Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	1	21

INDEX OF PLANS

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2	CONSTRUCTION DETAILS AND SUMMARY OF QUANTIITIES
3-4	CONSTRUCTION AREA SIGNS
5-9	TRAFFIC CONTROL SYSTEM

STRUCTURE PLANS

10-17	GENERAL PLANS
18-19	JOINT DETAIL
20	REPAIR DETAILS
21	STRUCTURE APPROACH

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

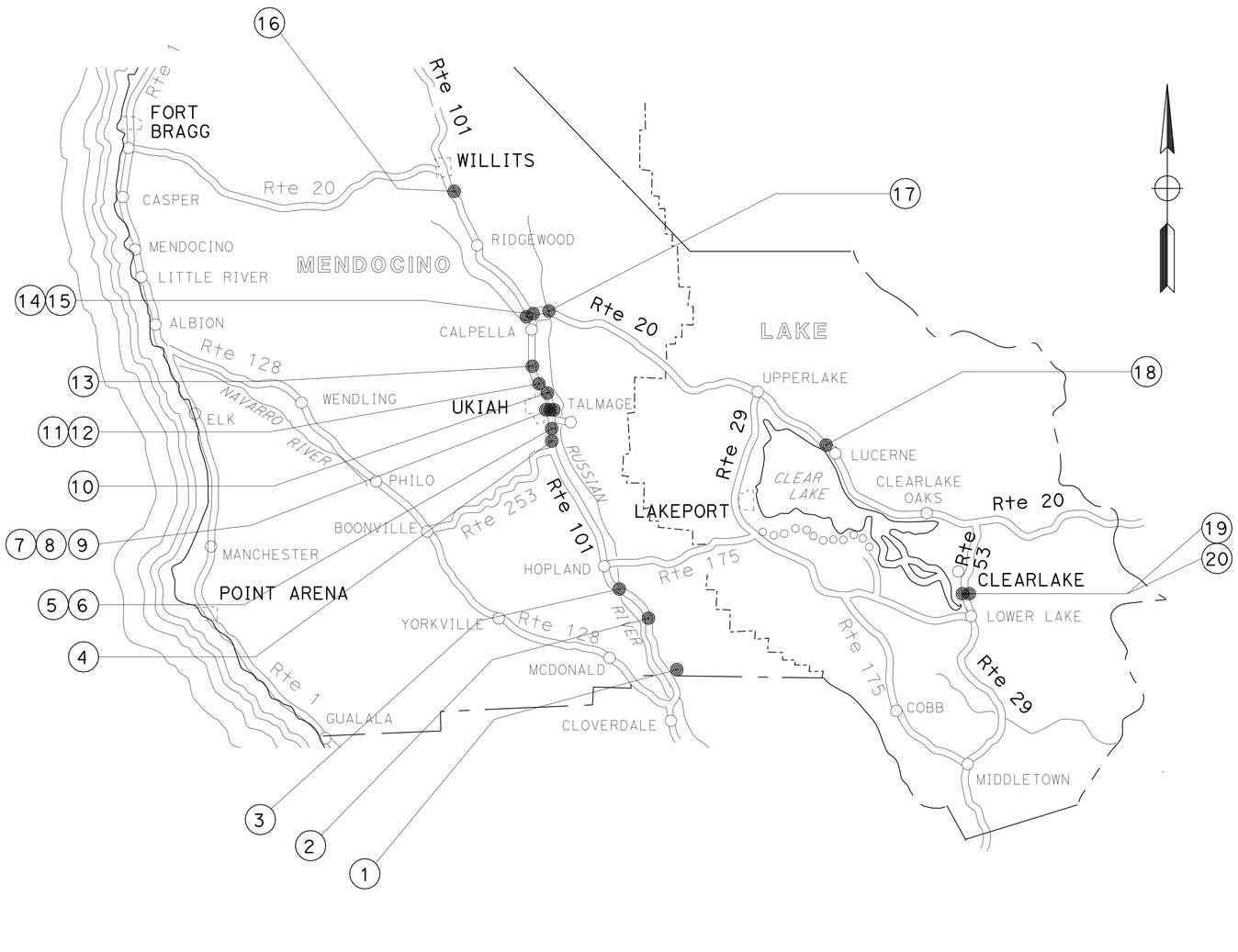
STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN LAKE AND MENDOCINO COUNTIES AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATION MAP

LOCATIONS OF CONSTRUCTION

LOCATION	COUNTY	ROUTE	PM	BRIDGE NAME	BRIDGE No.
1	Men	101	0.0	ASH CREEK (OLD US 101)	10 0088Y
2	Men	101	5.9	PIETA CREEK	10 0133
3	Men	101	9.2	RUSSIAN RIVER	10 0082
4	Men	101	21.6	ROUTE 253/101 SEPARATION	10 0186
5	Men	101	22.2	SOUTH UKIAH OH	10 0187L
6	Men	101	22.2	SOUTH UKIAH OH	10 0187R
7	Men	101	23.6	DOOLIN CREEK	10 0190K
8	Men	101	23.6	DOOLIN CREEK	10 0190R
9	Men	101	23.6	DOOLIN CREEK	10 0190L
10	Men	101	25.0	ORRS CREEK	10 0194R
11	Men	101	25.7	PRESSWOOD OH	10 0195L
12	Men	101	25.7	PRESSWOOD OH	10 0195R
13	Men	101	26.7	ACKERMAN CREEK	10 0199R
14	Men	101	30.8	ROUTE 101/20 SEPARATION	10 0205L
15	Men	101	30.8	ROUTE 101/20 SEPARATION	10 0205R
16	Men	101	44.0	HAEHL OVERHEAD	10 0125
17	Men	20	33.8	REDWOOD VALLEY UC	10 0183
18	Lak	20	16.8	MORRISON CREEK	14 0004
19	Lak	53	1.0	CACHE CREEK	14 0078L
20	Lak	53	1.0	CACHE CREEK	14 0078R

PROJECT MANAGER: Royal B. McCarthy

DESIGN ENGINEER: Royal B. McCarthy

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

NO SCALE

James T. Van Bonn 10/26/12
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — James T. Van Bonn — No. 70723 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

December 7, 2012
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.	01-0A4304
PROJECT ID	0100020282

LAST REVISION 00-00-00 DATE PLOTTED => 19-DEC-2012 TIME PLOTTED => 10:44

BORDER LAST REVISED 7/2/2010 | CALTRANS WEB SITE IS: HTTP//WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s121671 DGN FILE => 10a430ab001.dgn | UNIT 0052 | PROJECT NUMBER & PHASE 01000202821

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	2	21

James T. Van Bonn 10/26/12
REGISTERED CIVIL ENGINEER DATE

December 7, 2012
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — James T. Van Bonn — No. 70723 — Exp 6-30-13 — CIVIL — STATE OF CALIFORNIA

TRAFFIC STRIPE AND PAVEMENT MARKER QUANTITIES

LOCATION (PM) No.	FROM	TO	DETAIL NUMBER	DETAIL LENGTH	THERMOPLASTIC TRAFFIC STRIPE REMOVE HAZERDOUS WASTE YELLOW	REMOVE WHITE	4" SOLID YELLOW	4" SOLID WHITE	4" BROKEN WHITE (36-12)	PAVEMENT MARKERS REMOVE (N) TYPE A WHITE	TYPE D YELLOW	TYPE G CLEAR	TYPE H CLEAR	NON-REFLECTIVE TYPE A WHITE	RETROREFLECTIVE TYPE D YELLOW (TWO-WAY)	TYPE G CLEAR (ONE-WAY)	TYPE H CLEAR (ONE-WAY)	REMARKS
				LF						EA								
1	0.03	0.06	27B	282				572										ASH CREEK (OLD US 101)
			22	282			572				14				14			
2	R5.94	R5.96	27B	254		254		262										PIETA CREEK
			11&13	254		64			262	24		8		24		8		
			22	85	174		192				6				6			
			29	42	176		192				4				4			
3	9.23	9.46	27B	192		2400		2408										RUSSIAN RIVER
			22	48	2400		2408				48				48			
			29	48	192		196				4				4			
5	R22.16	R22.22	27B	324		324		328										SOUTH UKIAH OH LEFT
			11&13	324		81			328	28		8		28		8		
			25	324	324		328						8				8	
6	R22.16	R22.22	27B	324		324		328										SOUTH UKIAH OH RIGHT
			11&13	324		81			328	28		8		28		8		
			25	324	324		328						8				8	
11	R25.72	R25.80	27B	430		430		434										PRESSWOOD OH LEFT
			11&13	430		108			434	36		10		36		10		
			25	430	430		434						10				10	
12	R25.72	R25.80	27B	430		430		434										PRESSWOOD OH RIGHT
			11&13	430		108			434	36		10		36		10		
			25	430	430		434						10				10	
18	16.81	16.82	27B	124		124		132										MORRISON CREEK
			22	62	124		132				6				6			
19	1.00	1.04	27B	351		261		351										CACHE CREEK LEFT
			11&13	351		65			351	32		9		32		9		
			25	351	261		351						9				9	
20	1.00	1.04	27B	359		273		359										CACHE CREEK RIGHT
			11&13	359		68			359	28		9		28		9		
			25	359	273		359						9				9	
SUBTOTAL							5926	5608		212	82	62	54		82	62	54	
TOTAL					5108	5395	11534		2496	410				212		198		

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

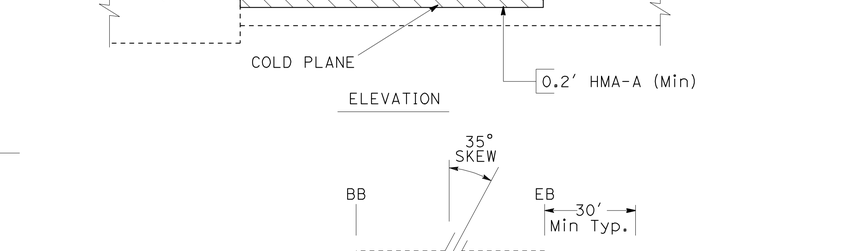
ROADWAY

LOCATION	BRIDGE NAME	BRIDGE No.	COLD PLANE AC PAVEMENT (SQYD)	TACK COAT (TON)	HMA (TYPE A) (TON)	REMARKS
20	CACHE CREEK	14-0078L	187.4	0.5	25.7	BB CONFORM
			187.4	0.5	25.7	EB CONFORM
21	CACHE CREEK	14-0078R	186.6	0.5	25.5	BB CONFORM
			186.6	0.5	25.5	EB CONFORM
		TOTAL	784.0	2.0	102.4	

ELEVATION

LEGEND

COLD PLANE AC



PLAN

LOCATION 19, 20

BRIDGE No. 14-0078L & R

CONSTRUCTION DETAILS AND SUMMARY OF QUANTITIES

C-1

NO SCALE

REVISED BY | DATE REVISED
Johnathon Jackson | James T. Van Bonn
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: Royal B. McCarthy
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION | DATE PLOTTED => 19-DEC-2012 | 00-00-00 | TIME PLOTTED => 10:44

BORDER LAST REVISED 7/2/2010 | USERNAME => s121671 | DGN FILE => 10a430ga001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0052 | PROJECT NUMBER & PHASE 01000202821

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	3	21

James T. Van Bonn 10/26/12
REGISTERED CIVIL ENGINEER DATE

December 7, 2012
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.

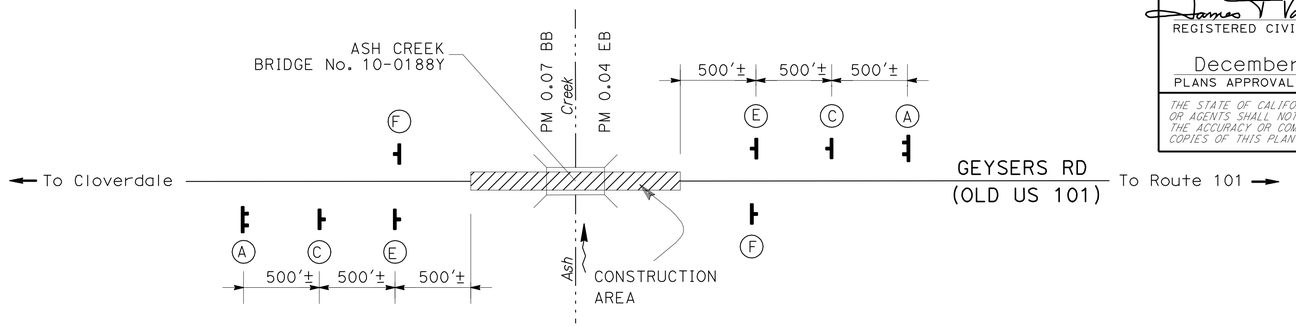
REGISTERED PROFESSIONAL ENGINEER — James T. Van Bonn — No. 70723 — Exp 6-30-13 — CIVIL — STATE OF CALIFORNIA

CONSTRUCTION AREA SIGNS

SIGN NO.	SIGN CODE	SIGN MESSAGE	PANEL SIZE (IN x IN)	NO OF POSTS AND SIZE (IN x IN)	NO.OF SIGNS
(A)	C40(CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	108x42	2-6x6	7
(B)	C40(CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	144x60	2-6x8	6
(C)	W20-1	ROAD WORK AHEAD	36x36	1-4x6	9
(D)	W20-1	ROAD WORK AHEAD	48x48	1-6x6	13
	C23B(CA)	BRIDGE REPAIR	36x24		
(E)	W11-1	BICYCLE SYMBOL	36x36	1-4x6	12
	W16-1	SHARE THE ROAD	24x30		
(F)	G20-2	END ROAD WORK	36x18	1-4x4	8
(G)	G20-2	END ROAD WORK	48x24	1-4x6	5

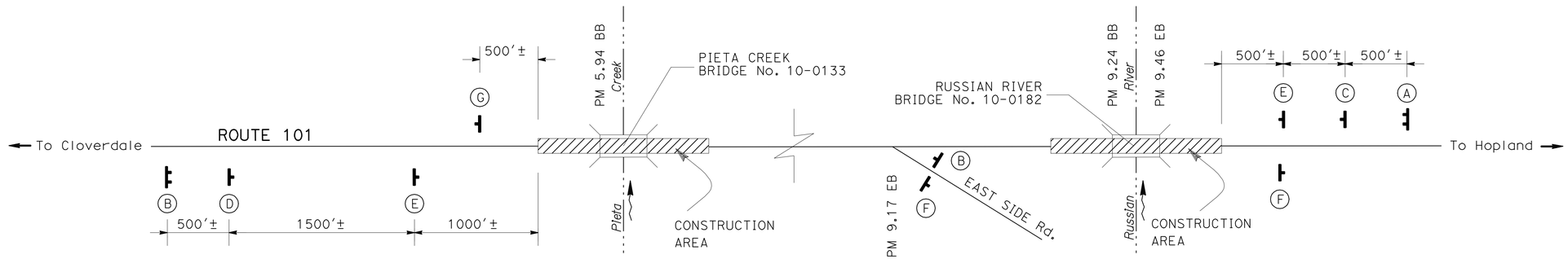
NOTES:

1. EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



LOCATION 1

ASH CREEK
BRIDGE No. 10-0088Y

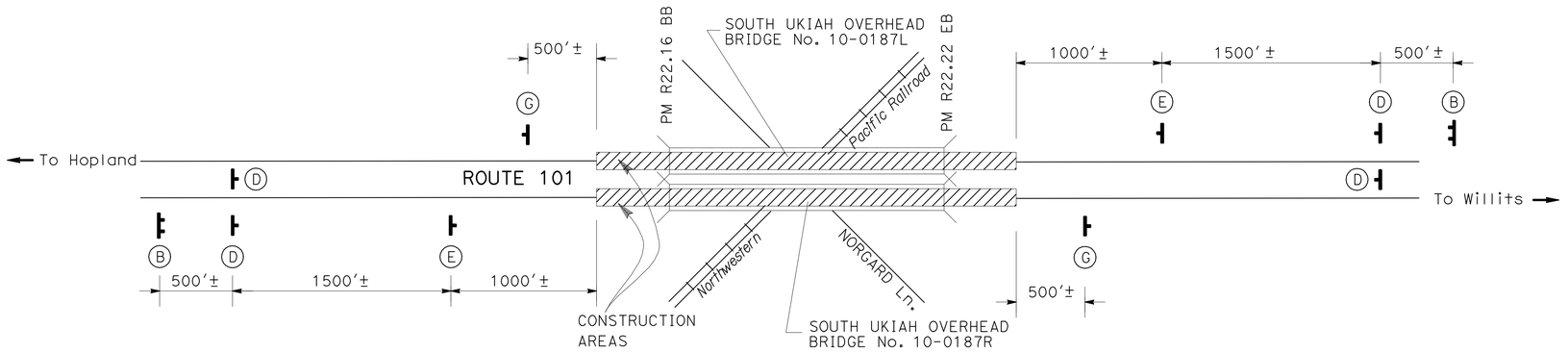


LOCATION 2

PIETA CREEK
BRIDGE No. 10-0133

LOCATION 3

RUSSIAN RIVER
BRIDGE No. 10-0082



LOCATION 5

SOUTH UKIAH OVERHEAD
BRIDGE No. 10-0187L

LOCATION 6

SOUTH UKIAH OVERHEAD
BRIDGE No. 10-0187R

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS
CS-1

NO SCALE

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY: Johnathon Jackson
CHECKED BY: James T. Van Bonn
FUNCTIONAL SUPERVISOR: Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 19-DEC-2012 | TIME PLOTTED => 10:44

BORDER LAST REVISED 7/2/2010 | USERNAME => s121671 | DGN FILE => 10a4301a001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0052 | PROJECT NUMBER & PHASE 01000202821

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	4	21

James T. Van Bonn 10/26/12
REGISTERED CIVIL ENGINEER DATE

December 7, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
James T. Van Bonn
No. 70723
Exp 6-30-13
CIVIL
STATE OF CALIFORNIA

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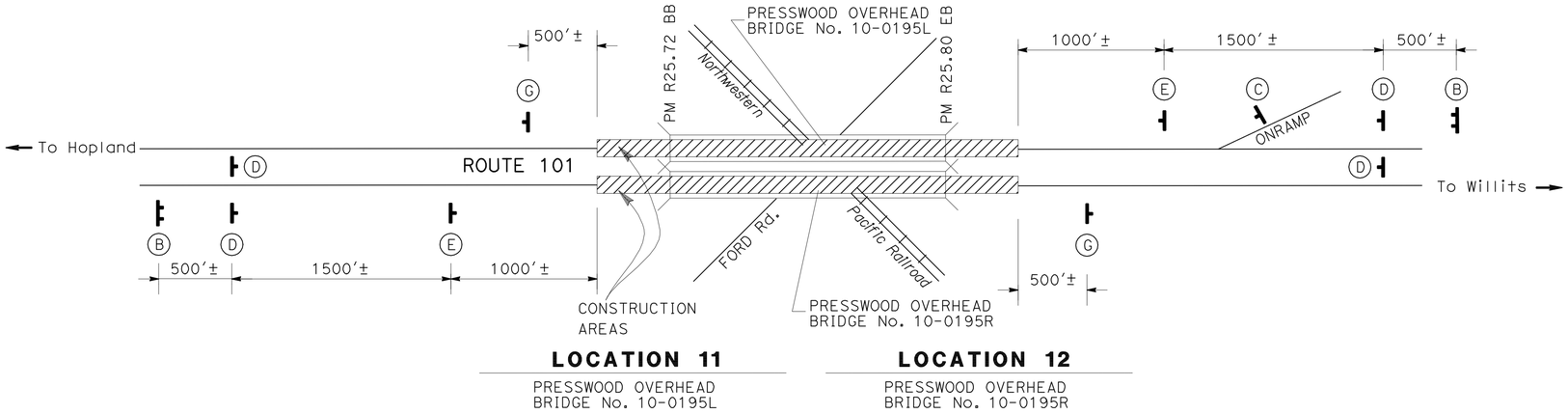
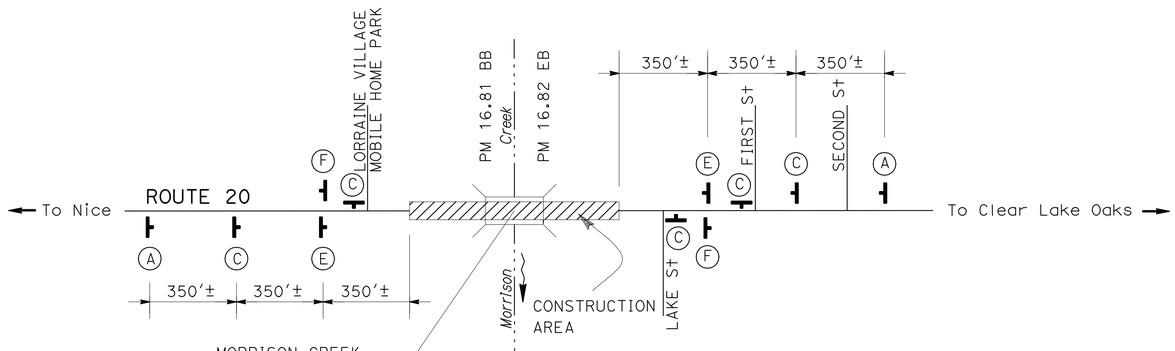
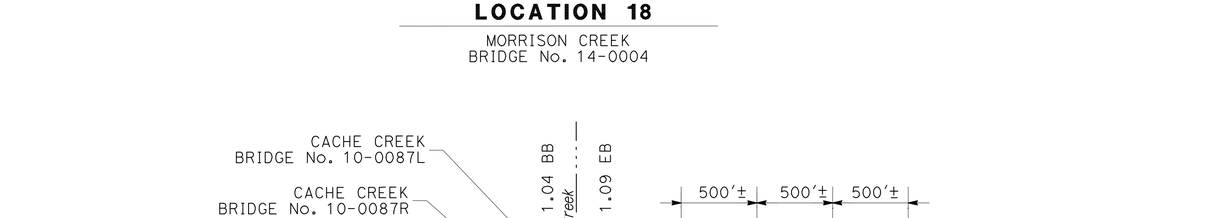


LOCATION 11
PRESSWOOD OVERHEAD
BRIDGE No. 10-0195L

LOCATION 12
PRESSWOOD OVERHEAD
BRIDGE No. 10-0195R



LOCATION 18
MORRISON CREEK
BRIDGE No. 14-0004



LOCATION 19
CACHE CREEK
BRIDGE No. 14-0078L

LOCATION 20
CACHE CREEK
BRIDGE No. 14-0078R

CONSTRUCTION AREA SIGNS
CS-2

NO SCALE

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Royal B. McCarthy	Johnathon Jackson	James T. Van Bonn		

LAST REVISION 00-00-00
DATE PLOTTED => 19-DEC-2012
TIME PLOTTED => 10:44

BORDER LAST REVISED 7/2/2010
USERNAME => s121671
DGN FILE => 10a430la002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0052
PROJECT NUMBER & PHASE 01000202821

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	5	21

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

December 7, 2012
PLANS APPROVAL DATE

Gurinderpal Bhullar No. C48815 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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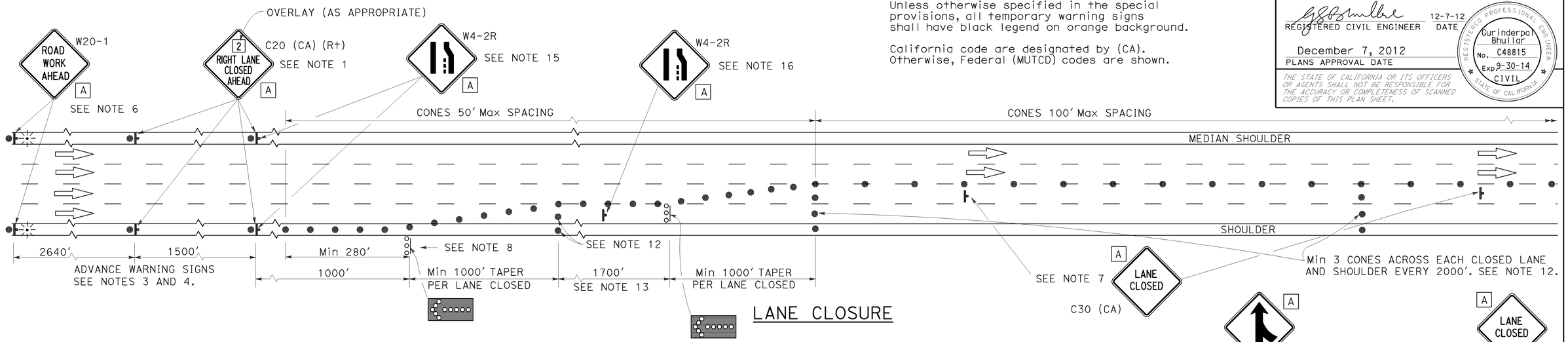
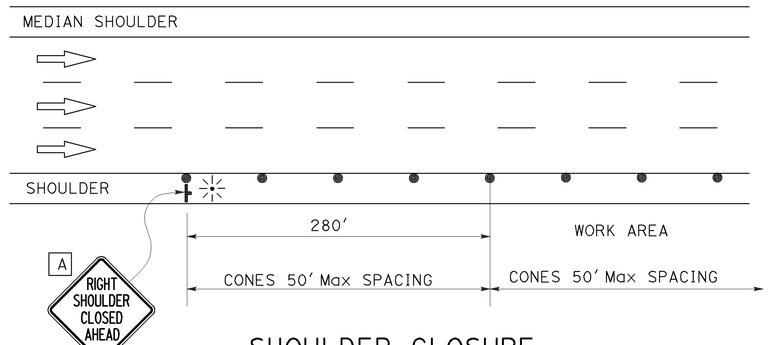
NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

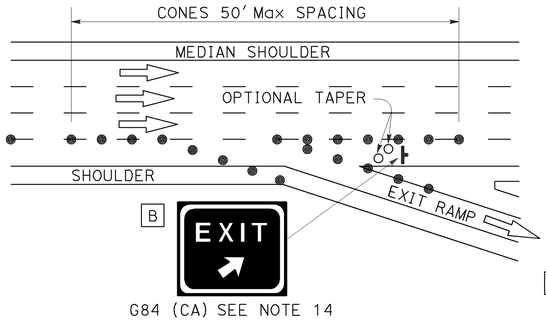
California code are designated by (CA).
Otherwise, Federal (MUTCD) codes are shown.



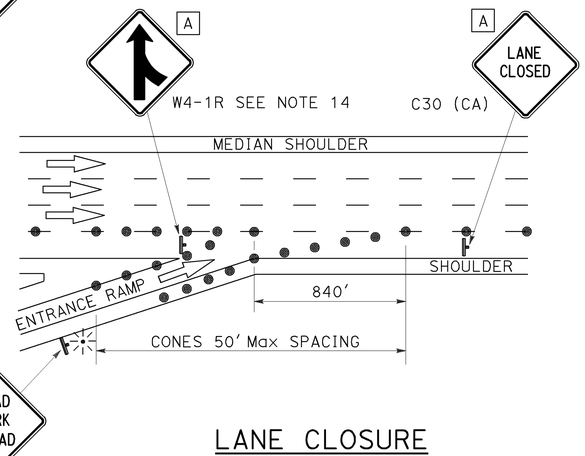
LANE CLOSURE



SHOULDER CLOSURE



LANE CLOSURE AT EXIT RAMP



LANE CLOSURE AT ENTRANCE RAMP

NOTES:

1. Median lane closures shall conform to the details for outside lane closures except that C20 (CA) (Lt) signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
7. Place a C30 (CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the G84 (CA) and W4-1 signs shall be used as shown.
15. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.
16. The W4-2 "LANE ENDS" symbol sign shown at this location is to be used where the W4-2 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

- A — 48" × 48"
- B — 54" × 48"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

TCS-1

REVISED BY | DATE REVISED
CALCULATED- | DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	6	21

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

December 7, 2012
PLANS APPROVAL DATE

Gurinderpal Bhullar No. C48815 Exp. 9-30-14 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.

TYPICAL LANE CLOSURE

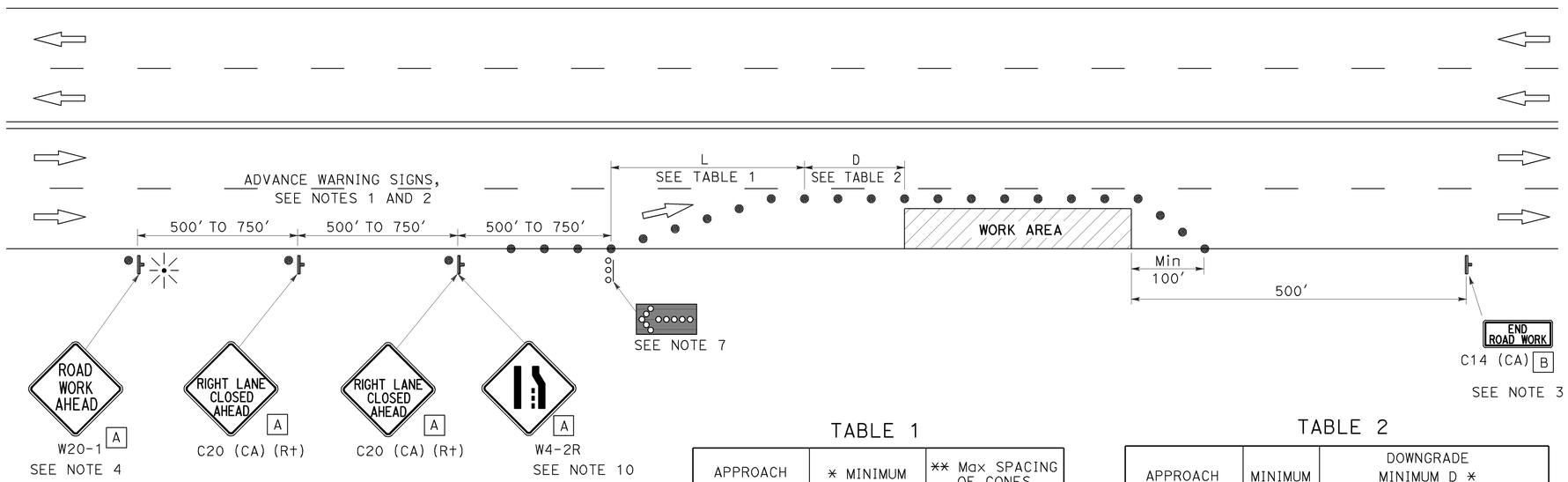


TABLE 1

APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 AND BELOW	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
Over 50	SEE NOTE 9	

* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12′.
** SEE NOTE 8.

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
OVER 50	SEE NOTE 9			

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

LEGEND

- TRAFFIC CONE
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A 36" × 36"

B 36" × 18"

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300′ spacing and placed closer in urban areas.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000′ of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow sign shall be either Type I or Type II.
8. The maximum spacing between cones along a tangent shall be 50′ and along a taper shall be approximately as shown in Table 1.
9. For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
10. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-2

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 10-DEC-2012 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	7	21

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

December 7, 2012
PLANS APPROVAL DATE

Gurinderpal Bhullar
No. C48815
Exp. 9-30-14
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.

LEGEND

- TRAFFIC CONE
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

TABLE 1

APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 and below	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
OVER 50	SEE NOTE 11	

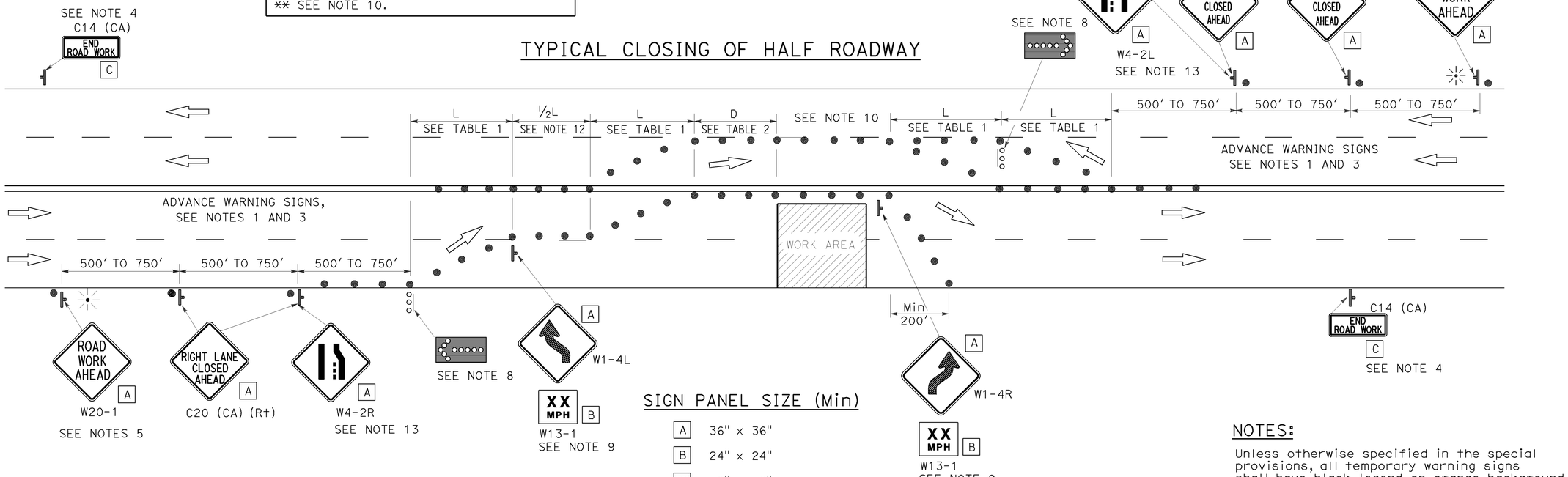
* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.
** SEE NOTE 10.

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
OVER 50	SEE NOTE 11			

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

TYPICAL CLOSING OF HALF ROADWAY



SIGN PANEL SIZE (Min)

- A — 36" x 36"
- B — 24" x 24"
- C — 36" x 18"

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

NOTES:

1. Where Approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.
3. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
4. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
5. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
6. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
7. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
8. Flashing arrow signs shall be either Type I or Type II.
9. Advisory speed will be determined by the Engineer. The W13-1 Sign will not be required when advisory speed is more than the posted or maximum speed limit.
10. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
11. For approach speeds over 50 mph, use the "Traffic Control System For Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
12. Unless otherwise specified in the special provisions, the (½ L) shown between the two (L) lane closure tapers shall be used.
13. When specified in the special provisions, a W4-2 "Lane Ends" symbol sign is to be used in place of the C20 (CA) "RIGHT (LEFT) LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-3

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION DATE PLOTTED => 10-DEC-2012
00-00-00 TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	8	21

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

December 7, 2012
PLANS APPROVAL DATE

Gurinderpal Bhullar No. C48815 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

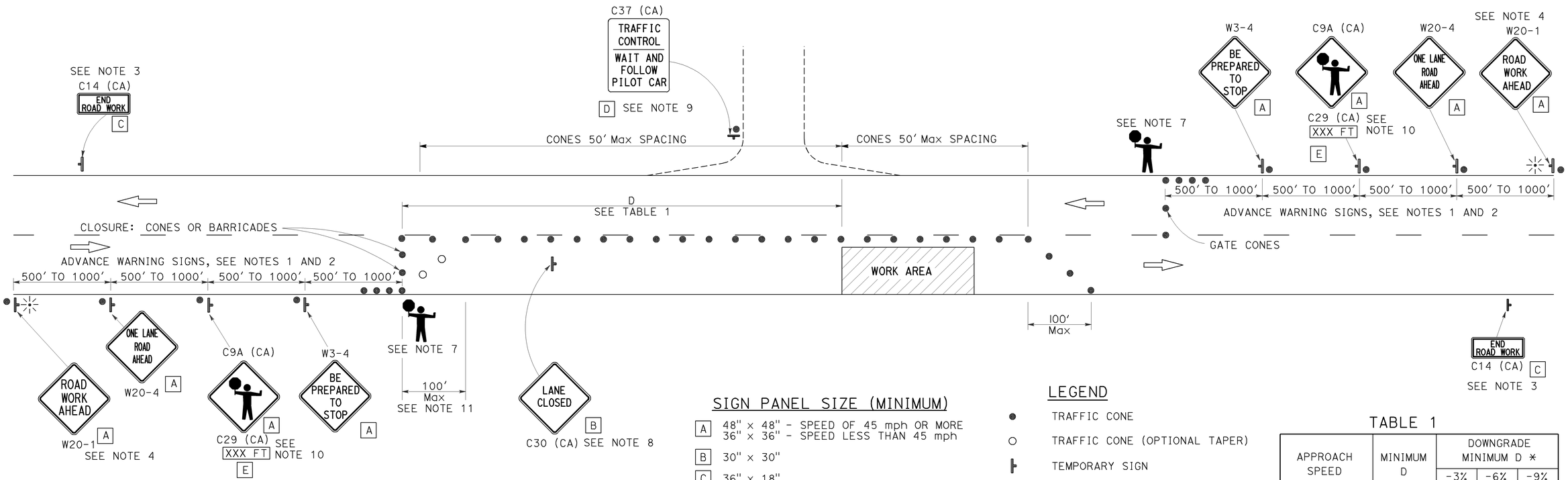
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A — 48" x 48" - SPEED OF 45 mph OR MORE; 36" x 36" - SPEED LESS THAN 45 mph
- B — 30" x 30"
- C — 36" x 18"
- D — 36" x 42"
- E — 36" x 9"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

TABLE 1

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
2. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____MILES", use a W20-4 sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
8. Place C30 (CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
9. When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
10. An optional C29 (CA) sign may be placed below the C9A (CA) sign.
11. Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-4

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION DATE PLOTTED => 10-DEC-2012
00-00-00 TIME PLOTTED => 09:45

TYPICAL RAMP CLOSURES

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 30" x 30"
- D 48" x 48" - SPEED OF 50 mph OR MORE
  36" x 36" - SPEED LESS THAN 50 mph
- E 48" x 36"

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak, Men	Var	Var	9	21

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

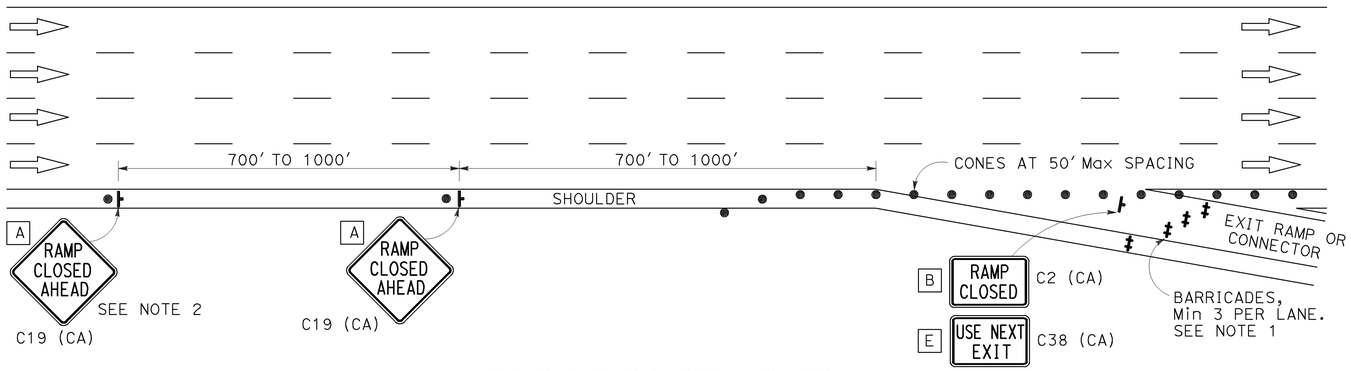
December 7, 2012
PLANS APPROVAL DATE

Gurinderpal Bhullar No. C48815 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

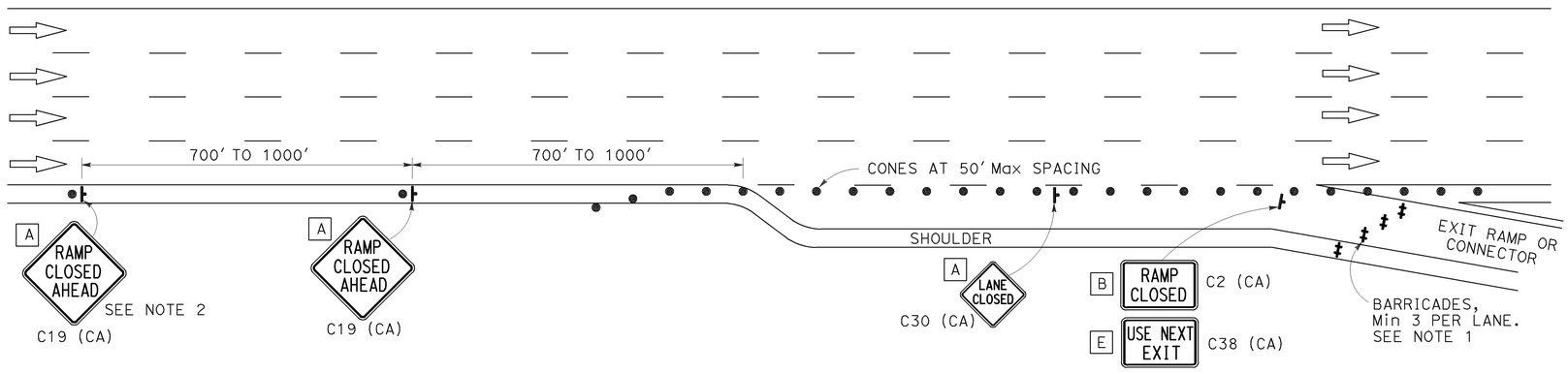
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND

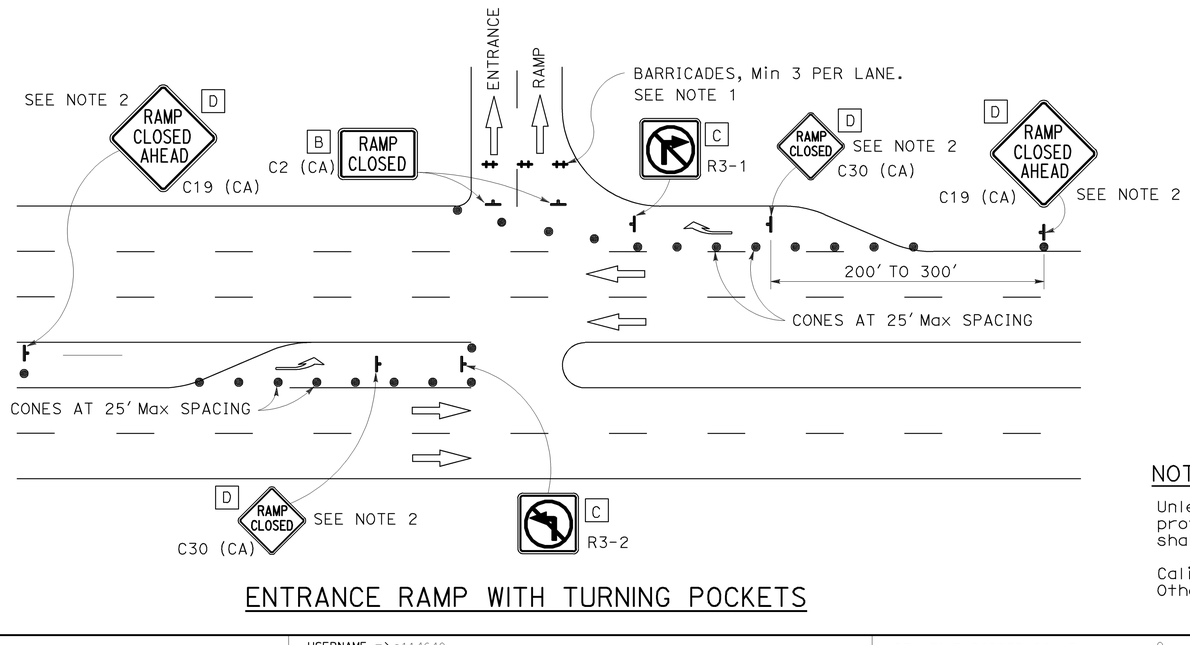
- TRAFFIC CONE
- TEMPORARY SIGN
- BARRICADES



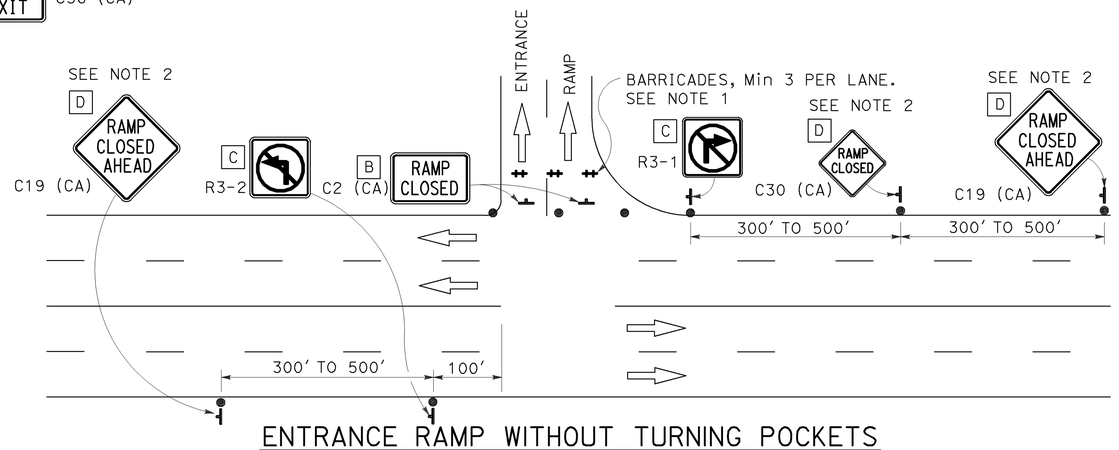
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

1. Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
2. In addition to placing the C19 (CA) "RAMP CLOSED AHEAD" and C30 (CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
3. Each advance C19 (CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" sign in the gore area shall be covered during ramp closures.

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

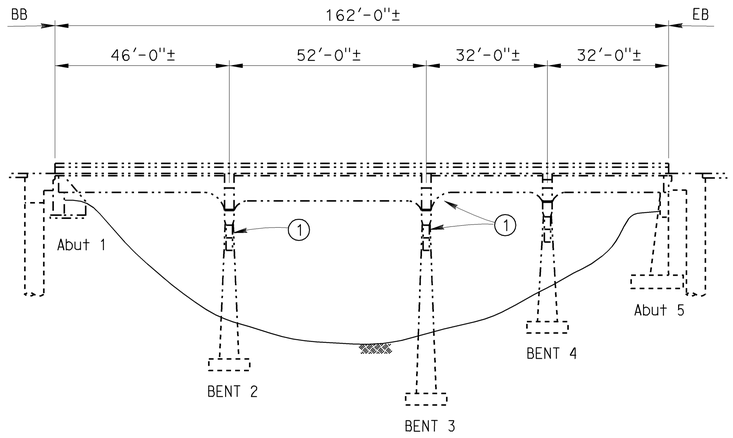
NO SCALE

TCS-5

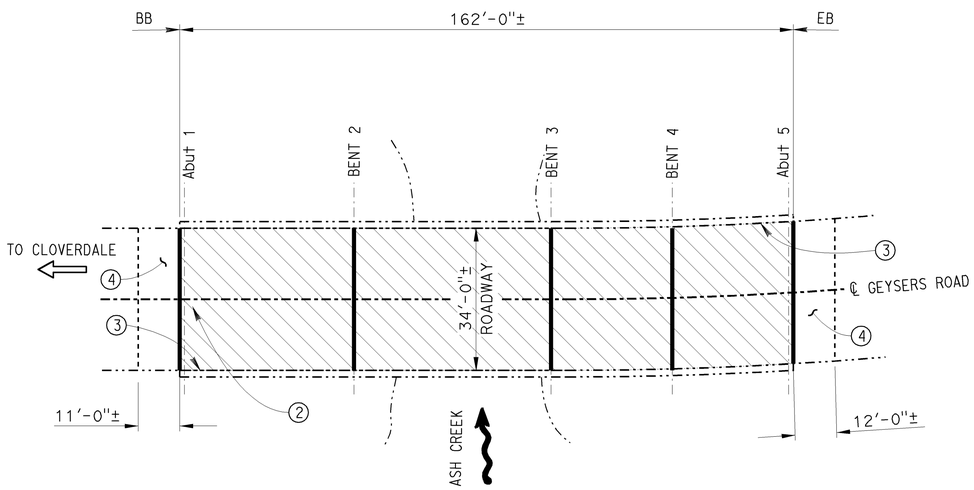
REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 10-DEC-2012 | TIME PLOTTED => 09:45 | 00-00-00

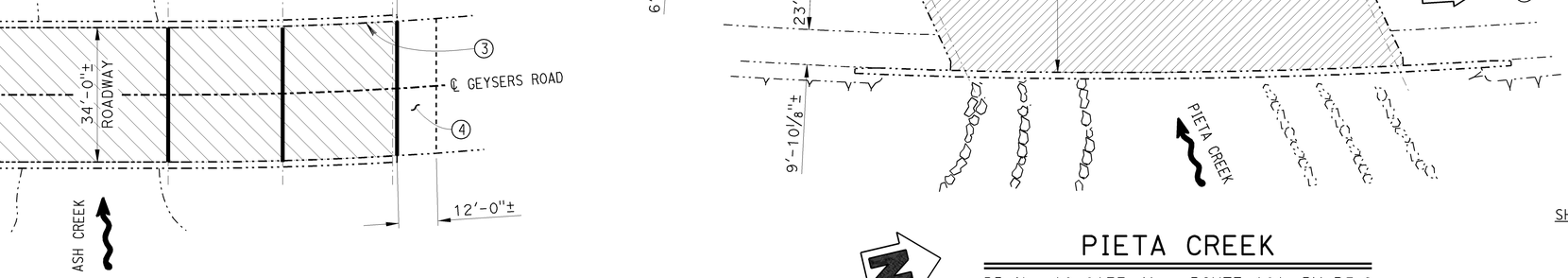
BORDER LAST REVISED 7/2/2010 | USERNAME => s114640 | DGN FILE => tcs14.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0052 | PROJECT NUMBER & PHASE 01000202821



ELEVATION



PLAN



PIETA CREEK

BR No. 10-0133, Men, ROUTE 101, PM R5.9
1" = 20'

ASH CREEK

BR No. 10-0088Y, Men, ROUTE 101, PM 0.0
1" = 20'

ASH CREEK BRIDGE NO 10-0088Y

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	1	CF
REPAIR SPALLED SURFACE AREA	6	SQFT
REMOVE ASPHALT CONCRETE SURFACING	5,510	SQFT
REMOVE UNSOUND CONCRETE	1	CF
HOT MIX ASPHALT (BRIDGE)	64	TON
CLEAN EXPANSION JOINT	175	LF
JOINT SEAL (ASPHALTIC PLUG)	175	LF

PIETA CREEK BRIDGE NO 10-0133

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	10,250	SQFT
TREAT BRIDGE DECK	10,250	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	114	GAL

NOTES: (APPLY TO ALL SHEETS)
Indicates existing.

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

STANDARD PLAN SHEET NUMBER
DETAIL NUMBER

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	10	21

T J Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL No. C 61037 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 electronic copies of this plan sheet.

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.

Indicates limits of remove existing 2"± depth AC overlay and place new 2" depth HMA overlay. Overlay to match existing PCC pavement at bridge ends.

Indicates location of remove existing AC and place Asphaltic Plug Joint Seal. See "Asphaltic Plug Detail" on "JOINT SEAL DETAILS No. 2" sheet.

① Indicates approximate location of repair spalled surface area at:
Bent 2, Column 3 (corner)
Bent 3, Column 2 (corner)
Bent 3, Cap (right side)
For details, see "Repair Spalled Surface Area Detail " on "REPAIR DETAILS" sheet.

② Indicates approximate location of deck repair. See "Deck Repair Detail" on REPAIR DETAILS sheet.

③ Paint bridge name and number on face of barrier rail.

④ Existing portland cement concrete pavement.

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	GENERAL PLAN No. 3
4	GENERAL PLAN No. 4
5	GENERAL PLAN No. 5
6	GENERAL PLAN No. 6
7	GENERAL PLAN No. 7
8	GENERAL PLAN No. 8
9	JOINT SEAL DETAILS No. 1
10	JOINT SEAL DETAILS No. 2
11	REPAIR DETAILS
12	STRUCTURE APPROACH TYPE R(30S)

STANDARD PLANS DATED 2010

SHEET No.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

10-26-12 Michael J. Lee
DESIGN ENGINEER

	BY	CHECKED	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	
DESIGN	T. Powell	H. Dang			
DETAILS	M. Hallstrom	H. Dang	LAYOUT	M. Hallstrom	T. Powell
QUANTITIES	T. Powell	H. Dang	SPECIFICATIONS	X	PLANS AND SPECS COMPARED X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
4-3-12				1	12

FILE => 01-0a4301_01gp_01.dgn

USERNAME => s1137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 09:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	11	21

REGISTERED CIVIL ENGINEER — 10-26-12 DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

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RUSSIAN RIVER BRIDGE NO 10-0082

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	505	CF
REMOVE ASPHALT CONCRETE SURFACING	38,640	SQFT
REMOVE UNSOUND CONCRETE	505	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	38,640	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	2,898	CF
PLACE POLYESTER CONCRETE OVERLAY	38,640	SQFT
BRIDGE REMOVAL (PORTION)	LUMP	SUM
AGGREGATE BASE (APPROACH SLAB)	8	CY
TEMPORARY DECKING	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	4	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	76	CY
CLEAN EXPANSION JOINT	689	LF
JOINT SEAL (MR½")	769	LF
BONDED JOINT SEAL	83	LF
BAR REINFORCING STEEL (BRIDGE)	1,350	LB

NOTES: (APPLY TO THIS SHEET ONLY)

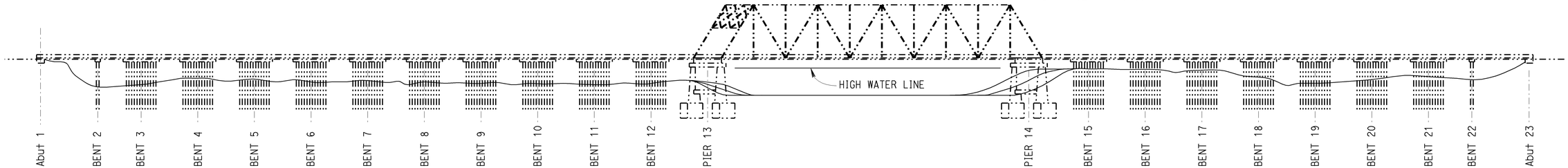
Indicates location of place Structure Approach Type R (30S).

Indicates location of clean existing open joints. Approx 6" deep. Total length = 690 ft, 41 ft each. Place new joint seal at each location. MR = ½".

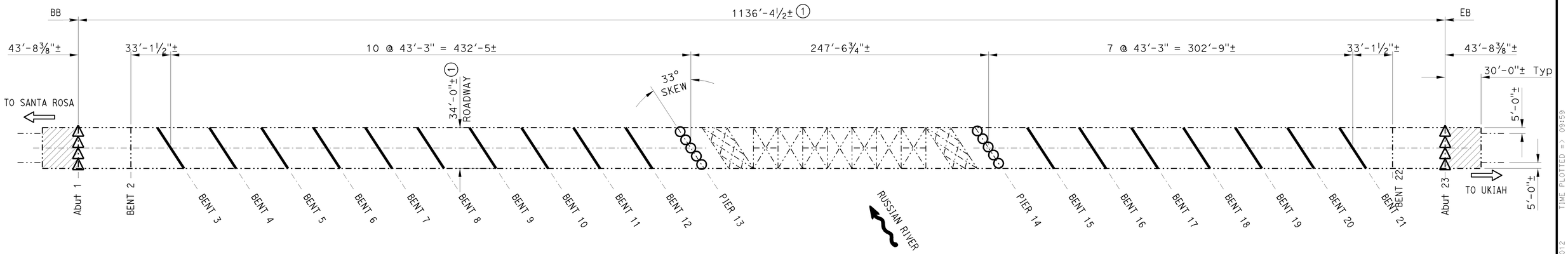
Indicates location of remove existing joint plate armor and place new bonded joint seal. For details, see "Typical Joint Armor Detail"on "JOINT SEAL DETAILS No. 1" sheet.

Indicates location of remove existing joint plate armor and place new joint seal. For details see "Typical Abutment Section" on "JOINT SEAL DETAILS No. 1" sheet.

(1) Indicates location of remove existing ¾" thick AC, repair deck, prepare concrete deck and place new ¾" thick polyester concrete overlay. See "Deck Repair Detail" on REPAIR DETAILS sheet.



ELEVATION



PLAN

N

RUSSIAN RIVER

BR No. 10-0082, Men, ROUTE 101, PM 9.24
1" = 40'

10-26-12 Michael J. Lee
DESIGN ENGINEER

DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD			
DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell		
QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No.	ROUTE 20, 29, 53, 101, 253 BRIDGES
VARIOUS	GENERAL PLAN No. 2
POST MILE	
VARIES	

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282
CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				2	12

FILE => 01-0a4301_02gp_02.dgn

USERNAME => s137477 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 09:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	12	21

REGISTERED CIVIL ENGINEER — 10-26-12 DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

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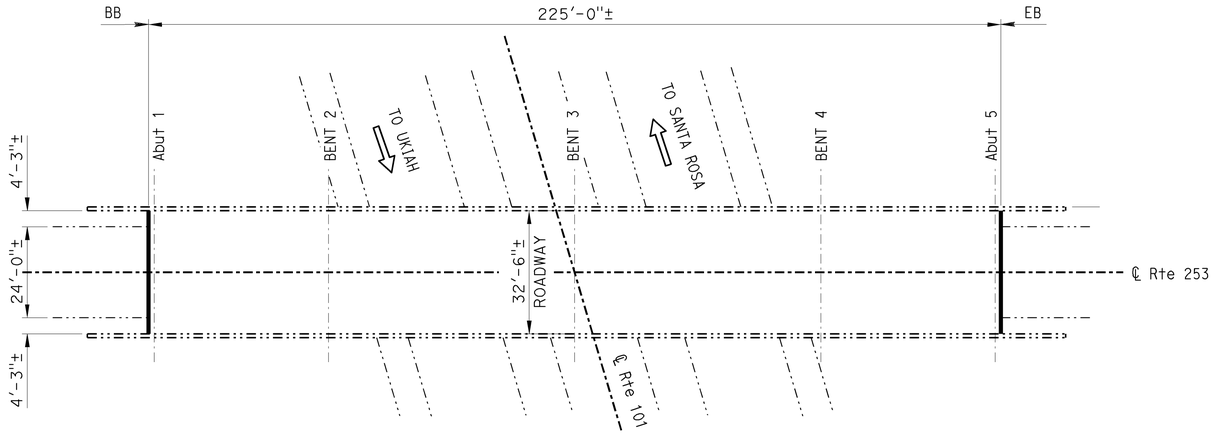


ROUTE 253/101 SEPARATION

BR No. 10-0186, Men, ROUTE 253, PM 17.16
1" = 20′

ROUTE 253/101 SEPARATION — BRIDGE NO 10-0186

QUANTITIES

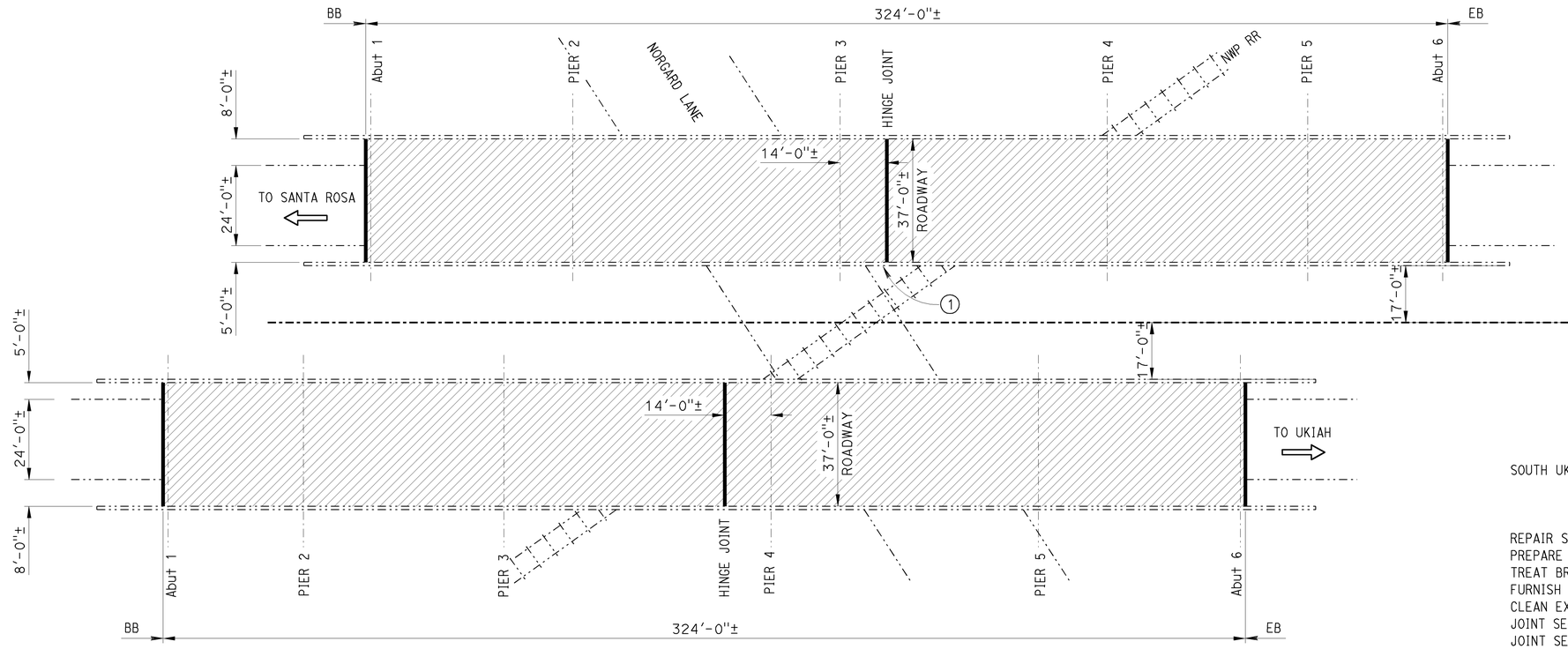
CLEAN EXPANSION JOINT	67 LF
JOINT SEAL (MR 1")	67 LF

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.

Indicates location of remove and clean existing joint seal and place new joint seal. For details see "Joint Seal Table" on "JOINT SEAL DETAILS No. 2" sheet.

(1) Indicates approximate location of repair spalled surface area at east side at bottom of Girder 6. For details, see "Spalled Surface Area Repair Detail" on "REPAIR DETAILS" sheet.



SOUTH UKIAH OVERHEAD

BR No. 10-0187L/R, Men, ROUTE 101, PM R22.16
1" = 20′

SOUTH UKIAH OVERHEAD — BRIDGE NO 10-0187L

QUANTITIES

REPAIR SPALLED SURFACE AREA	2 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	23,980 SQFT
TREAT BRIDGE DECK	23,980 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	266 GAL
CLEAN EXPANSION JOINT	226 LF
JOINT SEAL (MR 1")	150 LF
JOINT SEAL (MR 1½")	76 LF

10-26-12 Michael J. Lee
DESIGN ENGINEER

DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD			
DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell		
QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 3

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282
CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				3	12

FILE => 01-0a4301_03gp_03.dgn

USERNAME = s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 09:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	13	21

T J Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY J. POWELL
No. C 61037
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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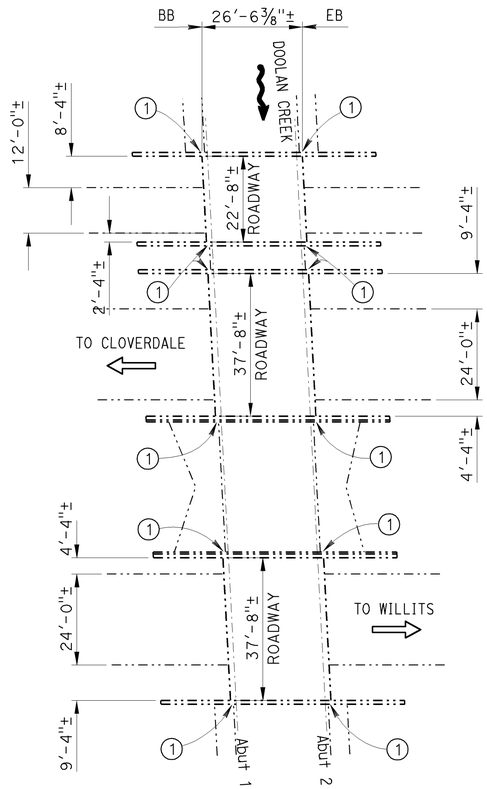
DOOLIN CREEK BRIDGE NO 10-0190K/L/R

QUANTITIES

INJECT CRACK (EPOXY)	24	LF
REPAIR SPALLED SURFACE AREA	3	SQFT



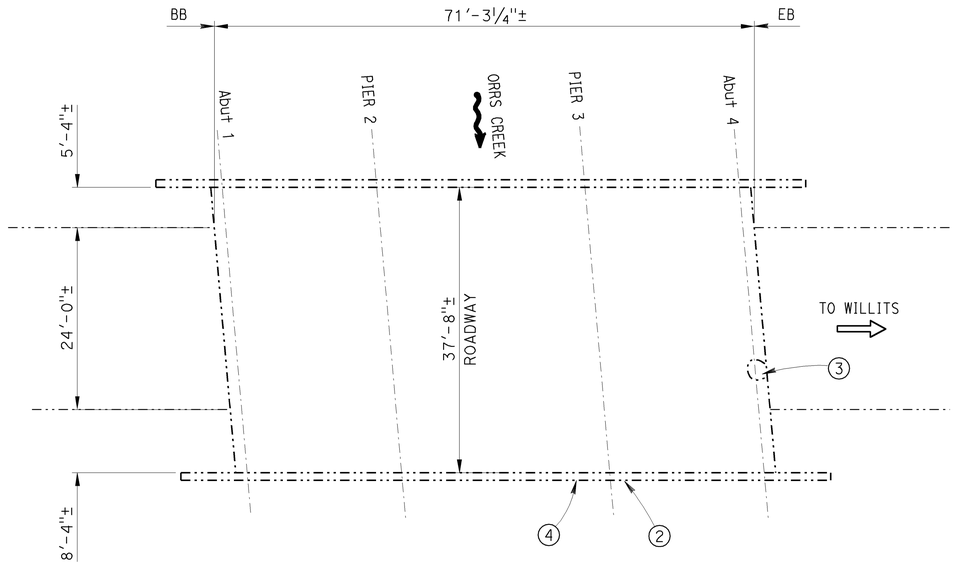
DOOLIN CREEK

BR No. 10-0190K/L/R, Men, ROUTE 101, PM R23.59
1″ = 20′

ORRS CREEK BRIDGE NO 10-0194R

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	1	CF
REPAIR SPALLED SURFACE AREA	4	SQFT
REMOVE UNSOUND CONCRETE	1	CF



ORRS CREEK

BR No. 10-0194R, Men, ROUTE 101, PM R25.01
1″ = 10′

NOTES: (APPLY TO THIS SHEET ONLY)

1. Indicates location of remove spalled concrete at the supports between the slab and abutments. Epoxy inject crack (Approx 24" long). Place rapid setting concrete over spalled area. For details, see "Spalled Surface Area Repair Detail" on REPAIR DETAILS sheet.
2. Indicates approximate location of repair 24" x 6" x 1" deep spall. Spall is located on the outside top of bridge deck on right side of span 3 near Pier 3. For details, see "Spalled Surface Area Repair Detail" on REPAIR DETAILS sheet.
3. Indicates approximate location of deck repair. For details, see "Deck Repair Detail" on "REPAIR DETAILS" sheet.
4. Indicates approximate location of repair 24" x 10" x 1" deep spall. Spall is located at the outside top edge of bridge railing on the right side of span 2 at Pier 3. For details, see "Spalled Surface Area Repair Detail" on REPAIR DETAILS sheet.

10-26-12 Michael J. Lee
DESIGN ENGINEER

DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD			
DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell		
QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 4

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				4	12

FILE => 01-0a4301_04gp_04.dgn

USERNAME => s137477 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 03:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	14	21

REGISTERED CIVIL ENGINEER — 10-26-12 DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

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PRESSWOOD OVERHEAD BRIDGE NO 10-0195L/R

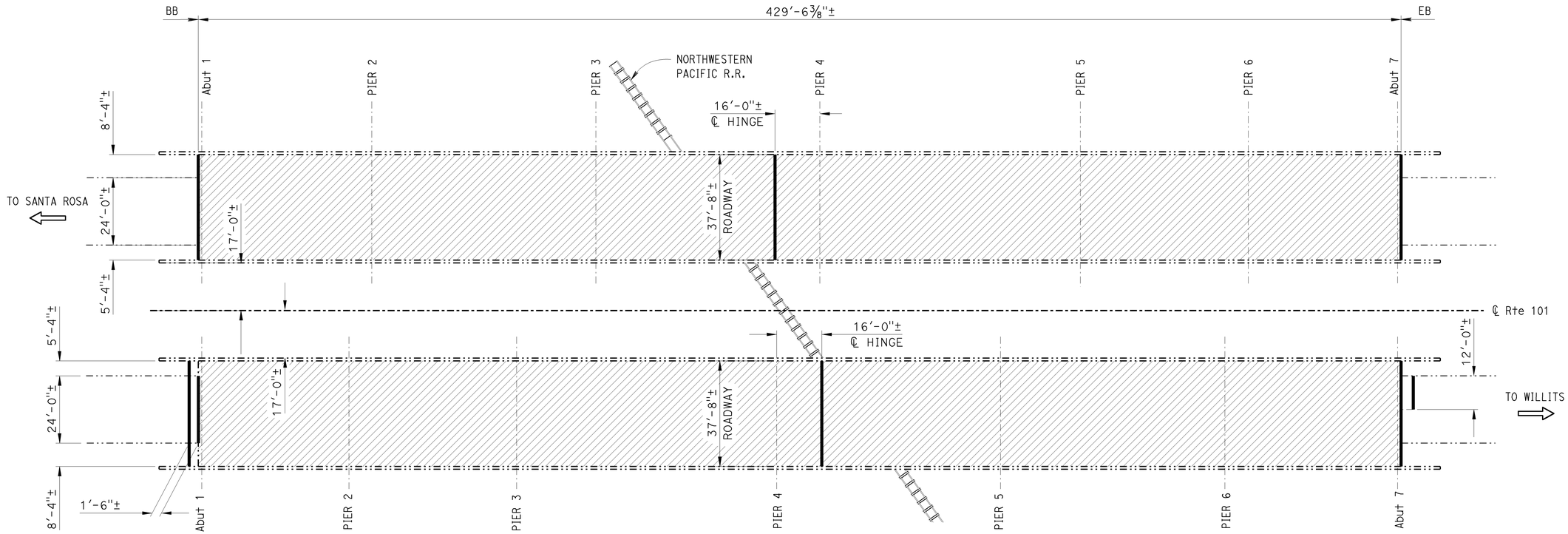
QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	32,360	SQFT
TREAT BRIDGE DECK	32,360	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	360	GAL
CLEAN EXPANSION JOINT	230	LF
JOINT SEAL (MR½")	52	LF
JOINT SEAL (MR 1")	139	LF
JOINT SEAL (MR 2")	76	LF

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.

Indicates location of remove and clean existing joint seal and place new joint seal. For details, see "Joint Seal Table" on JOINT SEAL DETAILS No. 2 sheet.



PRESSWOOD OVERHEAD

BR No. 10-0195L/R, Men, ROUTE 101, PM R25.72
1" = 20′

10-26-12 Michael J. Lee DESIGN ENGINEER	DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE No. VARIOUS	ROUTE 20, 29, 53, 101, 253 BRIDGES
	DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell			POST MILE VARIES	GENERAL PLAN No. 5
	QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X				

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				5	12

FILE => 01-0a4301_05gp_05.dgn

USERNAME = s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 09:59

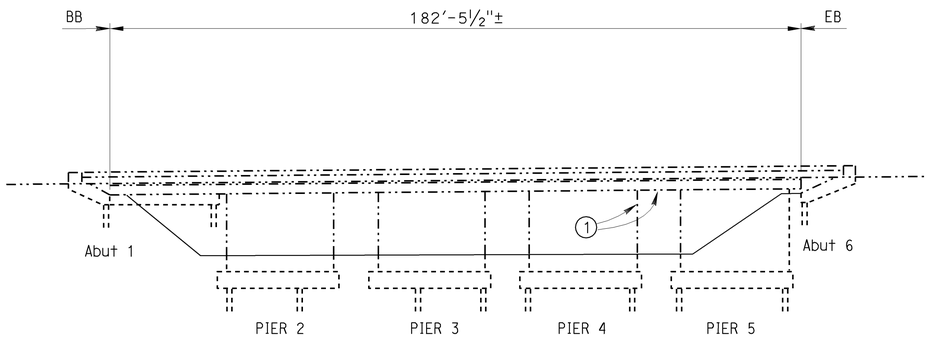
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	15	21

T J Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

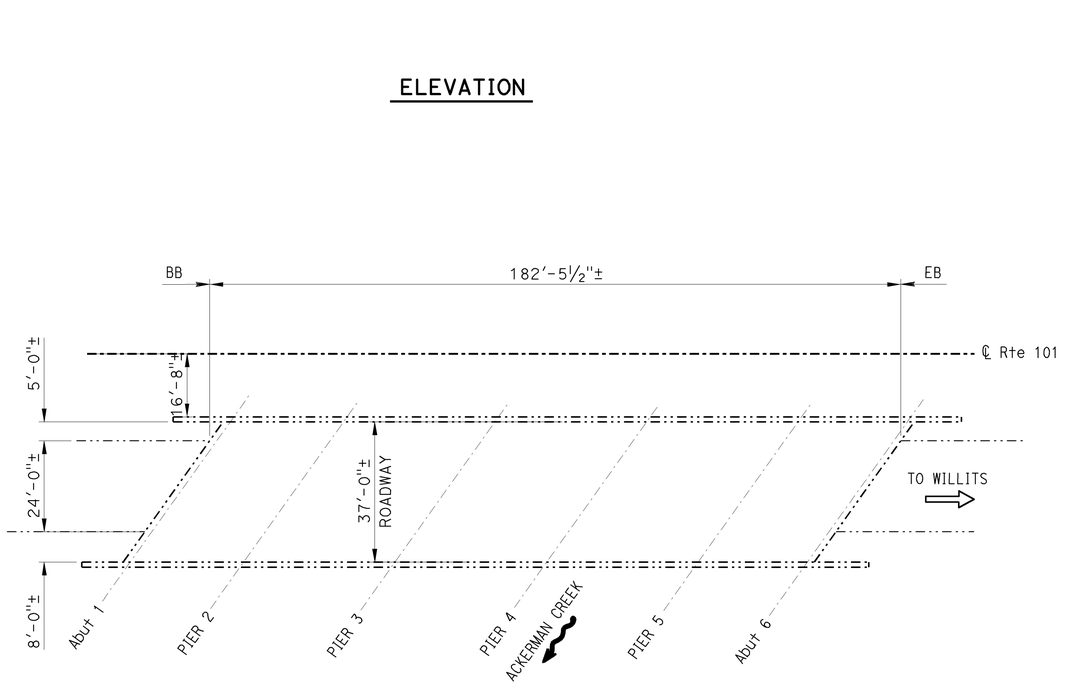
12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — 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 electronic copies of this plan sheet.



ELEVATION



PLAN

ACKERMAN CREEK

BR No. 10-0199R, Men, ROUTE 101, PM R26.66
1" = 20′

ACKERMAN CREEK — BRIDGE NO 10-0199R

QUANTITIES

REPAIR SPALLED SURFACE AREA	2	SQFT

ROUTE 101/20 SEPARATION — BRIDGE NO 10-0205L/R

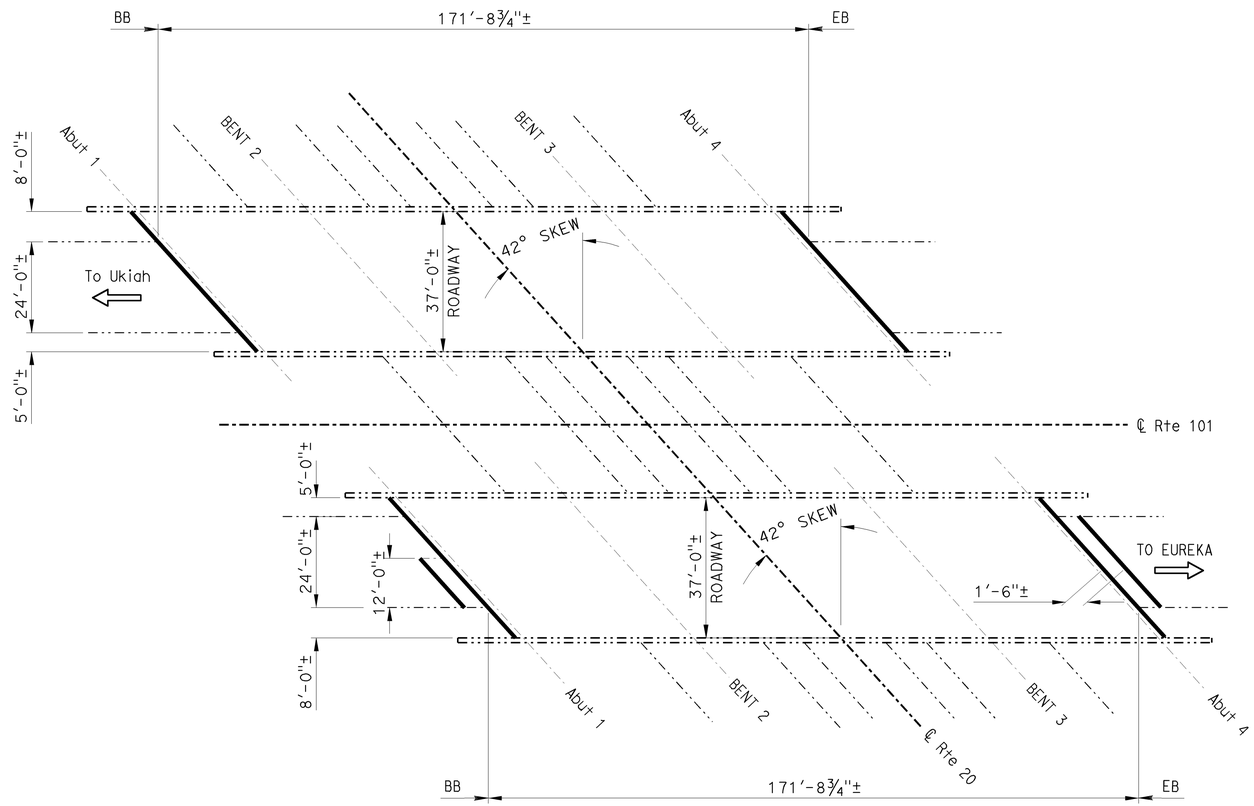
QUANTITIES

CLEAN EXPANSION JOINT	252	LF
JOINT SEAL (MR½")	51	LF
JOINT SEAL (MR 1")	202	LF

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates location of remove and clean existing joint seal and place new joint seal. For details see "Joint Seal Table" on "JOINT SEAL DETAILS No. 2" sheet.

(1) Indicates approximate location of repair spalled surface area at Girders 4 and 5 of span 4. For details, see "Spalled Surface Area Repair Detail" on "REPAIR DETAILS" sheet.



ROUTE 101/20 SEPARATION

BR No. 10-0205L/R, Men, ROUTE 101, PM R30.82
1" = 20′

10-26-12 Michael J. Lee DESIGN ENGINEER	DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
	DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell	
	QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X	

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 6

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282
CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
4-3-12				6	12

FILE => 01-0a4301_06gp_06.dgn

USERNAME => s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	16	21

T J Powell — 10-26-12
REGISTERED CIVIL ENGINEER — DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

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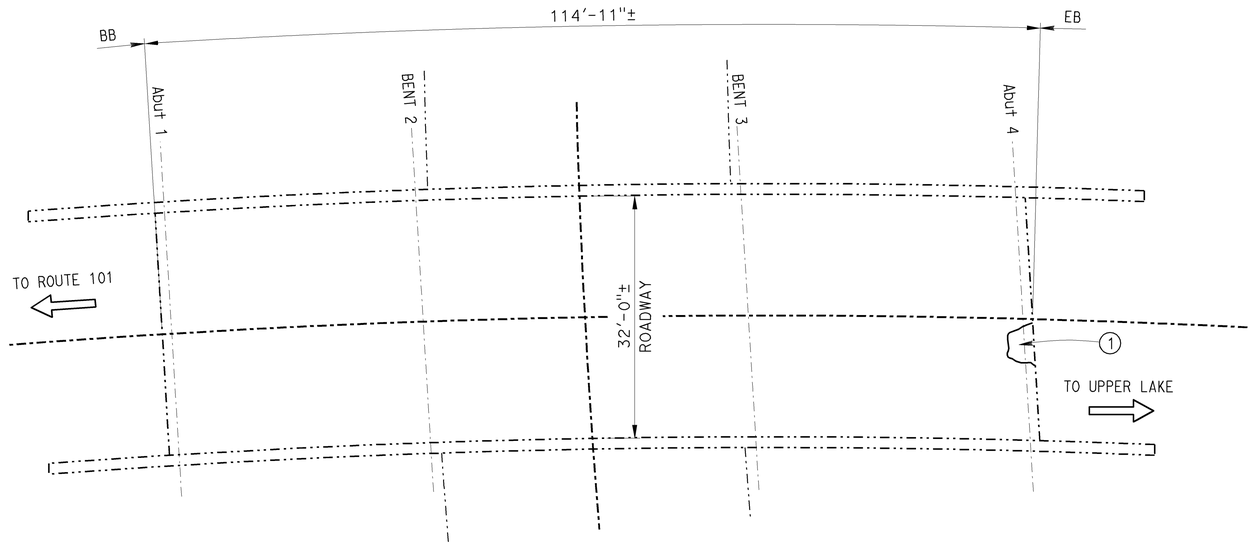


REDWOOD VALLEY UNDERCROSSING

BR No. 10-0183, Men, ROUTE 20, PM 33.77
1" = 10′

REDWOOD VALLEY UNDERCROSSING — BRIDGE NO 10-0183

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	1	CF
REMOVE UNSOUND CONCRETE	1	CF

HAEHL OVERHEAD — BRIDGE NO 10-0125

QUANTITIES

REPAIR SPALLED SURFACE AREA	2	SQFT

MORRISON CREEK — BRIDGE NO 14-0004

QUANTITIES

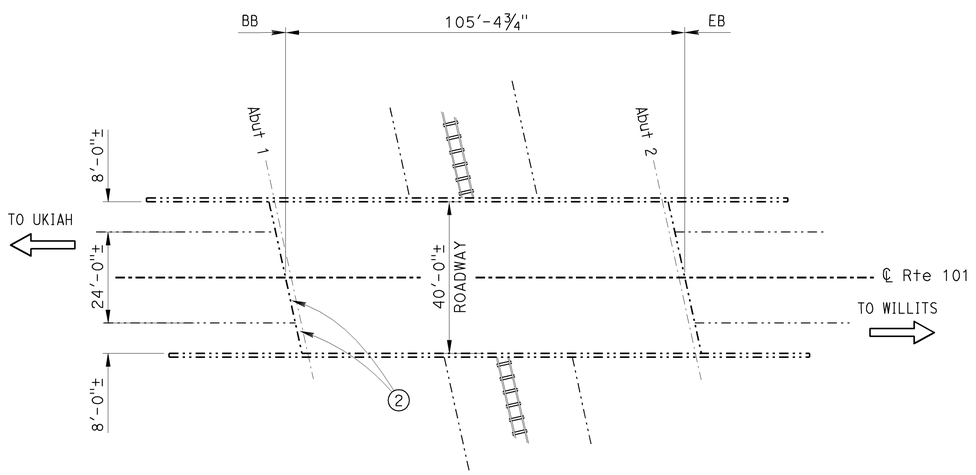
REMOVE ASPHALT CONCRETE SURFACING	100	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	1,860	SQFT
TREAT BRIDGE DECK	1,860	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	21	GAL

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.

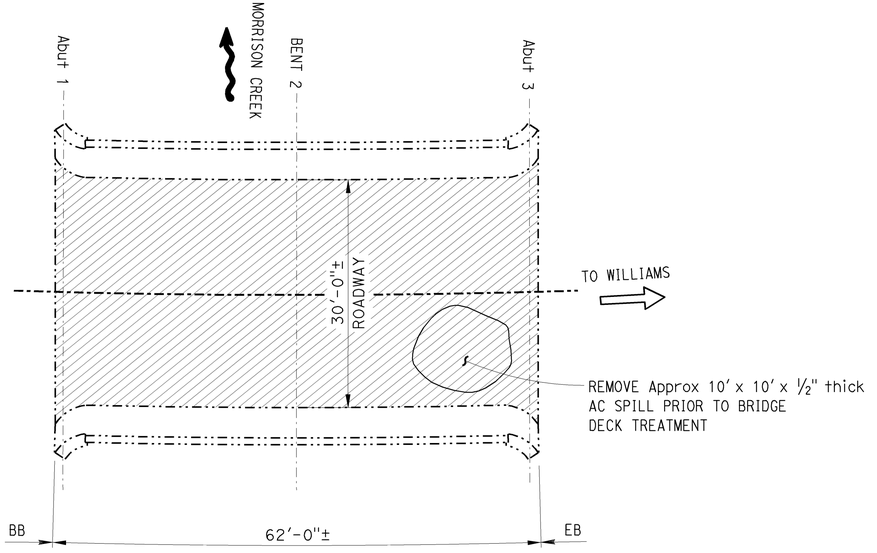
(1) Indicates approximate location of deck repair. See "Deck Repair Detail" on REPAIR DETAILS sheet.

(2) Indicates approximate location of repair spalled surface areas at Abutment 1 diaphragm. For details, see "Spalled Surface Area Repair Detail" on REPAIR DETAILS sheet.



HAEHL OVERHEAD

BR No. 10-0125, Men, ROUTE 101, PM T43.96
1" = 20′



MORRISON CREEK

BR No. 14-0004, Lak, ROUTE 20, PM 16.81
1" = 10′

10-26-12 Michael J. Lee DESIGN ENGINEER	DESIGN	BY T. Powell	CHECKED H. Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		
	DETAILS	BY M. Hallstrom	CHECKED H. Dang	LAYOUT	BY M. Hallstrom	CHECKED T. Powell	
	QUANTITIES	BY T. Powell	CHECKED H. Dang	SPECIFICATIONS	BY X	PLANS AND SPECS COMPARED X	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 7

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282
CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				7	12

FILE => 01-0a4301_07gp_07.dgn

USERNAME => s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	17	21

REGISTERED CIVIL ENGINEER — 10-26-12 DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

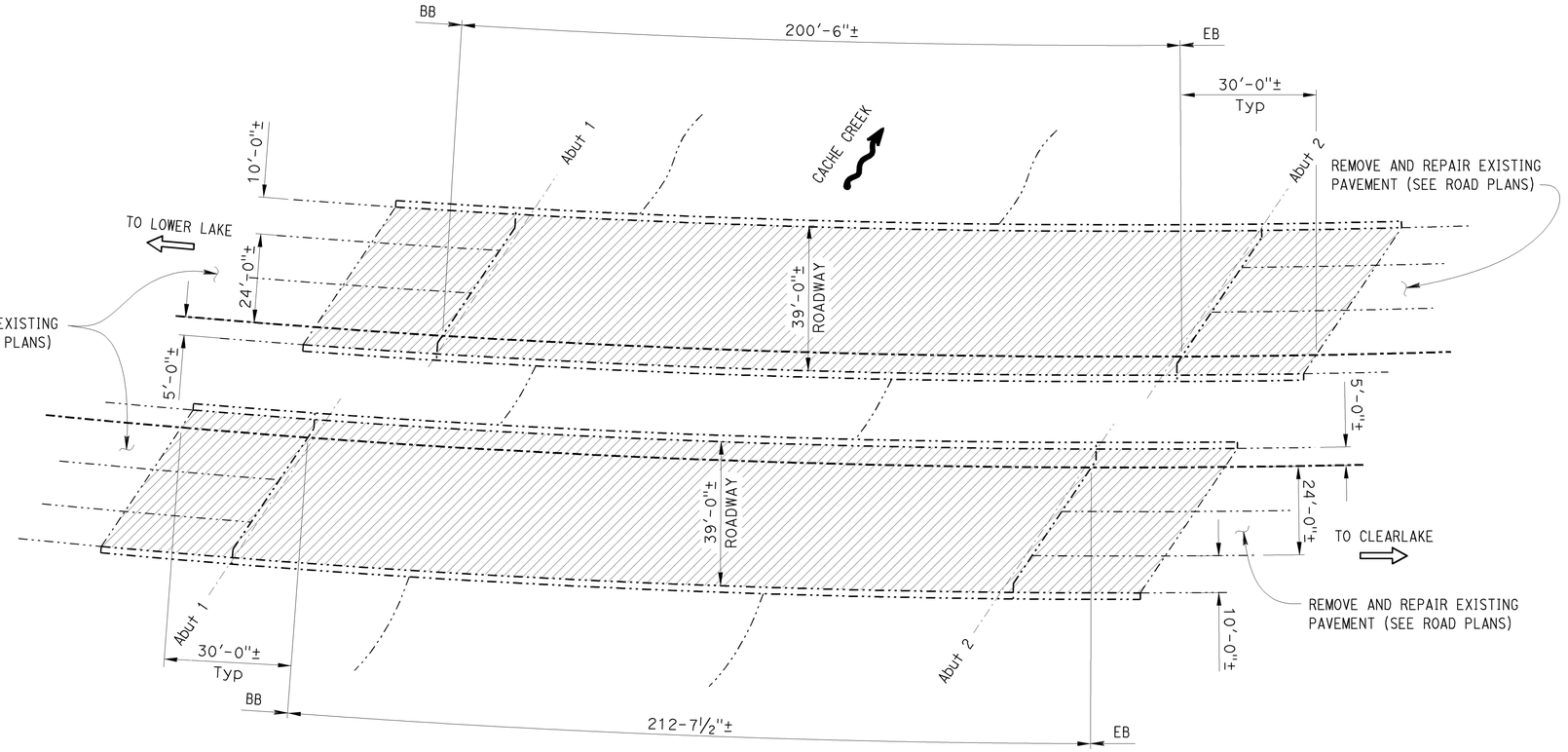
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare and treat bridge deck and structure approach slabs with high molecular weight methacrylate.

Indicates location of remove and clean existing joint seal and place new joint seal. For details, see "Joint Seal Table" on JOINT SEAL DETAILS No. 2 sheet.

(1) Indicates approximate location of repair spalled surface area in the corner of retrofit block of Abutment 1. Place rapid setting concrete over spalled area. For details, see "Spalled Surface Area Repair Detail" on REPAIR DETAILS sheet.



CACHE CREEK — BRIDGE NO 14-0078L/R

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	20,790	SQFT
TREAT BRIDGE DECK	20,790	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	231	GAL

CACHE CREEK

BR No. 14-0078 L/R, Lak, ROUTE 53, PM 1.0
1" = 20′

10-26-12 Michael J. Lee
DESIGN ENGINEER

	BY	CHECKED
DESIGN	T. Powell	H. Dang
DETAILS	M. Hallstrom	H. Dang
QUANTITIES	T. Powell	H. Dang

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

	BY	CHECKED
LAYOUT	M. Hallstrom	T. Powell
SPECIFICATIONS	X	PLANS AND SPECS COMPARED: X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
GENERAL PLAN No. 8

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
4-3-12	8	12

FILE => 01-0a4301_08gp_08.dgn

USERNAME => s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	18	21

T Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL No. C 61037 Exp. 12-31-12 CIVIL — STATE OF CALIFORNIA

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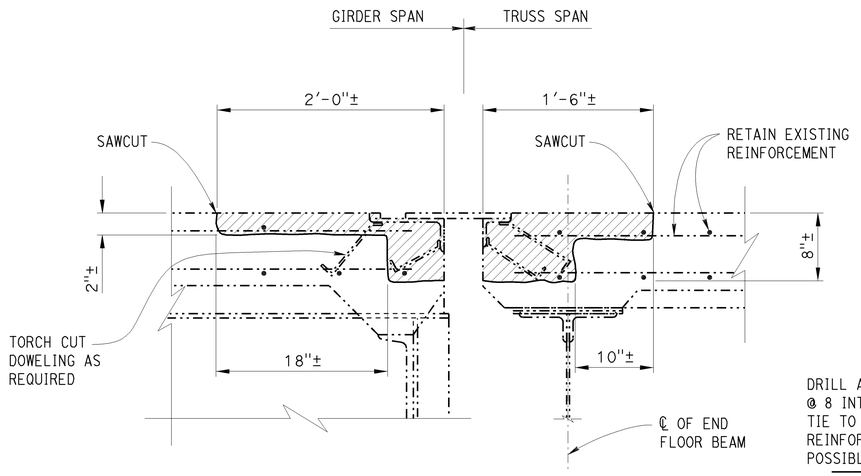
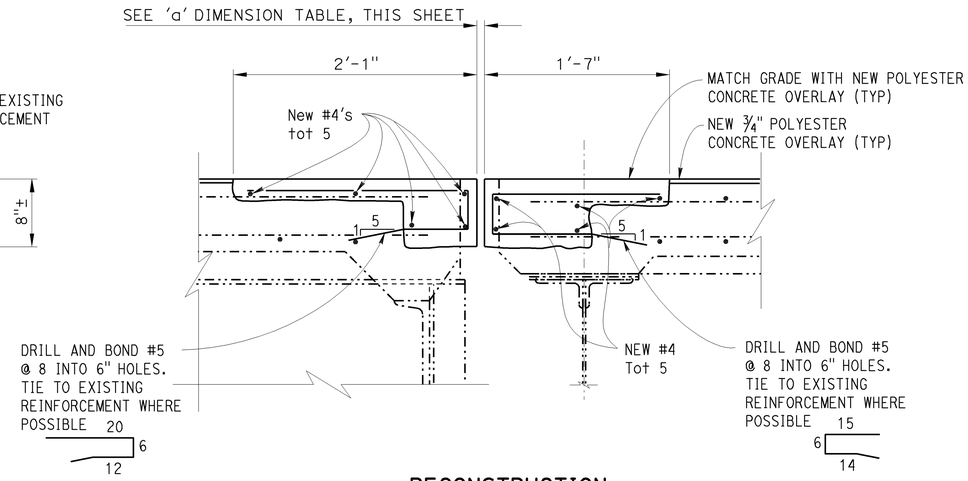
NOTES: (APPLY TO THIS SHEET ONLY)

Indicates location of remove concrete, reinforcement (UON) and joint armor.

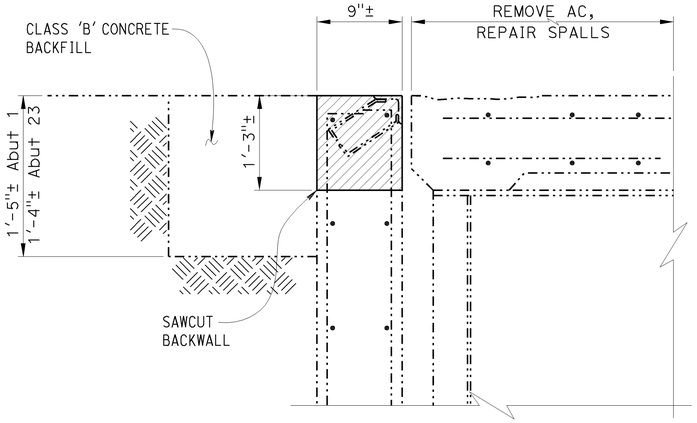


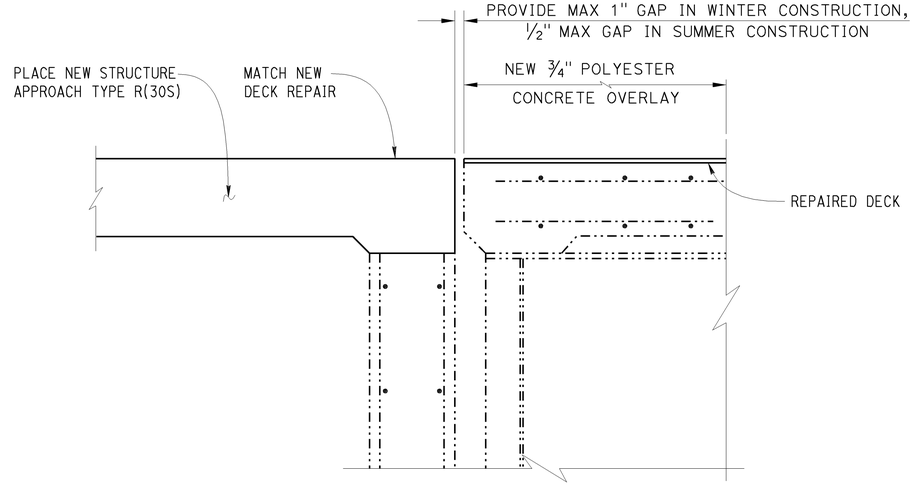


EXISTING **RECONSTRUCTION**

TYPICAL JOINT ARMOR DETAIL (PIERS 13 & 14)

BR No. 10-0082
1½" = 1'-0"





EXISTING **RECONSTRUCTION**

TYPICAL ABUTMENT SECTION (ABUTMENTS 1 & 23)

BR No. 10-0082
1½" = 1'-0"

GENERAL NOTES LOAD FACTOR DESIGN

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1996 AASHTO with Interims and Revisions by CALTRANS)

LIVE LOADING: HS20-44 and alternative and permit design load

REINFORCED CONCRETE: f_y = 60 ksi
f'_c = 3600 psi
n = 8

'a' Dimension (in)			
Temp F	MR=1	MR=1½	MR=2
12	2	2½	2¾
38	1⅝	2	2½
63	1½	1½	1¾
89	1	1	1¼
114	¾	¾	¾

DESIGN	BY T. Powell	CHECKED H. Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE No. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED H. Dang			POST MILE VARIES
QUANTITIES	BY T. Powell	CHECKED H. Dang			

ROUTE 20, 29, 53, 101, 253 BRIDGES
JOINT SEAL DETAILS No. 1

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				9	12

FILE => 01-0a4301_09jointseal_dets01_10.dgn

USERNAME => s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	20,29,53, Var 101,253	Var	19	21

T Powell — 10-26-12
REGISTERED CIVIL ENGINEER — DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL — No. C 61037 — Exp. 12-31-12 — CIVIL — STATE OF CALIFORNIA

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JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (inches)	APPROXIMATE LENGTH (feet)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXPANSION JOINT (inches)
ASH CREEK	10-0088Y	Abut 1	BW	1**	35.0	No	48.0
		Bent 2	℄	1**	35.0	No	48.0
		Bent 3	℄	1**	35.0	No	48.0
		Bent 4	℄	1**	35.0	No	48.0
		Abut 5	BW	1**	35.0	No	48.0
RUSSIAN RIVER	10-0082	Abut 1	BW	1/2	35.0	No	12.0
		Pier 13	℄	1 1/2Δ	42.0	No	12.0
		Pier 14	℄	1 1/2Δ	42.0	No	12.0
		Abut 23	BW	1/2	35.0	No	12.0
ROUTE 253/101 SEPARATION	10-0186	Abut 1	BW	1*	33.5	No	12.0
		Abut 5	BW	1*	33.5	No	12.0
SOUTH UKIAH OVERHEAD	10-0187L	Abut 1	BW	1*	37.5	No	12.0
		H	H	1 1/2*	37.5	No	12.0
		Abut 6	BW	1*	37.5	No	12.0
SOUTH UKIAH OVERHEAD	10-0187R	Abut 1	BW	1*	37.5	No	12.0
		H	H	1 1/2*	37.5	No	12.0
		Abut 6	BW	1*	37.5	No	12.0
PRESSWOOD OVERHEAD	10-0195L	Abut 1	BW	1*	38.2	No	12.0
		Span 3	H	2*	38.2	No	12.0
		Abut 7	BW	1*	38.2	No	12.0
PRESSWOOD OVERHEAD	10-0195R	Abut 1	BW / PN	1* / 1/2	24.0 / 38.2	No	12.0
		Span 4	H	2*	38.2	No	12.0
		Abut 7	BW / PN	1* / 1/2	38.2 / 13.6	No	12.0
ROUTE 101/20 SEPARATION	10-0205L	Abut 1	BW	1	50.5	No	12.0
		Abut 4	BW	1	50.5	No	12.0
ROUTE 101/20 SEPARATION	10-0205R	Abut 1	BW / PN	1 / 1/2	50.5 / 13.6	No	12.0
		Abut 4	BW / PN	1 / 1/2	50.5 / 32.3	No	12.0

LEGEND:
BW = Backwall
H = Hinge
PN = Paving Notch
℄ = Center Line of Pier.
* = Use B seal only.
** = Asphaltic Plug. See Detail this page.
Δ = Bonded joint seal only.

The following note applies to JOINT SEAL TYPE A:

Install Type A joint 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 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.

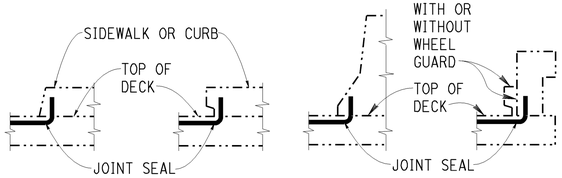
3) W1 shall be the smaller of the values determined as follows:

   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 Type B joint seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.

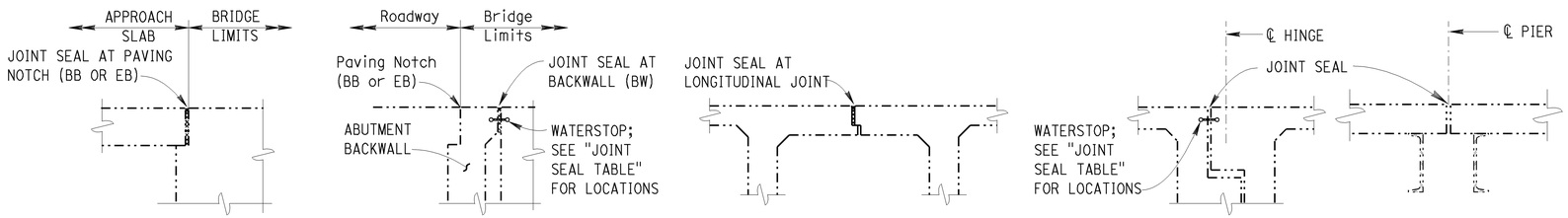
5) For details not shown see B6-21



SIDEWALK OR CURB — BARRIER RAIL

JOINT SEAL AT LOW SIDE OF DECK

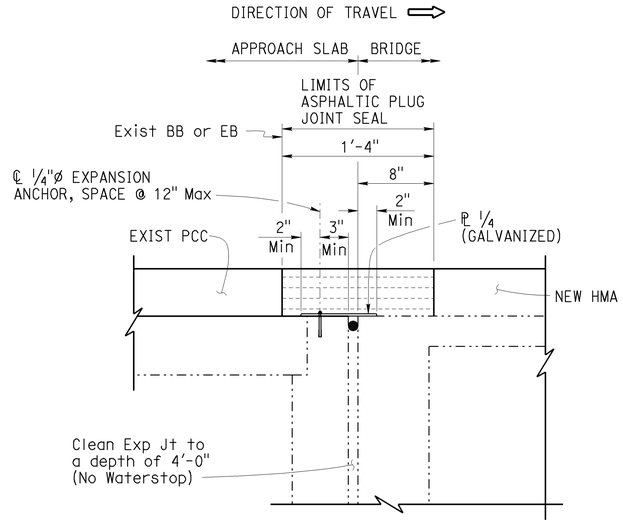
DETAILS SHOWN FOR ILLUSTRATION PURPOSES ONLY. FOR USE ONLY WHERE DECK JOINT MATCHES THE BARRIER RAIL JOINT.
NO SCALE



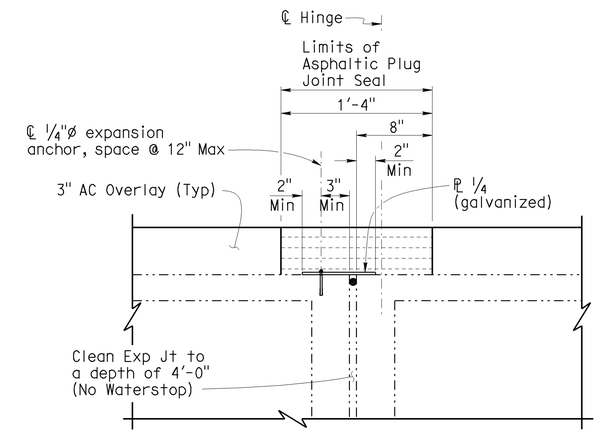
DIAPHRAGM ABUTMENT — ABUTMENT WITH BACKWALL — LONGITUDINAL JOINT — HINGE — PIER

JOINT SEAL LOCATION

NO SCALE



SECTION AT ABUTMENT



SECTION AT BENT

ASPHALTIC PLUG DETAIL

BR No. 10-0088Y
1 1/2" = 1'-0"

DESIGN	BY T. Powell	CHECKED H. Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE No. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED H. Dang			POST MILE VARIES
QUANTITIES	BY T. Powell	CHECKED H. Dang			

ROUTE 20, 29, 53, 101, 253 BRIDGES
JOINT SEAL DETAILS No. 2

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-3-12				10	12

FILE => 01-0a4301_10jointseal_dets02_10.dgn

USERNAME => s137417 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	20	21

T Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY J. POWELL
No. C 61037
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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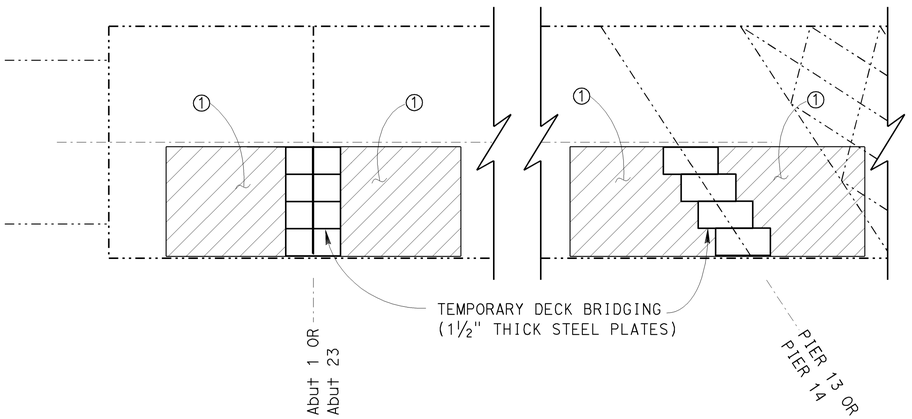
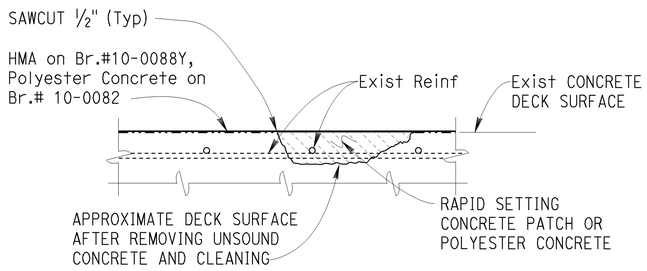


CONCRETE TAPER DETAIL

NO SCALE

Note:

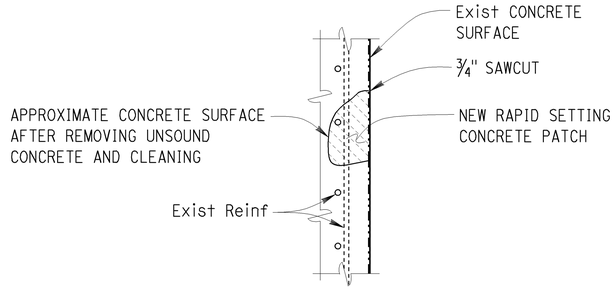
① Place tapered 200:1 (leading / trailing edge = ½" thick Max) rigid pavement material at approach and departure of construction.



DECK REPAIR DETAIL

REINFORCEMENT MAY BE ENCOUNTERED
DURING DECK CONCRETE REMOVAL.
NO SCALE

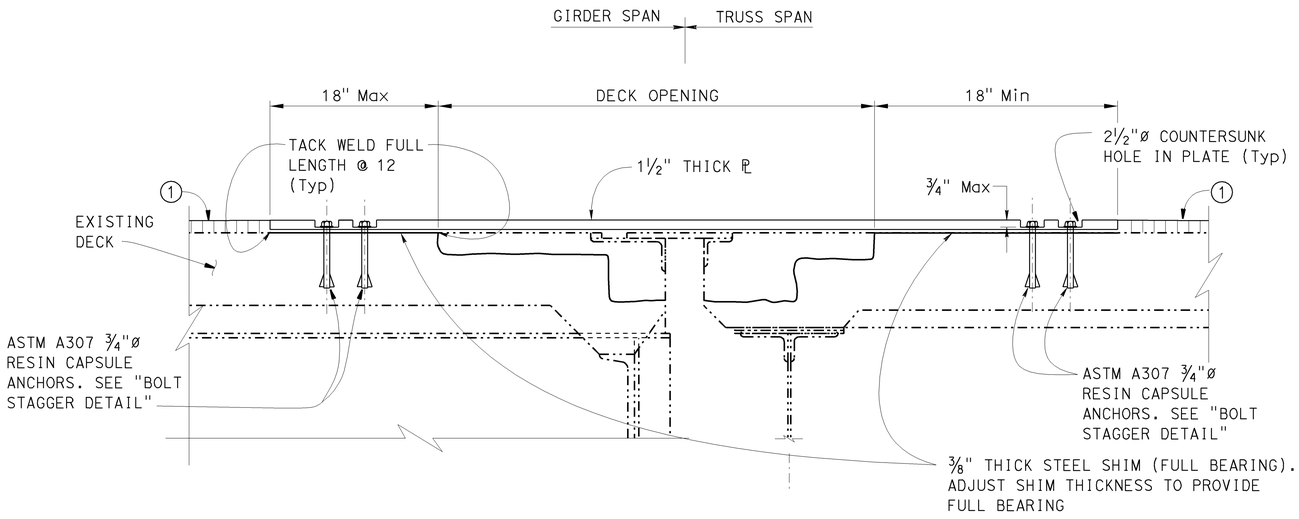
DECK REPAIR TABLE		
BRIDGE #	LOCATION	APPROXIMATE VOLUME (ft^3)
10-0088Y	Abutment 1	1
10-0082	Various locations over concrete portion of deck	505
10-0194R	Abutment 4	1
10-0183	Abutment 4	1



SPALLED SURFACE AREA REPAIR DETAIL

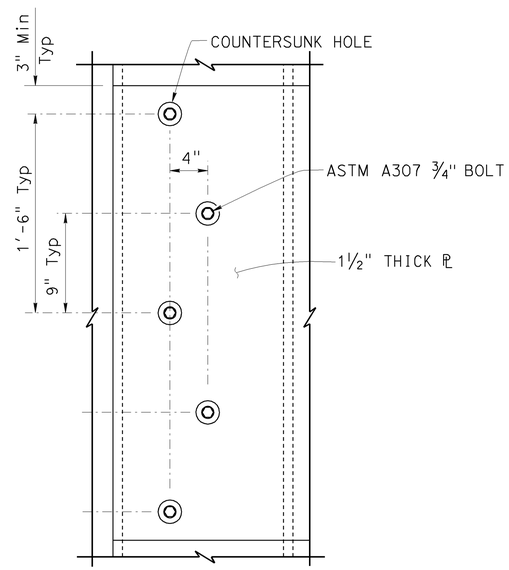
REINFORCEMENT MAY BE ENCOUNTERED
DURING CONCRETE REMOVAL.
NO SCALE

SPALLED SURFACE AREA REPAIR TABLE		
BRIDGE #	LOCATION	APPROXIMATE AREA (ft^2)
10-0088Y	Bent 2, Column 3	2
	Bent 3, Column 2	2
	Bent 3, Cap	2
10-0187L	Girder 6, Bottom	2
10-0190K	Both abutments, Both ends	1
10-0190L	Both abutments, Both ends	1
10-0190R	Both abutments, Both ends	1
10-0194R	Right side, Span 3	2
	Right side, Span 2	2
10-0199R	Span 4, Girders 4 & 5	2
10-0125	Between bays 5 & 6	1
	Between bays 4 & 5	1
14-0016	Retrofit block, Abut 1	1



TEMPORARY DECK PLATE CONNECTION

BR No. 10-0082
1½" = 1'-0"



BOLT STAGGER DETAIL

1½" = 1'-0"

TEMPORARY DECK PLATE LOAD CRITERIA		
MOMENT DEMAND/FOOT (kips-ft/ft)	BOLT SHEAR/FOOT (kips/ft)	BOLT TENSION (kips)
5.20	8.0	8.0

Plate deflection shall not exceed s/300 (s = span of plate).
Maximum anchor bolt spacing = 0'-9".

DESIGN	BY T. Powell	CHECKED H. Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE No. VARIOUS
DETAILS	BY M. Hallstrom	CHECKED H. Dang			POST MILE VARIES
QUANTITIES	BY T. Powell	CHECKED H. Dang			

ROUTE 20, 29, 53, 101, 253 BRIDGES
REPAIR DETAILS

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282 CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
4-3-12				11	12

FILE => 01-0a4301_11deckrepair_dets_11.dgn

USERNAME => s137477 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:00

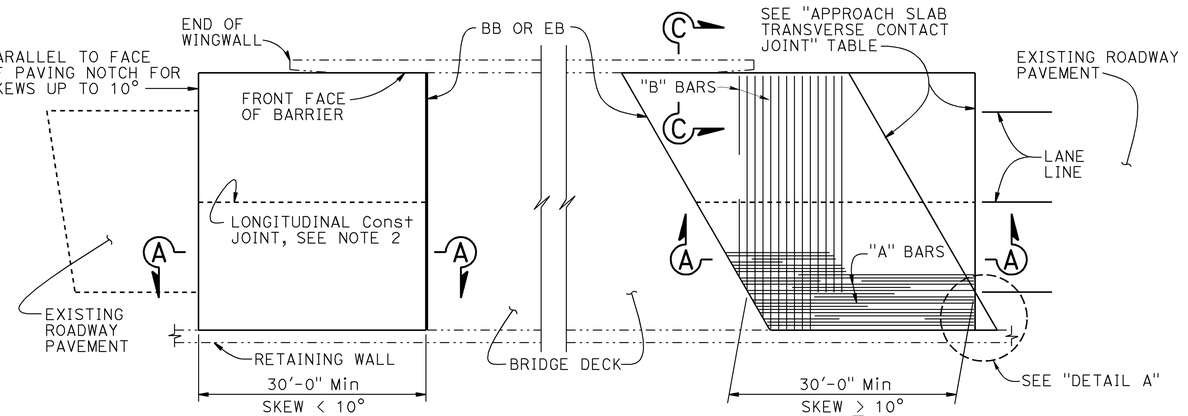
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men,Lak	Var	Var	21	21

T J Powell 10-26-12
REGISTERED CIVIL ENGINEER DATE

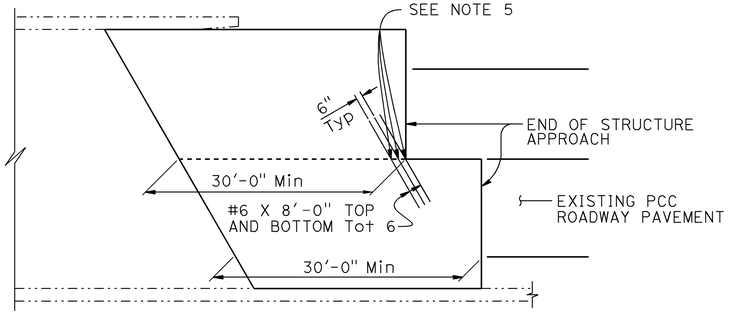
12-7-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY J. POWELL No. C 61037 Exp. 12-31-12 CIVIL — STATE OF CALIFORNIA

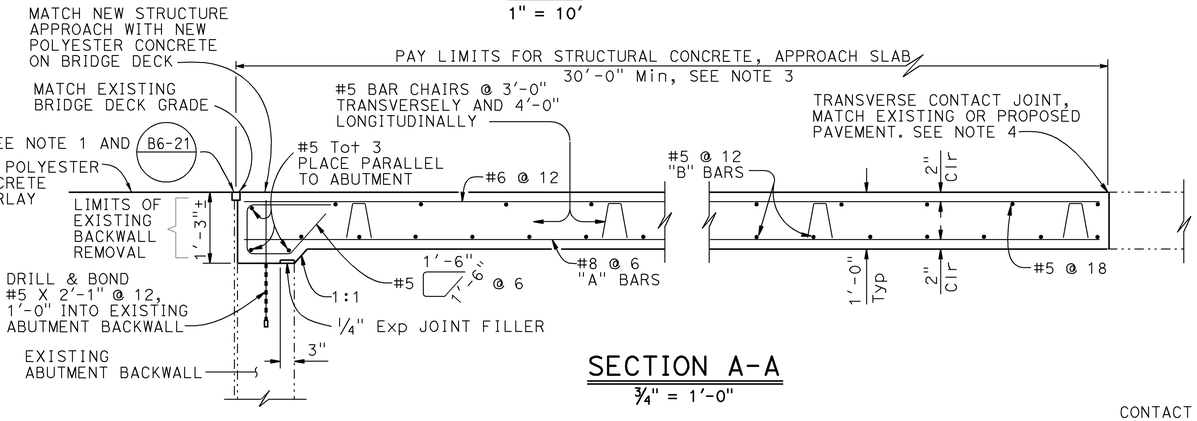
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



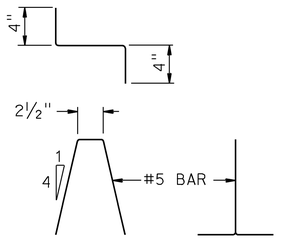
PLAN
1" = 10'



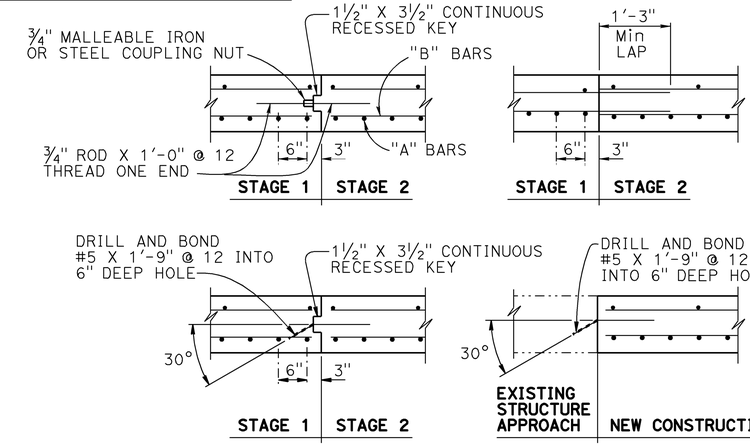
STRUCTURE APPROACH - END STAGGER DETAIL
NO SCALE

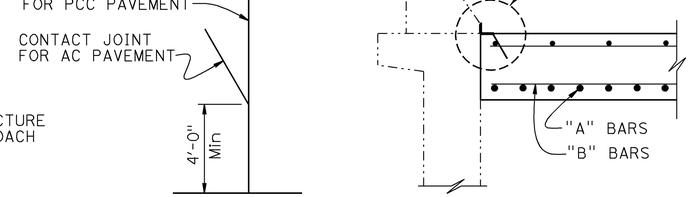


SECTION A-A
¾" = 1'-0"



BAR CHAIR DETAIL
1½" = 1'-0"

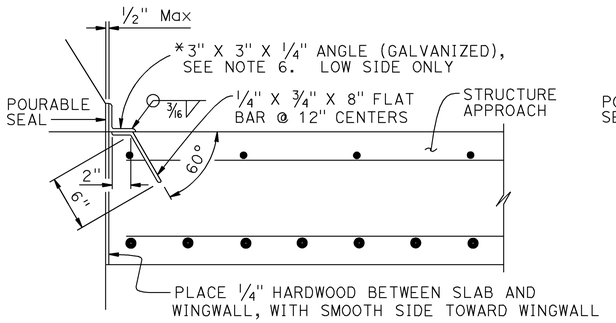




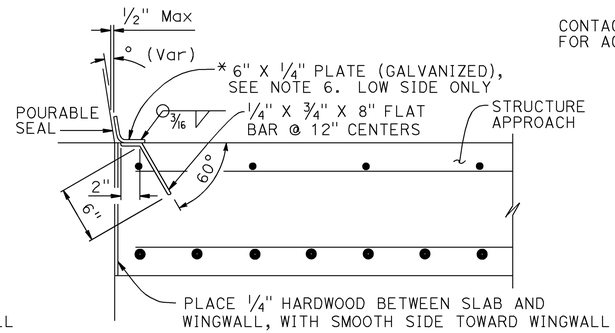
DETAIL A
No Scale

SECTION C-C
¾" = 1'-0"

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



*(TO BE USED WITH CONCRETE BARRIER WITH VERTICAL FACE)



*(TO BE USED WITH CONCRETE BARRIER WITH SLOPING FACE)

DETAIL B
1½" = 1'-0"

APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PN
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE

NOTES:
1. Sealed joint,for MR see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
2. Longitudinal construction joints, when permitted by Engineer, shall be located on lane lines
3. Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
4. For transverse contact joint with new PCC paving, refer to Standard Plan P10
5. Couplers are required for stage construction
6. End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

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

STANDARD DRAWING
FILE No. xs3-130
APPROVAL DATE July 2011

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE No. VARIOUS
POST MILE VARIES

ROUTE 20, 29, 53, 101, 253 BRIDGES
STRUCTURE APPROACH TYPE R(30S)

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3488
PROJECT NUMBER & PHASE: 0100020282
CONTRACT NO.: 01-0A4301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
4-5-12				12	12

FILE => 01-0a4301_12xs3-130.dgn

USERNAME => s1137477 DATE PLOTTED => 16-NOV-2012 TIME PLOTTED => 10:01