

INDEX OF PLANS

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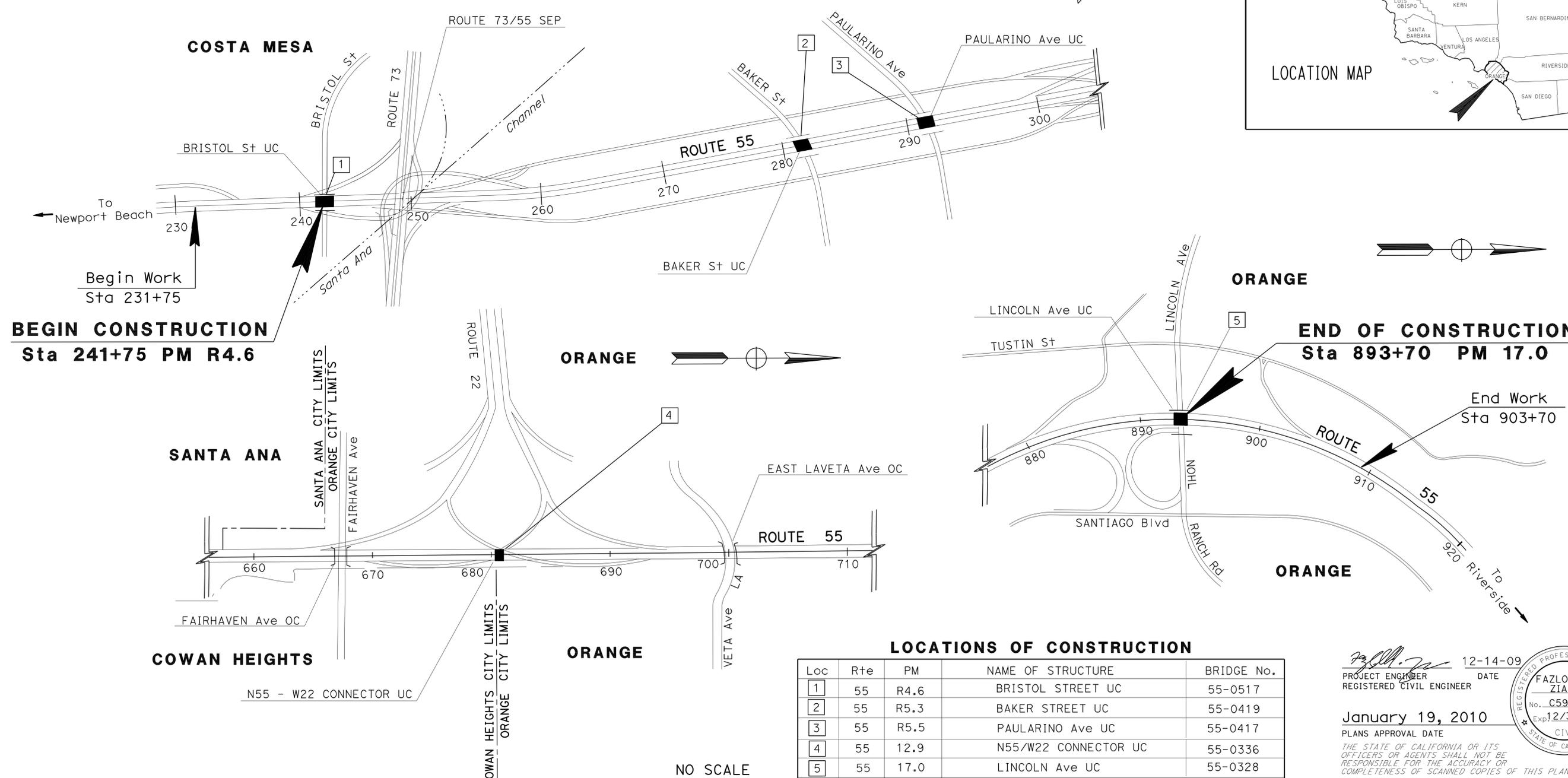
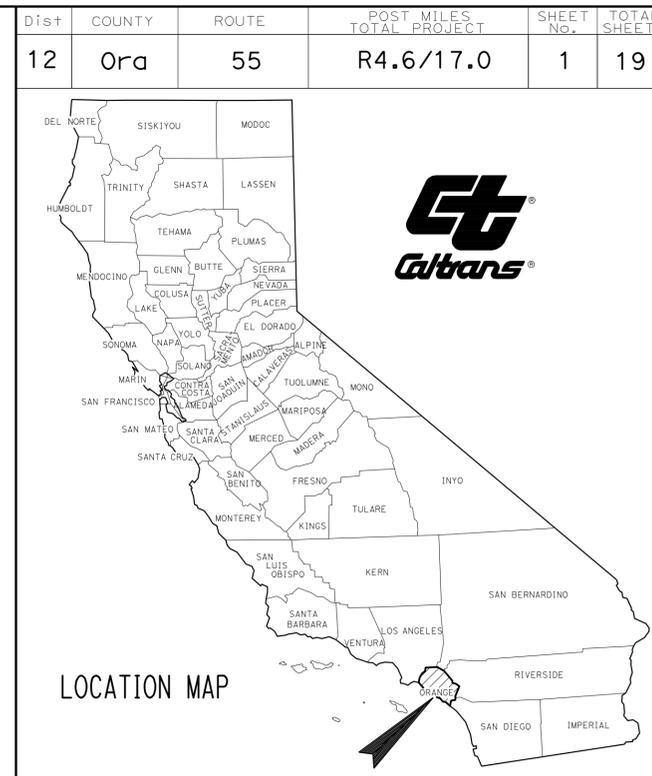
STRUCTURE PLANS

14-19	ROUTE 55 BRIDGES
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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 ORANGE COUNTY
IN COSTA MESA AND ORANGE
AT VARIOUS LOCATIONS
FROM BRISTOL STREET UNDERCROSSING
TO LINCOLN AVENUE UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATIONS OF CONSTRUCTION

Loc	Rte	PM	NAME OF STRUCTURE	BRIDGE No.
1	55	R4.6	BRISTOL STREET UC	55-0517
2	55	R5.3	BAKER STREET UC	55-0419
3	55	R5.5	PAULARINO Ave UC	55-0417
4	55	12.9	N55/W22 CONNECTOR UC	55-0336
5	55	17.0	LINCOLN Ave UC	55-0328

12-14-09
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
 January 19, 2010
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



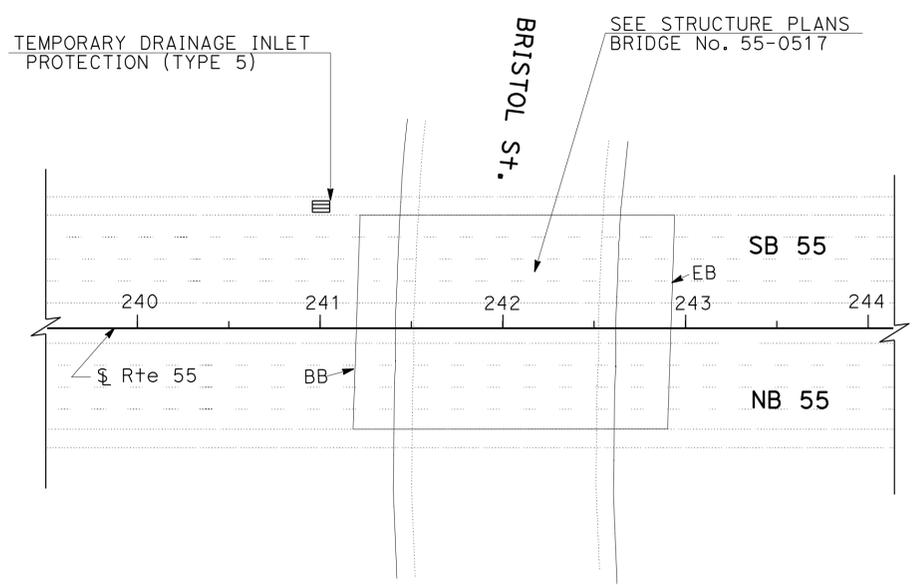
PROJECT MANAGER	MASOUD TAJIK
DESIGN ENGINEER	FAZLOLLAH ZIAIE

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

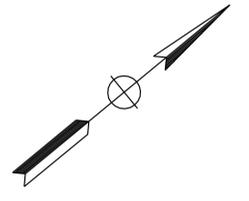
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	2	19
 REGISTERED CIVIL ENGINEER			12-14-09	DATE	
1-19-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



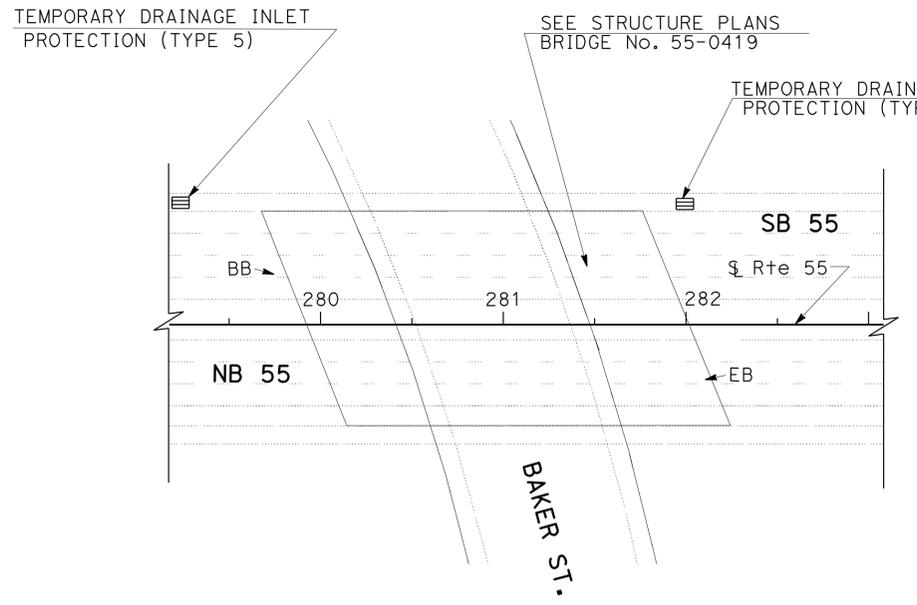
REVISOR	DATE
11-30-09	11-30-09
REVISOR	DATE
F. ZIAIE	
F. ZIAIE	
CALCULATED-DESIGNED BY	CHECKED BY
SUSAN YEE	
FUNCTIONAL SUPERVISOR	
SUSAN YEE	
DESIGN G	
DEPARTMENT OF TRANSPORTATION	
STATE OF CALIFORNIA	



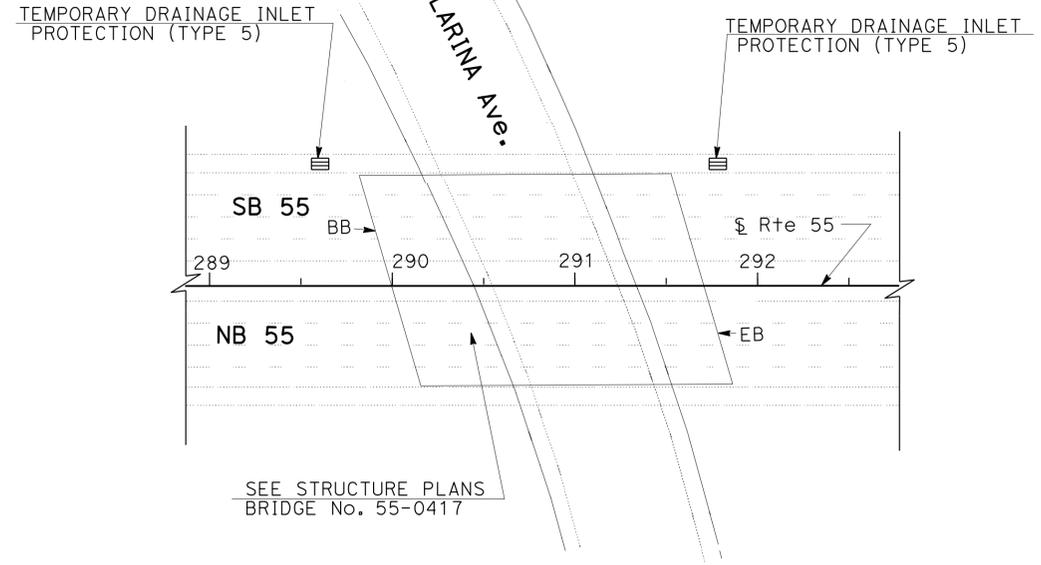
LOCATION 1
BRISTOL ST+ UC



LEGEND:
 LOCATION NO.



LOCATION 2
BAKER ST+ UC



LOCATION 3
PAULARINA Ave UC

TEMPORARY WATER POLLUTION CONTROL DETAIL

NO SCALE **WPCD-1**

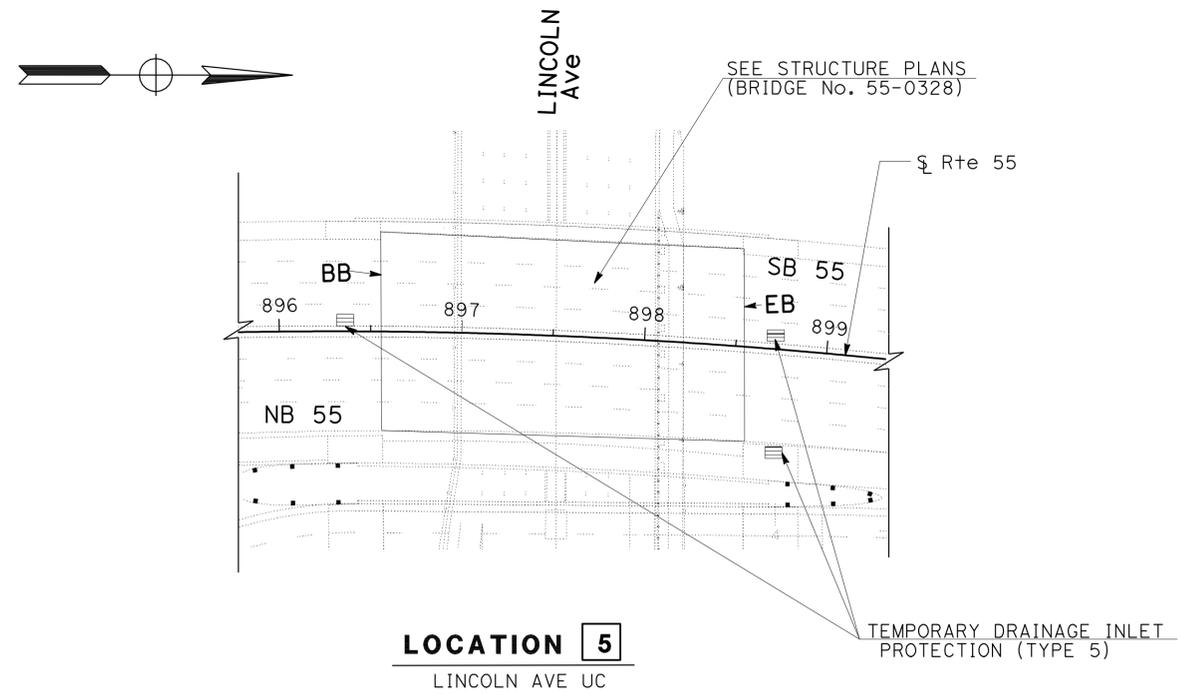
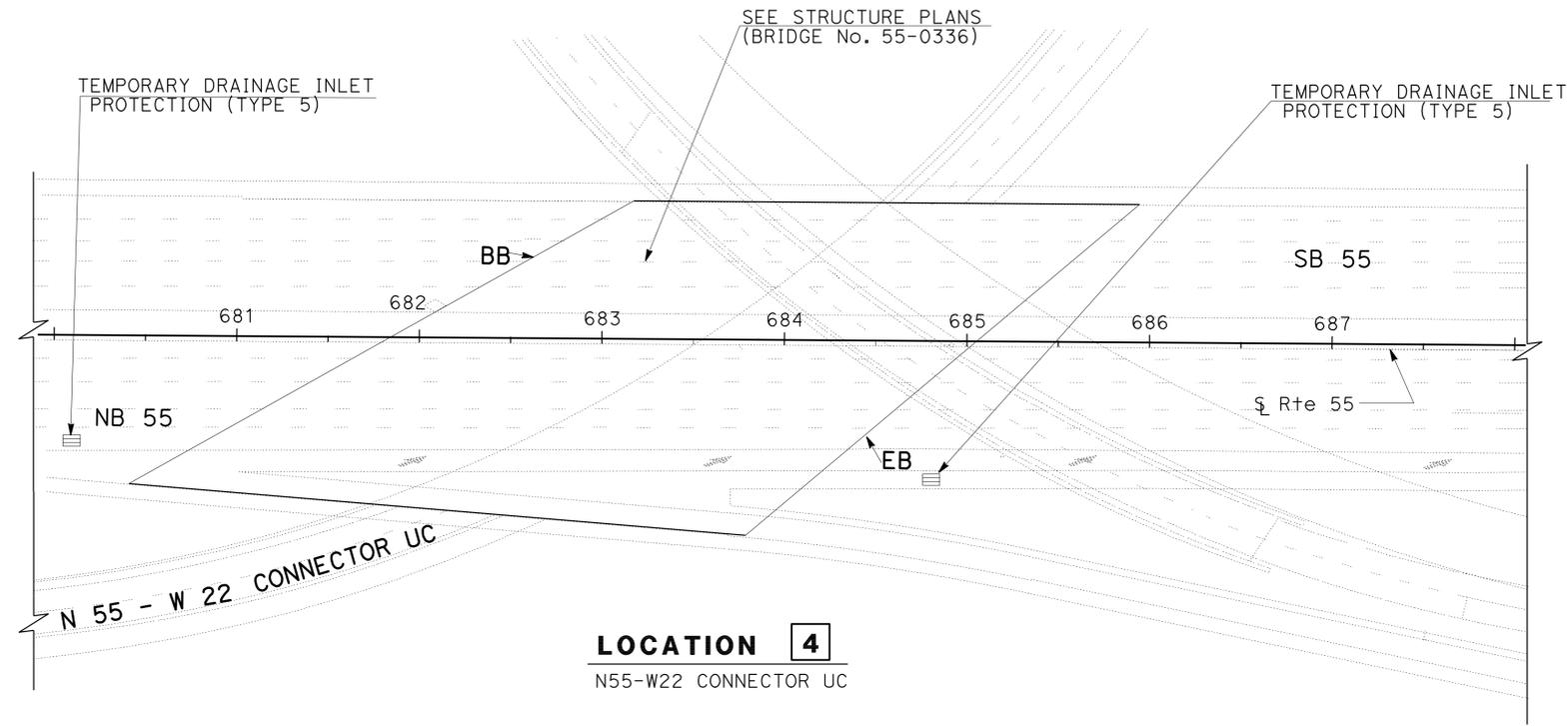
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	55	R4.6/17.0	3	19

12-14-09
 REGISTERED CIVIL ENGINEER DATE
 1-19-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
FAZLOLLAH ZIAIE
 No. C59746
 EXP. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN G
 FUNCTIONAL SUPERVISOR: SUSAN YEE
 F. ZIAIE
 F. ZIAIE
 11-30-09
 11-30-09
 REVISOR BY: DATE
 CHECKED BY:



TEMPORARY WATER POLLUTION CONTROL

SHEET No.	LOCATION	BRIDGE NAME	TEMPORARY DRAINAGE INLET PROTECTION (EA)
WPCD-1	1	BRISTOL St UC	1
	2	BAKER St UC	2
	3	PAULARINO Ave UC	2
WPCD-2	4	N55-W22 CONNECTOR UC	2
	5	LINCOLN Ave UC	3
TOTAL			10

TEMPORARY WATER POLLUTION CONTROL DETAIL

NO SCALE

WPCD-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	55	R4.6/17.0	4	19

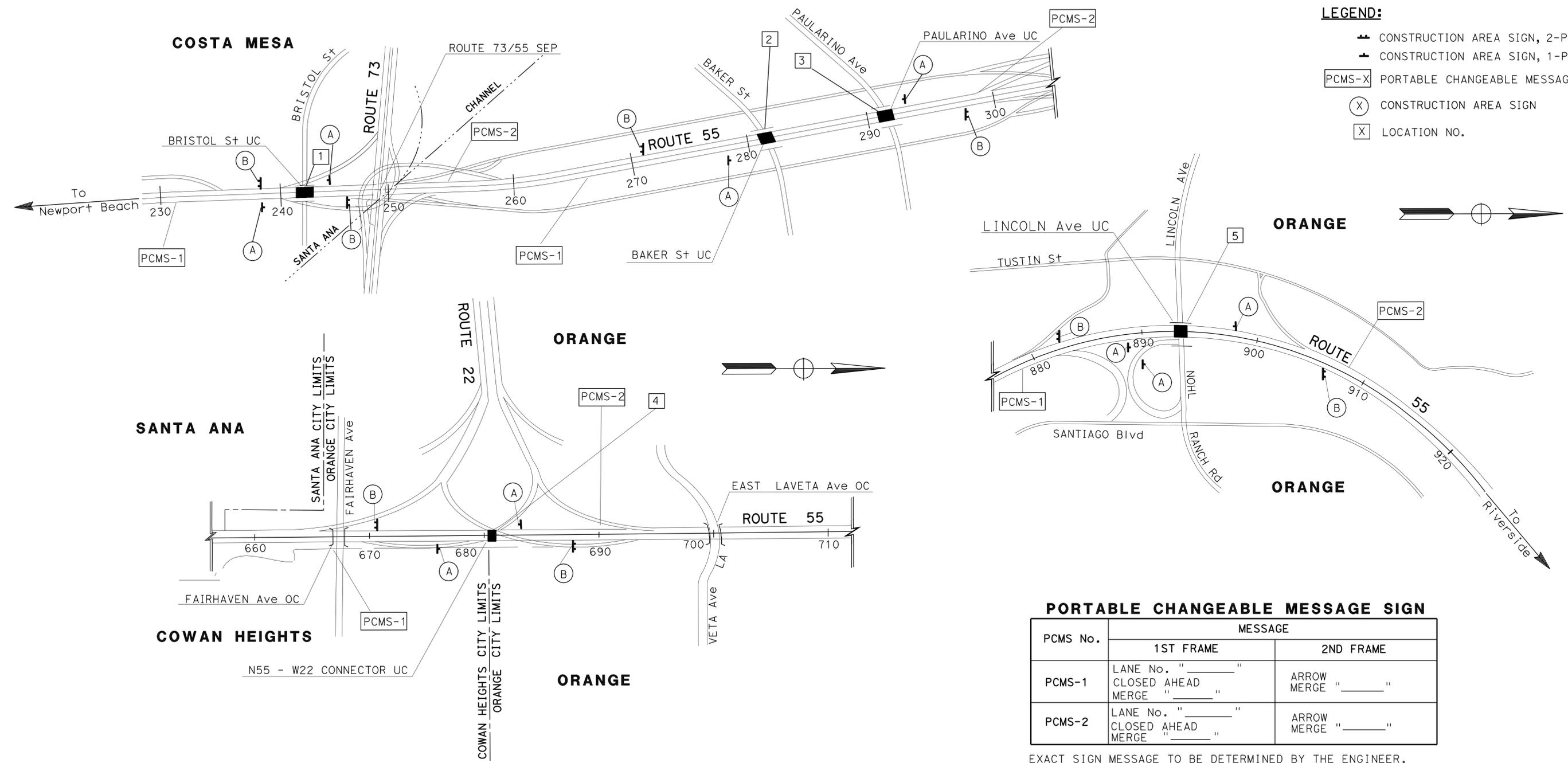
12-14-09
 REGISTERED CIVIL ENGINEER DATE
 1-19-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
FAZLOLLAH ZIAIE
 No. C59746
 EXP. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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

NOTE:

- SIGN LOCATIONS SHOWN ARE APPROXIMATE
EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.



LEGEND:

- CONSTRUCTION AREA SIGN, 2-POST
- CONSTRUCTION AREA SIGN, 1-POST
- PCMS-X PORTABLE CHANGEABLE MESSAGE SIGN
- CONSTRUCTION AREA SIGN
- LOCATION NO.

PORTABLE CHANGEABLE MESSAGE SIGN

PCMS No.	MESSAGE	
	1ST FRAME	2ND FRAME
PCMS-1	LANE No. " _____ " CLOSED AHEAD MERGE " _____ "	ARROW MERGE " _____ "
PCMS-2	LANE No. " _____ " CLOSED AHEAD MERGE " _____ "	ARROW MERGE " _____ "

EXACT SIGN MESSAGE TO BE DETERMINED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST AND SIZE	No. OF SIGNS
(A)	W20-1	48" x 48"	ROAD WORK	1 - 4" x 6"	9
(B)	G20-2	60" x 24"	END ROAD WORK	2 - 4" x 6"	8

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY



USERNAME => frmikes1
DGN FILE => c0k3501a001.dgn

CU 12234

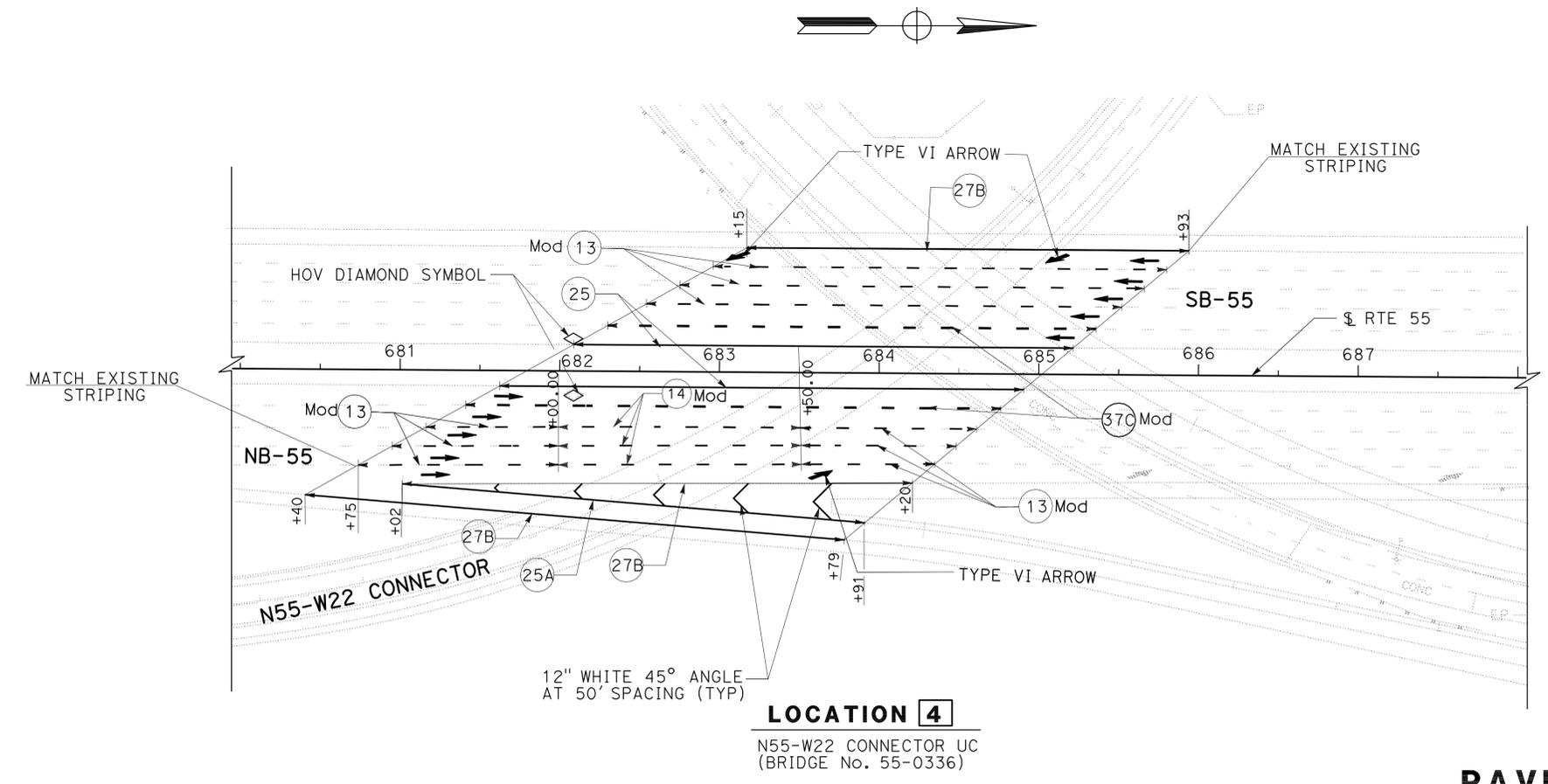
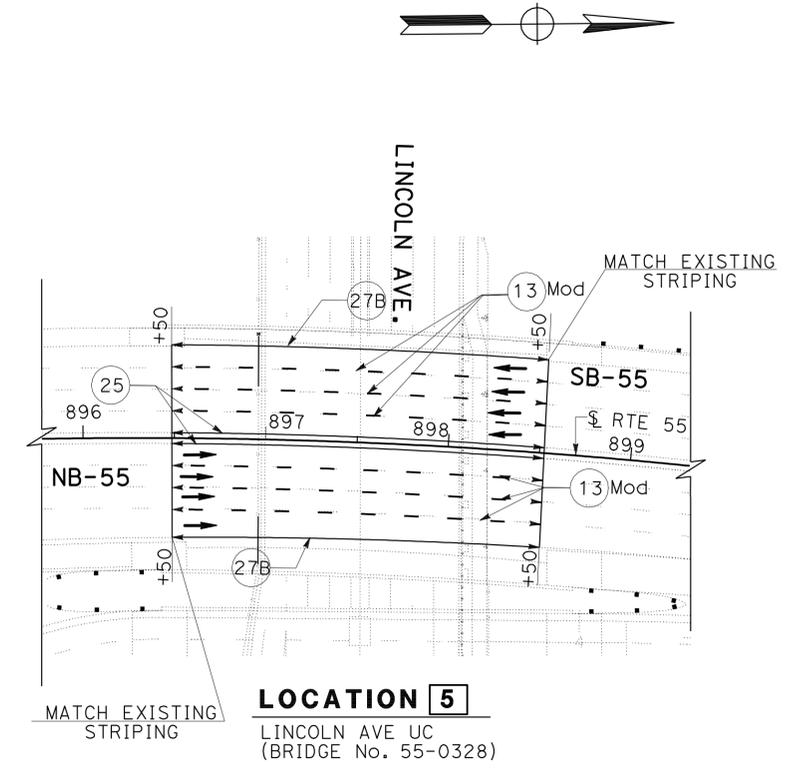
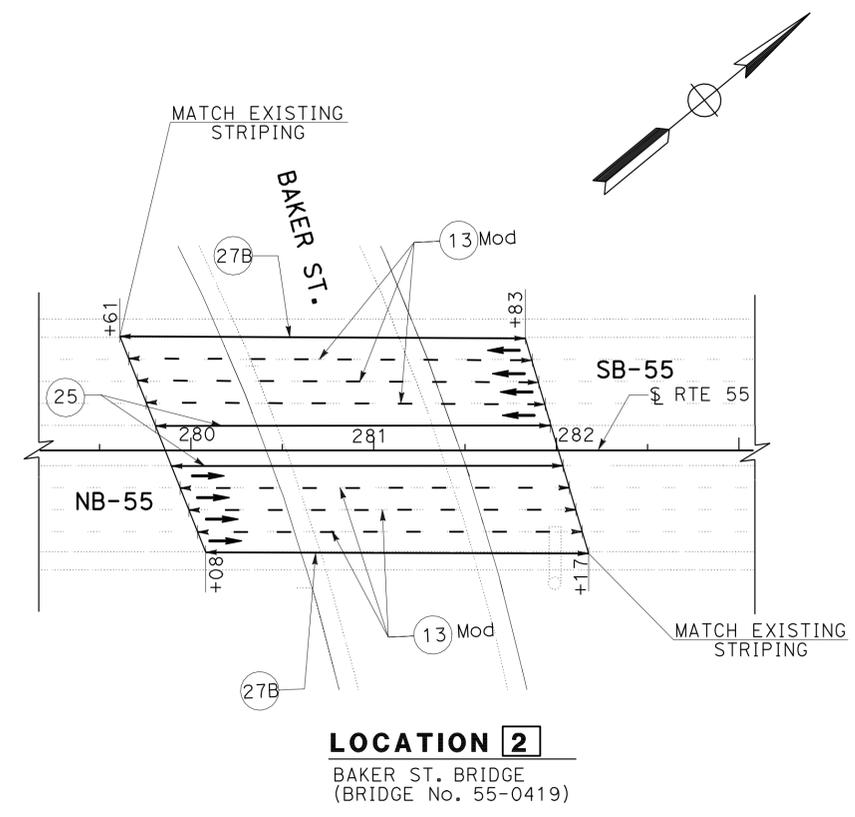
EA 0k3501

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: ADEL MALEK
 REVISIONS: TL 11/3/2009
 TRANG LUONG
 ADEL MALEK
 CALCULATED-DESIGNED BY: ADEL MALEK
 CHECKED BY: ADEL MALEK

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	5	19

REGISTERED CIVIL ENGINEER DATE 12-14-09
 1-19-10 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 TRANG LUONG
 No. C 64430
 Exp. 06/30/11
 CIVIL
 STATE OF CALIFORNIA

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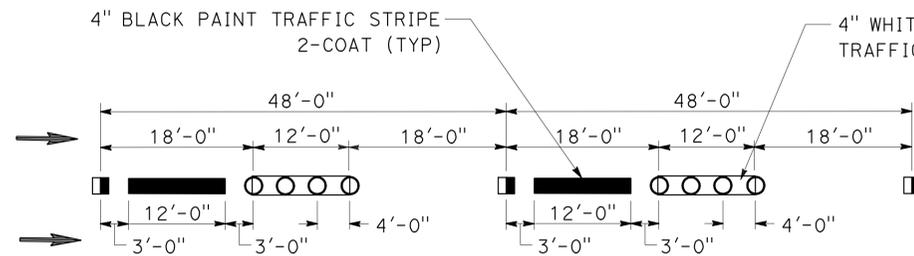


- LEGENDS:**
- (XX) PAVEMENT DELINEATION DETAIL No.
 - ↔ CHANGE IN PAVEMENT DELINEATION No.
 - ➔ DIRECTION OF TRAFFIC FLOW.
 - [X] LOCATION NUMBER

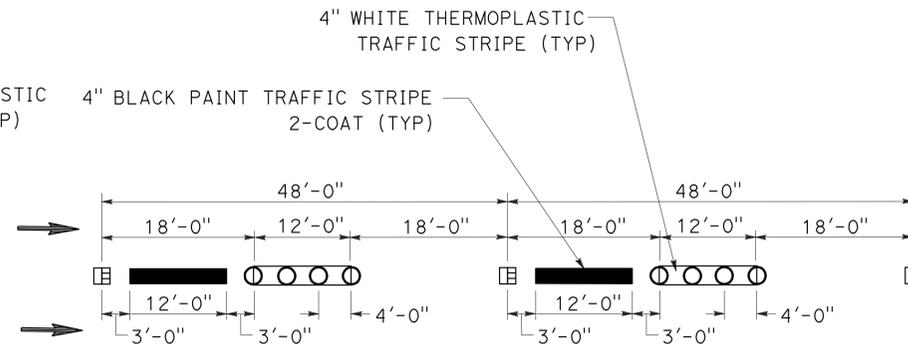
PAVEMENT DELINEATION DETAIL

SCALE: 1"=50' **PDD-1**

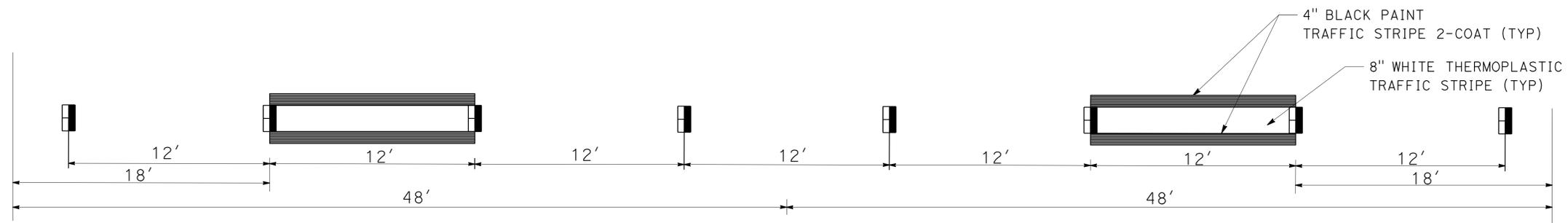
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	55	R4.6/17.0	6	19
 REGISTERED CIVIL ENGINEER			12-14-09	DATE	
1-19-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



DETAIL : 13 Mod



DETAIL : 14 Mod



DETAIL : 37C Mod
(FOR PCC PAVEMENT)

LEGENDS:

-  TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
-  TYPE C RED-CLEAR RETROREFLECTIVE MARKER
-  TYPE A WHITE NON-REFLECTIVE MARKER
-  4" BLACK PAINT TRAFFIC STRIPE (2-COAT)
-  4" WHITE THERMOPLASTIC TRAFFIC STRIPE
-  8" WHITE THERMOPLASTIC TRAFFIC STRIPE
-  DIRECTION OF TRAFFIC

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
Caltrans	ADEL MALEK	ADEL MALEK	TL	11/3/2009
TRAFFIC DESIGN				

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	7	19

 12-14-09
 REGISTERED CIVIL ENGINEER DATE

1-19-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
TRANG LUONG
 No. C 64430
 Exp. 06/30/11
 CIVIL
 STATE OF CALIFORNIA

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PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION No.	BRIDGE NAME (BRIDGE NUMBER)	THERMOPLASTIC TRAFFIC STRIPE						PAINT TRAFFIC STRIPE 2-COAT	THERMOPLASTIC PAVEMENT MARKING			PAVEMENT MARKER				REMOVE			
			DETAIL 25 4" SOLID YELLOW	DETAIL 25A 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 37C Mod 8" WHITE BROKEN (12-3)	DETAIL 13 Mod & 14 Mod 4" BLACK BROKEN (36-12)	TYPE V1 ARROW	12" SOLID DIAGONAL WHITE	HOV DIAMOND SYMBOL	NON-REFLECTIVE		RETROFLECTIVE		THERMOPLASTIC TRAFFIC STRIPE (YELLOW) (HAZARDOUS WASTE)	THERMOPLASTIC TRAFFIC STRIP (WHITE)	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER
			LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	TYPE A	TYPE H	TYPE G	TYPE C				
PD-1	2	BAKER STREET UC (55-0419)	440	440	1320			1320				110	10	29		440	880		149	
PD-1	4	N55-W22 CONN UC (55-0336)	640	290	980	1920	450	640	3650	126	100	11	198	28	150	10	930	2197	237	386
PD-1	5	LINCOLN AVE UC (55-0328)	400	400	1200			1200				100	9	26		400	800		135	
SUB TOTAL			1480	290	1820	4440	450	640	6170	126	100	11	408	47	205	10	1770	3877	237	670
TOTAL			3590			4890		640	6170	237			408	262			1770	3877	237	670

PAVEMENT DELINEATION QUANTITIES

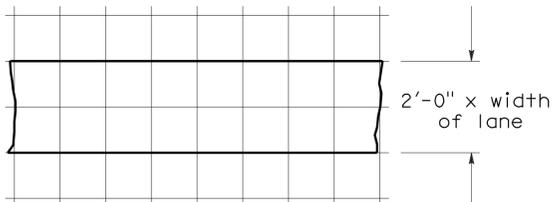
PDQ-1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	8	19

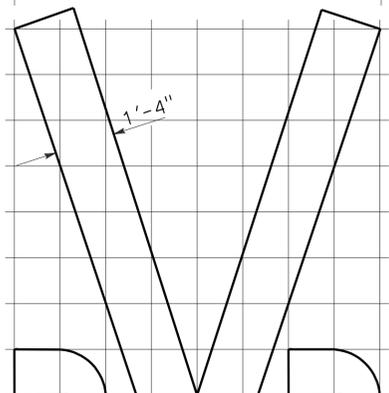
Donald E. Howe
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Donald E. Howe
 No. C46402
 Exp. 3-31-09
 CIVIL
 STATE OF CALIFORNIA

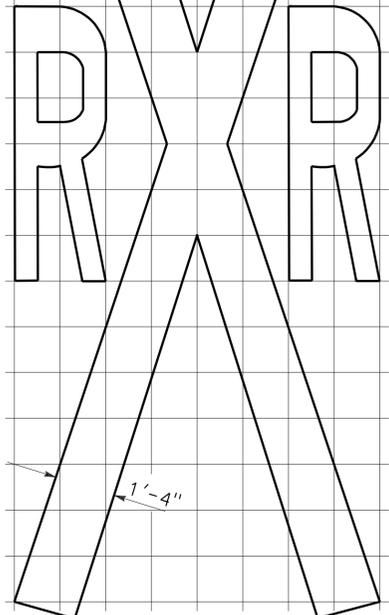
To accompany plans dated 1-19-10



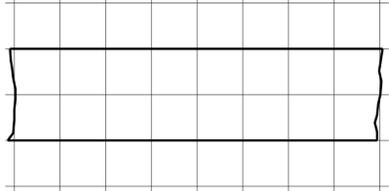
8'-0"



6'-0"
20'-0"



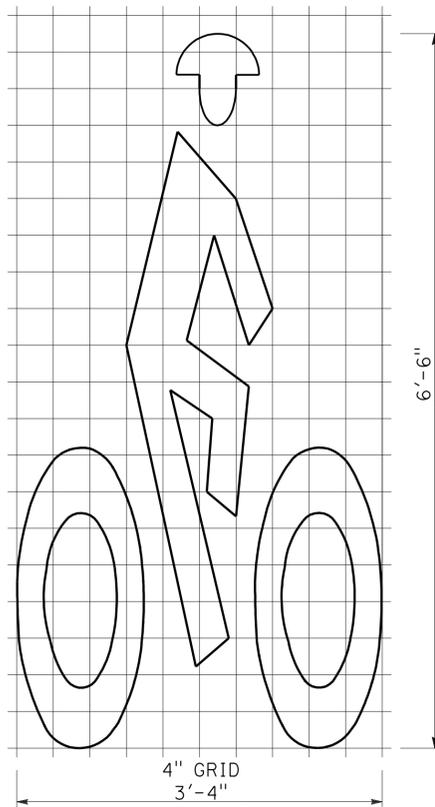
14'-0"



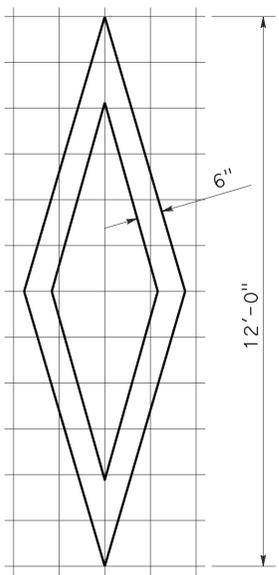
1'-0" GRID
A=70 sq ft ✕

RAILROAD CROSSING SYMBOL

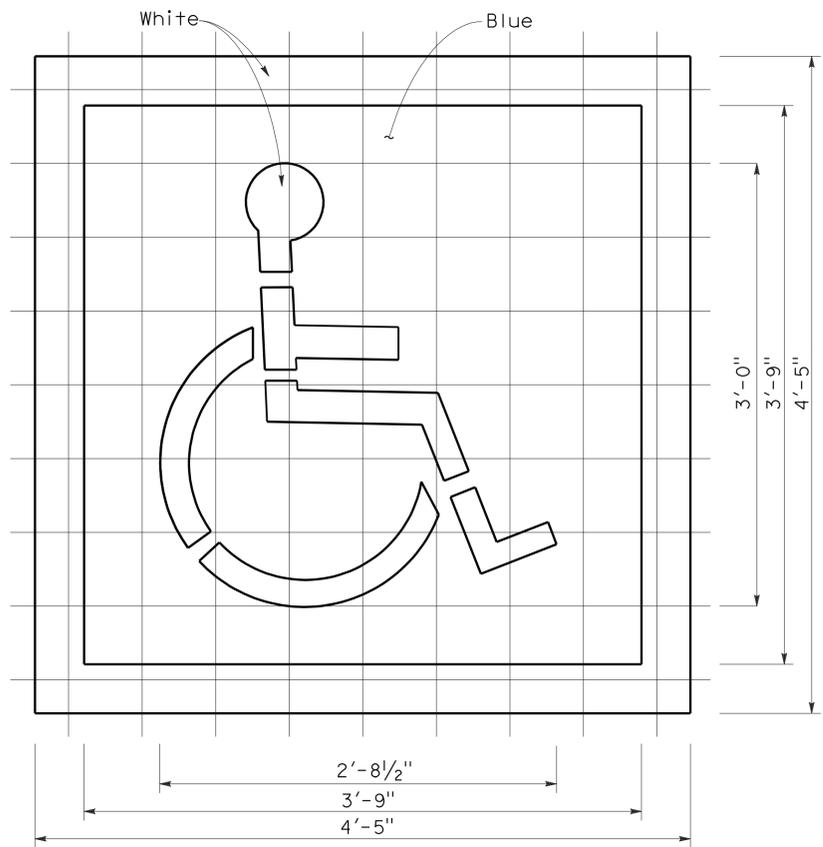
✕70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



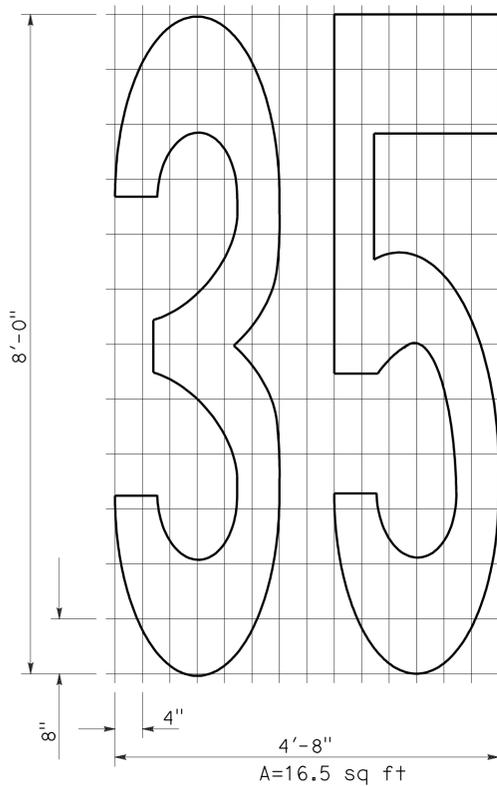
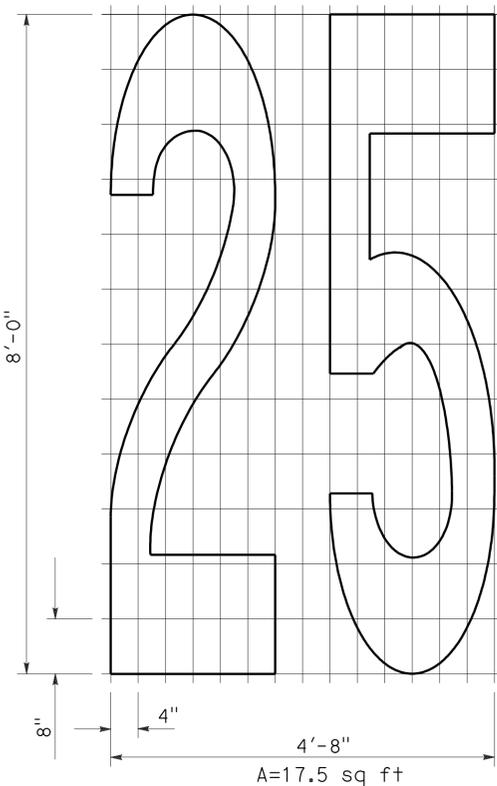
BIKE LANE SYMBOL



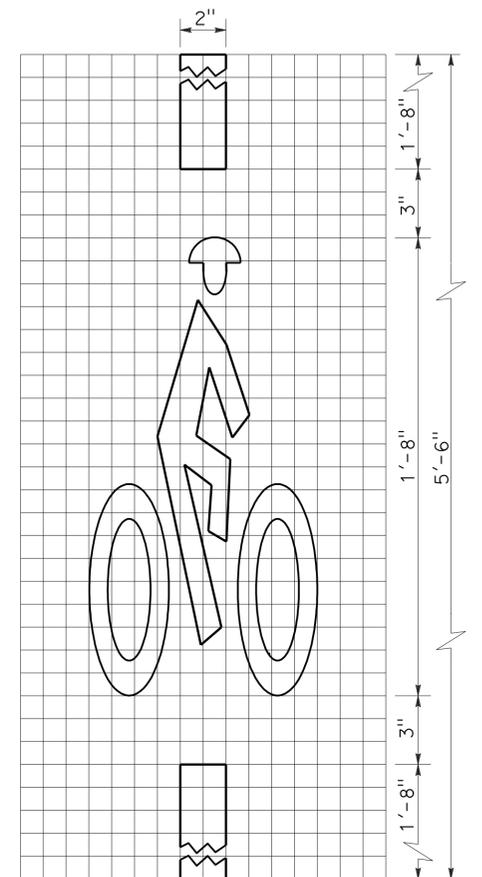
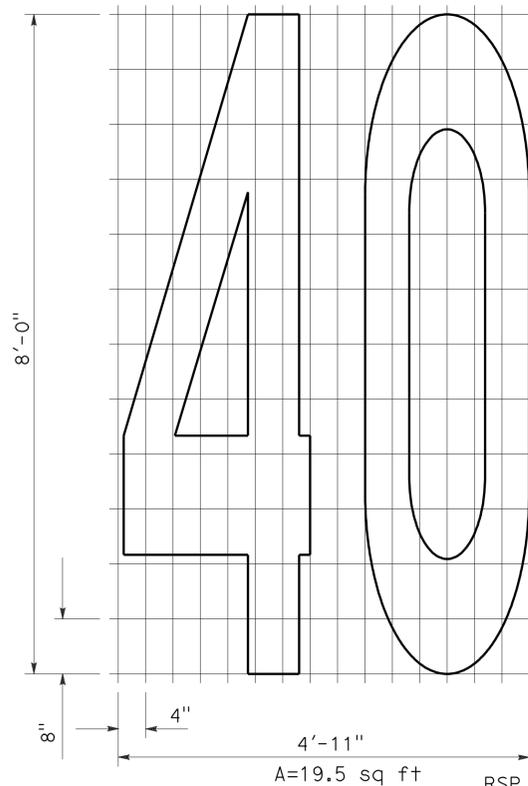
DIAMOND SYMBOL



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



NUMERALS



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

REVISED STANDARD PLAN RSP A24C

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

2006 REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	9	19

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

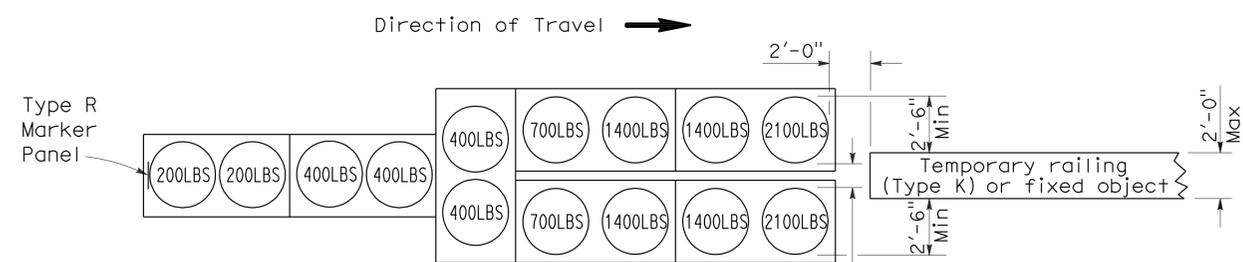
June 6, 2008
PLANS APPROVAL DATE

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

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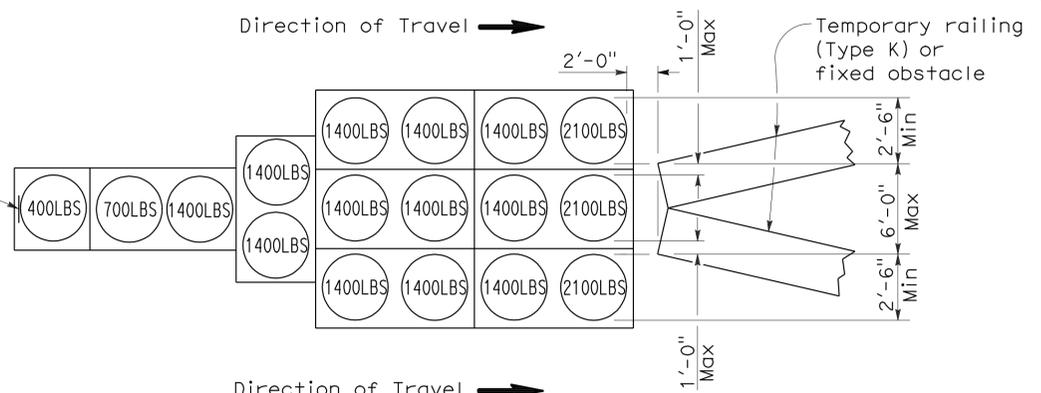
To accompany plans dated 1-19-10

2006 REVISED STANDARD PLAN RSP T1A



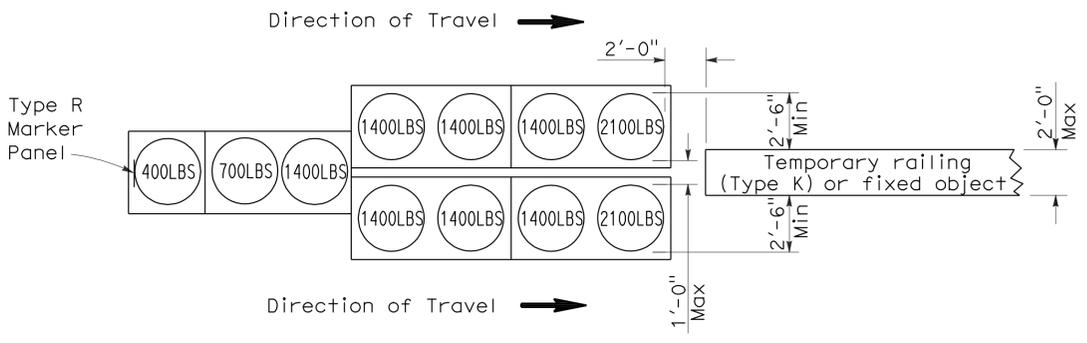
ARRAY 'TU14'

Approach speed 45 mph or more



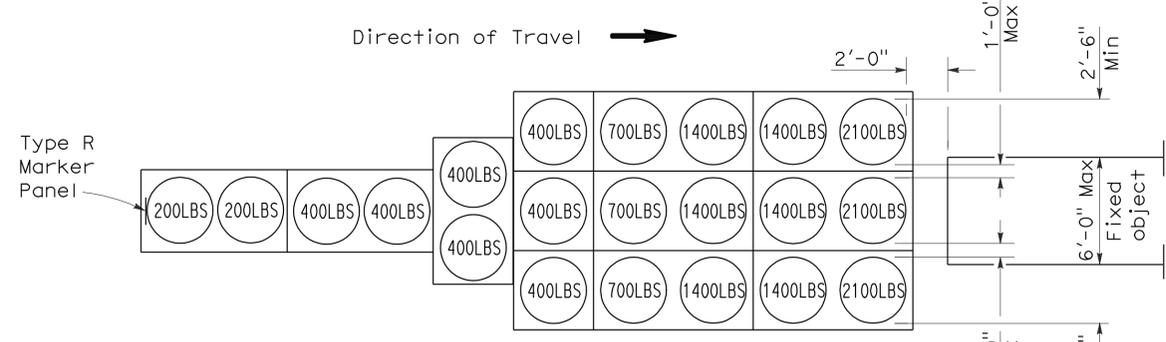
ARRAY 'TU17'

Approach speed less than 45 mph



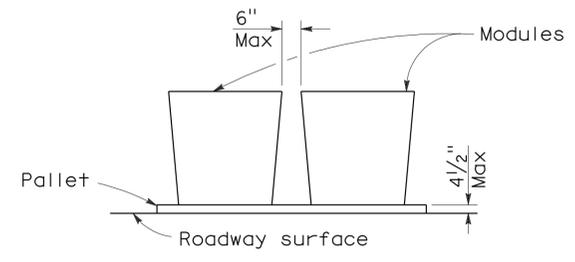
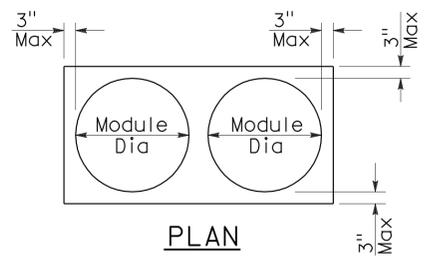
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more



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

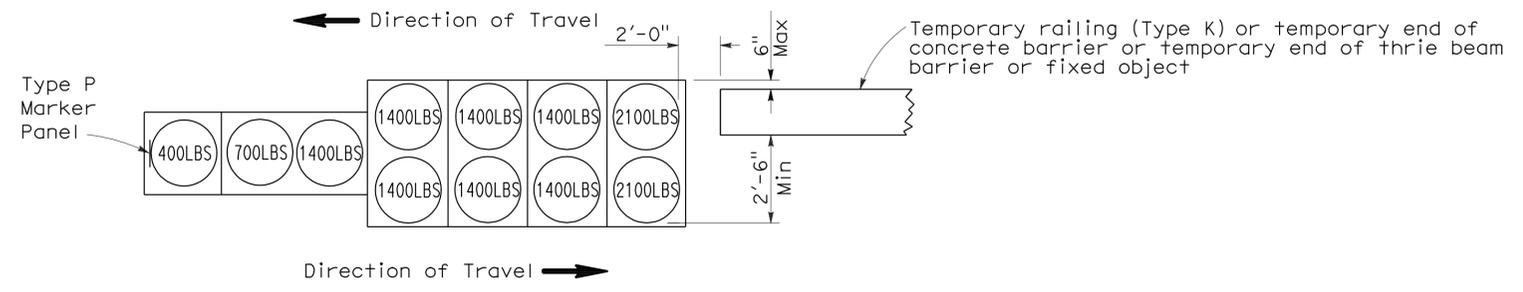
**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

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.

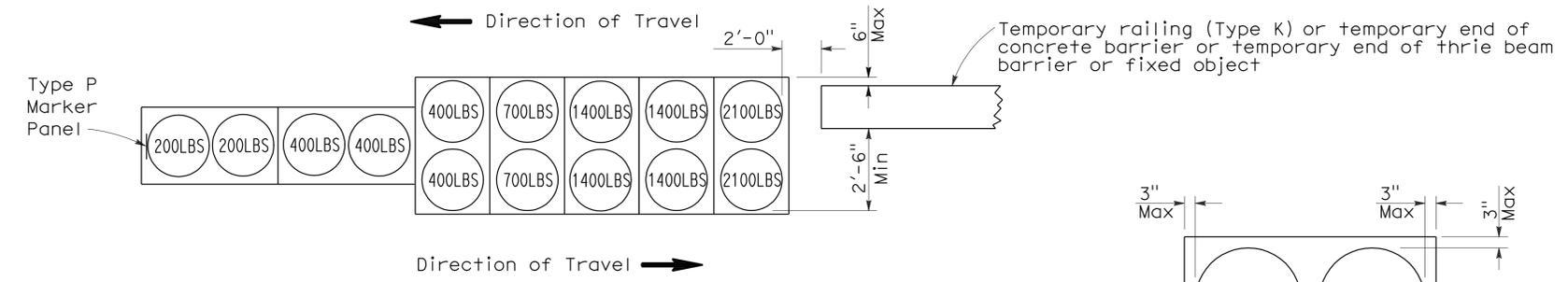
REVISED STANDARD PLAN RSP T1A

To accompany plans dated 1-19-10



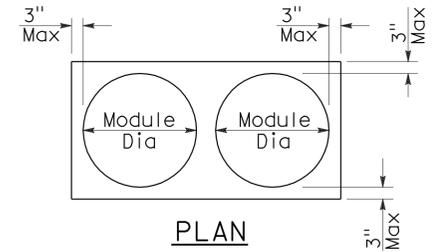
ARRAY 'TB11'

Approach speed less than 45 mph

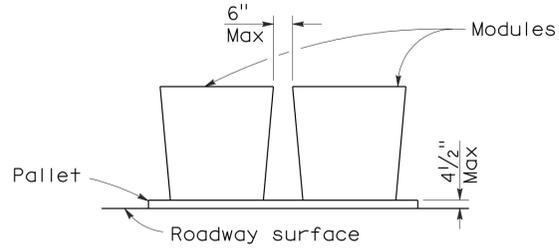


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	11	19

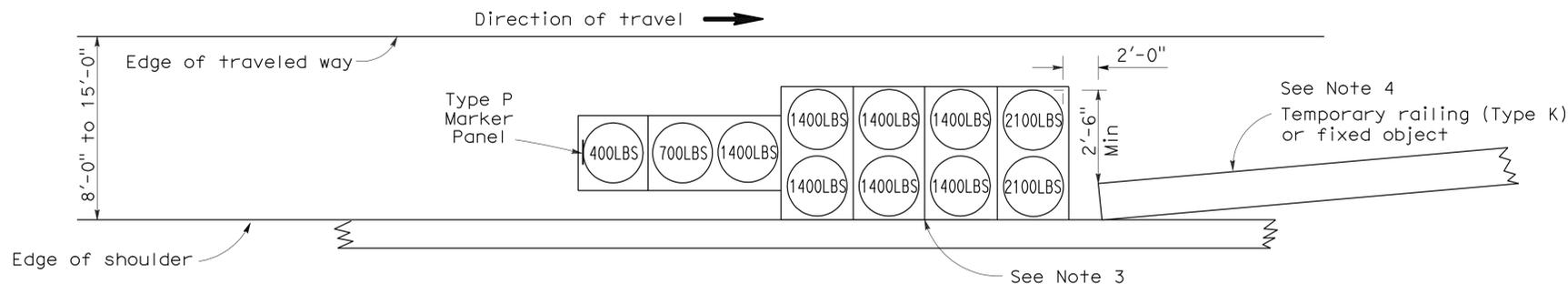
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

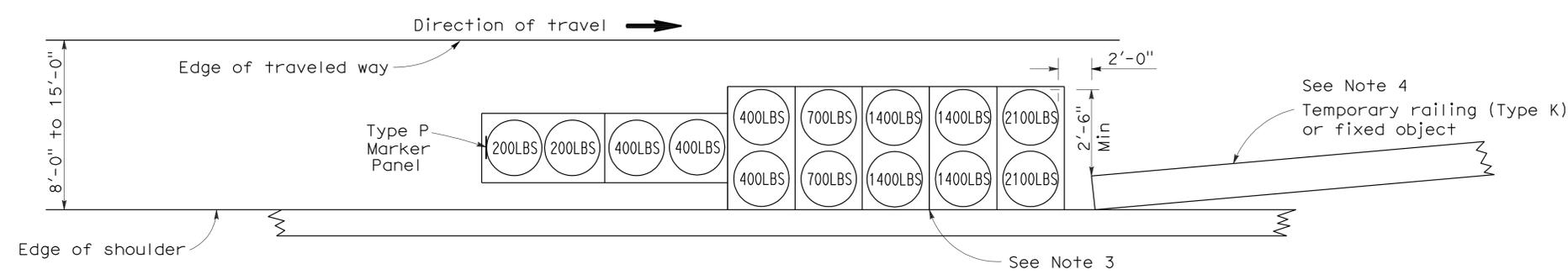
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 1-19-10



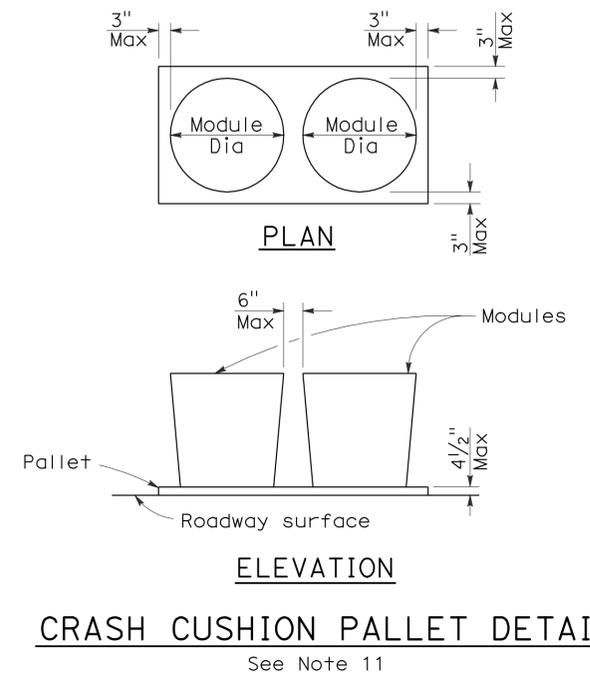
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



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

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.



CRASH CUSHION PALLET DETAIL
See Note 11

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE

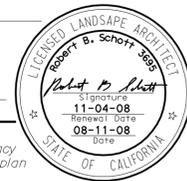
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

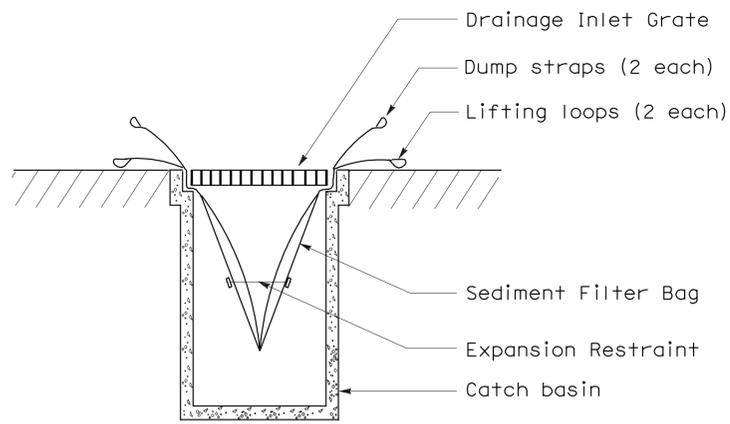
2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	R4.6/17.0	12	19

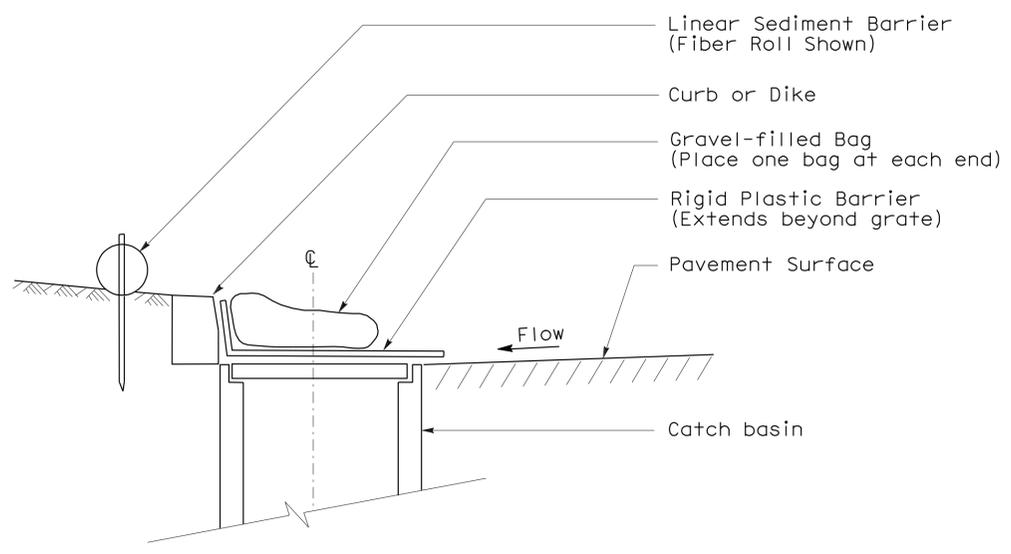
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



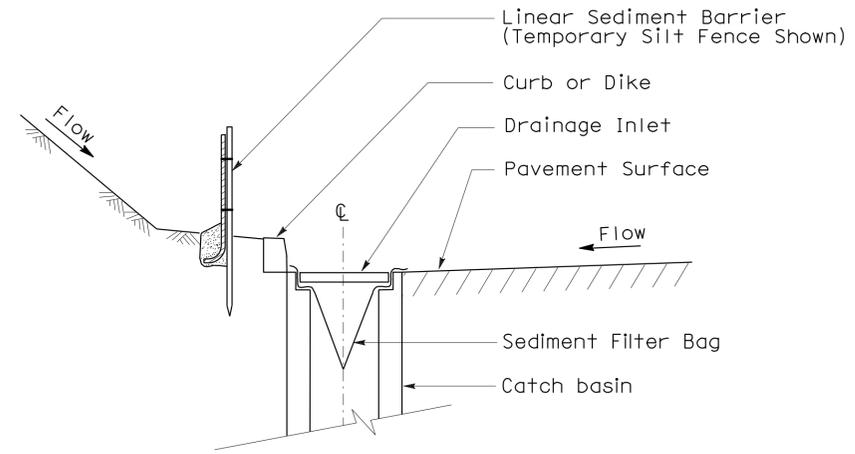
To accompany plans dated 1-19-10



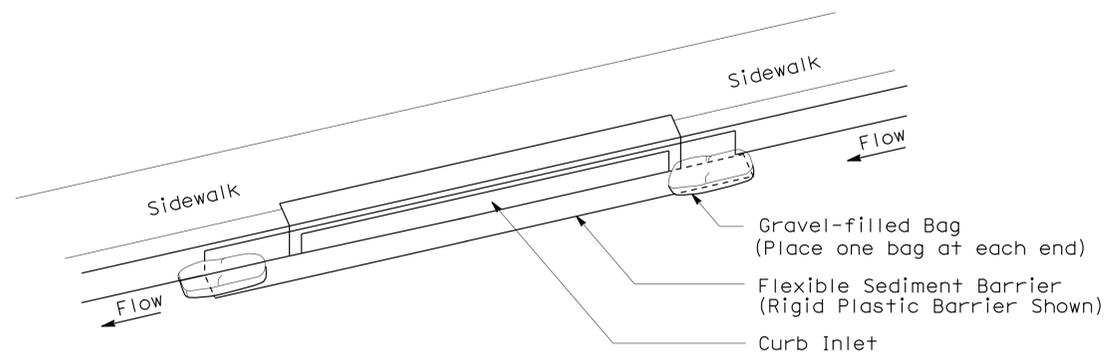
SECTION B-B
SEDIMENT FILTER BAG DETAIL



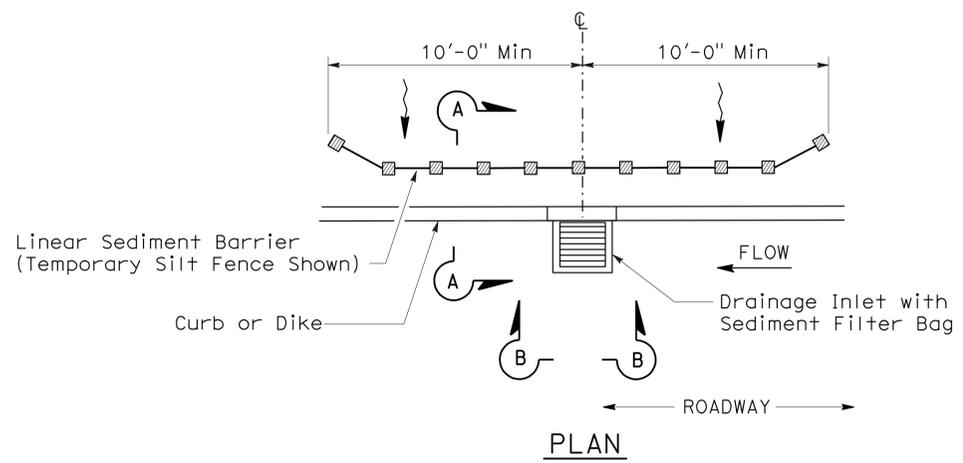
SECTION
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)



SECTION A-A



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



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

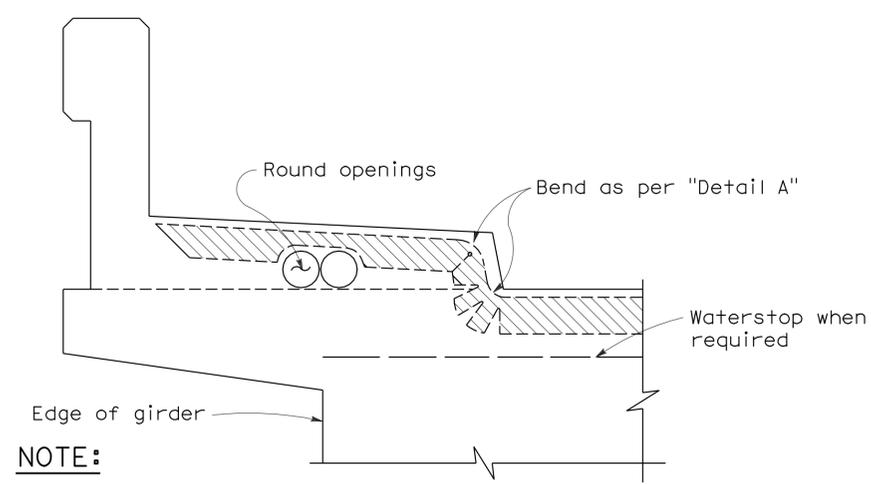
NOTES:

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

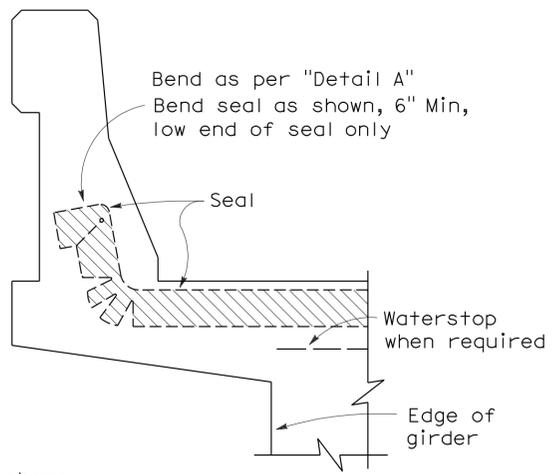
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T64

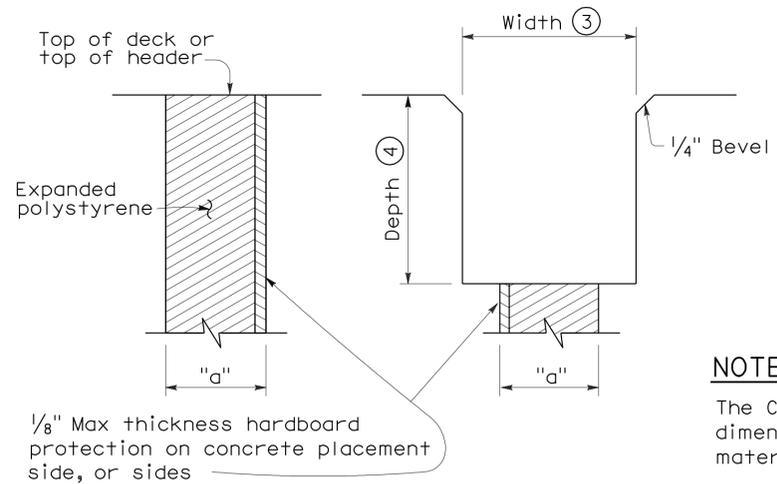


NOTE:
Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



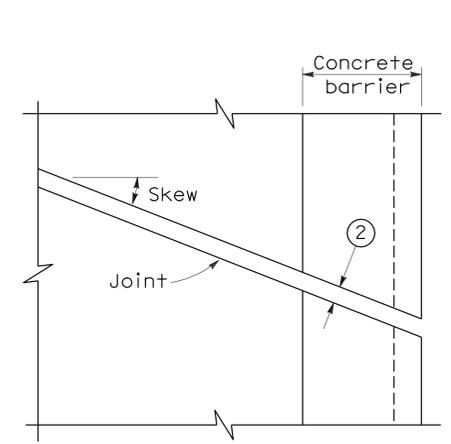
CONCRETE BARRIER



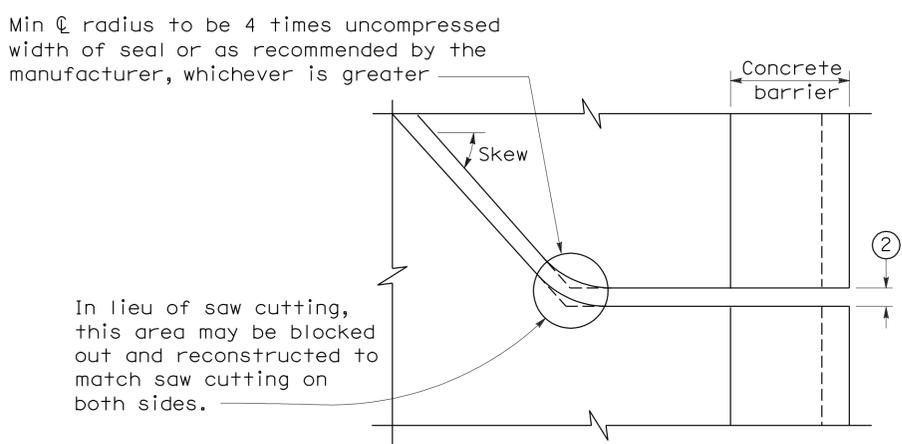
FORMING DETAIL SAWCUT DETAIL

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

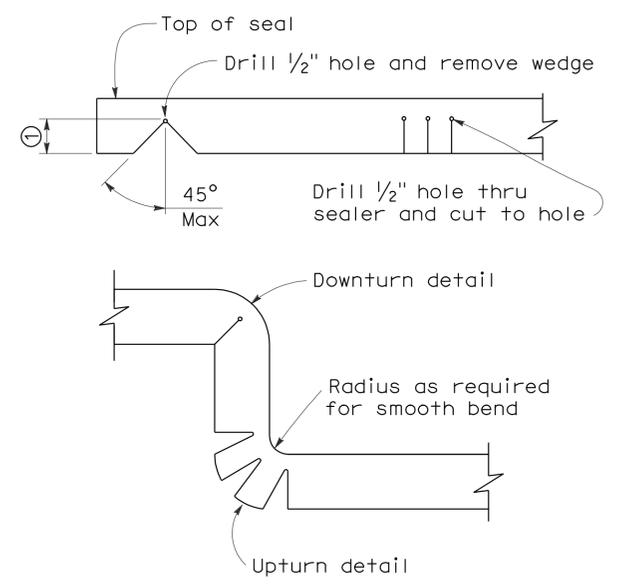
JOINT SEALS DETAILS



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



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



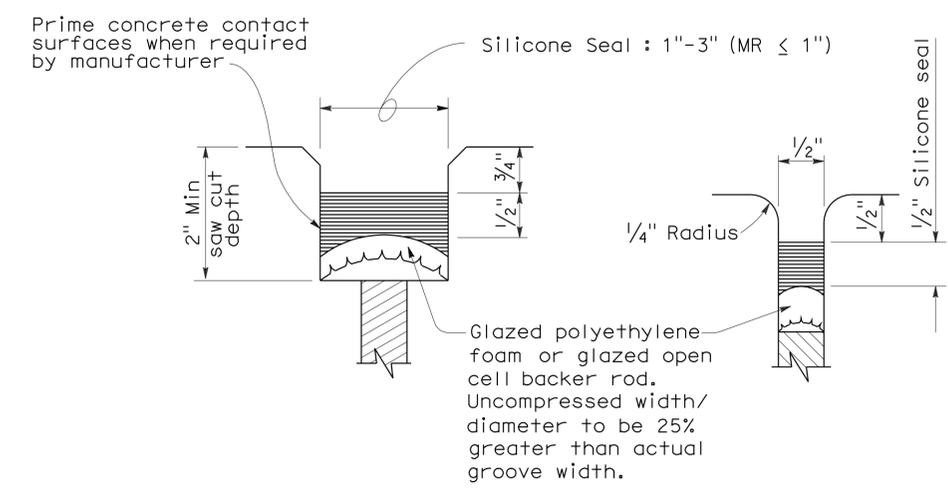
DETAIL A

- NOTES:**
- Make smooth cuts from the bottom of seal to 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
 - Opening in barrier to match width of sawn deck joint.
 - Sawcut groove widths shall be as ordered by the Engineer.
 - Depth of sawcut: Type A - Depth to be 2" minimum.
Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W₂) plus dimensions shown.
 - MR (movement rating) as shown on other plan sheets.
 - Other depths must be approved by the Engineer.

DIMENSIONS "a" OF JOINT REQUIRED

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

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

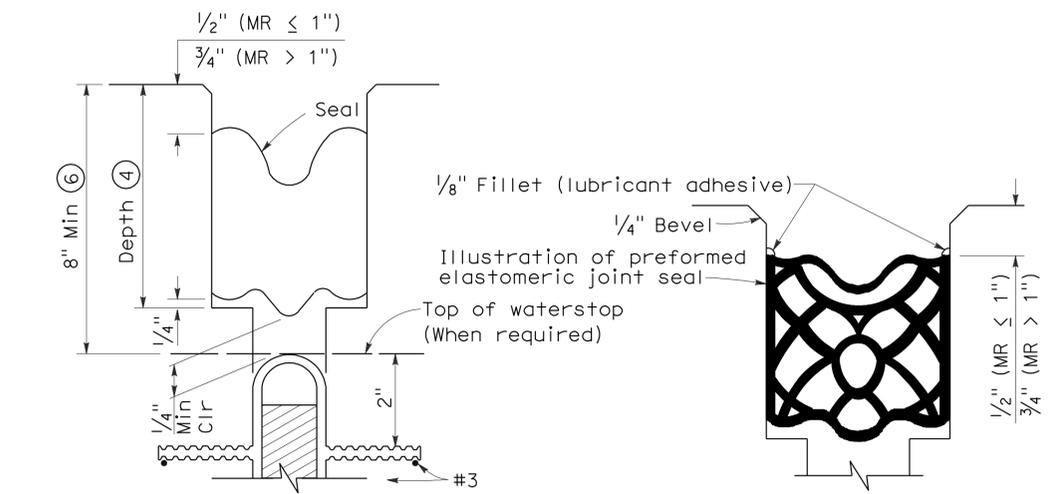


TYPE A SEAL

Movement rating : Silicone = 1" Max

TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W₂)

TYPE B SEAL

Movement Rating $\leq 2"$

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.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	55	R4.6/17.0	14	19

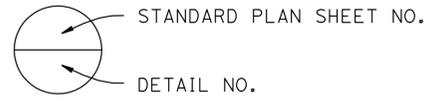
11/02/09
 REGISTERED CIVIL ENGINEER DATE
 1-19-10
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

INDEX TO PLANS

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

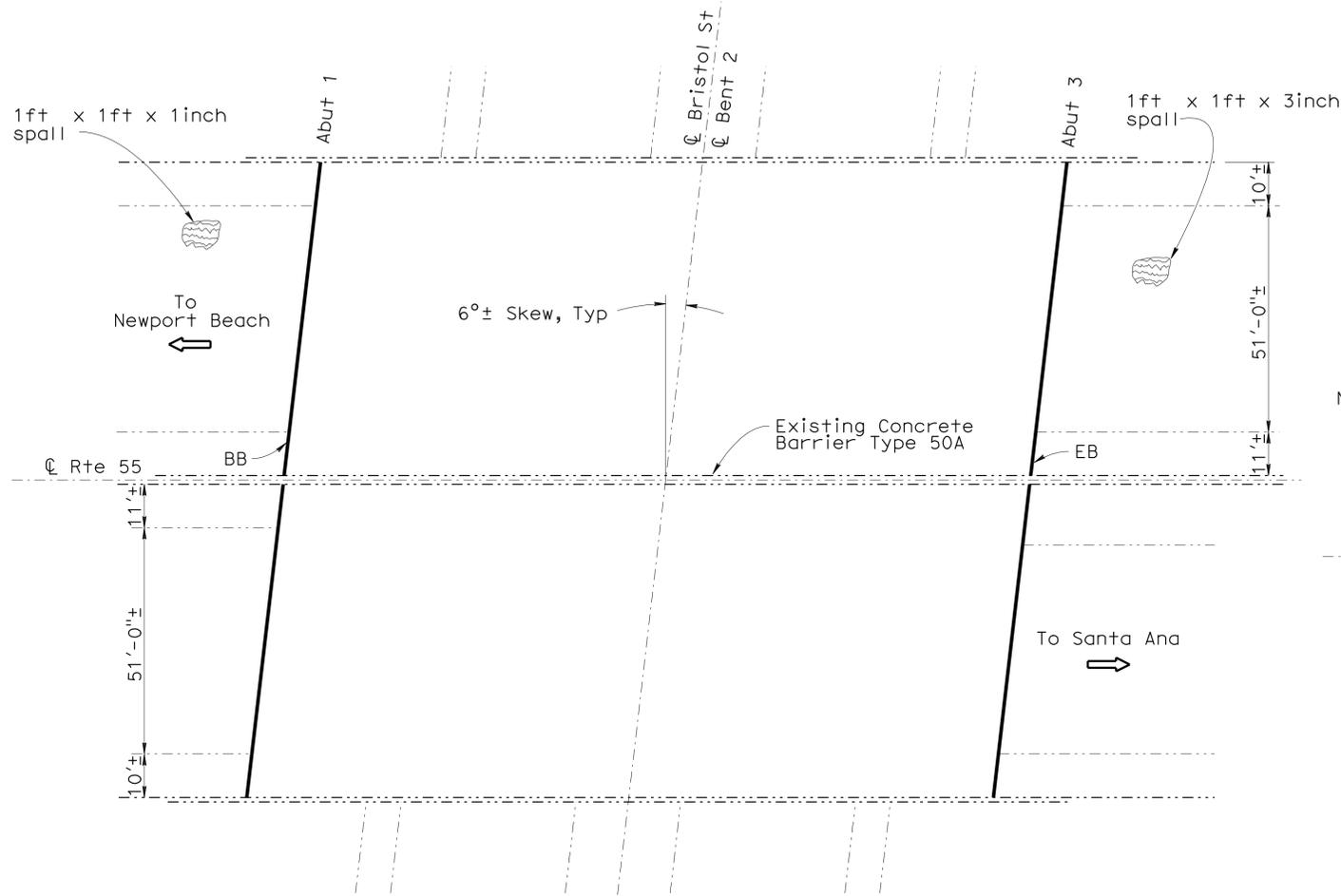
STANDARD PLANS DATED MAY 2006

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")



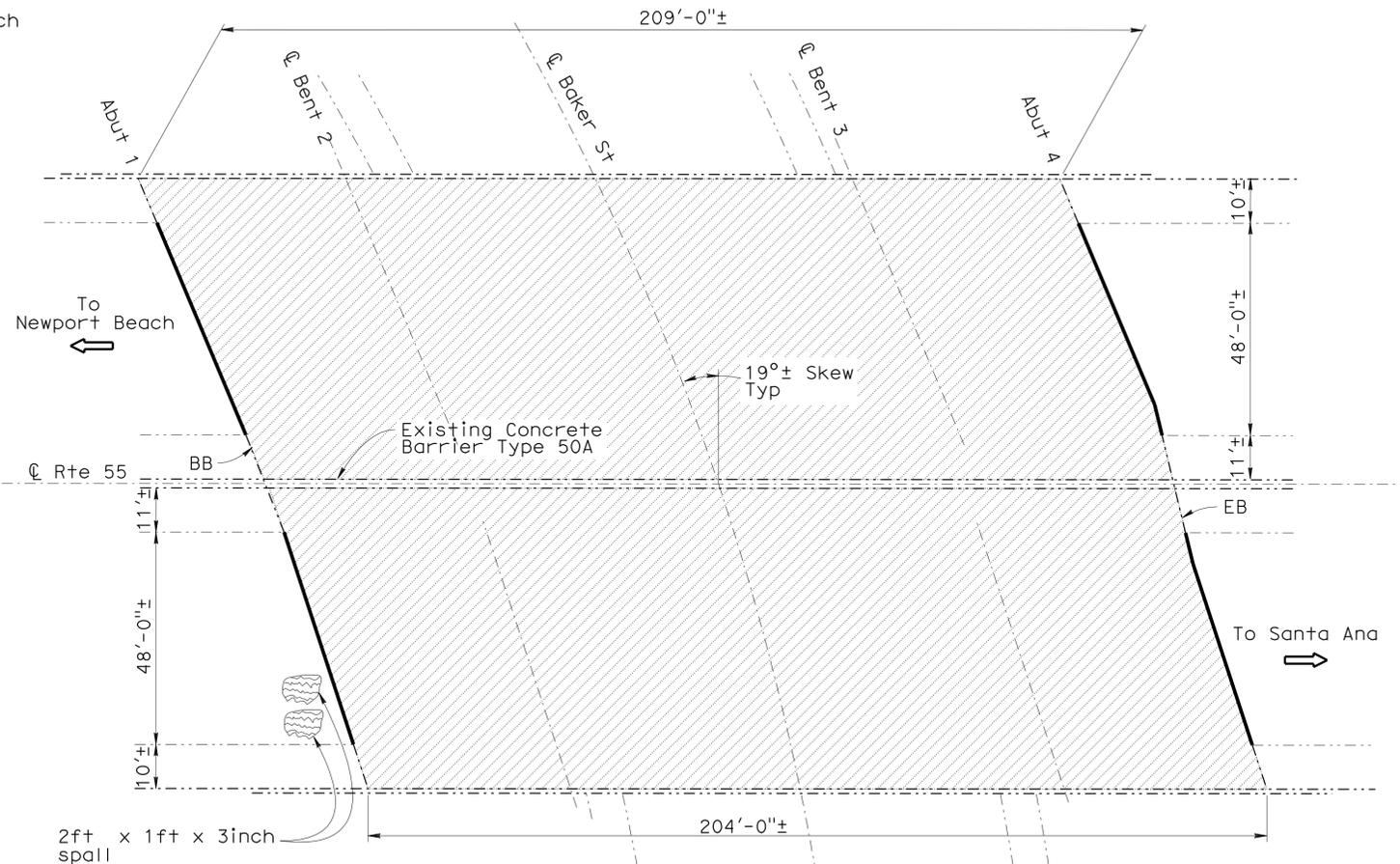
LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- Indicates location of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal repair joint spalls.
- Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
- Indicates removal of unsound concrete and place rapid setting concrete patch. Actual area may vary and will be determined by the Engineer.



BRISTOL STREET UC

Br No. 55-0517, Rte 55, PM R4.58
1" = 20'



BAKER STREET UC

Br No. 55-0419, Rte 55, PM R5.34
1" = 20'



BRISTOL STREET UC

BRIDGE NO 55-0517

QUANTITIES

REMOVE UNSOUND CONCRETE
CLEAN EXPANSION JOINT
RAPID SETTING CONCRETE (PATCH)
JOINT SEAL (MR 1 1/2")

2 CF
294 LF
2 CF
294 LF

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

BAKER STREET UC

BRIDGE NO 55-0419

QUANTITIES

REMOVE UNSOUND CONCRETE 73 CF
CLEAN BRIDGE DECK 28,497 SQFT
CLEAN EXPANSION JOINT 204 LF
RAPID SETTING CONCRETE (PATCH) 73 CF
JOINT SEAL (MR 1 1/2") 204 LF
TREAT BRIDGE DECK 28,497 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL 356 GAL

 TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Tony Brake	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: AND HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	BY Tom Dang	CHECKED Tony Brake	LAYOUT	BY Tom Dang
	QUANTITIES	BY Tony Brake	CHECKED Ramesh Patel	SPECIFICATIONS	BY Jennifer Ramirez

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

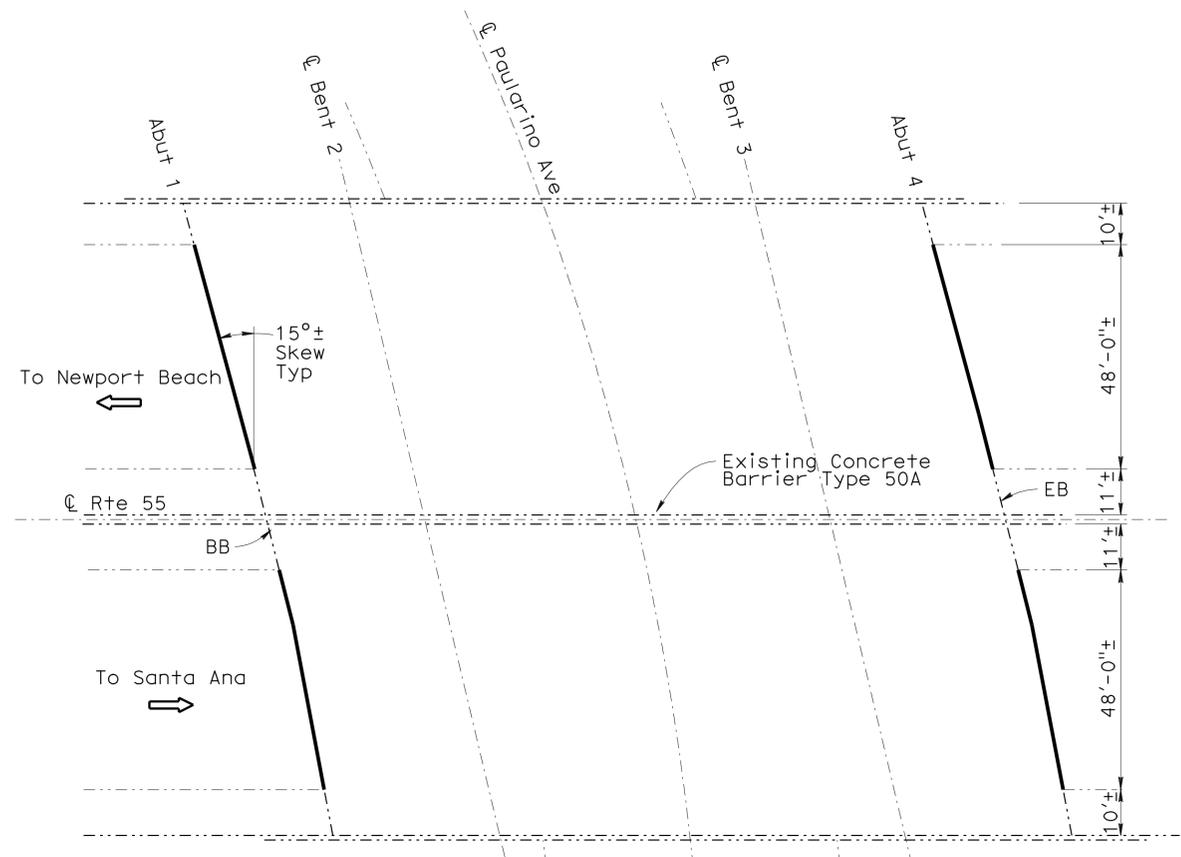
ROUTE 55 BRIDGES GENERAL PLAN NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Oran	55	R4.6/17.0	15	19

Tony D. Brake 11/02/09
 REGISTERED CIVIL ENGINEER DATE
 1-19-10
 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.

LEGEND:

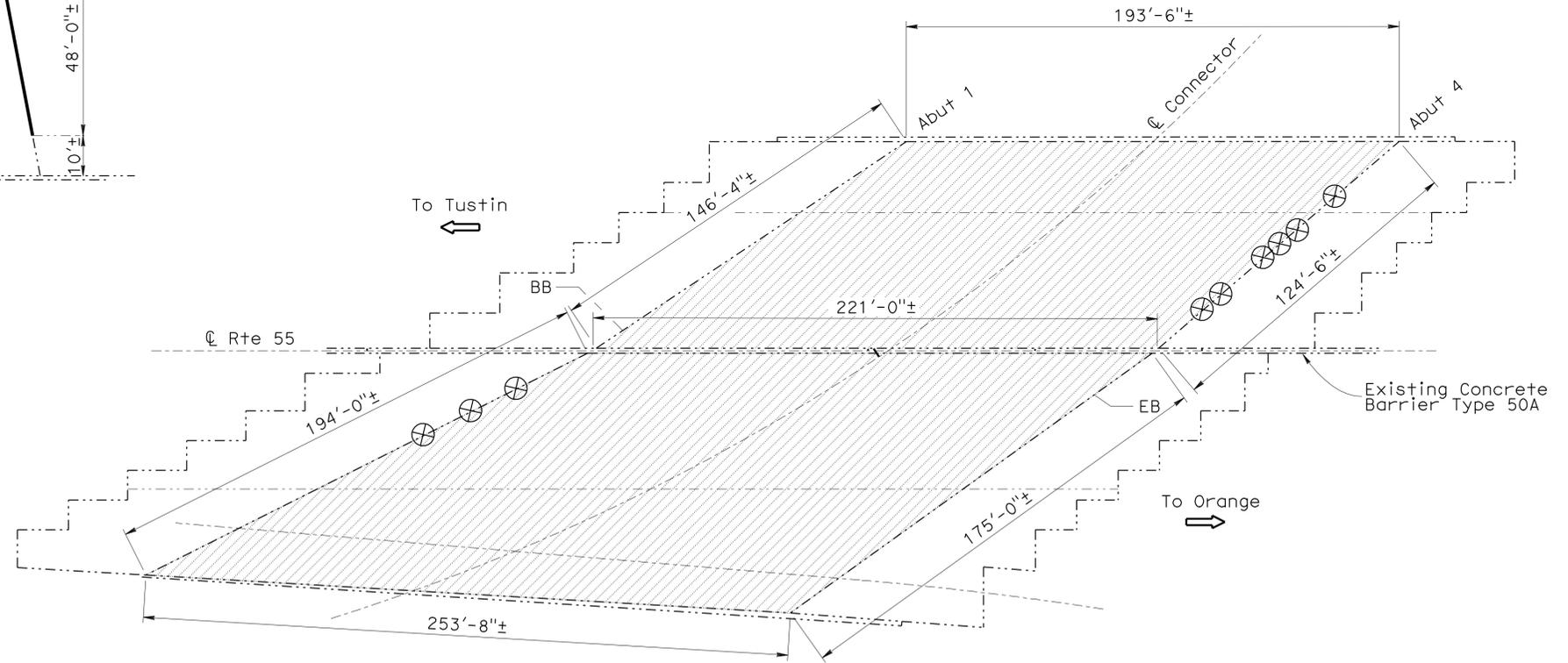
- Indicates existing.
- Indicates direction of traffic.
- /— Indicates location of existing joint seal removal and placement of new joint seal repair joint spalls.
- ▨ Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.
- ▤ Indicates removal of unsound concrete and place rapid setting concrete patch. Actual area may vary and will be determined by the Engineer.
- ⊗ Indicates location of expansion bearing shear bar repair. See "MISCELLANEOUS DETAILS NO. 3" sheet.



PAULARINO AVENUE UC

Br No. 55-0417, Rte 55, PM R5.52
1" = 20'

PAULARINO AVENUE UC	QUANTITIES	BRIDGE NO 55-0417
REMOVE UNSOUND CONCRETE	1	CF
CLEAN EXPANSION JOINT	200	LF
RAPID SETTING CONCRETE (PATCH)	1	CF
JOINT SEAL (MR 1/2")	200	LF



N55-W22 CONNECTOR UC

Br No. 55-0336, Rte 55, PM 12.93
NO SCALE

N55-W22 CONNECTOR UC	QUANTITIES	BRIDGE NO 55-0336
REMOVE UNSOUND CONCRETE	179	CF
CLEAN BRIDGE DECK	71,528	SQFT
RAPID SETTING CONCRETE (PATCH)	179	CF
TREAT BRIDGE DECK	71,528	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	894	GAL
MISCELLANEOUS METAL (BRIDGE)	20	LB

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	By Tony Brake	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	By Tom Dang	CHECKED Tony Brake	LAYOUT	By Tom Dang
	QUANTITIES	By Tony Brake	CHECKED Ramesh Patel	SPECIFICATIONS	By Jennifer Ramirez
				PLANS AND SPECS COMPARED	Jennifer Ramirez

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

BRIDGE NO. Various
 POST MILE Varies
ROUTE 55 BRIDGES
GENERAL PLAN NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Oran	55	R4.6/17.0	16	19

Tony D. Brake 11/02/09
 REGISTERED CIVIL ENGINEER DATE

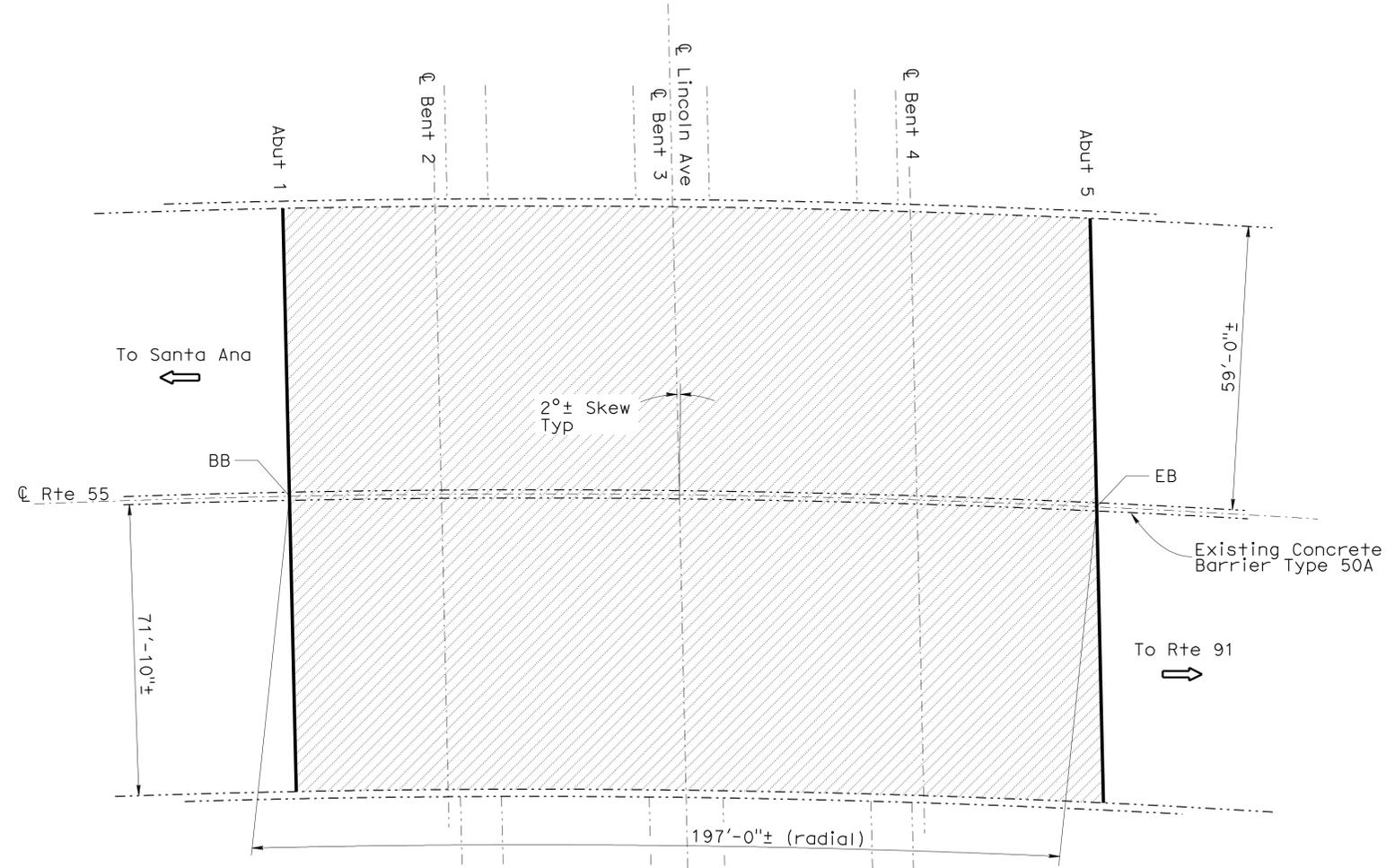
1-19-10
 PLANS APPROVAL DATE

Tony D. Brake
 No. C57863
 Exp. 06/30/10
 CIVIL
 STATE OF CALIFORNIA

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LEGEND:

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



LINCOLN AVENUE UC
 Br No. 55-0328, Rte 55, PM 16.98
 1" = 20'

LINCOLN AVENUE UC QUANTITIES BRIDGE NO 55-0328

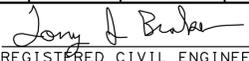
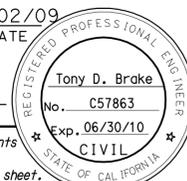
REMOVE UNSOUND CONCRETE	66	CF
CLEAN BRIDGE DECK	25,774	SQFT
CLEAN EXPANSION JOINT	264	LF
RAPID SETTING CONCRETE (PATCH)	66	CF
JOINT SEAL (MR 1 1/2")	264	LF
TREAT BRIDGE DECK	25,774	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	322	GAL

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

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Tony Brake	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
	DETAILS	BY Tom Dang	CHECKED Tony Brake	LAYOUT	BY Tom Dang
	QUANTITIES	BY Tony Brake	CHECKED Ramesh Patel	SPECIFICATIONS	BY Jennifer Ramirez

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

BRIDGE NO.	Various	ROUTE 55 BRIDGES GENERAL PLAN NO. 3
POST MILE	Varies	
REVISION DATES		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	55	R4.6/17.0	17	19
 REGISTERED CIVIL ENGINEER DATE 11/02/09					
1-19-10 PLANS APPROVAL DATE					
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JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (INCHES)	APPROX LENGTH (FT)	EXISTING WATERSTOP	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)
BRISTOL STREET UC	55-0517	Abut 1 PN	1/2	147	NO	9	3	6	5
		Abut 3 PN	1/2	147	NO	9	3	6	5
BAKER STREET UC	55-0419	Abut 1 PN	1/2	102	NO	9	3	6	5
		Abut 4 PN	1/2	102	NO	9	3	6	5
PAULARINO AVENUE UC	55-0417	Abut 1 PN	1/2	100	NO	9	3	6	5
		Abut 4 PN	1/2	100	NO	9	3	6	5
LINCOLN AVENUE UC	55-0328	Abut 1 PN	1/2	132	NO	9	3	6	5
		Abut 5 PN	1/2	132	NO	9	3	6	5

PN = Paving notch

NOTES:

The following notes apply to JOINT SEAL TYPE A:

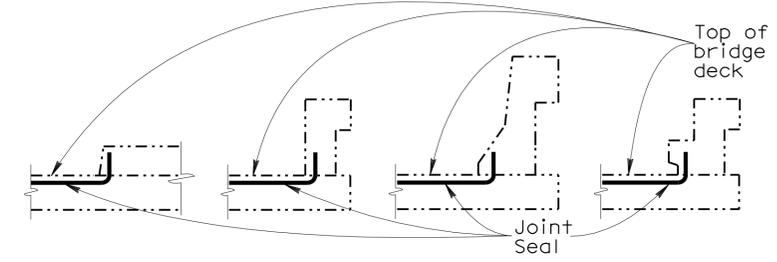
Install Joint Seal (MR = 1/2") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.

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.

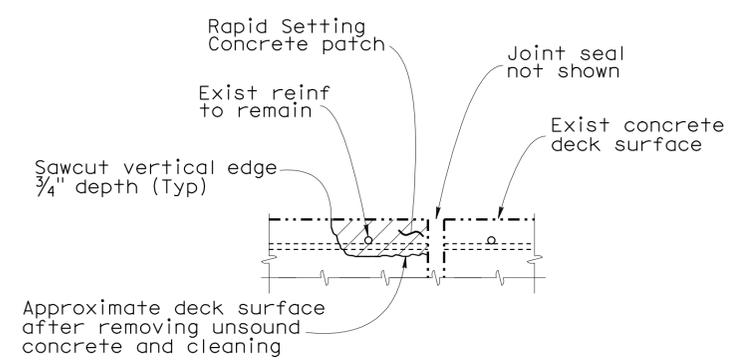


BARRIER RAIL

JOINT SEAL AT LOW SIDE OF DECK

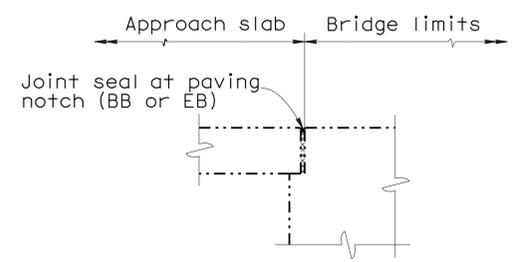
Note: Details shown for illustration purposes only.

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

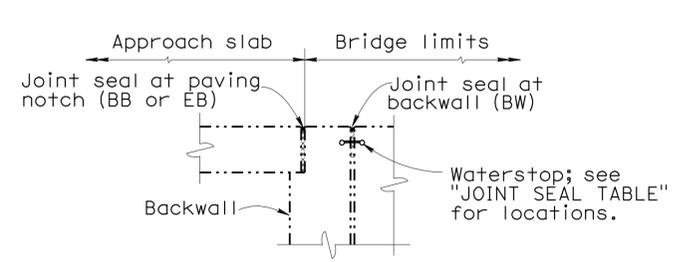


JOINT SPALL REPAIR DETAIL

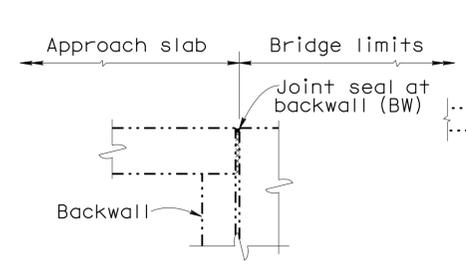
Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



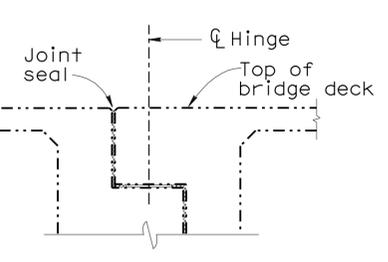
DIAPHRAGM ABUTMENT



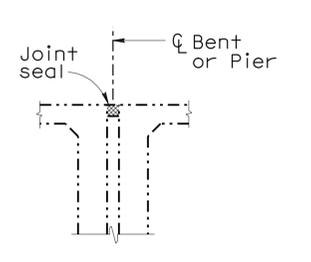
ABUTMENT WITH BACKWALL AND PAVING NOTCH



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.

DESIGN BY Tony Brake CHECKED Ramesh Patel DETAILS BY Tom Dang CHECKED Tony Brake QUANTITIES BY Tony Brake CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 55 BRIDGES MISCELLANEOUS DETAILS NO. 1
			Various	
			POST MILE	
			Varies	
STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 10/25/05)			CU 12 EA OK3501	REVISION DATES
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			0 1 2 3	4-01-09
			FILE => 12-0k3501-b-miscdf1s01.dgn	SHEET 04 OF 06

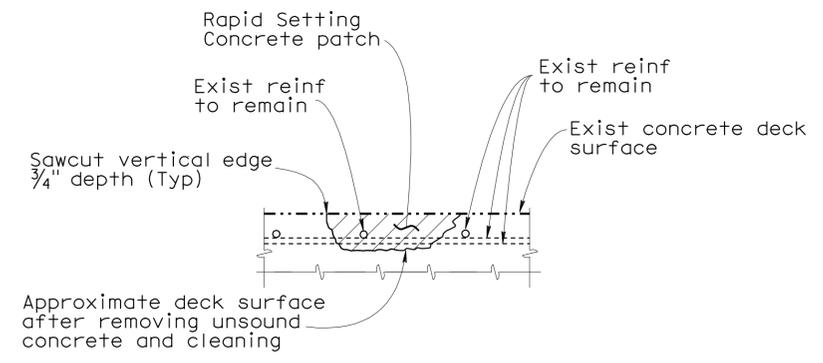
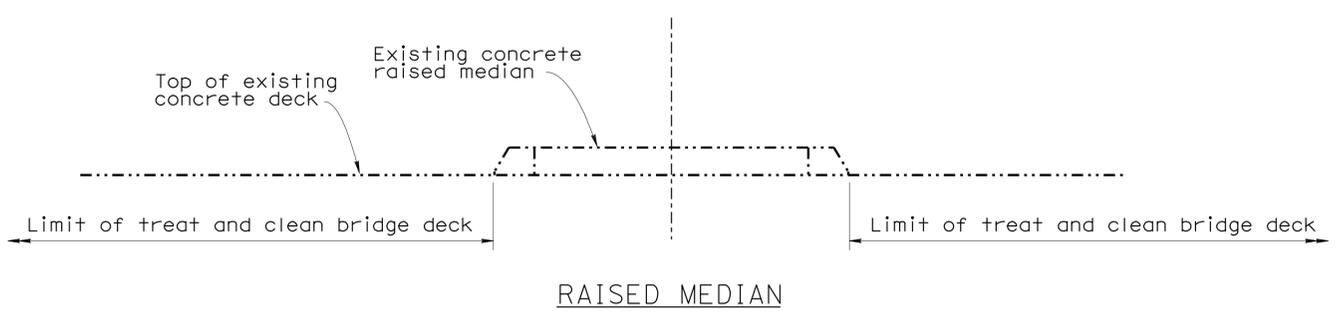
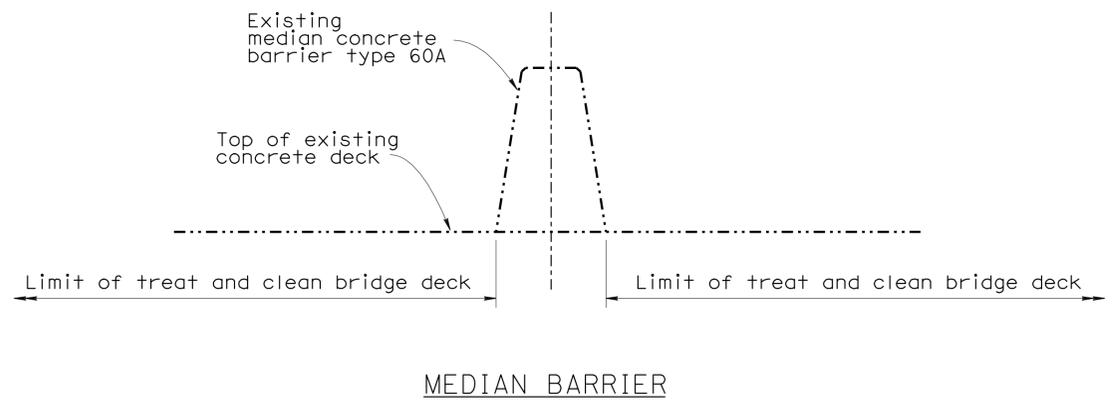
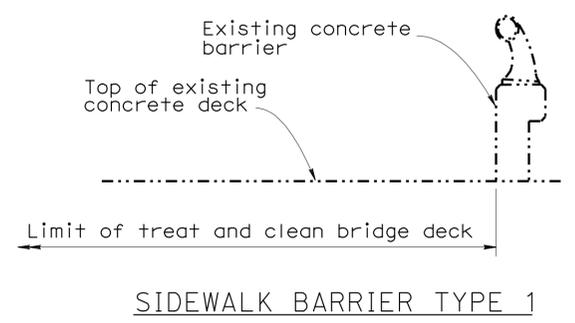
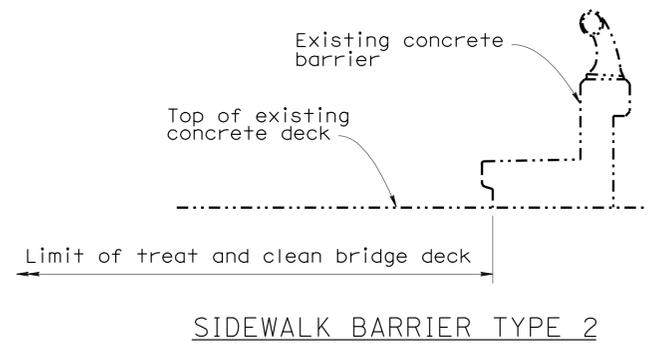
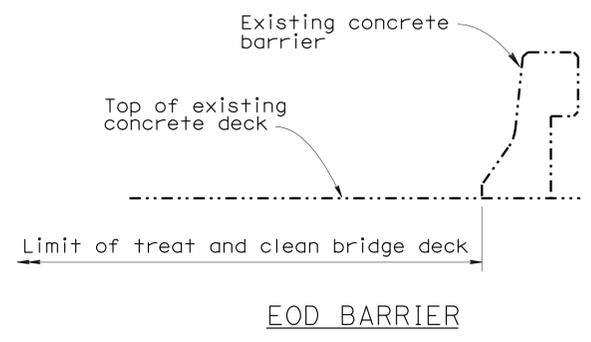
USERNAME => hrmikes DATE PLOTTED => 21-JAN-2010 TIME PLOTTED => 08:38

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	55	R4.6/17.0	18	19

Tony D. Brake 11/02/09
 REGISTERED CIVIL ENGINEER DATE
 1-19-10
 PLANS APPROVAL DATE
 Tony D. Brake
 No. C57863
 Exp. 06/30/10
 CIVIL
 STATE OF CALIFORNIA
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DECK REPAIR TABLE			
REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCHES)
BAKER STREET UC	55-0419	1	3
N55-W22 CONNECTOR UC	55-0336	1	3
LINCOLN AVENUE UC	55-0328	1	3

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



DECK DAMAGE REPAIR DETAIL
 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.

DESIGN	BY Tony Brake	CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 55 BRIDGES MISCELLANEOUS DETAILS NO. 2
DETAILS	BY Tom Dang	CHECKED Tony Brake			Various	
QUANTITIES	BY Tony Brake	CHECKED Ramesh Patel			Varies	

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 10/25/05)

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

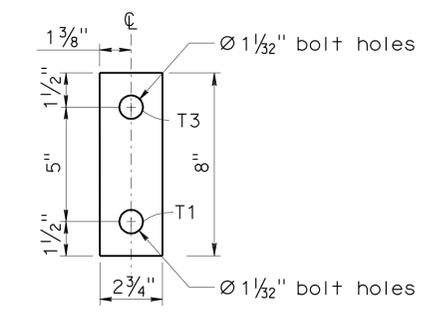
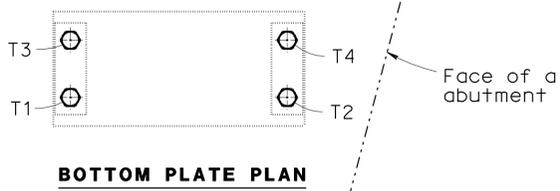
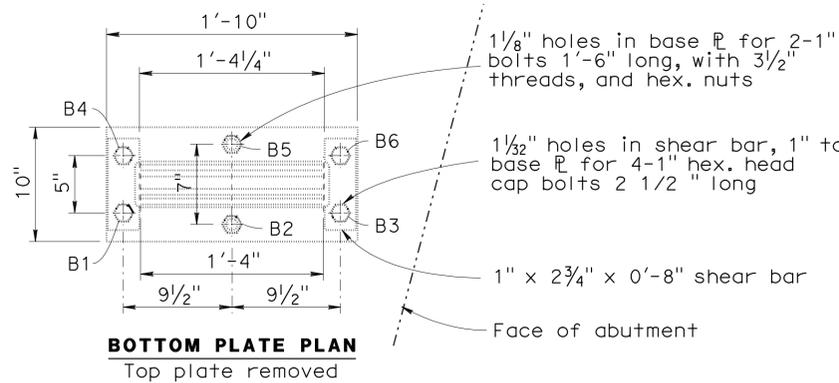
CU 12 EA 0K3501

DISREGARD PRINTS BEARING EARLIER REVISION DATES

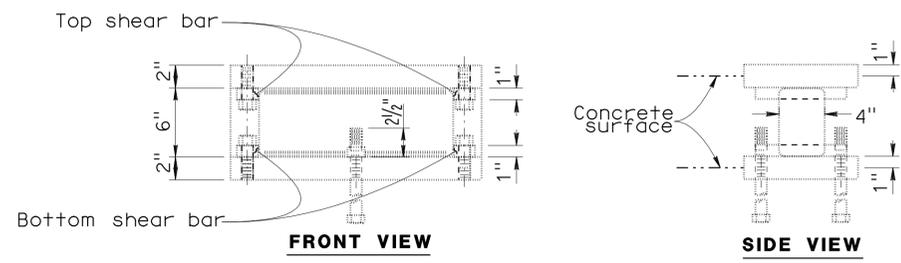
REVISION DATES: 4-1-09

SHEET 05 OF 06

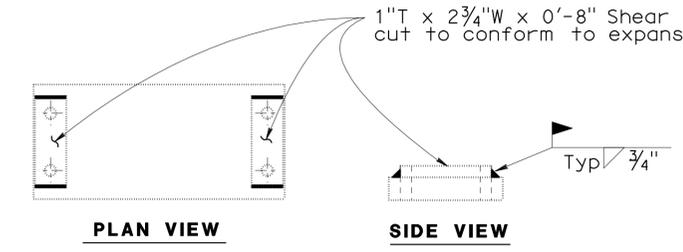
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SHEAR BAR DETAIL
 (Shear bar shall conform to the requirement of ASTM Designation A36)

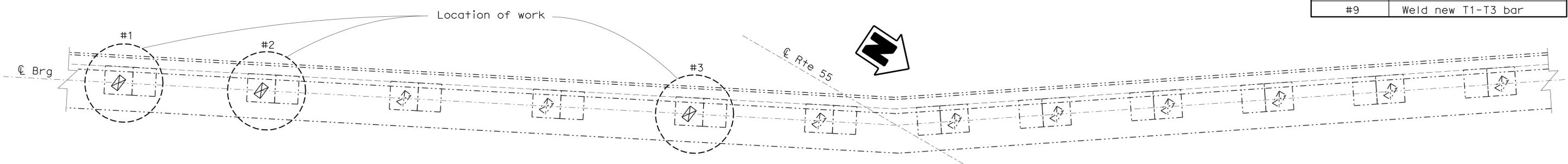


EXISTING 10" X 22" EXPANSION BEARING ASSEMBLY
 NO SCALE

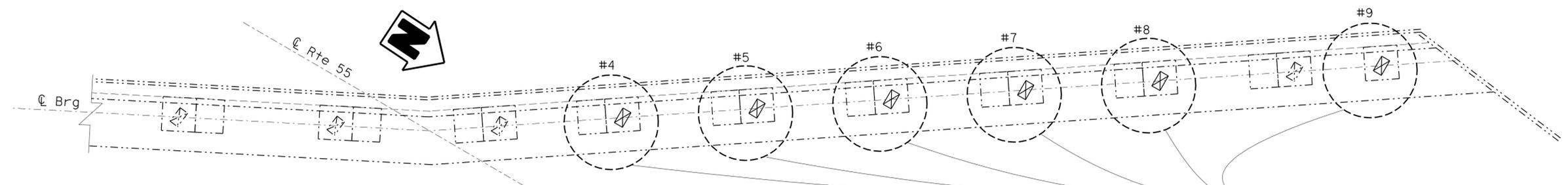


SHEAR BAR WELD DETAIL
 (Bottom shown top similar)

SHEAR BAR TABLE	
LOCATION	DESCRIPTION OF WORK
#1	Weld existing B3-B6 bar
#2	Weld existing T2-T4 bar
#3	Weld existing B3-B6 bar
#4	Weld new T1-T3 bar
#5	Weld existing B3-B6 bar
#6	Weld existing T1-T3 bar
#7	Weld existing B3-B6 bar
#8	Weld existing T1-T3 bar
#9	Weld new T1-T3 bar



PART - PLAN ABUT 1
 Br No. 55-0336
 3/16" = 1'-0"



PART - PLAN ABUT 4
 Br No. 55-0336
 3/16" = 1'-0"

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