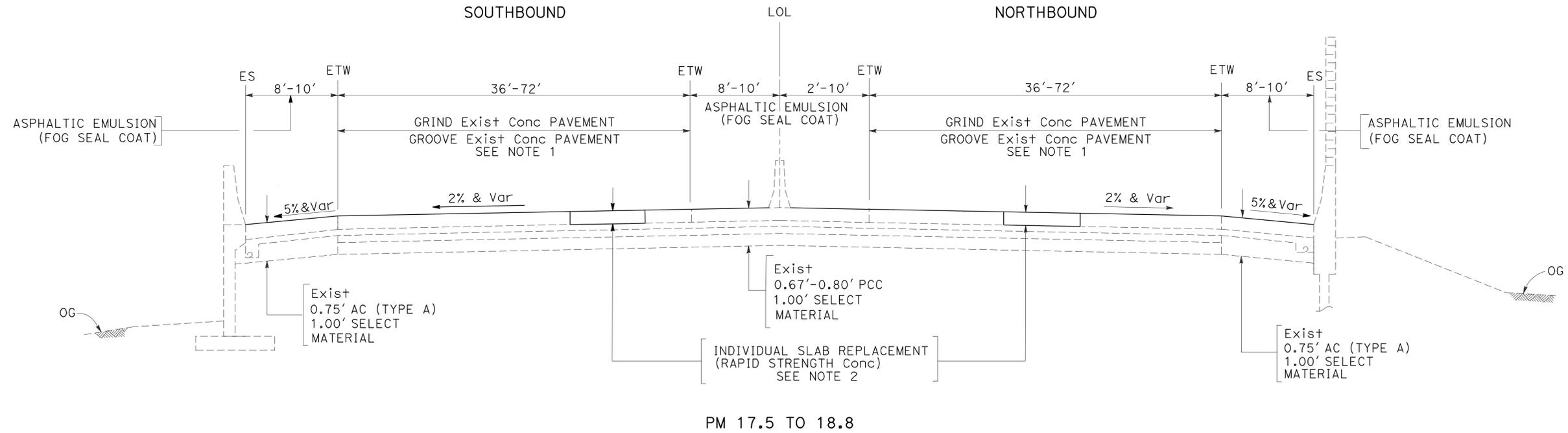


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	2	26
<i>Robert Camargo</i> REGISTERED CIVIL ENGINEER DATE			1-31-12 DATE		
2/6/12 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

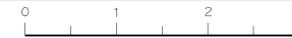
1. ALL EXISTING PAVEMENT DELINEATION SHALL BE REMOVED AND REPLACED IN THE SAME LOCATIONS AS THE EXISTING.
2. FOR LOCATION AND DEPTH OF INDIVIDUAL SLAB REPLACEMENT (RAPID STRENGTH CONCRETE) SEE QUANTITY SHEETS.
3. EXACT LIMITS OF GRIND EXISTING CONCRETE PAVEMENT AND GROOVE EXISTING CONCRETE PAVEMENT SHALL BE DETERMINED BY THE ENGINEER.



TYPICAL CROSS SECTIONS
NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	RAMSES SARGISS
		CALCULATED/DESIGNED BY	KARIN SERITIS
		CHECKED BY	ROBERT CAMARGO
		REVISOR	KS
		DATE REVISED	1/30/12



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	3	26

<i>Marialda Lerma</i>	2-10-11
REGISTERED CIVIL ENGINEER	DATE
2/6/12	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
Maria Elda R. Lerma
No. 75486
Exp. 6-30-12
CIVIL
STATE OF CALIFORNIA

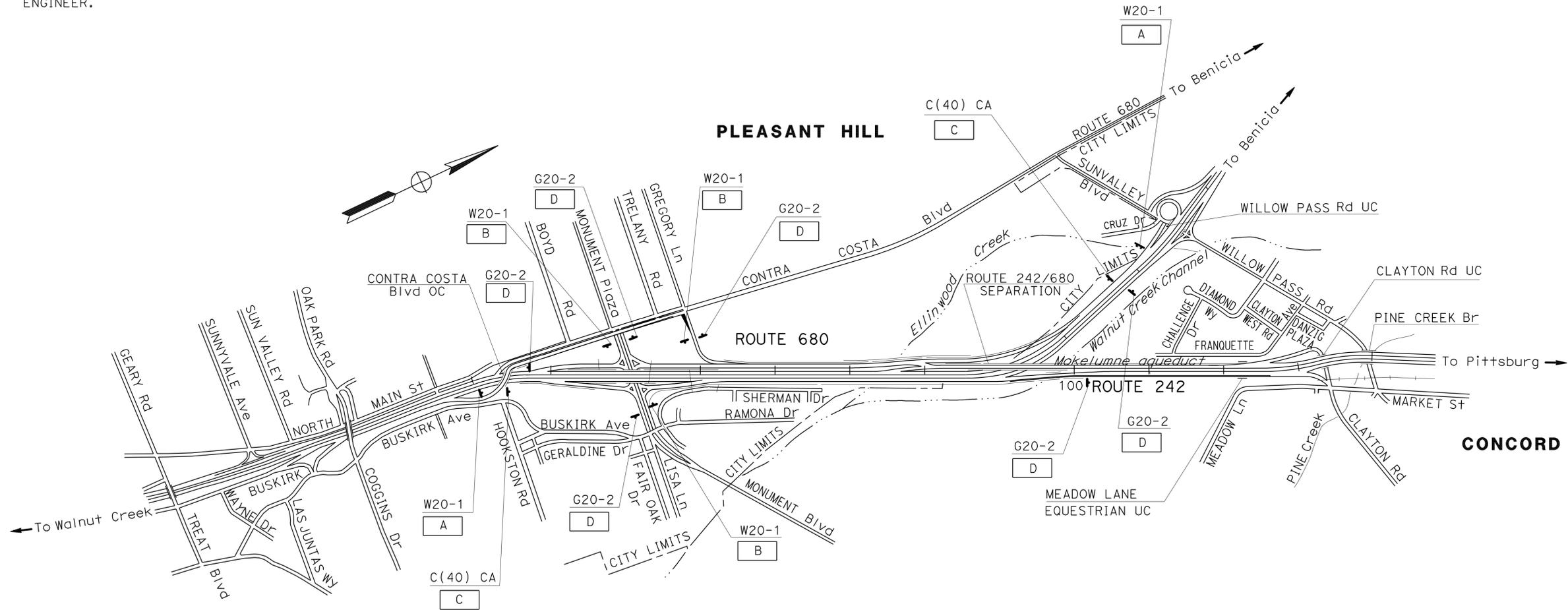
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND:

□ CONSTRUCTION AREA SIGN DESIGNATION

NOTES:

1. EXACT LOCATION AND POSITION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY THE ENGINEER.
2. POST SIZE AND LENGTH ARE APPROXIMATE, EXACT SIZE AND LENGTH TO BE DETERMINED BY THE ENGINEER.

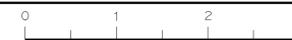


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	TRAFFIC
FUNCTIONAL SUPERVISOR	LOURDES DAVID
CALCULATED/DESIGNED BY	CHECKED BY
RAMON N CRUZ	MARIA LERMA
REVISOR	DATE
RC	2/08/12

CONSTRUCTION AREA SIGNS
NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY



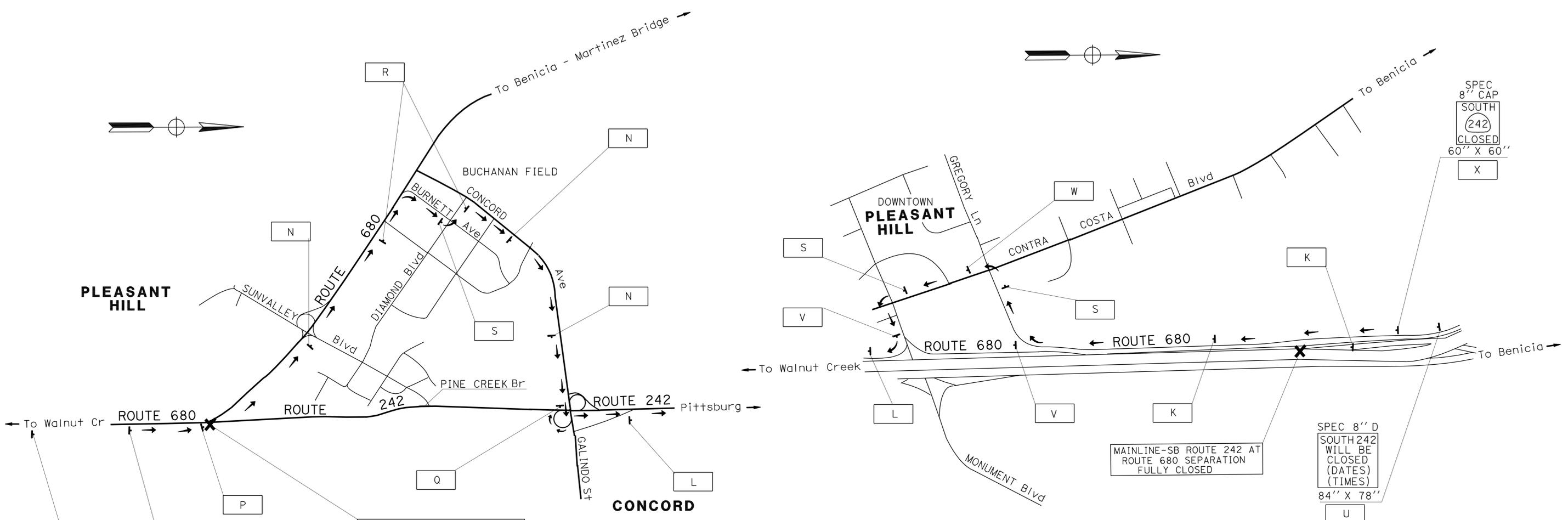
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	5	26

Registered Professional Engineer
 Maria Elda R. Lerma
 No. 75486
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

2-10-11
 REGISTERED CIVIL ENGINEER DATE
 2/6/12
 PLANS APPROVAL DATE

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 TRAFFIC
 FUNCTIONAL SUPERVISOR: LOURDES DAVID
 CHECKED BY: MARIA LERMA
 REVISIONS: RC 2/08/12
 REVISIONS: DATE REVISED



SPEC 8" CAP
 NORTH
 (242)
 CLOSED
 60" X 60"
 T

SPEC
 NORTH 242
 WILL BE
 CLOSED
 (DATES)
 (TIMES)
 8" D 84" X 78"
 O

MAINLINE-NB ROUTE 242 AT
 ROUTE 680 SEPARATION
 FULLY CLOSED

DETOUR PLAN No. 3
 VIA - NB ROUTE 680
 OFF-RAMP TO BURNETT Ave
 LEFT ON TO DIAMOND Blvd
 R+ ON TO CONCORD Ave
 TO NB ROUTE 242 ON-RAMP

MAINLINE-SB ROUTE 242 AT
 ROUTE 680 SEPARATION
 FULLY CLOSED

SPEC 8" D
 SOUTH 242
 WILL BE
 CLOSED
 (DATES)
 (TIMES)
 84" X 78"
 U

DETOUR PLAN No. 4
 VIA - SB Rte 242
 OFF-RAMP TO GREGORY Ln
 WB GREGORY Ln
 SB CONTRA COSTA Blvd
 EB MONUMENT Blvd
 ON-RAMP TO SB Rte 680

SPEC 8" CAP
 SOUTH
 (242)
 CLOSED
 60" X 60"
 X

CONSTRUCTION AREA SIGNS
 NO SCALE

FOR NOTES AND LEGEND,
 SEE SHEET CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-3

LAST REVISION DATE PLOTTED => 10-FEB-2012
 02-08-12 TIME PLOTTED => 12:42

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	6	26

Marialda Lerma 2-10-11
 REGISTERED CIVIL ENGINEER DATE
 2/6/12
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 No. 75486
 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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
[]					
A	W20-1	ROAD WORK AHEAD	48" x 48"	(ONE) 4" x 6"	2
B	W20-1	ROAD WORK AHEAD	36" x 36"	(ONE) 4" x 6"	3
C	C40 (CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONE	108" x 42"	(TWO) 4" x 6"	2
D	G20-2	END ROAD WORK	36" x 18"	(ONE) 4" x 4"	6
1E	SPECIAL	NORTH 680 CLOSED	48" x 48"	(ONE) 4" x 6"	5
2E	SPECIAL	NORTH 680 CLOSED	60" x 60"	(TWO) 4" x 6"	2
F	M4-8	DETOUR	24" x 12"	(ONE) 4" x 6"	8
	G27-2 (680) (CA)	ROUTE 680	21" x 18"		
	M3-1	NORTH	24" x 12"		
G	M6-3 (▲)	STRAIGHT ARROW	21" x 15"	(ONE) 4" x 6"	5
	M4-8	DETOUR	24" x 12"		
	G27-2 (680) (CA)	ROUTE 680	21" x 18"		
H	M3-1	NORTH	24" x 12"	(ONE) 4" x 6"	2
	M6-1 (◀)	LEFT ARROW	21" x 15"		
	SC6-4(CA)	RAMP CLOSURE NOTICE	48" x 60"		
I	M4-8	DETOUR	24" x 12"	(ONE) 4" x 6"	4
	G27-2 (680) (CA)	ROUTE 680	21" x 18"		
	M3-1	NORTH	24" x 12"		
J	M6-1 (▶)	RIGHT ARROW	21" x 15"	(ONE) 4" x 6"	1
	M4-8	DETOUR	24" x 12"		
	G27-2 (680) (CA)	ROUTE 680	21" x 18"		
K	M3-1	NORTH	24" x 12"	(ONE) 4" x 6"	5
	M6-2 (↗)	UP-RIGHT ARROW	21" x 15"		
	W20-2	DETOUR AHEAD	36" x 36"		
L	M4-8a	END DETOUR	30" x 18"	(ONE) 4" x 4"	4
M	SPECIAL	NORTH 680 WILL BE CLOSED (DATES) (TIMES)	84" x 78"	(TWO) 6" x 6"	2
N	M4-8	DETOUR	24" x 12"	(ONE) 4" x 6"	3
	G28-2 (242) (CA)	ROUTE 242	21" x 18"		
	M3-1	NORTH	24" x 12"		
O	M6-3 (▲)	STRAIGHT ARROW	21" x 15"	(TWO) 6" x 6"	1
	SPECIAL	NORTH 242 WILL BE CLOSED (DATES) (TIMES)	84" x 78"		
P	SC9(↖)(CA) SPECIAL	Fwy DETOUR UP-LEFT ARROW	36" x 36"	(ONE) 4" x 6"	1

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
[]					
Q	M4-8	DETOUR	24" x 12"	(ONE) 4" x 6"	1
	G28-2 (242) (CA)	ROUTE 242	21" x 18"		
	M3-1	NORTH	24" x 12"		
R	M6-2 (↗)	UP-RIGHT ARROW	21" x 15"	(ONE) 4" x 4"	2
	M4-10R	DETOUR (INSIDE ARROW) (RIGHT)	48" x 18"		
S	M4-10L	DETOUR (INSIDE ARROW) (LEFT)	48" x 18"	(ONE) 4" x 4"	3
T	SPECIAL	NORTH 242 CLOSED	60" x 60"	(TWO) 4" x 6"	1
U	SPECIAL	NORTH 242 WILL BE CLOSED (DATES) (TIMES)	84" x 78"	(TWO) 6" x 6"	1
V	M4-8	DETOUR	24" x 12"	(ONE) 4" x 6"	2
	G28-2 (242) (CA)	ROUTE 242	21" x 18"		
	M3-3	SOUTH	24" x 12"		
W	M6-2 (↗)	UP-RIGHT ARROW	21" x 15"	(ONE) 4" x 6"	1
	M4-8	DETOUR	24" x 12"		
	G28-2 (242) (CA)	ROUTE 242	21" x 18"		
X	M3-3	SOUTH	24" x 12"	(ONE) 4" x 6"	1
	M6-3 (▲)	STRAIGHT ARROW	21" x 15"		
X	SPECIAL	SOUTH 242 CLOSED	60" x 60"	(TWO) 4" x 6"	1

CONSTRUCTION AREA SIGNS
NO SCALE

CS-4

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	7	26

Robert Camargo 1-31-12
 REGISTERED CIVIL ENGINEER DATE
 2/6/12
 PLANS APPROVAL DATE

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

TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

NORTHBOUND									
LOCATION PM	DETAIL No. OR DESCRIPTION	PAVEMENT MARKER			THERMOPLASTIC TRAFFIC STRIPE			THERMOPLASTIC PAVEMENT MARKINGS SQFT	REMOVE PAVEMENT MARKERS EA
		NON-REFLECTIVE	REFLECTIVE		4" WHITE	8" WHITE	4" YELLOW		
		TYPE A	TYPE G	TYPE H					
		EA			LF				
17.5-17.6	13	125	33					158	
	25			37			1660	37	
	27B				1660				
	38		24			536		24	
17.6-17.8	DIAMOND						33		
	13	587	149					735	
	25			39			1758	39	
	27B				1758				
17.8-18.0	DIAMOND						49		
	13	587	149					735	
	25			39			1758	39	
	27B				1758				
18.0-18.2	DIAMOND						33		
	13	554	140					694	
	25			37			1660	37	
	27B				1660				
18.2-18.5	DIAMOND						33		
	13	332	85					417	
	25			43			1963	43	
	27B				1963				
18.5-18.6	DIAMOND						49		
	13	293	76					369	
	25			65			3028	65	
18.6-18.8	27B				3028				
	13	178	46					225	
	25			25			1075	25	
18.8-18.8	27B				1075				
	13	37	12					49	
	25			6			195	6	
	27B				195				
	36		25				571	25	
SUBTOTAL THIS SHEET		2693	739	291	13097	1107	13097	197	3722

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR
 RAMSES SARGISS
 CALCULATED/DESIGNED BY
 CHECKED BY
 KARIN SERRITIS
 ROBERT CAMARGO
 REVISED BY
 DATE REVISED
 KS
 1/24/12

**PAVEMENT DELINEATION
 QUANTITIES**
PDQ-1

LAST REVISION | DATE PLOTTED => 10-FEB-2012
 01-24-12 | TIME PLOTTED => 12:42

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	8	26

Robert Camargo 1-31-12
 REGISTERED CIVIL ENGINEER DATE
 2/6/12
 PLANS APPROVAL DATE

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

TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

SOUTHBOUND									
LOCATION PM	DETAIL No. OR DESCRIPTION	PAVEMENT MARKERS			THERMOPLASTIC TRAFFIC STRIPE			THERMOPLASTIC TRAFFIC MARKING SQFT	REMOVE PAVEMENT MARKERS EA
		NON-REFLECTIVE	REFLECTIVE		4" WHITE	8" WHITE	4" YELLOW		
		TYPE A	TYPE G	TYPE H					
		EA			LF				
17.5-17.6	13	156	42						198
	25						377		10
	27B								
17.6-17.8	13	732	185						917
	25						1758		39
	27B						1758		
	DIAMOND							49	
17.8-18.0	13	732	185						917
	25						1758		39
	27B						1758		
18.0-18.2	13	691	174						865
	25						1719		37
	27B						1719		
18.2-18.5	13	414	106						520
	25								43
	27B						1963		
	38								98
	38B								110
	DIAMOND								49
18.5-18.6	13	366	94						460
	25								33
	27B						1465		
	DIAMOND							33	
18.6-18.8	13	268	68						336
	25								25
	27B						1075		
	DIAMOND							16	
18.8-18.8	13	173	45						217
	25								16
	27B						685		
	36								36
	DIAMOND							49	
SUBTOTAL THIS SHEET		3532	1143	242	10800	4430	10800	262	4916
TOTAL		6225	2415		23897	5537	23897	459	8638

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR
 RAMSES SARGISS
 CALCULATED/DESIGNED BY
 CHECKED BY
 KARIN SERITIS
 ROBERT CAMARGO
 REVISED BY
 DATE REVISED
 KS
 1/24/12

**PAVEMENT DELINEATION
 QUANTITIES**
PDQ-2

LAST REVISION | DATE PLOTTED => 10-FEB-2012
 01-24-12 | TIME PLOTTED => 12:42

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	9	26

Robert Camargo 1-31-12
 REGISTERED CIVIL ENGINEER DATE

2/6/12
 PLANS APPROVAL DATE

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

INDIVIDUAL SLAB REPLACEMENT (RAPID STRENGTH CONCRETE)

NORTHBOUND						
LOCATION PM	LANE No.	No. OF SLABS (N)	LENGTH (N)	WIDTH (N)	DEPTH (N)	RAPID STRENGTH CONCRETE
			FT			CY
18.50	1,2	2	15.0	11.5	0.80	10
18.50	4	1	12.0	11.8	0.80	4
18.59	3	1	15.0	11.8	0.80	5
18.70	2	7	13.5	11.8	0.75	31
18.72	2	1	14.0	11.8	0.75	5
18.73	1,2	2	14.0	11.5	0.75	9
18.74	2	2	13.5	11.8	0.75	9
18.77	3	1	13.0	11.8	0.75	4
18.77	2,3	2	12.0	11.2	0.75	7
18.78	2	1	15.0	11.2	0.75	5
18.79	2,3	4	14.0	11.5	0.75	18
18.79	1,2,3	6	13.0	11.5	0.75	25
18.80	2	1	15.0	11.2	0.75	5
SUBTOTAL (THIS SHEET)						137

INDIVIDUAL SLAB REPLACEMENT (RAPID STRENGTH CONCRETE)

SOUTHBOUND						
LOCATION PM	LANE No.	No. OF SLABS (N)	LENGTH (N)	WIDTH (N)	DEPTH (N)	RAPID STRENGTH CONCRETE
			FT			CY
18.53	3	3	13.5	11.8	0.80	14
18.67	2,3	4	13.0	11.5	0.75	17
18.68	3	2	12.0	11.8	0.75	8
18.68	2,3	4	13.5	11.5	0.75	17
18.69	3	1	12.0	11.8	0.75	4
18.69	2,3	4	13.5	11.5	0.75	17
18.69	2	1	15.0	11.2	0.75	5
18.70	2,3	2	14.0	11.5	0.75	9
18.70	3	1	13.0	11.8	0.75	4
18.71	2	1	12.0	11.2	0.75	4
18.71	3	2	13.5	11.8	0.75	9
18.71	2	1	15.0	11.2	0.75	5
18.72	3	1	12.0	11.8	0.75	4
18.72	2	2	13.5	11.2	0.75	8
18.73	2	1	13.0	11.2	0.75	4
18.73	2	1	12.0	11.2	0.75	4
18.77	2,3	2	15.0	11.5	0.75	10
18.77	2	2	13.0	11.2	0.75	8
18.78	2,3	8	13.5	11.5	0.75	35
18.79	2,3	2	14.0	11.0	0.75	9
18.79	2,3	2	15.0	11.0	0.75	9
18.79	2	1	12.0	11.2	0.75	4
18.80	2,3	12	13.5	11.5	0.75	52
18.80	2,3	2	15.0	11.5	0.75	10
SUBTOTAL (THIS SHEET)						267
TOTAL						404

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR: RAMSES SARGISS
 CALCULATED/DESIGNED BY: KARIN SERITIS
 CHECKED BY: ROBERT CAMARGO
 REVISED BY: KS
 DATE REVISED: 1/24/12

SUMMARY OF QUANTITIES
Q-1

LAST REVISION DATE PLOTTED => 10-FEB-2012 01-24-12 TIME PLOTTED => 12:42

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	10	26

Robert Camargo 1-31-12
 REGISTERED CIVIL ENGINEER DATE
 2/6/12
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Robert Camargo
 No. 34402
 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.

GRIND EXISTING CONCRETE PAVEMENT/GROOVE EXISTING CONCRETE PAVEMENT/ ASPHALTIC EMULSION (FOG SEAL COAT)

NORTHBOUND MAINLINE								
PM-START	PM-END	LANE Nos.	LENGTH	LANE WIDTH	SHOULDER WIDTH	GRIND EXISTING CONCRETE PAVEMENT	GROOVE EXISTING CONCRETE PAVEMENT	ASPHALTIC EMULSION (FOG SEAL COAT, SHLD)
			FT			SQYD		TONS
17.54	17.67	1,2,3,4,5	686	56	20	4271	4271	0.6
17.67	17.74	1,2,3,4,5	370			BRIDGE- NON-GRIND/NON-GROOVE AREA		
17.74	17.85	1,2,3,4,5	581	60	13	3872	3872	0.3
17.85	18.25	1,2,3,4,5,6	2112	72	13	16896	16896	1.3
18.25	18.40	1,2,3,4,5,6	792	72	13	6336	6336	0.5
18.40	18.55	1,2,3,4,5,6	792	72	13	6336	6336	0.5
18.55	18.76	1,2,3	1109	36	13	4435	4435	0.7
18.76	18.83	1,2,3,4	370	48	13	1971	1971	0.2
TOTAL (NORTHBOUND)						44117	44117	4.1
SOUTHBOUND MAINLINE								
PM-START	PM-END	LANE Nos.	LENGTH	LANE WIDTH	SHOULDER WIDTH	GRIND EXISTING CONCRETE PAVEMENT	GROOVE EXISTING CONCRETE PAVEMENT	ASPHALTIC EMULSION (FOG SEAL COAT, SHLD)
			FT			SQYD		TONS
17.54	17.67	1,2,3,4,5,6	686	68	13	5186	5186	0.4
17.67	17.74	1,2,3,4,5,6	370			BRIDGE- NON-GRIND/NON-GROOVE AREA		
17.74	17.78	1,2,3,4,5,6	211	68	13	1596	1596	0.1
17.78	18.19	1,2,3,4,5,6	2165	68	13	16356	16356	1.3
18.19	18.40	1,2,3,4	1109	45	13	5544	5544	0.7
18.40	18.55	1,2,3,4	792	45	13	3960	3960	0.5
18.55	18.76	1,2,3,4	1109	45	13	5544	5544	0.7
18.76	18.83	1,2,3,4,5	370	57	13	2341	2341	0.2
TOTAL (SOUTHBOUND)						40527	40527	3.9
TOTAL (MAINLINE)						84644	84644	8.0

ASPHALTIC EMULSION (FOG SEAL COAT) : # SQYD x 0.10 GALLON/SQYD x TON/240 GALLONS - SHOULDERS ONLY

SUMMARY OF QUANTITIES

Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	11	26

1-31-12
 REGISTERED ELECTRICAL ENGINEER DATE

2/6/12
 PLANS APPROVAL DATE

Parwiz A. Khazi
 No. 17624
 Exp. 9-30-13
 ELECT

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.

ELECTRICAL INDEX

- E-1 ELECTRICAL INDEX AND NOTES
- E-2 LOOP DETECTOR REPLACEMENT (TRAFFIC MONITORING STATION)
- E-3 ELECTRICAL DETAILS

GENERAL NOTES

1. AT LEAST THREE WORKING DAYS PRIOR TO PERFORMING ANY WORK ON EACH EXISTING SYSTEM, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION, ELECTRICAL AND SIGNAL MAINTENANCE SUPERINTENDENT, PHONE (415) 330-6500
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE LOOP DETECTORS TO BE REPLACED PRIOR TO REPAVING.
3. THE CONTRACTOR SHALL PROVIDE TWO REPORTS PER LOCATION ON THE STATUS OF EACH DETECTOR LOOP REPLACEMENT SHOWING CONTINUITY AND INSULATION RESISTANCE READINGS. THE REPORTS SHALL BE SUBMITTED TO THE ENGINEER, ONE BEFORE STARTING WORK AND THE OTHER AFTER WORK HAS BEEN COMPLETED AT EACH LOCATION.
4. FOR INSTALLING DETECTOR LOOP IN PRECASE CONCRETE PAVEMENT OR PRECASTE POST-TENSION CONCRETE PAVEMENT, SLOTS SHALL BE FILLED WITH EPOXY.

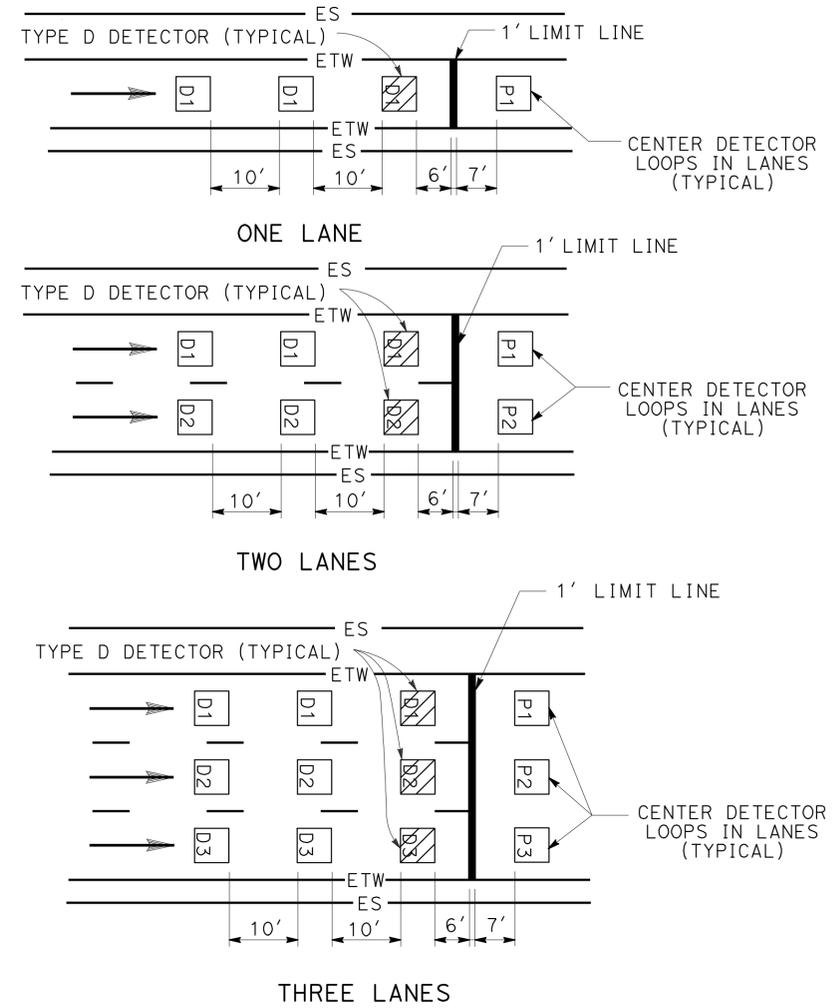
PROJECT NOTES

1. **AB** EXISTING DETECTORS AND INSTALLL NEW DETECTORS. SPLICE NEW LOOP CONDUCTORS TO CORRESPONDING DLC IN TERMINATION PULL BOX. VERIFY IDENTIFICATION OF DLC BEFORE CONNECTING TO THE CORRESPONDING LOOP CONDUCTORS.

ELECTRICAL INDEX AND NOTES



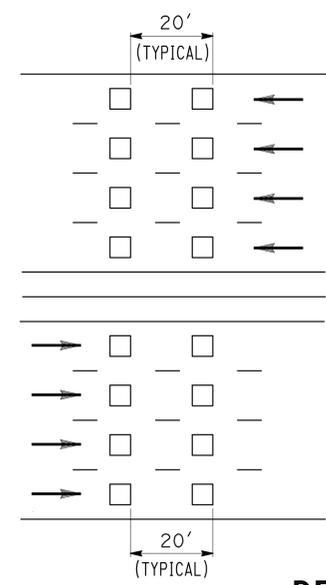
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	CC	680	17.5/18.8	12	26
			REGISTERED ELECTRICAL ENGINEER DATE	1-31-12	
			PLANS APPROVAL DATE	2/6/12	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



**DETAIL "RM"
RAMP METERING STATION**

RAMP METERING STATION NOTES

- SEE ES-5A, ES-5B, AND ES-13A FOR ADDITIONAL DETAILS.
- DLC CONDUCTORS SHALL BE SPLICED TO THE LOOP CONDUCTORS IN THE NEAREST PULLBOX.
- ALL SPLICES SHALL BE TYPE "S" OR TYPE "ST" AS REQUIRED.



TRAFFIC MONITORING STATION NOTES
FREEWAY MAINLINE DETECTOR DESIGNATION:

- N = NORTHBOUND LANES (NB)
- S = SOUTHBOUND LANES (SB)
- E = EASTBOUND LANES (EB)
- W = WESTBOUND LANES (WB)

NUMBER OF LANES FROM LEFT WITH RESPECT TO DIRECTION OF TRAFFIC:

- 1 = FIRST LANE FROM LEFT
- 2 = SECOND LANE FROM LEFT
- 3 = THIRD LANE FROM LEFT
- 4 = FOURTH LANE FROM LEFT

NUMBER OF DETECTOR IN THE SAME LANE:

- 1 = ENTERING DETECTOR
- 2 = LEAVING DETECTOR

**DETAIL "TM"
TRAFFIC MONITORING STATION**

RAMP DETECTOR DESIGNATION:

- D=DEMAND DETECTOR
- P=PASSAGE DETECTOR
- Q=QUEUE DETECTOR
- F=OFFRAMP DETECTOR

- 1=FIRST LANE FROM LEFT
- 2=SECOND LANE FROM LEFT

**ELECTRICAL DETAILS
(RAMP METERING AND TRAFFIC MONITORING
DETECTOR SPACING AND DESIGNATION)**

NO SCALE

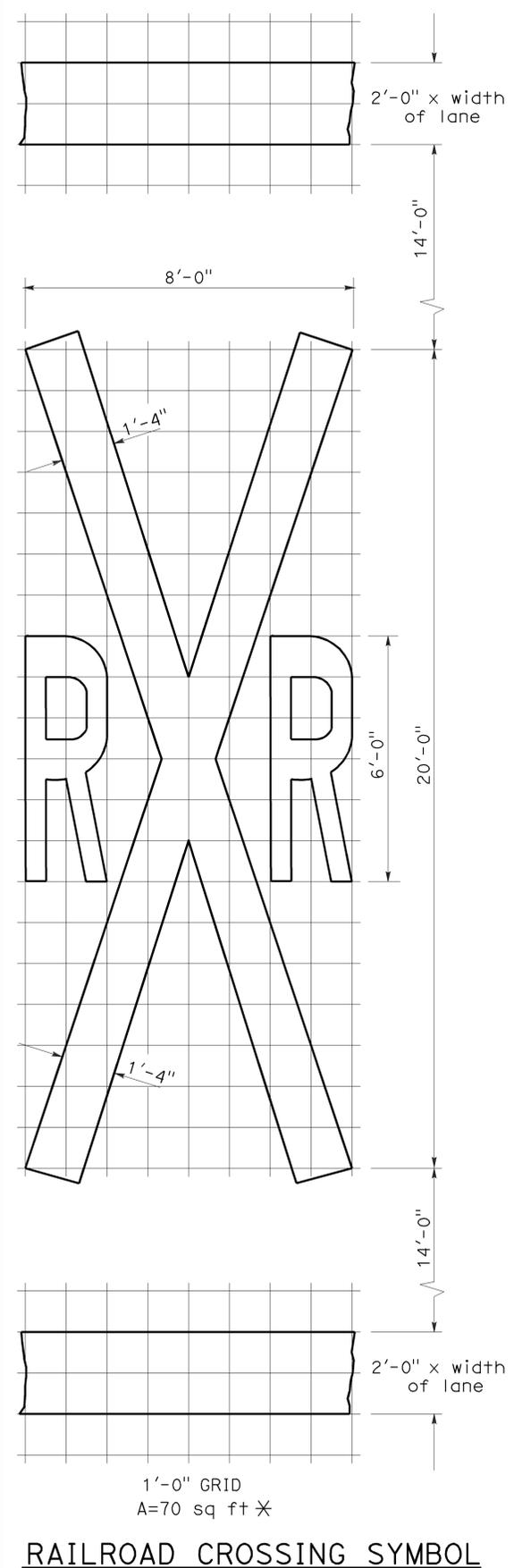
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	ELECTRICAL	FUNCTIONAL SUPERVISOR	LAI HONG CHIU
		CALCULATED-DESIGNED BY	CHECKED BY
PK	2/08/11	REVISOR	DATE
PARWIZ KHAZI	M. MOII		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	13	26

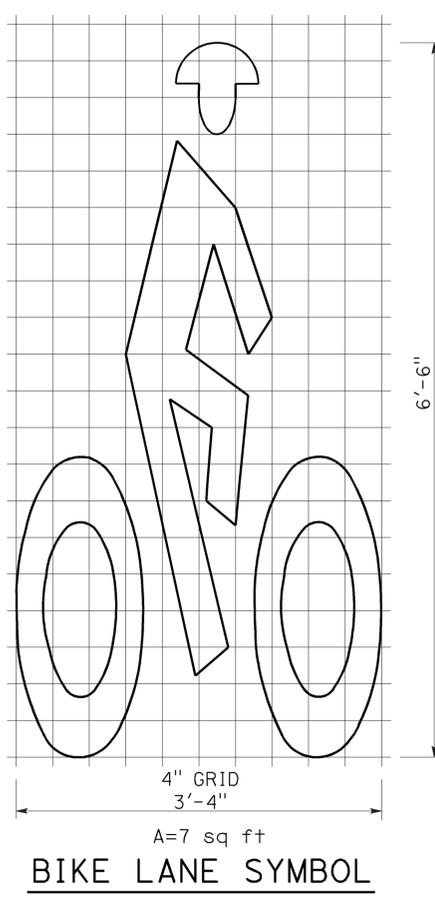
Donald E. Howe
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 Donald E. Howe
 No. C46402
 Exp. 3-31-09
 CIVIL
 STATE OF CALIFORNIA

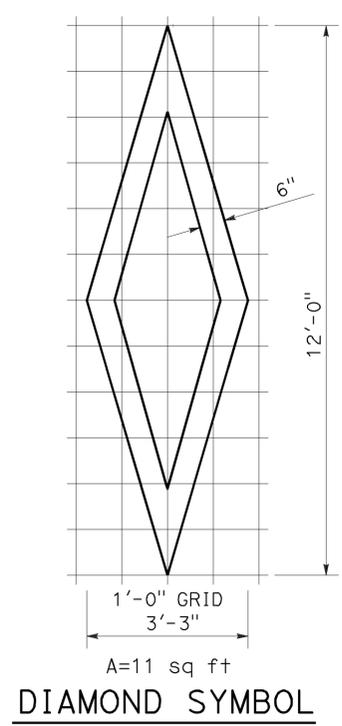
To accompany plans dated 2-6-12



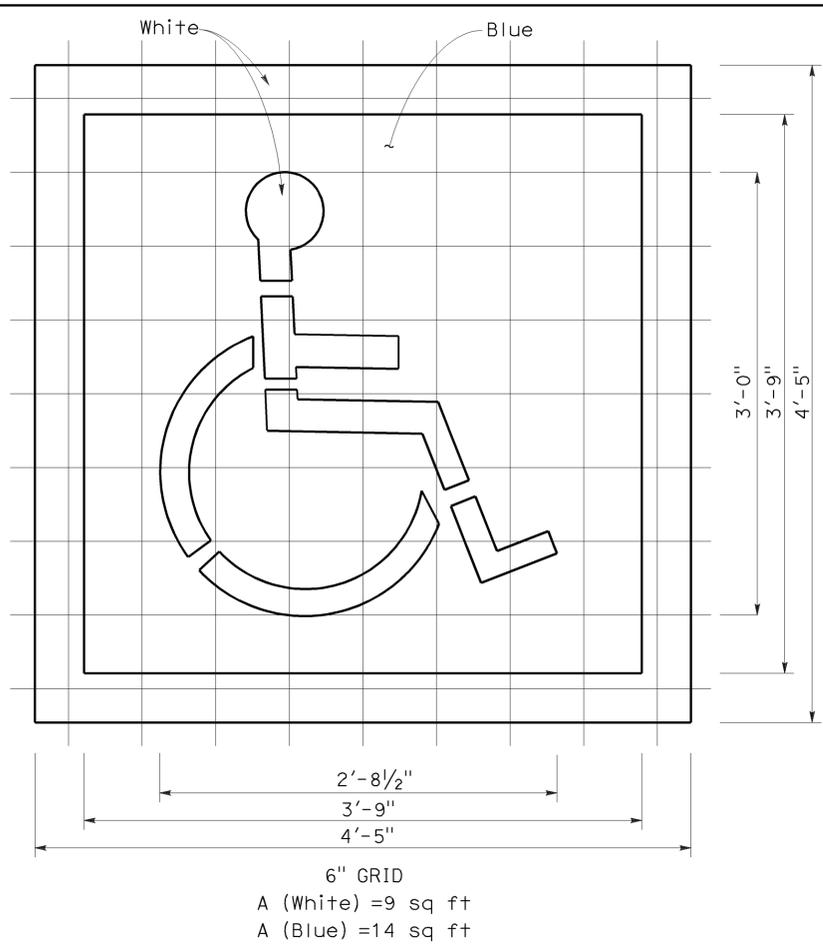
RAILROAD CROSSING SYMBOL
 *70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



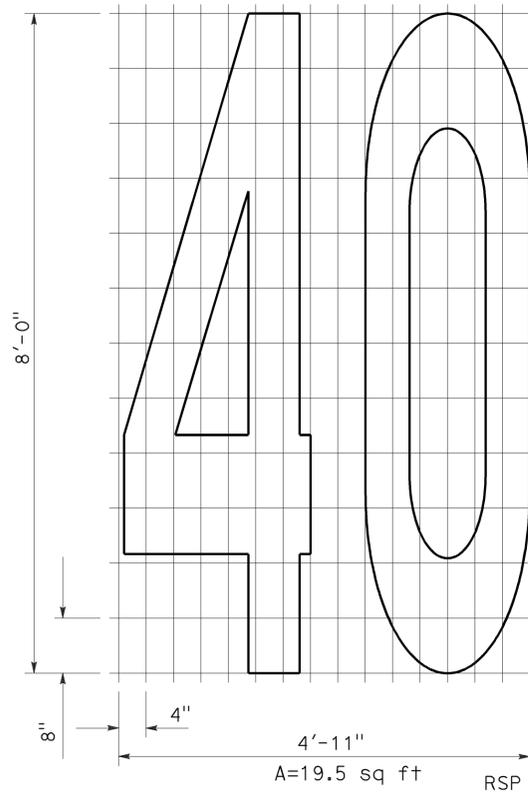
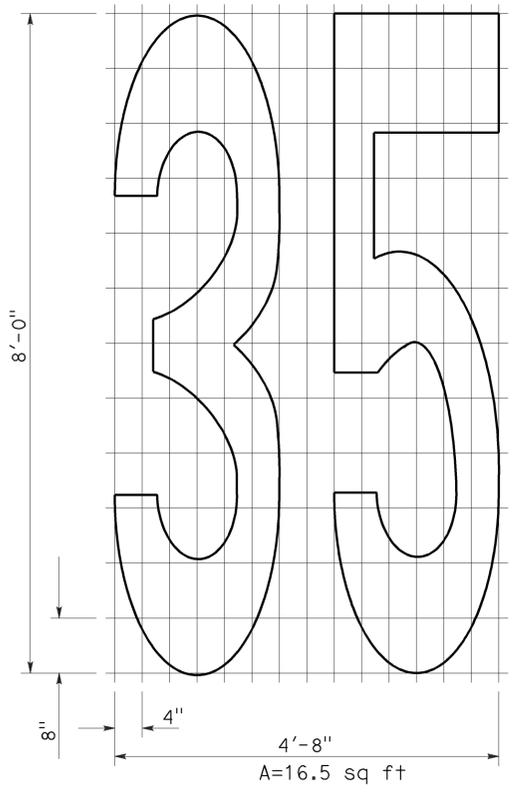
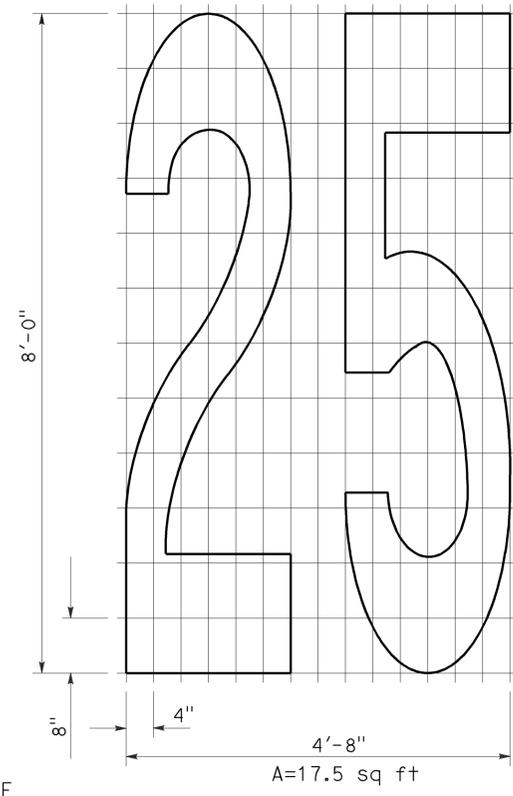
BIKE LANE SYMBOL



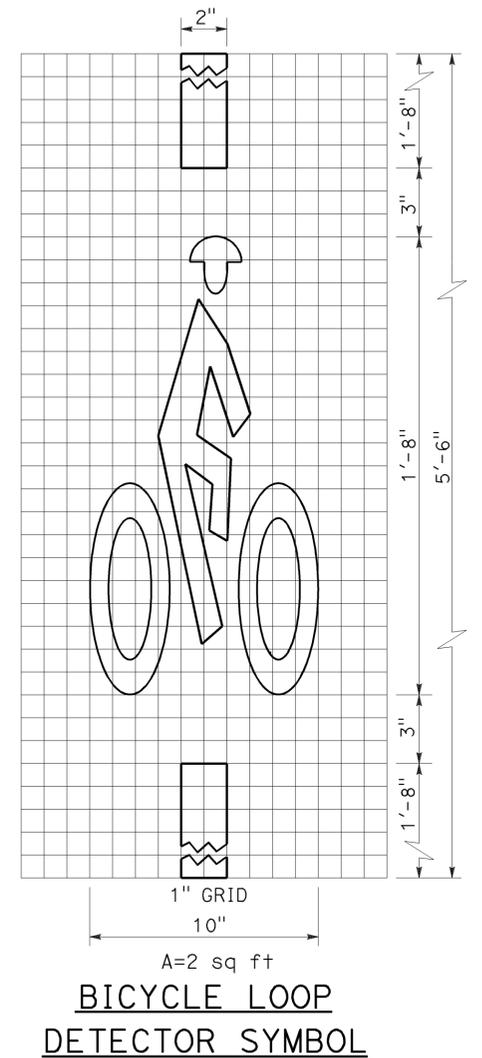
DIAMOND SYMBOL



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



NUMERALS



BICYCLE LOOP DETECTOR SYMBOL

NOTE:
 1. Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS SYMBOLS AND NUMERALS
 NO SCALE

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A24C

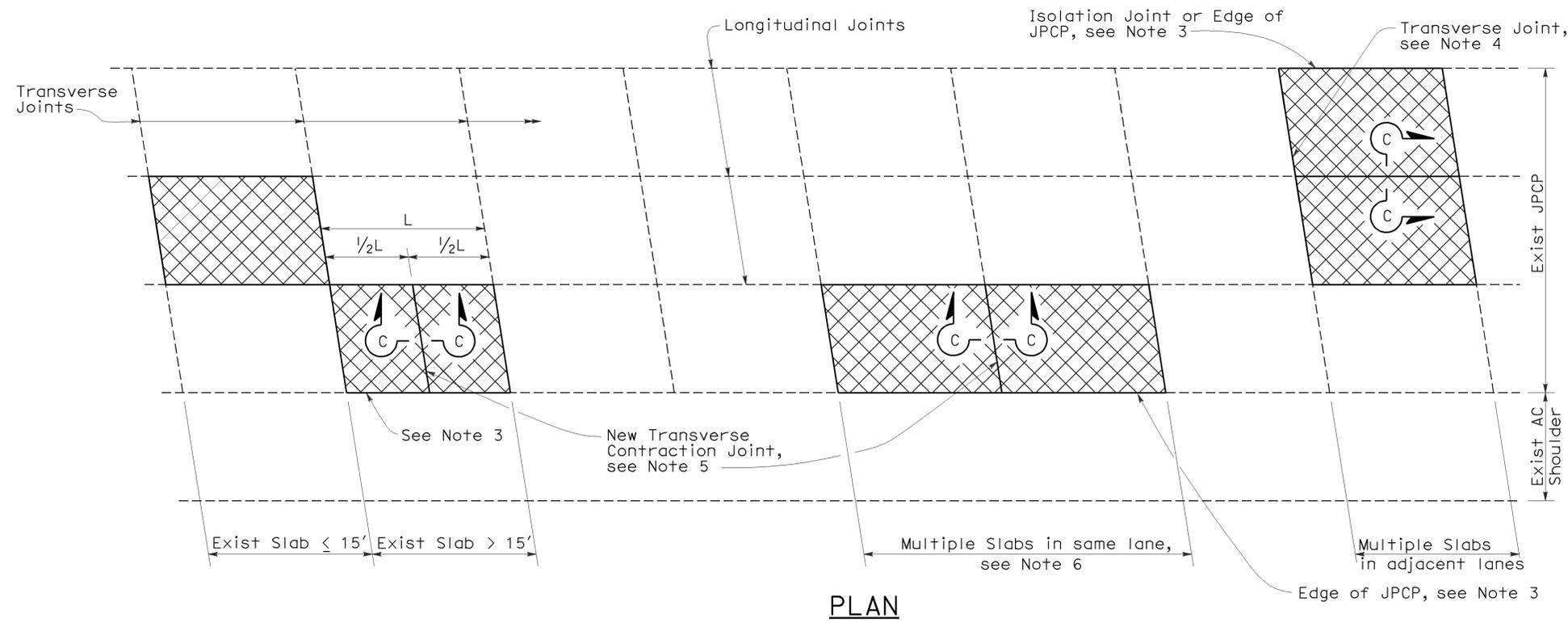
2006 REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	14	26

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

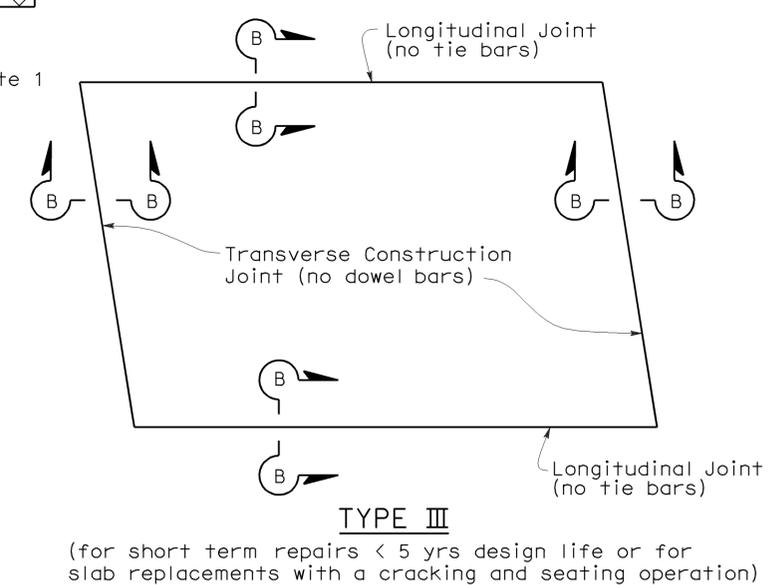
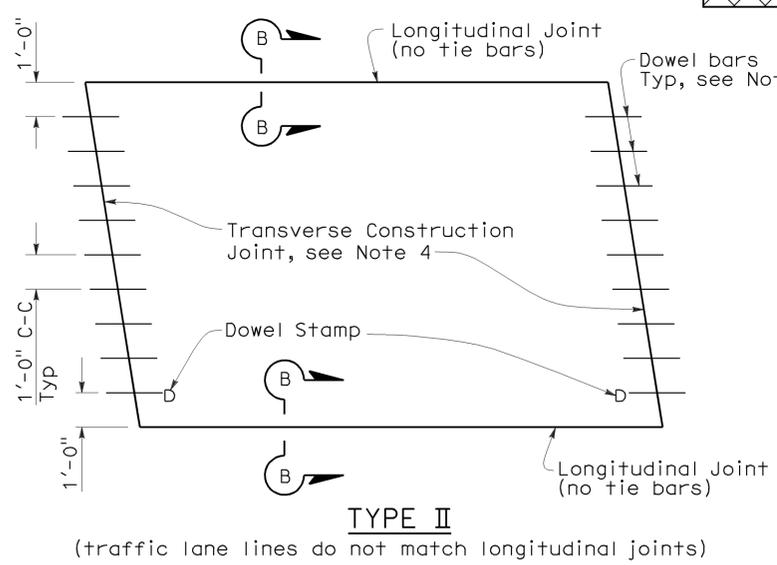
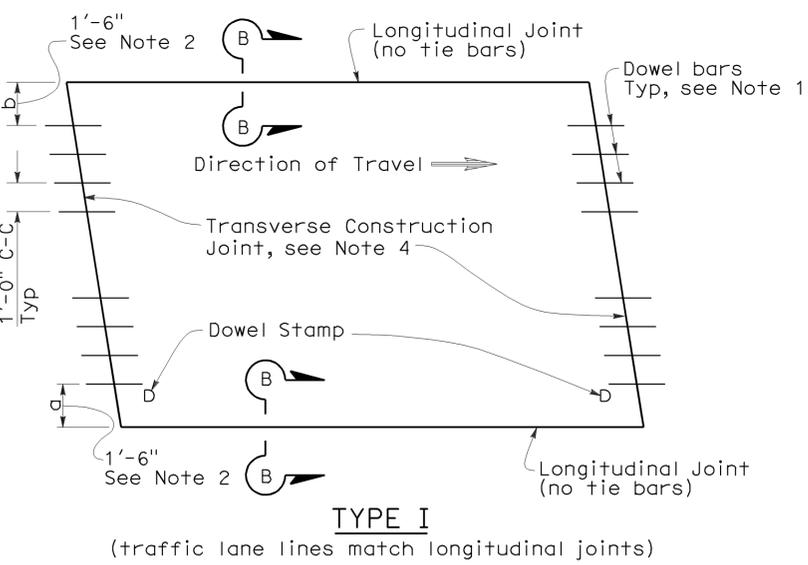
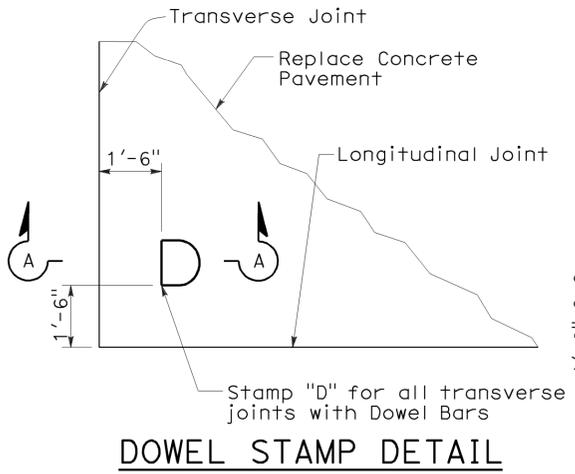
To accompany plans dated 2-6-12



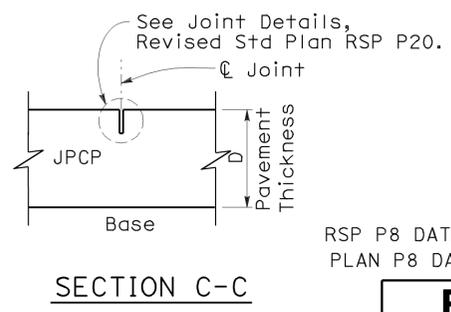
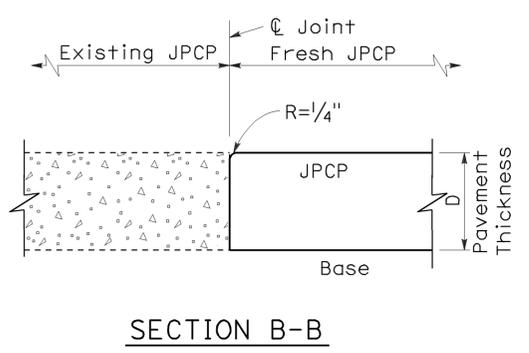
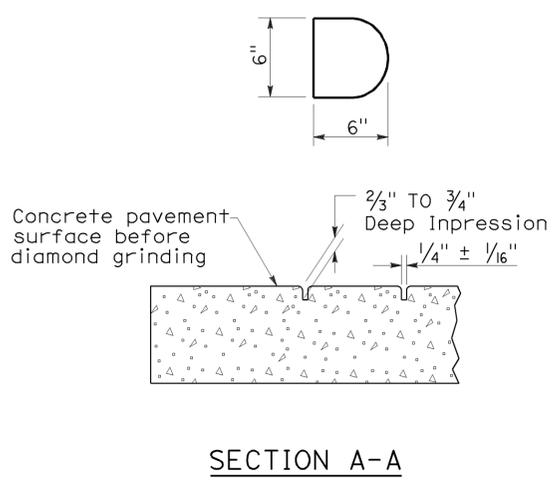
NOTES:

- For details not shown, see Revised Standard Plan RSP P10.
- Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1'-0" and the "b" dimension shall be 2'-0".
- Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
- For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
- Transverse joint to match skew of existing joint. Omit dowel bars.
- This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100'.

LEGEND



SLAB LAYOUT



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT
 NO SCALE

RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

123

2006 REVISED STANDARD PLAN RSP P8

NOTE:

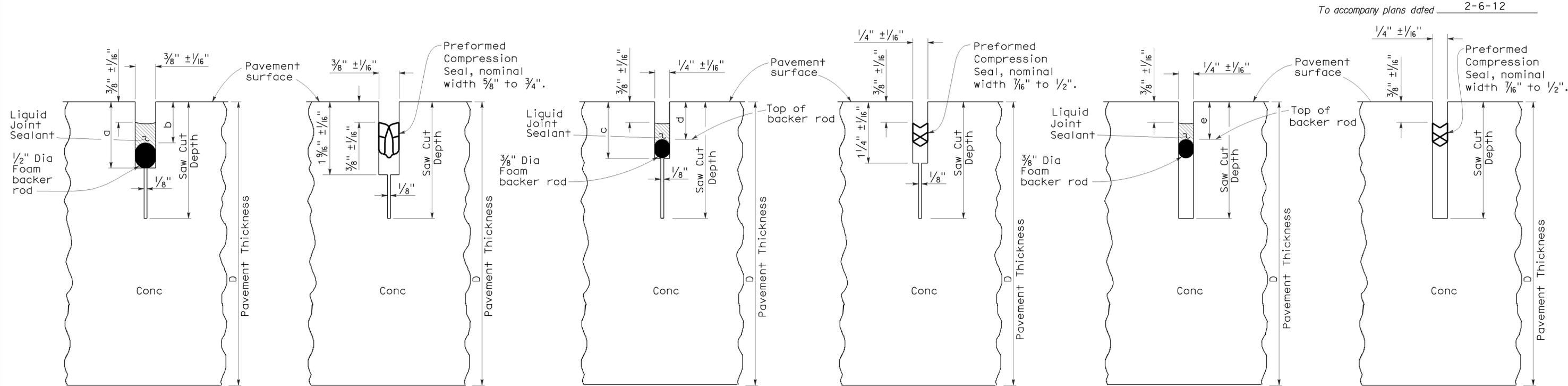
1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	15	26

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE

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

2006 REVISED STANDARD PLAN RSP P20



LIQUID SEALANT

COMPRESSION SEAL

LIQUID SEALANT

COMPRESSION SEAL

LIQUID SEALANT

COMPRESSION SEAL

TYPE A1

TYPE A2

TYPE B

Transverse Contraction Joints

Longitudinal Contraction Joints

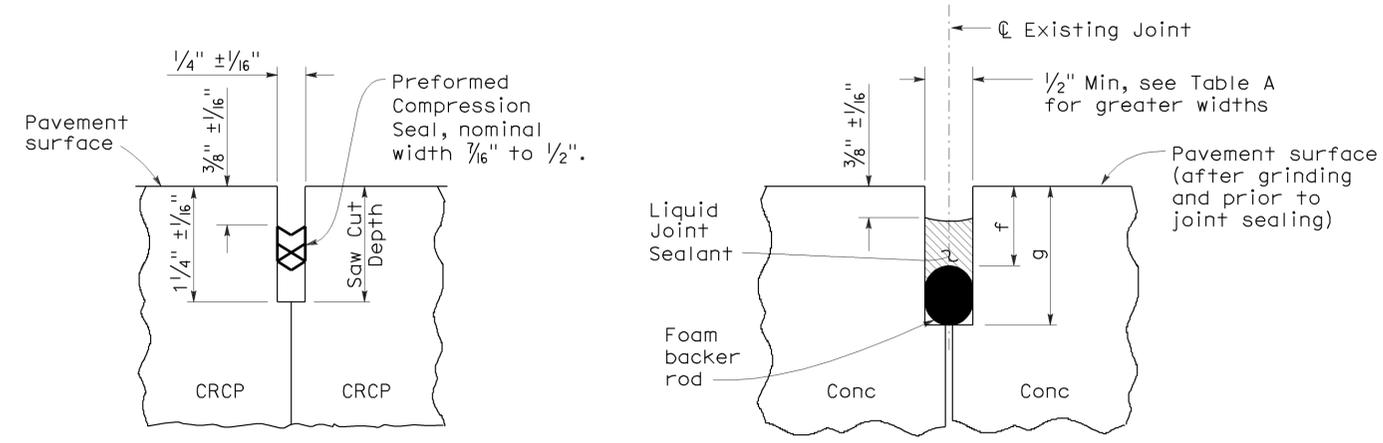
Longitudinal or Transverse Contraction Joint

LIQUID SEALANT RESERVOIR DEPTH

LIQUID SEALANT MATERIAL	3/8" Joint Width Type A1		1/4" Joint Width Type A2		1/4" Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILICONE	1" ± 1/16"	5/8" ± 1/16"	15/16" ± 1/16"	9/16" ± 1/16"	9/16" ± 1/16"
ASPHALT RUBBER	1 3/16" ± 1/16"	3/4" ± 1/16"	1 1/16" ± 1/16"	11/16" ± 1/16"	11/16" ± 1/16"

TABLE A (TYPE R JOINT)

Sawn Joint Width	Backer Rod Diameter ± 1/16"	DIMENSION "f"	DIMENSION "g"
1"	1 5/16"	7/8"	2 1/4"
7/8"	1 3/16"	13/16"	2"
3/4"	1"	3/4"	1 3/4"
5/8"	7/8"	11/16"	1 1/2"
1/2"	11/16"	5/8"	1 1/4"



COMPRESSION SEAL

LIQUID SEALANT

TYPE C

TYPE R

Transverse and Longitudinal Construction Joints (For CRCP)

Retrofit Transverse and Longitudinal Joints

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
 JOINT DETAILS**

NO SCALE

RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20
 DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P20

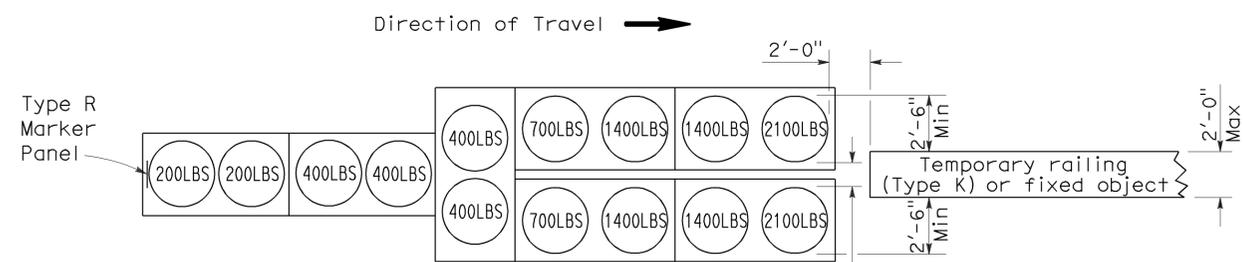
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	16	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

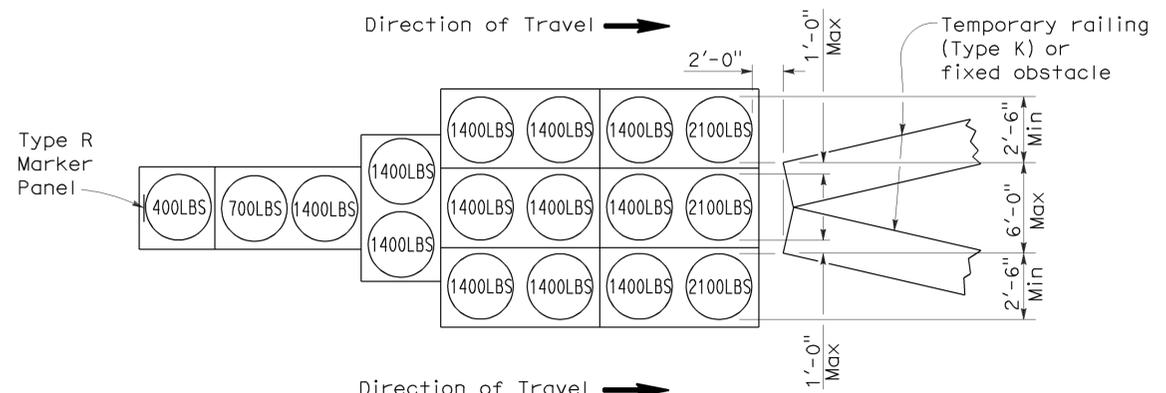
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2-6-12



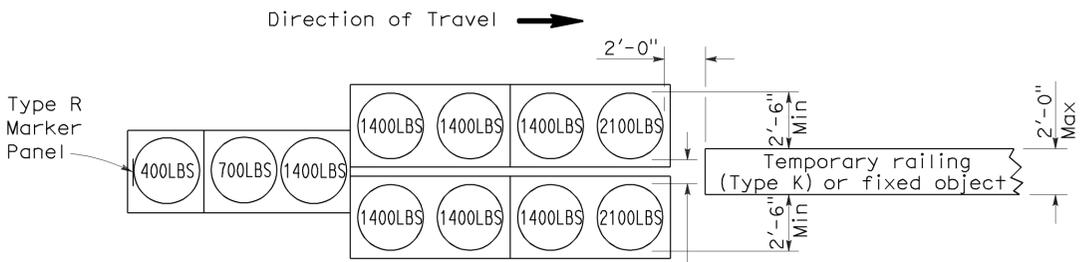
ARRAY 'TU14'

Approach speed 45 mph or more



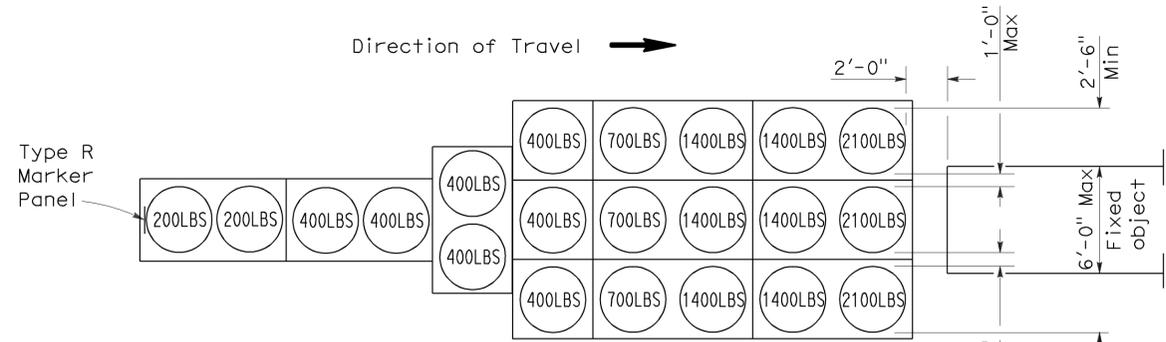
ARRAY 'TU17'

Approach speed less than 45 mph



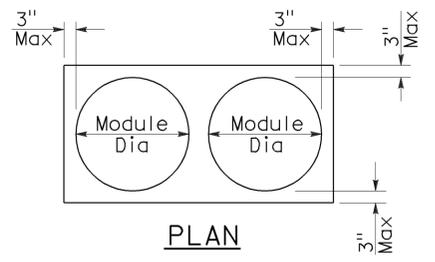
ARRAY 'TU11'

Approach speed less than 45 mph

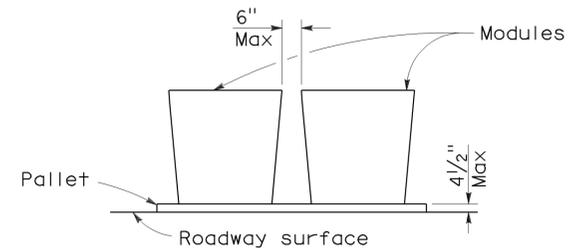


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

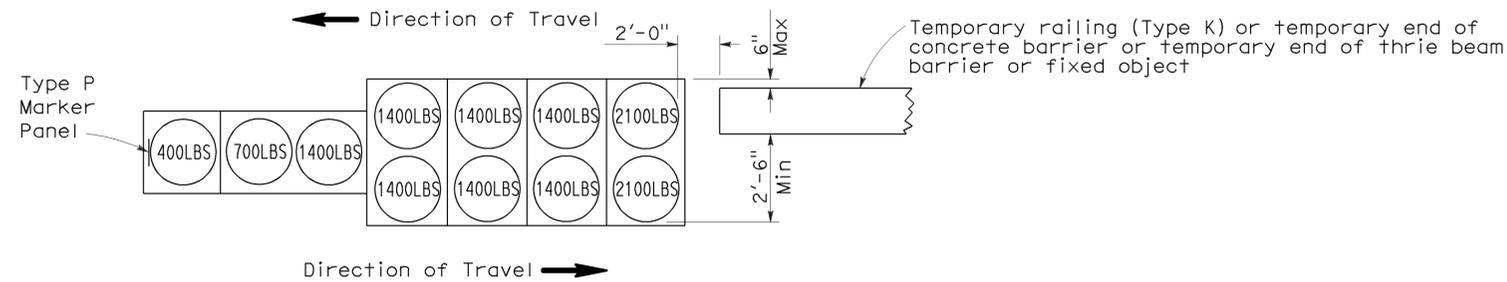
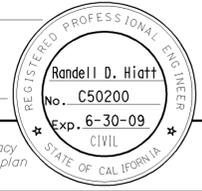
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	17	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

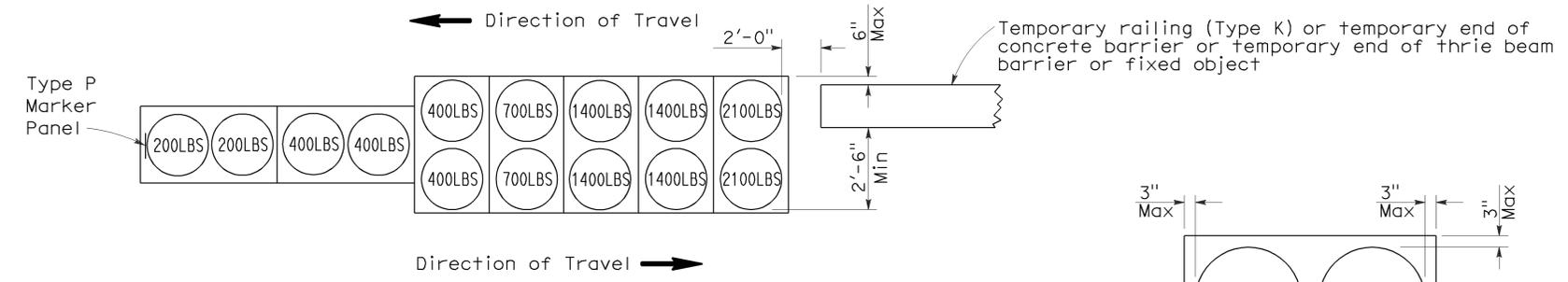
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2-6-12



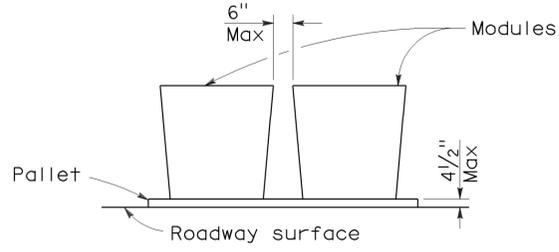
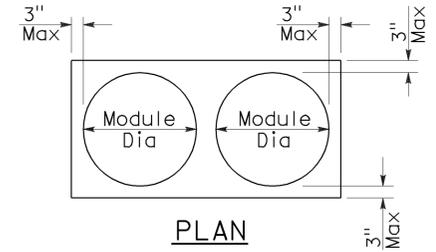
ARRAY 'TB11'

Approach speed less than 45 mph



ARRAY 'TB14'

Approach speed 45 mph or more



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

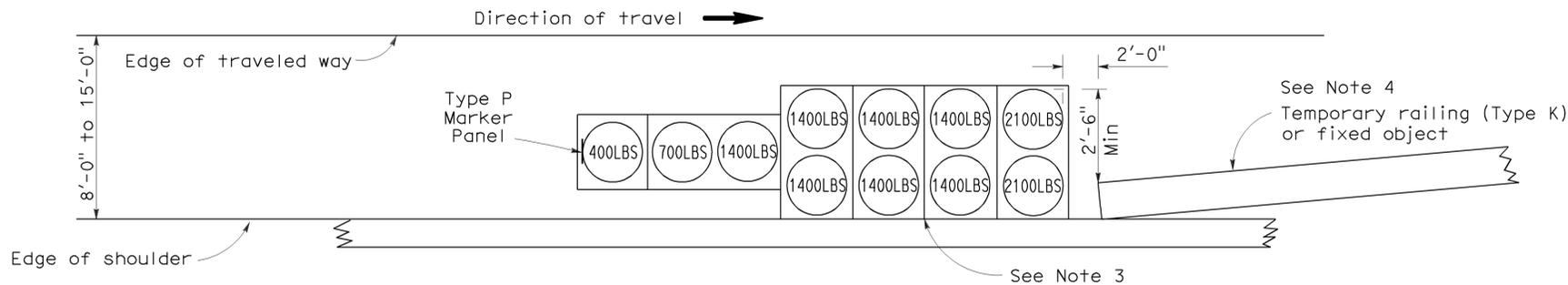
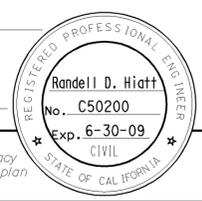
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	18	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

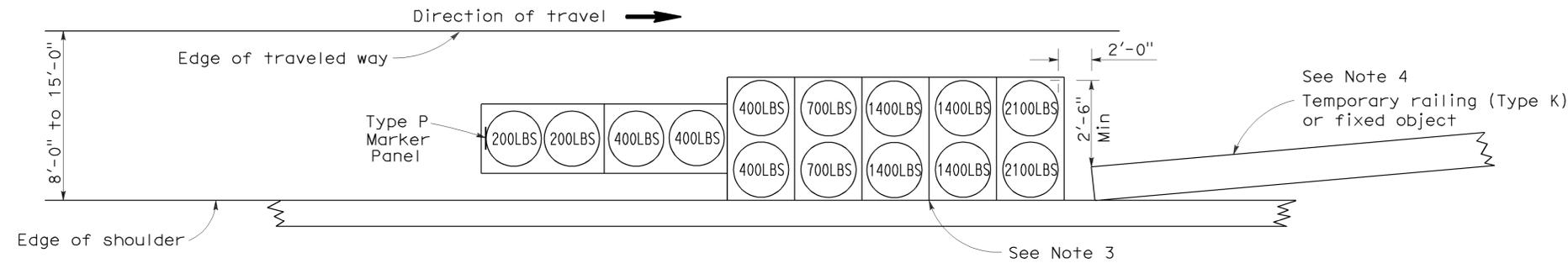
June 6, 2008
PLANS APPROVAL DATE

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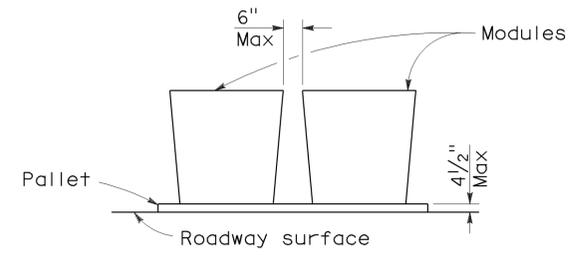
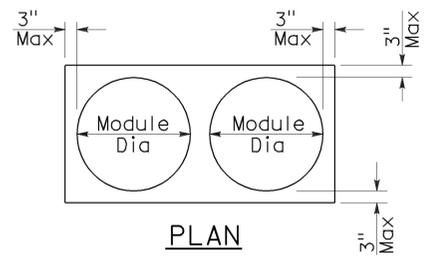
To accompany plans dated 2-6-12



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

- (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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**
NO SCALE

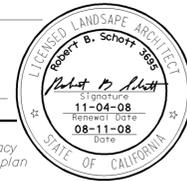
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

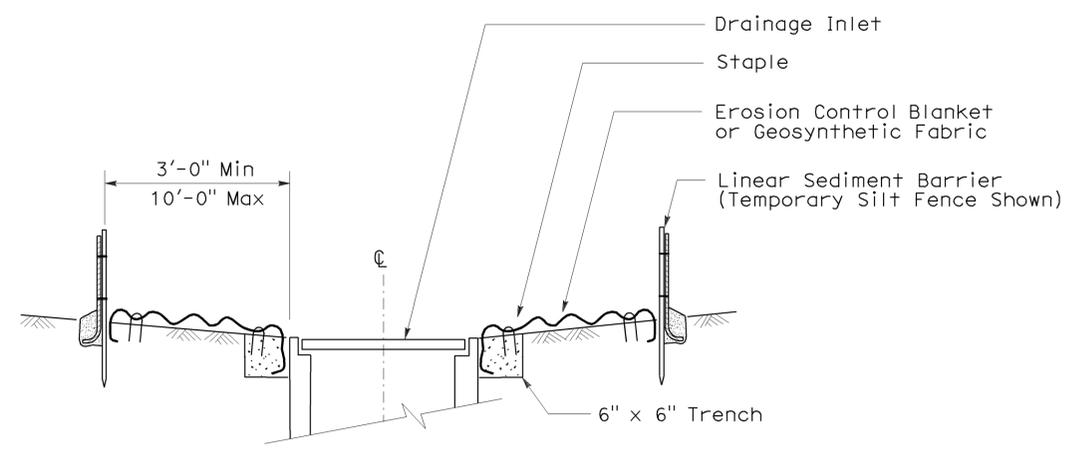
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	19	26

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.

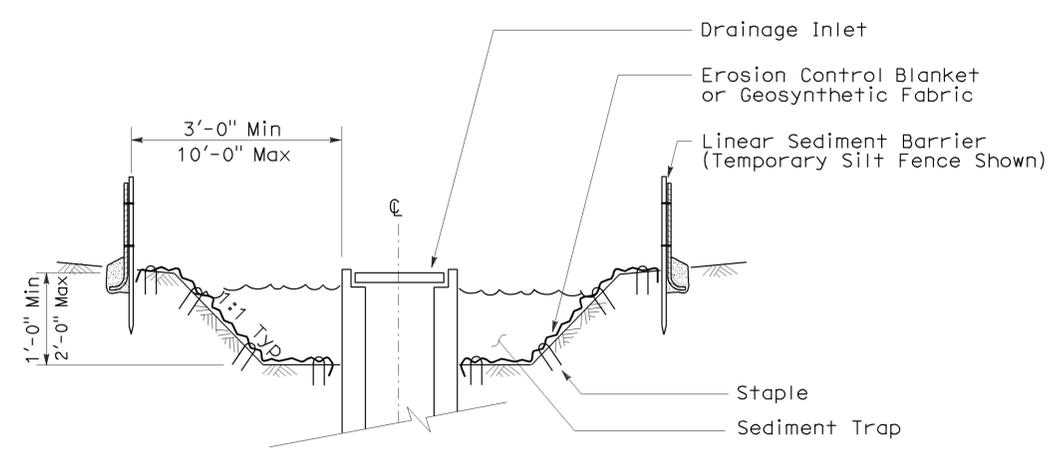


To accompany plans dated 2-6-12

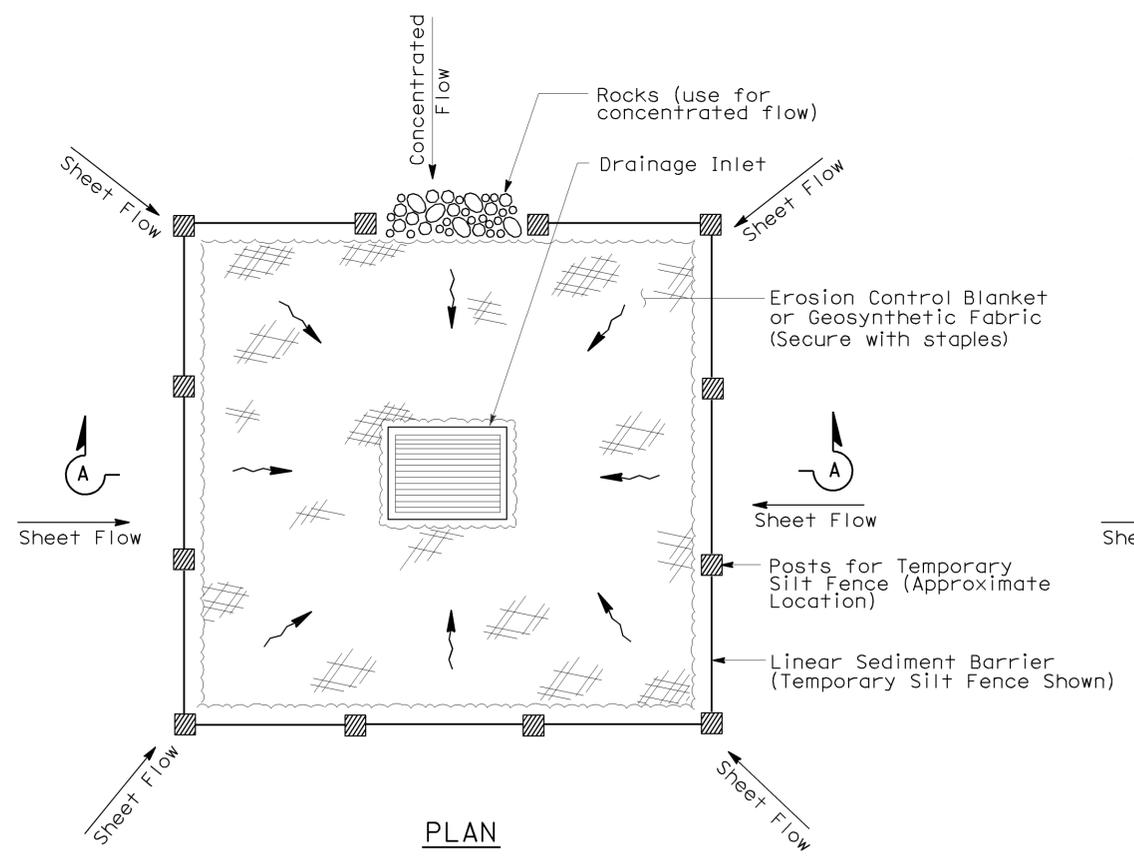
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
 - Dimensions may vary to fit field conditions.



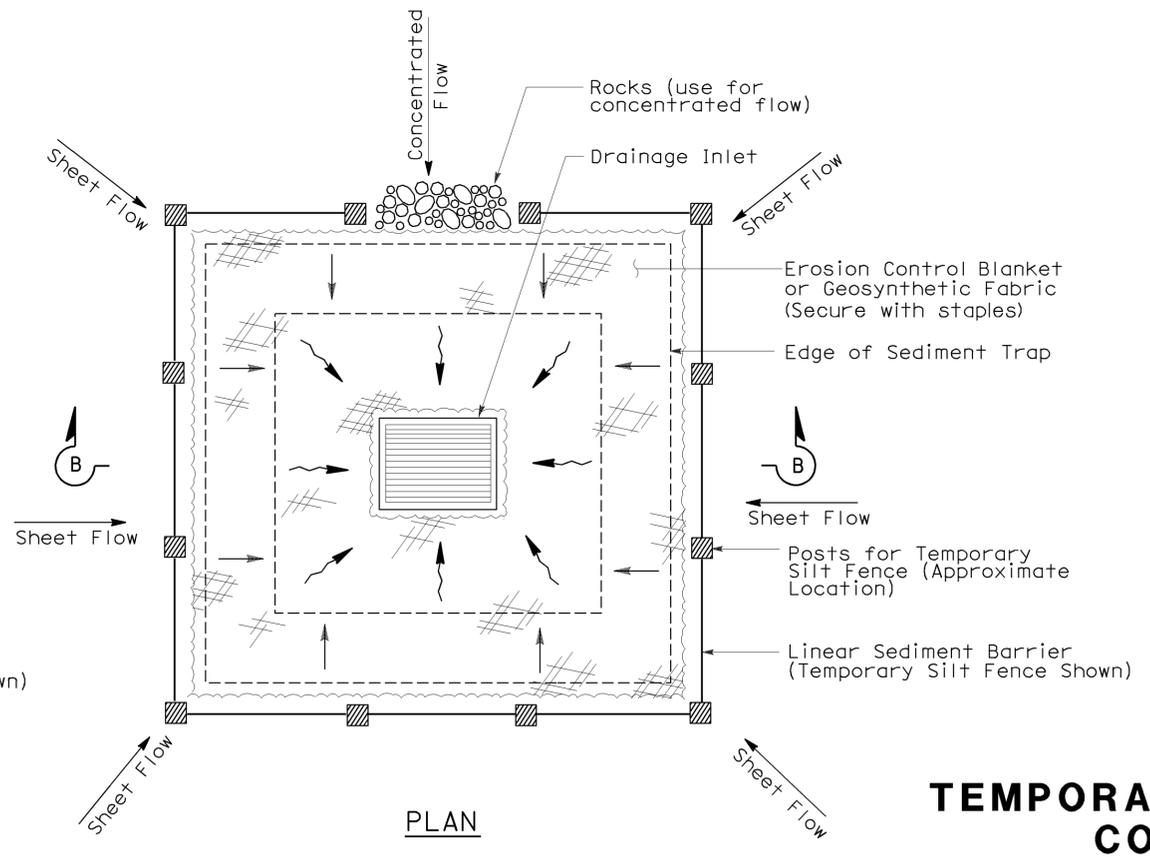
SECTION A-A



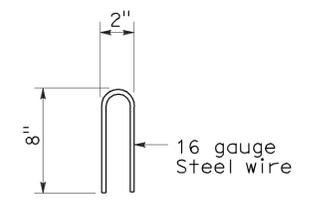
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



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



STAPLE DETAIL

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

Nsp t61 dated august 15, 2008 supplements the standard plans book dated may 2006.

2006 NEW STANDARD PLAN NSP T61

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	20	26

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.

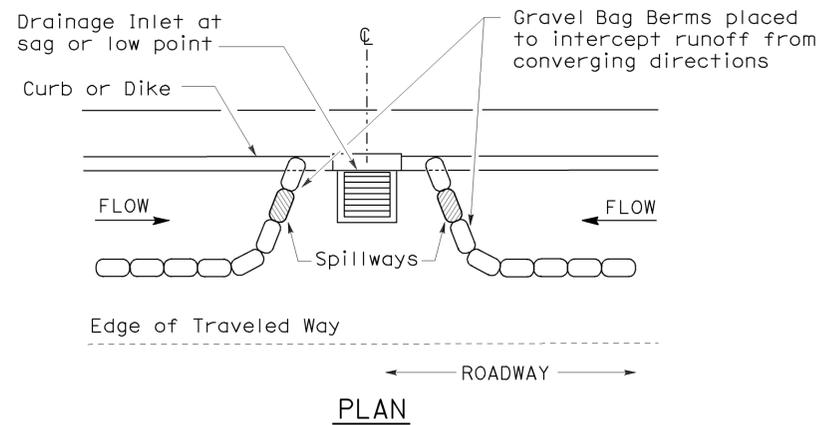
To accompany plans dated 2-6-12

2006 NEW STANDARD PLAN NSP T62

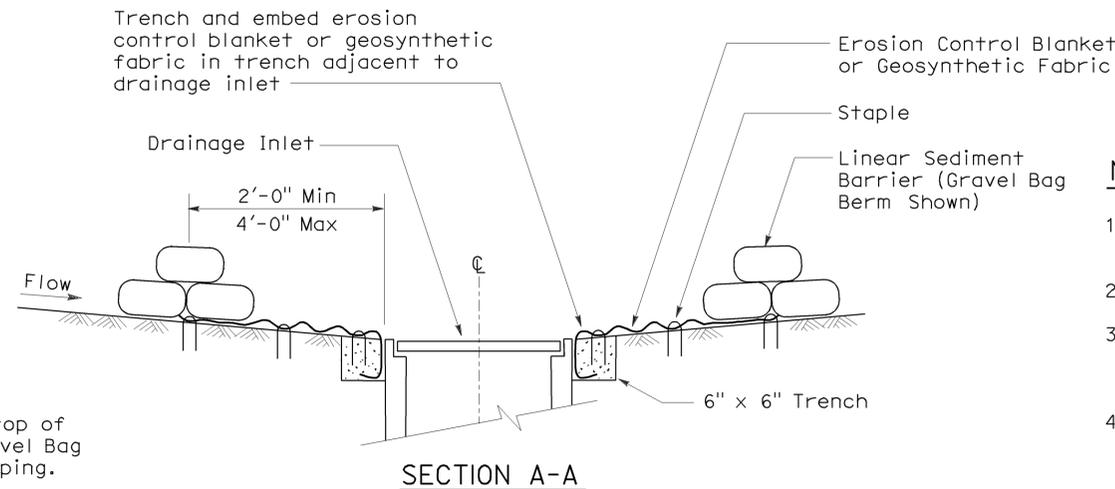
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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



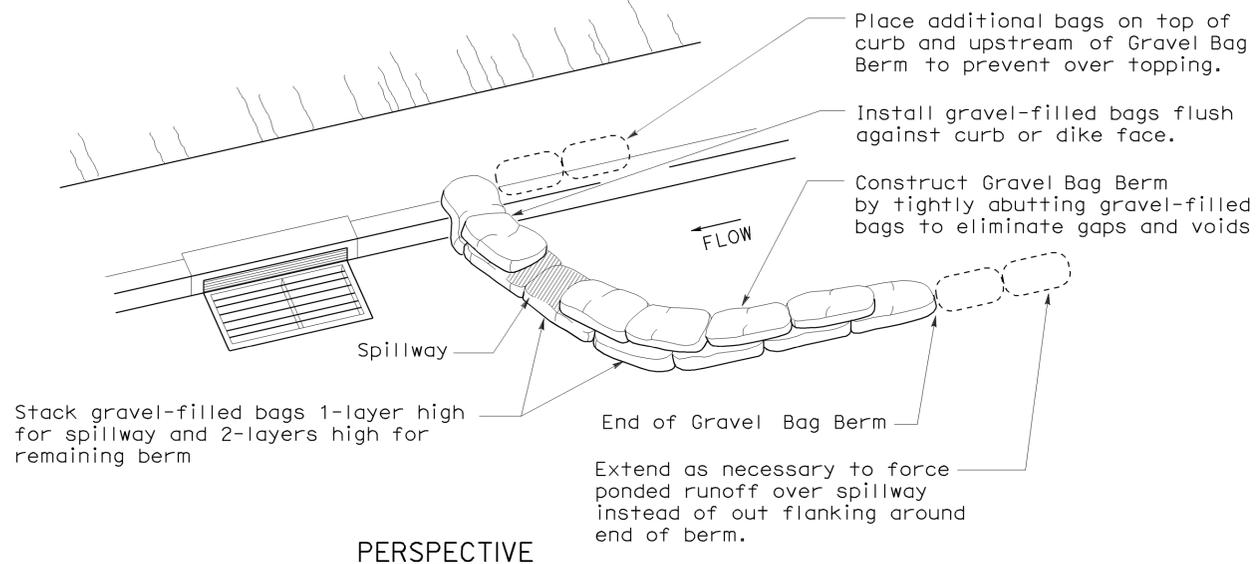
PLAN
CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)



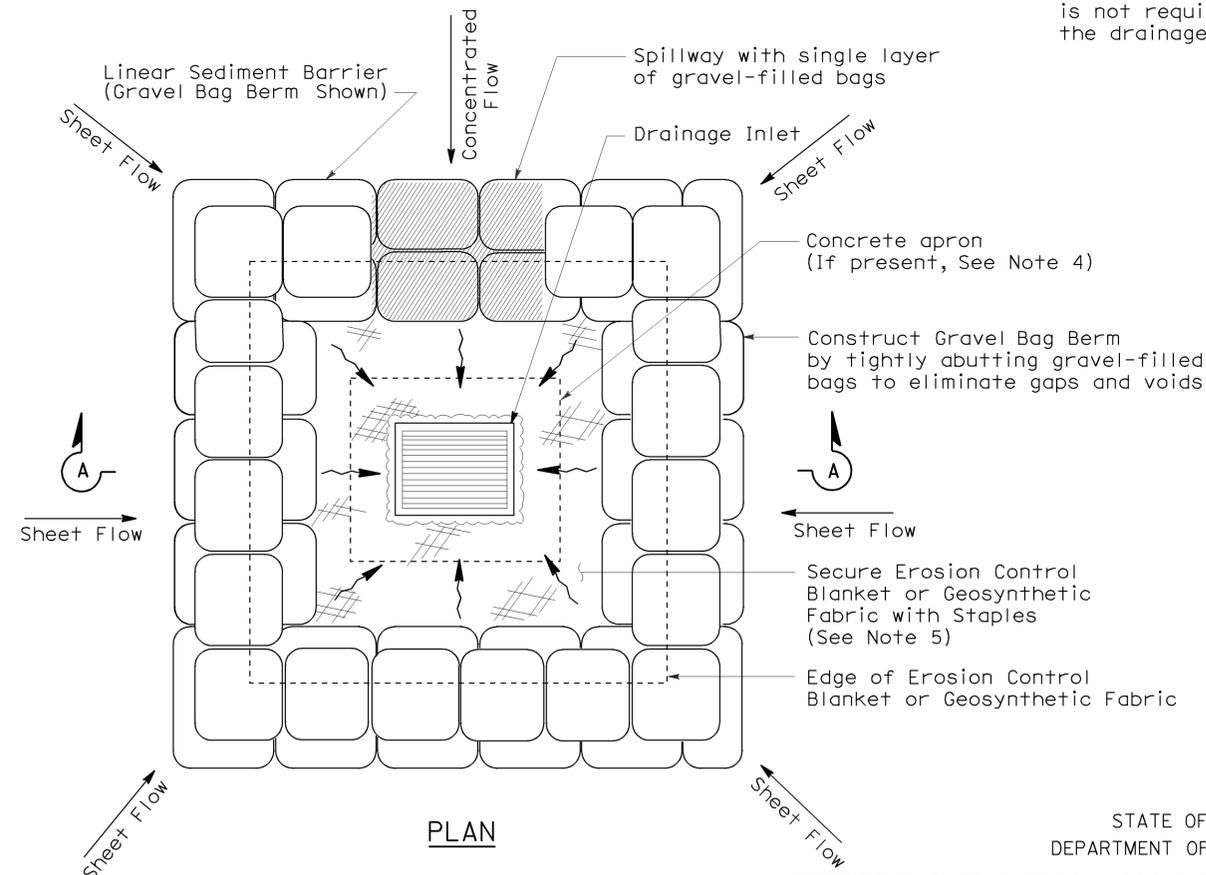
SECTION A-A

NOTES:

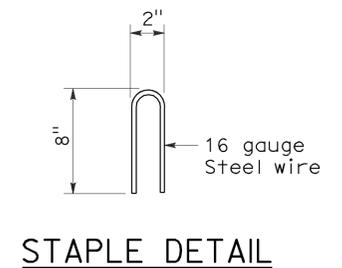
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



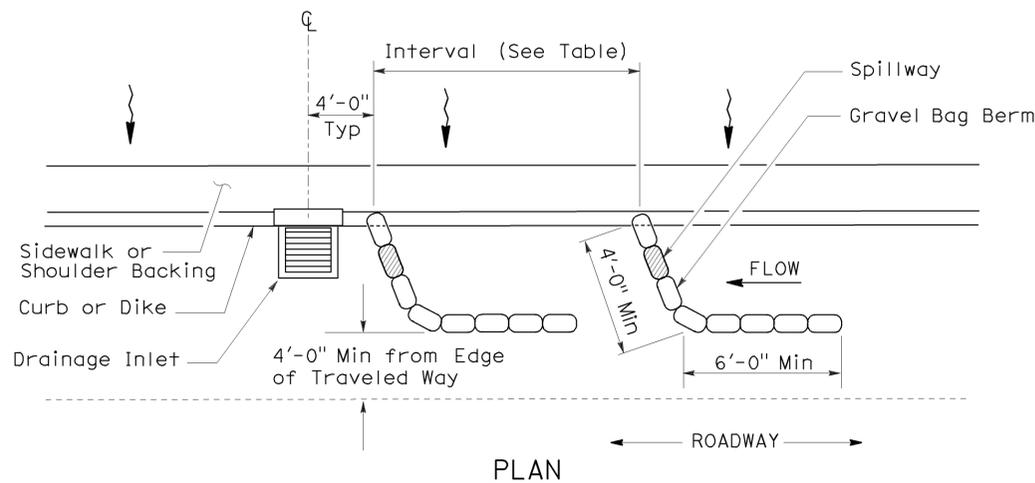
PERSPECTIVE



PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



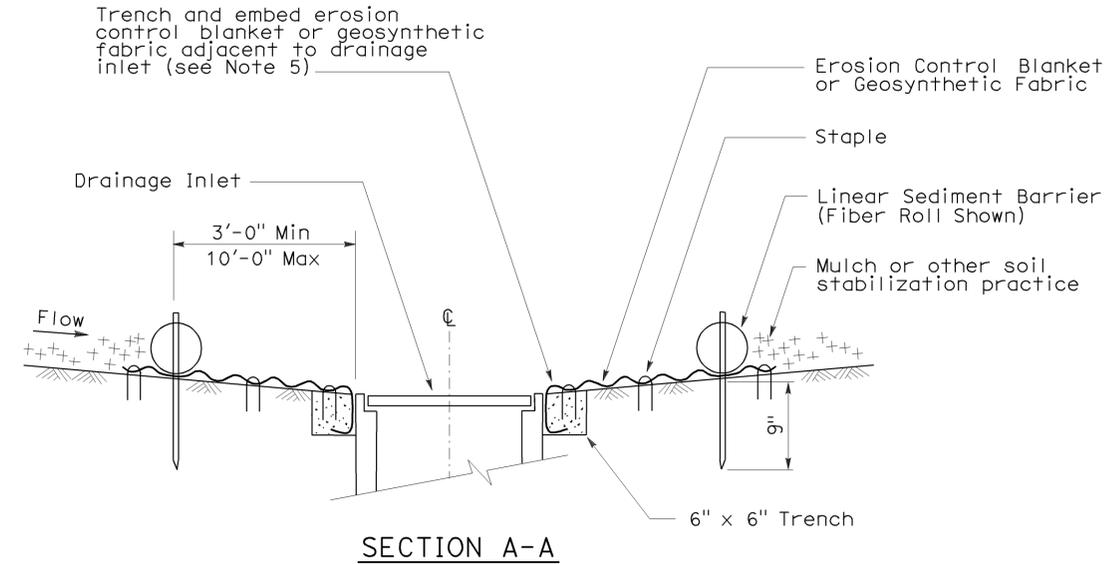
PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)

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

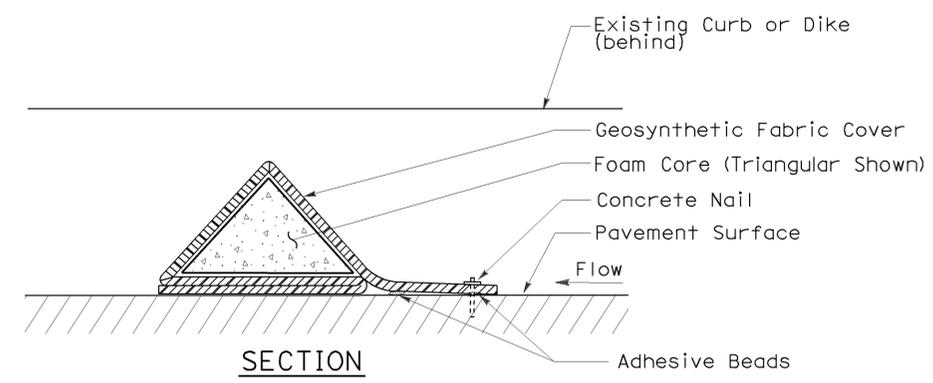
NO SCALE
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

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

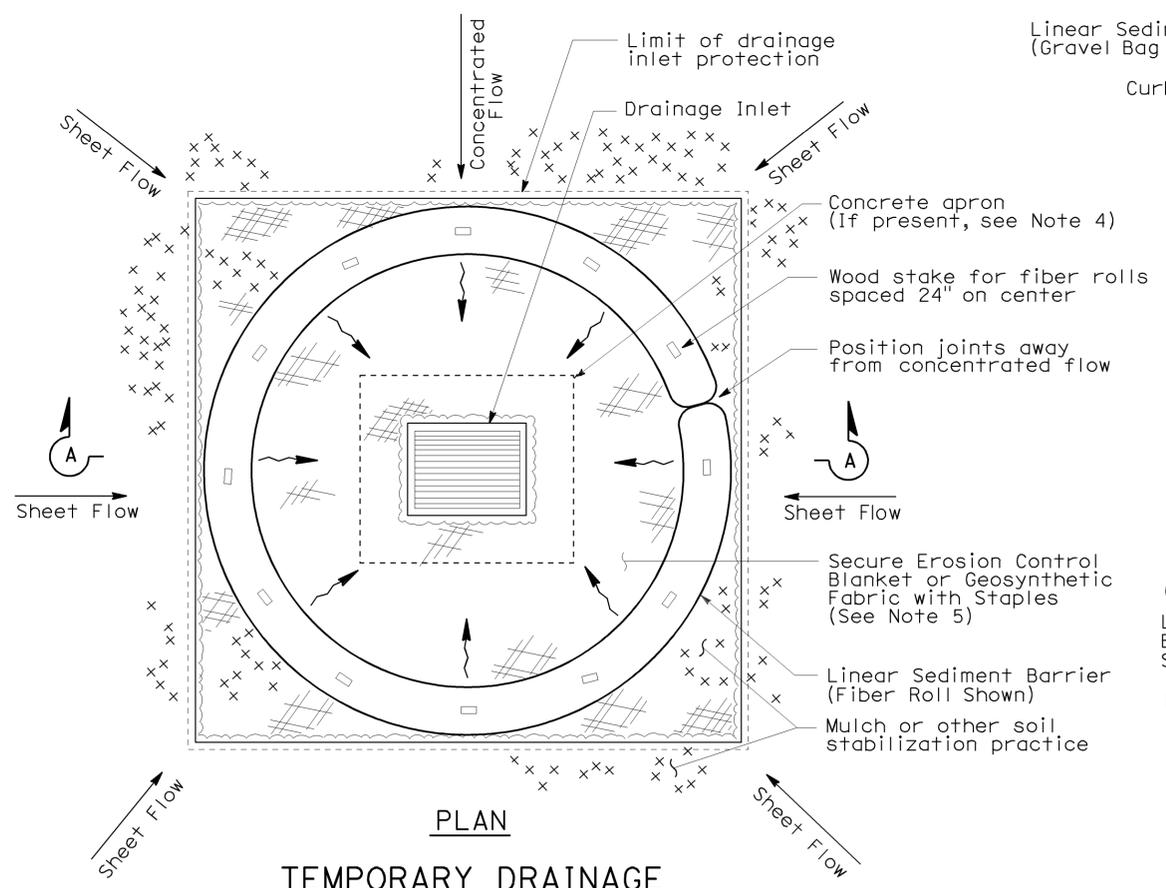


SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

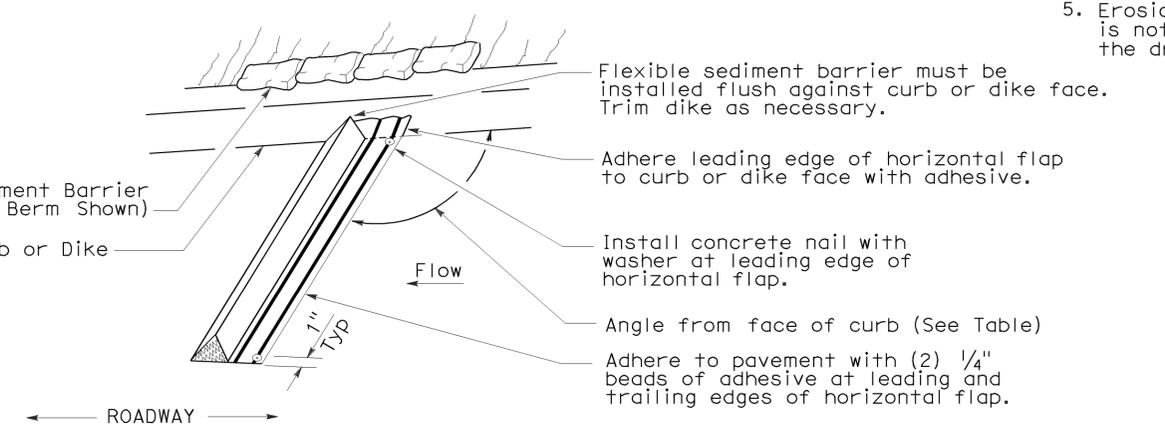
NOTES:

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.

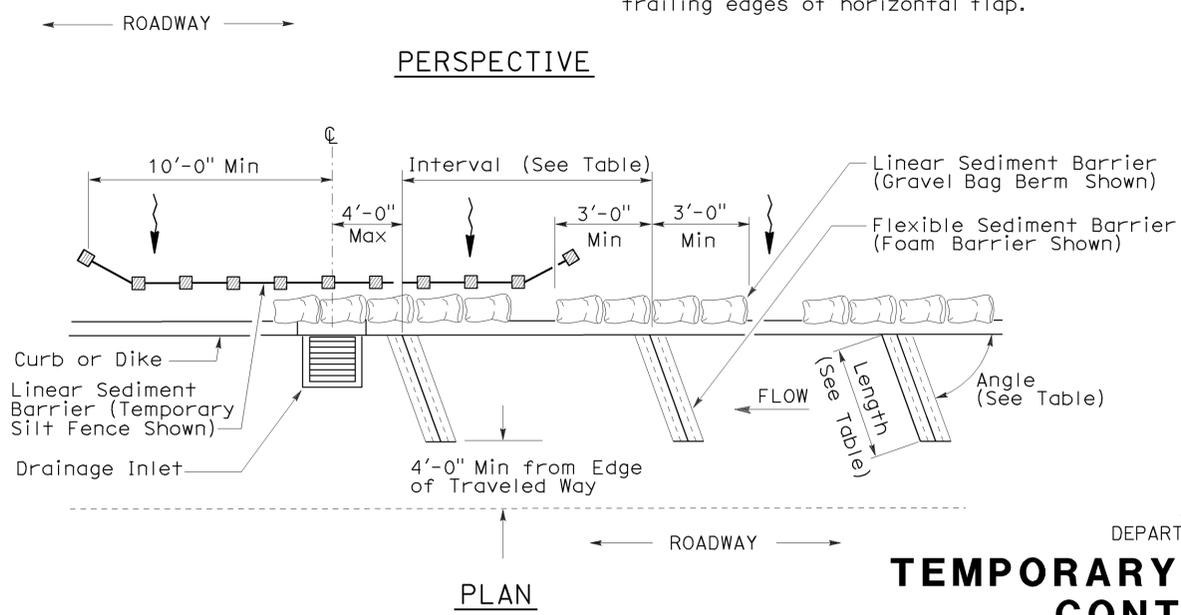
To accompany plans dated 2-6-12



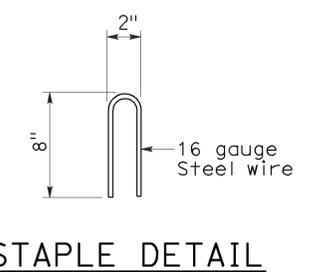
PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PERSPECTIVE



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



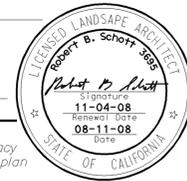
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

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

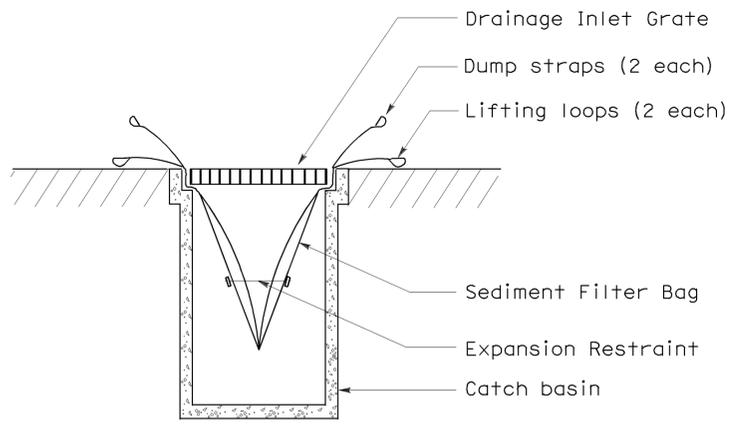
2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	22	26

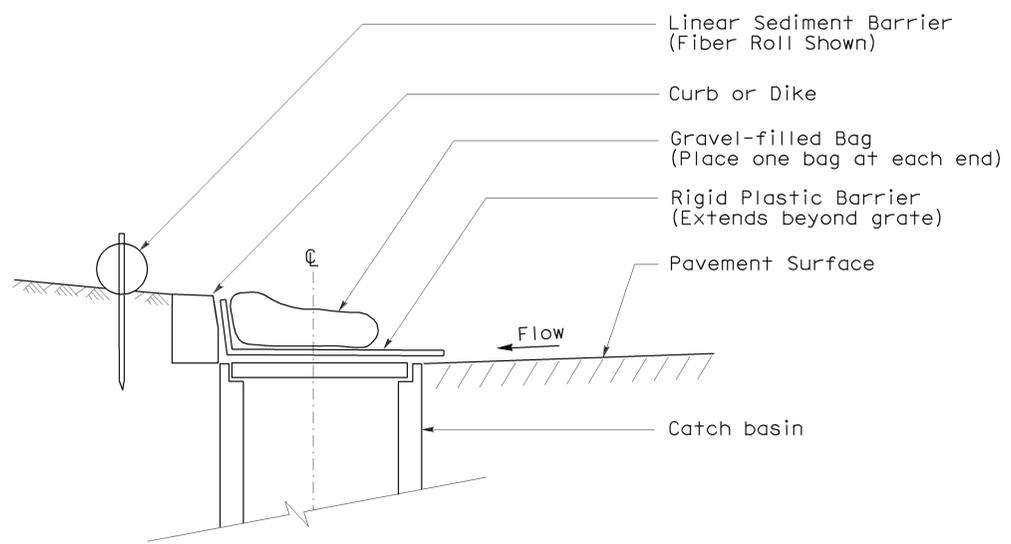
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS APPROVAL DATE
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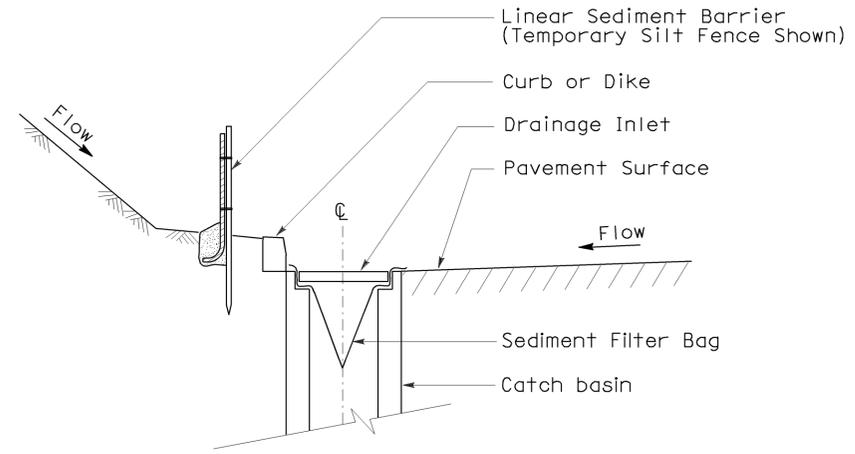
To accompany plans dated 2-6-12



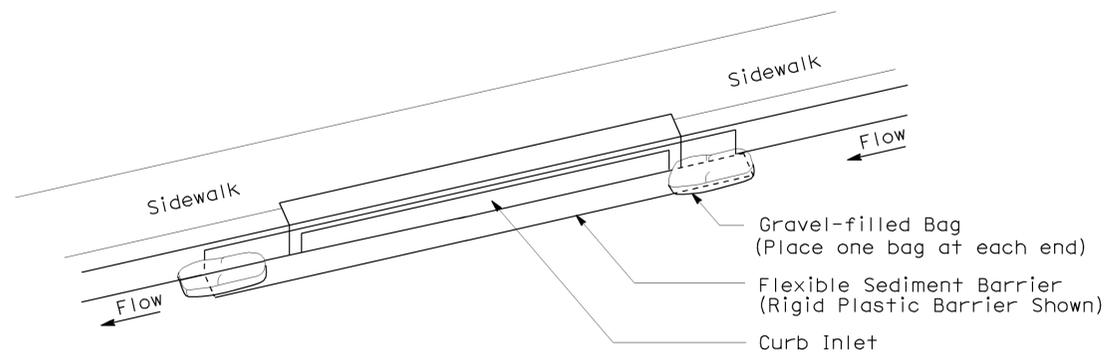
SECTION B-B
SEDIMENT FILTER BAG DETAIL



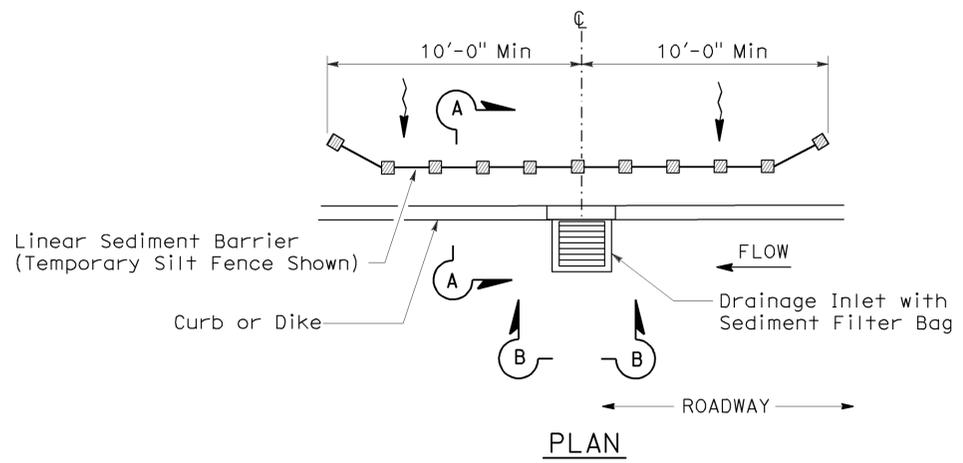
SECTION
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)



SECTION A-A



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



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

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

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

NEW STANDARD PLAN NSP T64

2006 NEW STANDARD PLAN NSP T64

ELECTROLIERS

STANDARD TYPES	Symbol	Description
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		NOTES: 1. Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified. 2. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified. 3. Variations noted adjacent to symbol on project plans.
32		
35		
36-20A		

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	23	26

REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE

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To accompany plans dated 2-6-12

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

NOTE:
Arrow indicates "street side" of luminaire.

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

NO SCALE

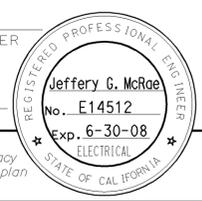
RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	24	26

REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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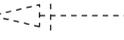
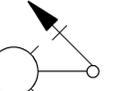
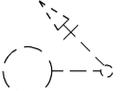
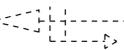
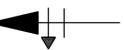
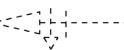
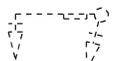


To accompany plans dated 2-6-12

CONDUIT

PROPOSED	EXISTING	
---	---	Lighting Conduit, unless otherwise indicated or noted
---	---	Traffic signal conduit
-C-	-c-	Communication conduit
-T-	-t-	Telephone conduit
-F-	-f-	Fire alarm conduit
-FO-	-fo-	Fiber optic conduit
---	---	Conduit termination 
		Conduit riser in/on structure or service pole

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" Indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign

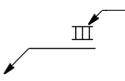
SIGNAL EQUIPMENT Cont

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

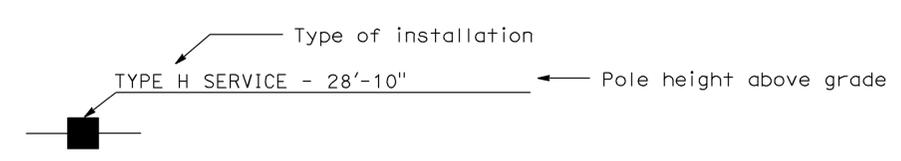
NOTES:

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

SERVICE EQUIPMENT

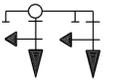
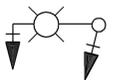
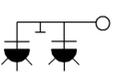
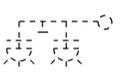
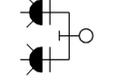
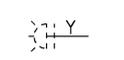
PROPOSED	EXISTING	
---OH	---oh	Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

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

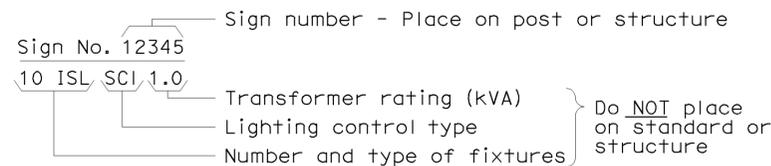
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

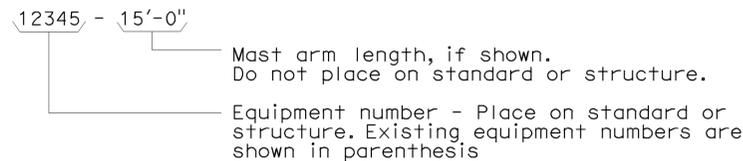
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

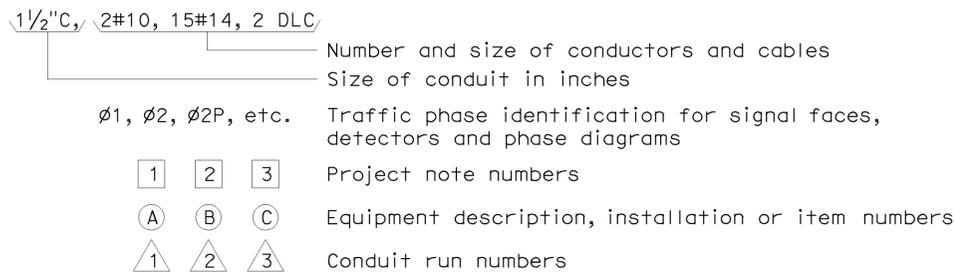
ILLUMINATED SIGN IDENTIFICATION NUMBER:



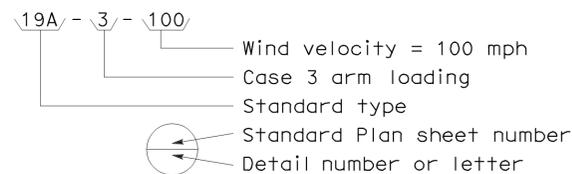
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



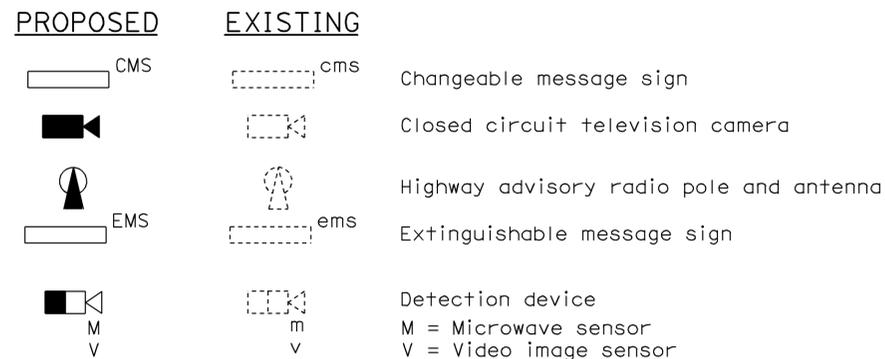
CONDUIT AND CONDUCTOR IDENTIFICATION:



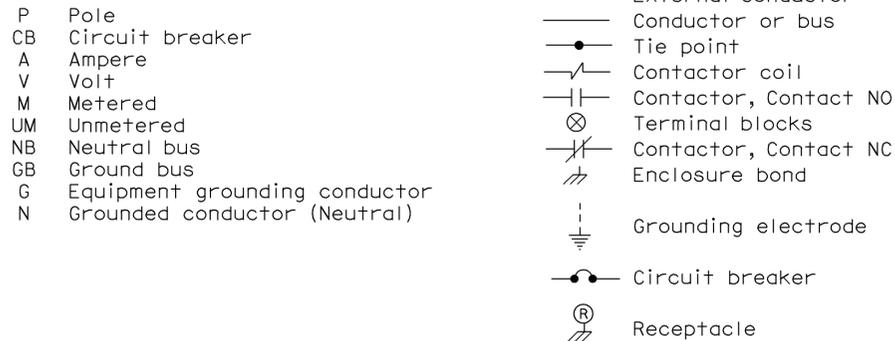
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



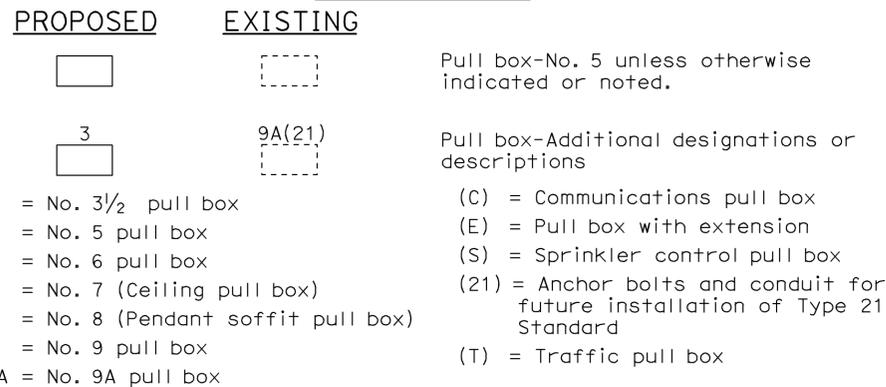
MISCELLANEOUS EQUIPMENT



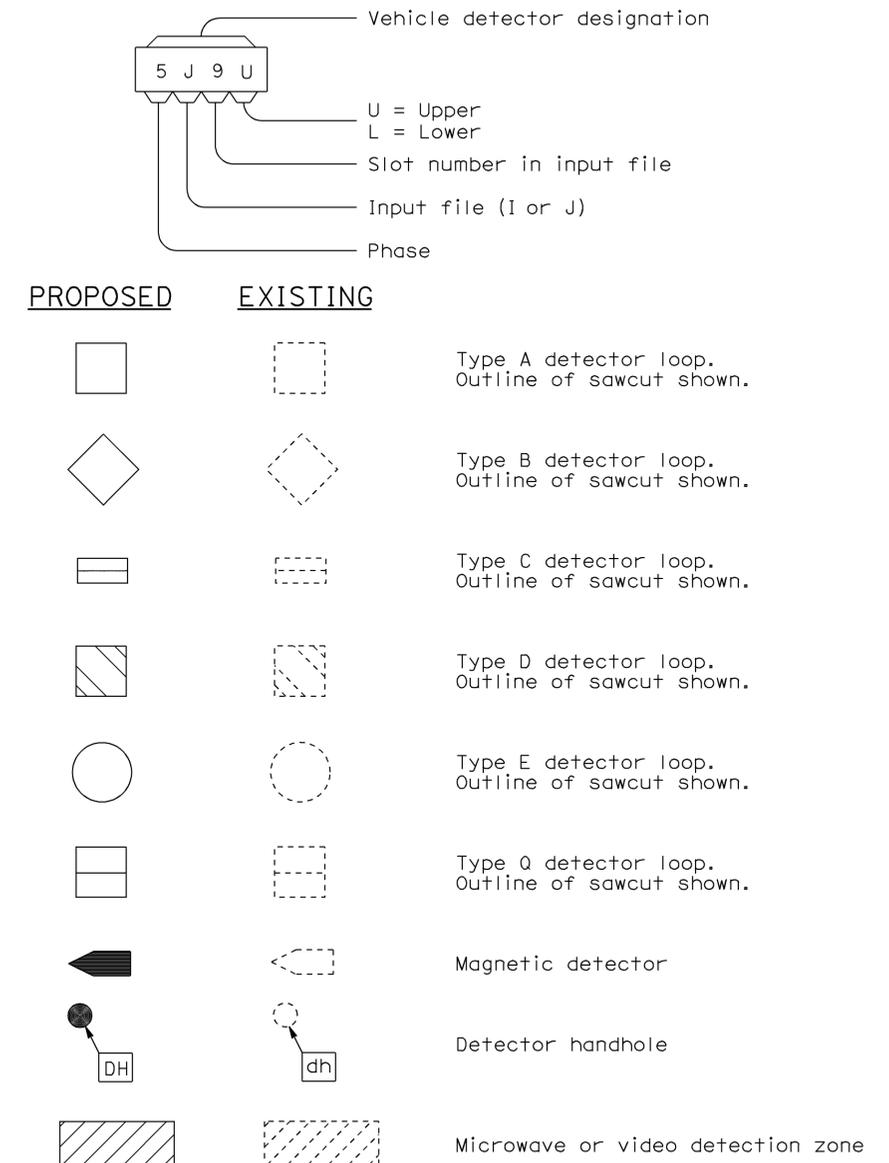
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



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

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

REVISED STANDARD PLAN RSP ES-1C

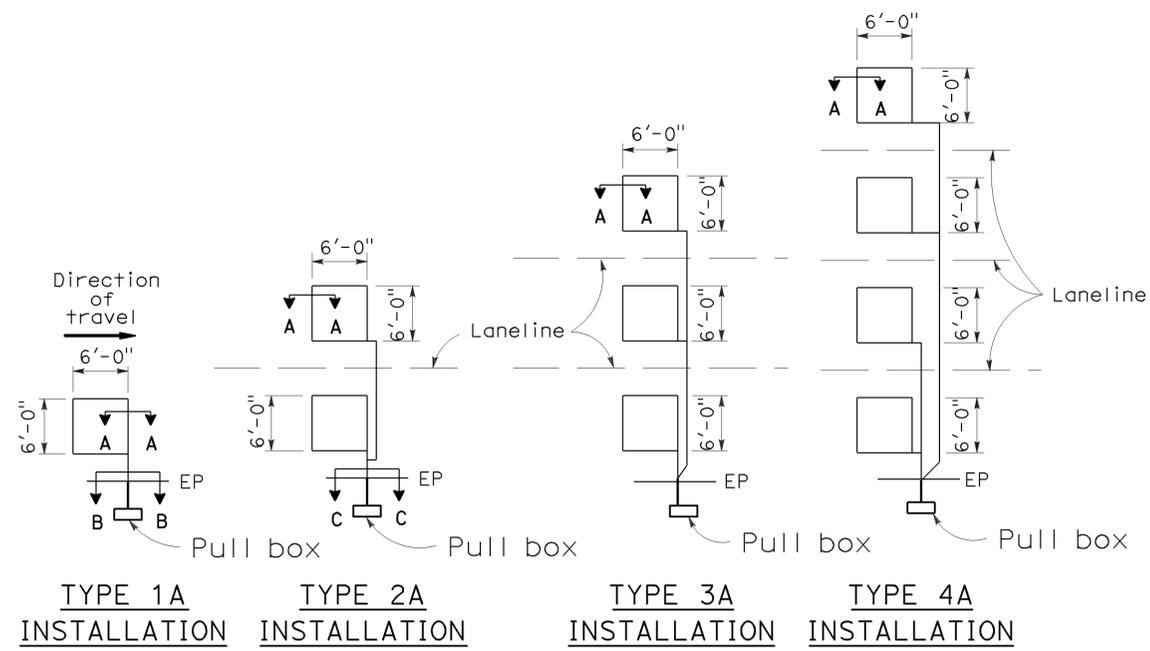
2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC	680	17.5/18.8	26	26

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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LOOP INSTALLATION PROCEDURE

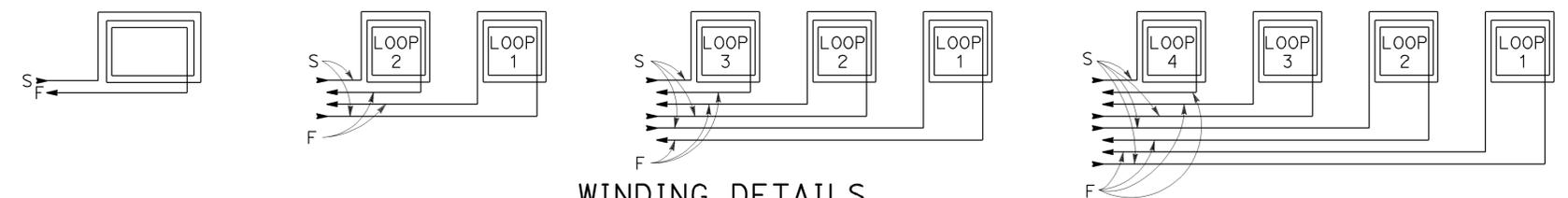
- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



TYPE 1A INSTALLATION **TYPE 2A INSTALLATION** **TYPE 3A INSTALLATION** **TYPE 4A INSTALLATION**

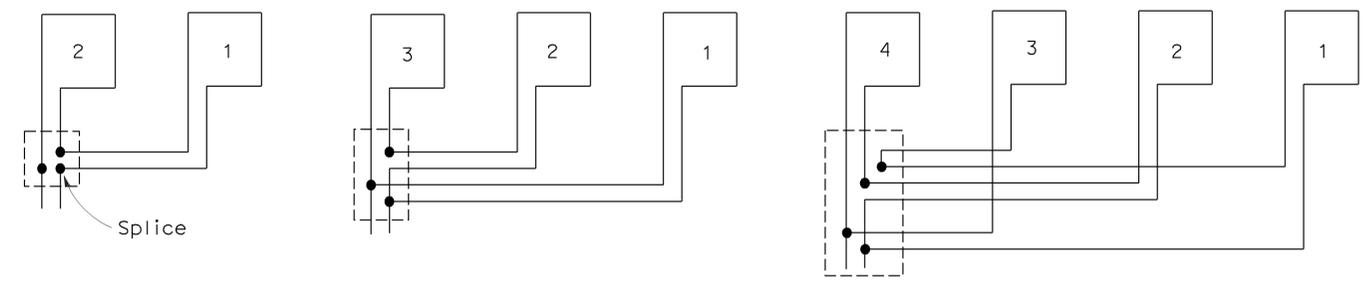
SAWCUT DETAILS

- (Type A loop detector configurations illustrated)
- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



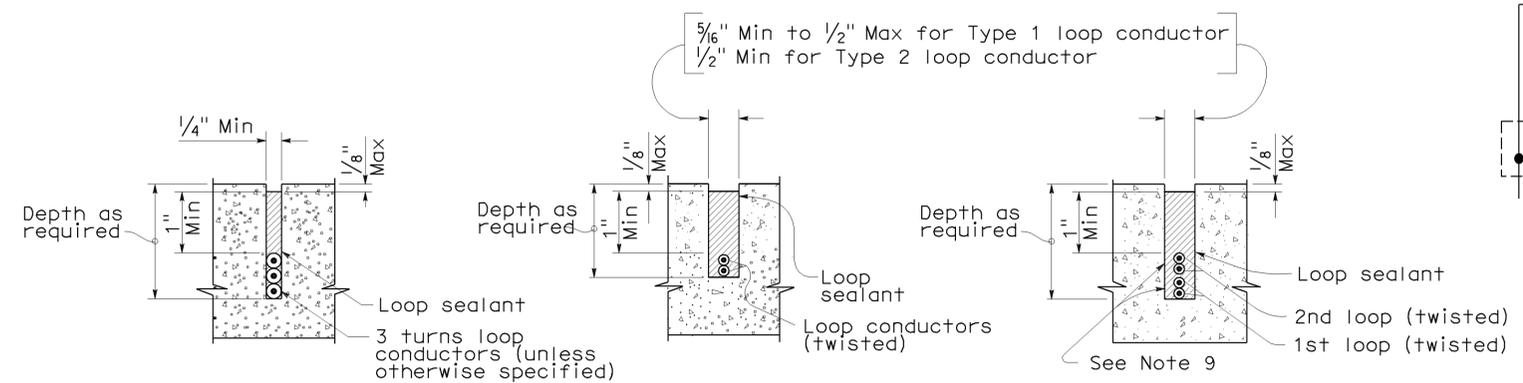
WINDING DETAILS

See Notes 6 and 7



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A **SECTION B-B** **SECTION C-C**
SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

2006 REVISED STANDARD PLAN RSP ES-5A