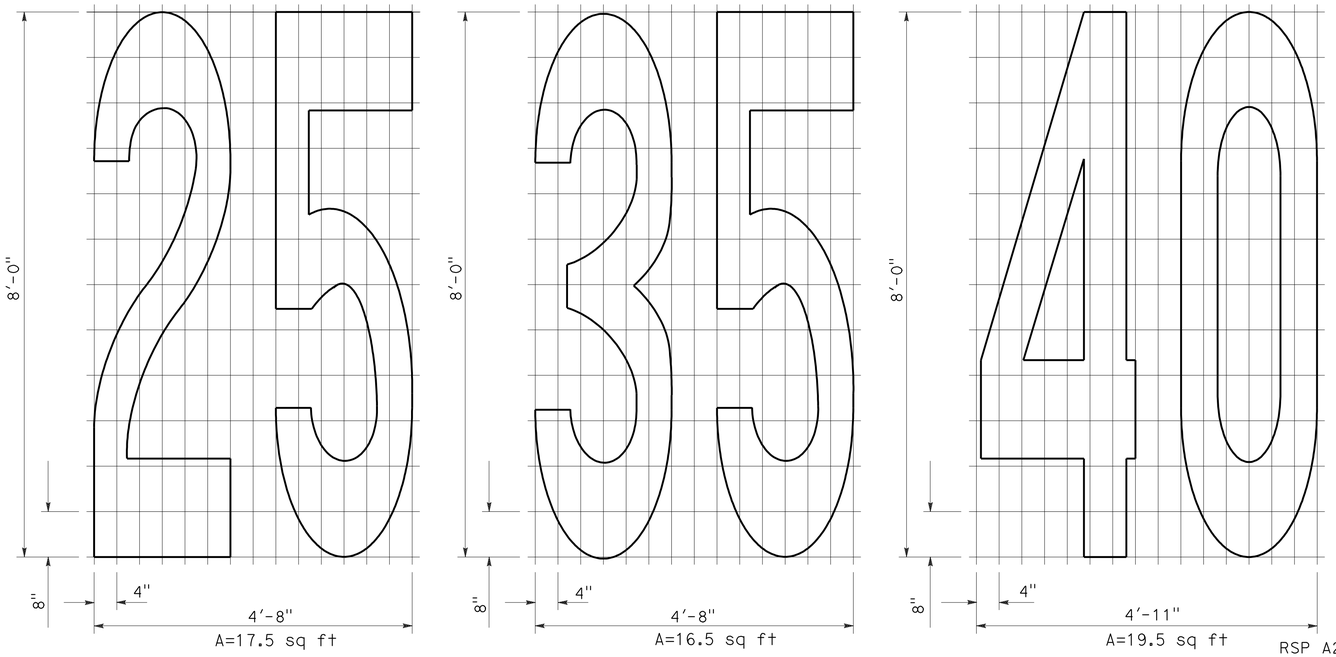
A=11 sq ft

DIAMOND SYMBOL

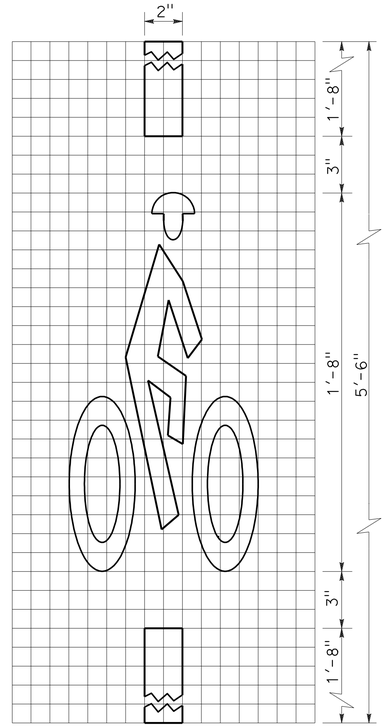


6" GRID
A (White) =9 sq ft
A (Blue) =14 sq ft

INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



NUMERALS



A=2 sq ft

BICYCLE LOOP DETECTOR SYMBOL

NOTE:

1. Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A24C

5-27-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	9	22

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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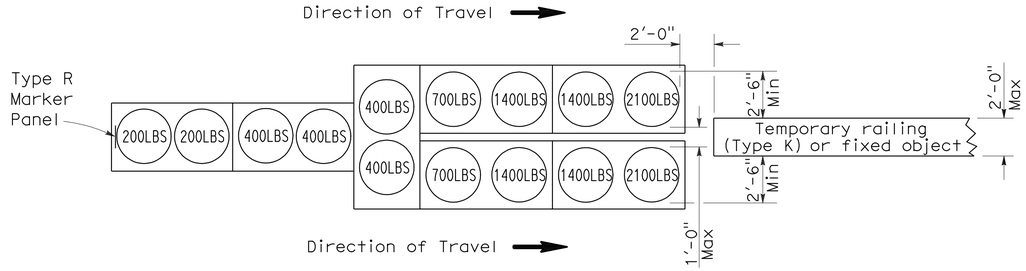
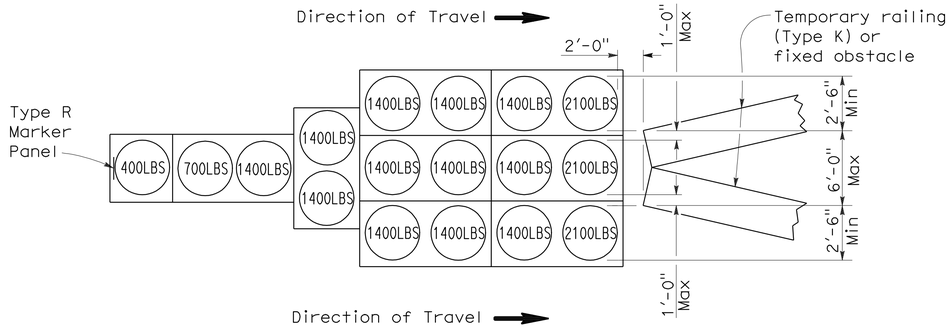
To accompany plans dated 7-20-09

2006 REVISED STANDARD PLAN RSP T1A



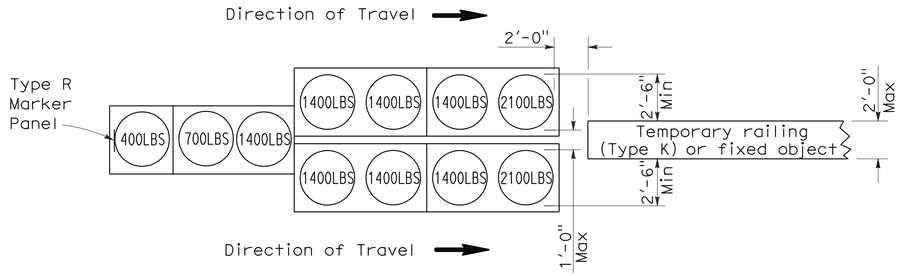
ARRAY 'TU14'

Approach speed 45 mph or more



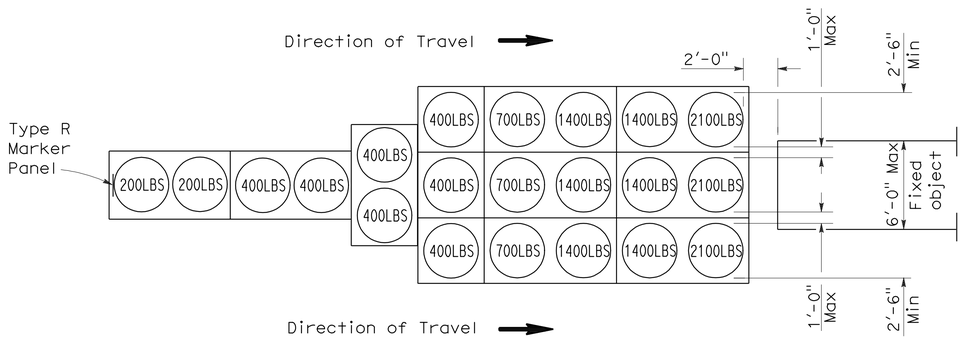
ARRAY 'TU17'

Approach speed less than 45 mph



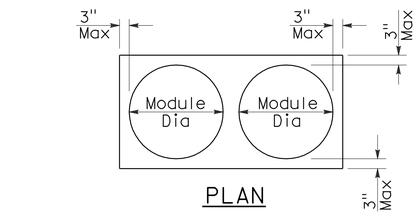
ARRAY 'TU11'

Approach speed less than 45 mph

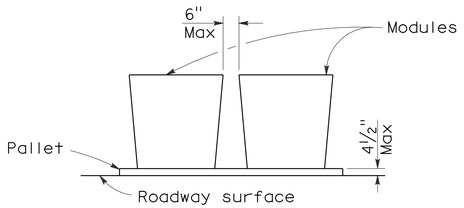


ARRAY 'TU21'

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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	10	22

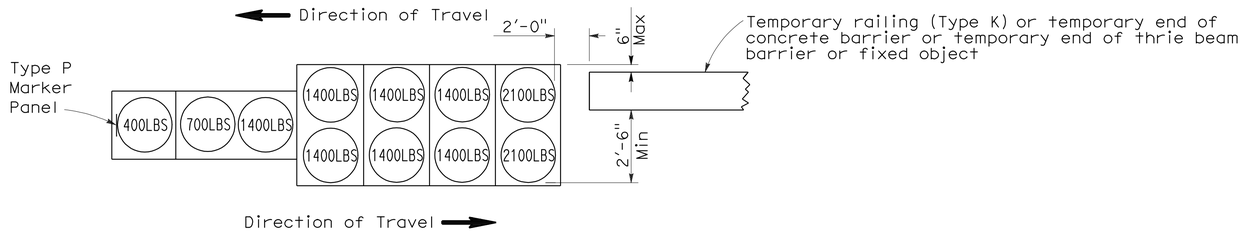
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

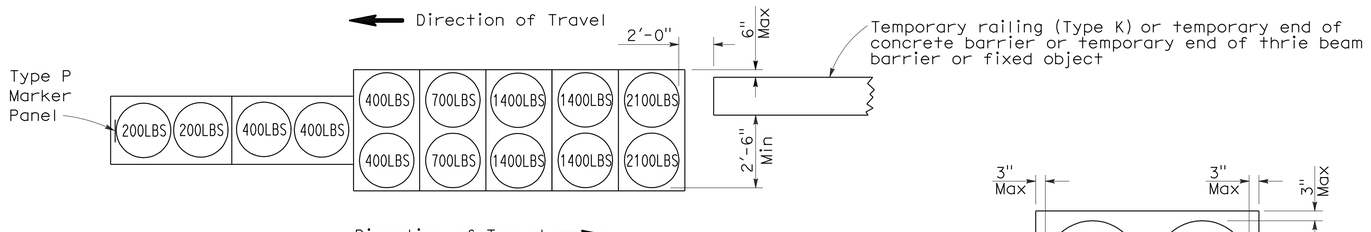
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-20-09



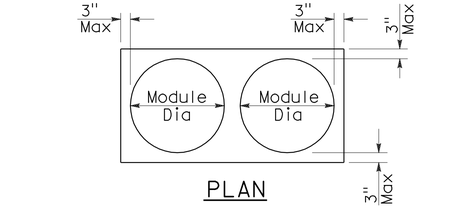
ARRAY 'TB11'

Approach speed less than 45 mph

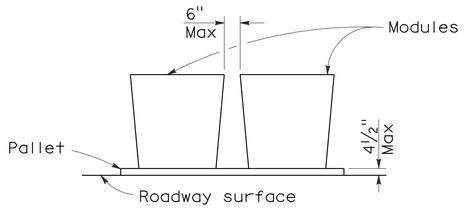


ARRAY 'TB14'

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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	11	22

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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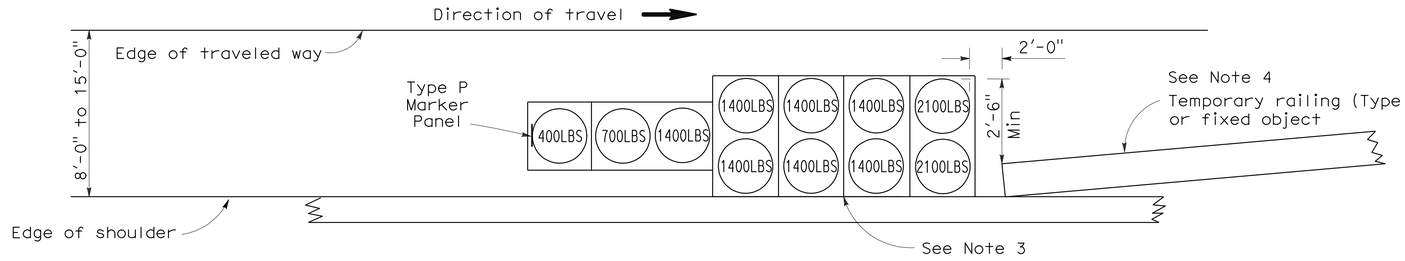
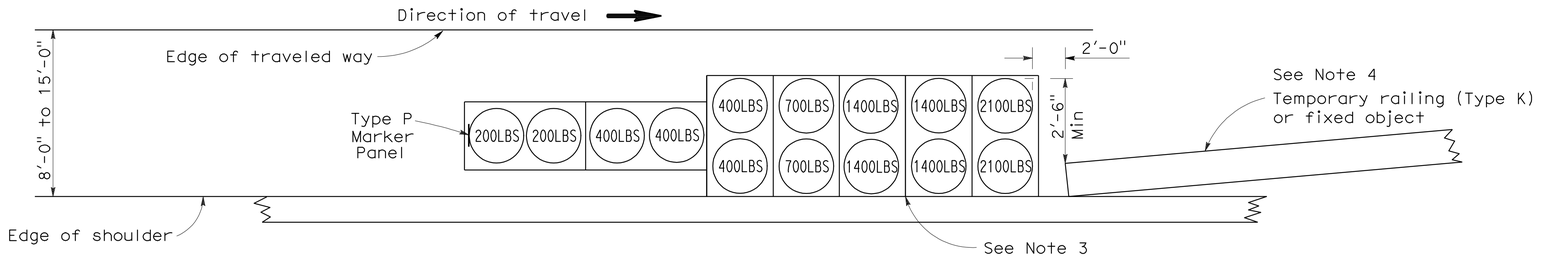
To accompany plans dated 7-20-09



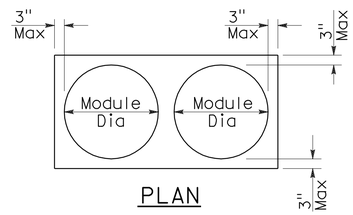
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

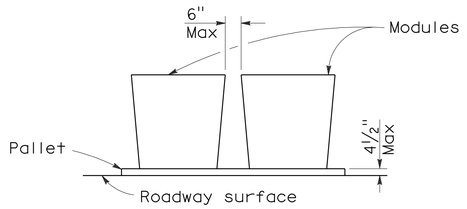


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

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. 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.
4. 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.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. 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.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. 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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	12	22

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

August 15, 2008
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3825 — Signature — 11-04-08 Renewal Date — 08-11-08 Date — STATE OF CALIFORNIA

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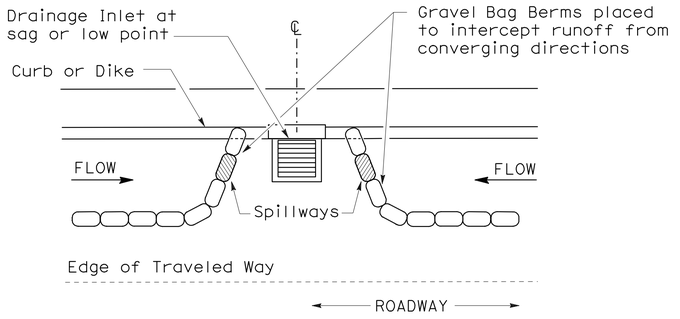
To accompany plans dated 7-20-09



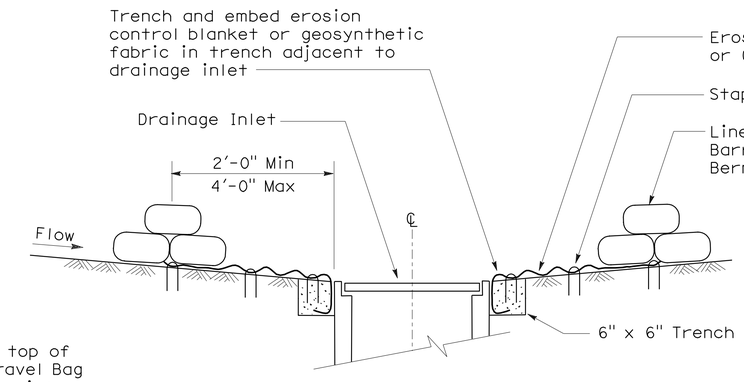
PLAN

CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)

GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100′	75′	50′	25′	12′

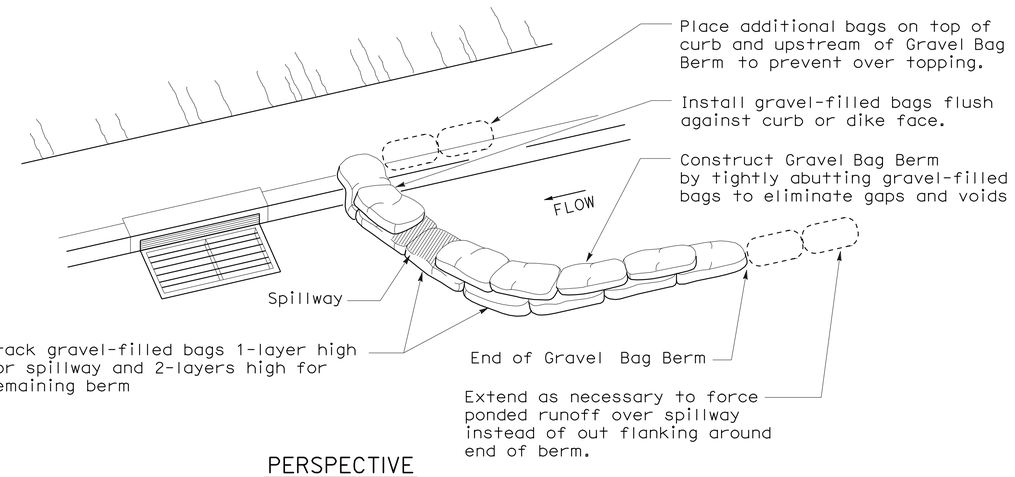
For slope of less than 1%, install barriers only if erosion/sediment is prevalent



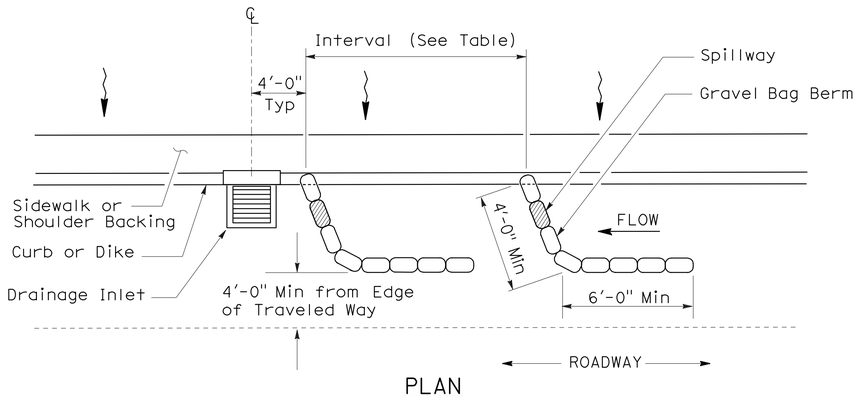
SECTION A-A

NOTES:

1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.

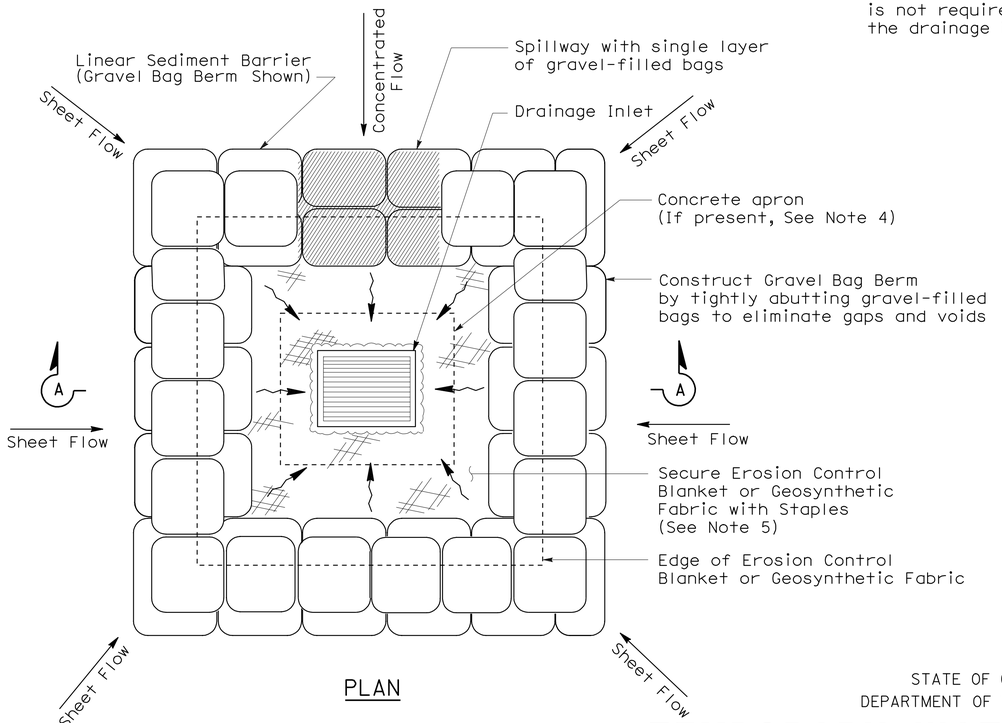


PERSPECTIVE



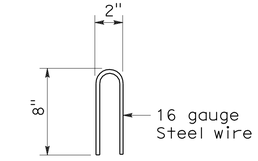
PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)



PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T62

2006 NEW STANDARD PLAN NSP T62

7-11-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	13	22

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

August 15, 2008
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3825 — Signature — 11-04-08 Renewal Date — 08-11-08 Date — STATE OF CALIFORNIA

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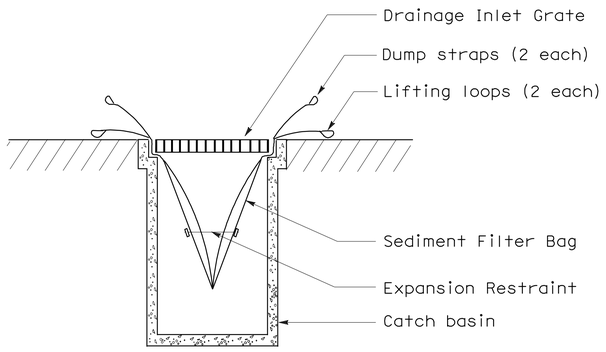
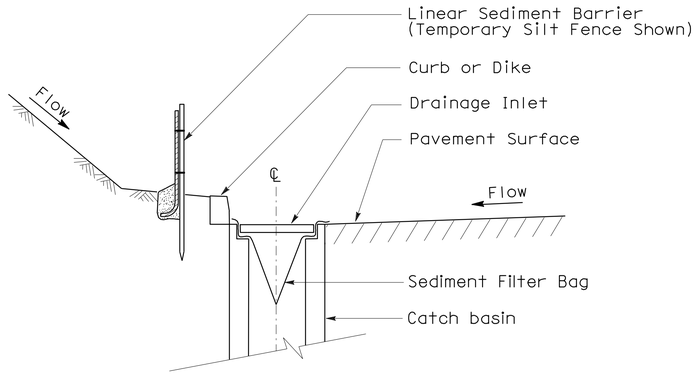
To accompany plans dated 7-20-09

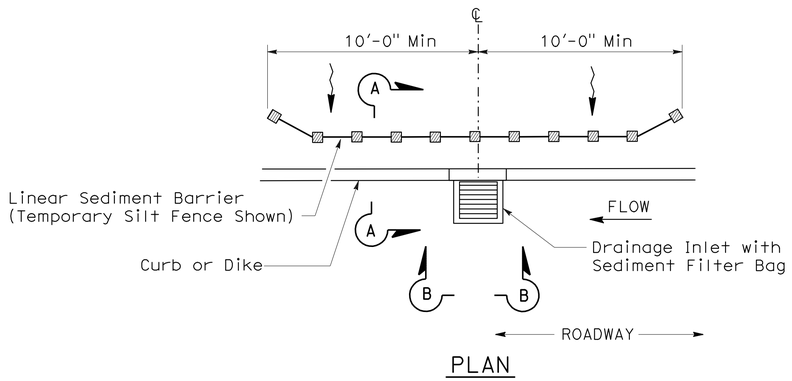


SECTION B-B

SEDIMENT FILTER BAG DETAIL

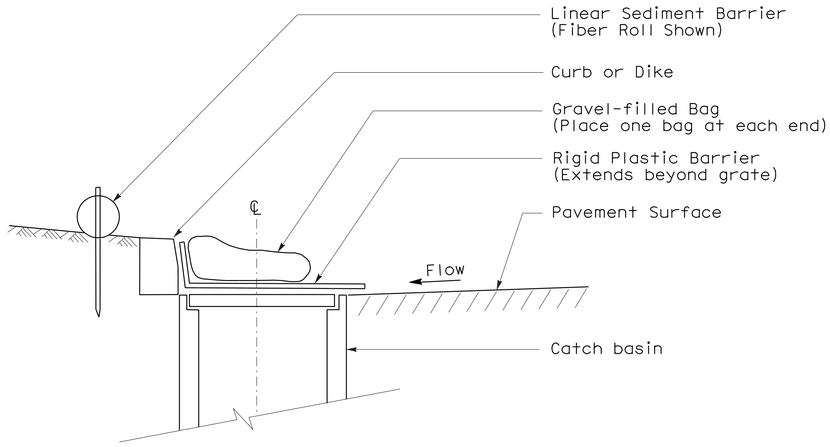


SECTION A-A



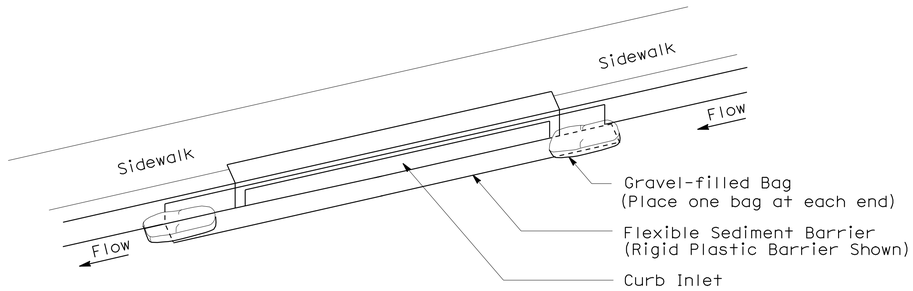
PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 5) (SEDIMENT FILTER BAG)



SECTION

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6A) (CATCH BASIN WITH GRATE)



PERSPECTIVE

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6B) (CURB INLET WITHOUT GRATE)

NOTES:

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T64

2006 NEW STANDARD PLAN NSP T64

7-11-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	14	22

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3025 — Signature — 11-30-10 Renewal Date — 2-25-09 Date — STATE OF CALIFORNIA

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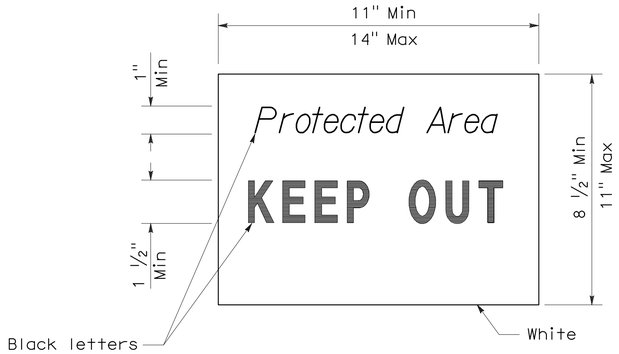
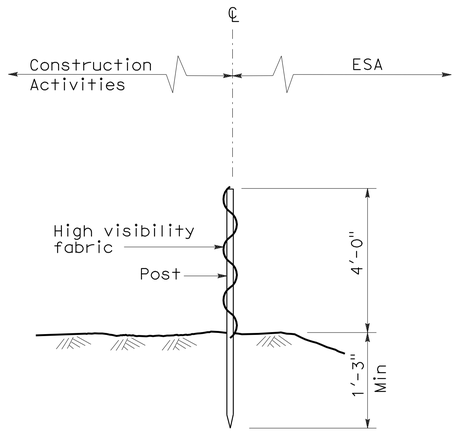
To accompany plans dated 7-20-09



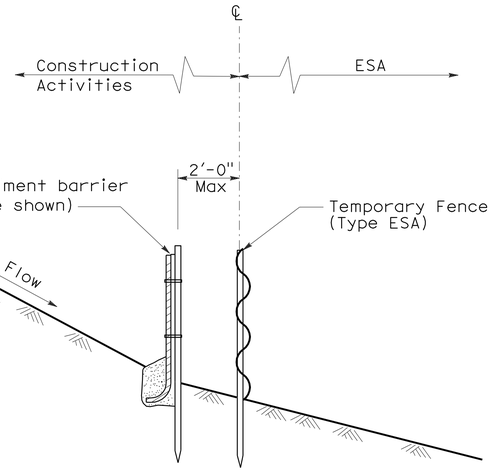
SIGN DETAIL

NOTE:

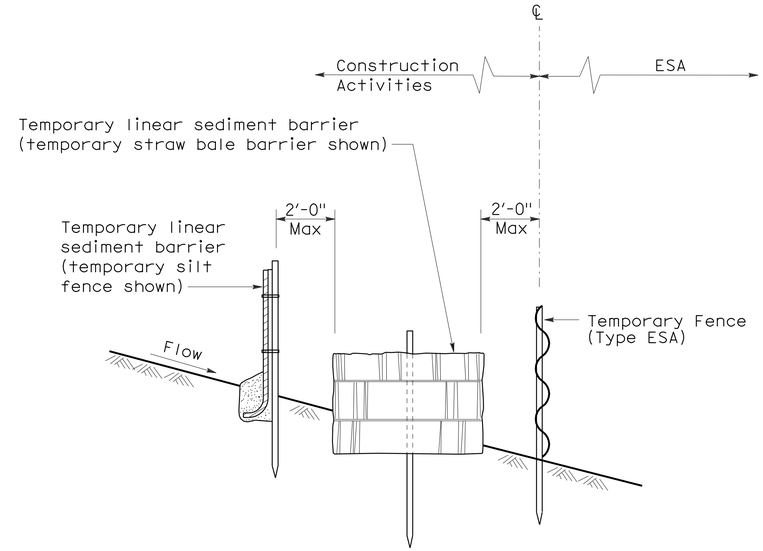
1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.



SECTION
TEMPORARY FENCE (TYPE ESA)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY
FENCE (TYPE ESA)
(See Note 1)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY SILT FENCE
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)
(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS [TEMPORARY FENCE (TYPE ESA)]

NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T65

2006 NEW STANDARD PLAN NSP T65

1-7-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	15	22

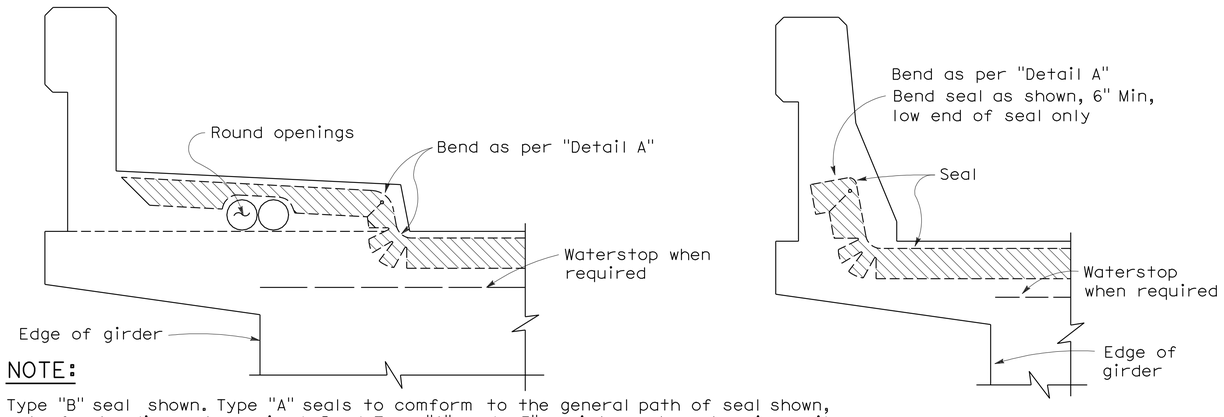
REGISTERED CIVIL ENGINEER

Efthymios Delis
No. C51434
Exp. 6-30-08
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

October 5, 2007
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 7-20-09

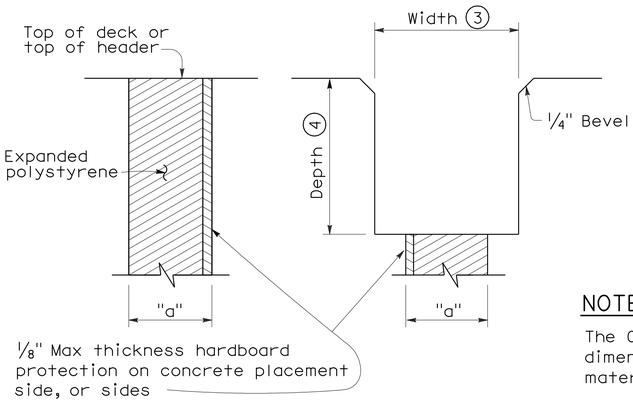


NOTE:

Type "B" seal shown. Type "A" seals to comform 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



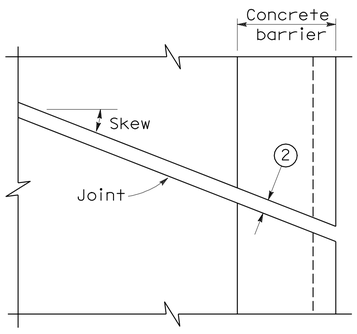
FORMING DETAIL

SAWCUT DETAIL

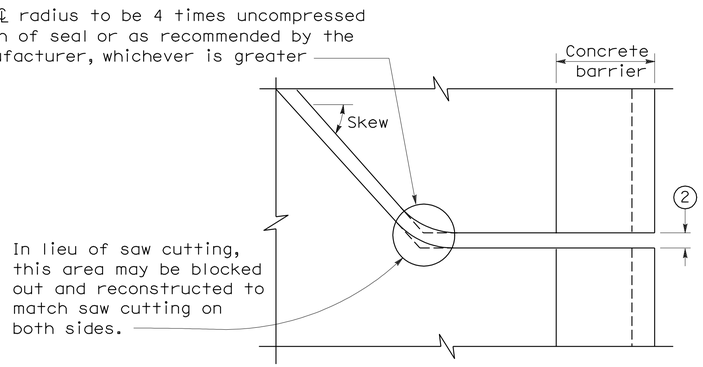
NOTE:

The Contractor shall verify all controlling field dimensions before ordering or fabricatiing any material.

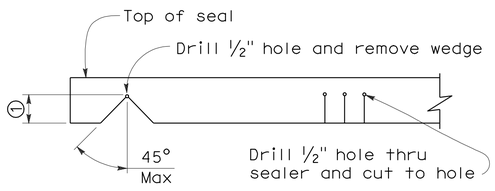
JOINT SEALS DETAILS



PLAN OF JOINT (SKEW ≤ 20°)



PLAN OF JOINT (SKEW > 20°)



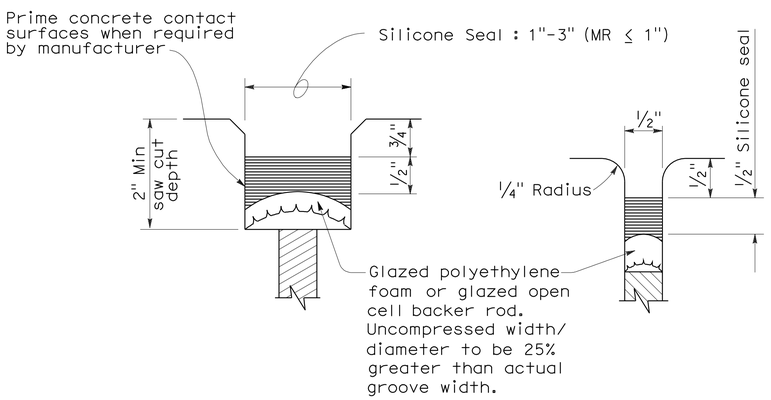
DETAIL A

NOTES:

1. Make smooth cuts from the bottom of seal to 1½" 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.
2. Opening in barrier to match width of sawn deck joint.
3. Sawcut groove widths shall be as ordered by the Engineer.
4. Depth of sawcut: Type A - Depth to be 2" minimum.
   Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W_2) plus dimensions shown.
5. MR (movement rating) as shown on other plan sheets.
6. 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	1½"	1¼"	¾"
	CIP/PS	1¼"	1"	½"
1½"	All except CIP/PS	1¼"	1"	½"
	CIP/PS	1"	¾"	½"
1"	All except CIP/PS	1"	¾"	½"
	CIP/PS	¾"	½"	½"
½"	All except CIP/PS	¾"	¾"	½"
	CIP/PS	½"	½"	½"

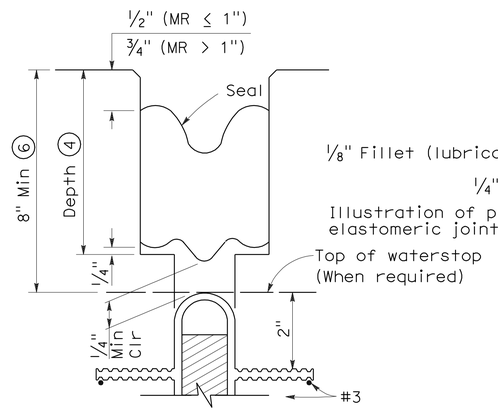


TYPE A SEAL

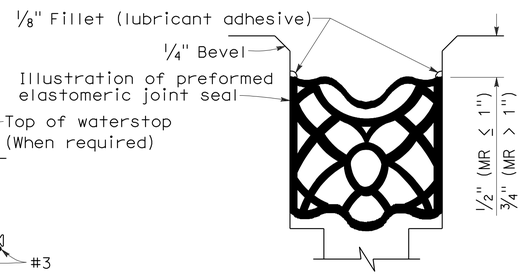
Movement rating : Silicone = 1" Max

TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W_2)



TYPE B SEAL

Movement Rating ≤ 2"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

NO SCALE

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

5-8-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	16	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake — No. C57863 — Exp. 06/30/10 — 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:

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.

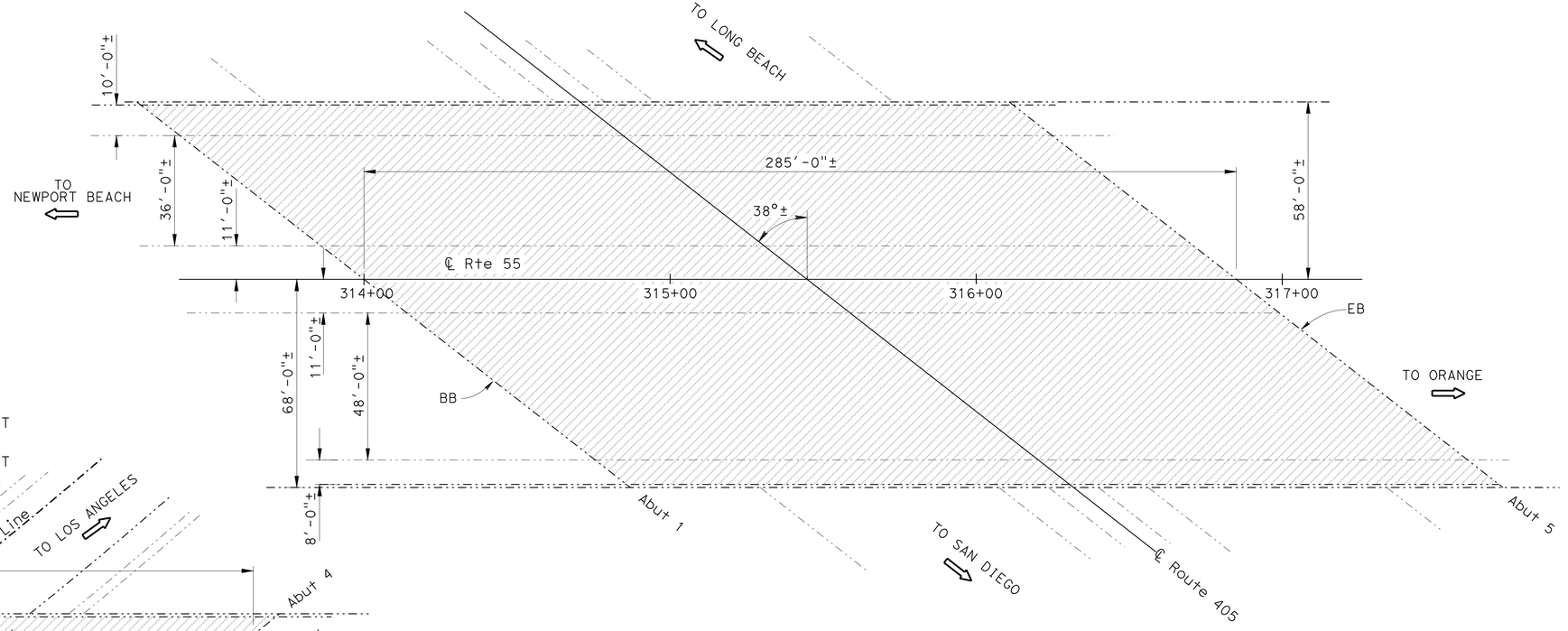
STANDARD PLANS DATED MAY 2006

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")

STANDARD PLAN SHEET NO.

DETAIL NO.

INDEX TO PLANS



ROUTE 55/405 SEPARATION

Br No. 55-0252, Rte 055, PM R5.99
NO SCALE

55/405 SEP BR. NO. 55-0252

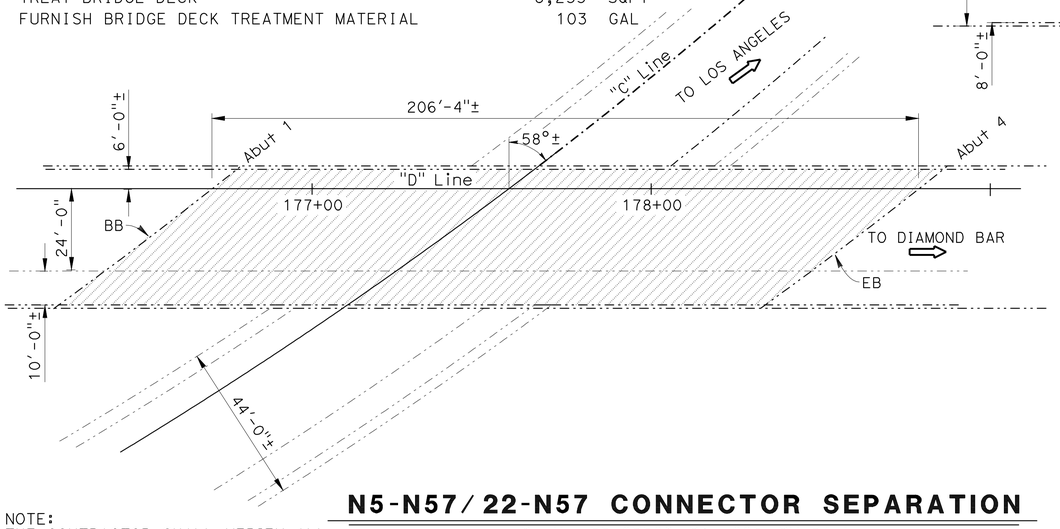
QUANTITIES

REMOVE UNSOUND CONCRETE	90	CF
CLEAN BRIDGE DECK	35,600	SQFT
RAPID SETTING CONCRETE (PATCH)	90	CF
TREAT BRIDGE DECK	35,600	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	445	GAL

N5-N57/22-N57 CONNECTOR SEP BR. NO. 55-0350G

QUANTITIES

REMOVE UNSOUND CONCRETE	20	CF
CLEAN BRIDGE DECK	8,255	SQFT
RAPID SETTING CONCRETE (PATCH)	20	CF
TREAT BRIDGE DECK	8,255	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	103	GAL



N5-N57/22-N57 CONNECTOR SEPARATION

Br No. 55-0350G, Rte 005, PM 34.4
NO SCALE

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

TONY D. BRAKE
DESIGN ENGINEER

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 12
EA 0F3401

BRIDGE NO. Various
POST MILE Varies

ROUTE 5,55,90,91 BRIDGES
GENERAL PLAN NO. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
7-18-09										1	7

FILE => 12-0f3401-a-gp01.dgn

USERNAME => rtmikes1 DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:43

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	17	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake — No. C57863 — Exp. 06/30/10 — CIVIL — STATE OF CALIFORNIA

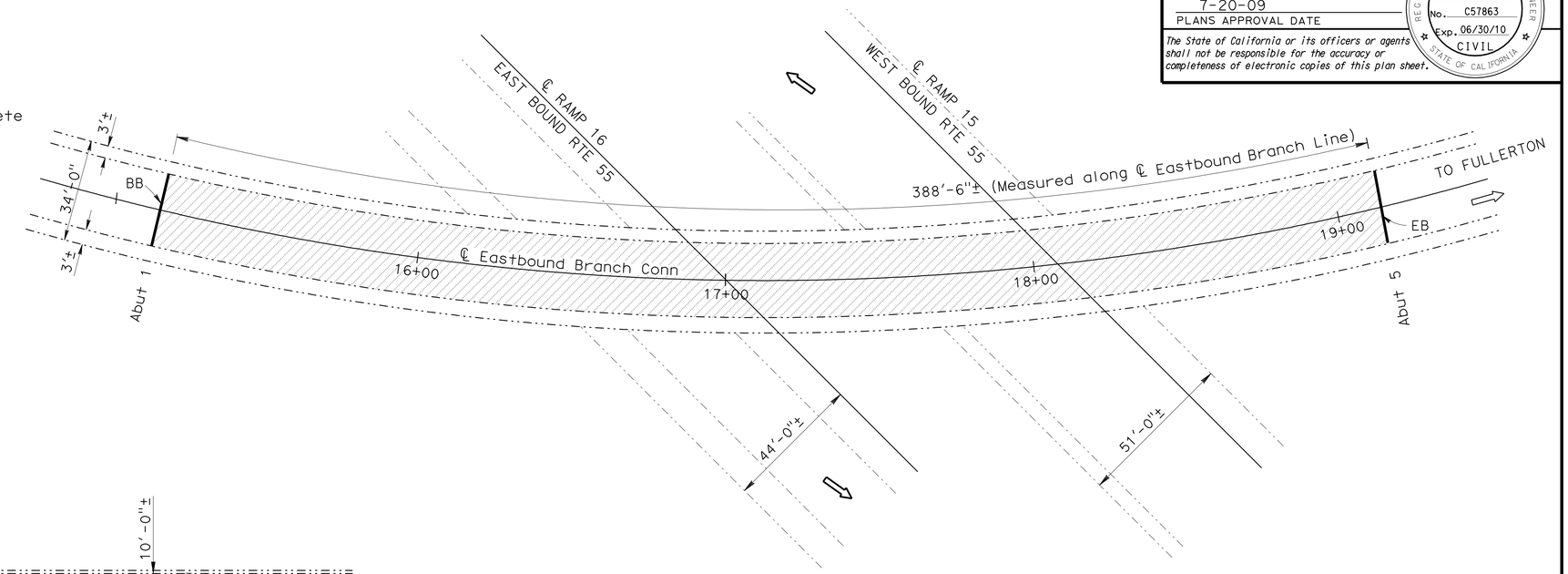
LEGEND:

Indicates existing.

Indicates direction of traffic.

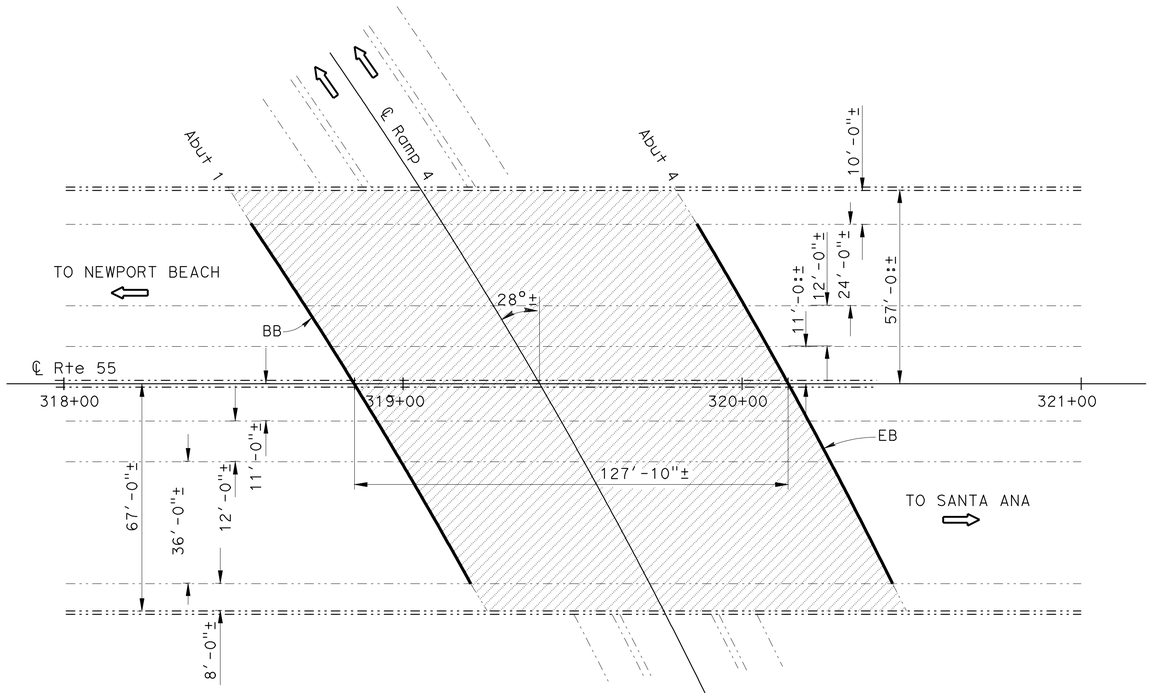
Indicates limits of clean and treat bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.

Indicates limits of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint spalls.



N55-W91/55 CONNECTOR SEPARATION

Br No. 55-0321G, Rte 055, PM 17.71
NO SCALE



55/N405-S55 CONNECTOR SEPARATION

Br No. 55-0424, Rte 055, PM R6.06
NO SCALE

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

N55-W91/55 CONNECTOR SEP — BR. NO. 55-0321G
QUANTITIES

REMOVE UNSOUND CONCRETE	30	CF
CLEAN BRIDGE DECK	10,880	SQFT
CLEAN EXPANSION JOINT	56	LF
RAPID SETTING CONCRETE (PATCH)	30	CF
JOINT SEAL (MR 2")	56	LF
TREAT BRIDGE DECK	10,880	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	136	GAL

55/N405-S55 CONNECTOR SEP — BR. NO. 55-0424
QUANTITIES

REMOVE UNSOUND CONCRETE	40	CF
CLEAN BRIDGE DECK	15,860	SQFT
CLEAN EXPANSION JOINT	242	LF
RAPID SETTING CONCRETE (PATCH)	40	CF
JOINT SEAL (MR 2")	242	LF
TREAT BRIDGE DECK	15,860	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	198	GAL

TONY D. BRAKE
DESIGN ENGINEER

	BY	CHECKED
DESIGN	Ramesh Patel	Tony Brake
DETAILS	Ramesh Patel	Tony Brake
QUANTITIES	Ramesh Patel	Tony Brake

LOAD FACTOR DESIGN — LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD

	BY	CHECKED
LAYOUT	Clayton Tom	Tony Brake
SPECIFICATIONS	Tanya Kershell	PLANS AND SPECS COMPARED: Tanya Kershell

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 12
EA 0F3401

BRIDGE NO. Various
POST MILE Varies

ROUTE 5,55,90,91 BRIDGES
GENERAL PLAN NO. 2

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 2-18-09 5-18-09

SHEET 2 OF 7

FILE => 12-0f3401-a-gp02.dgn

USERNAME => tmikesl DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:43

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	18	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake, No. C57863, Exp. 06/30/10, CIVIL — STATE OF CALIFORNIA

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LEGEND:

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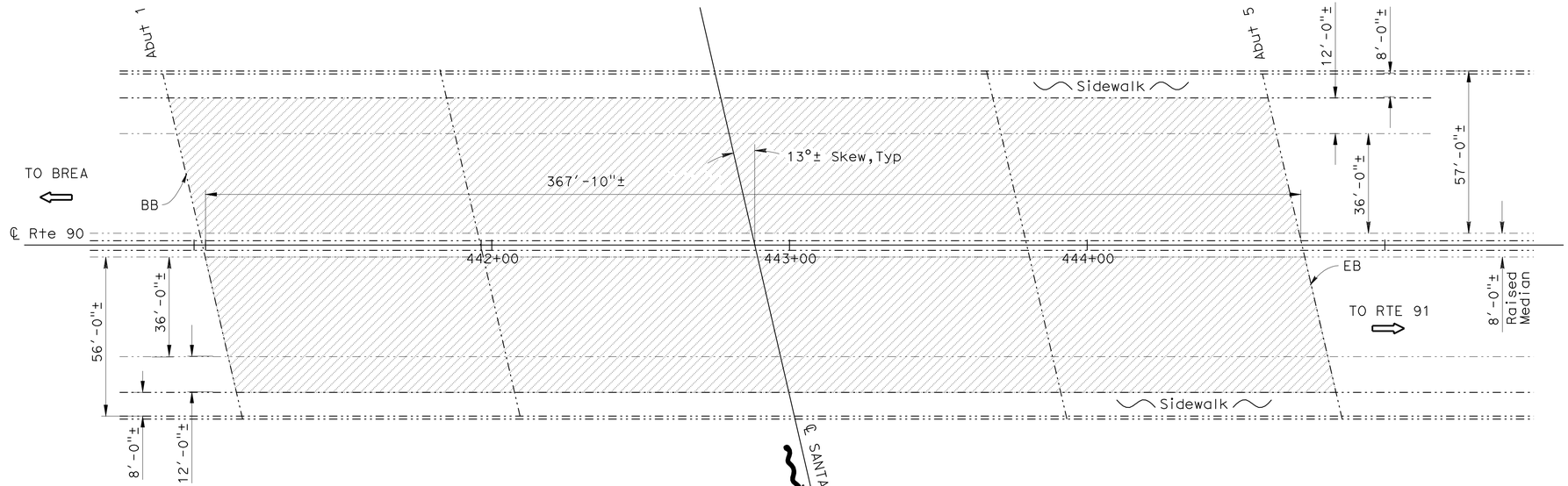
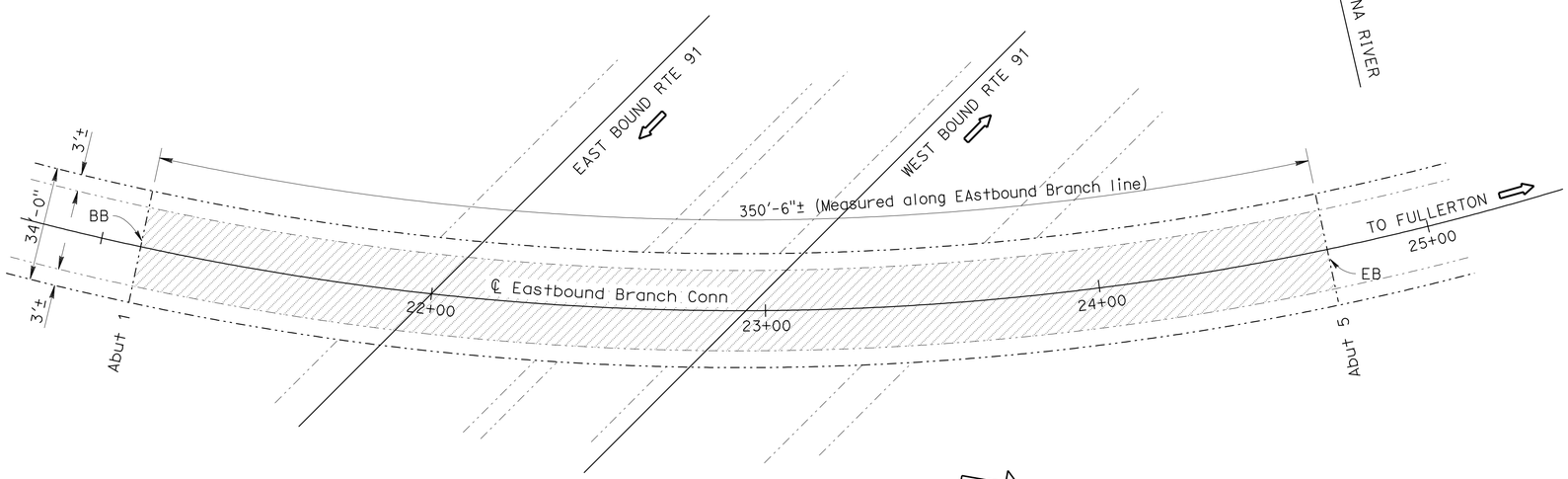


SANTA ANA RIVER

Br No. 55-0079, Rte 90, PM 12.59
NO SCALE



N55-W91/91 CONNECTOR SEPARATION

Br No. 55-0329G, Rte 055, PM 17.90
NO SCALE

N55-W91/91 CONNECTOR SEP — BR. NO. 55-0329G

QUANTITIES		
REMOVE UNSOUND CONCRETE	25	CF
CLEAN BRIDGE DECK	9,820	SQFT
RAPID SETTING CONCRETE (PATCH)	25	CF
TREAT BRIDGE DECK	9,820	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	123	GAL

SANTA ANA RIVER BRIDGE — BR. NO. 55-0079

QUANTITIES		
REMOVE UNSOUND CONCRETE	90	CF
CLEAN BRIDGE DECK	35,680	SQFT
RAPID SETTING CONCRETE (PATCH)	90	CF
TREAT BRIDGE DECK	35,680	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	446	GAL

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

TONY D. BRAKE
DESIGN ENGINEER

	BY	CHECKED
DESIGN	Ramesh Patel	Tony Brake
DETAILS	Ramesh Patel	Tony Brake
QUANTITIES	Ramesh Patel	Tony Brake

LOAD FACTOR DESIGN — LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD

	BY	CHECKED
LAYOUT	Clayton Tom	Tony Brake
SPECIFICATIONS	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

ROUTE 5,55,90,91 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 12
EA 0F3401

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 02-18-09

SHEET 3 OF 7

FILE => 12-0f3401-a-gp03.dgn

USERNAME => trmikesi DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:43

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	19	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake — No. C57863 — Exp. 06/30/10 — CIVIL — STATE OF CALIFORNIA

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LEGEND:

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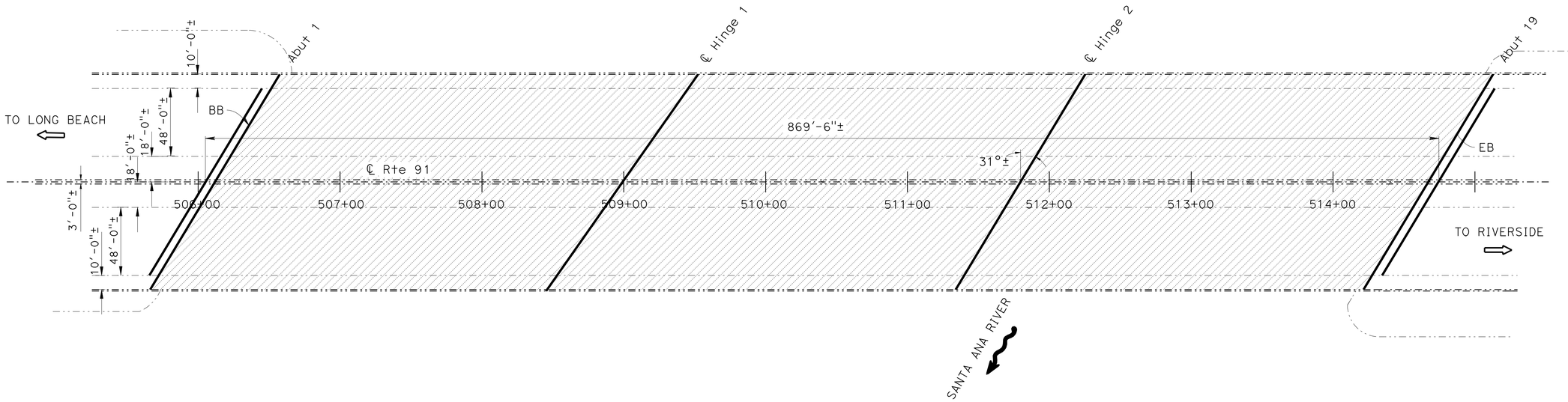
Indicates limits of clean expansion joint and placement of new joint seal. Repair joint spalls, prior to placement of new joint seal.

SANTA ANA RIVER BRIDGE BR. NO. 55-0106

QUANTITIES

REMOVE UNSOUND CONCRETE	330	CF
CLEAN BRIDGE DECK	131,200	SQFT
CLEAN EXPANSION JOINT	1,020	LF
RAPID SETTING CONCRETE (PATCH)	330	CF
JOINT SEAL (MR 2")	1,020	LF
TREAT BRIDGE DECK	131,200	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,640	GAL



SANTA ANA RIVER

Br No. 55-0106, Rte 91, PM 8.57
NO SCALE

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Ramesh Patel	CHECKED Tony Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
	DETAILS	BY Ramesh Patel	CHECKED Tony Brake	LAYOUT	BY Clayton Tom	CHECKED Tony Brake	
	QUANTITIES	BY Ramesh Patel	CHECKED Tony Brake	SPECIFICATIONS	BY Tanya Kershell	PLANS AND SPECS COMPARED Tanya Kershell	

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 12
EA 0F3401

BRIDGE NO. Various
POST MILE Varies

ROUTE 5,55,90,91 BRIDGES
GENERAL PLAN NO.4

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 02-18-09 | 05-18-09

SHEET 4 OF 7

FILE => 12-0f3401-a-gp04.dgn

USERNAME => rmhkesi DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	20	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake, No. C57863, Exp. 06/30/10, CIVIL — STATE OF CALIFORNIA

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LEGEND:

Indicates existing.

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

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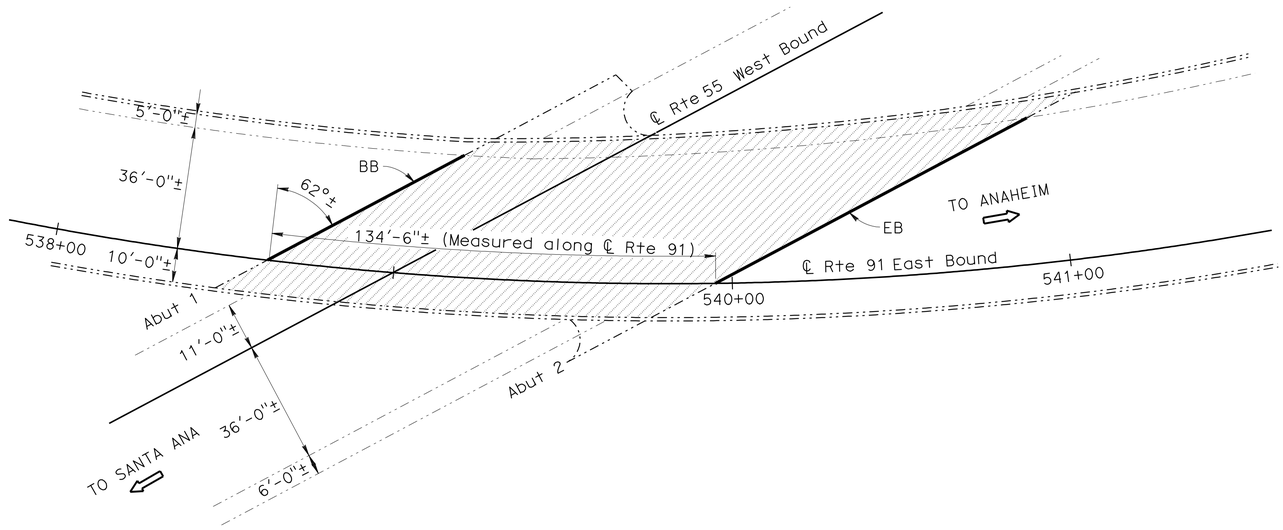
E91/91-55 FASTTRACK SEP BR. NO. 55-0493R

QUANTITIES

EMOVE UNSOUND CONCRETE	20	CF
CLEAN BRIDGE DECK	6,840	SQFT
CLEAN EXPANSION JOINT	154	LF
RAPID SETTING CONCRETE (PATCH)	20	CF
JOINT SEAL (MR 2")	154	LF
TREAT BRIDGE DECK	6,840	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	86	GAL



E91/91-55 FASTTRACK SEPARATION

Br No. 55-0493R, Rte 091, PM R9.19
NO SCALE

N

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Ramesh Patel	CHECKED Tony Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN
	DETAILS	BY Ramesh Patel	CHECKED Tony Brake	LAYOUT	BY Clayton Tom	CHECKED Tony Brake		
	QUANTITIES	BY Ramesh Patel	CHECKED Tony Brake	SPECIFICATIONS	BY Tanya Kershell	PLANS AND SPECS COMPARED Tanya Kershell		

BRIDGE NO. Various
POST MILE Varies

ROUTE 5,55,90,91 BRIDGES
GENERAL PLAN NO.5

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 12
EA 0F3401

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
02-16-09	05-18-09									5	7

FILE => 12-0f3401-a-gp05.dgn

USERNAME => trmikesl DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	21	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake — No. C57863 — Exp. 06/30/10 — CIVIL — STATE OF CALIFORNIA

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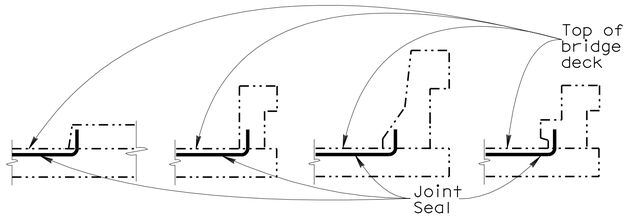
JOINT SEAL TABLE

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)
55/N405-S55 Conn Sep	55-0424	ABUTMENT 1 PN	2	NO	121	6	3	6	5
		ABUTMENT 4 PN	2	NO	121	6	3	6	5
N55-W91/55 Conn Sep	55-0321G	ABUTMENT 1 BW	2	NO	28	6	3	6	5
		ABUTMENT 5 BW	2	NO	28	6	3	6	5
SANTA ANA RIVER	55-0106	ABUTMENT 1 PN	2	NO	154	6	3	6	5
		ABUTMENT 1 BW	2	NO	178	6	3	6	5
		HINGE 1	2	YES	178	3	3	6	5
		HINGE 2	2	YES	178	3	3	6	5
		ABUTMENT 19 BW	2	NO	178	6	3	6	5
		ABUTMENT 19 PN	2	NO	154	6	3	6	5
E91/91-55 FASTTRACK	55-0493R	ABUTMENT 1 PN	2	NO	77	6	3	6	5
		ABUTMENT 2 PN	2	NO	77	6	3	6	5

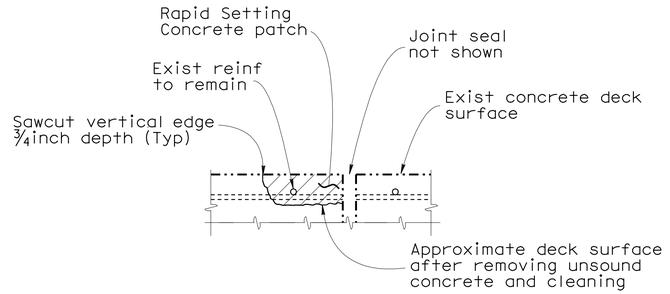


BARRIER RAIL

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.



JOINT SPALL REPAIR DETAIL

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

NOTES:

The following notes apply to JOINT SEAL TYPE A:

Install Joint Seal (MR = ½") 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:

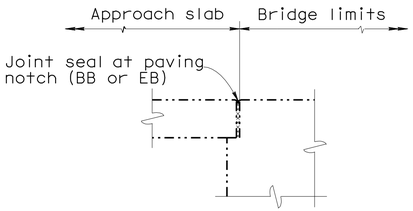
1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.

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.

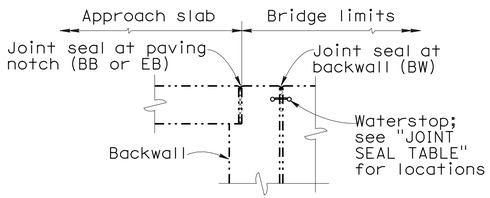
3) W1 shall be the smaller of the values determined as follows:
   A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
   B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3.0 PSI.

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.

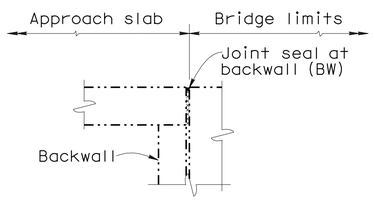
For details not shown see RSP B6-21.



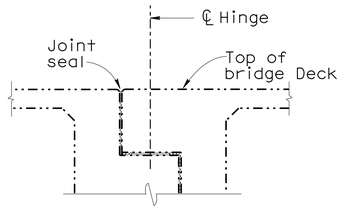
DIAPHRAGM ABUTMENT



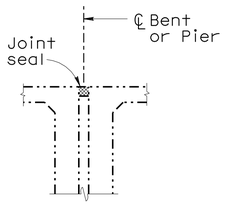
ABUTMENT WITH BACKWALL AND PAVING NOTCH



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.

	BY	CHECKED
DESIGN	Ramesh Patel	Tony Brake
DETAILS	Ramesh Patel	Tony Brake
QUANTITIES	Ramesh Patel	Tony Brake

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	ROUTE 5,55,90,91 BRIDGES
POST MILE Varies	MISCELLANEOUS DETAILS NO. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 12
EA 0F3401

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES	SHEET	OF
02-18-09	6	7

FILE => 12-0f3401-b-miscdt01.dgn

USERNAME => trmikesl DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5,55, 90,91	Var	22	22

Tony D. Brake 05/18/09
REGISTERED CIVIL ENGINEER DATE

7-20-09
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.

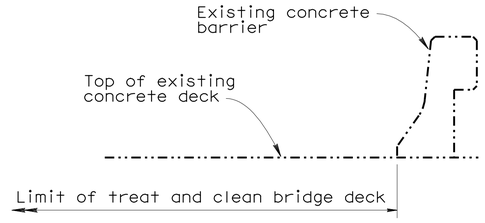
REGISTERED PROFESSIONAL ENGINEER — Tony D. Brake — No. C57863 — Exp. 06/30/10 — CIVIL — STATE OF CALIFORNIA

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

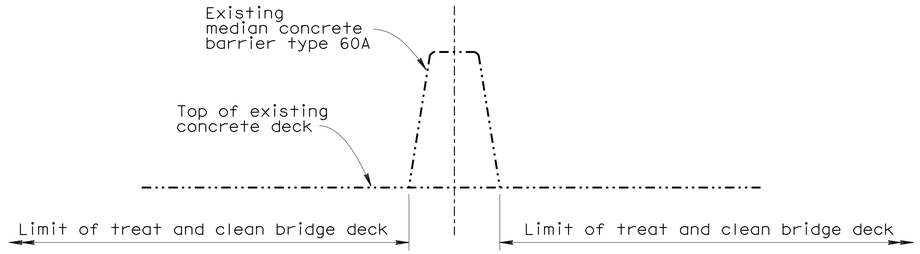
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCHES)
N5-N57/22-N57 Conn Sep	55-0350G	1	3
ROUTE 55/405 SEPARATION	55-0252	1	3
55/N405-S55 Conn Sep	55-0424	1	3
N55-W91/55 Conn Sep	55-0321G	1	3
N55-W91/91 Conn Sep	55-0329G	1	3
SANTA ANA RIVER	55-0079	1	3
SANTA ANA RIVER	55-0106	1	3
E91/91-55 FAST TRACK Sep	55-0493R	1	3

DECK REPAIR NOTES:

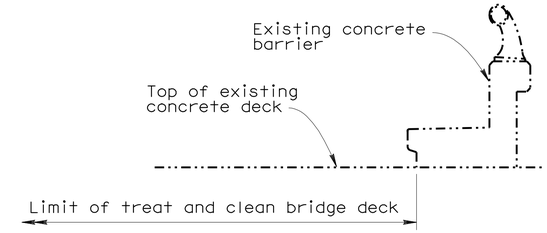
1. Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
2. It is responsibility of the Contractor to repair any reinforcement that is accidently cut by saw cutting operations.
3. When existing transverse reinforcement is exposed in the deck surface, saw cutting shall be waived with the approval of the Engineer.
4. The saw cut depth shall not exceed ¾ inch or the concrete cover over the top steel reinforcing bars, whichever is less.
5. Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original deck surface with rapid setting concrete patch.



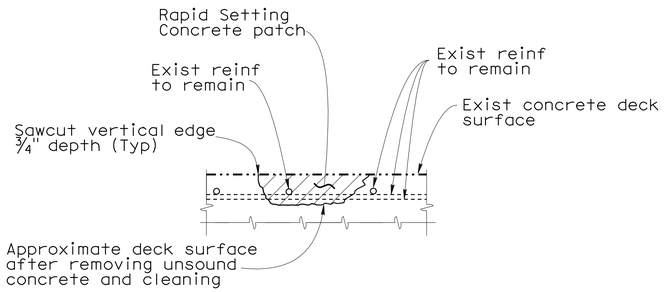
EOD BARRIER



MEDIAN BARRIER

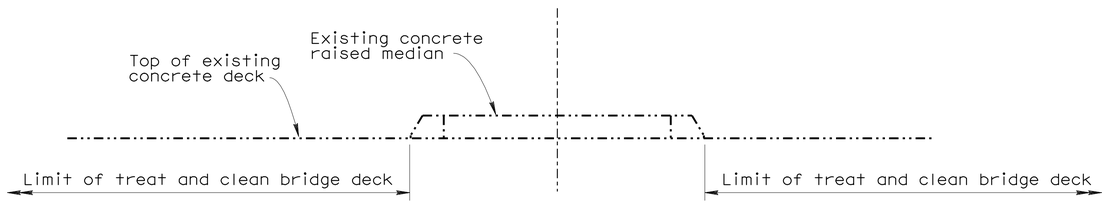


SIDEWALK BARRIER TYPE 2

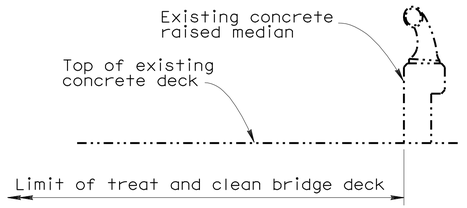


DECK DAMAGE REPAIR DETAIL

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



RAISED MEDIAN



SIDEWALK BARRIER TYPE 1

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

TYPICAL LIMITS OF DECK WORK

NO SCALE

DESIGN	BY Ramesh Patel	CHECKED Tony Brake	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various	ROUTE 5,55.90,91 BRIDGES	
DETAILS	BY Ramesh Patel	CHECKED Tony Brake			POST MILE Varies	MISCELLANEOUS DETAILS NO. 2	
QUANTITIES	BY Ramesh Patel	CHECKED Tony Brake		CU 12 EA 0F3401	DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES: 2-18-09	SHEET 7 OF 7

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 12-0f3401-b-miscdt02.dgn

USERNAME => ttmikesi DATE PLOTTED => 27-JUL-2009 TIME PLOTTED => 06:44