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

IM-000C(344)E

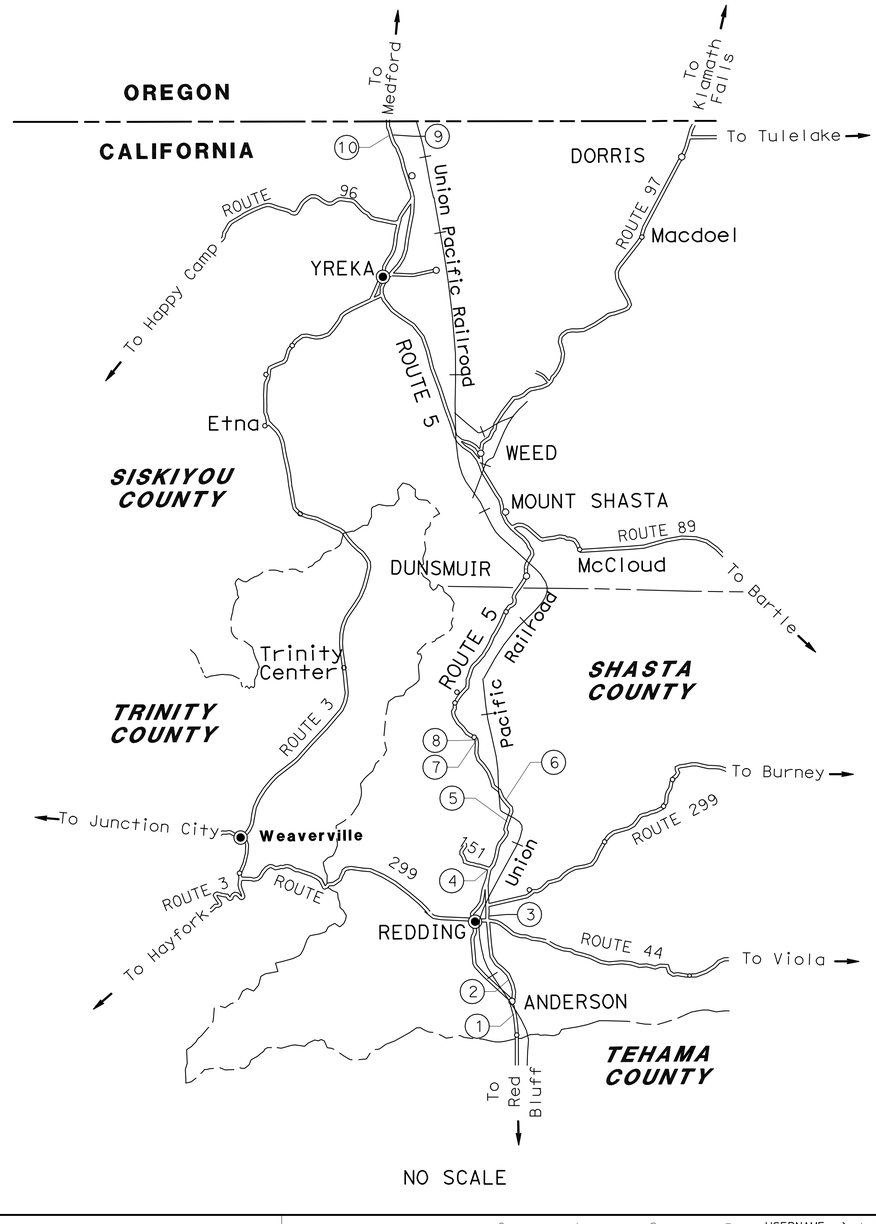
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	1	44

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN SHASTA AND SISKIYOU COUNTIES AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



NO SCALE

LOCATION MAP

LOCATIONS OF CONSTRUCTION

No.	Co	Rte	PM	BRIDGE No.	BRIDGE NAME
1	Sha	5	R4.57	06-0098R	SOUTH ANDERSON OH
2	Sha	5	R5.64	06-0141R	NORTH STREET UC
3	Sha	5	R16.15	06-0101	HILLTOP DRIVE OC
5	Sha	5	R27.63	06-0149	BRIDGE BAY OC
6	Sha	5	R32.16	06-0148R	O'BRIEN UC
7	Sha	5	R37.08	06-0159L	UPPER SALT CREEK ROAD UC
8	Sha	5	R37.08	06-0159R	UPPER SALT CREEK ROAD UC
9	Sis	5	R63.65	02-0175R	COTTONWOOD CREEK
10	Sis	5	R63.77	02-0175L	COTTONWOOD CREEK
ADDITIVE 1					
4	Sha	5	R22.14	06-0156	ROUTE 151/5 SEPARATION

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

01-12-11
DATE

JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

April 4, 2011
PLANS APPROVAL DATE

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

CONTRACT No.	02-2E3204
PROJECT ID	0200000583

PROJECT MANAGER: PHIL BAKER
DESIGN ENGINEER: JOHN MARTIN

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

P:\proj2\02\2E320_plans\pse\22E3201ab001.dgn

LAST REVISION 01-12-11
DATE PLOTTED => 25-MAY-2011
TIME PLOTTED => 05:54

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	2	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

NOTES:

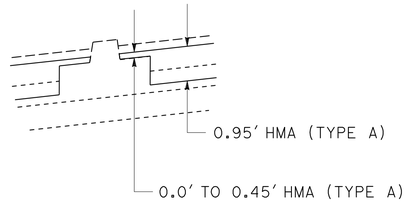
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS AS SHOWN OR AS DETERMINED BY THE ENGINEER.

DESIGN DESIGNATION (ROUTE 151)

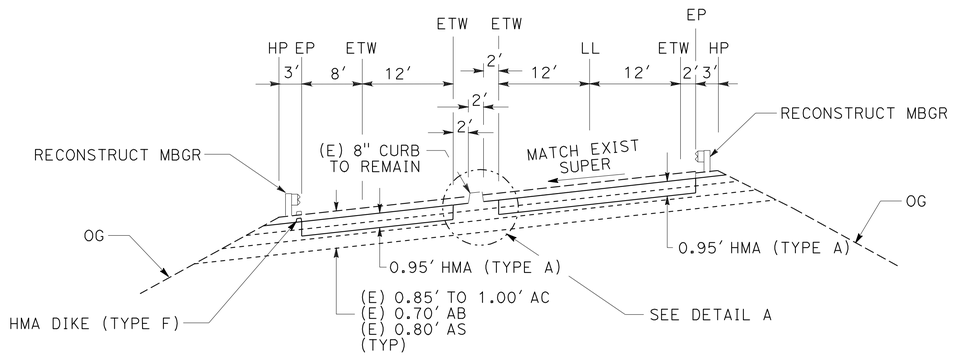
ADT (2008) = 13200 D = 59% (NB)
ADT (2011) = 13400 T = 5.0%
ADT (2021) = 14400
ADT (2031) = 15400
DHV (2021) = 1400
DHV (2031) = 1500

ABBREVIATIONS:

SUPER SUPERELEVATION
LL LANE LINE



DETAIL A



LOCATION 4
SHA 151/5 SEPARATION
Br No. 06-0156
PM R22.14

ADDITIVE 1

TYPICAL CROSS SECTIONS

NO SCALE

X-1

REVISED BY | DATE REVISED
JIM RASMUSSEN | JOHN MARTIN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DESIGN

P:\proj2\02\2E320_plans\pse\22e3201ca001.dgn

DATE PLOTTED => 11-APR-2011
TIME PLOTTED => 10:46
LAST REVISION

BORDER LAST REVISED 7/2/2010
USERNAME => trmnguye
DGN FILE => 22e3201ca001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

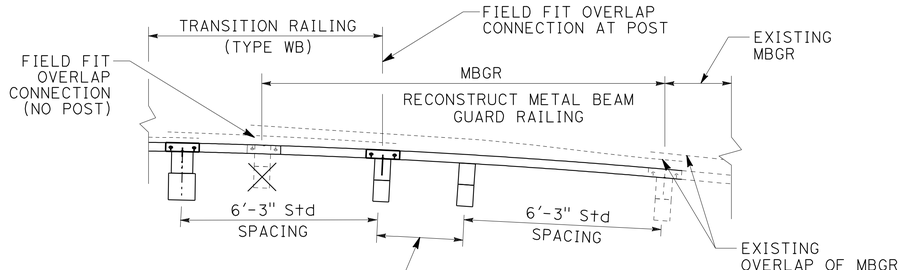
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	3	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
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 SCANNED COPIES OF THIS PLAN SHEET.



MBGR OVERLAP DETAIL

O'BRIEN UC 06-0148R
UPPER SALT CREEK ROAD UC 06-0159L/R
COTTONWOOD CREEK 02-0175L/R

CONSTRUCTION DETAILS

NO SCALE

C-1

CALCULATED-DESIGNED BY	JIM RASMUSSEN	REVISED BY	
CHECKED BY	JOHN MARTIN	DATE REVISED	
FUNCTIONAL SUPERVISOR	JOHN MARTIN		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

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LAST REVISION 12-22-10
DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 10:35

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USERNAME => trmikesl
DGN FILE => 22e3201ga001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	4	44

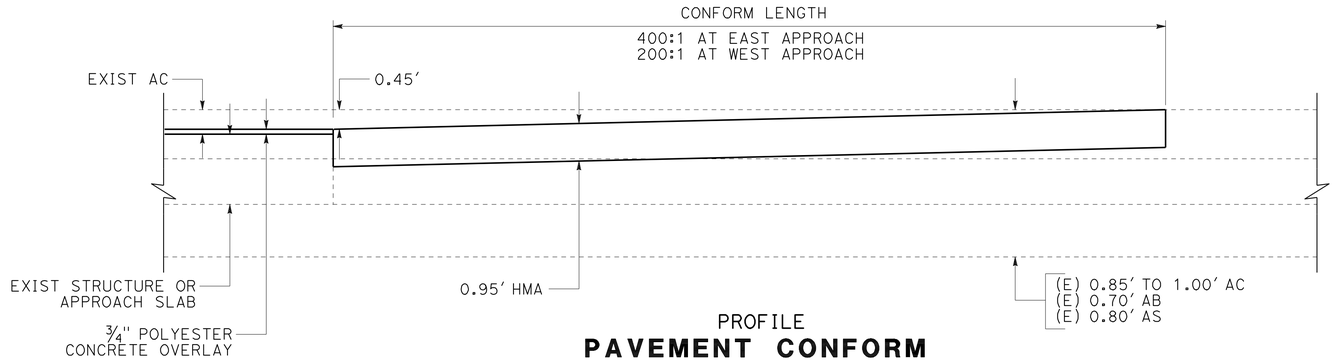
01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

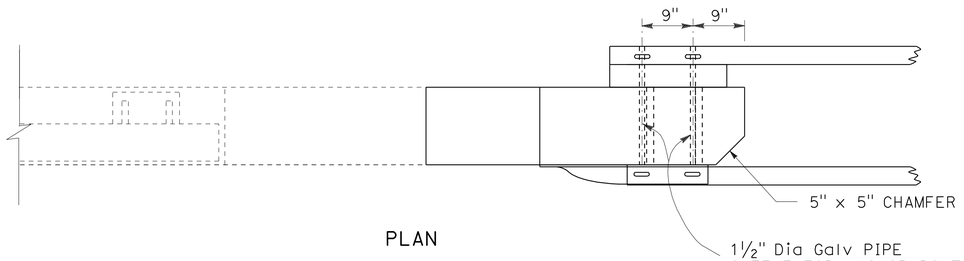
NOTE:

1. FOR DETAILS NOT SHOWN SEE STD PLAN A77J1.

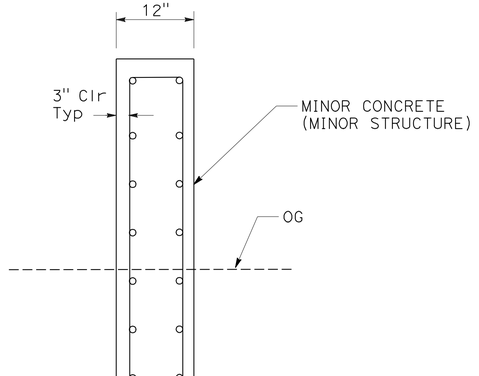


PROFILE

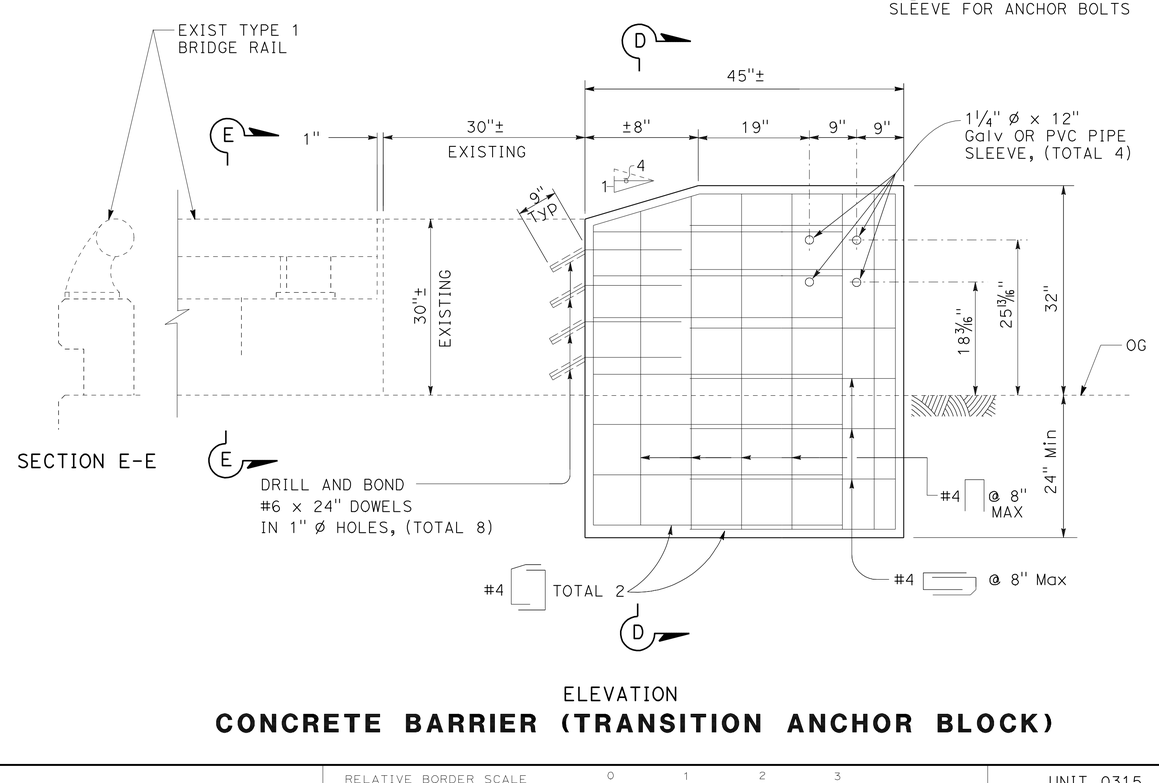
PAVEMENT CONFORM



PLAN



SECTION D-D



ELEVATION

CONCRETE BARRIER (TRANSITION ANCHOR BLOCK)

ADDITIVE 1

CONSTRUCTION DETAILS

NO SCALE

C-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: JIM RASMUSSEN
CHECKED BY: JOHN MARTIN
FUNCTIONAL SUPERVISOR: JOHN MARTIN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

LAST REVISION: DATE PLOTTED => 07-APR-2011
12-22-10 TIME PLOTTED => 10:37

P:\proj2\02\2E320_plans\pse\22e3201ga002.dgn

BORDER LAST REVISED 7/2/2010 | USERNAME => trmikesl | DGN FILE => 22e3201ga002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0315 | PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	5	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

JAMES D. RASMUSSEN No. C76401 Exp. 12-31-12 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-4-11
PLANS APPROVAL DATE

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

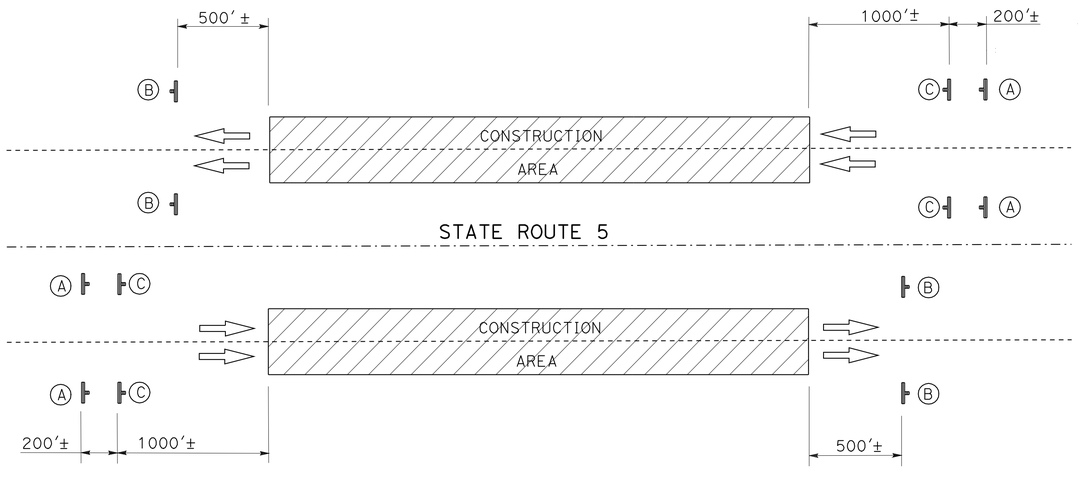
NOTES:

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. ALL SIGNS SHALL BE BLACK ON ORANGE EXCEPT C40 (CA), WHICH IS BLACK ON WHITE.
3. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.

LEGEND:

ONE POST STATIONARY MOUNTED SIGN

DIRECTION OF TRAVEL

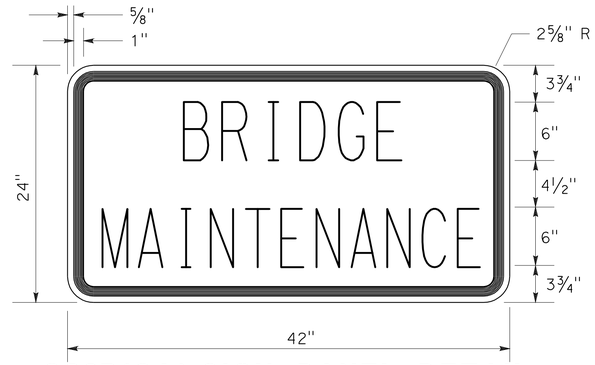


CONSTRUCTION AREA SIGNS

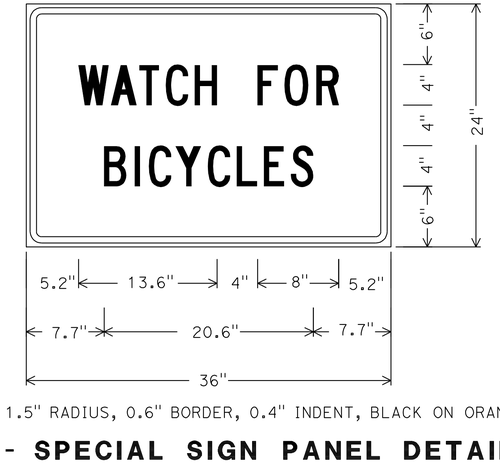
O'BRIEN UC, Br No. 06-0148R
UPPER SALT CREEK ROAD UC, Br No. 06-0159L
UPPER SALT CREEK ROAD UC, Br No. 06-0159R
COTTONWOOD CREEK Br, Br No. 02-175L
COTTONWOOD CREEK Br, Br No. 02-175R

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN No.	TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
Ⓐ	W20-1 C23B(CA)	48" x 48" 42" x 24"	ROAD WORK AHEAD "BRIDGE MAINTENANCE"	1- 4" x 6"	10
Ⓑ	G20-2	36" x 18"	END ROAD WORK	1- 4" x 4"	10
Ⓒ	C-SPECIAL	24" x 36"	WATCH FOR BICYCLES	1- 4" x 6"	10



C23B(CA) SIGN PANEL DETAIL



1.5" RADIUS, 0.6" BORDER, 0.4" INDENT, BLACK ON ORANGE

C - SPECIAL SIGN PANEL DETAIL

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR: JOHN MARTIN
CALCULATED-DESIGNED BY: JIM RASMUSSEN
CHECKED BY: JOHN MARTIN
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 10:40
12-22-10

P:\proj2\02\2E320_plans\pse\22e32011a001.dgn

BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e32011a001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	6	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

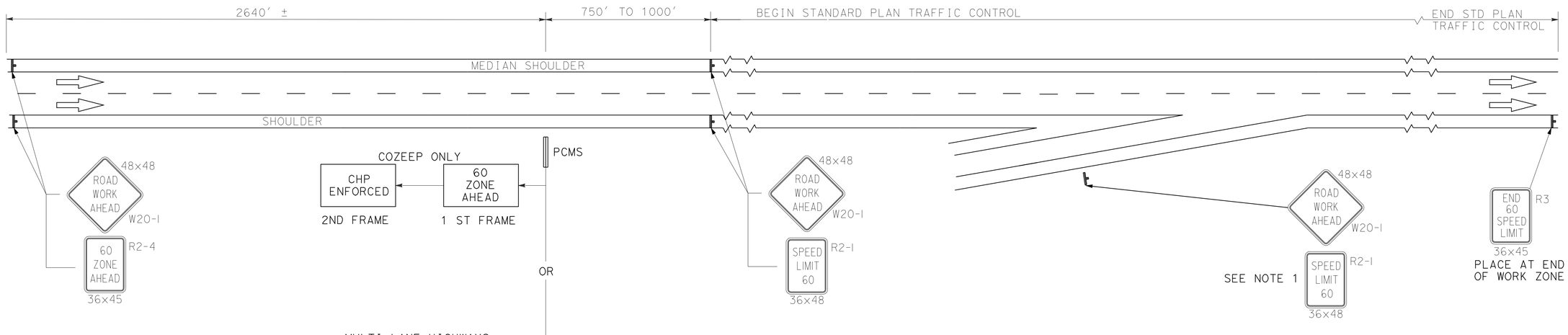
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. EXACT SIGN & PCMS LOCATIONS TO BE DETERMINED BY ENGINEER.

LEGEND:

- PORTABLE SIGN
- DIRECTION OF TRAVEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)



TYPICAL SIGNING FOR REDUCED SPEED ZONE

SOUTH ANDERSON OH Br No. 06-0098R
NORTH STREET UC Br No. 06-0141R

CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
JIM RASMUSSEN
JOHN MARTIN
FUNCTIONAL SUPERVISOR
JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

LAST REVISION DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 10:42
12-22-10

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BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e32011a003.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	7	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

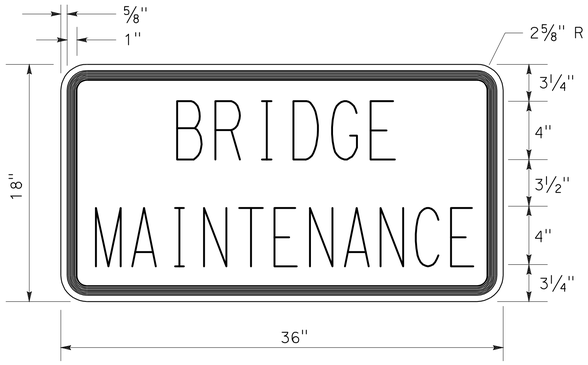
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. ALL SIGNS SHALL BE BLACK ON ORANGE EXCEPT C40 (CA), WHICH IS BLACK ON WHITE.
3. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.

LEGEND:

ONE POST STATIONARY MOUNTED SIGN.



C23B(CA) SIGN PANEL DETAIL

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN No.	TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
(A)	W20-1 C23B(CA)	48" x 48" 36" x 18"	ROAD WORK AHEAD "BRIDGE MAINTENANCE"	1- 4" x 6"	5
(B)	G20-2	36" x 18"	END ROAD WORK	1- 4" x 4"	5

CONSTRUCTION AREA SIGNS
SHA 151/5 SEP Br No. 06-0156

ADDITIVE 1
CONSTRUCTION AREA SIGNS
NO SCALE **CS-3**

CALCULATED-DESIGNED BY: JIM RASMUSSEN
CHECKED BY: JOHN MARTIN
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

REVISED BY | DATE REVISED

P:\proj\02\2E320_plans\pse\22e32011a002.dgn

LAST REVISION DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 10:43
12-22-10

BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e32011a002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	8	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

JAMES D. RASMUSSEN No. C76401 Exp. 12-31-12 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-4-11
PLANS APPROVAL DATE

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

NOTES:

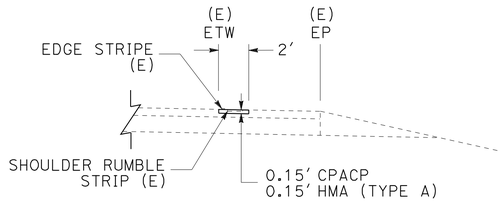
1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. CALIFORNIA SIGN CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL SIGN CODES ARE SHOWN.
3. TEMPORARY RAILING (TYPE K) SHALL BE PINNED WHEN LESS THAN 1′ FROM EDGE OF EXCAVATION.

LEGEND:

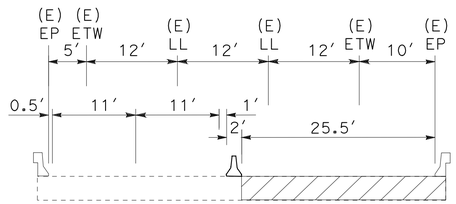
- WORK AREA
- TEMPORARY RAILING (TYPE K)
- TRAFFIC DIRECTION
- TEMPORARY CRASH CUSHION MODULE (TYPE TS14)
- TYPE P MARKER
- CHANNELIZER (SURFACE MOUNTED)
- FLASHING ARROW SIGN
- TEMPORARY FLASHING BEACON
- TRAFFIC CONTROL

ABBREVIATIONS:

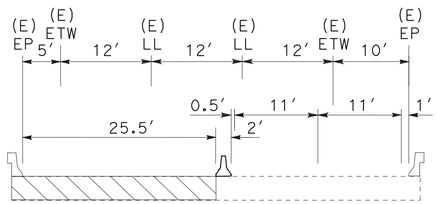
CPACP	COLD PLANE ASPHALT CONCRETE PAVEMENT
TEMPORARY STRIPE (TAPE)	TEMPORARY TRAFFIC STRIPE (TAPE)



REMOVE RUMBLE STRIP DETAIL (TYP)



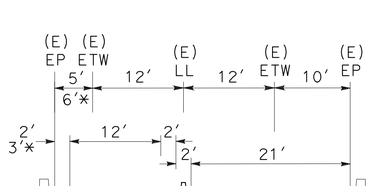
STAGE 1



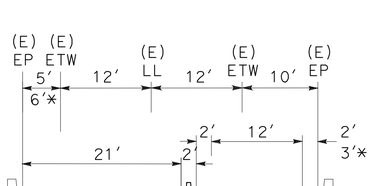
STAGE 2

TYPICAL SECTION

O′BRIEN UC Br No. 06-0148R



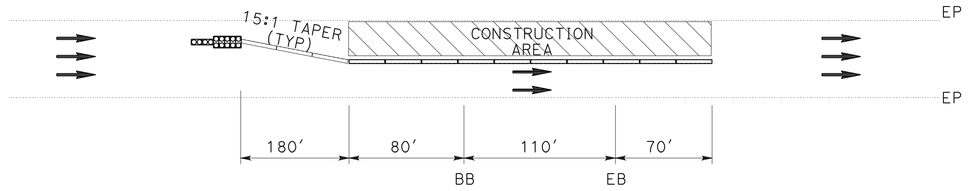
STAGE 1



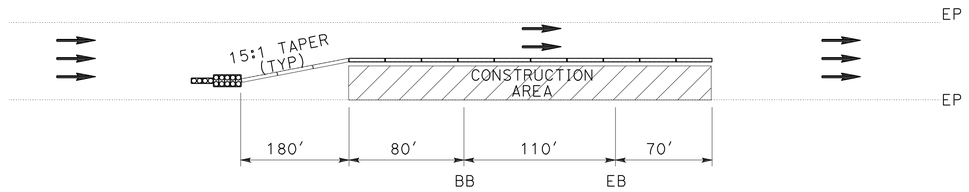
STAGE 2

TYPICAL SECTION

UPPER SALT CR Rd UC Br No. 06-0159R
(UPPER SALT CR Rd UC Br No. 06-0159L MIRRORED)
* COTTONWOOD CR Br Br No. 02-0175R
(* COTTONWOOD CR Br Br No. 02-0175L MIRRORED)



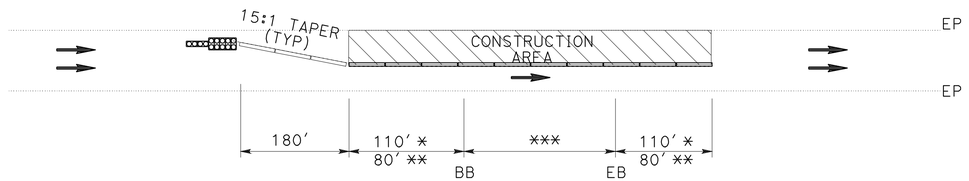
STAGE 2



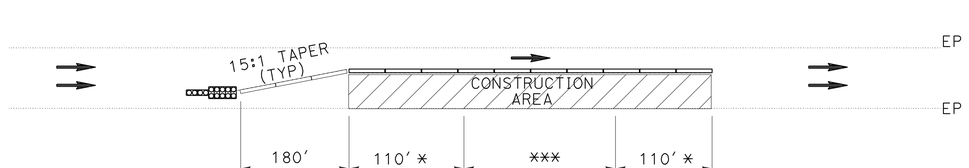
STAGE 1

TEMPORARY RAILING (TYPE K) LAYOUT

O′BRIEN UC Br No. 06-0148R



STAGE 2



STAGE 1

TEMPORARY RAILING (TYPE K) LAYOUT

* UPPER SALT CR UC Br No.06-0159L/R
** COTTONWOOD CR Br Br No. 02-0175L/R

*** UPPER SALT CR UC Br No. 06-0159L/R = 120′
COTTONWOOD CR Br Br No. 02-0175R = 180′
COTTONWOOD CR Br Br No. 02-0175L = 220′

TRAFFIC HANDLING PLAN

NO SCALE

TH-1

REVISED BY | DATE REVISED
JIM RASMUSSEN | JOHN MARTIN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DESIGN

P:\proj2\02\2E320_plans\pse\22e3201md001.dgn

LAST REVISION | DATE PLOTTED => 07-APR-2011
12-28-10 | TIME PLOTTED => 11:06

BORDER LAST REVISED 7/2/2010 | USERNAME => trmikesl | DGN FILE => 22e3201md001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0315 | PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	9	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

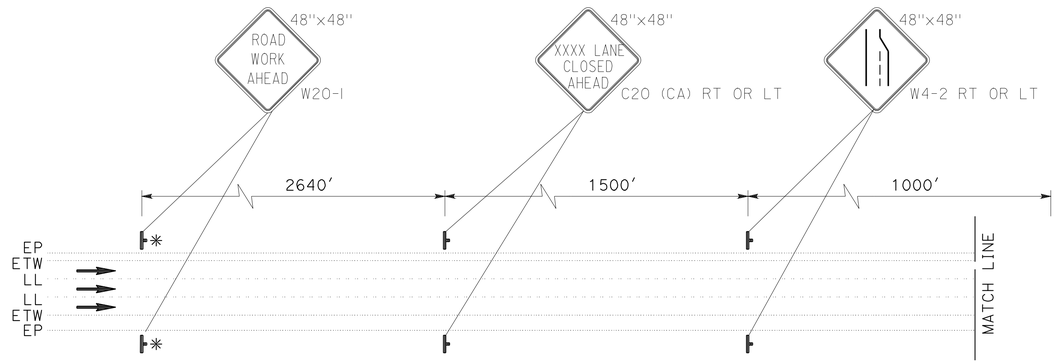
4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

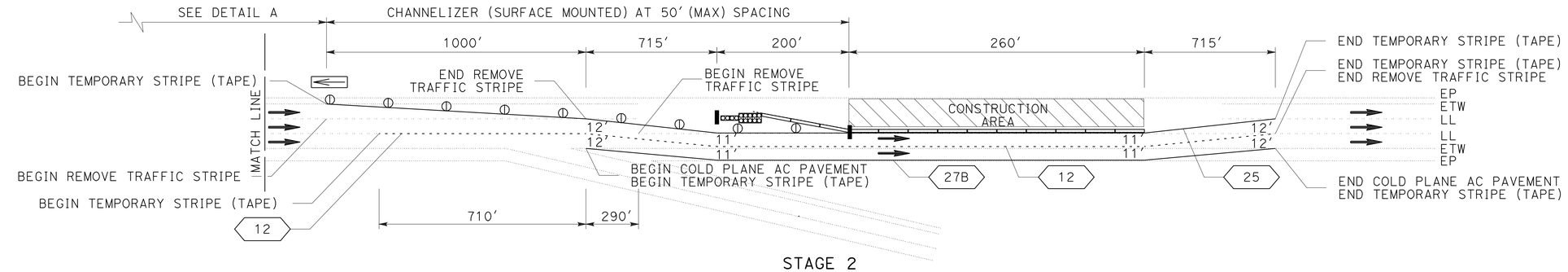
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

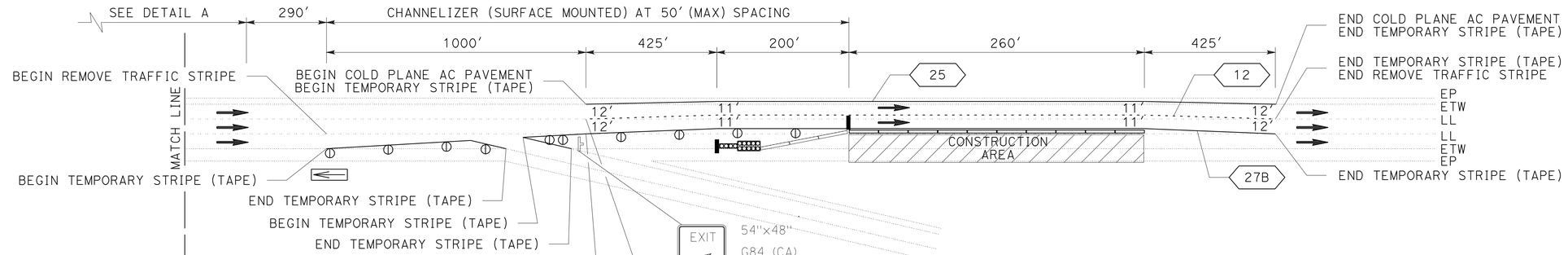
1. SEE STANDARD PLAN T-10 FOR TRAFFIC CONTROL DETAILS NOT SHOWN.



DETAIL A



STAGE 2



STAGE 1

TEMPORARY STRIPING LAYOUT

O'BRIEN UC Br No. 06-0148R

TRAFFIC HANDLING PLAN

NO SCALE

TH-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR: JOHN MARTIN
CALCULATED-DESIGNED BY: JIM RASMUSSEN
CHECKED BY: JOHN MARTIN
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 11:09

P:\proj2\02\2E320_plans\pse\22e3201md002.dgn

BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e3201md002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	10	44

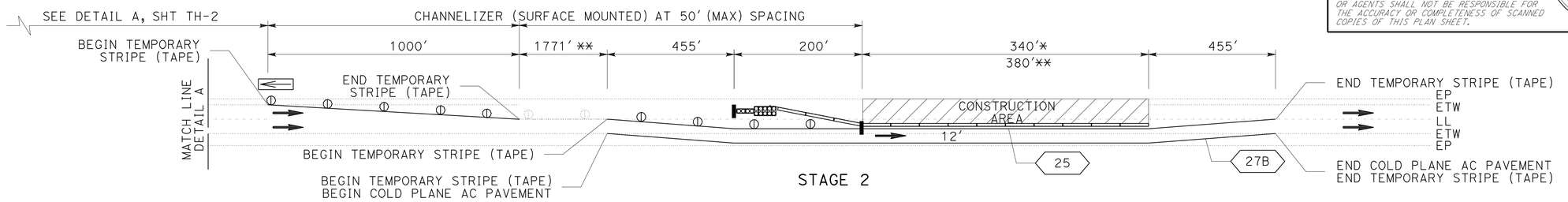
01-12-11
REGISTERED CIVIL ENGINEER DATE

JAMES D. RASMUSSEN No. C76401 Exp. 12-31-12 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

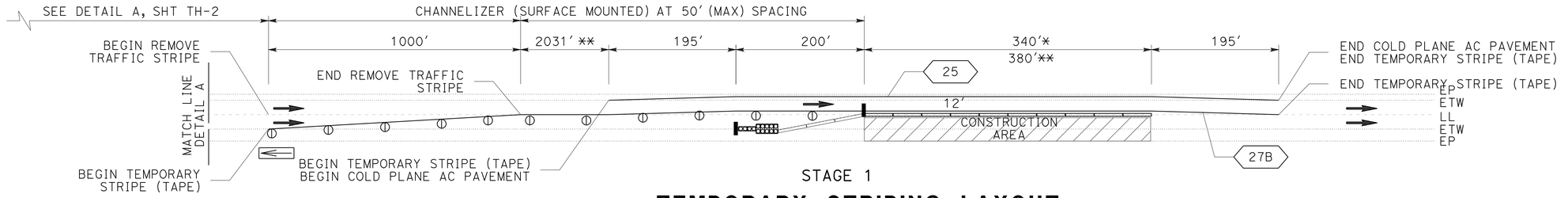
4-4-11
PLANS APPROVAL DATE

NOTE:

1. SEE STANDARD PLAN T-10 FOR TRAFFIC CONTROL DETAILS NOT SHOWN.



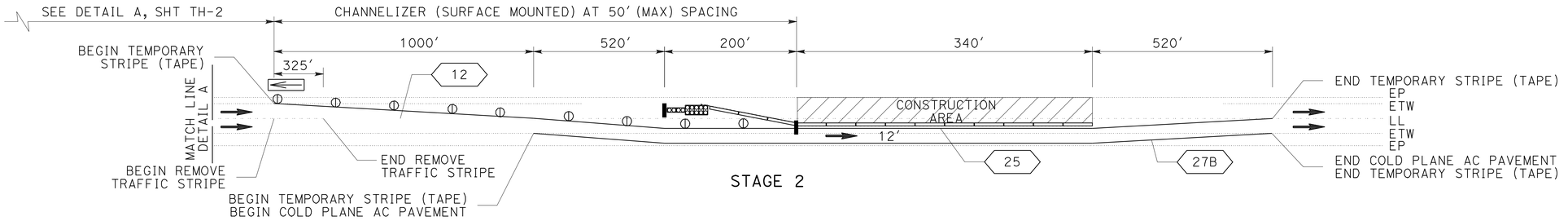
STAGE 2



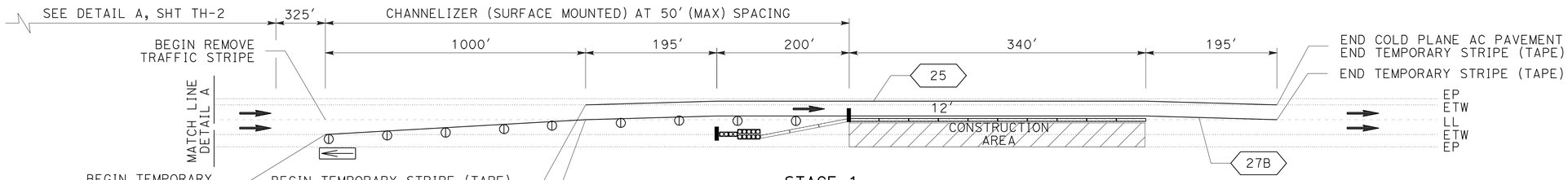
STAGE 1

TEMPORARY STRIPING LAYOUT

* COTTONWOOD CR Br No. 02-0175R
** COTTONWOOD CR Br No. 02-0175L (MIRRORED)



STAGE 2



STAGE 1

TEMPORARY STRIPING LAYOUT

UPPER SALT CR UC Br No. 06-0159R
UPPER SALT CR UC Br No. 06-0159L (MIRRORED)

TRAFFIC HANDLING PLAN

NO SCALE

TH-3

REVISED BY	DATE REVISED
JIM RASMUSSEN	JOHN MARTIN
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	JOHN MARTIN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

P:\proj2\02\2E320_plans\pse\22e3201md003.dgn

LAST REVISION 12-28-10
DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 11:10

BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e3201md003.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	11	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

NOTE:

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

FLASHING ARROW SIGN (N)

	EA
TOTAL	10

TEMPORARY FLASHING BEACON (N)

	EA
TOTAL	10

TRAFFIC CONTROL SIGNS (STATIONARY MOUNTED) (N)

TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
W20-1	48" x 48"	ROAD WORK AHEAD	1- 4" x 6"	10
C20 (CA) RT	48 x 48"	RIGHT LANE CLOSED AHEAD	1- 4" x 6"	10
C20 (CA) LT	48" x 48"	LEFT LANE CLOSED AHEAD	1- 4" x 6"	10
W4-2 RT	48" x 48"	RIGHT LANE ENDS	1- 4" x 6"	10
W4-2 LT	48" x 48"	LEFT LANE ENDS	1- 4" x 6"	10

TRAFFIC HANDLING QUANTITIES

LOC	CO	RTE	PM	Br No.	BRIDGE NAME	STAGE	TEMPORARY TRAFFIC STRIPE (TAPE)	CHANNELIZER (SURFACE MOUNTED)	TEMPORARY RAILING (TYPE K)	TEMPORARY CRASH CUSHION MODULE	REMOVE TRAFFIC STRIPE	(N) OBJECT MARKER (TYPE P)
							LF	EA	LF	EA	LF	EA
6	SHA	5	R32.16	06-0148R	O'BRIEN UC	1	4930	33	440	14	588	2
						2	7670	39	440	14	612	2
7	SHA	5	R37.08	06-0159L	UPPER SALT CREEK ROAD UC	1	2860	28	520	14	252	2
						2	5160	35	520	14		2
8	SHA	5	R37.08	06-0159R	UPPER SALT CREEK ROAD UC	1	2860	28	520	14	252	2
						2	5160	35	520	14		2
9	SIS	5	R63.65	02-0175R	COTTONWOOD CREEK	1	6922	69	520	14	252	2
						2	8442	69	520	14		2
10	SIS	5	R63.77	02-0175L	COTTONWOOD CREEK	1	2940	28	560	14	252	2
						2	4980	34	560	14		2
						TOTAL	51,924	398	5120	140	2208	20

TRAFFIC HANDLING PLAN
TH-4

CALCULATED-DESIGNED BY: JIM RASMUSSEN
CHECKED BY: JOHN MARTIN
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

P:\proj2\02\2E320_plans\pse\22e3201md004.dgn

LAST REVISION DATE PLOTTED => 07-APR-2011
TIME PLOTTED => 11:12

BORDER LAST REVISED 7/2/2010
USERNAME => trmikesl
DGN FILE => 22e3201md004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0315
PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	12	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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

NOTES:

1. PRE-NOTIFICATION PCMS: PLACE NEAR RAMP AND ACTIVATE APPROXIMATELY 12 HOURS PRIOR TO RAMP CLOSURE.

RAMP WILL BE CLOSED	TONIGHT (OR TODAY) 0 PM - 0 AM
FRAME 1	FRAME 2

2. RAMP CLOSED PCMS: MOVE PRE-NOTIFICATION PCMS APPROXIMATELY 1000 FEET BEFORE RAMP AND ACTIVATE DURING RAMP CLOSURE.

NB RAMP CLOSED	FOLLOW DETOUR
FRAME 1	FRAME 2

3. PLACE 7 DAYS PRIOR TO RAMP CLOSURE.
4. CALIFORNIA SIGN CODES ARE DESIGNATED BY (CA), OTHERWISE, FEDERAL MUTCD SIGN CODES ARE SHOWN.
5. RAMP CLOSED PCMS: PLACE BEFORE OPEN ON-RAMP AND ACTIVATE DURING RAMP CLOSURE.

NB I-5 ON RAMP CLOSED	FOLLOW DETOUR
FRAME 1	FRAME 2

6. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS (PORTABLE)

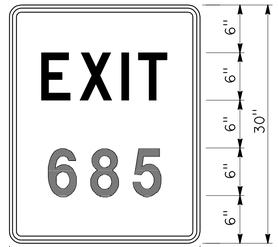
CODE	PANEL SIZE	SIGN MESSAGE	EA
G27-1(5)(CA)	24" x 24"	ROUTE SHIELD (5)	4
G28-1(151)(CA)	24" x 24"	ROUTE SHIELD (151)	4
M3-1	24" x 12"	DIRECTION (NORTH)	4
M4-8A	24" x 18"	END DETOUR	2
M4-10L	48" x 18"	DETOUR (LT ARROW)	4
M4-10R	48" x 18"	DETOUR (RT ARROW)	4
SC3(CA)	48" x 18"	DETOUR WITH UP ARROW	1
SC6-3(CA)	48" x 48"	RAMP CLOSED - DATE TIME	2
SP1(CA)	24" x 30"	EXIT NUMBER	5

LEGEND:

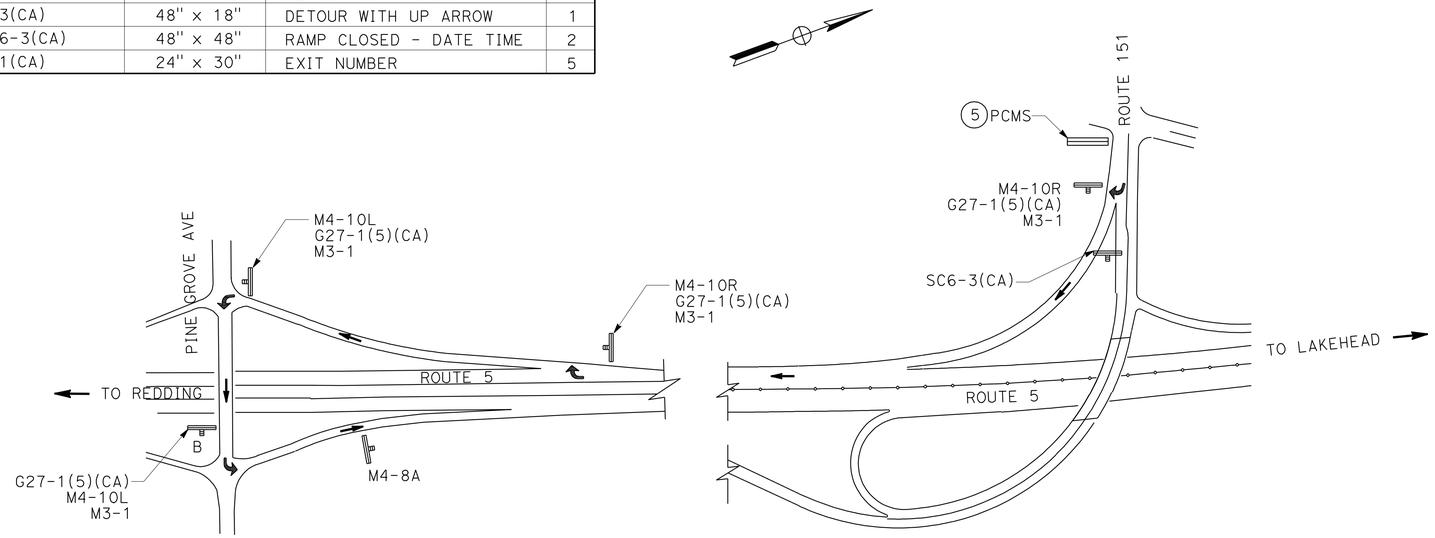
PORTABLE CHANGEABLE MESSAGE SIGN

ABBREVIATIONS:

PCMS PORTABLE CHANGEABLE MESSAGE SIGN



EXIT NUMBER SIGN (SP1) DETAIL



DETOUR FOR CLOSURE OF SR 151 NB ON RAMP TO I-5

DETOUR FOR CLOSURE OF I-5 NB OFF RAMP TO SR 151

ADDITIVE 1

DETOUR PLAN

NO SCALE

DE-1

THIS PLAN ACCURATE FOR DETOUR CONSTRUCTION WORK ONLY.

REVISED BY | DATE REVISED
JIM RASMUSSEN | JOHN MARTIN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

LAST REVISION | DATE PLOTTED => 07-APR-2011
12-22-10 | TIME PLOTTED => 08:16

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BORDER LAST REVISED 7/2/2010 | USERNAME => trphils | DGN FILE => 22e3201mg001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0315 | PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	13	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

JAMES D. RASMUSSEN No. C76401 Exp. 12-31-12 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-4-11
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.

EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS TO BE MAINTAINED

CO	RTE	PM	BR NO.	TYPE	DESCRIPTION
SHA	5	R16.13	06-0148R	SUPER HAR	WEST SIDE OF I-5 AT HILLTOP OC
SHA	5	R32.22	06-0159L	CCTV & CMS	RT SHOULDER OF SB I-5 (PART OF CURVE WARNING SYSTEM)

STORM WATER PREVENTION

	UNIT	QTY
TEMPORARY FIBER ROLL	LF	150
MULCH	SQFT	1700

PAVEMENT DELINEATION

LOC	CO	RTE	PM	BR NO.	BRIDGE NAME	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			PAVEMENT MARKER (RETROREFLECTIVE)		PAVEMENT MARKER (RETROREFLECTIVE-RECESSED)	
						DETAIL 12	DETAIL 25	DETAIL 27B	TYPE G	TYPE H	TYPE G	TYPE H
						LF	LF	LF	EA	EA	EA	EA
2	SHA	5	R5.64	06-0141R	NORTH STREET UC	234	234	234	6	6		
6	SHA	5	R32.16	06-0148R	O'BRIEN UC	5780	2890	2890			122	62
7	SHA	5	R37.08	06-0159L	UPPER SALT CREEK ROAD UC	2580	2580	2580			55	55
8	SHA	5	R37.08	06-0159R	UPPER SALT CREEK ROAD UC	2580	2580	2580			55	55
9	SIS	5	R63.65	02-0175R	COTTONWOOD CREEK	4221	4221	4221			89	89
10	SIS	5	R63.77	02-0175L	COTTONWOOD CREEK	2490	2490	2490			53	53
					SUBTOTAL	17,651	14,761	14,761	6	6	374	314
					TOTAL	47,173			12		688	

METAL BEAM GUARD RAILING

LOC	CO	RTE	PM	BR NO.	BRIDGE NAME	BRIDGE APPROACH QUADRANT		REMOVE METAL BEAM GUARD RAILING	RECONSTRUCT METAL BEAM GUARD RAILING	TRANSITION RAILING (TYPE WB)
								LF	LF	EA
6	SHA	5	R32.16	06-0148R	O'BRIEN UC	BB	LT	25	12	1
							RT	25	12	1
7	SHA	5	R37.08	06-0159L	UPPER SALT CREEK ROAD UC	BB	LT	25	12	1
						EB	LT	25	12	1
8	SHA	5	R37.08	06-0159R	UPPER SALT CREEK ROAD UC	BB	RT	25	12	1
						EB	RT	25	12	1
9	SIS	5	R63.65	02-0175R	COTTONWOOD CREEK	BB	LT	25	12	1
							RT	25	12	1
10	SIS	5	R63.77	02-0175L	COTTONWOOD CREEK	EB	LT	25	12	1
							RT	25	12	1
							TOTAL	250	120	10

ROADWAY SUMMARY

LOC	CO	RTE	PM	BR NO.	BRIDGE NAME	COLD PLANE ASPHALT CONCRETE PAVEMENT	HOT MIX ASPHALT (TYPE A)	SHOULDER RUMBLE STRIP (AC, GROUND-IN INDENTATIONS)	TACK COAT
						SQYD	TON	STA	TON
6	SHA	5	R32.16	06-0148R	O'BRIEN UC	662	80	30	0.3
7	SHA	5	R37.08	06-0159L	UPPER SALT CREEK ROAD UC	503	56	23	0.2
8	SHA	5	R37.08	06-0159R	UPPER SALT CREEK ROAD UC	503	56	23	0.2
9	SIS	5	R63.65	02-0175R	COTTONWOOD CREEK	452	50	20	0.4
10	SIS	5	R63.77	02-0175L	COTTONWOOD CREEK	449	50	20	0.2
					TOTAL	2569	286	116	1.3

SUMMARY OF QUANTITIES
Q-1

REVISED BY | DATE REVISED
JIM RASMUSSEN | JOHN MARTIN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: JOHN MARTIN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DESIGN

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LAST REVISION | DATE PLOTTED => 07-APR-2011
12-28-10 | TIME PLOTTED => 08:16

BORDER LAST REVISED 7/2/2010 | USERNAME => trphils | DGN FILE => 22e3201pa001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0315 | PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	14	44

01-12-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES D. RASMUSSEN
No. C76401
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

NOTE:

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

ADDITIVE COMPONENT 1

	LS
ADDITIVE COMPONENT 1	1

STORM WATER PREVENTION (N)

	UNIT	QTY
TEMPORARY FIBER ROLL	LF	300
MULCH	SQFT	1700

LOOP DETECTOR (N)

TYPE	SIZE	EA
A	6 X 6	2
C	27'	4

THERMOPLASTIC PAVEMENT MARKING (N)

DESCRIPTION	NUMBER	SQFT
TYPE V ARROW	2 @ 33 SQFT	66
"SIGNAL"	2 @ 32 SQFT	64
"AHEAD"	2 @ 31 SQFT	62
	TOTAL	192

ROADWAY SUMMARY (N)

BRIDGE APPROACH QUADRANT		REMOVE METAL BEAM GUARD RAILING	RECONSTRUCT METAL BEAM GUARD RAILING	HOT MIX ASPHALT (TYPE A)	TRANSITION RAILING (TYPE WB)	REMOVE ASPHALT CONCRETE DIKE	PLACE HMA DIKE (TYPE F)	MINOR CONCRETE (MINOR STRUCTURE)	TAPERED INLET	ALTERNATIVE FLARED TERMINAL SYSTEM	ROADWAY EXCAVATION	TACK COAT
		LF	LF	TON	EA	EA	LF	CY	EA	EA	CY	TON
BB	LT		100	1062		75	75		1		554	1.1
	RT	25	75		1			0.6		1		
EB	LT	25	25		1	185	185	0.6		1		
	RT		50							1		
TOTAL		50	250	1062	2	260	260	1.2	1	3	554	1.1

PAVEMENT DELINEATION SUMMARY (N)

	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			PAVEMENT MARKER (RETROREFLECTIVE)	
	DETAIL 12	DETAIL 25A	DETAIL 27B	TYPE G	TYPE H
	LF	LF	LF	EA	EA
	637	1273	1273	15	55
TOTAL	3183			70	

ADDITIVE 1
SUMMARY OF QUANTITIES
Q-2

REVISED BY | DATE REVISED
JIM RASMUSSEN | JOHN MARTIN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: JOHN MARTIN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

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LAST REVISION 12-28-10 | DATE PLOTTED => 07-APR-2011 | TIME PLOTTED => 11:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	15	44

J. Hannigan 01-12-11
REGISTERED ELECTRICAL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
J.M. HANNIGAN
No. E13665
Exp. 6-30-11
ELECTRICAL
STATE OF CALIFORNIA

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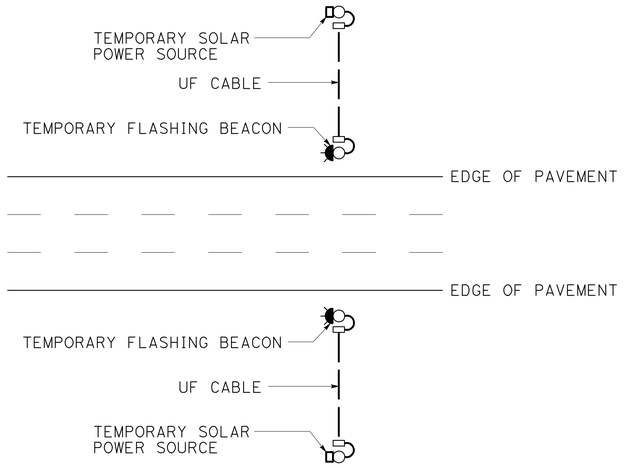
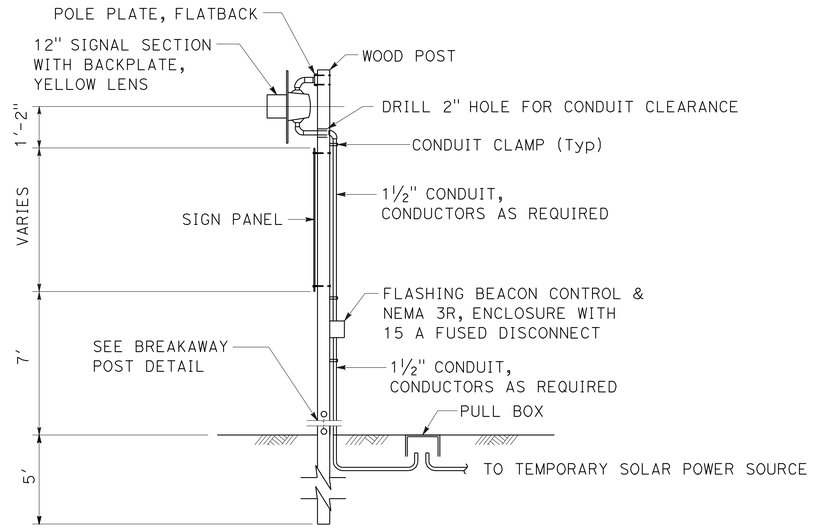
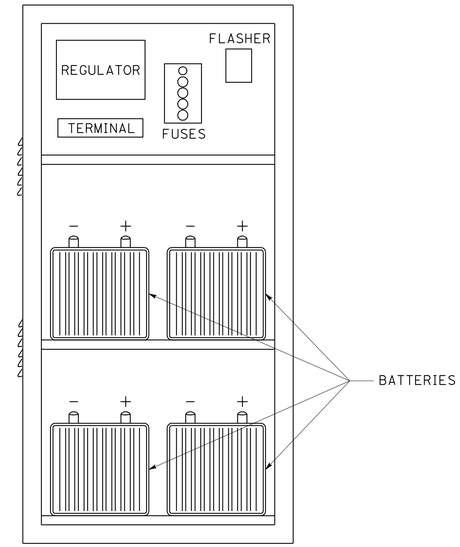


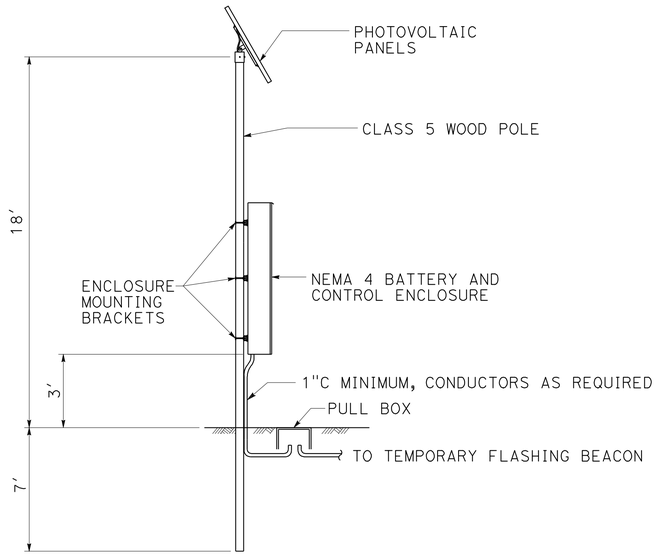
TYPICAL SOLAR INSTALLATION



TEMPORARY FLASHING BEACON

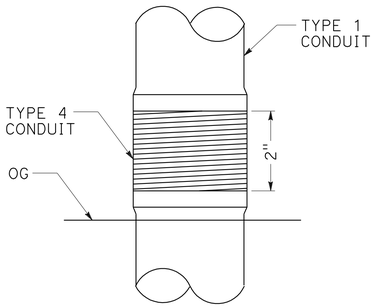


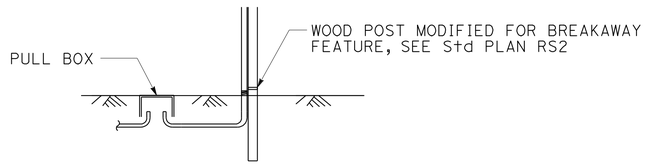
NEMA 4 BATTERY AND CONTROL ENCLOSURE



NOTE: POLE SHALL BE LOCATED 15' FROM ETW OR PROVIDE ATTENUATION.

TEMPORARY SOLAR POWER SOURCE





BREAKAWAY POST
(CONDUIT CONNECTION)

TEMPORARY SOLAR FLASHING BEACON

NO SCALE

E-1

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
TERI ANDERSON	JAMES M. HANNIGAN		

FUNCTIONAL SUPERVISOR: ROB STINGER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

LAST REVISION: DATE PLOTTED => 07-APR-2011
01-12-11 TIME PLOTTED => 08:26

22e3201ua001.dgn

BORDER LAST REVISED 7/2/2010 | USERNAME => trphils | DGN FILE => 22e3201ua001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0147 | PROJECT NUMBER & PHASE 02000005831

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	Var	16	44

REGISTERED ELECTRICAL ENGINEER — 01-12-11 DATE

J.M. HANNIGAN No. E13665 Exp. 6-30-11 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

4-4-11
PLANS APPROVAL DATE

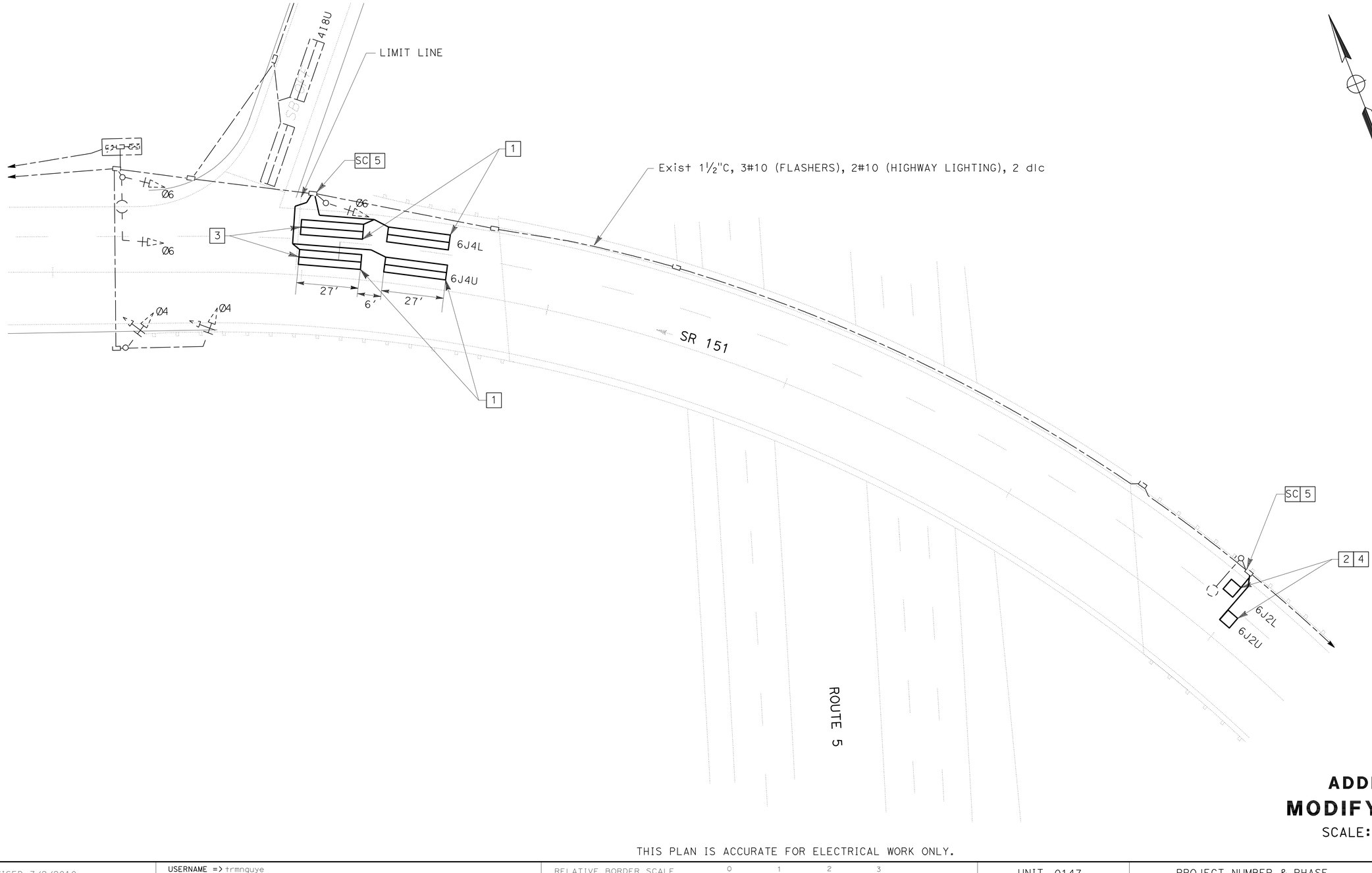
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD AT DISTRICT OFFICE.

NOTES (THIS SHEET):

1. ABANDON Exist TYPE C LOOP. INSTALL NEW TYPE C LOOP CENTERED IN LANE.
2. ABANDON Exist TYPE A LOOP. INSTALL NEW TYPE A LOOP CENTERED IN LANE.
3. INSTALL LOOP 1′ FROM LIMIT LINE.
4. INSTALL LOOP 405′ FROM LIMIT LINE.
5. AFTER CONDUCTORS HAVE BEEN INSTALLED, THE ENDS OF CONDUITS TERMINATING IN PULL BOXES SHALL BE SEALED WITH AN APPROVED TYPE OF SEALING COMPOUND.
6. SEE SHEET Q-1 FOR EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS TO BE MAINTAINED.



ADDITIVE 1

MODIFY SIGNAL

SCALE: 1" = 20′

E-2

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

REVISED BY			
DATE REVISED			
TERI ANDERSON	CALCULATED-DESIGNED BY		
JAMES P. HANNIGAN	CHECKED BY		
ROB STINGER	FUNCTIONAL SUPERVISOR		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			
Caltrans® ELECTRICAL DESIGN			

LAST REVISION 12-13-10 | DATE PLOTTED => 07-APR-2011 | TIME PLOTTED => 08:20

22e3201ua002.dgn

BORDER LAST REVISED 7/2/2010 | USERNAME => trmnguye | DGN FILE => 22e3201ua002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0147 | PROJECT NUMBER & PHASE 02000005831

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	17	44

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

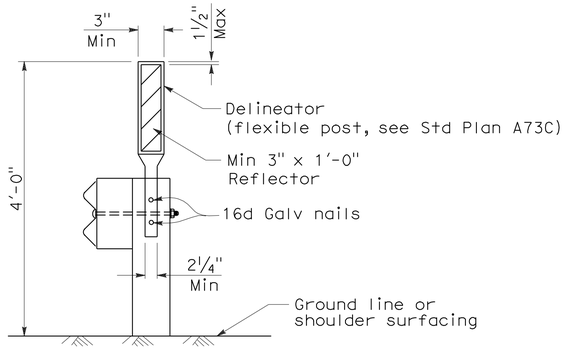
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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.

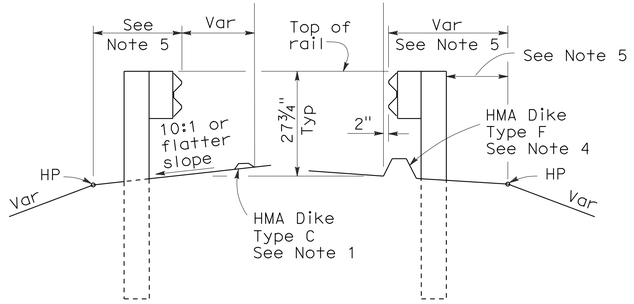
To accompany plans dated 4-4-11

NOTES:

1. When necessary to place dike in front of face of guard railing, only Type C dike may be used. For dike details, see Standard Plan A87B.
2. For standard railing post embedment, see Standard Plans A77C3.
3. Guard railing delineation to be used where shown on the Project Plans.
4. When dike or curb is placed under guard railing, the maximum height of the dike or curb shall be 4". Mountable dike should not be used. For dike and curb details, see Revised Standard Plans RSP A87A and Standard Plan A87B.
5. For details of typical distance between the face of rail and hinge point, see Standard Plan A77C3.



GUARD RAILING DELINEATION
See Note 3



DIKE POSITIONING
See Note 1

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING TYPICAL RAILING DELINEATION AND DIKE POSITIONING DETAILS

NO SCALE

RSP A77C4 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77C4
DATED MAY 1, 2006 - PAGE 47 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77C4

2006 REVISED STANDARD PLAN RSP A77C4

12-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	18	44

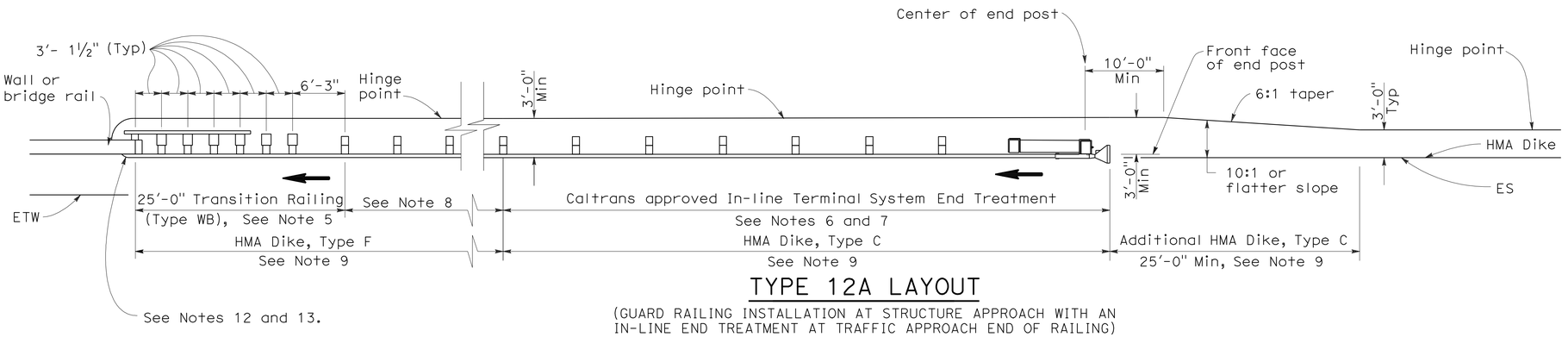
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

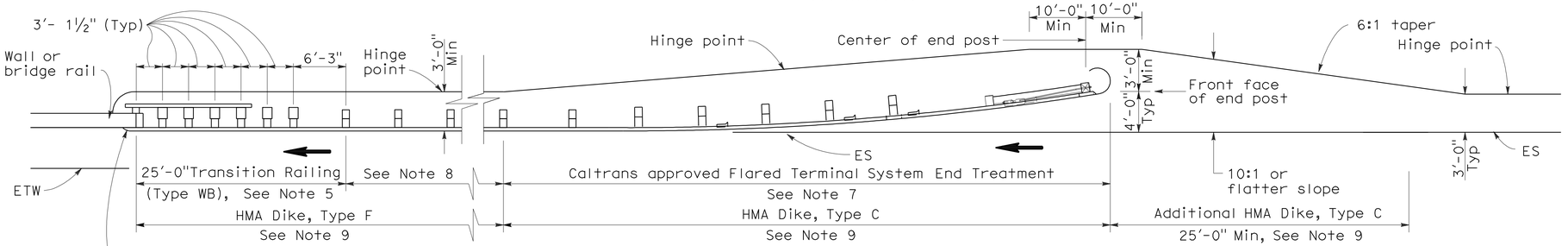
REGISTERED PROFESSIONAL ENGINEER — Randell D. Hiatt — No. C50200 — Exp. 6-30-09 — CIVIL — STATE OF CALIFORNIA

To accompany plans dated 4-4-11



TYPE 12A LAYOUT

(GUARD RAILING INSTALLATION AT STRUCTURE APPROACH WITH AN IN-LINE END TREATMENT AT TRAFFIC APPROACH END OF RAILING)
See Notes 10



TYPE 12B LAYOUT

(GUARD RAILING INSTALLATION AT STRUCTURE APPROACH WITH A FLARED END TREATMENT AT TRAFFIC APPROACH END OF RAILING)
See Notes 10

NOTES:

1. Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
2. Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood posts with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
4. Direction of adjacent traffic indicated by ➞.
5. For Transition Railing (Type WB) details for Types 12A and 12B Layouts, see Standard Plan A77J4.
6. In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
7. The type of terminal system end treatment to be used will be shown on the Project Plans.
8. Dependent on site conditions (embankment height, side slopes, or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.
9. Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.
10. Type 12A or Type 12B Layouts are typically used:
    a. To the right of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
    b. To the left of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
    c. To the right of approaching traffic at the end of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
    d. To the right of approaching traffic at the end of the structure on multilane freeways or expressways with decked median on the bridge.
11. See Revised Standard Plan RSP A77F3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
12. For additional details of typical connections to bridge rail, see Connection Detail AA on Revised Standard Plans RSP A77J1 and RSP A77J2 and Connection Detail FF on Standard Plans A77K1 and A77K2.
13. For additional details of a typical connection to walls or abutments, see Standard Plan A77J3.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING TYPICAL LAYOUTS FOR STRUCTURE APPROACH

NO SCALE

RSP A77F1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77F1
DATED MAY 1, 2006 - PAGE 54 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77F1

2006 REVISED STANDARD PLAN RSP A77F1

12-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	19	44

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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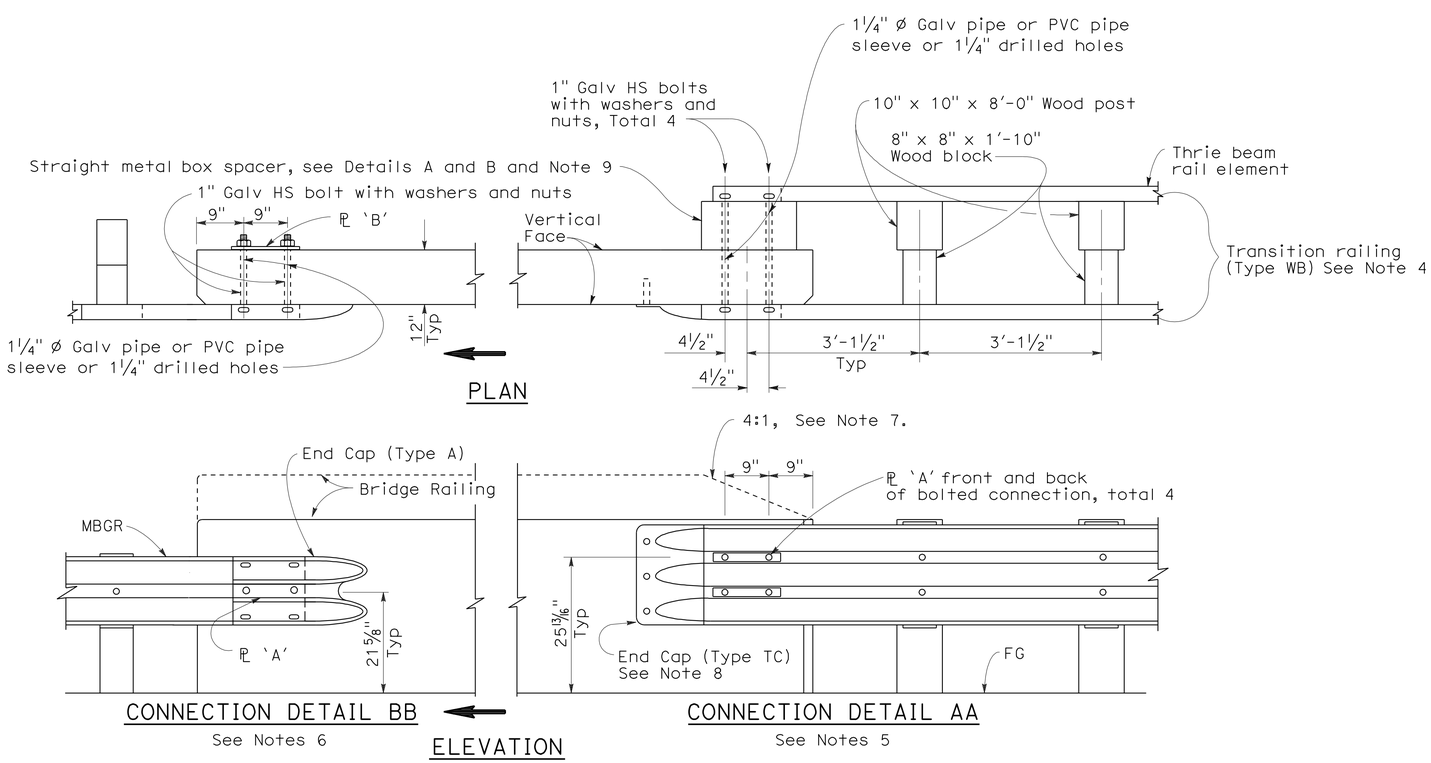
To accompany plans dated 4-4-11



GUARD RAILING CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77J2 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Standard Plan A77B1, A77C1 and A77C2.
3. Direction of adjacent traffic indicated by ➡.
4. For additional details of Transition Railing (Type WB), see Standard Plan A77J4. Transition Railing (Type WB) transitions the 12 gage w-beam standard railing section of guard railing to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
5. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77F1, Layout Types 12C and 12D on Standard Plan A77F2, and Layout Type 12E on Revised Standard Plan RSP A77F3.
6. For typical use of Connection Detail BB, see Layout Type 12D (structure departure railing connection) on Standard Plan A77F2 and Layout Type 12DD on Standard Plan A77F5.
7. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail.
8. For details of End Cap (Type TC), see Standard Plan A77J4.
9. See Standard Plan A77J4 for additional details regarding depth dimension for straight metal box spacer.

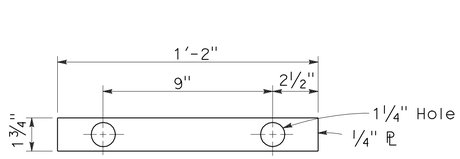


PLATE 'A'

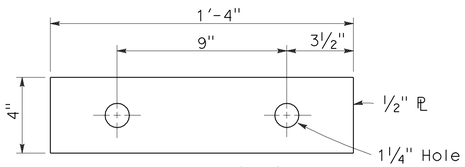
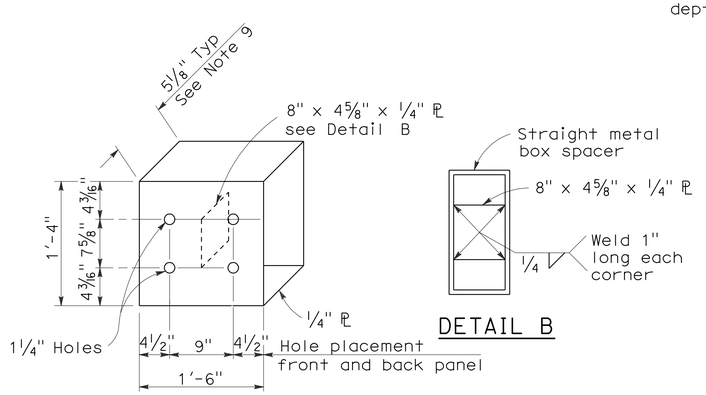


PLATE 'B'
(For backside of connection BB)



DETAIL A

STRAIGHT METAL BOX SPACER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No.1

NO SCALE

RSP A77J1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77J1
DATED MAY 1, 2006 - PAGE 72 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77J1

2006 REVISED STANDARD PLAN RSP A77J1

12-10-07

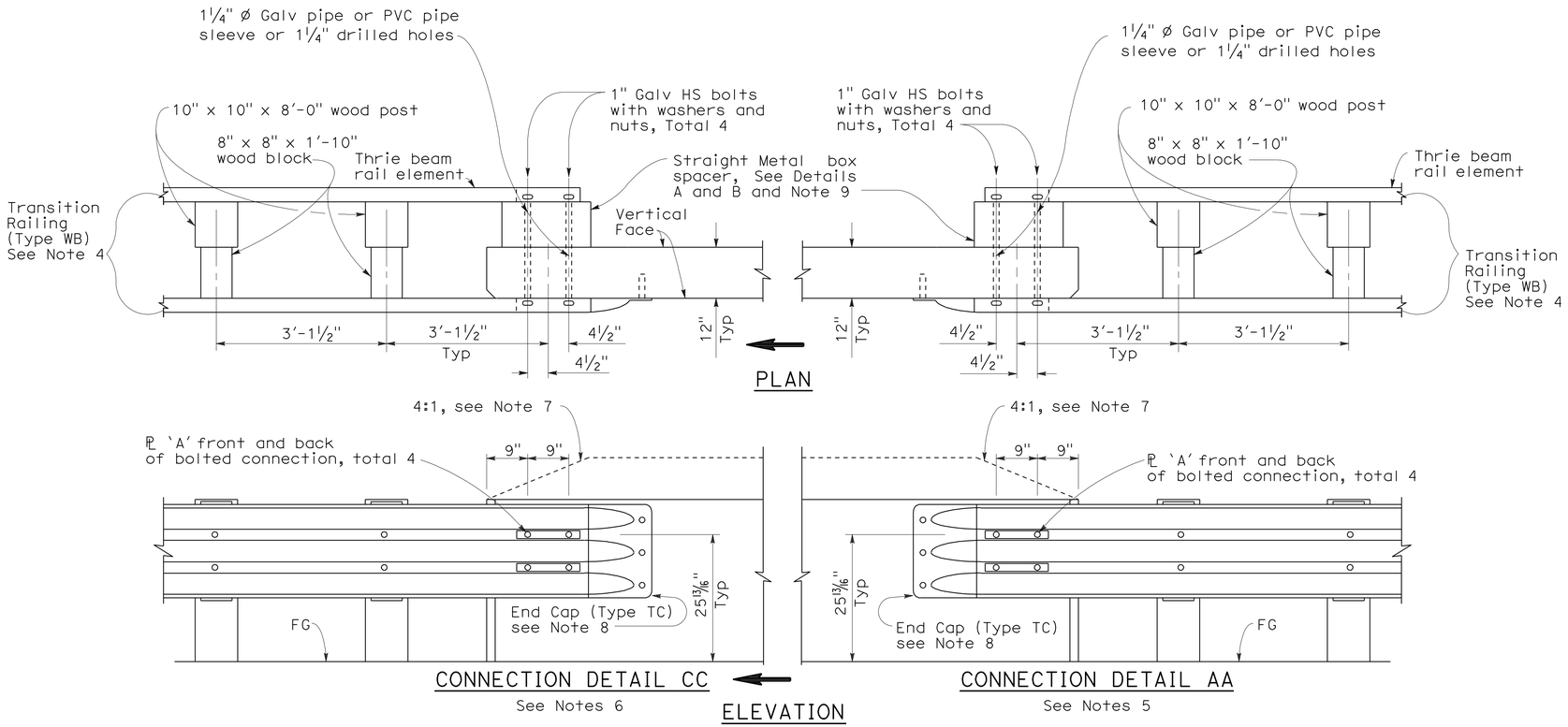
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	20	44

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

To accompany plans dated 4-4-11



GUARD RAILING CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77J1 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Standard Plan A77B1, A77C1 and A77C2.
3. Direction of adjacent traffic indicated by ⟹.
4. For additional details of Transition Railing (Type WB), see Standard Plan A77J4. Transition Railing (Type WB) transitions the 12 gage w-beam standard railing section of guard railing to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
5. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77F1, Layout Types 12C and 12D on Standard Plan A77F2, and Layout Type 12E on Revised Standard Plan RSP A77F3.
6. For typical use of Connection Detail CC, see Layout Types 12AA and 12BB on Standard Plan A77F4 and Layout Type 12CC on Standard Plan A77F5.
7. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA and connection Detail CC, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam railing.
8. For details of End Cap (Type TC), see Standard Plans A77J4.
9. See Standard Plans A77J4 for additional details regarding depth dimension for straight metal box spacer.

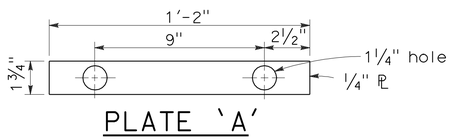


PLATE 'A'

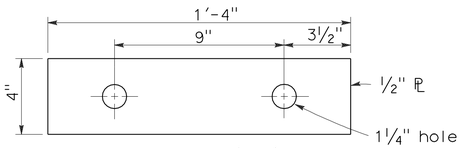
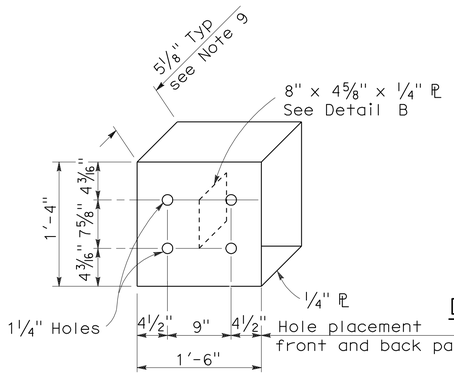
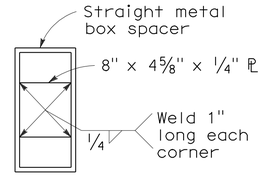


PLATE 'B'
(For backside of connection BB)



DETAIL A



DETAIL B

STRAIGHT METAL BOX SPACER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No.2

NO SCALE

RSP A77J2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77J2
DATED MAY 1, 2006 - PAGE 73 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77J2

2006 REVISED STANDARD PLAN RSP A77J2

12-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	21	44

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 5, 2009
PLANS APPROVAL DATE

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

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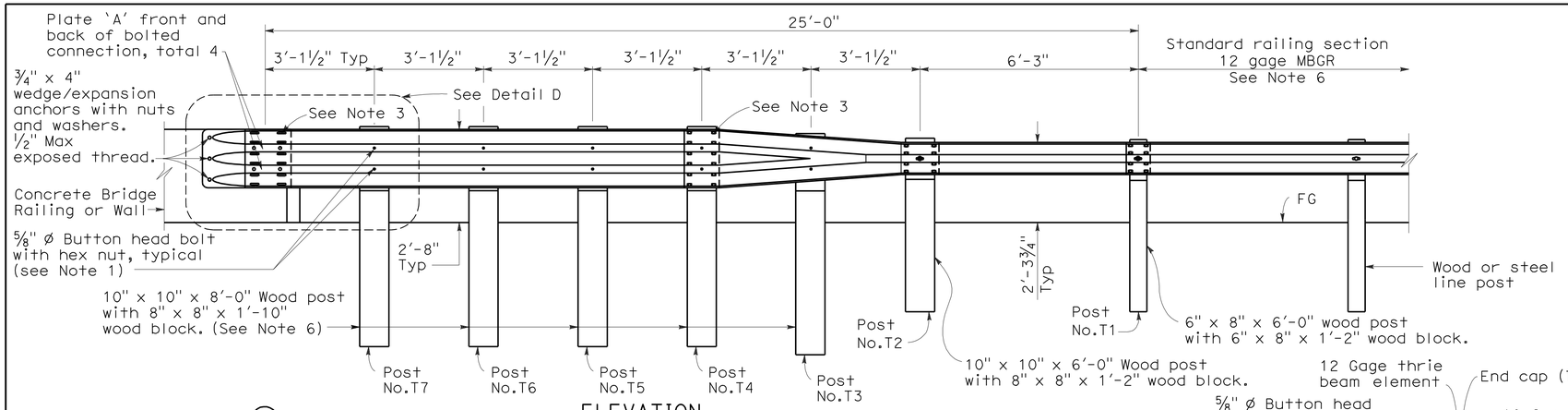
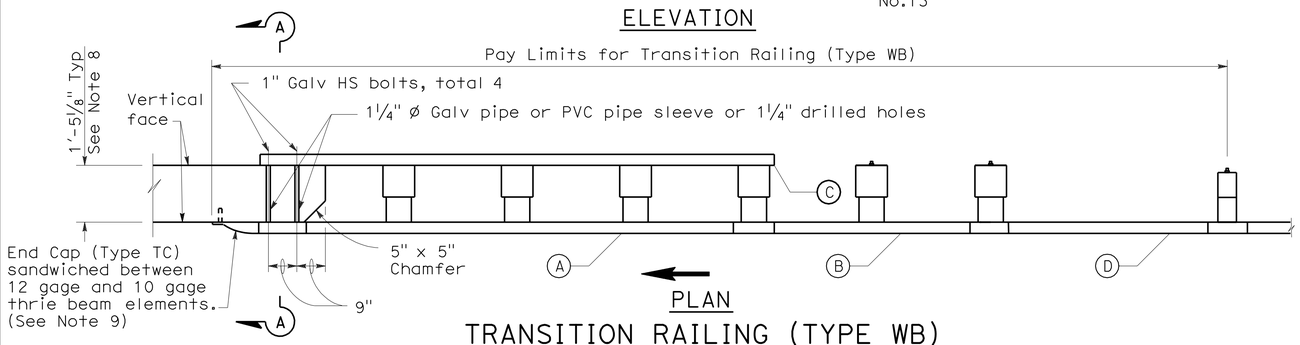


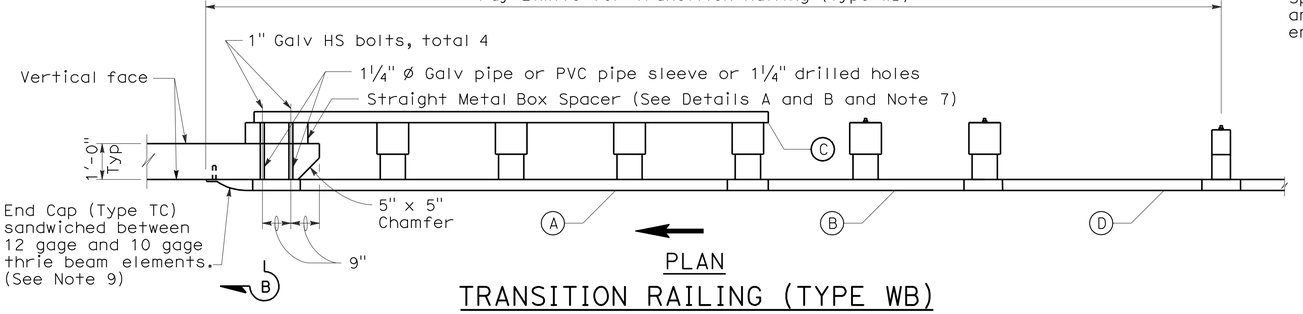
ELEVATION



PLAN

TRANSITION RAILING (TYPE WB)

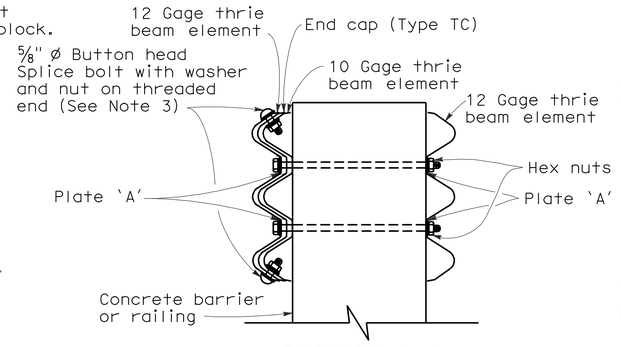
(No Blockout Attachment)



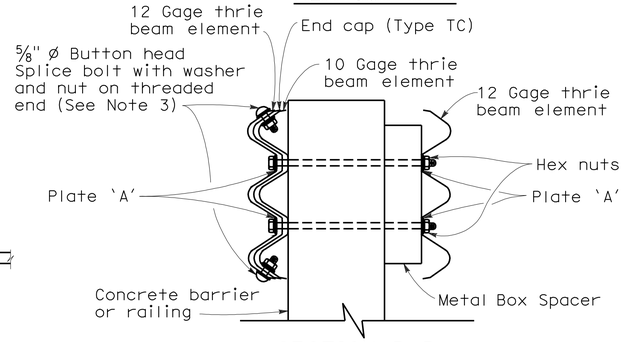
PLAN

TRANSITION RAILING (TYPE WB)

(Blockout Attachment)



SECTION A-A



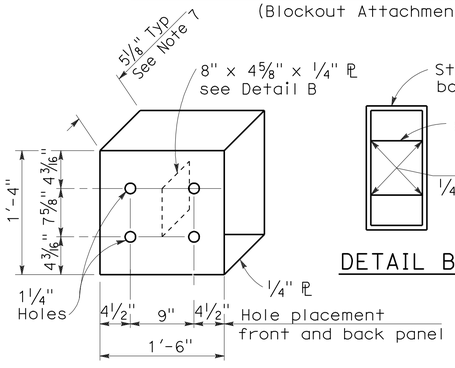
SECTION B-B

LEGEND

- (A) Nested thrie beam elements (one 12 gage element nested over one 10 gage element).
- (B) One 10 gage "W" beam to thrie beam element.
- (C) One 12 gage thrie beam element.
- (D) One 10 gage "W" beam rail element (7'-3½" length)

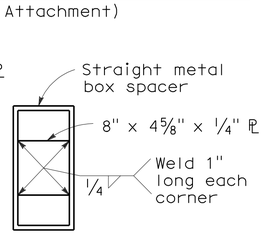
10 gage = 0.135" thick

12 gage = 0.108" thick

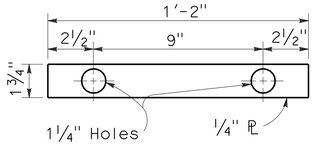


DETAIL A

STRAIGHT METAL BOX SPACER

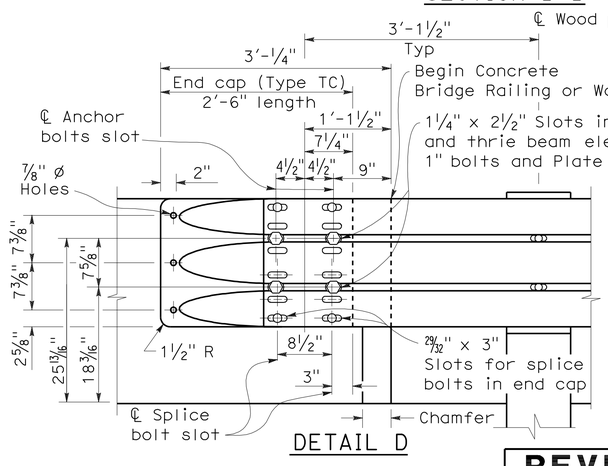


DETAIL B



DETAIL C

PLATE 'A'



DETAIL D

NOTES:

To accompany plans dated 4-4-11

1. Use 5/8 " ø Button head bolts and hex nuts for connections to posts. No washer on rail face for bolted connections to post.
2. The nested rail elements, end cap, and 'W' beam to thrie beam element may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
3. Exterior splice bolt holes for rail element splices at Post No.T4 and the connection to the concrete barrier or railing shall be the standard 29/32 " x 1 1/8 " slot size. Interior splice bolt holes at these locations may be increased up to 1 1/4 " ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No.T4 and the connection to the concrete barrier or railing.
4. Direction of adjacent traffic indicated by →.
5. The top elevation of Post Nos.T2 through T7 shall not project more than 1" above the top elevation of the rail element.
6. Typically, the railing connected to Transition Railing (Type WB) will be either standard railing section of metal beam guard railing or an approved Caltrans end treatment attached to Post No.T1.
7. The depth of the metal box spacer varies from the 5 1/8 " to 1 1/2 " and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17 1/8 ". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1 1/2 ", metal plates similar to Plate 'A' are to be used as spacers.
8. Where the width of the concrete railing or wall is greater than 17 1/8 ", wood blocks are to be used to fill the space created between the backside of Posts No.4 through No.7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
9. End cap may be installed over 12 gage and 10 gage thrie beam elements where transition railing is installed on the departure end of bridge railing.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING TRANSITION RAILING (TYPE WB)

NO SCALE

RSP A77J4 DATED JUNE 5, 2009 SUPERSEDES RSP A77J4 DATED JUNE 6, 2008 AND STANDARD PLAN A77J4 DATED MAY 1, 2006 - PAGE 75 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77J4

2006 REVISED STANDARD PLAN RSP A77J4

5-14-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	22	44

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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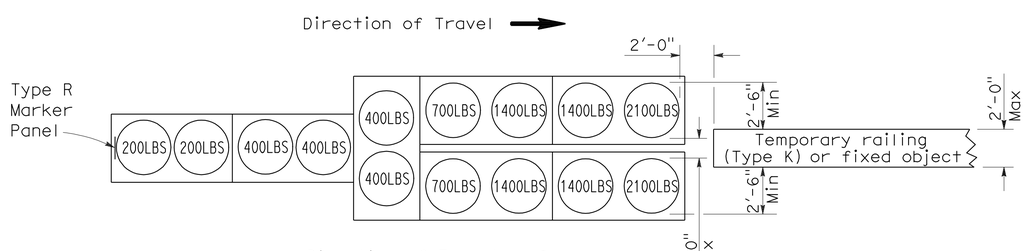
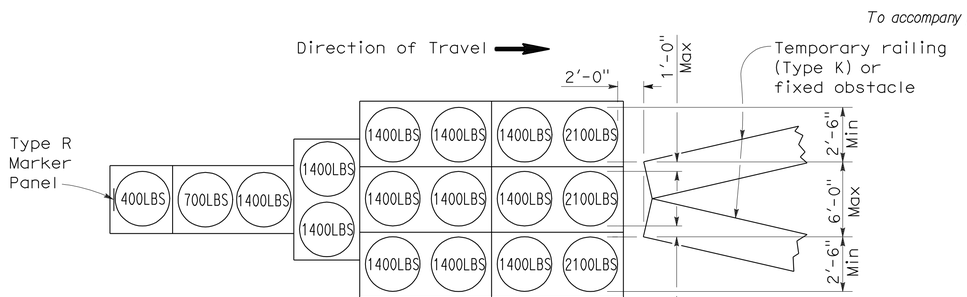
To accompany plans dated 4-4-11



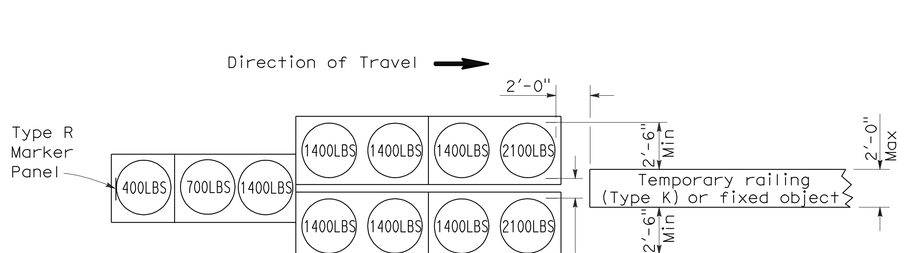
ARRAY 'TU14'

Approach speed 45 mph or more



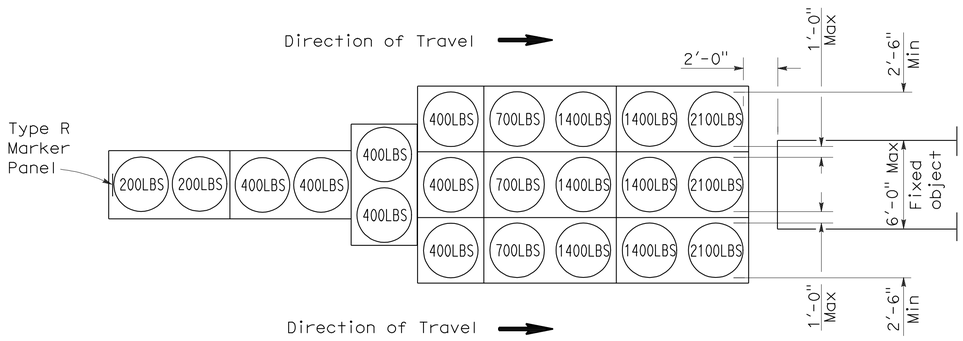
ARRAY 'TU17'

Approach speed less than 45 mph



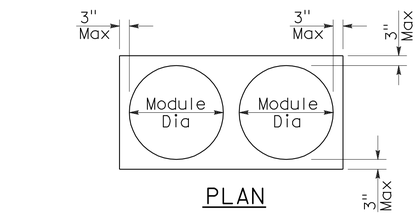
ARRAY 'TU11'

Approach speed less than 45 mph

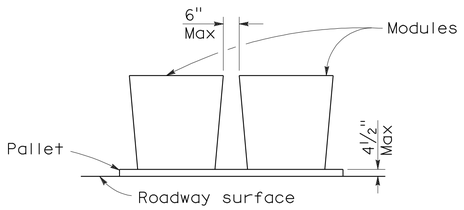


ARRAY 'TU21'

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

2006 REVISED STANDARD PLAN RSP T1A

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	23	44

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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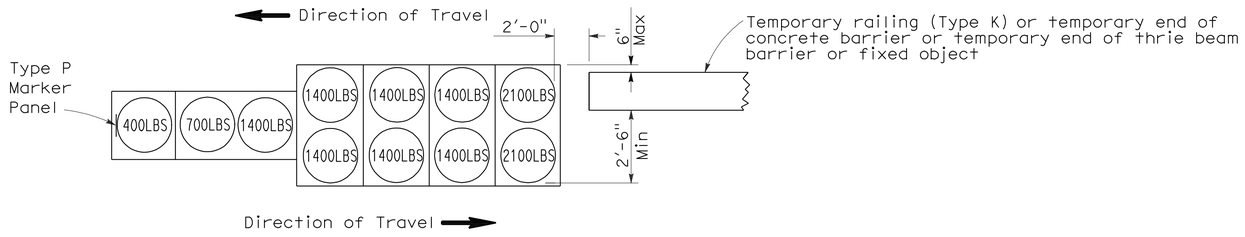
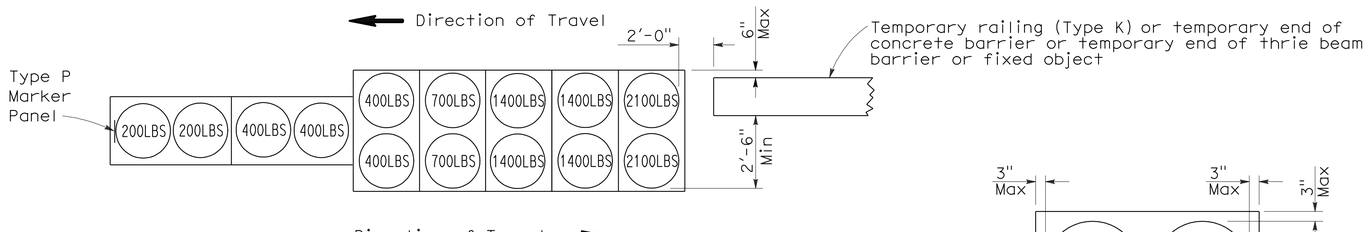
To accompany plans dated 4-4-11



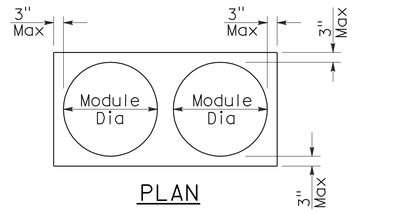
ARRAY 'TB11'

Approach speed less than 45 mph

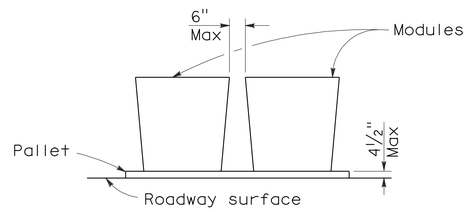


ARRAY 'TB14'

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
02	Sha,Sis	5	Var	24	44

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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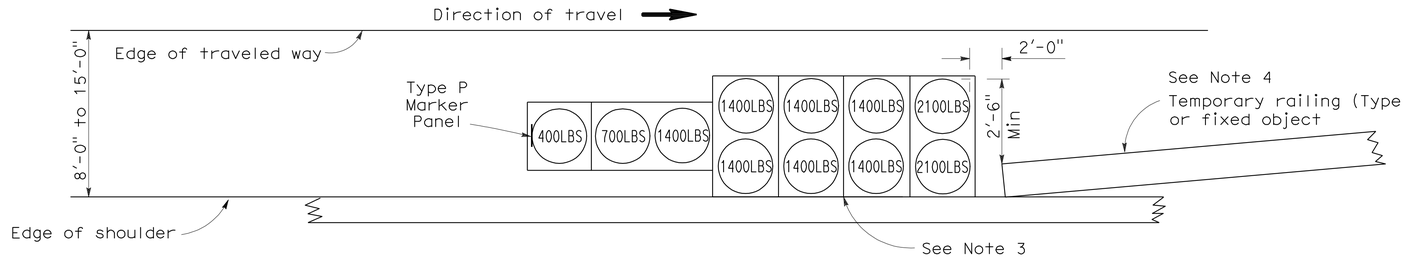
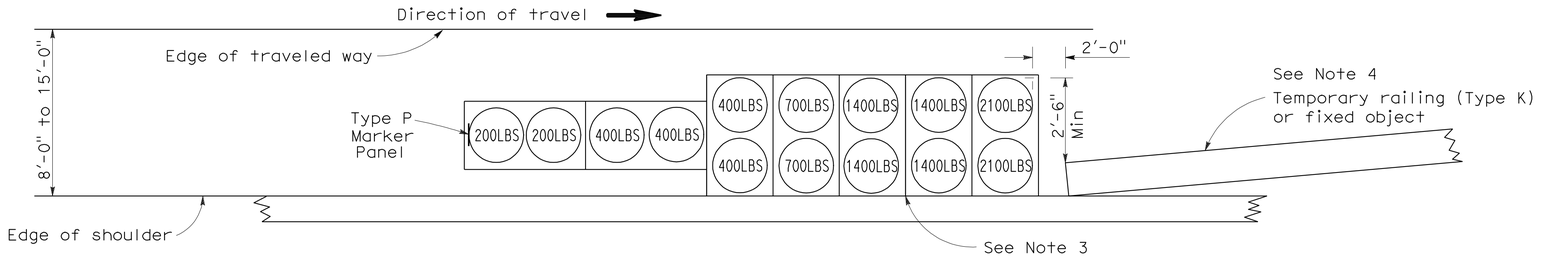
To accompany plans dated 4-4-11



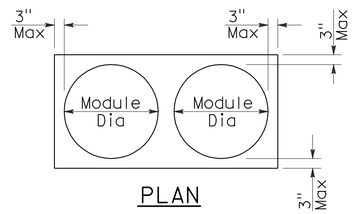
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

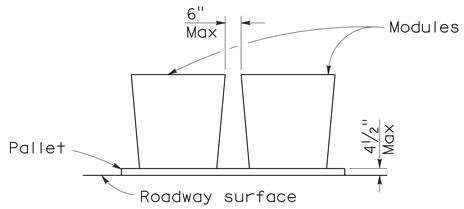


ARRAY 'TS14'

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
02	Sha,Sis	5	Var	25	44

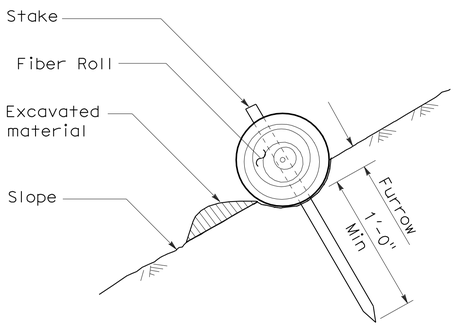
Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3035 — Registration Expiration Date 11-30-10 — Renewal Date 2-25-09 — Date — STATE OF CALIFORNIA

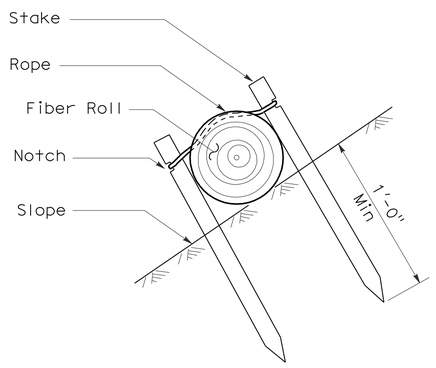
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 4-4-11

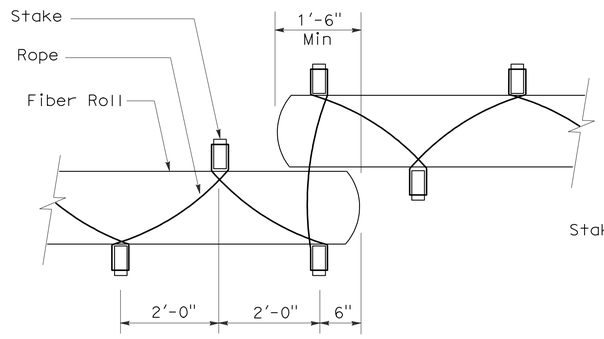


SECTION

TEMPORARY FIBER ROLL (TYPE 1)

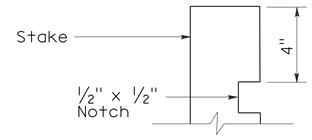


SECTION



PLAN

TEMPORARY FIBER ROLL (TYPE 2)

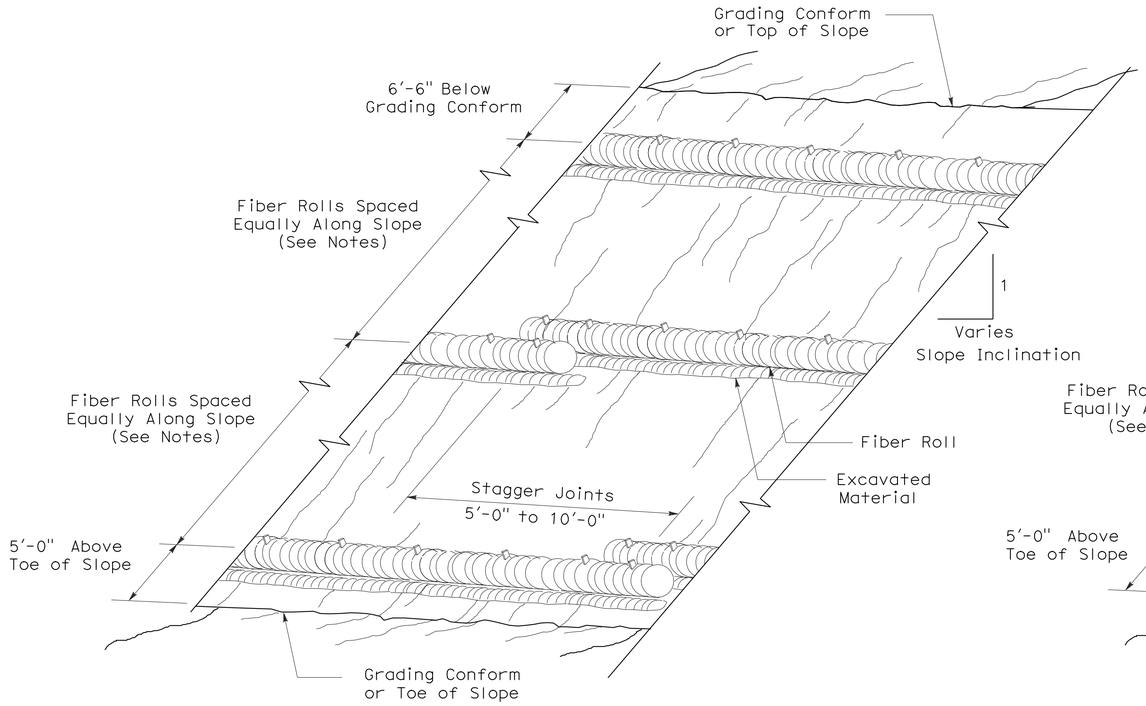


ELEVATION

STAKE NOTCH DETAIL

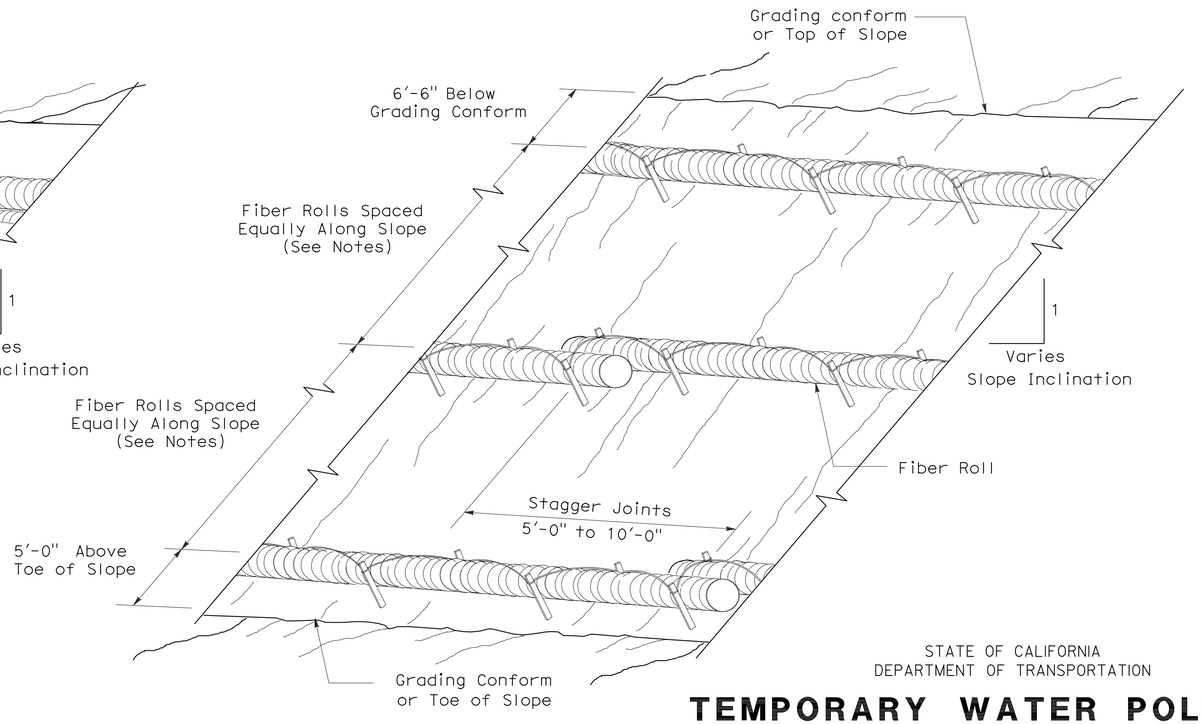
NOTES:

1. Temporary fiber roll spacing varies depending upon slope inclination.
2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



PERSPECTIVE

TEMPORARY FIBER ROLL (TYPE 1)



PERSPECTIVE

TEMPORARY FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLL)

NO SCALE

RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56
DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T56

2006 REVISED STANDARD PLAN RSP T56

2-23-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	26	44

REGISTERED CIVIL ENGINEER

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

October 5, 2007
PLANS APPROVAL DATE

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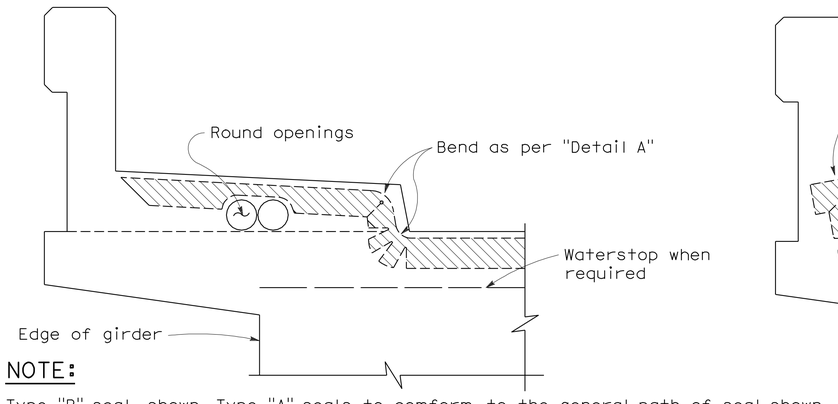
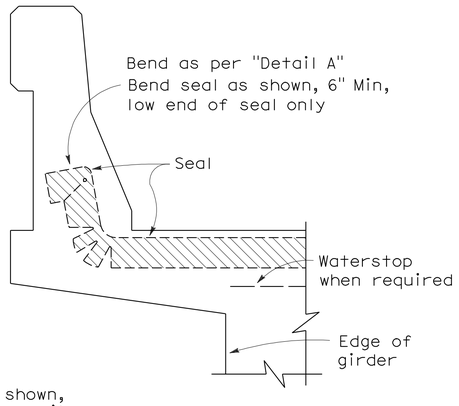
To accompany plans dated 4-4-11



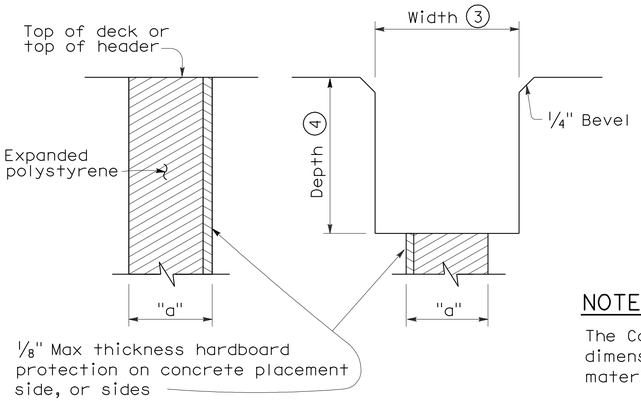


NOTE:

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



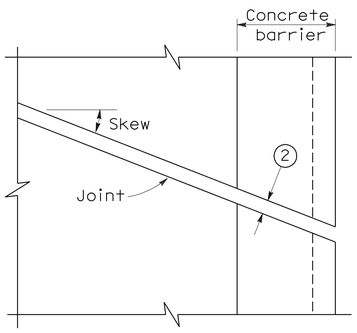
FORMING DETAIL

SAWCUT DETAIL

NOTE:

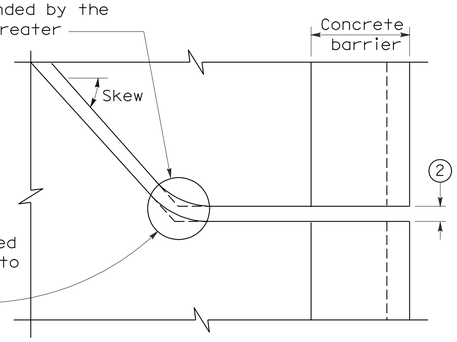
The Contractor shall verify all controlling field dimensions before ordering or fabricatiing any material.

JOINT SEALS DETAILS

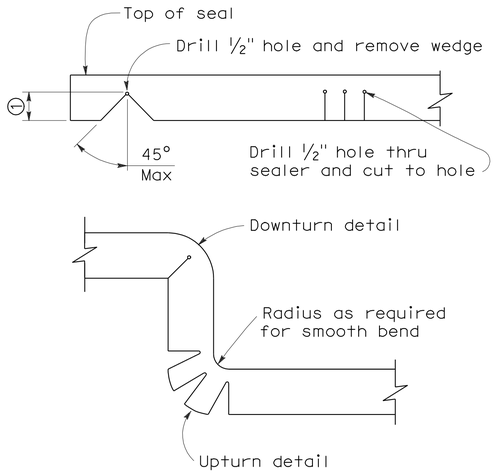


PLAN OF JOINT (SKEW ≤ 20°)

Min ℄ radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



PLAN OF JOINT (SKEW > 20°)



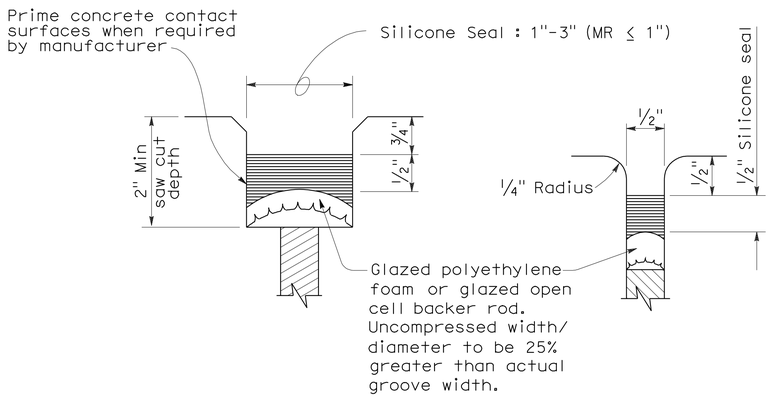
DETAIL A

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"

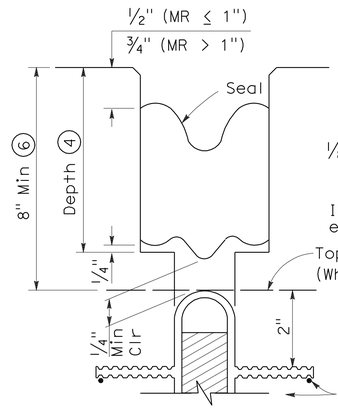


TYPE A SEAL

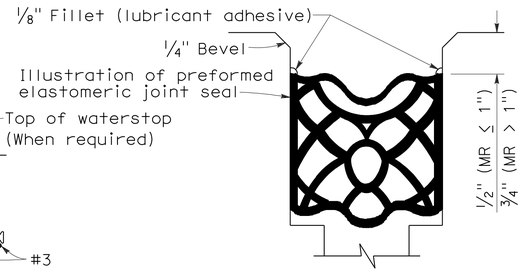
Movement rating : Silicone = 1" Max

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
02	Sha,Sis	5	Var	27	44

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-08 — ELECTRICAL — STATE OF CALIFORNIA

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To accompany plans dated 4-4-11

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast light pole

Double Arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES:

1. Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
2. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
3. Variations noted adjacent to symbol on project plans.

Electrolier (see project notes or project plans)

Luminaire on wood pole

STANDARD NOTES:

- AB — Abandon. If applied to conduit, remove conductors.
- BC — Install pull box in existing conduit run.
- BP — Pedestrian barricade, type as indicated on plan.
- CB — Install conduit into existing pull box.
- CC — Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF — Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH — Detector handhole.
- FA — Foundation to be abandoned.
- IS — Install sign on signal mast arm.
- NS — No slip base on standard.
- PEC — Photoelectric control.
- PEU — Photoelectric unit.
- RC — Equipment or material to be removed and become the property of the Contractor.
- RE — Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL — Relocate equipment.
- RR — Remove and reuse equipment.
- RS — Remove and salvage equipment.
- SC — Splice new to existing conductors.
- SD — Service disconnect.
- SF — Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP — Telephone service point.

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED	EXISTING	
BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces,
MAS-4B	mas-4B	side attachment - 4 signal section
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces,
MAS-5B	mas-5B	side attachment - 5 signal section
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- (M) Existing soffit or wall luminaire to be modified as specified.

NOTE:
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A
DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	28	44

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-08 — ELECTRICAL — 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 4-4-11

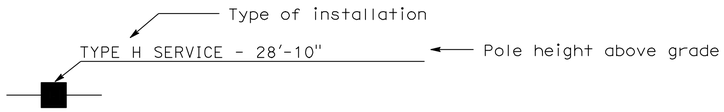
CONDUIT

PROPOSED	EXISTING	
— — —	— — —	Lighting Conduit, unless otherwise indicated or noted
— - — - —	— - — - —	Traffic signal conduit
—C— —	—c— —	Communication conduit
—T— —	—t— —	Telephone conduit
—F— —	—f— —	Fire alarm conduit
—FO— —	—fo— —	Fiber optic conduit
— — —]	— — —]	Conduit termination (RSP ES-9A C)
R	r	Conduit riser in/on structure or service pole

SERVICE EQUIPMENT

PROPOSED	EXISTING	
—OH—	—oh—	Overhead lines
U	U	Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
III		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
T	t	Telephone demarcation cabinet

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
PV	PV	Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
R	Y	Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. Signal indication shall be LED.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

2006 REVISED STANDARD PLAN RSP ES-1B

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	29	44

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
STATE OF CALIFORNIA

October 5, 2007
PLANS APPROVAL DATE

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To accompany plans dated 4-4-11

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345 — Sign number - Place on post or structure

10 ISL SCI 1.0
- 1.0 — Transformer rating (kVA)
- SCI — Lighting control type
- ISL — Number and type of fixtures

Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"
- 15'-0" — Mast arm length, if shown. Do not place on standard or structure.
- 12345 — Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC
- 2#10, 15#14, 2 DLC — Number and size of conductors and cables
- 1½"C — Size of conduit in inches

ø1, ø2, ø2P, etc. — Traffic phase identification for signal faces, detectors and phase diagrams

[1] [2] [3] — Project note numbers

(A) (B) (C) — Equipment description, installation or item numbers

△1 △2 △3 — Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100
- 100 — Wind velocity = 100 mph
- 3 — Case 3 arm loading
- 19A — Standard type
- Standard Plan sheet number
- Detail number or letter

MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
		Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

- External conductor
- Conductor or bus
- Tie point
- Contactor coil
- Contactor, Contact NO
- Terminal blocks
- Contactor, Contact NC
- Enclosure bond
- Grounding electrode
- Circuit breaker
- Receptacle

PULL BOXES

PROPOSED	EXISTING
3	9A(21)

3 = No. 3½ pull box
5 = No. 5 pull box
6 = No. 6 pull box
7 = No. 7 (Ceiling pull box)
8 = No. 8 (Pendant soffit pull box)
9 = No. 9 pull box
9A = No. 9A pull box

Pull box-No. 5 unless otherwise indicated or noted.

Pull box-Additional designations or descriptions
- (C) = Communications pull box
- (E) = Pull box with extension
- (S) = Sprinkler control pull box
- (21) = Anchor bolts and conduit for future installation of Type 21 Standard
- (T) = Traffic pull box

VEHICLE DETECTORS

5 J 9 U
- 5 — Vehicle detector designation
- U = Upper, L = Lower
- 9 — Slot number in input file
- J — Input file (I or J)
- U — Phase

PROPOSED	EXISTING	
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
DH	dh	Detector handhole
		Microwave or video detection zone

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C
DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	30	44

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
STATE OF CALIFORNIA

October 5, 2007
PLANS APPROVAL DATE

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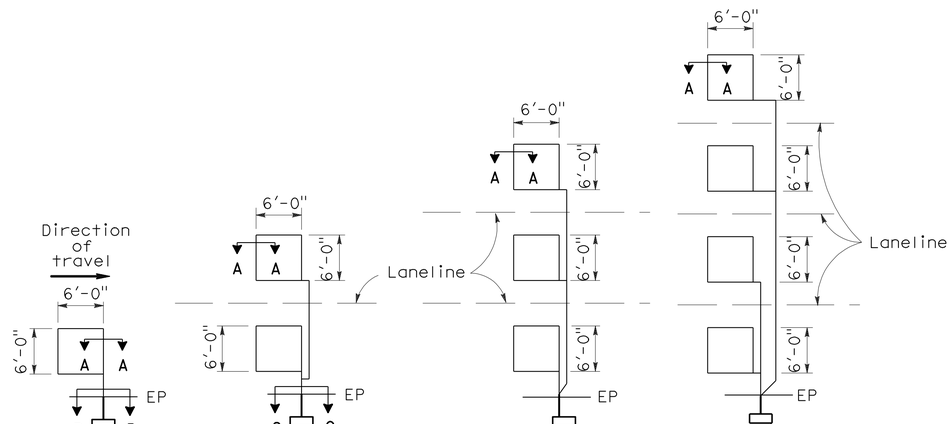
To accompany plans dated 4-4-11

LOOP INSTALLATION PROCEDURE

1. Loops shall be centered in lanes.
2. Saw slots in pavement for loop conductors as shown in details.
3. Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
4. Bottom of saw slot shall be smooth with no sharp edges.
5. Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
6. Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
7. Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
8. Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
9. No more than 2 twisted pairs shall be installed in one sawed slot.
10. Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
11. The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
12. Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
13. Fill slots as shown in details.
14. Splice loop conductors to lead-in-cable. Splices shall be soldered.
15. End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
16. Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
17. Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
18. Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.

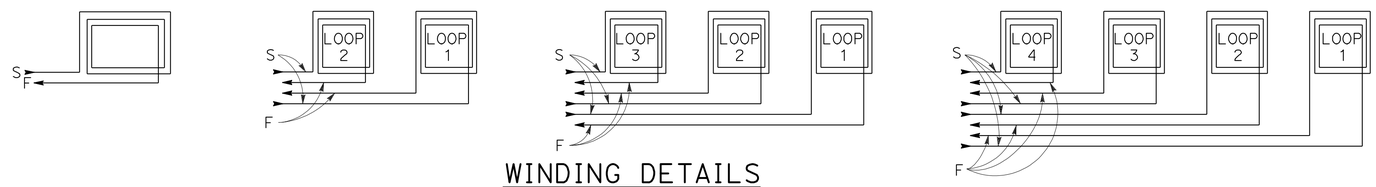


TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

SAWCUT DETAILS

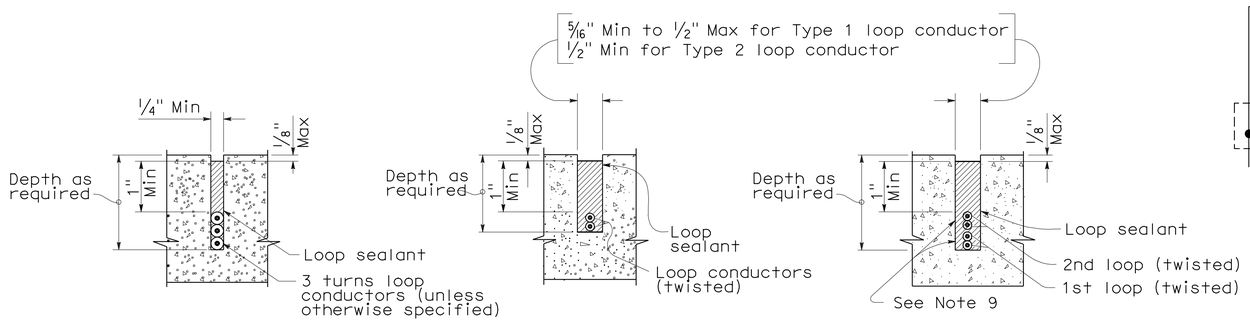
(Type A loop detector configurations illustrated)

1. 1A thru 4A = 1 Type A loop configuration in each lane.
2. 1B thru 4B = 1 Type B loop configuration in each lane.
3. 1C = 1 Type C loop configuration entering lanes as required.
4. 1D thru 4D = 1 Type D loop configuration in each lane.
5. 1E thru 4E = 1 Type E loop configuration in each lane.
6. 1Q thru 4Q = 1 Type Q loop configuration in each lane.
   (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



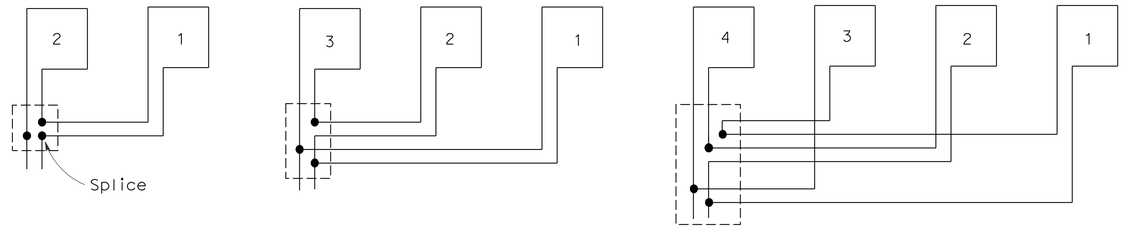
WINDING DETAILS

See Notes 6 and 7



SECTION A-A | SECTION B-B | SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A
DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

2006 REVISED STANDARD PLAN RSP ES-5A

8-17-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	31	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA

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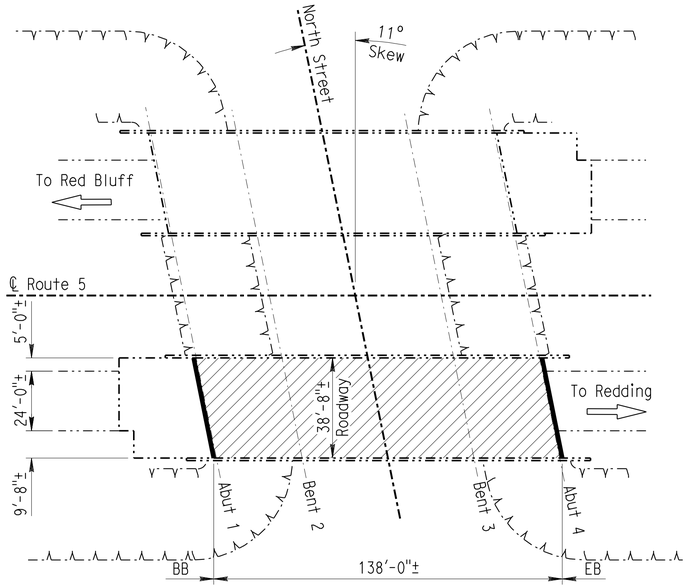
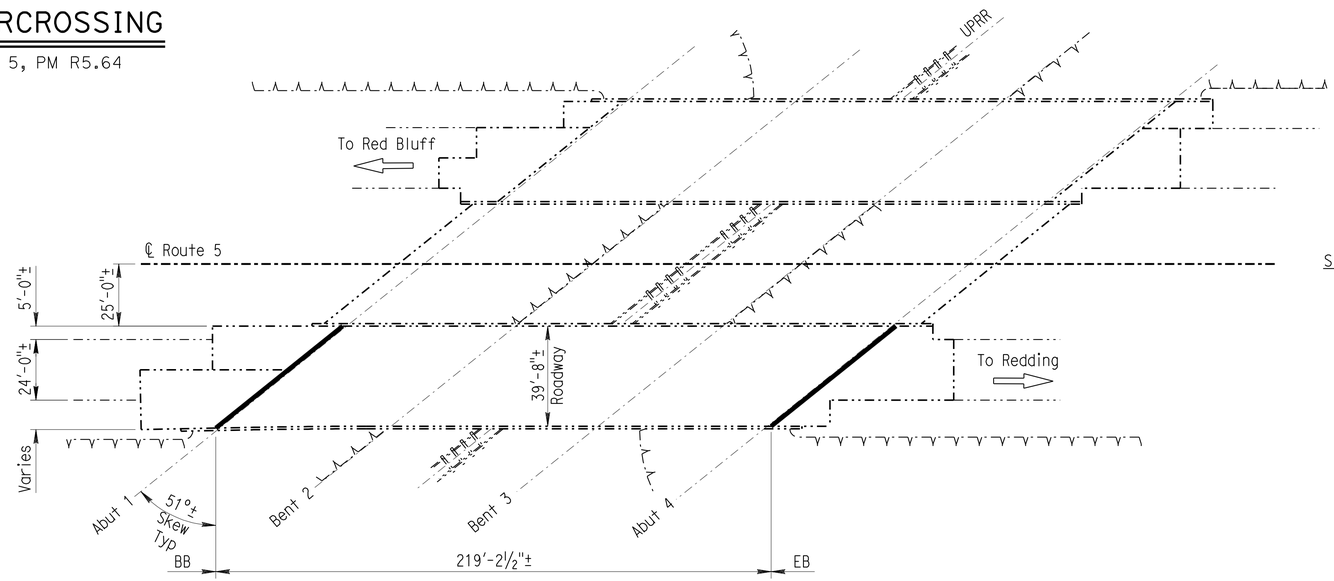


NORTH STREET UNDERCROSSING

BR NO. 06-0141R, SHA, ROUTE 5, PM R5.64
1′ = 30′

NORTH STREET UNDERCROSSING	BRIDGE NO. 06-0141R	
QUANTITIES		
GRIND EPOXY GRIT OVERLAY	5,337	SQFT
REMOVE UNSOUND CONCRETE	27	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	5,337	SQFT
CLEAN EXPANSION JOINT	80	LF
RAPID SETTING CONCRETE (PATCH)	27	CF
PLACE MULTILAYER POLYMER OVERLAY (SIKADUR 22 LO-MOD)	5,337	SQFT
JOINT SEAL (MR 1")	80	LF

SOUTH ANDERSON OVERHEAD	BRIDGE NO. 06-0098R	
QUANTITIES		
REMOVE UNSOUND CONCRETE	1	CF
CLEAN EXPANSION JOINT	128	LF
RAPID SETTING CONCRETE (PATCH)	1	CF
JOINT SEAL (MR 1")	128	LF



SOUTH ANDERSON OVERHEAD

BR NO. 06-0098R, SHA, ROUTE 5, PM R4.57
1′ = 30′

NOTES: (APPLY TO ALL SHEETS)

Indicates existing structure.

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

STANDARD PLAN SHEET NUMBER
DETAIL NUMBER

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of grind epoxy grit overlay, prepare bridge deck, place multi layer polymer (Sikadur 22 Lo-Mod polymer) overlay. Remove unsound concrete and patch with rapid setting concrete prior to bridge deck treatment. See JOINT SEAL & DECK REPAIR DETAILS sheet.

Indicates location of remove existing joint seal and place new joint seal. Repair spalled concrete as directed by the Engineer. For details, see JOINT SEAL & DECK REPAIR DETAILS sheet.

INDEX TO PLANS

STANDARD PLANS DATED MAY 2006

SHEET NO.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
B11-56	CONCRETE BARRIER TYPE 736
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

Michael J. Lee 1-7-11
DESIGN ENGINEER

	BY	CHECKED
DESIGN	C. Hutchinson	B. Nguyen
DETAILS	M. Hallstrom	B. Nguyen
QUANTITIES	C. Hutchinson	B. Nguyen
LAYOUT	M. Hallstrom	B. Nguyen
SPECIFICATIONS	X	PLANS AND SPECIFICATIONS COMPARED X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 02
EA 2E3201

BRIDGE NO. VARIOUS
POST MILE VARIES

SHASTA BRIDGE PREVENTATIVE MAINTENANCE

GENERAL PLAN NO. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
10-5-10	10-7-10	12-13-10	12-23-10	12-29-10						1	14

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	32	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA

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NOTES: (APPLY TO THIS SHEET ONLY)

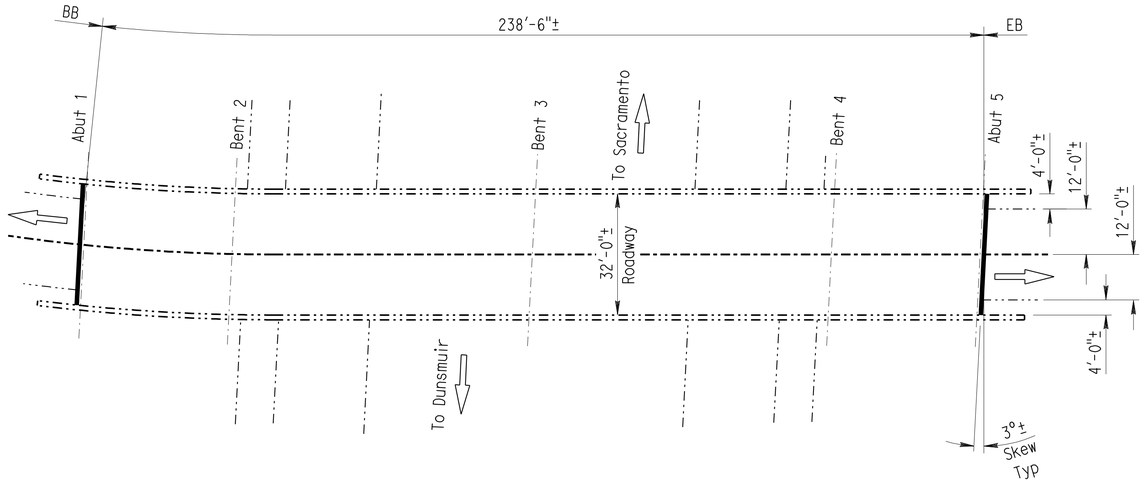
/ Indicates location of remove existing joint seal and place new joint seal. Repair spalled concrete as directed by the Engineer. For details, see JOINT SEAL & DECK REPAIR DETAILS sheet.

HILLTOP DRIVE OVERCROSSING BRIDGE NO. 06-0101

QUANTITIES		
REMOVE UNSOUND CONCRETE	1	CF
CLEAN EXPANSION JOINT	66	LF
RAPID SETTING CONCRETE (PATCH)	1	CF
JOINT SEAL (MR 1")	66	LF

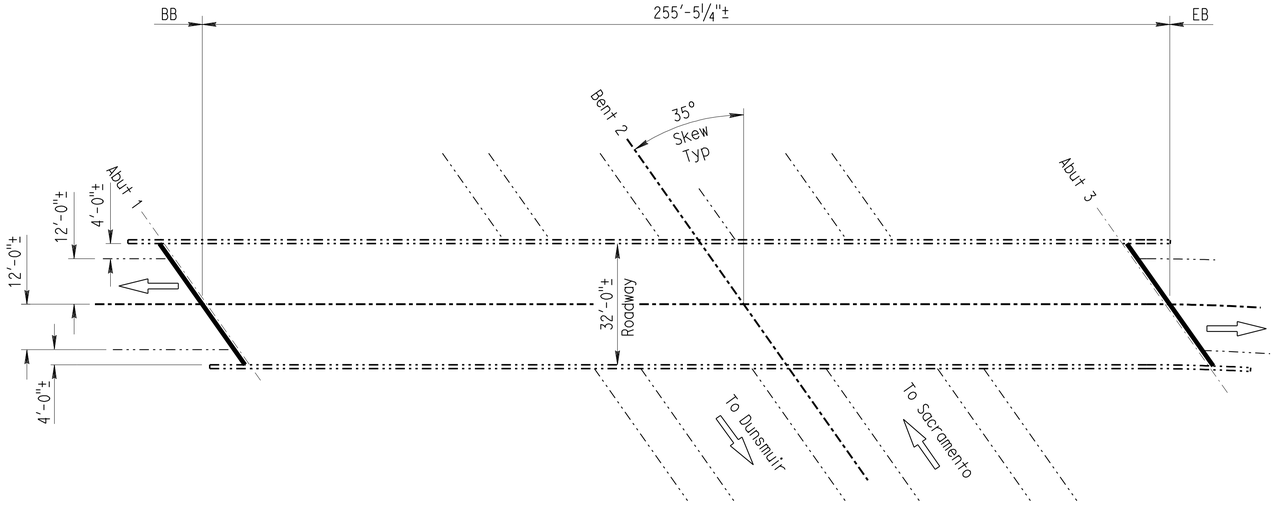
BRIDGE BAY OVERCROSSING BRIDGE NO. 06-0149

QUANTITIES		
REMOVE UNSOUND CONCRETE	1	CF
CLEAN EXPANSION JOINT	80	LF
RAPID SETTING CONCRETE (PATCH)	1	CF
JOINT SEAL (MR 1")	80	LF



HILLTOP DRIVE OVERCROSSING

BR NO. 06-0101, SHA, ROUTE 5, PM R16.15
1′ = 20′



BRIDGE BAY OVERCROSSING

BR NO. 06-0149, SHA, ROUTE 5, PM R27.63
1′ = 20′

Michael J. Lee 1-7-11 DESIGN ENGINEER	DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	LAYOUT	BY M. Hallstrom	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS / POST MILE VARIES — SHASTA BRIDGE PREVENTATIVE MAINTENANCE GENERAL PLAN NO. 2
	DETAILS	BY M. Hallstrom	CHECKED B. Nguyen	SPECIFICATIONS	BY X	PLANS AND SPECIFICATIONS COMPARED X			
	QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen						

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 02
EA 2E3201

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 2 OF 14

FILE => 02-2e3201_02gp2.dgn

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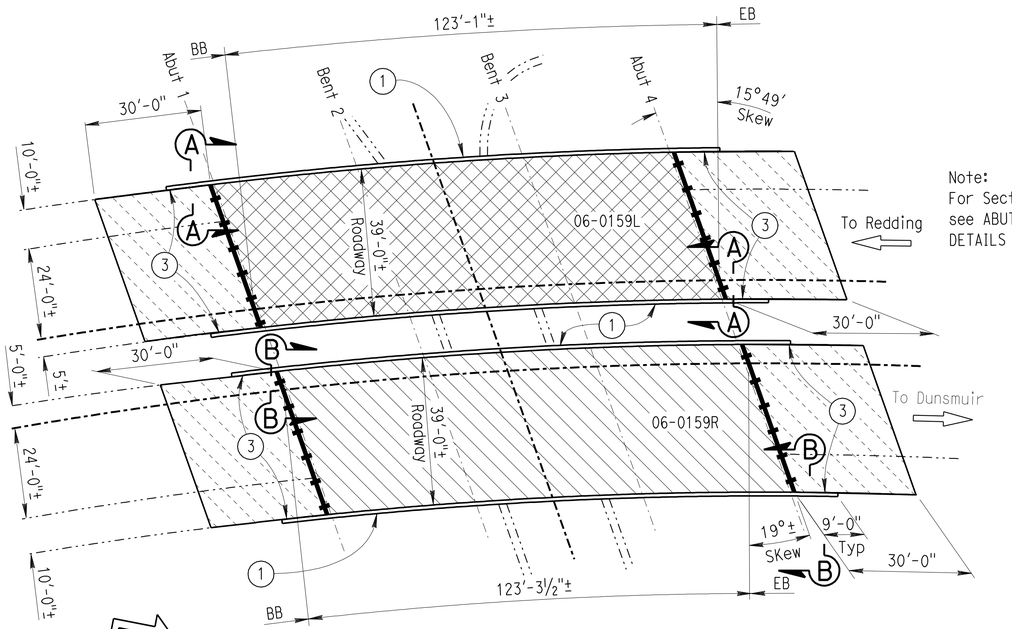


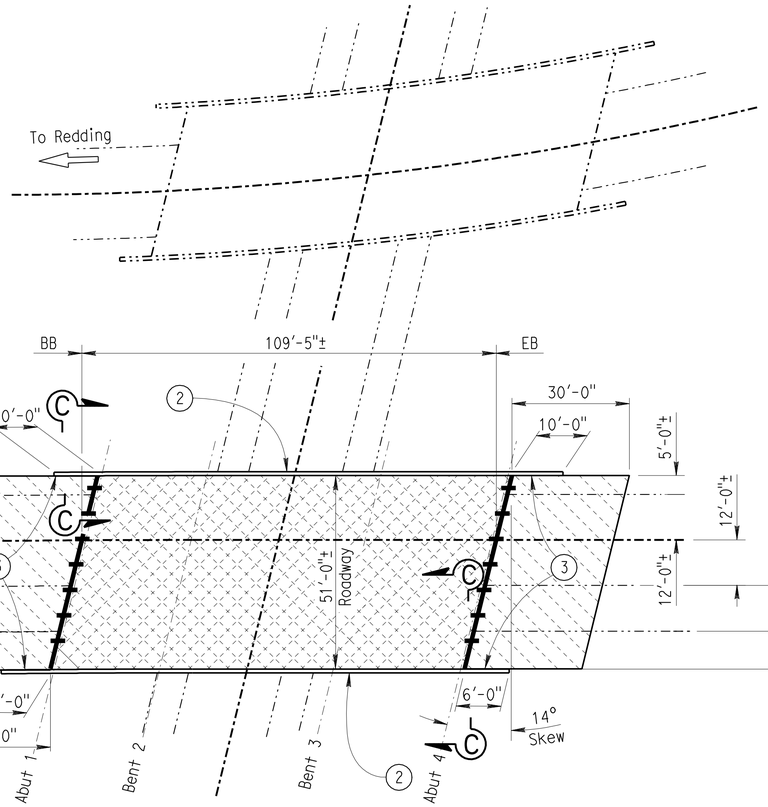
Note:
For Section A-A and Section B-B, see ABUTMENT AND WINGWALL DETAILS sheet.

UPPER SALT CREEK ROAD UNDERCROSSING

BR NO. 06-0159L/R, SHA, ROUTE 5, PM R37.08
1′ = 20′

UPPER SALT CREEK ROAD UC	BRIDGE NO. 06-0159R	
QUANTITIES		
REMOVE REINFORCED PORTLAND CEMENT CONCRETE OVERLAY	4,800	SQFT
REMOVE UNSOUND CONCRETE	60	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	4,800	SQFT
BRIDGE REMOVAL (PORTION), LOCATION B	LUMP	SUM
AGGREGATE BASE (APPROACH SLAB)	9	CY
STRUCTURAL CONCRETE, BRIDGE	64	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	87	CY
PAVING NOTCH EXTENSION	63	CF
DRILL AND BOND DOWEL	610	LF
RAPID SETTING CONCRETE (PATCH)	60	CF
SNOWPLOW DEFLECTOR	18	EA
JOINT SEAL (MR 1")	82	LF
BAR REINFORCING STEEL (EPOXY COATED BRIDGE)	10,200	LB
CONCRETE BARRIER (TYPE 736R)	246	LF
CONCRETE BARRIER (TYPE 736A MODIFIED)	36	LF

O'BRIEN UNDERCROSSING	BRIDGE NO. 06-0148R	
QUANTITIES		
REMOVE ASPHALT CONCRETE SURFACING	5,585	SQFT
REMOVE UNSOUND CONCRETE	70	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	5,585	SQFT
BRIDGE REMOVAL (PORTION), LOCATION C	LUMP	SUM
AGGREGATE BASE (APPROACH SLAB)	12	CY
STRUCTURAL CONCRETE, BRIDGE	73	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	120	CY
PAVING NOTCH EXTENSION	79	CF
DRILL AND BOND DOWEL	705	LF
RAPID SETTING CONCRETE (PATCH)	70	CF
SNOWPLOW DEFLECTOR	22	EA
JOINT SEAL (MR 1")	106	LF
BAR REINFORCING STEEL (EPOXY COATED BRIDGE)	11,600	LB
CONCRETE BARRIER (TYPE 736R)	219	LF
CONCRETE BARRIER (TYPE 736A MODIFIED)	32	LF



Note:
For Section C-C, see ABUTMENT AND WINGWALL DETAILS sheet.

O'BRIEN UNDERCROSSING

BR NO. 06-0148R, SHA, ROUTE 5, PM R32.16
1′ = 20′

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	33	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp.12-31-11 — CIVIL — STATE OF CALIFORNIA

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of Remove 6"± AC overlay, remove Bituthane membrane, widen existing deck, prepare deck surface, place a 6" PCC deck-on-deck using epoxy coated rebar. See DECK ON DECK DETAILS NO 3 sheet. Remove unsound concrete and patch with rapid setting concrete prior to place deck-on-deck. See JOINT SEAL & DECK REPAIR DETAILS sheet.

Indicates limits of remove existing 4"± reinforced PCC deck, widen existing bridge deck, prepare deck surface, place 4" PCC deck-on-deck using epoxy coated rebar. See DECK ON DECK DETAILS NO. 2 sheet. Remove unsound concrete and patch with rapid setting concrete prior to place deck-on-deck. See JOINT SEAL & DECK REPAIR DETAILS sheet.

Indicates location of place new Structure Approach Slab Type R(30D). Install paving notch extension at abutments. For details, see STRUCTURE APPROACH TYPE R(30D) sheet.

Indicates location of remove existing joint seal, place new joint seal, and install Snow Plow Deflectors. For details, see JOINT SEAL & DECK REPAIR DETAILS and SNOW PLOW DEFLECTOR DETAILS sheet.

Indicates limits of Remove 4"± AC overlay, remove Bituthane membrane, widen existing deck, prepare deck surface, place a 4" PCC deck-on-deck using epoxy coated rebar. See DECK ON DECK DETAILS NO. 1 sheet. Remove unsound concrete and patch with rapid setting concrete prior to place deck-on-deck. See JOINT SEAL & DECK REPAIR DETAILS sheet.

New profile grade to match existing roadway grade.

(1) Remove existing Type 1 Barrier Rail and replace with Concrete Barrier Type 736R. See DECK ON DECK DETAILS NO. 2 & 3 sheet.

(2) Remove existing Type 9 Barrier Rail and replace with Concrete Barrier Type 736R. See DECK ON DECK DETAILS NO. 1 sheet.

(3) Remove existing barrier and section of wingwall. Reconstruct wingwall and place new Concrete Barrier Type 736A Mod. See ABUTMENT AND WINGWALL DETAILS sheet.

Michael J. Lee 1-7-11
DESIGN ENGINEER

	BY	CHECKED
DESIGN	C. Hutchinson	B. Nguyen
DETAILS	M. Hallstrom	B. Nguyen
QUANTITIES	C. Hutchinson	B. Nguyen
LAYOUT	M. Hallstrom	B. Nguyen
SPECIFICATIONS	X	PLANS AND SPECIFICATIONS COMPARED X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 02
EA 2E3201

BRIDGE NO. VARIOUS
POST MILE VARIES

SHASTA BRIDGE PREVENTATIVE MAINTENANCE

GENERAL PLAN NO. 3

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 3 OF 14

FILE => 02-2e3201_03gp3.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => rtrim

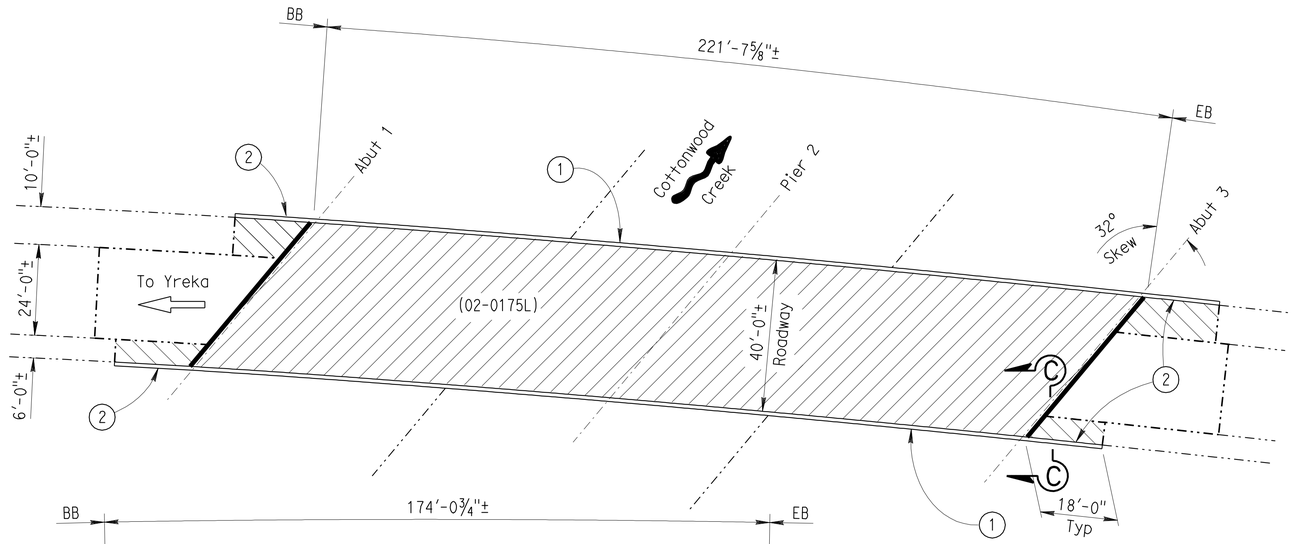
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	34	44

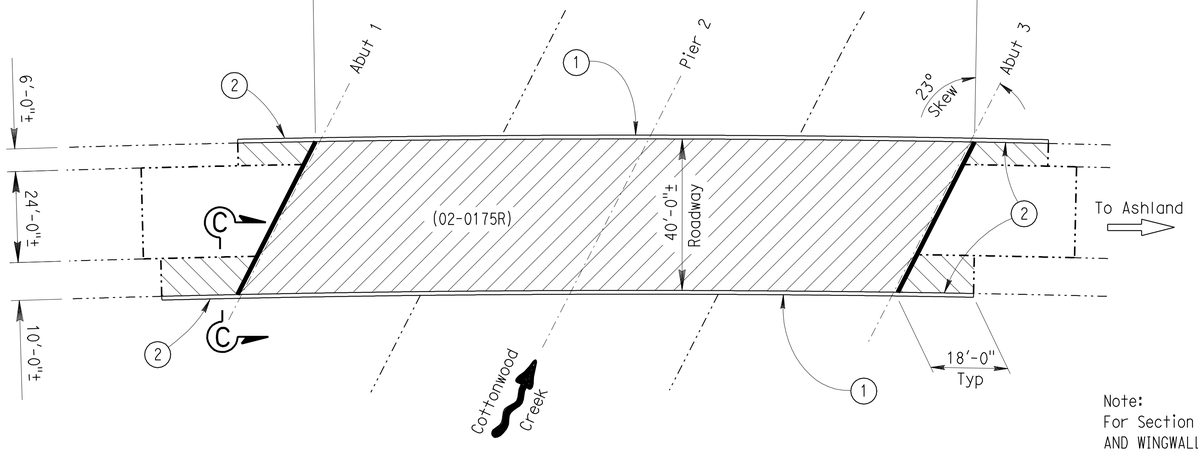
Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA





Note:
For Section C-C, see ABUTMENT AND WINGWALL DETAILS sheet.

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of Remove 4"± AC overlay and Bituthane membrane, widen existing deck, prepare deck surface and place a 4" PCC deck-on-deck using epoxy coated rebar. See DECK ON DECK DETAILS NO. 4 and DECK ON DECK DETAILS NO. 5 sheets. Remove unsound concrete and patch with rapid setting concrete prior to place deck-on-deck. For details, see JOINT SEAL & DECK REPAIR DETAILS sheet.

Indicates location of place new Structure Approach Slab Type R(30D). Install paving notch extension at abutments. For details, see STRUCTURE APPROACH TYPE R(30D) sheet.

Indicates location of remove existing joint seal, place new joint seal. For details, see JOINT SEAL & DECK REPAIR DETAILS.

(1) New profile grade to match existing approach slab. Remove existing Type 9 Barrier Rail and replace with Type 736R Barrier Rail. See DECK ON DECK DETAILS NO 4 & 5 sheet

(2) Remove existing barrier and section of wingwall. Reconstruct wingwall and place new Type 736A Mod barrier. See ABUTMENT AND WINGWALL DETAILS sheet.

COTTONWOOD CREEK	BRIDGE NO. 02-0175L/R	
QUANTITIES		
REMOVE ASPHALT CONCRETE SURFACING	15,815	SQFT
REMOVE UNSOUND CONCRETE	197	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	15,815	SQFT
BRIDGE REMOVAL (PORTION), LOCATION D	LUMP	SUM
AGGREGATE BASE (APPROACH SLAB)	9	CY
STRUCTURAL CONCRETE, BRIDGE	210	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	80	CY
PAVING NOTCH EXTENSION	54	CF
DRILL AND BOND DOWEL	1,680	LF
CLEAN EXPANSION JOINT	115	LF
RAPID SETTING CONCRETE (PATCH)	197	CF
JOINT SEAL (MR 1")	190	LF
BAR REINFORCING STEEL (EPOXY COATED BRIDGE)	31,600	LB
CONCRETE BARRIER (TYPE 736R)	792	LF
CONCRETE BARRIER (TYPE 736A MODIFIED)	144	LF

COTTONWOOD CREEK

BR NO. 02-0175L/R, SIS, ROUTE 5, PM LEFT R63.77, RIGHT R63.65
1′ = 20′

Michael J. Lee 1-7-11
DESIGN ENGINEER

	BY	CHECKED
DESIGN	C. Hutchinson	B. Nguyen
DETAILS	M. Hallstrom	B. Nguyen
QUANTITIES	C. Hutchinson	B. Nguyen
LAYOUT	M. Hallstrom	B. Nguyen
SPECIFICATIONS	X	PLANS AND SPECIFICATIONS COMPARED: X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 02
EA 2E3201

BRIDGE NO. VARIOUS
POST MILE VARIES

SHASTA BRIDGE PREVENTATIVE MAINTENANCE
GENERAL PLAN NO. 4

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 4 OF 14

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 02-2e3201_04gp4.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => rtim

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	35	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

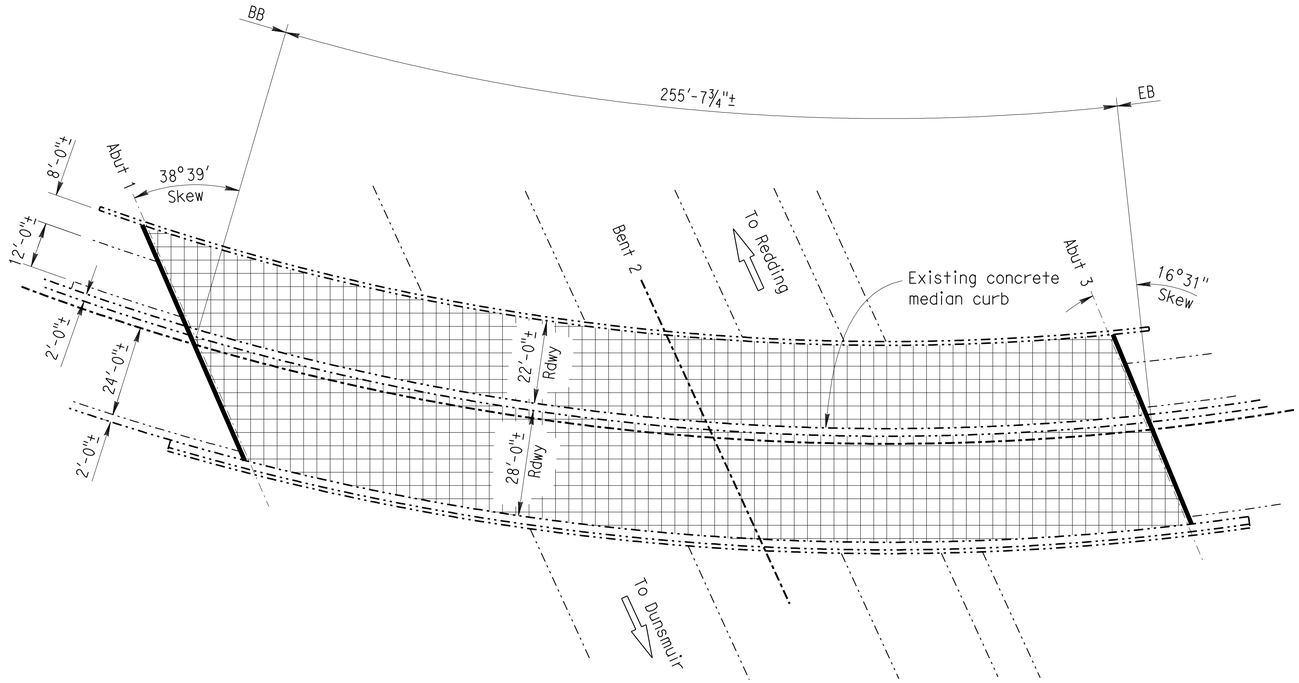
4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — 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.

ROUTE 151/5 SEPARATION BRIDGE NO. 06-0156

(N)	REMOVE ASPHALT CONCRETE SURFACING	12,788	SQFT
(N)	REMOVE UNSOUND CONCRETE	160	CF
(N)	PREPARE CONCRETE BRIDGE DECK SURFACE	12,788	SQFT
(N)	CLEAN EXPANSION JOINT	120	LF
(N)	JOINT SEAL (MR 1")	120	LF
(N)	RAPID SETTING CONCRETE (PATCH)	160	CF
(N)	FURNISH POLYESTER CONCRETE	959	CF
(N)	PLACE POLYESTER CONCRETE	12,788	SQFT



ADDITIVE 1
ROUTE 151/5 SEPARATION

BR NO. 06-0156, SHA, ROUTE 5, PM R22.14
1' = 20'

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of Remove 6½"± AC overlay and Bituthane membrane, prepare bridge deck and place a ¾" min depth poylester concrete overlay. Remove unsound concrete and patch with rapid setting concrete prior to bridge deck treatment. See JOINT SEAL & DECK REPAIR DETAILS sheet.

Indicates location of remove existing joint seal and place new joint seal. Repair spalled concrete as directed by the engineer. For details, see JOINT SEAL & DECK REPAIR DETAILS sheet.

Concrete median to remain in place.

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

BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
ROUTE 151/5 SEPARATION	06-0156	1	3

Locations to be determined by the engineer.
For details see "DECK REPAIR DETAIL".

JOINT SEAL TABLE

LOCATION	MINIMUM "MR" (inches)	APPROXIMATE LENGTH (feet)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXPANSION JOINT (inches)
Abut 1	1	65	No	12.0
Abut 3	1	53	No	12.0

Michael J. Lee 1-7-11
DESIGN ENGINEER

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	LAYOUT	BY M. Hallstrom	CHECKED B. Nguyen
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen	SPECIFICATIONS	BY X	PLANS AND SPECIFICATIONS COMPARED X
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen			

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

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 02
EA 2E3201

BRIDGE NO. VARIOUS
POST MILE VARIES

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHASTA BRIDGE PREVENTATIVE MAINTENANCE
GENERAL PLAN NO. 5 ADDITIVE 1

SHEET 5 OF 14

FILE => 02-2e3201_05gp5_adda.dgn

USERNAME => tmikesl DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	36	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA

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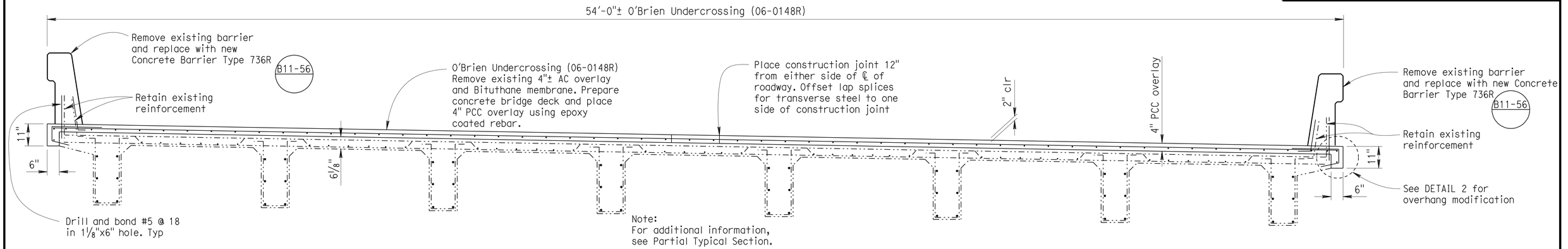
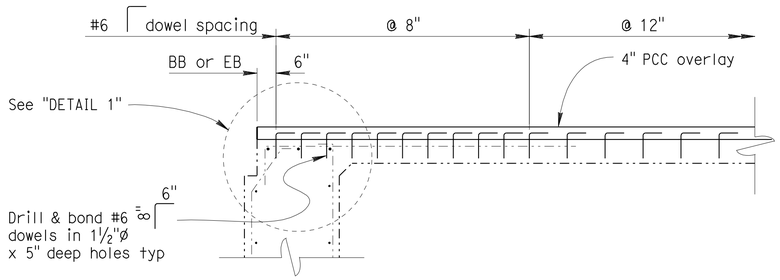


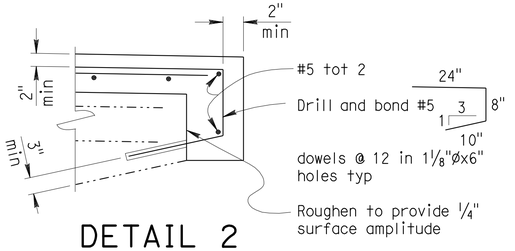
TYPICAL SECTION

½" = 1'-0"



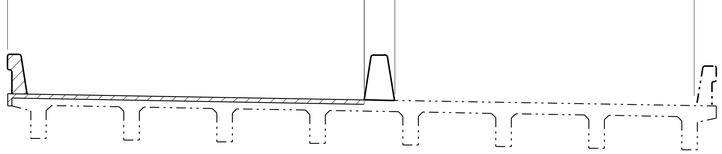
SECTION AT ABUTMENT

½" = 1'-0"

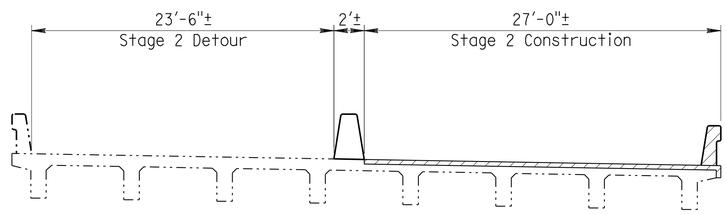


DETAIL 2

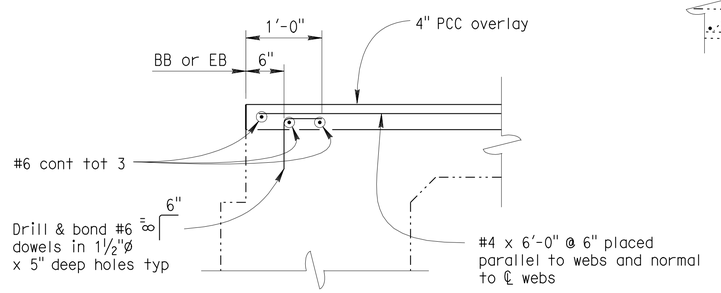
1½" = 1'-0"



STAGE 1 CONSTRUCTION

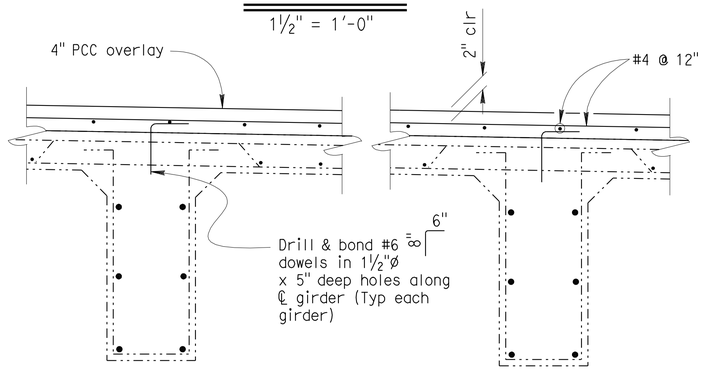


STAGE 2 CONSTRUCTION



DETAIL 1

1" = 1'-0"



PARTIAL TYPICAL SECTION

1" = 1'-0"

STAGING PLAN

O'BRIEN UNDERCROSSING (06-0148R)
NO SCALE

O'BRIEN UC (06-0148R) DECK-ON-DECK DETAILS

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen	
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen	

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

CU 02
EA 2E3201

BRIDGE NO. VARIOUS
POST MILE VARIES

SHASTA BRIDGE PREVENTATIVE MAINTENANCE

DECK ON DECK DETAILS NO. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 6 OF 14

FILE => 02-2e3201_06deck_on_deck_1.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => hrlim

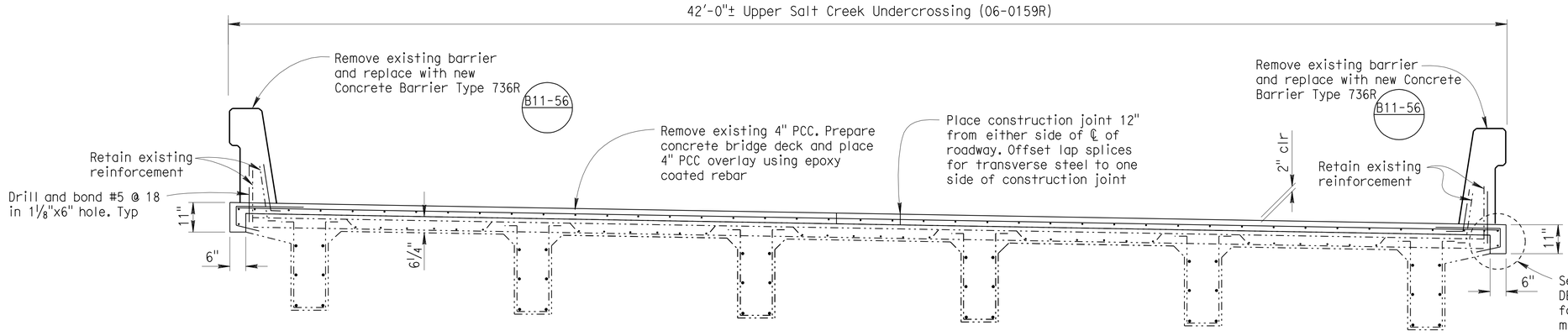
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	37	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp.12-31-11 — CIVIL — STATE OF CALIFORNIA

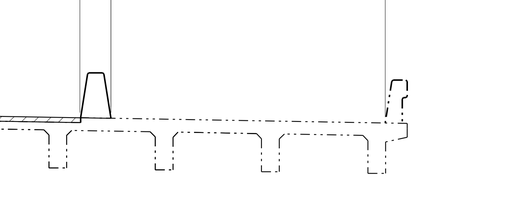
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



Note:
For additional information, see Partial Typical Section.

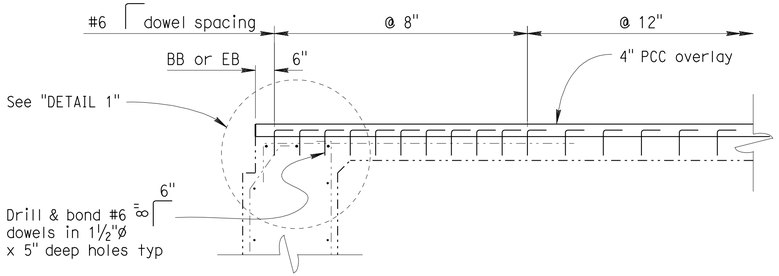
TYPICAL SECTION

½" = 1'-0"



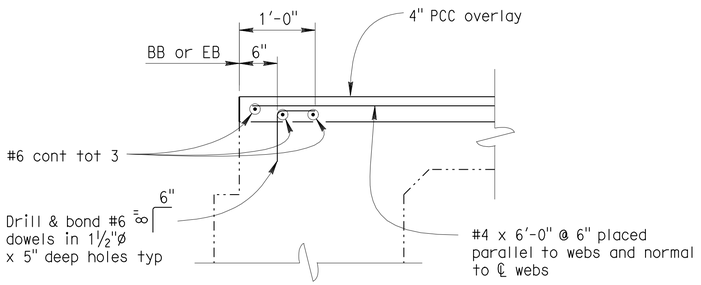
DETAIL 2

1½" = 1'-0"



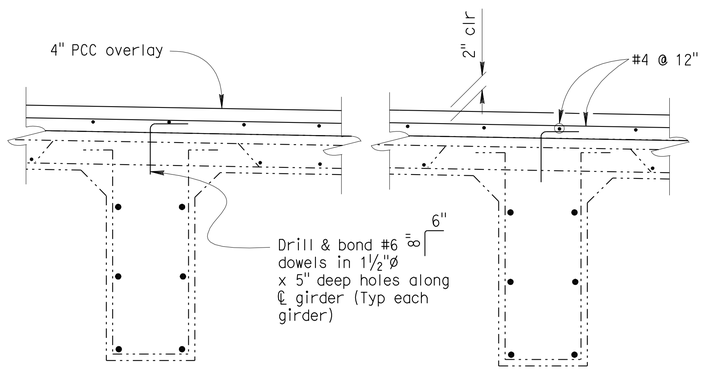
SECTION AT ABUTMENT

½" = 1'-0"



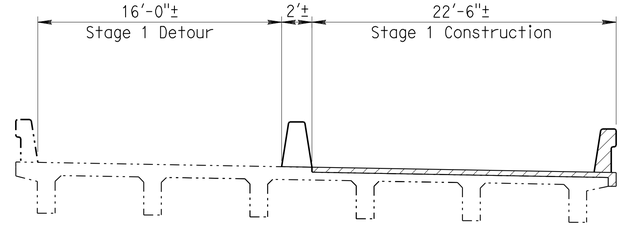
DETAIL 1

1" = 1'-0"



PARTIAL TYPICAL SECTION

1" = 1'-0"



STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION

STAGING PLAN

UPPER SALT CREEK UNDERCROSSING (06-0159R)
NO SCALE

UPPER SALT CREEK UC (06-0159R) DECK-ON-DECK DETAILS

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS / POST MILE VARIES
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen		CU 02 EA 2E3201	

SHASTA BRIDGE PREVENTATIVE MAINTENANCE
DECK ON DECK DETAILS NO. 2

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 7 OF 14

FILE => 02-2e3201_07deck_on_deck_2.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => rrim

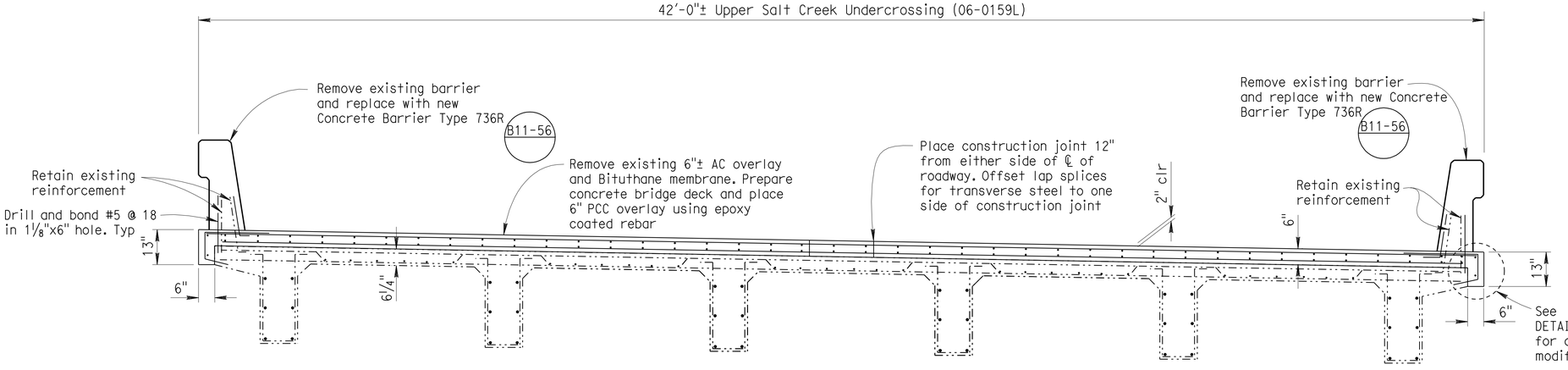
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	38	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

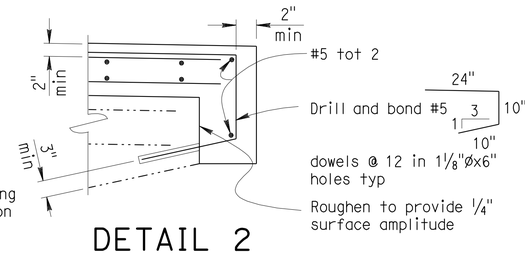
REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp. 12-31-11 — CIVIL — STATE OF CALIFORNIA

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.

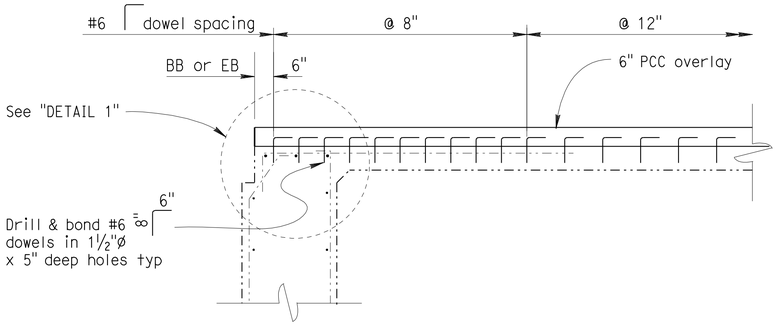


Note:
For additional information, see Partial Typical Section.

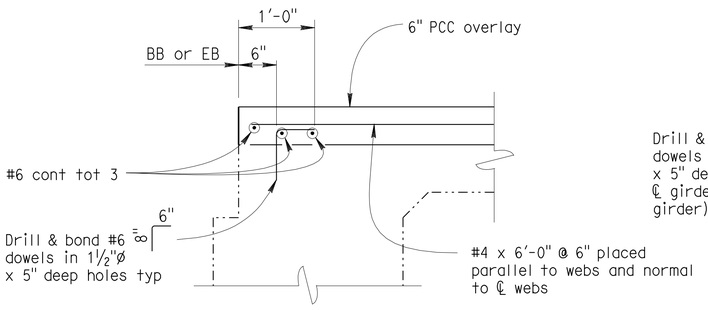
TYPICAL SECTION
½" = 1'-0"



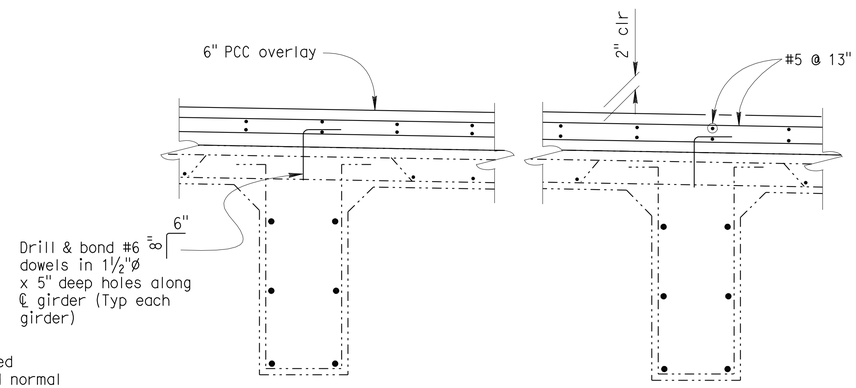
DETAIL 2
1½" = 1'-0"



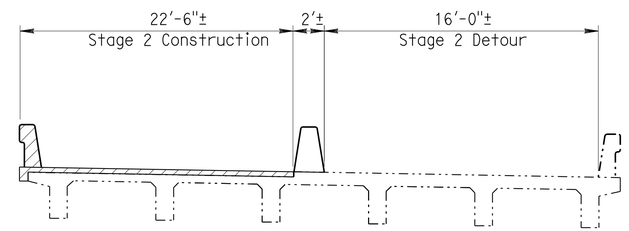
SECTION AT ABUTMENT
½" = 1'-0"



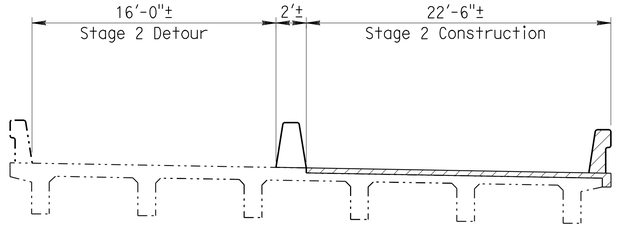
DETAIL 1
1" = 1'-0"



PARTIAL TYPICAL SECTION
1" = 1'-0"



STAGE 1 CONSTRUCTION



STAGE 2 CONSTRUCTION

STAGING PLAN
UPPER SALT CREEK UNDERCROSSING (06-0159L)
NO SCALE

UPPER SALT CREEK UC (06-0159L) DECK-ON-DECK DETAILS

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen			

SHASTA BRIDGE PREVENTATIVE MAINTENANCE
DECK ON DECK DETAILS NO. 3

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 02
EA 2E3201

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
10-5-10	10-7-10	12-13-10	12-23-10	12-29-10						8	14

FILE => 02-2e3201_08deck_on_deck_3.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => rrlim

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	39	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

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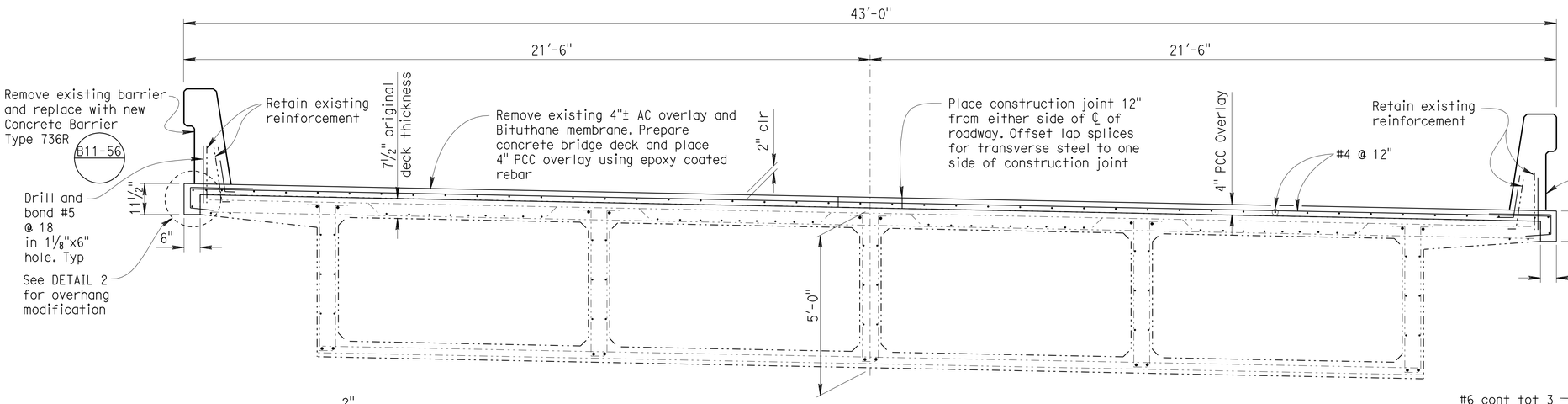
REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA



TYPICAL SECTION

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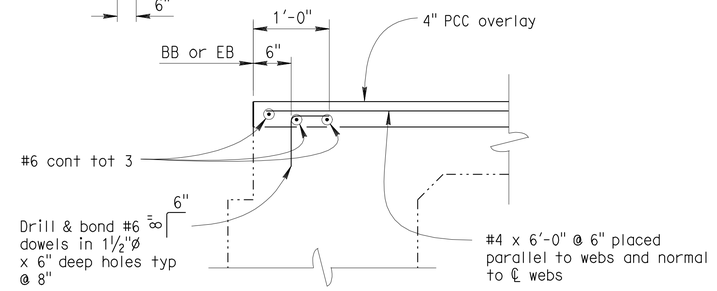

DETAIL 1

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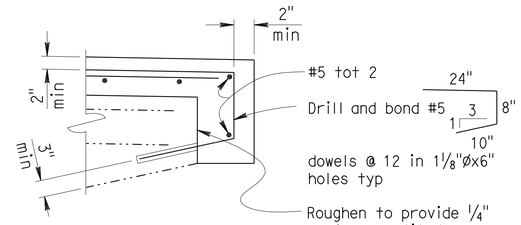

DETAIL 2

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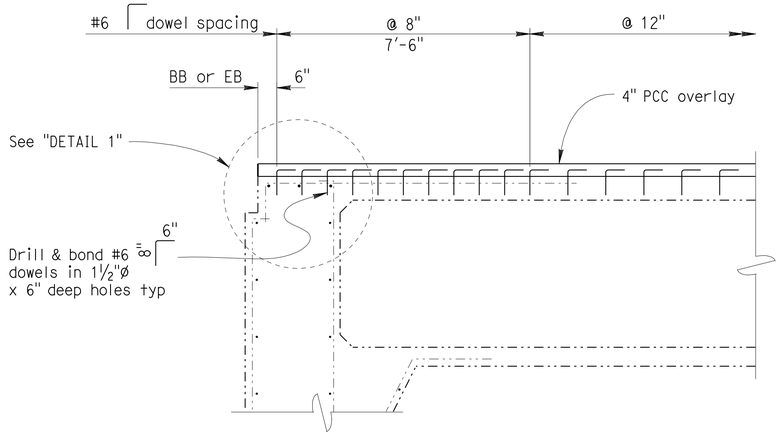

SECTION AT ABUTMENT

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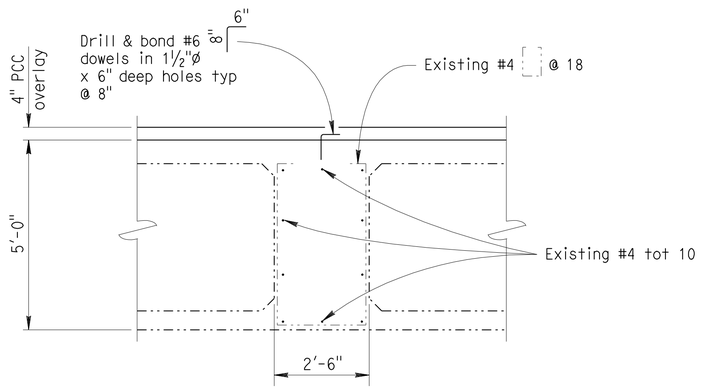

SECTION AT BENT 2

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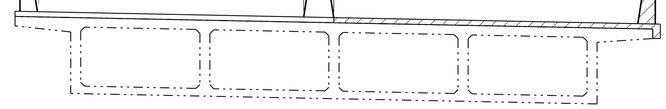
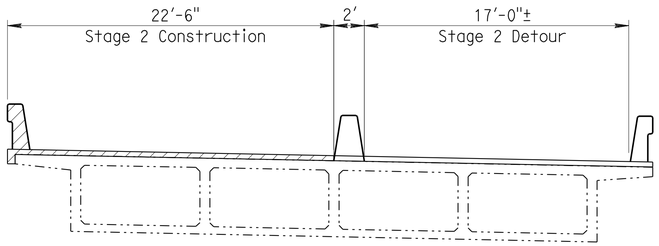


STAGE 1 CONSTRUCTION



STAGE 2 CONSTRUCTION

STAGING PLAN

COTTONWOOD CREEK (02-0175R)
NO SCALE

COTTONWOOD CREEK (02-0175R) DECK-ON-DECK DETAILS

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS	SHASTA BRIDGE PREVENTATIVE MAINTENANCE	
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES	DECK ON DECK DETAILS NO. 4	
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen		CU 02 EA 2E3201	DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES: 10-5-10, 10-7-10, 12-13-10, 12-23-10, 12-29-10	SHEET 9 OF 14

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 02-2e3201_09deck_on_deck_4.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27
USERNAME => tt1tm

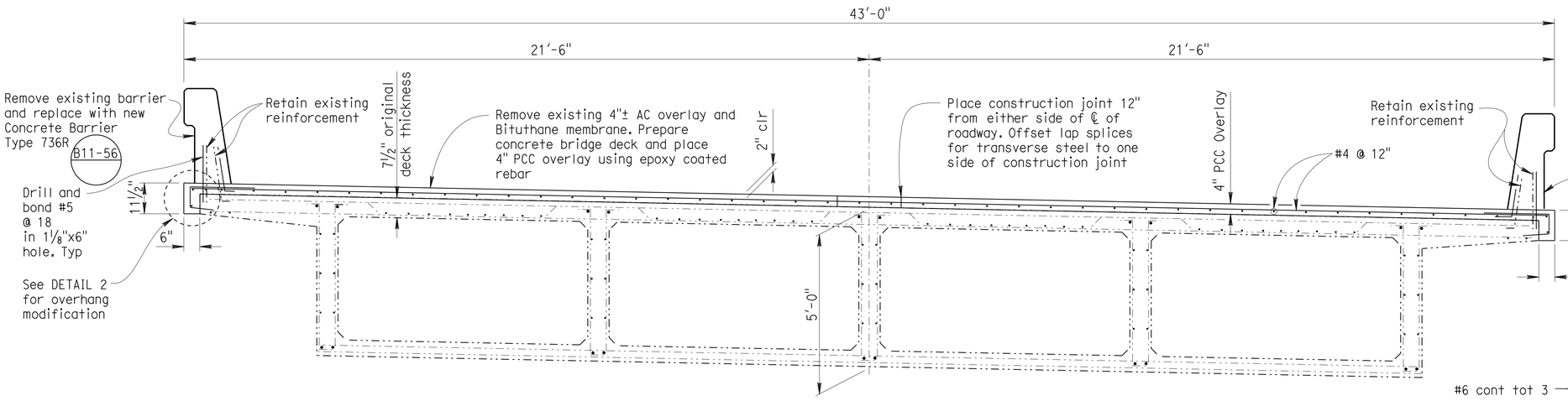
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	40	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

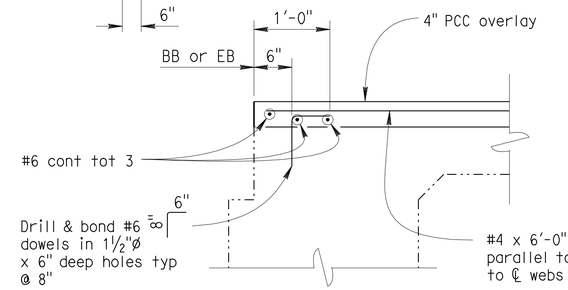
REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp. 12-31-11 — CIVIL — STATE OF CALIFORNIA

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.



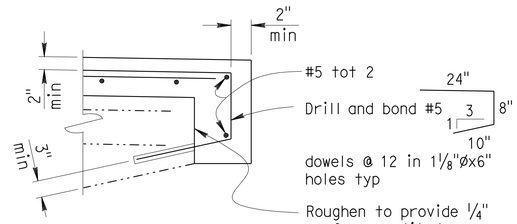
TYPICAL SECTION

½" = 1'-0"



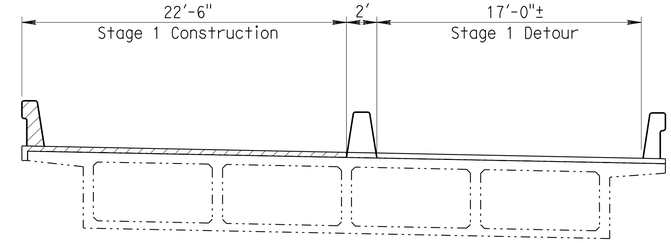
DETAIL 1

1" = 1'-0"

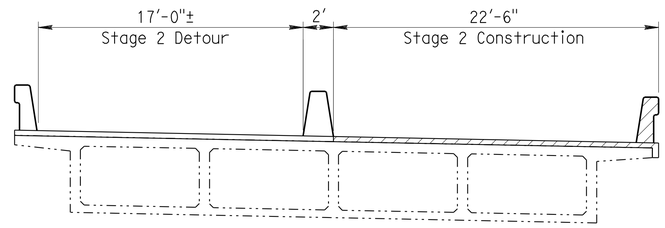


DETAIL 2

1½" = 1'-0"



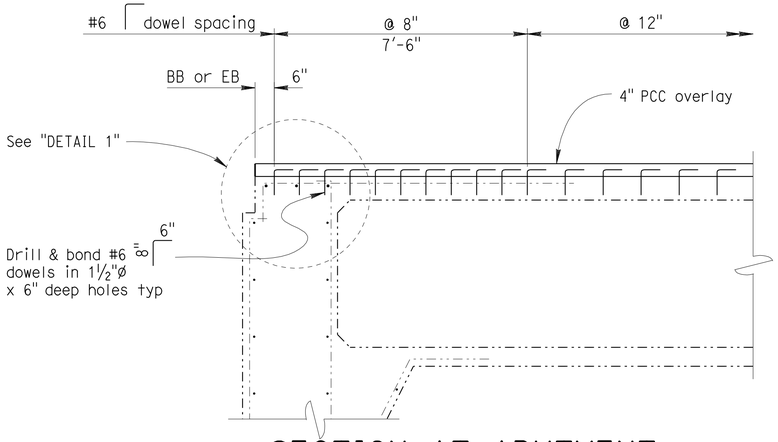
STAGE 1 CONSTRUCTION



STAGE 2 CONSTRUCTION

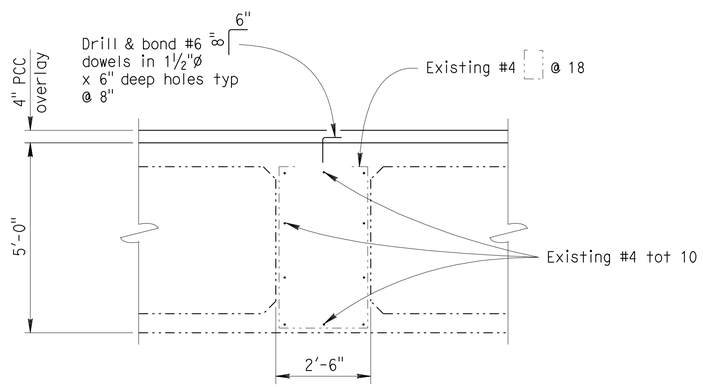
STAGING PLAN

COTTONWOOD CREEK (02-0175L)
NO SCALE



SECTION AT ABUTMENT

½" = 1'-0"



SECTION AT BENT 2

½" = 1'-0"

COTTONWOOD CREEK (02-0175L) DECK-ON-DECK DETAILS

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS	SHASTA BRIDGE PREVENTATIVE MAINTENANCE	
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES	DECK ON DECK DETAILS NO. 5	
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen					

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 02
EA 2E3201

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
10-5-10	10-7-10	12-13-10	12-23-10	12-29-10						10	14

FILE => 02-2e3201_10deck_on_deck_5.dgn

USERNAME => ttpierce DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	41	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

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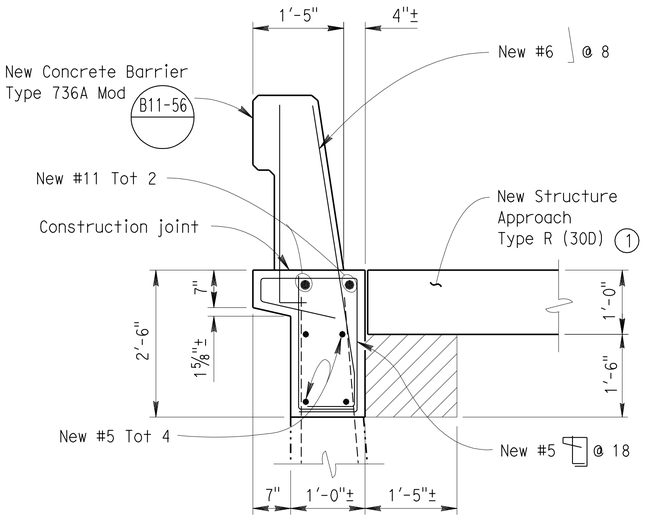
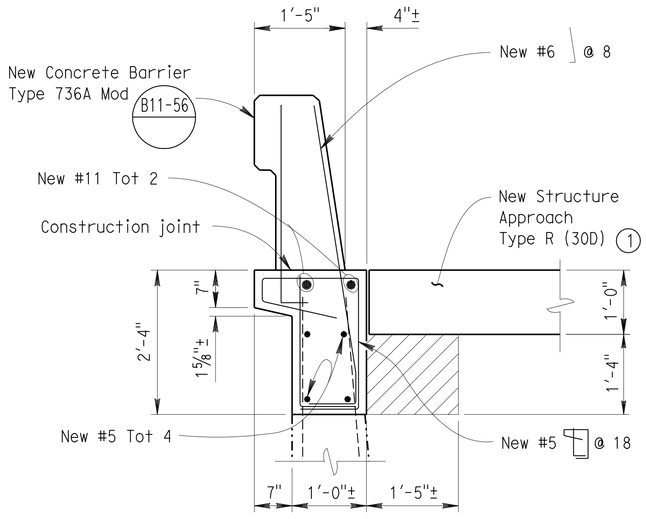
REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA

NOTES: (APPLY TO THIS SHEET ONLY)

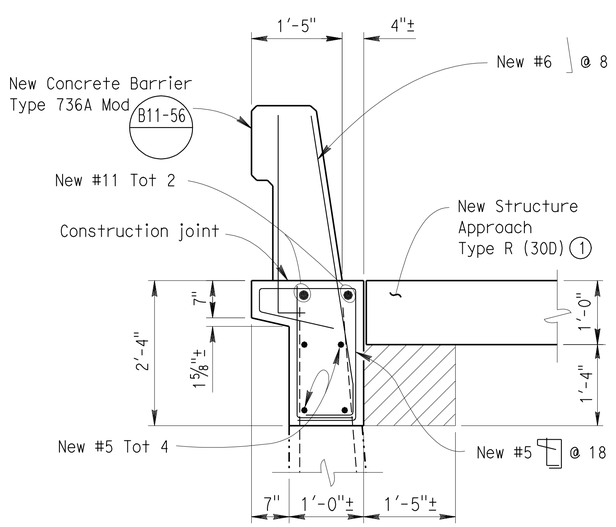
- Indicates limits of remove existing concrete and existing reinforcing bars except where shown otherwise.
- Indicates limits of structure excavation.
- Indicates limits of structure backfill.
- (1) For additional details see STRUCTURE APPROACH TYPE R (30D) sheet.



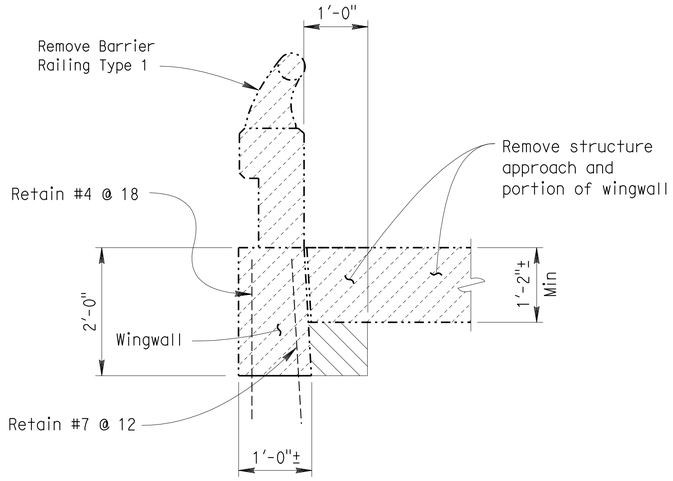
RECONSTRUCTION



RECONSTRUCTION



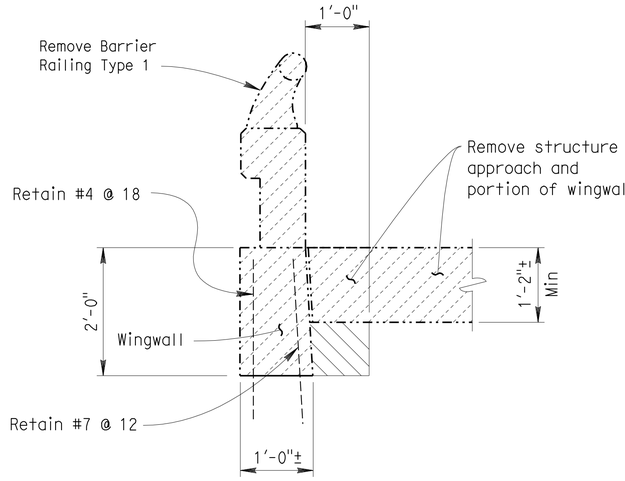
RECONSTRUCTION



EXISTING

SECTION A-A

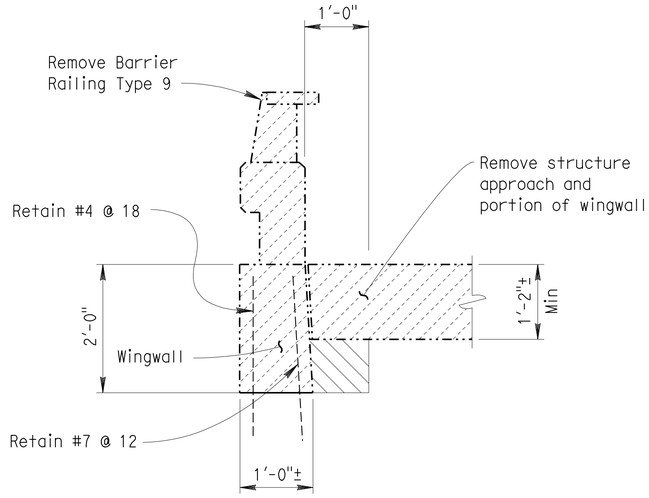
UPPER SALT CREEK UC (06-0159L)
1" = 1'-0"



EXISTING

SECTION B-B

UPPER SALT CREEK UC (06-0159R)
1" = 1'-0"



EXISTING

SECTION C-C

O'BRIEN UC (06-0148R)
COTTONWOOD CREEK (02-0175L/R)
1" = 1'-0"

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen		CU 02 EA 2E3201	

SHASTA BRIDGE PREVENTATIVE MAINTENANCE

ABUTMENT AND WINGWALL DETAILS

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 11 OF 14

FILE => 02-2e3201_11abut-wwall_dets.dgn

USERNAME => trpierce DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	42	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp 12-31-11 — CIVIL — STATE OF CALIFORNIA

JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (inches)	APPROXIMATE LENGTH (feet)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXPANSION JOINT (inches)	APPROXIMATE DEPTH OF JOINT SPALLS (inches)	APPROXIMATE WIDTH OF JOINT SPALLS (inches)	APPROXIMATE LENGTH OF JOINT SPALLS (feet)
SOUTH ANDERSON OVERHEAD	06-0098R	Abut 1	BW	1	64	No	12	3	6	5
		Abut 4	BW	1	64	No	12	3	6	5
HILLTOP DRIVE OVERCROSSING	06-0101	Abut 1	BW	1*	33	No	12	3	6	5
		Bent 5	BW	1*	33	No	12	3	6	5
BRIDGE BAY OVERCROSSING	06-0149	Abut 1	BW	1*	40	No	12	3	6	5
		Bent 5	BW	1*	40	No	12	3	6	5
UPPER SALT CREEK UNDERCROSSING	06-0159L	Abut 1	BW	1*	41	No	N/A	N/A	N/A	N/A
		Abut 4	BW	1*	41	No	N/A	N/A	N/A	N/A
UPPER SALT CREEK UNDERCROSSING	06-0159R	Abut 1	BW	1*	41	No	N/A	N/A	N/A	N/A
		Abut 4	BW	1*	41	No	N/A	N/A	N/A	N/A
NORTH STREET UNDERCROSSING	06-0141R	Abut 1	BW	1	40	No	12	3	6	5
		Abut 4	BW	1	40	No	12	3	6	5
O'BRIEN UNDERCROSSING	06-0148R	Abut 1	BW	1*	53	No	N/A	N/A	N/A	N/A
		Abut 4	BW	1*	53	No	N/A	N/A	N/A	N/A
COTTONWOOD CREEK	02-0175L	Abut 1	BW	1*	49	No	12	N/A	N/A	N/A
		Abut 3	BW	1*	49	No	12	N/A	N/A	N/A
COTTONWOOD CREEK	02-0175R	Abut 1	BW	1*	46	No	12	N/A	N/A	N/A
		Abut 3	BW	1*	46	No	12	N/A	N/A	N/A

* Type B seals only.

LEGEND:
BW = Abutment Backwall
BB = Paving notch at beginning of bridge
EB = Paving notch at end of bridge
℄ = Bent joint

NOTES:

The following note applies to JOINT SEAL TYPE A:

Install seal 3" up into curb or rail on the low side of the deck where joint matches curb or rail joint. For details not shown see RSP B6-21

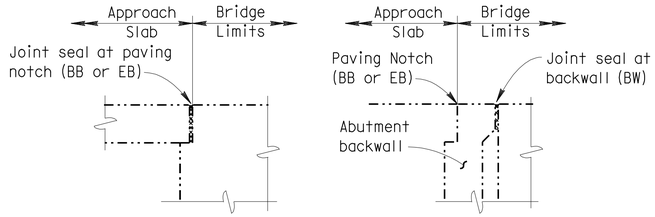
The following notes apply to JOINT SEAL TYPE B:

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 calculated 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 psi.
4) Bend seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
5) For details not shown see RSP B6-21

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

BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
NORTH STREET UNDERCROSSING	06-0141R	1	3
UPPER SALT CREEK UNDERCROSSING	06-0159L	1	3
UPPER SALT CREEK UNDERCROSSING	06-0159R	1	3
O'BRIEN UNDERCROSSING	06-0148R	1	3
COTTONWOOD CREEK	02-0175L	1	3
COTTONWOOD CREEK	02-0175R	1	3

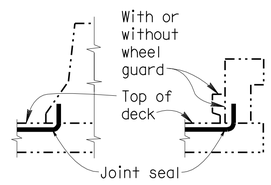
Locations to be determined by the engineer.
For details see "DECK REPAIR DETAIL".



DIAPHRAGM ABUTMENT — ABUTMENT WITH BACKWALL

JOINT SEAL LOCATION

NO SCALE

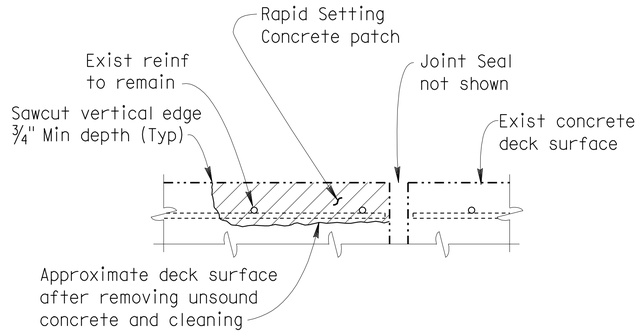


BARRIER RAIL

JOINT SEAL AT LOW SIDE OF DECK

Details shown for illustration purposes only. For use only where deck joint matches the barrier rail joint.

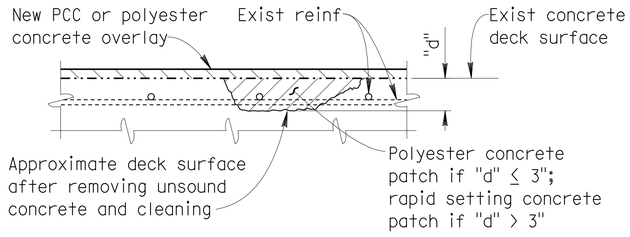
NO SCALE



JOINT SPALL REPAIR DETAIL

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

NO SCALE



DECK REPAIR DETAIL

Locations to be determined by the Engineer.
Reinforcement may be encountered during deck concrete removal.

NO SCALE

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen		CU 02 EA 2E3201	DISREGARD PRINTS BEARING EARLIER REVISION DATES →

SHASTA BRIDGE PREVENTATIVE MAINTENANCE

JOINT SEAL & DECK REPAIR DETAILS

REVISION DATES: 10-5-10 | 10-7-10 | 12-13-10 | 12-23-10 | 12-29-10

SHEET 12 OF 14

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 02-2e3201_12dets.dgn

USERNAME => trmikes1 DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 13:37

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	43	44

Charles R Hutchinson 1-7-11
REGISTERED CIVIL ENGINEER DATE

4-4-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp. 12-31-11 — CIVIL — STATE OF CALIFORNIA

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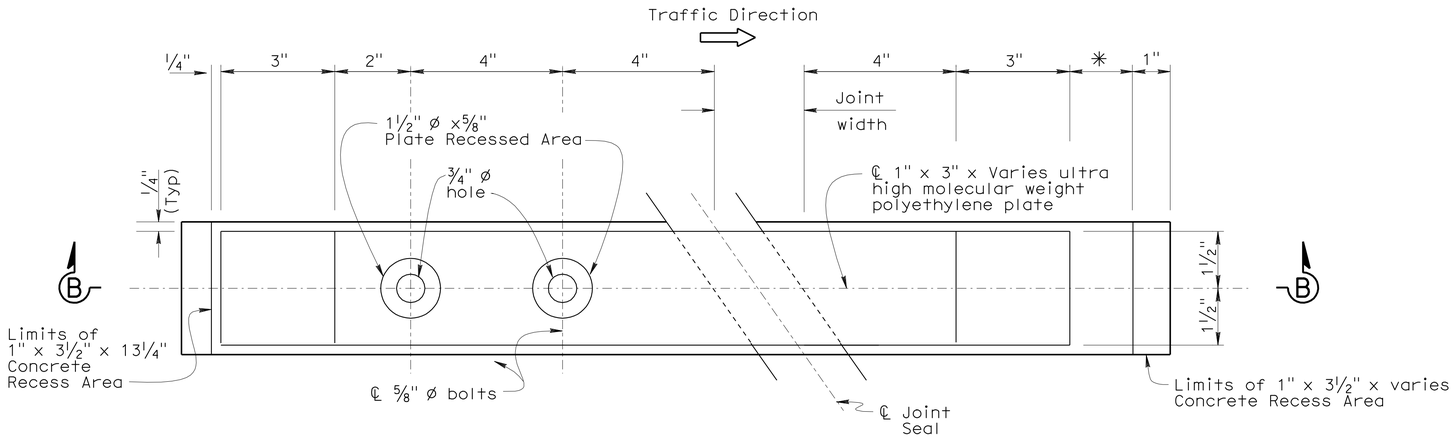
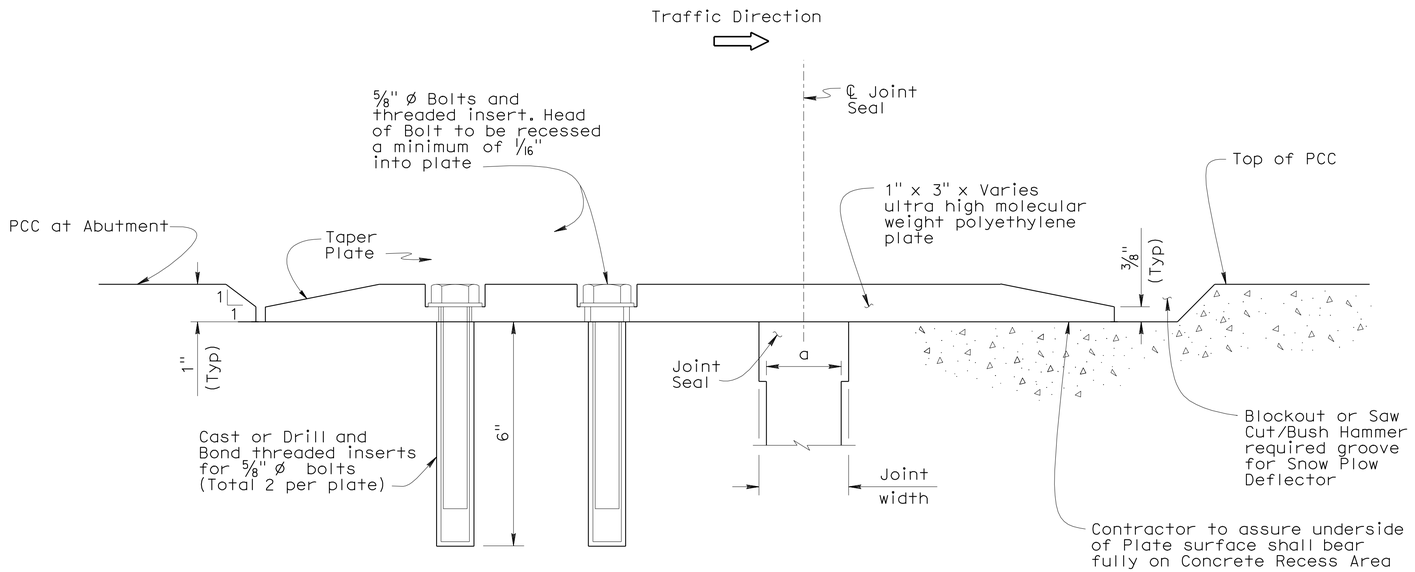
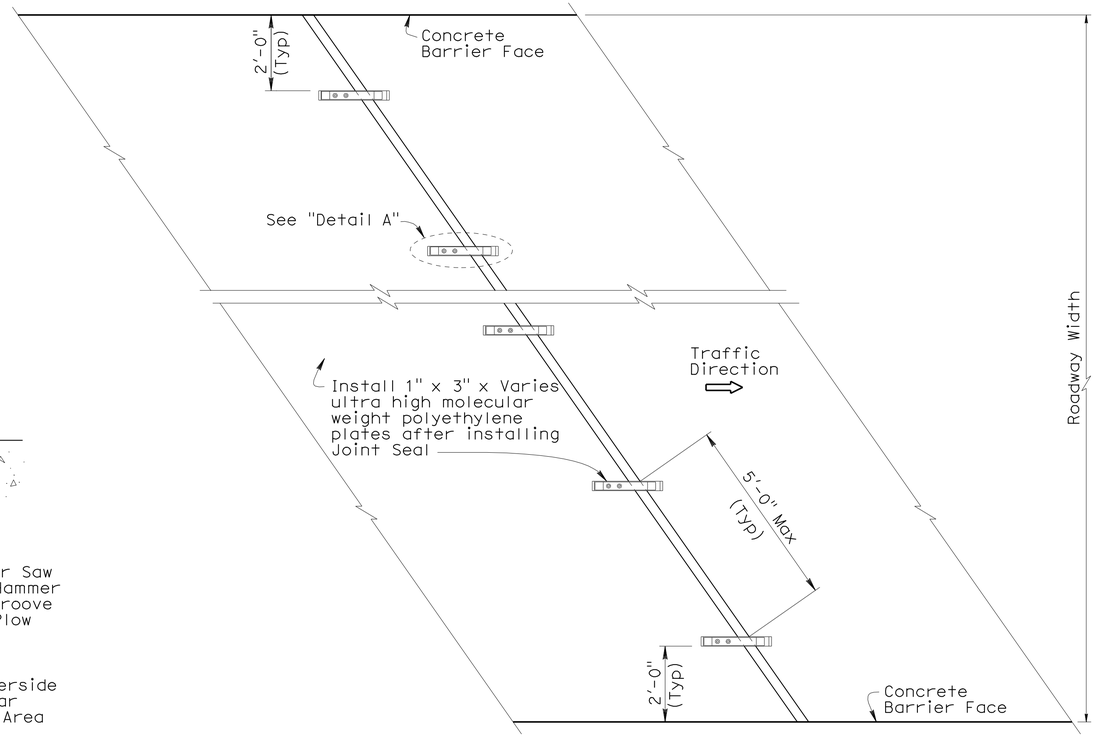


* "a" dimension plus 3/8"

DETAIL A
6"=1'-0"



SECTION B-B
6"=1'-0"



SNOW PLOW DEFLECTOR PLAN
1/2"=1'-0"

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

DESIGN	BY C. Hutchinson	CHECKED B. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED B. Nguyen			POST MILE VARIES
QUANTITIES	BY C. Hutchinson	CHECKED B. Nguyen		CU 02 EA 2E3201	

SHASTA BRIDGE PREVENTATIVE MAINTENANCE
SNOW PLOW DEFLECTOR DETAILS

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES										SHEET	OF
10-5-10	10-7-10	12-13-10	12-23-10	12-29-10						13	14

FILE => 02-2e3201_13snow_plow.dgn

USERNAME => trmartin DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:13

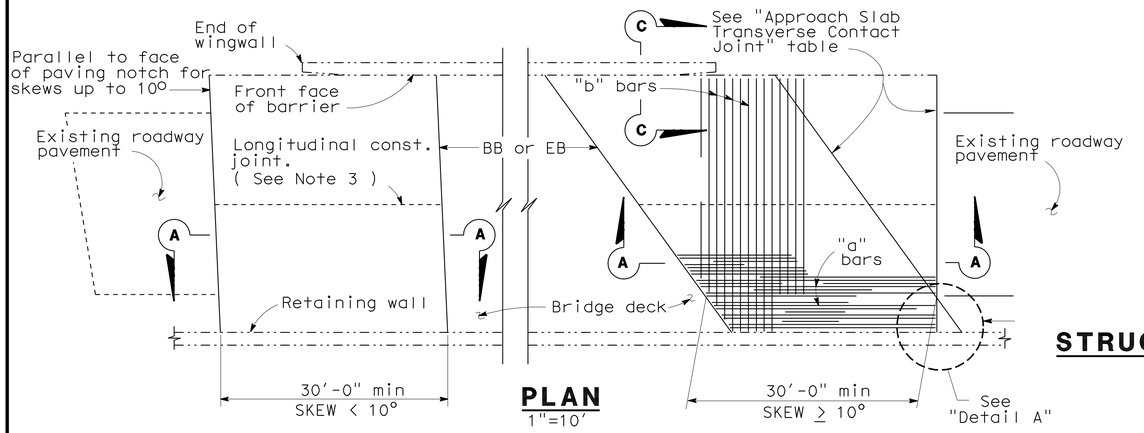
DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	Var	44	44

Charles R. Hutchinson 1-7-11
REGISTERED ENGINEER - CIVIL

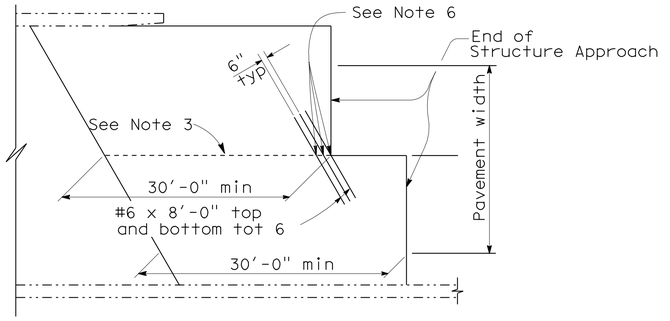
4-4-11
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — CHARLES R. HUTCHINSON — No. C 54226 — Exp. 12-31-11 — CIVIL — STATE OF CALIFORNIA

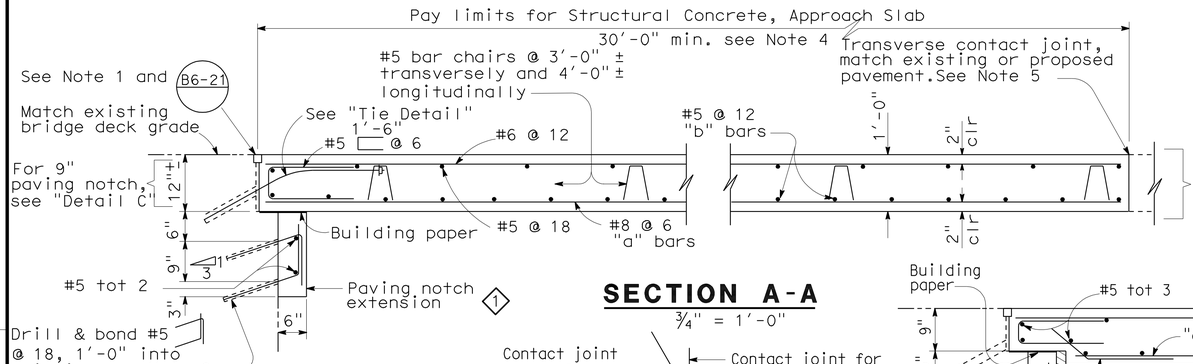


PLAN
1"=10'

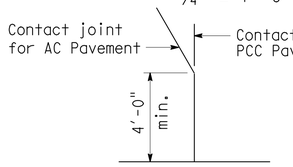


STRUCTURE APPROACH - END STAGGER DETAIL
NO SCALE

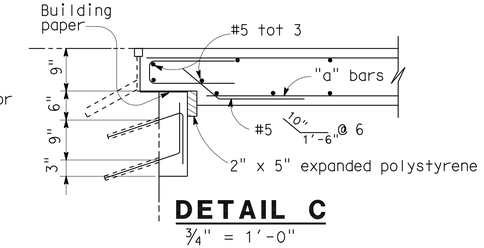
APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 24' to 36' apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



SECTION A-A
¾" = 1'-0"

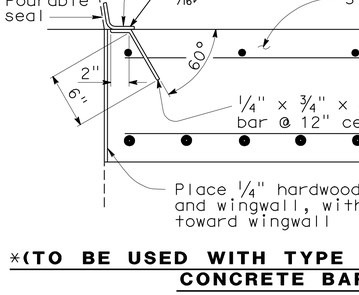


DETAIL A
No Scale

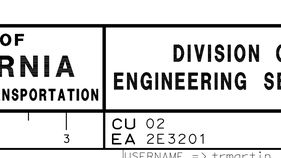


DETAIL C
¾" = 1'-0"

NOTE: For details not shown,see "Section A-A".

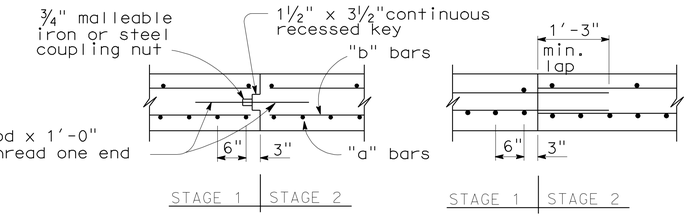


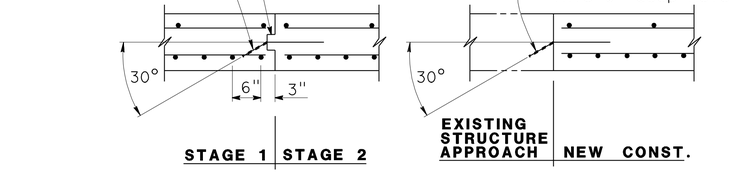
SECTION C-C
¾" = 1'-0"



BAR CHAIR DETAIL
1½" = 1'-0"

***(TO BE USED WITH TYPE 732 OR TYPE 736 CONCRETE BARRIER)**

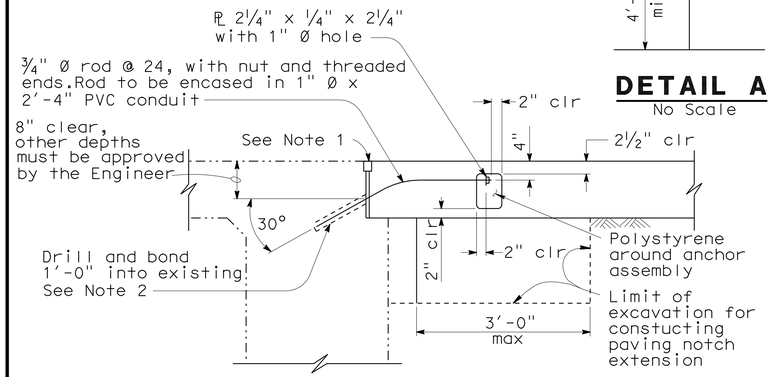




LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
¾" = 1'-0"

NOTES:

1. For details not shown or noted,see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint,when required.
2. Space to avoid existing prestress anchorages and main reinforcement.
3. Longitudinal construction joints,when permitted by the Engineer,shall be located on lane lines.
4. Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint.
5. For transverse contact joint with new PCC paving. refer to Standard Plan P10.
6. Couplers are required for stage construction.
7. End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.



TIE DETAIL
¾" = 1'-0"

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

① DETAIL B
1½" = 1'-0"

SPECIAL DETAILS

STANDARD DRAWING				
RELEASE DATE **REVISED**	DESIGN	BY M.TRAFFALIS	CHECKED E.THORKILDSEN	RELEASED BY
FILE NO. **xs3-140e**	DETAILS	BY R.YEE	CHECKED E.THORKILDSEN	DRAWING DATE 8/92
	SUBMITTED	BY M.HA		OFFICE CHIEF

① Detail Revised

STATE OF **CALIFORNIA** DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	SHASTA BRIDGE PREVENTATIVE MAINTENANCE
VARIOUS	
MILE POST	STRUCTURE APPROACH TYPE R(30D)
VARIES	

DS OSD 2147A (ENGLISH) (REV. X/XX/XX)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 02
EA 2E3201

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 10-5-10

SHEET 14 OF 14

USERNAME => trmartin

02-2e3201_14approach_slab.dgn

DATE PLOTTED => 07-APR-2011 TIME PLOTTED => 08:13