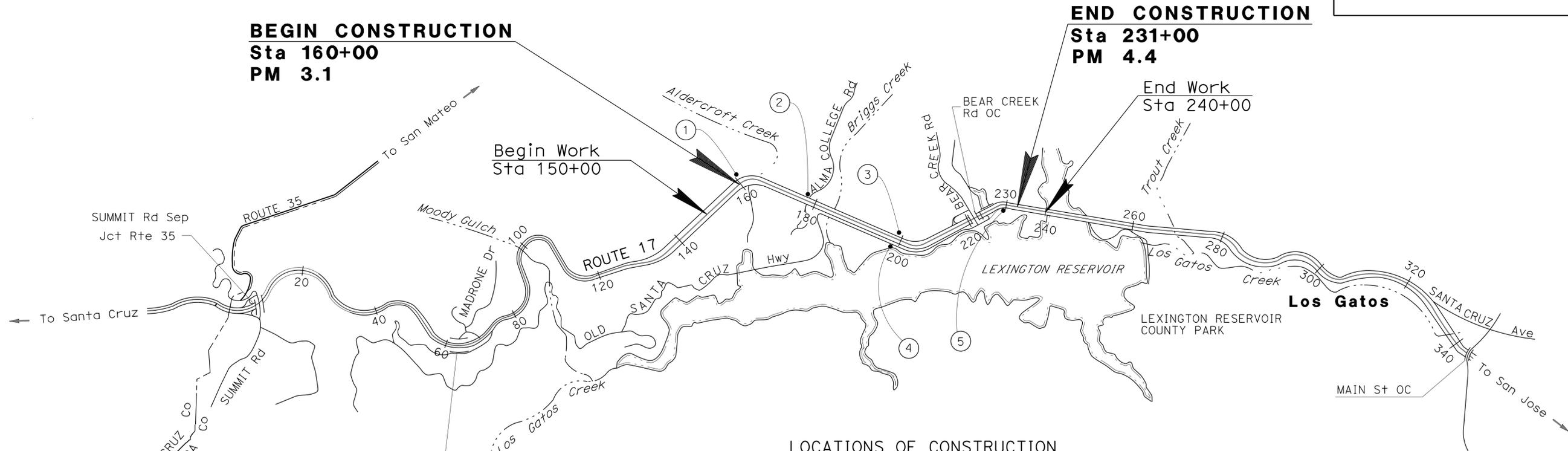
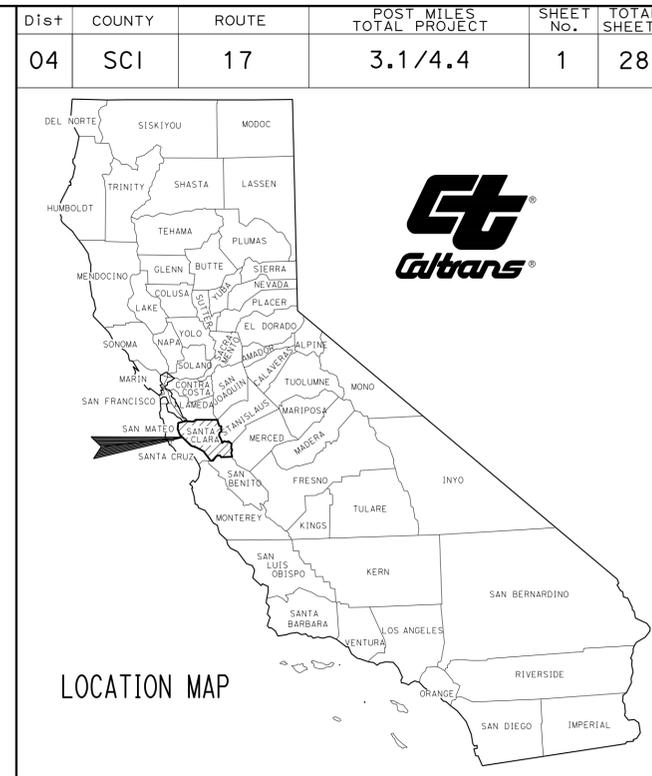


SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-6	LAYOUTS
7	CONSTRUCTION DETAILS
8-14	DRAINAGE PROFILES, DETAILS, AND QUANTITIES
15	CONSTRUCTION AREA SIGNS
16-17	SUMMARY OF QUANTITIES
18-21	EROSION CONTROL LEGEND, PLANS, AND DETAILS
22-28	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACNHP-P017(109)E  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN SANTA CLARA COUNTY**  
**AT VARIOUS LOCATIONS FROM 0.3 MILE SOUTH**  
**OF ALMA COLLEGE ROAD TO 0.2 MILE NORTH**  
**OF BEAR CREEK ROAD OVERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION

No. (X)	COUNTY	ROUTE	POST MILE	DESCRIPTION	DIRECTION
1	SCI	17	3.10	0.30 MILE SOUTH OF ALMA COLLEGE Rd	SOUTHBOUND
2	SCI	17	3.40	AT ALMA COLLEGE Rd CROSSING	SOUTHBOUND
3	SCI	17	3.70	0.42 MILE SOUTH OF BEAR CREEK Rd OC	SOUTHBOUND
4	SCI	17	3.70	0.42 MILE SOUTH OF BEAR CREEK Rd OC	NORTHBOUND
5	SCI	17	4.40	0.19 MILE NORTH OF BEAR CREEK Rd OC	NORTHBOUND

NO SCALE

PROJECT ENGINEER DATE 7-18-11  
 REGISTERED CIVIL ENGINEER  
**September 3, 2013**  
 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.

PROJECT MANAGER  
 DINA EL-TAWANSY  
 DESIGN ENGINEER  
 GETACHEW ESHETE

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

DATE PLOTTED => 12-FEB-2014  
 TIME PLOTTED => 05:56  
 LAST REVISION 07-18-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	2	28

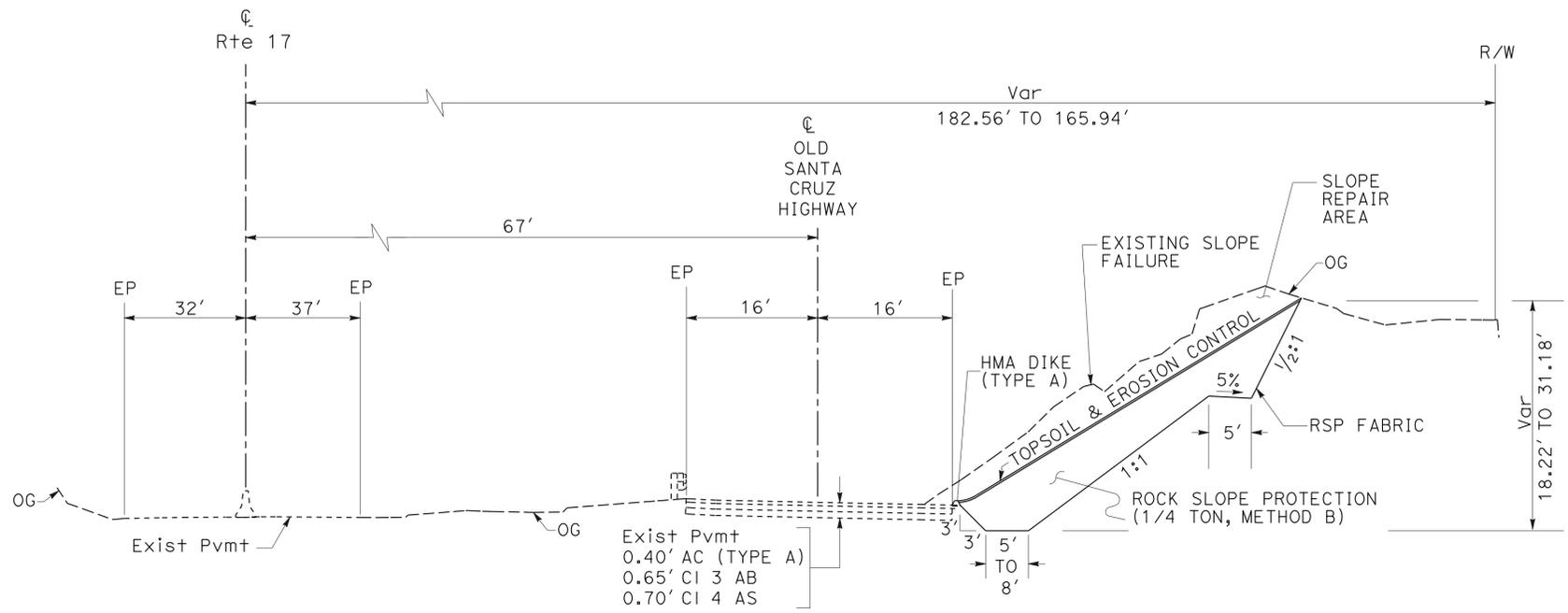
REGISTERED CIVIL ENGINEER	DATE	7-18-11
PLANS APPROVAL DATE		9-3-13

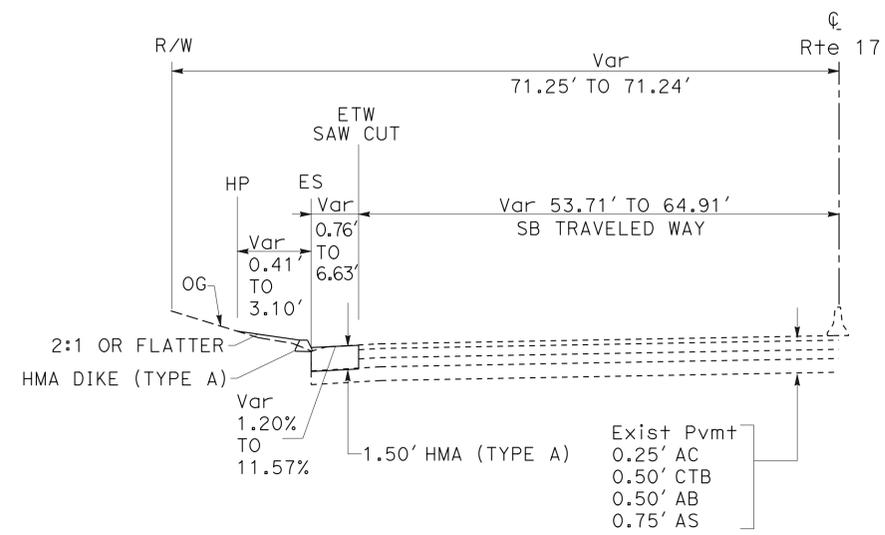
REGISTERED PROFESSIONAL ENGINEER	DANIEL B. MASSA
No.	59095
Exp.	6/30/15
CIVIL	

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.

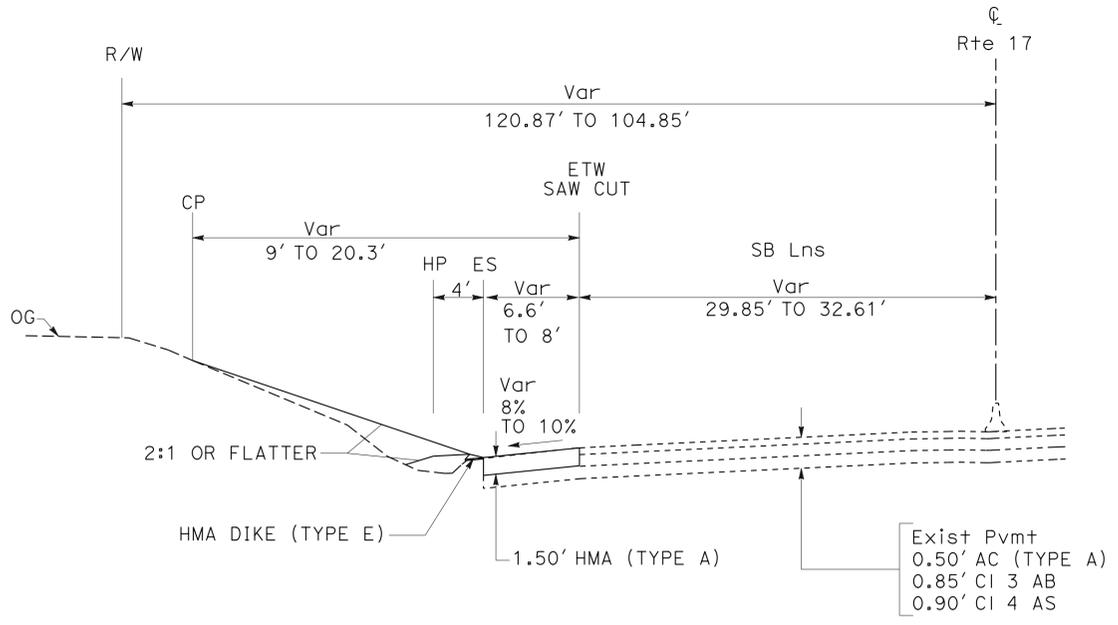
- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
  - FOR LOCATION AND TYPE OF DIKE SEE LAYOUTS, SUMMARY OF QUANTITIES AND CONSTRUCTION DETAILS.
  - DIMENSIONS OF THE PAVEMENT STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
  - SUPERELEVATION AS SHOWN OR AS DIRECTED BY ENGINEER.



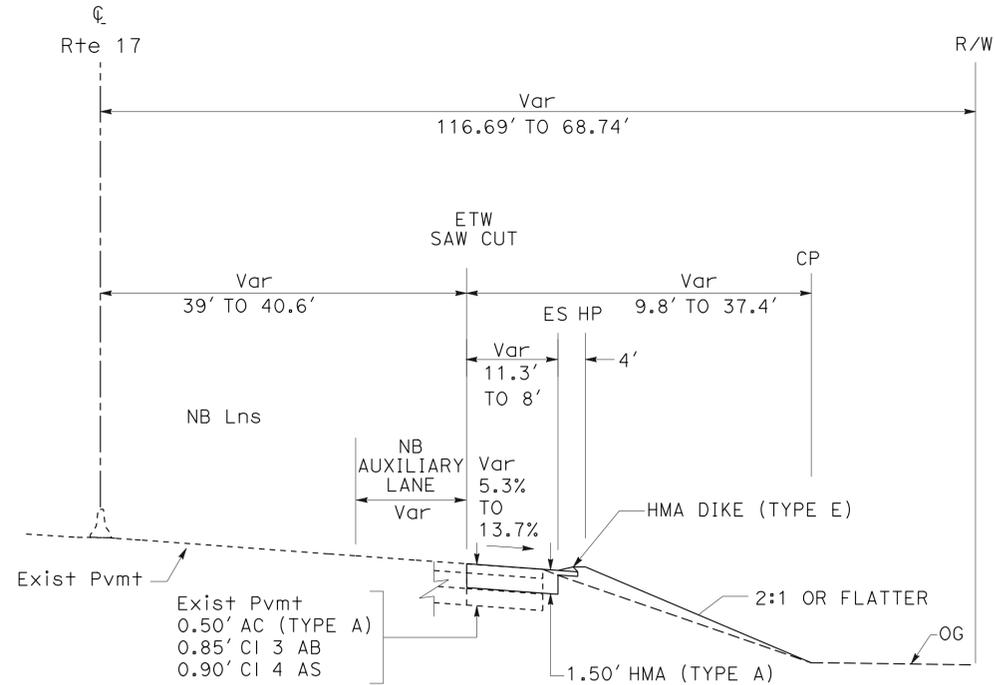
**LOCATION 4 (PM 3.7 NB)**  
Sta 195+50.00 TO Sta 196+10.00



**LOCATION 2 (PM 3.4 SB)**  
Sta 177+11.57 TO Sta 177+39.24



**LOCATION 3 (PM 3.7 SB)**  
Sta 197+35.00 TO Sta 198+40.00



**LOCATION 5 (PM 4.4 NB)**  
Sta 227+70.00 TO Sta 230+00.00

**TYPICAL CROSS SECTIONS**  
NO SCALE  
**X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - 06-DESIGN  
Caltrans

REVISOR BY  
DATE

KEN CLAASSEN  
DANIEL MASSA

CALCULATED/DESIGNED BY  
CHECKED BY

FUNCTIONAL SUPERVISOR  
GETACHEW ESHETE

06-DESIGN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	3	28

REGISTERED CIVIL ENGINEER 7-18-11 DATE

9-3-13 PLANS APPROVAL DATE

DANIEL B. MASSA No. 59095 Exp. 6/30/15 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.

**NOTES:**

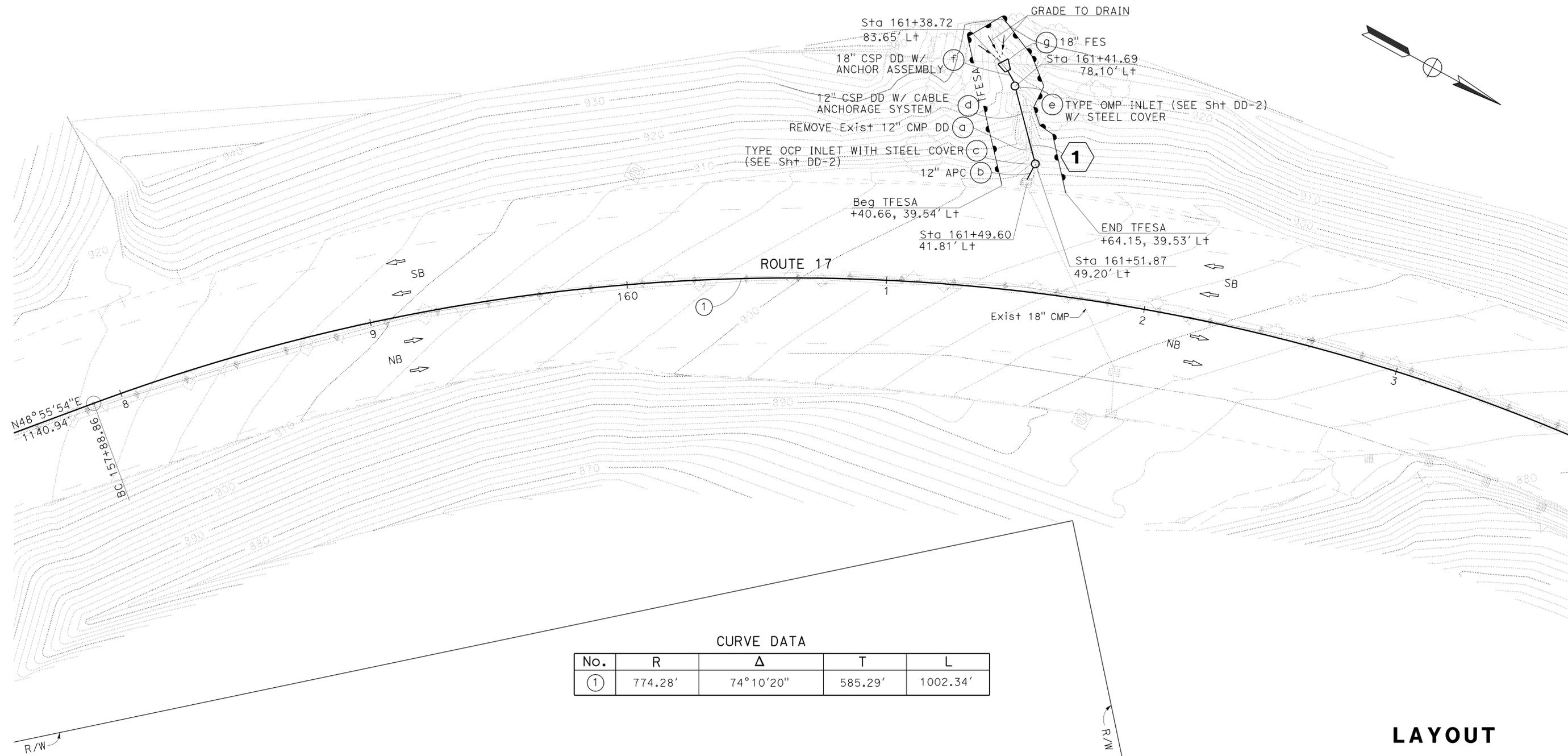
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- TYPE Z-2 MATERIAL EXISTS AT LOCATIONS 1 AND 2.

**LEGEND:**

- FES
- HMA OVERSIDE DRAIN
- GRADE TO DRAIN
- RSP (FACING, METHOD B)
- SLOPE REPAIR AREA AND RSP (1/4 TON, METHOD B)
- SAW CUT AREA

**ABBREVIATIONS:**

- OMP 36" DIAMETER METAL PIPE INLET
- OCP 36" DIAMETER CONCRETE PIPE INLET
- TFESA TEMPORARY FENCE ENVIRONMENTALLY SENSITIVE AREA
- W/ WITH



**CURVE DATA**

No.	R	Δ	T	L
①	774.28'	74°10'20"	585.29'	1002.34'

**LAYOUT**  
**LOCATION 1 (PM 3.1 SB)**  
 SCALE: 1" = 20' **L-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: DANIEL MASSA  
 CHECKED BY: DANIEL MASSA  
 REVISED BY: MVZ  
 DATE REVISED: 4/7/11  
 BORDER LAST REVISED 7/2/2010

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN

FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 KEN CLAASSEN DANIEL MASSA  
 REVISED BY: DATE REVISED:  
 PKD 09/09

**NOTES:**

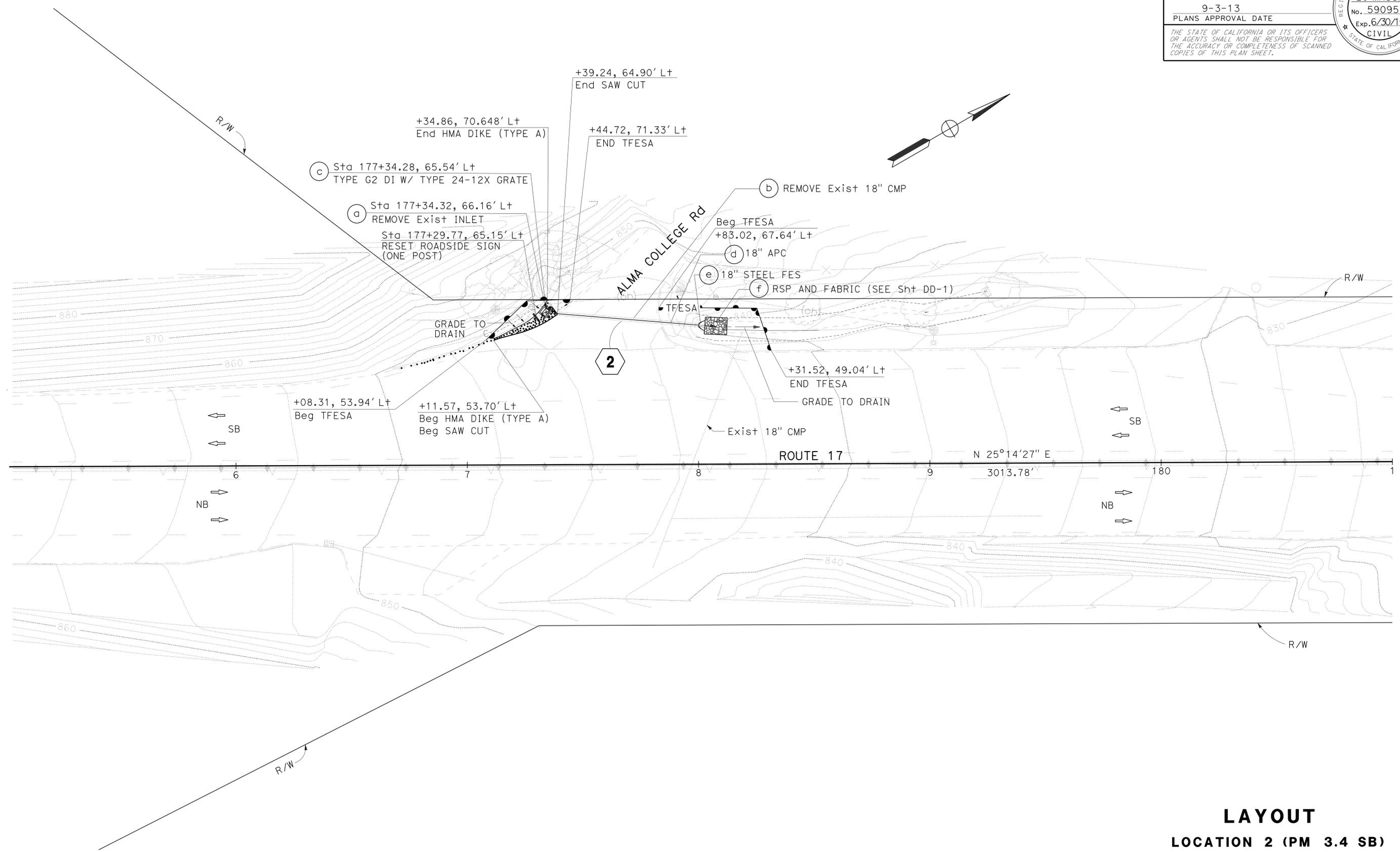
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	4	28

REGISTERED CIVIL ENGINEER: DANIEL B. MASSA  
 No. 59095  
 Exp. 6/30/15  
 CIVIL

PLANS APPROVAL DATE: 9-3-13  
 DATE: 7-18-11

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.



**LAYOUT**  
**LOCATION 2 (PM 3.4 SB)**  
 SCALE: 1" = 20'  
**L-2**

LAST REVISION DATE PLOTTED => 04-SEP-2013 07-18-11 TIME PLOTTED => 11:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	5	28

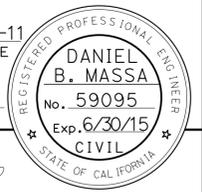
REGISTERED CIVIL ENGINEER	DATE
7-18-11	

PLANS APPROVAL DATE
9-3-13

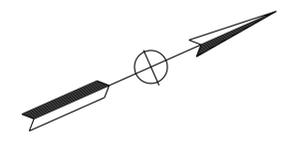
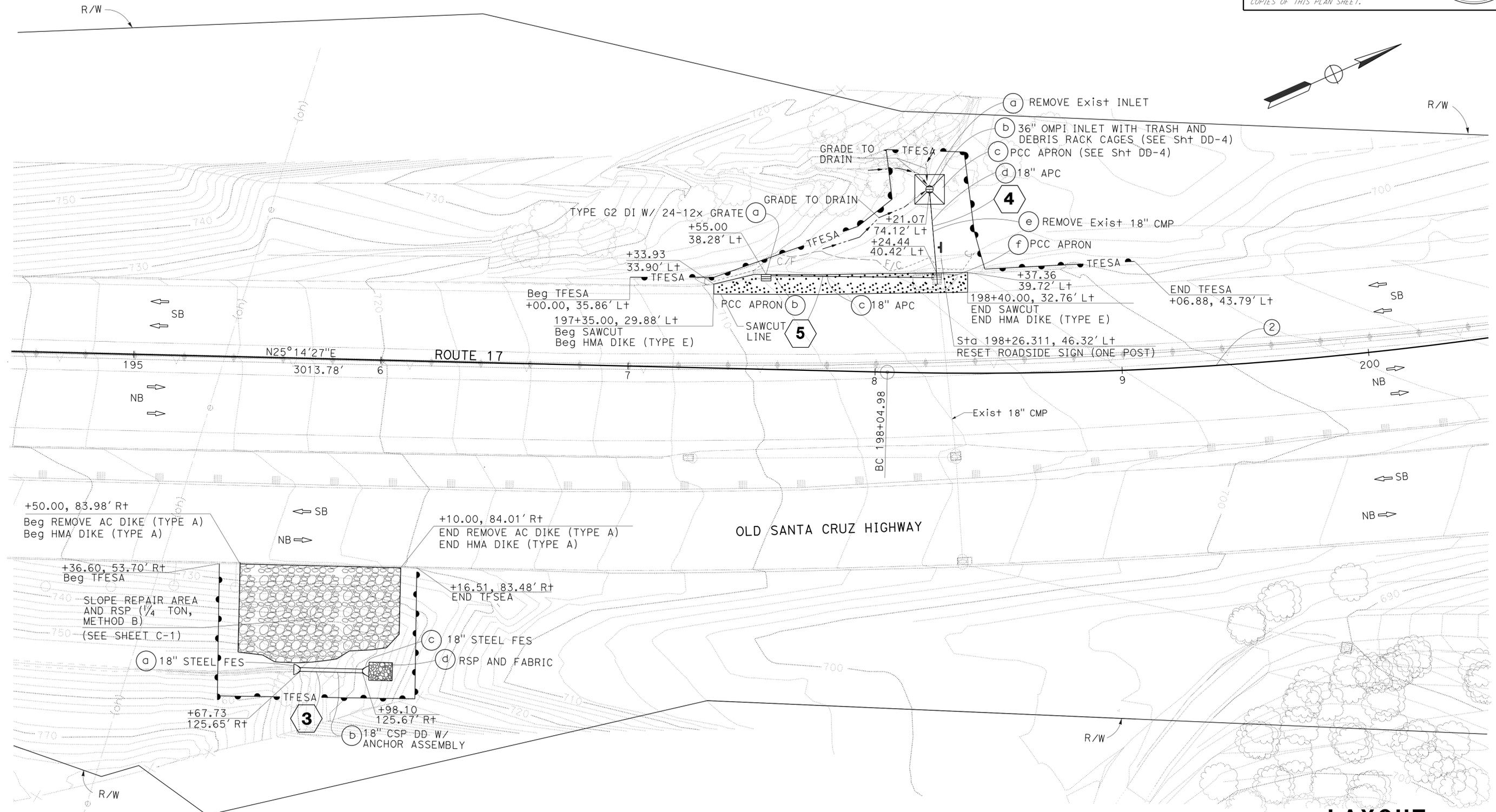
  

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



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

CURVE DATA				
No.	R	Δ	T	L
②	1509.18'	52°45'38"	748.52'	1389.73'



**LAYOUT**  
**LOCATION 3 (PM 3.7 SB)**  
**LOCATION 4 (PM 3.7 NB)**  
 SCALE: 1" = 20'  
**L-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN

FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: KEN CLAASSEN  
 CHECKED BY: DANIEL MASSA  
 REVISED BY: DATE REVISED  
 PKD: 02/09  
 DBM: 08/11

LAST REVISION DATE PLOTTED => 04-SEP-2013  
 07-18-11 TIME PLOTTED => 11:11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: KEN CLAASSEN  
 CHECKED BY: DANIEL MASSA  
 REVISED BY: DANIEL MASSA  
 DATE REVISED: 08/11  
 DBM: 08/11

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

**CURVE DATA**

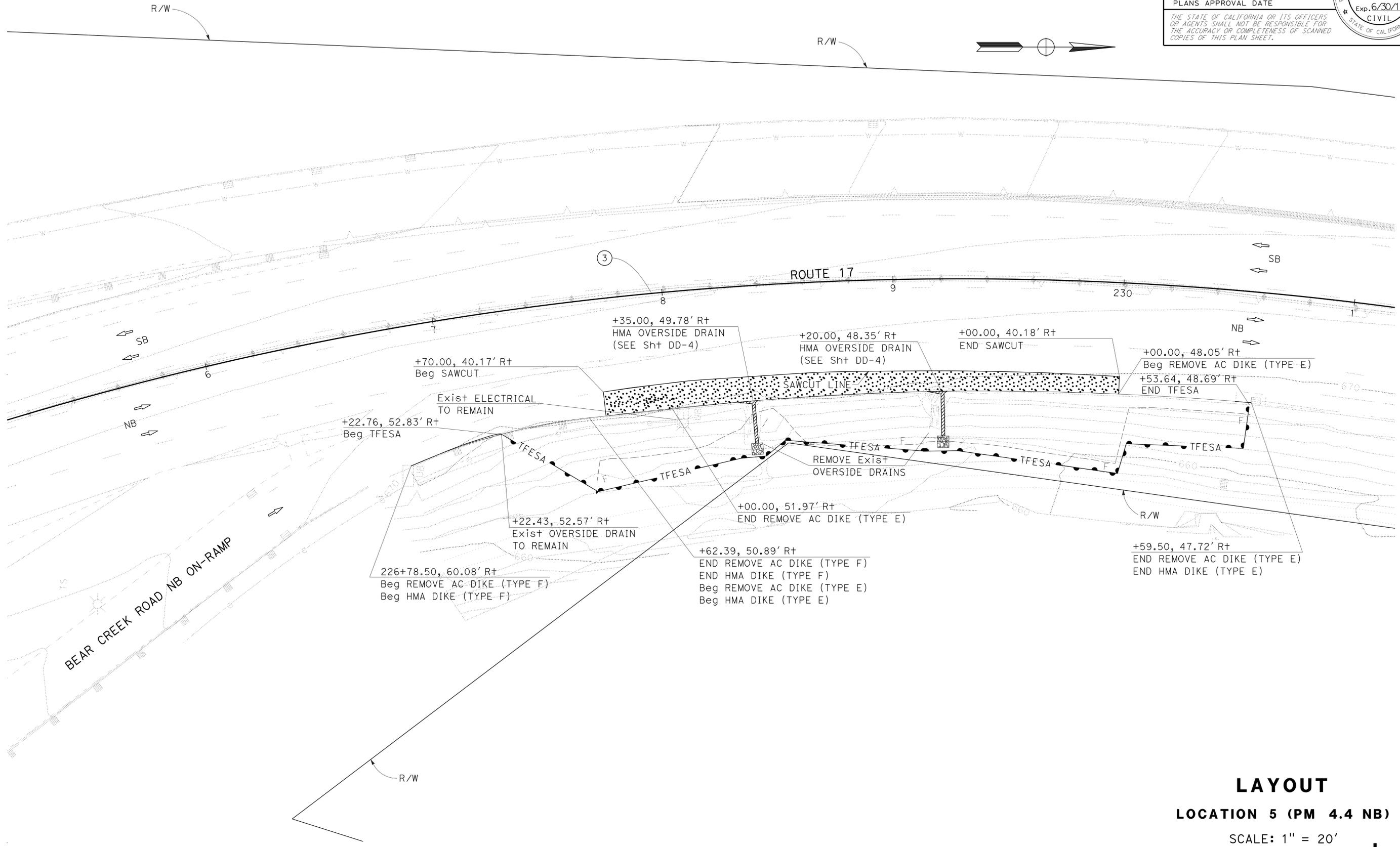
No.	R	$\Delta$	T	L
③	1427.16'	38°33'15"	499.14'	960.33'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	6	28

REGISTERED CIVIL ENGINEER 7-18-11  
 DATE  
 9-3-13  
 PLANS APPROVAL DATE

**DANIEL B. MASSA**  
 No. 59095  
 Exp. 6/30/15  
 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.

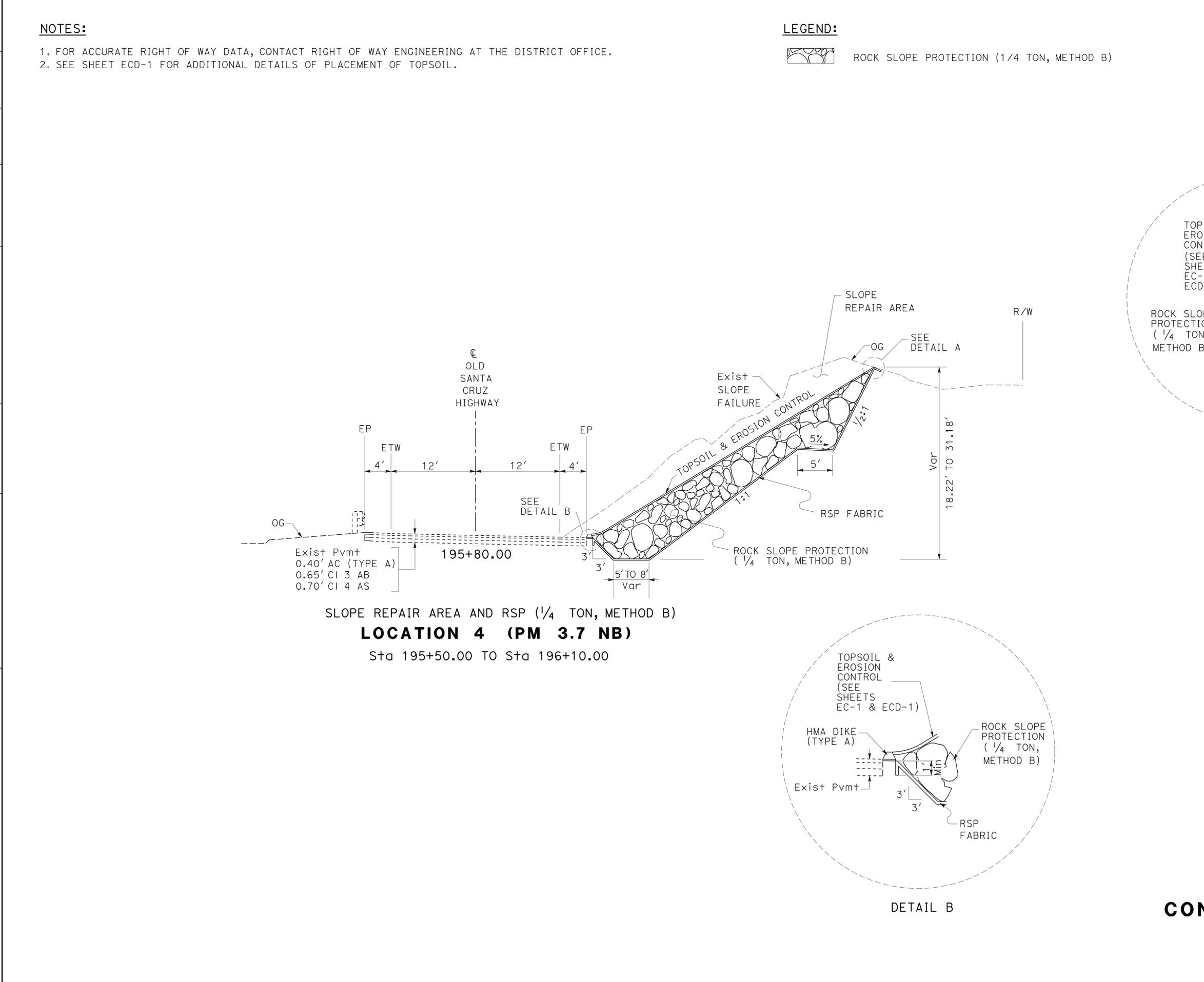


**LAYOUT**  
**LOCATION 5 (PM 4.4 NB)**  
 SCALE: 1" = 20'

**L-4**

LAST REVISION DATE PLOTTED => 04-SEP-2013 07-18-11 TIME PLOTTED => 11:11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN



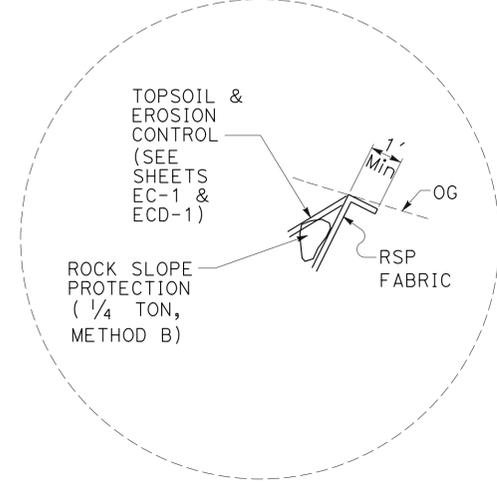
SLOPE REPAIR AREA AND RSP (1/4 TON, METHOD B)  
**LOCATION 4 (PM 3.7 NB)**  
 Sta 195+50.00 TO Sta 196+10.00

**LEGEND:**  
 ROCK SLOPE PROTECTION (1/4 TON, METHOD B)

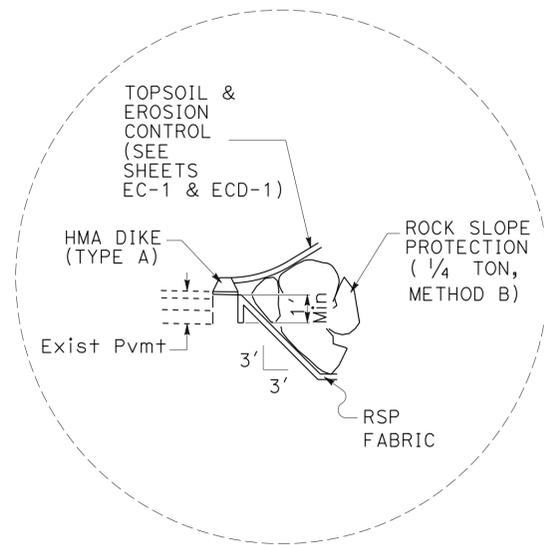
**NOTES:**  
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.  
 2. SEE SHEET ECD-1 FOR ADDITIONAL DETAILS OF PLACEMENT OF TOPSOIL.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	7	28

REGISTERED CIVIL ENGINEER DATE 7-18-11  
 9-3-13 PLANS APPROVAL DATE  
 DANIEL B. MASSA No. 59095 Exp. 6/30/15 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.



DETAIL A



DETAIL B

**CONSTRUCTION DETAILS**

NO SCALE **C-1**

LAST REVISION DATE PLOTTED => 04-SEP-2013 07-18-11 TIME PLOTTED => 11:12

**ABBREVIATIONS:**

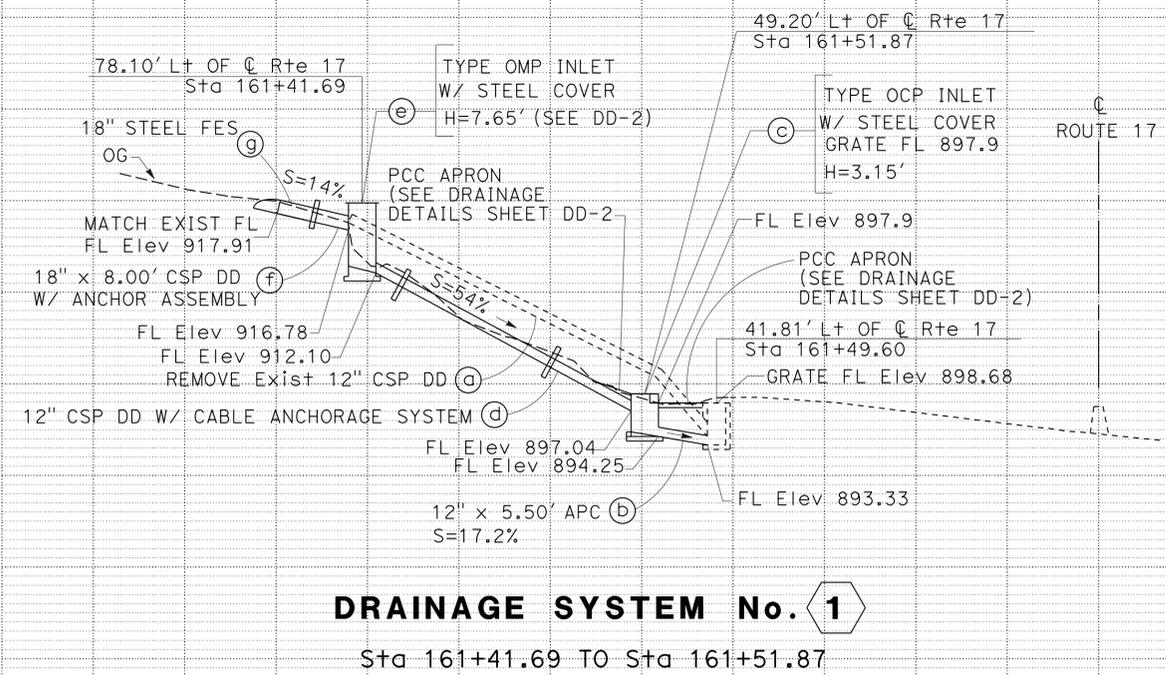
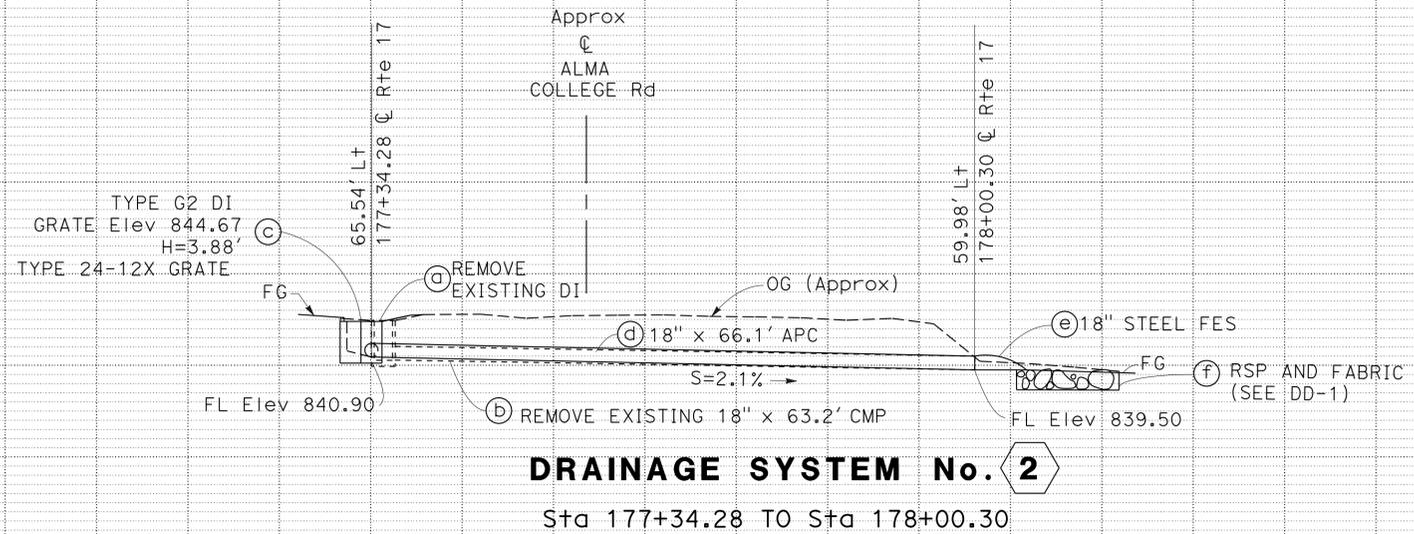
OMP 36" DIAMETER METAL PIPE INLET  
 OCP 36" DIAMETER CONCRETE PIPE INLET  
 W/ WITH

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	8	28

REGISTERED CIVIL ENGINEER DATE 7-18-11  
 9-3-13  
 PLANS APPROVAL DATE

DANIEL B. MASSA  
 No. 59095  
 Exp. 6/30/15  
 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.



**DRAINAGE PROFILES**  
 SCALE: Horiz 1" = 10'  
 Vert 1" = 10' **DP-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR GETACHEW ESHETE  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 REVISIONS: 03/15/11  
 REVISOR: M. ZAMORA  
 DATE: 03/15/11

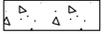


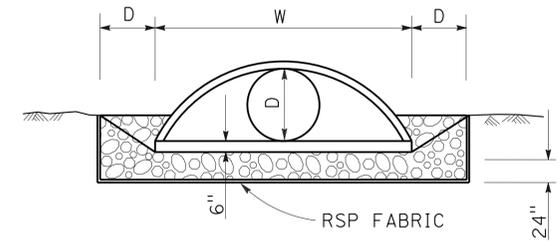
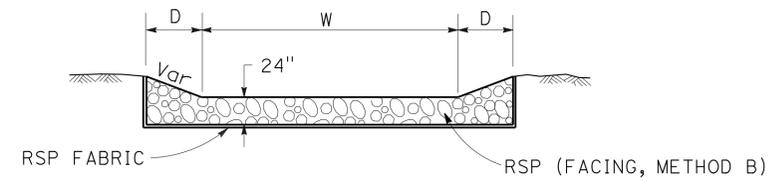
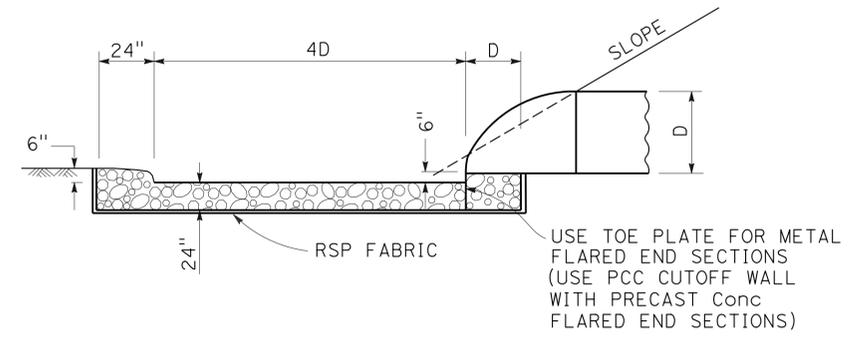
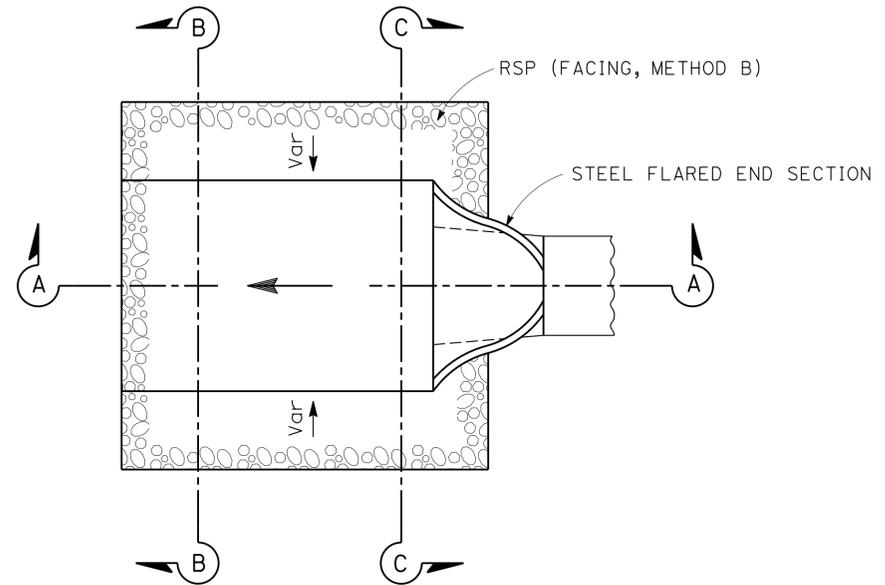
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 KEN CLAASSEN DAN MASSA  
 REVISED BY: DATE REVISED:

**NOTES:**

- "D" REPRESENTS THE OUTSIDE DIAMETER OF THE PIPE CONNECTED TO THE FLARED END SECTION.
- "W" REPRESENTS THE WIDTH OF THE FLARED END SECTION OPENING.

**LEGEND:**

-  RSP (FACING, METHOD B)
-  PCC
-  GRADE TO DRAIN
-  HMA



**ROCK ENERGY DISSIPATOR**

**DRAINAGE DETAILS**

NO SCALE

**DD-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	10	28

REGISTERED CIVIL ENGINEER DATE 7-18-11  
 9-3-13  
 PLANS APPROVAL DATE

DANIEL B. MASSA  
 No. 59095  
 Exp. 6/30/15  
 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.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	12	28

REGISTERED CIVIL ENGINEER	DATE
7-18-11	
PLANS APPROVAL DATE	
9-3-13	

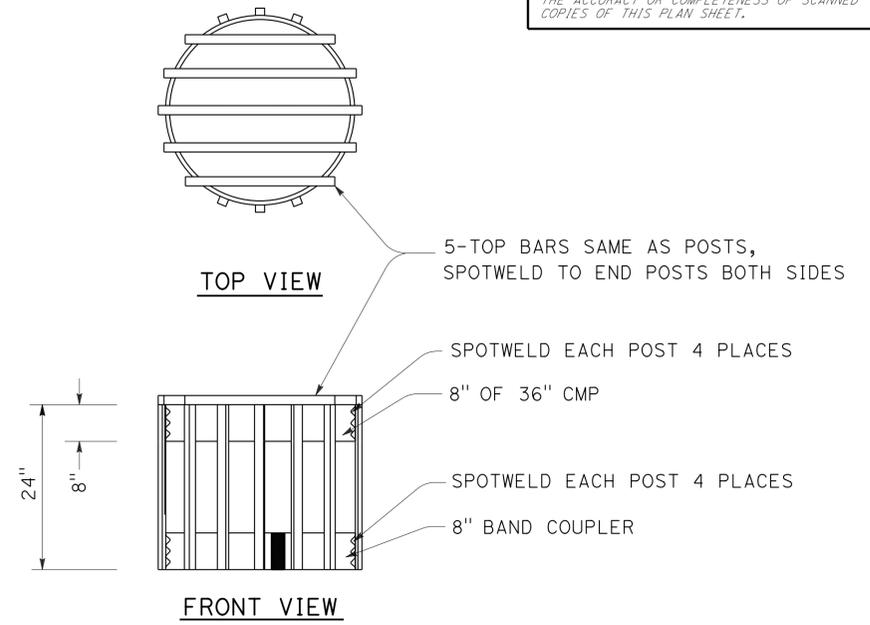
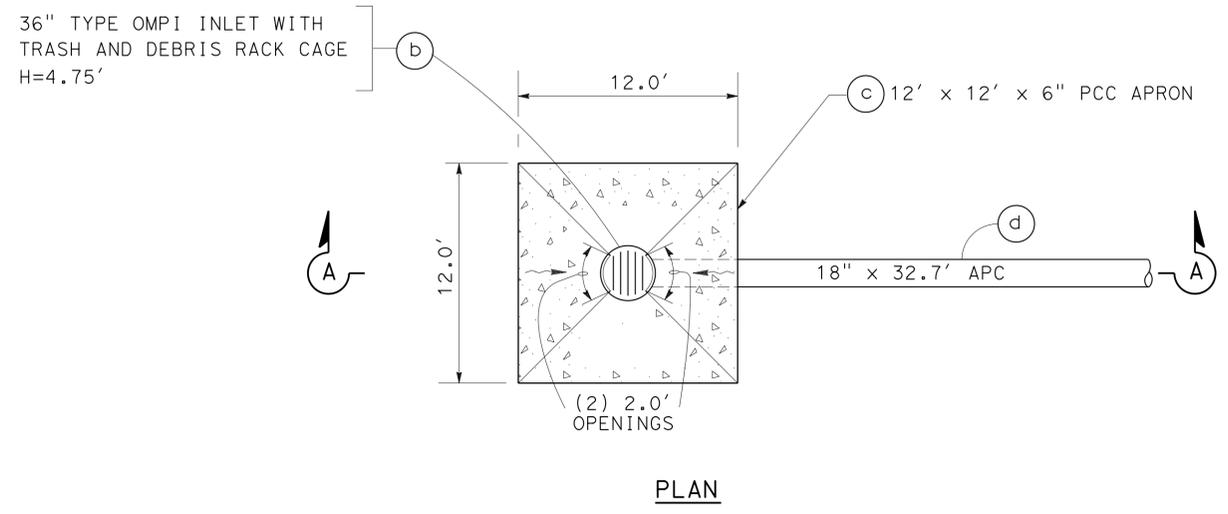
  

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. MASSA
No. 59095
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

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

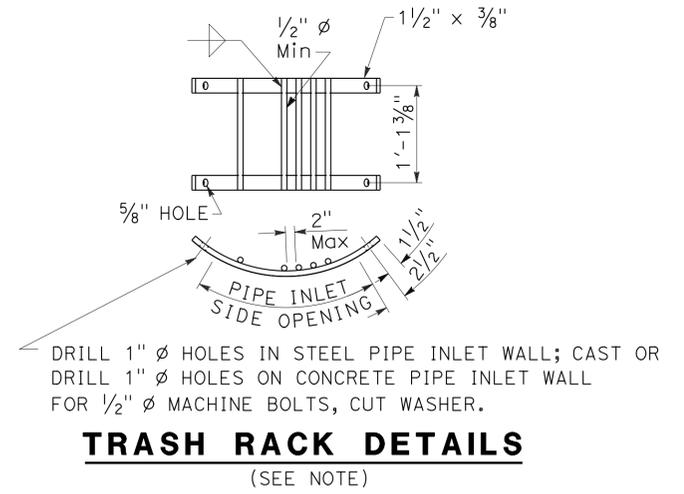
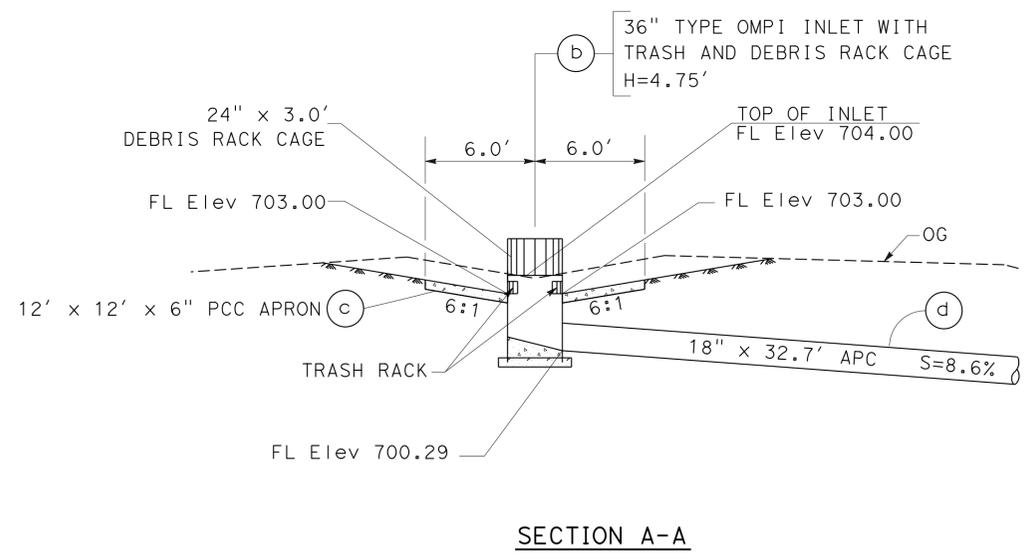
**NOTE:**

ALL HARDWARE TO BE GALVANIZED AFTER FABRICATION.



16 POSTS - USE 2" PIPE OR L2" x 2" x 3/16" (GALVANIZED STEEL OR ALUMINUM)

**DEBRIS RACK CAGE DETAILS**



**DRAINAGE SYSTEM No. 4**

Sta 198+21.07 TO Sta 198+24.44

**DRAINAGE DETAILS**

NO SCALE

**DD-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - 06-DESIGN

Caltrans

REVISOR

REVISION

DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR

DATE PLOTTED => 04-SEP-2013

TIME PLOTTED => 11:18

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 CALCULATED/DESIGNED BY: [blank]  
 CHECKED BY: DANIEL MASSA  
 REVISED BY: KEN CLAASSEN  
 DATE REVISED: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	13	28

REGISTERED CIVIL ENGINEER DATE 7-18-11  
 9-3-13 PLANS APPROVAL DATE  
 DANIEL B. MASSA No. 59095 Exp. 6/30/15 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.

**HMA OVERSIDE DRAIN**

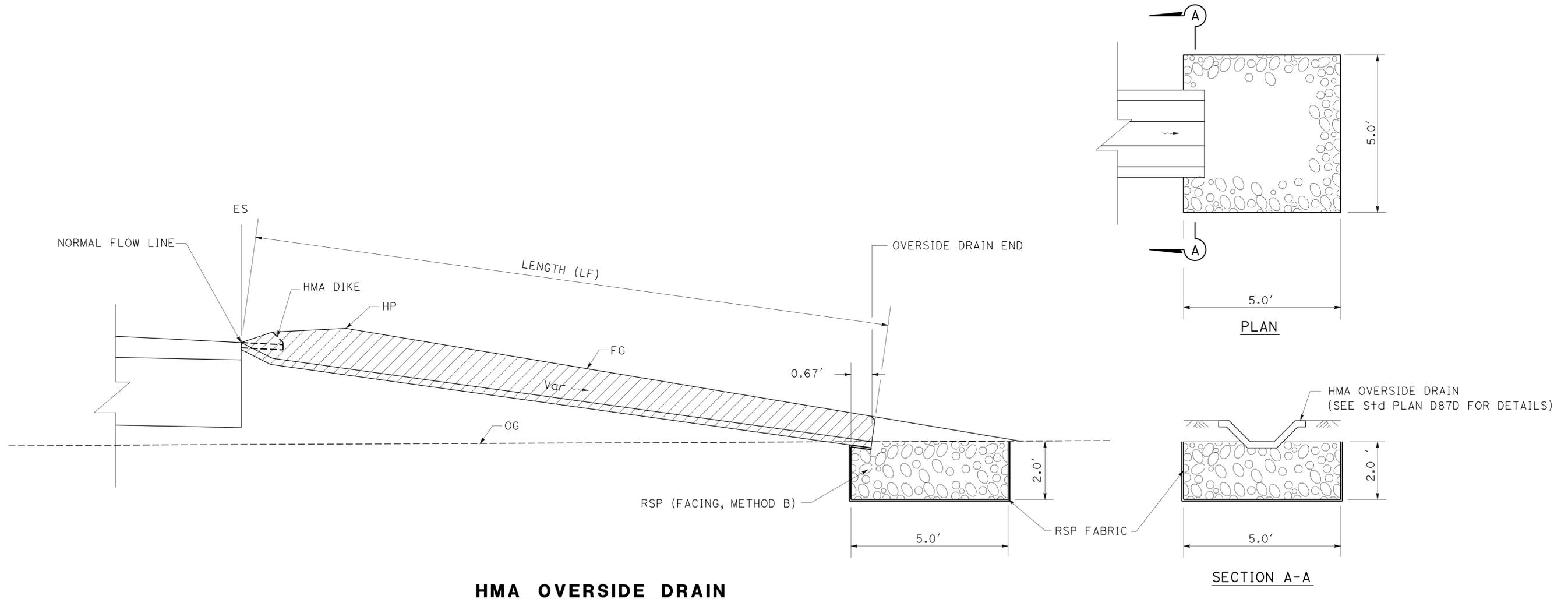
LOCATION	LENGTH	PLACE HMA (MISCELLANEOUS AREA)
	LF	SQYD
Sta 228+35.00, 49.78' Rt	7.0	3.6
Sta 229+20.00, 48.35' Rt	20.0	7.6
SUBTOTAL	27.0	11.2 *

\* SEE SHEET Q-1 FOR TOTAL QUANTITY.

**RSP (FACING, METHOD B)**

LOCATION	QUANTITY
	CY
Sta 228+35.00, 49.78' Rt	1.85
Sta 229+20.00, 48.35' Rt	1.85
SUBTOTAL	3.70 *

\* SEE SHEET DQ-1 FOR TOTAL QUANTITY.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	14	28

7-18-11  
REGISTERED CIVIL ENGINEER DATE

9-3-13  
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.

DESIGNATION	APC ALLOWABLE PIPE MATERIAL			
	RCP	HDPE (TYPE S)	CSP (POLYMERIC SHEET COATED)	
	SIZE	SIZE	SIZE	THICKNESS
18" APC	18"	18"	18"	0.109"
24" APC	24"	24"	24"	0.109"
36" APC	36"	36"	36"	0.109"

**NOTES:**

- ALL GRATES MUST BE 24-12X EXCEPT AS OTHERWISE SHOWN IN THE DESCRIPTION.
- ALL CORRUGATED STEEL PIPE MUST BE POLYMERIC SHEET COATED.

**ABBREVIATIONS:**

OCP 36" DIAMETER CONCRETE PIPE INLET  
OMP 36" DIAMETER METAL PIPE INLET

**DRAINAGE QUANTITIES**

DRAINAGE SYSTEM No.	DRAINAGE UNIT	INLET TYPE (N)	Misc IRON & STEEL	DESIGN H (N)	MINOR CONCRETE (MINOR STRUCTURE)	MINOR CONCRETE (Misc CONSTRUCTION)	12" APC	18" APC	18" ANCHOR ASSEMBLY	12" CABLE ANCHORAGE SYSTEM (N)	12" CSP DD (0.079" THICK)	18" CSP DD (0.109" THICK)	18" STEEL FES	36" PRECAST CONCRETE PIPE INLET	36" CSP INLET (0.168" THICK)	RSP		MAXIMUM COVER (N)	REMOVE CULVERT	REMOVE INLET	REMOVE Exist 18" CMP (N)	DESCRIPTION	STATION	DRAINAGE PLAN SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	
																(FACING, METHOD B)	FABRIC (CLASS 8)										
LB	LF	CY	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	SQYD	EA	EA	EA	EA					
1	a																		47.3				REMOVE Exist 12" CSP DD	161+40.19 TO 161+58.72	1	1	a
	b						5.5																12" x 5.50' APC	161+51.87 TO 161+49.60			b
	c	OCP	112	3.15	0.90									3.65									TYPE OCP INLET W/STEEL COVER	161+51.87			c
	d									31.75	31.75												12" x 31.75' CSP DD W/ CABLE ANCHORAGE SYSTEM	161+41.69 TO 161+51.87			d
	e	OMP	177	7.65	0.47										8.15								TYPE OMP INLET W/STEEL COVER	161+41.69			e
1	f								1			8.0											18" x 8.00' CSP DD W/ ANCHOR ASSEMBLY	161+35.72 TO 161+41.69			f
	g												1										18" STEEL FES	161+38.72	1	1	g
2	a																				1		REMOVE EXISTING INLET	177+34.28	2	2	a
	b																		63.2				REMOVE EXISTING 18" x 63.2' CMP	177+34.50 TO 178+00.30			b
	c	G2	239	3.88	1.79																		TYPE G2 DI W/ TYPE 24-12X GRATE	177+34.28			c
	d						66.1												3.8				18" x 66.1' APC	177+34.28 TO 178+00.30			d
	e												1										18" STEEL FES	178+00.30			e
2	f																5.17	7.75					RSP AND FABRIC	178+02.60 TO 178+12.07	2	2	f
3	a												1										18" STEEL FES	195+67.73	2	3	a
	b								2			30.4											18" x 30.4' CSP DD W/ANCHOR ASSEMBLY	195+67.73 TO 195+98.10			b
	c												1										18" STEEL FES	195+98.10			c
3	d																5.17	7.75					RSP AND FABRIC	195+98.10 TO 196+08.10	2	3	d
4	a																				1		REMOVE EXISTING INLET	198+21.07	3	4	a
	b	OMPI	1045	4.75	0.47										5.25								36" OMPI INLET WITH TRASH & DEBRIS RACK	198+21.07			b
	c					1.76																	12' x 12' x 0.5' PCC APRON	198+15.07 TO 198+21.07			c
	d						32.7												4.6				18" x 32.7' APC	198+21.07 TO 198+24.44			d
	e																					33.8	REMOVE Exist 18" CMP	198+21.07 TO 198+24.44			e
4	f					0.88																	PCC APRON (6" THICKNESS)	198+24.44	3	4	f
5	a	G2	239	4.29	1.64																		TYPE G2 DI W/24 - 12X GRATE	197+55.00	3	5	a
	b					0.88																	PCC APRON (6" THICKNESS)	197+55.00			b
5	c						66.5												3.4				18" x 66.5' APC	197+55.00 TO 198+24.44	3	5	c
FROM SHEET DD-4																	3.70						RSP (FACING, METHOD B)	Sta 228+35.00 TO Sta 229+20.00	FROM SHEET DD-4		
TOTAL			1812		5.27	3.52	5.5	165.3	3		31.75	38.4	4	3.65	13.40	14.04	15.50*		110.5	2							

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY  
\* SEE SHEET Q-1 FOR TOTAL QUANTITY.

**DRAINAGE QUANTITIES DQ-1**

LAST REVISION DATE PLOTTED => 18-SEP-2013 07-18-11 TIME PLOTTED => 10:41

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	15	28

10-19-11  
 REGISTERED CIVIL ENGINEER DATE

9-3-13  
 PLANS APPROVAL DATE

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

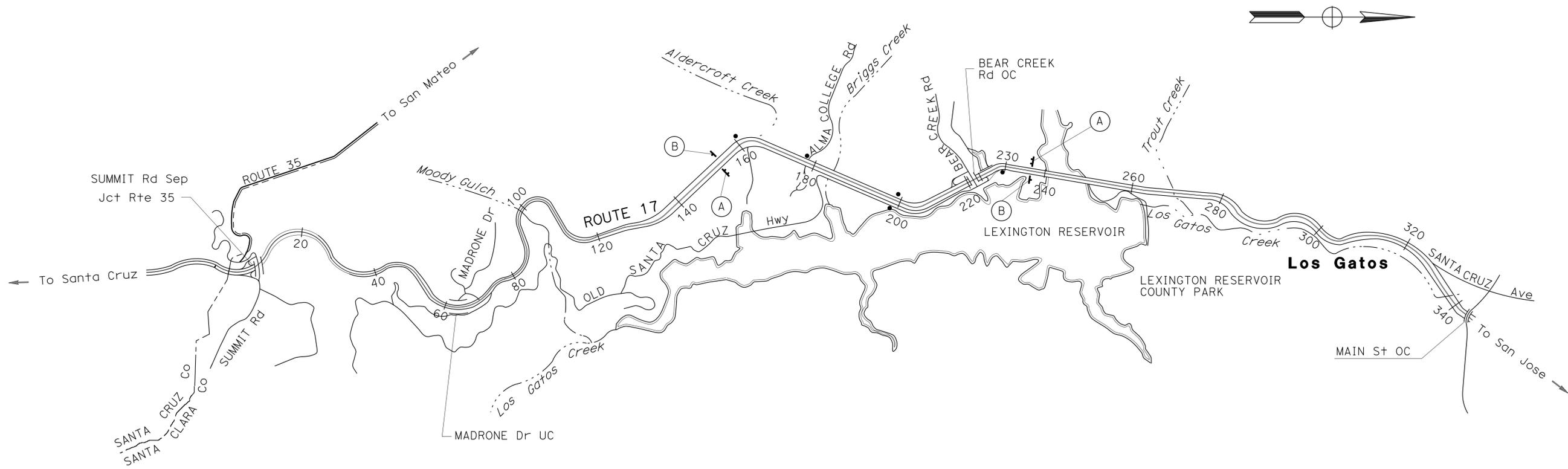
REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. 54750  
 Exp. 12-31-13  
 CIVIL  
 STATE OF CALIFORNIA

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
(A)	G20-1	60" x 60"	ROAD WORK NEXT 5 MILES	2-4" x 6"	2
(B)	G20-2	36" x 36"	END ROAD WORK	1-4" x 6"	2

**NOTE:**

LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06 - TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 DAVID BLACK: FAWZI YAGHMOUR  
 REVISED BY: DATE REVISED:

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

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

LAST REVISION: DATE PLOTTED => 04-SEP-2013  
 07-12-11 TIME PLOTTED => 12:45

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR  
 GETACHEW ESHETE  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 KEN CLAASEN  
 DANIEL MASSA  
 REVISED BY  
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	16	28

7-18-11  
 REGISTERED CIVIL ENGINEER DATE  
 9-3-13  
 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.

### ROADWAY ITEMS QUANTITIES

LOCATION	STATION	ROCK SLOPE PROTECTION (1/4 TON, METHOD B)	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	ROADWAY EXCAVATION	ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	EMBANKMENT (N)	HOT MIX ASPHALT (TYPE A)	TACK COAT	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)
		CY	SQYD	CY	CY	CY	TON	TON	SQYD
Loc 1	161+40.00, Lt				41				
Loc 2	177+11.58 TO 177+34.86, Lt			1	22		7	0.1	
Loc 3	197+35.00 TO 198+40.00, Lt			51		10	100	0.1	
Loc 4	195+50.00 TO 196+10.00, Rt	485	345	660					
Loc 5	226+78.50 TO 230+59.50, Rt			125		121	251	0.3	
FROM SHEET DD-4									11.2
FROM SHEET DQ-1			15.5						
<b>TOTAL</b>		485	360.5	837	63		358	0.5	11.2

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

### RESET ROADSIDE SIGN (ONE POST)

LOCATION	STATION	EA
Loc 2	177+29.77, 65.15' Lt	1
Loc 3	198+26.31, 46.32' Lt	1
<b>TOTAL</b>		2

### TEMPORARY DRAINAGE INLET PROTECTION

LOCATION	STATION	EA
Loc 1	161+49.60, 41.81' Lt	1
Loc 2	177+34.28, 65.54' Lt	1
Loc 3	198+37.75, 74.21' Rt	1
Loc 4	197+55.00, 38.28' Lt	1
Loc 4	198+24.44, 40.42' Lt	1
Loc 5	230+59.50, 47.75' Rt	1
<b>TOTAL</b>		6

### TEMPORARY FENCE (TYPE ESA)

LOCATION	STATION	LF
Loc 1	161+40.66 TO 161+64.15, Lt	151
Loc 2	177+08.31 TO 177+44.72, Lt	62
Loc 2	177+83.02 TO 178+31.52, Lt	43
Loc 3	197+00.00 TO 199+06.88 Lt	273
Loc 4	195+36.00 TO 196+16.51, Rt	185
Loc 5	227+22.76 TO 230+53.64, Rt	358
<b>TOTAL</b>		1072

### PLACE HOT MIX ASPHALT DIKE

LOCATION	STATION	(TYPE A)	(TYPE E)	(TYPE F)
		LF	LF	LF
Loc 2	177+11.57 TO 177+34.86, Lt	30		
Loc 3	197+35.00 TO 198+40.00, Lt		105	
Loc 4	195+50.00 TO 196+10.00, Rt	60		
Loc 5	226+78.50 TO 227+62.39, Rt			83.9
Loc 5	227+62.39 TO 230+59.50, Rt		297.1	
<b>TOTAL</b>		90	402.1	83.9

### REMOVE ASPHALT CONCRETE DIKE \*

LOCATION	STATION	TYPE A	TYPE E	TYPE F
		LF	LF	LF
Loc 4	195+50.00 TO 196+10.00, Rt	60		
Loc 5	226+78.50 TO 227+62.39, Rt			83.9
Loc 5	230+00.00 TO 230+59.50, Rt		59.5	
<b>SUB-TOTAL</b>		60	59.5	83.9
<b>TOTAL</b>			203.4	

\* AC DIKE TYPE IS FOR INFORMATION ONLY.

## SUMMARY OF QUANTITIES

Q-1

LAST REVISION DATE PLOTTED => 04-SEP-2013  
 07-18-11 TIME PLOTTED => 11:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	17	28

REGISTERED CIVIL ENGINEER DATE 7-18-11  
 9-3-13  
 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.

### EROSION CONTROL QUANTITIES

SHEET No.	STATION		TYPE	(N) AREA SQFT	IMPORTED TOPSOIL CY	COMPOST SQFT	RECP (NETTING) SQFT	HYDROSEED SQFT	FIBER ROLLS LF	HYDROMULCH SQFT
	BEGIN	END								
EC-1	195+45, 85' R+	196+10, 83' R+	1	2822	105	2822	-	2822	-	2822
EC-1	197+28, 33.67' L+	198+45, 41' L+	2	744	-	744	744	744	51	744
EC-2	227+58, 51'.33 L+	230+57, 48.50' L+	2	5701	-	5701	5701	5701	-	5701
<b>TOTAL</b>					105	9267	6445	9267	51	9267

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

### PAVEMENT DELINEATION QUANTITIES

SHEET No.	STATION	DETAIL No.	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)
			4" WHITE LF
L-3	197+35 TO 198+40	27B	105
L-3	195+50 TO 196+10	27B	60
L-4	227+70 TO 230+00	27B	230
<b>TOTAL</b>			395

### TEMPORARY FIBER ROLL

LOCATION	STATION	LF
Loc 1	161+40.66 TO 161+64.15 L+	40
Loc 2	177+08.31 TO 178+31.52 L+	25
Loc 3	197+00.00 TO 199+06.88 L+	150
Loc 4	195+36.60 TO 196+16.51 R+	115
Loc 5	226+78.50 TO 230+53.64 R+	250
<b>TOTAL</b>		580

### TEMPORARY HYDRUALIC MULCH (BONDED FIBER MATRIX)

LOCATION	STATION	SQYD
Loc 1	161+40.66 TO 161+64.15 L+	157
Loc 2	177+08.31 TO 178+31.52 L+	90
Loc 3	197+00.00 TO 199+06.88 L+	287
Loc 4	195+36.60 TO 196+16.51 R+	467
Loc 5	226+78.50 TO 230+53.64 R+	564
<b>TOTAL</b>		1565

## SUMMARY OF QUANTITIES Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: GETACHEW ESHETE  
 KEN CLAASEN  
 DANIEL MASSA  
 REVISIONS: 9-3-13  
 PLANS APPROVAL DATE: 7-18-11  
 REGISTERED CIVIL ENGINEER: DANIEL B. MASSA, No. 59095, Exp. 6/30/15  
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 WATER QUALITY  
 SENIOR LANDSCAPE ARCHITECT  
 DAVID W YAM  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 LAURIE J SMITH  
 ALEX MC DONALD  
 REVISED BY  
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	18	28

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT

9-3-13  
 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.

**FIBER ROLLS**

SEQUENCE	ITEM	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
IN EC TYPE 1 AREAS FIBER ROLLS MUST BE INSTALLED AFTER RECP (NETTING) AND BEFORE HYDROSEED.	FIBER ROLLS	FIBER ROLL	TYPE B 8" TO 10" Dia	TYPE 1 FIBER ROLL INSTALLATION

**EROSION CONTROL TYPE 1**

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	IMPORTED TOPSOIL	TOPSOIL	IMPORTED	1,620 CY/ACRE
STEP 2	COMPOST	COMPOST	MEDIUM	130 CY/ACRE
STEP 3	HYDROSEED	SEED	MIX 1	60.5 LB/ACRE
		FIBER	WOOD	500 LB/ACRE
STEP 4	HYDROMULCH	FIBER	WOOD	1,500 LB/ACRE
		TACKIFIER	GUAR	250 LB/ACRE

**EROSION CONTROL TYPE 2**

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	130 CY/ACRE
STEP 2	ROLLED EROSION CONTROL PRODUCT (NETTING)	NETTING	TYPE A	
STEP 3	HYDROSEED	SEED	MIX 1	60.5 LB/ACRE
		FIBER	WOOD	500 LB/ACRE
STEP 4	HYDROMULCH	FIBER	WOOD	1,500 LB/ACRE
		TACKIFIER	GUAR	250 LB/ACRE

**SEED MIX**

SEED	BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
MIX 1	ACHILLEA MILLEFOLIUM <sup>1</sup> (WHITE YARROW)	40	0.5
	BROMUS CARINATUS (CALIFORNIA BROME)	40	12
	ELYMUS GLAUCUS (BLUE WILD RYE)	40	12
	HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	40	10
	LEYMUS TRITICOIDES (BEARDLESS WILD RYE)	40	8
	NASSELLA PULCHURA (PURPLE NEEDLEGRASS)	35	12
	VULPIA MICROSTACHYS <sup>1</sup> (SMALL FESCUE)	35	6

<sup>1</sup> SEED PRODUCED IN CALIFORNIA ONLY.

**EROSION CONTROL LEGEND**  
**ECL-1**

LAST REVISION DATE PLOTTED => 04-SEP-2013 03-28-13 TIME PLOTTED => 11:01

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 WATER QUALITY

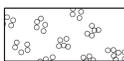
SENIOR LANDSCAPE ARCHITECT  
 DAVID W YAM

CALCULATED-DESIGNED BY  
 CHECKED BY

LAURIE J SMITH  
 ALEX MC DONALD

REVISED BY  
 DATE REVISED

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

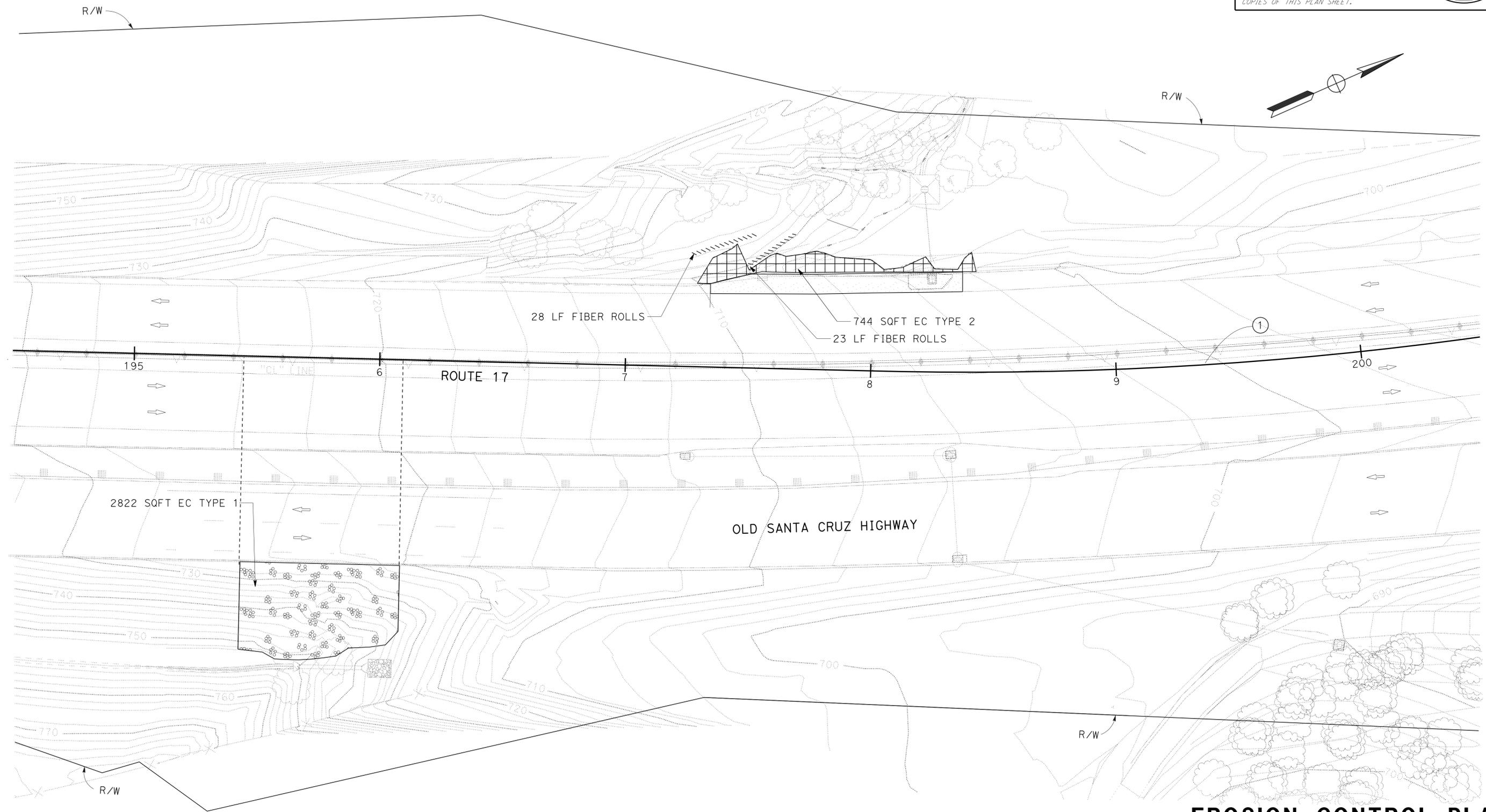
**LEGEND:**  
 EC TYPE 1  
 EC TYPE 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	19	28

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT

9-3-13  
 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.

**EROSION CONTROL PLAN**  
**LOCATION 3 (PM 3.7 SB)**  
**LOCATION 4 (PM 3.7 NB)**  
 SCALE: 1" = 20'  
**EC-1**

APPROVED FOR EROSION CONTROL WORK ONLY

LAST REVISION DATE PLOTTED => 04-SEP-2013 03-28-13 TIME PLOTTED => 11:04

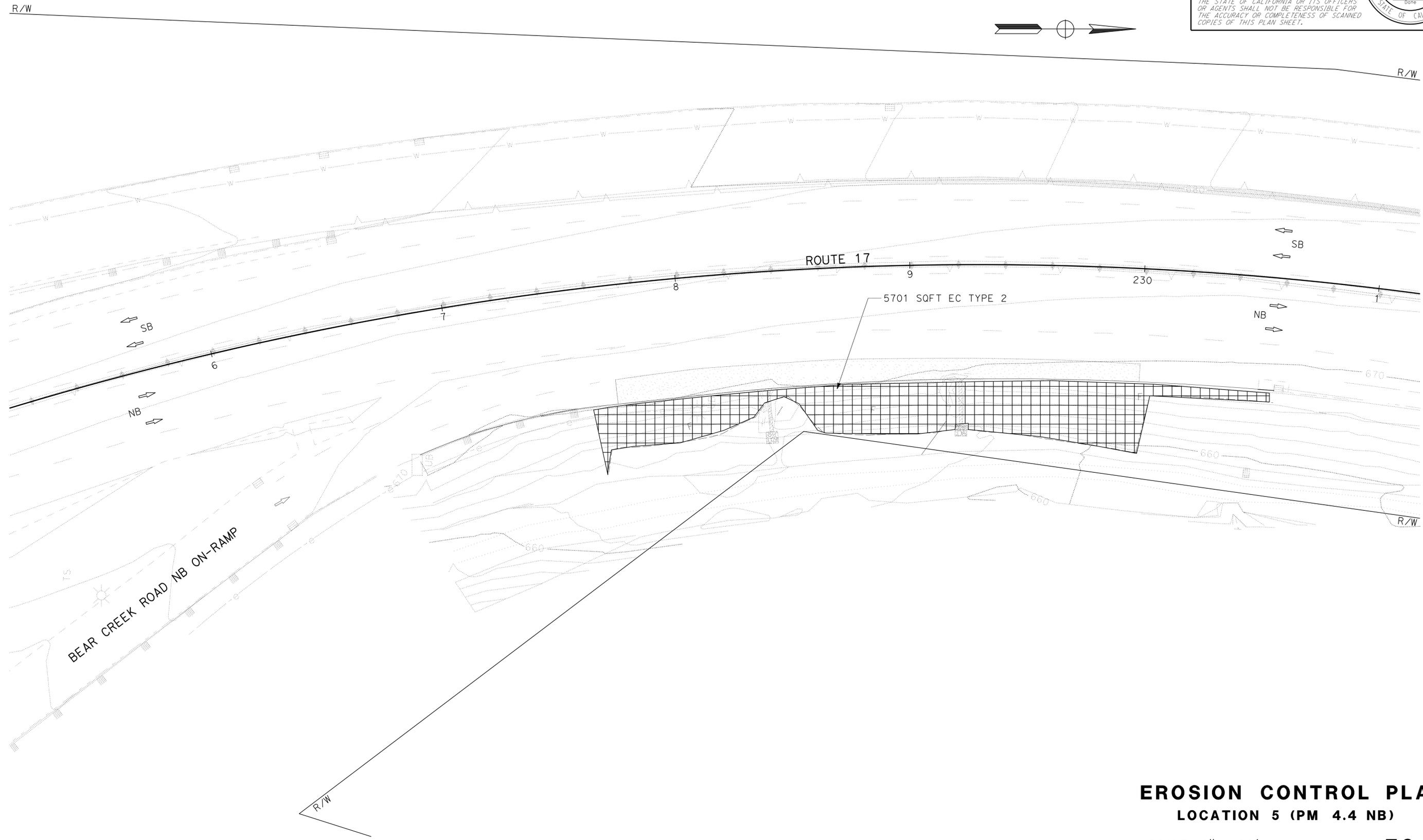
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** WATER QUALITY  
 SENIOR LANDSCAPE ARCHITECT DAVID W YAM  
 CALCULATED/DESIGNED BY CHECKED BY  
 LAURIE J SMITH ALEX MC DONALD  
 REVISED BY DATE REVISED

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	20	28

Laurie J. Smith  
 LICENSED LANDSCAPE ARCHITECT  
 9-3-13  
 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.



**EROSION CONTROL PLAN**  
**LOCATION 5 (PM 4.4 NB)**  
 SCALE: 1" = 20'  
**EC-2**

APPROVED FOR EROSION CONTROL WORK ONLY

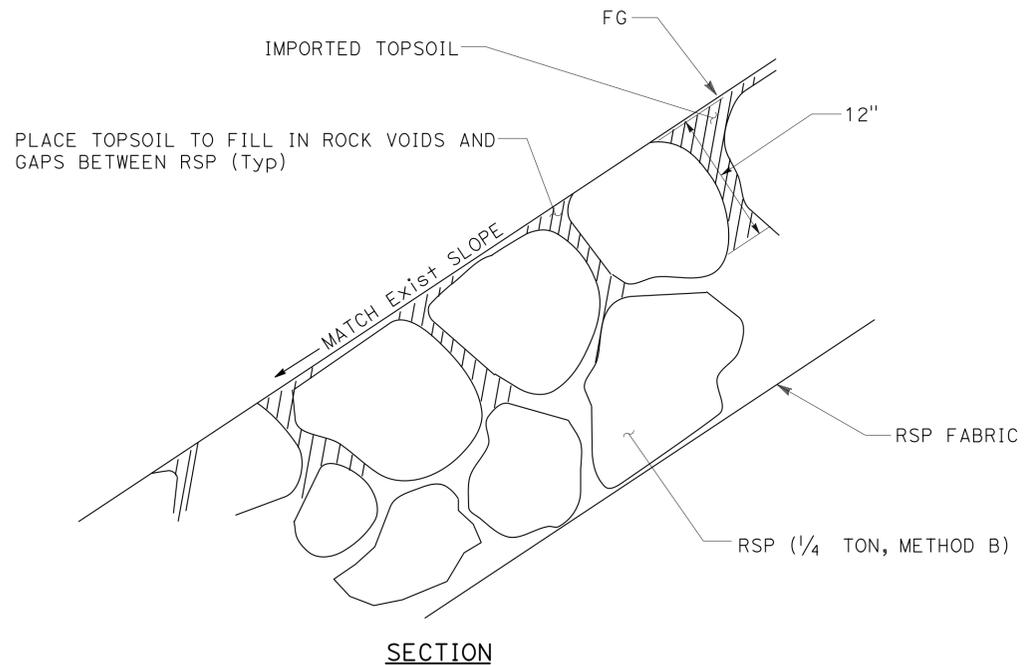
LAST REVISION DATE PLOTTED => 04-SEP-2013 06-07-11 TIME PLOTTED => 11:05

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	DAVID W YAM	CHECKED BY	LAURIE J SMITH	
<b>WATER QUALITY</b>			ALEX MC DONALD	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	21	28

Signature: *Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT  
 9-3-13  
 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.



**SECTION**  
**IMPORTED TOPSOIL ON**  
**ROCK SLOPE PROTECTION**  
 Sta 195+50.00 TO Sta 196+10.00

**EROSION CONTROL DETAILS**  
**ECD-1**  
 NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	22	28

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
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.

TO ACCOMPANY PLANS DATED 9-3-13

**UNIT OF MEASUREMENT SYMBOLS:**

Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B  
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

**M**

Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
MBB	METAL BEAM BARRIER
MBGR	METAL BEAM GUARD RAILING
Med	MEDIAN
MGS	MIDWEST GUARDRAIL SYSTEM
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Misc I & S	MISCELLANEOUS IRON AND STEEL
Mkr	MARKER
Mod	MODIFIED, MODIFY
Mon	MONUMENT
MP	METAL PLATE
MPGR	METAL PLATE GUARD RAILING
MR	MOVEMENT RATING
MSE	MECHANICALLY STABILIZED EMBANKMENT
Mt	MOUNTAIN, MOUNT
MtI	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT

**N**

N	NORTH
NB	NORTHBOUND
No.	NUMBER (MUST HAVE PERIOD)
Nos.	NUMBERS (MUST HAVE PERIOD)
NPS	NOMINAL PIPE SIZE
NS	NEAR SIDE
NSP	NEW STANDARD PLAN
NTS	NOT TO SCALE

**O**

Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN

**P**

p	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

**P continued**

PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
PL, PL	PLATE
P/L	PROPERTY LINE
PM	POST MILE, TIME FROM NOON TO MIDNIGHT
PN	PAVING NOTCH
POC	POINT OF HORIZONTAL CURVE
POT	POINT OF TANGENT
POVC	POINT OF VERTICAL CURVE
PP	PIPE PILE, PLASTIC PIPE, POWER POLE
PPL	PREFORMED PERMEABLE LINER
PPP	PERFORATED PLASTIC PIPE
PRC	POINT OF REVERSE CURVE
PRF	PAVEMENT REINFORCING FABRIC
PRVC	POINT OF REVERSE VERTICAL CURVE
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS, P/S	PRESTRESSED
PSP	PERFORATED STEEL PIPE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
Pvmt	PAVEMENT

**Q**

Qty	QUANTITY
-----	----------

**R**

R	RADIUS
R & D	REMOVE AND DISPOSE
R & S	REMOVE AND SALVAGE
R/C	RATE OF CHANGE
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
Rd	ROAD
Reinf	REINFORCED, REINFORCEMENT, REINFORCING
Rel	RELOCATE
Repl	REPLACEMENT
Ret	RETAINING
Rev	REVISED, REVISION
Rdwy	ROADWAY
RHMA	RUBBERIZED HOT MIX ASPHALT
Riv	RIVER
RM	ROAD-MIXED
RP	RADIUS POINT, REFERENCE POINT
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN
Rt	RIGHT
Rte	ROUTE
RW	REDWOOD, RETAINING WALL
R/W	RIGHT OF WAY
Rwy	RAILWAY

**S**

S	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
SL	STATION LINE
SM	SELECTED MATERIAL
Spec	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE
SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
St	STREET
Sta	STATION
STBB	SINGLE THRIE BEAM BARRIER
Std	STANDARD
Str	STRUCTURE
Surf	SURFACING
SW	SIDEWALK, SOUND WALL
Swr	SEWER
Sym	SYMMETRICAL
S4S	SURFACE 4 SIDES

**T**

T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
TeI	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

**T continued**

TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME
W	WEST, WIDTH
WB	WESTBOUND
WH	WEEP HOLE
WM	WIRE MESH
WS	WATER SURFACE
WSP	WELDED STEEL PIPE
Wt	WEIGHT
WV	WATER VALVE
WW	WINGWALL
WWL	WINGWALL LAYOUT LINE
X Sec	CROSS SECTION
Xing	CROSSING
Yr	YEAR
Yrs	YEARS

**U**

**V**

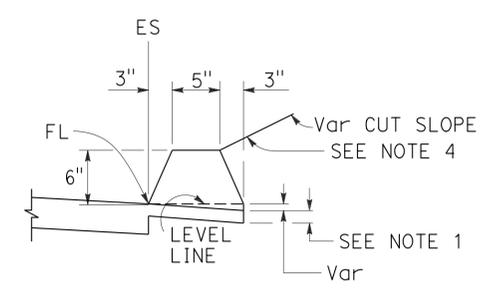
**W**

**X**

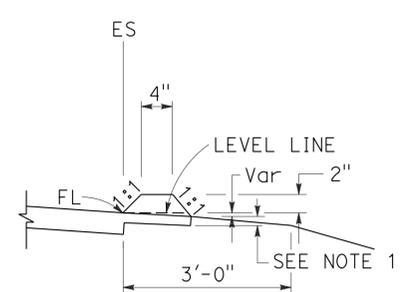
**Y**



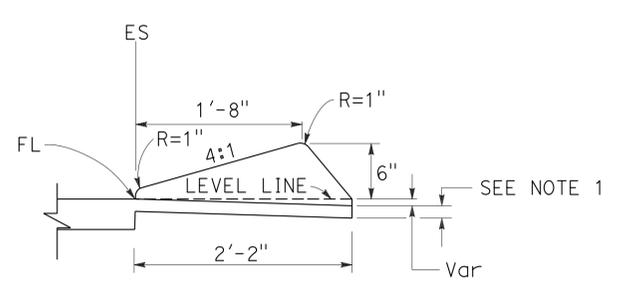
TO ACCOMPANY PLANS DATED 9-3-13



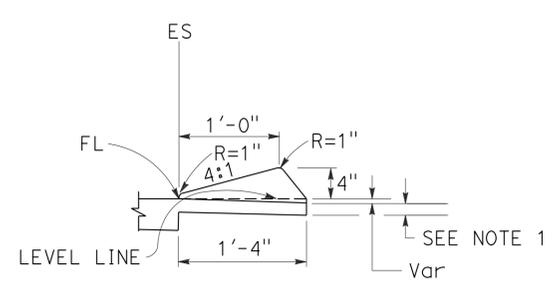
**TYPE A**  
See Note 3



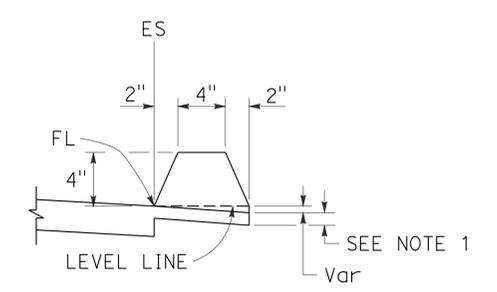
**TYPE C**



**TYPE D**

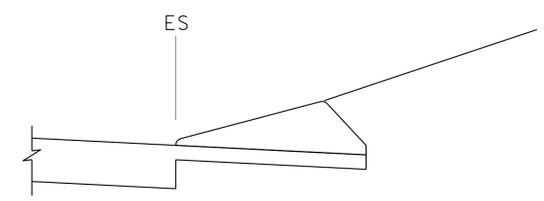


**TYPE E**

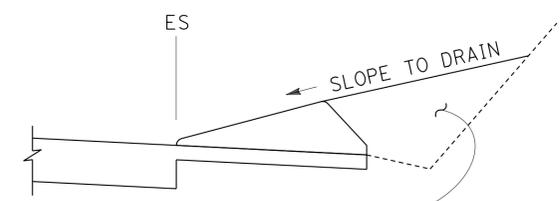


**TYPE F**  
See Note 5

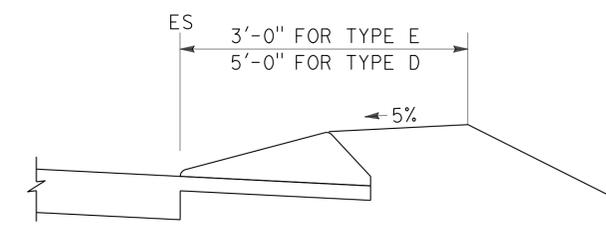
**DIKES**



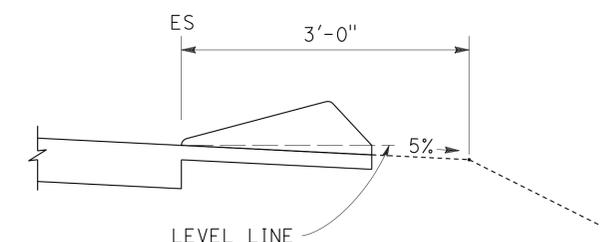
**CASE C-1**  
Cut Slope



**CASE C-2**  
Cut Slope



**CASE F**



**CASE R**  
See Note 2

**TYPE D AND E BACKFILL DETAILS**

**NOTES:**

1. For HMA shoulders only, extend top layer of HMA placed on the shoulder under dike with no joint at the ES. For projects with OGFC shoulders, do not extend OGFC under dike. See project plans for modified dike detail.
2. Case R applies to retrofit only projects where restrictive conditions do not provide enough width for Case F backfill.
3. Type A dike only to be used where restrictive slope conditions do not provide enough width to use Type D or Type E dike.
4. Fill and compact with excavated material to top of dike.
5. Use Type F dike, where dike is required with guard railing installations. See Revised Standard Plan RSP A77N4 for dike positioning details.

**DIKE QUANTITIES**

TYPE	CUBIC YARDS PER LINEAR FOOT
A	0.0135
C	0.0038
D	0.0293
E	0.0130
F	0.0066

Quantities based on 5% cross slope.

STATE OF CALIFORNIA  
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**HOT MIX ASPHALT DIKES**

NO SCALE

RSP A87B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A87B  
DATED MAY 20, 2011 - PAGE 120 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A87B**

2010 REVISED STANDARD PLAN RSP A87B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	24	28

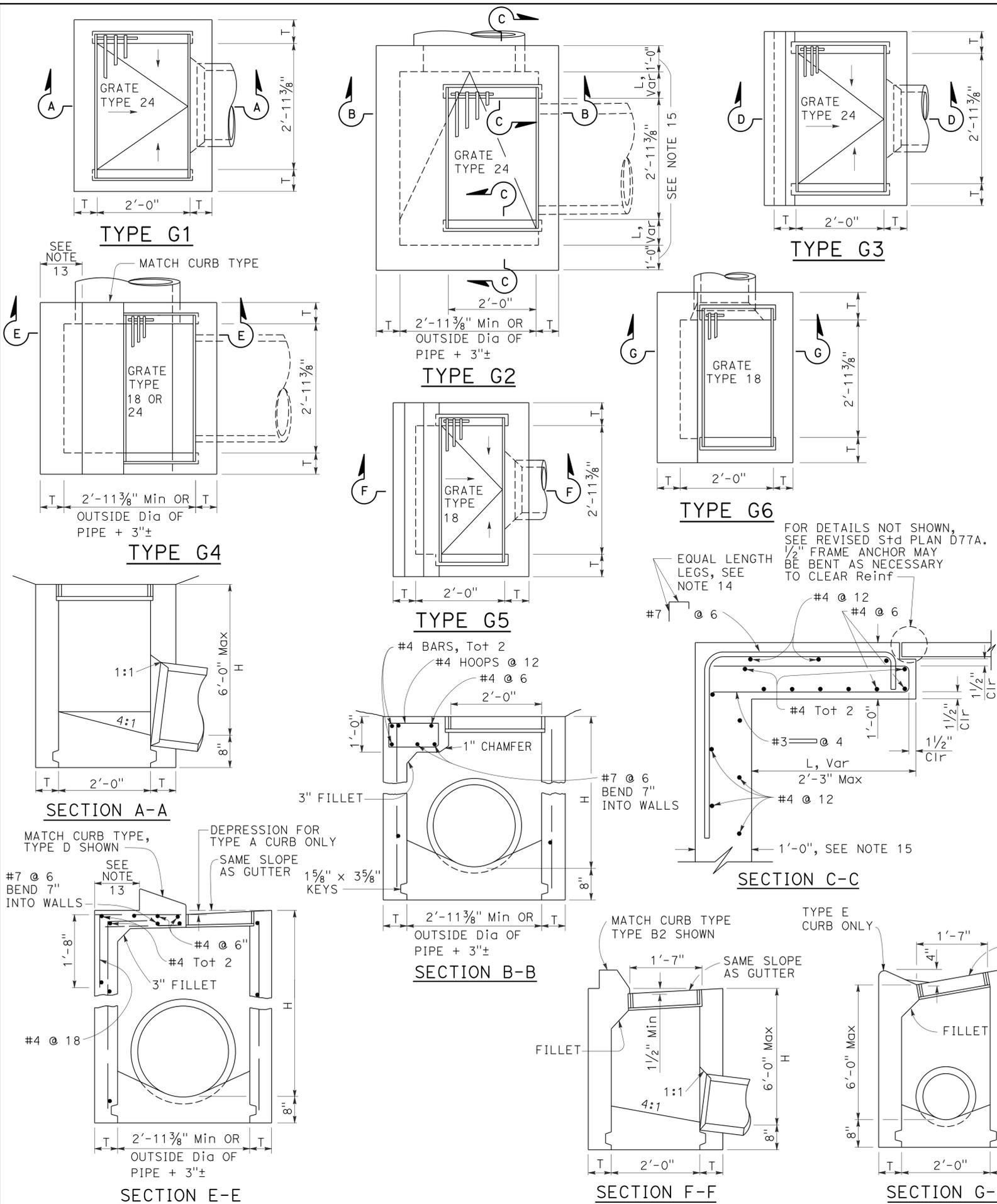
Glenn DeCou  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

Glenn DeCou  
No. C34547  
Exp. 9-30-13  
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.

2010 REVISED STANDARD PLAN RSP D73



**NOTES:**

- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undepressed.
- 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 bars @ 1'-6" ± 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 and alternative half round 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. Steps inserts may be substituted for the bar steps. Step inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
- Details shown apply to both metal and concrete pipe.
- Pipe(s) can be placed in any wall.
- Curb section shall match adjacent curb.
- Basin floors shall have wood trowel finish and a minimum slope of 12:3 from all directions toward outlet pipe.
- Set inlet so that grate bars are parallel to direction of principal surface flow.
- See Revised Standard Plans D77A and D77B for grate and frame details and weights of miscellaneous iron and steel.
- See Standard Plan D78A for gutter depression details.
- This dimension will vary with different grates, curbs types, box width and wall thickness.
- Bar may be rotated as necessary to clear opening. Where "L" is 6" or less, bar may be omitted.
- Where "L" is 6" or less, wall thickness shall be as shown in Table A.
- 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 connections conforming to details for Type GCP Inlet shown on Standard Plan D75B. See Standard Specifications for mortar composition.

**TABLE A**

TYPE	CONCRETE QUANTITIES			
	H=3'-0" TO 8'-0" (T=6")	H=8'-1" TO 20'-0" (T=8")	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
G-1	0.95	0.220	See Note A	SEE NOTE A
G-2*	1.31	0.255	3.50	0.357
G-3	1.03	0.220	See Note A	SEE NOTE A
G-4* (TYPE 24)	1.27	0.255	3.48	0.357
G-4* (TYPE 18)	1.30	0.255	3.50	0.357
G-5	1.02	0.220	SEE NOTE A	SEE NOTE A
G-6	1.04	0.220	SEE NOTE A	SEE NOTE A

TABLE BASED ON 8" FLOOR SLAB. NO DEDUCTIONS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPES. \* QUANTITIES FOR TYPE G-2 AND G-4 INLETS BASED ON THE MINIMUM INTERIOR DIMENSIONS.

**NOTE A:**

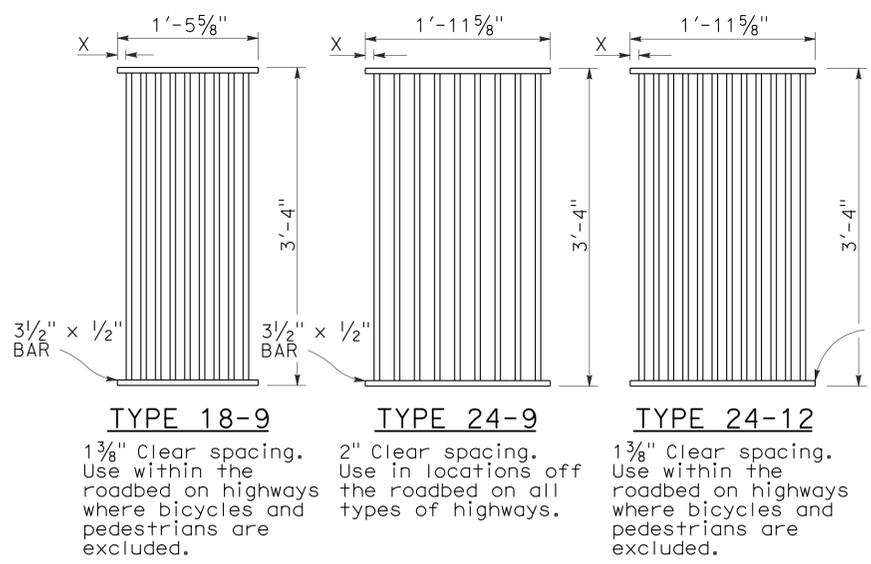
Maximum allowable height 6'-0".

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

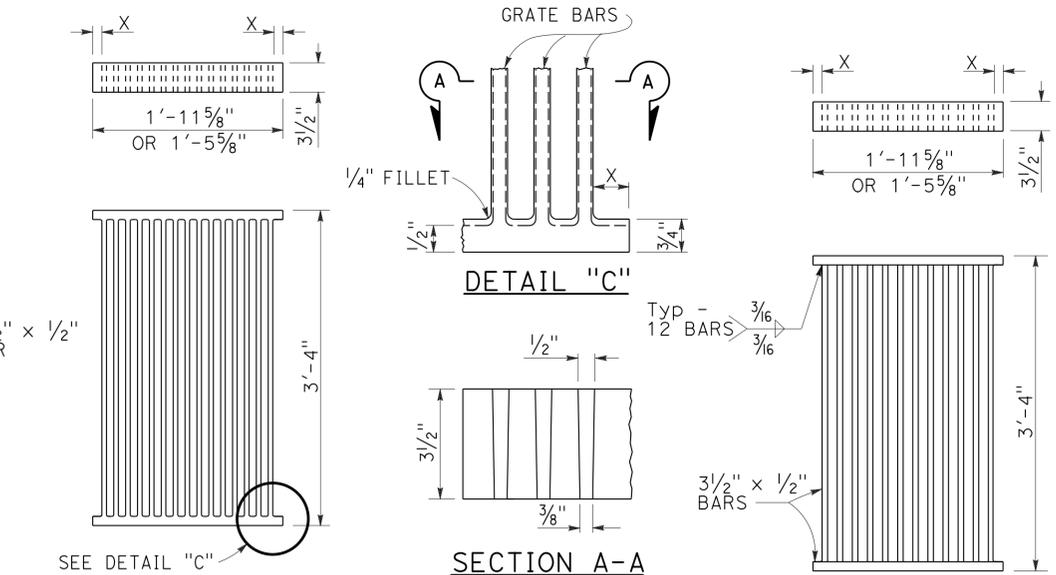
**DRAINAGE INLETS**  
NO SCALE

RSP D73 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN D73 DATED MAY 20, 2011 - PAGE 156 OF THE STANDARD PLANS BOOK DATED 2010.

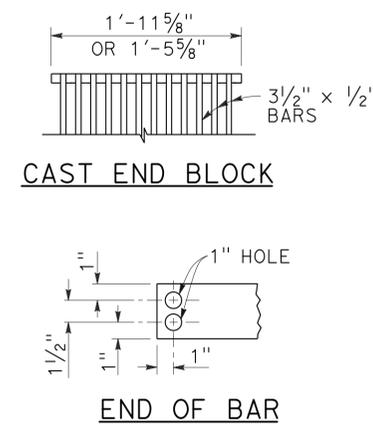
**REVISED STANDARD PLAN RSP D73**



**RECTANGULAR GRATE DETAILS**  
(See table below)

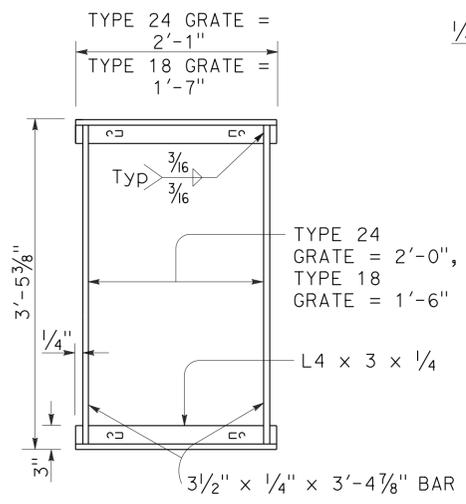


**ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE**  
**ALTERNATIVE WELDED GRATE**

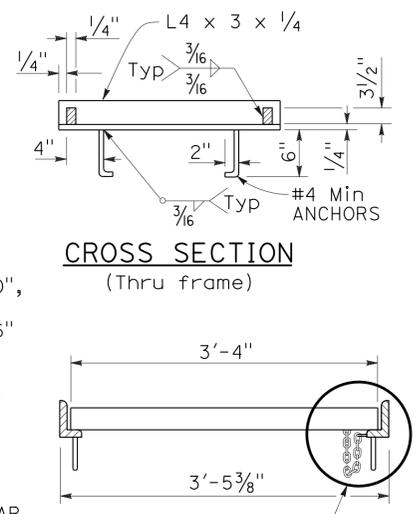


**CAST END BLOCK**  
**END OF BAR**

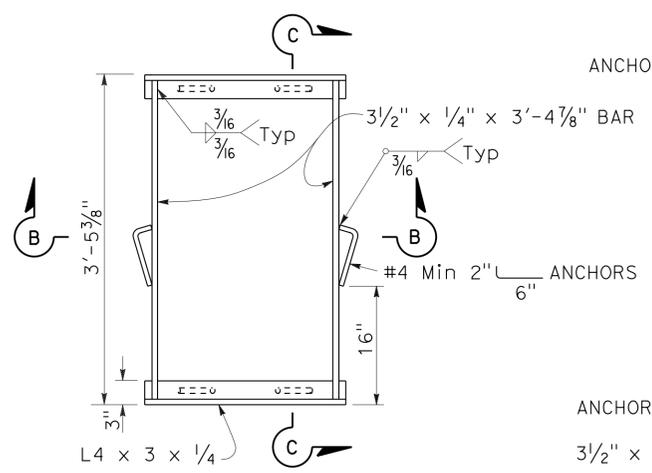
- NOTES:**
- Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
  - Contractor has the option of using cast ductile iron, cast carbon steel, welded, bolted, or cast end block grate.
  - Rounded top of bars optional on all grates.
  - Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
  - Complete joint 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.
  - Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
  - Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.



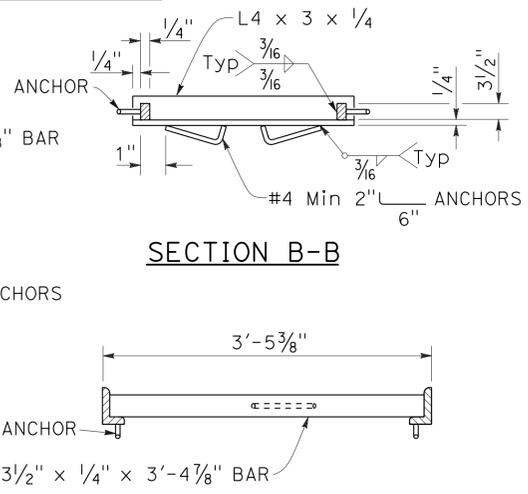
**TYPICAL FRAME**



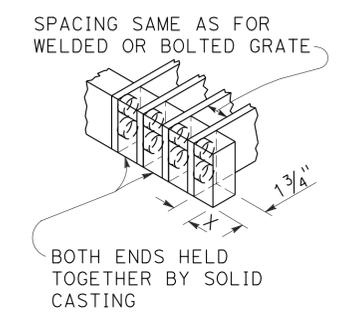
**CROSS SECTION (Thru frame)**  
**LONGITUDINAL SECTION (Thru frame and grate)**



**TYPICAL FRAME**  
**ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME**  
(For details not shown, See Rectangular Frame Details)



**SECTION B-B**  
**SECTION C-C**



**ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE**

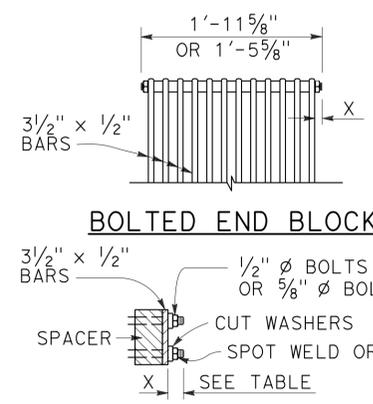
**RECTANGULAR FRAME DETAILS**  
(For all rectangular grates)

**GRATE BAR SPACING TABLE**

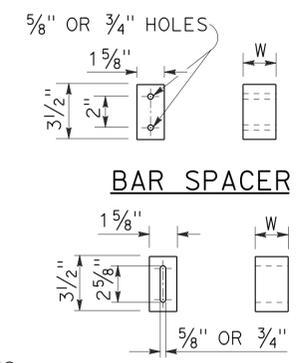
TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	PLATE	112
OMP	PLATE	177
OMPI	PLATE	177

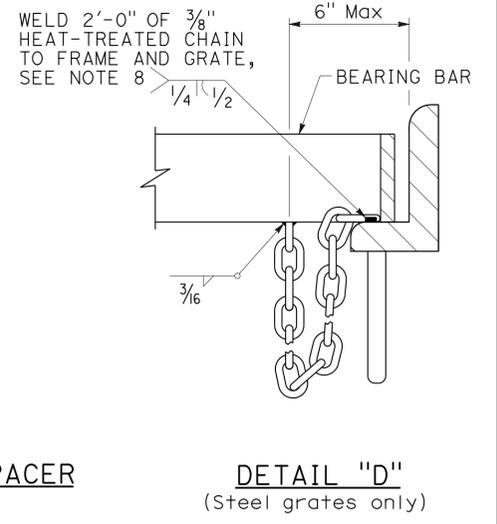
INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3



**BOLTED END BLOCK**  
**BOLTING DETAIL**  
**ALTERNATIVE BOLTED GRATE**



**ALTERNATIVE SPACER**  
W = 1 3/8" or 2"



**DETAIL "D"**  
(Steel grates only)

**BASIS FOR MISC IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS**  
(See Note 7)

RSP D77A DATED APRIL 19, 2013 SUPERSEDES RSP D77A DATED JULY 20, 2012 AND STANDARD PLAN D77A DATED MAY 20, 2011 - PAGE 164 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP D77A**

2010 REVISED STANDARD PLAN RSP D77A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	17	3.1/4.4	26	28

  
 LICENSED LANDSCAPE ARCHITECT  
 July 19, 2013  
 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.

**A**

AB AGGREGATE BASE  
 ABS ACRYLONITRILE-BUTADIENE-STYRENE  
 AC ASPHALT CONCRETE  
 ACC ARMOR-CLAD CONDUCTORS  
 Adj ADJACENT/ADJUSTABLE  
 AIC AUXILIARY IRRIGATION CONTROLLER  
 Alt ALTERNATIVE  
 AMEND AMENDMENT  
 ARV AIR RELEASE VALVE  
 AUTO AUTOMATIC  
 AUX AUXILIARY  
 AVB ATMOSPHERIC VACUUM BREAKER

**B**

B&B BALLED AND BURLAPPED  
 B/B BRASS/BRONZE  
 B/B/PL BRASS/BRONZE/PLASTIC  
 B/PL BRASS/PLASTIC  
 BFM BONDED FIBER MATRIX  
 Bit Ctd BITUMINOUS COATED  
 BP BOOSTER PUMP  
 BPA BACKFLOW PREVENTER ASSEMBLY  
 BPE BACKFLOW PREVENTER ENCLOSURE  
 BV BALL VALVE

**C**

C CONDUIT  
 CAP CORRUGATED ALUMINUM PIPE  
 CARV COMBINATION AIR RELEASE VALVE  
 CB COUPLING BAND  
 CCA CAM COUPLER ASSEMBLY  
 CEC CONTROLLER ENCLOSURE CABINET  
 CHDPE CORRUGATED HIGH DENSITY POLYETHYLENE  
 CL CHAIN LINK  
 CNC CONTROL AND NEUTRAL CONDUCTORS  
 Conc CONCRETE  
 CP COPPER PIPE  
 CS COMPOST SOCK  
 CSP CORRUGATED STEEL PIPE  
 CST CENTER STRIP  
 CV CHECK VALVE

**D**

Dia DIAMETER  
 DIP DUCTILE IRON PIPE  
 DIT DRIP IRRIGATION TUBING  
 DG DECOMPOSED GRANITE  
 DN DIAMETER NOMINAL  
 DVA DRIP VALVE ASSEMBLY

**E**

EC EROSION CONTROL  
 ECTC EROSION CONTROL TECHNOLOGY COUNCIL  
 Elect ELECTRIC/ELECTRICAL  
 Elev ELEVATION  
 ELL ELBOW  
 ENCL ENCLOSURE  
 EP EDGE OF PAVEMENT  
 ES EDGE OF SHOULDER  
 EST END STRIP  
 ESTB ESTABLISHMENT  
 ETW EDGE OF TRAVELED WAY

**F**

F FULL CIRCLE  
 F/P FULL/PART CIRCLE  
 FCV FLOW CONTROL VALVE  
 FERT FERTILIZER  
 FG FINISHED GRADE  
 FH FLEXIBLE HOSE  
 FIPT FEMALE IRON PIPE THREAD  
 FIS FERTILIZER INJECTOR SYSTEM  
 FL FLOW LINE  
 FR FIBER ROLL  
 FS FLOW SENSOR  
 FSC FLOW SENSOR CABLE  
 FV FLUSH VALVE

**G**

Galv GALVANIZED  
 GARV GARDEN VALVE  
 GARVA GARDEN VALVE ASSEMBLY  
 GM GRAVEL MULCH  
 GPH GALLONS PER HOUR  
 GPM GALLONS PER MINUTE  
 GSP GALVANIZED STEEL PIPE  
 GV GATE VALVE

**H**

H HALF CIRCLE  
 HDPE HIGH DENSITY POLYETHYLENE  
 HP HORSEPOWER/HINGE POINT  
 HPL HIGH PRESSURE LINE  
 Hwy HIGHWAY

**I**

IC IRRIGATION CONTROLLER  
 ICC IRRIGATION CONTROLLER(S)  
 IN CONTROLLER ENCLOSURE CABINET  
 ID INSIDE DIAMETER  
 IFS IRRIGATION FILTRATION SYSTEM  
 IPS IRON PIPE SIZE  
 IPT IRON PIPE THREAD  
 Irr IRRIGATION

**L**

L LENGTH

**M**

Max MAXIMUM  
 MBGR METAL BEAM GUARD RAILING  
 MCV MANUAL CONTROL VALVE  
 MIC MASTER IRRIGATION CONTROLLER  
 Min MINIMUM  
 MIPT MALE IRON PIPE THREAD  
 Misc MISCELLANEOUS  
 MtI MATERIAL  
 MVP MAINTENANCE VEHICLE PULLOUT

**N**

NCN NO COMMON NAME  
 NL NOZZLE LINE  
 No. NUMBER  
 NPT NATIONAL PIPE THREAD

**O**

O/C ON CENTER  
 OD OUTSIDE DIAMETER  
 OL OVERLAP

**P**

P PART CIRCLE  
 PB PULL BOX  
 PCC PORTLAND CEMENT CONCRETE  
 PE POLYETHYLENE  
 PKt PACKET  
 PL PLASTIC  
 PLS PURE LIVE SEED  
 PLT PLANT/PLANTING  
 PLT ESTB PLANT ESTABLISHMENT  
 PM POST MILE  
 PR PRESSURE RATED  
 PRLV PRESSURE RELIEF VALVE  
 PRV PRESSURE REGULATING VALVE  
 PVC POLYVINYL CHLORIDE  
 PvmT PAVEMENT

**Q**

Q QUARTER CIRCLE  
 QCV QUICK COUPLING VALVE

**NOTE:**  
 For additional abbreviations,  
 see Standard Plans A10A and A10B.

**R**

R RADIUS  
 RCP REINFORCED CONCRETE PIPE  
 RCV REMOTE CONTROL VALVE  
 RCVM REMOTE CONTROL VALVE (MASTER)  
 RCVMF REMOTE CONTROL VALVE (MASTER) W/FLOW SENSOR  
 RCVP REMOTE CONTROL VALVE W/PRESSURE REGULATOR  
 RCW RECYCLED WATER  
 RECP ROLLED EROSION CONTROL PRODUCT  
 REQ REQUIRED  
 RICS REMOTE IRRIGATION CONTROL SYSTEM  
 R/W RIGHT OF WAY

**S**

S SLIP  
 SCH SCHEDULE  
 SF STATE-FURNISHED  
 Shld SHOULDER  
 Sq SQUARE  
 SST SIDE STRIP  
 Sta STATION  
 Std STANDARD  
 SW SIDEWALK/SOUND WALL

**T**

T THIRD CIRCLE/THREAD  
 TLS TRUCK LOADING STANDPIPE  
 TQ THREE QUARTER CIRCLE  
 TRM TURF REINFORCEMENT MAT  
 TT TWO-THIRDS CIRCLE  
 TWSA TREE WELL SPRINKLER ASSEMBLY  
 Typ TYPICAL

**U**

UG UNDERGROUND

**W**

W WIDTH  
 W/ WITH  
 WM WATER METER  
 WS WYE STRAINER  
 WSA WYE STRAINER ASSEMBLY  
 WSP WELDED STEEL PIPE  
 WWM WELDED WIRE MESH

TO ACCOMPANY PLANS DATED 9-3-13

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**LANDSCAPE AND  
 EROSION CONTROL ABBREVIATIONS**  
 NO SCALE

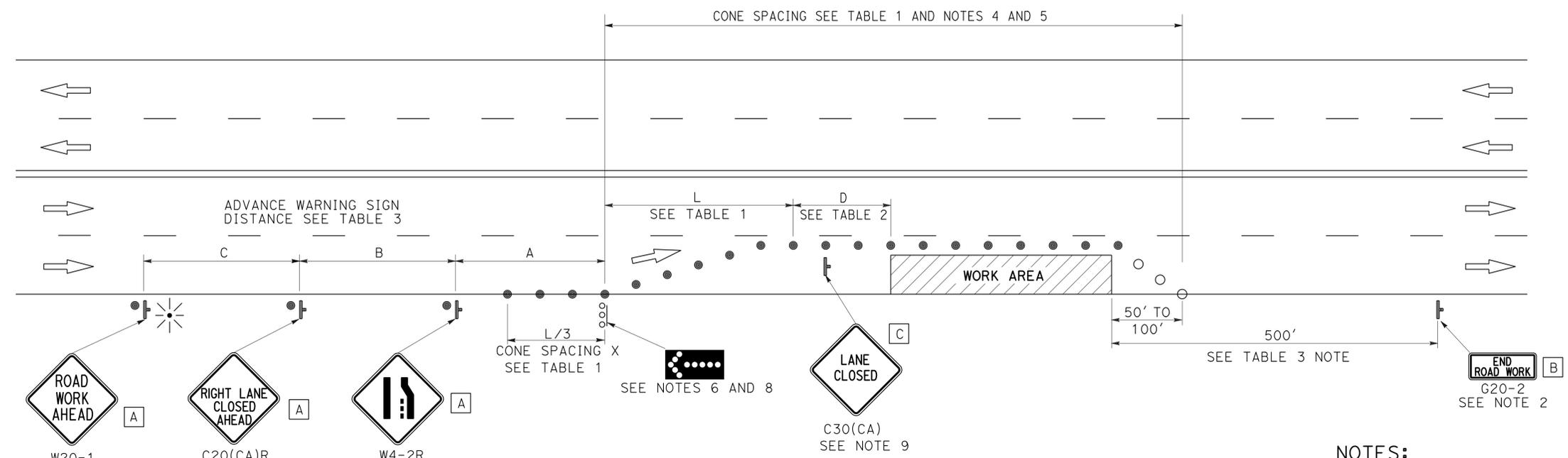
RSP H1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H1  
 DATED MAY 20, 2011 - PAGE 218 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP H1**

2010 REVISED STANDARD PLAN RSP H1



TO ACCOMPANY PLANS DATED 9-3-13



TYPICAL LANE CLOSURE

NOTES:

See Revised Standard Plan RSP T9 for tables.  
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.  
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.  
 California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

NOTES:

- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA) sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.

LEGEND

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

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11 DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T11**

2010 REVISED STANDARD PLAN RSP T11

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

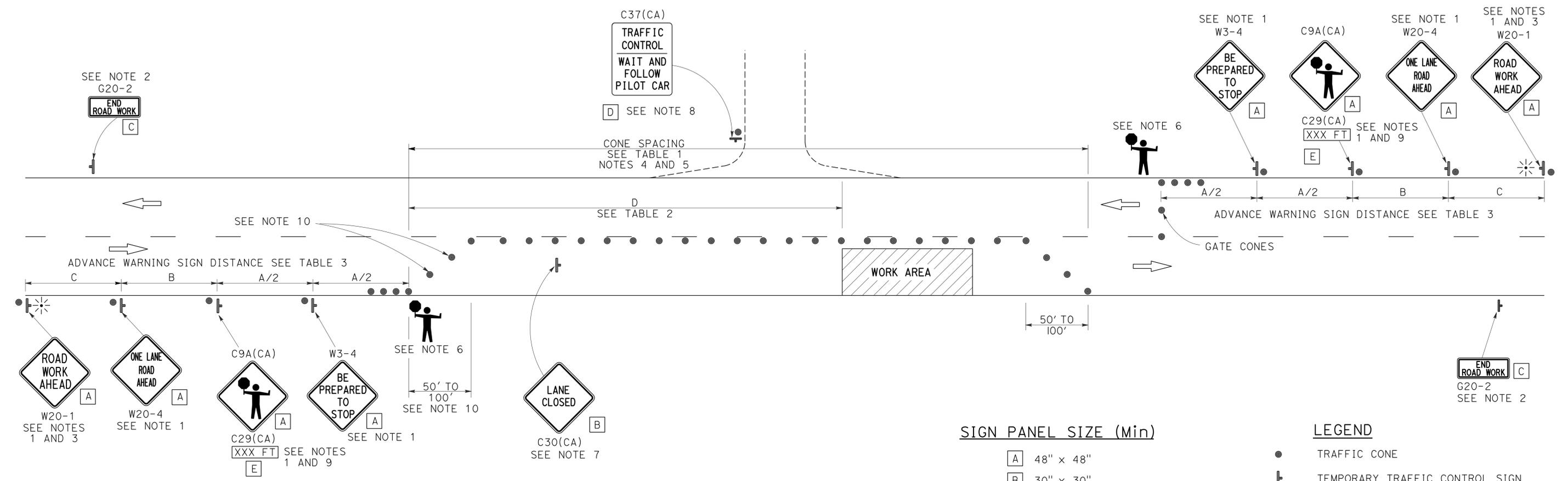
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 9-3-13



**NOTES:**

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 TWO LANE CONVENTIONAL  
 HIGHWAYS**  
 NO SCALE

RSP T13 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T13  
 DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T13**

2010 REVISED STANDARD PLAN RSP T13