

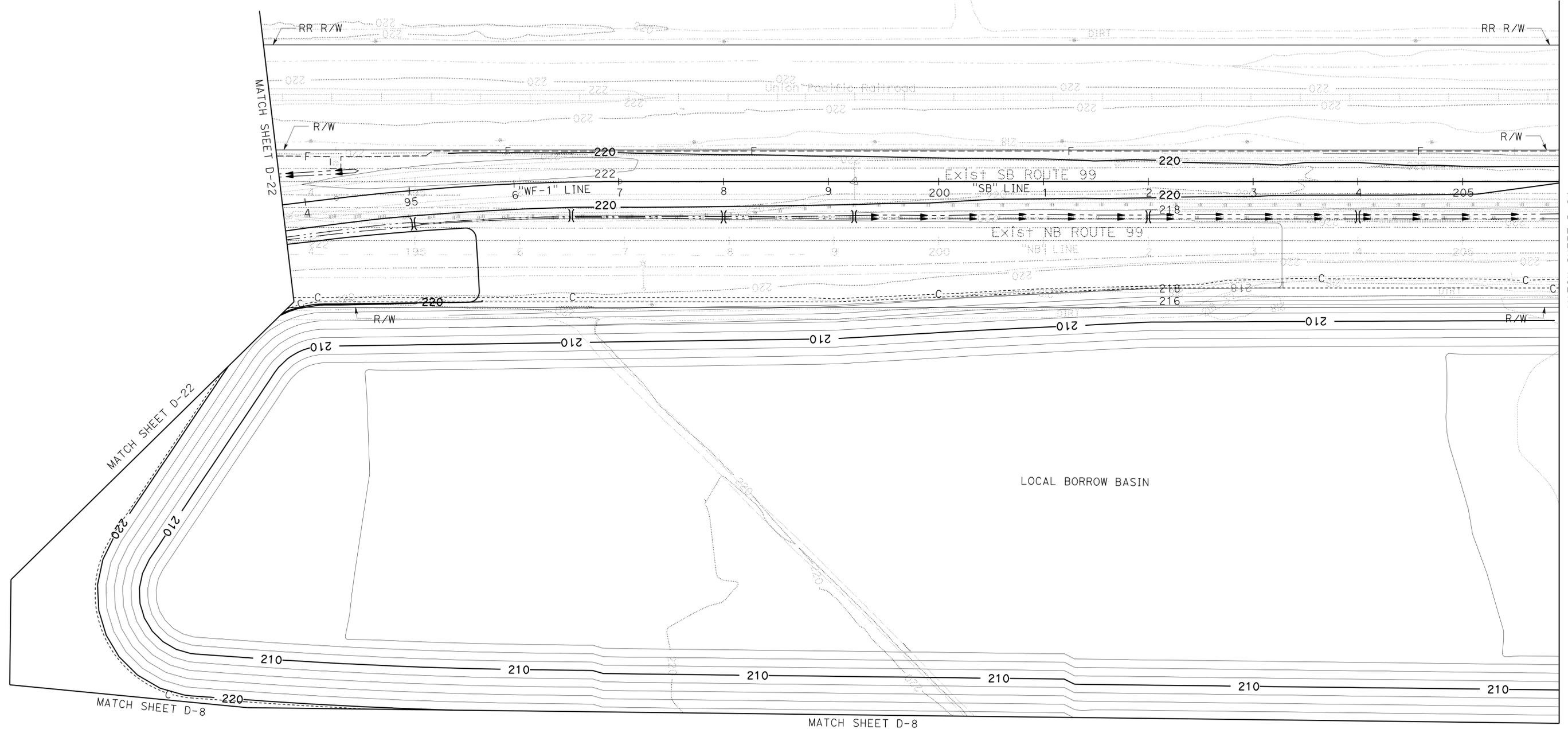
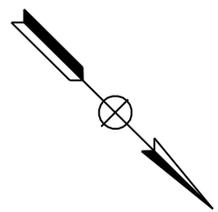
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	155	607

<i>Chris Gardner</i>	4-26-10
REGISTERED CIVIL ENGINEER	DATE
11-1-10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	CHRIS GARDNER
No. C60348	
Exp. 6-30-10	
CIVIL	

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

NOTE:
FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	06-DESIGN
Caltrans	
FUNCTIONAL SUPERVISOR	BORIS AYAVIRI
CALCULATED/DESIGNED BY	CHECKED BY
ANONH SENGMYA	MARIO JARAMILLO
REVISOR BY	DATE REVISED

THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING WORK ONLY.

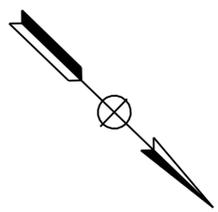


REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

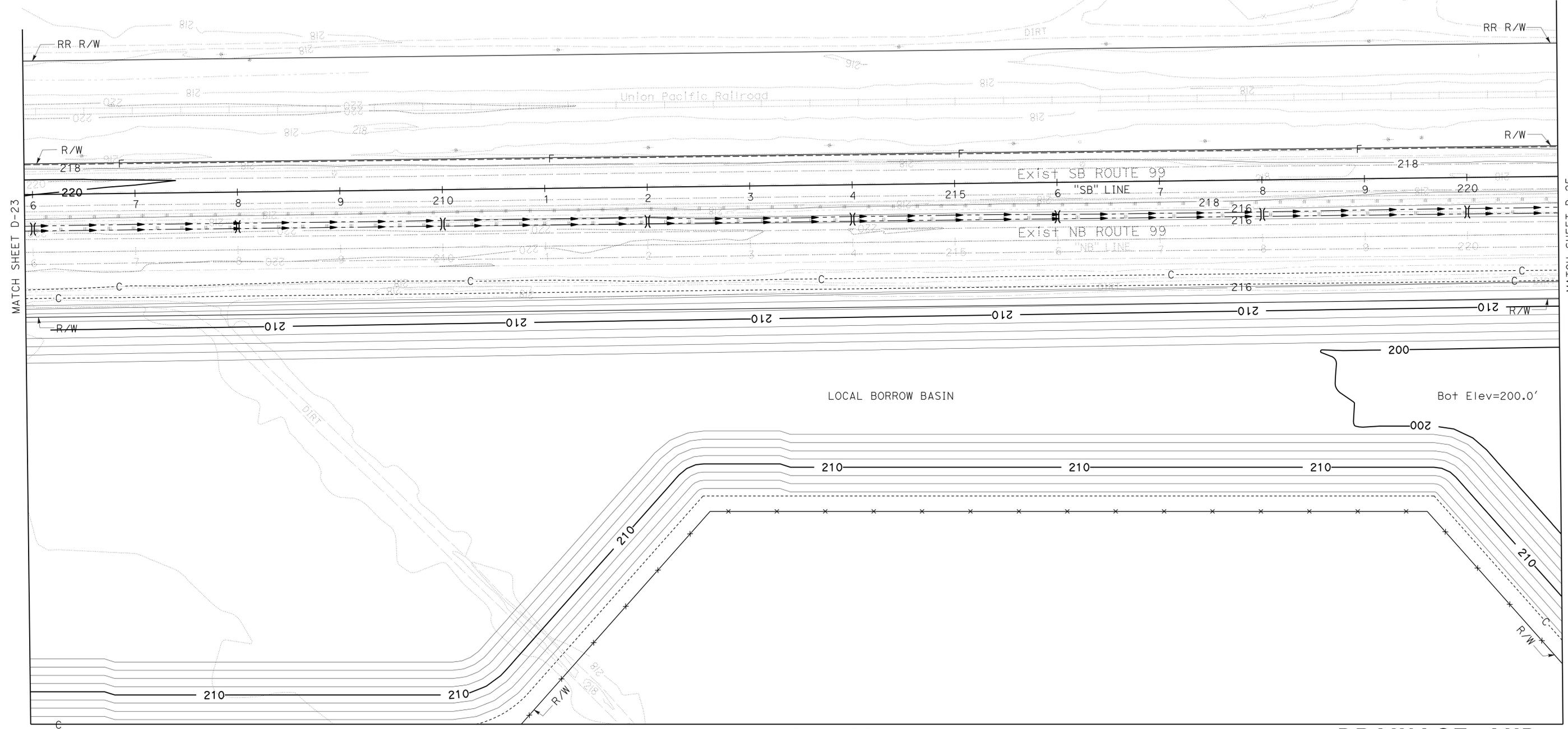
SCALE: 1" = 50' **D-23**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	156	607
<i>Chris Gardner</i> REGISTERED CIVIL ENGINEER			4-26-10 DATE		
11-1-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTE:
 FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans 06-DESIGN
 FUNCTIONAL SUPERVISOR: BORIS AYAVIRI
 CALCULATED/DESIGNED BY: ANONH SENGMYA
 CHECKED BY: MARIO JARAMILLO
 REVISED BY: DATE REVISOR
 REVISOR: DATE REVISOR



3 REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING WORK ONLY.

**DRAINAGE AND
 CONTOUR GRADING
 PLAN**

SCALE: 1"=50'

D-24

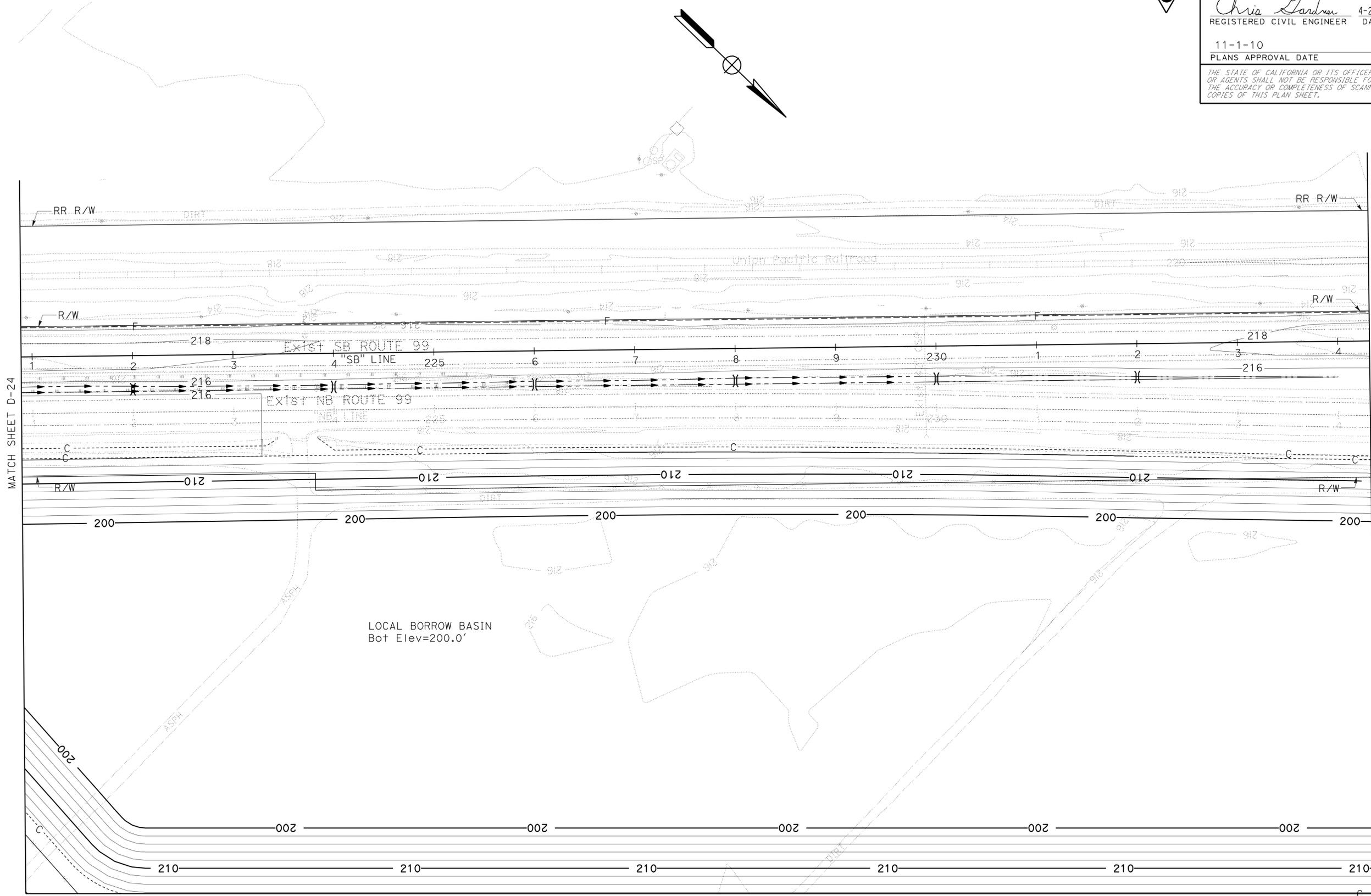
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	157	607

<i>Chris Gardner</i>	4-26-10
REGISTERED CIVIL ENGINEER	DATE
11-1-10	
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 ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

3



MATCH SHEET D-24

MATCH SHEET D-26

MATCH SHEET D-10

3 REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

DRAINAGE AND CONTOUR GRADING PLAN

SCALE: 1" = 50'

D-25

THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans 06-DESIGN
 FUNCTIONAL SUPERVISOR: BORIS AYAVIRI
 CALCULATED/DESIGNED BY: ANONH SENGMYA
 CHECKED BY: MARIO JARAMILLO
 REVISED BY: ANONH SENGMYA
 DATE REVISED: MARIO JARAMILLO

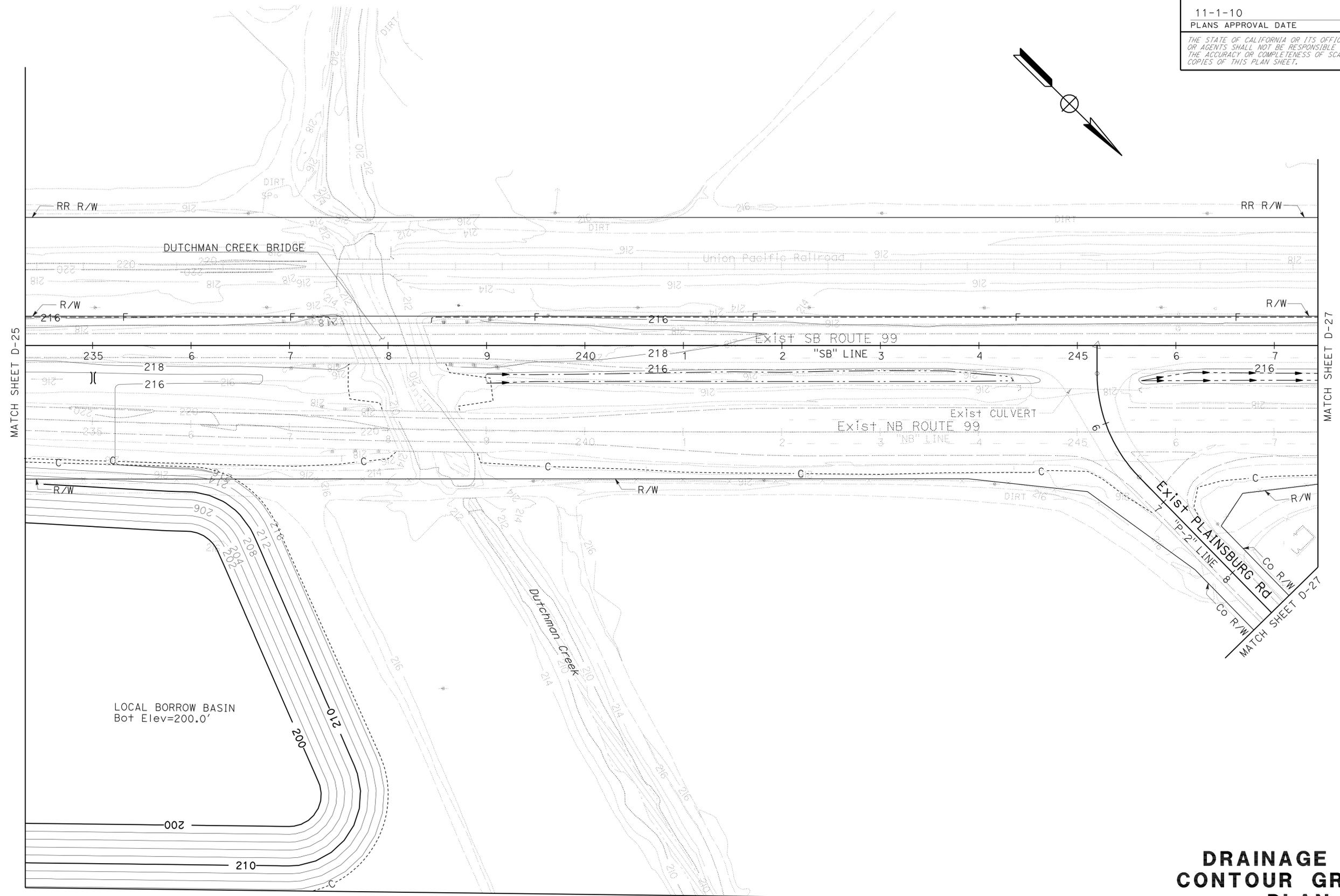
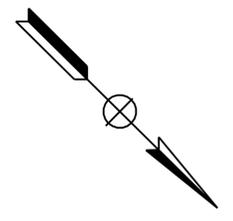
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	158	607

<i>Chris Gardner</i>	06-28-10
REGISTERED CIVIL ENGINEER	DATE
11-1-10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
CHRIS GARDNER
No. C60348
Exp. 6-30-12
CIVIL

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NOTE:
FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	BORIS AYAVIRI	CHECKED BY	ANONH SENGMYA
06-DESIGN			MARIO JARAMILLO
			DATE REVISOR

MATCH SHEET D-11
3 REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012
 THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING WORK ONLY. SCALE: 1" = 50' **D-26**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	391	607

Chris Gardner 06-28-10
 REGISTERED CIVIL ENGINEER DATE

11-1-10
 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
CHRIS GARDNER
 No. C60348
 Exp. 6-30-12
 CIVIL



- NOTES:**
1. Vol INCLUDED IN "A" LINE Qty (STAGE II - PHASE I) & CUL-DE-SAC Qty (THIS STAGE AND PHASE)
 2. Vol INCLUDED IN "A" & "F" LINE Qty (THIS STAGE AND PHASE)
 3. Vol INCLUDED IN "A" LINE Qty (THIS STAGE AND PHASE) UNLESS OTHERWISE NOTED
 4. Vol INCLUDED IN "A" LINE Qty (STAGE II - PHASE II)
 5. Vol INCLUDED IN "WF-1", "WF-2" & "SB" LINE Qty (THIS STAGE AND PHASE) UNLESS OTHERWISE NOTED
 6. Vol INCLUDED IN "WF-1" & "WF-2" LINE Qty (THIS STAGE AND PHASE) UNLESS OTHERWISE NOTED
 7. Vol INCLUDED IN "B" & "C" LINE Qty (THIS STAGE AND PHASE)
 8. Vol INCLUDED IN REMOVE BASE AND SURFACING
 9. ONLY QUANTITIES WITH REFERENCES TO PS SHEETS ARE INCLUDED IN PS SHEET QUANTITIES

EARTHWORK

LOCATION	Rdwy EXCAVATION	(N) EMBANKMENT	PLAN SHEET No.
	CY	CY	SEE NOTE 9
STAGE I - PHASE I			
"F" 21+00 TO 179+29.78	34,157	17,670	PS-35 TO 47
"B" 53+00 TO 72+00	1,888	4,745	PS-24,25
SANDY MUSH Rd De+ "SM-2" 17+50 TO 25+26.41	290	857	DE-1
"P-3" 28+75.17 TO 30+00	552	2	PS-59
STAGE I - PHASE I SUBTOTAL	36,887	23,274	
STAGE I - PHASE II			
REMOVE PORTIONS OF PLAINSBURG Rd	SEE NOTE 1 & 8		
"B" 72+00 TO 79+00	1,189	524	PS-25,26
"F" 95+50 TO 97+50	633	101	PS-41
PLAINSBURG Rd CUL-DE-SAC	800		C-8
PLAINSBURG Rd CUL-DE-SAC	800		C-11
"P-3" 30+00 TO 33+50	277	20	PS-59
REMOVE PORTION OF HARVEY PETTIT Rd	SEE NOTE 1 & 8		
"F" 14+00 TO 21+00	1,747	157	PS-35
HARVEY PETTIT Rd CUL-DE-SAC	800		C-7
STAGE I - PHASE II SUBTOTAL	6,246	802	
STAGE II - PHASE I			
"A" 148+00 TO 352+00	158,260	642,791	PS-3 TO 18
"B" 36+50 TO 53+00	1,567	144,585	PS-22 TO 24
"NR-1" LINE	5,374	36,817	PS-27,28
"NR-2" LINE	3,962	39,524	PS-29,30
"SR-1" LINE	7,667	53,371	PS-31,32
"SR-2" LINE	5,950	63,407	PS-33,34
"R-4" 41+00 TO 42+06.24 (BASIN ONLY)	811	8	PS-59
"R-3" 46+00 TO 58+39.23 & BASIN	21,943	5,543	PS-57,58
"NR-1" BASIN	17,854		PS-12,13
"NR-2" BASIN	17,901		PS-13,14
"SR-1" BASIN	19,920		PS-13,14
"SR-2" BASIN	23,496		PS-12,13
SOUTH DUTCHMAN Cr OVERFLOW CHANNEL	712		D-7,22
STAGE II - PHASE I SUBTOTAL	285,417	986,046	
STAGE II - PHASE II			
"A" 122+00 TO 137+00	1,858	11,086	PS-1,2
"NB" 99+79.1 TO 111+24.8	589	31	C-16
"NB" 111+24.8 TO 117+29.53 ("T-2" 11+24.8 TO 17+30.48)	220	147	PS-56
"SB" 99+96.2 TO 118+50	1,053	70	
"T-1" 18+50 TO 19+75.23	65	121	PS-55
"T-2" 17+30.48 TO 19+71.79	50	95	PS-56
"R-4" LINE	306	254	PS-59
"R-3" 39+17.58 TO 46+00	203	1,340	PS-57
REMOVE PORTIONS OF SANDY MUSH Rd	SEE NOTE 2 & 8		
"F" 97+80 TO 98+54	200		PS-41
"A" 258+75 TO 263+00	1,994	908	PS-11
"R-1" BASIN Sta 12+00 TO 30+07.22	11,832	729	D-1 TO 3
STAGE II - PHASE II SUBTOTAL	18,370	14,781	

EARTHWORK

LOCATION	Rdwy EXCAVATION	(N) EMBANKMENT	PLAN SHEET No.
	CY	CY	SEE NOTE 9
STAGE II - PHASE III			
"R-3" 39+17.58 TO 43+00	687	503	PS-57
"A" 137+00 TO 151+50	316	20,827	PS-2 TO 3
"T-2" 17+30.48 TO 22+04.48	1,536	2,048	PS-56
STAGE II - PHASE III SUBTOTAL	2,539	23,378	
STAGE III			
REMOVE PORTIONS OF Exist Rte 99 NB Rdwy	SEE NOTE 3		
"T-2" 17+30.48 TO 22+02.21	840	200	PS-56
"NB" 170+50 TO 181+27.07	4,629		
"NB" 268+00 TO 278+00	7,162		
"NB" 280+25 TO 337+61.24	35,217		
"NBT" 57+65.62 TO 63+86.19	5,093		
"A" 122+00 TO 170+26.01	19,994	27,440	PS-1 TO 4
"A" 260+00 TO 262+00	SEE NOTE 4		
"A" 344+50 TO 370+72.75	21,046	5,010	PS-18 TO 20
"T-1" 19+75.23 TO 27+00	1,925	87	PS-55
"B" 19+00 TO 33+45 (PARTIAL)	1,657	59,939	PS-21,22
"B" 35+25 TO 37+50	831	22,653	PS-22,23
"C" 21+00 TO 30+00	1,055	2,370	PS-48
STAGE III SUBTOTAL	99,449	117,699	
STAGE IV - PHASE I			
"B" 19+00 TO 33+45 (REMAINDER)		68,000	PS-21,22
REMOVE PORTIONS OF Rte 99 SB Rdwy	SEE NOTE 5		
"T-1" 22+00 TO 27+02.21	200	150	PS-55
"A" 127+00 TO 152+00	600	2,195	PS-1 TO 3
"A" 354+00 TO 370+22.7	4,545	418	PS-19,20
REMOVE PORTIONS OF Rte 99 NB Rdwy	SEE NOTE 6		
"SB" 199+19.64 TO 256+00	32,646		
"WF-1" 70+50 TO 99+25	10,490	189	PS-50 TO 52
"WF-2" 56+00 TO 81+00	7,174	1,689	PS-53,54
"SB" 280+95.8 TO 342+25	39,884	3,543	
"SB" 342+25 TO 361+50	1,843	238	PS-60,61
"SB" 361+50 TO 364+60	160	13	
STAGE IV - PHASE I SUBTOTAL	97,542	76,435	
STAGE IV - PHASE II			
"SB" 357+00 TO 364+60	25	25	PS-61
WEST Fr Rd AND ATHLONE Rd	250	250	C-10
"WF-1" 82+86.29 TO 99+25	3,546	158	PS-51,52
"WF-2" 56+00 TO 69+07.96	2,310	579	PS-53,54
REMOVE PORTIONS OF Rte 99 SB Rdwy	SEE NOTE 6		
REMOVE PORTIONS OF SANDY MUSH Rd	SEE NOTE 7 & 8		
"B" 13+00 TO 20+40	1,128	377	PS-21
"C" 18+78.07 TO 21+00 & 30+00 TO 38+97.37	1,440	4,354	PS-48,49
"SB" 199+19.64 TO 256+00	2,712	712	
STAGE IV - PHASE II SUBTOTAL	11,411	6,455	

REMOVE BASE AND SURFACING

DESCRIPTION	AREA	DEPTH	Rdwy EX
	FT ²	FT	CY
STAGE I - PHASE II			
"HP-2" 102+71 TO 110+79	16,310	0.5	302
"P-2" 258+42 TO 259+64	3,590	0.5	66
"P-2" 261+24 TO 266+45	14,850	0.5	275
"P-3" 46+26 TO 61+34	41,450	0.5	768
STAGE II - PHASE II			
"SM-2" 17+00 TO 17+31	440	0.5	8
"SM-2" 22+60 TO 24+75	4,400	0.5	81
STAGE IV - PHASE II			
"SM" 21+75 TO 30+80	18,900	0.5	350
TOTAL			1,850

* QUANTITY INCLUDED IN SUMMARY OF EARTHWORK TABLE

SUMMARY OF EARTHWORK

DESCRIPTION	Rdwy EXCAVATION	(N) EMBANKMENT
	CY	CY
REMOVE BASE AND SURFACING	1,850	
STAGE I		
PHASE I	36,887	23,274
PHASE II	6,246	802
STAGE II		
PHASE I	285,417	986,046
PHASE II	18,370	14,781
PHASE III	2,539	23,378
STAGE III		
PHASE I	99,499	117,699
STAGE IV		
PHASE I	97,542	76,435
PHASE II	11,411	6,455
SUBTOTAL	559,711	1,248,870
LOCAL BORROW	809,800	
TOTAL	1,369,511	

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY



REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

SUMMARY OF QUANTITIES Q-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	398	607

Chris Gardner 4-26-10
 REGISTERED CIVIL ENGINEER DATE
 11-1-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHRIS GARDNER
 No. C60348
 Exp. 6-30-10
 CIVIL
 STATE OF CALIFORNIA

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SAW CUT TABLE

LOCATION		(N) SAW CUT
FROM	TO	LF
"NB" 99+88.8	"NB" 111+24.8	1,136
"SB" 99+97.3	"SB" 118+50.0	1,853
"T-2" 11+24.8	"T-2" 17+30.5	1,245
"T-1" 18+50.0	"T-1" 30+00.6	1,954
"WF-1" 70+50.0	"WF-1" 99+25.0	1,234
"F" 14+00.0		23
"SB" 238+43.2	"SB" 244+00.0	1,434
"WF-2" 57+00.0	"WF-2" 80+00.0	76
"SB" 355+00.0	"SB" 364+60.0	1,306
"B" 13+00.0	"B" 77+30.0	52
"C" 35+55.0	"C" 39+59.1	128
"P-2" 245+44.0	"P-2" 252+05.6	417
"P-3" 32+00.0	"P-3" 44+74.8	60
"V" 19+60.5	"V" 20+52.7	185
"AT" 5+10.0	"AT" 6+11.7	232
"HP-2" 93+26.7	"HP-2" 95+59.2	117
"SM-2" 10+78.1	"SM-2" 11+64.2	106
"SM-2" 17+00		18
"R-3" 40+17.8		38

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY

SEAL PAVEMENT JOINT

LOCATION	LONGITUDINAL	TRANSVERSE	LONGITUDINAL ISOLATION
	LF	LF	LF
"A" LINE Rte 99 NB	43,939	73,378	
"A" LINE Rte 99 SB	46,338	79,282	
"R-3" RAMP GORE	1,471	4,539	628
"NB-1" RAMP GORE		423	473
"NB-2" RAMP GORE		659	1,019
"SB-1" RAMP GORE		423	473
"SB-1" RAMP GORE		659	1,019
SUBTOTAL	91,748	159,363	3,612
TOTAL	251,111		3,612

EROSION CONTROL



LOCATION	SEQUENCING				STRAW (N)	FIBER (N)	COMPOST BLANKET (N)	PURE LIVE SEED (N)	COMMERCIAL FERTILIZER (N)	TACKIFIER (N)
	TYPE 1	TYPE 2	TYPE 3							
	HYDROSEED (TYPE 1)	COMPOST BLANKET	DRILL SEED	HYDROSEED (TYPE 2)						
	ACRE	CY	ACRE	ACRE	TON	LB	ACRE	LB	LB	LB
"A"	93.87		29.34	29.34	246.4	132,070.4		1,687.8	34,003.2	1,232.0
"NR-1" AND BASIN	7.36	153.3			14.7	7,889.9	1.14	116.5	2,031.4	73.6
"NR-2" AND BASIN	7.83	228.6			15.7	8,393.8	1.70	130.6	2,161.1	78.3
"SR-1" AND BASIN	8.92	302.5			17.8	9,562.2	2.25	153.0	2,461.9	89.2
"SR-2" AND BASIN	9.13	338.8			18.3	9,787.4	2.52	159.6	2,519.9	91.3
"R-1" BASIN	3.06				6.1	3,280.3		41.9	844.6	30.6
"R-3" AND "R-4"	7.39				14.8	7,922.1		101.2	2,039.6	73.9
"T-1"			0.66	0.66	1.3	707.5		9.0	182.2	6.6
"T-2"	0.60				1.2	643.2		8.2	165.6	6.0
"SB"	15.62				31.2	16,744.6		214.0	4,311.1	156.2
"NB"	16.45				32.9	17,634.4		225.4	4,540.2	164.5
"B"	3.63	1,406.3			7.3	3,891.4	10.46	193.0	1001.9	36.3
"C"	1.97				3.9	2,111.8		27.0	543.7	19.7
"F"	14.43	252.8			28.9	15,469.0	1.88	223.4	3,982.7	144.3
"P-2"	0.56				1.1	600.3		7.7	154.6	5.6
"P-3"	1.14				2.3	1,222.1		15.6	314.6	11.4
"WF-1"	6.02				12.0	6,453.4		82.4	1,661.5	60.2
"WF-2"	3.34				6.7	3,580.5		45.8	921.8	33.4
"NBT"	1.53				3.1	1,640.2		21.0	422.3	15.3
"SM-1"	0.46				0.9	493.1		6.3	127.0	4.6
"SM-2"	0.12				0.2	128.6		1.6	33.1	1.2
"HP-2"	0.39				0.8	418.1		5.3	107.6	3.9
"AT"	0.14				0.3	150.1		1.9	38.6	1.4
S DUTCHMAN Cr OVERFLOW Chnl	0.29				0.6	310.9		4.0	80.0	2.9
LOCAL BORROW BASIN	42.4				84.8	45,452.8		580.9	11,702.4	424.0
SUBTOTAL	246.65	2,682.3	30.00	30.00	553.3	296,558.1	19.95	4,063.2	76,352.6	2,766.4
TOTAL	246.65	2,682.3	30.00	30.00						

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



REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

SUMMARY OF QUANTITIES
Q-8

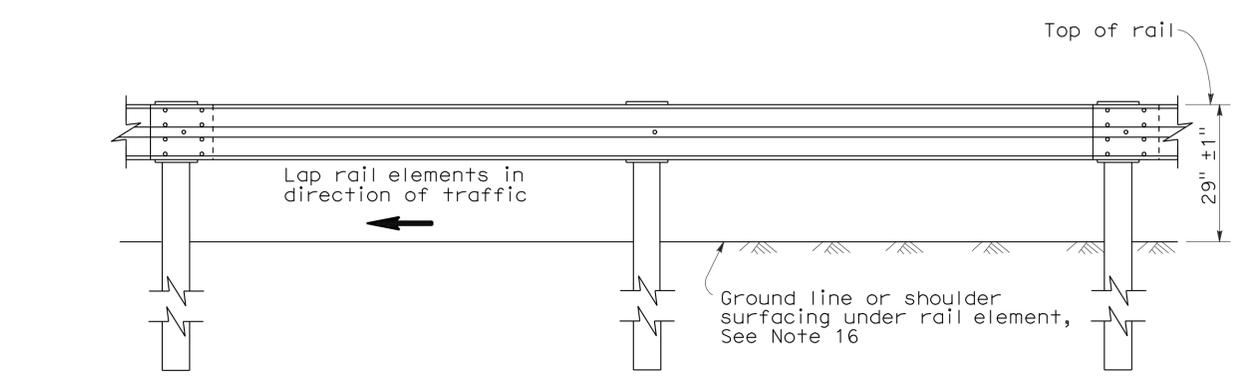
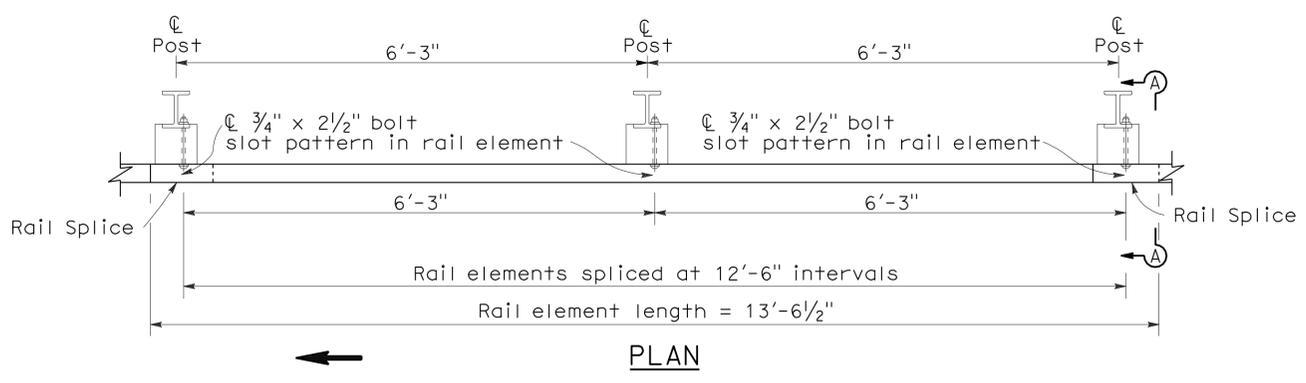
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	451A	607

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

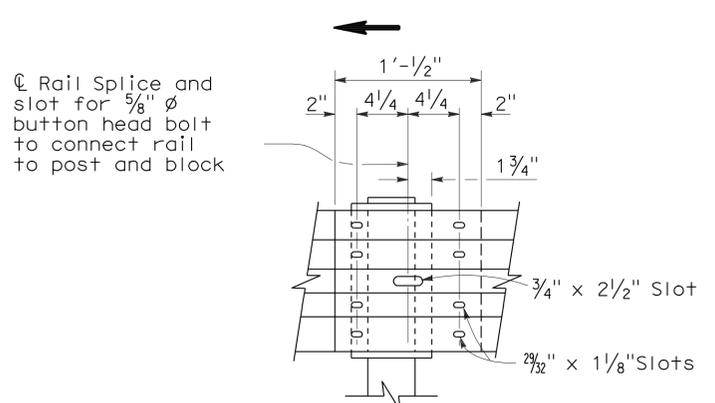
May 20, 2011
PLANS APPROVAL DATE

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

To accompany plans dated 11-1-10

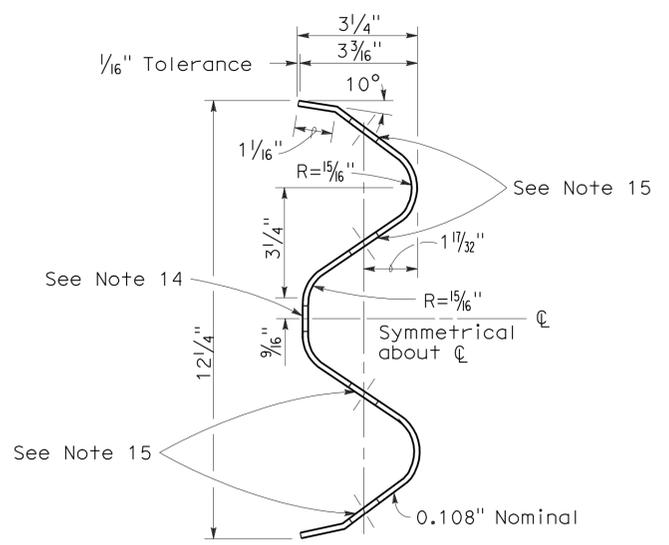


METAL BEAM GUARD RAILING WITH STEEL POSTS AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS

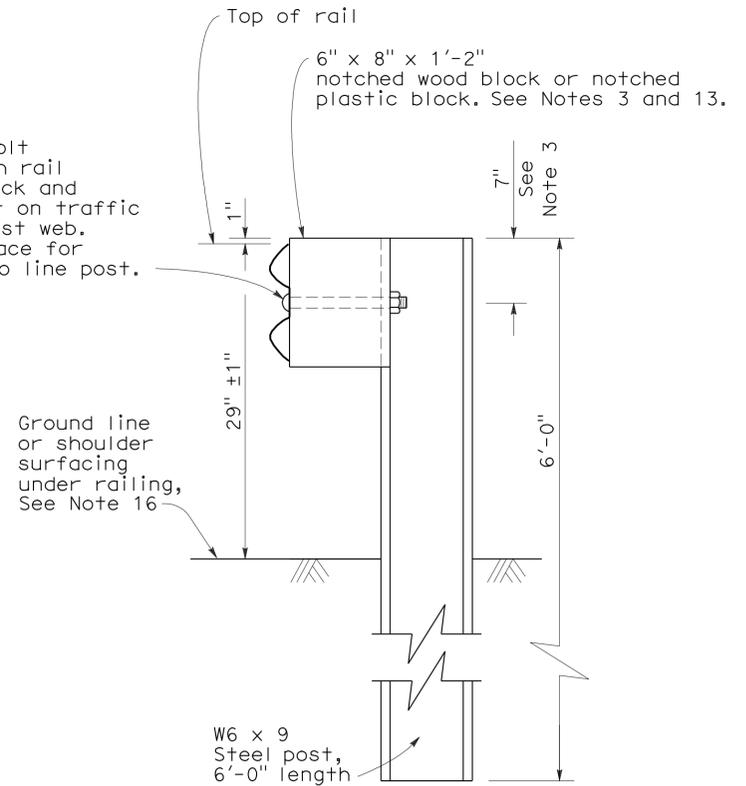


ELEVATION
RAIL ELEMENT SPLICE DETAIL

- Connect the overlapped end of the rail elements with 5/8" Ø x 1 3/8" button head oval shoulder splice bolts inserted into the 2 3/32" x 1 1/8" slots and bolted together with 5/8" Ø recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.



SECTION THRU RAIL ELEMENT



SECTION A-A
TYPICAL STEEL LINE POST INSTALLATION

See Note 4

NOTES:

- For details of wood post installations, see Standard Plan A77A1.
- For details of standard hardware used to construct guard railing, see Standard Plan A77B1.
- For details of steel posts and notched wood blocks used to construct guard railing, see Standard Plan A77C2.
- For additional installation details, see Standard Plan A77C3.
- Guard railing post spacing to be 6'-3" center to center, except as otherwise noted.
- For guard railing typical layouts, see the A77E, A77F and A77G Series of Standard Plans.
- For terminal system end treatment details, see the A77L Series of Standard Plans. To connect railing to terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system end treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
- For guard railing end anchor details, see Standard Plans A77H1 and A77I2.
- For details of guard railing transition to bridge railing, see Standard Plan A77J4.
- For additional details of guard railing connection to bridge railings, see Standard Plans A77J1, A77J2 and A77K1.
- For dike positioning and guard railing delineation details, see Standard Plan A77C4.
- Direction of adjacent traffic indicated by →.
- Notched face of block faces steel post.
- Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".
- Install posts in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING STANDARD RAILING SECTION (STEEL POST WITH NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)

NO SCALE

RSP A77A2 DATED MAY 20, 2011 SUPERSEDES STANDARD PLAN A77A2 DATED MAY 1, 2006 - PAGE 42 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77A2

3 ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

2006 REVISED STANDARD PLAN RSP A77A2

To accompany plans dated 11-1-10



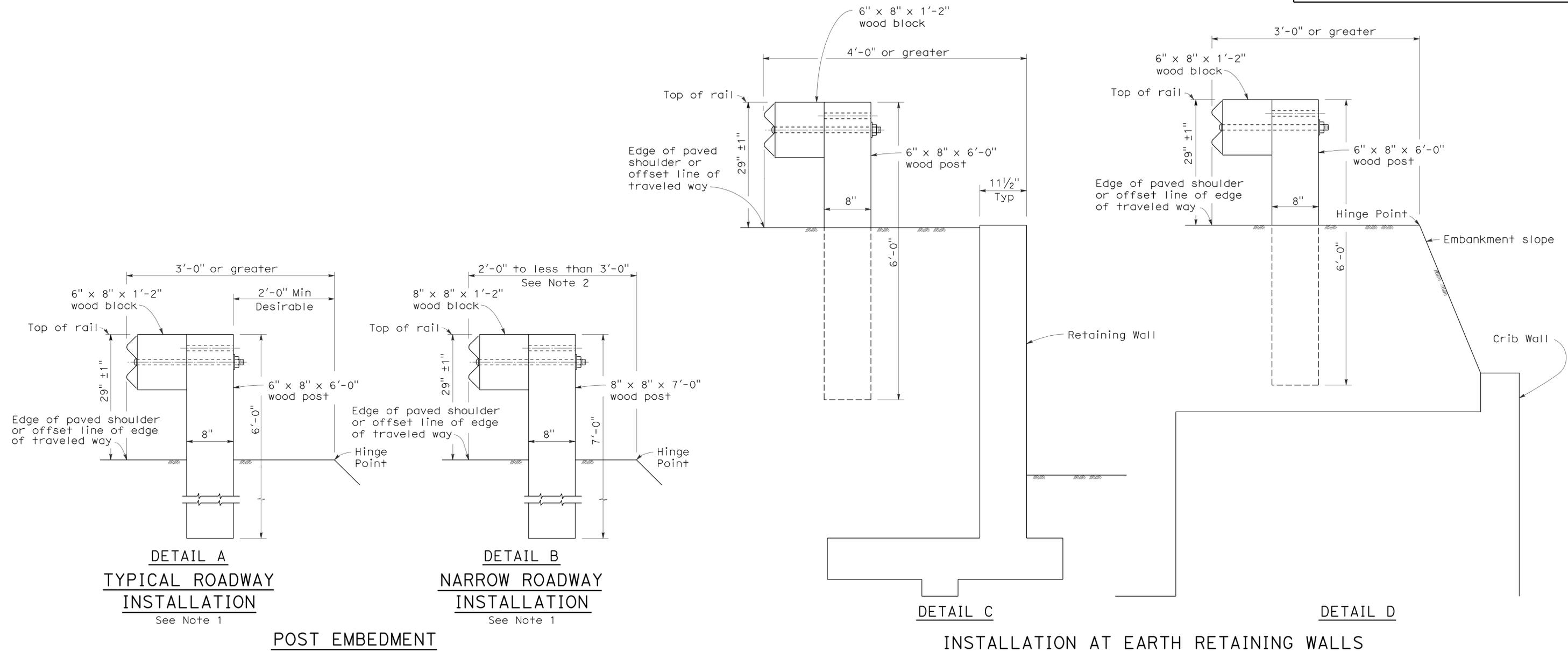
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	451B	607

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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NOTES:

1. These installation details also applicable to steel line post installations. For Detail A, C, and D, where steel line post installations are constructed, W6 x 9 steel post, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For Detail B, where steel line post installations are constructed, W6 x 9 steel post, 7'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For additional installation details, see Standard Plans A77A1 and A77A2.
2. Where the distance between the face of the rail and the hinge point is less than 2'-0", see the Project Plans for special details.
3. For dike positioning with guard railing installations, see Standard Plan A77C4.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL LINE POST
EMBEDMENT AND
HINGE POINT OFFSET DETAILS**

NO SCALE

RSP A77C3 DATED MAY 20, 2011 SUPERSEDES STANDARD PLAN A77C3
DATED MAY 1, 2006 - PAGE 46 OF THE STANDARD PLANS BOOK DATED MAY 2006.



ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

REVISED STANDARD PLAN RSP A77C3

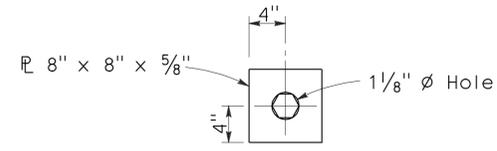
2006 REVISED STANDARD PLAN RSP A77C3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	463A	607

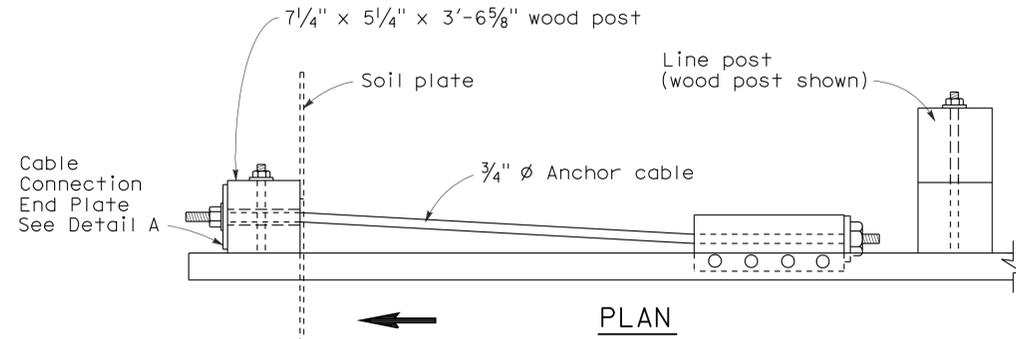
3
Randell D. Hiatt
 REGISTERED CIVIL ENGINEER
 May 20, 2011
 PLANS APPROVAL DATE
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To accompany plans dated 11-1-10

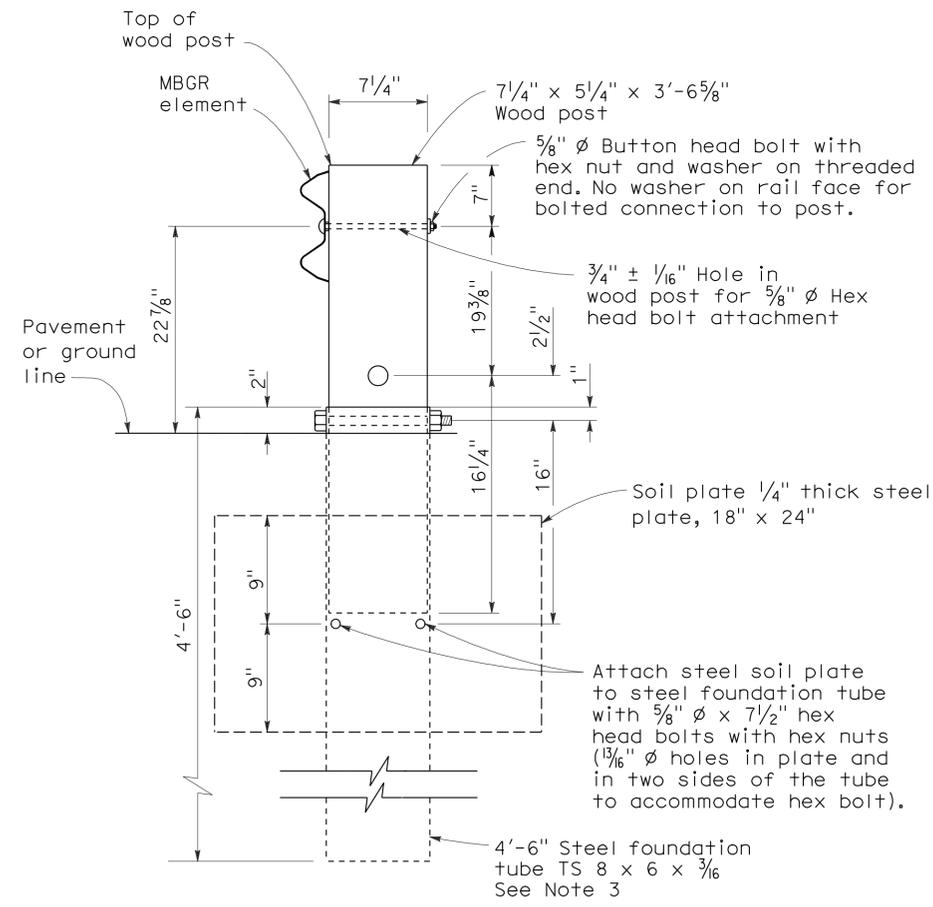
2006 REVISED STANDARD PLAN RSP A77H1



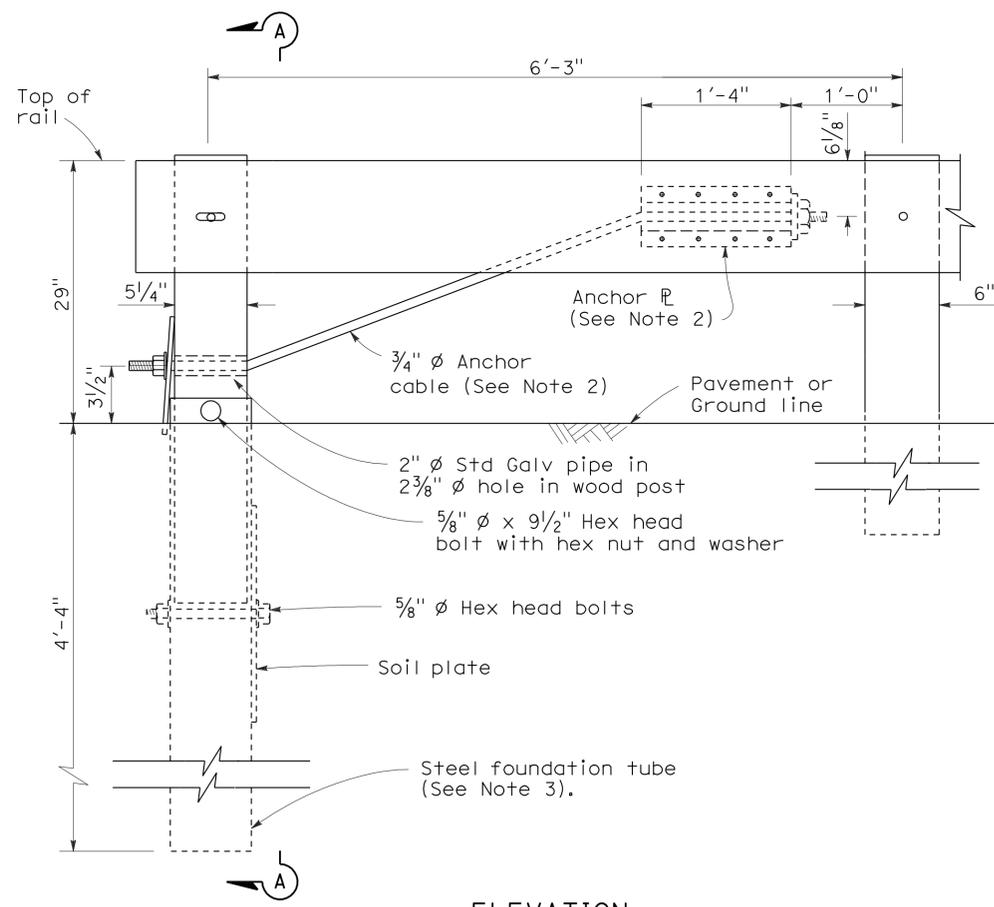
DETAIL A
CABLE CONNECTION
END PLATE



PLAN



SECTION A-A



ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)
See Note 1

NOTES:

1. See the A77E, A77F and A77G series of Standard Plans for typical use of End Anchor Assembly (Type SFT).
2. For details of the anchor plate and 3/4" cable, see Standard Plan A77H3.
3. A 6'-0" length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" diameter hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
4. Direction of traffic indicated by →.
5. Install line post, steel foundation tube and soil plate in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
METAL RAILING
END ANCHOR ASSEMBLY
(TYPE SFT)

NO SCALE

3 ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

RSP A77H1 DATED MAY 20, 2011 SUPERSEDES STANDARD PLAN A77H1
DATED MAY 1, 2006 - PAGE 67 OF THE STANDARD PLANS BOOK DATED MAY 2006.
REVISED STANDARD PLAN RSP A77H1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	463B	607

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

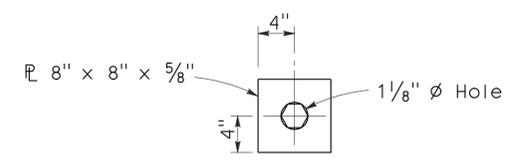
May 20, 2011
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

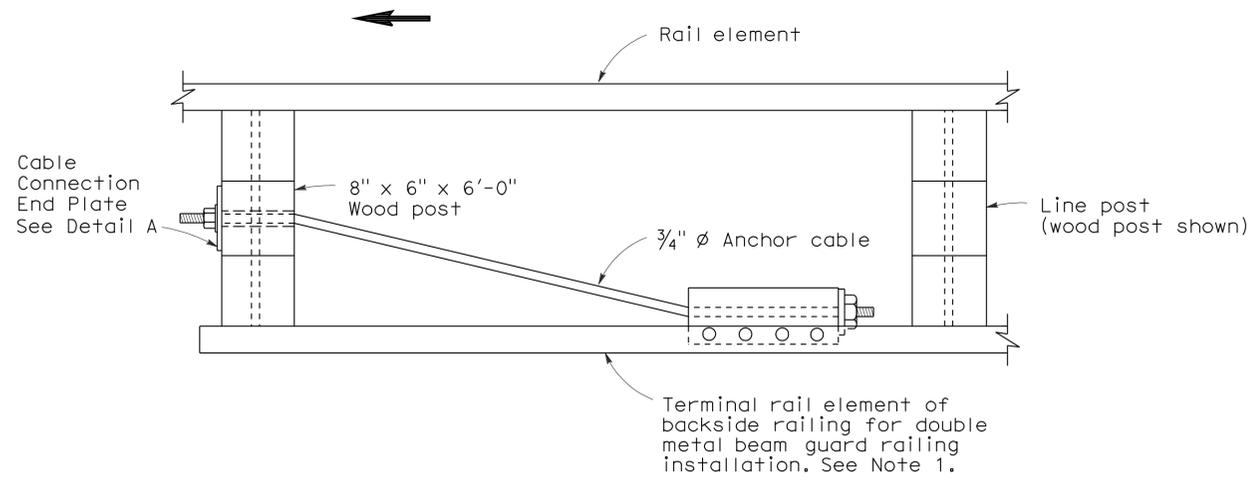
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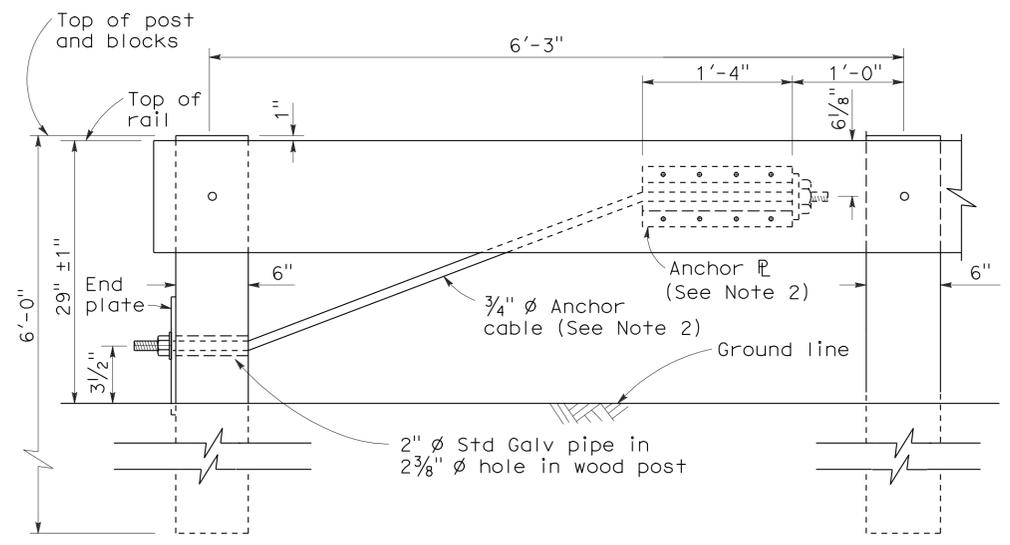
To accompany plans dated 11-1-10



DETAIL A
CABLE CONNECTION
END PLATE



PLAN



ELEVATION
RAIL TENSIONING
ASSEMBLY
See Note 1

NOTES:

1. See Standard Plan A77F3 and Standard Plan A77G1 for typical use of rail tensioning assembly.
2. For details of the anchor plate and 3/4 inch cable, see Standard Plan A77H3.
3. Direction of traffic indicated by

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL RAILING
RAIL TENSIONING ASSEMBLY

NO SCALE

RSP A77H2 DATED MAY 20, 2011 SUPERSEDES STANDARD PLAN A77H2
DATED MAY 1, 2006 - PAGE 68 OF THE STANDARD PLANS BOOK DATED MAY 2006.

3 ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

REVISED STANDARD PLAN RSP A77H2

2006 REVISED STANDARD PLAN RSP A77H2

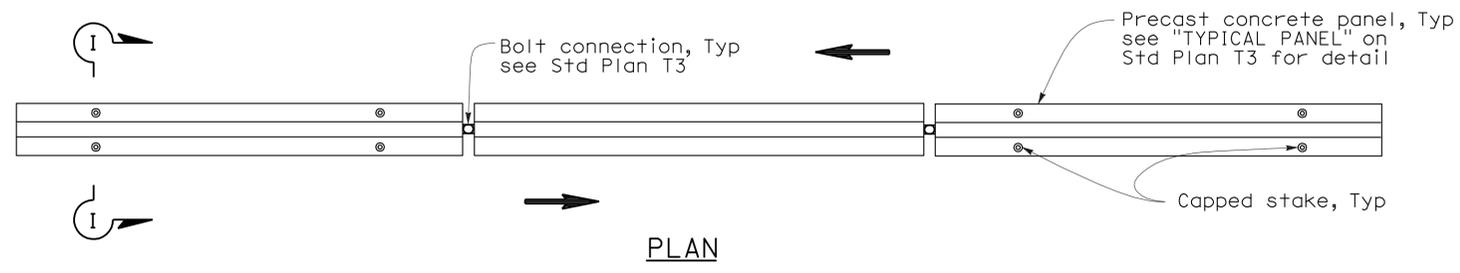
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Mer	99	0.0/4.6	493A	607

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

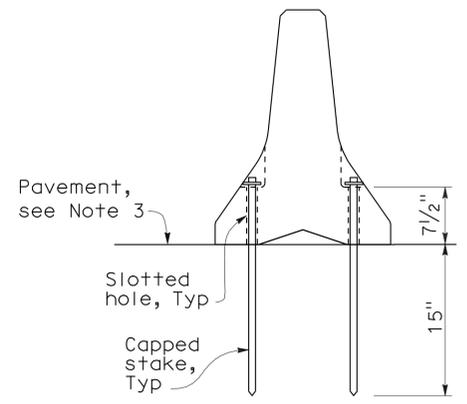
May 20, 2011
PLANS APPROVAL DATE

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To accompany plans dated 11-1-10

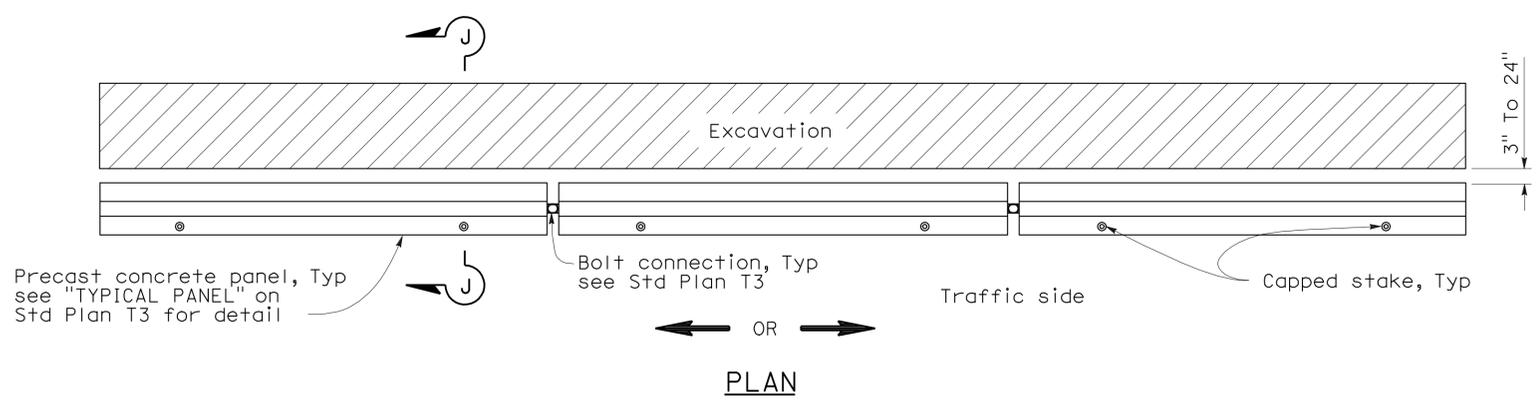


RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1

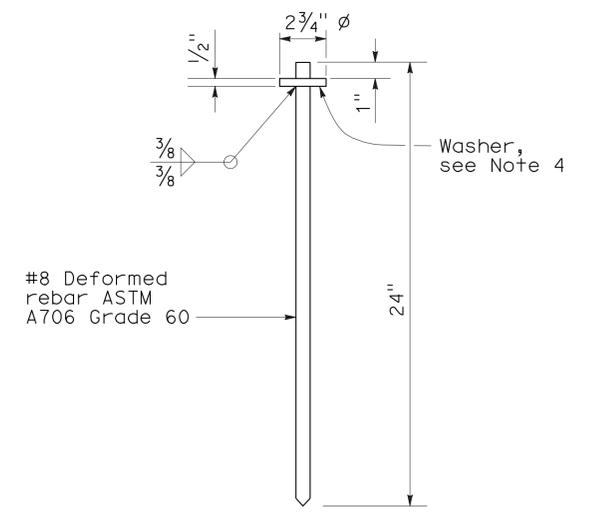
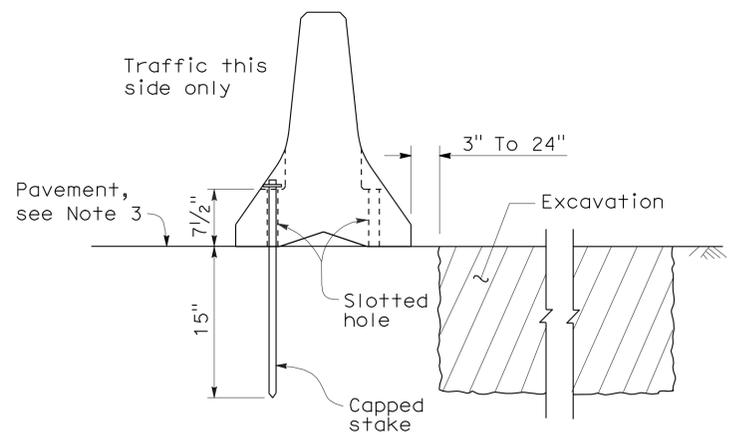


NOTES:

1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by \Rightarrow .



RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION
See Note 2



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY RAILING
(TYPE K)**

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

3 ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

NEW STANDARD PLAN NSP T3A

2006 NEW STANDARD PLAN NSP T3A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Mer	99	0.0/4.6	512A	607

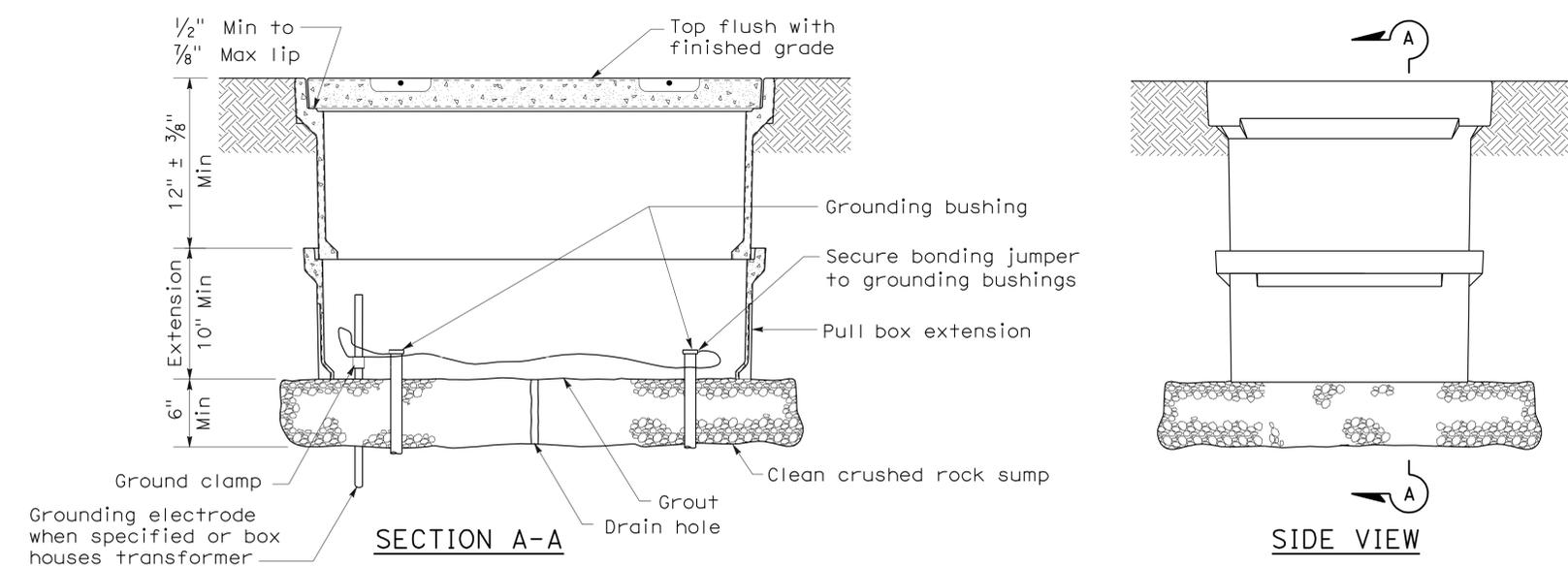
REGISTERED ELECTRICAL ENGINEER
Jeffery G. McRae
 No. E14512
 Exp. 6-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

January 20, 2012
 PLANS APPROVAL DATE

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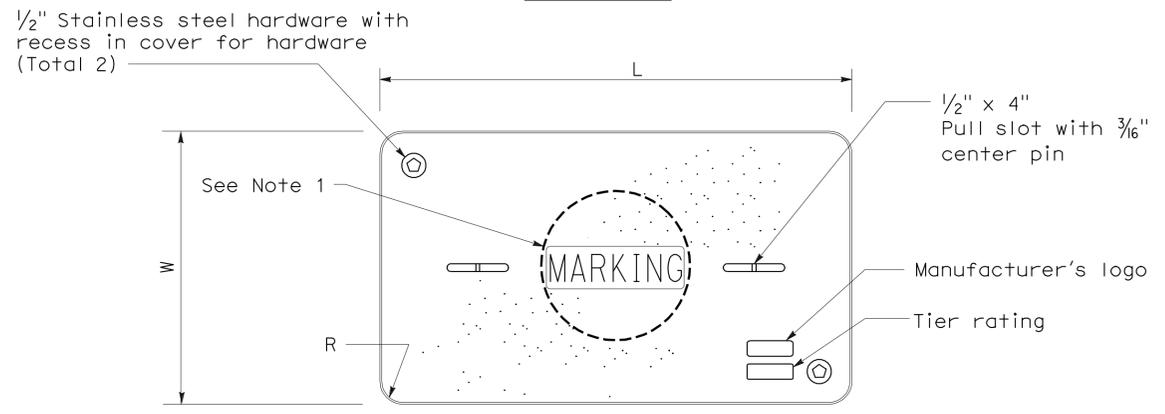


To accompany plans dated 11-1-10

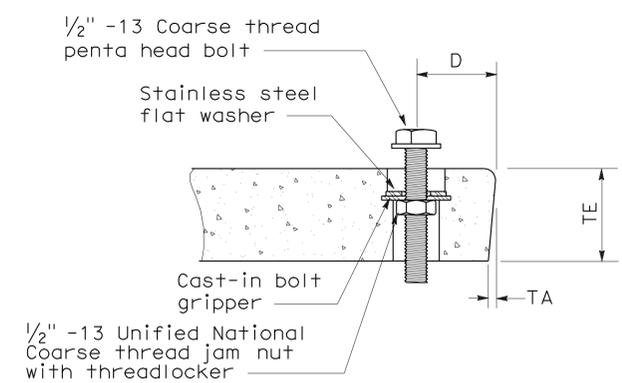


INSTALLATION DETAILS

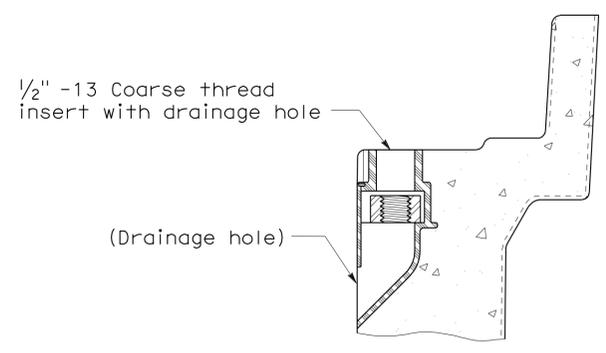
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
(Or similar)



TYPICAL THREADED INSERT
(Or similar)

NOTES ON PULL BOXES:

- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - No. 3/2 pull box.
 - "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - No. 5, 6, 9 or 9A pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATIONS" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communication line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus 1/8" or greater.
- Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within 1/8". Top outside radius of covers and pull boxes must have a 1/8" radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.



ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

PULL BOX	PULL BOX			COVER						
	Minimum Depth Box	Minimum Depth Extension	Maximum Weight	L	W	R	TE	TA	D	Maximum Weight
No. 3/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(PULL BOX)
 NO SCALE

NSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP ES-8A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Mer	99	0.0/4.6	512B	607

3

Jeffrey G. McRae
REGISTERED ELECTRICAL ENGINEER

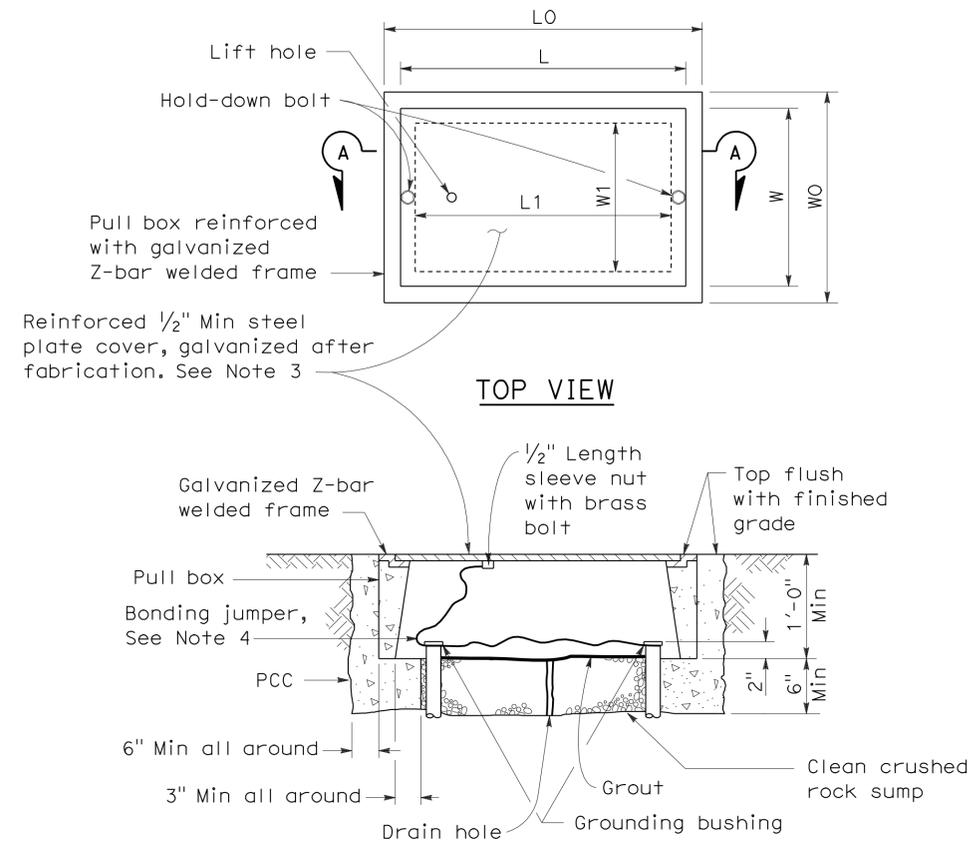
January 20, 2012
PLANS APPROVAL DATE

Jeffrey G. McRae
REGISTERED PROFESSIONAL ENGINEER
No. E14512
Exp. 6-30-12
ELECTRICAL
STATE OF CALIFORNIA

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To accompany plans dated 11-1-10

2006 NEW STANDARD PLAN NSP ES-8B



No. 3 1/2(T), No. 5(T) AND No. 6(T) TRAFFIC PULL BOX

NOTES ON PULL BOXES:

1. Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
2. Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
3. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
 - A) No. 3 1/2(T) pull box.
 - 1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - B) No. 5(T) or 6(T) pull box.
 - 1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - 3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - 4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - 5) "RAMP METER" - Ramp meter circuits.
 - 6) "COUNT STATION" - Count or speed monitor circuits.
 - 7) "COMMUNICATION" - Communication circuits.
 - 8) "TOS COMMUNICATIONS" - TOS communications line.
 - 9) "TOS POWER" - TOS power.
 - 10) "TDC POWER" - Telephone demarcation cabinet power.
 - 11) "CCTV" - Closed circuit television circuits.
 - 12) "TMS" - Traffic monitoring station circuits.
 - 13) "CMS" - Changeable message sign circuits.
 - 14) "HAR" - Highway advisory radio circuits.
4. Bonding jumper for metal covers shall be 3' long, minimum.
5. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
6. Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within 1/8".

3 ADDED PER ADDENDUM No. 3 DATED MAY 25, 2012

PULL BOX	BOX						COVER				
	Minimum * Thickness	Minimum Depth Box and Extension	W0	L0	L1	W1	L **	W **	R	Edge Thickness	Edge Taper
No. 3 1/2(T)	1 1/2"	1'-0"	1'-5" ± 1"	1'-8 7/8" ±	1'-2 1/2" ±	10 5/8" ± 1"	1'-8" ±	1'-1 3/4" ±	0"	1/2"	None
No. 5(T)	1 3/4"	1'-0"	1'-11 1/2" ± 1"	2'-5 1/2" ±	1'-7" ±	1'-1" ± 1"	2'-3" ±	1'-4" ±	0"	1/2"	None
No. 6(T)	2"	1'-0"	2'-6" ± 1"	2'-11 1/2" ±	1'-11 1/2" ±	1'-5" ± 1"	2'-9" ±	1'-8" ±	0"	1/2"	None

* Excluding conduit web ** Top dimension

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(TRAFFIC RATED PULL BOX)**
NO SCALE

NSP ES-8B DATED JANUARY 20, 2012 SUPPLEMENTS THE
STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP ES-8B

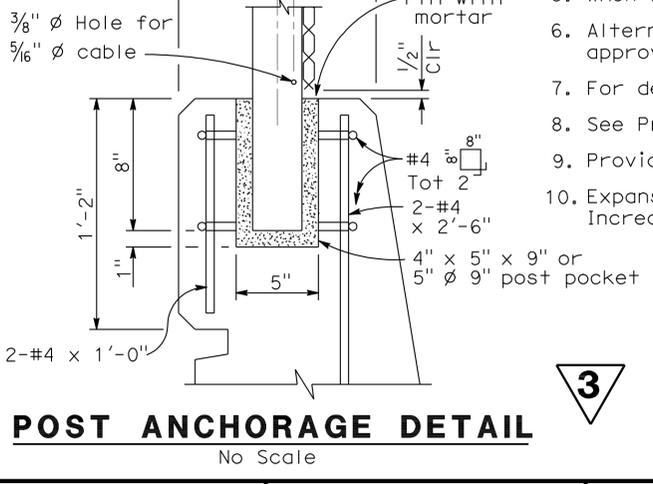
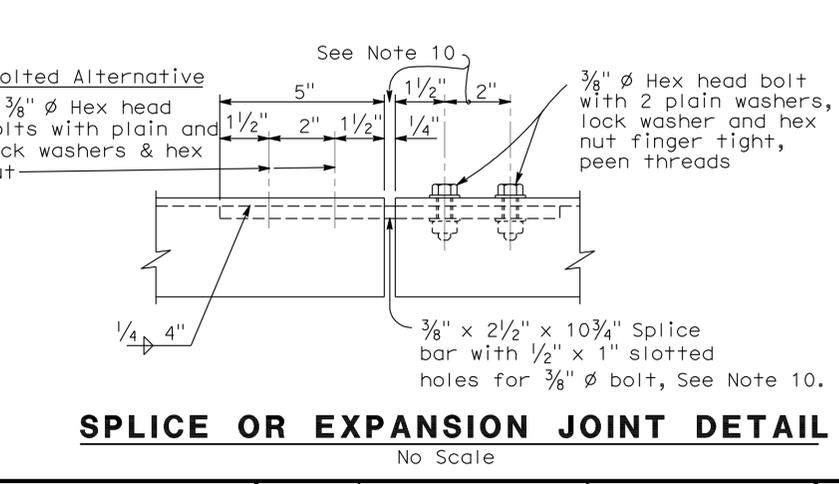
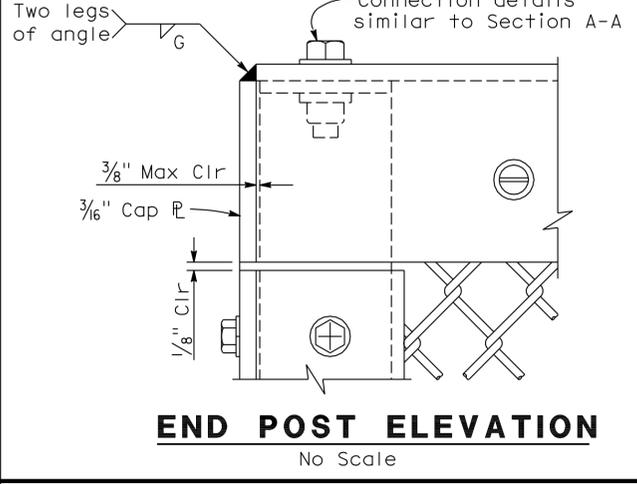
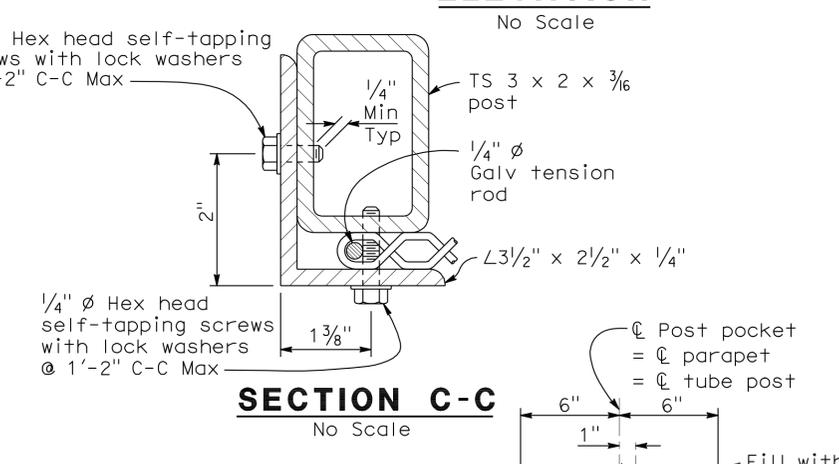
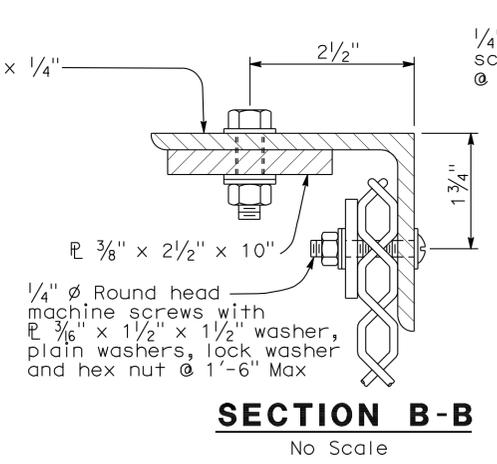
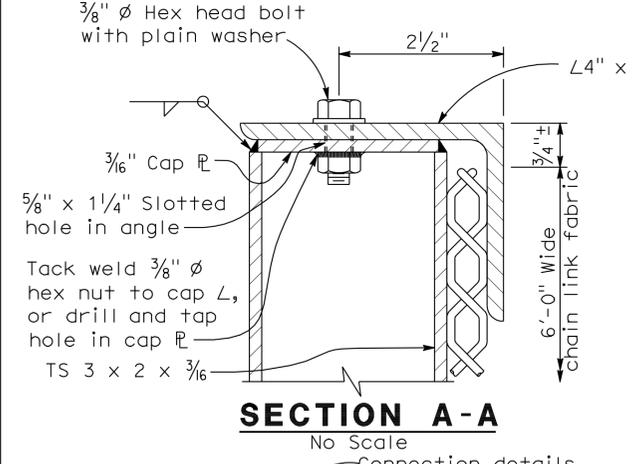
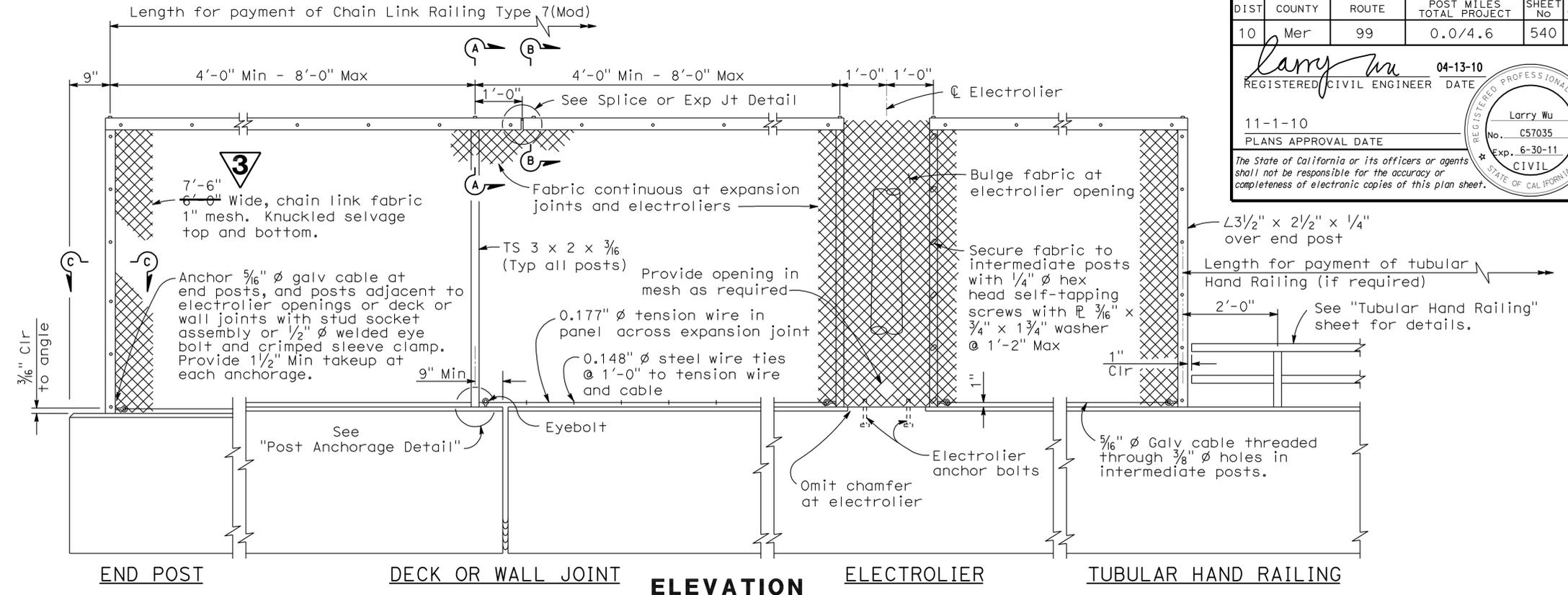
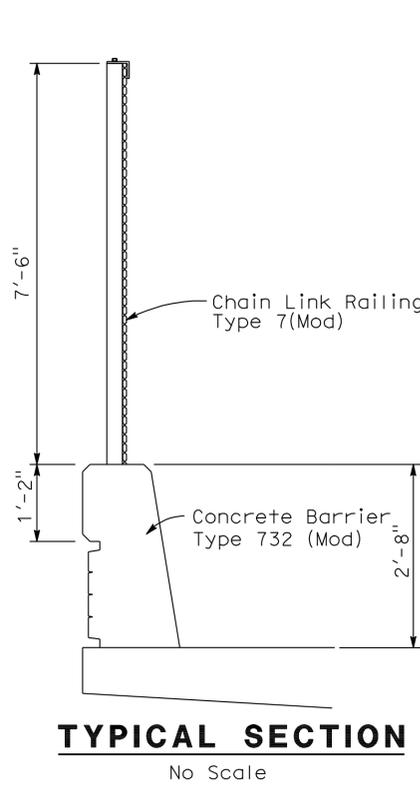
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	Mer	99	0.0/4.6	540	607

Larry Wu 04-13-10
REGISTERED CIVIL ENGINEER DATE

11-1-10
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
LARRY WU
No. C57035
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA



- NOTES:**
- Railing assembly except chain link fabric to be galvanized after fabrication.
 - Posts shall be vertical.
 - Railing shall conform to horizontal and vertical alignment. When railing is placed on a curved horizontal alignment with radius of 148'-0" or less, thread the 5/16" cable through 3/8" welded eye rods embedded 4" into the top of the concrete parapet and equally spaced to limit the midordinate distance between the 5/16" cable and the curve to 1" maximum. Horizontal angle shall be bent to conform to horizontal alignment if radius is 148'-0" or less and may be on 10'-0" chords if radius is over 148'-0"
 - Horizontal angle shall be continuous over not less than two intermediate posts, except that a shorter length is permitted at expansion joints, electroliers and other rail discontinuities.
 - When rail is on slope, place fabric parallel to slope.
 - Alternative details may be submitted by Contractor for Engineer's approval.
 - For details and reinforcement not shown see Standard Plan B11-55.
 - See Project Plans for limits of Chain Link Railing Type 7 (Mod).
 - Provide thimbles at all cable loops.
 - Expansion joint same dimension as expansion joint in deck or wall. Increase slotted hole length and splice bar length correspondingly.

3 REVISED PER ADDENDUM No. 3 DATED MAY 25, 2012

DESIGN BY L. Wu	CHECKED J. Szabo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 10	BRIDGE NO. 39-0236	SANDY MUSH OVERHEAD CHAIN LINK RAILING TYPE 7(MOD)
DETAILS BY Y. Tang	CHECKED J. Szabo			POST MILE 3.4	
QUANTITIES BY A. McPhee	CHECKED J. Delgado				

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS CU 10 EA 415801 DISREGARD PRINTS BEARING EARLIER REVISION DATES 3-03-10

REVISION DATES SHEET 15 OF 20