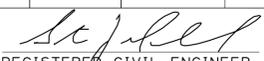


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	101	284


 REGISTERED CIVIL ENGINEER DATE 07-06-12
 9-24-12
 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.

AECOM
 TECHNICAL SERVICES, Inc.
 2020 L STREET, SUITE 300
 SACRAMENTO, CA 95811

REGISTERED PROFESSIONAL ENGINEER
 Stephen J. Mislinski
 No. C61834
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

STAGE CONSTRUCTION SIGNS (N)

PLAN SHEET No.	STAGE	SIGN No.	SIGN CODE	PANEL SIZE	No. OF SIGN	SIGN MESSAGE	REMARK
EA							
SCD-1	6	1	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-1	6	2	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-1	6	3	C20 (CA)	48" x 48"	2	RIGHT LANE CLOSED AHEAD	RIGHT
SCD-1	6	4	W4-2R	48" x 48"	2	LANE ENDS	
SCD-1	6	5	W1-4L	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-1	6	6	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-1	2/4/5	7	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-1	2/4/5	8	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-1	2/4/5	9	C20 (CA)	48" x 48"	1	LEFT LANE CLOSED AHEAD	LEFT
SCD-1	2/4/5	10	W4-2L	48" x 48"	1	LANE ENDS	
SCD-1	2/4/5	11	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-1	2/4/5	12	W1-4R	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-1	3	13	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-1	3	14	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-1	3	15	C20 (CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
SCD-1	3	16	W4-2R	48" x 48"	1	LANE ENDS	
SCD-1	3	17	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-1	3	18	W1-4L	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-2	3/6	19	W1-4R	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-2	3/6	20	W4-2L	48" x 48"	1	LANE ENDS	
SCD-2	3/6	21	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-2	3/6	22	C20 (CA)	48" x 48"	1	LEFT LANE CLOSED AHEAD	LEFT
SCD-2	3/6	23	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-2	3/6	24	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-2	2/4	19	W1-4L	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-2	2/4	20	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-2	2/4	21	W4-2R	48" x 48"	1	RIGHT ENDS	
SCD-2	2/4	22	C20 (CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
SCD-2	2/4	23	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-2	2/4	24	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-2	5	25	W1-4L	36" x 36"	1	HORIZONTAL ALIGNMENT SIGN	
SCD-2	5	26	W13-1	24" x 24"	1	ADVISORY SPEED	
SCD-2	5	27	W4-2R	48" x 48"	1	RIGHT ENDS	
SCD-2	5	28	C20 (CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
SCD-2	5	29	W20-1	48" x 48"	1	ROAD WORK AHEAD	
SCD-2	5	30	C14 (CA)	36" x 18"	1	END ROAD WORK	
SCD-3	2/3/4/5/6	32	R3-2	30" x 30"	5	NO LEFT TURN	
SCD-3	2/3/4/5/6	33	R6-1	36" x 12"	4	ONE WAY	
SCD-3	3/4	34	W4-1	48" x 48"	2	MERGING SIGN	
SCD-3	3	35	R1-2	24" x 24"	1	YIELD	
SCD-3	3	36	W12-1	48" x 48"	1	WARNING SIGN	

REMOVE CONCRETE BARRIER (TYPE 50)

CROSSOVER OPENING	STAGE	LF
X-7	5	290
TOTAL		290 *

* = QUANTITY INCLUDED IN TOTAL ON SHEET Q-3

SAFEGUARD LINK SYSTEM, TEMPORARY CRASH CUSHION (ABSORB 350 TEST LEVEL 3)

LOCATION / STAGE	PLAN SHEET No.	CROSSOVER OPENING	SAFEGUARD LINK SYSTEM	TEMPORARY CRASH CUSHION (ABSORB 350 TEST LEVEL 3)
			LF	EA
STAGE 5	SCD-2	X-7	290	2
STAGE 6	SCD-1	X-7	290 (N)	2 (N)
TOTAL			290	2

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

STAGE CONSTRUCTION SUMMARY

LOCATION / STAGE	PLAN SHEET No.	BARRICADE		PLASTIC DRUMS (N)	TRAFFIC CONE (N)	OBJECT MARKER (TYPE P) (N)
		TYPE II	TYPE III			
EA						
TWO LANE CLOSURE						
STAGE 1	SCD-1,2,3	3	2		284	1
STAGE 2	SCD-1,2,3	3	4	17	321	
STAGE 3	SCD-1,2,3	9	4	17	406	
STAGE 4	SCD-1,2,3	5	4	17	299	
STAGE 5	SCD-1,2,3	3			338	1
STAGE 6	SCD-1,2,3	3			400	1
TOTAL		26	14	51	2048	3

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

STAGE CONSTRUCTION AND TRAFFIC HANDLING QUANTITIES

SCQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Youichi Nakagawa
 Keen Poong
 William Nascimento
 AECOM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	103	284

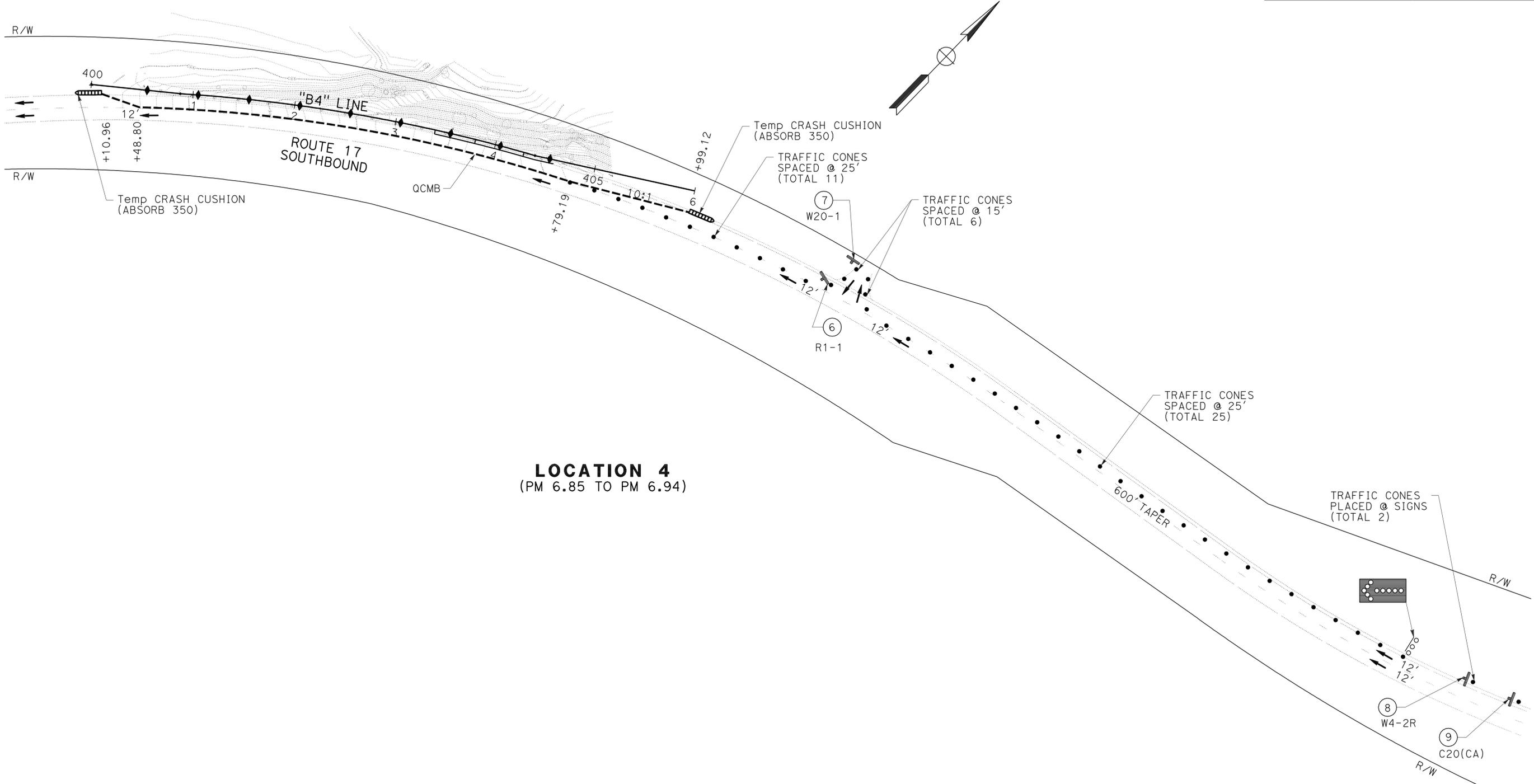
REGISTERED CIVIL ENGINEER DATE 07-06-12
 James A. Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 PLANS APPROVAL DATE
 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans	MARK POLISCHUK	
	JAMES A. LABANOWSKI JR.	
	CHECKED BY	
	GARRY HORTON	
	CALCULATED/DESIGNED BY	



LOCATION 4
(PM 6.85 TO PM 6.94)

TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)
SCALE: 1" = 50'
TH-2

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	104	284

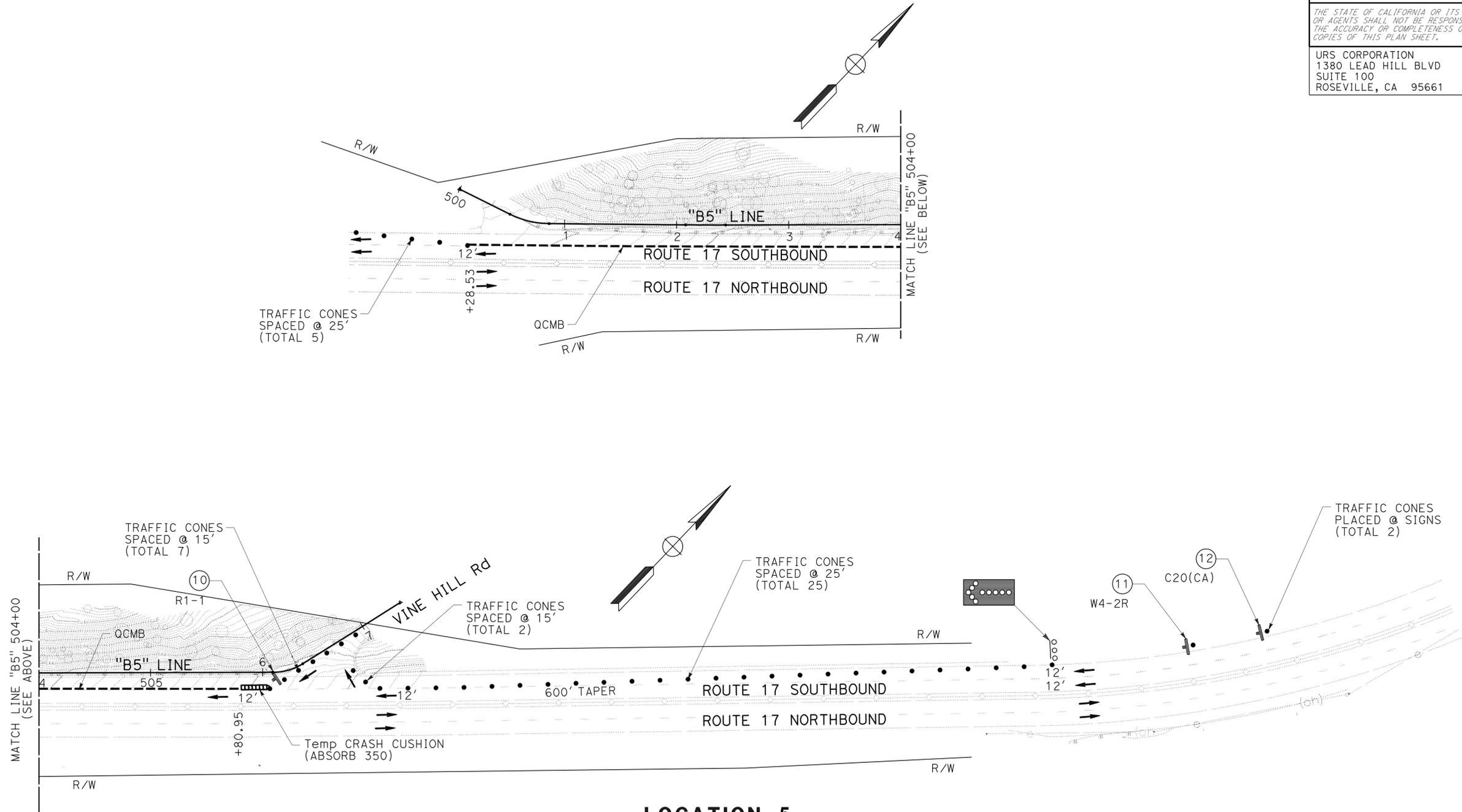
REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Et Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISOR
		JAMES A. LABANOWSKI JR.	



LOCATION 5
(PM 7.32 TO PM 7.44)

**TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)**

SCALE: 1" = 50'

TH-3

APPROVED FOR TRAFFIC HANDLING WORK ONLY

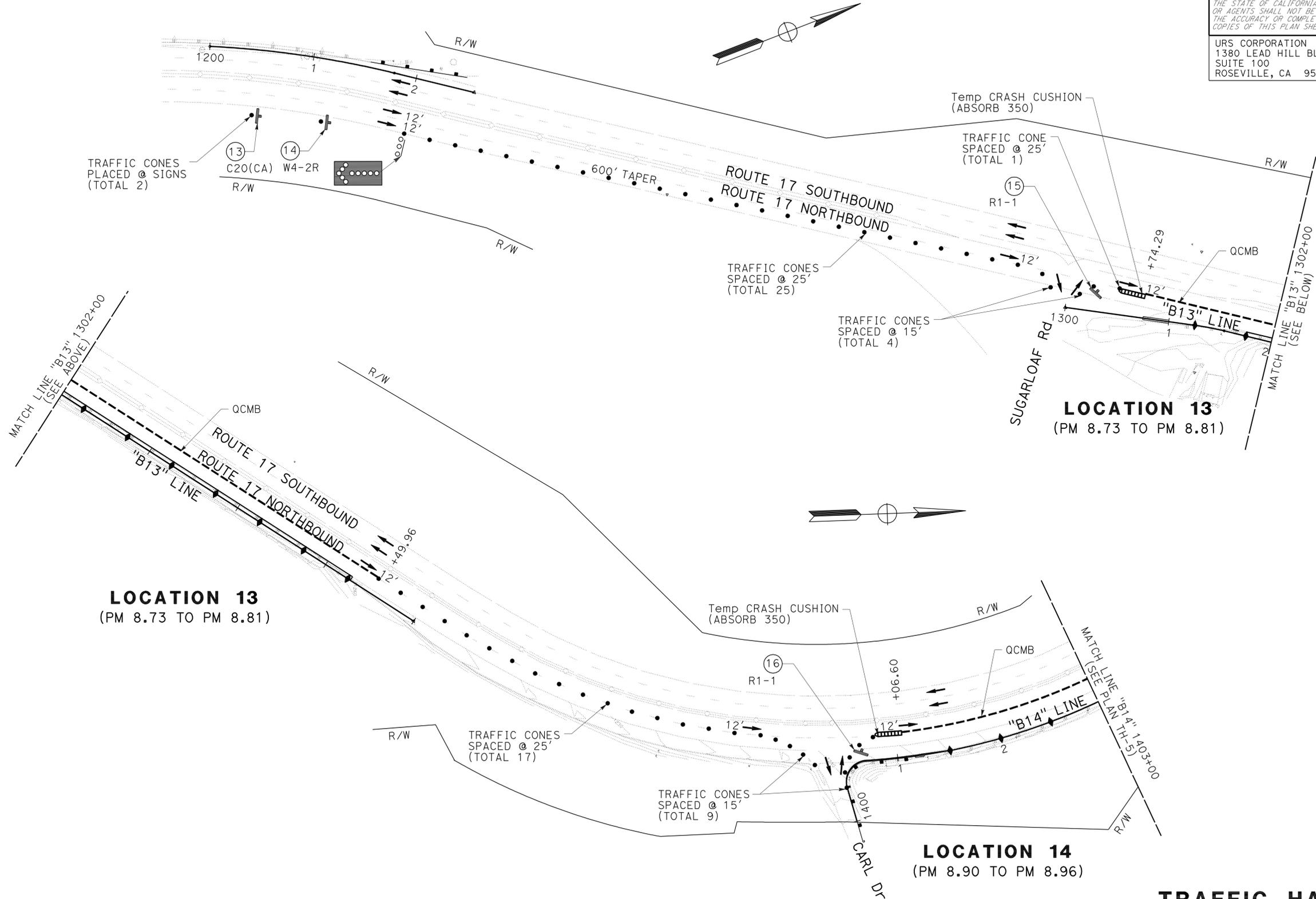


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	105	284

REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED PROFESSIONAL ENGINEER
 James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
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 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

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TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)
 SCALE: 1" = 50'
TH-4

APPROVED FOR TRAFFIC HANDLING WORK ONLY

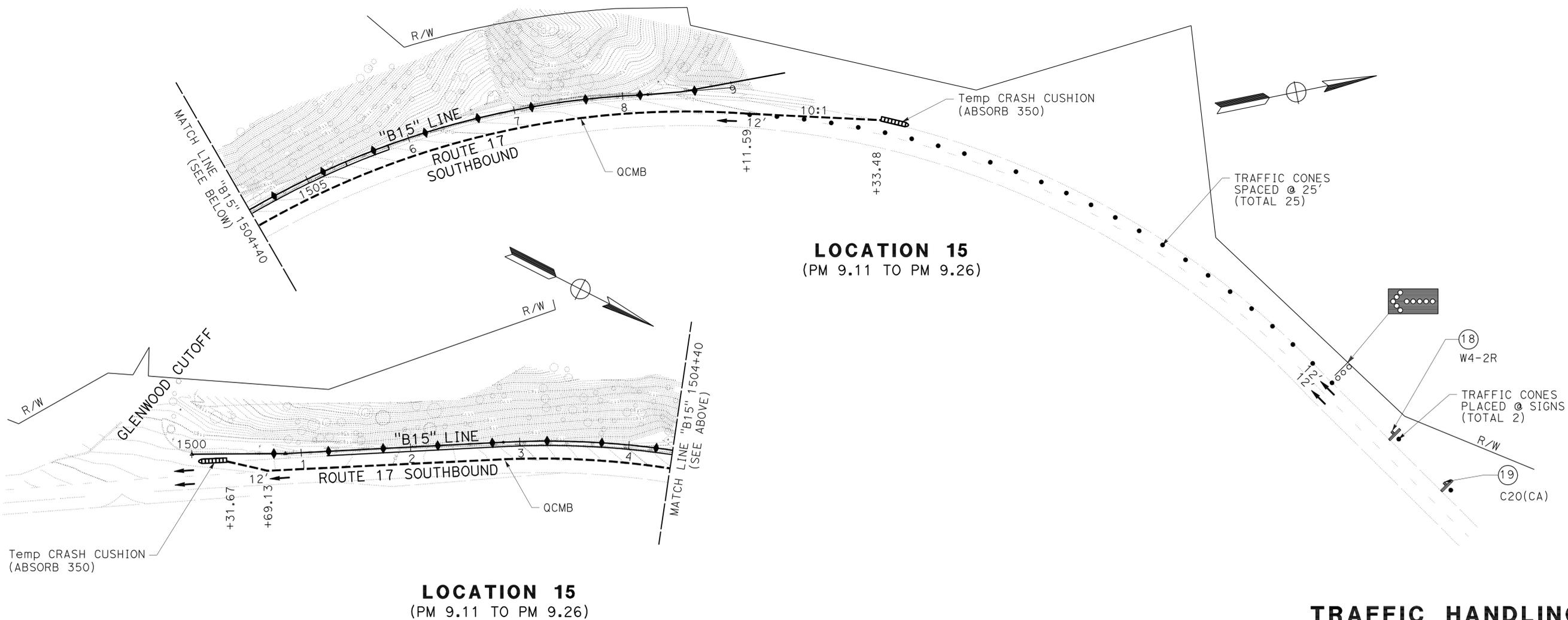
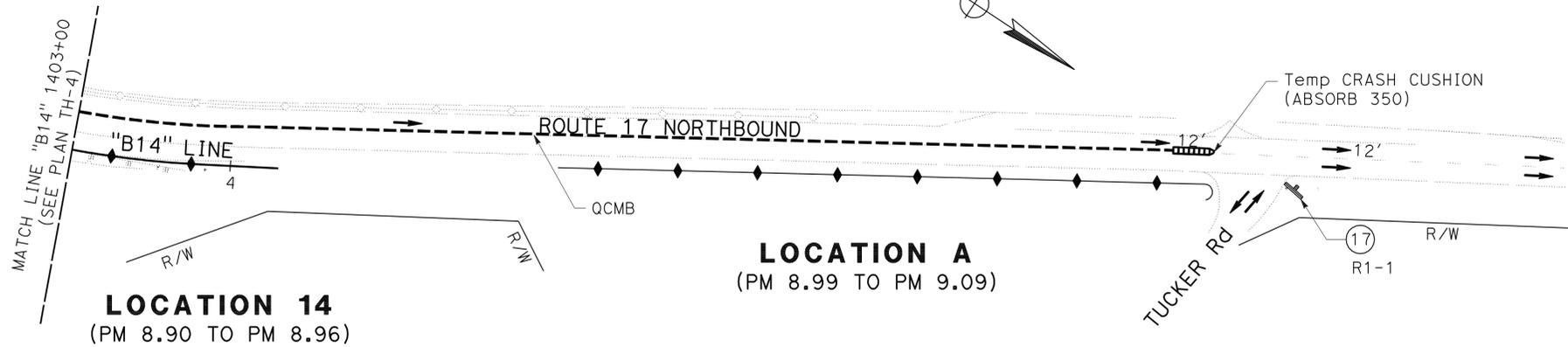
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR BY
Et Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISED
		JAMES A. LABANOWSKI JR.	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	106	284

	07-06-12 REGISTERED CIVIL ENGINEER DATE
9-24-12 PLANS APPROVAL DATE	
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URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661	

NOTES:

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**TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)**

SCALE: 1" = 50'

TH-5

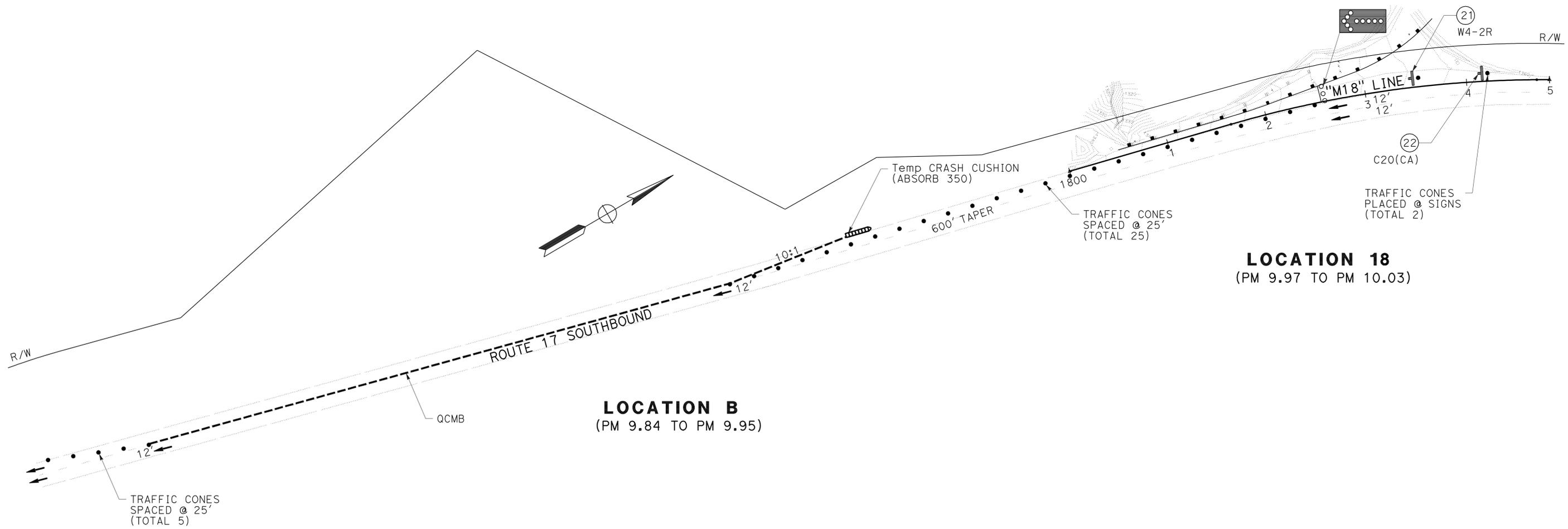
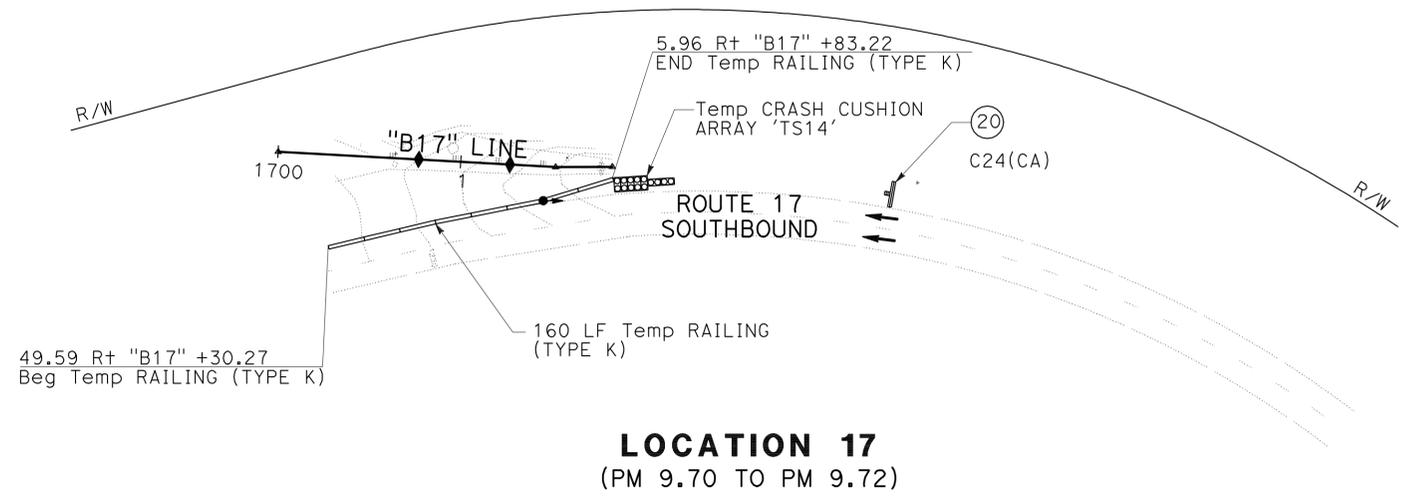
APPROVED FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
	MARK POLISCHUK	
	JAMES A. LABANOWSKI JR.	
CONSULTANT FUNCTIONAL SUPERVISOR	CHECKED BY	
GARRY HORTON		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	107	284
<i>James A. Labanowski, Jr.</i> REGISTERED CIVIL ENGINEER			07-06-12	DATE	
9-24-12 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>					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					

NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
	MARK POLISCHUK	JAMES A. LABANOWSKI JR.
	CALCULATED/DESIGNED BY	CHECKED BY
CONSULTANT SUPERVISOR	GARRY HORTON	



TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)
 SCALE: 1" = 50'
TH-6

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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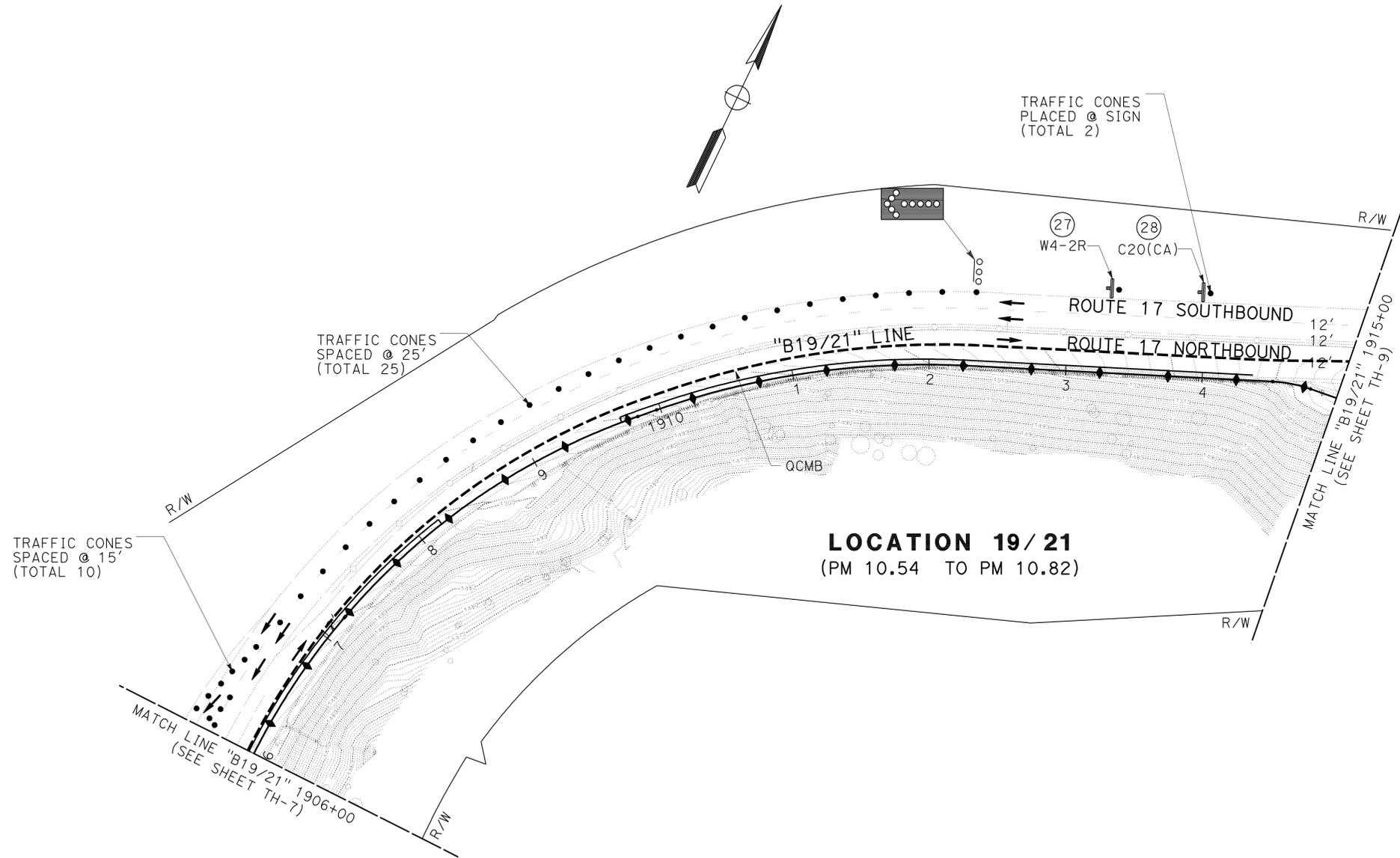
REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER
 James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 PLANS APPROVAL DATE
 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	DATE
		JAMES A. LABANOWSKI JR.	REVISOR
			DATE



**TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)**

SCALE: 1" = 50'

TH-8

APPROVED FOR TRAFFIC HANDLING WORK ONLY

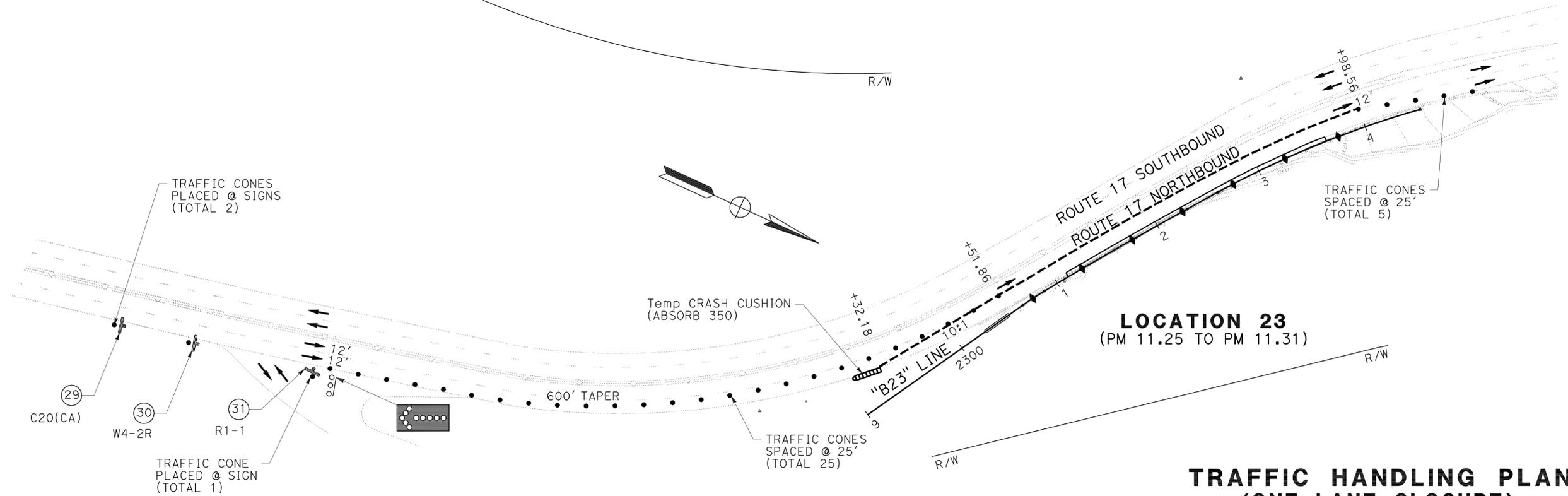
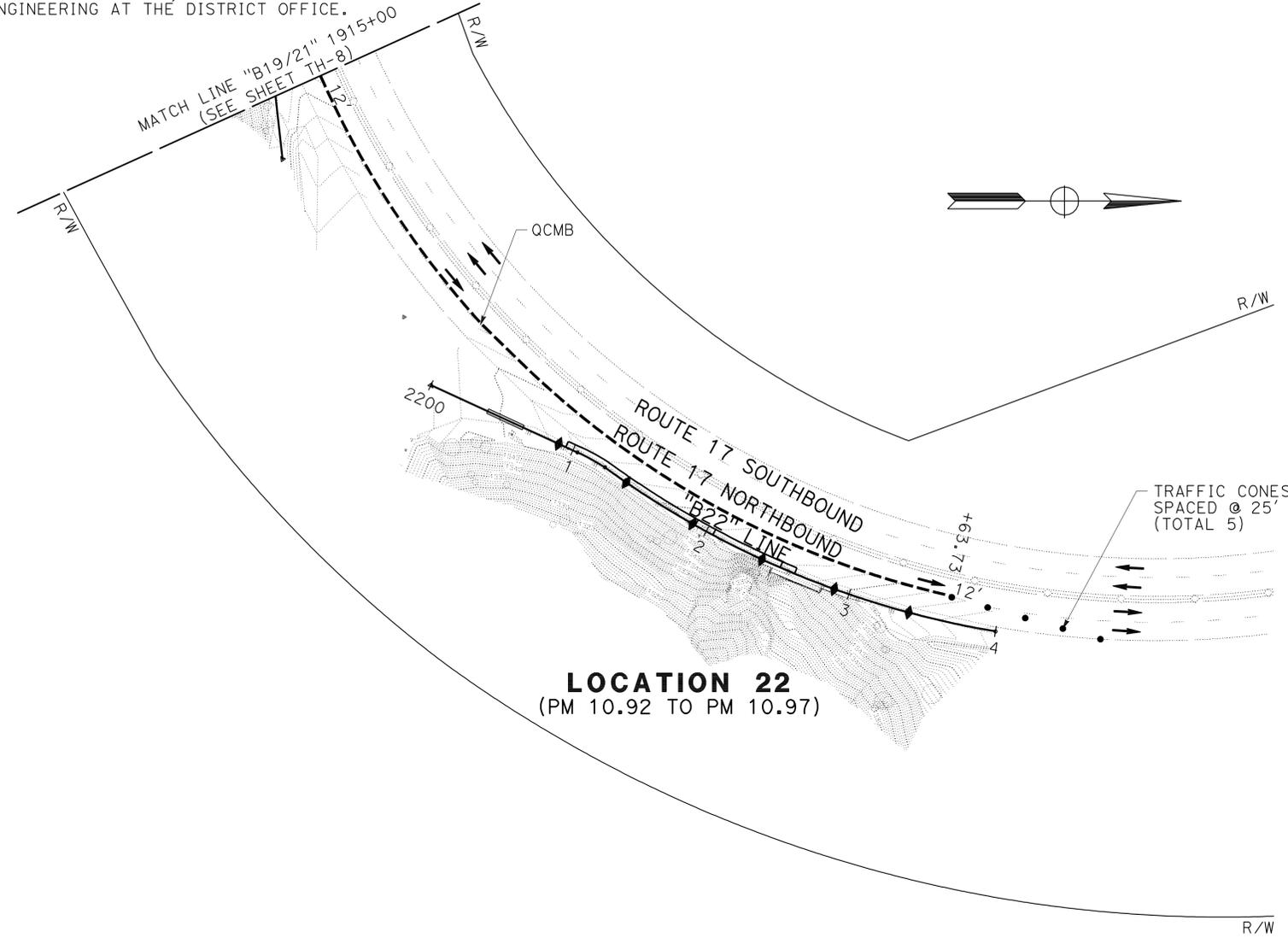


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	110	284
			07-06-12	DATE	
REGISTERED CIVIL ENGINEER			PLANS APPROVAL DATE		
9-24-12			DATE		
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URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



NOTES:

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
	MARK POLISCHUK	
	JAMES A. LABANOWSKI JR.	
CONSULTANT FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY
GARRY HORTON		

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TRAFFIC HANDLING PLAN
(ONE LANE CLOSURE)**

SCALE: 1" = 50'

TH-9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	111	284

REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER DATE 9-24-12
 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.

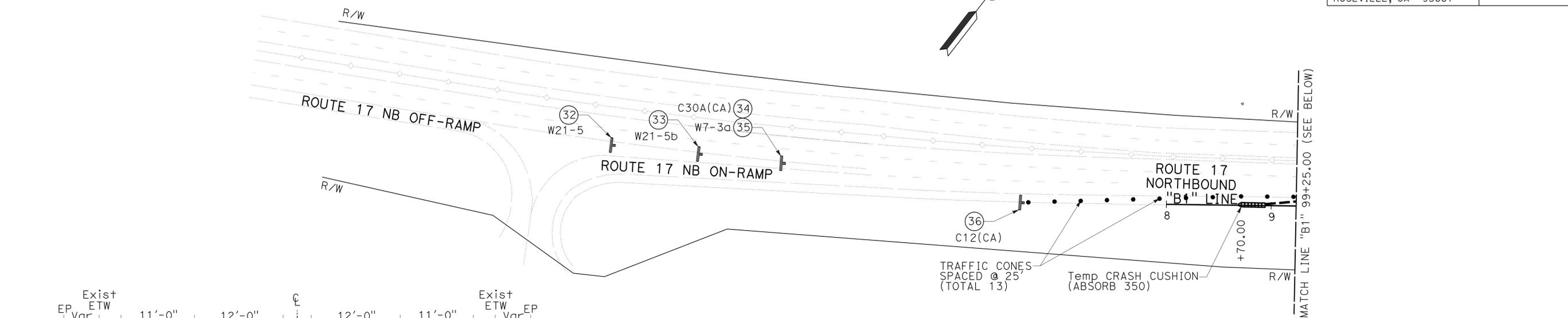


URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

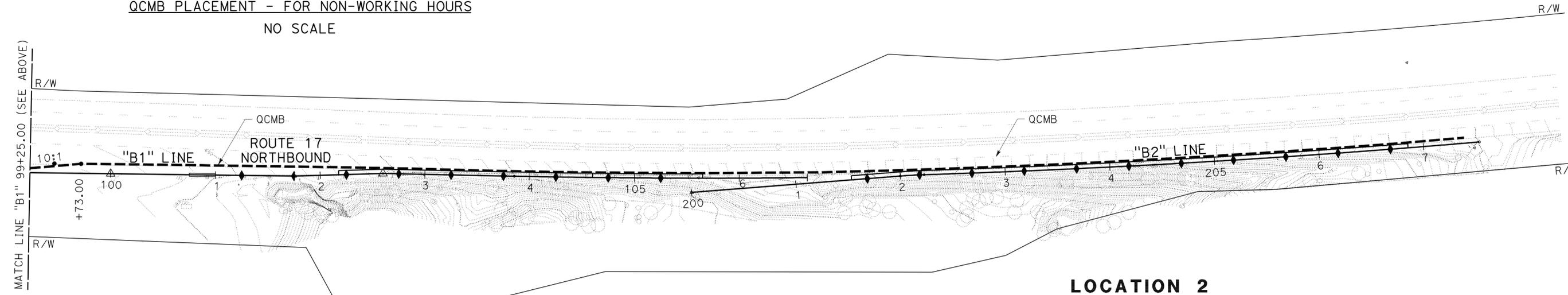
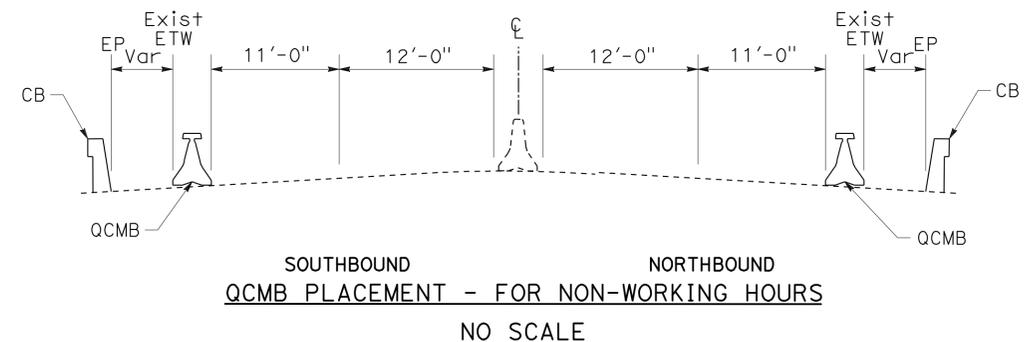
NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 GARRY HORTON
 CONSULTANT - FUNCTIONAL SUPERVISOR
 MARK POLISCHUK
 REVISED BY
 JAMES A. LABANOWSKI JR.
 DATE REVIS
 CALCULATED/DESIGNED BY
 CHECKED BY



LOCATION 1
(PM 6.04 TO PM 6.13)



LOCATION 1
(PM 6.04 TO PM 6.13)

LOCATION 2
(PM 6.14 TO PM 6.26)

TRAFFIC HANDLING PLAN (SHOULDER CLOSURE)

SCALE: 1" = 50'

TH-10

APPROVED FOR TRAFFIC HANDLING WORK ONLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	112	284

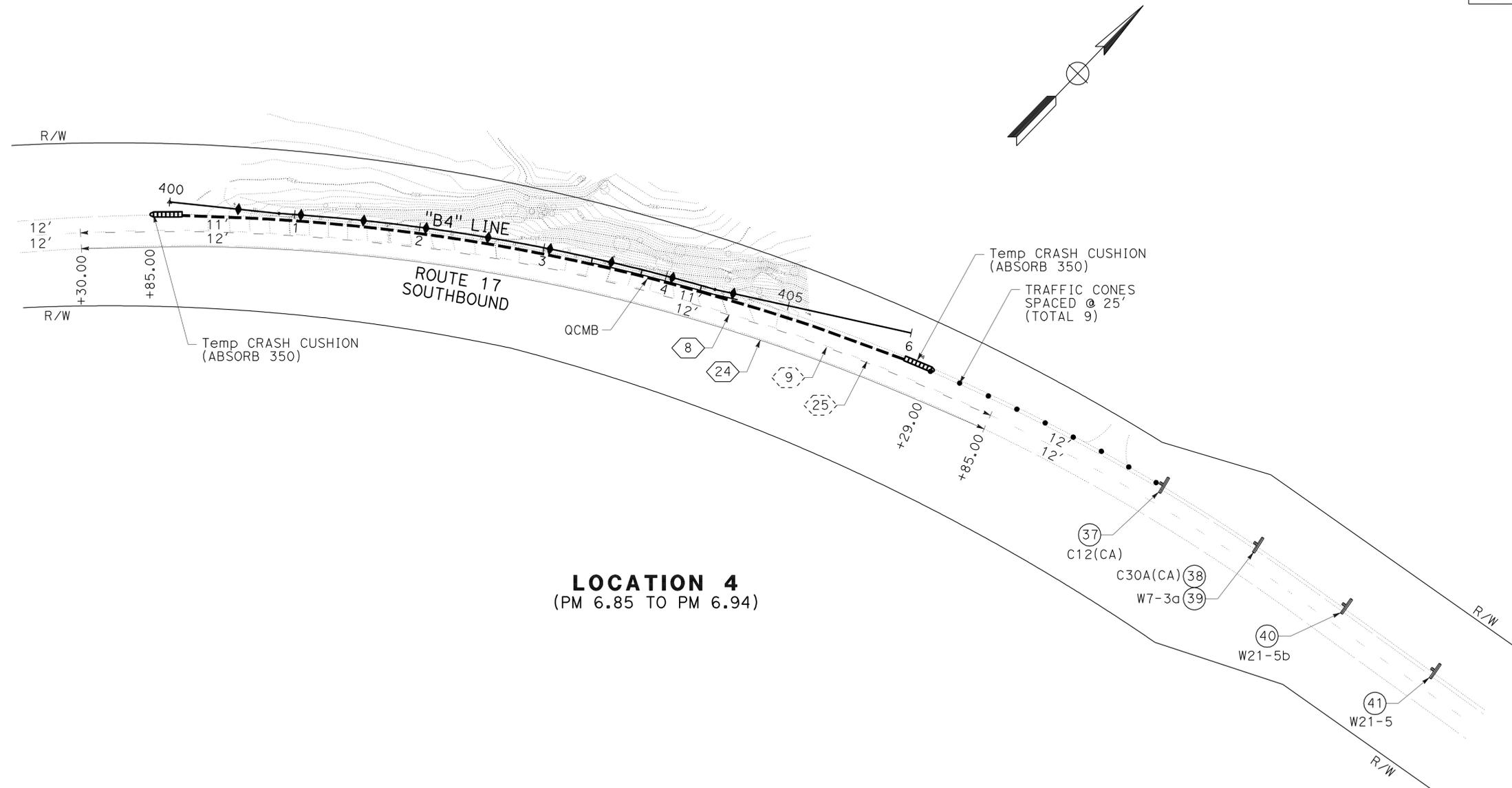
REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER
 James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 PLANS APPROVAL DATE
 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans	MARK POLISCHUK	
	JAMES A. LABANOWSKI JR.	
CONSULTANT FUNCTIONAL SUPERVISOR	CHECKED BY	
GARRY HORTON		



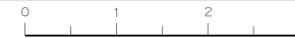
LOCATION 4
(PM 6.85 TO PM 6.94)

TRAFFIC HANDLING PLAN (SHOULDER CLOSURE)

SCALE: 1" = 50'

TH-11

APPROVED FOR TRAFFIC HANDLING WORK ONLY



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	113	284

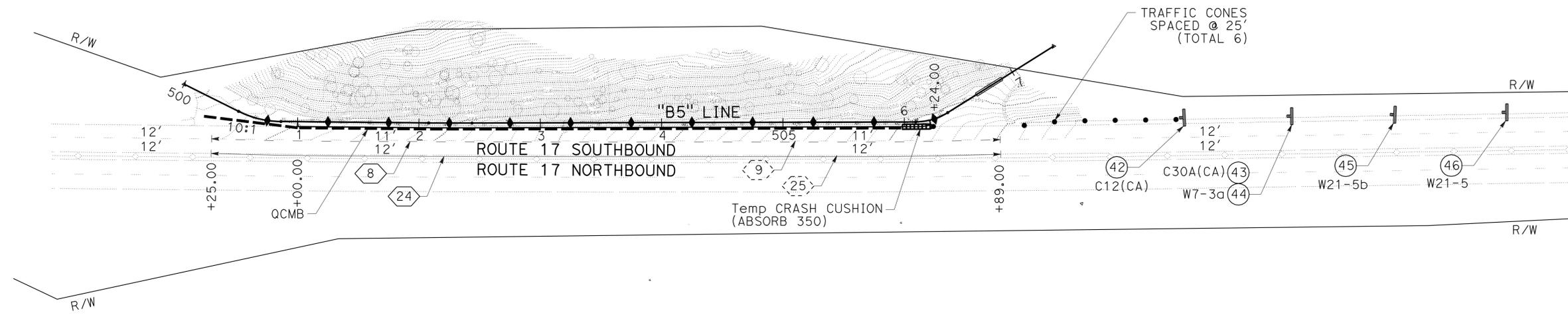
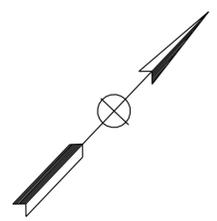
REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER DATE 9-24-12
 PLANS APPROVAL DATE
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URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LOCATION 5
(PM 7.32 TO PM 7.44)

**TRAFFIC HANDLING PLAN
(SHOULDER CLOSURE)**

SCALE: 1" = 50'

TH-12

APPROVED FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans	MARK POLISCHUK	
	JAMES A. LABANOWSKI JR.	
CONSULTANT - FUNCTIONAL SUPERVISOR	CHECKED BY	DATE
GARRY HORTON		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	114	284

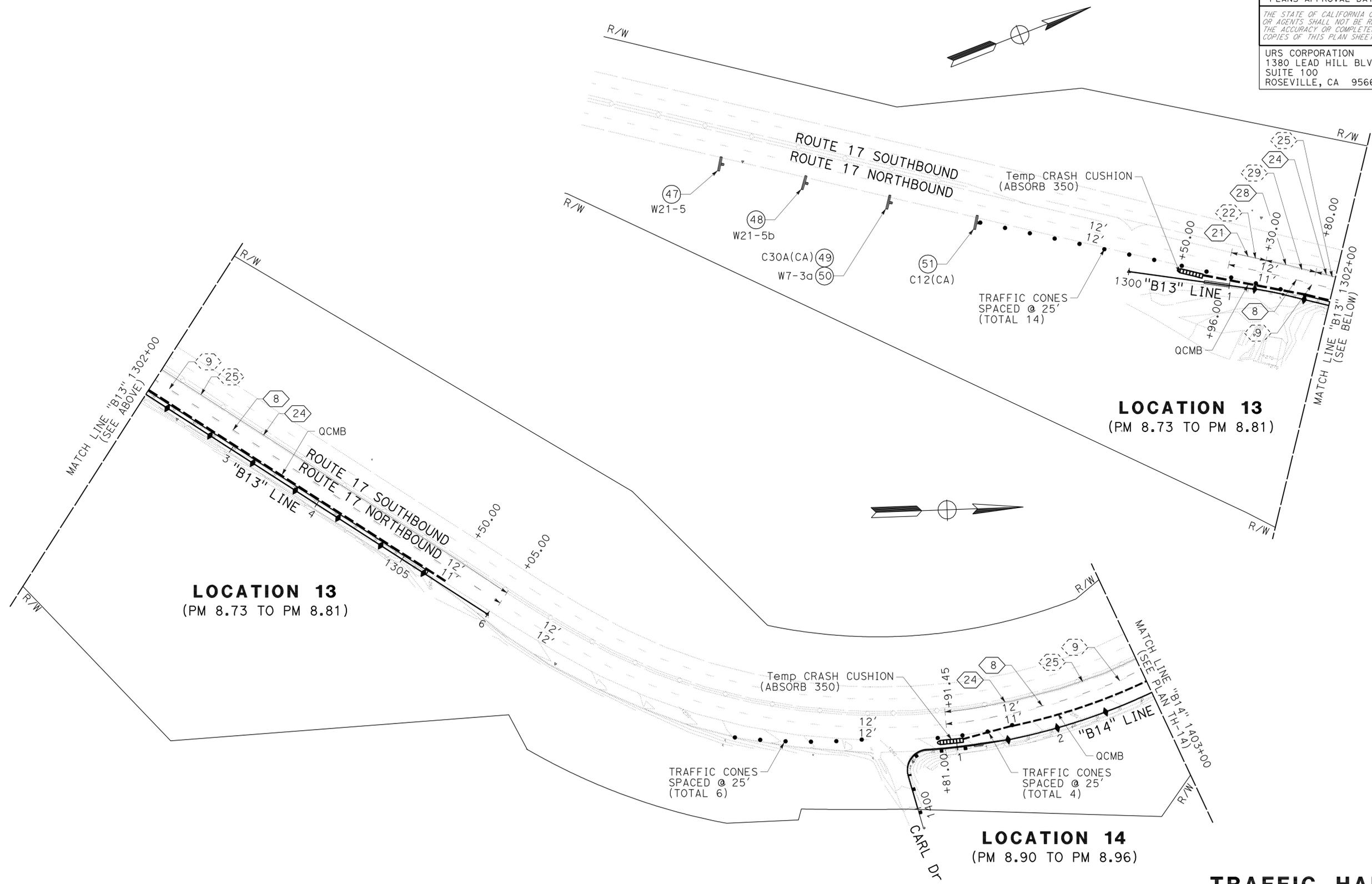
<i>James A. Labanowski, Jr.</i> REGISTERED CIVIL ENGINEER No. C55039 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA	07-06-12 DATE 9-24-12 PLANS APPROVAL DATE
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URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISOR
		JAMES A. LABANOWSKI JR.	



**TRAFFIC HANDLING PLAN
 (SHOULDER CLOSURE)**
 SCALE: 1" = 50'
TH-13

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	115	284

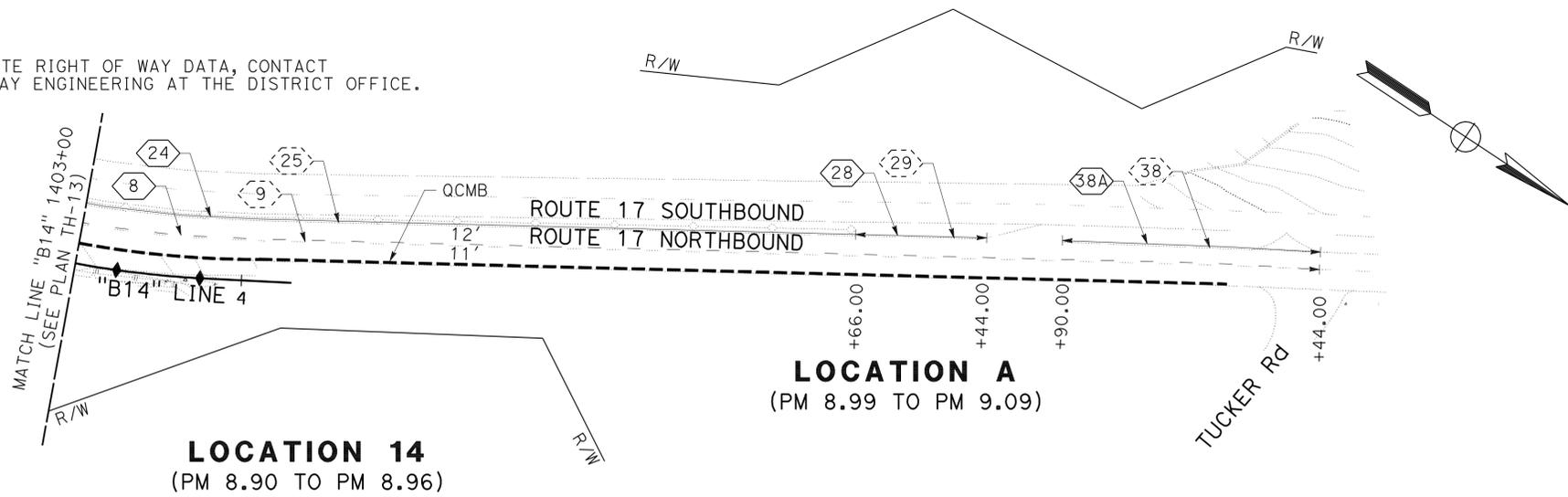
<i>James A. Labanowski, Jr.</i> REGISTERED CIVIL ENGINEER No. C55039 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA	07-06-12 DATE 9-24-12 PLANS APPROVAL DATE
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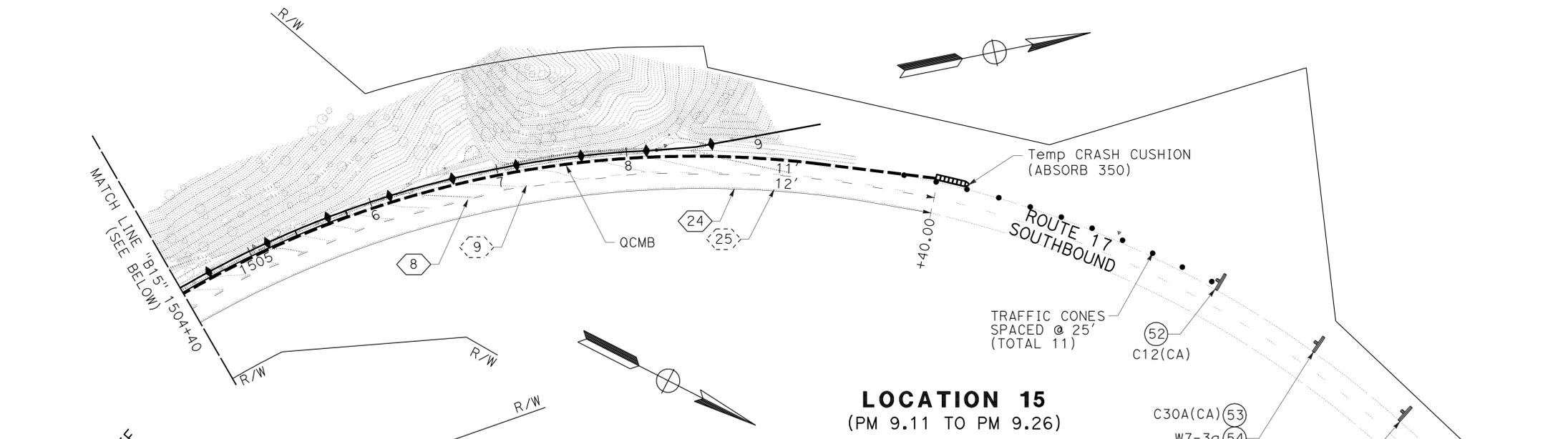
URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

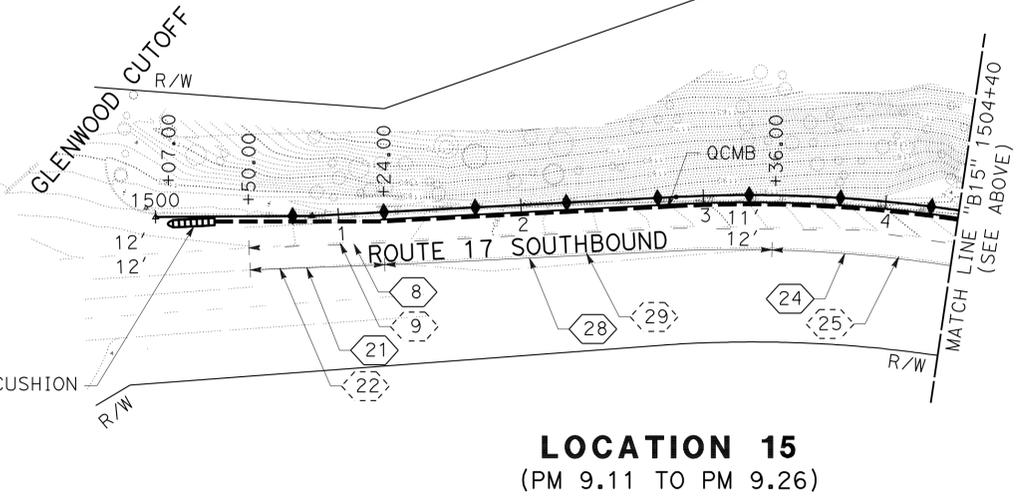
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LOCATION 14
(PM 8.90 TO PM 8.96)



LOCATION 15
(PM 9.11 TO PM 9.26)



LOCATION 15
(PM 9.11 TO PM 9.26)

**TRAFFIC HANDLING PLAN
(SHOULDER CLOSURE)**

SCALE: 1" = 50'

TH-14

APPROVED FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
	MARK POLISCHUK	9-24-12
	JAMES A. LABANOWSKI JR.	
CONSULTANT FUNCTIONAL SUPERVISOR	CHECKED BY	
GARRY HORTON		
	CALCULATED/DESIGNED BY	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	117	284

<i>James A. Labanowski, Jr.</i>	07-06-12
REGISTERED CIVIL ENGINEER	DATE
9-24-12	
PLANS APPROVAL DATE	

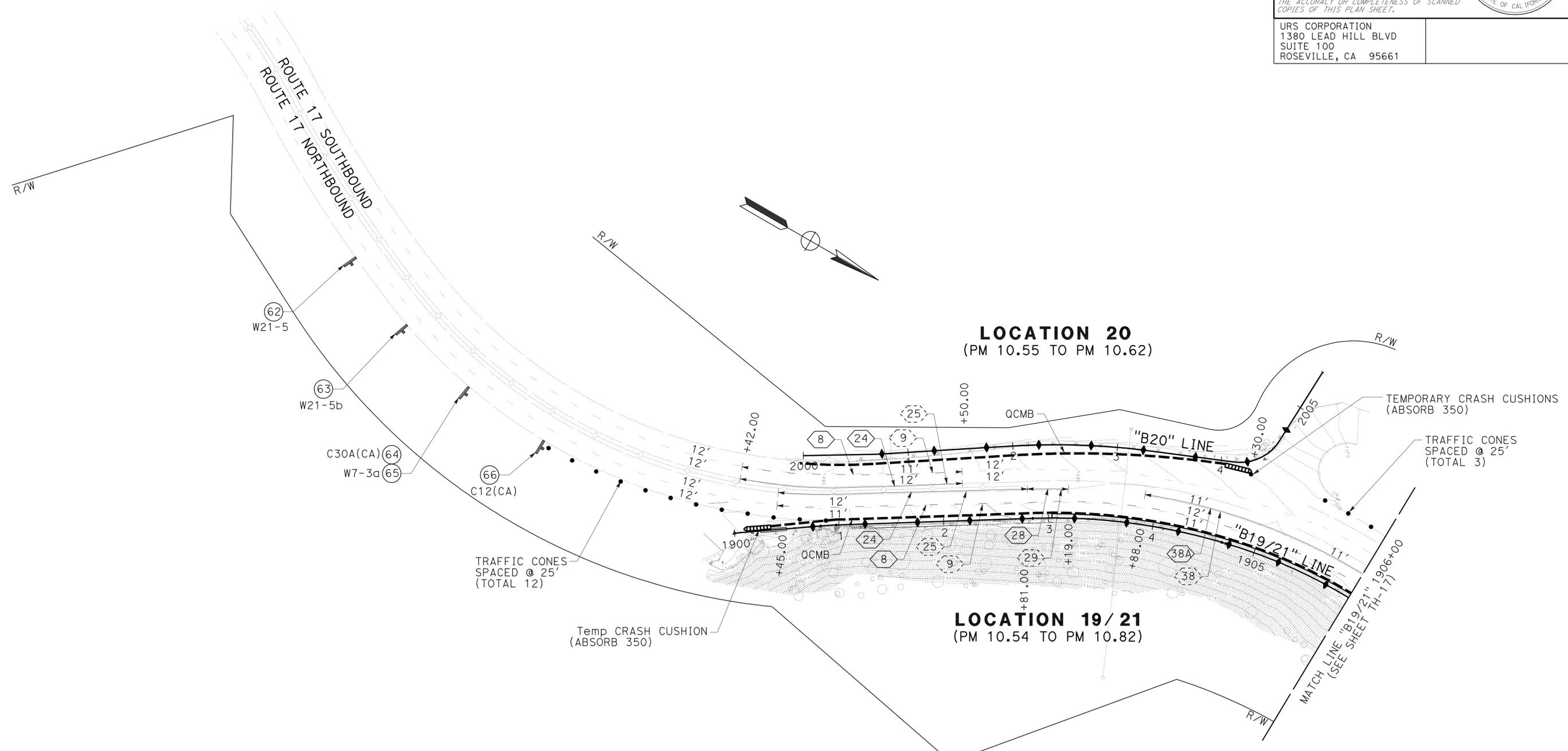
James Angelo Labanowski, Jr. No. C55039 Exp. 6/30/14 CIVIL

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.

URS CORPORATION
1380 LEAD HILL BLVD
SUITE 100
ROSEVILLE, CA 95661

NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR BY
Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISED
		JAMES A. LABANOWSKI JR.	



**TRAFFIC HANDLING PLAN
(SHOULDER CLOSURE)**
SCALE: 1" = 50'
TH-16

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	118	284

James A. Labanowski, Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 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.

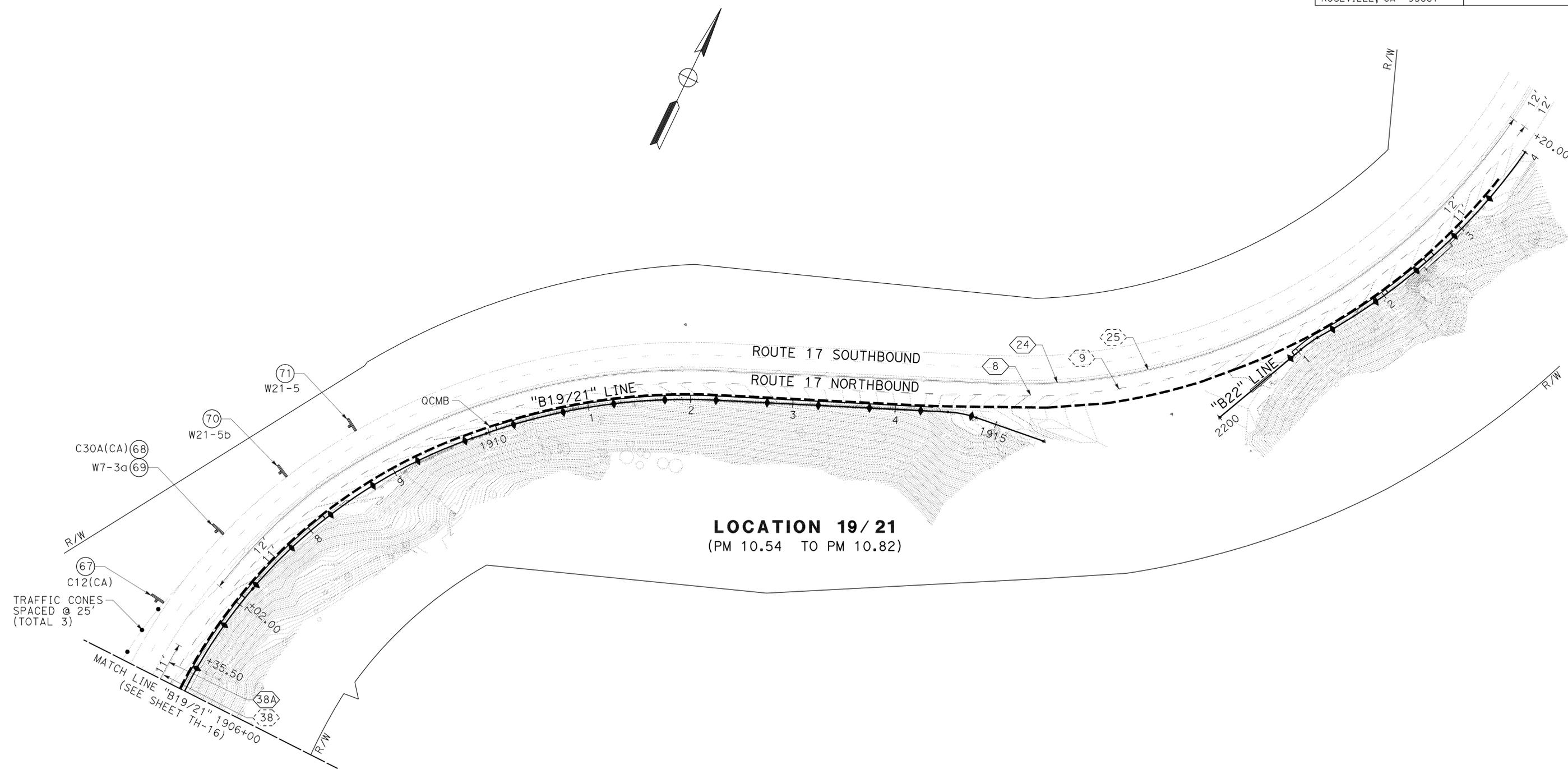


URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISED
		JAMES A. LABANOWSKI JR.	



LOCATION 19/21
(PM 10.54 TO PM 10.82)

**TRAFFIC HANDLING PLAN
(SHOULDER CLOSURE)**

SCALE: 1" = 50'

TH-17

APPROVED FOR TRAFFIC HANDLING WORK ONLY



USERNAME => s109858
DGN FILE => 50L701md017.dgn

CU 06253

EA 0L7014

BORDER LAST REVISED 4/11/2008

LAST REVISION: DATE PLOTTED => 01-OCT-2012
07-06-12 TIME PLOTTED => 11:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	119	284

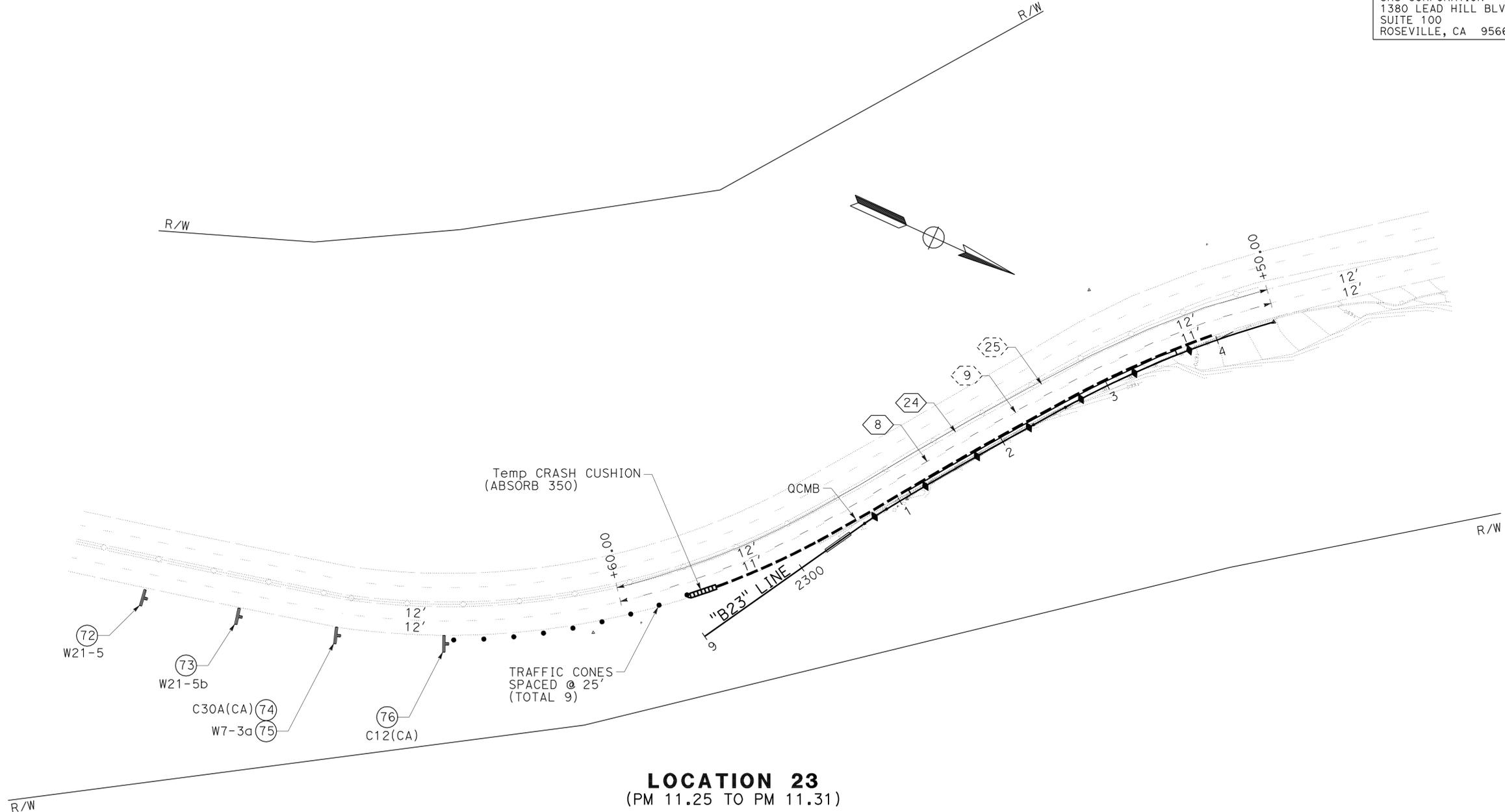
REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER
 James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 PLANS APPROVAL DATE
 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	DATE
		JAMES A. LABANOWSKI JR.	REVISOR
			DATE



LOCATION 23
(PM 11.25 TO PM 11.31)

**TRAFFIC HANDLING PLAN
(SHOULDER CLOSURE)**

SCALE: 1" = 50'

TH-18

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	120	284
 REGISTERED CIVIL ENGINEER			07-06-12	DATE	
9-24-12 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>					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					

NOTE:

- COVER SIGN PANEL WHEN NOT IN USE.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

PLAN SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE	No. OF SIGNS	SIGN MESSAGE	REMARK
				EA		
TH-1	1	C20(CA)	48" x 48"	2	RIGHT LANE CLOSED AHEAD	RIGHT
	2	W4-2R	48" x 48"	2	LANE ENDS	RIGHT
	3	W4-1R	48" x 48"	1	MERGE	RIGHT
	4	W4-1R	48" x 48"	1	MERGE	RIGHT
	5	C30(CA)	48" x 48"	1	LANE CLOSED	
TH-2	6	R1-1	48" x 48"	1	STOP	
	7	W20-1	48" x 48"	1	ROAD WORK AHEAD	
	8	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
TH-3	9	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	10	R1-1	48" x 48"	1	STOP	
	11	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
TH-4	12	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	13	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	14	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
TH-5	15	R1-1	48" x 48"	1	STOP	
	16	R1-1	48" x 48"	1	STOP	
	17	R1-1	48" x 48"	1	STOP	
TH-6	18	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
	19	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	20	C24(CA)	48" x 48"	1	SHOULDER WORK AHEAD	
TH-7	21	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
	22	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	23	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
TH-8	24	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
	25	W20-1	48" x 48"	1	ROAD WORK AHEAD	
	26	R1-1	48" x 48"	1	STOP	
TH-9	27	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
	28	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
	29	C20(CA)	48" x 48"	1	RIGHT LANE CLOSED AHEAD	RIGHT
TH-10	30	W4-2R	48" x 48"	1	LANE ENDS	RIGHT
	31	R1-1	48" x 48"	1	STOP	
	32	W21-5	48" x 48"	1	SHOULDER WORK	
TH-11	33	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	34	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	35	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
TH-12	36	C12(CA)	48" x 48"	1	NARROW LANES	
	37	C12(CA)	48" x 48"	1	NARROW LANES	
	38	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
TH-13	39	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
	40	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	41	W21-5	48" x 48"	1	SHOULDER WORK	
TH-14	42	C12(CA)	48" x 48"	1	NARROW LANES	
	43	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	44	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
TH-15	45	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	46	W21-5	48" x 48"	1	SHOULDER WORK	

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

PLAN SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE	No. OF SIGNS	SIGN MESSAGE	REMARK
				EA		
TH-13	47	W21-5	48" x 48"	1	SHOULDER WORK	
	48	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	49	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	50	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
TH-14	51	C12(CA)	48" x 48"	1	NARROW LANES	
	52	C12(CA)	48" x 48"	1	NARROW LANES	
	53	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	54	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
TH-15	55	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	56	W21-5	48" x 48"	1	SHOULDER WORK	
	57	C12(CA)	48" x 48"	1	NARROW LANES	
	58	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
TH-16	59	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
	60	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	61	W21-5	48" x 48"	1	SHOULDER WORK	
	62	W21-5	48" x 48"	1	SHOULDER WORK	
TH-17	63	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 2000 FT	RIGHT
	64	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	65	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
	66	C12(CA)	48" x 48"	1	NARROW LANES	
TH-18	67	C12(CA)	48" x 48"	1	NARROW LANES	
	68	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	69	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
	70	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
TH-19	71	W21-5	48" x 48"	1	SHOULDER WORK	
	72	W21-5	48" x 48"	1	SHOULDER WORK	
	73	W21-5b	48" x 48"	1	RIGHT SHOULDER CLOSED 1500 FT	RIGHT
	74	C30A(CA)	48" x 48"	1	SHOULDER CLOSED	
	75	W7-3a	48" x 48"	1	NEXT 0.5 MILE	
	76	C12(CA)	48" x 48"	1	NARROW LANES	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 GARRY HORTON
 CONSULTANT - FUNCTIONAL SUPERVISOR
 MARK POLISCHUK
 JAMES A. LABANOWSKI JR.
 REVISOR BY DATE
 CALCULATED/DESIGNED BY CHECKED BY
 URS CORPORATION

TRAFFIC HANDLING QUANTITIES THQ-1

LAST REVISION: DATE PLOTTED => 01-OCT-2012 TIME PLOTTED => 13:11

TEMPORARY TRAFFIC STRIPE (PAINT)

PLAN SHEET No.	STATION	LOCATION	DETAIL No.	TEMPORARY TRAFFIC STRIPE (PAINT)		
				WHITE (LF)		YELLOW (LF)
				4"	8"	4"
TH-11	"B4" 399+30.00 TO "B4" 406+85.00	4	8	745		
	"B4" 399+30.00 TO "B4" 406+85.00		24		740	
TH-12	"B5" 500+25.00 TO "B5" 505+89.00	5	8	651		
	"B5" 500+25.00 TO "B5" 505+89.00		24		651	
TH-13	"B13" 1300+96.00 TO "B13" 1301+30.00	13	21		35	
	"B13" 1301+30.00 TO "B13" 1301+80.00		28		50	
	"B13" 1301+80.00 TO "B13" 1306+05.00		8	424		
	"B13" 1301+80.00 TO "B13" 1306+05.01		24		424	
TH-14	"B14" 1400+91.45 TO "B14" 1403+00.00	14	8	200		
	"B14" 1400+91.45 TO "B14" 1403+00.00		24		200	
TH-14	"B14" 1403+00.00 TO "B14" 1410+44.00	14/A	8	741		
	"B14" 1403+00.00 TO "B14" 1407+66.00		24		461	
	"B14" 1407+66.00 TO "B14" 1408+44.00		28		79	
	"B14" 1408+90.00 TO "B14" 1410+44.00	38A		155		
	"B15" 1500+50.00 TO "B15" 1501+24.00	15	21		74	
	"B15" 1500+50.00 TO "B15" 1510+40.00		8	974		
"B15" 1501+24.00 TO "B15" 1503+36.00	28			212		
TH-15	LOCATION B TO "M18" 1799+52.00	B	8	849		
	LOCATION B TO "M18" 1799+52.00		24		849	
TH-16	"B19/21" 1900+45.00 TO "B19/21" 1906+00.00	19/21	8	568		
	"B19/21" 1900+45.00 TO "B19/21" 1902+81.00		24		237	
	"B19/21" 1902+81.00 TO "B19/21" 1903+19.00		28		39	
	"B19/21" 1903+88.00 TO "B19/21" 1906+00.00	38A		223		
	"B20" 1999+42.00 TO "B20" 2001+50.00	20	8	210		
"B20" 1999+42.00 TO "B20" 2001+50.00	24			212		
TH-17	"B19/21" 1906+00.00 TO "B19/21" 1906+35.50	19/21	38A		37	
	"B19/21" 1906+00.00 TO "B22" 2204+20.00	19/21/22	8	1520		
	"B19/21" 1907+02.00 TO "B22" 2204+20.00		24		1414	
TH-18	"B23" 2299+60.00 TO "B23" 2304+50.00	23	8	605		
	"B23" 2299+60.00 TO "B23" 2304+50.00		24		605	
SUBTOTAL				7487	415	7170
TOTAL				15,072		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	ScR	17	6.0/12.6	121	284
 REGISTERED CIVIL ENGINEER			07-06-12 DATE		
9-24-12 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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					

TRAFFIC HANDLING

No.	POST MILE		DIRECTION	TRAFFIC CONE (N)	FLASHING BEACON (PORTABLE) (N)	QUICKCHANGE MOVEABLE BARRIER SYSTEM	TEMPORARY RAILING (TYPE K)	Temp CRASH CUSHION (ABSORB 350) (N)	TEMPORARY CRASH CUSHION MODULES	OBJECT MARKER (TYPE P) (N)	FLASHING ARROW SIGN (FAS) (N)
	BEGIN	END									
1/2	6.04	6.26	NB	99	1	1312.1		1			1
4	6.85	6.94	SB	44		509.4		2			1
5	7.32	7.44	SB	41		578.5		1			1
13/14/A	8.90	9.09	NB	67		1363.5		3			1
15	9.11	9.26	SB	27		918.4		2			1
17	9.70	9.72	SB				160		14	1	
B	9.84	9.95	SB	32		628.9		1			1
20	10.55	10.62		68		406.6		1			1
19/21/22	10.54	10.97	NB	45		2107.9		1			1
23	10.54	10.97	NB	32		390.3		1			1
TOTALS				455	1	8215.5	160	13	14	1	9

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

TRAFFIC HANDLING QUANTITIES

NO SCALE

THQ-2

REMOVE THERMOPLASTIC TRAFFIC STRIPE

PLAN SHEET No.	STATION	LOCATION	DETAIL No.	REMOVE THERMOPLASTIC TRAFFIC STRIPE		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE PAVEMENT MARKER		
				(LF)		(LF)	(RETROREFLECTIVE)		
				4"	8"	4"	TYPE G (EA)	TYPE D (EA)	TYPE H (EA)
TH-11	"B4" 399+30.00 TO "B4" 406+85.00	4	9	745			16		
	"B4" 399+30.00 TO "B4" 406+85.00		25		740			16	
TH-12	"B5" 500+25.00 TO "B5" 505+89.00	5	9	651			14		
	"B5" 500+25.00 TO "B5" 505+89.00		25		651			14	
TH-13	"B13" 1300+96.00 TO "B13" 1301+30.00	13	22					4	
	"B13" 1301+30.00 TO "B13" 1301+80.00		29		50			6	
	"B13" 1301+80.00 TO "B13" 1306+05.00		9	424			9		
	"B13" 1301+80.00 TO "B13" 1306+05.01	25		424				9	
	"B14" 1400+91.45 TO "B14" 1403+00.00	14	9	200			5		
	"B14" 1400+91.45 TO "B14" 1403+00.00		25		200			5	
TH-14	"B14" 1403+00.00 TO "B14" 1410+44.00	14/A	9	741			16		
	"B14" 1403+00.00 TO "B14" 1407+66.00		25		461			10	
	"B14" 1407+66.00 TO "B14" 1408+44.00		29		79			8	
	"B14" 1408+90.00 TO "B14" 1410+44.00		38		155		7		8
	"B15" 1500+50.00 TO "B15" 1501+24.00	15	22		74			8	
	"B15" 1500+50.00 TO "B15" 1510+40.00		9	974			21		19
	"B15" 1501+24.00 TO "B15" 1503+36.00		29		212			19	
	"B15" 1503+36.00 TO "B15" 1510+40.00		25		888				19
TH-15	LOCATION B TO "M18" 1799+52.00	B	9	849			18		
	LOCATION B TO "M18" 1799+52.00		25		849			18	
TH-16	"B19/21" 1900+45.00 TO "B19/21"	19/21	9	568			12		
	"B19/21" 1900+45.00 TO "B19/21"		25		237			5	
	"B19/21" 1902+81.00 TO "B19/21"		29		39			5	
	"B19/21" 1903+88.00 TO "B19/21"	38		223		10			
	"B20" 1999+42.00 TO "B20" 2001+50.00	20	9	210			5		
	"B20" 1999+42.00 TO "B20" 2001+50.00		25		212			5	
TH-17	"B19/21" 1906+00.00 TO "B19/21"	19/21	38		37		2		
	"B19/21" 1906+00.00 TO "B22" 2204+20.00	19/21/22	9	1520			32		
	"B19/21" 1907+02.00 TO "B22" 2204+20.00		25		1414			30	
TH-18	"B23" 2299+60.00 TO "B23" 2304+50.00	23	9	605			13		
	"B23" 2299+60.00 TO "B23" 2304+50.00		25		605			13	
SUBTOTAL				7487	415	7170	180	50	144
TOTAL				7,902		7,170	374		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	122	284
			07-06-12 REGISTERED CIVIL ENGINEER DATE		
9-24-12 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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: MARK POLISCHUK
 CHECKED BY: JAMES A. LABANOWSKI JR.
 REVISED BY: [] DATE REVISED: []

TRAFFIC HANDLING QUANTITIES

NO SCALE

THQ-3

LAST REVISION: 07-06-12
 DATE PLOTTED => 01-06-2012
 TIME PLOTTED => 11:59

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: []
 CHECKED BY: JAMES A. LABANOWSKI JR.
 MARK POLISCHUK
 REVISED BY: []
 DATE REVISED: []

LEGEND:

-  CHANGE IN STRIPING PATTERN
-  THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE) DETAIL NUMBER
-  TYPE III ARROW THERMOPLASTIC PAVEMENT MARKING
-  TYPE V ARROW THERMOPLASTIC PAVEMENT MARKING
-  TYPE VI ARROW THERMOPLASTIC PAVEMENT MARKING
-  OBJECT MARKER (TYPE P)

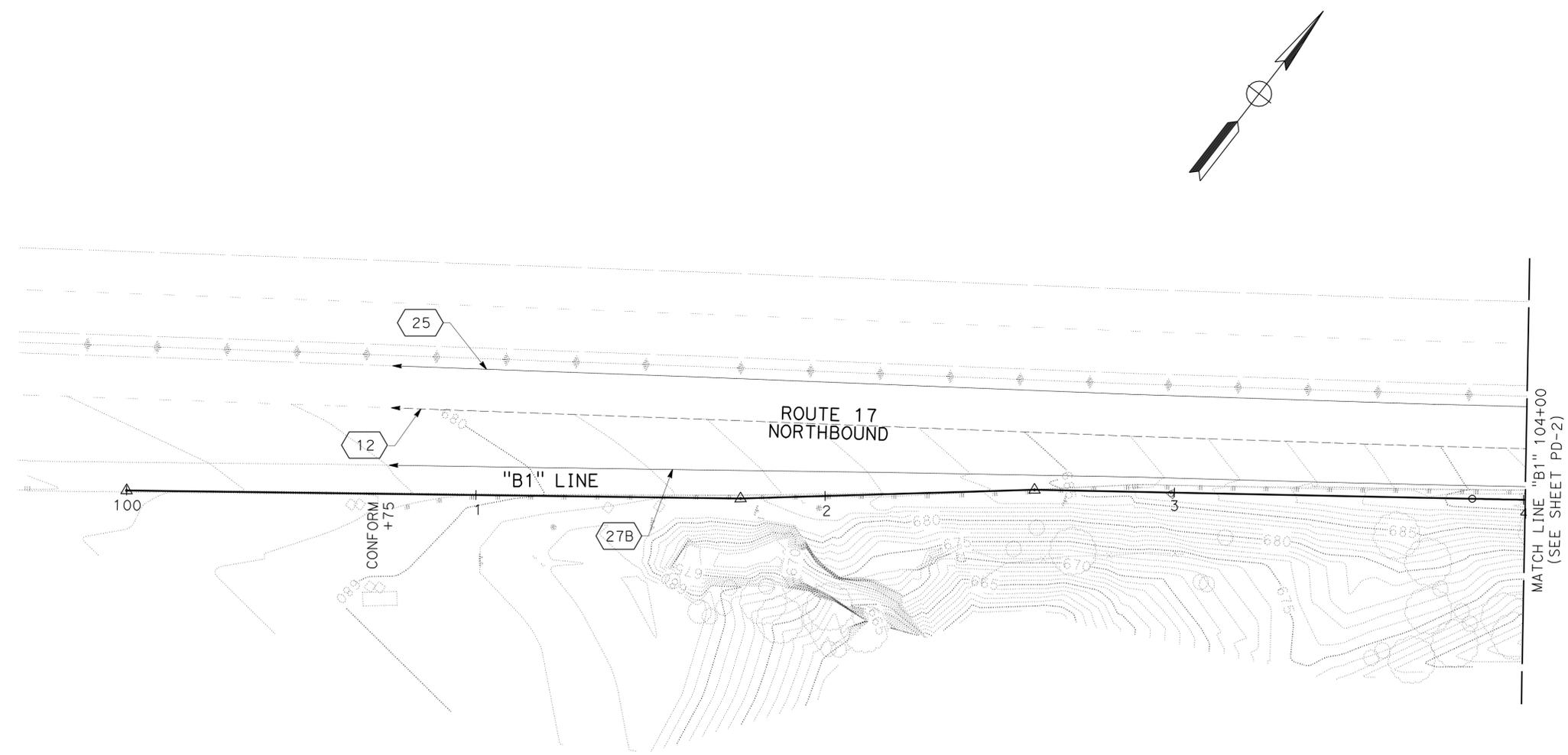
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	123	284

REGISTERED CIVIL ENGINEER DATE: 07-06-12
 REGISTERED CIVIL ENGINEER: James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 PLANS APPROVAL DATE

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URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



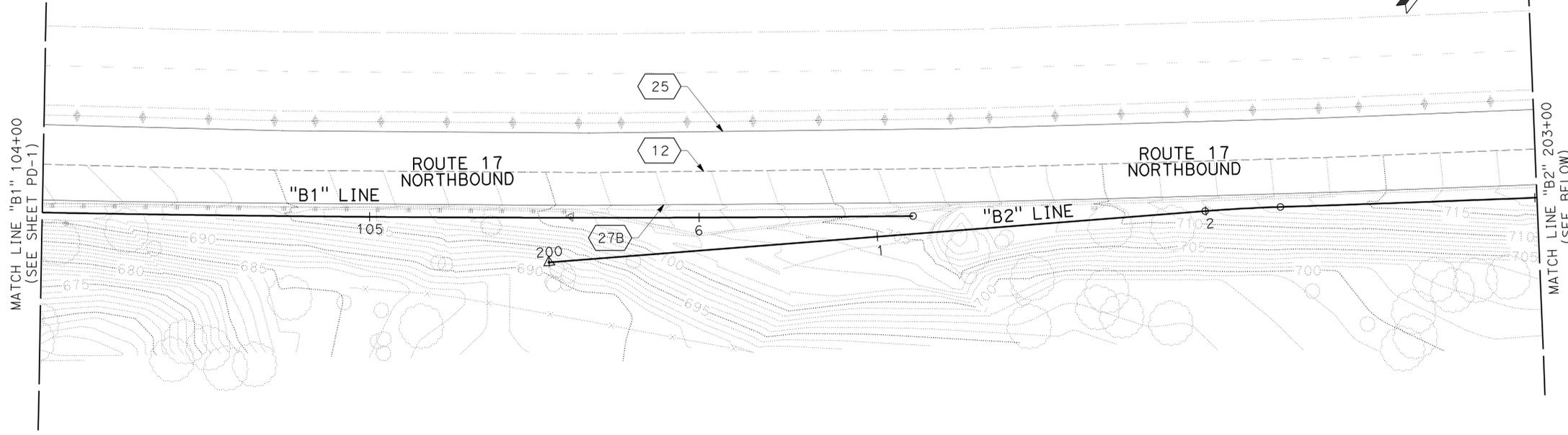
LOCATION 1
 (PM 6.04 TO PM 6.13)

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-1

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

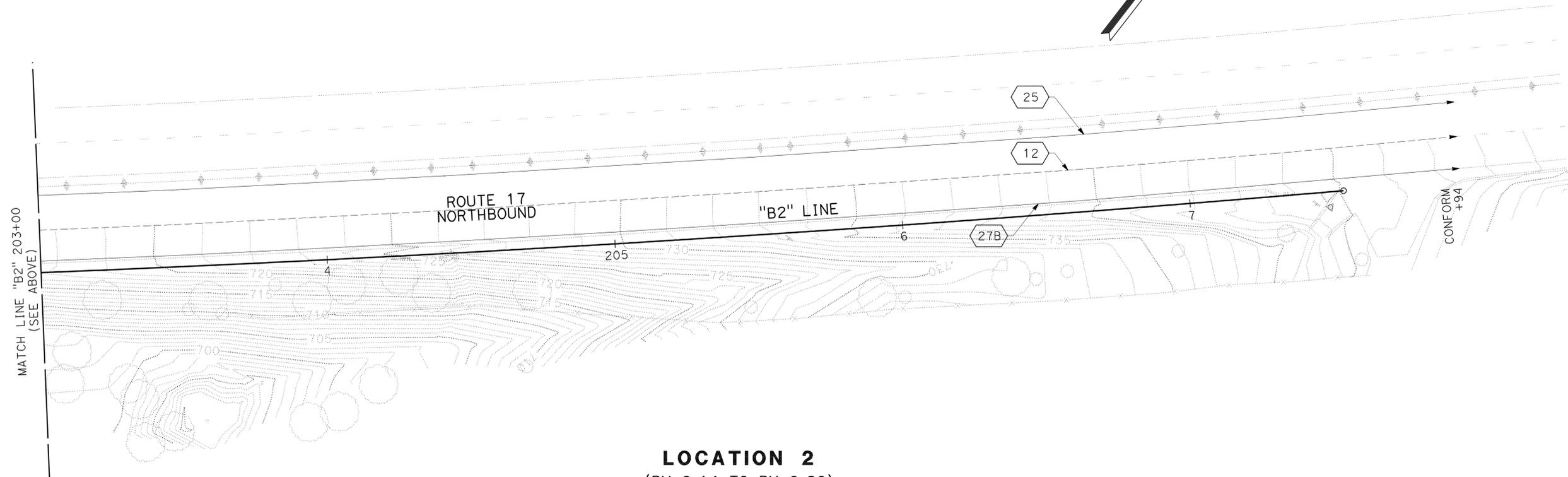
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	DATE
		JAMES A. LABANOWSKI JR.	REVISOR
			DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	124	284
			07-06-12		
James A. Labanowski, Jr.			REGISTERED CIVIL ENGINEER	DATE	
9-24-12			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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



LOCATION 1
(PM 6.04 TO PM 6.13)

LOCATION 2
(PM 6.14 TO PM 6.26)



LOCATION 2
(PM 6.14 TO PM 6.26)

PAVEMENT DELINEATION PLAN
SCALE: 1" = 20'
PD-2

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: CHECKED BY: JAMES A. LABANOWSKI JR.
 MARK POLISCHUK
 REVISED BY: DATE REVISED:

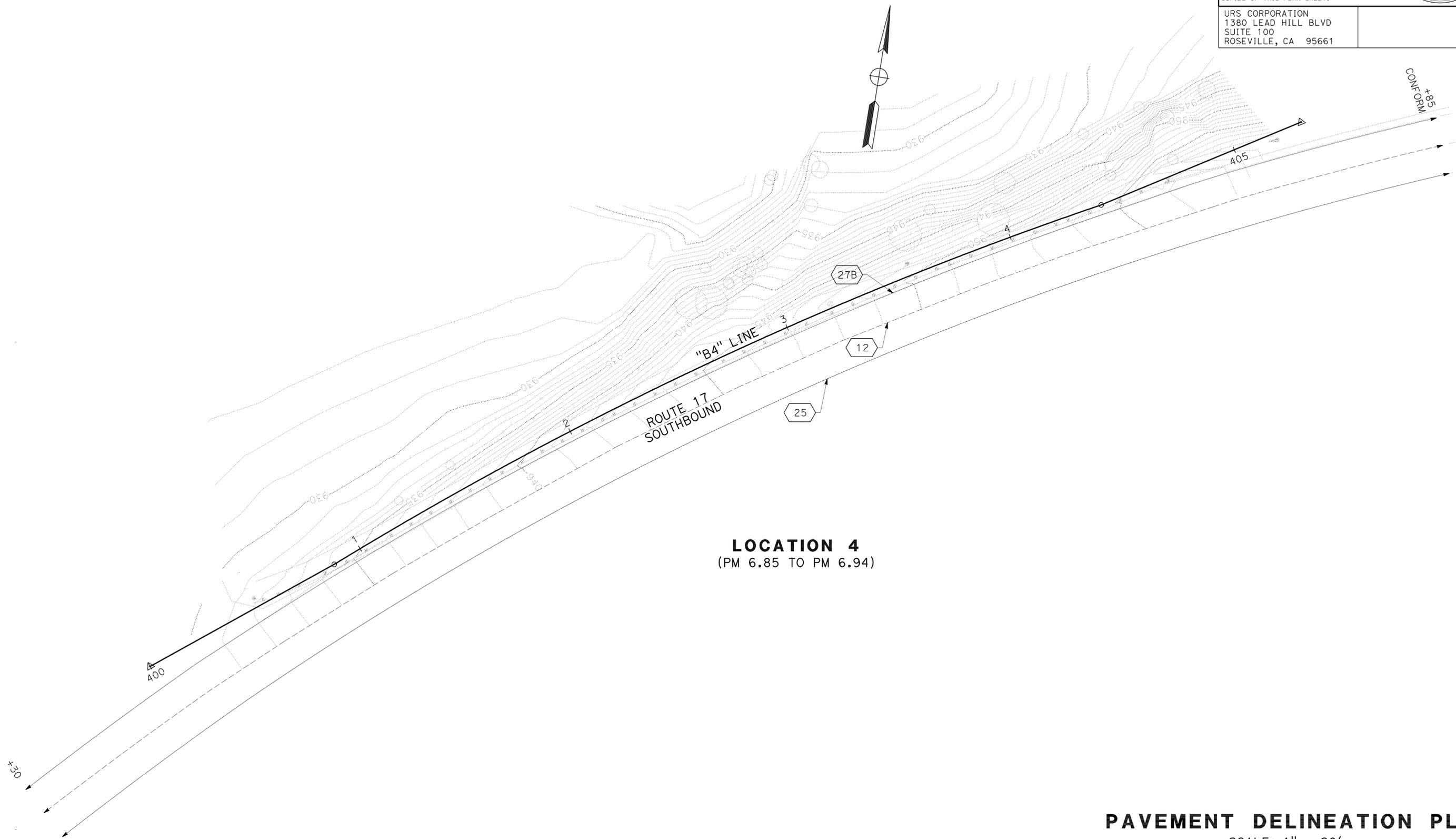
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	125	284

REGISTERED CIVIL ENGINEER: *James A. Labanowski Jr.* DATE: 07-06-12
 REGISTERED CIVIL ENGINEER: James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

9-24-12
 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.

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



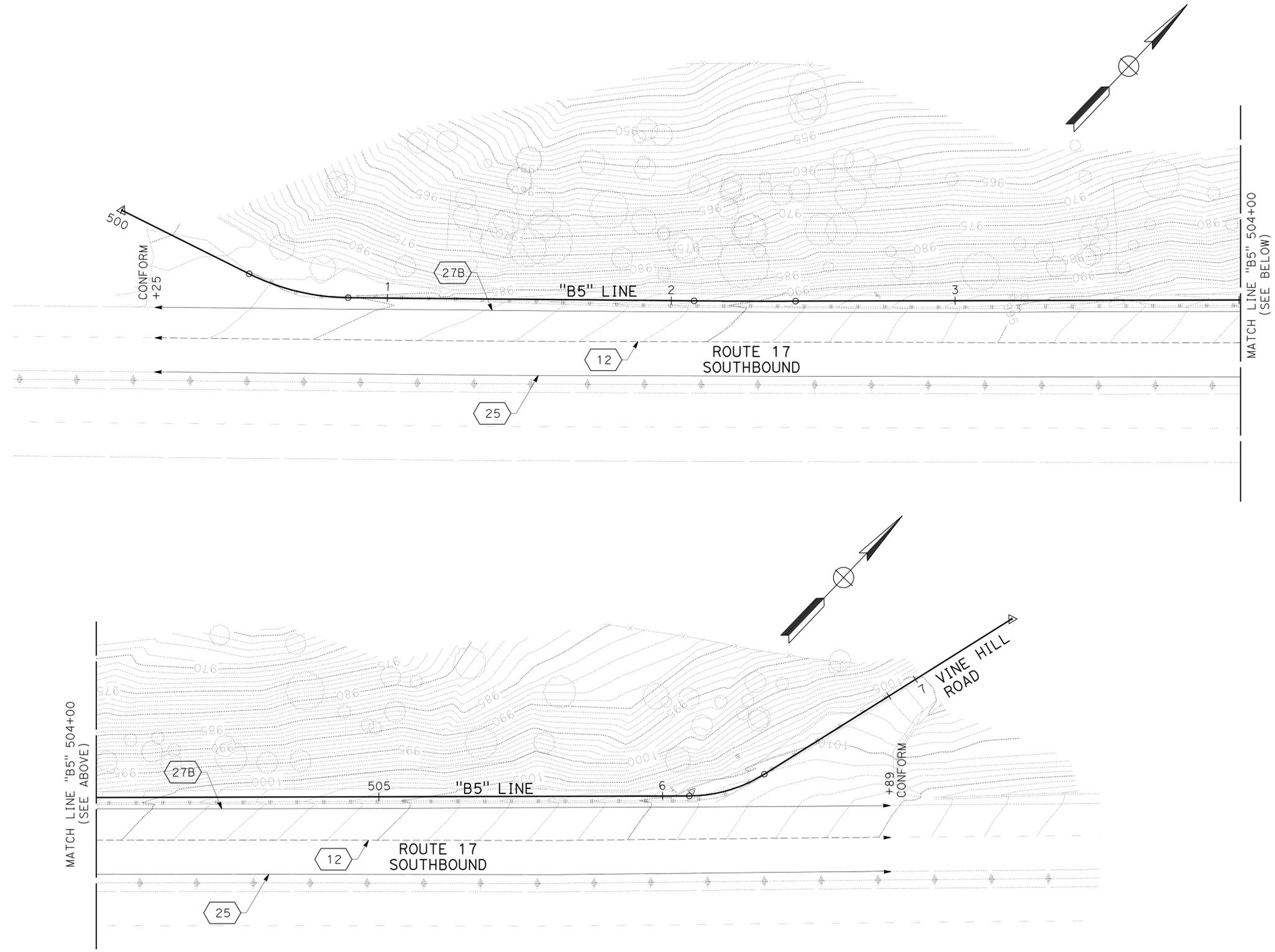
LOCATION 4
 (PM 6.85 TO PM 6.94)

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	CHECKED BY	DATE
		JAMES A. LABANOWSKI JR.	
		MARK POLISCHUK	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	126	284
			07-06-12		
			REGISTERED CIVIL ENGINEER DATE		
			9-24-12		
			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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



LOCATION 5
(PM 7.32 TO PM 7.44)

PAVEMENT DELINEATION PLAN
SCALE: 1" = 20'
PD-4

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

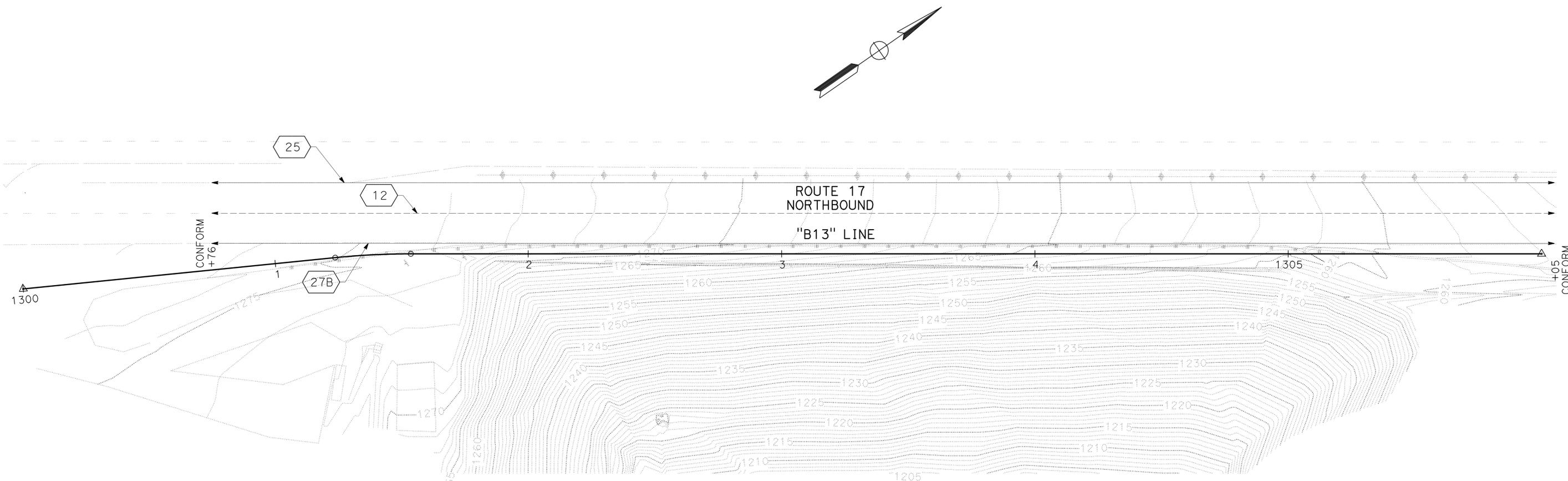
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	127	284

James A. Labanowski, Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 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.



URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	MARK POLISCHUK
		CHECKED BY	DATE REVISOR
		JAMES A. LABANOWSKI JR.	



LOCATION 13
 (PM 8.73 TO PM 8.81)

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-5

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



USERNAME => s121614
 DGN FILE => 50L701na005.dgn

CU 06253
 EA 0L7014

BORDER LAST REVISED 4/11/2008

LAST REVISION: 07-06-12
 DATE PLOTTED => 02-06-2012
 TIME PLOTTED => 06:06

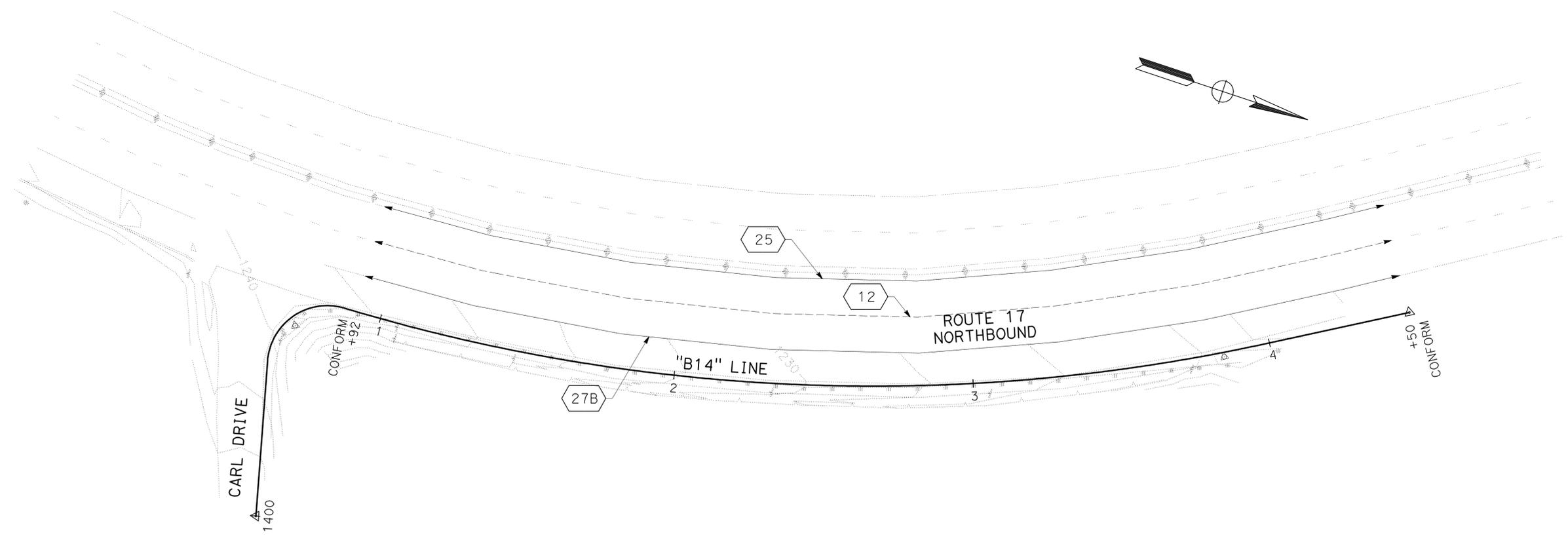
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT: FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: CHECKED BY: JAMES A. LABANOWSKI JR.
 REVISED BY: DATE REVISED:

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	128	284

James A. Labanowski, Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 PLANS APPROVAL DATE

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URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



LOCATION 14
 (PM 8.90 TO PM 8.96)

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-6

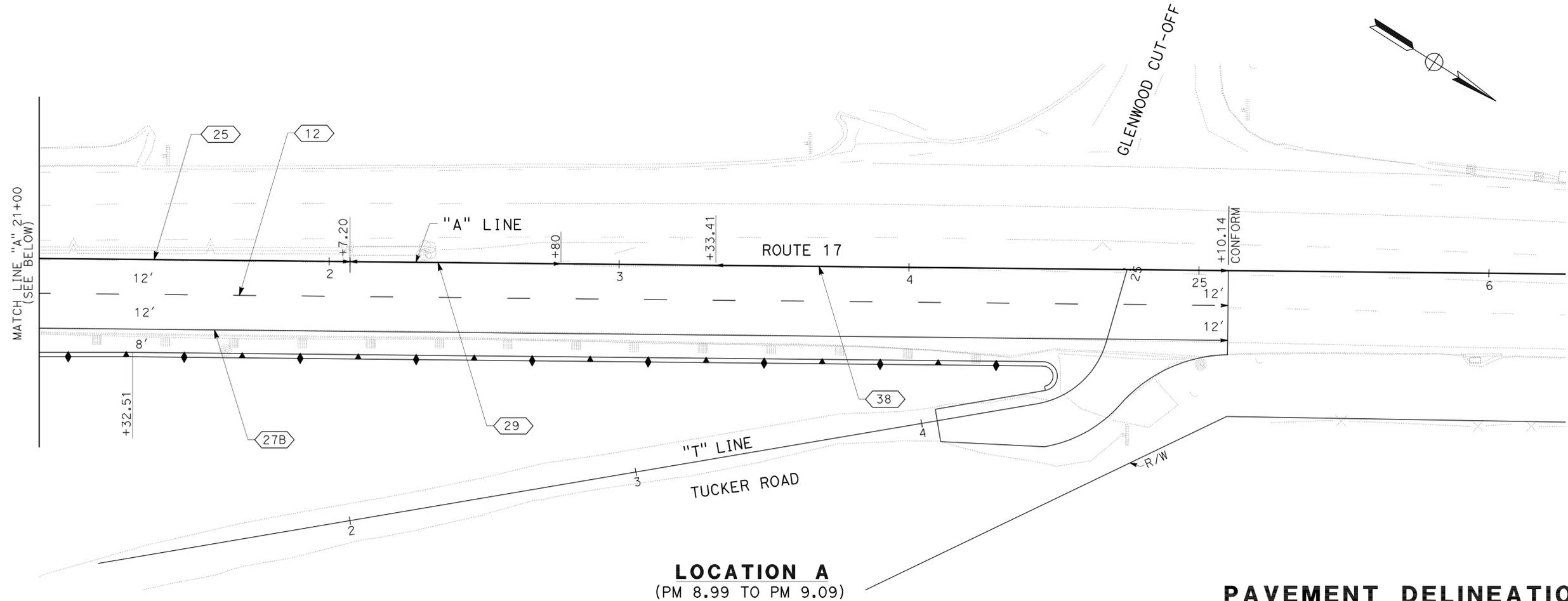
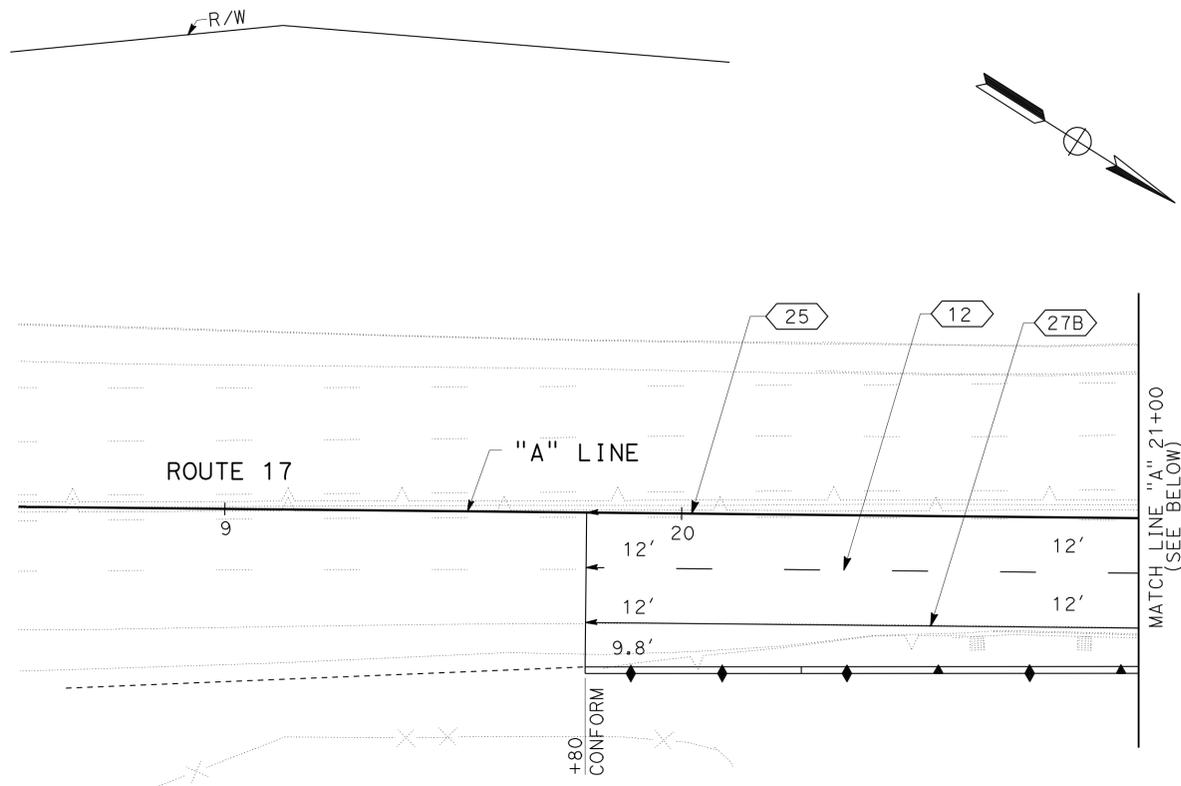
APPROVED FOR PAVEMENT DELINEATION WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	129	284

Stephen J. Mislinski
 REGISTERED CIVIL ENGINEER DATE 07-06-12
 9-24-12
 PLANS APPROVAL DATE
 Stephen J. Mislinski
 No. C61834
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

AECOM
 TECHNICAL SERVICES, Inc.
 2020 L STREET, SUITE 300
 SACRAMENTO, CA 95811

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEER AT THE DISTRICT OFFICE.



LOCATION A
 (PM 8.99 TO PM 9.09)

PAVEMENT DELINEATION PLAN

PD-7

APPROVED FOR PAVEMENT DELINEATION WORK ONLY.

SCALE: 1" = 20'

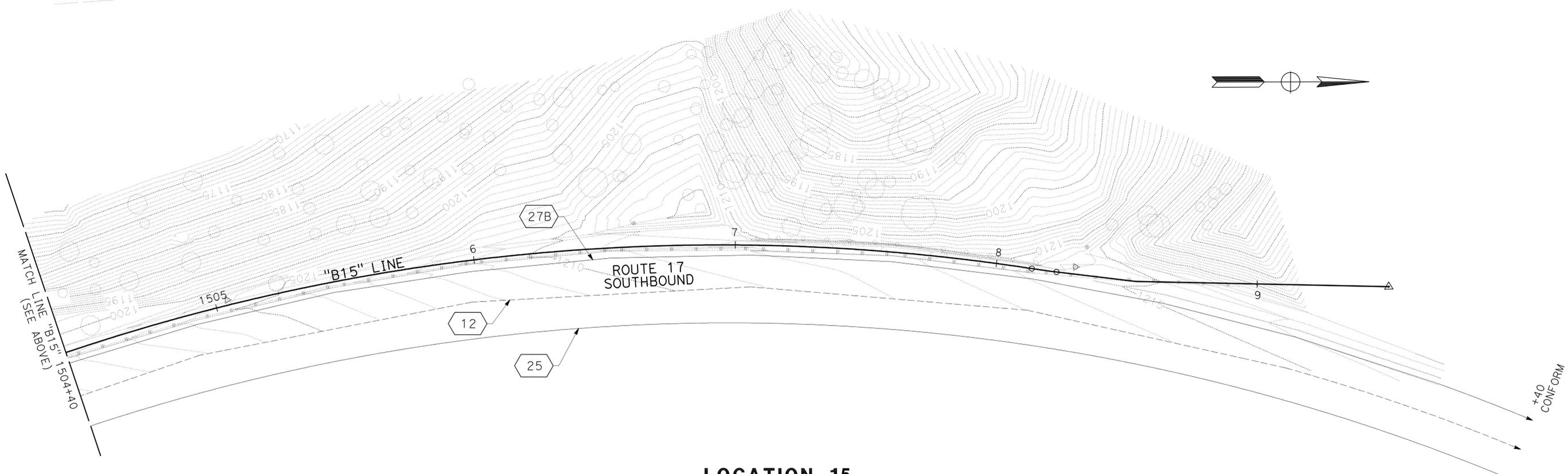
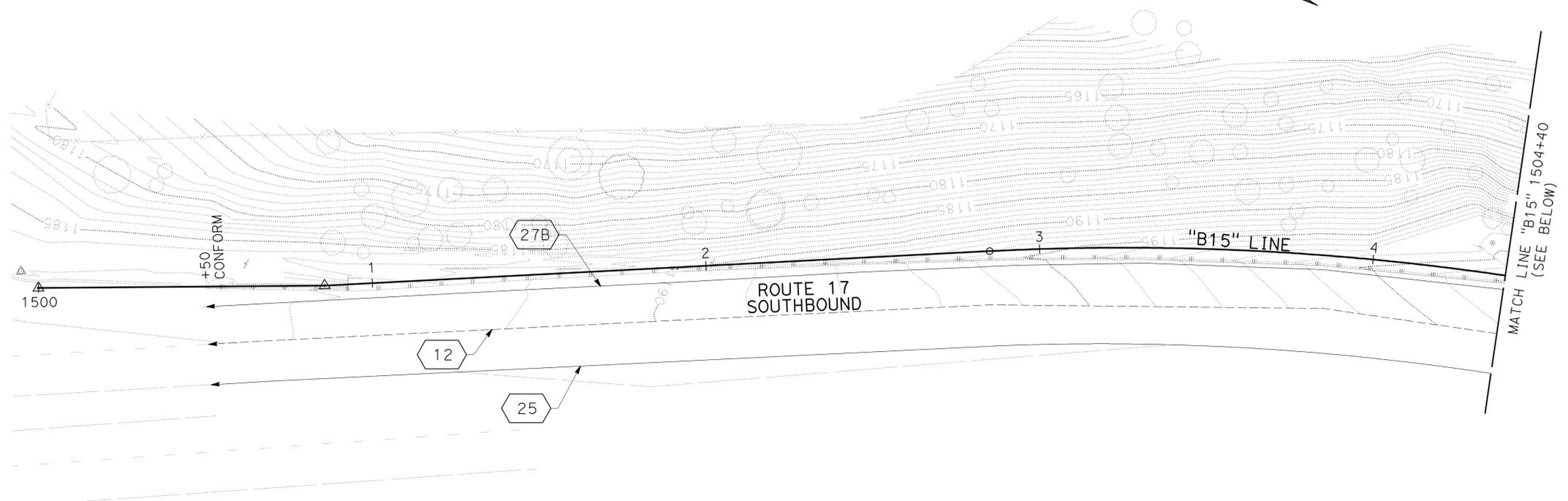
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
	WILLIAM NASCIMENTO	YOSHICHI NAKAGAWA	KEEN POONG		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: JAMES A. LABANOWSKI JR.
 MARK POLISCHUK
 REVISED BY: [blank]
 DATE REVISED: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	130	284

REGISTERED CIVIL ENGINEER: James A. Labanowski, Jr.
 DATE: 07-06-12
 PLANS APPROVAL DATE: 9-24-12
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



LOCATION 15
 (PM 9.11 TO PM 9.26)

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-8

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT - FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	WILLIAM NASCIMENTO	CHECKED BY	DATE
		YOUICHI NAKAGAWA	KEEN POONG

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEER AT THE DISTRICT OFFICE.

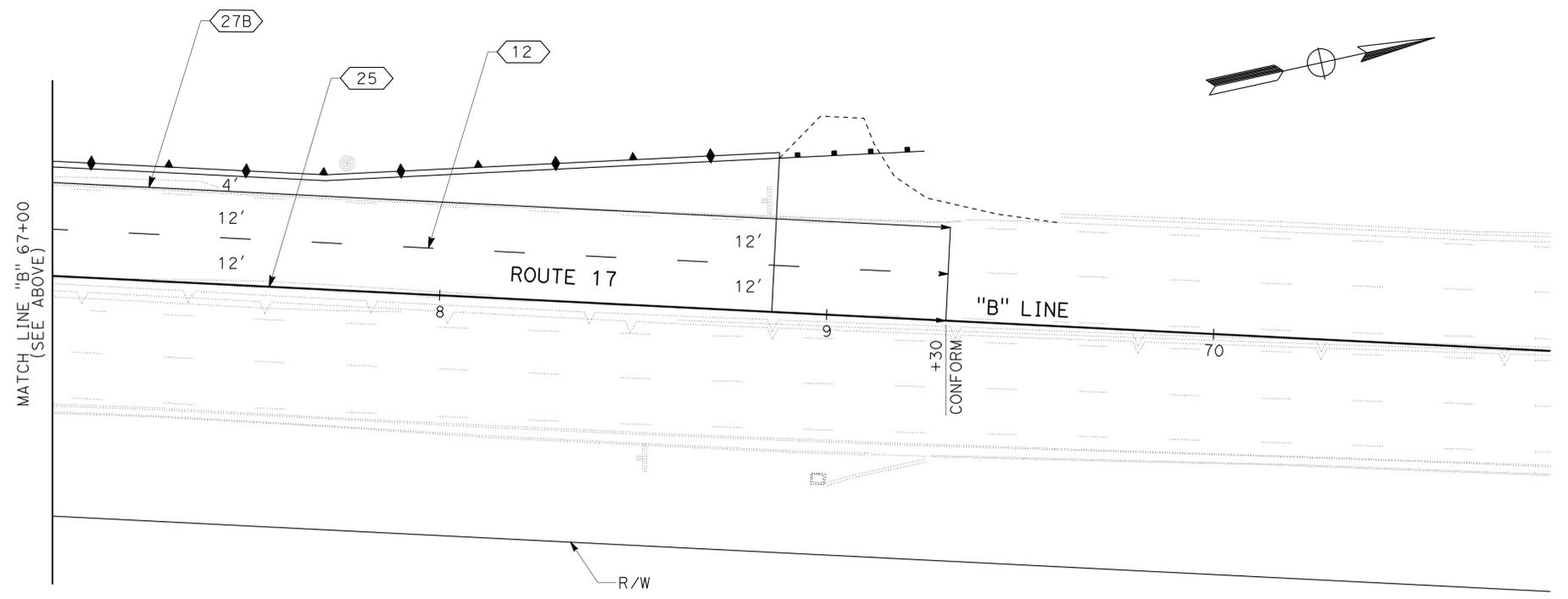
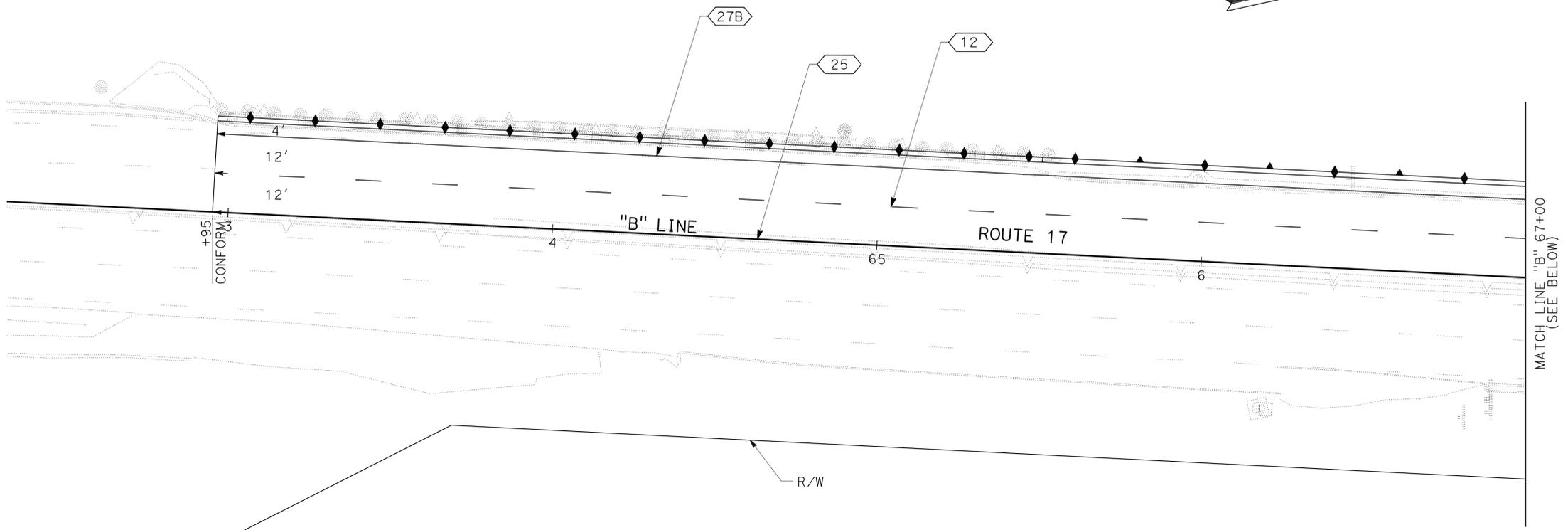
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	131	284

07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 PLANS APPROVAL DATE

Stephen J. Misinski
 No. C61834
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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

AECOM
 TECHNICAL SERVICES, Inc.
 2020 L STREET, SUITE 300
 SACRAMENTO, CA 95811



LOCATION B
(PM 9.84 TO PM 9.95)

PAVEMENT DELINEATION PLAN

SCALE: 1" = 20'
PD-9

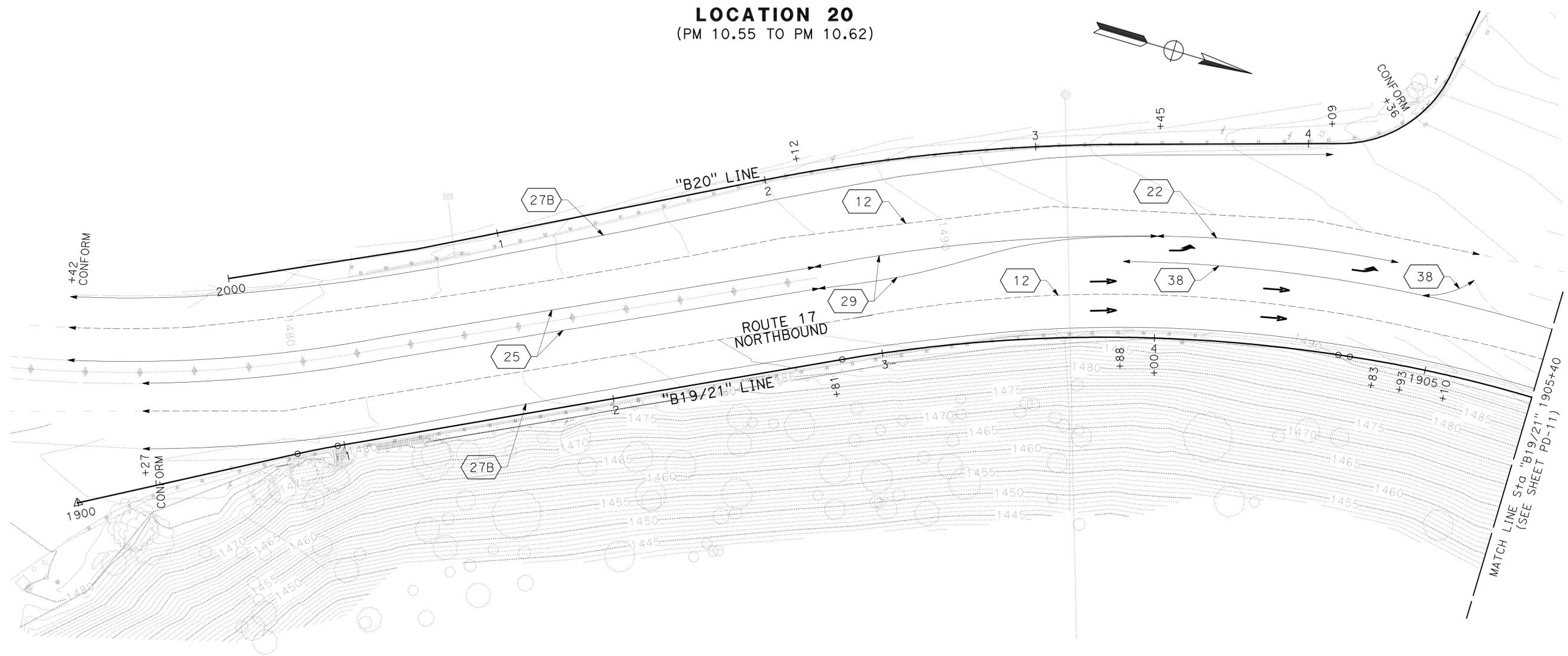
APPROVED FOR PAVEMENT DELINEATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: MARK POLISCHUK
 CHECKED BY: JAMES A. LABANOWSKI JR.
 REVISED BY: []
 DATE REVISED: []

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	132	284

REGISTERED CIVIL ENGINEER: James A. Labanowski, Jr.
 DATE: 07-06-12
 PLANS APPROVAL DATE: 9-24-12
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



LOCATION 20
 (PM 10.55 TO PM 10.62)

LOCATION 19/21
 (PM 10.54 TO PM 10.82)

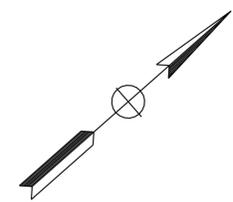
PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-10

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

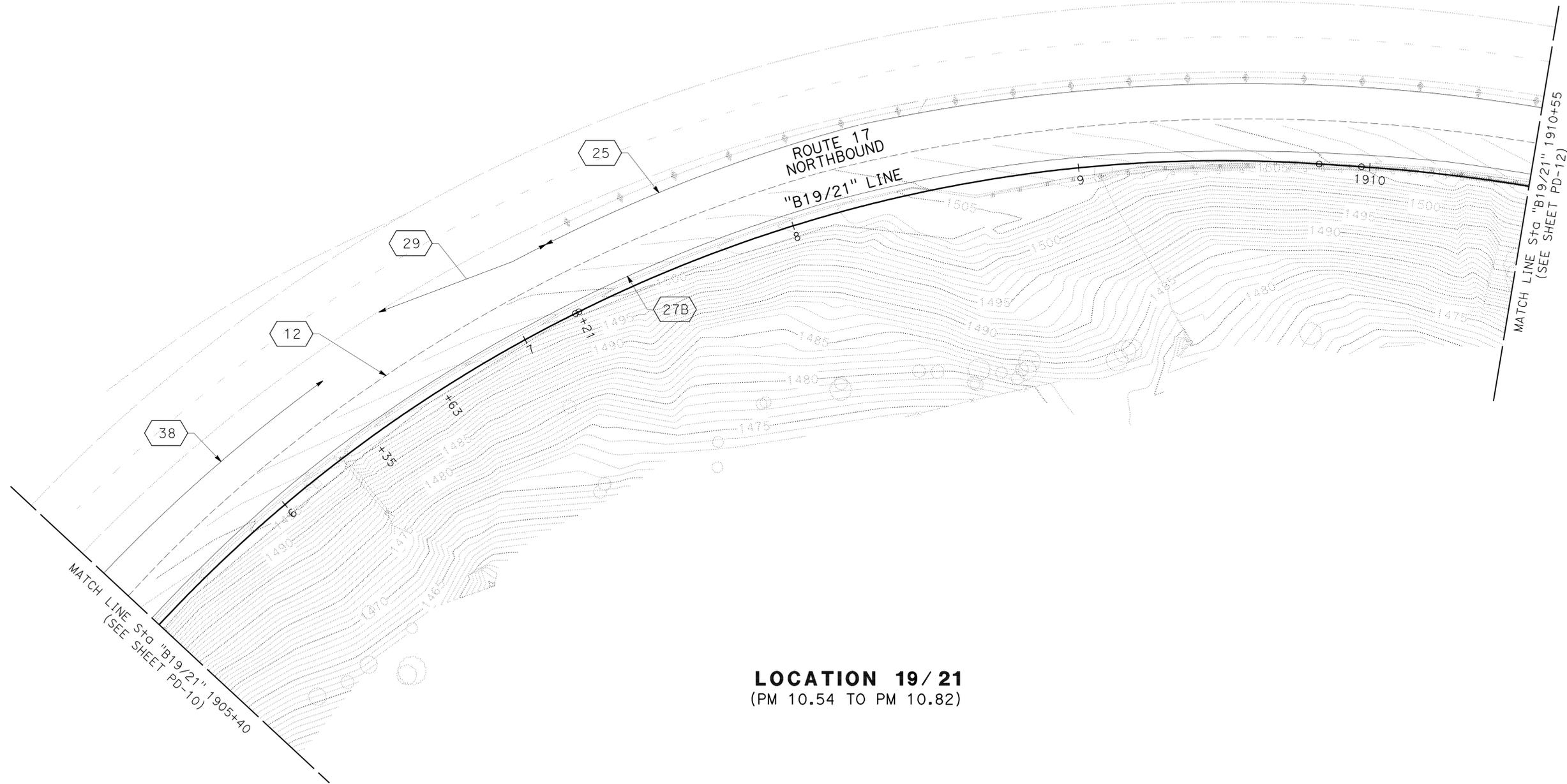
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	6.0/12.6	133	284

REGISTERED CIVIL ENGINEER DATE 07-06-12
 REGISTERED CIVIL ENGINEER
 James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE 9-24-12
 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	REVISOR
		JAMES A. LABANOWSKI JR.	DATE REVISOR



LOCATION 19/21
 (PM 10.54 TO PM 10.82)

PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-11

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



USERNAME => s114926
 DGN FILE => 50L701na011.dgn

CU 06253

EA 0L7014

BORDER LAST REVISED 4/11/2008

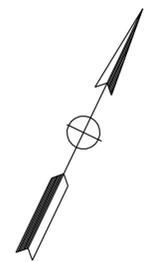
LAST REVISION: 07-06-12
 DATE PLOTTED => 01-OCT-2012
 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	134	284

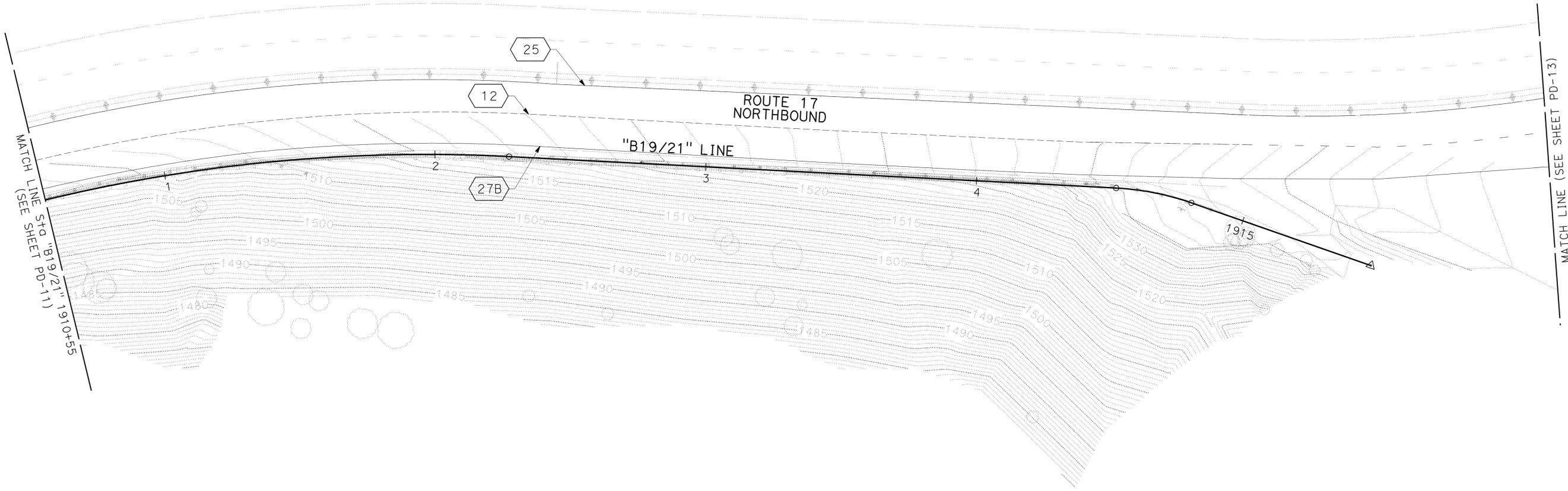
James A. Labanowski, Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	MARK POLISCHUK	DATE
		JAMES A. LABANOWSKI JR.	REVISOR
			DATE



LOCATION 19/21
 (PM 10.54 TO PM 10.82)

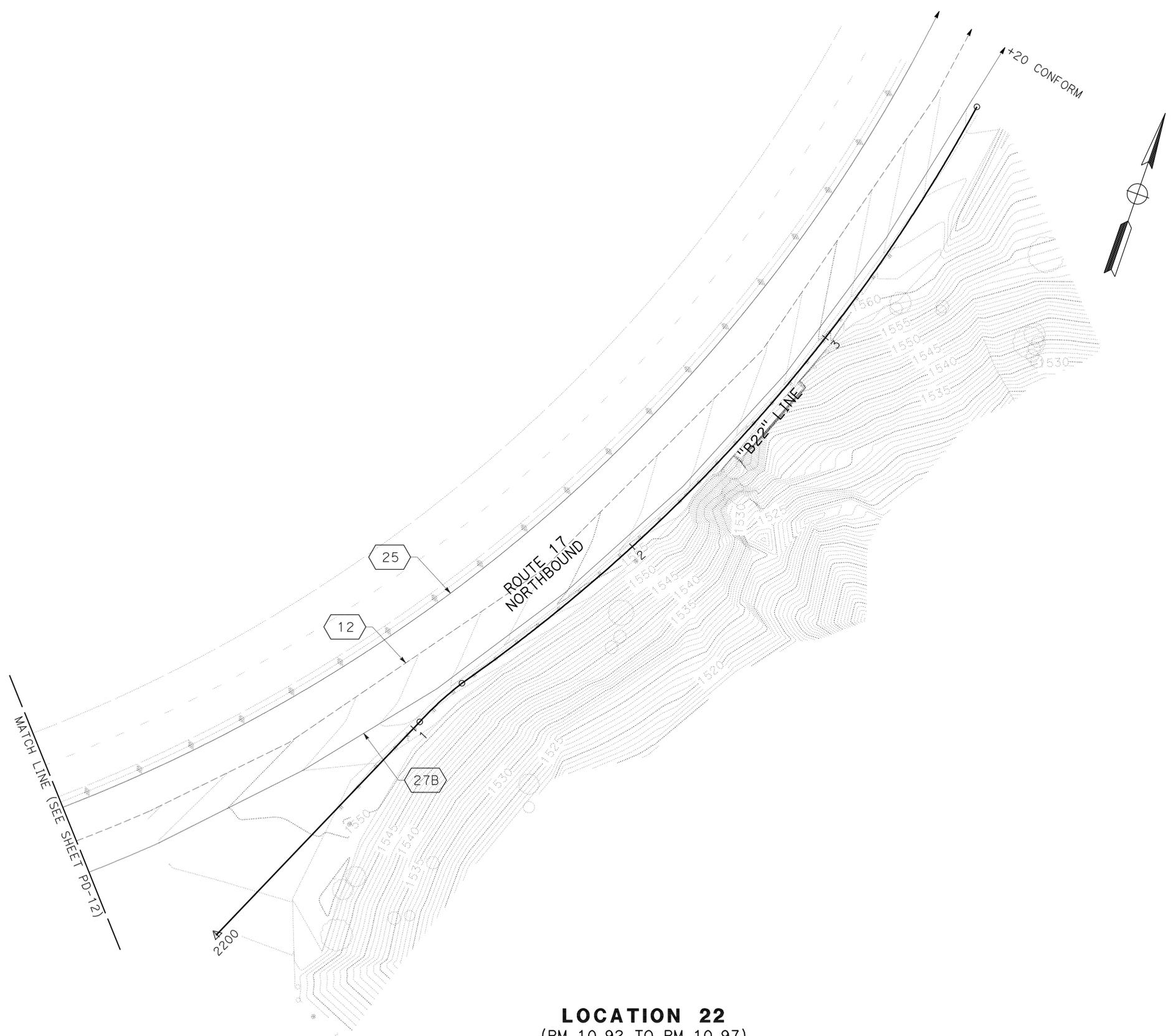
PAVEMENT DELINEATION PLAN
 SCALE: 1" = 20'
PD-12

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION Caltrans	CONSULTANT FUNCTIONAL SUPERVISOR	GARRY HORTON	CALCULATED/DESIGNED BY	MARK POLISCHUK	REVISOR	REVISOR
			CHECKED BY	JAMES A. LABANOWSKI JR.	DATE	DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	135	284
			07-06-12		
			REGISTERED CIVIL ENGINEER		
			9-24-12		
			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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



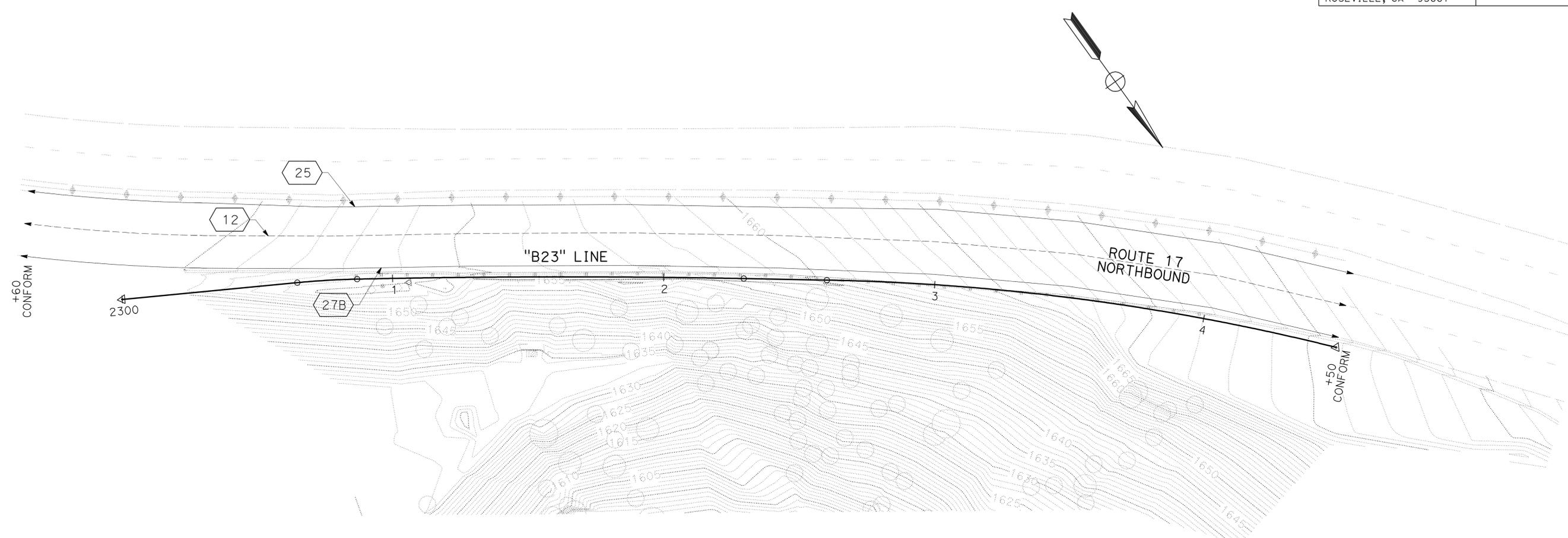
LOCATION 22
(PM 10.92 TO PM 10.97)

PAVEMENT DELINEATION PLAN
PD-13

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

SCALE: 1" = 20'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	136	284
			07-06-12		
REGISTERED CIVIL ENGINEER			DATE		
9-24-12			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>					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



LOCATION 23
(PM 11.25 TO PM 11.31)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MARK POLISCHUK	REVISOR	DATE
	JAMES A. LABANOWSKI JR.	REVISOR	DATE
CONSULTANT - FUNCTIONAL SUPERVISOR	CHECKED BY	CALCULATED/DESIGNED BY	
GARRY HORTON			

PAVEMENT DELINEATION PLAN
SCALE: 1" = 20'
PD-14

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



PAVEMENT DELINEATION QUANTITIES

PLAN SHEET No.	STATION	LOCATION	DETAIL No.	PAVEMENT MARKER						THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)				THERMOPLASTIC PAVEMENT MARKING		
				RETROREFLECTIVE			RETROREFLECTIVE-RECESSED			4" DASHED WHITE	4" SOLID YELLOW	4" SOLID WHITE	8" SOLID WHITE	TYPE III ARROW	TYPE V ARROW	
				TYPE D	TYPE G	TYPE H	TYPE D	TYPE G	TYPE H							EA
PD-1/2	"B1" 100+75 TO "B2" 207+94	1/2	12		26					1271						
	"B1" 100+75 TO "B2" 207+94		25			27						1272				
	"B1" 100+75 TO "B2" 207+94		27B										1272			
PD-3	"B4" 400+50 TO 404+84	4	12		12					560						
	"B4" 400+50 TO 404+84		25			12						557				
	"B4" 400+50 TO 404+84		27B										563			
PD-4	"B5" 500+36 TO 506+21	5	12		14					664						
	"B5" 500+36 TO 506+21		25			14						664				
	"B5" 500+36 TO 506+21		27B										663			
PD-5	"B13" 1300+76 TO 1305+40	13	12		11					530						
	"B13" 1300+76 TO 1305+40		25			11						530				
	"B13" 1300+76 TO 1305+40		27B										530			
PD-6	"B14" 1401+10 TO 1403+97	14	12				7			346						
	"B14" 1401+10 TO 1403+97		25					7				341				
	"B14" 1401+10 TO 1403+97		27B										351			
PD-8	"B15" 1500+50 TO 1509+00	15	12					20		978						
	"B15" 1500+50 TO 1509+00		25						20			969				
	"B15" 1500+50 TO 1509+00		27B										988			
PD-10/11/12/13	"B19/21" 1900+27 TO "B22" 2204+20	19/21/22	12					44		2127						
	"B19/21" 1904+00 TO 1904+83		22			4					88					
	"B19/21" 1900+27 TO 1902+81		25									251				
	"B19/21" 1907+21 TO "B22" 2204+20		25									1409				
	"B19/21" 1900+27 TO "B22" 2204+20		27B				11						2108			
	"B19/21" 1902+81 TO 1904+00		29									126				
	"B19/21" 1906+63 TO 1907+21		29						11			62				
	"B19/21" 1903+88 TO 1906+35		38						1				260			
	"B19/21" 1904+93 TO 1905+10		38						11				20			
PD-10	"B20" 2000+50 TO 2004+35	20	12						11		518					
	"B20" 2000+50 TO 2002+12		25							6		269				
	"B20" 2000+50 TO 2004+09		27B										466			
	"B20" 2002+12 TO 2003+45		29					11				126				
	"B20" 2000+50 TO 2004+09		29													
PD-14	"B23" 2300+26 TO 2304+00	23	12						10		493					
	"B23" 2300+26 TO 2304+00		25									495				
	"B23" 2300+26 TO 2304+00		27B										491			
SHEET TOTAL				0 *	64 *	64 *	31 *	115 *	77 *	7487 *	7159 *	7432 *	280 *	84 *	132 *	
TOTAL					128			223			22357			216		

* = QUANTITY INCLUDED IN TOTAL ON SHEET PDQ-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	137	284

07-06-12
 REGISTERED CIVIL ENGINEER DATE

9-24-12
 PLANS APPROVAL DATE

James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

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

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

PAVEMENT DELINEATION QUANTITIES

PDQ-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	138	284

Stephen J. Misinski
 REGISTERED CIVIL ENGINEER DATE 07-06-12
 9-24-12
 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.

AECOM
 TECHNICAL SERVICES, Inc.
 2020 L STREET, SUITE 300
 SACRAMENTO, CA 95811

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR
WILLIAM NASCIMENTO
 CALCULATED-DESIGNED BY
 CHECKED BY
 YUICHI NAKAGAWA
 KEEN POONG
 REVISED BY
 DATE REVISED

PAVEMENT DELINEATION QUANTITIES

PLAN SHEET No.	STATION	LOCATION	DETAIL No.	REMOVE PAVEMENT MARKER (N)	PAVEMENT MARKER						THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)				THERMOPLASTIC PAVEMENT MARKING	
					(RETROREFLECTIVE)			(RETROREFLECTIVE-RECESSED)			4" DASHED WHITE	4" SOLID YELLOW	4" SOLID WHITE	8" SOLID WHITE	TYPE III ARROW	TYPE V ARROW
					TYPE D	TYPE G	TYPE H	TYPE D	TYPE G	TYPE H						
					EA			EA			LF				SQFT	
PD-7	A 19+80.00 TO 25+10.14	A	27B													
	A 19+80.00 TO 22+07.20	A	25	5			6					228				
	A 19+80.00 TO 25+10.14	A	12	12		13				530						
	A 22+07.20 TO 22+80.00	A	29	8	6						73					
	A 23+33.41 TO 25+10.14	A	38	9		9								177		
PD-9	B 62+95.00 TO 69+30.00	B	27B									635				
	B 62+95.00 TO 69+30.00	B	25	14			15					635				
	B 62+95.00 TO 69+30.00	B	12	14		15				635						
SHEET TOTAL				62	6	37	21				1165	936	1166	177		
FROM PDQ-1					0	64	64	31	115	77	7487	7159	7432	280	84	132
TOTAL				62		192			223				25,802			216

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

PAVEMENT DELINEATION QUANTITIES

PDQ-2

METAL BEAM GUARD RAIL

LOCATION	STATION		DIRECTION	REMOVE MBGR	MBGR (STEEL POST)	ALTERNATIVE IN-LINE TERMINAL SYSTEM	ALTERNATIVE FLARED TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	BURIED POST END ANCHOR (N)	STRENGTHENED RAILING SECTIONS (N)		
	No.	FROM									TO	NB/SB
3	"M3"	300+20.95	"M3"	301+92.94	NB	152.8	169.0			1	1	1
4	"B4"	400+50.11	"B4"	404+78.79	SB	428.9						
5	"B5"	500+53.72	"B5"	506+90.52	SB	638.0						
13	"B13"	1301+01.41	"B13"	1305+26.29	NB	425.4						
14	"B14"	1400+50+00	"B14"	1403+97.44	NB	332.0	60.8	1				
15	"B15"	1500+50.18	"B15"	1508+93.27	SB	841.8						
17	"B17"	1700+50.76	"B17"	1701+52.00	SB	101.3						
19/21	"B19/21"	1899+93.04	"B19/21"	1914+92.07	NB	973.4						
20	"B20"	2000+46.01	"B20"	2004+79.75	SB	444.3						
22	"B22"	2200+59.94	"B22"	2203+41.03	NB	281.0						
23	"B23"	2300+77.12	"B23"	2304+02.58	NB	325.5						
25	"M25"	2500+71.82	"M25"	2501+53.10	NB	74.3	50.0		1			1
SHEET TOTAL						5018.8*	279.8*	1	1	1	1*	2
TOTAL								1	1	1		2

(N) = NOT SEPARATE PAY ITEM, FOR INFORMATION ONLY.
 * = QUANTITY INCLUDED IN TOTAL ON SHEET Q-3

REMOVE PAINTED TRAFFIC STRIPE

LOCATION	STATION	DETAIL No.	REMOVE PAINTED TRAFFIC STRIPE	REMOVE YELLOW PAINTED TRAFFIC STRIPE (HAZARDOUS WASTE)
			(LF)	(LF)
4	"B4" 399+30.00 TO "B4" 406+85.00	8	338	4"
	"B4" 399+30.00 TO "B4" 406+85.00	24		333
5	"B5" 500+25.00 TO "B5" 505+89.00	8	22	
	"B5" 500+25.00 TO "B5" 505+89.00	24		22
13	"B13" 1301+80.00 TO "B13" 1306+05.00	8	65	
	"B13" 1301+80.00 TO "B13" 1306+05.00	24		65
14	"B14" 1400+91.45 TO "B14" 1403+00.00	8	200	
	"B14" 1400+91.45 TO "B14" 1403+00.00	24		200
	"B14" 1403+00.00 TO "B14" 1410+44.00	8	42	
	"B14" 1403+00.00 TO "B14" 1407+66.00	24		42
15	"B15" 1500+50.00 TO "B15" 1501+24.00	21		74
	"B15" 1500+50.00 TO "B15" 1510+40.00	8	148	
	"B15" 1503+36.00 TO "B15" 1510+40.00	24		148
19/21	"B19/21" 1900+45.00 TO "B19/21" 1906+00.00	8	10	
	"B19/21" 1900+45.00 TO "B19/21" 1902+81.00	24		10
	"B19/21" 1906+00.00 TO "B22" 2204+20.00	8	68	
	"B19/21" 1907+02.00 TO "B22" 2204+20.00	24		67
20	"B20" 1999+42.00 TO "B20" 2001+50.00	8	110	
	"B20" 1999+42.00 TO "B20" 2001+50.00	24		111
23	"B23" 2299+60.00 TO "B23" 2304+50.00	8	236	
	"B23" 2299+60.00 TO "B23" 2304+50.00	24		233
SHEET TOTAL			1239	1305

RELOCATE ROADSIDE SIGN

LOCATION	STATION	DIRECTION	RELOCATE ROADSIDE SIGN
		NB/SB	EA
No.			
2	"B2" 205+60.15	NB	1
3	"M3" 301+25.55	NB	1
5	"B5" 502+72.75	SB	1
	"B5" 506+03.30		1
13	"B13" 1301+74.00	NB	1
15	"B15" 1502+02.00	NB	1
20	"B20" 2004+48.18	SB	1
22	"B22" 2200+96.50	NB	1
TOTAL			8

ALTERNATIVE CRASH CUSHION SYSTEM

LOCATION	STATION	DIRECTION	ALTERNATIVE CRASH CUSHION SYSTEM	EPOXY/TIGHTEN BOLTS (N)
		NB/SB	EA	EA
No.				
1	"B1" 101+00.00	NB		1
2	"B2" 201+43.20	NB		1
4	"B4" 404+59.50	SB	1	
5	"B5" 506+65.00	SB	1	
13	"B13" 1301+00.00	NB	1	
19/21	"B19/21" 1900+50.00	NB	1	
22	"B22" 2200+65.00	NB	1	
23	"B23" 2300+50.00	NB	1	
TOTAL			6	2

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

DESTROY WELL

LOCATION	STATION	DESTROY WELL
		EA
No.		
4	403+20.28	1
TOTAL		1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	139	284

James A. Labanowski, Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 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.

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

SUMMARY OF QUANTITIES

NO SCALE

Q-1



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR
GARRY HORTON
 CALCULATED/DESIGNED BY
 CHECKED BY
JAMES A. LABANOWSKI JR.
 MARK POLISCHUK
 REVISED BY
 DATE REVISED

ROADWAY

No.	LOCATION	STATION	CY			TON			SQYD	LF		SQYD			
			AGGREGATE BASE CLASS 2	IMPORTED BORROW	ROADWAY EXCAVATION	ROADWAY EXCAVATION (TYPE Z-2)	IMPORTED MATERIAL (SHOULDER BACKLING)	HOT MIX ASPHALT (TYPE A)	HOT MIX ASPHALT (OPEN GRADED)	TACK COAT	COLD PLANE ASPHALT CONCRETE PAVEMENT	PLACE HOT MIX ASPHALT DIKE (TYPE F)	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE C)	PLACE HOT MIX ASPHALT (MISC AREA)
1	"B1"	101+00.00 TO 105+65.00	12.9		4.2	31.2	2.0	12.3	111.1	6.2	1458.0		34.9		
2	"B2"	200+00.00 TO 207+00.00	17.5			29.1	3.8	16.5	159.3	8.8	2086.6		58.3		
3	"M3"	300+00.00 TO 302+00.00	14.5			20.0		11.2	2.8	0.7		174.1			
4	"B4"	400+50.00 TO 404+80.00	54.1		8.3	103.3	24.3	35.0	90.9	6.3	1163.8				
5	"B5"	500+00.00 TO 506+90.00	12.4		2.6	29.1	5.9	8.0	149.3	7.9	1954.2			2.0	
8	"M8"	800+00.00 TO 800+13.00										13.1			
10	"M10"	1000+00.00 TO 1005+00.00										467.2			
13	"B13"	1301+00.00 TO 1305+00.00	9.5		6.9	18.3		7.3	102.4	5.5	1170.3				
14	"B14"	1401+09.48 TO 1404+26.76	35.2		7.1	78.1	16.2	27.2	80.0	5.4	1083.8		29.5		
15	"B15"	1500+50.00 TO 1509+20.00	30.0		28.9	62.9	11.3	23.2	175.5	9.9	2311.0			2.0	
17	"B17"	1700+50.00 TO 1701+52.00	11.7		12.7	16.4	1.9	9.0	24.0	2.6	604.6				
18	"M18"	1800+50.00 TO 1802+15.00										164.2		2.0	
19/21	"B19/21"	1900+50.00 TO 1915+00.00	44.9		26.1	99.7	9.0	34.7	339.5	18.7	4468.0			2.0	
20	"B20"	2000+50.00 TO 2005+11.00	65.6	248.4		152.4		50.6	127.9	8.9	1688.7		19.7	1.6	
22	"B22"	2200+65.00 TO 2203+47.00	6.8		9.2	31.9	0.7	5.3	65.6	3.5	844.0				
23	"B23"	2304+00.00 TO 2304+14.81	18.3		6.0	52.8	1.7	14.1	83.4	4.9	1071.2		15.0		
24	"M24"	2401+00.00 TO 2408+00.00										655.8		38.0	
PLACE HOT MIX ASPHALT								25.8							
SHEET TOTAL			333.5*	248.4*	112.0*	725.2*	76.6*	280.2*	1511.7*	90.6*	19904.3*	1474.3*	157.3*	38.0*	9.6*

* = QUANTITY INCLUDED IN TOTAL ON SHEET Q-3

CONCRETE BARRIER

No.	LOCATION	STATION	CONCRETE BARRIER (TYPE 732B)	CONCRETE FINISHING **	CONCRETE BARRIER (TYPE 736B)	CONCRETE BARRIER (TYPE 60)	CONCRETE HEADLIGHT GLARE SCREEN	REMOVE CONCRETE BARRIER	CONCRETE BARRIER TRANSITION	LF
1	"B1"	101+00.00 TO 105+65.00		117.6						
2	"B2"	200+00.00 TO 207+00.00		24.8						
4	"B4"	400+50.00 TO 404+80.00	289.5							
5	"B5"	500+00.00 TO 506+90.00	94.0							
13	"B13"	1301+00.00 TO 1305+00.00	87.0							
14	"B14"	1401+09.48 TO 1404+26.76	254.0							9
15	"B15"	1500+50.00 TO 1509+20.00	362.5							
17	"B17"	1700+50.00 TO 1701+52.00	93.0							9
19/21	"B19/21"	1900+50.00 TO 1915+00.00	458.8							
20	"B20"	2000+50.00 TO 2005+11.00	445.0							15
22	"B22"	2200+65.00 TO 2203+47.00	112.3							
23	"B23"	2304+00.00 TO 2304+14.81	97.0							
25	"M25"	2500+71.82 TO 2501+53.10								9
SHEET TOTAL			2293.1*	142.4*	0.0*	0.0*	0.0*	0.0*		42.0*

* = QUANTITY INCLUDED IN TOTAL ON SHEET Q-3
 ** = EXISTING CONCRETE BARRIER

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	140	284
			07-06-12	DATE	
			9-24-12	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>					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					

REMOVE ASPHALT CONCRETE DIKE

No.	LOCATION	STATION		NB/SB	LENGTH
		FROM	TO		LF
20	"B20"	2004+70.00	2004+79.94	NB	19.7
TOTAL					19.7

TRANSITION RAILING (TYPE WB)

No.	LOCATION	STATION	DIRECTION	TRANSITION RAILING (TYPE WB)
			NB/SB	EA
14	"B14"	1401+43.48	NB	1
25	"M25"	2501+21.96	NB	1
SHEET TOTAL				2*

* = QUANTITY INCLUDED IN TOTAL ON SHEET Q-3

DITCH EXCAVATION

No.	LOCATION	DITCH LENGTH	DITCH AREA	EXCAVATED VOLUME
		LF	SF	CY
18		70	0.75	1.9
TOTAL				1.9

SUMMARY OF QUANTITIES
NO SCALE
Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT - FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: MARK POLISCHUK
 CHECKED BY: JAMES A. LABANOWSKI JR.
 REVISED BY: DATE REVISOR

TEMPORARY FENCE (TYPE ESA)

LOCATION	STATION		LENGTH LF
	FROM	TO	
1/2	"B1" 100+00.00	"B2" 207+00.00	1173.9
3	"M3" 300+20.67	"M3" 301+88.97	196.1
4	"B4" 400+50.00	"B4" 404+80.00	461.5
5	"B5" 500+50.00	"B5" 506+90.00	681.3
8	"M8" 800+00.99	"M8" 801+75.74	176.1
10	"M10" 1000+19.22	"M10" 1004+70.38	491.5
13	"B13" 1301+00.00	"B13" 1305+40.00	408.5
A	"A" 18+98.61	"A" 23+99+94	507.0
	"T" 20+44.99	"T" 23+95.65	368.0
14	"B14" 1401+09.48	"B14" 1404+26.76	388.0
15	"B15" 1500+50.00	"B15" 1509+02.00	926.8
17	"B17" 1700+50.00	"B17" 1701+52.00	130.6
B	"B" 62+63.02	"B" 68+93.02	705.0
18	"M18" 1800+54.39	"M18" 1802+80.36	290.6
19/21	"B19/21" 1900+50.00	"B19/21" 1915+00.00	1501.2
20	"B20" 2000+50.00	"B20" 2005+11.00	486.3
22	"B22" 2200+65.00	"B22" 2203+47.00	683.3
22 (MINOR)	PRIVATE DRIVE		300.0
23	"B23" 2304+00.00	"B23" 2304+14.81	438.9
24	"M24" 2401+41.75	"M24" 2409+10.23	859.7
25	"M25" 2500+71.82	"M25" 2501+53.10	150.8
TOTAL			11,325.3

TEMPORARY FIBER ROLL

LOCATION	STATION		LENGTH LF
	FROM	TO	
3	"M3" 300+20.67	"M3" 301+88.97	176.2
6	"M6" 600+25.75	"M6" 601+30.64	115.5
7	"M7" 700+50.13	"M7" 701+74.32	127.7
9	"M9" 903+15.71	"M9" 904+18.64	108.7
10	"M10" 1000+19.22	"M10" 1004+70.38	473.3
11	"M11" 1100+37.81	"M11" 1101+61.40	105.0
12	"M12" 1201+53.98	"M12" 1201+97.49	93.6
18	"M18" 1800+54.39	"M18" 1802+80.36	366.5
24	"M24" 2401+41.75	"M24" 2409+10.23	285.5
25	"M25" 2500+71.82	"M25" 2501+53.10	811.1
27	"M27" 2700+30.97	"M27" 2701+06.97	110.5
TOTAL			2773.6

TEMPORARY GRAVEL BAG BERM

LOCATION	STATION		LENGTH LF
	FROM	TO	
1/2	"B1" 100+00.00	"B2" 207+00.00	12.0
3	"M3" 300+20.67	"M3" 301+88.97	5.0
4	"B4" 400+50.00	"B4" 404+80.00	3.0
5	"B5" 500+50.00	"B5" 506+90.00	15.0
6	"M6" 600+25.75	"M6" 601+30.64	12.0
7	"M7" 700+50.13	"M7" 701+74.32	6.0
10	"M10" 1000+19.22	"M10" 1004+70.38	12.0
13	"B13" 1301+00.00	"B13" 1305+40.00	6.0
14	"B14" 1401+09.48	"B14" 1404+26.76	7.0
15	"B15" 1500+50.00	"B15" 1509+02.00	10.0
17	"B17" 1700+50.00	"B17" 1701+52.00	12.0
18	"M18" 1800+54.39	"M18" 1802+80.36	18.0
19/21	"B19/21" 1900+50.00	"B19/21" 1915+00.00	12.0
20	"B20" 2000+50.00	"B20" 2005+11.00	22.0
22	"B22" 2200+65.00	"B22" 2203+47.00	20.0
23	"B23" 2304+00.00	"B23" 2304+14.81	35.0
24	"M24" 2401+41.75	"M24" 2409+10.23	10.0
25	"M25" 2500+71.82	"M25" 2501+53.10	10.0
TOTAL			227.0

TEMPORARY CHECK DAM

LOCATION	STATION	LENGTH
		LF
2	"B2" 207+00.00	17.0
3	"M3" 300+10.00	16.5
4	"B4" 404+90.00	12.0
5	"B5" 507+00.00	7.0
10	"B10" 1004+80.00	11.5
13	"B13" 1301+60.00	40.0
15	"B15" 1509+20.00	16.5
17	"B17" 1700+50.00	10.0
18	"M18" 1800+50.00	15.0
	"M18" 1803+25.00	18.0
20	"B20" 2002+00.00	22.0
	"B20" 2004+50.00	15.5
19/21	"B19/21" 1900+20.00	13.0
22	"B22" 2203+40.00	15.0
23	"B23" 2300+20.00	16.5
	"B23" 2303+80.00	18.5
24	"M24" 2409+20.00	13.0
TOTAL		277.0

TEMPORARY DRAINAGE INLET PROTECTION

LOCATION	STATION	EA
1	"B1" 104+73.31	1
3	"M3" 301+93.35	1
4	"B4" 404+69.15	1
5	"B5" 501+91.60	1
13	"B13" 1301+38.00	1
B	"B" 64+00.00	1
	"B" 66+00.00	1
19/21	"B19/21" 1900+57.53	1
	"B19/21" 1902+09.20	1
	"B19/21" 1903+67.04	1
	"B19/21" 1906+25.20	1
20	"B19/21" 1909+07.36	1
	"B20" 2000+84.94	1
	"B20" 2003+11.63	1
	"B20" 2004+42.82	1
20	"B20" 2004+81.69	1
	TOTAL	17

TEMPORARY CONSTRUCTION ENTRANCE

LOCATION	STATION	EA
1/2	"B1" 100+50	1
4	"B4" 400+25	1
13	"B13" 1300+50	1
A	"A" 24+70.13	1
17	"B17" 1700+25	1
B	"B" 69.00.00	1
22	"B22" 2203+75	1
23	"B23" 2304+50	1
TOTAL		8

TEMPORARY COVER

STATION		SQYD
FROM	TO	
"B1" 100+00.00	"B23" 2304+14.81	100.0
TOTAL		100.0

TEMPORARY SILT FENCE

LOCATION	STATION		LENGTH LF
	FROM	TO	
1/2	"B1" 100+00.00	"B2" 207+00.00	1173.94
3	"M3" 300+20.67	"M3" 301+88.97	196.10
4	"B4" 400+50.00	"B4" 404+80.00	461.46
5	"B5" 500+50.00	"B5" 506+90.00	681.34
13	"B13" 1301+00.00	"B13" 1305+40.00	408.48
A	"A" 18+98.61	"A" 23+99+94	507.00
	"T" 20+44.99	"T" 23+95.65	368.00
14	"B14" 1401+09.48	"B14" 1404+26.76	388.02
15	"B15" 1500+50.00	"B15" 1509+02.00	926.76
17	"B17" 1700+50.00	"B17" 1701+52.00	130.65
B	"B" 62+63.02	"B" 68+93.02	705.00
19/21	"B19/21" 1900+50.00	"B19/21" 1915+00.00	1501.22
20	"B20" 2000+50.00	"B20" 2005+11.00	486.34
22	"B22" 2200+65.00	"B22" 2203+47.00	383.26
22 (MINOR)	PRIVATE DRIVE		250.00
23	"B23" 2304+00.00	"B23" 2304+14.81	438.92
25	"M25" 2500+71.82	"M25" 2501+53.10	150.81
TOTAL			9157.29

SUMMARY OF QUANTITIES

NO SCALE

Q-4



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	142	284

James A. Labanowski Jr. 07-06-12
 REGISTERED CIVIL ENGINEER DATE

9-24-12
 PLANS APPROVAL DATE

James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

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

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT: GARRY HORTON
 CALCULATED/DESIGNED BY: MARK POLISCHUK
 CHECKED BY: JAMES A. LABANOWSKI JR.
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. TREES TO BE REMOVED SHALL BE FLAGGED BY THE CONTRACTOR AT LEAST 5 WORKING DAYS PRIOR TO REMOVAL. NO REMOVAL SHALL TAKE PLACE UNTIL THE FLAGGED TREES ARE REVIEWED AND APPROVED BY THE ENGINEER.

LEGEND

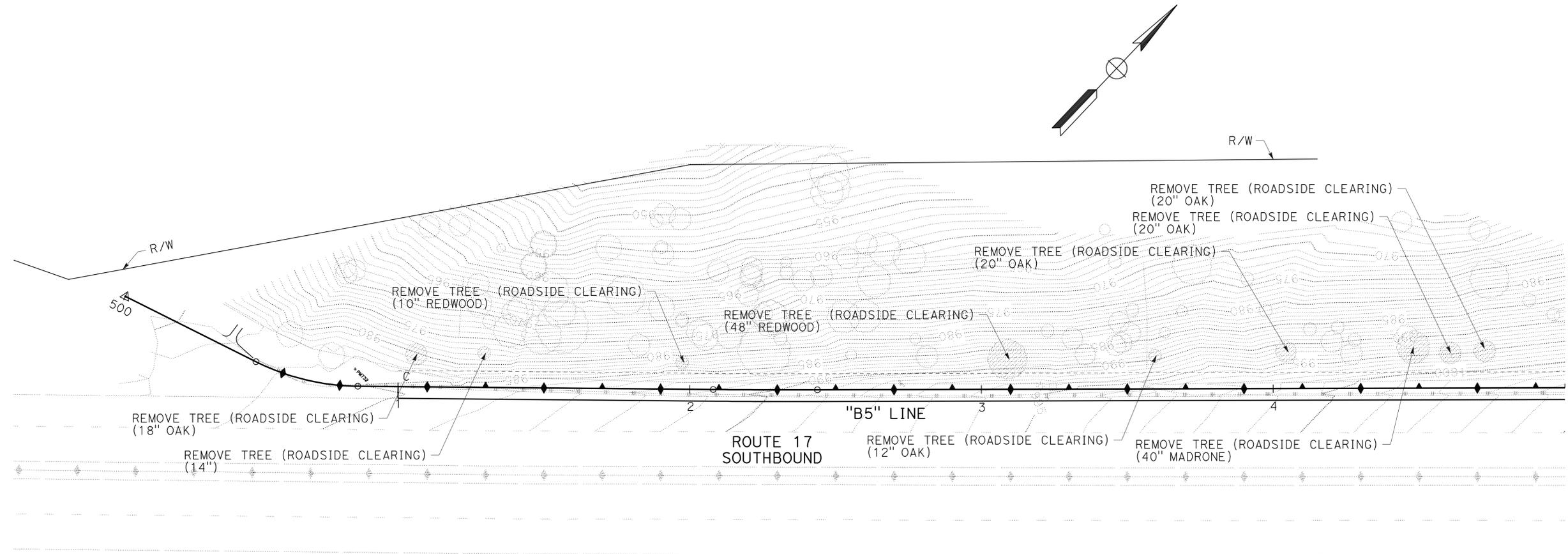


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	143	284

REGISTERED CIVIL ENGINEER: *James A. Labanowski Jr.* DATE: 09-11-12
 PLANS APPROVAL DATE: 9-24-12
 REGISTERED PROFESSIONAL ENGINEER: James Angelo Labanowski, Jr.
 No. C55039
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

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

URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



LOCATION 5
(PM 7.32 TO PM 7.44)

THIS PLAN ACCURATE FOR PLANT REMOVAL ONLY.

PLANT REMOVAL PLAN
 SCALE: 1" = 20'
PR-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	144	284

09-11-12
 REGISTERED CIVIL ENGINEER DATE
 9-24-12
 PLANS APPROVAL DATE

Stephen J. Misinski
 No. C61834
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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

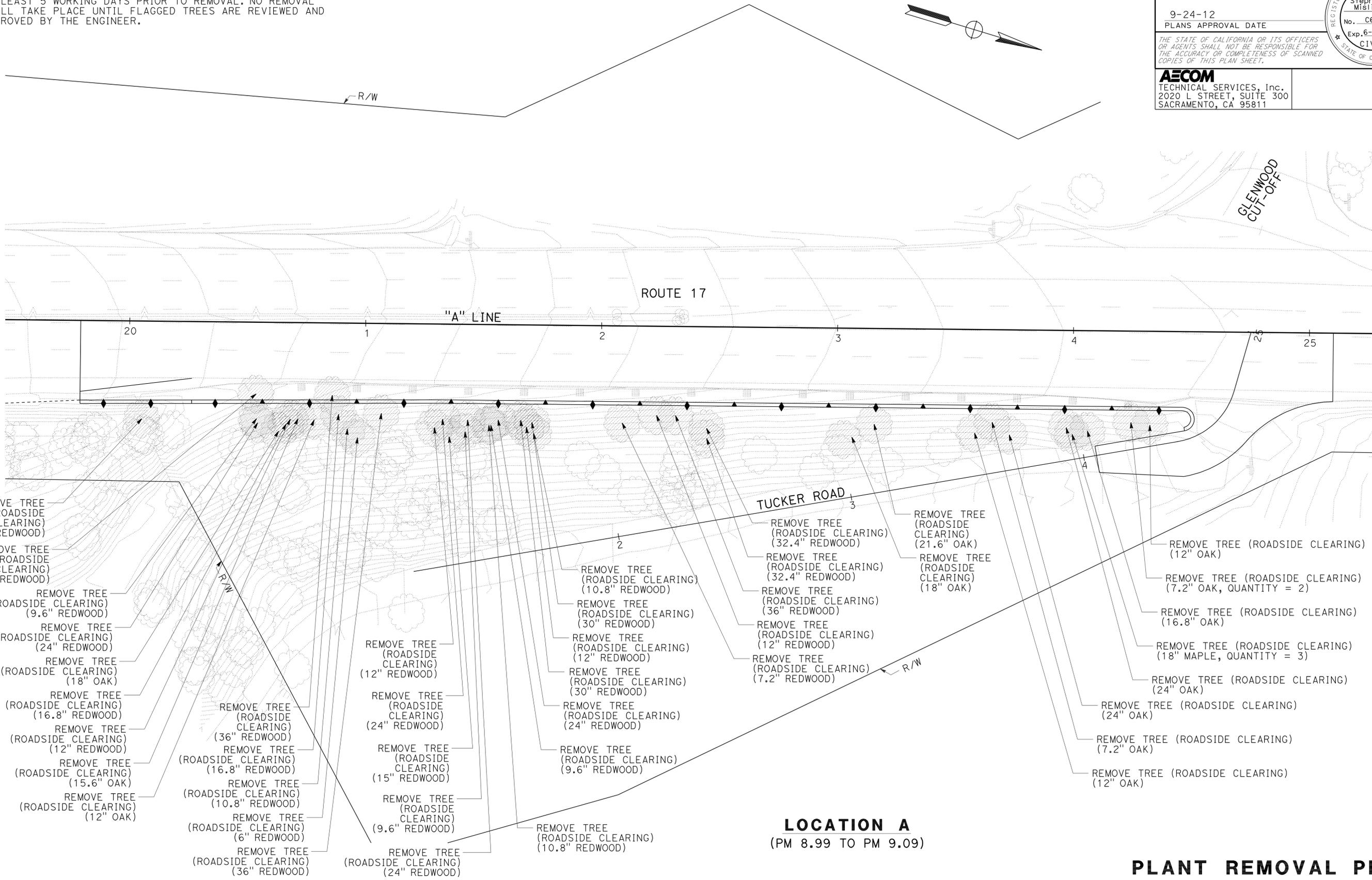
AECOM
 TECHNICAL SERVICES, Inc.
 2020 L STREET, SUITE 300
 SACRAMENTO, CA 95811

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- TREES TO BE REMOVED SHALL BE FLAGGED BY THE CONTRACTOR AT LEAST 5 WORKING DAYS PRIOR TO REMOVAL. NO REMOVAL SHALL TAKE PLACE UNTIL FLAGGED TREES ARE REVIEWED AND APPROVED BY THE ENGINEER.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans®
 CONSULTANT - FUNCTIONAL SUPERVISOR
 WILLIAM NASCIMENTO
 CALCULATED/DESIGNED BY
 CHECKED BY
 BRIAN DONG
 KEEN POONG
 REVISED BY
 DATE REVISED



LOCATION A
(PM 8.99 TO PM 9.09)

PLANT REMOVAL PLAN

PR-2

THIS PLAN ACCURATE FOR PLANT REMOVAL WORK ONLY.

SCALE: 1" = 20'



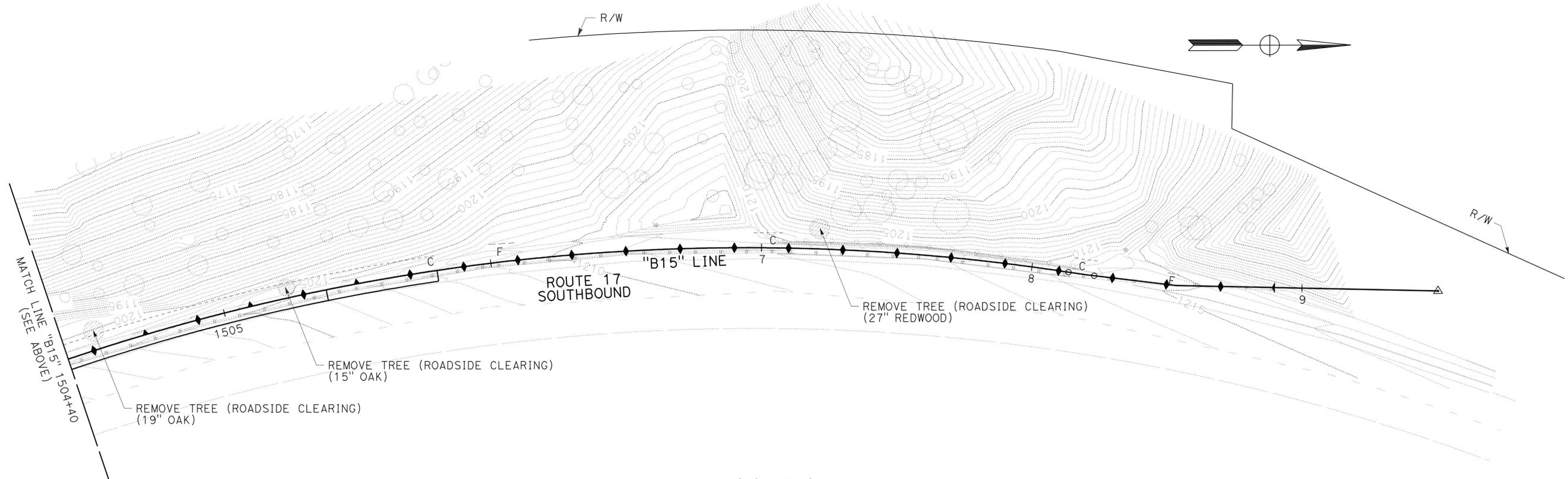
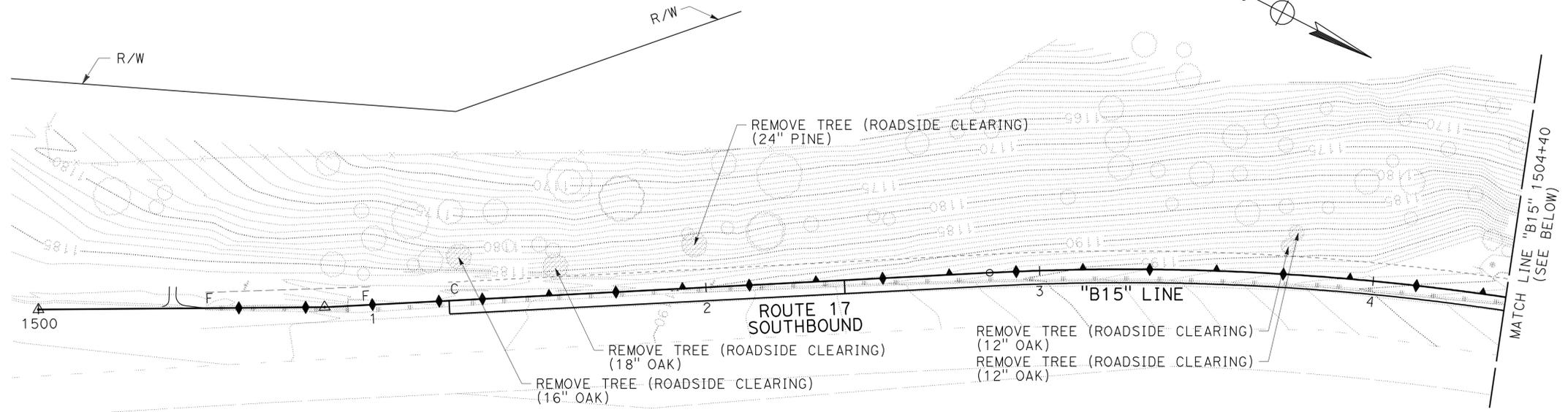
LAST REVISION | DATE PLOTTED => 01-OCT-2012
 09-11-12 | TIME PLOTTED => 07:57

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	145	284
		<i>James A. Labanowski, Jr.</i> 09-11-12 REGISTERED CIVIL ENGINEER DATE			
		9-24-12 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.					
URS CORPORATION 1380 LEAD HILL BLVD SUITE 100 ROSEVILLE, CA 95661					



NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. TREES TO BE REMOVED SHALL BE FLAGGED BY THE CONTRACTOR AT LEAST 5 WORKING DAYS PRIOR TO REMOVAL. NO REMOVAL SHALL TAKE PLACE UNTIL THE FLAGGED TREES ARE REVIEWED AND APPROVED BY THE ENGINEER.



LOCATION 15
(PM 9.11 TO PM 9.26)

THIS PLAN ACCURATE FOR PLANT REMOVAL ONLY.

PLANT REMOVAL PLAN
SCALE: 1" = 20'
PR-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	GARRY HORTON	CHECKED BY	DATE REVISOR
		MARK POLISCHUK	
		JAMES A. LABANOWSKI JR.	

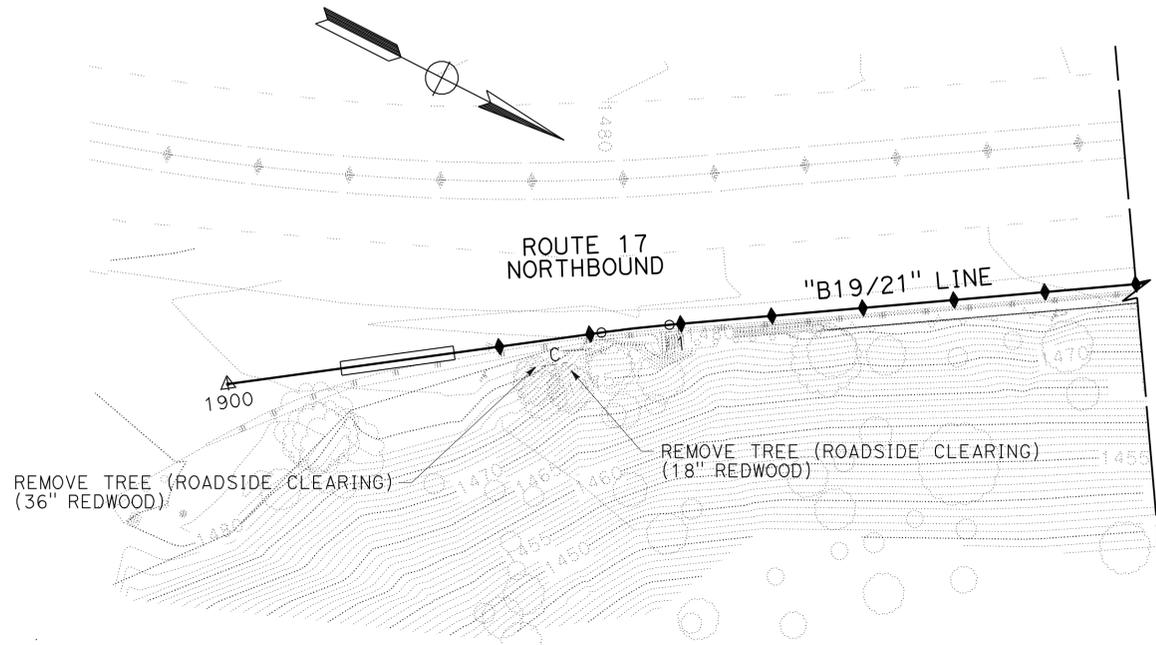
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 CONSULTANT: FUNCTIONAL SUPERVISOR: GARRY HORTON
 CALCULATED/DESIGNED BY: CHECKED BY:
 MARK POLISCHUK JAMES A. LABANOWSKI JR.
 REVISED BY: DATE REVISED:

NOTES:

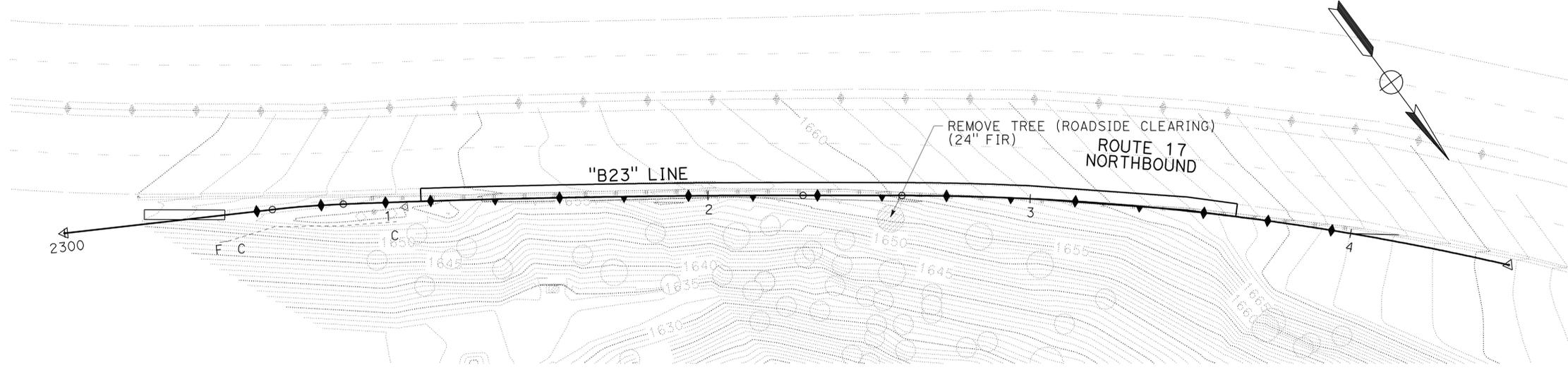
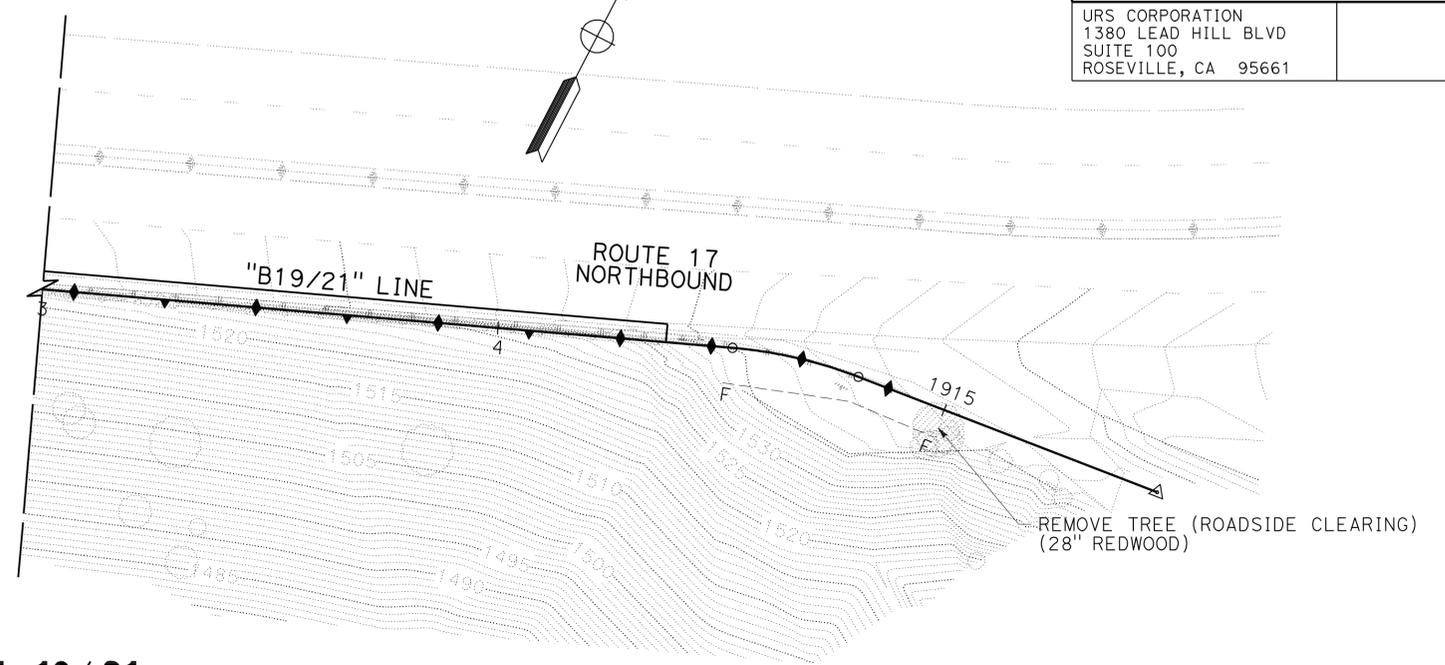
1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. TREES TO BE REMOVED SHALL BE FLAGGED BY THE CONTRACTOR AT LEAST 5 WORKING DAYS PRIOR TO REMOVAL. NO REMOVAL SHALL TAKE PLACE UNTIL THE FLAGGED TREES ARE REVIEWED AND APPROVED BY THE ENGINEER.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	147	284

REGISTERED CIVIL ENGINEER: *James A. Labanowski Jr.* DATE: 09-11-12
 PLANS APPROVAL DATE: 9-24-12
 REGISTERED PROFESSIONAL ENGINEER: James Angelo Labanowski, Jr.
 No. C55039 Exp. 6/30/14 CIVIL
 STATE OF CALIFORNIA
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 URS CORPORATION
 1380 LEAD HILL BLVD
 SUITE 100
 ROSEVILLE, CA 95661



LOCATION 19/21
(PM 10.54 TO PM 10.82)



LOCATION 23
(PM 11.25 TO PM 11.31)

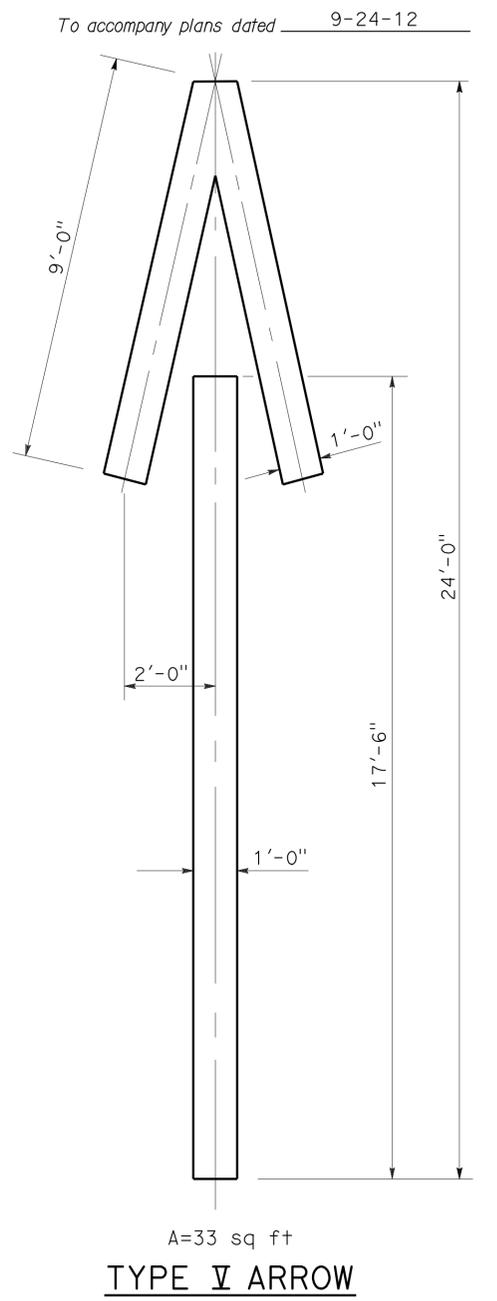
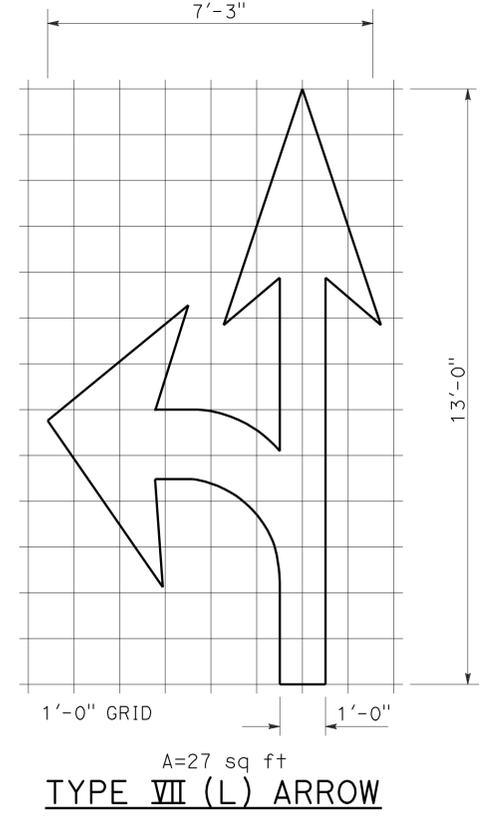
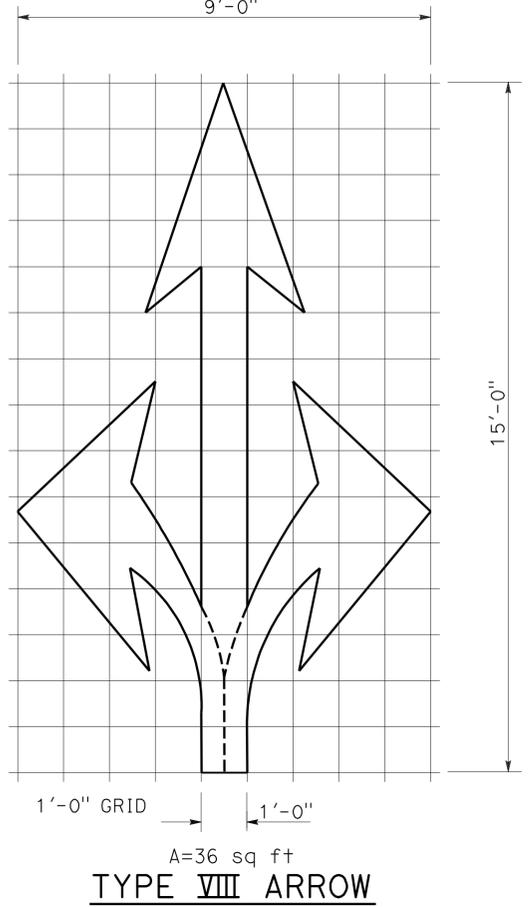
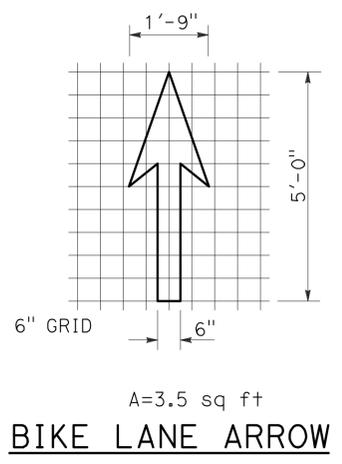
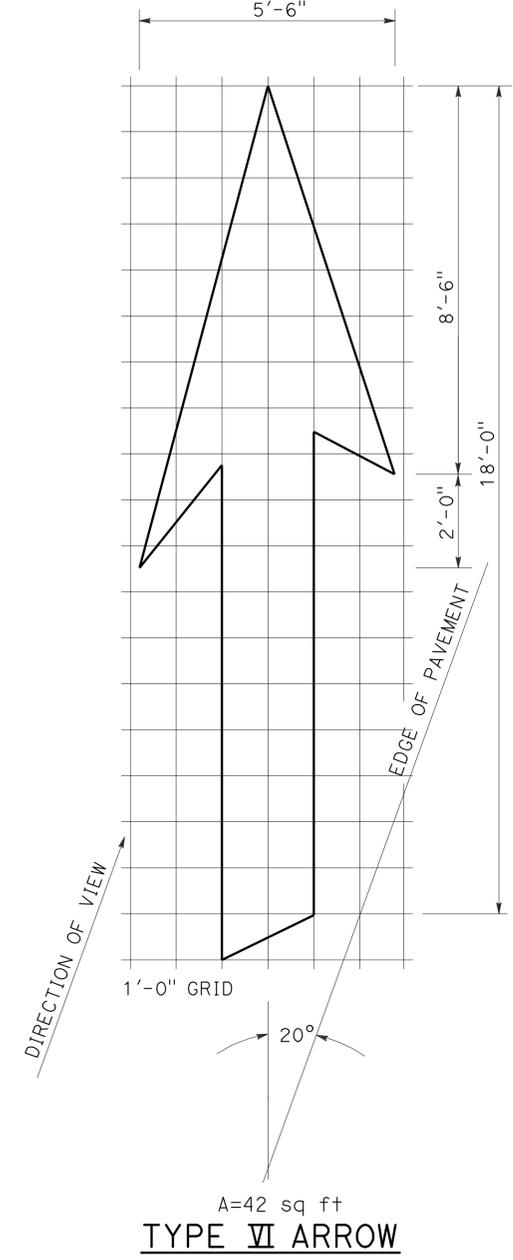
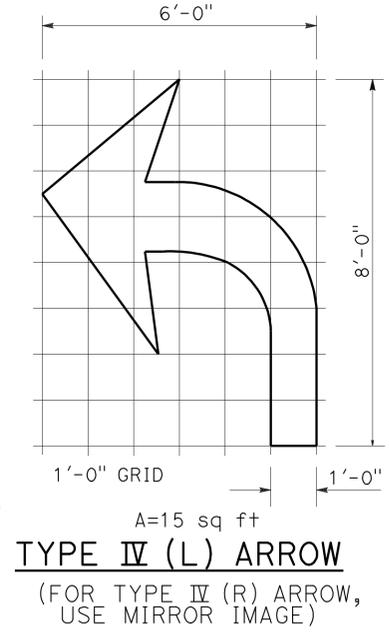
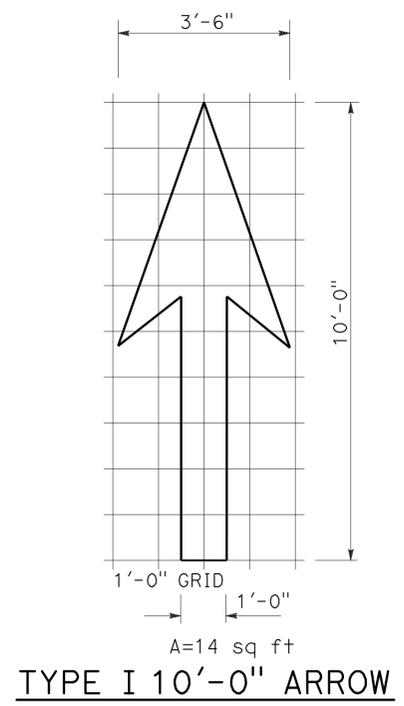
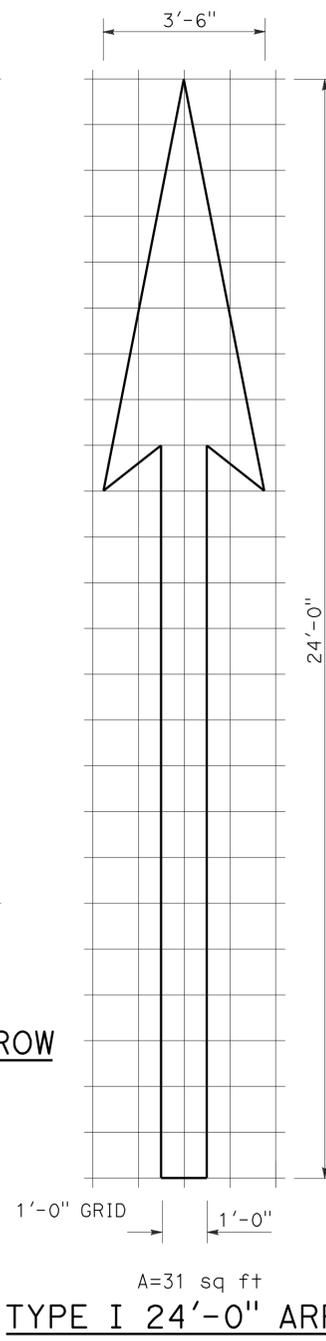
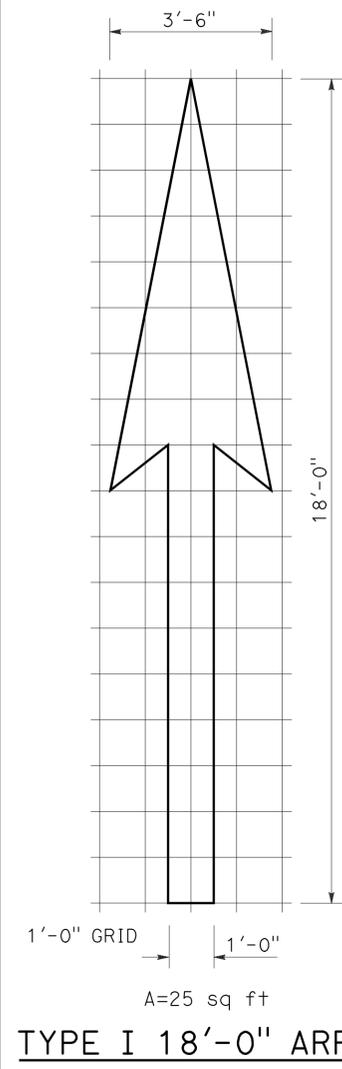
THIS PLAN ACCURATE FOR PLANT REMOVAL ONLY.

PLANT REMOVAL PLAN
 SCALE: 1" = 20'
PR-5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	17	6.0/12.6	150	284

Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA



NOTE:
MINOR VARIATIONS IN DIMENSIONS
MAY BE ACCEPTED BY THE ENGINEER.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A
DATED MAY 1, 2006 - PAGE 9 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A24A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	151	284

Dallas Forester
REGISTERED CIVIL ENGINEER

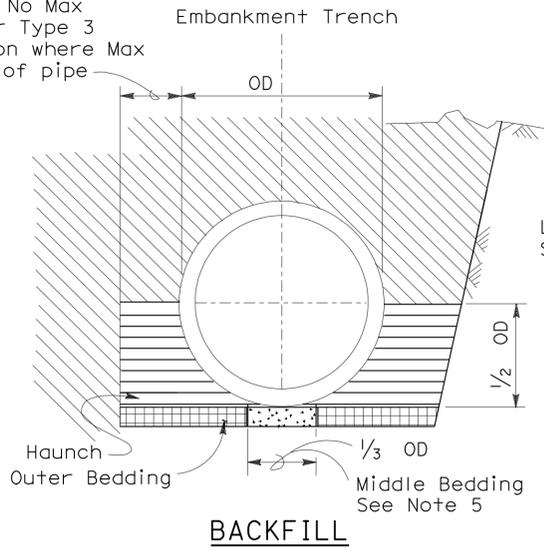
November 17, 2006
PLANS APPROVAL DATE

Dallas Forester
REGISTERED PROFESSIONAL ENGINEER
No. C37765
Exp. 12-31-06
CIVIL
STATE OF CALIFORNIA

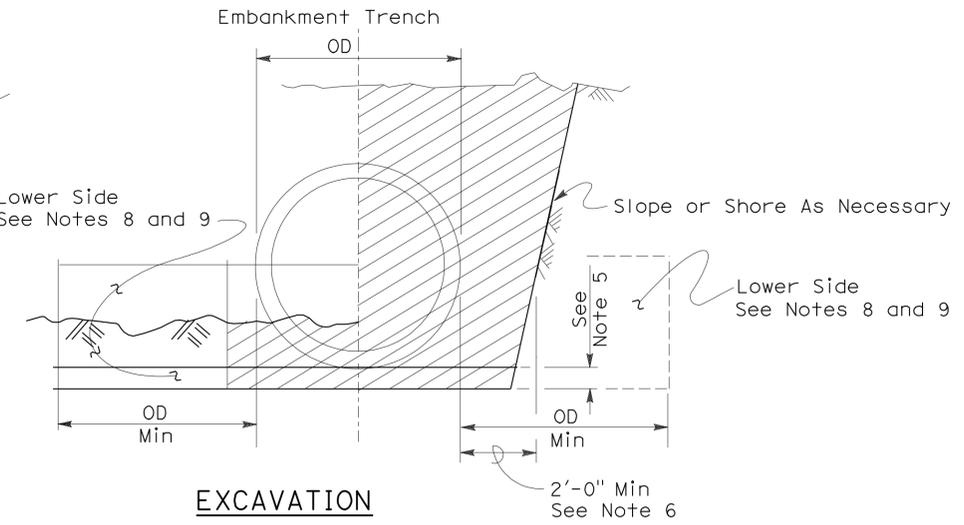
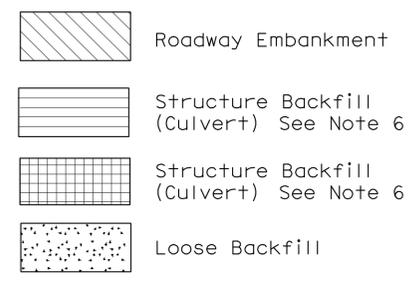
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 9-24-12

2'-0" Min; No Max except for Type 3 Installation where Max Equals OD of pipe



BACKFILL



EXCAVATION



TYPE 1 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 30 and the maximum percentage passing the 75 μm sieve size shall be 12.

TYPE 2 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 25.

TYPE 3 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 85 percent relative compaction. 90 percent relative compaction will be required where the fill over the pipe is less than 4'-0" or 1/2 OD.

INSTALLATION TYPE 1

MINIMUM CLASS AND D-LOAD	COVER	
	108" Dia AND SMALLER	OVER 108" Dia
Class II 1000D	14.9'	12.9'
Class III 1350D	15.0' - 20.9'	13.0' - 18.9'
Class III Special 1700D	21.0' - 26.9'	19.0' - 24.9'
Class IV 2000D	27.0' - 31.9'	25.0' - 29.9'
Class IV Special 2500D	32.0' - 40.9'	30.0' - 38.9'
Class V 3000D	41.0' - 49.9'	39.0' - 46.9'
Class V Special 3600D	50.0' - 59.0'	47.0' - 58.0'

INSTALLATION TYPE 2

MINIMUM CLASS AND D-LOAD	COVER
Class II 1000D	9.9'
Class III 1350D	10.0' - 14.9'
Class III Special 1700D	15.0' - 19.9'
Class IV 2000D	20.0' - 24.9'
Class IV Special 2500D	25.0' - 31.9'
Class V 3000D	32.0' - 38.9'
Class V Special 3600D	39.0' - 47.0'

INSTALLATION TYPE 3

MINIMUM CLASS AND D-LOAD	COVER	
	48" Dia AND SMALLER	OVER 48" Dia
Class II 1000D	7.9'	5.9'
Class III 1350D	8.0' - 10.9'	6.0' - 8.9'
Class III Special 1700D	11.0' - 14.9'	9.0' - 12.9'
Class IV 2000D	15.0' - 17.9'	13.0' - 15.9'
Class IV Special 2500D	18.0' - 21.9'	16.0' - 19.9'
Class V 3000D	22.0' - 26.9'	20.0' - 24.9'
Class V Special 3600D	30.0' - 33.0'	25.0' - 31.0'

NOTES:

- Unless otherwise shown on the plans or specified in the special provision, the Contractor shall have the option of selecting the class of RCP and the type of installation to be used, provided the height of cover does not exceed the value shown for the RCP selected.
Example: 24" RCP culvert with maximum cover of 19'-0" the options are:
a) Class III or stronger with Installation Type 1.
b) Class III Special or stronger with Installation Type 2.
c) Class IV Special or stronger with Installation Type 3.
Cover is defined as the maximum vertical distance from top of the pipe to finished grade within the length of any given culvert.
- The class of RCP and Installation Type selected shall be the same throughout the length of any given culvert.
- The "length of any culvert" is defined as the culvert between:
a) Successive drainage structure (inlets, junction boxes, headwalls, etc.).
b) A drainage structure and the inlet or outlet end of the culvert.
c) The inlet and outlet end of the culvert when there are no intervening drainage structures.
- Oval and arch shaped RCP shall not be used.
- 1/25 OD Min, not less than 3".
- Slurry cement backfill may be substituted for backfill in the outer bedding and haunch areas. If slurry is used the outer and middle beddings shall be omitted. Prior to installation the soil under the middle 1/3 of the outside diameter of the pipe shall be softened by scarifying or other means to a minimum depth of 1/25 OD, but not less than 3". Where slurry cement backfill is used clear distance to trench wall may be reduced as set forth in Section 19-3.062 of the Standard Specifications.
- Backfill shall be placed full width of excavation except where dimensions are shown for backfill width or thickness. Dimensions shown are minimums.
- Lower side shall be suitable material as determined by the Engineer. Otherwise it shall be considered unsuitable as set forth in Section 19-2.02 of the Standard Specifications. See Note 9.
- Where the pipe is placed in a trench, if the trench walls are sloped at 5 vertical to 1 horizontal or steeper for at least 90 percent of the trench height or up to not less than 12" from the grading plane, the firmness of the soil in the lower side need not be considered.
- Non-reinforced precast concrete pipe sizes 3'-0" or smaller may be placed under installation Types 1, 2 or 3.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**EXCAVATION AND BACKFILL
CONCRETE PIPE CULVERTS**
NO SCALE

RSP A62DA DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A62DA DATED MAY 1, 2006 - PAGE 20 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A62DA

2006 REVISED STANDARD PLAN RSP A62DA

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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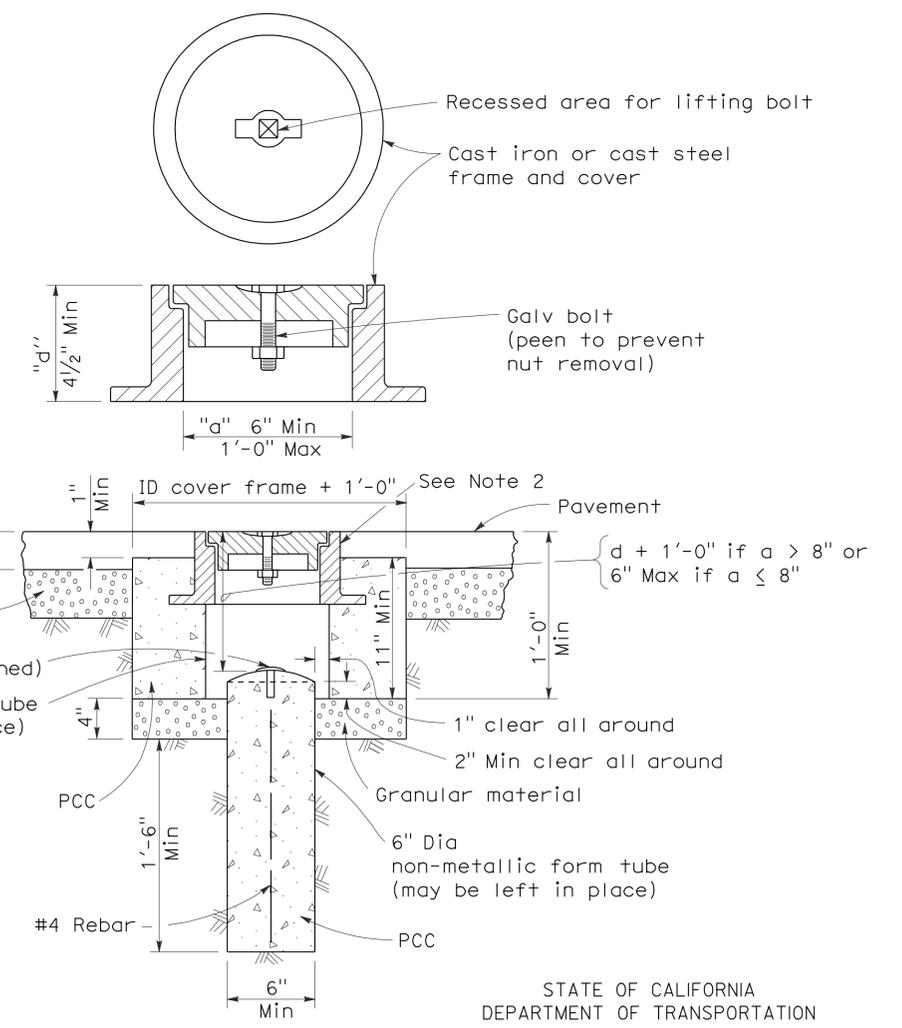
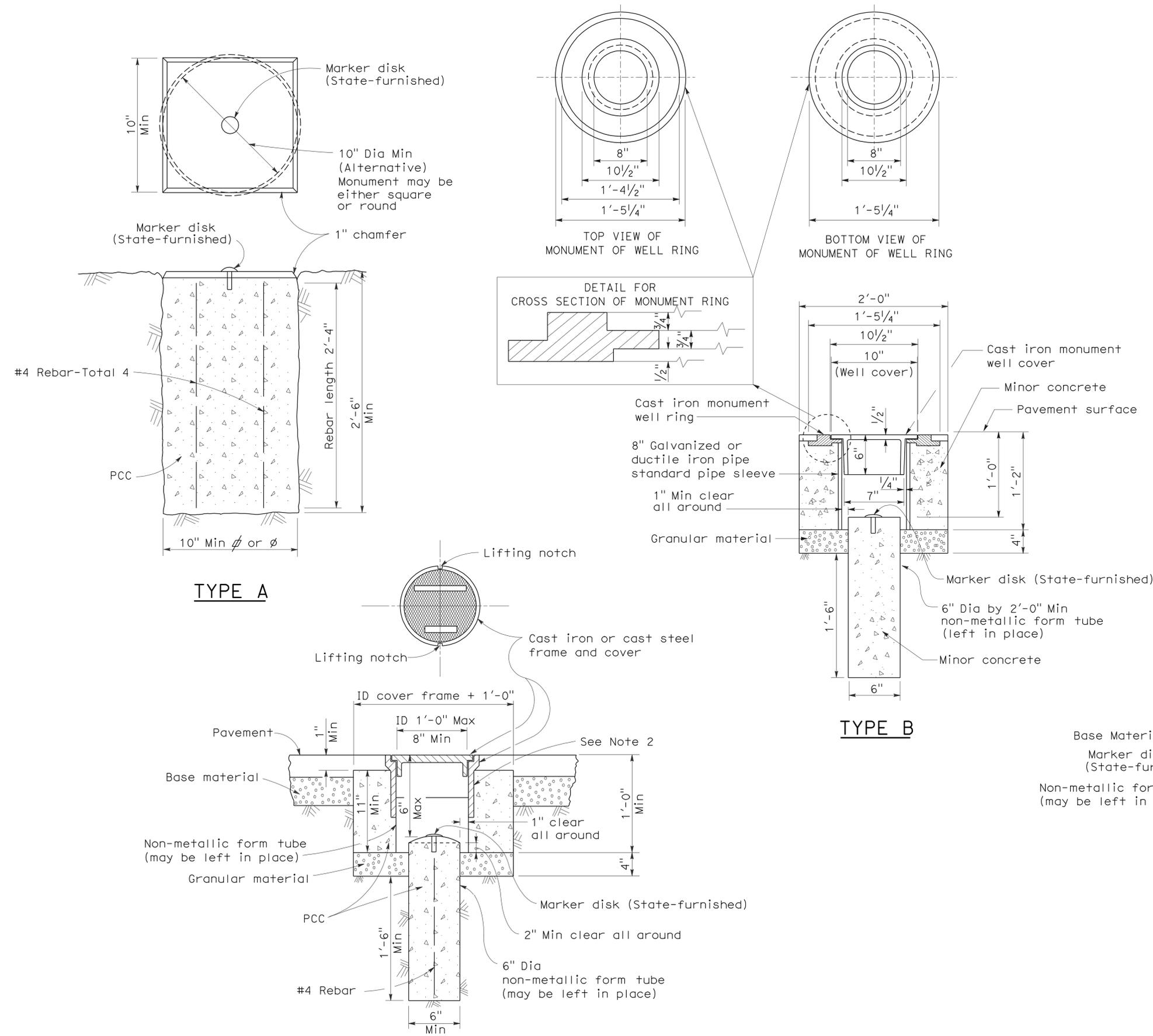
Mark S. Turner
 PROFESSIONAL LAND SURVEYOR
 June 30, 2006
 PLANS APPROVAL DATE
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LICENSED LAND SURVEYOR
 Mark S. Turner
 No. 6228
 Exp. 3-31-08
 STATE OF CALIFORNIA

To accompany plans dated 9-24-12

NOTES:

1. The configuration of the cast iron or cast steel frame and cover may vary from that shown.
2. Frame shall be embedded in the concrete a minimum of 3".
3. Type D monument shall be either Alternative No. 1 or Alternative No. 2 at the contractor's option.
4. All portland cement concrete shall be Class 2 or minor concrete with 1" maximum aggregate.



TYPE D SURVEY MONUMENTS
 Alternative No. 2
 NO SCALE

RSP A74 DATED JUNE 30, 2006 SUPERSEDES STANDARD PLAN DATED MAY 1, 2006 - PAGE 28 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A74

2006 REVISED STANDARD PLAN RSP A74

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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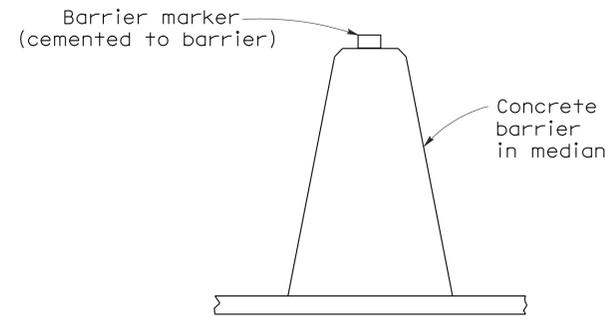
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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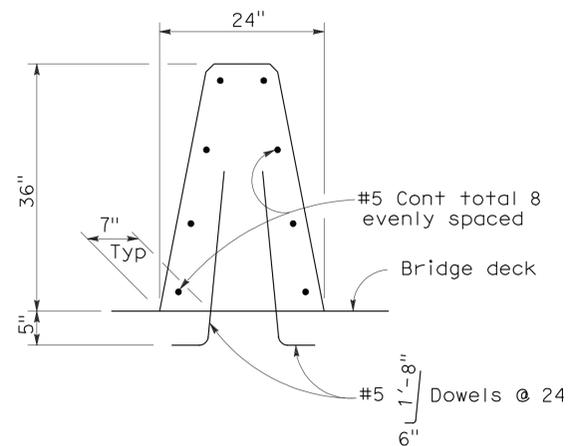
To accompany plans dated 9-24-12

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



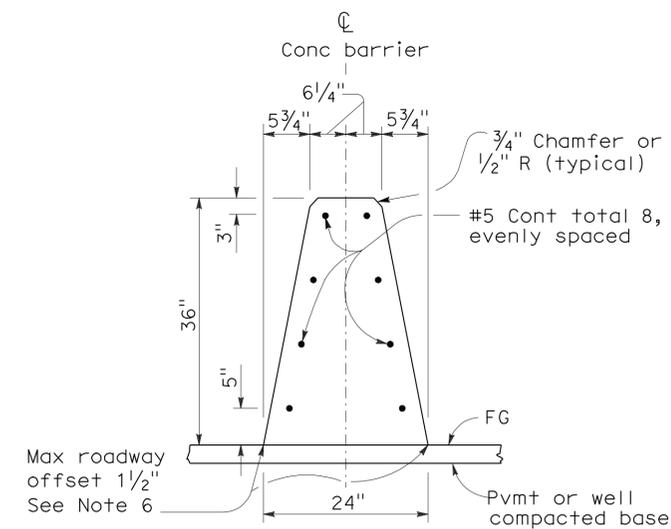
CONCRETE BARRIER TYPE 60 DELINEATION

See Notes 7 and 8



CONCRETE BARRIER TYPE 60A

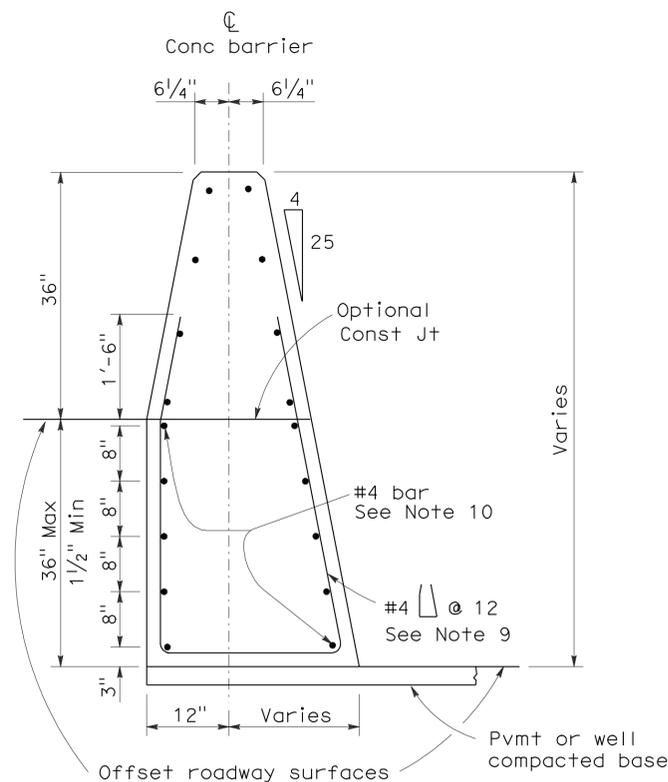
Details similar to Type 60 except as noted.



CONCRETE BARRIER TYPE 60

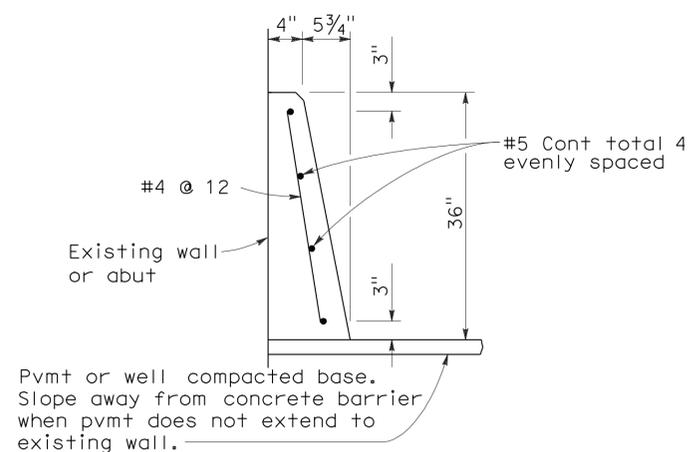
NOTES:

- See Standard Plan A76B for details of Concrete Barrier Type 60 end anchors, connection to structures and transitions to Concrete Barrier Type 50 and Concrete Barrier Type 60S.
- See Standard Plan A76C for Concrete Barrier Type 60 transitions at bridge column and sign pedestals.
- Where glare screen is required on Concrete Barrier Type 60, use Concrete Barrier Type 60G.
- Where the concrete barrier is added to the face of existing concrete structure, match existing weep holes.
- Expansion joints in concrete barrier shall be located at all deck, pavement and principal wall joints. Expansion joint filler material shall be the same size as joint or 1/2" minimum.
- Where roadway offset is greater than 1 1/2", see Concrete Barrier Type 60C.
- Barrier delineation to be used when required by the Special Provisions.
- Spacing of barrier markers to match spacing of raised pavement markers on the adjacent median edgeline pavement delineation.
- Reinforcing stirrup not required for roadway offsets less than 1'-0".
- For roadway surfaces offset greater than 1 1/2" to 3", no rebars required. For roadway surfaces offset greater than 3" to 8" use two #4 rebars at 3" above the lower roadway surface. For roadway surfaces offset greater than 8" to 12", use two #4 rebars at 3" above the lower roadway surface and two #4 rebars at 8" above the lower roadway surface. For roadway surfaces offset greater than 12" to 36", use two #4 rebars at 3" above the lower roadway surface and two #4 rebars at every 8" increment vertical spacing above the first two #4 rebars.



CONCRETE BARRIER TYPE 60C

Details similar to Type 60 except as noted. Concrete barrier end anchor when necessary. 36" roadway surfaces offset shown.



CONCRETE BARRIER TYPE 60D

CONCRETE BARRIER TYPE 60

NO SCALE

RSP A76A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A76A DATED MAY 1, 2006 - PAGE 29 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A76A

2006 REVISED STANDARD PLAN RSP A76A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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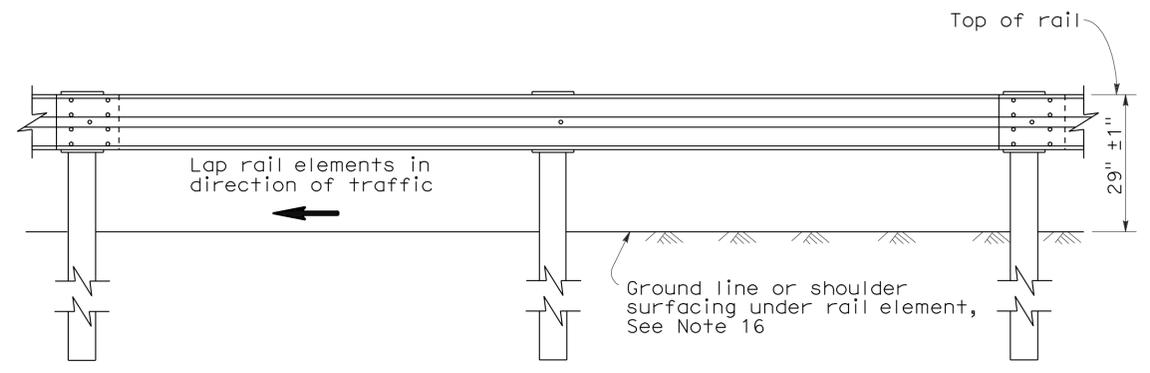
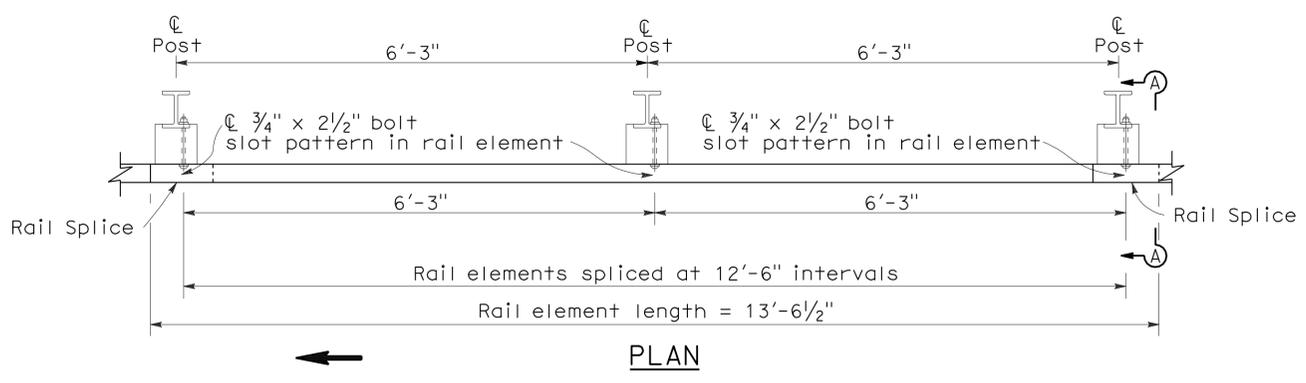
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

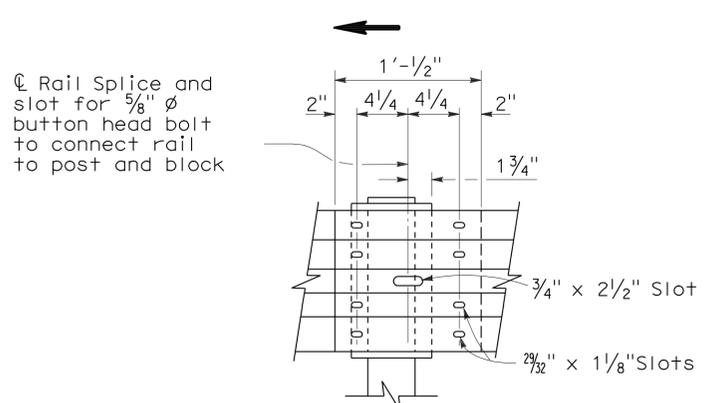
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To accompany plans dated 9-24-12

2006 REVISED STANDARD PLAN RSP A77A2

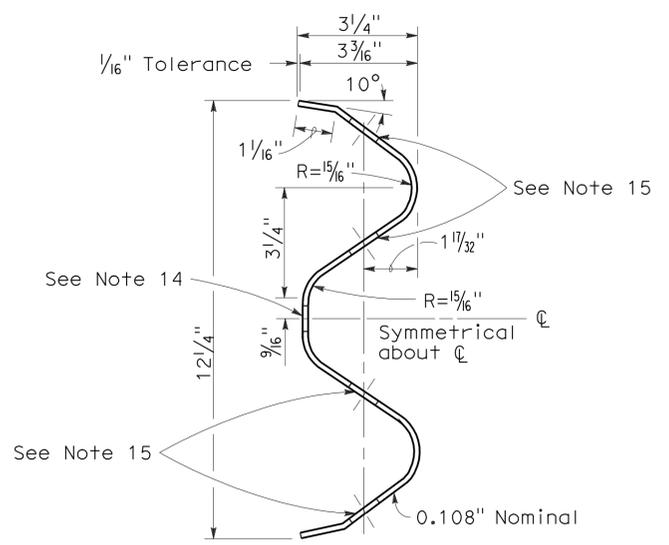


METAL BEAM GUARD RAILING WITH STEEL POSTS AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS

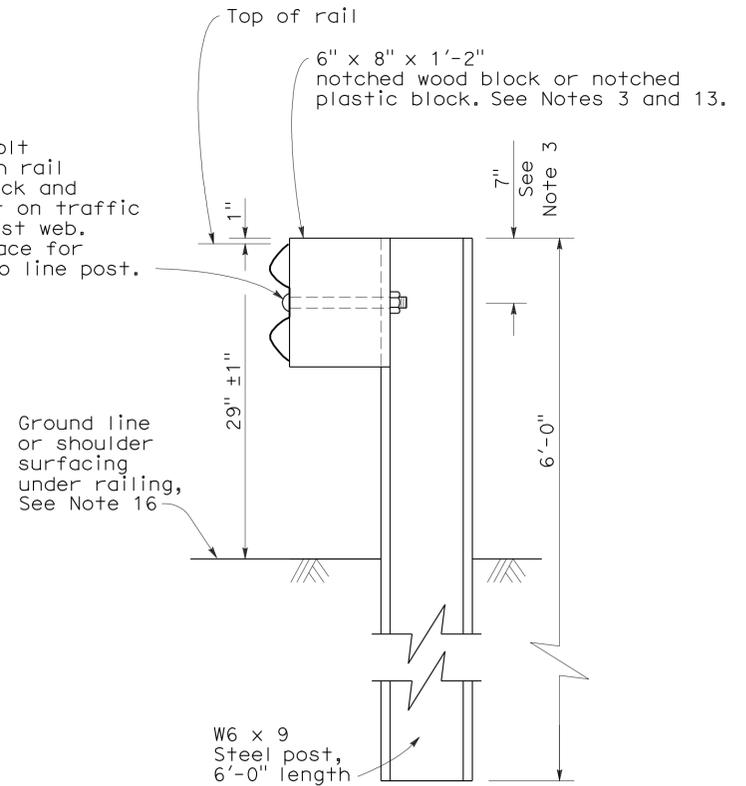


**ELEVATION
RAIL ELEMENT SPLICE DETAIL**

- Connect the over lapped end of the rail elements with 5/8" ϕ 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" ϕ 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 \rightarrow .
- 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

To accompany plans dated 9-24-12

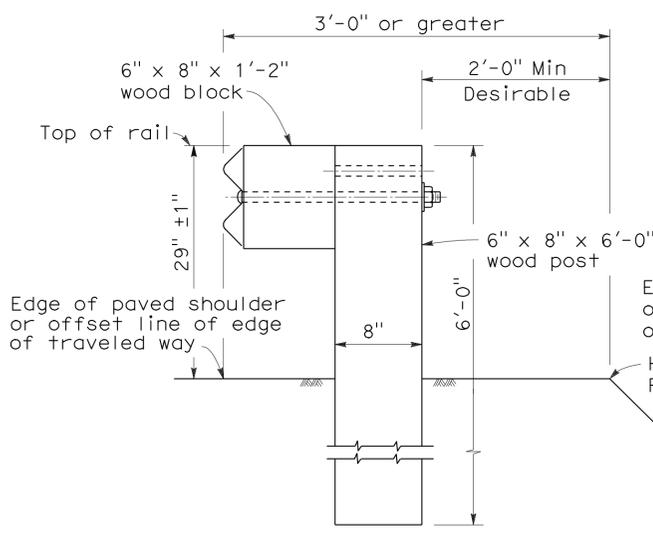
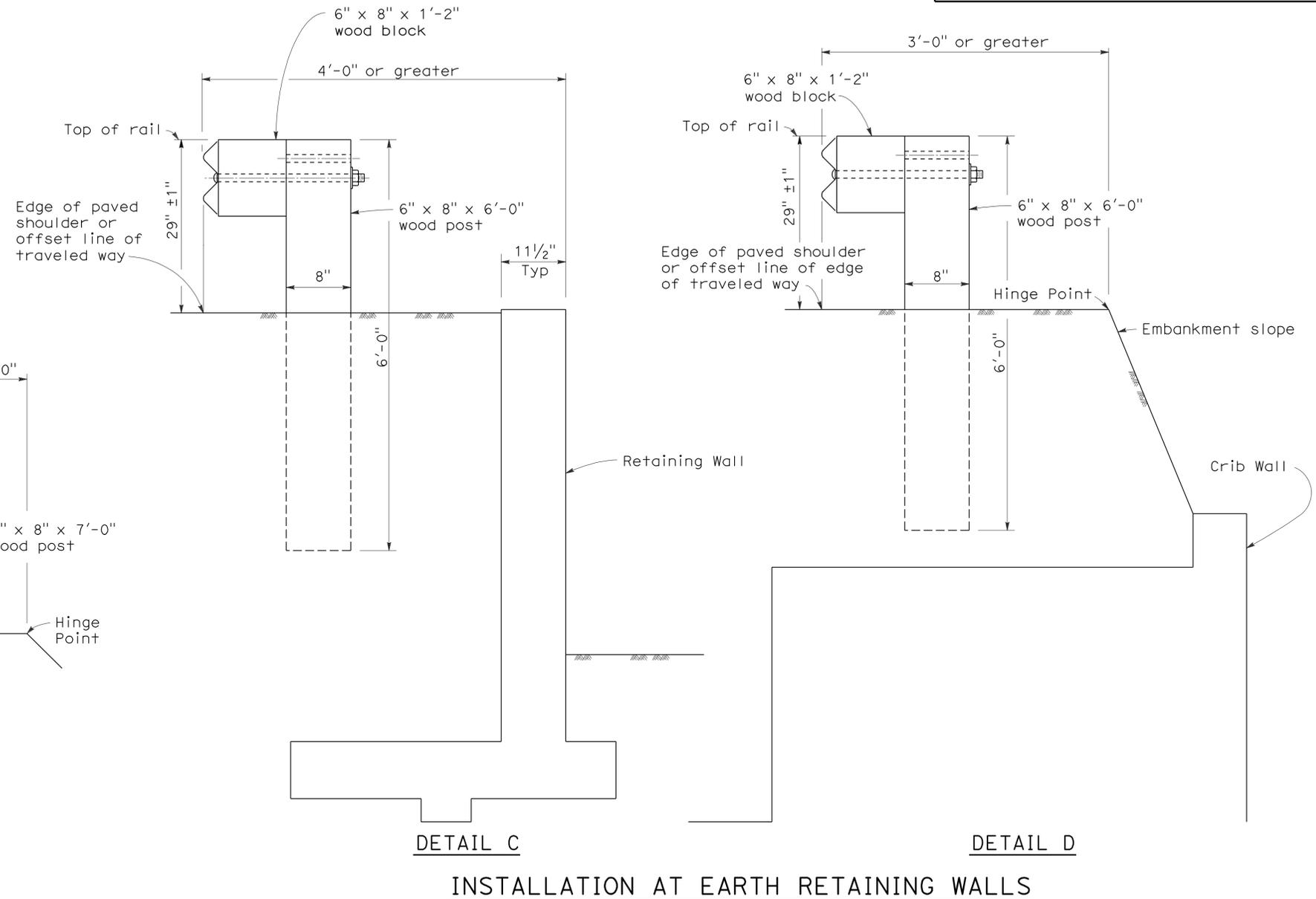
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	155	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

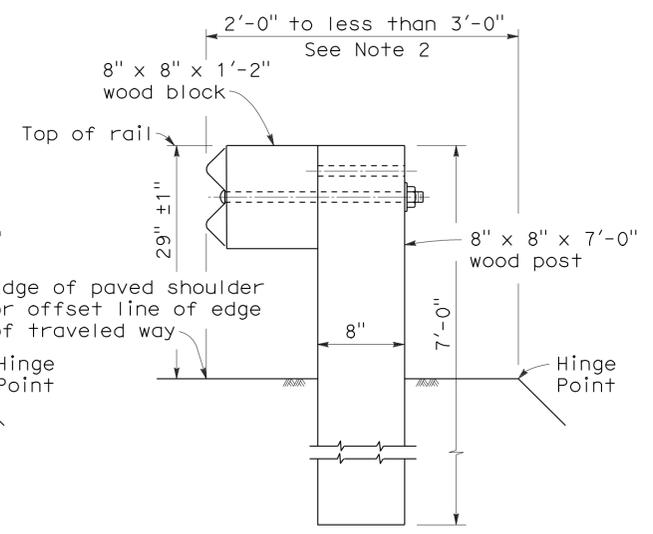
May 20, 2011
PLANS APPROVAL DATE

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

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DETAIL A
TYPICAL ROADWAY
INSTALLATION
See Note 1



DETAIL B
NARROW ROADWAY
INSTALLATION
See Note 1

POST EMBEDMENT

DETAIL C
INSTALLATION AT EARTH RETAINING WALLS
DETAIL D

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.

REVISED STANDARD PLAN RSP A77C3

2006 REVISED STANDARD PLAN RSP A77C3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	156	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

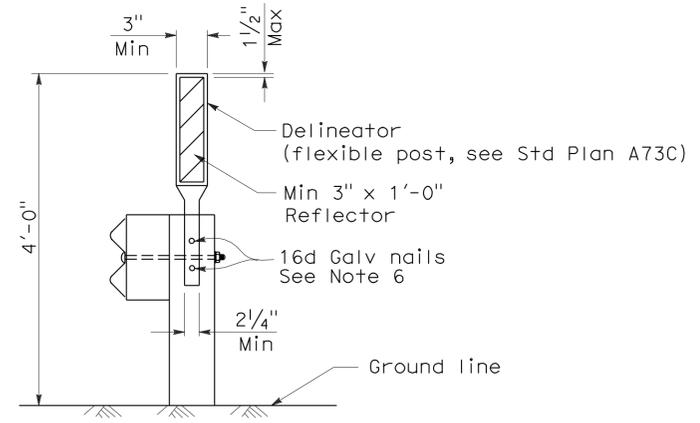
May 20, 2011
PLANS APPROVAL DATE

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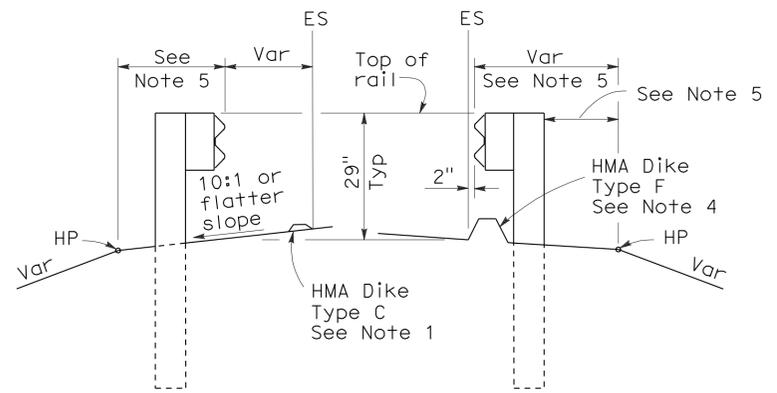
To accompany plans dated 9-24-12

NOTES:

1. When necessary to place dike in front of face of guard railing, only Type C dike may be used. For dike details, see Standard Plan A87B.
2. For standard railing post embedment, see Standard Plans A77C3.
3. Guard railing delineation to be used where shown on the Project Plans.
4. When dike or curb is placed under guard railing, the maximum height of the dike or curb shall be 4". Mountable dike should not be used. For dike and curb details, see Standard Plans A87A and A87B.
5. For details of typical distance between the face of rail and hinge point, see Standard Plan A77C3.
6. For steel line posts, use 1/4" - 20 self-tapping screws in 0.22" diameter holes or 1/4" bolts in 3/32" diameter holes.



GUARD RAILING DELINEATION
See Note 3



DIKE POSITIONING
See Note 1

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL RAILING DELINEATION
AND DIKE POSITIONING DETAILS**

NO SCALE

RSP A77C4 DATED MAY 20, 2011 SUPERSEDES RSP A77C4 DATED JUNE 6, 2008 AND STANDARD PLAN A77C4 DATED MAY 1, 2006 - PAGE 47 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77C4

2006 REVISED STANDARD PLAN RSP A77C4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	157	284

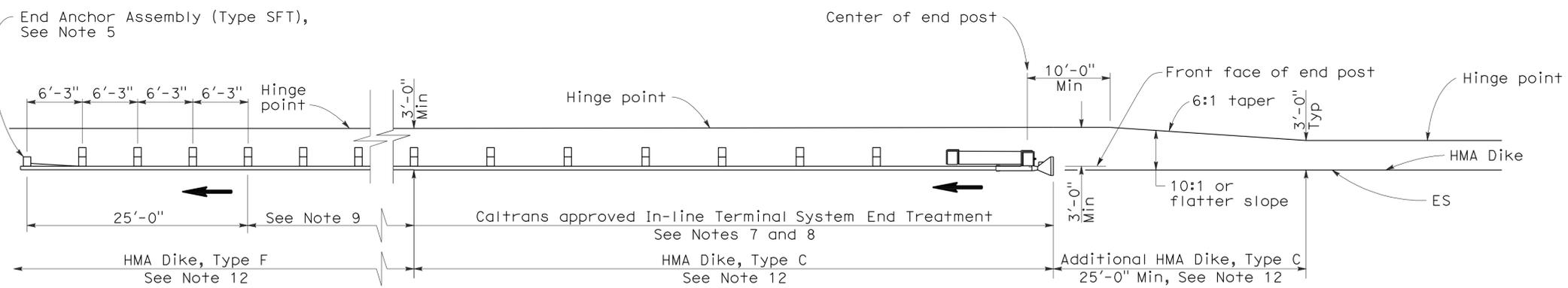
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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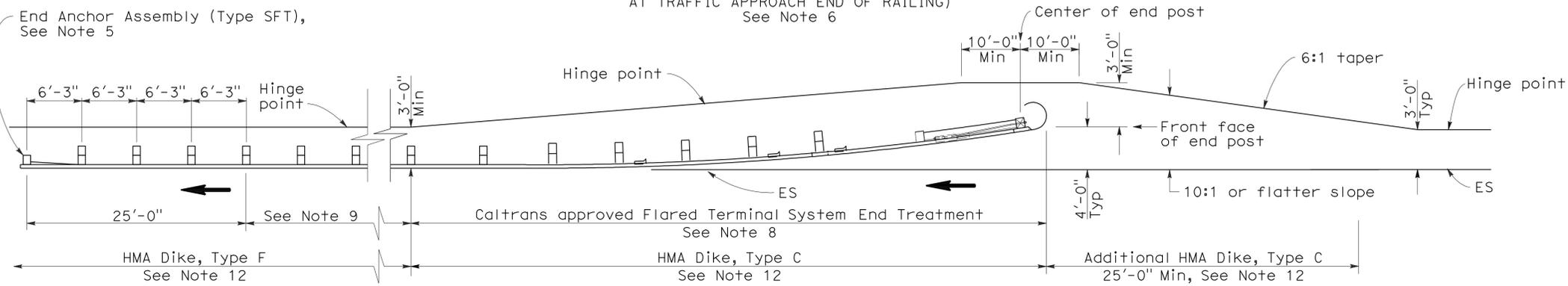
To accompany plans dated 9-24-12

2006 REVISED STANDARD PLAN RSP A77E1



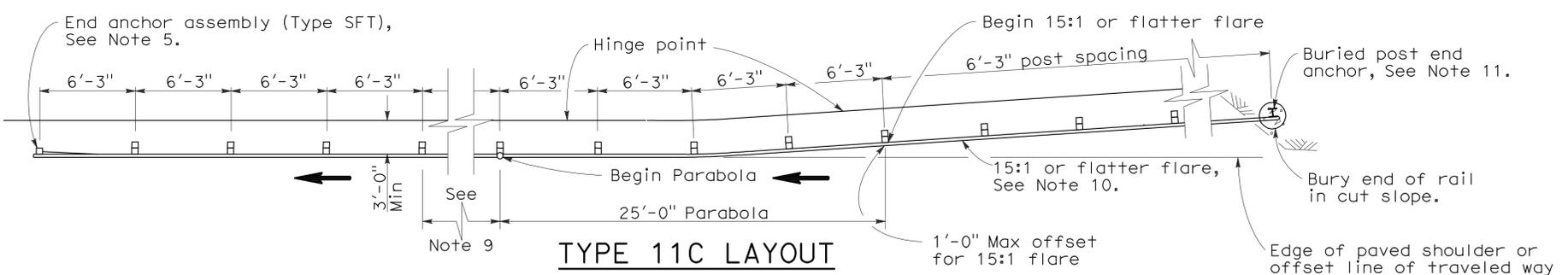
TYPE 11A LAYOUT

(EMBANKMENT GUARD INSTALLATION WITH IN-LINE END TREATMENT AT TRAFFIC APPROACH END OF RAILING)
See Note 6



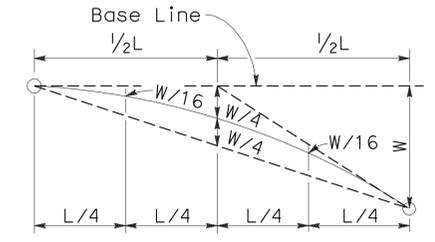
TYPE 11B LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH FLARED END TREATMENT AT TRAFFIC APPROACH END OF RAILING)
See Note 6

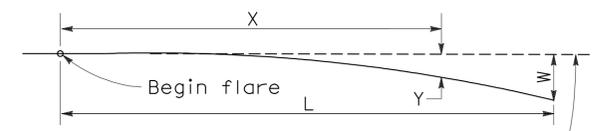


TYPE 11C LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH BURIED END ANCHOR TREATMENT AT TRAFFIC APPROACH END OF RAILING)
See Notes 6 and 12



TYPICAL PARABOLIC LAYOUT

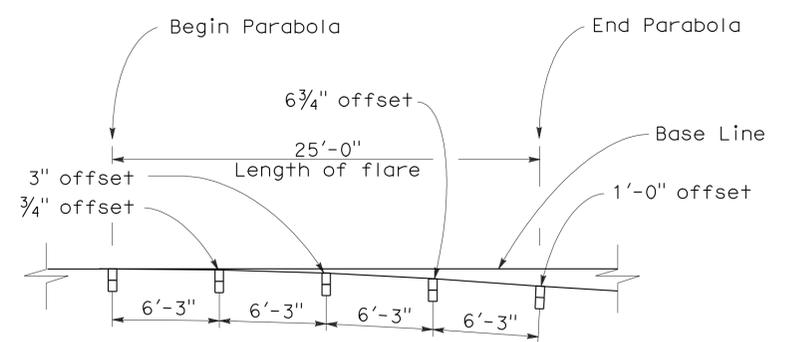


Base Line (Edge of paved shoulder or offset line of edge of traveled way)

$Y = \frac{WX^2}{L^2}$

Y = Offset from base line
W = Maximum offset
X = Distance along base line
L = Length of flare

PARABOLIC FLARE OFFSETS



TYPICAL FLARE OFFSETS FOR 1 FOOT MAX END OFFSET

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1, and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or recycled plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by \rightarrow .
- For End Anchor Assembly (Type SFT) details, see Standard Plan A77H1.
- Layout Types 11A, 11B or 11C are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for only one direction of traffic.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11C Layout, see Standard Plan A77I2.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77E1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E1
DATED MAY 1, 2006 - PAGE 48 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77E1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	158	284

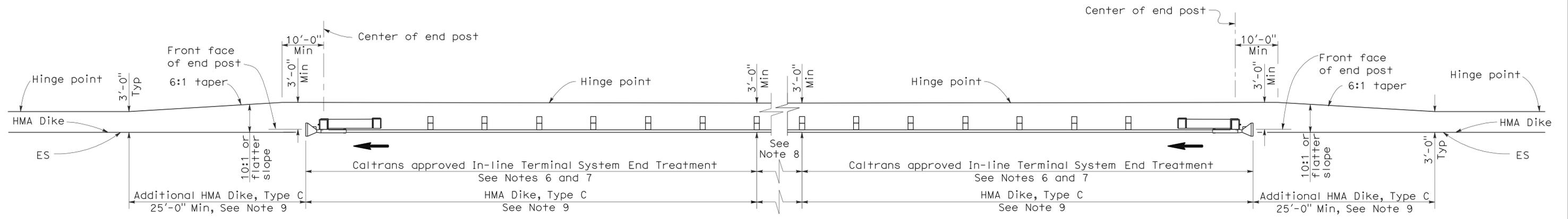
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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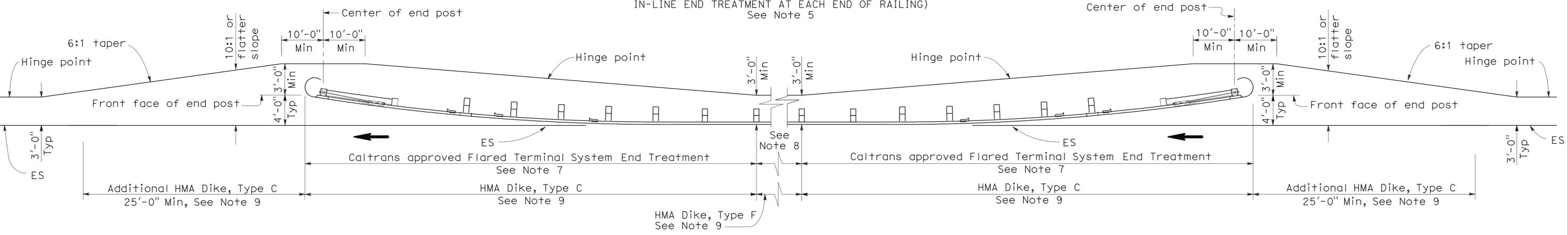
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 9-24-12



TYPE 11D LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH IN-LINE END TREATMENT AT EACH END OF RAILING)
See Note 5



TYPE 11E LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH FLARED END TREATMENT AT EACH END OF RAILING)
See Note 5

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by
- Layout Types 11D through 11L, shown on the A77E Series of Revised Standard Plans, are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for both directions of traffic.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE
RSP A77E2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E2
DATED MAY 1, 2006 - PAGE 49 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77E2

2006 REVISED STANDARD PLAN RSP A77E2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	159	284

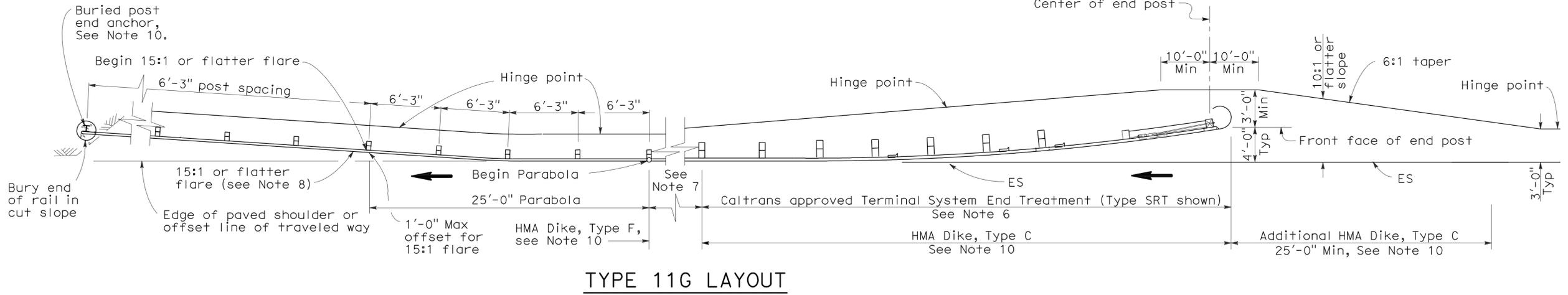
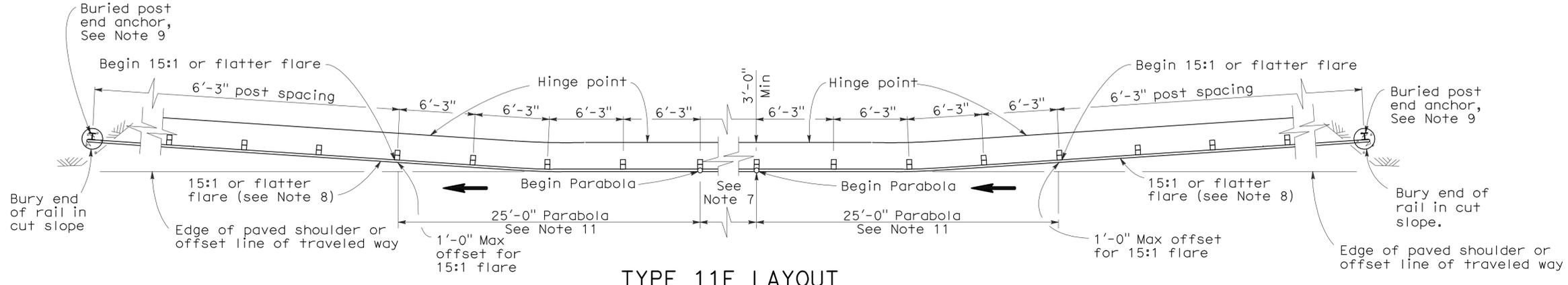
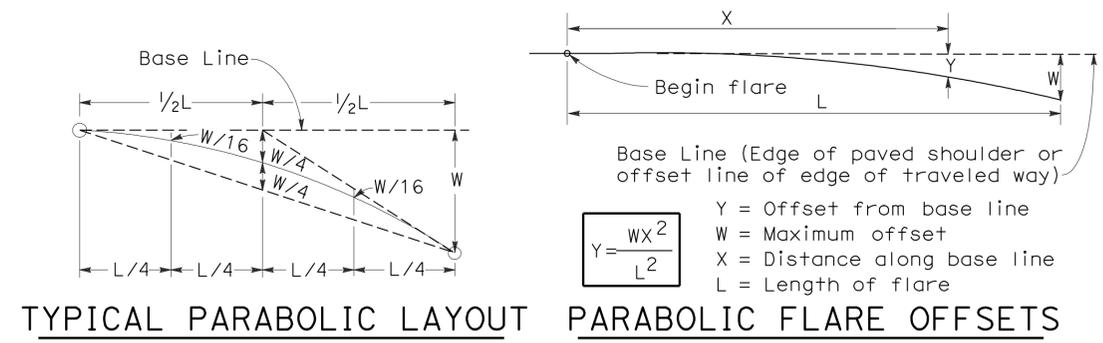
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

To accompany plans dated 9-24-12



NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by \rightarrow .
- Layout Types 11D through 11L, shown on the A77E Series of Revised Standard Plans, are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for both directions of traffic.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11F and 11G Layouts, see Standard Plan A77I2.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77E1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77E3 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E3
DATED MAY 1, 2006 - PAGE 50 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77E3

2006 REVISED STANDARD PLAN RSP A77E3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	160	284

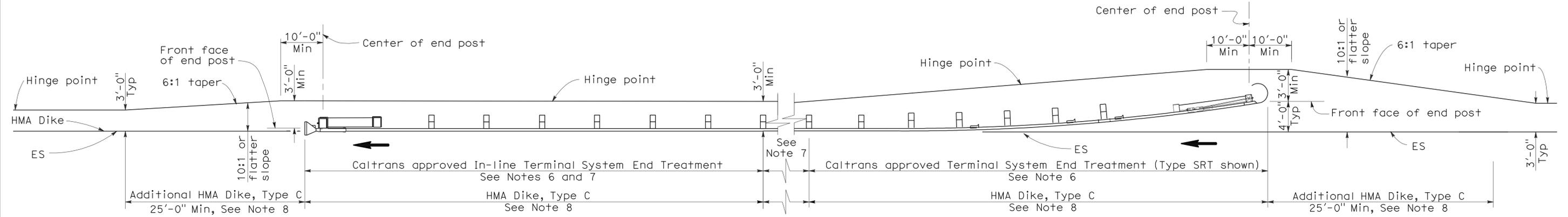
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June 6, 2008
PLANS APPROVAL DATE

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No. C50200
Exp. 6-30-09
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STATE OF CALIFORNIA

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To accompany plans dated 9-24-12



TYPE 11H LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH FLARED END TREATMENT AND AN IN-LINE TREATMENT AT THE ENDS OF RAILING)
See Notes 5 and 8

NOTES:

1. Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
2. Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
4. Direction of adjacent traffic indicated by →.
5. Layout Types 11D through 11L, shown on the A77E Series of Revised Standard Plans, are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for both directions of traffic.
6. The type of terminal system end treatment to be used will be shown on the Project Plans.
7. Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
8. Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**
NO SCALE

RSP A77E4 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E4
DATED MAY 1, 2006 - PAGE 51 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77E4

2006 REVISED STANDARD PLAN RSP A77E4

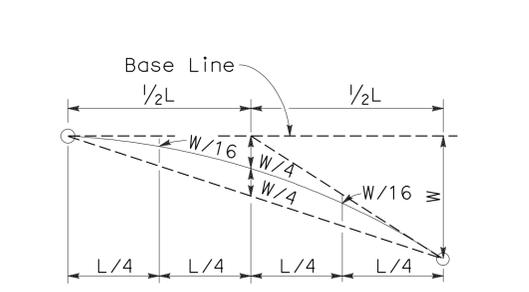
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	161	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

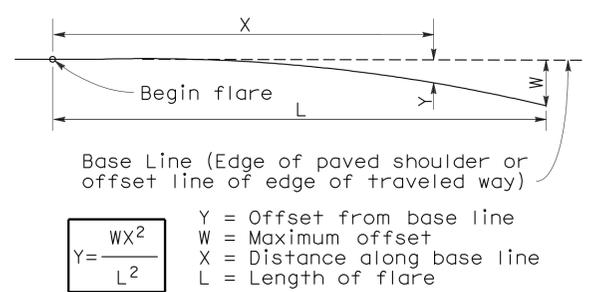
June 6, 2008
PLANS APPROVAL DATE

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STATE OF CALIFORNIA

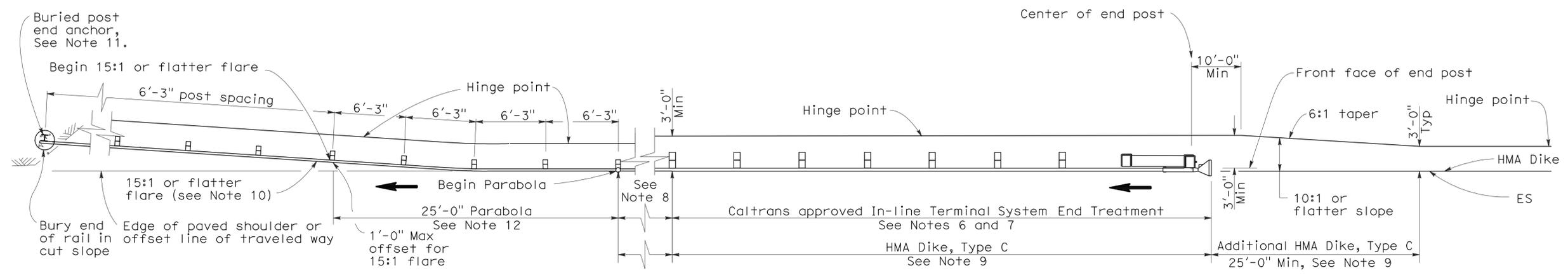


TYPICAL PARABOLIC LAYOUT



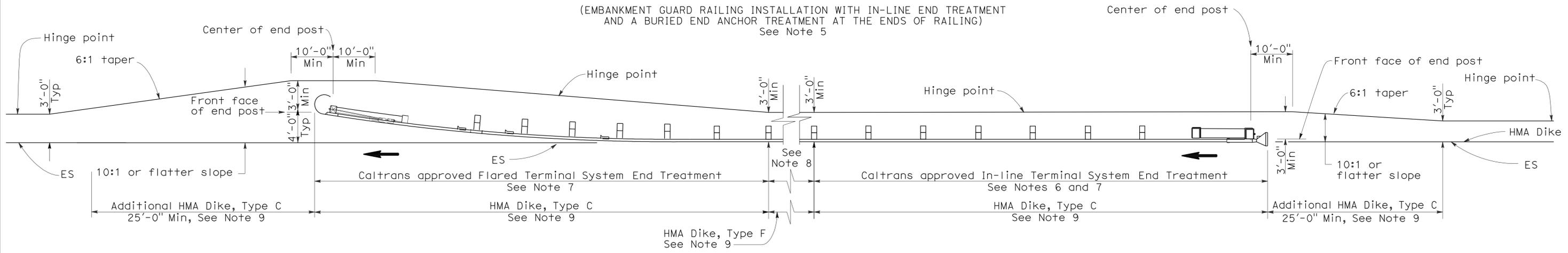
PARABOLIC FLARE OFFSETS

To accompany plans dated 9-24-12



TYPE 11I LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH IN-LINE END TREATMENT AND A BURIED END ANCHOR TREATMENT AT THE ENDS OF RAILING)
See Note 5



TYPE 11J LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH IN-LINE END TREATMENT AND FLARED END TREATMENT AT THE ENDS OF RAILING)
See Note 5

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by \rightarrow .
- Layout Types 11D through 11L, shown on the A77E Series of Revised Standard Plans, are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for both directions of traffic.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11I Layout, see Standard Plan A77I2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77E1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77E5 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E5
DATED MAY 1, 2006 - PAGE 52 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77E5

2006 REVISED STANDARD PLAN RSP A77E5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	162	284

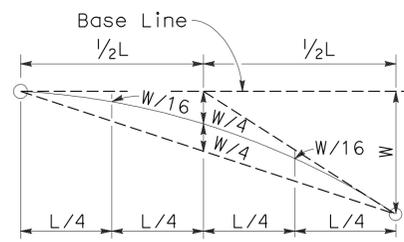
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

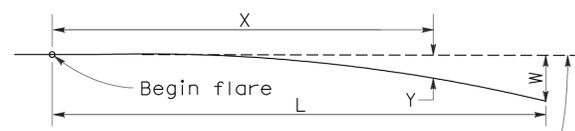
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Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 9-24-12



TYPICAL PARABOLIC LAYOUT

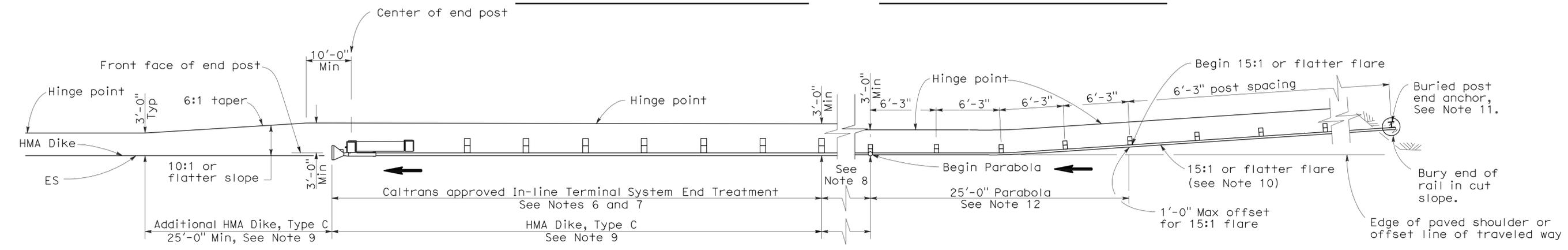


Base Line (Edge of paved shoulder or offset line of edge of traveled way)

$$Y = \frac{WX^2}{L^2}$$

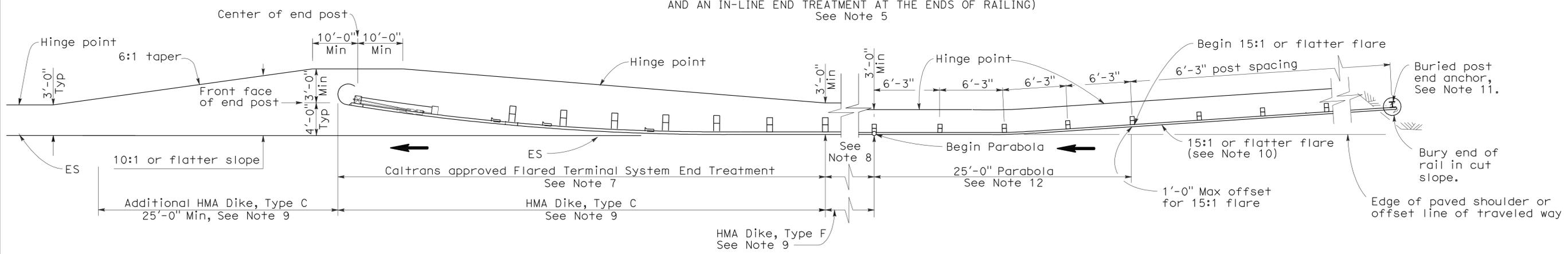
Y = Offset from base line
W = Maximum offset
X = Distance along base line
L = Length of flare

PARABOLIC FLARE OFFSETS



TYPE 11K LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH A BURIED END ANCHOR TREATMENT AND AN IN-LINE END TREATMENT AT THE ENDS OF RAILING)
See Note 5



TYPE 11L LAYOUT

(EMBANKMENT GUARD RAILING INSTALLATION WITH A BURIED END ANCHOR TREATMENT AND A FLARED END TREATMENT AT THE ENDS OF RAILING)
See Note 5

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by \rightarrow .
- Layout Types 11D through 11L, shown on the A77E Series of Revised Standard Plans, are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for both directions of traffic.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11K and 11L Layouts, see Standard Plan A77I2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77E1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE
RSP A77E6 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E6
DATED MAY 1, 2006 - PAGE 53 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A77E6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	163	284

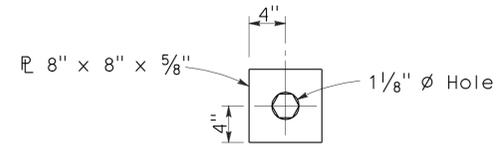
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

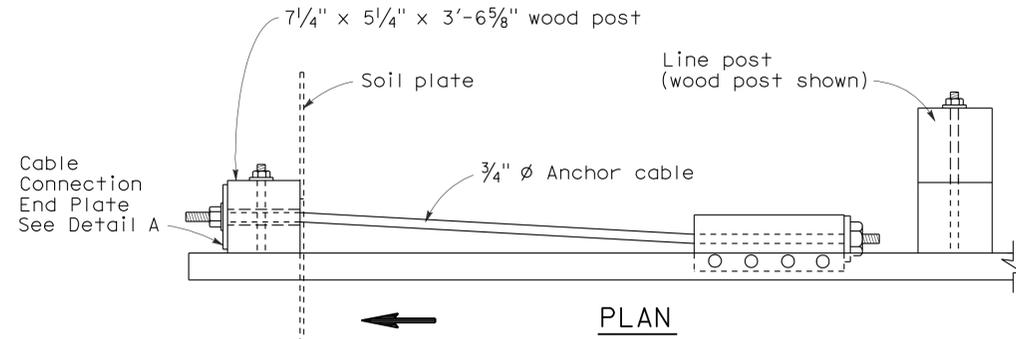
Randell D. Hiatt
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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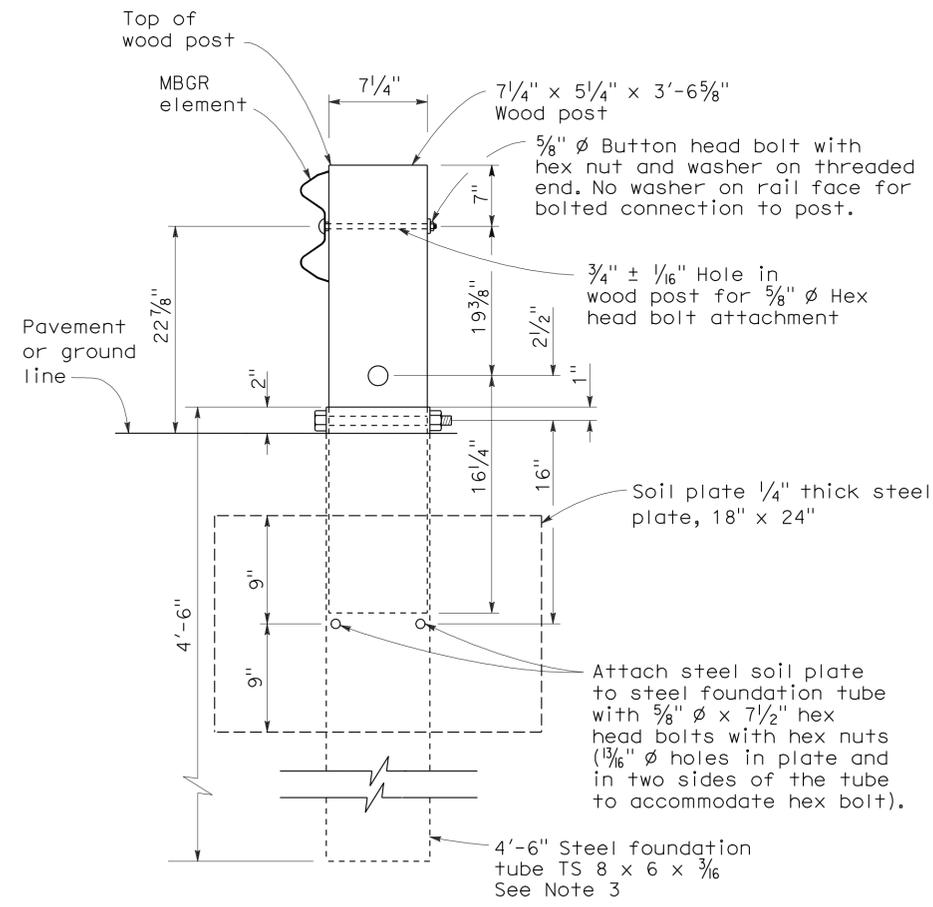
To accompany plans dated 9-24-12



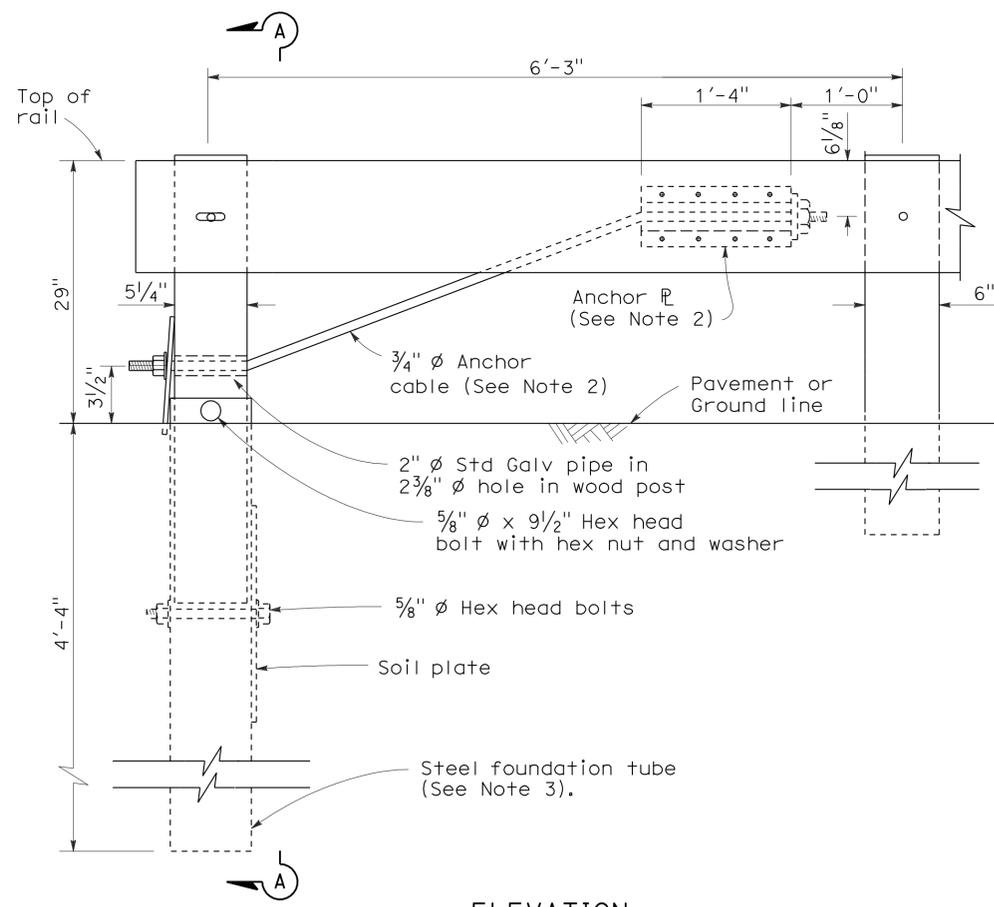
DETAIL A
CABLE CONNECTION
END PLATE



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 \Rightarrow .
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

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

2006 REVISED STANDARD PLAN RSP A77H1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	164	284

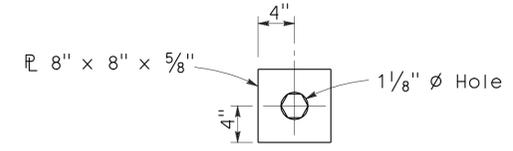
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

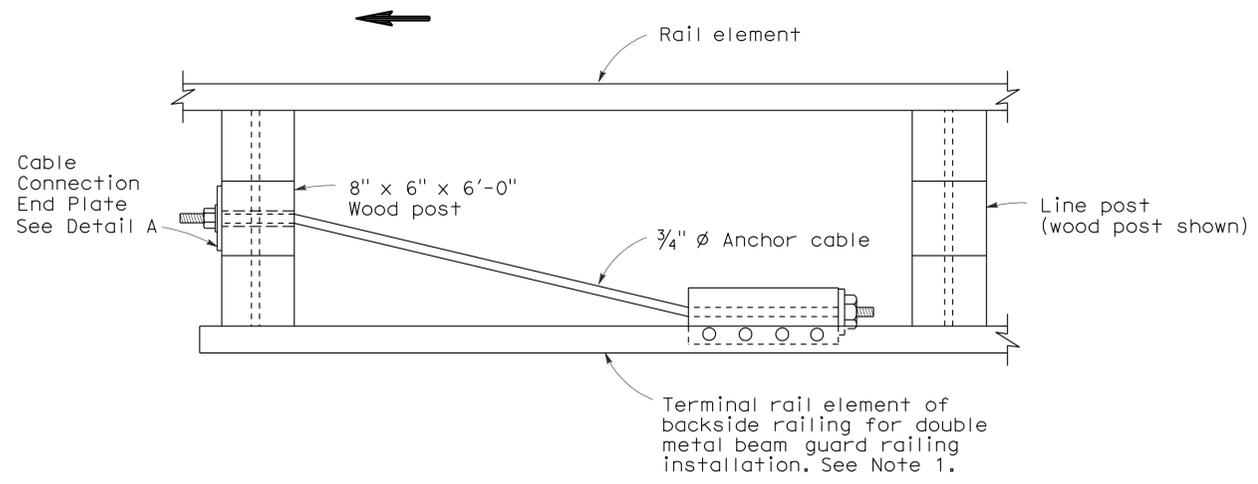
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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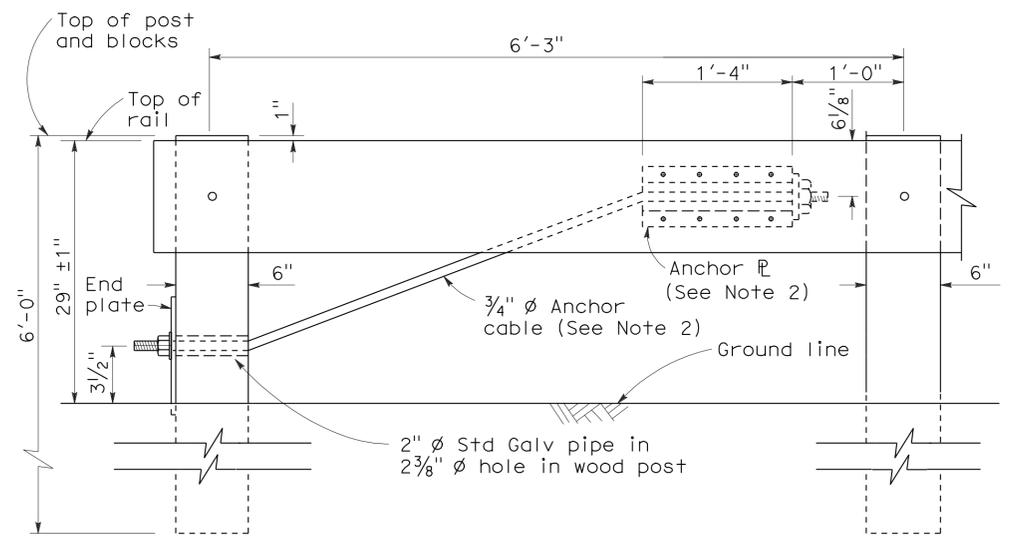
To accompany plans dated 9-24-12



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.

REVISED STANDARD PLAN RSP A77H2

2006 REVISED STANDARD PLAN RSP A77H2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	165	284

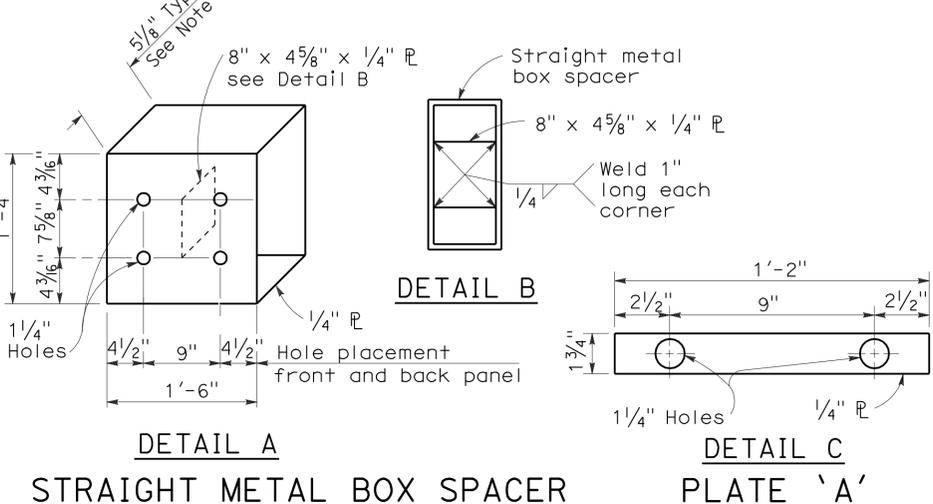
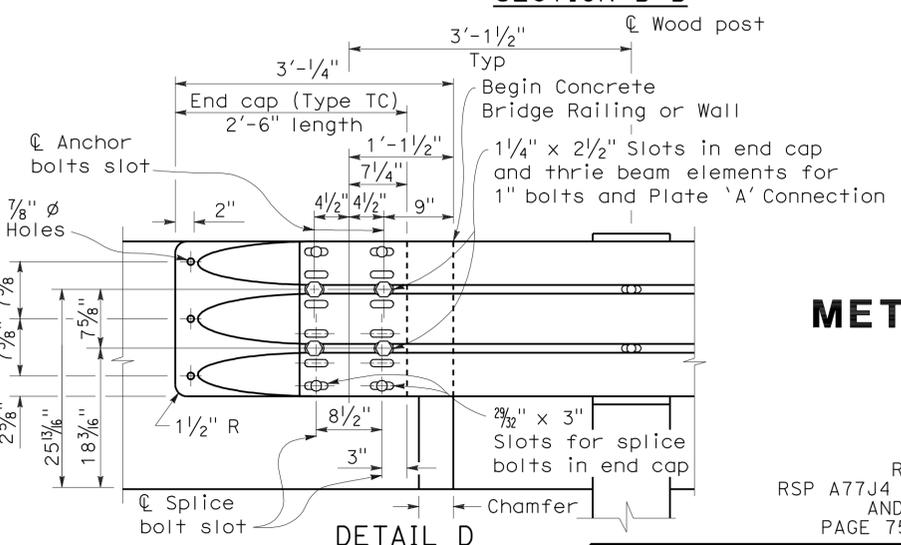
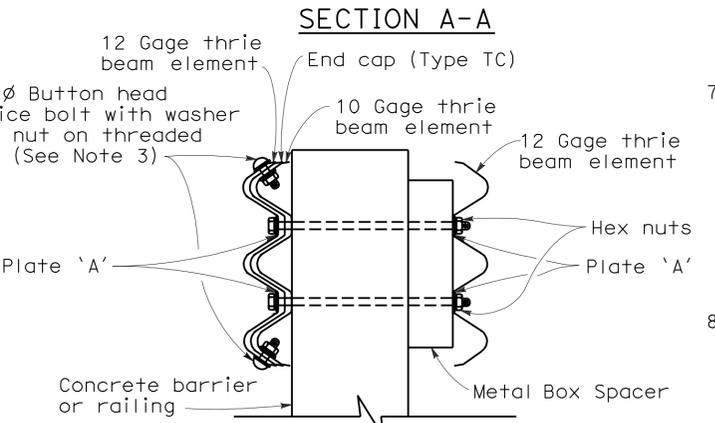
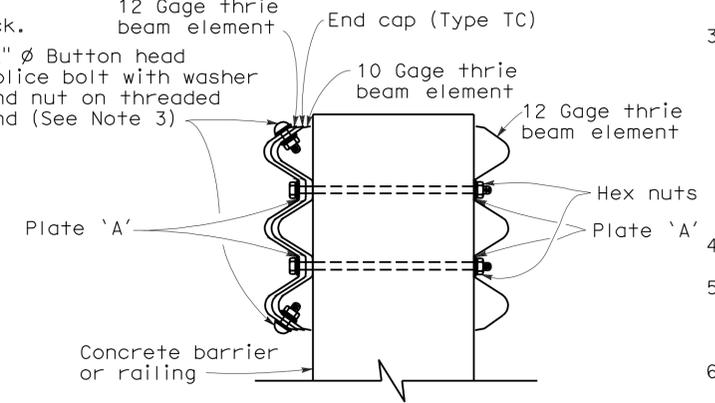
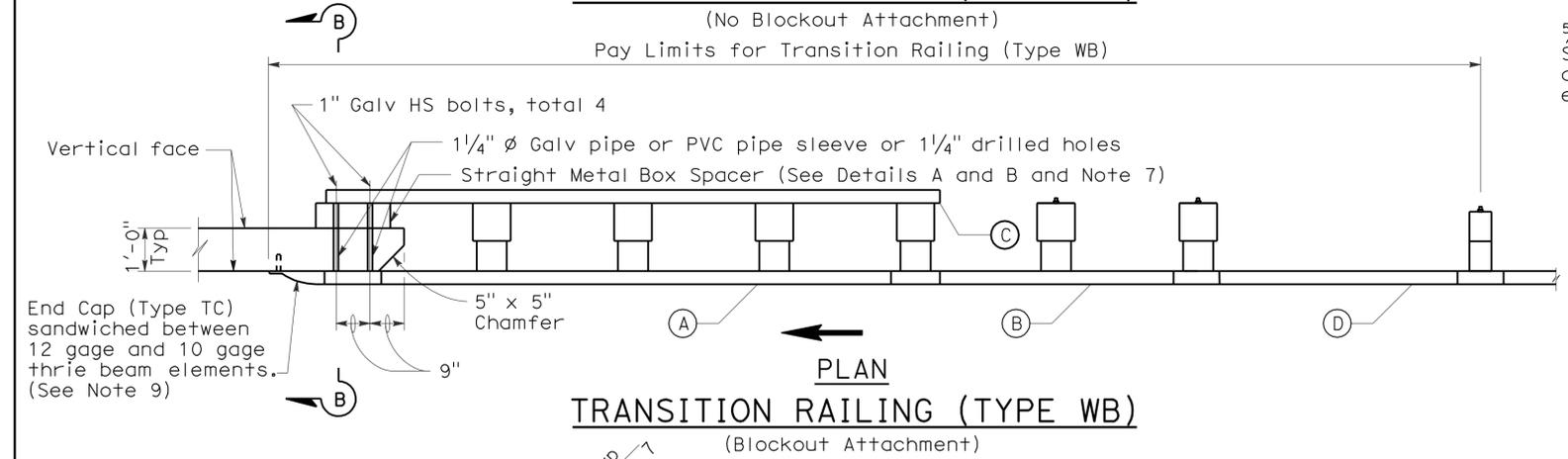
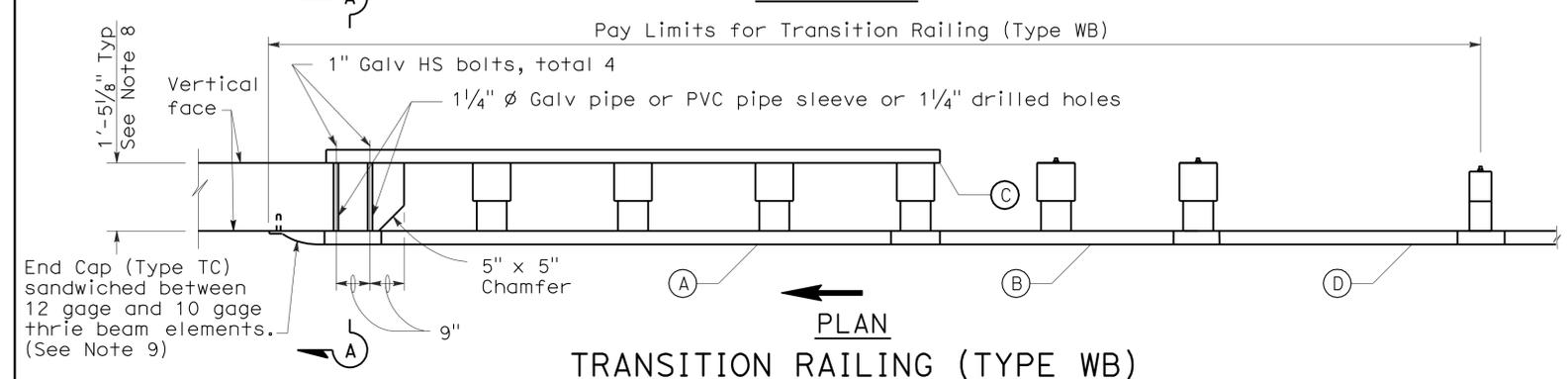
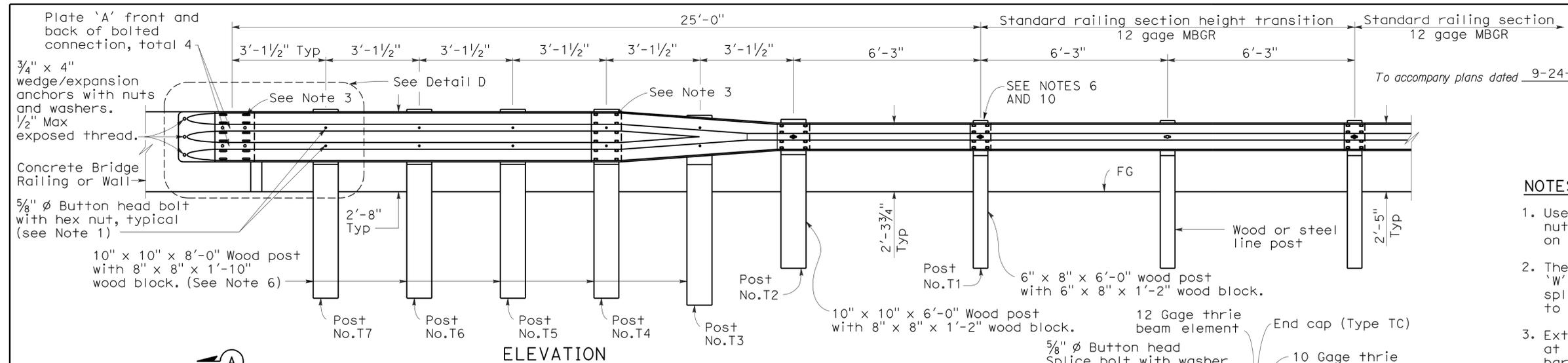
RANDALL D. HIATT
 REGISTERED CIVIL ENGINEER
 No. C50200
 Exp. 6-30-11
 STATE OF CALIFORNIA

May 20, 2011
PLANS APPROVAL DATE

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NOTES:

- Use 5/8" ø Button head bolts and hex nuts for connections to posts. No washer on rail face for bolted connections to post.
- The nested rail elements, end cap, and W beam to thrie beam element may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
- Exterior splice bolt holes for rail element splices at Post No. T4 and the connection to the concrete barrier or railing shall be the standard 7/32" x 1/8" slot size. Interior splice bolt holes at these locations may be increased up to 1/4" ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No. T4 and the connection to the concrete barrier or railing.
- Direction of adjacent traffic indicated by →.
- The top elevation of Posts No. T2 through No. T7 shall not project more than 1" above the top elevation of the rail element.
- Typically, the railing connected to Transition Railing (Type WB) will be either standard railing section of metal beam guard railing with height transition ratio of 120:1 or an approved Caltrans end treatment attached to Post No. T1.
- The depth of the metal box spacer varies from the 5/8" to 1 1/2" and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17 1/8". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1 1/2", metal plates similar to Plate 'A' are to be used as spacers.
- Where the width of the concrete railing or wall is greater than 17 1/8", wood blocks are to be used to fill the space created between the backside of Posts No. T4 through No. T7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
- End cap may be installed over 12 gage and 10 gage thrie beam elements where transition railing is installed on the departure end of bridge railing.
- Conform standard railing section height to 2'-3 3/4" at Post No. T1 using height transition ratio of 120:1.



- LEGEND**
- (A) Nested thrie beam elements (one 12 gage element nested over one 10 gage element).
 - (B) One 10 gage "W" beam to thrie beam element.
 - (C) One 12 gage thrie beam element.
 - (D) One 10 gage "W" beam rail element (7'-3 1/2" length)
- 10 gage = 0.135" thick
12 gage = 0.108" thick

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TRANSITION RAILING
(TYPE WB)**
NO SCALE
RSP A77J4 DATED MAY 20, 2011 SUPERSEDES
RSP A77J4 DATED JUNE 5, 2009, RSP A77J4 DATED JUNE 6, 2008
AND STANDARD PLAN A77J4 DATED MAY 1, 2006 -
PAGE 75 OF THE STANDARD PLANS BOOK DATED MAY 2006.

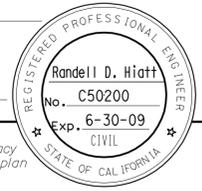
2006 REVISED STANDARD PLAN RSP A77J4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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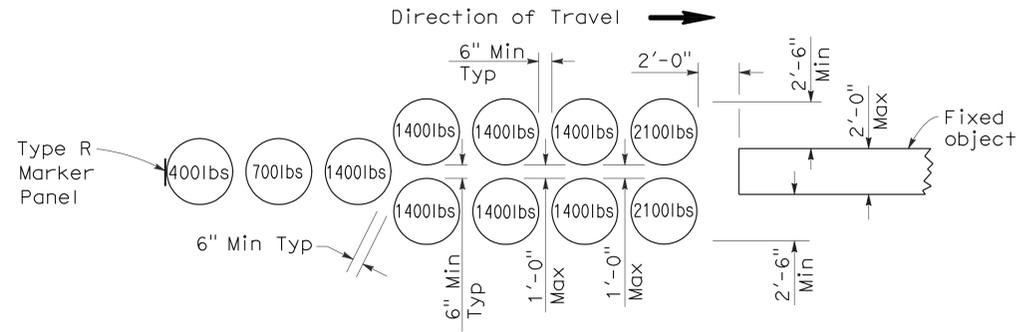
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

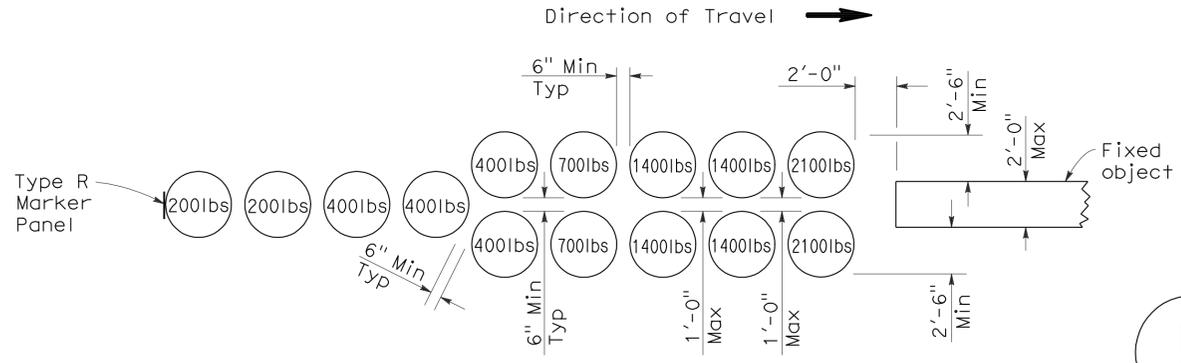
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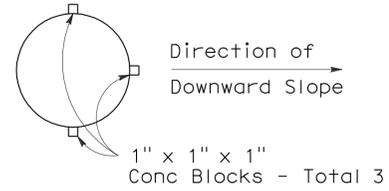
To accompany plans dated 9-24-12



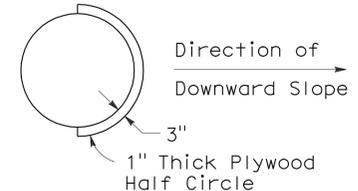
Direction of Travel →
ARRAY 'U11'
Approach speed less than 45 mph



Direction of Travel →
ARRAY 'U14'
Approach speed 45 mph or more

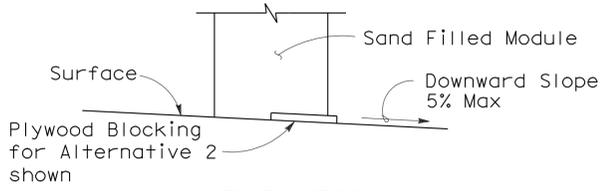


ALTERNATIVE 1

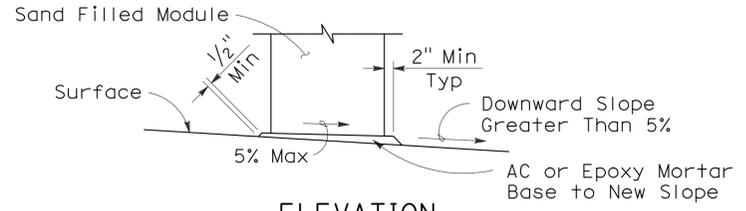


ALTERNATIVE 2

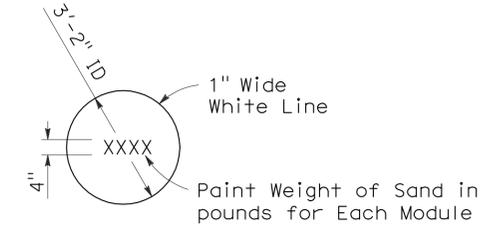
PLAN



ELEVATION
BRIDGE DECK MODULE BLOCKING DETAILS
(See Note 6)



ELEVATION
SLOPED SEAT DETAIL
(See Note 4)



PAINTING DETAIL
(See Note 5)

NOTES:

1. (xxx) Indicates module location and mass of sand in pounds for each module. Module spacing is based on the greater diameter of the modules.
2. All sand weights are nominal.
3. Each module is to contain amount of sand indicated, supported according to the manufacturer's instructions.
4. Modules shall be placed on asphalt concrete, epoxy mortar or concrete surface. Modules to be placed on surfacing with greater than 5% downward slope shall be seated as shown.
5. Mass of sand and outline of each module shall be painted on the surface at each module location.
6. Module blocking, epoxied to the deck surface, is required for all modules placed on bridge decks. Two acceptable alternatives are shown. Other alternatives recommended by the manufacturer and approved by the Engineer will be accepted.
7. Place the top of the Type R marker panel 1" below the module lid.
8. Approach speeds indicated conform to NCHRP Report criteria.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

RSP A81A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A81A
DATED MAY 1, 2006 - PAGE 99 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A81A

2006 REVISED STANDARD PLAN RSP A81A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	167	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

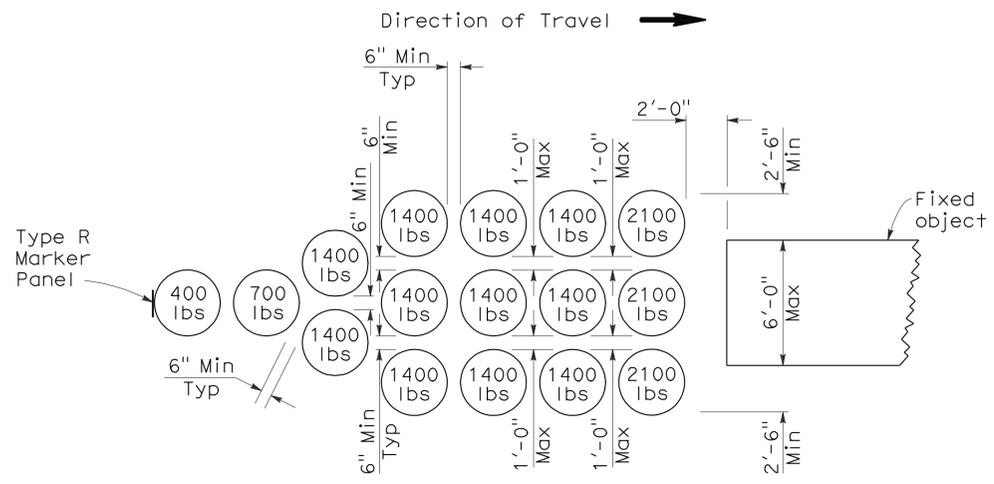
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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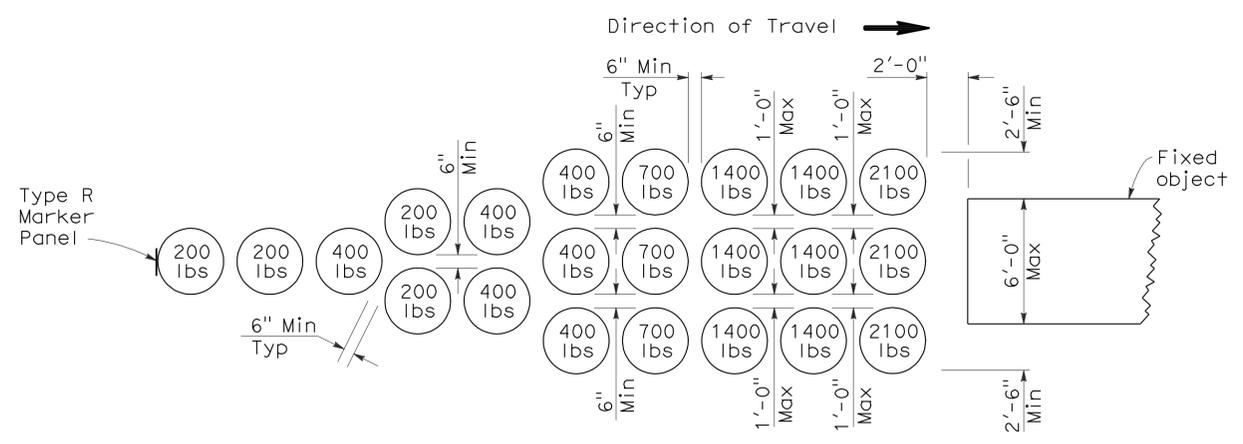
To accompany plans dated 9-24-12

NOTES:

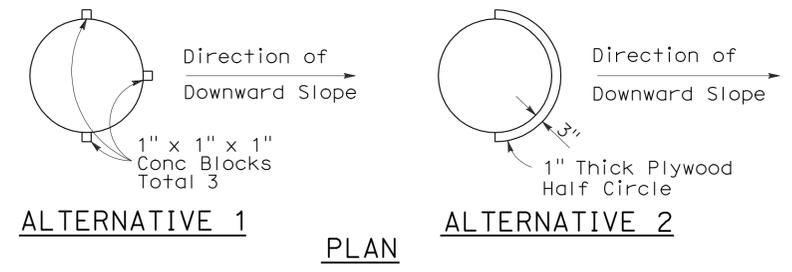
1. (XXX) Indicates module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the modules.
2. All sand weights are nominal.
3. Each module is to contain amount of sand indicated, supported according to the manufacturer's instructions.
4. Modules shall be placed on asphalt concrete, epoxy mortar or concrete surface. Modules to be placed on surfacing with greater than 5% downward slope shall be seated as shown.
5. Mass of sand and outline of each module shall be painted on the surface at each module location.
6. Module blocking, epoxied to the deck surface, is required for all modules placed on bridge decks. Two acceptable alternatives are shown. Other alternatives recommended by the manufacturer and approved by the Engineer will be accepted.
7. Place the top of the Type R marker panel 1" below the module lid.
8. Approach speeds indicated conform to NCHRP Report criteria.



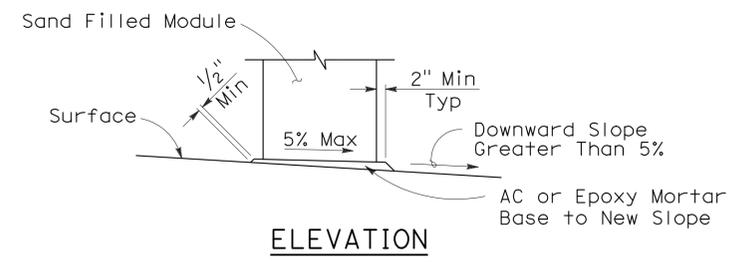
ARRAY 'U16'
Approach speed less than 45 mph



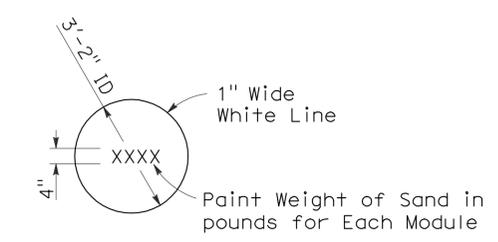
ARRAY 'U21'
Approach speed 45 mph or more



BRIDGE DECK MODULE BLOCKING DETAILS
(See Note 6)



SLOPED SEAT DETAIL
(See Note 4)



PAINTING DETAIL
(See Note 5)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**
NO SCALE

RSP A81B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A81B
DATED MAY 1, 2006 - PAGE 100 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A81B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	168	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

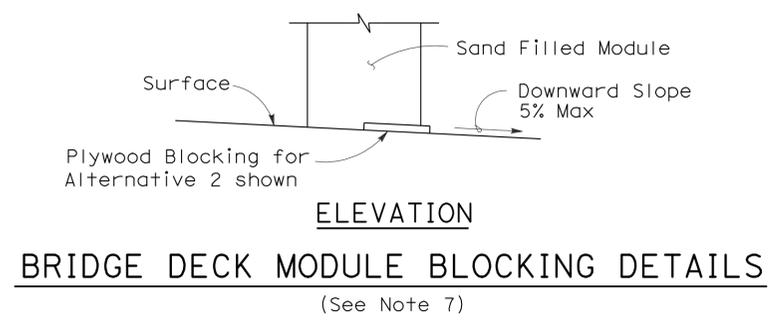
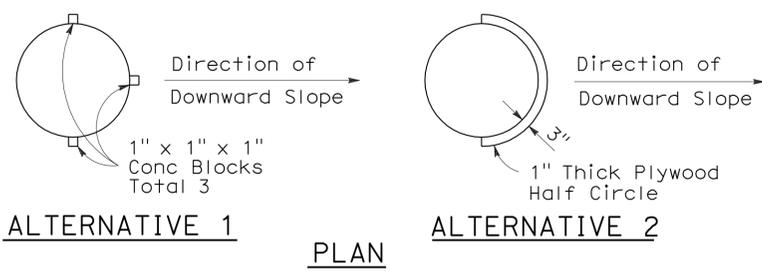
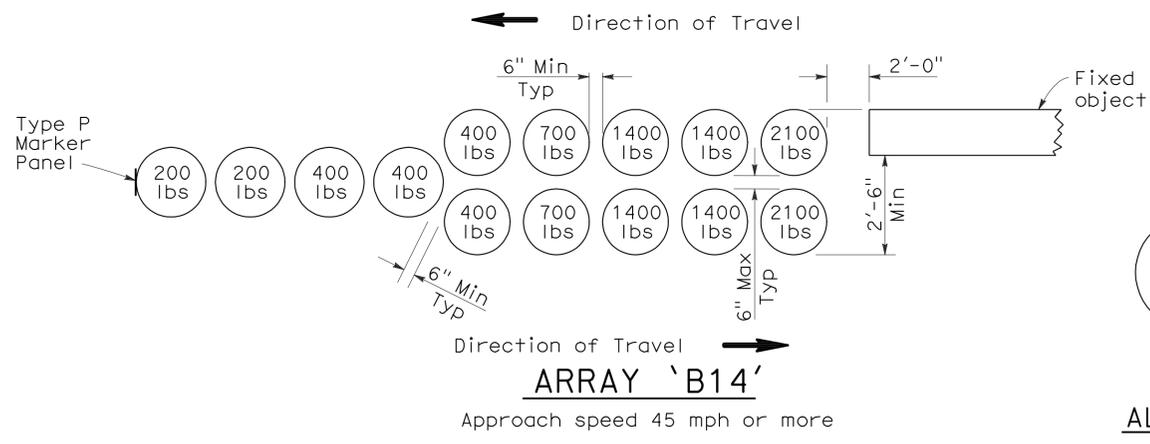
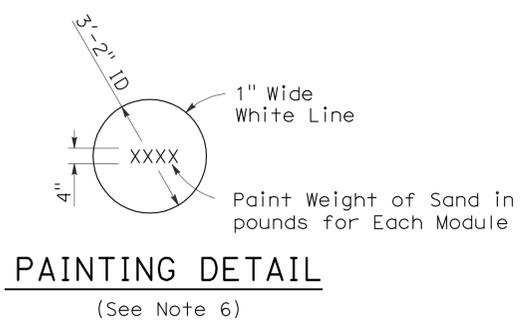
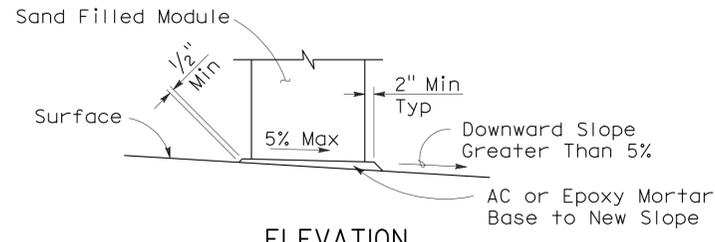
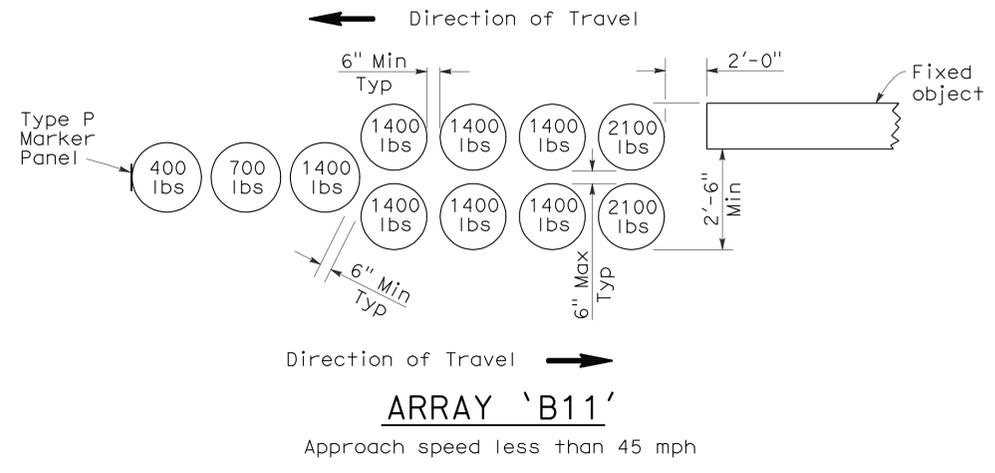
June 6, 2008
PLANS APPROVAL DATE

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

To accompany plans dated 9-24-12

2006 REVISED STANDARD PLAN RSP A81C



NOTES:

1. (xxx) Indicates module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Each module is to contain amount of sand indicated, supported according to the manufacturer's instructions.
4. Bidirectional crash cushion arrays may be angled toward approaching traffic. Amount of angle not to exceed 10 degrees.
5. Modules shall be placed on asphalt concrete, epoxy mortar or concrete surface. Modules to be placed on surfacing with greater than 5% downward slope shall be seated as shown.
6. Mass of sand and outline of each module shall be painted on the surface at each module location.
7. Module blocking, epoxied to the deck surface, is required for all modules placed on bridge decks. Two acceptable alternatives are shown. Other alternatives recommended by the manufacturer and approved by the Engineer will be accepted.
8. Place the Type P marker panel so that the bottom of the panel is at the bottom of the module.
9. Approach speeds indicated conform to NCHRP Report criteria.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**
NO SCALE

RSP A81C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A81C
DATED MAY 1, 2006 - PAGE 101 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A81C

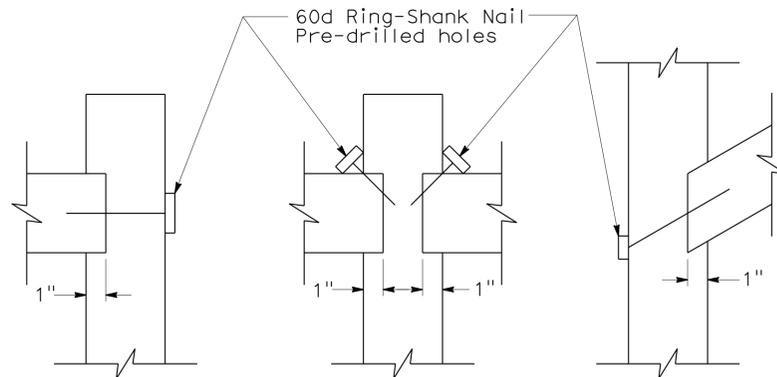
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	169	284

Glenn DeCou
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Glenn DeCou
 No. C34547
 Exp. 9-30-09
 CIVIL
 STATE OF CALIFORNIA

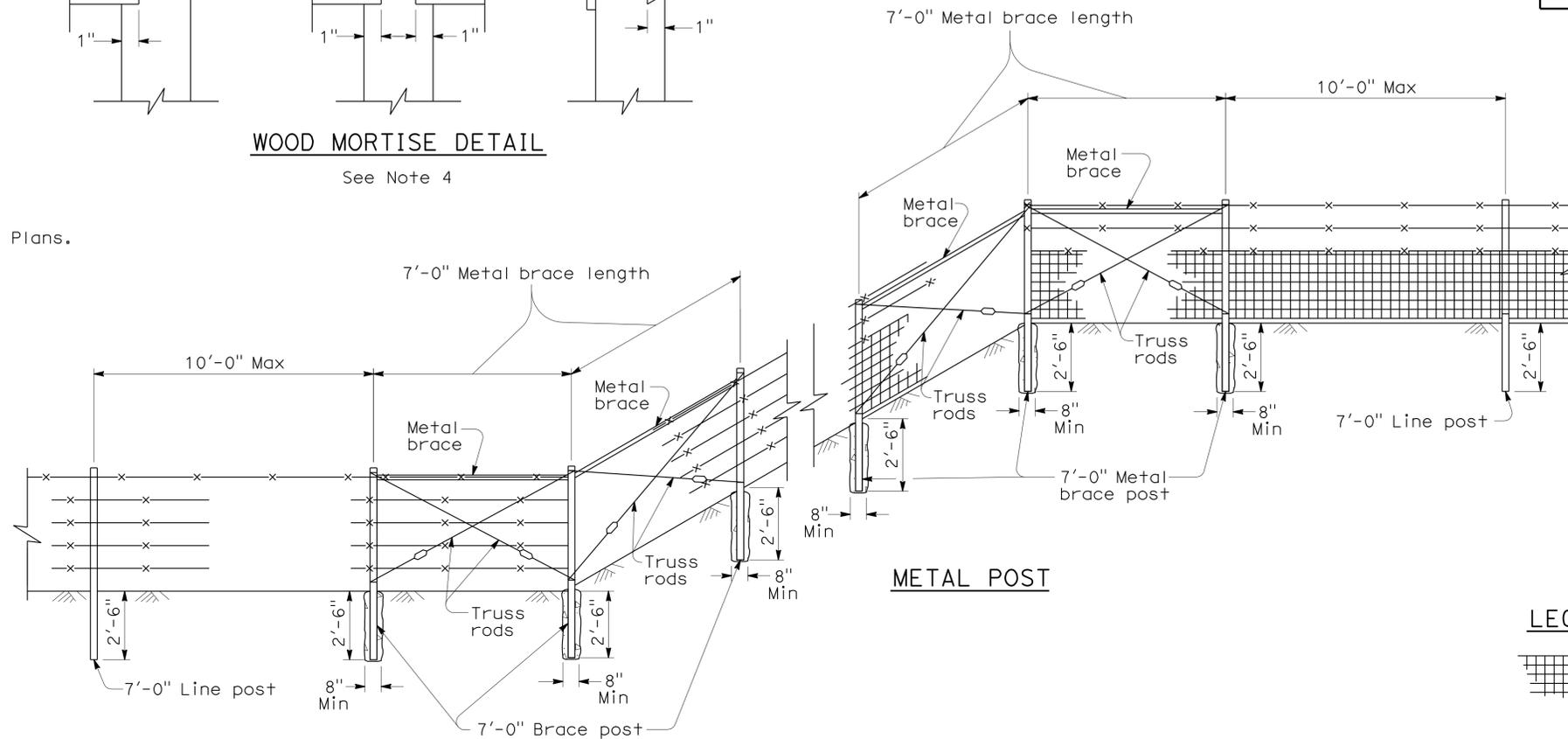
NOTES:

1. Offset to be 2'-0" at monument locations, measured at right angles to R/W lines. Taper to achieve offset to be at least 20'-0" long.
2. Line post spacing for wood post equals 12'-0" maximum. Line post spacing for metal post equals 10'-0" maximum.
3. See Standard Plan A86 for Barbed Wire and Wire Mesh dimensions and for steel post and wood post dimensions and weight.
4. Use wood posts when specified in the Special Provisions or shown on the Project Plans.



WOOD MORTISE DETAIL

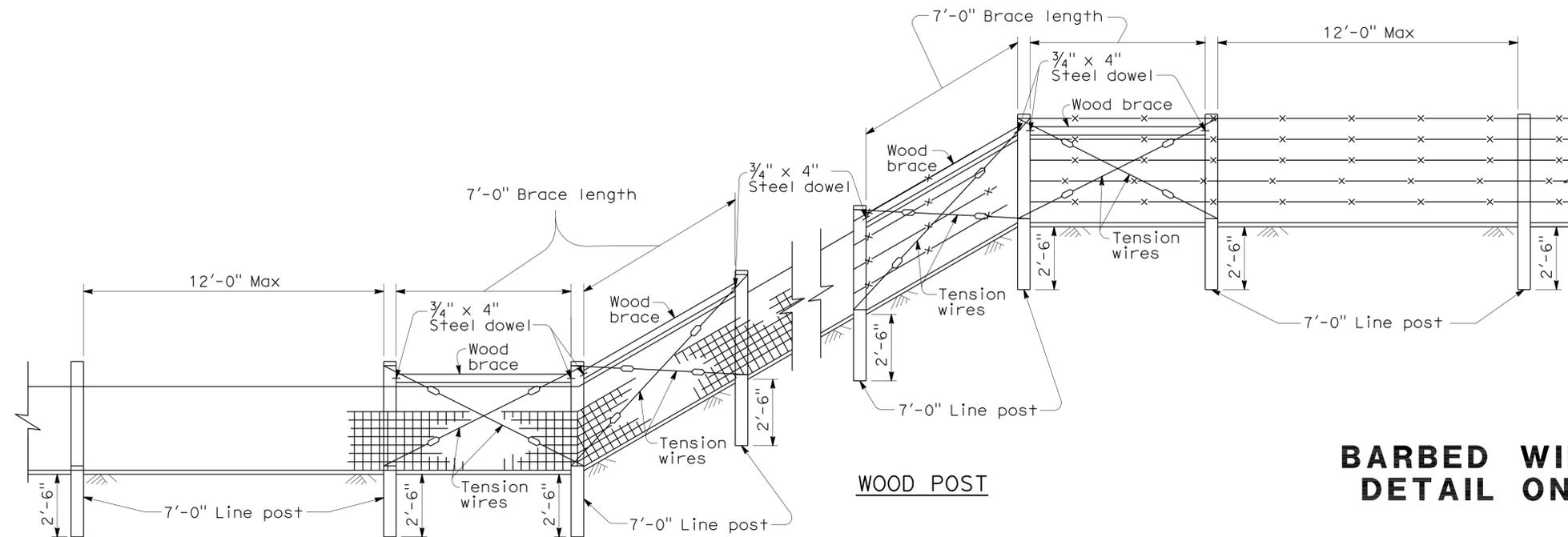
See Note 4



METAL POST

LEGEND

- Wire Mesh fencing
- Barbed Wire fencing



WOOD POST

FENCE ON SHARP BREAK IN GRADE

**BARBED WIRE AND WIRE MESH FENCE
DETAIL ON SHARP BREAK IN GRADE**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

NSP A86A DATED JUNE 5, 2009 SUPPLEMENTS THE
STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A86A

2006 NEW STANDARD PLAN NSP A86A

To accompany plans dated 9-24-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	17	6.0/12.6	170	284

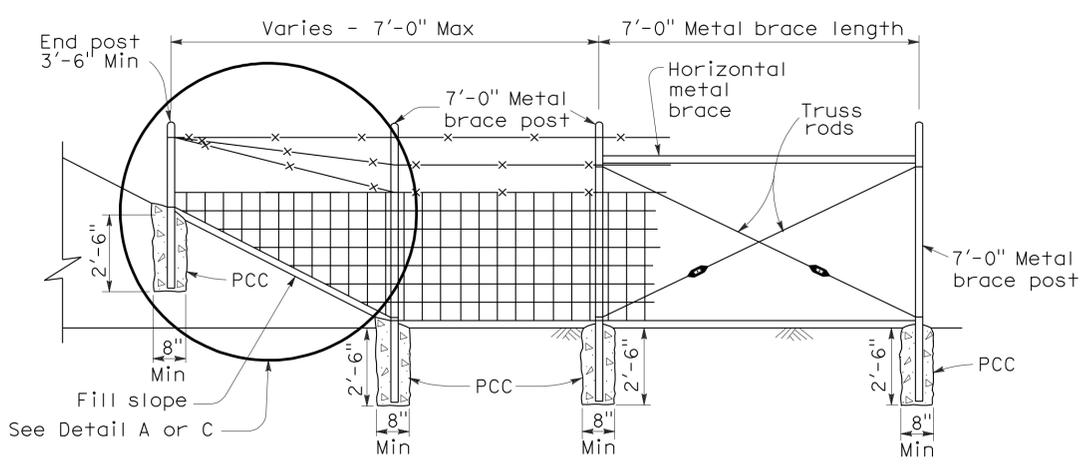
Glenn DeCou
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Glenn DeCou
 No. C34547
 Exp. 9-30-09
 CIVIL
 STATE OF CALIFORNIA

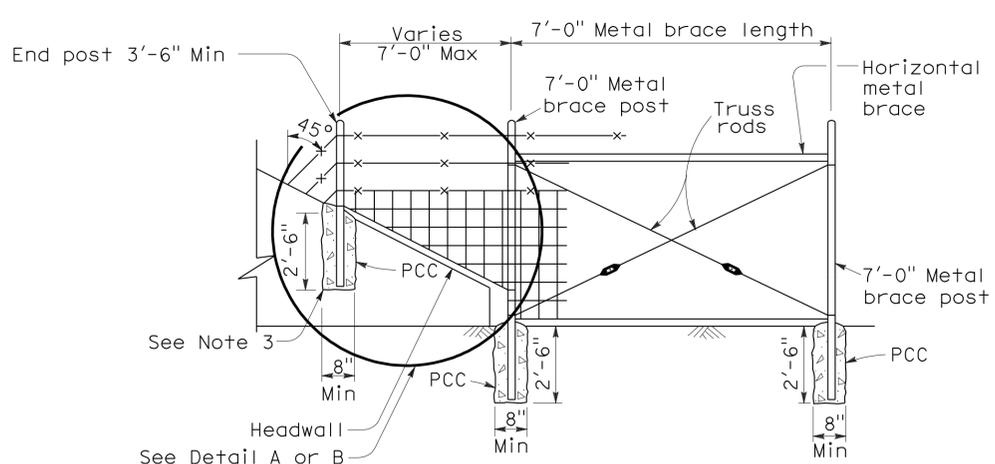
To accompany plans dated 9-24-12

NOTES:

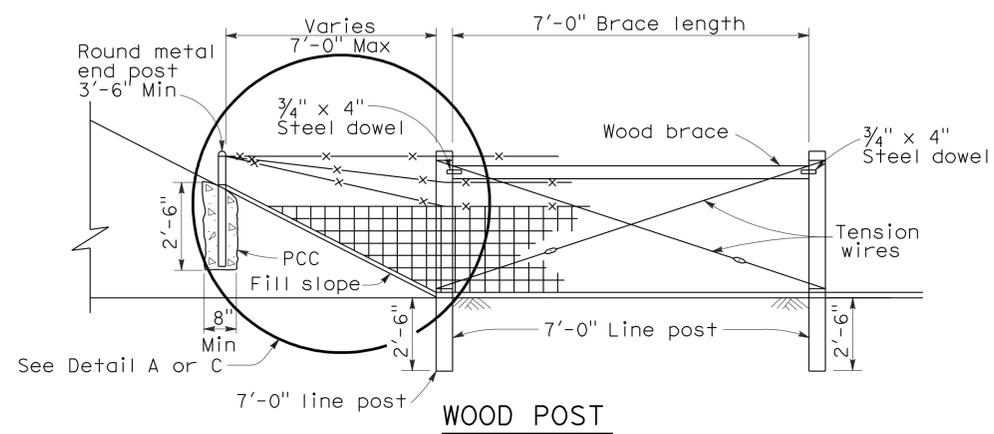
1. Wire Mesh fencing shown, can also use Barbed Wire fencing.
2. See Standard Plan A86 for Wire Mesh and Barbed Wire fence dimensions.
3. See Standard Plan B11-7 Alternative Anchorage Detail for connection at headwall. Round metal post to be used for all fence types.



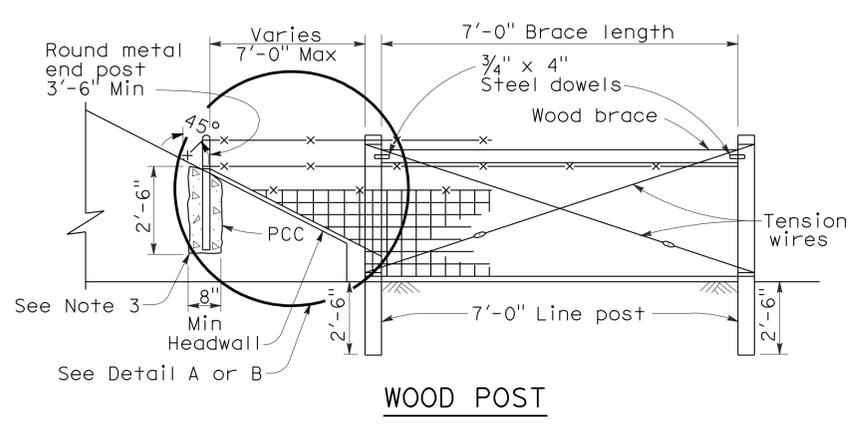
METAL POST



METAL POST



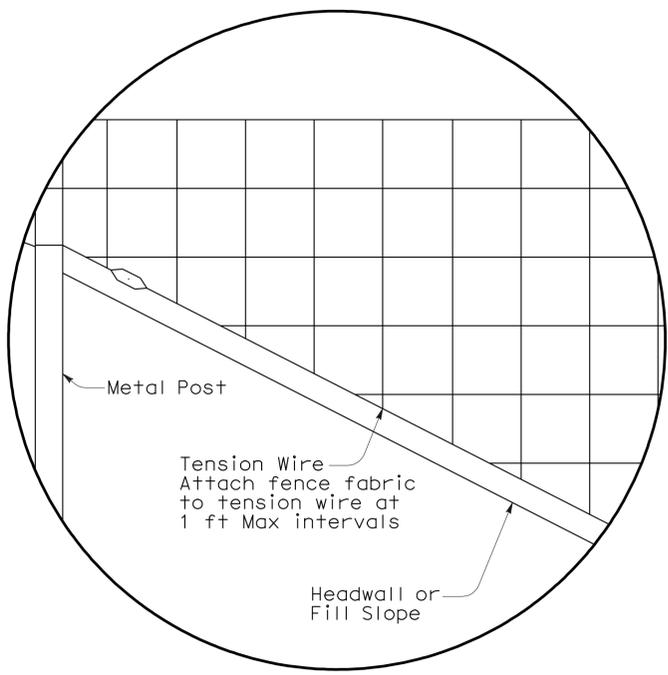
WOOD POST



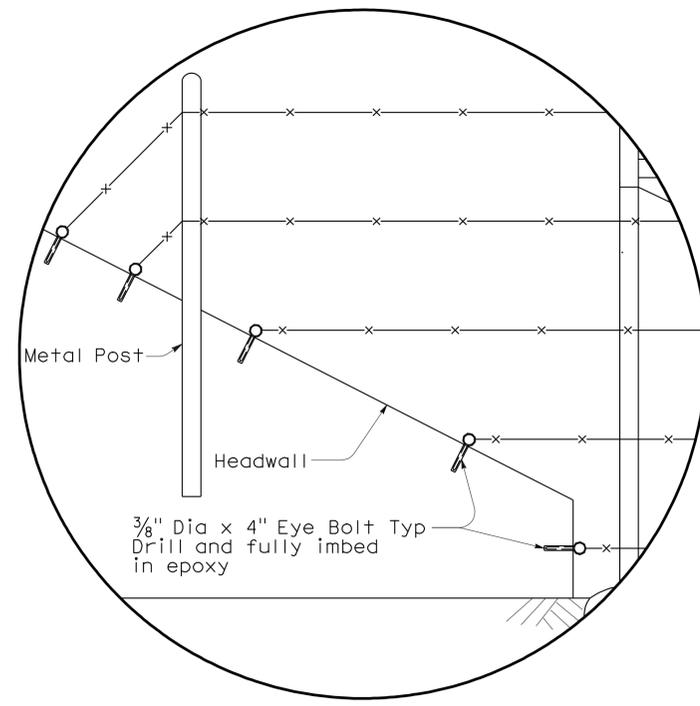
WOOD POST

METHOD OF ERECTING FENCE FOR FILL SLOPE

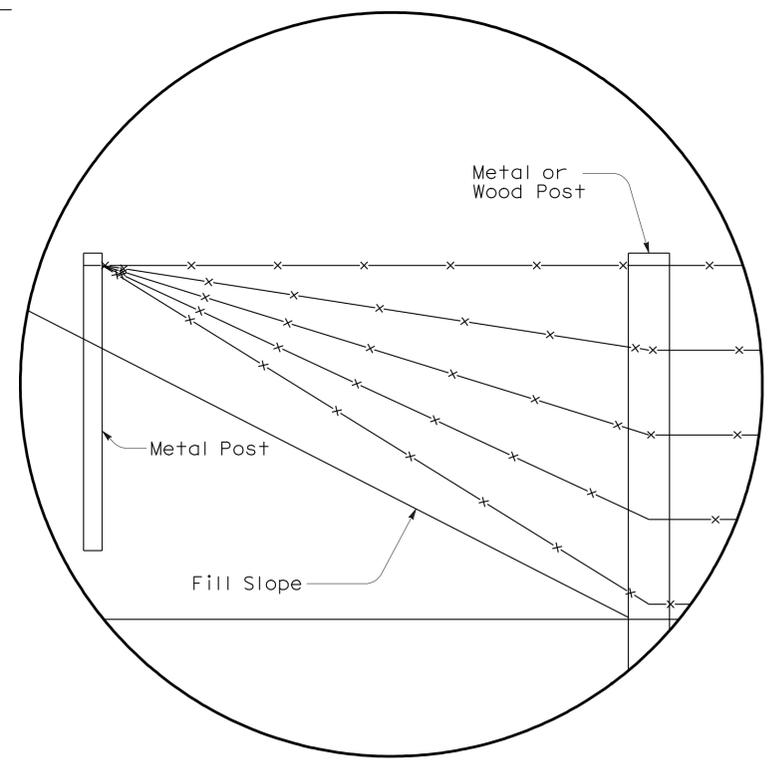
METHOD OF TYING FENCE TO HEADWALL



DETAIL A



DETAIL B



DETAIL C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
BARBED WIRE AND WIRE MESH FENCE DETAILS

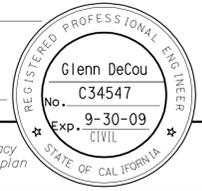
NSP A86B DATED JUNE 5, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A86B

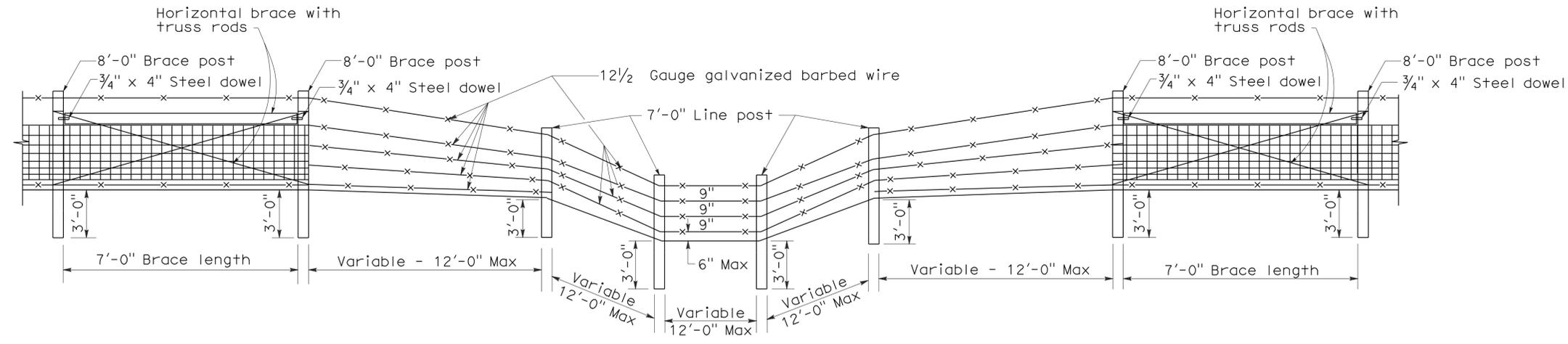
2006 NEW STANDARD PLAN NSP A86B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	171	284

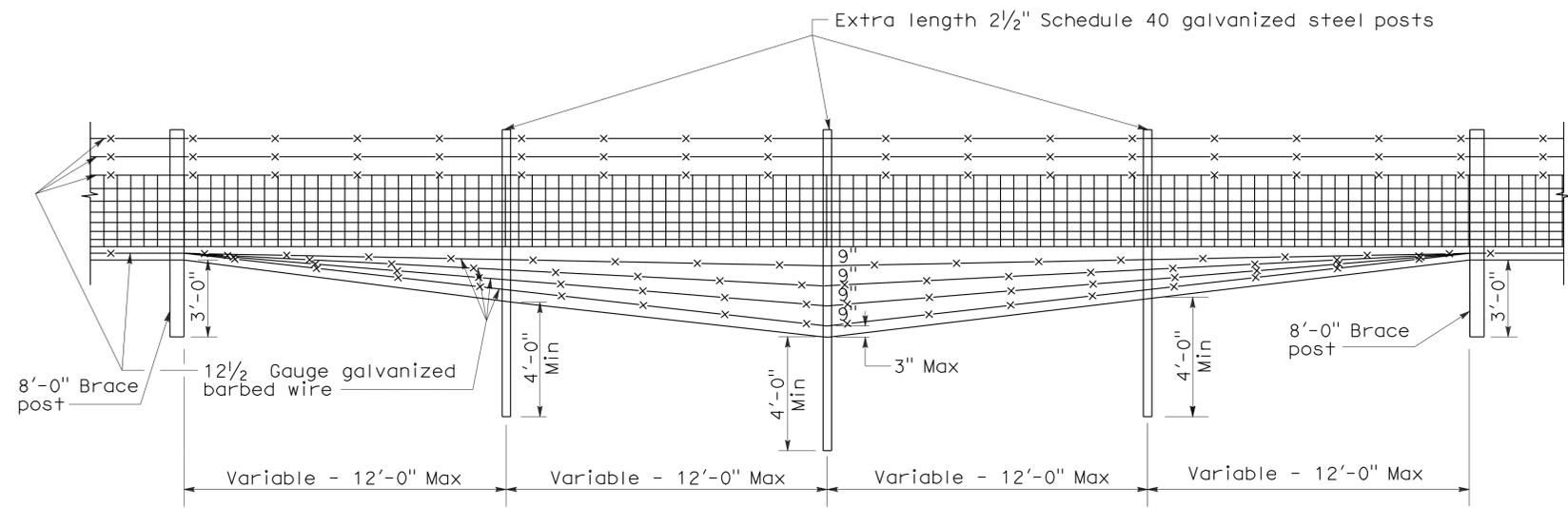
Glenn DeCou
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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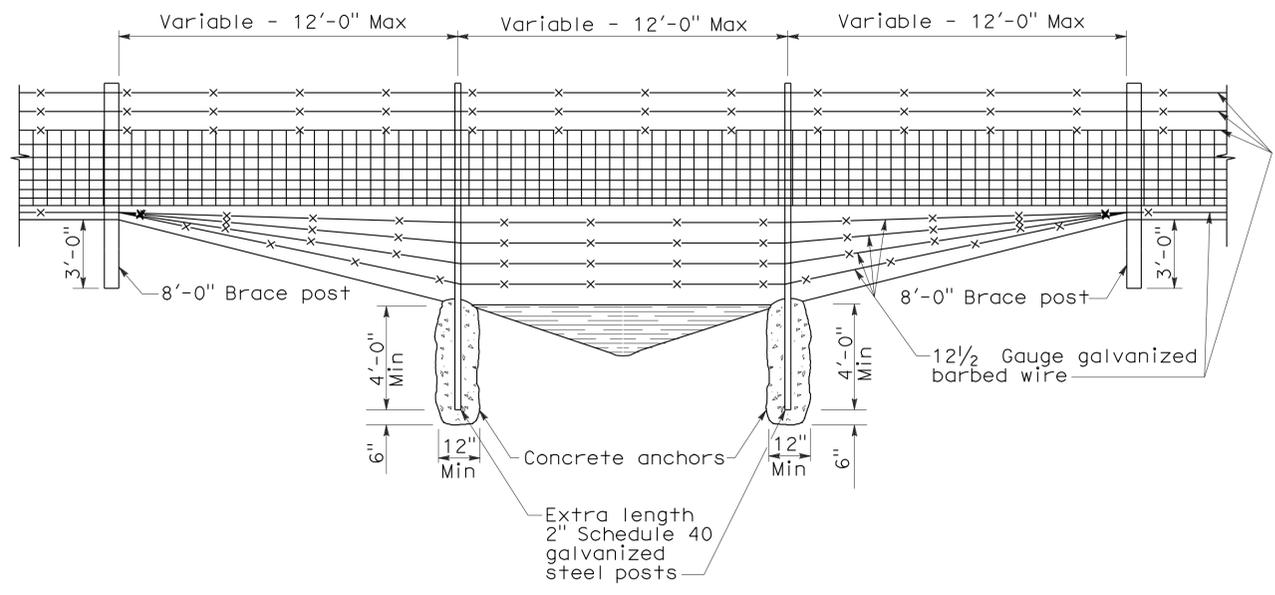
To accompany plans dated 9-24-12



TYPE I



TYPE II



TYPE III
DITCH CROSSINGS

NOTES:

1. Type I Ditch Crossing shows wood posts. Steel posts may be used in place of wood.
2. Ditch crossing show Wire Mesh fencing. Barbed Wire fencing may be used in place of Wire Mesh.
3. See Standard Plan A86 for Wire Mesh and Barbed Wire fence dimensions.
4. See Standard Plan A86 for steel post installation.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**BARBED WIRE AND WIRE MESH
FENCE DETAILS AT DITCH CROSSING**

NO SCALE

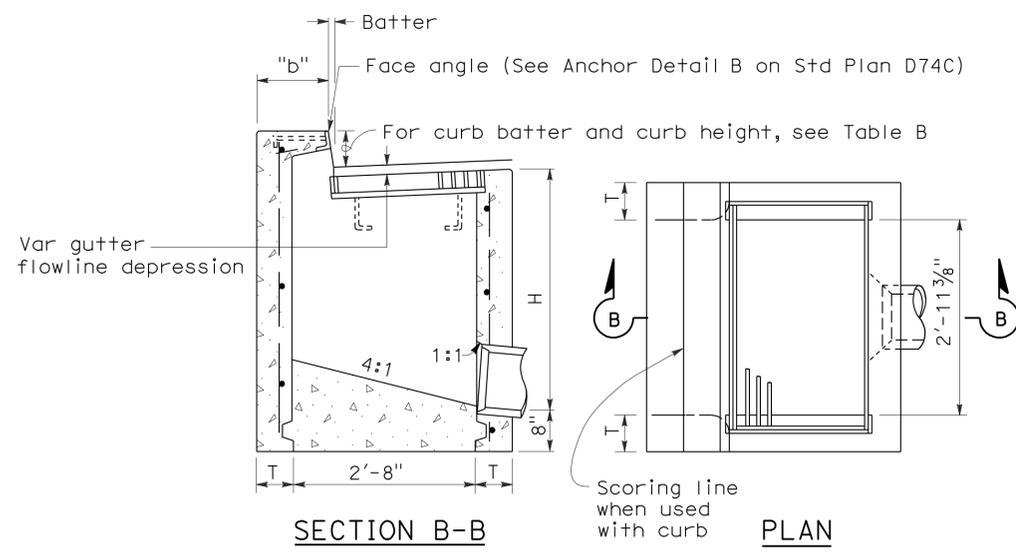
NSP A86C DATED JUNE 5, 2009 SUPPLEMENTS THE
STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A86C

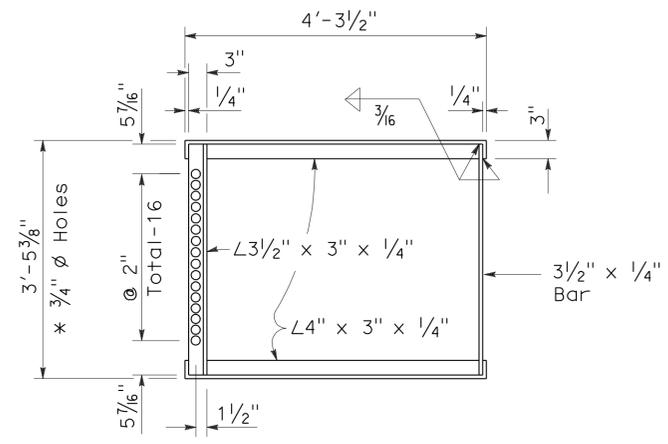
2006 NEW STANDARD PLAN NSP A86C

To accompany plans dated 9-24-12

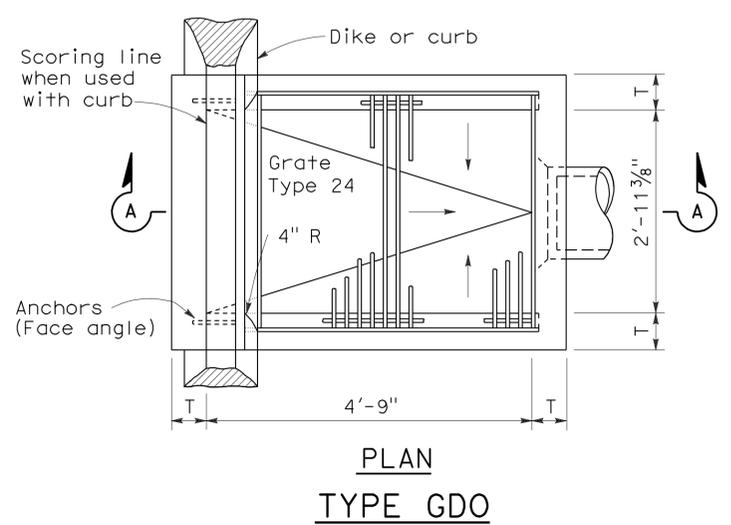
2006 REVISED STANDARD PLAN RSP D74B



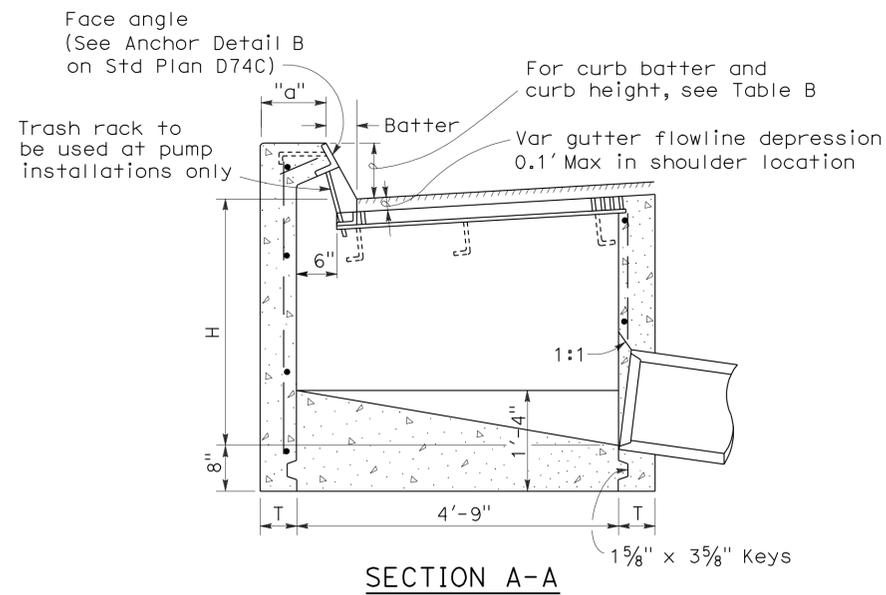
TYPE GO



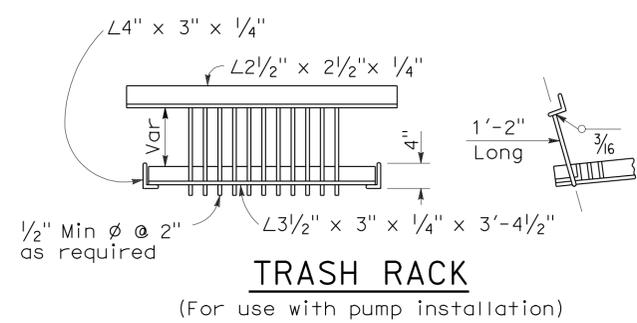
GRATE FRAME FOR TYPE GDO INLET



PLAN
TYPE GDO



SECTION A-A



TRASH RACK
(For use with pump installation)

TABLE A
CONCRETE QUANTITIES

TYPE	H=3'-0" TO 8'-0" (T=6")	H=8'-1" TO 20'-0" (T=8")	
	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
GO	1.24	3.39	0.346
GDO	1.62	4.36	0.446

Table based on 8" floor slab, no deduction for pipe openings, and curb type giving highest quantity of concrete. No deductions or adjustments are to be made to these quantities because of pipe openings, different floor alternatives or different curb type.

TABLE B

CURB TYPE	NORMAL CURB HEIGHT	CURB BATTER	"a" DIMENSION	"b" DIMENSION
A1-6	6"	1 1/2"	T+7 1/2"	T+6 1/2"
A1-8	8"	2"	T+7"	T+6"
B1-6	6"	4"	T+5"	T+4"
Type A Dike	6"	3"	T+6"	T+5"

NOTES:

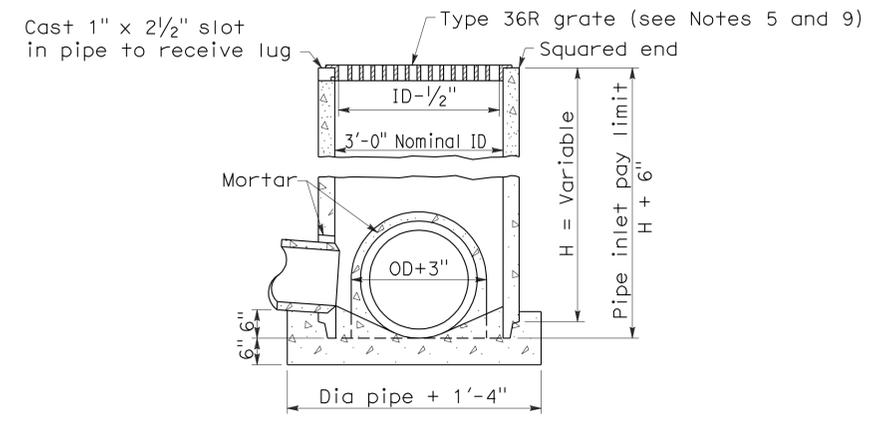
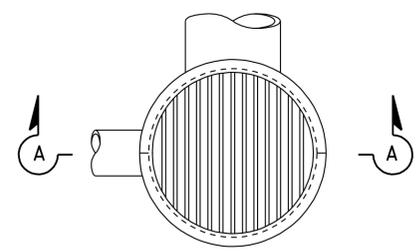
- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undeepressed.
- For "T" wall thickness, see Table A below.
- Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 @ 18"± centers placed 1/2" clear to inside of box unless otherwise shown.
- Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom.
- Steps - None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Step inserts may be substituted for the bar steps. Step Inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
- When shown on the project plans, place a 3/4" plain round protection bar horizontally across the length of the opening and bend back 4" into the inlet wall on each side.
- Pipe(s) can be placed in any wall.
- Curb section shall match adjacent curb.
- Basin floors shall have wood trowel finish and shall slope toward the outlet pipe as shown.
- Galvanizing - See Standard Specifications or Special Provisions.
- See Standard Plan D77A and D77B for grate and frame details and weights of miscellaneous iron and Steel.
- See Standard Plan D78A for gutter depression details.
- Full penetration butt welds may be substituted for the fillet welds on all anchors.
- Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
- Cast-in-place or precast alternative is optional with contractor. See Standard Specifications.
- Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet and concrete poured in one continuous operation. Precast inlets shall have mortared pipe connections conforming to details for Type GCP inlets on Standard Plan D75B. See Standard Specifications for mortar composition.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DRAINAGE INLETS
NO SCALE

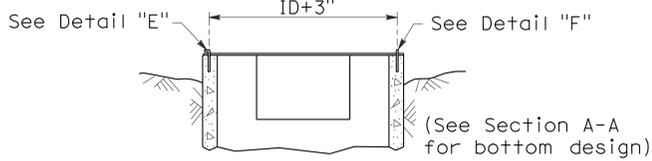
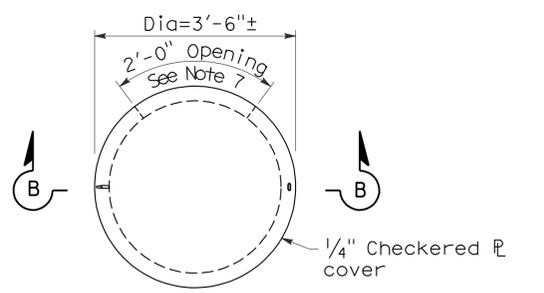
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	174	284

Raymond Don Tsztso
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
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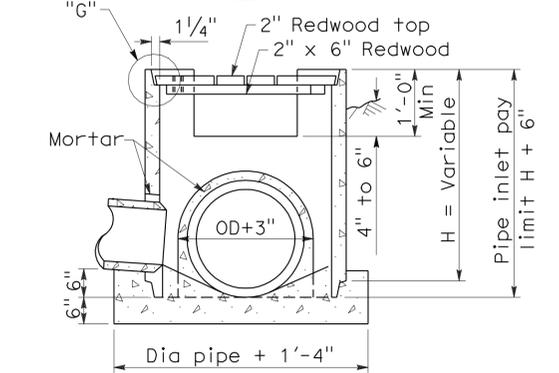
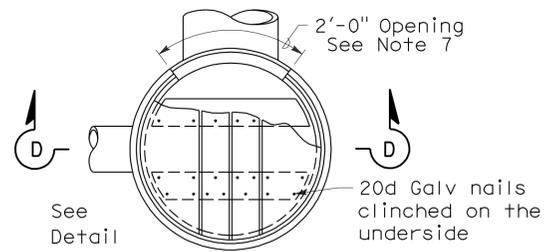
2006 REVISED STANDARD PLAN RSP D75B



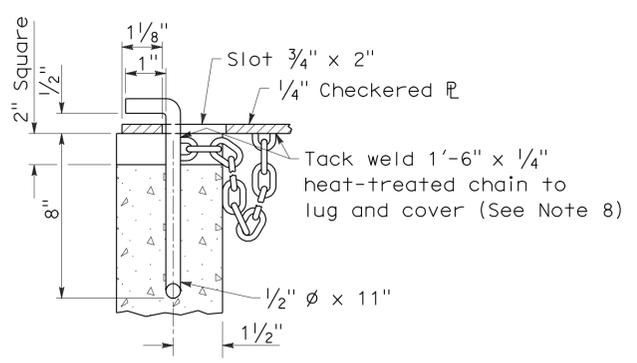
SECTION A-A
TYPE GCP
CONCRETE PIPE INLET WITH GRATE



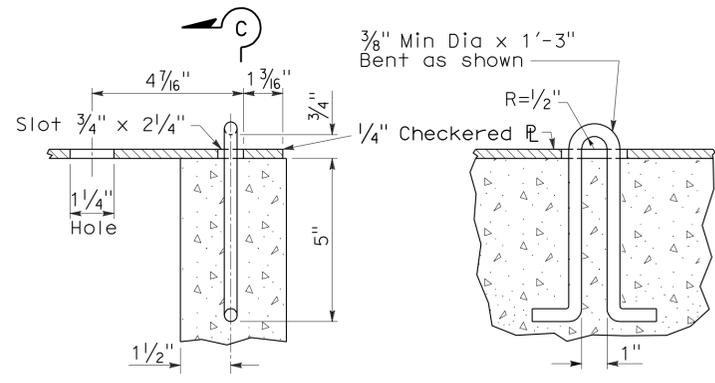
SECTION B-B
TYPE OCP or OCPI
CONCRETE PIPE INLET WITH STEEL COVER
(See Note 6)



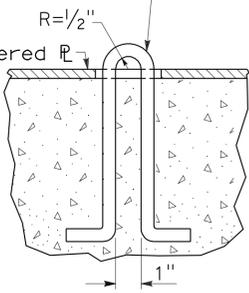
SECTION D-D
TYPE OCP or OCPI
CONCRETE PIPE INLET WITH REDWOOD COVER
(See Notes 6 and 10)



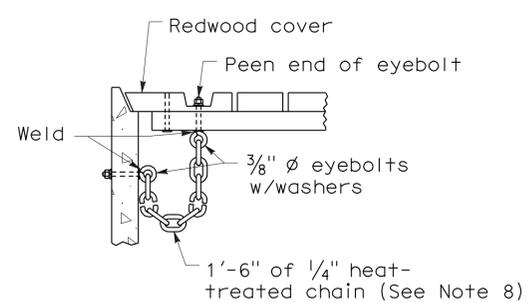
DETAIL "E"



DETAIL "F"



SECTION C-C



DETAIL "G"

NOTES:

- For details of steel pipe inlets, see Standard Plan D75A.
- For details of ladder and steps and when ladder or steps are required, see Standard Plan D75C.
- Inlet pipes shall not protrude into basin.
- Except for inlets used for junction boxes, basin floors shall have minimum slope of 4:1 from all directions toward outlet pipe, and a wood trowel finish.
- See Revised Standard Plan RSP D77A and Standard Plan D77B for Grate and Frame Details and Weights of Miscellaneous Iron and Steel.
- Designation of Type OCPI pipe inlets on plans indicates trash racks are to be furnished and installed on all side openings. See Standard Plan D75C for Trash Rack details.
- More than one side opening may be required. Location and number as ordered by the Engineer. Opening may be cast in pipe.
- Chain to be provided when specified.
- Place pipe so bars of grate will be parallel with main surface flow.
- Redwood covers shall only be placed at locations designated on the plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PIPE INLETS

NO SCALE

RSP D75B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN D75B
DATED MAY 1, 2006 - PAGE 153 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP D75B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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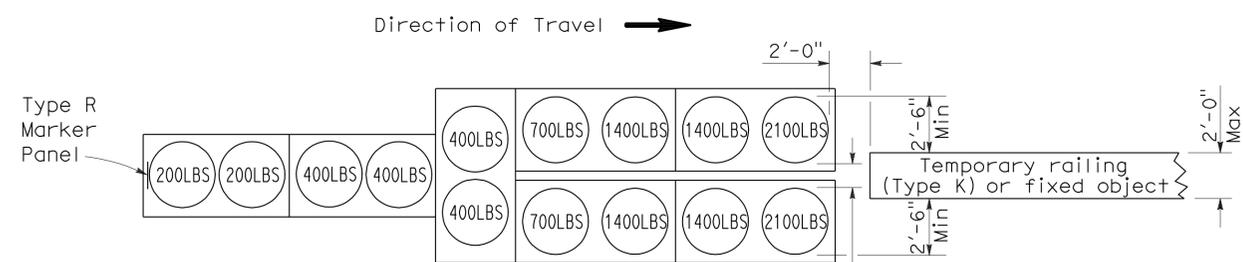
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

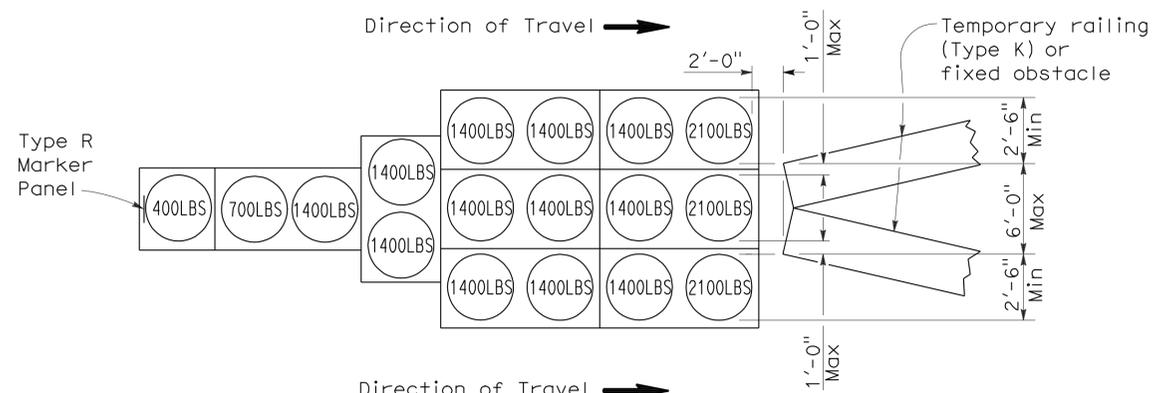
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To accompany plans dated 9-24-12



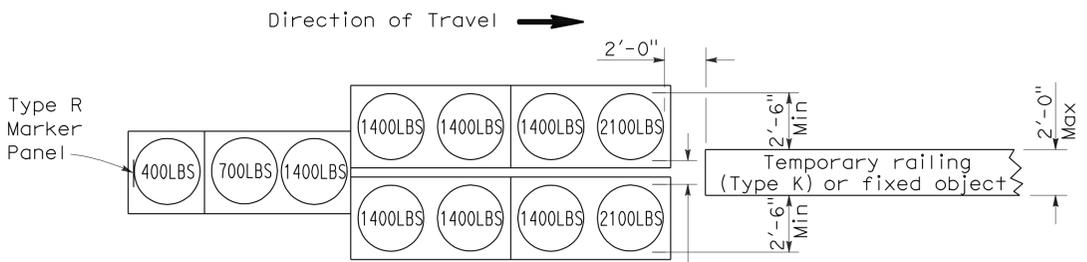
ARRAY 'TU14'

Approach speed 45 mph or more



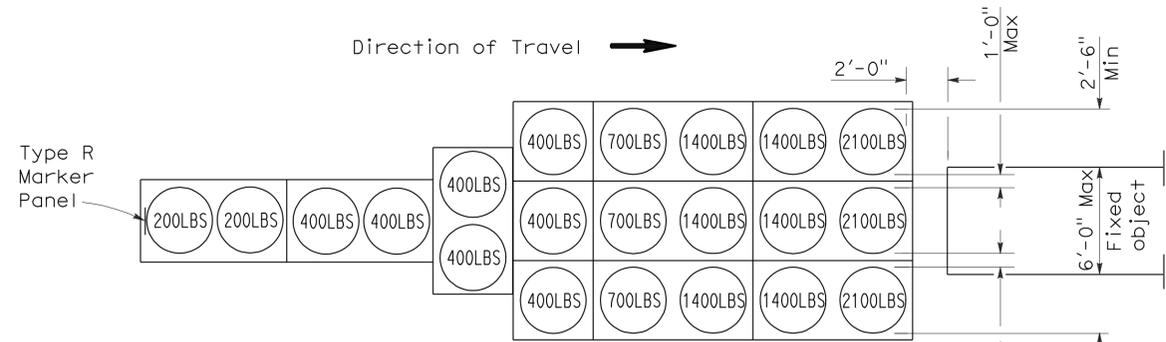
ARRAY 'TU17'

Approach speed less than 45 mph



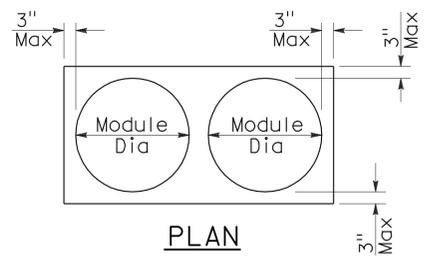
ARRAY 'TU11'

Approach speed less than 45 mph

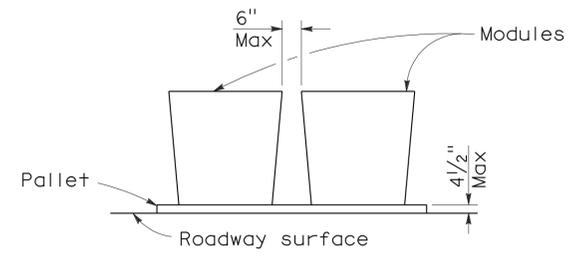


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

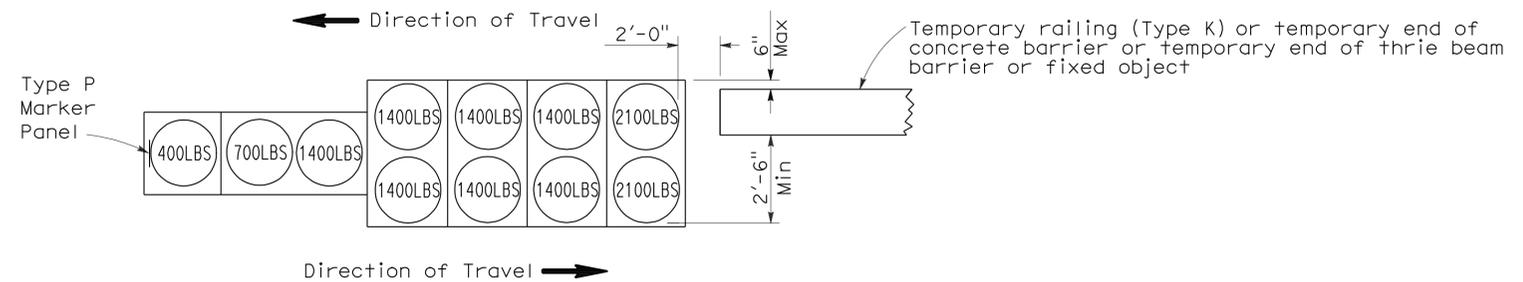
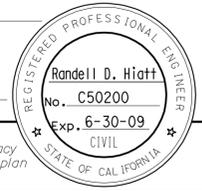
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	177	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

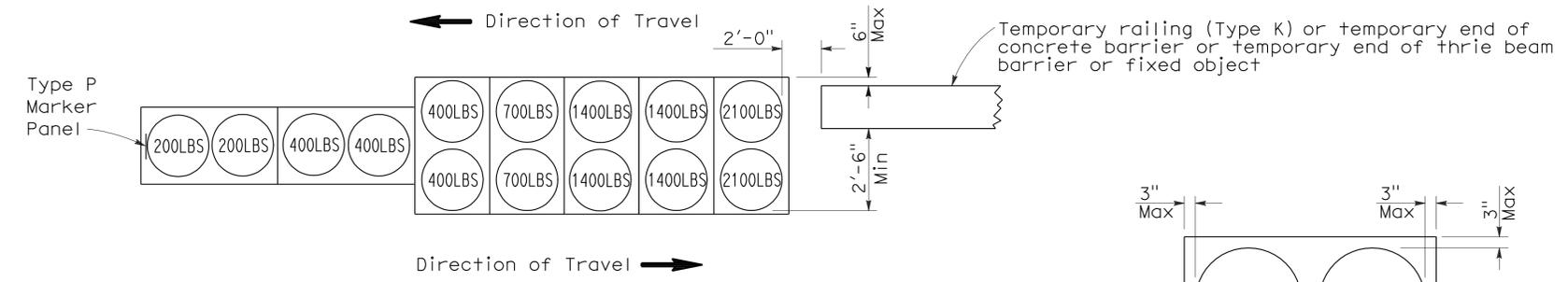
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To accompany plans dated 9-24-12



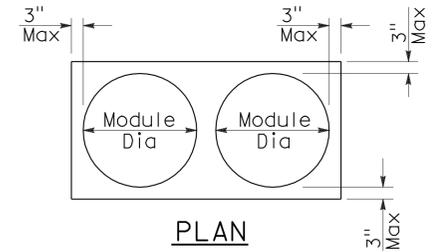
ARRAY 'TB11'

Approach speed less than 45 mph

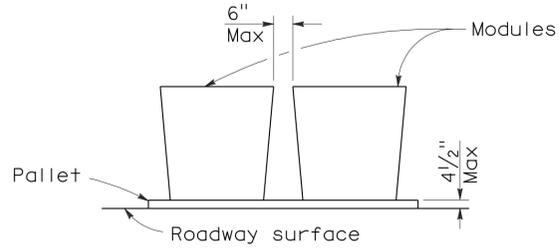


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

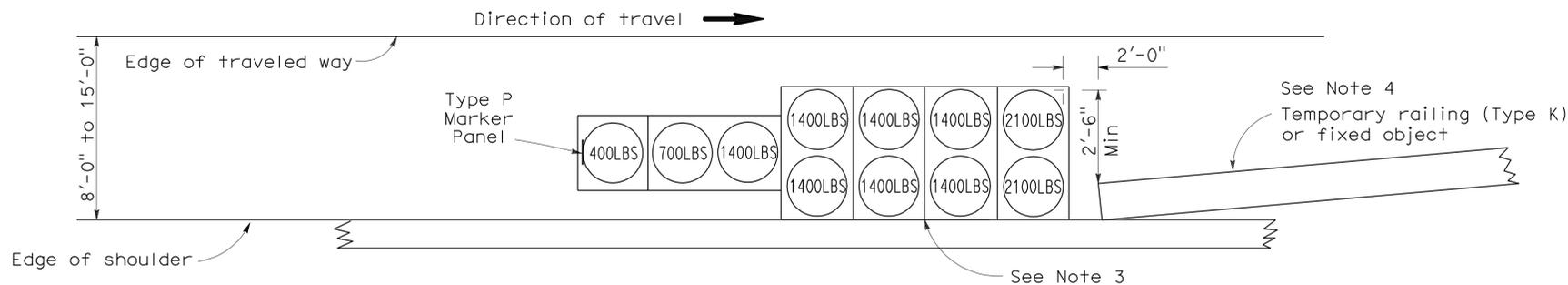
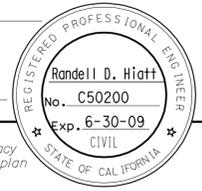
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	178	284

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

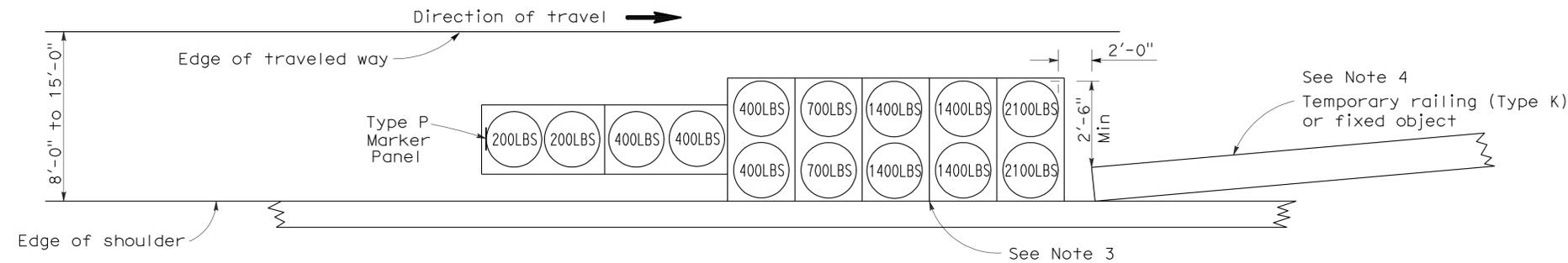
June 6, 2008
PLANS APPROVAL DATE

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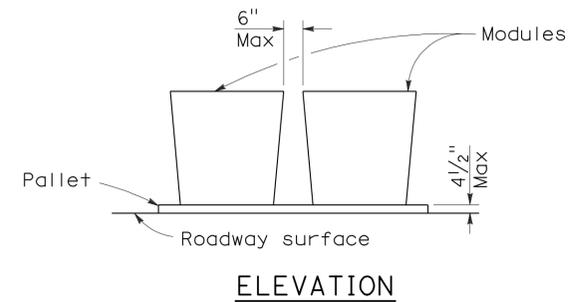
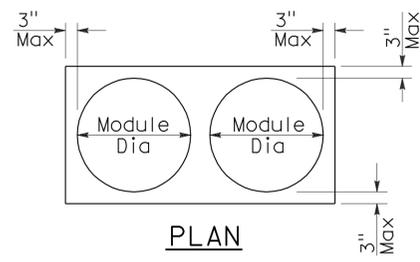
To accompany plans dated 9-24-12



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
4. If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	17	6.0/12.6	179	284

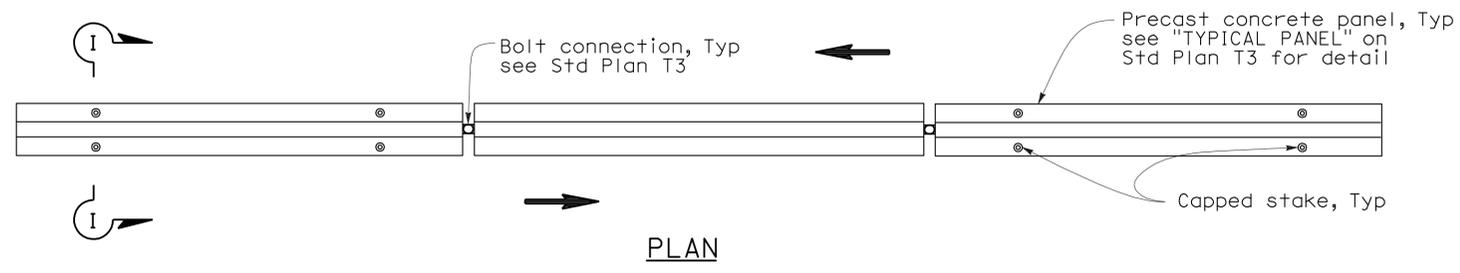
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

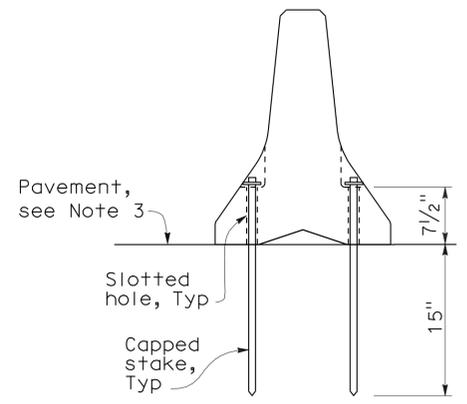
Randell D. Hiatt
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 9-24-12



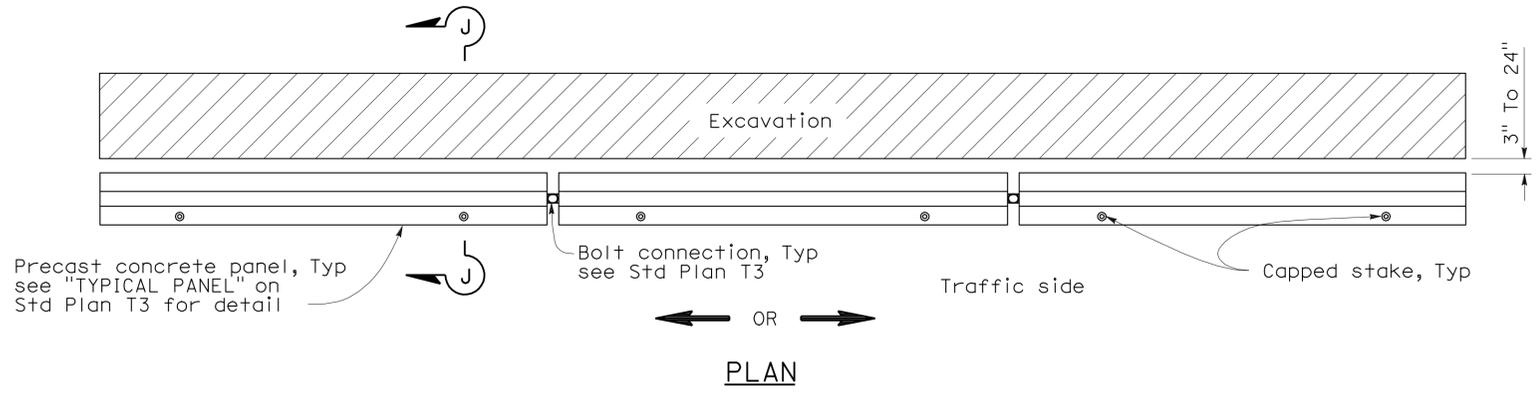
RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1



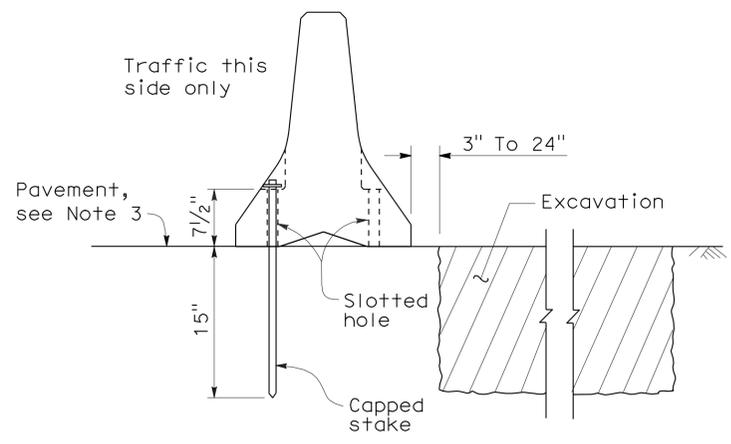
SECTION I-I

NOTES:

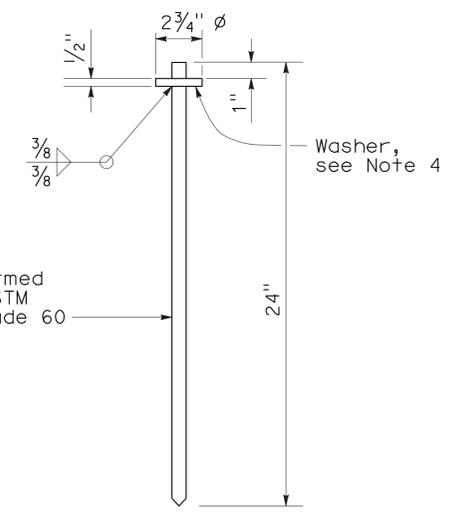
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of 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



SECTION J-J



CAPPED STAKE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY RAILING
(TYPE K)**

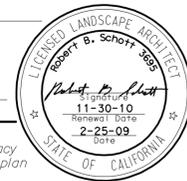
NO SCALE

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

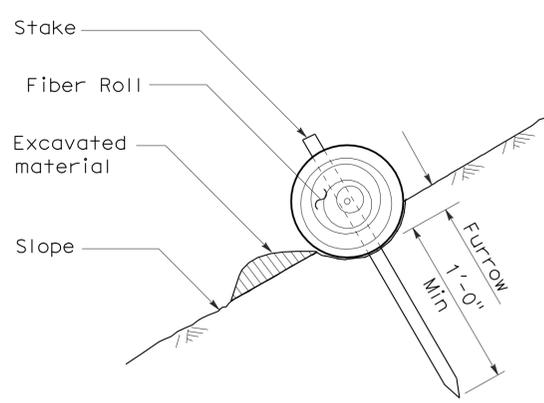
2006 NEW STANDARD PLAN NSP T3A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	181	284

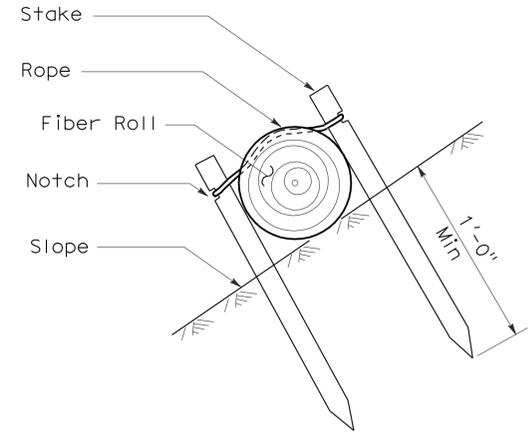
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 PLANS APPROVAL DATE
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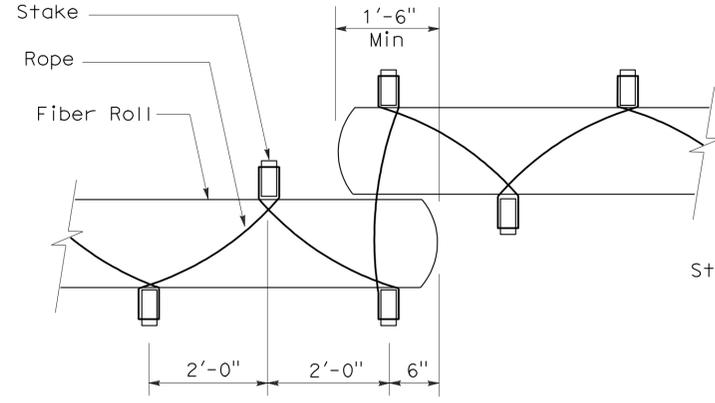
To accompany plans dated 9-24-12



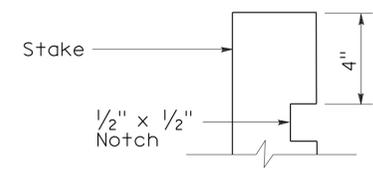
SECTION
TEMPORARY FIBER ROLL (TYPE 1)



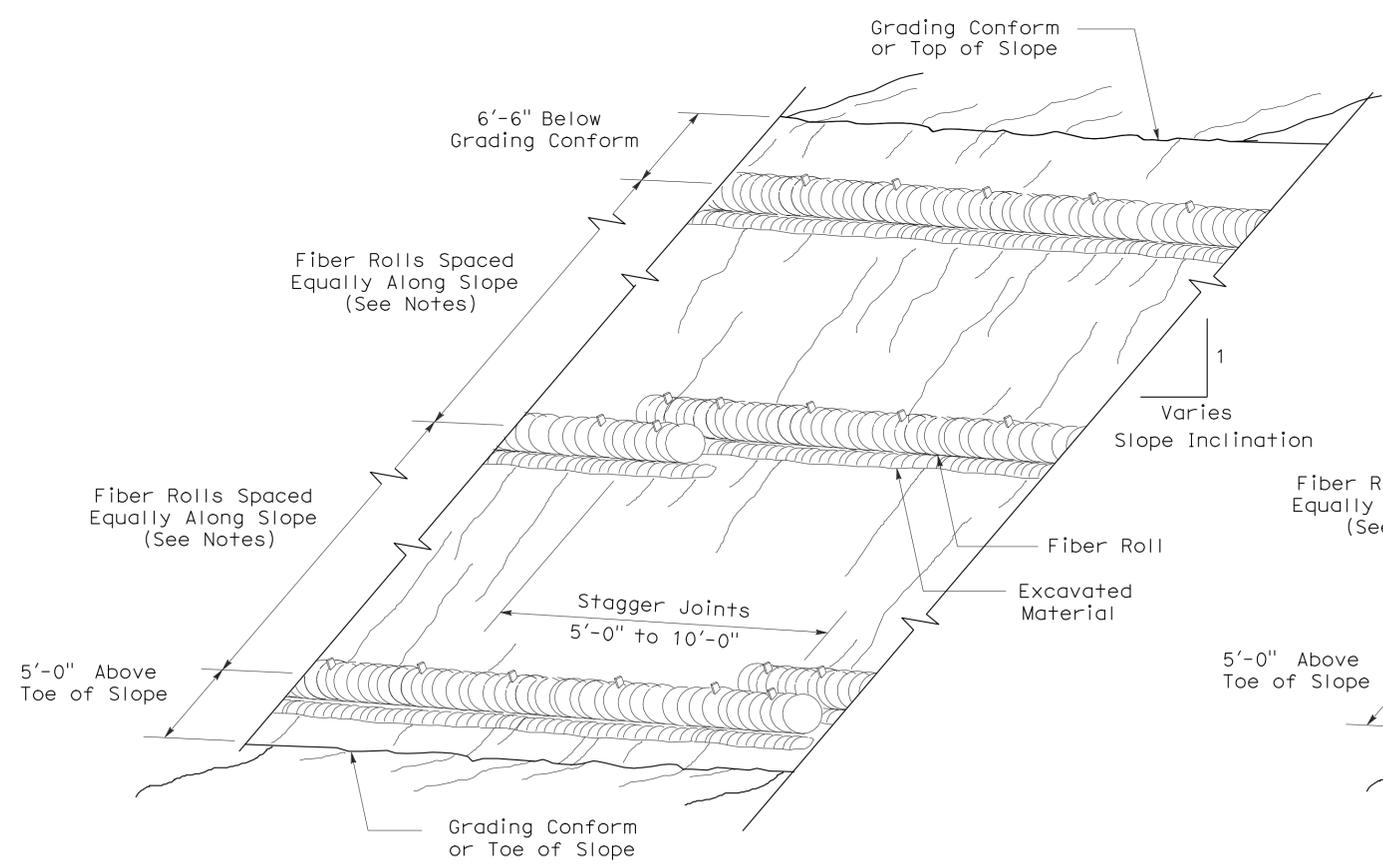
SECTION
TEMPORARY FIBER ROLL (TYPE 2)



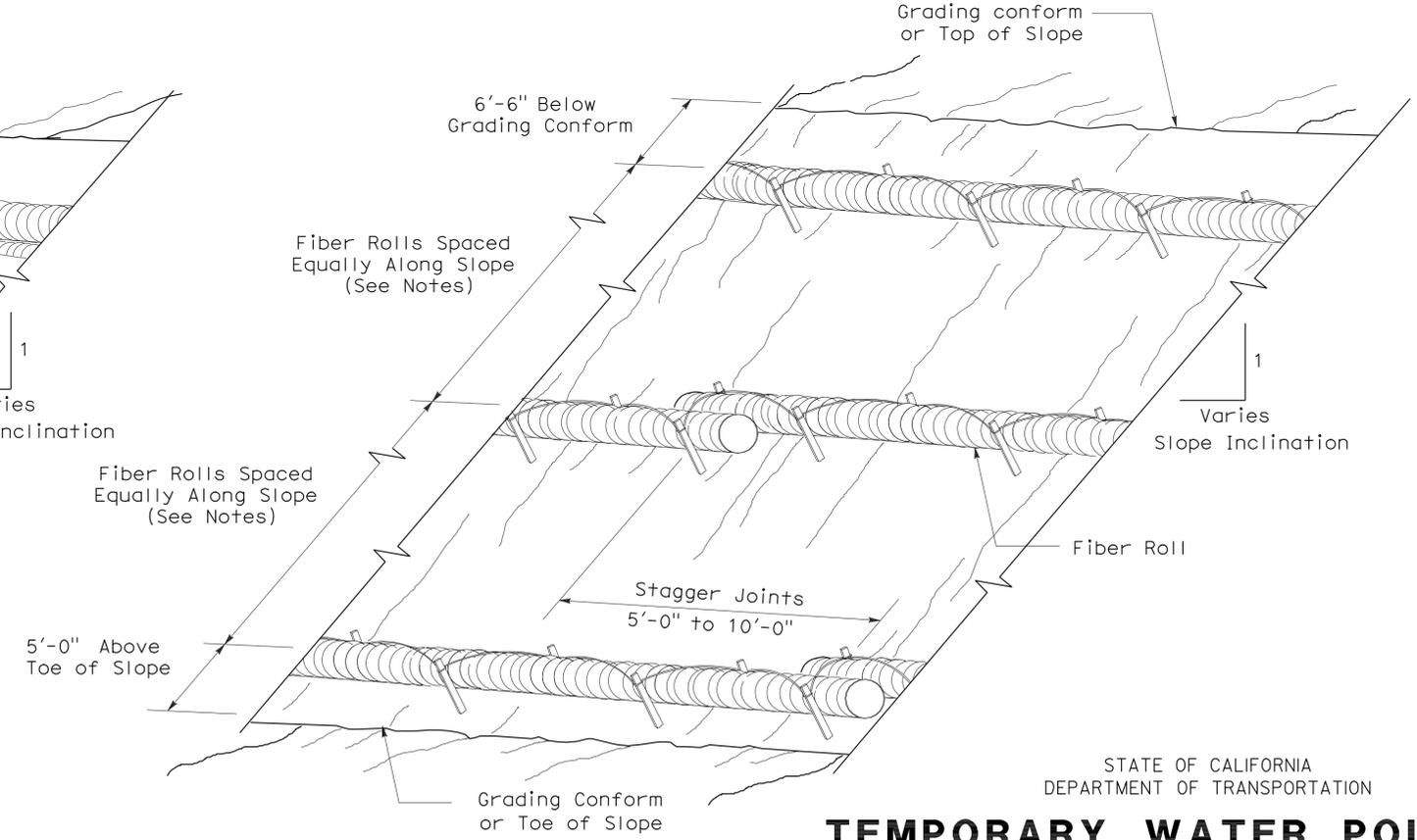
PLAN
ELEVATION
STAKE NOTCH DETAIL



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



PERSPECTIVE
TEMPORARY FIBER ROLL (TYPE 1)



PERSPECTIVE
TEMPORARY FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLL)

NO SCALE

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

REVISED STANDARD PLAN RSP T56

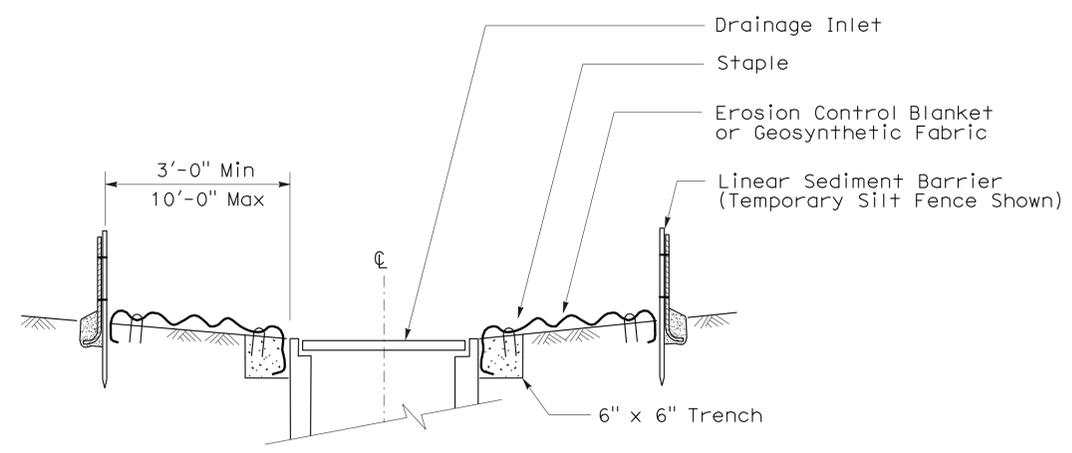
2006 REVISED STANDARD PLAN RSP T56

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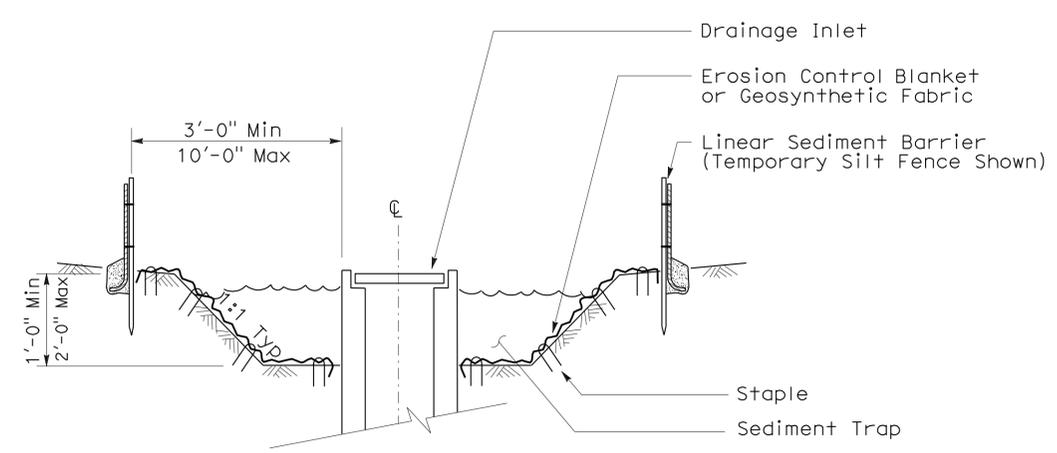
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS Approval DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 9-24-12

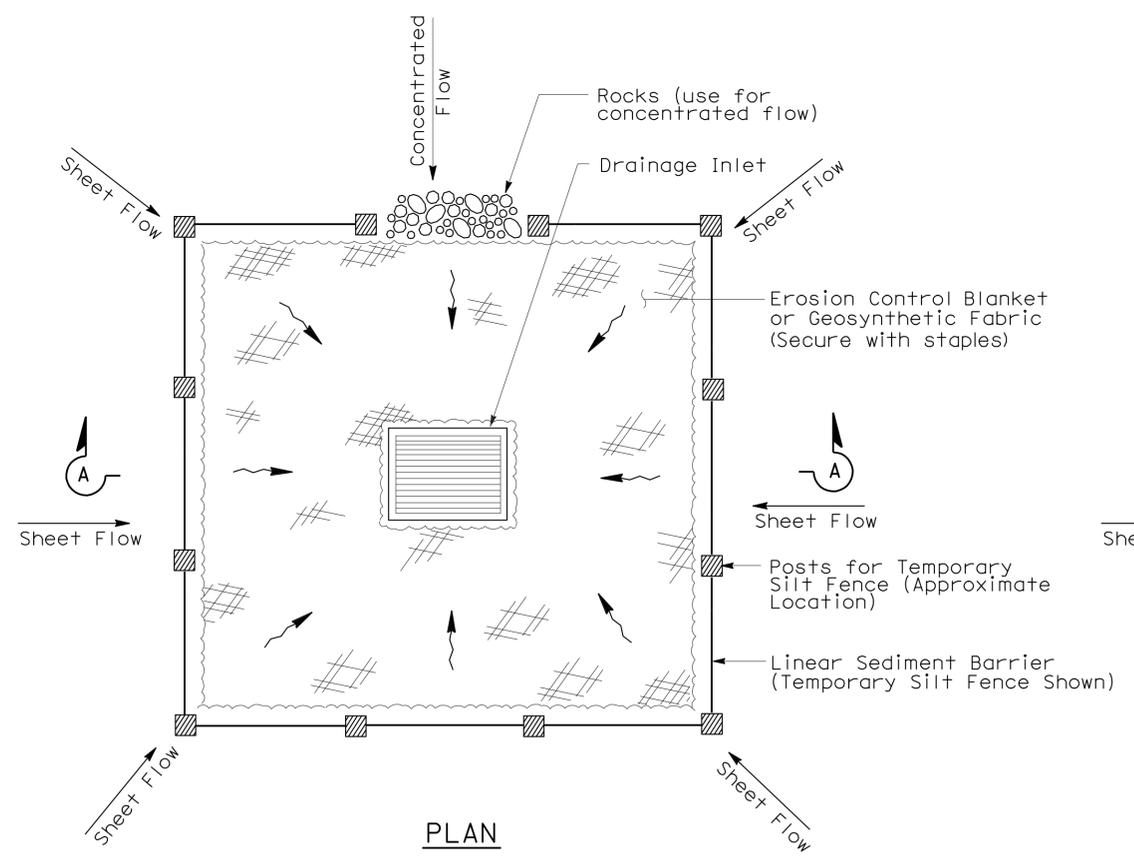
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
 - Dimensions may vary to fit field conditions.



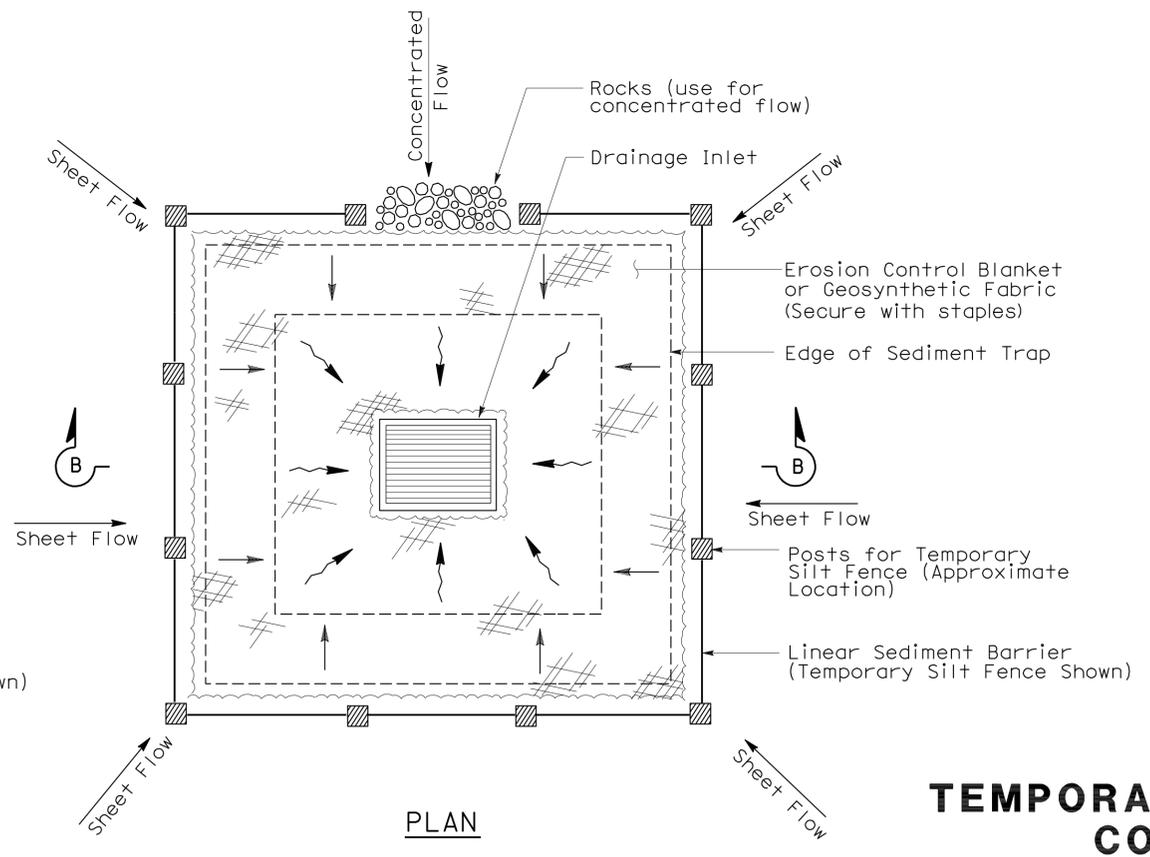
SECTION A-A



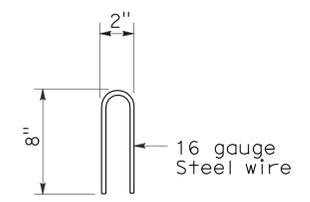
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)

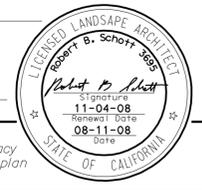


STAPLE DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS
(TEMPORARY DRAINAGE INLET PROTECTION)
 NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

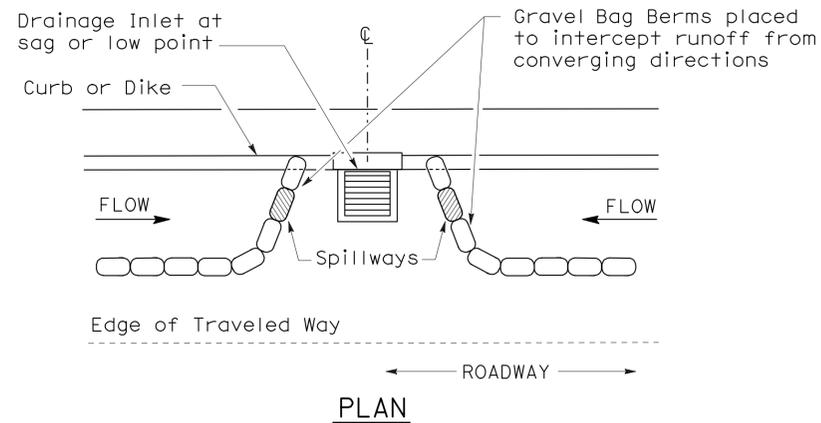


To accompany plans dated 9-24-12

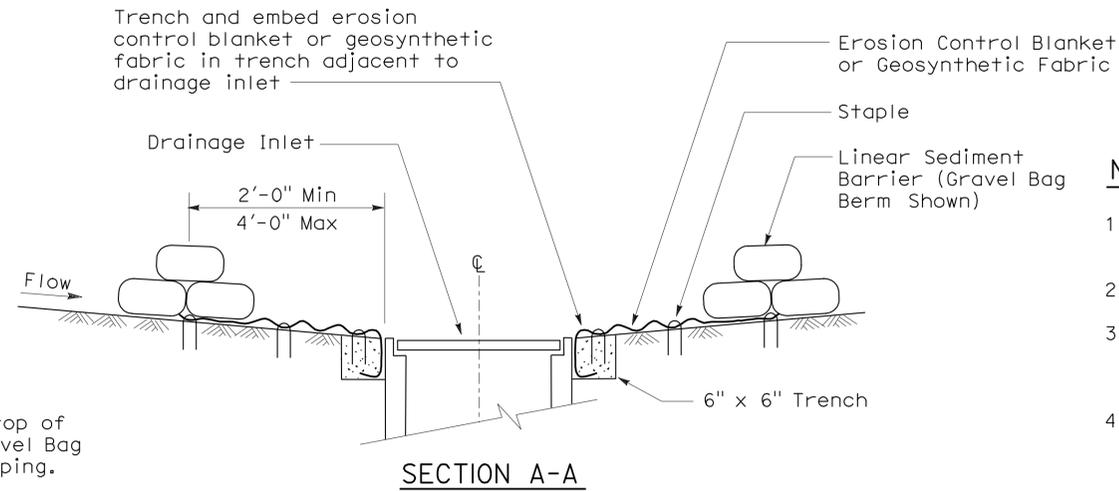
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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

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



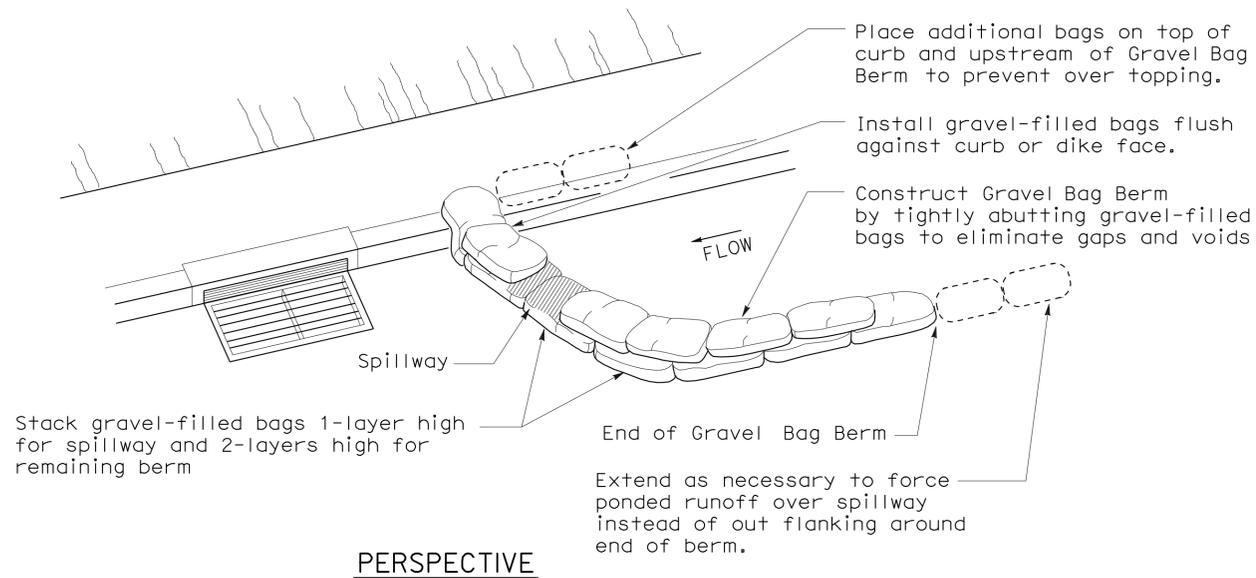
PLAN
CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)



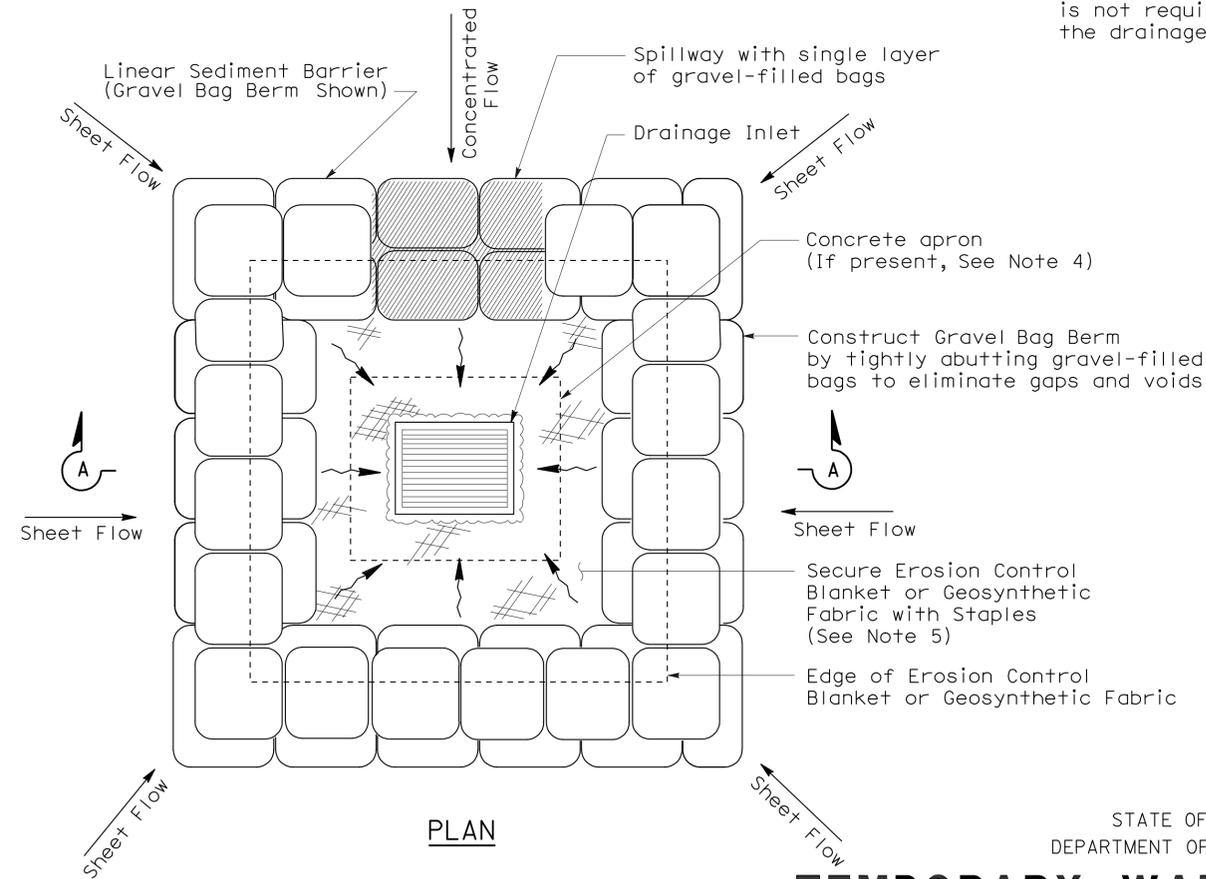
SECTION A-A

NOTES:

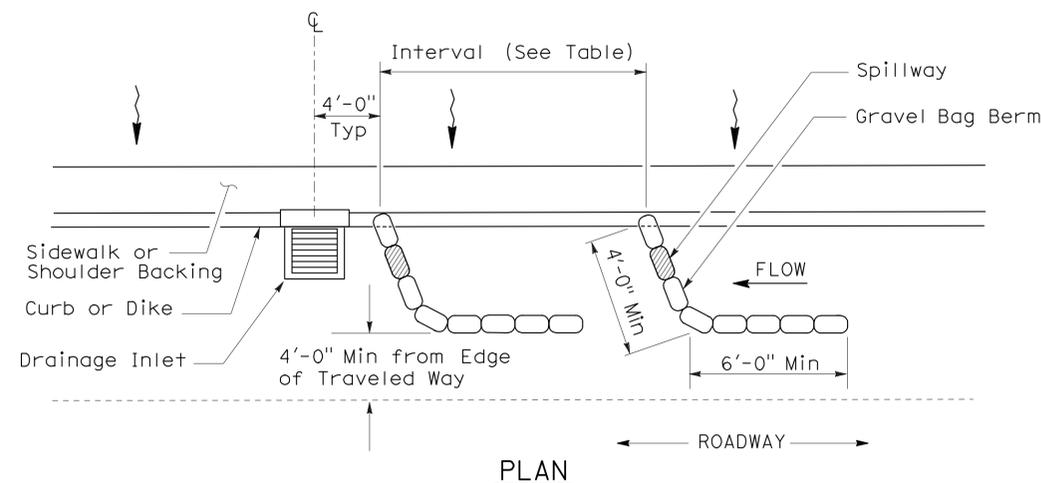
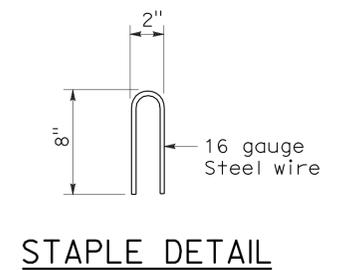
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



PERSPECTIVE



PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



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

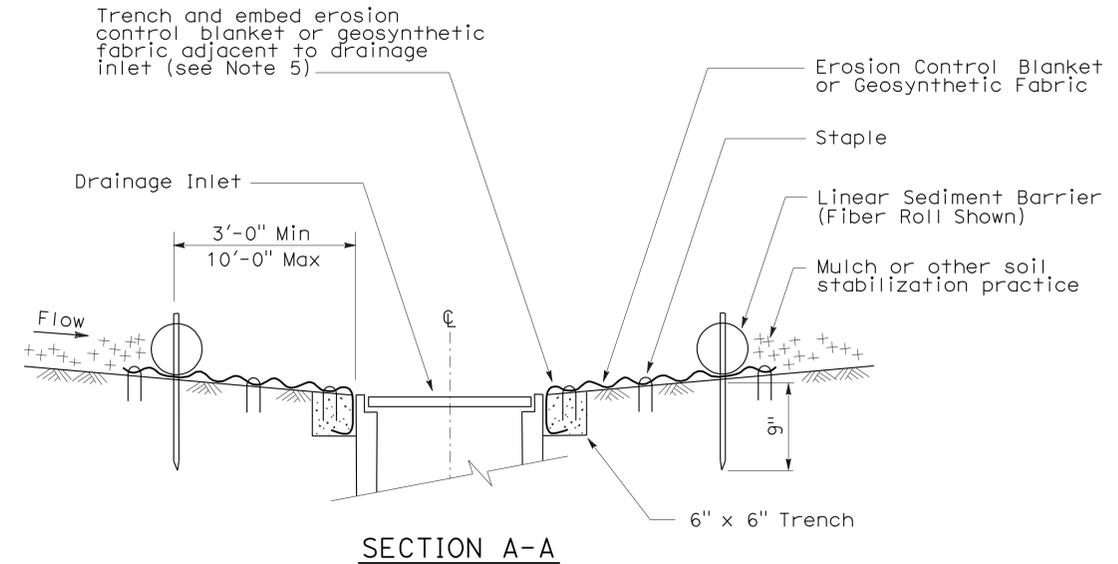
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE
 NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

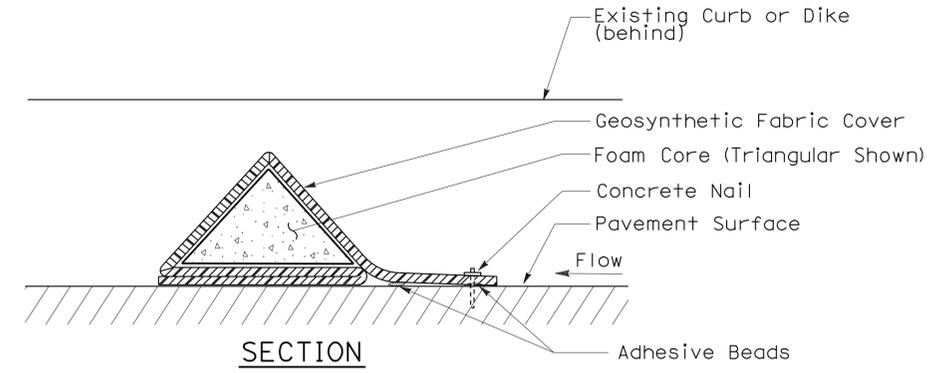
2006 NEW STANDARD PLAN NSP T62

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'



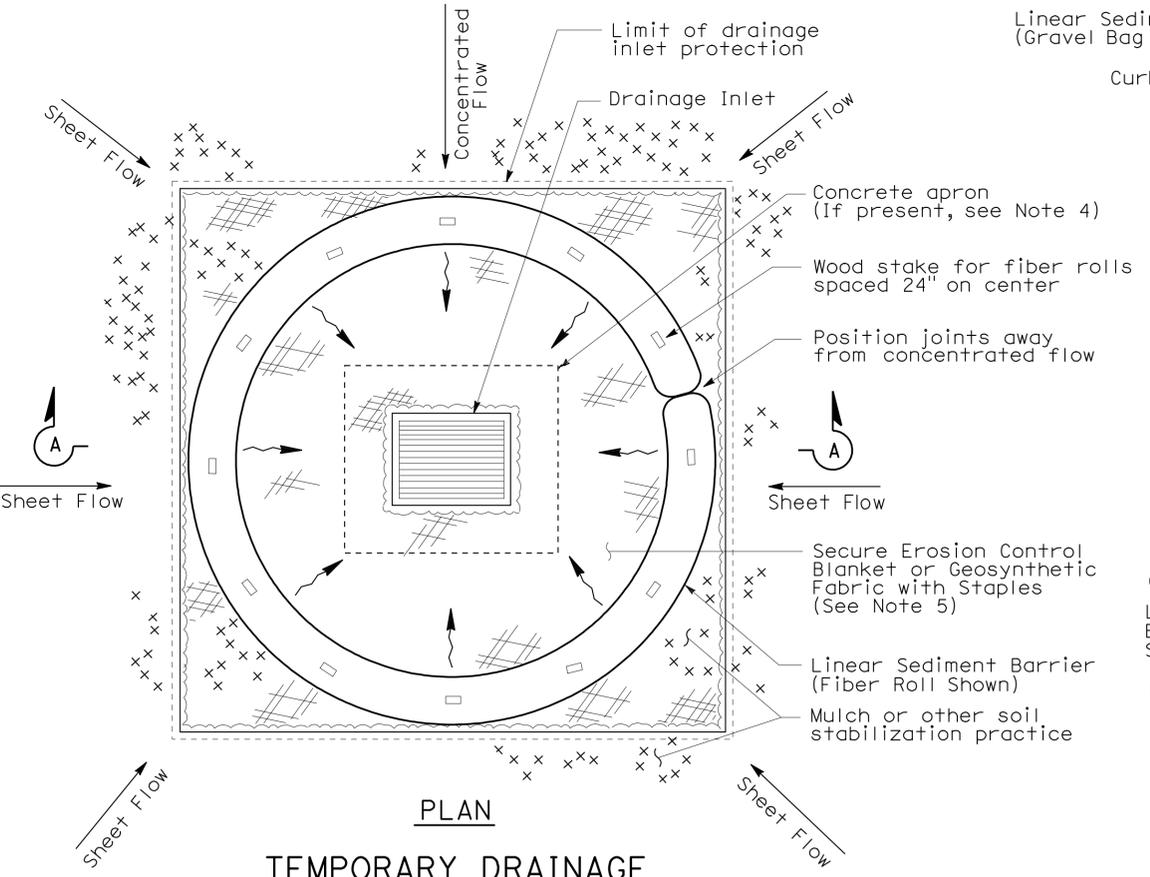
SECTION A-A



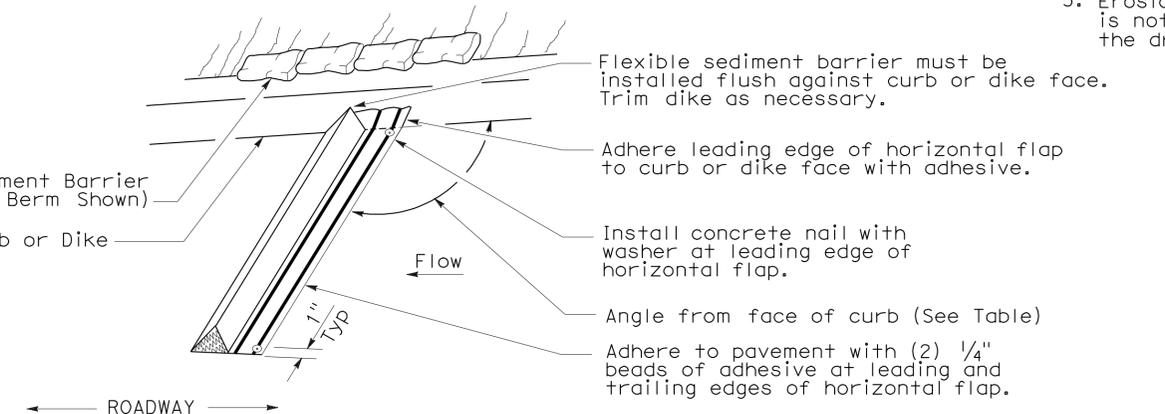
SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

NOTES:

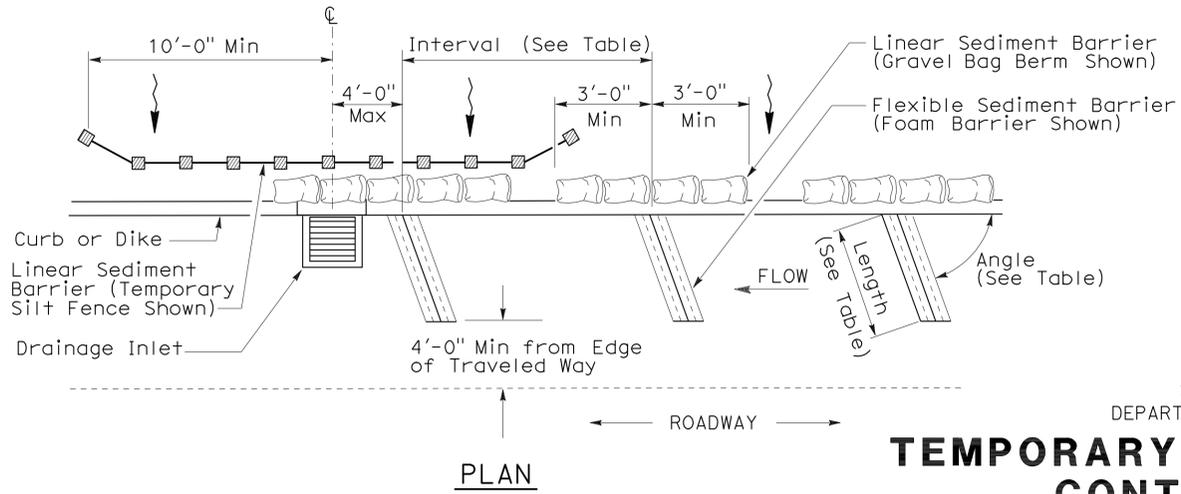
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.



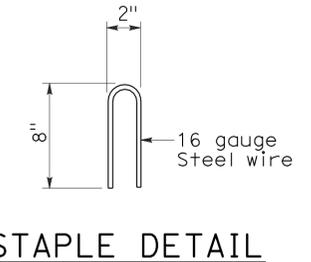
PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PERSPECTIVE



PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4B) FLEXIBLE SEDIMENT BARRIER

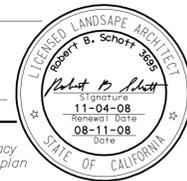


STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

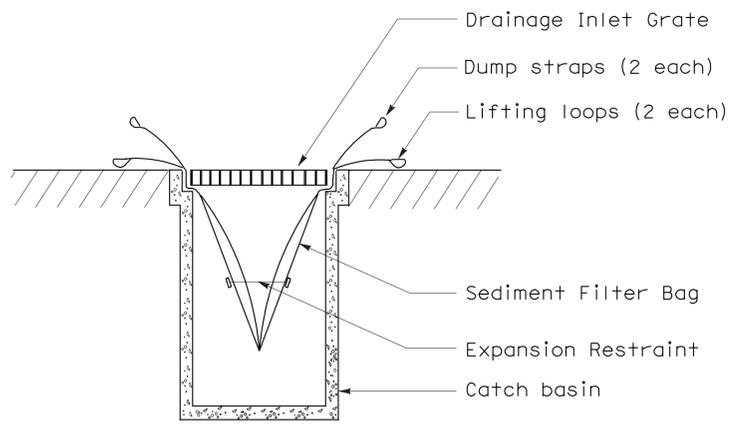
NO SCALE
 NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	185	284

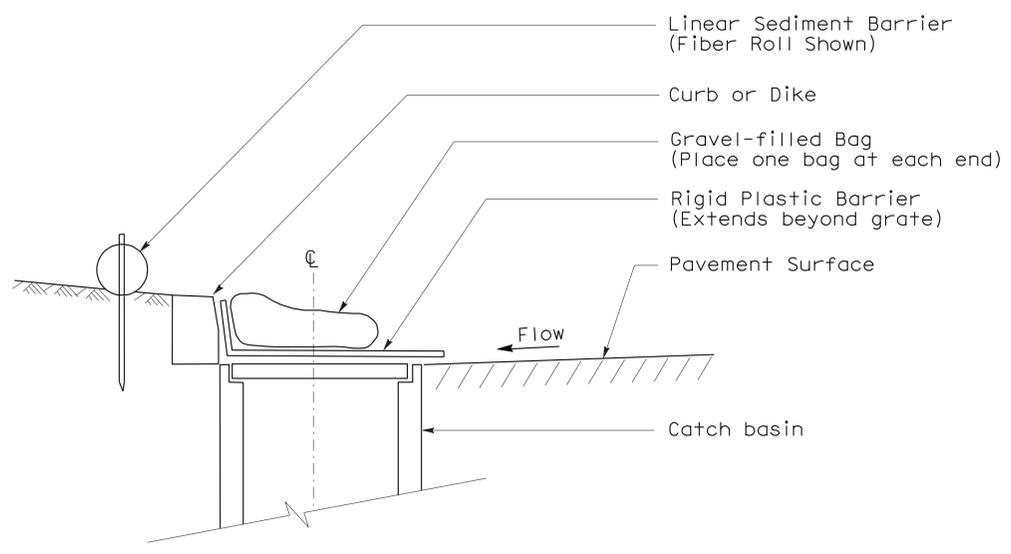
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



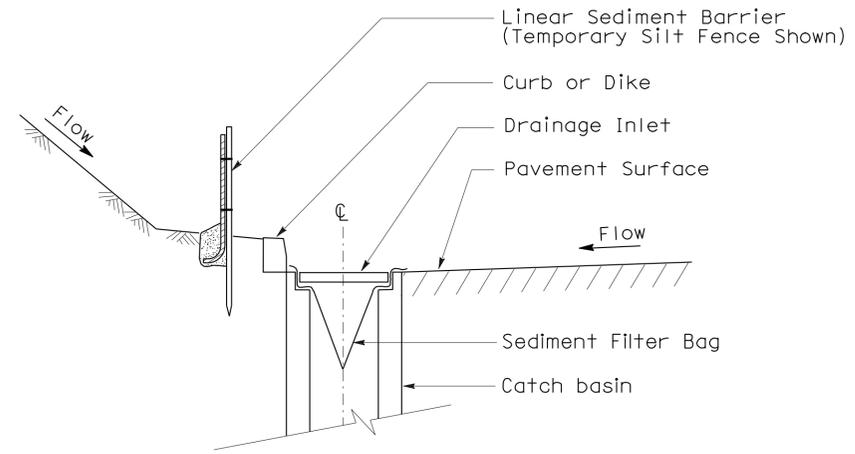
To accompany plans dated 9-24-12



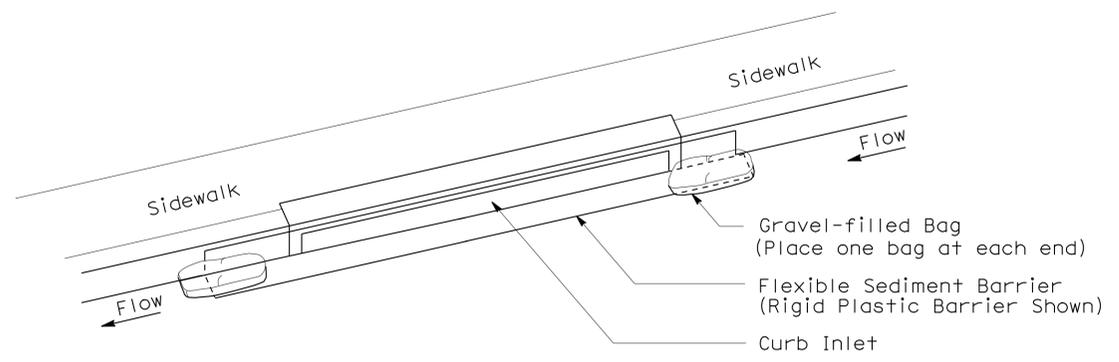
SECTION B-B
SEDIMENT FILTER BAG DETAIL



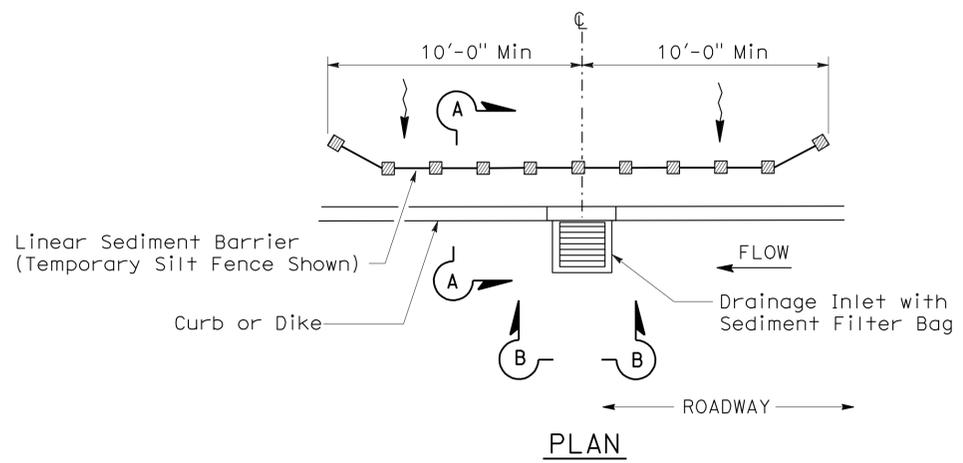
SECTION
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)



SECTION A-A



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



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

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

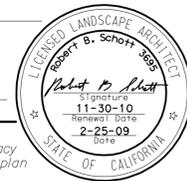
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T64

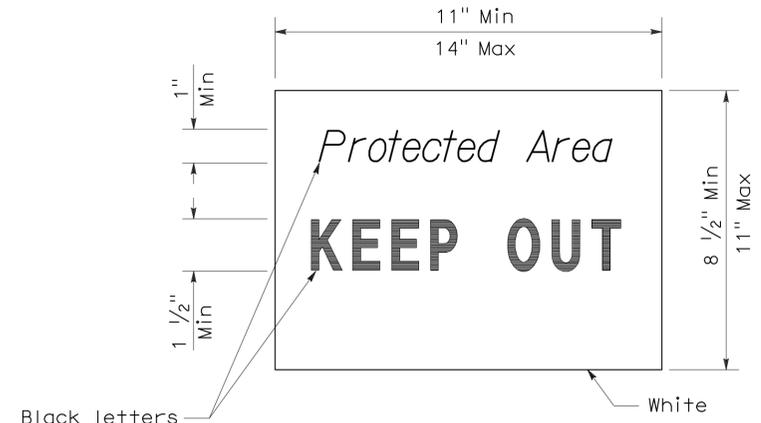
2006 NEW STANDARD PLAN NSP T64

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	186	284

Robert B Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 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.



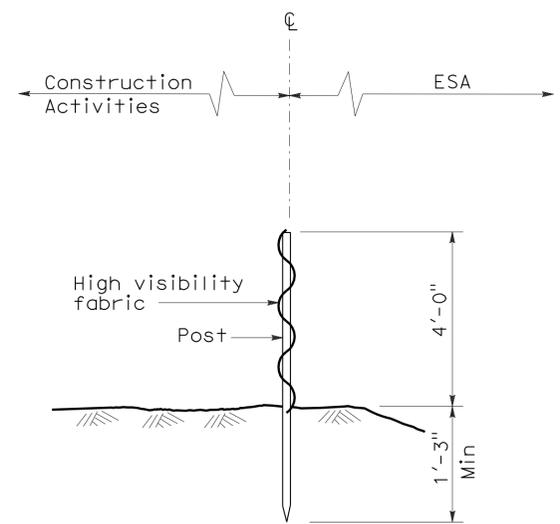
To accompany plans dated 9-24-12



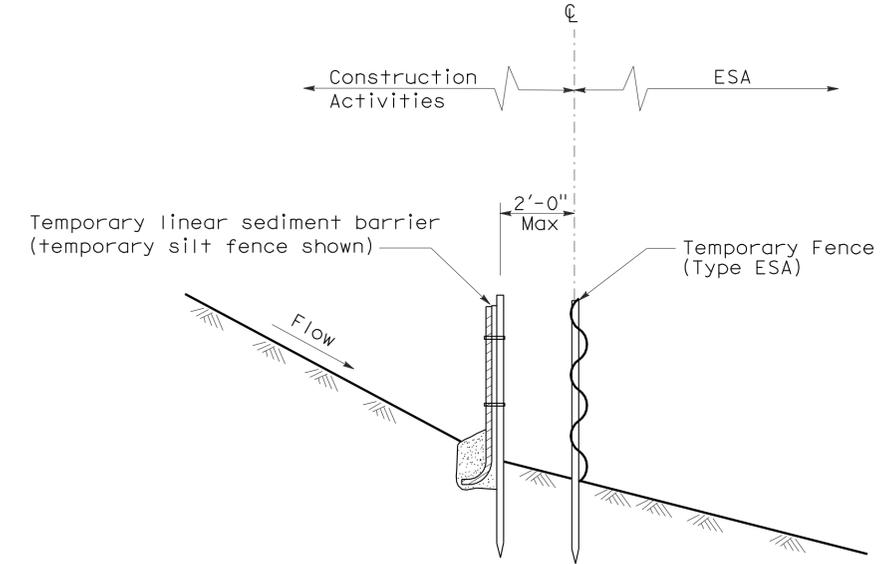
SIGN DETAIL

NOTE:

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

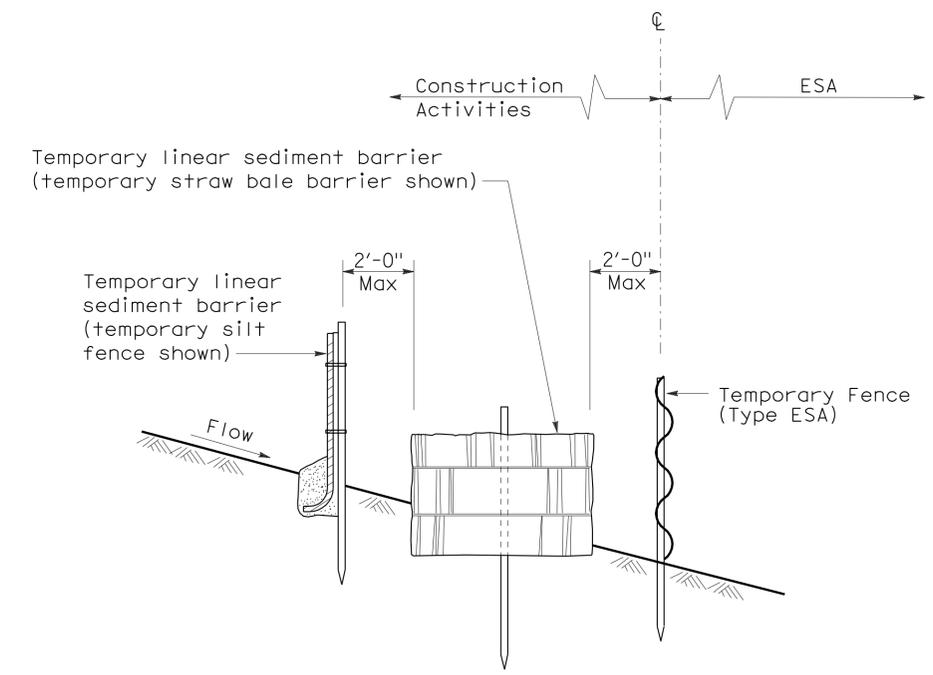


SECTION TEMPORARY FENCE (TYPE ESA)



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

(See Note 1)



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

(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

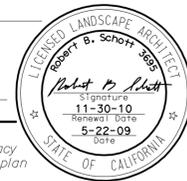
NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T65

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	187	284

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 June 5, 2009
 PLANS APPROVAL DATE

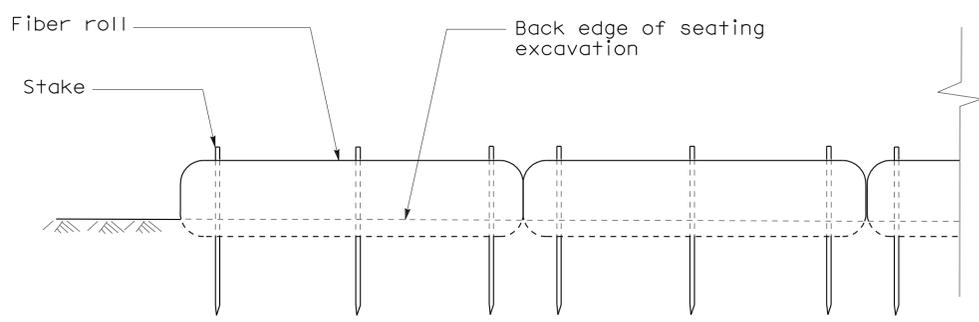
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



To accompany plans dated 9-24-12

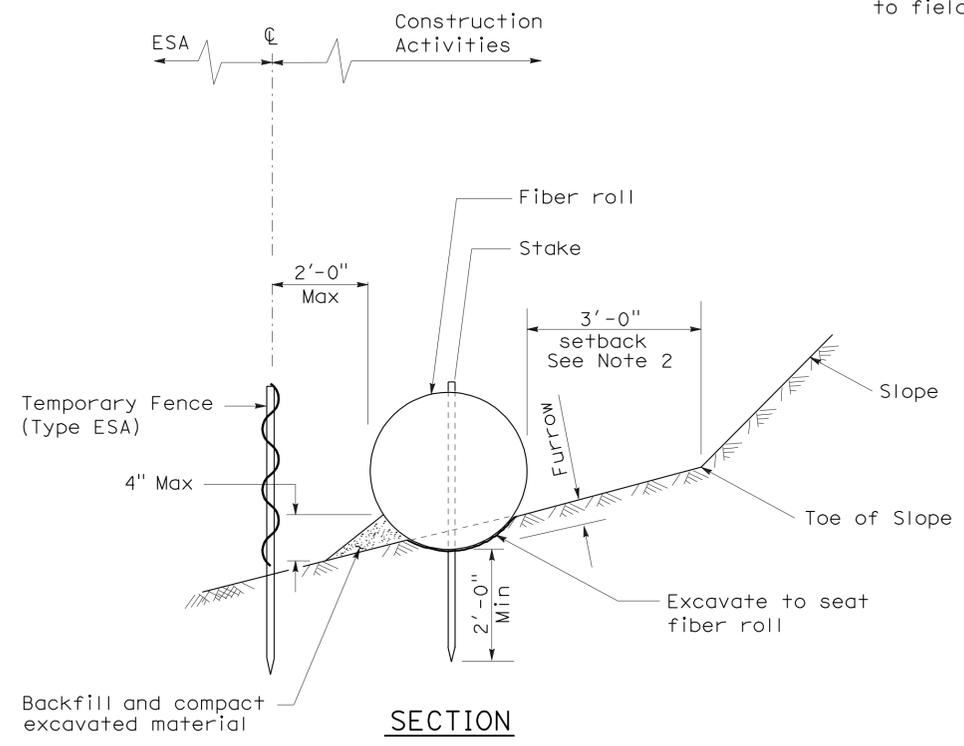
NOTES:

1. Temporary fence (Type ESA) shown for reference purposes only.
2. Setback dimension may vary according to field conditions or as designated on plans



FRONT ELEVATION

TEMPORARY LARGE SEDIMENT BARRIER



SECTION

PLACEMENT DETAIL
FOR TEMPORARY FENCE (TYPE ESA)
USED WITH TEMPORARY LARGE SEDIMENT BARRIER

(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

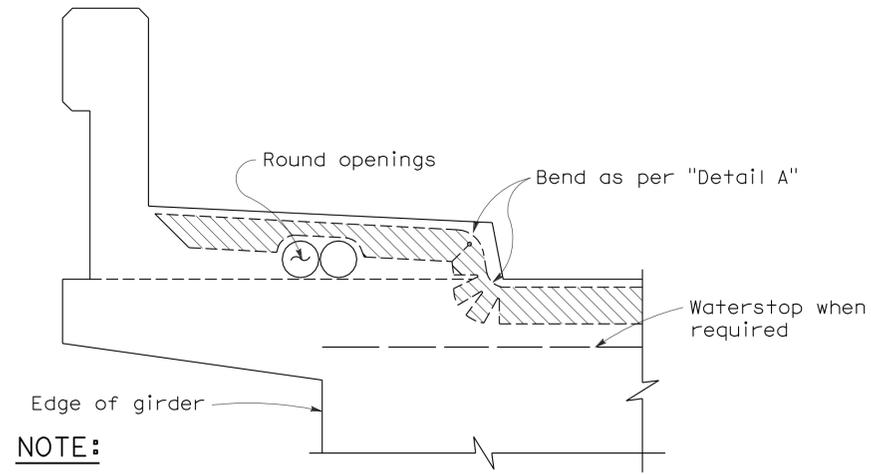
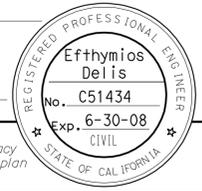
**TEMPORARY WATER POLLUTION
CONTROL DETAILS
(TEMPORARY LARGE SEDIMENT
BARRIER)**

NO SCALE

NSP T66 DATED JUNE 5, 2009 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

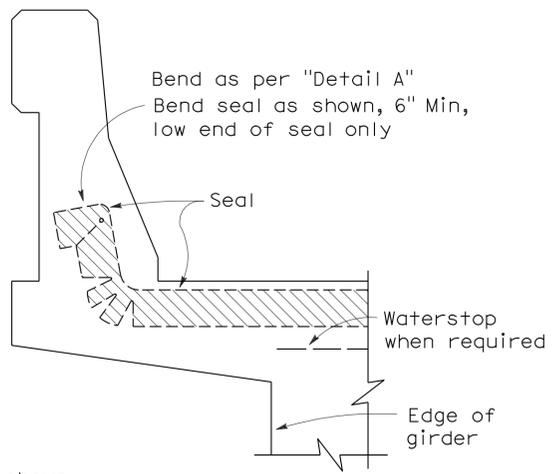
NEW STANDARD PLAN NSP T66

2006 NEW STANDARD PLAN NSP T66

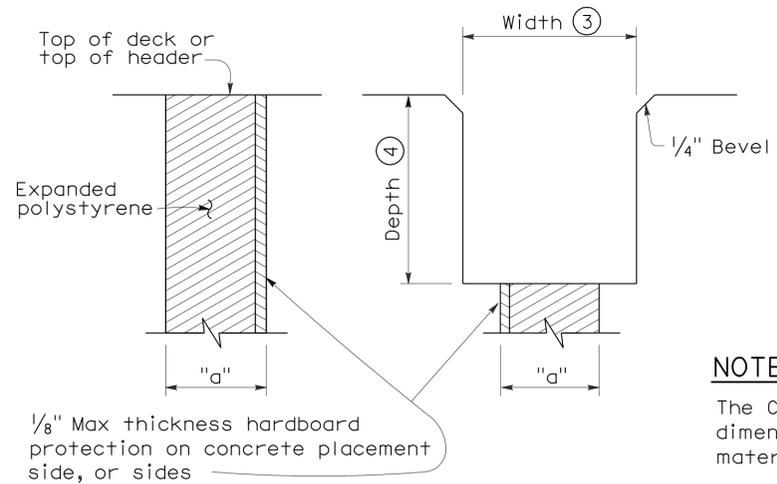


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



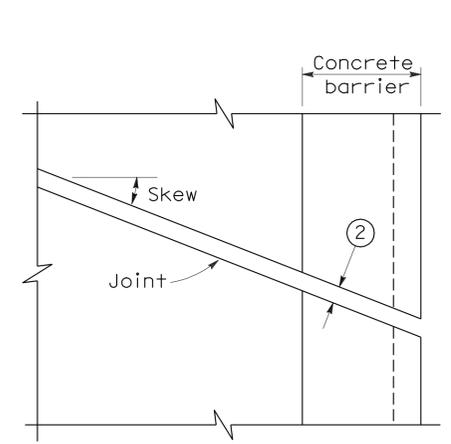
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

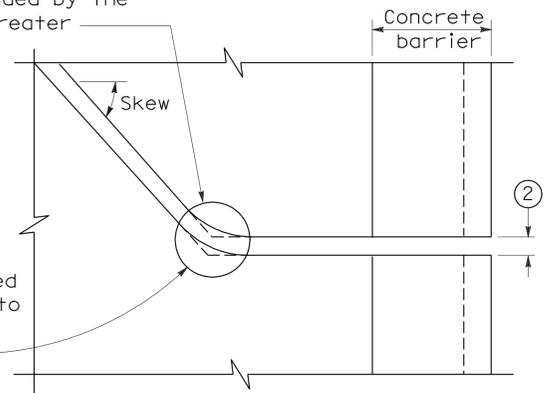
NOTE:
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



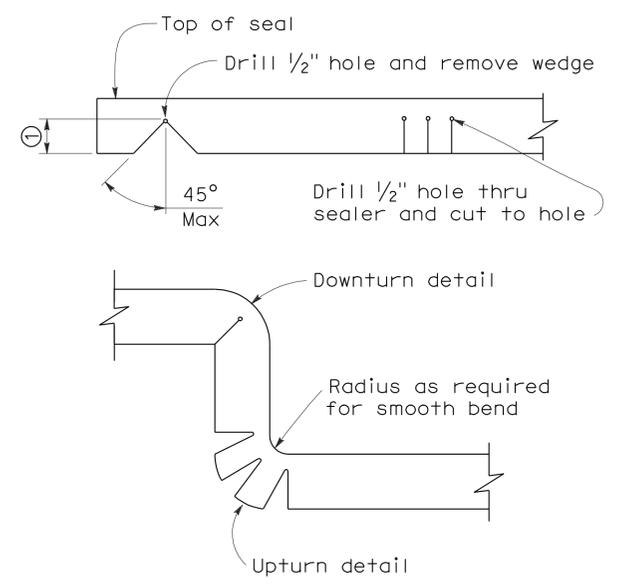
PLAN OF JOINT (SKEW ≤ 20°)

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



PLAN OF JOINT (SKEW > 20°)

In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.

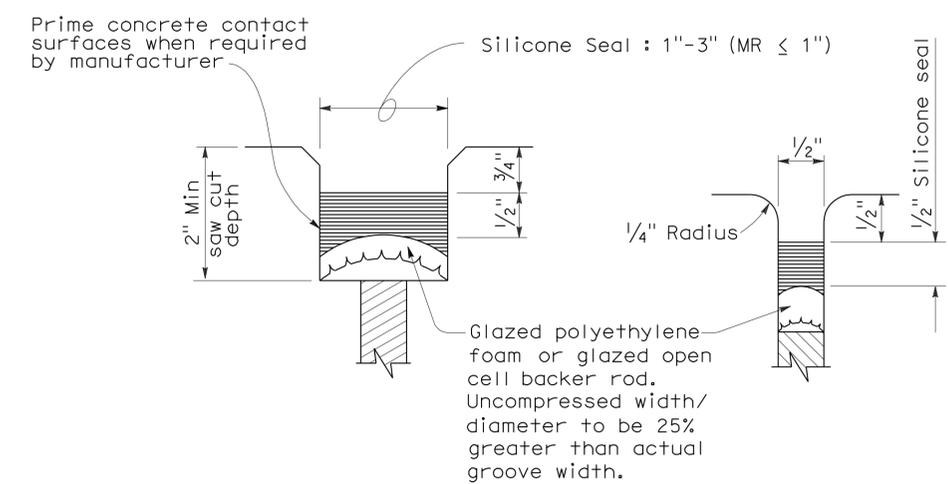


DETAIL A

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

DIMENSIONS "a" OF JOINT REQUIRED

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

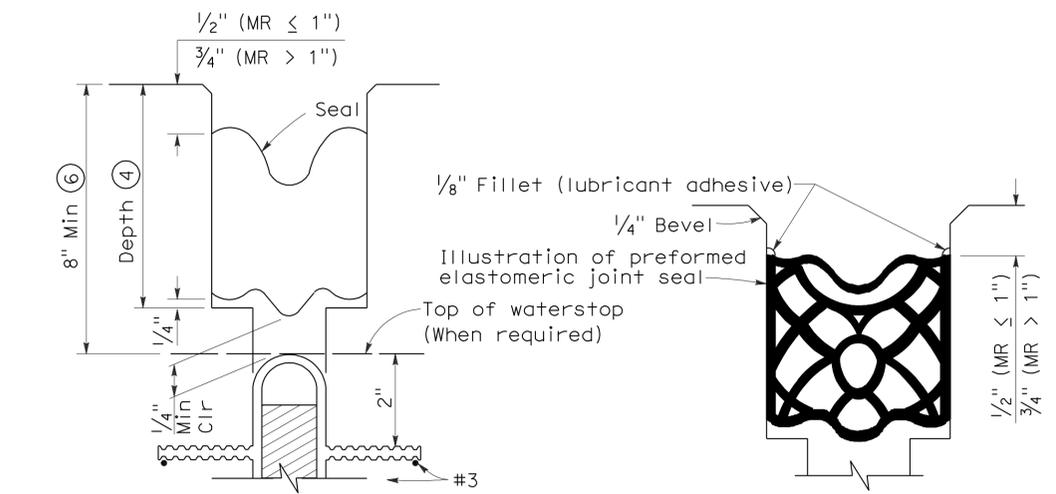


TYPE A SEAL

Movement rating : Silicone = 1" Max

TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W₂)

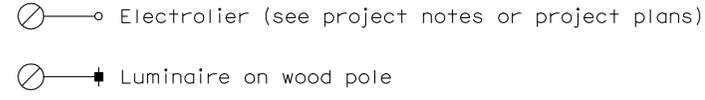
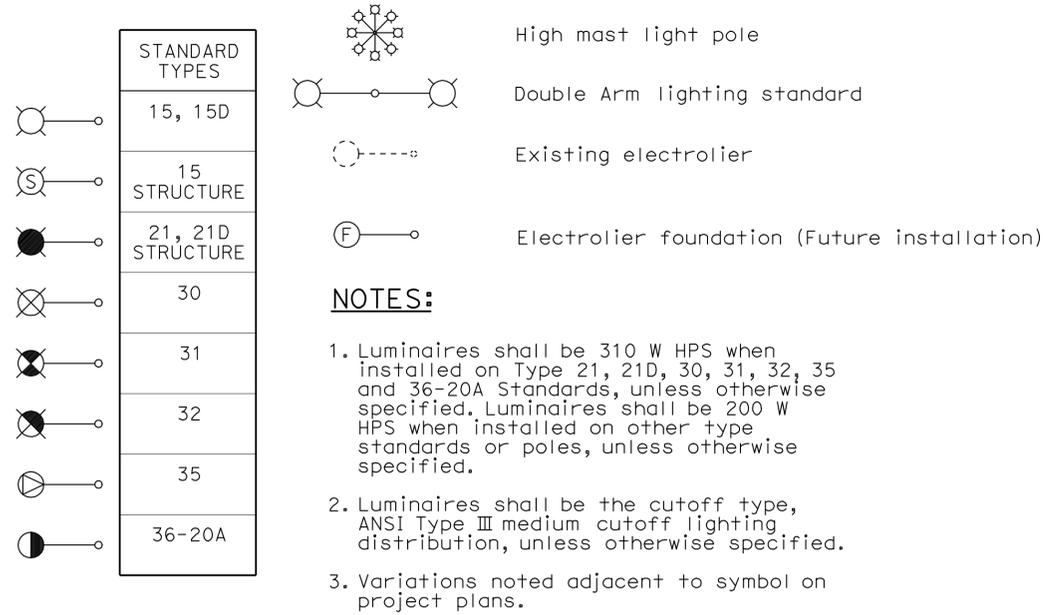
TYPE B SEAL

Movement Rating ≤ 2"

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

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

ELECTROLIERS



STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	189	284

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

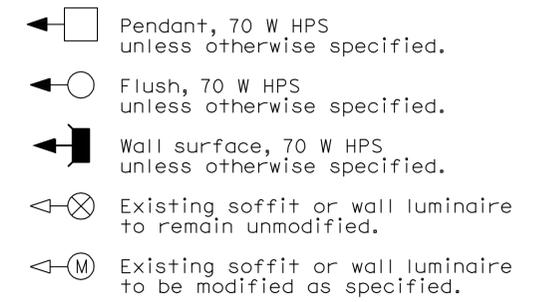
October 5, 2007
PLANS APPROVAL DATE

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

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

To accompany plans dated 9-24-12

SOFFIT AND WALL MOUNTED LUMINAIRES



NOTE:
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	190	284

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

To accompany plans dated 9-24-12

CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
		Communication conduit
		Telephone conduit
		Fire alarm conduit
		Fiber optic conduit
		Conduit termination RSP ES-9A C
		Conduit riser in/on structure or service pole

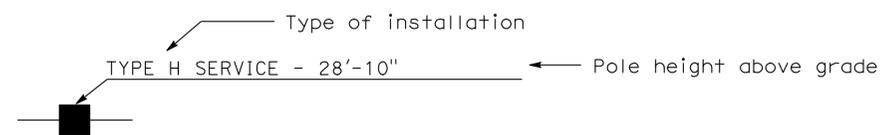
SIGNAL EQUIPMENT

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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT Cont

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

NOTES:

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SYMBOLS AND ABBREVIATIONS)**
 NO SCALE

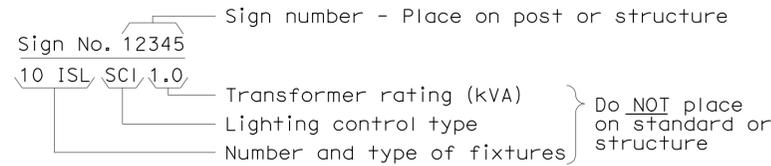
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

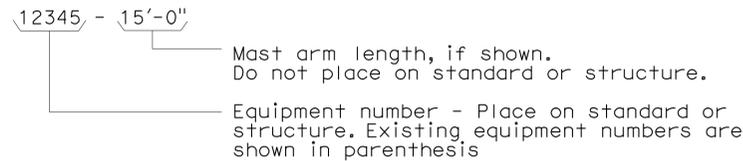
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

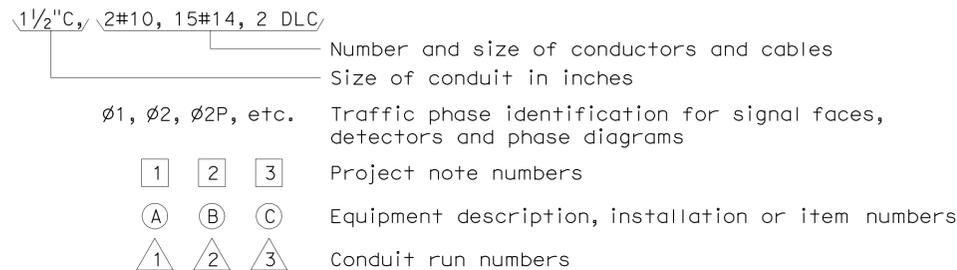
ILLUMINATED SIGN IDENTIFICATION NUMBER:



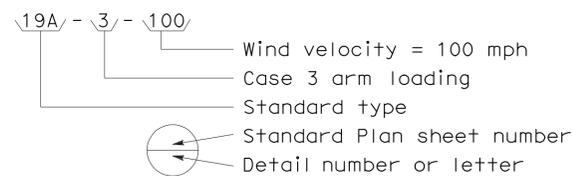
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



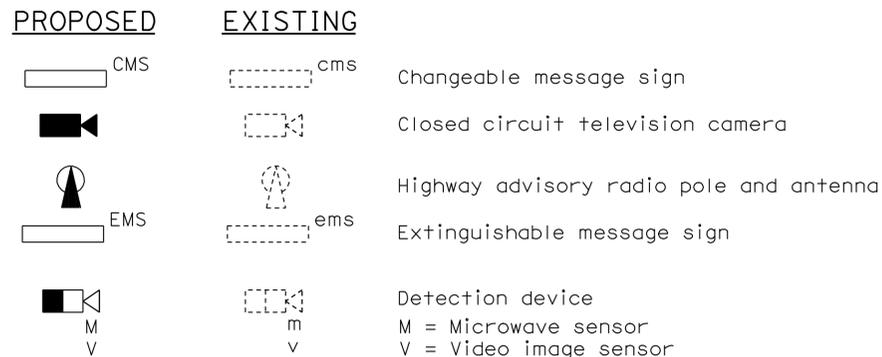
CONDUIT AND CONDUCTOR IDENTIFICATION:



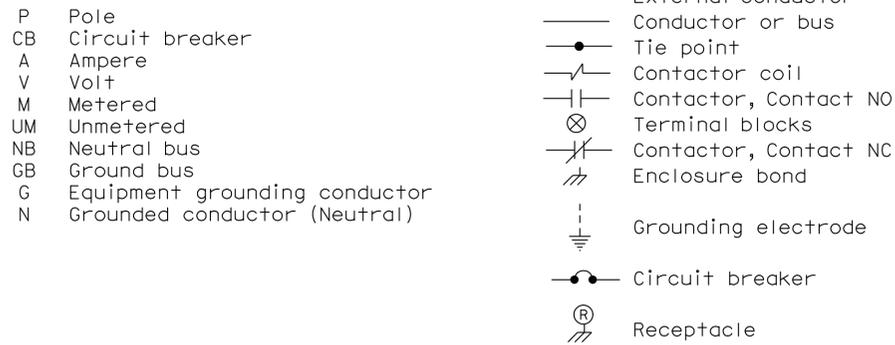
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



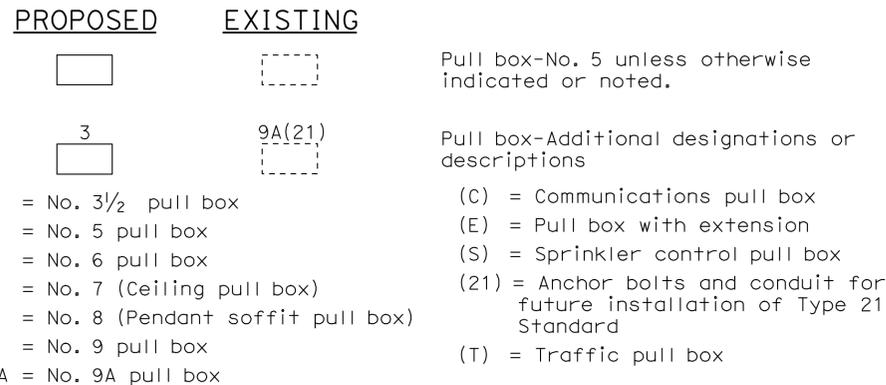
MISCELLANEOUS EQUIPMENT



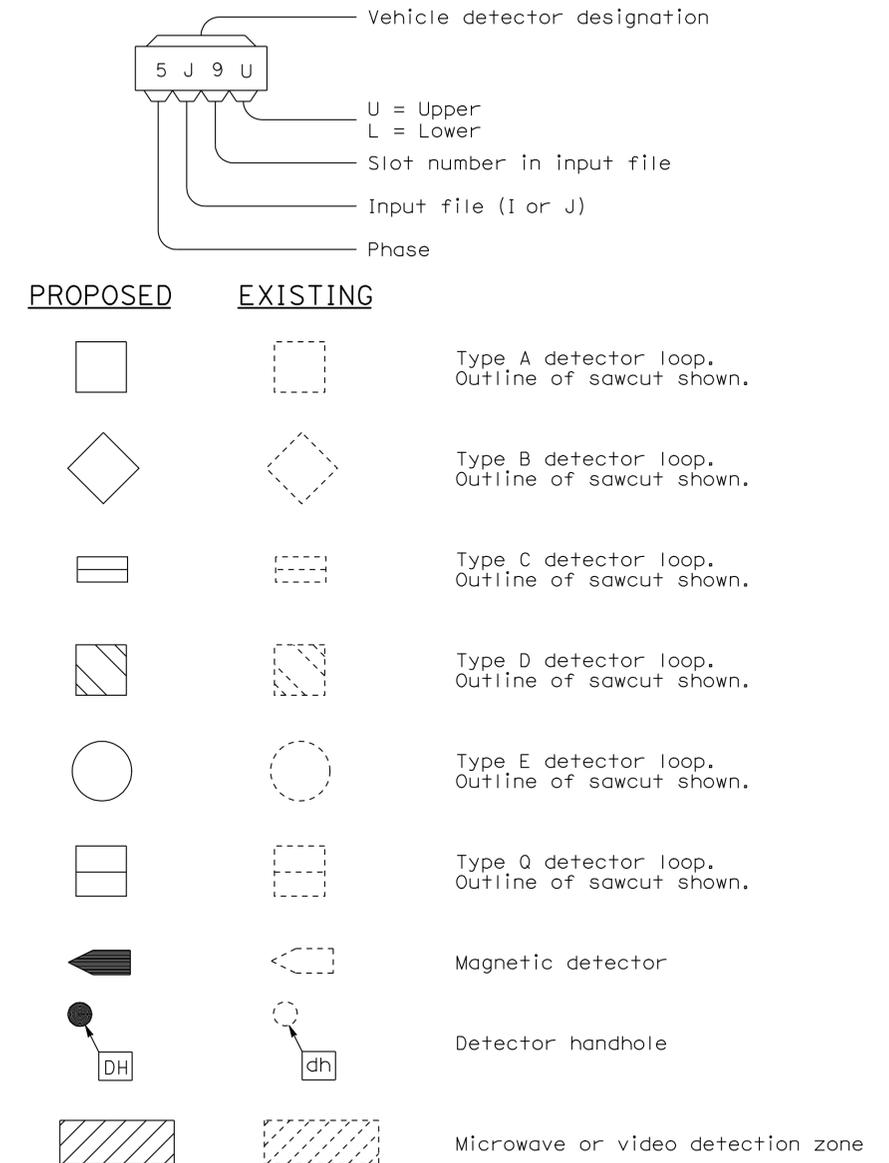
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SYMBOLS AND ABBREVIATIONS)**

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1C

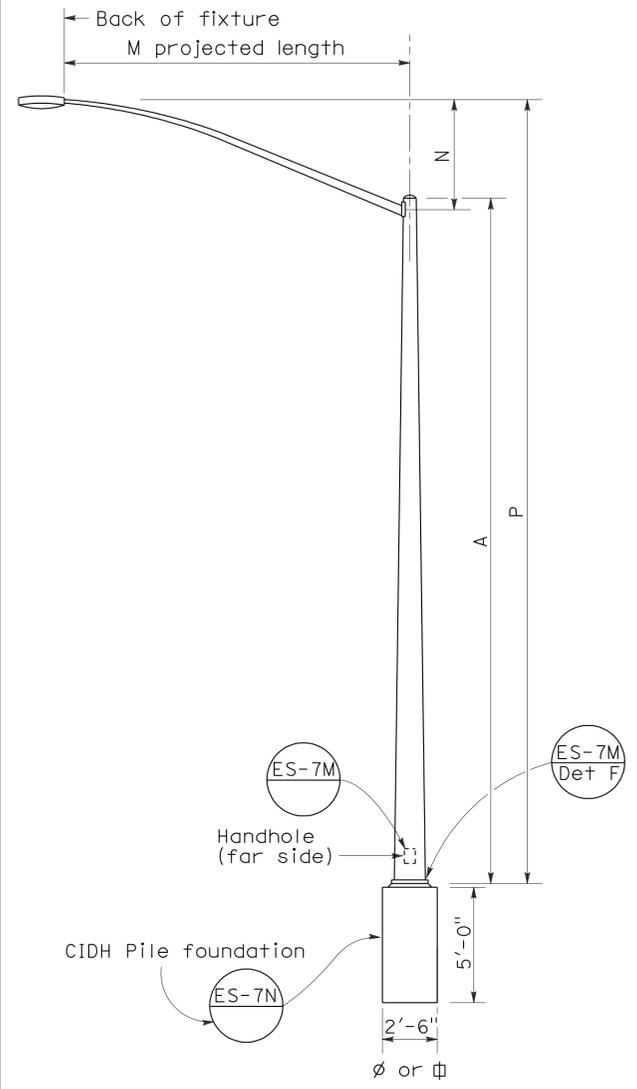
2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	192	284

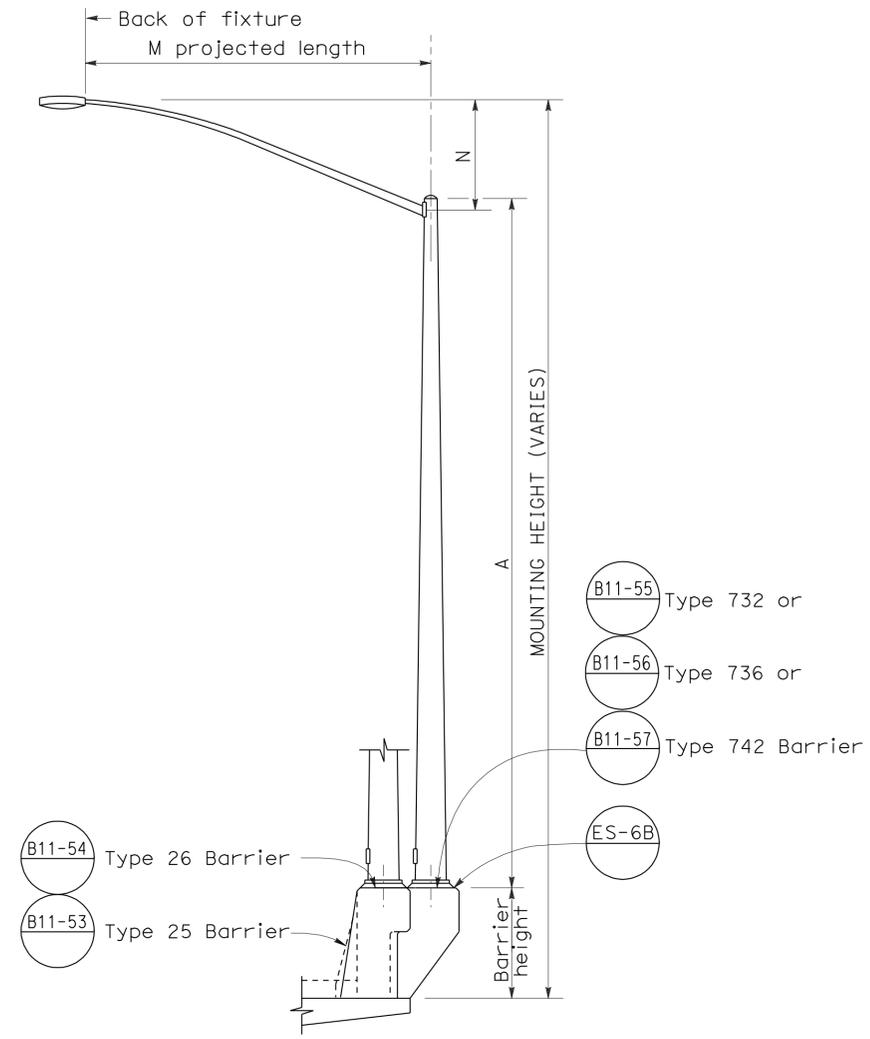
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
 No. C57793
 Exp. 3-31-08
 CIVIL
 STATE OF CALIFORNIA

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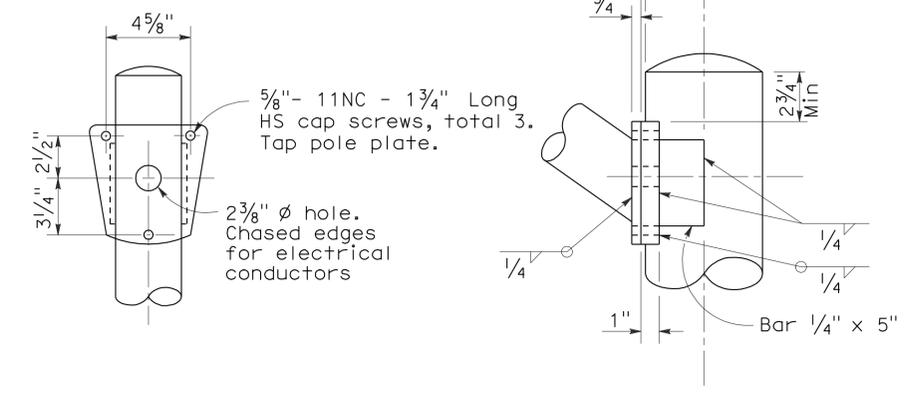
To accompany plans dated 9-24-12



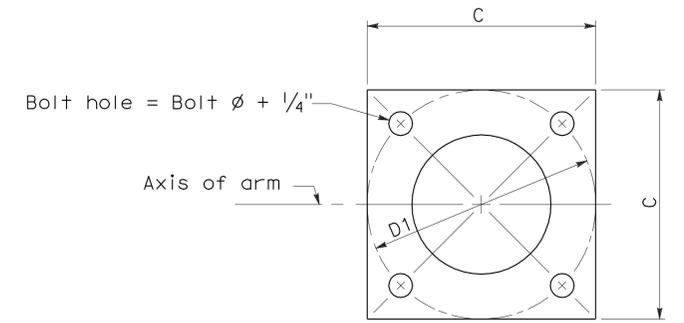
ELEVATION
TYPE 15 AND TYPE 21



ELEVATION
TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED



DETAIL R
LUMINAIRE ARM CONNECTION



BASE PLATE

POLE TYPE	POLE DATA				BASE PLATE DATA				LUMINAIRE ARM
	A Height	Min OD		Wall Thickness	C	D1 Bolt Circle	Thick-ness	Anchor Bolts Size	
15	30'	8"	3 7/8"	0.1196"	1'-0"	1'-0"	1"	1" ø x 3'-0" x 4"*	6' - 15' 12'
21	35'	8 5/8"	3 7/8"	0.1196"	1'-0"	1'-0"	1"	1 1/4" ø x 3'-0" x 4"*	6' - 15' 12'

* For barrier rail bolts, see Standard Plan ES-6B.

M Projected Length	N Rise	Min OD At Pole	Nominal Thickness	LUMINAIRE ARM DATA	
				Type 15	Type 21
6'-0"	2'-0"±	3/4"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3/2"	0.1196"	32'-0"±	37'-0"±
10'-0"	3'-3"±	3 7/8"	0.1196"	32'-9"±	37'-9"±
12'-0"	4'-3"±	3 7/8"	0.1196"	33'-9"±	38'-9"±
15'-0"	4'-9"±	4 1/4"	0.1196"	34'-3"±	39'-3"±

NOTES:

- Indicates arm length to be used unless otherwise noted on the plans.
- For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Standard Plan ES-6F.
- For additional notes, see Standard Plan ES-7M and ES-7N.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(LIGHTING STANDARD
TYPES 15 AND 21)

NO SCALE

RSP ES-6A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-6A DATED MAY 1, 2006 - PAGE 427 OF THE STANDARD PLANS BOOK DATED MAY 2006.

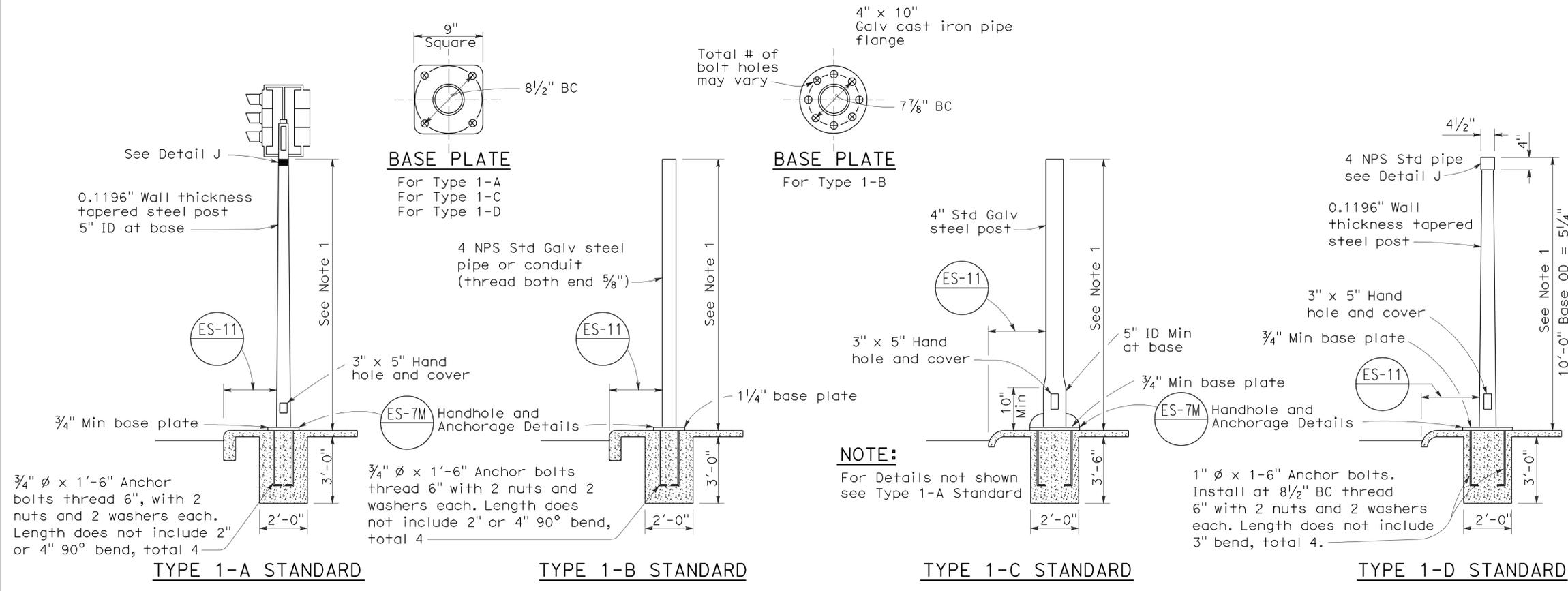
REVISED STANDARD PLAN RSP ES-6A

2006 REVISED STANDARD PLAN RSP ES-6A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	193	284

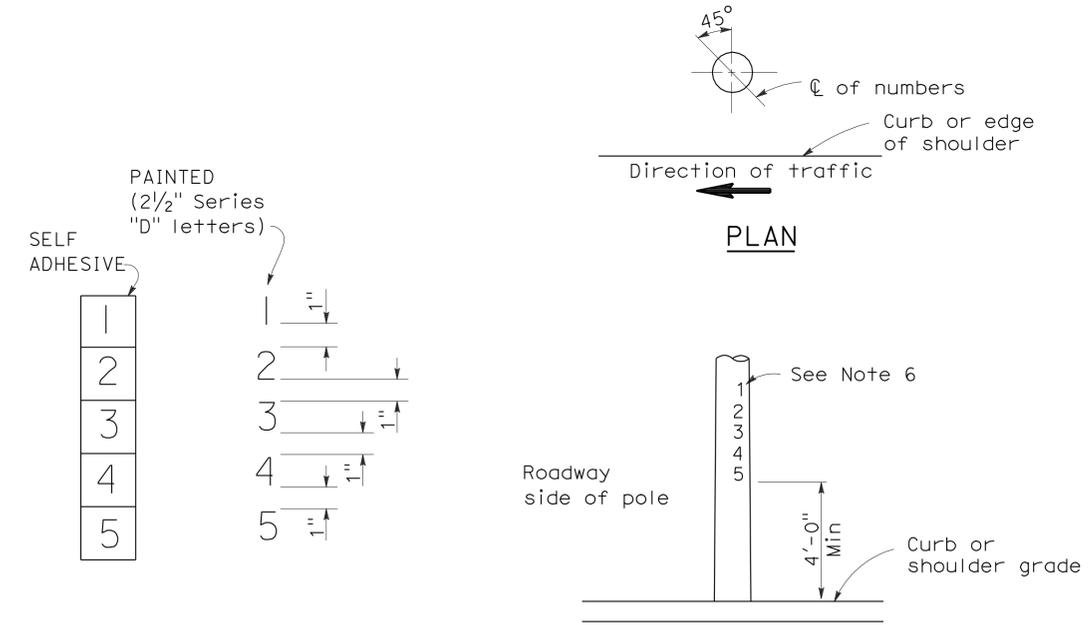
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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 REGISTERED PROFESSIONAL ENGINEER
 Stanley P. Johnson
 No. C57793
 Exp. 3-31-08
 CIVIL
 STATE OF CALIFORNIA

To accompany plans dated 9-24-12

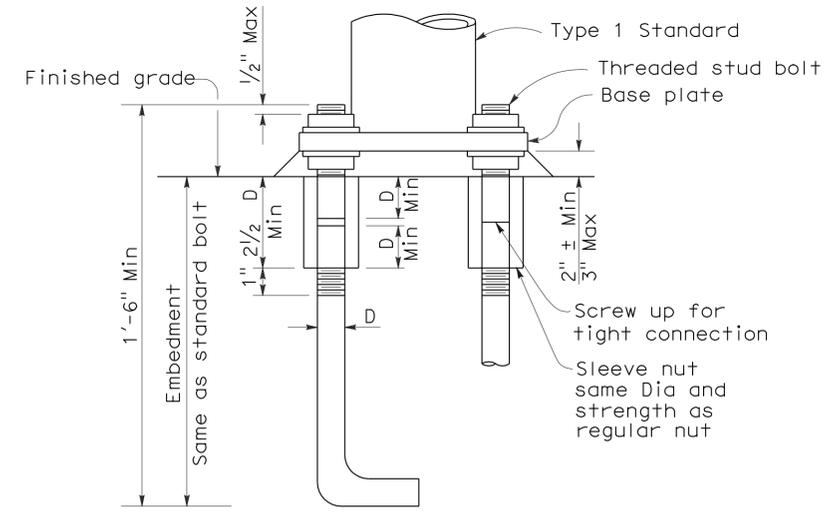


- NOTES:**
- Standards shall be 10'-0" ± 2" for vehicle signals and 7'-0" ± 2" for pedestrian signals unless otherwise noted on plans.
 - Top of standards shall be 4 1/2" OD.
 - Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
 - Anchor bolts shall be bonded to conduit or grounding conductor.
 - Conduit between standard and adjacent pull box shall be 2" minimum.
 - Paint numbers on roadway side facing traffic when electrolier or post is left of direction of traffic.

TYPE 1 SIGNAL STANDARDS

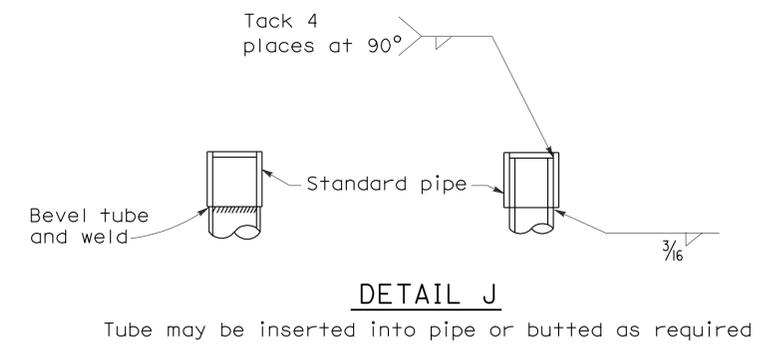


LOCATION OF EQUIPMENT NUMBERS ON STANDARDS AND POSTS



ANCHOR BOLTS WITH SLEEVE NUTS

Sleeve nuts to be used only when shown or specified on Project Plans
 D = Diameter of anchor bolt



ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD TYPE 1 STANDARD AND EQUIPMENT NUMBERING)

NO SCALE

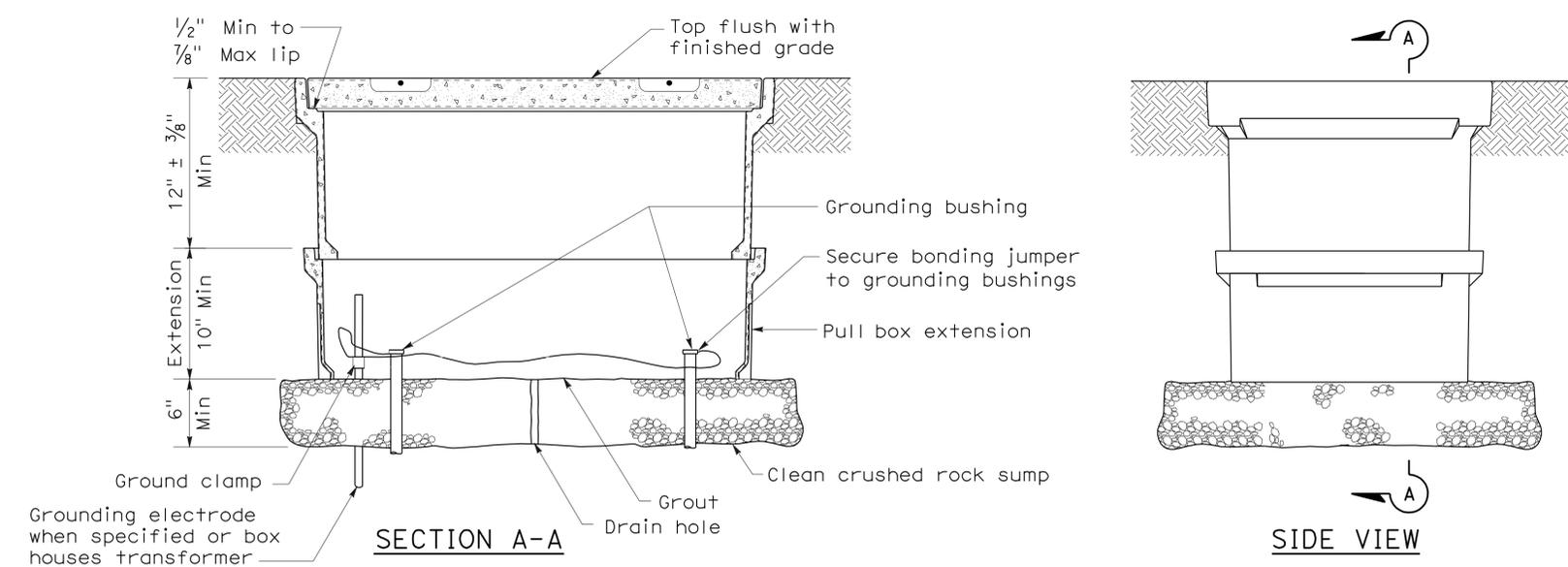
RSP ES-7B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-7B DATED MAY 1, 2006 - PAGE 438 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7B

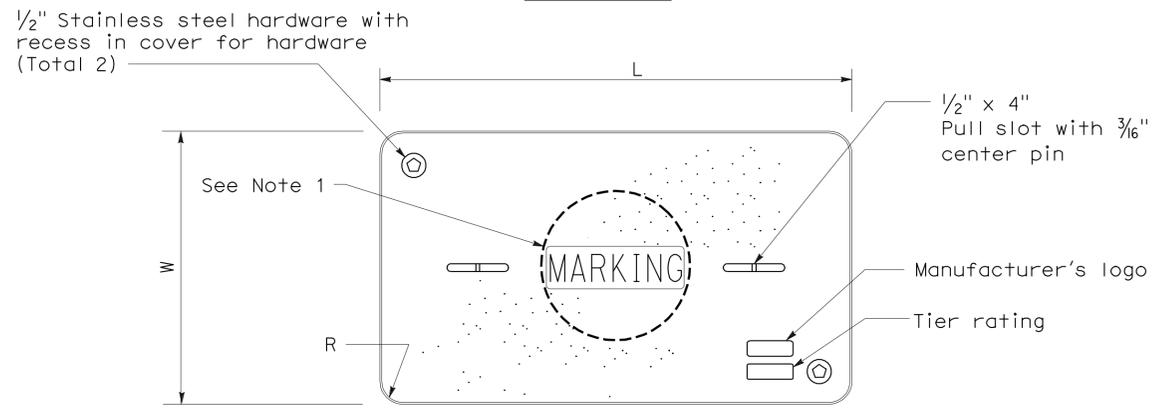
2006 REVISED STANDARD PLAN RSP ES-7B

2006 NEW STANDARD PLAN NSP ES-8A

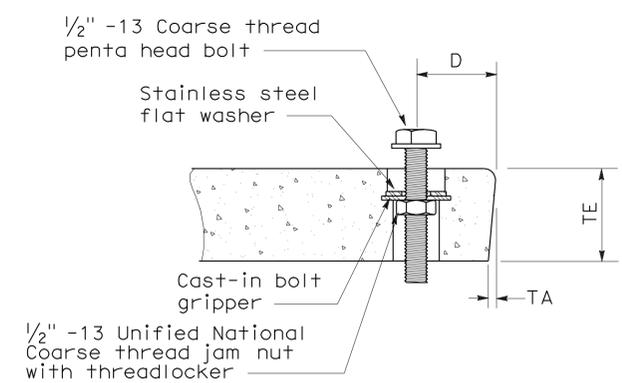
To accompany plans dated 9-24-12



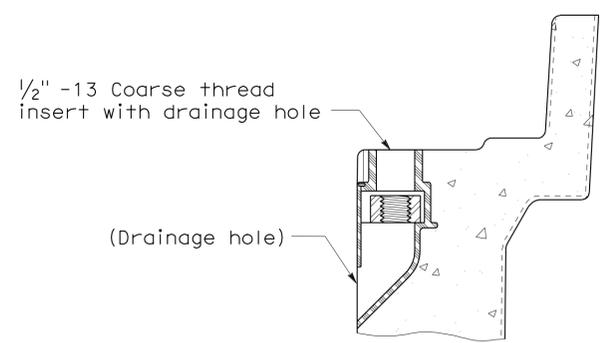
INSTALLATION DETAILS
DETAIL A



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.

DIMENSION TABLE

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.

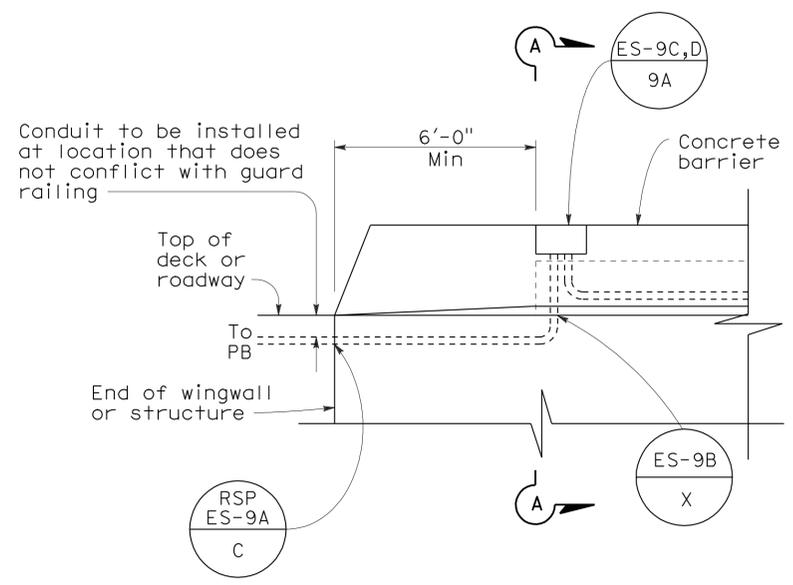
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	195	284

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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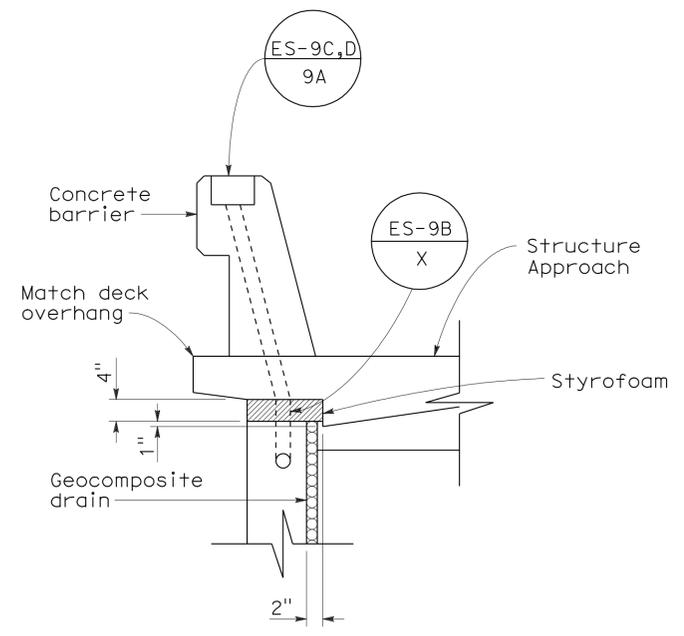
REGISTERED PROFESSIONAL ENGINEER
 Jeffery G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

To accompany plans dated 9-24-12

2006 REVISED STANDARD PLAN RSP ES-9A

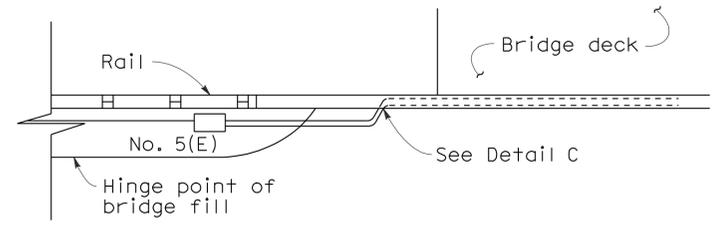


SIDEVIEW

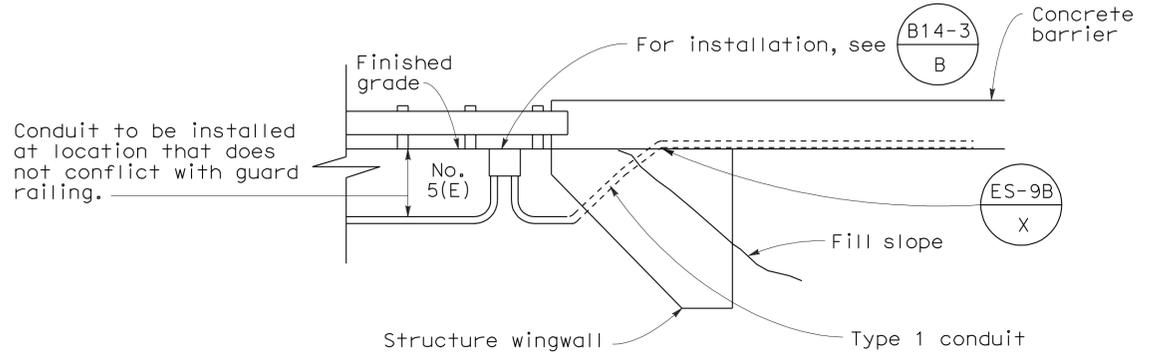


SECTION A-A

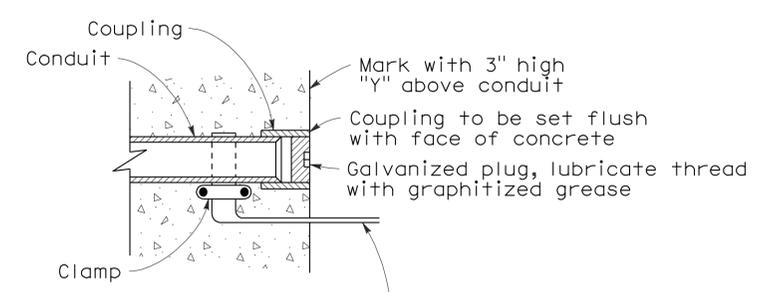
**DETAIL A
CONDUIT TERMINATION**



TOP VIEW



**SIDE VIEW
DETAIL I
CONDUIT TERMINATION**



**DETAIL C
CONDUIT TERMINATION**

Copper bonding strap install only at structure construction joint, extend at least 6" from face of concrete

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(ELECTRICAL DETAILS
STRUCTURE INSTALLATIONS)**

NO SCALE

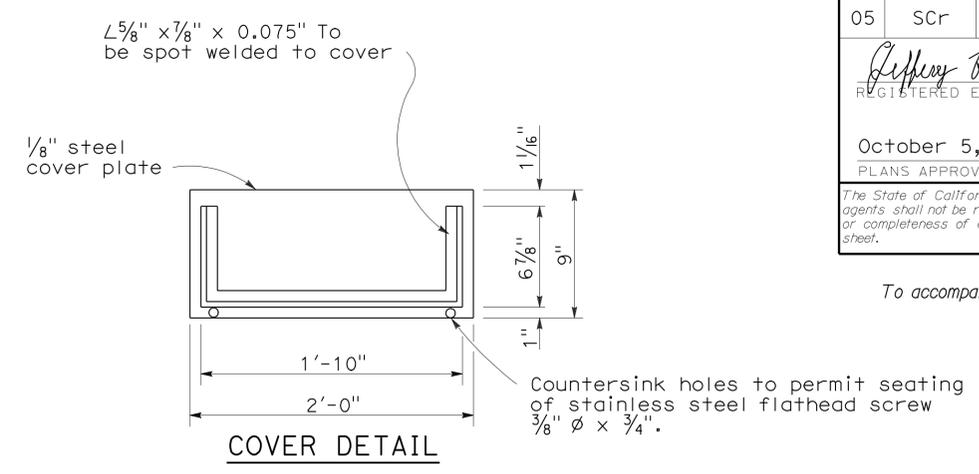
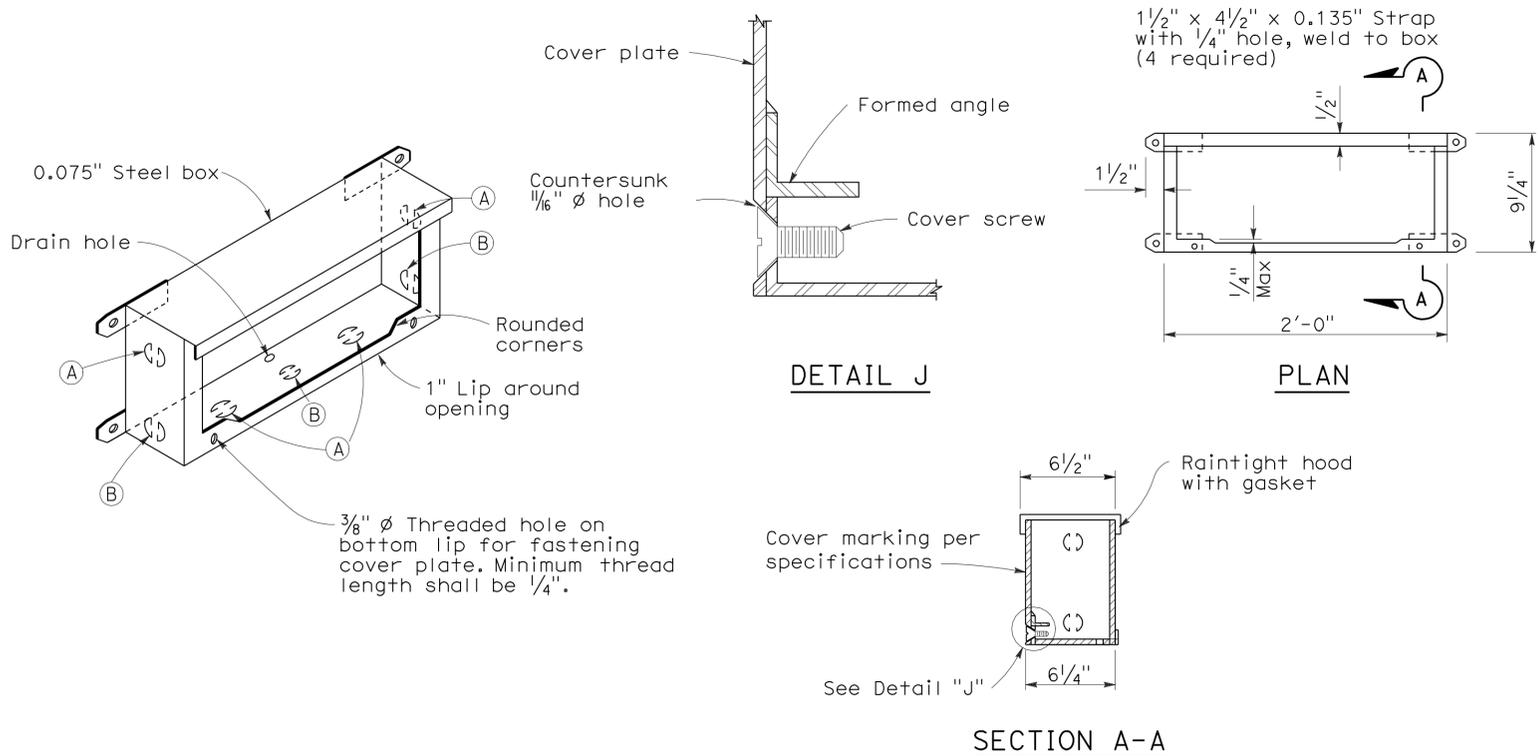
RSP ES-9A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9A
DATED MAY 1, 2006 - PAGE 454 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-9A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	196	284

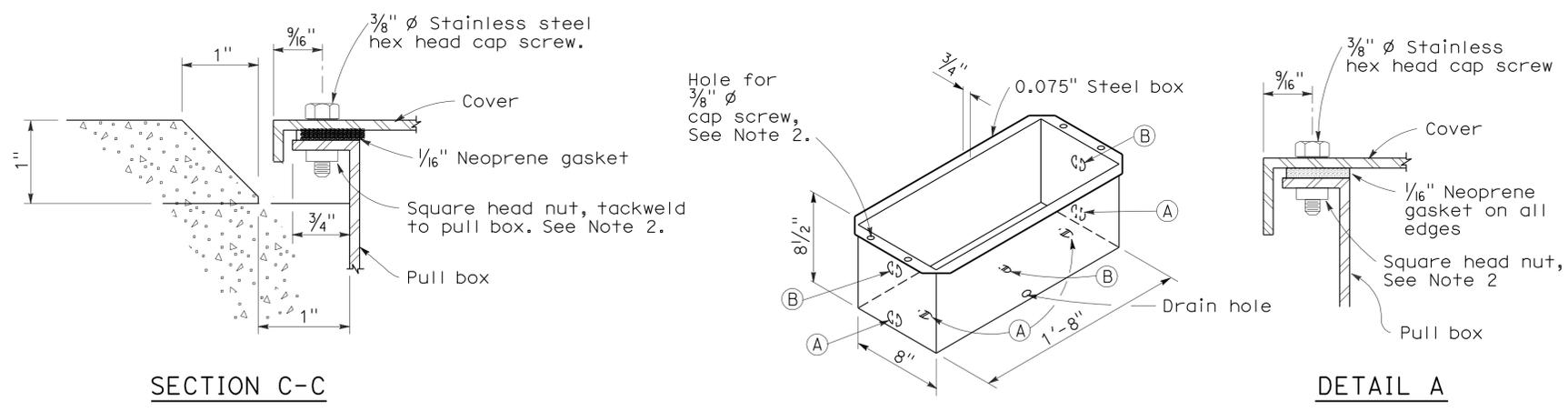
Jeffrey G. McRae
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 October 5, 2007
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 No. E14512
 Exp. 6-30-08
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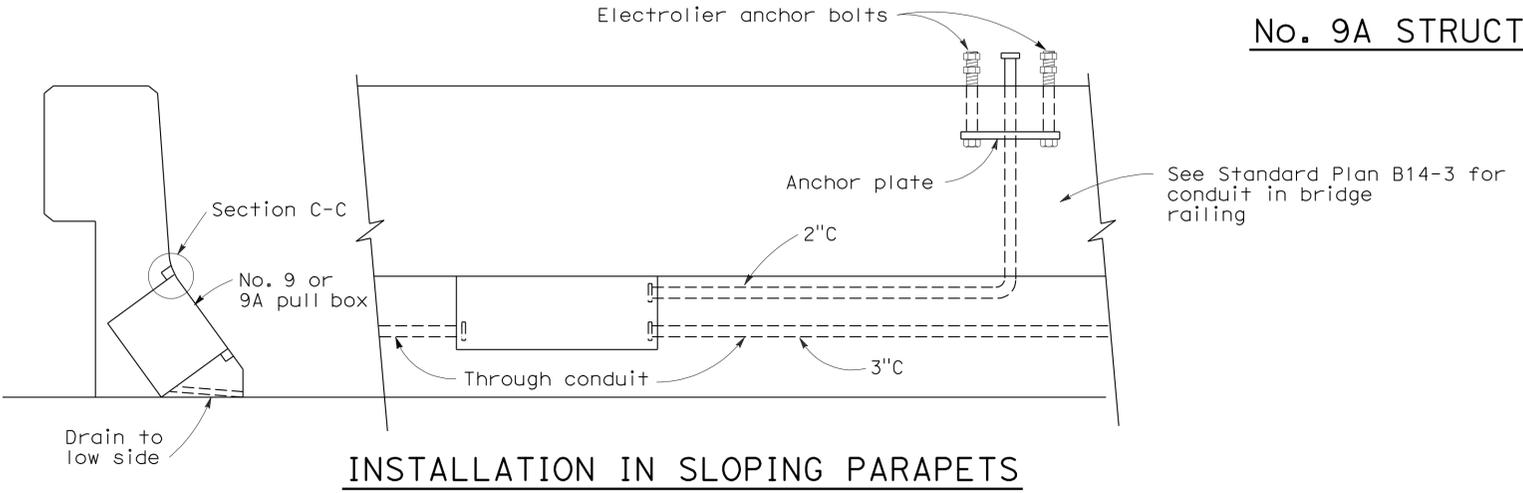


INSTALLATION NOTE:
 Box shall be parallel to top of railing. Close cover box during pouring with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of raintight hood.

No. 9 STRUCTURE PULL BOX



No. 9A STRUCTURE PULL BOX



INSTALLATION IN SLOPING PARAPETS
 For reinforcement in area of electrolier, see railing sheets. For electrolier anchor bolts, see Standard Plan ES-6B.

- NOTES:** No. 9 and 9A Pull Box
- Corner joints shall be lapped and secured by spot welding or riveting.
 - Where cap screws are used to attach cover to box, either of the following methods of providing adequate threading may be used:
 - Tack weld square nut to bottom of flange (Total 4), or
 - Tack weld a 1/4" x 5/8" x 8" bar beneath flange (Total 2).
 - Pound knockouts flat after punching.
 - Multiple size knockouts shall not be permitted.
 - Pull box covers shall be marked as shown on Standard Plan ES-8.

- KNOCKOUT SCHEDULE**
No. 9 AND 9A PULL BOX
- (A) 2"C, 1 each end, 2 on bottom.
 - (B) 3"C, 1 each end, 1 on bottom.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(ELECTRICAL DETAILS
STRUCTURE INSTALLATIONS)

NO SCALE
 RSP ES-9C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9C
 DATED MAY 1, 2006 - PAGE 456 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-9C

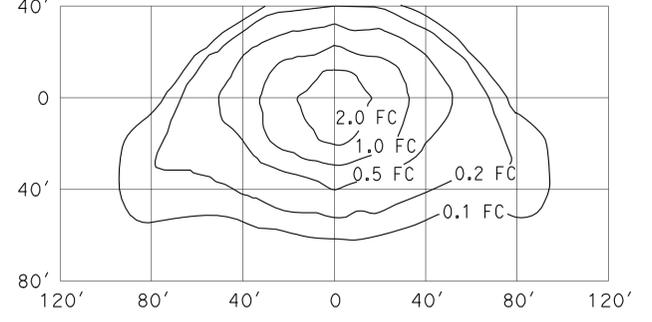
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	17	6.0/12.6	197	284

Jeffery G. McRae
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 July 20, 2012
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 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

To accompany plans dated 9-24-12

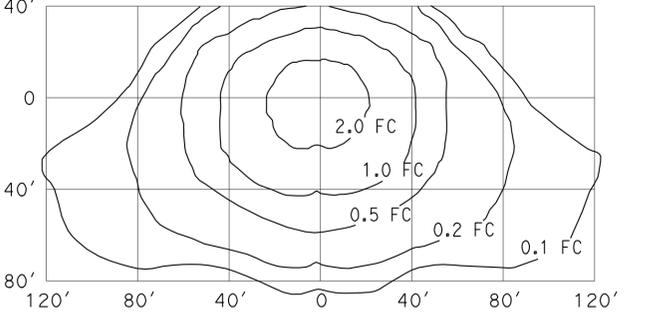
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 34' Mounting Height
 Lamp operated at 22,000 lm
 200-W high pressure sodium lamp
 ANSI Designation S66

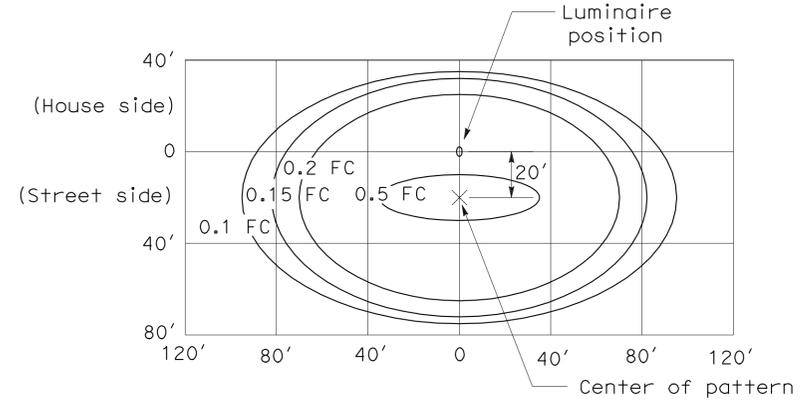
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 40' Mounting Height
 Lamp operated at 37,000 lm
 310-W high pressure sodium lamp
 ANSI Designation S67

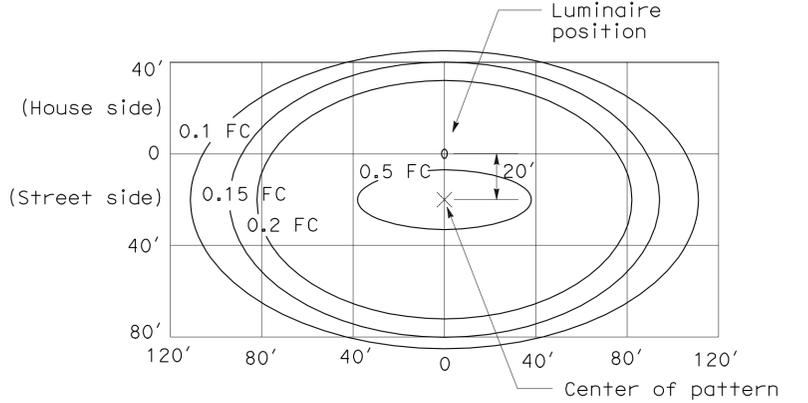
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 1

200-W HPS Equivalent at 34' Mounting Height

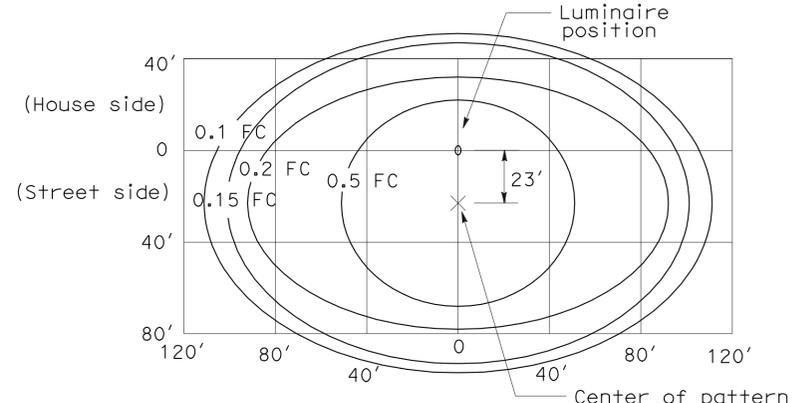
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 2

310-W HPS Equivalent at 40' Mounting Height

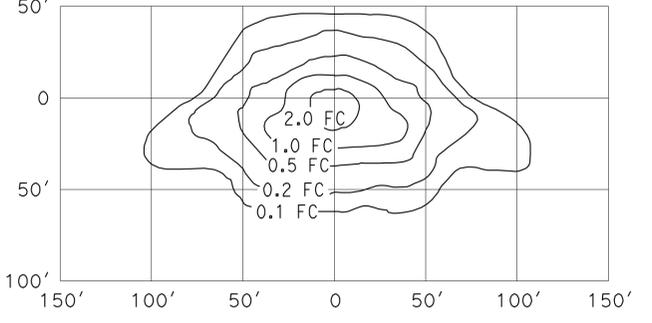
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 4

400-W HPS Equivalent at 40' Mounting Height

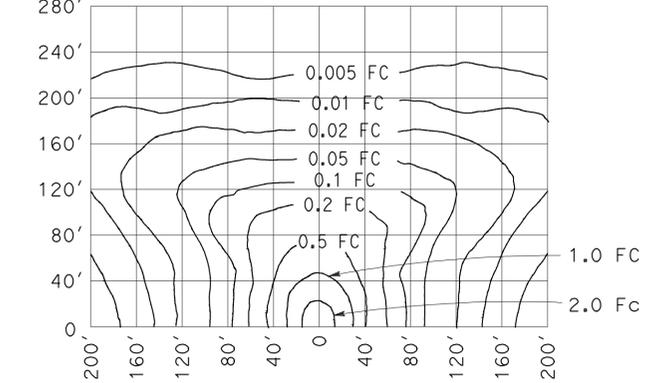
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 30' Mounting Height
 Lamp operated at 16,000 lm
 150-W high pressure sodium lamp
 ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



LOW PRESSURE SODIUM LUMINAIRE

40' Mounting Height
 Lamp operated at 33,000 lm
 180-W low pressure sodium lamp

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

NSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED MAY 2006.

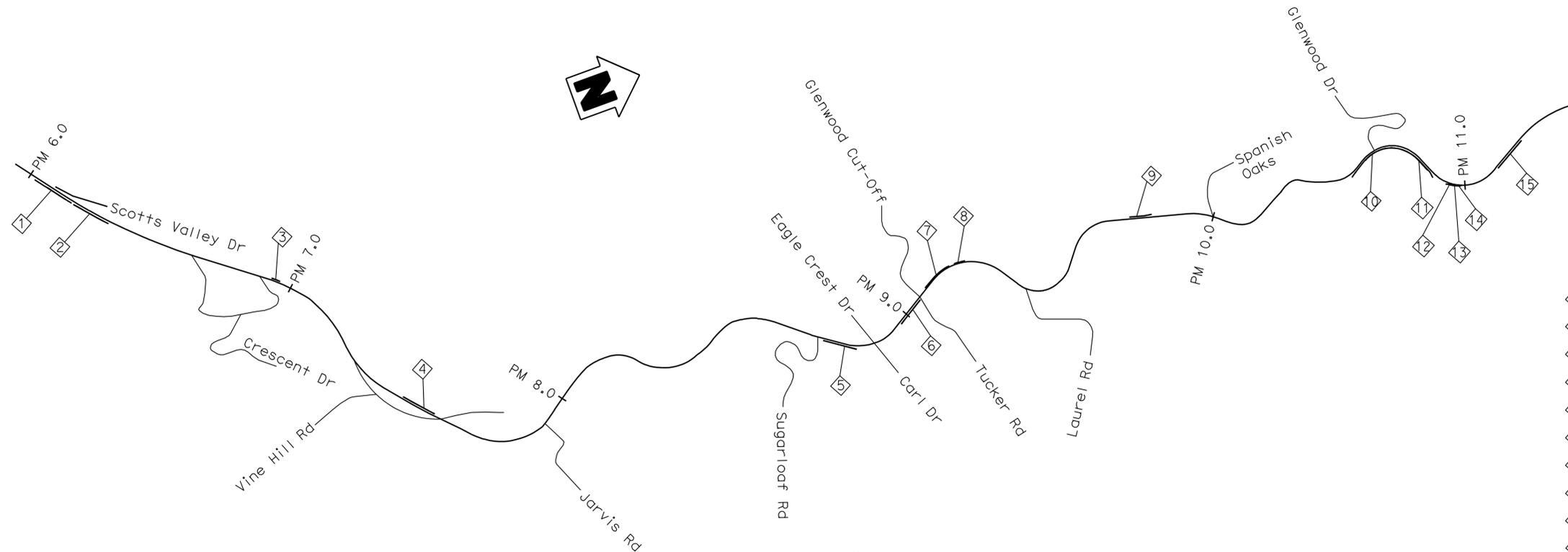
NEW STANDARD PLAN NSP ES-10A

2006 NEW STANDARD PLAN NSP ES-10A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	Scr	17	6.0/12.6	198	284

Todd W. Dudley
REGISTERED CIVIL ENGINEER 8/4/11 DATE
9-24-12 PLANS APPROVAL DATE
T. Dudley
No. C039514
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

AECOM TECHNICAL SERVICES, INC.
2020 L STREET, SUITE 300
SACRAMENTO, CALIFORNIA 95811



WALL LOCATION KEY MAP
NO SCALE

INDEX TO PLANS

SHEET No.	TITLE	SHEET No.	TITLE	SHEET No.	TITLE	SHEET No.	TITLE
1.	INDEX TO PLANS	RETAINING WALL NO. 6	RETAINING WALL NO. 11	LOG OF TEST BORINGS			
2.	GENERAL NOTES NO. 1	16. RW NO. 6 GENERAL PLAN	34. RW NO. 11 GENERAL PLAN	51. LOTB RW NO. 1			
3.	GENERAL NOTES NO. 2	17. RW NO. 6 STRUCTURE PLAN	35. RW NO. 11 STRUCTURE PLAN NO. 1	52. LOTB RW NO. 2			
	RETAINING WALL NO. 1	18. RW NO. 6 FOUNDATION PLAN	36. RW NO. 11 STRUCTURE PLAN NO. 2	53. LOTB RW NO. 3			
4.	RW NO. 1 GENERAL PLAN	RETAINING WALL NO. 7	37. RW NO. 11 FOUNDATION PLAN	54. LOTB RW NO. 4, 1 OF 2			
	RETAINING WALL NO. 2	19. RW NO. 7 GENERAL PLAN	RETAINING WALL NO. 15	55. LOTB RW NO. 4, 2 OF 2			
5.	RW NO. 2 GENERAL PLAN	20. RW NO. 7 STRUCTURE PLAN	38. RW NO. 15 GENERAL PLAN	56. LOTB RW NO. 6			
	RETAINING WALL NO. 3	21. RW NO. 7 FOUNDATION PLAN	39. RW NO. 15 STRUCTURE PLAN	57. LOTB RW NO. 7			
6.	RW NO. 3 GENERAL PLAN	RETAINING WALL NO. 8	40. RW NO. 15 FOUNDATION PLAN	58. LOTB RW NO. 8			
7.	RW NO. 3 STRUCTURE PLAN	22. RW NO. 8 GENERAL PLAN	RETAINING WALLS	59. LOTB RW NO. 9			
8.	RW NO. 3 FOUNDATION PLAN	23. RW NO. 8 STRUCTURE PLAN	41. DETAILS NO. 1	60. LOTB RW NO. 10			
	RETAINING WALL NO. 4	24. RW NO. 8 FOUNDATION PLAN	42. DETAILS NO. 2	61. LOTB RW NO. 11			
9.	RW NO. 4 GENERAL PLAN	RETAINING WALL NO. 9	43. DETAILS NO. 3	62. LOTB NOTES 1 OF 3			
10.	RW NO. 4 STRUCTURE PLAN NO. 1	25. RW NO. 9 GENERAL PLAN	44. DETAILS NO. 4	63. LOTB NOTES 2 OF 3			
11.	RW NO. 4 STRUCTURE PLAN NO. 2	26. RW NO. 9 STRUCTURE PLAN	45. DETAILS NO. 5	64. LOTB NOTES 3 OF 3			
12.	RW NO. 4 FOUNDATION PLAN	27. RW NO. 9 FOUNDATION PLAN	46. DETAILS NO. 6				
	RETAINING WALL NO. 5	RETAINING WALL NO. 10	47. DRAINAGE INLET DETAILS NO.1				
13.	RW NO. 5 GENERAL PLAN	28. RW NO. 10 GENERAL PLAN NO. 1	48. DRAINAGE INLET DETAILS NO.2				
14.	RW NO. 5 STRUCTURE PLAN	29. RW NO. 10 GENERAL PLAN NO. 2	49. MAINTENANCE PLATFORM DETAILS NO. 1				
15.	RW NO. 5 FOUNDATION PLAN	30. RW NO. 10 STRUCTURE PLAN NO. 1	50. MAINTENANCE PLATFORM DETAILS NO. 2				
		31. RW NO. 10 STRUCTURE PLAN NO. 2					
		32. RW NO. 10 FOUNDATION PLAN NO. 1					
		33. RW NO. 10 FOUNDATION PLAN NO. 2					

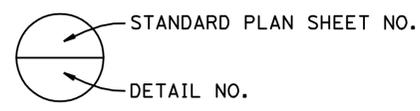
LEGENDS:

- ① Retaining Wall No. 1 (Location 1)
- ② Retaining Wall No. 2 (Location 2)
- ③ Retaining Wall No. 3 (Location 4)
- ④ Retaining Wall No. 4 (Location 5)
- ⑤ Retaining Wall No. 5 (Location 13)
- ⑥ Retaining Wall No. 6 (Location A)
- ⑦ Retaining Wall No. 7 (Location 15)
- ⑧ Retaining Wall No. 8 (Location 15)
- ⑨ Retaining Wall No. 9 (Location B)
- ⑩ Retaining Wall No. 10 (Location 19/21)
- ⑪ Retaining Wall No. 11 (Location 19/21)
- ⑫ Retaining Wall No. 12 * (Location 22)
- ⑬ Retaining Wall No. 13 * (Location 22)
- ⑭ Retaining Wall No. 14 * (Location 22)
- ⑮ Retaining Wall No. 15 (Location 23)

* For Retaining Wall Nos 12, 13 & 14, see "SIDEHILL VIADUCT" plans.

STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
RSP D74B	DRAINAGE INLETS
D74C	DRAINAGE INLET DETAILS
RSP D77B	BICYCLE PROOF GRATE DETAILS
BO-1	BRIDGE DETAILS
BO-3	BRIDGE DETAILS
BO-13	BRIDGE DETAILS
B11-55	CONCRETE BARRIER TYPE 732
B11-56	CONCRETE BARRIER TYPE 736
RSP ES-6A	ELECTRICAL SYSTEMS (LIGHTING STANDARD TYPES 15 AND 21)
ES-6B	ELECTRICAL SYSTEMS (LIGHTING STANDARD TYPES 15 AND 21 BARRIER RAIL MOUNTED DETAILS)



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

DESIGN OVERSIGHT Wei An	DESIGN BY T. Dudley	CHECKED R. Price	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. Varies	RETAINING WALLS INDEX TO PLANS
SIGN OFF DATE	DETAILS BY C. Lee / Y. Ng	CHECKED R. Price		POST MILE Varies	
DESIGN DETAIL SHEET (ENGLISH) (REV. 2/25/05)	QUANTITIES BY T. Dudley / M. Stiller	CHECKED E. Navarez/S. Desalegn		CU 05 EA 0L7014	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY) 9/28/08 12/01/08 02/04/09 03/18/09 04/23/09 03/25/11 05/25/11 08/04/11
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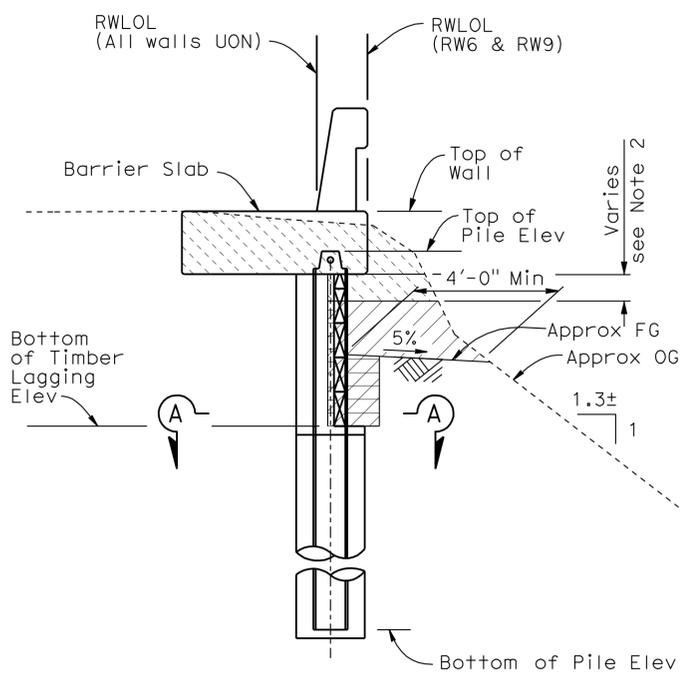
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	Scr	17	6.0/12.6	199	284

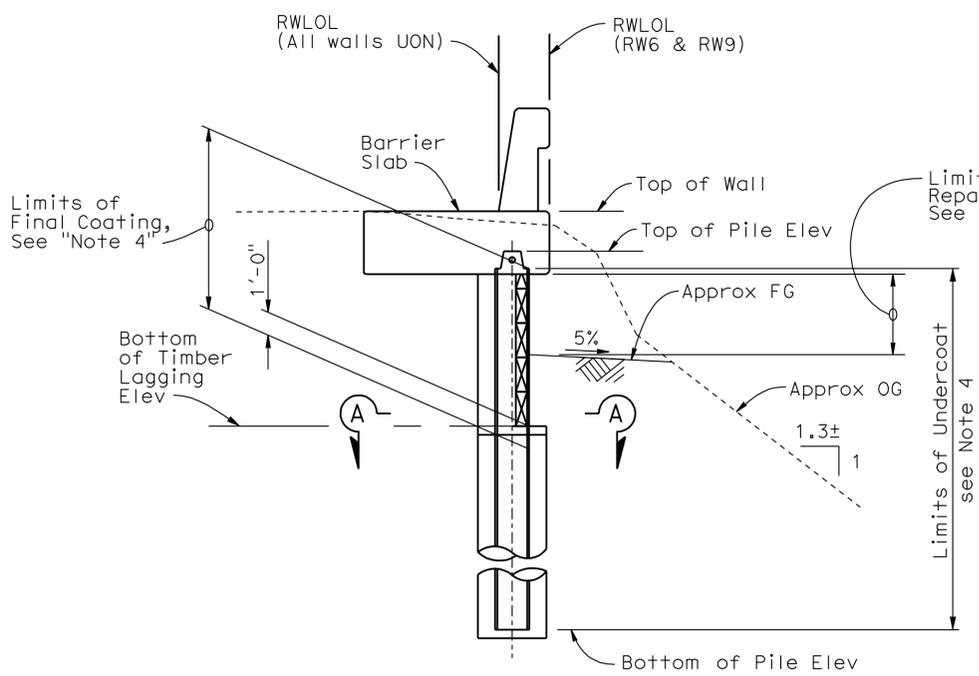
REGISTERED CIVIL ENGINEER
 T. Dudley
 No. C039514
 Exp. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

8/4/11 DATE
 9-24-12 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.

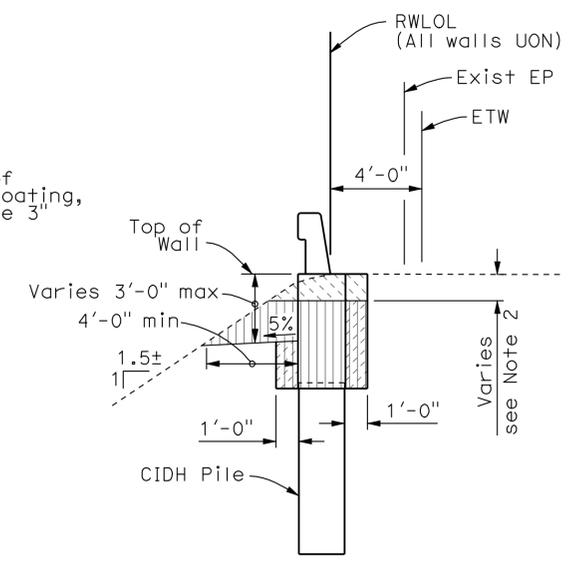
AECOM TECHNICAL SERVICES, INC.
 2020 L STREET, SUITE 300
 SACRAMENTO, CALIFORNIA 95811



LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL (SOLDIER PILE WALL)
 $\frac{3}{8}'' = 1'-0''$



LIMITS OF PAYMENT FOR PAINTING OF PILES
 $\frac{3}{8}'' = 1'-0''$



LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL (RETAINING WALL)
 $\frac{1}{4}'' = 1'-0''$

GENERAL NOTES
LOAD FACTOR DESIGN

DESIGN: CALTRANS BRIDGE DESIGN SPECIFICATIONS - April 2000 (LFD) (1996 AASHTO with Interims and Revision by CALTRANS)

LIVE LOAD: Surcharge = 240 psf

REINFORCED CONCRETE (Typ):
 $f'_c = 3.6$ ksi (Concrete compressive strength at 28 days)
 $f_y = 60$ ksi (Yield strength of reinforcement)

REINFORCED CONCRETE (CIDH Pile):
 $f'_c = 4.0$ ksi (Concrete compressive strength at 28 days)
 $f_y = 60$ ksi (Yield strength of reinforcement)

STRUCTURAL STEEL:
 Steel Piles - ASTM Designation: A709, Grade 50
 Bolts - ASTM Designation: A307

TIMBER:
 Treated Douglas Fir Grade No. 1 or Better
 Lagging members shall be sawn full size and pressure treated with preservative

TRAFFIC BARRIER LOAD:
 Minimum design force: 20 kips/pile or 3.5 kips/ft X Pile Spacing not to exceed 40 kips. Apply as lateral force at top of pile, pile connection into barrier slab assumed to be pinned.

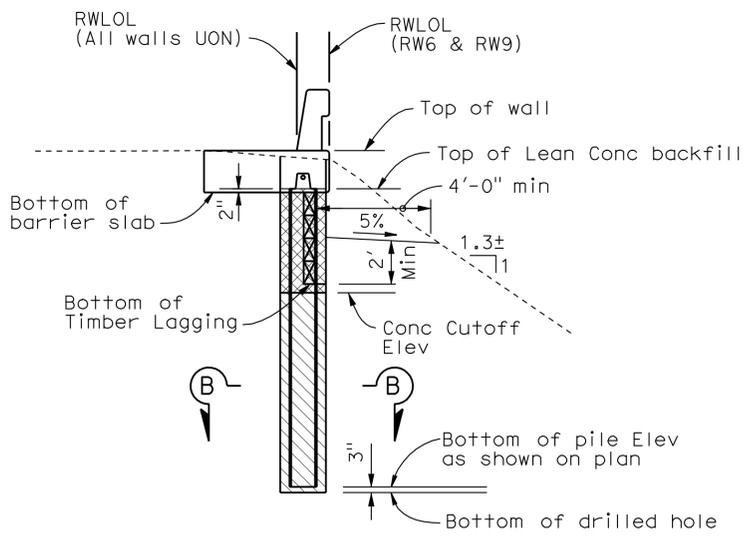
SOIL STRENGTH PARAMETERS:
 See Foundation Report for each retaining Wall for Soil Strength Parameters.

NOTE:

- For Sections A-A and B-B see "General Notes No. 2" sheet.
- See Limits of Structural Excavation (Type Z-2) (Aerially Deposited Lead) on "General Notes No. 2" sheet for variations in depth of Type Z-2 material.
- Limits of repair coating apply to retaining walls 1 and 2 only.
- Final coating and undercoating shall be applied to all soldier piles, except those already in place at retaining walls 1 and 2.

LEGEND

- Structure Backfill (Soldier Pile Wall)
- Structure Excavation (Soldier Pile Wall)
- Structure Excavation (Retaining Wall)
- Structure Backfill (Retaining Wall)
- Lean Concrete Backfill
- Concrete Backfill
- Structure Excavation (Type Z-2) (Aerially Deposited Lead)



LIMITS OF PAYMENT FOR CONCRETE BACKFILL
 $\frac{1}{4}'' = 1'-0''$

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

DESIGN OVERSIGHT	Wei An
SIGN OFF DATE	

DESIGN	BY T. Dudley	CHECKED R. Price
DETAILS	BY S. Desalegn	CHECKED R. Price
QUANTITIES	BY T. Dudley / M. Stiller	CHECKED E. Navarez/S. Desalegn

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Stephen J. Misinski
 PROJECT ENGINEER

BRIDGE NO.	Varies
POST MILE	Varies

RETAINING WALLS GENERAL NOTES NO. 1

DESIGN DETAIL SHEET (ENGLISH) (REV. 2/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

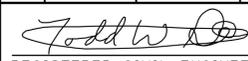
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CU 05
 EA 0L7014

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
9/28/08 12/01/08 02/04/09 03/18/09 03/18/09 04/23/09 04/23/09 05/27/11 08/04/11	2	64

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	Scr	17	6.0/12.6	200	284


 REGISTERED CIVIL ENGINEER DATE 8/4/11
 PLANS APPROVAL DATE 9-24-12
 T. Dudley
 No. C039514
 Exp. 12/31/11
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 STATE OF CALIFORNIA

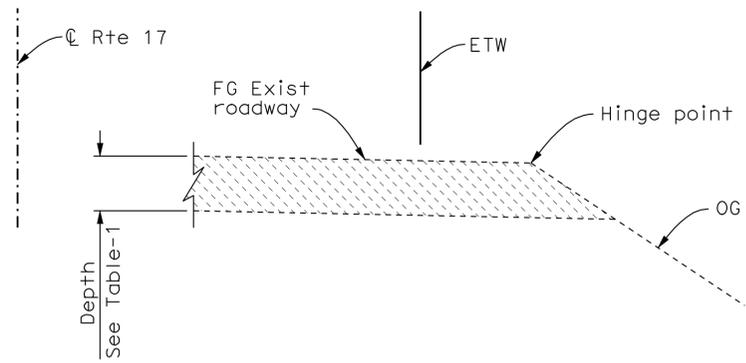
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 2020 L STREET, SUITE 300
 SACRAMENTO, CALIFORNIA 95811

TABLE 1 - LIMITS OF STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)

STATION LIMITS	RETAINING WALL NO.	DEPTH OF (TYPE Z-2) MATERIAL (FT)	NOTES NO.
403+39.50 - 404+59.50	3	2	
501+00.00 - 506+21.00	4	2	
1301+75.00 - 1305+28.00	5	1	
20+26.51 - 24+46.51	6	2	1
1501+23.00 - 1505+80.00	7	1	
1506+97.13 - 1508+24.75	8	1	
65+49.66 - 68+89.66	9	1	1
1900+64.83 - 1908+18.38	10	3	2
1909+09.54 - 1914+36.91	11	1	
2301+11.00 - 2303+64.00	15	6	3

NOTES:

1. Stations measured along the retaining wall layout line.
2. If the top three feet of contaminated soil is not disposed of separately, then the full volume of soil excavated for drilled holes, both for CIDH piles and for soldier piles, must be handled and disposed of as Structure Excavation (Type Z-2) (Aerially Deposited Lead).
3. The full volume of soils excavated for the drilled holes for the two new soldier piles shall be handled and disposed of as Structure Excavation (Type Z-2) (Aerially Deposited Lead).



LIMITS OF STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)

No scale
(Detail shown for RH side, LH side similar)

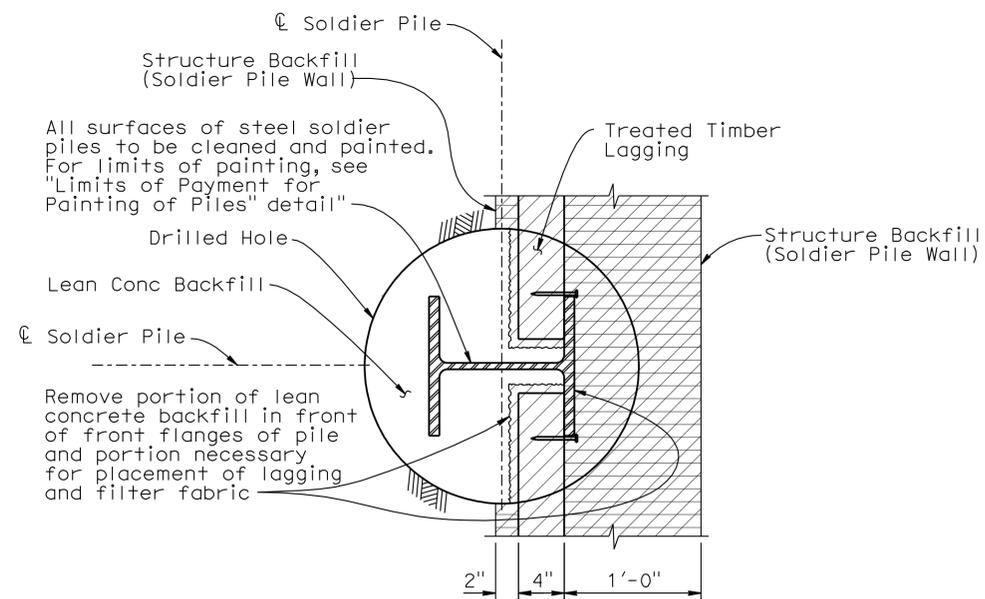
Note: Existing highway improvements not shown for clarity.

ABBREVIATIONS

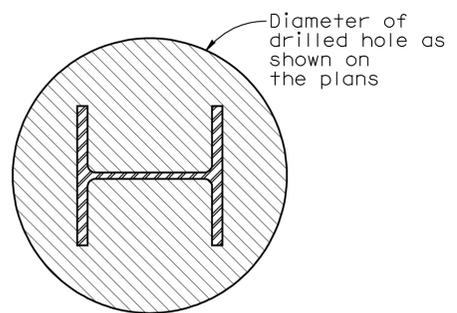
RH Right Hand
LH Left Hand

LEGEND

-  Structure Backfill (Soldier Pile Wall)
-  Structure Excavation (Soldier Pile Wall)
-  Concrete Backfill
-  Structure Excavation (Type Z-2) (Aerially Deposited Lead)



SECTION A-A
1/2" = 1'-0"



SECTION B-B
1/2" = 1'-0"

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

DESIGN OVERSIGHT Wei An	DESIGN BY T. Dudley	CHECKED R. Price	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. Varies	RETAINING WALLS GENERAL NOTES NO. 2
	DETAILS BY S. Desalegn	CHECKED R. Price		PROJECT ENGINEER Stephen J. Mislinski	
	QUANTITIES BY T. Dudley / M. Stiller	CHECKED E. Navarez/S. Desalegn		POST MILE Varies	
SIGN OFF DATE	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		CU 05 EA 0L7014	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY) 04/23/09 04/27/09 03/25/11 05/25/11 08/04/11
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