

INDEX OF PLANS

SHEET No.	DESCRIPTION
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9	CONSTRUCTION AREA SIGNS
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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
HSNHG-Q101(188)E
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MENDOCINO COUNTY
IN AND NEAR UKIAH
FROM EL ROBLE ROAD OVERCROSSING
TO ROUTE 101/20 SEPARATION

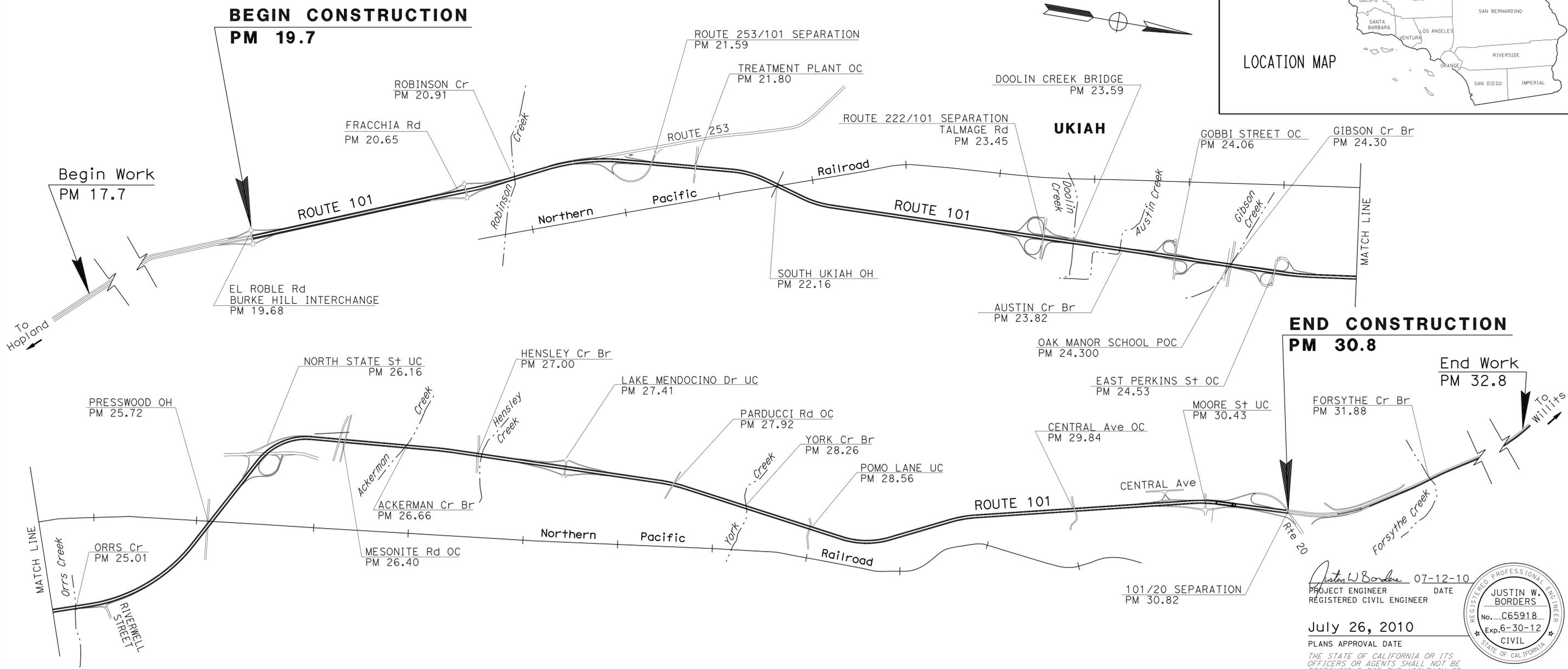
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	1	24





LOCATION MAP



PROJECT MANAGER: GRACE TELL
 DESIGN ENGINEER: AL TRUJILLO

END CONSTRUCTION
PM 30.8

End Work
 PM 32.8

JUSTIN W. BORDERS 07-12-10
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

July 26, 2010
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	3	24

Justin W. Borders 07-14-10
 REGISTERED CIVIL ENGINEER DATE
 7-26-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JUSTIN W. BORDERS
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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



NOTES:

1. TRANSITION DETAIL IS TYPICAL AT ALL TAPER POINTS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN POSITIVELY LOCATED.
3. OFFSET DISTANCES ARE MEASURED FROM MBGR TANGENT.

LEGEND:

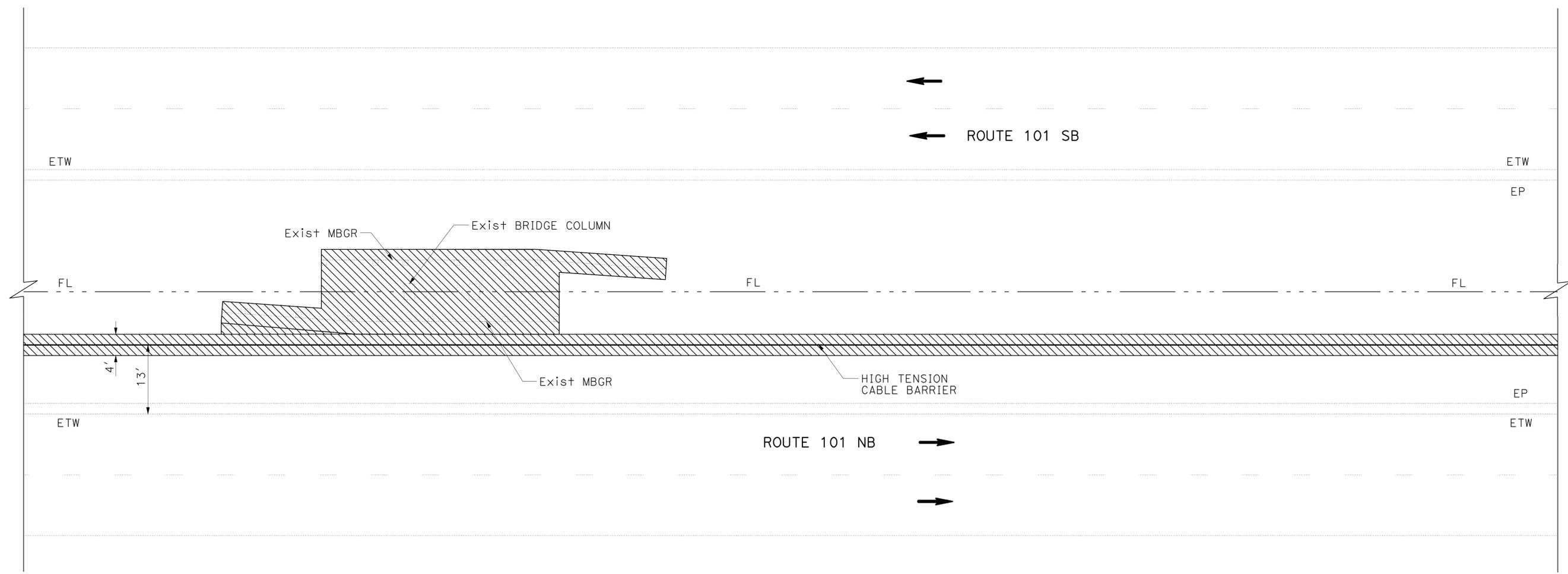
- ➔ DIRECTION OF TRAVEL
- ▨ MINOR HMA
- ▨ VEGETATION CONTROL (MINOR CONCRETE)

ABBREVIATION:

H - ADDITIONAL HEIGHT TO EXISTING INLET

COLUMN LOCATIONS

BRIDGE	PM
EL ROBLE Rd OC	19.68
FRACCHIA Rd OC	20.65
ROUTE 253/101 SEPARATION	21.59
TREATMENT PLANT OC	21.80
TALMAGE Rd OC	23.45
GOBBI St OC	24.06
EAST PERKINS St OC	24.53
MASONITE Rd OC	26.40
PARDUCCI Rd OC	27.92
CENTRAL Ave OC	29.84



**CABLE BARRIER LAYOUT
AT OC BRIDGE COLUMNS (Typ)**

CONSTRUCTION DETAILS
NO SCALE
C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DESIGN
 AL TRUJILLO
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 JUSTIN BORDERS
 BILL LEHMAN
 REVISOR
 DATE
 REVISED BY
 DATE
 REVISION

LAST REVISION | DATE PLOTTED => 28-JUL-2010
 07-14-10 TIME PLOTTED => 13:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	4	24

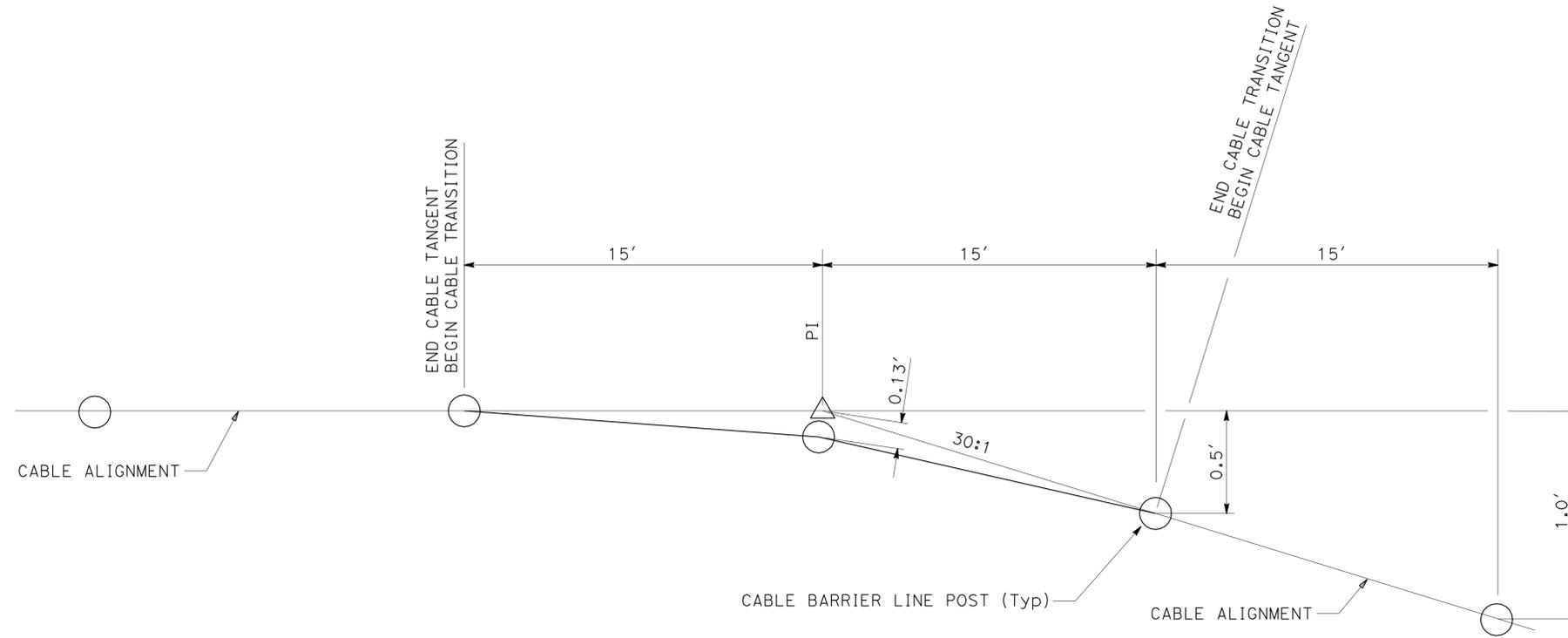
Justin W. Borders 07-14-10
 REGISTERED CIVIL ENGINEER DATE
 7-26-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JUSTIN W. BORDERS
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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NOTES:

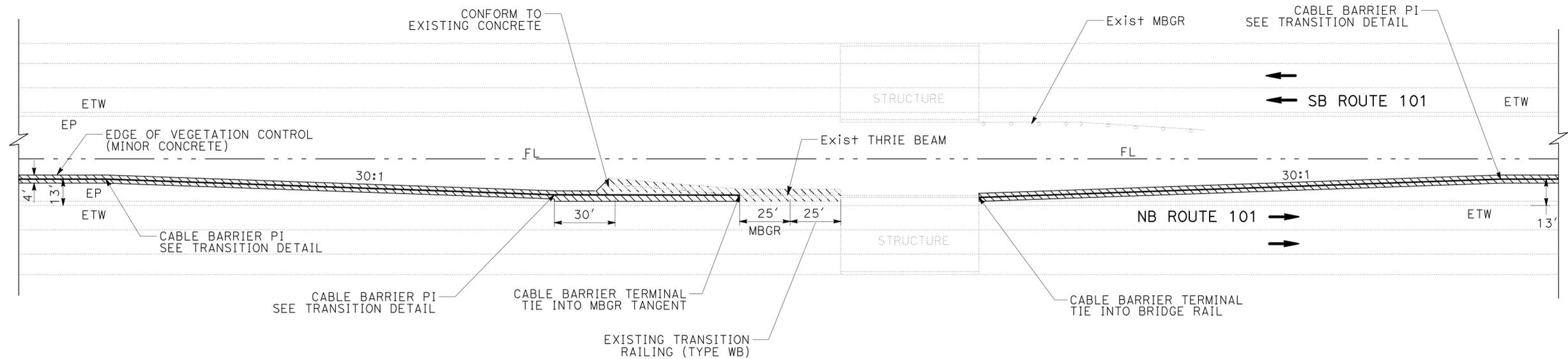
- FOR OFFSETS, SEE TRANSITION DETAIL.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN POSITIVELY LOCATED.



PROFILE TRANSITION DETAIL (Typ)

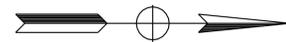
CABLE BARRIER TIE IN LOCATIONS

BRIDGE (NB)	PM
ROBINSON Cr BRIDGE	21.91
SOUTH UKIAH OH	22.16
DOOLIN Cr BRIDGE	23.59
GIBSON Cr BRIDGE	24.30
ORRS Cr BRIDGE	25.01
PRESSWOOD OH	25.72
NORTH STATE UC	26.16
ACKERMAN Cr BRIDGE	26.66
HENSLEY Cr BRIDGE	27.00
LAKE MENDECINO Dr UC	27.41
YORK Cr BRIDGE	28.26
POMO LANE UC	28.56
MOORE St UC	30.43
ROUTE 101/20 SEPARATION	30.82



CABLE BARRIER LAYOUT TIE-IN TO MBGR END TREATMENT (UC BRIDGERAIL APPROACH) (Typ)

CONSTRUCTION DETAILS
NO SCALE
C-2



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	6	24

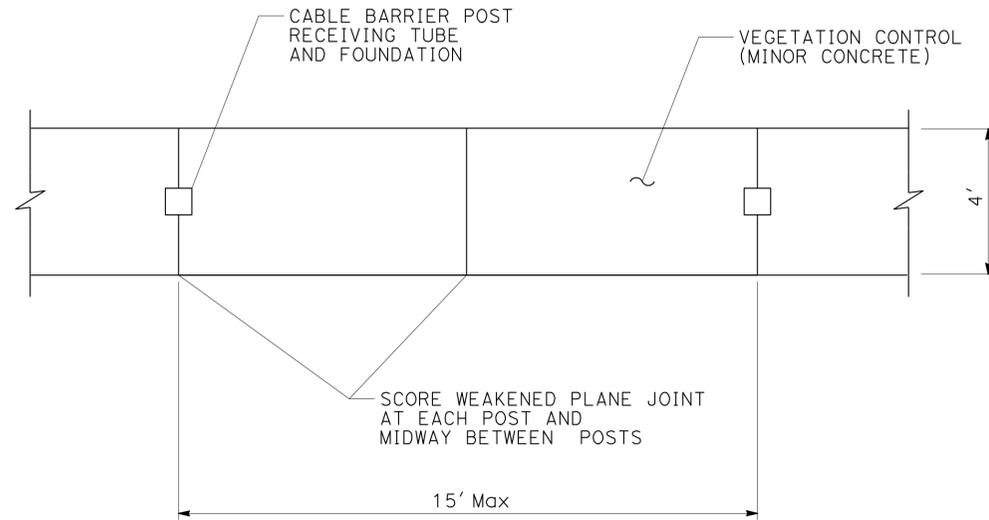
<i>Justin W Borders</i>	07-14-10
REGISTERED CIVIL ENGINEER	DATE
7-26-10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
JUSTIN W. BORDERS
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

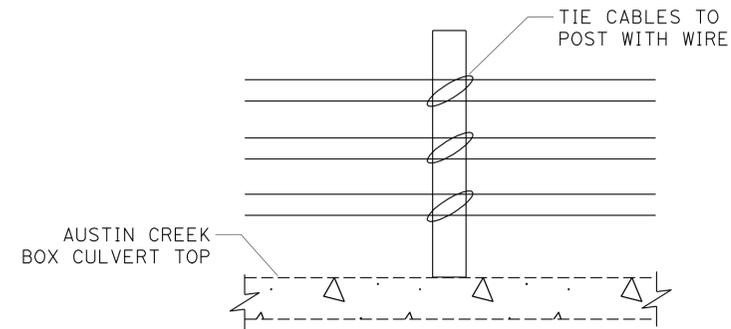
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

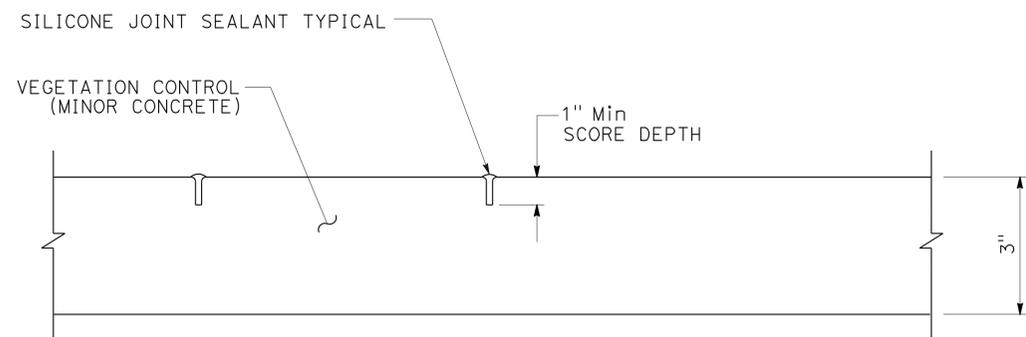
1. ASPHALT RUBBER JOINT SEALANT SHALL BE APPLIED TO ALL JOINTS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN POSITIVELY LOCATED.



PLAN

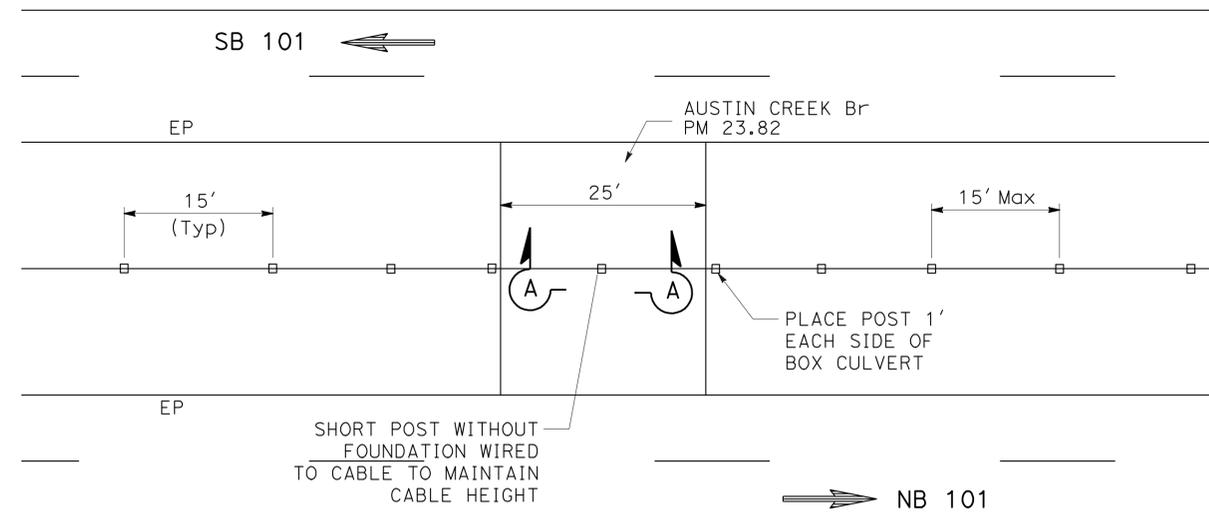


SECTION A-A



ELEVATION

VEGETATION CONTROL (MINOR CONCRETE) SCORING DETAIL



POST SPACING AROUND BOX CULVERT

CONSTRUCTION DETAILS

NO SCALE

C-4

P:\proj\101\49990_plans\pse\249990ga004.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR

AL TRUJILLO

CALCULATED/DESIGNED BY

CHECKED BY

BILL LEHMAN

JUSTIN BORDERS

REVISED BY

DATE REVISED

X

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	7	24

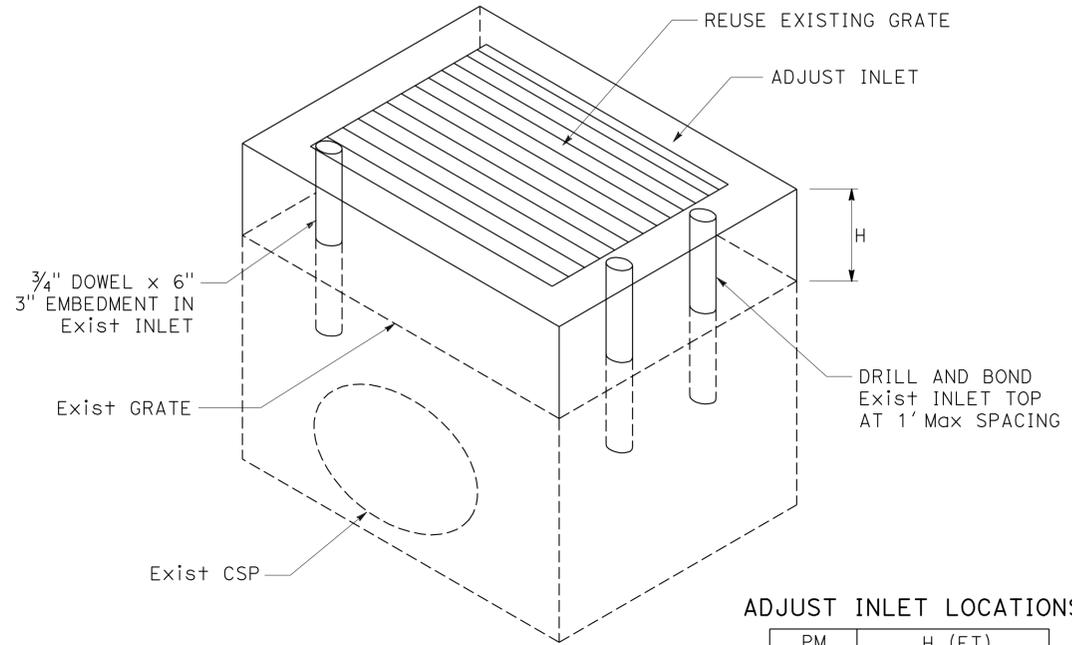
Justin W. Borders 07-14-10
 REGISTERED CIVIL ENGINEER DATE
 7-26-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JUSTIN W. BORDERS
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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NOTES:

1. MODIFIED INLETS SHALL BE CAST IN PLACE.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN POSITIVELY LOCATED.



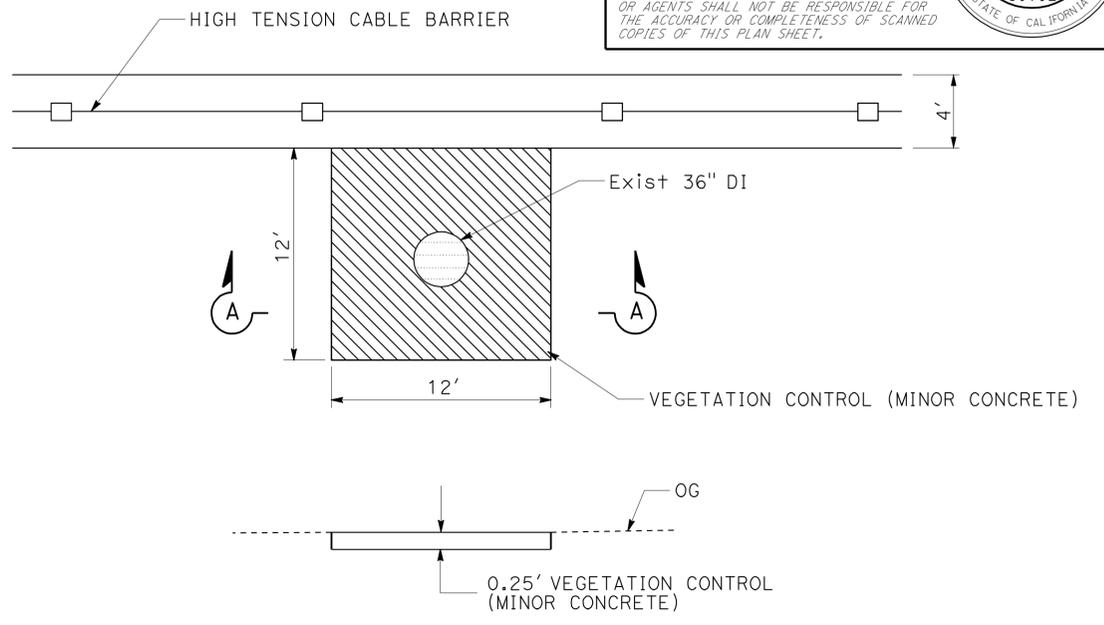
ADJUST INLET LOCATIONS

PM	H (FT)
21.05	0.5
21.21	0.5
21.55	0.5
22.44	1
25.94	0.75
27.16	0.5
29.52	0.75

ADJUST INLET

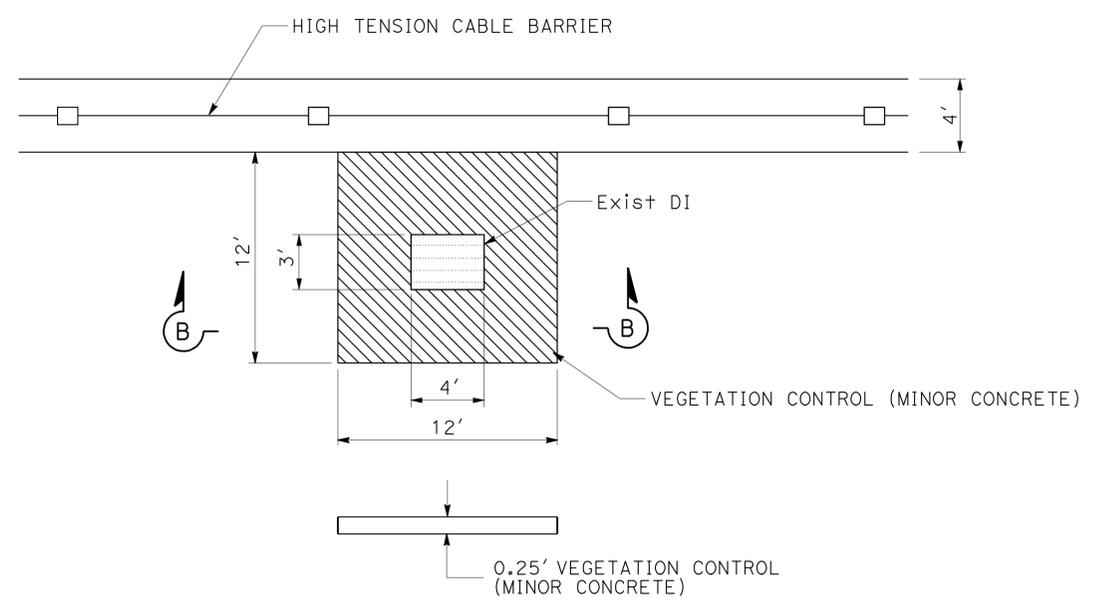
DRAINAGE INLET LOCATIONS

PM	GRATE TYPE
21.05	RECTANGULAR
21.21	RECTANGULAR
21.55	RECTANGULAR
21.65	RECTANGULAR
21.67	RECTANGULAR
21.84	RECTANGULAR
22.44	RECTANGULAR
22.96	CIRCULAR
23.22	RECTANGULAR
23.42	RECTANGULAR
23.72	RECTANGULAR
24.45	RECTANGULAR
24.85	RECTANGULAR
25.12	CIRCULAR
25.23	RECTANGULAR
25.36	RECTANGULAR
25.51	RECTANGULAR
25.88	RECTANGULAR
26.31	RECTANGULAR
26.46	RECTANGULAR
26.53	RECTANGULAR
26.60	RECTANGULAR
26.92	RECTANGULAR
27.16	RECTANGULAR
27.26	RECTANGULAR DOUBLE GRATE
27.30	RECTANGULAR
27.53	RECTANGULAR
27.75	RECTANGULAR
28.19	RECTANGULAR
28.38	RECTANGULAR
28.48	RECTANGULAR
28.57	RECTANGULAR
28.68	RECTANGULAR
28.81	RECTANGULAR
28.96	RECTANGULAR
29.10	RECTANGULAR
29.28	RECTANGULAR
29.39	RECTANGULAR
29.52	RECTANGULAR
29.62	RECTANGULAR
29.82	RECTANGULAR
29.89	RECTANGULAR
29.97	RECTANGULAR
30.22	RECTANGULAR
30.38	RECTANGULAR
30.45	RECTANGULAR
30.54	RECTANGULAR
30.61	RECTANGULAR



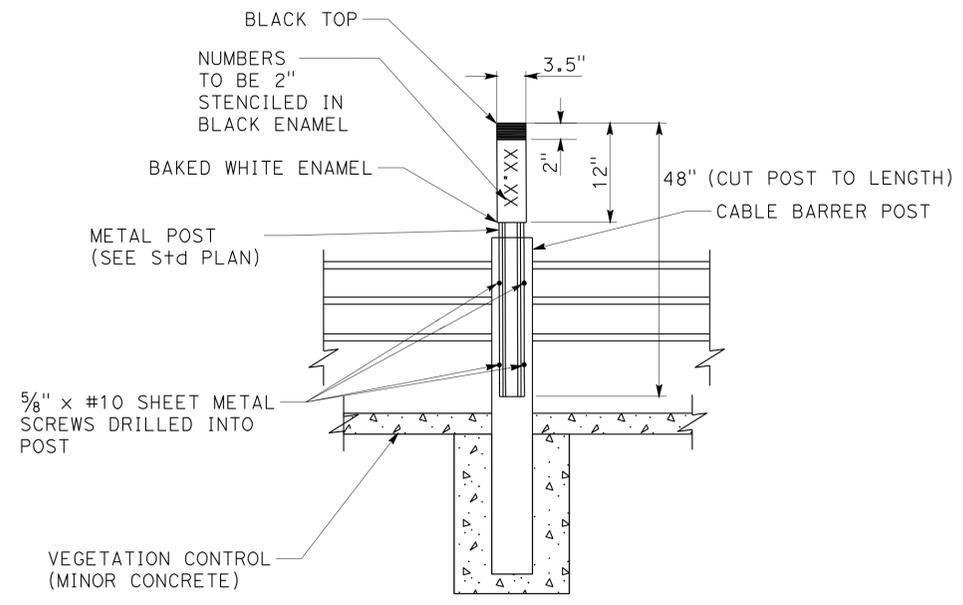
SECTION A-A

CONCRETE APRON DETAIL (CIRCULAR DI)



SECTION B-B

CONCRETE APRON DETAIL (RECTANGULAR DI)



CULVERT MARKER (BARRIER MOUNTED)

CONSTRUCTION DETAILS

NO SCALE

C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DESIGN
 AL TRUJILLO
 BILL LEHMAN
 JUSTIN BORDERS
 REVISIONS: 01, 02, 03, 04, 05, 06, 07, 08, 09, 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

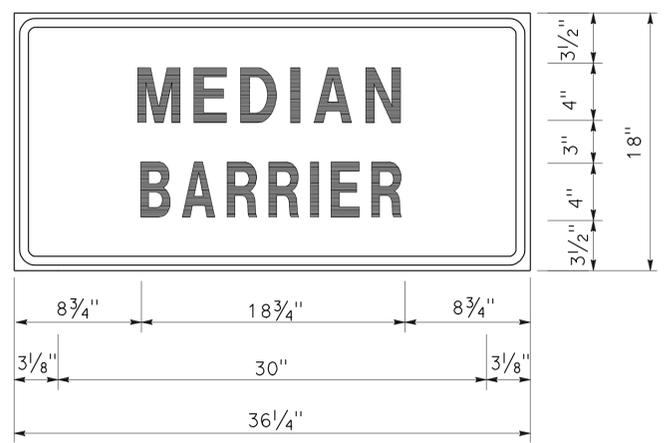
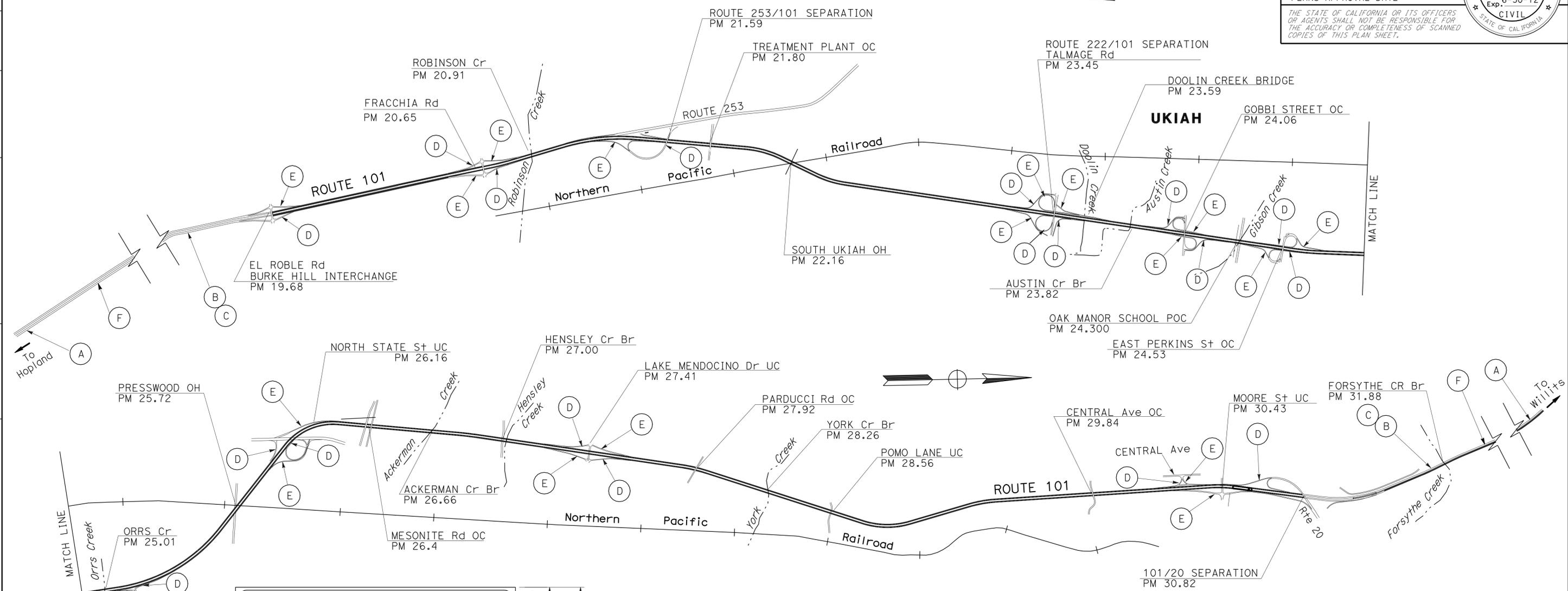
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	101	19.7/30.8	9	24

Justin W Borders 07-14-10
 REGISTERED CIVIL ENGINEER DATE
 7-26-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JUSTIN W. BORDERS
 No. C65918
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

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- NOTES:**
- A MINIMUM OF 500' MUST BE PLACED BETWEEN SIGNS "A" AND "B" AND A MINIMUM OF 1000' BETWEEN SIGNS "B" AND BEGINNING OF PROJECT.
 - EXISTING UTILITY FACILITIES HAVE NOT BEEN POSITIVELY LOCATED.



1.5" RADIUS, 0.6" BORDERS, 0.4" INDENT, BLACK ON ORANGE;

C23B SIGN PANEL DETAIL
PLACE UNDER G20-1 SIGN

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

TYPE	CODE	PANEL SIZE	SIGN MESSAGE	No. AND SIZE OF POSTS	No. OF SIGNS	COMMENTS
(A)	C40A (CA)	48" x 48"	TRAFFIC FINES DOUBLED IN WORK AREA	2 - 4" x 6"	2	
(B)	G20-1	48" x 48"	ROAD WORK NEXT 11 MILES	2 - 4" x 6"	2	PLACE "MEDIAN BARRIER" SIGN ON "ROAD WORK NEXT 11 MILES" SIGN POST
(C)	C23B (CA)	36" x 18"	MEDIAN BARRIER			
(D)	W20-1	48" x 48"	ROAD WORK AHEAD	17 - 4" x 6"	18	
(E)	G20-2	36" x 18"	END ROAD WORK	17 - 4" x 4"	18	
(F)	W11-1	48" x 48"	BICYCLE SYMBOL	2 - 4" x 6"	2	PLACE "SHARE THE ROAD" SIGN ON "BICYCLE SYMBOL" SIGN POST
	W16-1	24" x 30"	SHARE THE ROAD		2	

EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS
NO SCALE
CS-1

NOTE:

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

ROADWAY QUANTITIES

PM TO PM	HIGH TENSION CABLE BARRIER	VEGETATION CONTROL (MINOR CONCRETE)	ROADWAY EXCAVATION	MINOR HMA	CLASS 2 AGGREGATE BASE	HIGH TENSION CABLE BARRIER TERMINAL	SILICONE JOINT SEALANT (N)
	LF	SQYD	CY	TON	CY	EA	LF
19.68 TO 21.0	6970	3407	258			2	3717
21.0 TO 22.2	6336	3098	235			2	3379
22.2 TO 24.3	11088	5421	411			2	5914
24.3 TO 25.0	3696	1807	137			2	1971
25.0 TO 25.7	3696	1807	137			2	1971
25.7 TO 26.1	2112	1033	78			2	1126
26.1 TO 26.7	3168	1549	117			2	1690
26.7 TO 27.0	1584	774	59			2	845
27.0 TO 27.4	2112	1033	78			2	1126
27.4 TO 28.3	4752	2323	176			2	2534
28.3 TO 28.6	1584	774	59			2	845
28.6 TO 30.5	10032	4905	371			2	5350
30.5 TO 30.8	1584	774	59			2	845
CHP TURNAROUND PM28.5			233	188	141		
DRAINAGE INLETS		705	58				
MBGR		3983					
TOTAL	58714	33392	2465	188	141	26	31314

MBGR

LOCATION	REMOVE MBGR	DOUBLE THRIE BEAM BARRIER (WOOD POST)
PM TO PM	LF	LF
28.26 TO 28.56		1438
28.26	81	
28.56	81	
TOTAL	162	1438

ADJUST INLET

LOCATION	ADJUST INLET	ADDITIONAL HEIGHT TO EXISTING INLET (N)	COMMENTS
PM	EA	FT	
21.05	1	0.5	REUSE GRATE (N)
21.21	1	0.5	
21.55	1	0.5	
22.44	1	1.0	
25.94	1	0.75	
27.16	1	0.5	
29.52	1	0.75	
TOTAL	7		

DRAINAGE INLETS

LOCATION	*VEGETATION CONTROL (MINOR CONCRETE)	MARKER (CULVERT)	GRATE TYPE
PM	SQYD	EA	
21.05	14.7	1	RECTANGULAR
21.21	14.7	1	RECTANGULAR
21.55	14.7	1	RECTANGULAR
21.65	14.7	1	RECTANGULAR
21.67	14.7	1	RECTANGULAR
21.84	14.7	1	RECTANGULAR
22.44	14.7	1	RECTANGULAR
22.96	15.2	1	CIRCULAR
23.22	14.7	1	RECTANGULAR
23.42	14.7	1	RECTANGULAR
23.72	14.7	1	RECTANGULAR
24.45	14.7	1	RECTANGULAR
24.85	14.7	1	RECTANGULAR
25.12	15.2	1	CIRCULAR
25.23	14.7	1	RECTANGULAR
25.36	14.7	1	RECTANGULAR
25.51	14.7	1	RECTANGULAR
25.88	14.7	1	RECTANGULAR
26.31	14.7	1	RECTANGULAR
26.46	14.7	1	RECTANGULAR
26.53	14.7	1	RECTANGULAR
26.60	14.7	1	RECTANGULAR
26.92	14.7	1	RECTANGULAR
27.16	14.7	1	RECTANGULAR
27.26	13.3	1	RECTANGULAR DOUBLE GRATE
27.30	14.7	1	RECTANGULAR
27.53	14.7	1	RECTANGULAR
27.75	14.7	1	RECTANGULAR
28.19	14.7	1	RECTANGULAR
28.38	14.7	1	RECTANGULAR
28.48	14.7	1	RECTANGULAR
28.57	14.7	1	RECTANGULAR
28.68	14.7	1	RECTANGULAR
28.81	14.7	1	RECTANGULAR
28.96	14.7	1	RECTANGULAR
29.10	14.7	1	RECTANGULAR
29.28	14.7	1	RECTANGULAR
29.39	14.7	1	RECTANGULAR
29.52	14.7	1	RECTANGULAR
29.62	14.7	1	RECTANGULAR
29.82	14.7	1	RECTANGULAR
29.89	14.7	1	RECTANGULAR
29.97	14.7	1	RECTANGULAR
30.22	14.7	1	RECTANGULAR
30.38	14.7	1	RECTANGULAR
30.45	14.7	1	RECTANGULAR
30.54	14.7	1	RECTANGULAR
30.61	14.7	1	RECTANGULAR
TOTAL	705.2	48	

* TOTALS ARE INCLUDED ON ROADWAY QUANTITIES

MBGR (VEGETATION CONTROL)

LOCATION	*VEGETATION CONTROL (MINOR CONCRETE)	DIRECTION	BRIDGE TYPE
PM	SQYD	NB/SB	
19.68	103		OC
20.65	103		OC
21.59	103		OC
21.80	103		OC
21.91	100	NB	UC
	100	SB	
22.16	100	NB	UC
	100	SB	
23.45	103		OC
23.59	100	NB	UC
	100	SB	
24.06	103		OC
24.30	100	NB	UC
	100	SB	
24.53	103		OC
25.01	100	NB	UC
	100	SB	
25.72	100	NB	UC
	100	SB	
26.16	100	NB	UC
	100	SB	
26.40	456		OC
26.66	100	NB	UC
	100	SB	
27.00	100	NB	UC
	100	SB	
27.41	100	NB	UC
	100	SB	
27.92	103		OC
28.26	100	NB	UC
28.56	100	SB	UC
29.84	103		OC
30.43	100	NB	UC
	100	SB	
30.82	100	NB	UC
	100	SB	
TOTAL	3983		

* TOTALS ARE INCLUDED ON ROADWAY QUANTITIES

EROSION CONTROL

LOCATION	EROSION CONTROL (HYDROSEED)	FIBER (EROSION CONTROL) (N)	PURE LIVE SEED (EROSION CONTROL) (N)	STABILIZING EMULSION (N)	ORGANIC FERTILIZER (N)
PM TO PM	ACRE	LB	LB	LB	LB
19.7 TO 30.8	16	48000	1456	3200	1600

TEMPORARY WATER POLLUTION CONTROL

TEMPORARY FIBER ROLL	TEMPORARY DRAINAGE INLET PROTECTION	TEMPORARY CHECK DAM	TEMPORARY SOIL BINDER
LF	EA	LF	SQYD
368	48	384	87718

ROADSIDE SIGN (ONE POST)

PM	EA	SIGN CODE	NO TURN OFFICIAL VEHICLES EXEMPT
28.5	2	R34-2 (CA)	
TOTAL	2		

SUMMARY OF QUANTITIES

Q-1

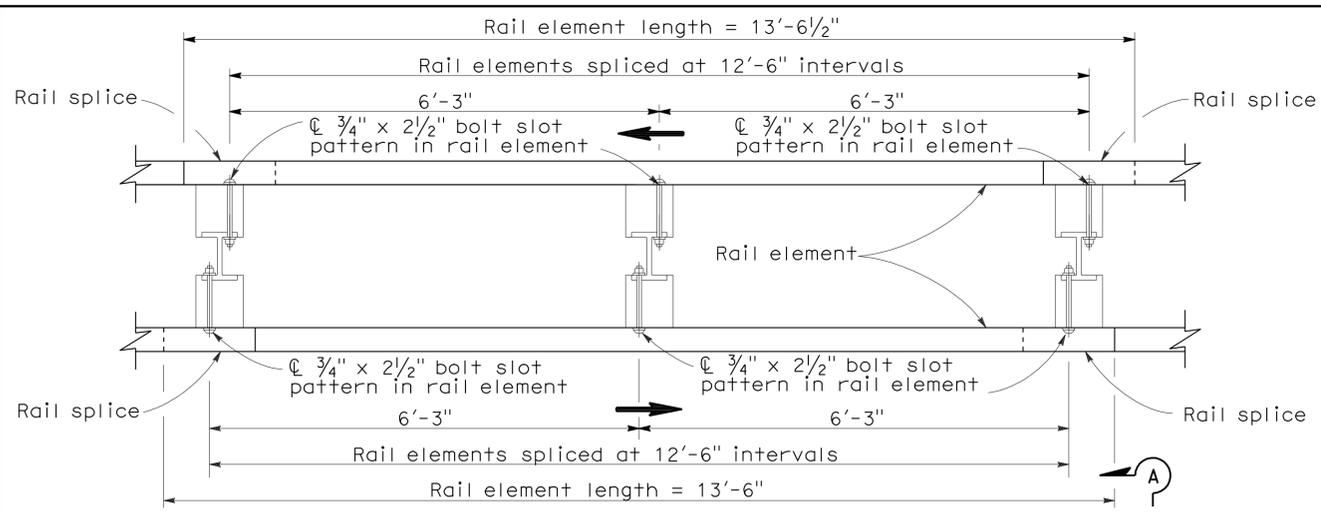
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	11	24

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

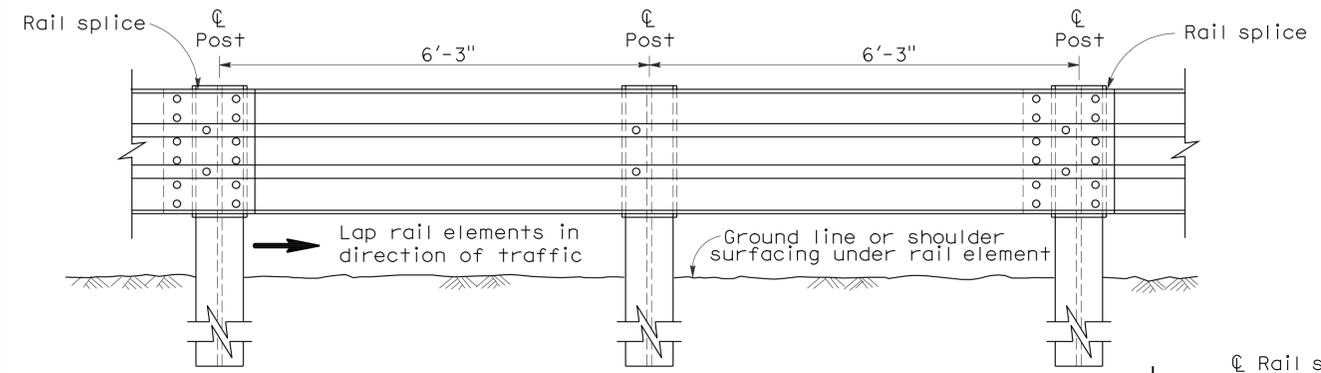
June 6, 2008
PLANS APPROVAL DATE

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

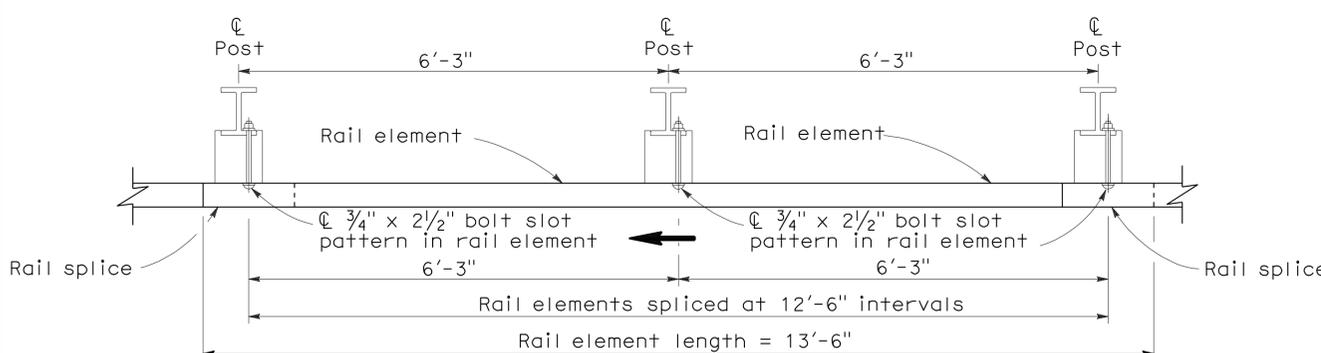
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA



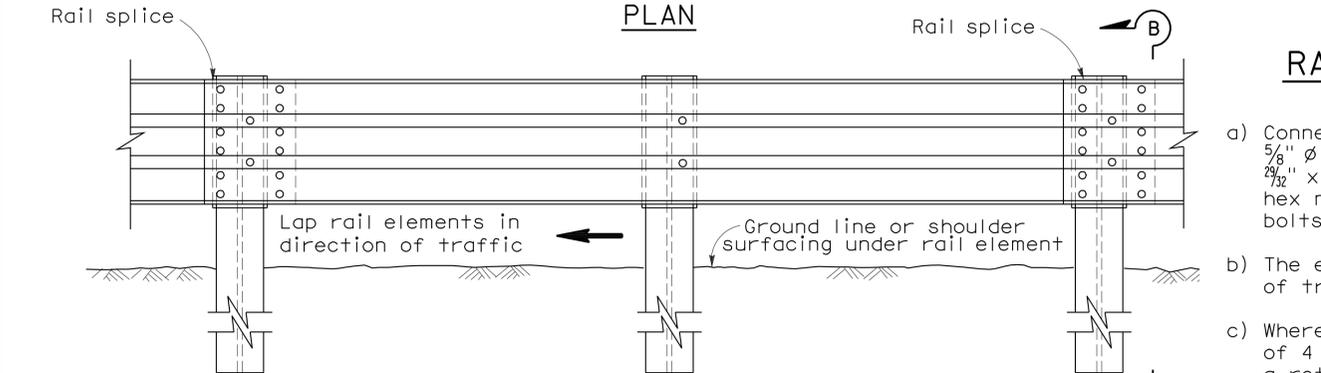
PLAN
DOUBLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1



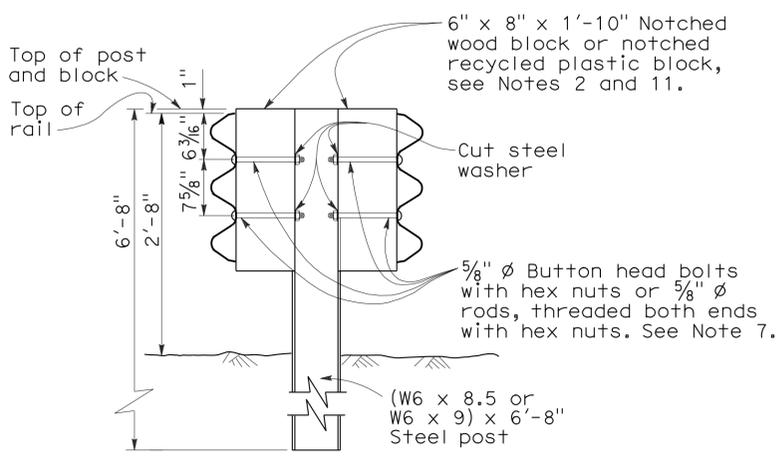
ELEVATION
DOUBLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1



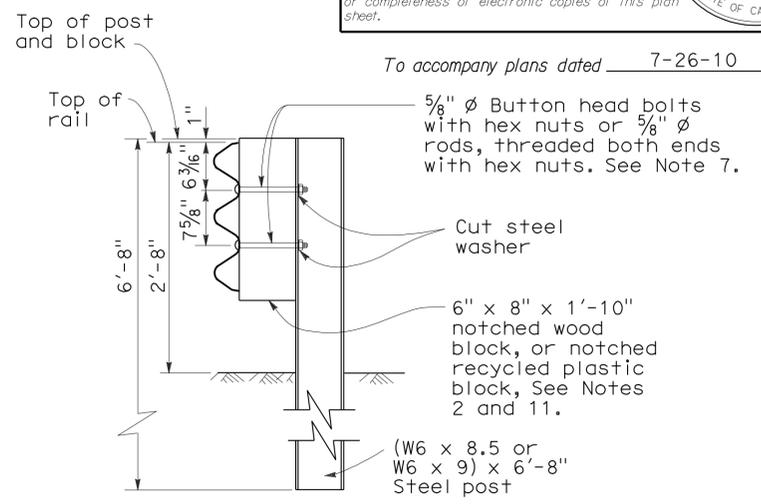
PLAN
SINGLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1



ELEVATION
SINGLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1

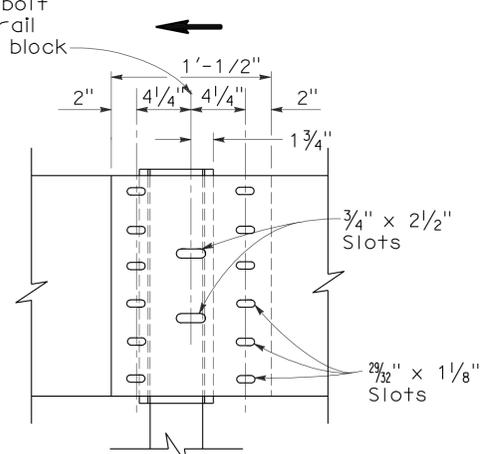


SECTION A-A
TYPICAL STEEL LINE POST INSTALLATION



SECTION B-B
TYPICAL STEEL LINE POST INSTALLATION

⊘ Rail splice and slots for 5/8" ⌀ button head bolt to connect rail to post and block



ELEVATION
RAIL ELEMENT SPLICE DETAIL

- Connect the overlapped ends of the thrie beam rail elements with 5/8" ⌀ x 1 1/8" button head oval shoulder bolts inserted into the 29/32" x 1 1/8" slots and bolted together with 5/8" ⌀ x 1 1/8" recessed hex nuts. Recess of hex nut points toward rail element. A total of 12 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. Where a return cap is to be attached to the ends of rail elements, a total of 8 of the above described splice bolts and nuts are to be used.

NOTES:

- For details of the cross section of the thrie beam rail element and details for wood post with wood block installations, see Standard Plan A78A.
- For details of standard hardware, posts and blocks used to construct thrie beam barrier, see Revised Standard Plan RSP A78C1 and Standard Plan A78C2.
- Thrie beam barrier post spacing to be 6'-3" center to center, except as otherwise noted.
- Top of barrier rail to be 2'-8" above ground line or shoulder surfacing under the rail element.
- For barrier end treatments and barrier connections, see Standard Plans A78E1, A78E2 and A78E3, Revised Standard Plans RSPs A78F1 and A78F2, Standard Plan A78G and Revised Standard Plan RSP A78H.
- For connection to Concrete Barrier, see Revised Standard Plan RSP A78I.
- Attach rail element to block and steel post with 2 bolts or rods on approaching traffic side of block and post web. No washer on rail face for rod or bolted connections to line post.
- For details of thrie beam barrier on bridges, see Standard Plan A78D2. For details of thrie beam barrier at fixed objects, see Standard Plan A78D1.
- Direction of traffic indicated by →.
- Notched face of block faces steel post.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER
STANDARD BARRIER RAILING
SECTION (STEEL POST
WITH NOTCHED WOOD BLOCK
OR NOTCHED RECYCLED
PLASTIC BLOCK)**

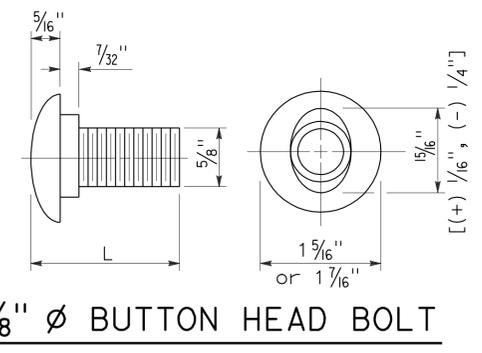
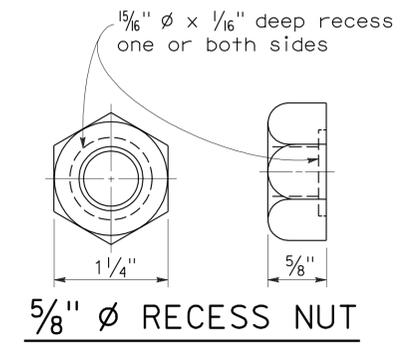
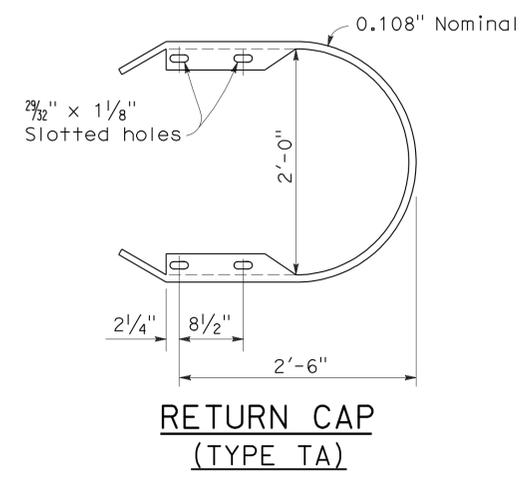
NO SCALE

RSP A78B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A78B
DATED MAY 1, 2006 - PAGE 84 OF THE STANDARD PLANS BOOK DATED MAY 2006.

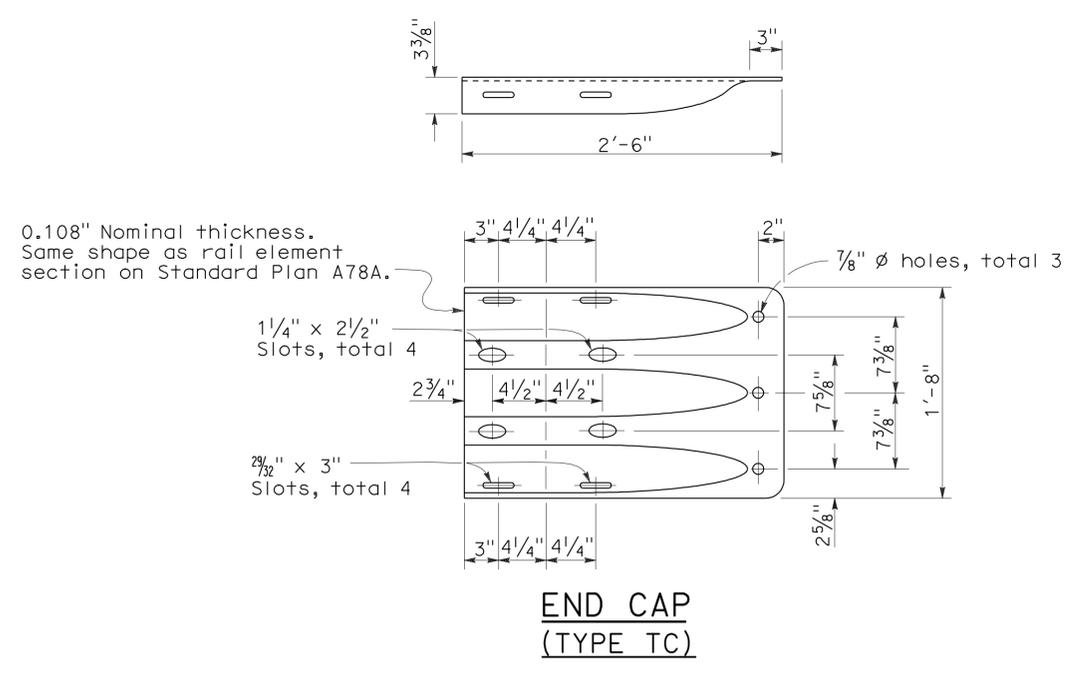
REVISED STANDARD PLAN RSP A78B

2006 REVISED STANDARD PLAN RSP A78B

To accompany plans dated 7-26-10



L	THREAD LENGTH
1 1/4"	full thread length
2"	full thread length
9/2"	4" Min thread length
18"	4" Min thread length



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER
STANDARD HARDWARE DETAILS**

NO SCALE

RSP A78C1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A78C1
DATED MAY 1, 2006 - PAGE 85 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A78C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	13	24

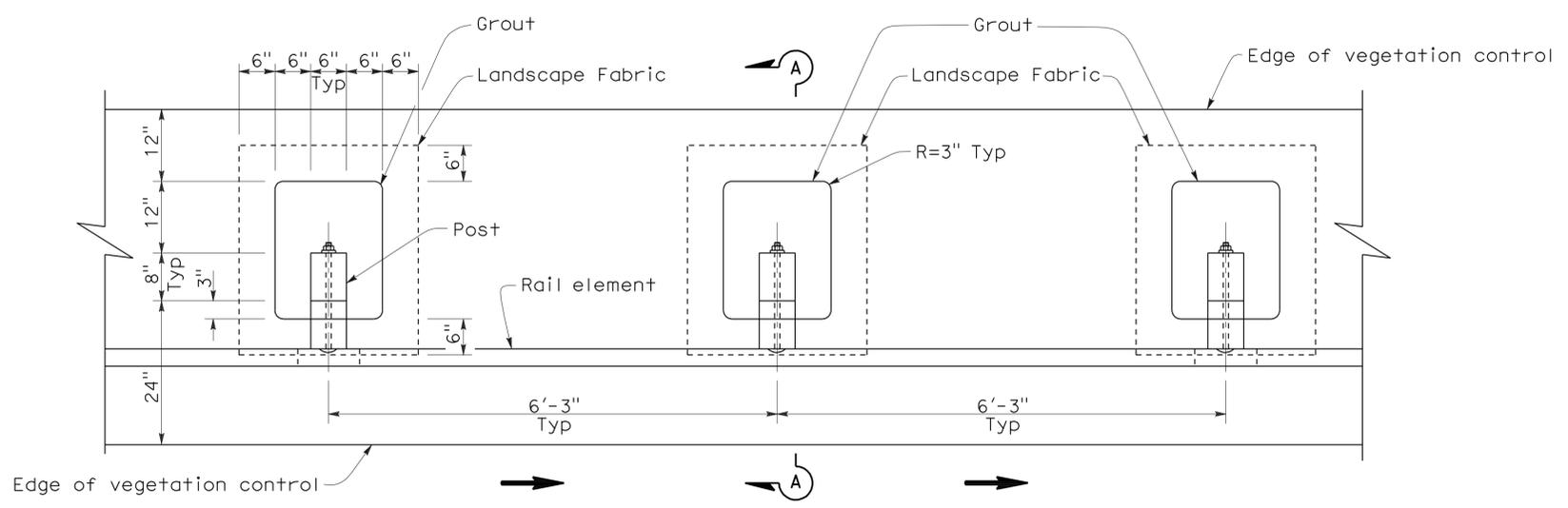
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

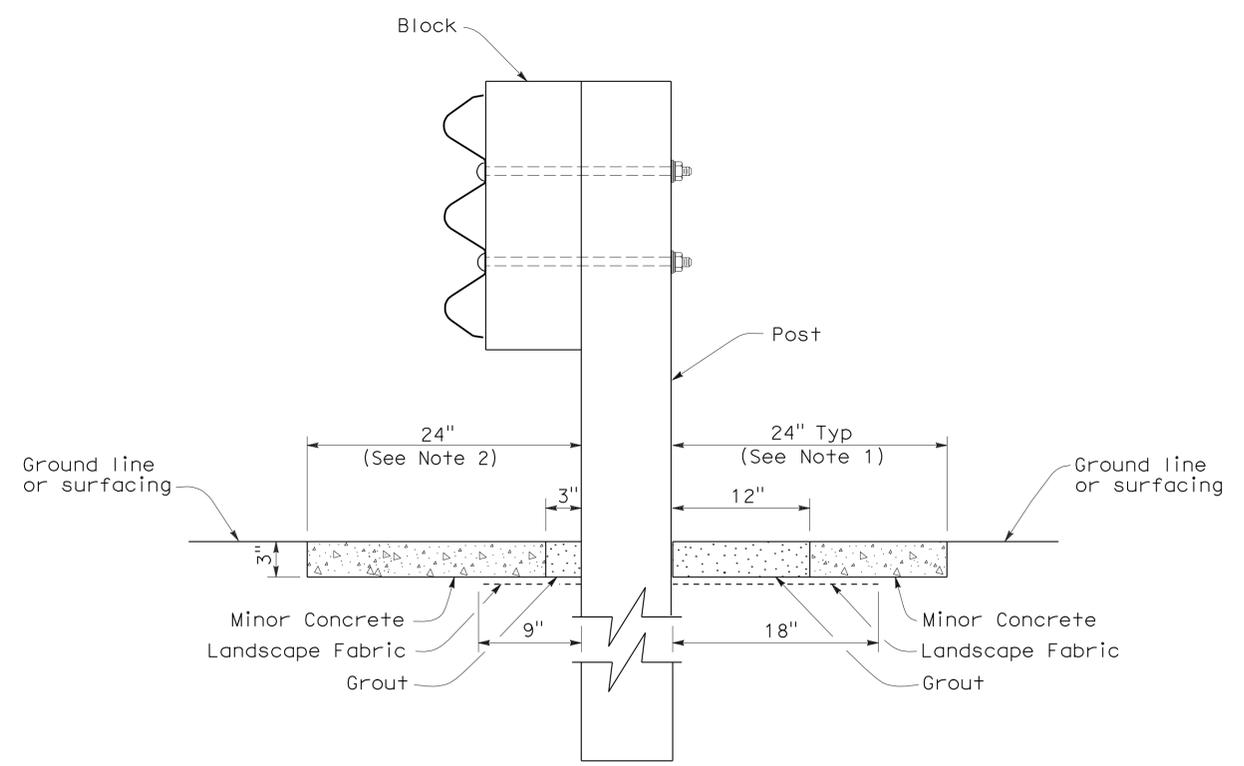
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

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 7-26-10



PLAN



SECTION A-A

NOTES:

1. Where the distance between back of post and hinge point is less than 24", vegetation control to be constructed flush with the back edge of the post.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
3. Direction of adjacent traffic indicated by → .

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**SINGLE THRIE BEAM BARRIER
TYPICAL VEGETATION CONTROL
STANDARD BARRIER RAILING SECTION**

NO SCALE
NSP A78C3 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A78C3

2006 NEW STANDARD PLAN NSP A78C3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	14	24

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

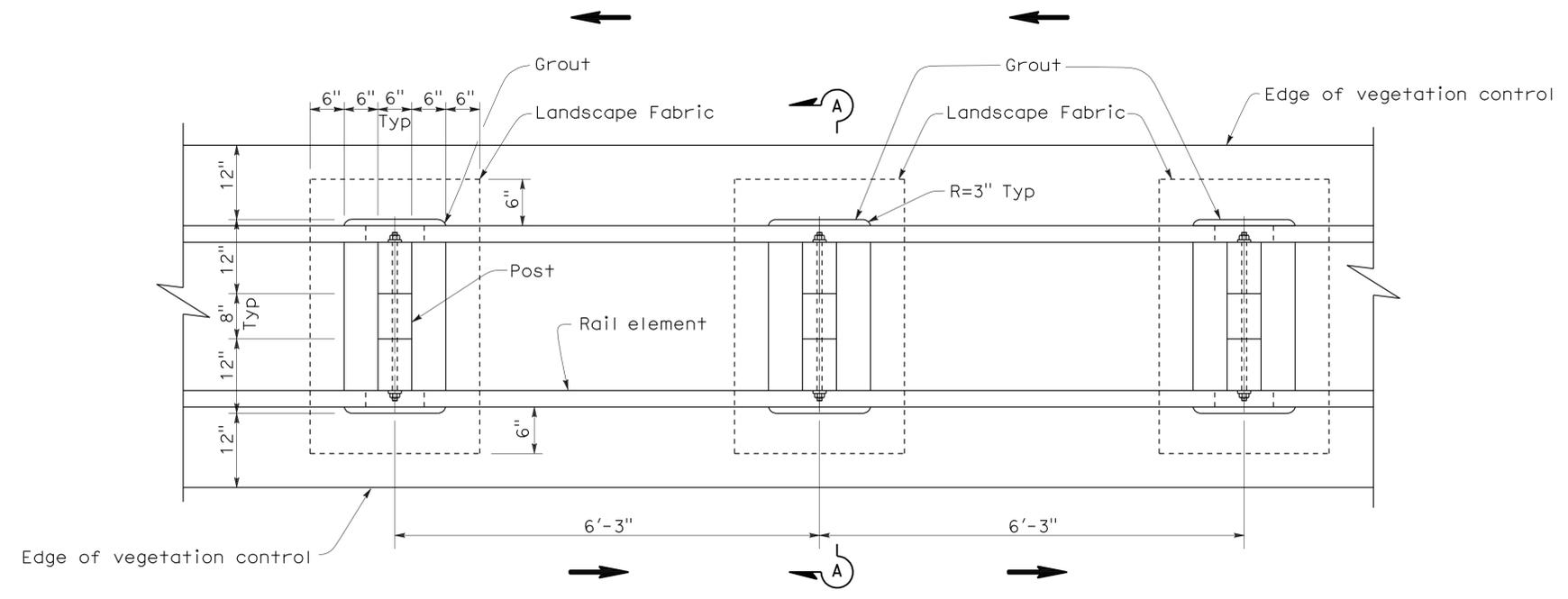
October 20, 2006
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

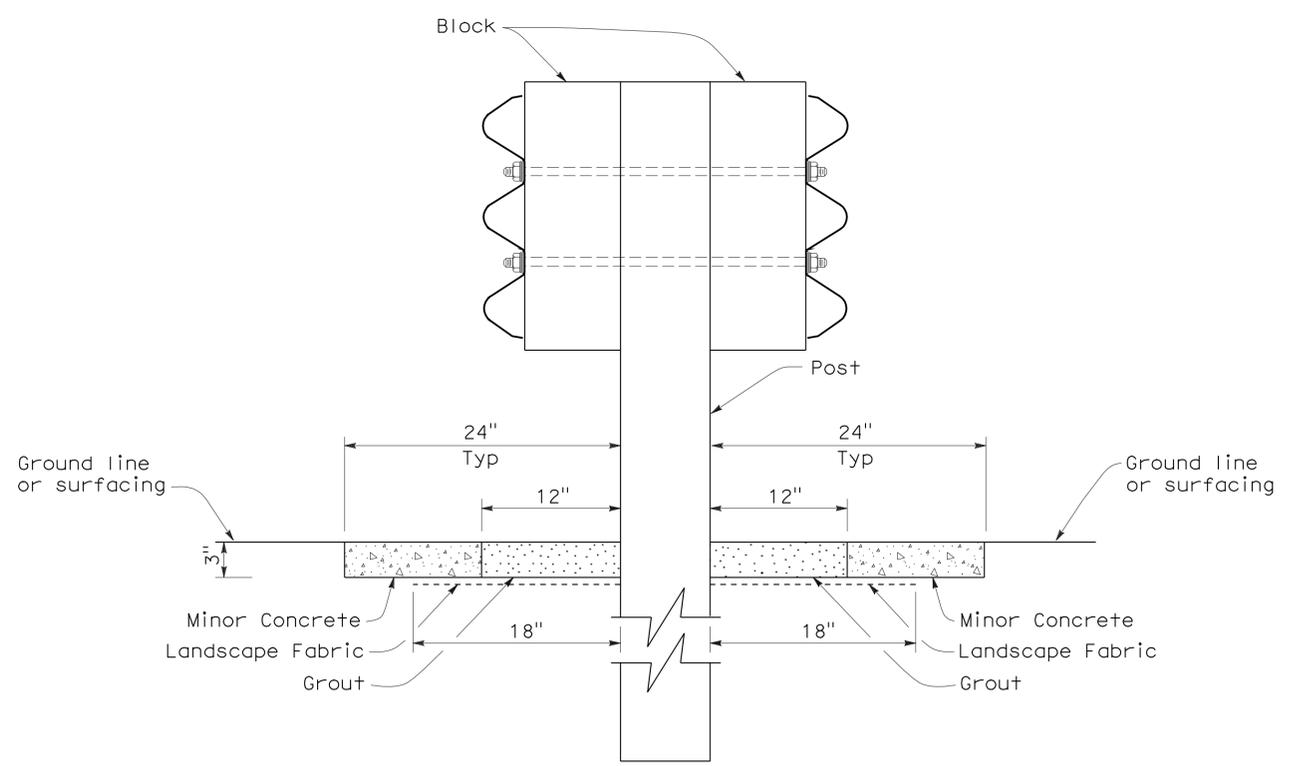
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To accompany plans dated 7-26-10

2006 NEW STANDARD PLAN NSP A78C4



PLAN



SECTION A-A

NOTE:

1. Direction of adjacent traffic indicated by →.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**DOUBLE THRIE BEAM BARRIER
TYPICAL VEGETATION CONTROL
STANDARD BARRIER RAILING SECTION**

NO SCALE
NSP A78C4 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A78C4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	15	24

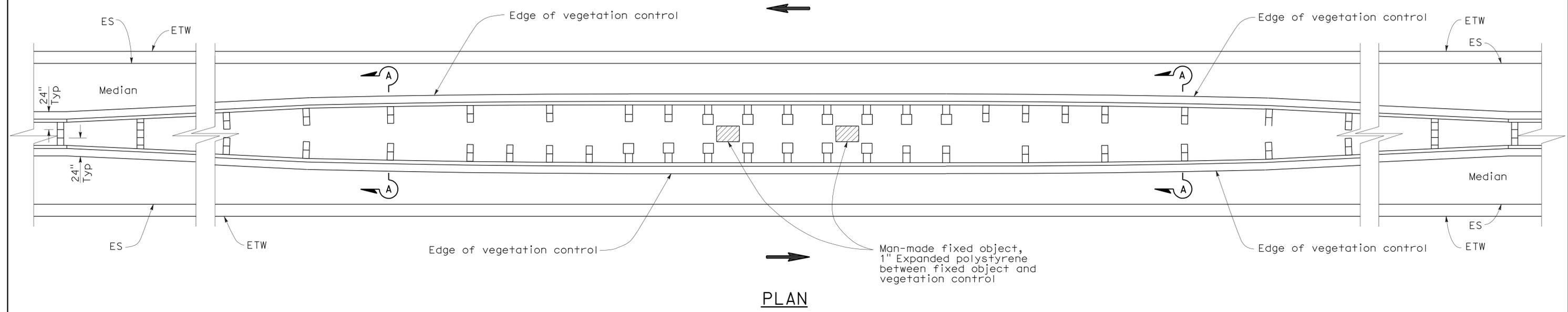
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

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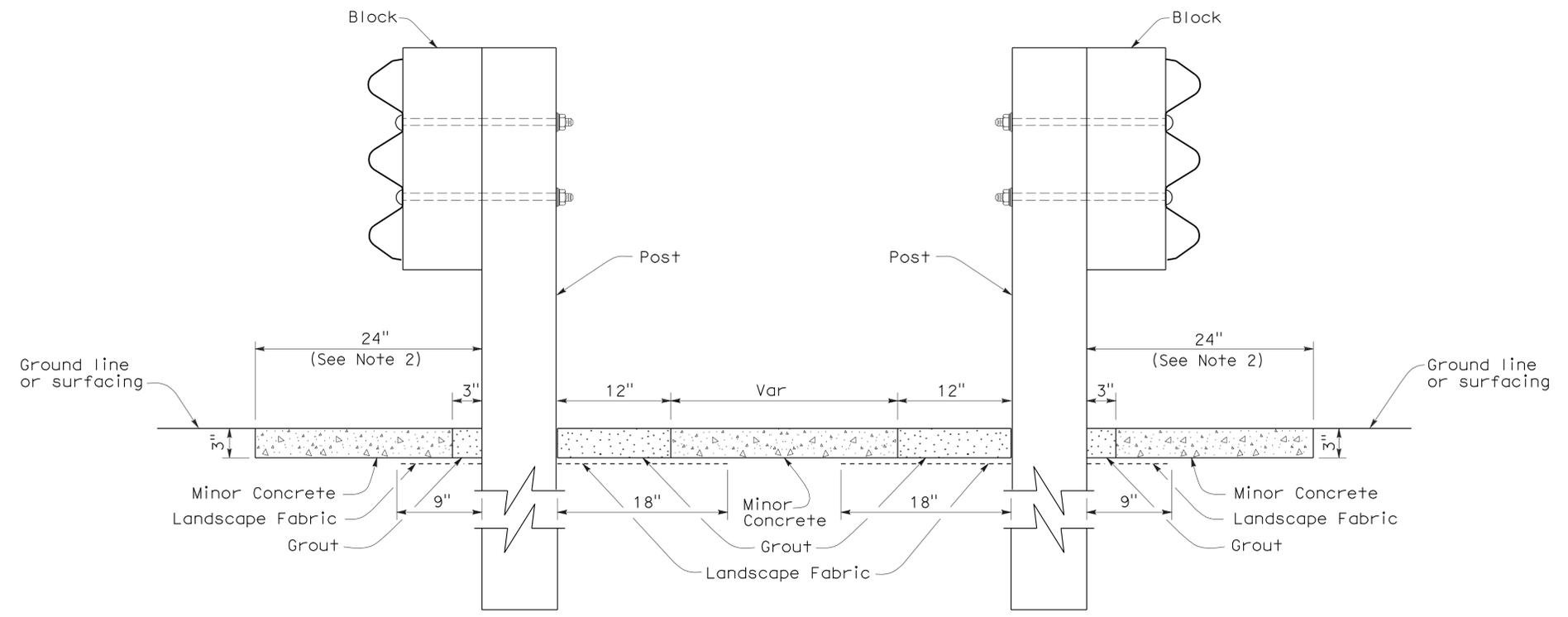
To accompany plans dated 7-26-10



PLAN

NOTES:

1. See New Standard Plan NSP A78C3 for additional vegetation control.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
3. Direction of adjacent traffic indicated by ←.



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**THREE BEAM BARRIER
TYPICAL VEGETATION CONTROL
AT FIXED OBJECTS
IN MEDIAN**

NO SCALE
NSP A78C5 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP A78C5

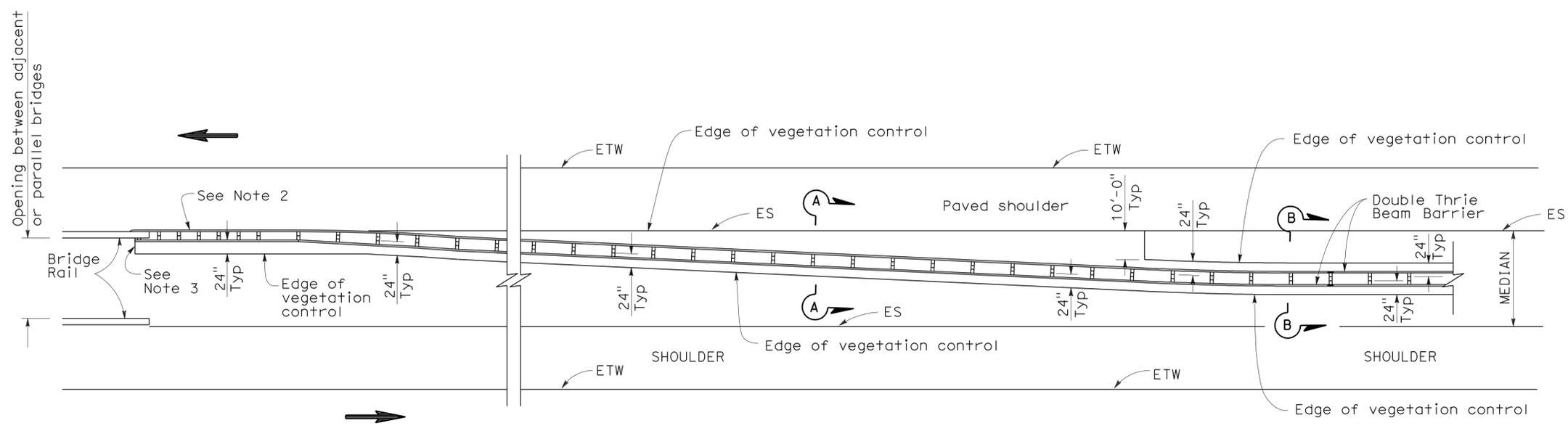
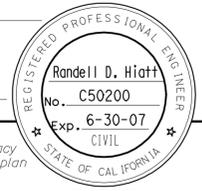
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	16	24

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

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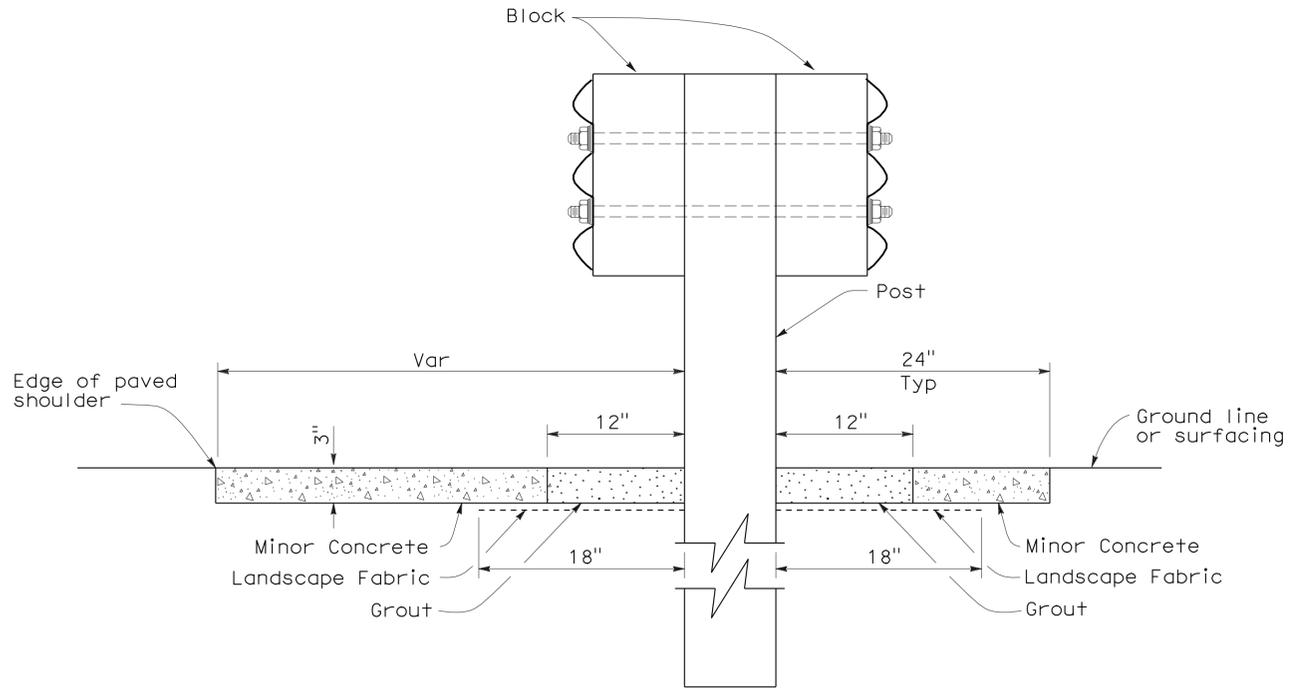
To accompany plans dated 7-26-10



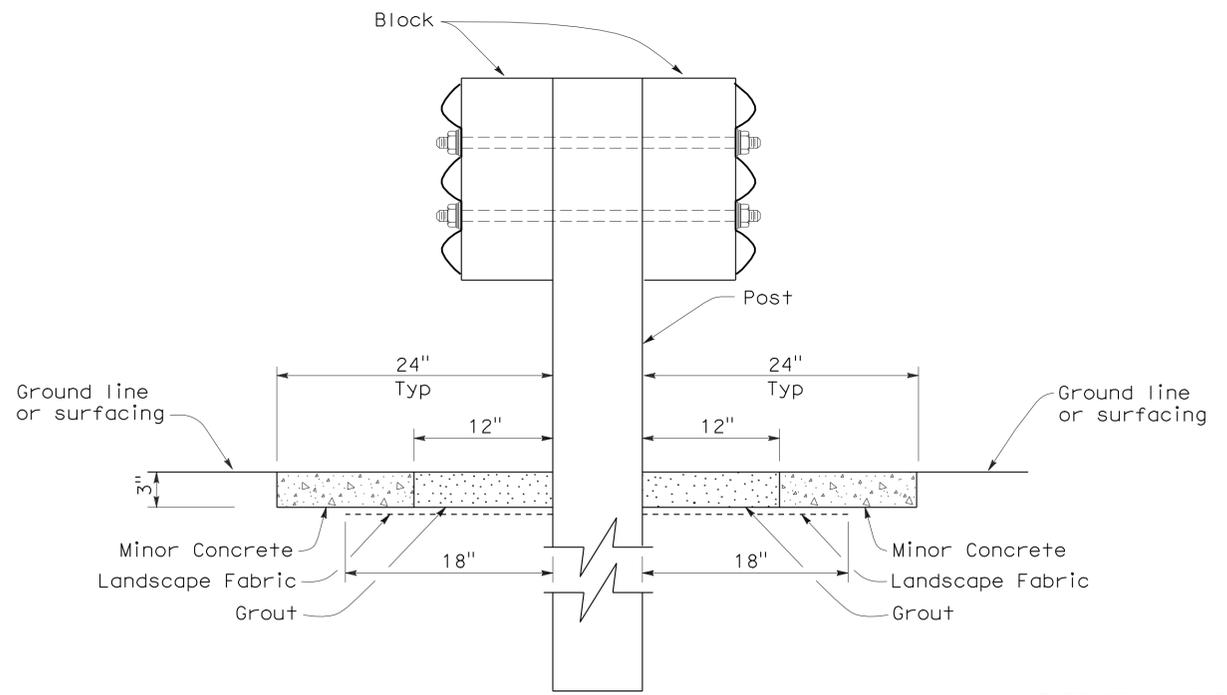
PLAN

NOTES:

1. See New Standard Plan NSP A78C4 for additional vegetation control details.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
3. End vegetation control at end of backside rail element attached to bridge railing.
4. Direction of adjacent traffic indicated by ←.



SECTION A-A



SECTION B-B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**THRIE BEAM BARRIER
TYPICAL VEGETATION CONTROL
AT STRUCTURE APPROACH**
NO SCALE

NSP A78C6 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP A78C6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	17	24

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

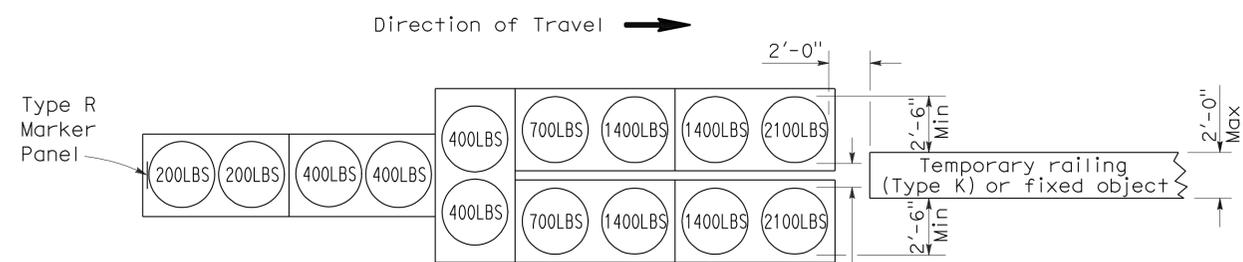
June 6, 2008
PLANS APPROVAL DATE

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

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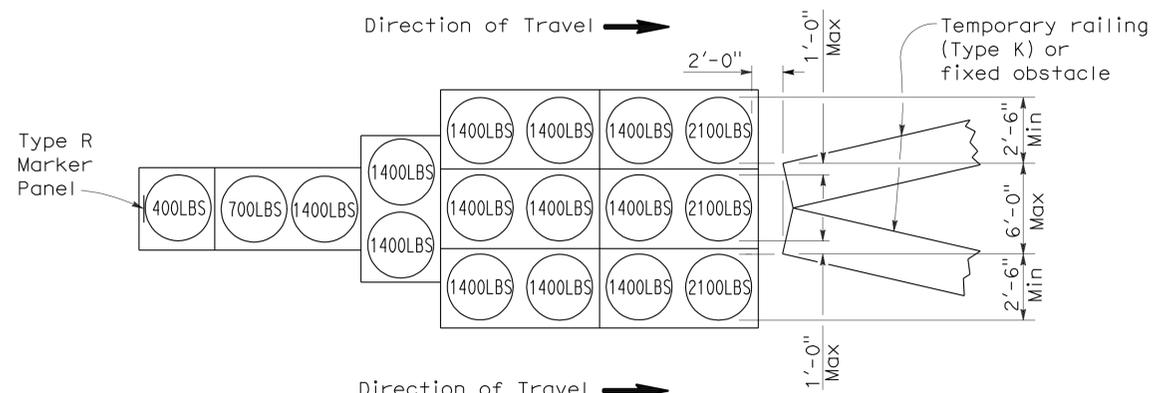
To accompany plans dated 7-26-10

2006 REVISED STANDARD PLAN RSP T1A



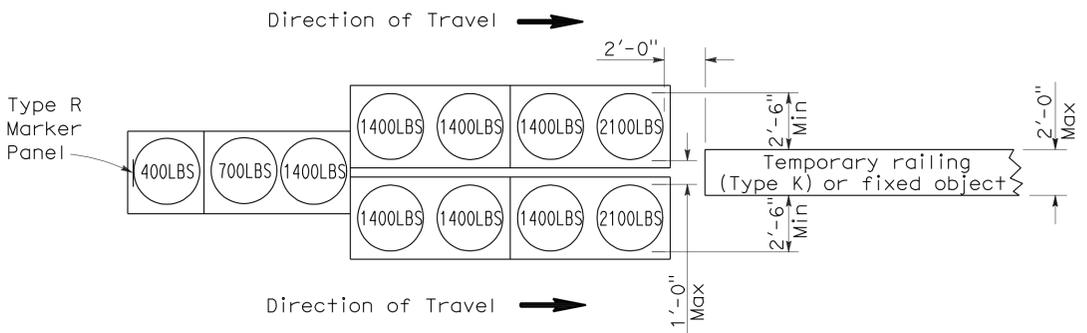
ARRAY 'TU14'

Approach speed 45 mph or more



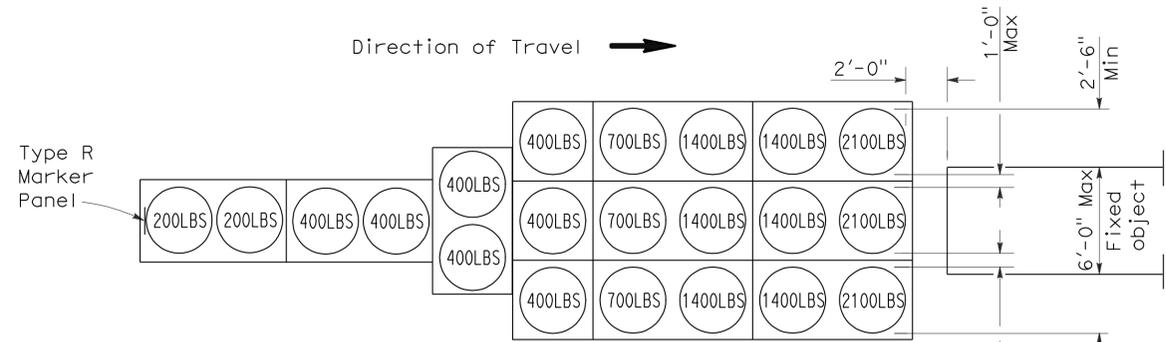
ARRAY 'TU17'

Approach speed less than 45 mph



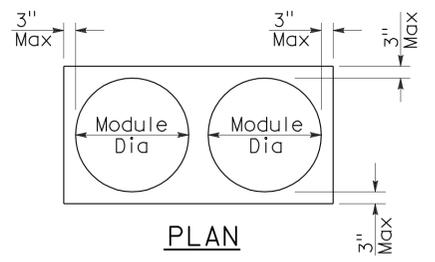
ARRAY 'TU11'

Approach speed less than 45 mph

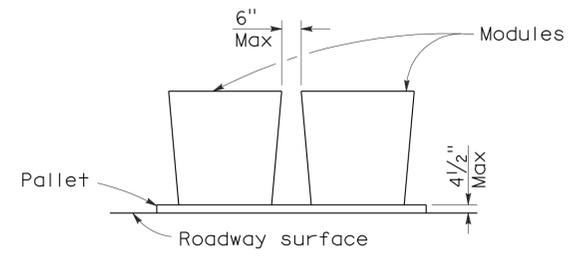


ARRAY 'TU21'

Approach speed 45 mph or more



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

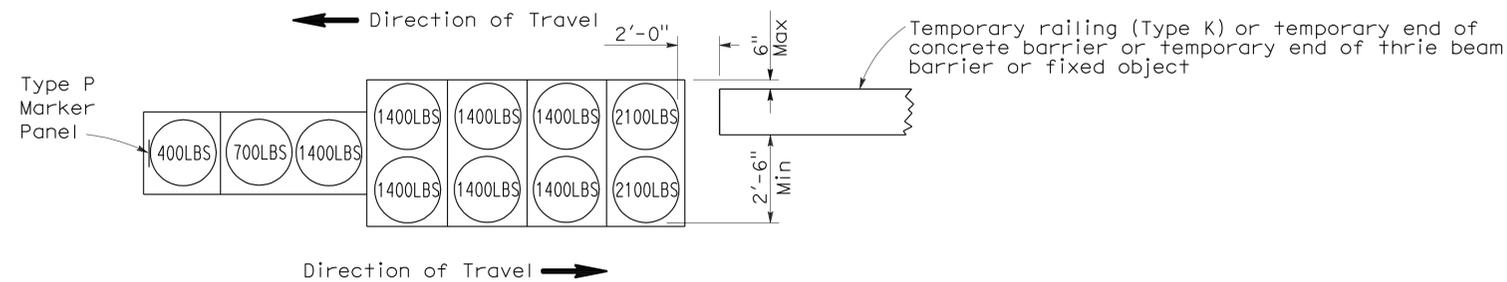
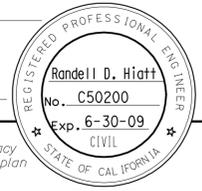
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	18	24

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

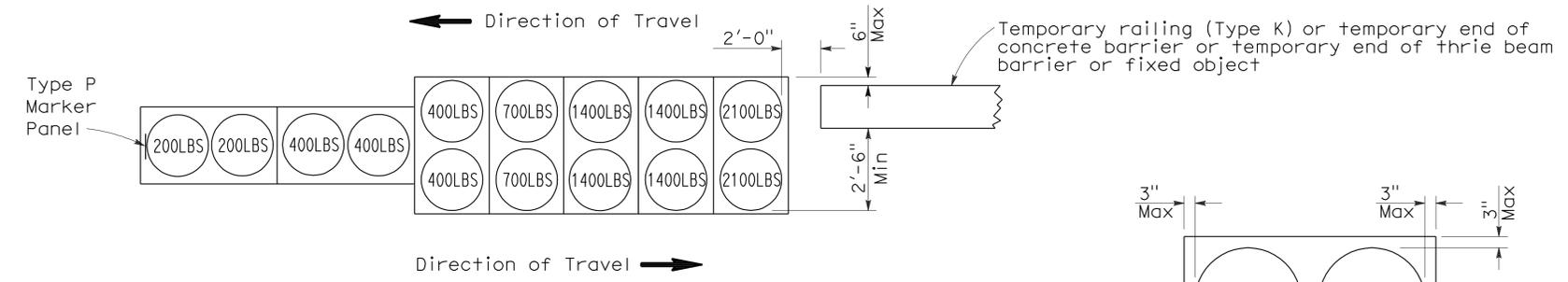
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To accompany plans dated 7-26-10



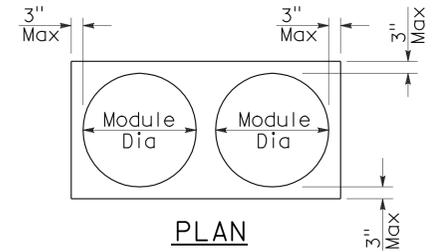
ARRAY 'TB11'

Approach speed less than 45 mph

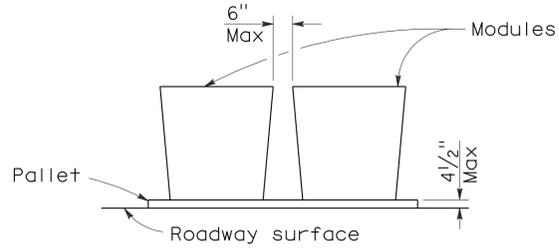


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

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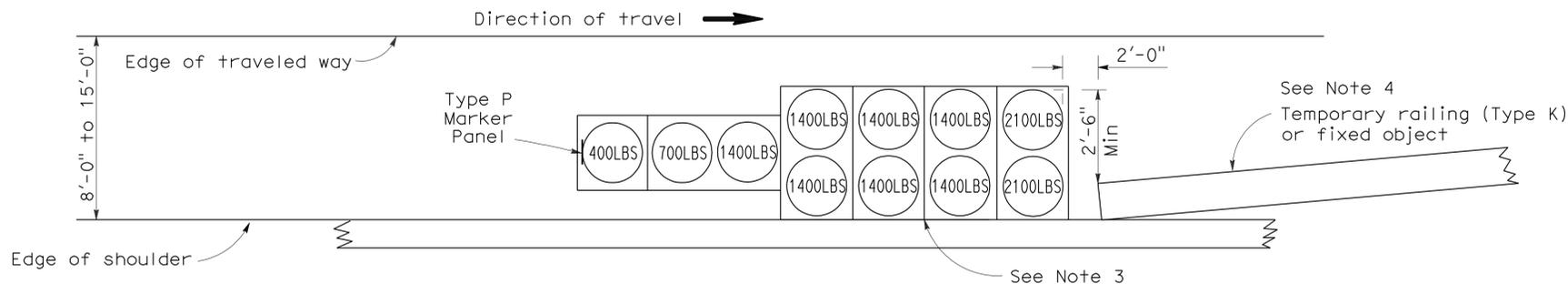
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

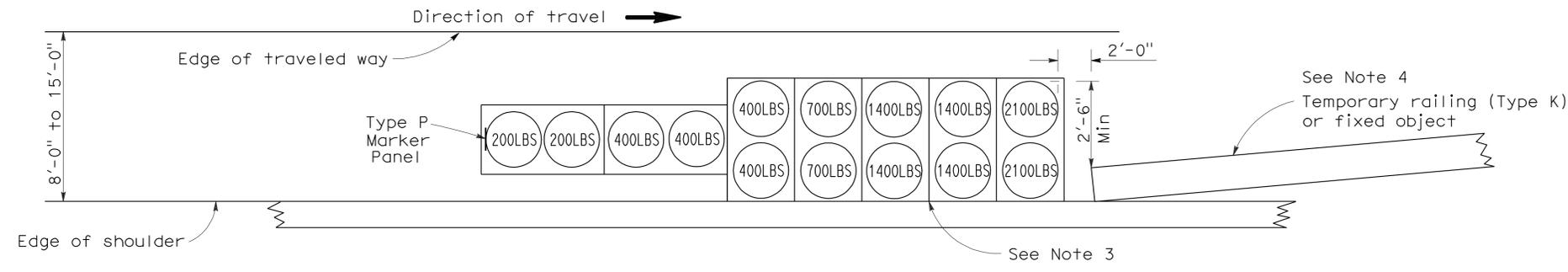
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 7-26-10



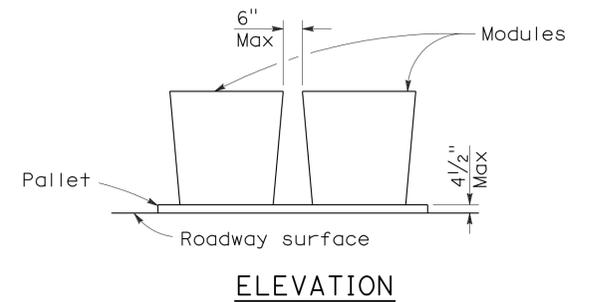
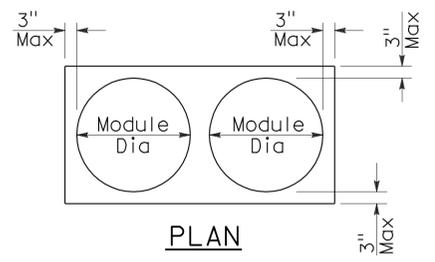
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



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

NOTES:

- (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.
- All sand weights are nominal.
- 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.
- 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.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- 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.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.



CRASH CUSHION PALLET DETAIL
See Note 11

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

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

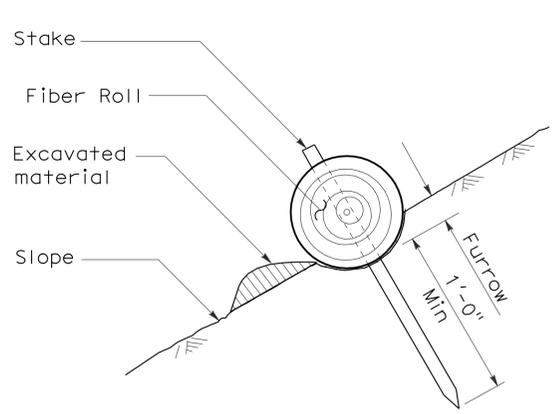
REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

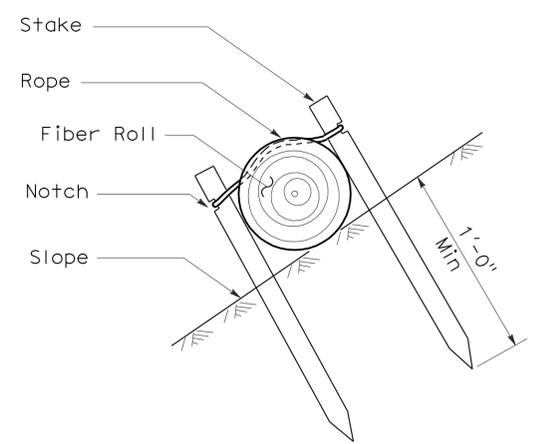
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	20	24

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 PLANS APPROVAL DATE
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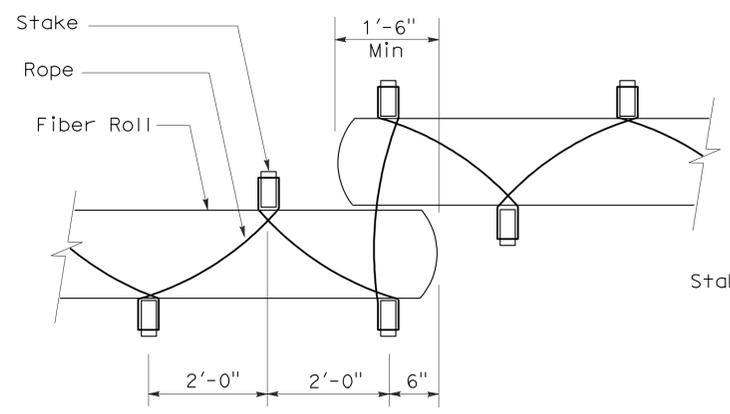
To accompany plans dated 7-26-10



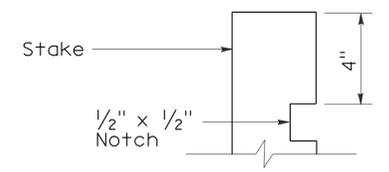
SECTION
TEMPORARY FIBER ROLL (TYPE 1)



SECTION
TEMPORARY FIBER ROLL (TYPE 2)

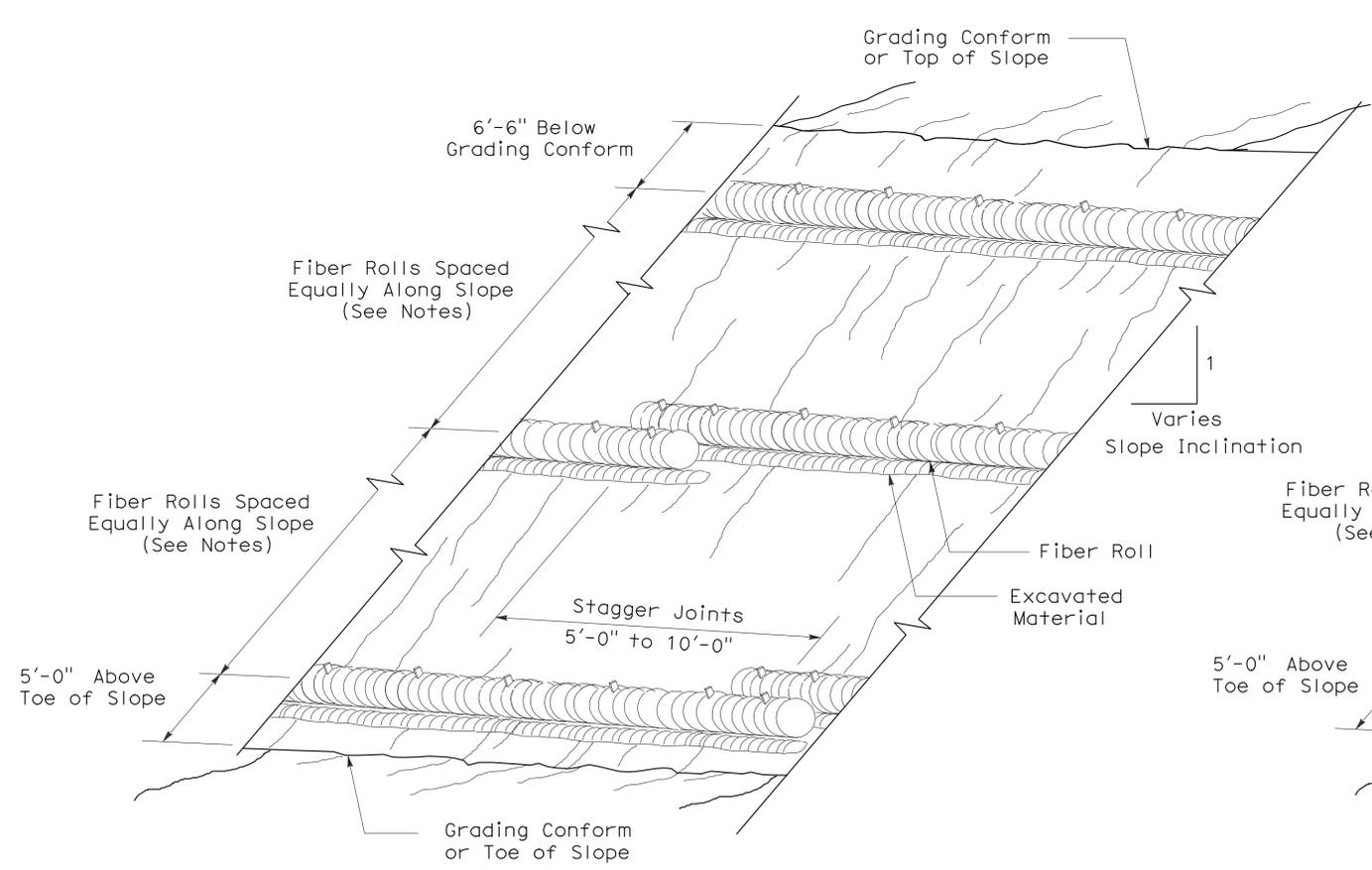


PLAN

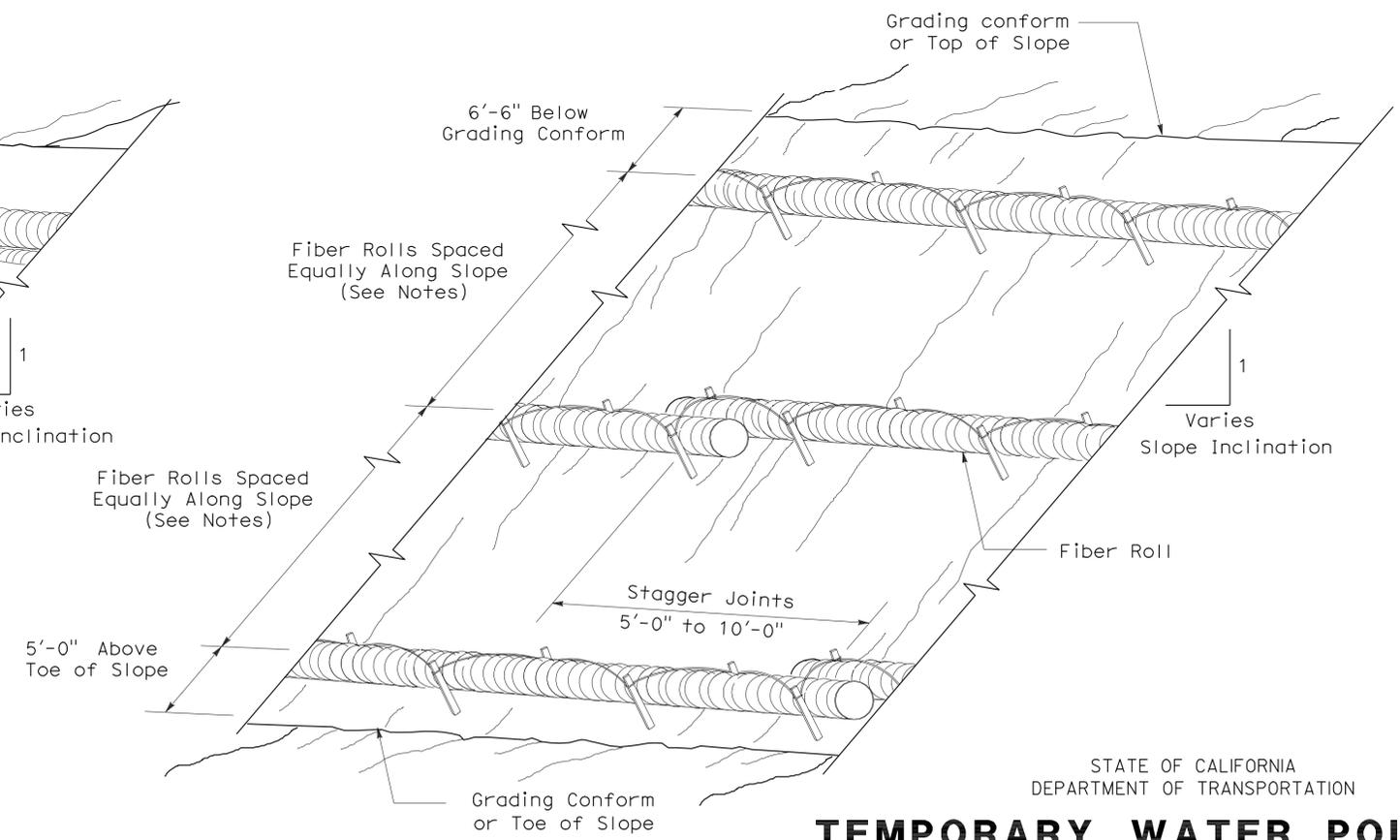


ELEVATION
STAKE NOTCH DETAIL

- 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

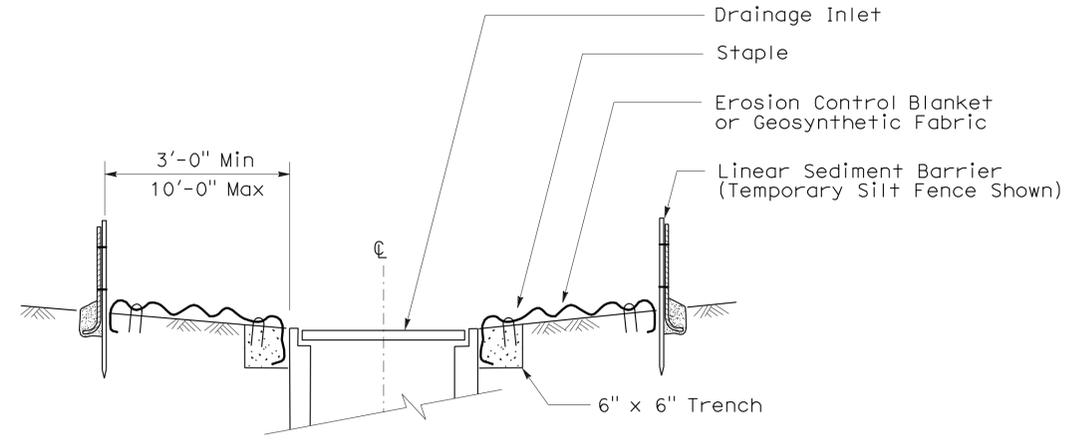
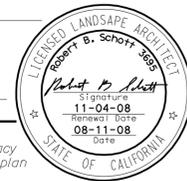
2006 REVISED STANDARD PLAN RSP T56

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	21	24

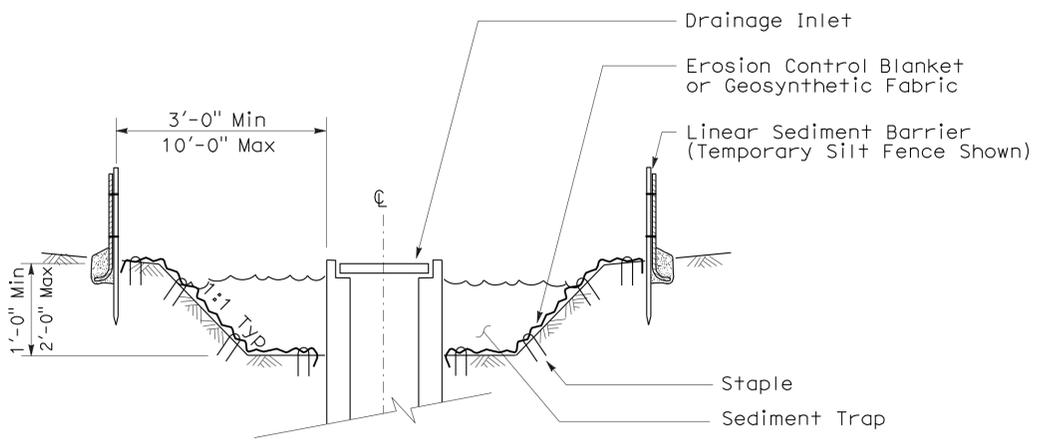
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS Approval DATE

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To accompany plans dated 7-26-10

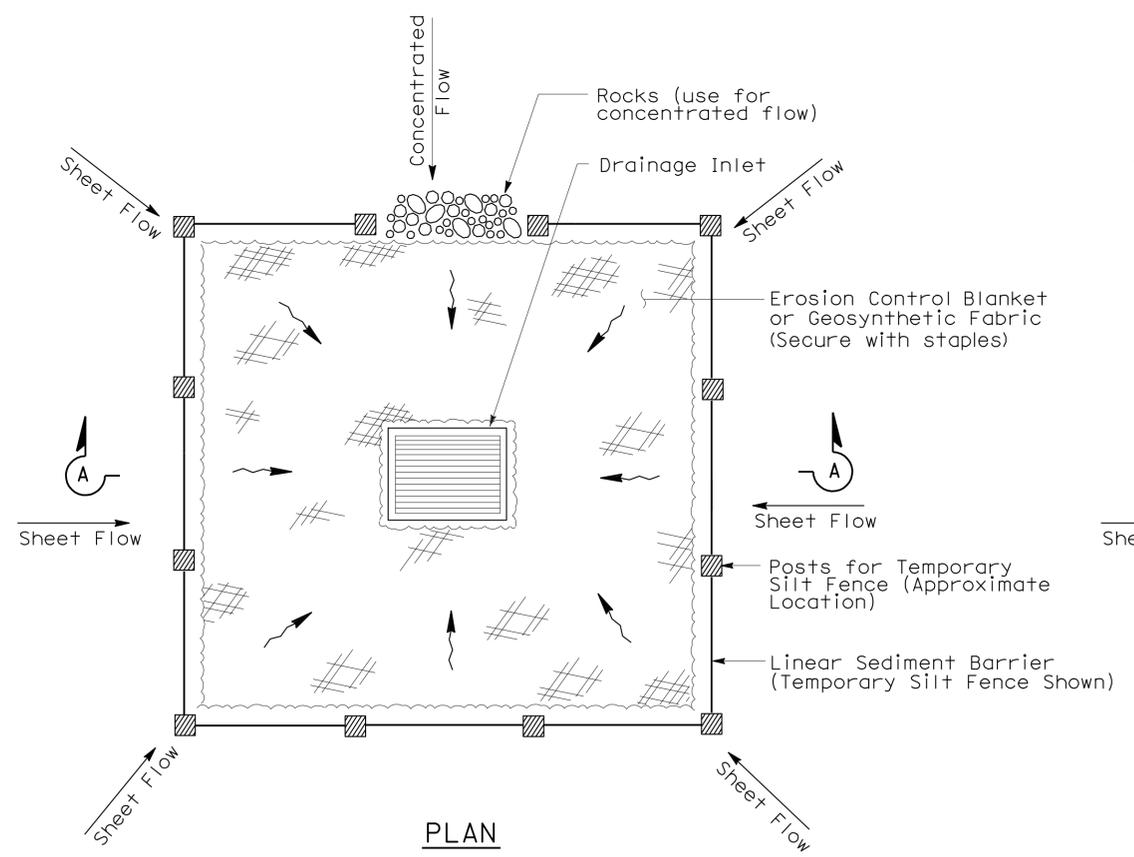


SECTION A-A

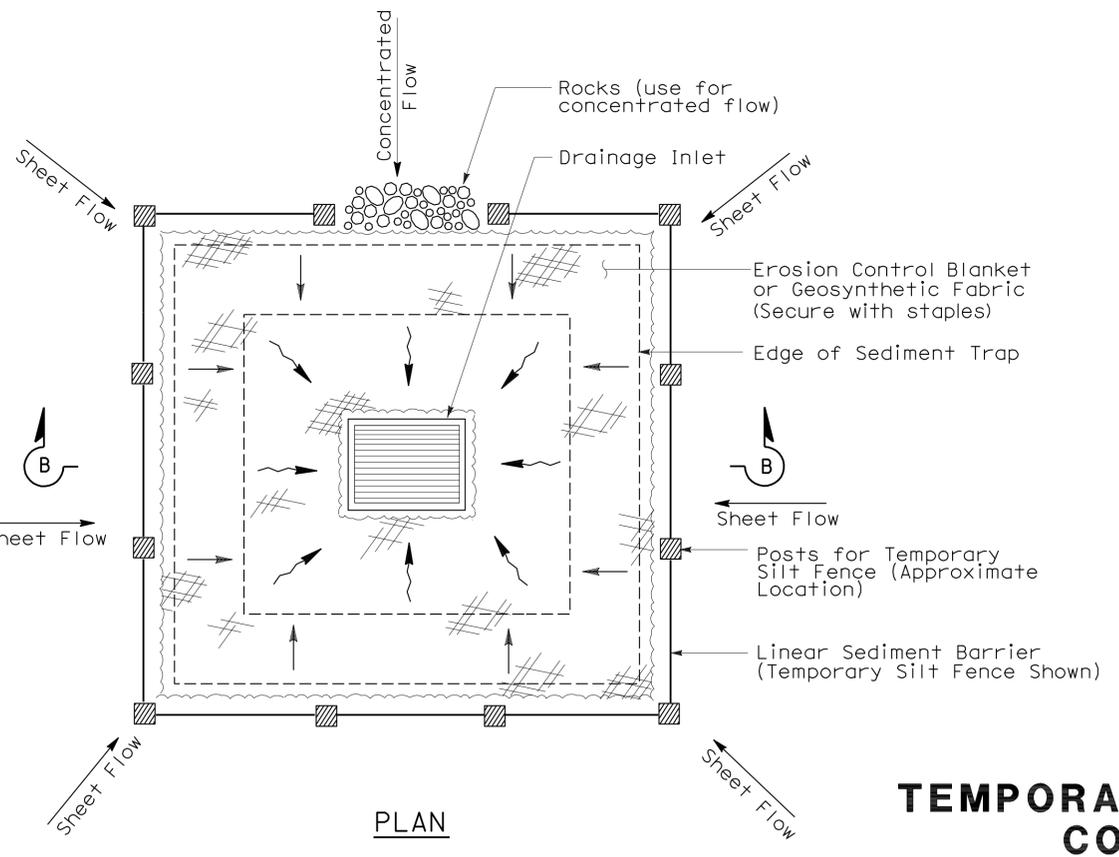


SECTION B-B

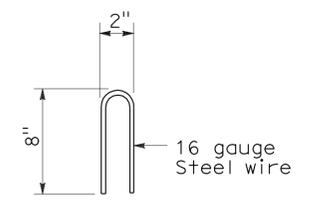
- NOTES:**
1. See Standard Plan T51 for Temporary Silt Fence.
 2. Dimensions may vary to fit field conditions.



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)

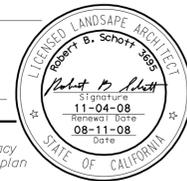
NO SCALE

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

2006 NEW STANDARD PLAN NSP T61

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	22	24

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.

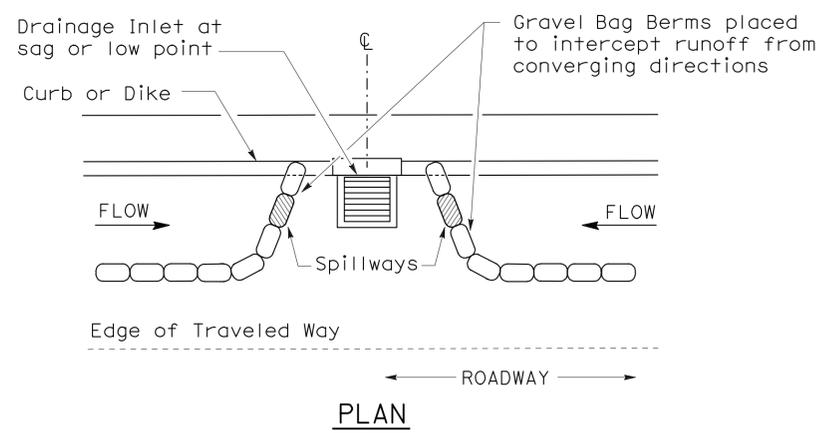


To accompany plans dated 7-26-10

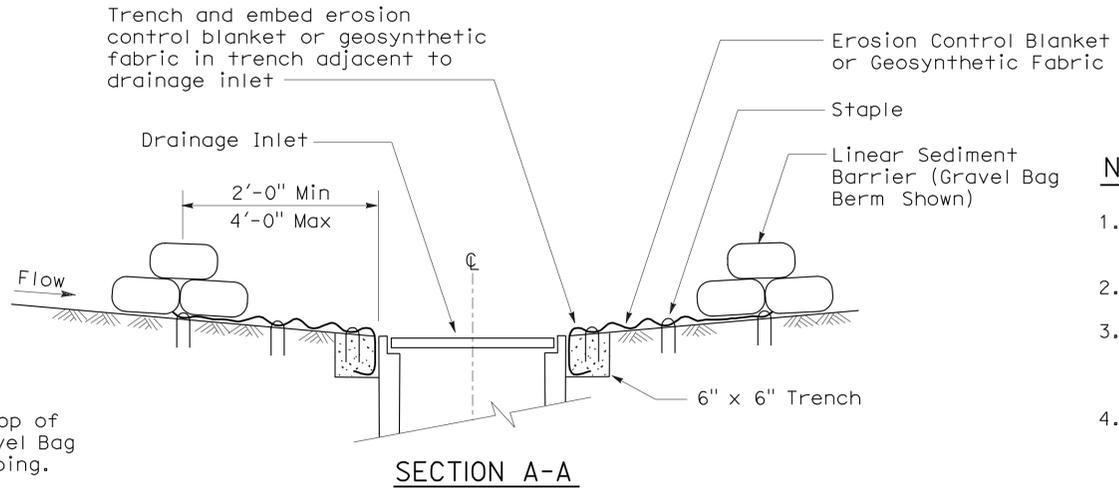
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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



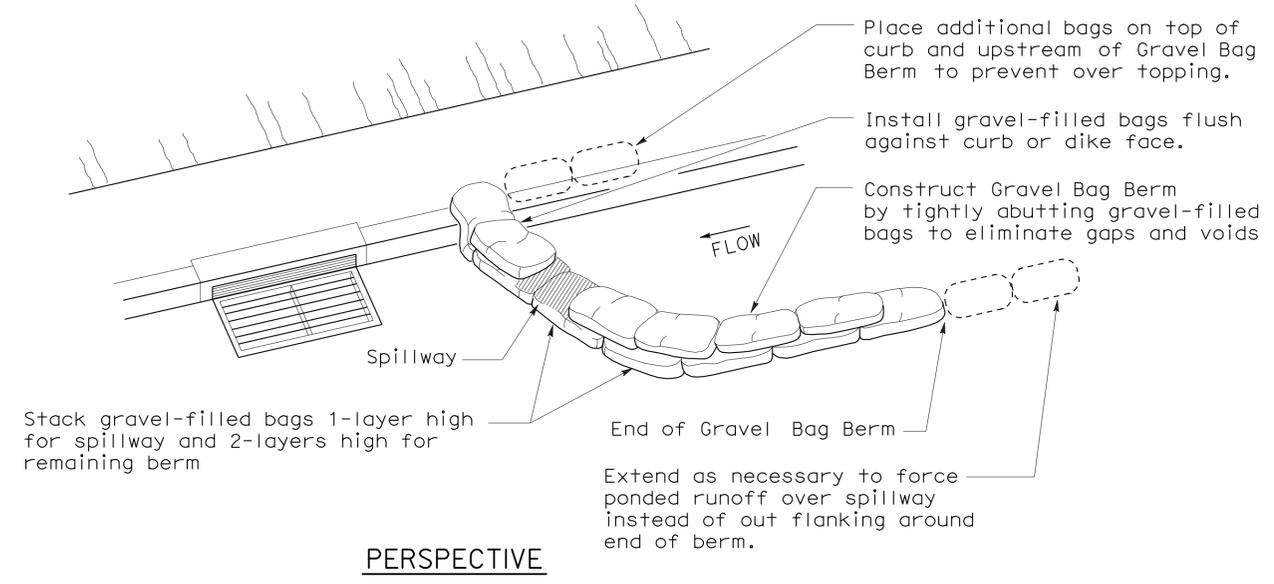
PLAN
CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)



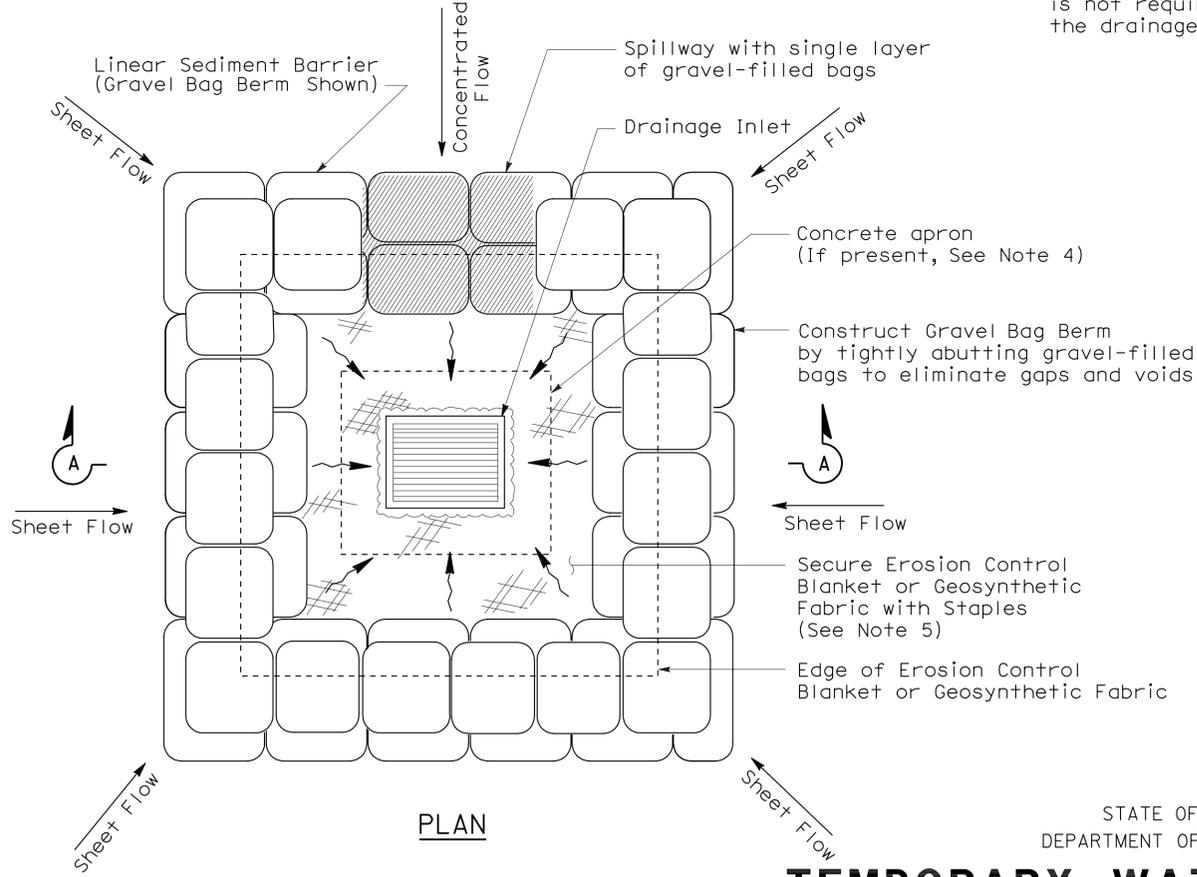
SECTION A-A

NOTES:

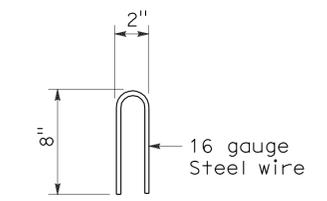
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



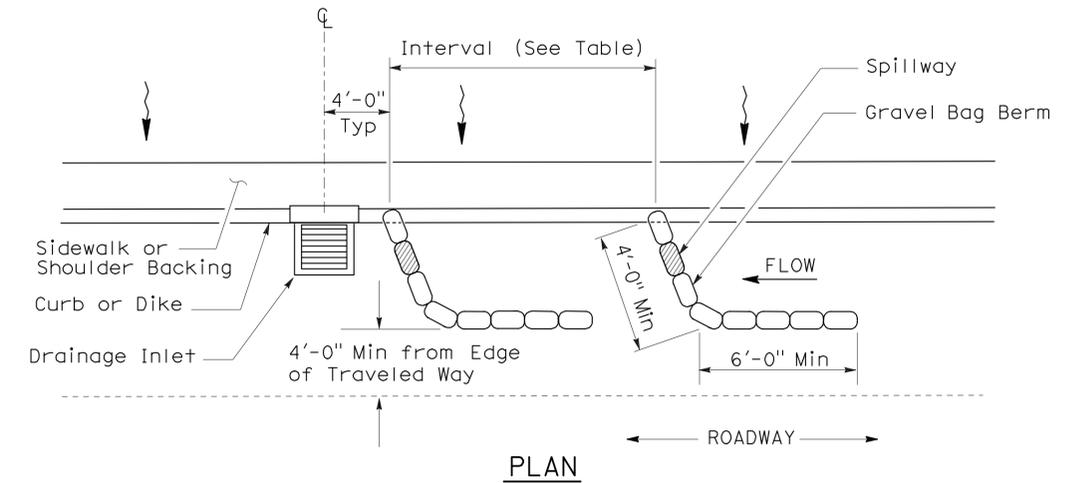
PERSPECTIVE



PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



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

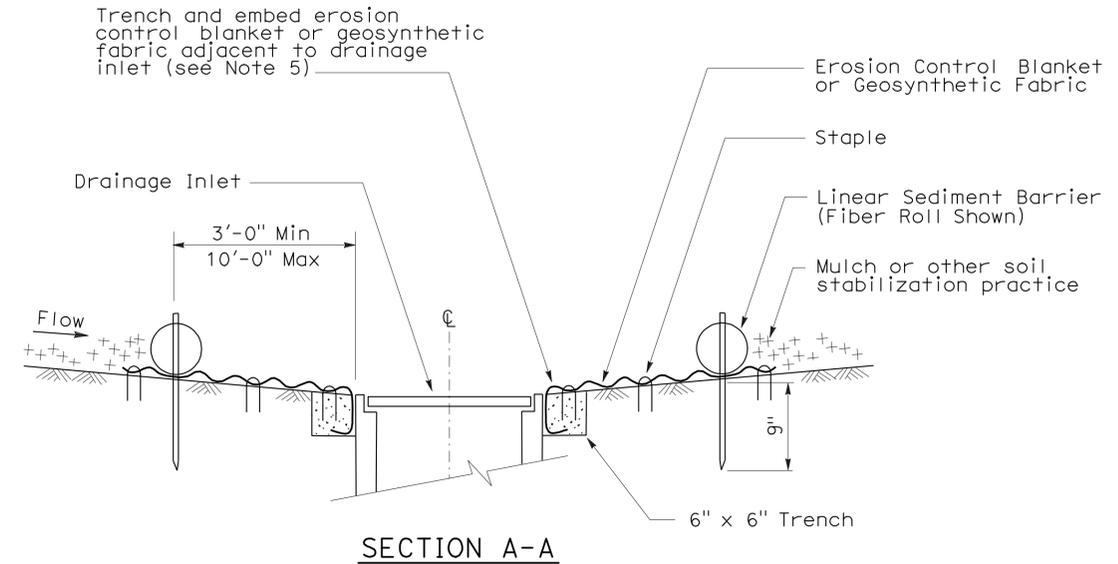
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

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

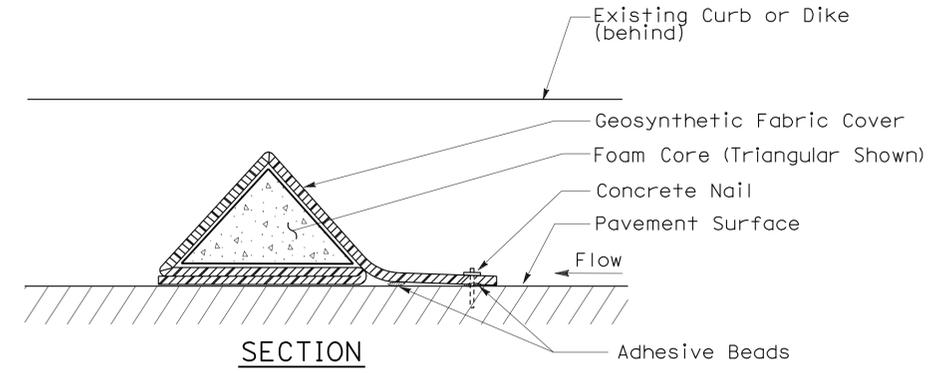
2006 NEW STANDARD PLAN NSP T62

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

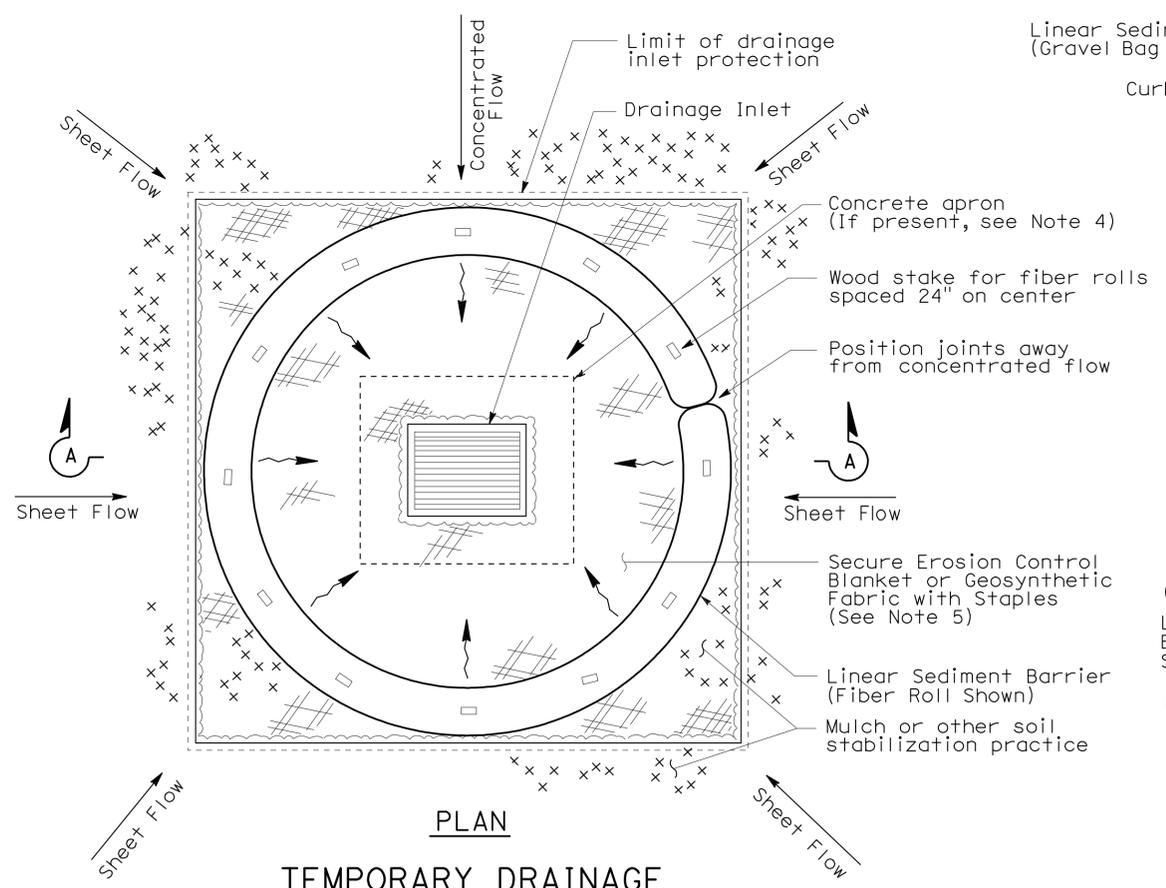


SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

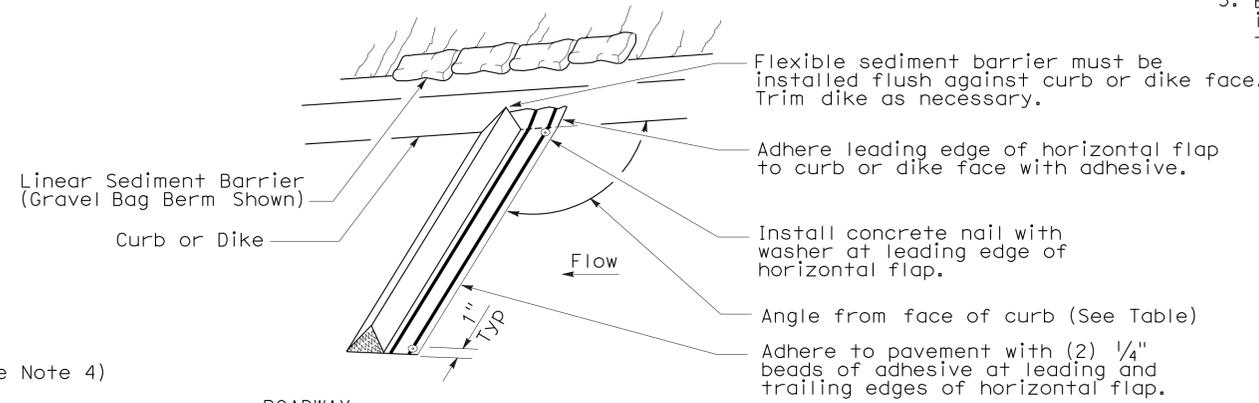
NOTES:

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.

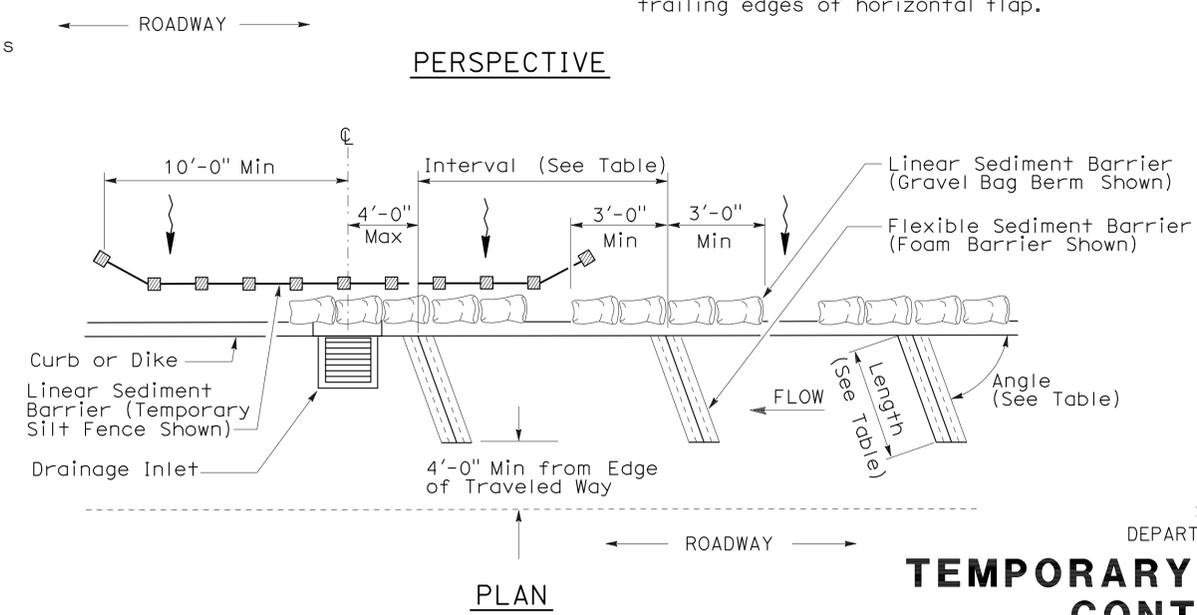
To accompany plans dated 7-26-10



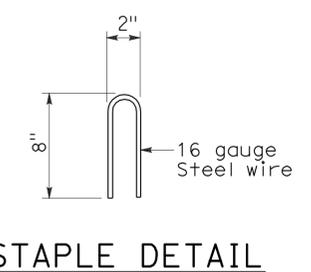
PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PERSPECTIVE



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



STAPLE DETAIL

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.

2006 NEW STANDARD PLAN NSP T63

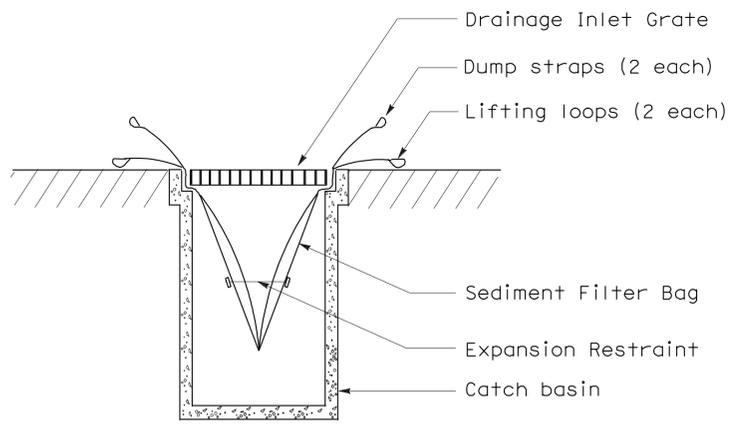
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	101	19.7/30.8	24	24

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT

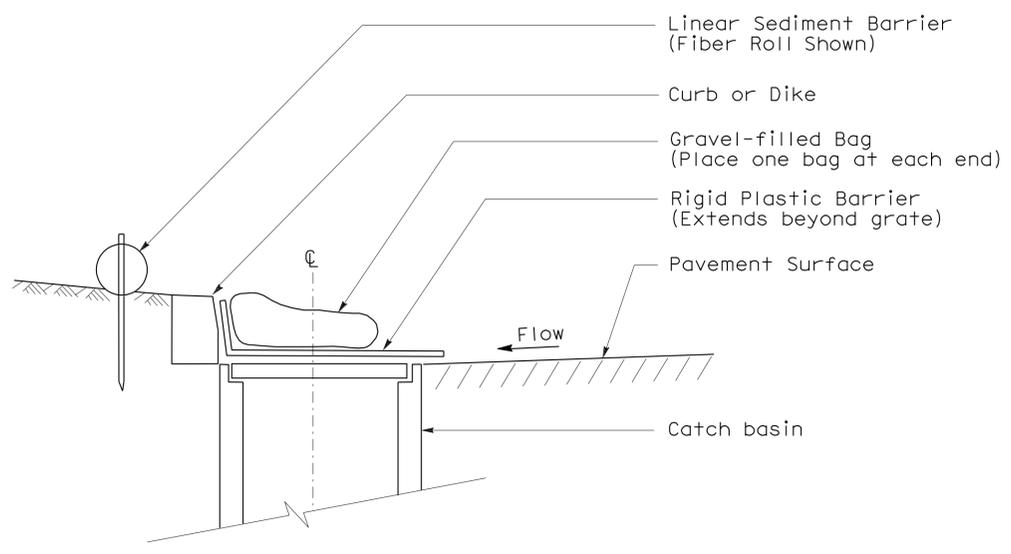
August 15, 2008
 PLANS APPROVAL DATE

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 Signature
 11-04-08
 Renewal Date
 08-11-08
 Date

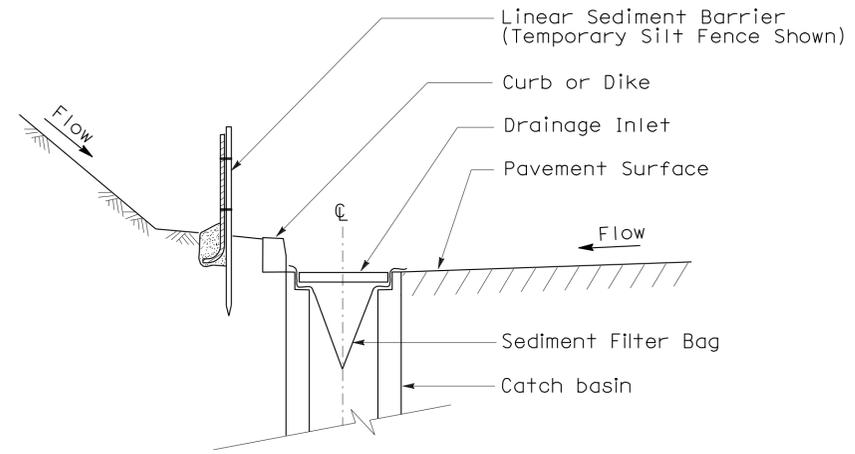
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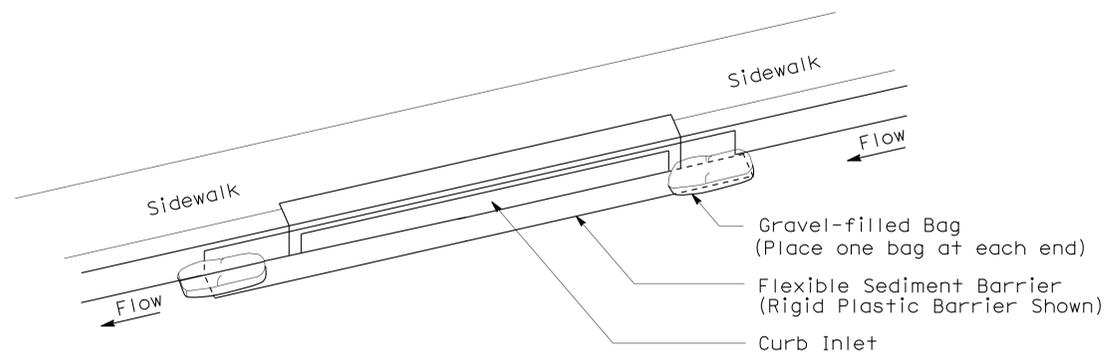
SECTION B-B
SEDIMENT FILTER BAG DETAIL



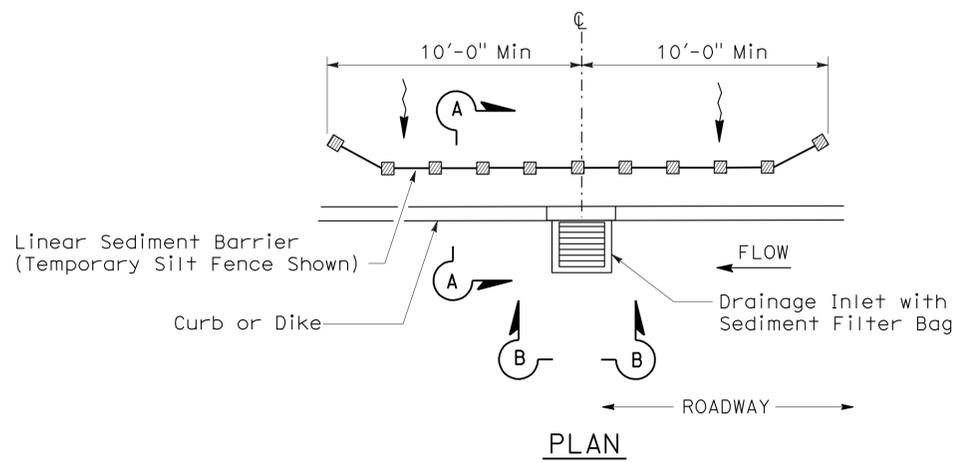
SECTION
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)



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.

To accompany plans dated 7-26-10

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.