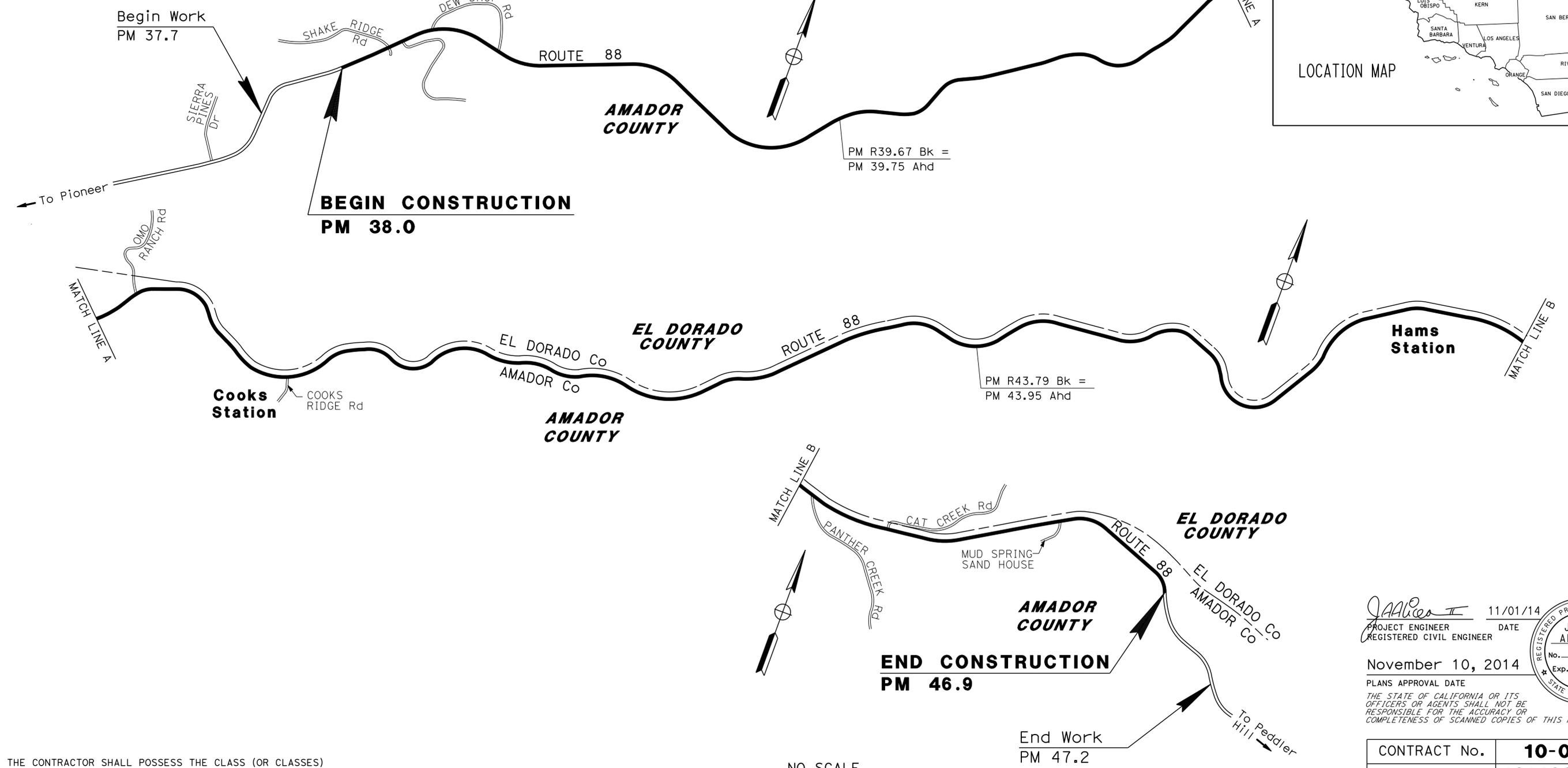


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Ama	88	38.0/46.9	1	24



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN AMADOR COUNTY
ABOUT 8 MILES WEST OF PIONEER
FROM 0.2 MILE WEST OF SHAKE RIDGE ROAD
TO 0.9 MILE EAST OF CAT CREEK ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



INDEX OF PLANS

SHEET NO.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	CONSTRUCTION DETAILS
4	CONSTRUCTION AREA SIGNS
5	PAVEMENT DELINEATION AND SIGN DETAILS
6	SIGN QUANTITIES
7-9	SUMMARY OF QUANTITIES
10-12	ELECTRICAL PLANS
13-24	REVISED STANDARD PLANS

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

PROJECT MANAGER	ALVIN MANGINDIN
DESIGN MANAGER	ALVIN MANGINDIN

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

PROJECT ENGINEER: *JA Alicea II* DATE: 11/01/14
 REGISTERED CIVIL ENGINEER
 No. 64817 Exp. 6/30/15
 CIVIL
 STATE OF CALIFORNIA

November 10, 2014
 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.

CONTRACT No.	10-0Y9404
PROJECT ID	1014000062

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	2	24

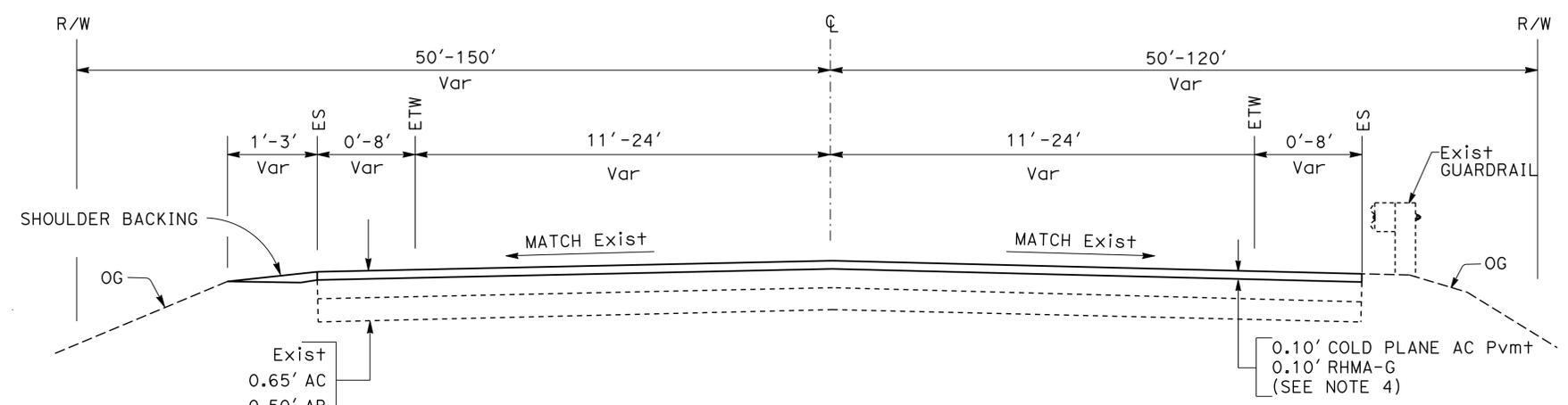
REGISTERED CIVIL ENGINEER	DATE
11-01-14	
PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

- NOTES:**
- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
 - FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
 - FOR COLD PLANE AC PAVEMENT DIMENSIONS AND LOCATIONS, SEE SUMMARY OF QUANTITIES SHEET.
 - ENVIRONMENTALLY SENSITIVE AREA (ESA), NO WORK OR GROUND DISTURBANCE SHALL BE PERFORMED BEYOND SHOULDER BACKING.
 - FOR DETAILS, SEE CONFORM TAPER AT GUARDRAIL DETAIL ON SHEET C-1. FOR LOCATIONS, SEE CONFORM TAPER AT GUARDRAIL TABLE ON SUMMARY OF QUANTITIES SHEET.
 - FOR HMA DIKE LOCATIONS, SEE SUMMARY OF QUANTITIES SHEET.

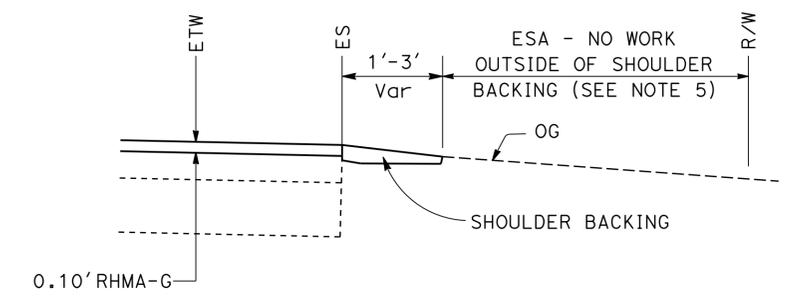
ABBREVIATIONS:

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

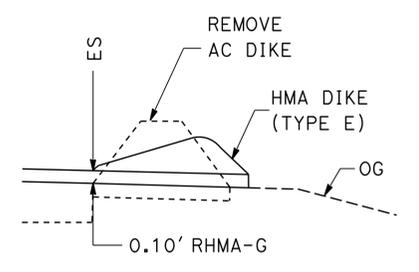
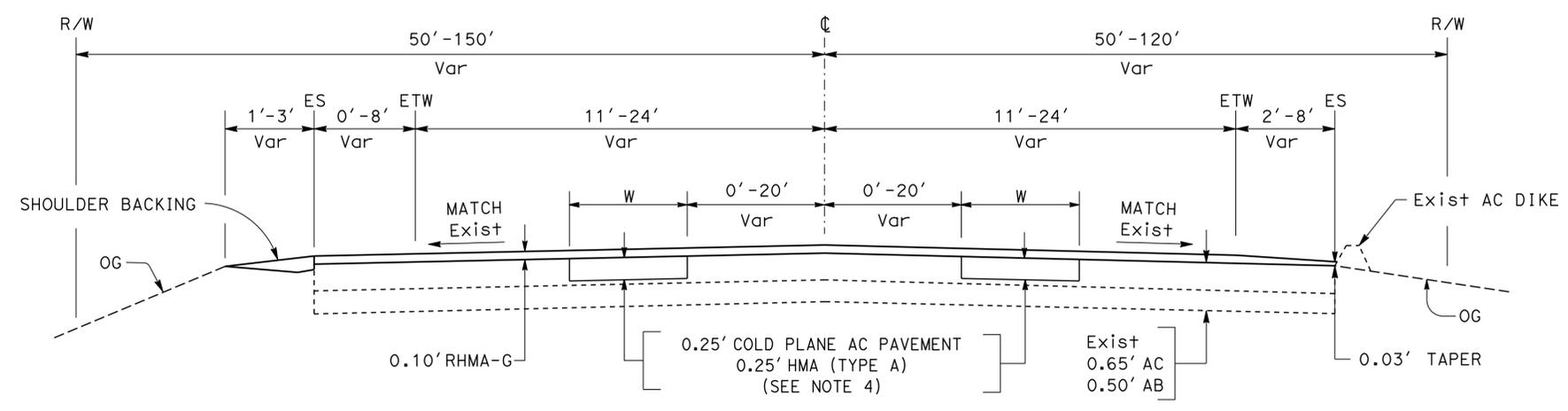
PAVEMENT CLIMATE REGION
HIGH MOUNTAIN



EXISTING GUARDRAIL LOCATIONS
(SEE NOTE 6)



PM 45.31 TO 45.49 (EB/WB)
ESA LOCATIONS



PLACE HMA DIKE
(SEE NOTE 7)

PM 38.0 TO 46.9
ROUTE 88

TYPICAL CROSS SECTIONS

NO SCALE **X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN
CALCULATED/DESIGNED BY: THOA HUYNH
CHECKED BY: JOSE A ALICEA
REVISOR: JAA
DATE REVISED: 12/12/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amg	88	38.0/46.9	3	24

<i>J. Alicea II</i>	11/01/14
REGISTERED CIVIL ENGINEER	DATE
11-10-14	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	JOSE A. ALICEA II
No. 64817	
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:

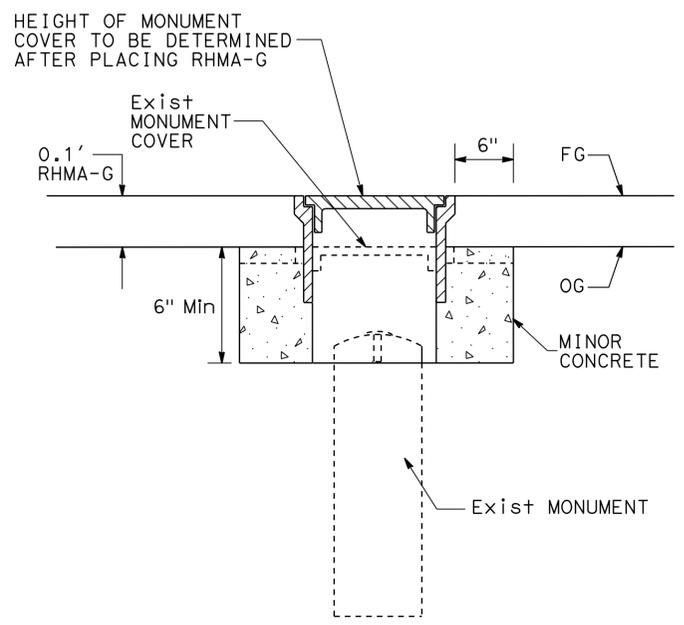
- * - SEE SUMMARY OF QUANTITIES FOR PROJECT TOTALS.
- PRIVATE DRIVEWAY WIDTHS AND LOCATIONS ARE APPROXIMATE. THE ENGINEER DETERMINES THE ACTUAL LOCATIONS AND WIDTH.

ABBREVIATION

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

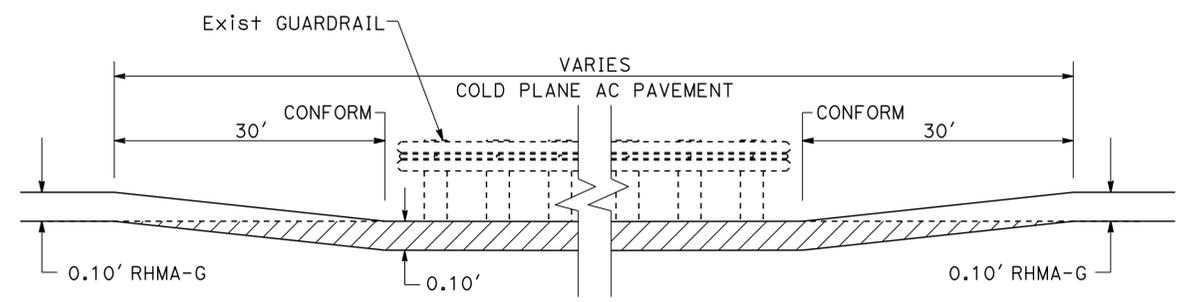
LEGEND:

- COLD PLANE AC PAVEMENT
RHMA-G
- COLD PLANE AC PAVEMENT
HMA (TYPE A)
- HMA (TYPE A)



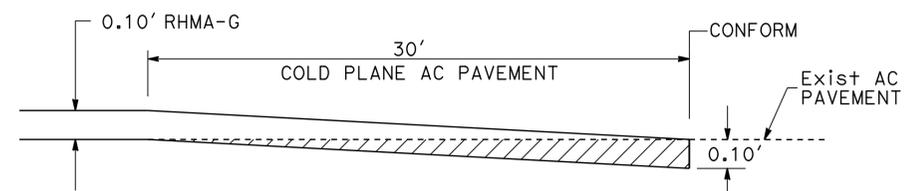
SEE SUMMARY OF QUANTITIES
(ADJUST MONUMENT COVER)
SURVEY MONUMENT

ADJUST MONUMENT COVER

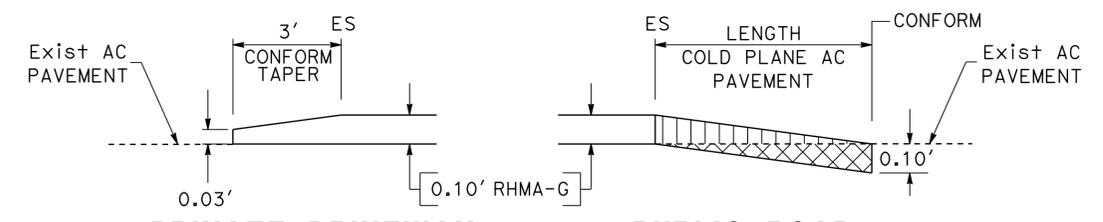


(SEE CONFORM TAPER AT GUARDRAIL TABLE ON SUMMARY OF QUANTITIES)

CONFORM TAPER AT GUARDRAIL

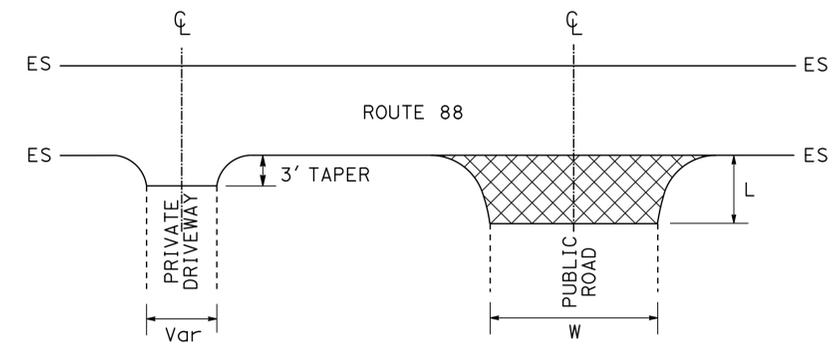


CONFORM TAPER AT BEGIN/END CONSTRUCTION



PRIVATE DRIVEWAY CONFORM TAPER

PUBLIC ROAD CONFORM TAPER



(SEE CONFORM TAPER AT PRIVATE DRIVEWAY TABLE AND CONFORM TAPER AT PUBLIC ROAD INTERSECTION TABLE ON SUMMARY OF QUANTITIES SHEET)

PAVING LIMITS AT PRIVATE DRIVEWAYS AND PUBLIC ROAD INTERSECTIONS

CONSTRUCTION DETAILS

NO SCALE **C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 CALTRANS
 FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN
 THOAH HUYNH
 JOSE A ALICEA II
 REVISOR: JAA
 DATE: 11/02/14

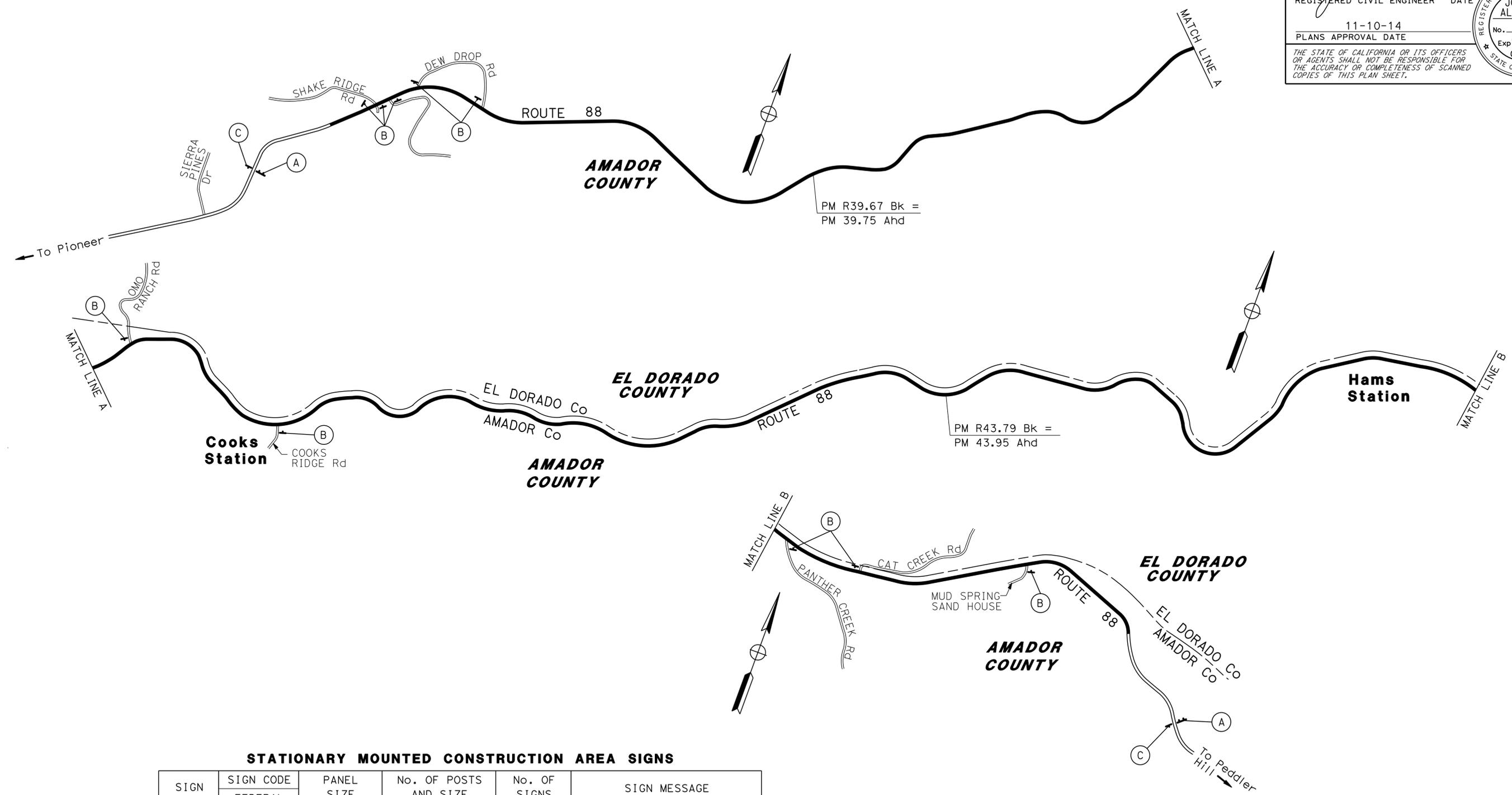
LAST REVISION DATE PLOTTED => 09-JAN-2015
 00-00-00 TIME PLOTTED => 09:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	4	24

REGISTERED CIVIL ENGINEER DATE 11/01/14
 JOSE A. ALICEA II
 No. 64817
 Exp 6/30/15
 CIVIL
 STATE OF CALIFORNIA

11-10-14
 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.



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN	SIGN CODE	PANEL SIZE	No. OF POSTS AND SIZE	No. OF SIGNS	SIGN MESSAGE
	FEDERAL				
(A)	G20-1	60" x 36"	2 - 4" x 6"	2	ROAD WORK NEXT 9 MILES
(B)	W20-1	36" x 36"	1 - 4" x 6"	10	ROAD WORK AHEAD
(C)	G20-2	36" x 18"	1 - 4" x 4"	2	END ROAD WORK

NOTE: EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR ALVIN MANGINDIN
 CHECKED BY JOSE A ALICEA
 THOA HUYNH
 REVISOR JAA
 DATE 11/02/14

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

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

LAST REVISION DATE PLOTTED => 09-JAN-2015
 00-00-00 TIME PLOTTED => 09:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Ama	88	38.0/46.9	5	24

<i>J. Alicea II</i>	11/01/14
REGISTERED CIVIL ENGINEER	DATE
11-10-14	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
JOSE A. ALICEA II
No. 64817
Exp 6/30/15
CIVIL
STATE OF CALIFORNIA

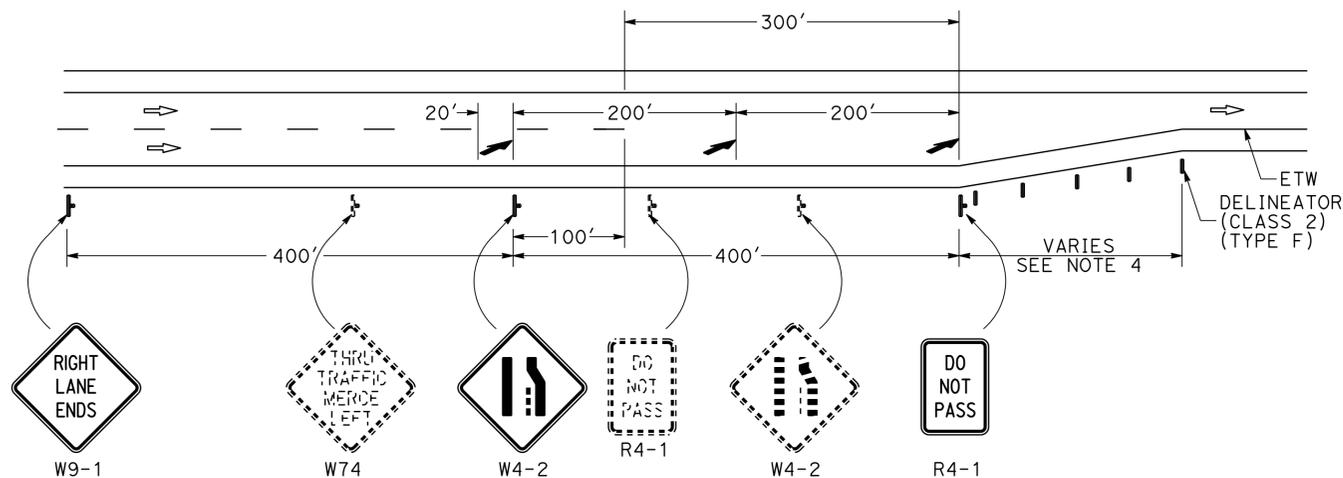
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. A W9-1 SIGN SHOULD BE USED IN CONJUNCTION WITH THE W4-2 SIGN.
2. LANE REDUCTION ARROWS ARE PLACED IN GROUPS OF THREE.
3. EXACT SIGN LOCATIONS TO BE DETERMINED BY ENGINEER.
4. DELINEATORS SHOULD BE SPACED APPROXIMATELY 200 FEET APART. THERE SHOULD BE A MINIMUM OF 3 DELINEATORS THROUGH THE LENGTH OF A LANE REDUCTION TRANSITION.

LEGEND:

- REMOVE ROADSIDE SIGN (WOOD POST)
- DELINEATOR (CLASS 2) (TYPE F)



PM R39.5/R39.58 (EB)
 PM 42.4/42.52 (WB)
 PM 46.15/46.22 (EB)
 PM 46.39/46.47 (WB)

LANE-REDUCTION TRANSITION DETAIL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

PAVEMENT DELINEATION AND SIGN DETAILS

NO SCALE

PDD-1

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

NOTES:

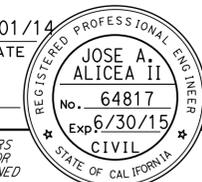
1. EXACT LOCATION AND POSITION OF ROADSIDE SIGNS TO BE DETERMINED BY THE ENGINEER.
2. POST LENGTHS GIVEN ARE APPROXIMATE.
3. "C" DIM = VERTICAL CLEARANCE TO BOTTOM OF SIGN PANEL.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amg	88	38.0/46.9	6	24

 11/01/14
 REGISTERED CIVIL ENGINEER DATE

11-10-14
 PLANS APPROVAL DATE

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ROADSIDE SIGN QUANTITIES

LOCATION	SIGN CODE	SIGN PANEL SIZE	SINGLE FACED	BACKGROUND		LEGEND		PROTECTIVE FILM		FURNISH SINGLE SHEET ALUMINUM SIGN (0.063" UNFRAMED)	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063" UNFRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	RETROREFLECTIVE SHEETING (TYPE XI)	"C" DIM IN FEET	POST SIZE AND LENGTH	ROADSIDE SIGN	DELINEATOR (CLASS 2)	REMOVE ROADSIDE SIGN (WOOD POST)	TREATED WOOD WASTE	DESCRIPTION									
				SHEETING COLOR	RETRO-REFLECTIVE ASTM TYPE	SHEETING COLOR	RETRO-REFLECTIVE ASTM TYPE	STANDARD	PREMIUM											SQFT	SQFT	SQFT	ONE POST	TYPE F	EACH	EACH	EACH	LB
R39.50 TO R39.58	EB	W9-1R	36 x 36	X	YELLOW	XI	BLACK	NONE		X		9	9	5	16'	1				RIGHT LANE ENDS								
R39.50 TO R39.58	EB	W4-2	30 x 30	X	YELLOW	XI	BLACK	NONE		X		6.3	6.3	5	14'	1		1	45	LANE ENDS SYMBOL								
R39.50 TO R39.58	EB	R4-1	24 x 30	X	WHITE	IX	BLACK	NONE	X		5			5	14'	1	5	1	45	DO NOT PASS								
42.40 TO 42.52	WB	W9-1R	36 x 36	X	YELLOW	XI	BLACK	NONE		X		9	9	5	16'	1				RIGHT LANE ENDS								
42.40 TO 42.52	WB	W4-2	30 x 30	X	YELLOW	XI	BLACK	NONE		X		6.3	6.3	5	14'	1		1	45	LANE ENDS SYMBOL								
42.40 TO 42.52	WB	R4-1	24 x 30	X	WHITE	IX	BLACK	NONE	X		5			5	14'	1	5	1	45	DO NOT PASS								
46.15 to 46.22	EB	W9-1R	36 x 36	X	YELLOW	XI	BLACK	NONE		X		9	9	5	16'	1				RIGHT LANE ENDS								
46.15 to 46.22	EB	W4-2	30 x 30	X	YELLOW	XI	BLACK	NONE		X		6.3	6.3	5	14'	1		1	45	LANE ENDS SYMBOL								
46.15 to 46.22	EB	R4-1	24 x 30	X	WHITE	IX	BLACK	NONE	X		5			5	14'	1	5	1	45	DO NOT PASS								
46.39 TO 46.47	WB	W9-1R	36 x 36	X	YELLOW	XI	BLACK	NONE		X		9	9	5	16'	1				RIGHT LANE ENDS								
46.39 TO 46.47	WB	W4-2	30 x 30	X	YELLOW	XI	BLACK	NONE		X		6.3	6.3	5	14'	1		1	45	LANE ENDS SYMBOL								
46.39 TO 46.47	WB	W74	24 x 30	X	WHITE	IX	BLACK	NONE	X		5			5	14'	1	5	1	45	DO NOT PASS								
R39.50 TO R39.58	EB	W4-7	36 x 36	X														1	45	THRU TRAFFIC MERGE LEFT								
42.40 TO 42.52	WB	W4-7	36 x 36	X														1	45	THRU TRAFFIC MERGE LEFT								
46.15 to 46.22	EB	W4-7	36 x 36	X														1	45	THRU TRAFFIC MERGE LEFT								
46.39 TO 46.47	WB	W4-7	36 x 36	X														1	45	THRU TRAFFIC MERGE LEFT								
TOTAL											20	61.2	61.2				12	20	12	540								

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 THOA HUYNH
 JOSE A ALICEA
 REVISOR BY
 DATE REVISOR
 JAA
 12/15/14
 CALCULATED/DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN

SIGN QUANTITIES
SQ-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	7	24

<i>JAALICEA II</i>	11/01/14
REGISTERED CIVIL ENGINEER	DATE
11-10-14	
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.

NOTES:

- * - TOTAL INCLUDED IN ROADWAY ITEMS TABLE.
- (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
- TRAFFIC MANAGEMENT SYSTEM ELEMENTS LOCATIONS ARE APPROXIMATE.

ABBREVIATION

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

TRAFFIC MANAGEMENT SYSTEM ELEMENT (EXISTING)

LOCATION	PM	TYPE	DIRECTION
EAST OF SHAKE RIDGE Rd	38.2	TMS	BOTH
DEW DROP ROAD	38.2	CMS	EB

DIKE QUANTITIES

LOCATION		REMOVE AC DIKE	PLACE HMA DIKE (TYPE E)	HMA (TYPE A)
PM TO PM	SIDE	LF	LF	TON
38.8 TO 38.9	EB	945	945	26
38.8 TO 38.9	WB	105	105	3
TOTAL		1050	1050	29*

CONFORM TAPER QUANTITIES

LOCATION		LENGTH	WIDTH	COLD PLANE AC Pvm†	RHMA-G
PM	DESCRIPTION			SQYD	TON
38.0	BEGIN CONSTRUCTION	30'	26'	87	7
46.9	END CONSTRUCTION	30'	40'	134	10
TOTAL				221*	17*

CONFORM TAPER AT PUBLIC INTERSECTION QUANTITIES

LOCATION			LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm†	HMA (TYPE A)
PM	SIDE	DESCRIPTION			SQYD	TON
38.2	L+	SHAKE RIDGE ROAD	50'	45'	834	57
R38.31	L+	DEW DROP ROAD (WEST)	60'	35'	1,000	68
R38.51	L+	DEW DROP ROAD (EAST)	70'	40'	1,945	132
41.2	L+	OMO RANCH ROAD	110'	20'	2,078	141
45.8	R+	PANTHER CREEK ROAD	60'	30'	1,000	68
46.0	L+	CAT CREEK ROAD	35'	20'	428	29
TOTAL					7,285*	495*

CONFORM TAPER AT PRIVATE DRIVEWAY QUANTITIES

LOCATION	SIDE	LENGTH	WIDTH	RHMA-G
PM				TON
38.2	R+	3'	100'	2.2
38.2	R+	3'	60'	1.3
R38.3	R+	3'	100'	2.2
R39.4	L+	3'	30'	0.7
R39.4	R+	3'	60'	1.3
41.7	R+	3'	200'	4.4
41.7	L+	3'	200'	4.4
R43.5	L+	3'	60'	1.3
R43.6	L+	3'	60'	1.3
45.3	L+	3'	50'	1.1
45.4	R+	3'	200'	4.4
45.8	L+	3'	50'	1.1
46.5	L+	3'	60'	1.3
SUBTOTAL				27.0*

CONFORM TAPER AT GUARDRAIL QUANTITIES

LOCATION		LENGTH	WIDTH	COLD PLANE AC Pvm†	RHMA-G
PM TO PM				SQYD	TON
38.25 TO 38.58		1670'	52'	9,649	643
38.99 TO 39.04		240'	52'	1,387	93
43.62 TO 43.87		1220'	28'	3,796	253
44.46 TO 44.60		670'	36'	2,680	179
44.64 TO 44.71		410'	28'	1,276	85
44.76 TO 44.84		380'	28'	1,183	79
44.89 TO 45.02		670'	28'	2,085	139
46.12 TO 46.24		590'	40'	2,623	175
46.83 TO 47.00		850'	40'	3,778	252
TOTAL				28,457*	1,898*

SUMMARY OF QUANTITIES
Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN
 THOA HUYNH
 JOSE A ALICEA
 JAA
 11/02/14
 REVISOR BY: JAA
 DATE REVISED: 11/02/14
 CALCULATED/DESIGNED BY: THOA HUYNH
 CHECKED BY: JOSE A ALICEA

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amg	88	38.0/46.9	8	24

REGISTERED CIVIL ENGINEER DATE 11/01/14
 REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/15
 CIVIL
 STATE OF CALIFORNIA
 11-10-14
 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.

DIGOUT QUANTITIES

LOCATION		LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm†	HMA (TYPE A)
PM	SIDE			SQYD	TON
38.5/39.0	EB	500'	4'	223	38
39.0/39.5	EB	240'	4'	107	18
	EB	160'	4'	72	12
	WB	90'	4'	40	7
	WB	400'	4'	178	30
	WB	235'	4'	105	18
	WB	110'	4'	49	9
39.5/40.0	EB	100'	4'	45	8
	EB	90'	4'	40	7
	EB	200'	4'	89	15
	EB	150'	4'	67	12
	EB	80'	4'	36	6
	EB	220'	4'	98	17
	WB	90'	4'	40	7
	WB	90'	4'	40	7
	WB	500'	4'	223	38
	WB	190'	4'	85	15
	WB	255'	4'	114	20
	WB	300'	4'	134	23
	WB	300'	4'	134	23
40.0/40.5	EB	85'	4'	38	7
	EB	140'	4'	63	11
	WB	105'	4'	47	8
	WB	270'	4'	120	21
40.5/41.0	EB	80'	4'	36	6
	EB	145'	4'	65	11
	WB	80'	4'	36	6
	WB	170'	4'	76	13
	WB	85'	4'	38	7
	WB	125'	4'	56	10
	WB	155'	4'	69	12
	WB	230'	4'	103	18
41.0/41.5	EB	110'	4'	49	9
	EB	105'	4'	47	8
	EB	140'	4'	63	11
	EB	125'	4'	56	10
	EB	80'	4'	36	6
SUBTOTAL 1				2,917	504

LOCATION		LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm†	HMA (TYPE A)
PM	SIDE			SQYD	TON
41.0/41.5	WB	250'	4'	112	19
	WB	125'	4'	56	10
	WB	150'	4'	67	12
	WB	250'	4'	112	19
	WB	140'	4'	63	11
	WB	320'	4'	143	24
	WB	220'	4'	98	17
	WB	105'	4'	47	8
	WB	100'	4'	45	8
	WB	330'	4'	147	25
	WB	170'	4'	76	13
41.5/42.0	EB	330'	4'	147	25
	EB	175'	4'	78	14
	EB	150'	4'	67	12
	EB	65'	4'	29	5
	EB	230'	4'	103	18
	EB	205'	4'	92	16
	WB	400'	4'	178	30
	WB	215'	4'	96	17
	WB	170'	4'	76	13
	WB	135'	4'	60	11
	WB	90'	4'	40	7
42.0/42.5	EB	400'	4'	178	30
	EB	240'	4'	107	18
	EB	200'	4'	89	15
	EB	95'	4'	43	8
	EB	178'	4'	80	14
	WB	500'	4'	223	38
	WB	105'	4'	47	8
	WB	220'	4'	98	17
	WB	560'	4'	249	42
	WB	260'	4'	116	20
42.5/43.0	EB	290'	4'	129	22
	EB	80'	4'	36	6
	EB	140'	4'	63	11
	EB	150'	4'	67	12
	EB	130'	4'	58	10
SUBTOTAL 2				3,515	605

LOCATION		LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm†	HMA (TYPE A)
PM	SIDE			SQYD	TON
42.5/43.0	EB	310'	4'	138	24
	WB	290'	4'	129	22
	WB	240'	4'	107	18
	WB	245'	4'	109	19
	WB	330'	4'	147	25
	WB	130'	4'	58	10
43.5/44.0	EB	500'	4'	223	38
	EB	140'	4'	63	11
	EB	145'	4'	65	11
	WB	90'	4'	40	7
	WB	140'	4'	63	11
	WB	200'	4'	89	15
44.0/44.5	EB	95'	4'	43	8
	EB	300'	4'	134	23
	EB	500'	4'	223	38
	EB	100'	4'	45	8
	EB	230'	4'	103	18
	EB	320'	4'	143	24
	EB	125'	4'	56	10
	EB	80'	4'	36	6
	EB	280'	4'	125	21
	EB	385'	4'	172	29
	WB	130'	4'	58	10
	WB	210'	4'	94	16
	WB	100'	4'	45	8
	WB	500'	4'	223	38
	WB	180'	4'	80	14
	WB	500'	4'	223	38
44.5/45.0	WB	350'	4'	156	27
	WB	365'	4'	163	28
	WB	180'	4'	80	14
45.0/45.5	EB	180'	4'	80	14
	EB	150'	4'	67	12
	EB	225'	4'	100	17
	EB	200'	4'	89	15
	EB	120'	4'	54	9
	EB	115'	4'	52	9
SUBTOTAL 3				3,875	665

LOCATION		LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm†	HMA (TYPE A)
PM	SIDE			SQYD	TON
45.0/45.5	EB	190'	4'	85	15
	WB	340'	4'	152	26
	WB	500'	4'	223	38
	WB	160'	4'	72	12
	WB	210'	4'	94	16
	WB	100'	4'	45	8
	WB	120'	4'	54	9
	WB	120'	4'	54	9
	WB	230'	4'	103	18
45.5/46.0	EB	500'	4'	223	38
	EB	500'	4'	223	38
	EB	250'	4'	112	19
	EB	185'	4'	83	14
	WB	500'	4'	223	38
	WB	400'	4'	178	30
	WB	300'	4'	134	23
	WB	500'	4'	223	38
46.0/46.5	EB	100'	4'	45	8
	EB	130'	4'	58	10
	EB	145'	4'	65	11
	EB	500'	4'	223	38
	EB	80'	4'	36	6
	EB	145'	4'	65	11
	EB	500'	4'	223	38
	EB	500'	4'	223	38
	EB	370'	4'	165	28
	WB	190'	4'	85	15
	WB	290'	4'	129	22
	WB	500'	4'	223	38
	WB	400'	4'	178	30
	WB	300'	4'	134	23
	WB	500'	4'	223	38
SUBTOTAL 4				4,356	743
SUBTOTAL 1				2,917	504
SUBTOTAL 2				3,515	605
SUBTOTAL 3				3,875	665
TOTAL				14,663*	2517*

SUMMARY OF QUANTITIES

Q-2

NOTE: ACTUAL LOCATIONS AND DIMENSIONS OF DIGOUTS MAY VARY IN THE FIELD AND WILL BE DETERMINED BY THE ENGINEER.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 THOA HUYNH
 JOSE A ALICEA
 ALVIN MANGINDIN
 JAA
 11/02/14

LAST REVISION DATE PLOTTED => 09-JAN-2015
 00-00-00 TIME PLOTTED => 09:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Ama	88	38.0/46.9	9	24


 11/01/14
 REGISTERED CIVIL ENGINEER DATE
 No. 64817
 Exp. 6/30/15
 CIVIL
 STATE OF CALIFORNIA

11-10-14
 PLANS APPROVAL DATE

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

NOTE:
 LOCATIONS OF PAVEMENT DELINEATION ARE APPROXIMATE.
 EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.

ADJUST MONUMENT COVER

LOCATION	DESCRIPTION	TYPE	EA
PM			
37.62	T-BAR WITHOUT CAP	MONUMENT	1
38.17	T-BAR WITHOUT CAP	MONUMENT	1
38.20	2.25 SURVEY DISC	MONUMENT	1
38.30	2.25 SURVEY DISC	MONUMENT	1
38.80	2.25 SURVEY DISC	MONUMENT	1
38.80	2" BRASS CAP	MONUMENT	1
39.10	2.25 SURVEY DISC	MONUMENT	1
39.40	2.25 SURVEY DISC	MONUMENT	1
39.70	T-BAR WITH CAP	MONUMENT	1
40.25	T-BAR WITH CAP	MONUMENT	1
40.30	T-BAR WITHOUT CAP	MONUMENT	1
40.40	T-BAR WITHOUT CAP	MONUMENT	1
42.46	T-BAR WITHOUT CAP	MONUMENT	1
TOTAL			13

ROADWAY QUANTITIES

LOCATION	COLD PLANE AC PAVEMENT	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	HOT MIX ASPHALT (TYPE A)	TACK COAT	SHOULDER BACKING
	SQYD	TON	TON	TON	TON
PM 38.0/46.9		13,144		41	4100
CONFORM TAPER (BEGIN/END CONSTRUCTION)	221	17		1	
DIGOUT	14,663		2517	3	
CONFORM TAPER AT PUBLIC INTERSECTION	7,285		495	2	
CONFORM TAPERS AT PRIVATE DRIVEWAY		27		1	
CONFORM TAPER AT GUARDRAIL	28,457	1,898		6	
DIKE			29	1	
TOTAL	50,626	15,086	3041	55	4100

PAVEMENT DELINEATION QUANTITIES

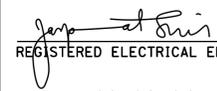
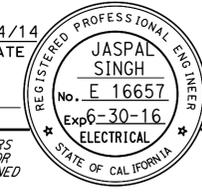
LOCATION	REMOVE THERMO-PLASTIC PAVEMENT MARKINGS		REMOVE YELLOW THERMO-PLASTIC TRAFFIC STRIPE (HAZADOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE		THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			THERMOPLASTIC PAVEMENT MARKING				
	TYPE III (R) ARROW	TYPE VI (L) ARROW	4" YELLOW	4" WHITE	8" WHITE	4" WHITE	8" WHITE	4" YELLOW	LIMIT LINE (WHITE)	STOP	TYPE III (R) ARROW	TYPE VI ARROW	
PM TO PM	SQFT		LF	LF		LF			SQFT				
38.0 TO 46.9	42	504				28,973	118,909	1,615	59,695	255	154	42	504
43.2 TO 46.9			31,680										
46.4 TO 46.9				2677									
R39.5, 42.4, 46.4				1200									
40.8, 42.1, 44.4					2480								
R38.5, 41.2					750								
TOTAL	546		31,680	7107		209,192			955				

SUMMARY OF QUANTITIES

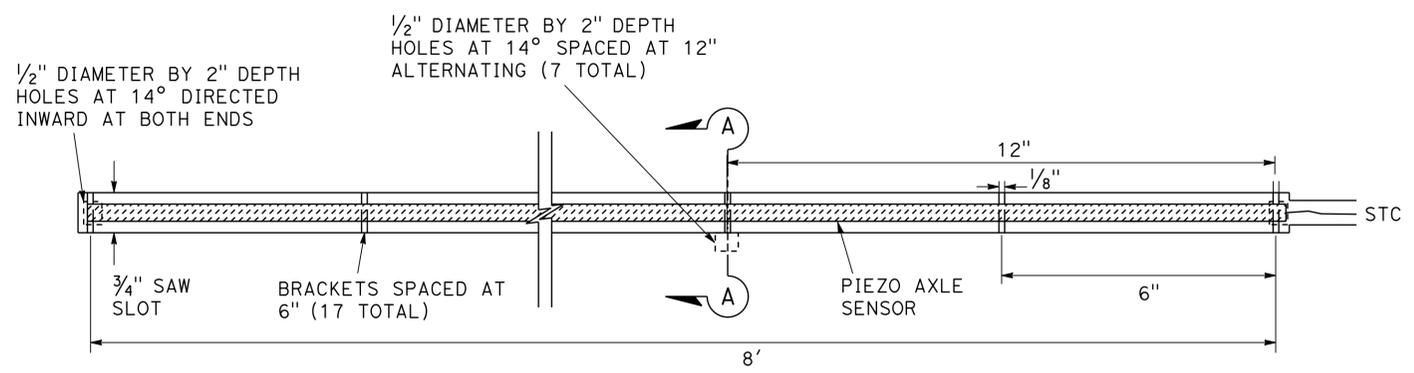
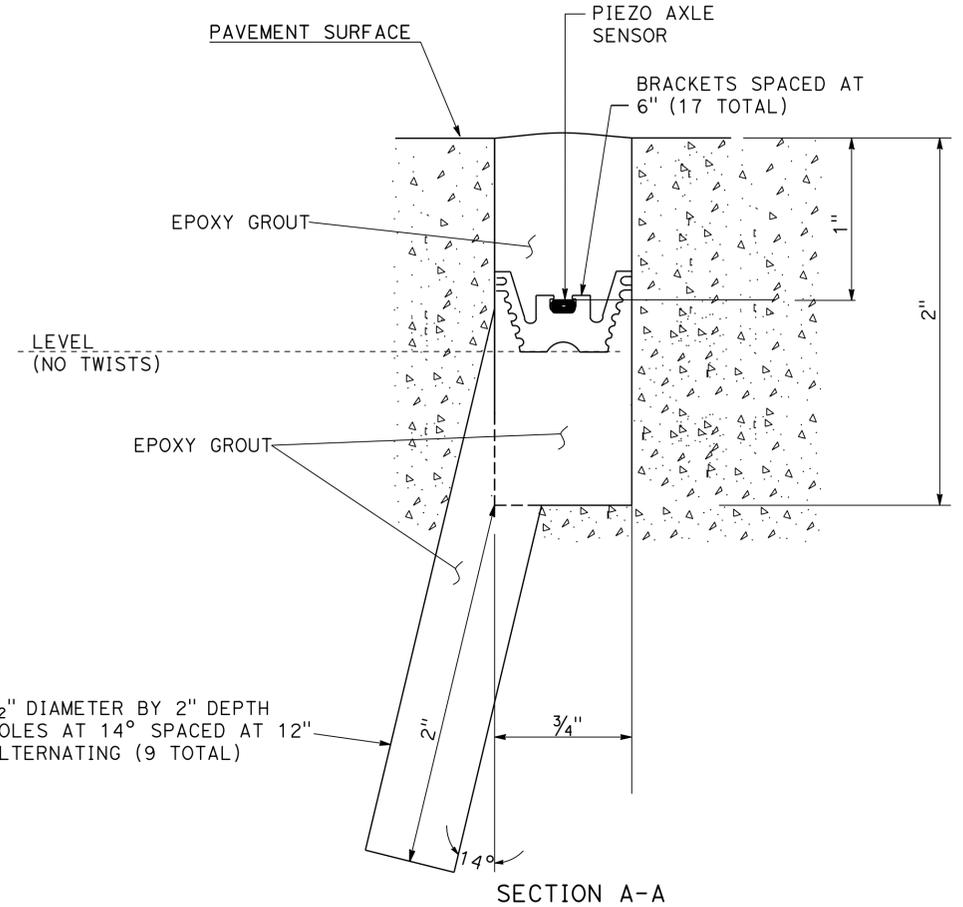
Q-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 Alvin Mangindin
 Functional Supervisor
 Jose A. Alicea
 Registered Civil Engineer
 Thoa Huynh
 Calculated/Designed By
 Checked By
 JAA
 Revised By
 Date Revised
 11/02/14

LAST REVISION DATE PLOTTED => 09-JAN-2015
 00-00-00 TIME PLOTTED => 09:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Ama	88	38.0/46.9	11	24
			11/04/14	DATE	
REGISTERED ELECTRICAL ENGINEER			PLANS APPROVAL DATE		
			11-10-14		
<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>					
					

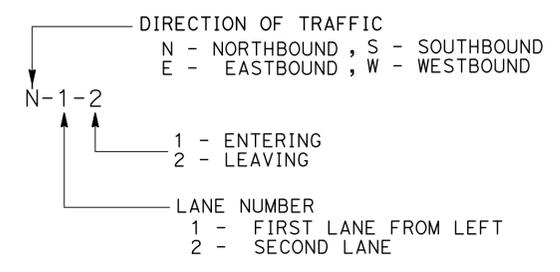
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ALI BAKHDOUD
 CALCULATED/DESIGNED BY: JASPAL SINGH
 CHECKED BY: JASPAL SINGH
 REVISED BY: JS
 DATE REVISED: 11/04/14
 USERNAME => s120300
 DGN FILE => a0Y940ua002.dgn



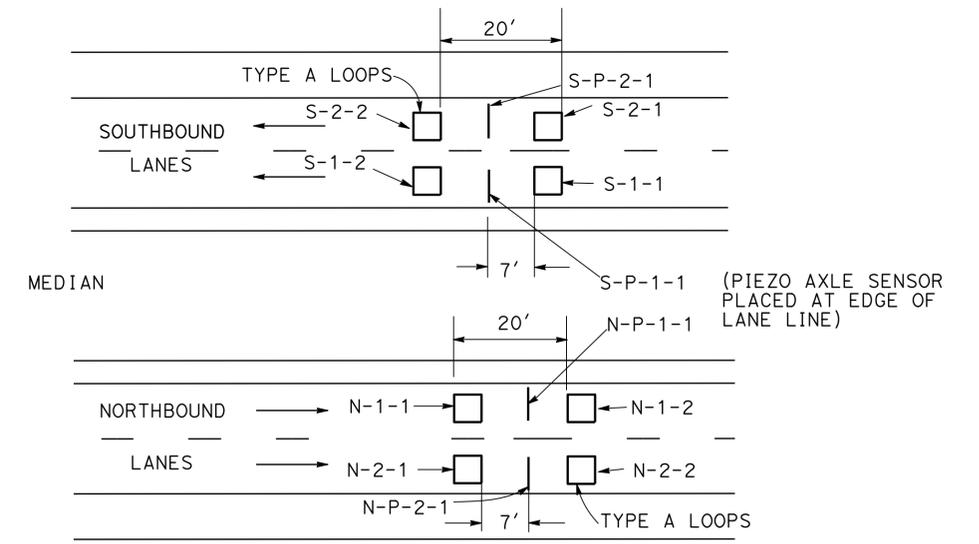
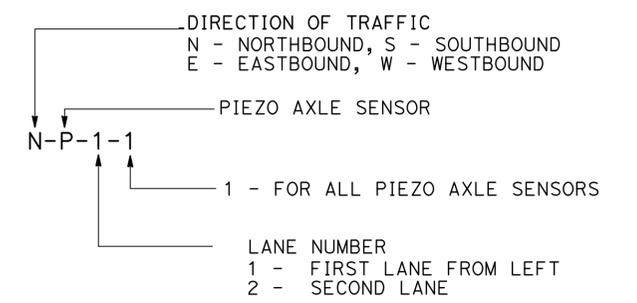
PIEZO AXLE SENSOR INSTALLATION

TOP VIEW
DETAIL A

**INDUCTIVE LOOP DETECTOR
SENSOR DESIGNATION**



PIEZO AXLE SENSOR DESIGNATION



**LOOP DETECTOR AND PIEZO AXLE SENSOR
PLACEMENT AND DESIGNATION**

DETAIL B

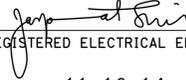
**ELECTRICAL DETAILS
E-2**

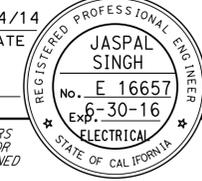
NO SCALE

NOTE:

ITEMS SHOWN IN THE TABLE ARE NOT SEPARATE
PAY ITEMS, FOR INFORMATION ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	12	24

 11/04/14
 REGISTERED ELECTRICAL ENGINEER DATE
 11-10-14
 PLANS APPROVAL DATE



THE STATE OF CALIFORNIA OR ITS OFFICERS
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COPIES OF THIS PLAN SHEET.

**MODIFY
VEHICLE CLASSIFICATION STATION**

SHEET No.	No 5(T) PB	No 6(T) PB	TYPE A LOOP DETECTORS	PAS WITH STC	2"C, TYPE 3
	EA				
E-1	1	1	6	3	10

ELECTRICAL QUANTITIES

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR
 ALT BAKHDODD
 CALCULATED-DESIGNED BY
 CHECKED BY
 JASPAL SINGH
 JASPAL SINGH
 REVISED BY
 DATE REVISED
 JS
 11/04/14

LAST REVISION DATE PLOTTED => 09-JAN-2015
 00-00-00 TIME PLOTTED => 09:12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	13	24

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 11-10-14

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 ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	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.

REVISED STANDARD PLAN RSP A10B

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	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
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	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

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

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
WWLOL	WINGWALL LAYOUT LINE
X Sec	CROSS SECTION
Xing	CROSSING
Yr	YEAR
Yrs	YEARS

P continued

S

T continued

M

Q

R

W

X

T

Y

N

O

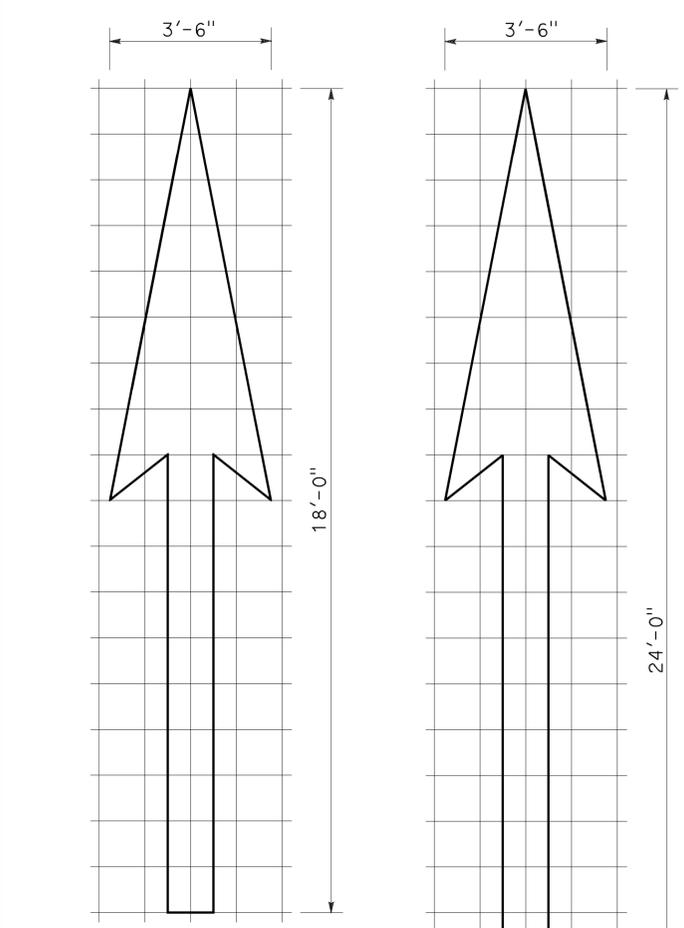
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	14	24

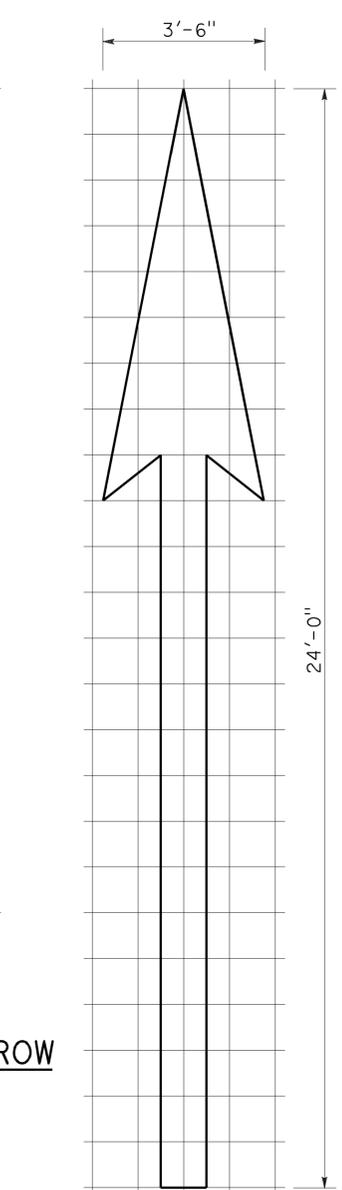
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

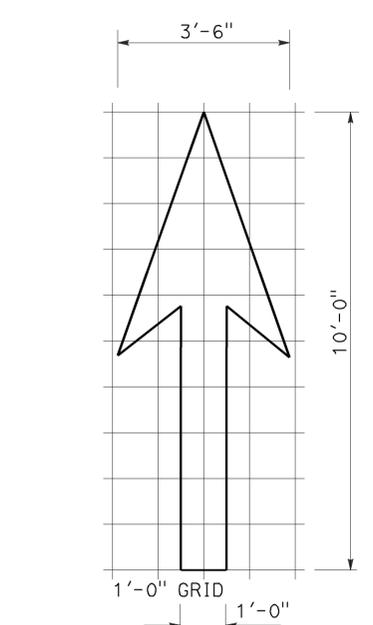
TO ACCOMPANY PLANS DATED 11-10-14



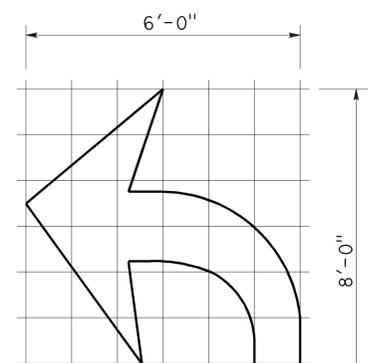
A=25 ft²
TYPE I 18'-0" ARROW



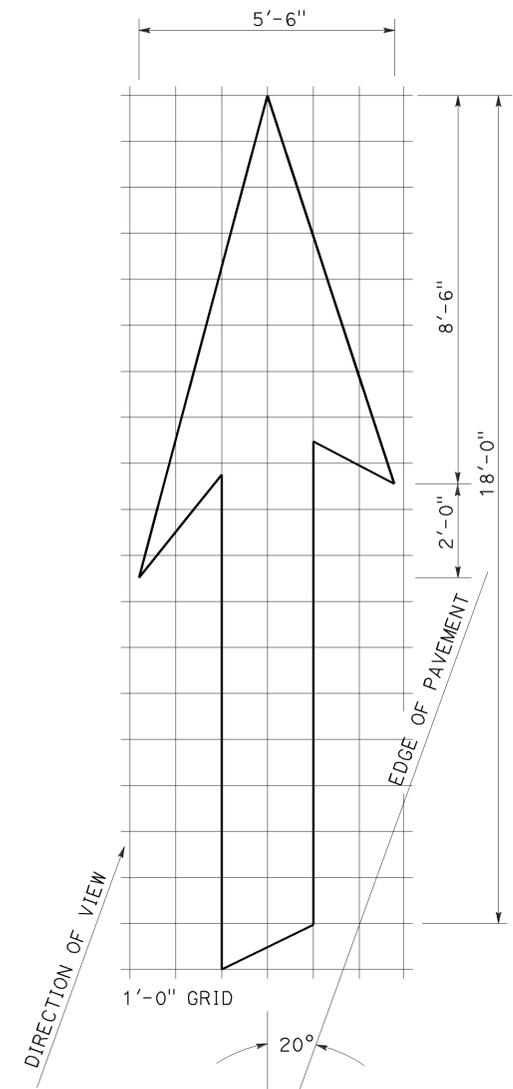
A=31 ft²
TYPE I 24'-0" ARROW



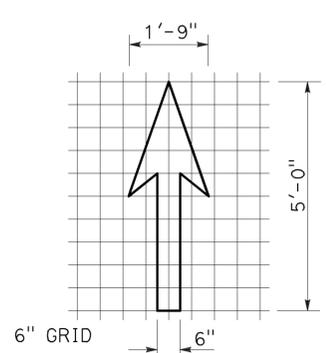
A=14 ft²
TYPE I 10'-0" ARROW



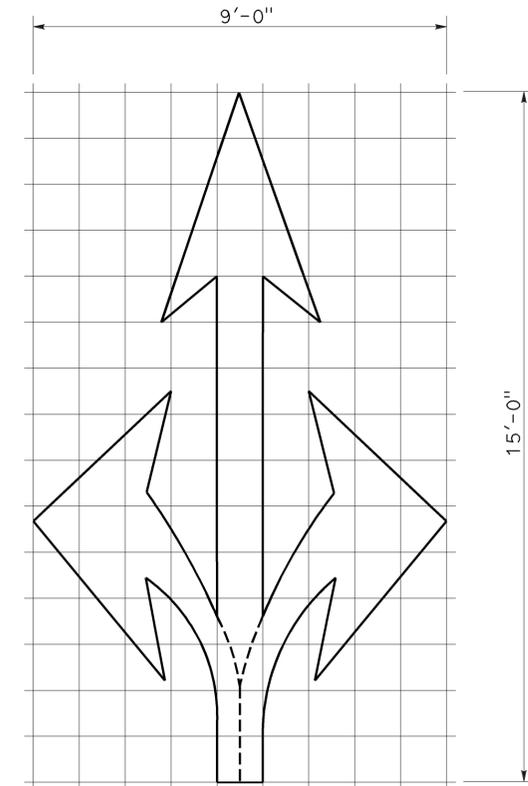
A=15 ft²
TYPE IV (L) ARROW
 (For Type IV (R) arrow, use mirror image)



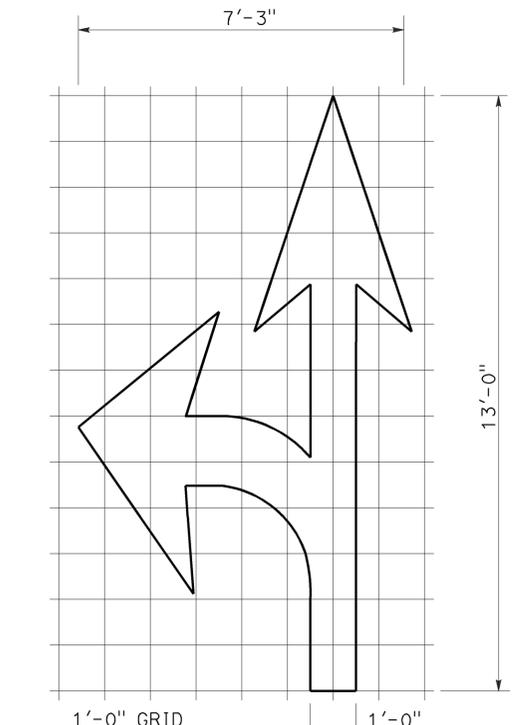
A=42 ft²
TYPE VI ARROW
 Right lane drop arrow
 (For left lane, use mirror image)



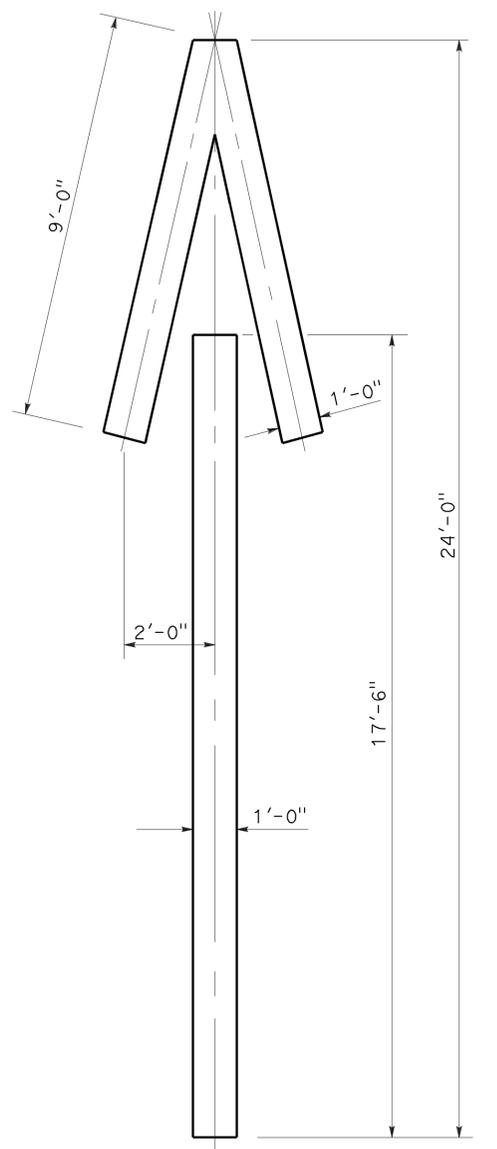
A=3.5 ft²
BIKE LANE ARROW



A=36 ft²
TYPE VIII ARROW



A=27 ft²
TYPE VII (L) ARROW
 (For Type VII (R) arrow, use mirror image)



A=33 ft²
TYPE V ARROW

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

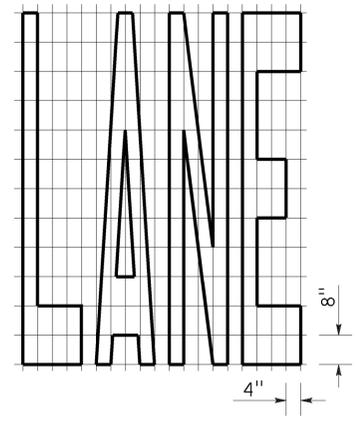
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
 ARROWS**
 NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A
 DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

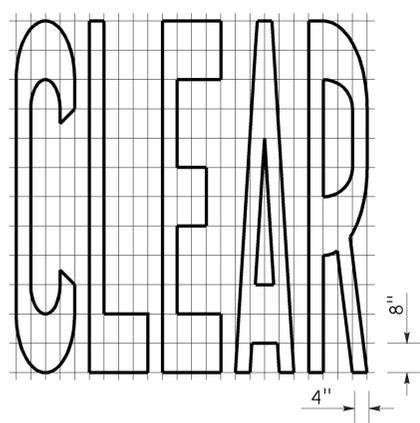
REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

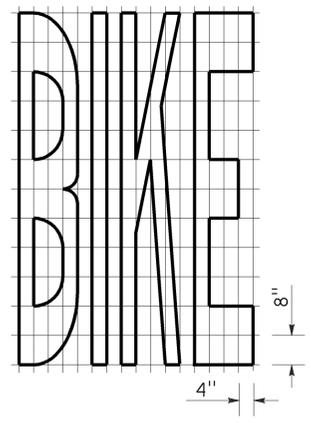
TO ACCOMPANY PLANS DATED 11-10-14



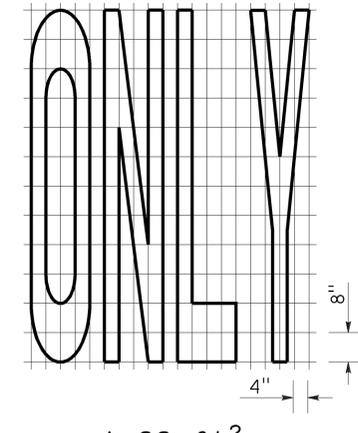
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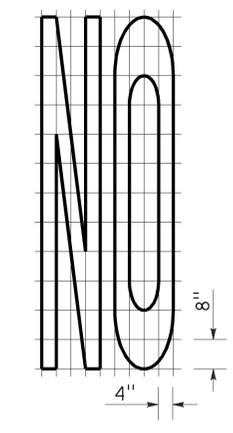
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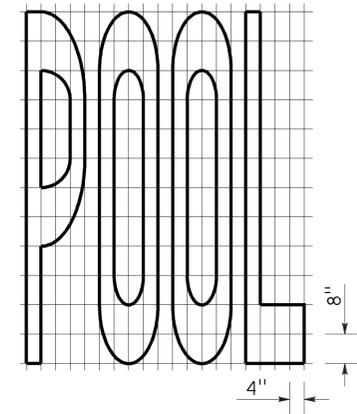
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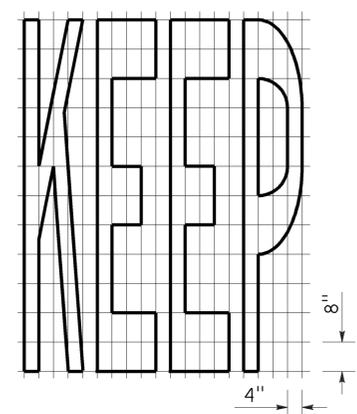
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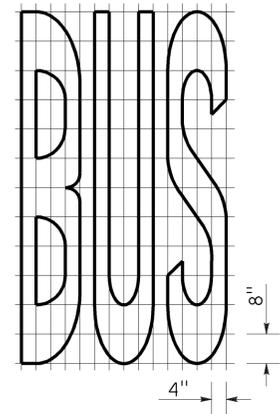
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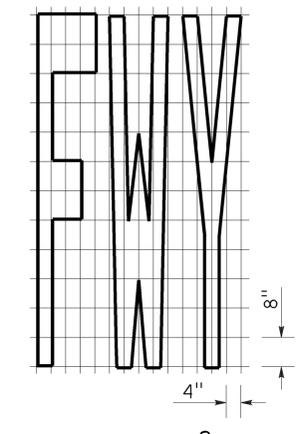
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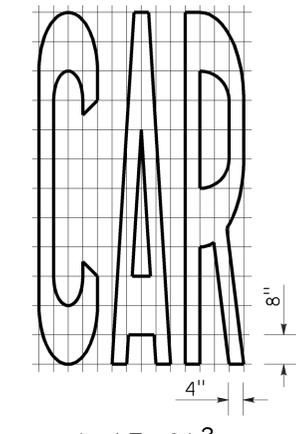
A=24 ft²



A=20 ft²

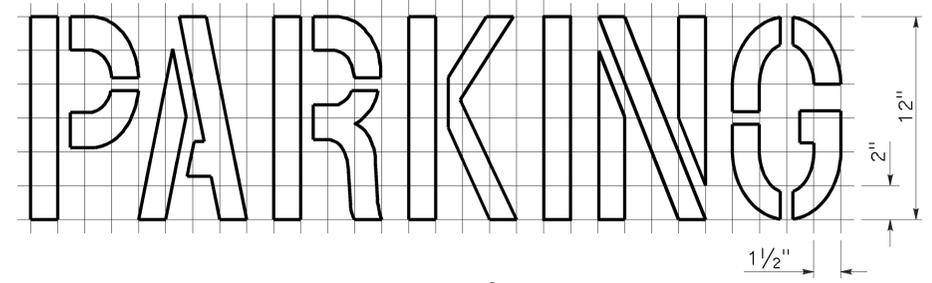
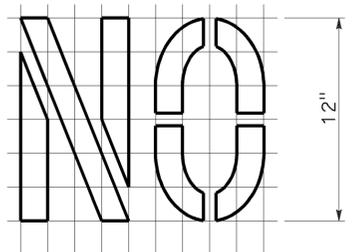


A=16 ft²

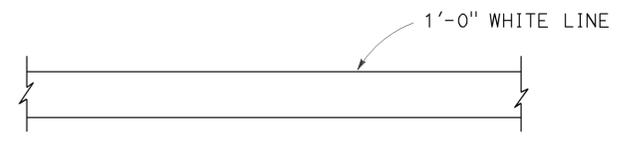


A=17 ft²

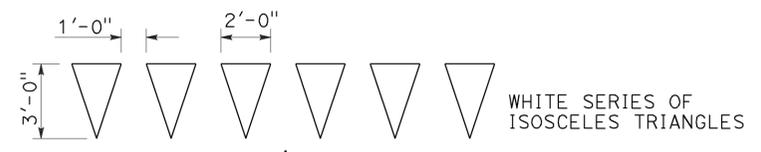
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

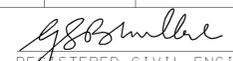
NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	16	24


 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 11-10-14

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Longitudinal buffer space or flagger station spacing
 *** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**
 NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T9

2010 REVISED STANDARD PLAN RSP T9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Ama	88	38.0/46.9	17	24

Devinder Singh
 REGISTERED CIVIL ENGINEER
 No. C50470
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

October 17, 2014
 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.

NOTES:

See Revised Standard Plan RSP T9 for tables.

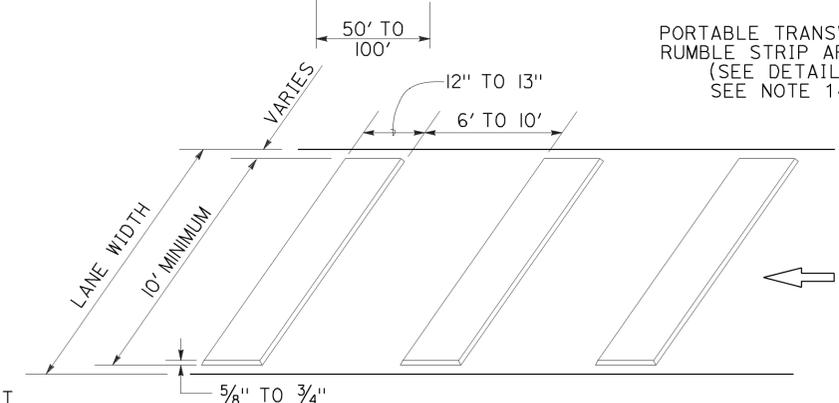
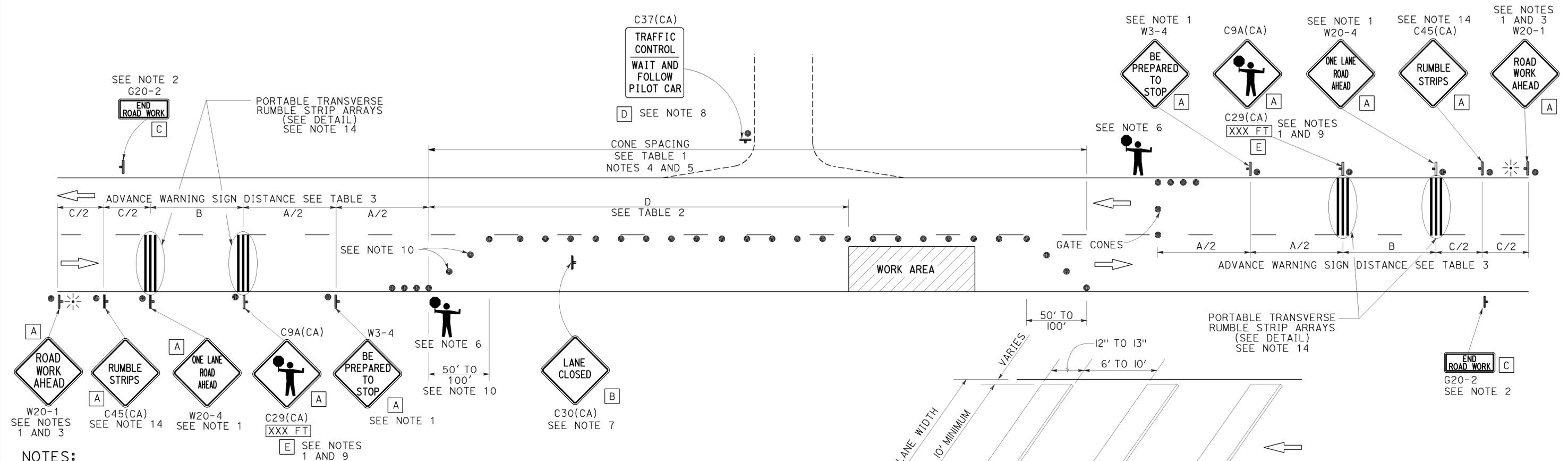
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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 11-10-14



- 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.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

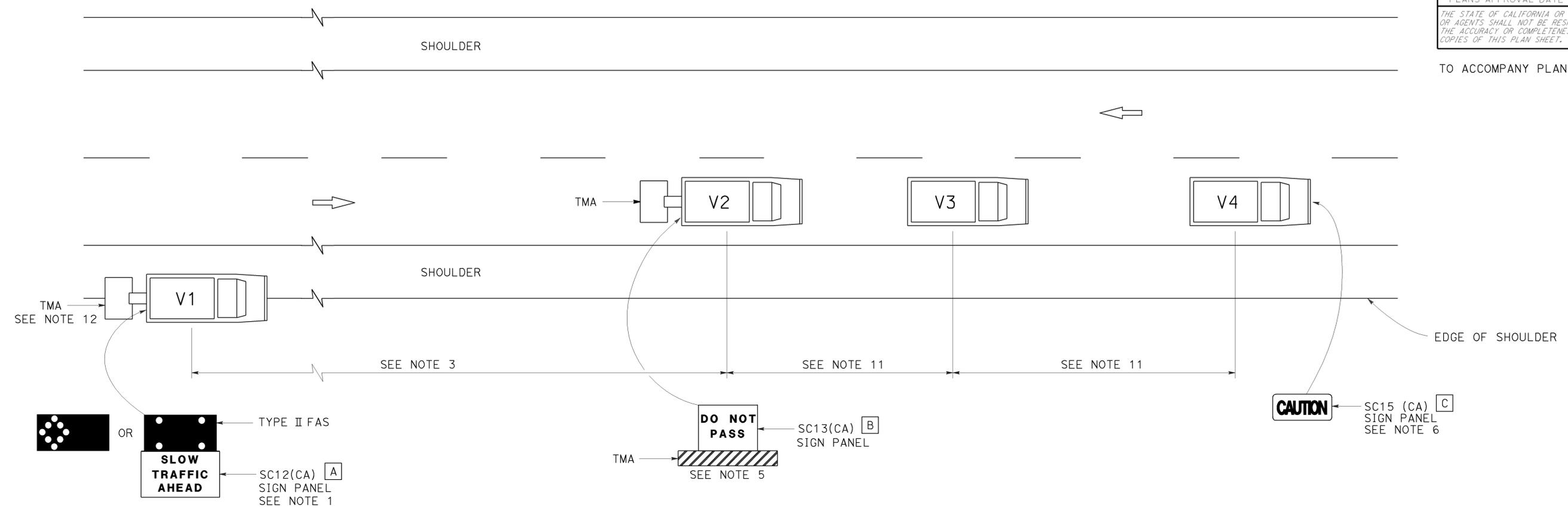
**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
TWO LANE CONVENTIONAL
HIGHWAYS**

NO SCALE

RSP T13 DATED OCTOBER 17, 2014 SUPERSEDES RSP T13 DATED JULY 18, 2014
AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED
MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP T13

TO ACCOMPANY PLANS DATED 11-10-14



NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.

7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- V4 SIGN VEHICLE
- TMA TRUCK-MOUNTED ATTENUATOR
-  FLASHING ARROW SIGN (FAS) IN FLASHING CAUTION MODE
-  FLASHING ARROW SIGN (FAS) IN ALTERNATING DIAMOND CAUTION

SIGN PANEL SIZE (Min)

- A** 72" x 42"
- B** 54" x 42"
- C** 54" x 24"

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

RSP T17 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T17
 DATED MAY 20, 2011 - PAGE 245 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

LEGEND:

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 TAPE
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
TSP	TELEPHONE SERVICE POINT

ABBREVIATIONS

APS	ACCESSIBLE PEDESTRIAN SIGNAL	M/M	MULTIPLE TO MULTIPLE TRANSFORMER
BBS	BATTERY BACKUP SYSTEM	Mtg	MOUNTING
BC	BOLT CIRCLE	MV	MERCURY VAPOR LIGHTING FIXTURE
BPB	BICYCLE PUSH BUTTON	MVDS	MICROWAVE VEHICLE DETECTION SYSTEM
C	CONDUIT	N	NEUTRAL (GROUNDED CONDUCTOR)
CB	CIRCUIT BREAKER	NB	NEUTRAL BUS
CCTV	CLOSED CIRCUIT TELEVISION	NC	NORMALLY CLOSE
Ck+	CIRCUIT	NO	NORMALLY OPEN
CMS	CHANGEABLE MESSAGE SIGN	P	CIRCUIT BREAKER'S POLE
Ctid	CALTRANS IDENTIFICATION	PB	PULL BOX
Comm	COMMUNICATION	PBA	PUSH BUTTON ASSEMBLY
DLC	LOOP DETECTOR LEAD-IN CABLE	PEC	PHOTOELECTRIC CONTROL
EMS	EXTINGUISHABLE MESSAGE SIGN	Ped	PEDESTRIAN
EVUC	EMERGENCY VEHICLE UNIT CABLE	PEU	PHOTOELECTRIC UNIT
EVUD	EMERGENCY VEHICLE UNIT DETECTOR	PT	CONDUIT WITH PULL TAPE
FB	FLASHING BEACON	RE	RELOCATED EQUIPMENT
FBCA	FLASHING BEACON CONTROL ASSEMBLY	RM	RAMP METERING
FBS	FLASHING BEACON WITH SLIP BASE	RWIS	ROADSIDE WEATHER INFORMATION SYSTEM
FO	FIBER OPTIC	SB	SLIP BASE
G	EQUIPMENT GROUNDING CONDUCTOR	SIC	SIGNAL INTERCONNECT CABLE
GB	GROUND BUS	Sig	SIGNAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SMA	SIGNAL MAST ARM
HAR	HIGHWAY ADVISORY RADIO	SNS	STREET NAME SIGN
Hex	HEXAGONAL	SP	SERVICE POINT
HPS	HIGH PRESSURE SODIUM	TDC	TELEPHONE DEMARCATION CABINET
IISNS	INTERNALLY ILLUMINATED STREET NAME SIGN	TMS	TRAFFIC MONITORING STATION
ISL	INDUCTION SIGN LIGHTING	TOS	TRAFFIC OPERATIONS SYSTEM
LED	LIGHT EMITTING DIODE	Veh	VEHICLE
LMA	LUMINAIRE MAST ARM	VIVDS	VIDEO IMAGE VEHICLE DETECTION SYSTEM
LPS	LOW PRESSURE SODIUM	WIM	WEIGH-IN-MOTION
Ltg	LIGHTING	Xfmr	TRANSFORMER
Lum	LUMINAIRE		
M	METERED		
MAT	MAST ARM MOUNTING TOP ATTACHMENT		
MAS	MAST ARM MOUNTING SIDE ATTACHMENT		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amg	88	38.0/46.9	19	24

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 11-10-14

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.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL USED	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(dc)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
Hz	HERTZ

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT NOTES OR PROJECT PLANS)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

NOTES:

- HPS luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. HPS luminaires shall be 200 W when installed on other type standards or poles, unless otherwise specified.
- LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W when installed on other type standards or poles, unless otherwise specified.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	20	24

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 11-10-14

CONDUIT

NEW	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 ATTACHED TO THE STRUCTURE OR SERVICE POLE

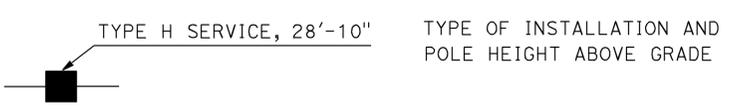
SIGNAL EQUIPMENT

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD "C" INDICATES COUNTDOWN PEDESTRIAN HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)
		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

SERVICE EQUIPMENT

NEW	EXISTING	
---OH---	---oh---	OVERHEAD LINES
		WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
		SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
		TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION



FLASHING BEACON

NEW	EXISTING	
		FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
		FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
		FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION SYSTEM

NOTES:

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

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

STATE OF CALIFORNIA
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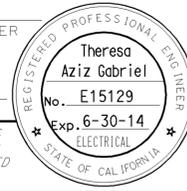
**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

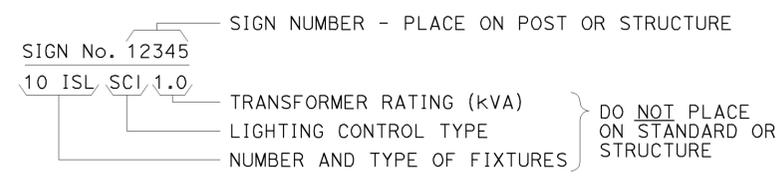
2010 REVISED STANDARD PLAN RSP ES-1B



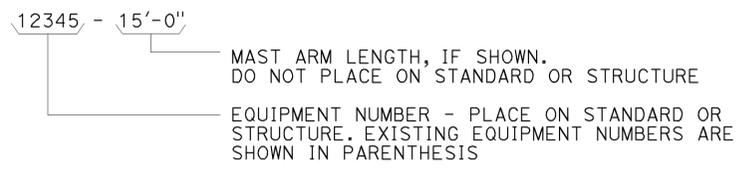
TO ACCOMPANY PLANS DATED 11-10-14

EQUIPMENT IDENTIFICATION

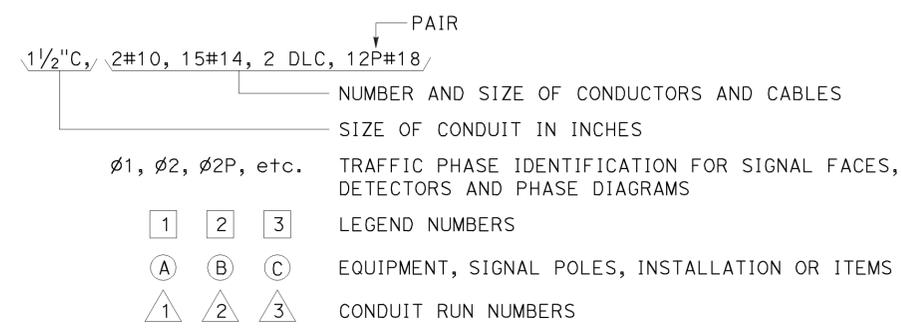
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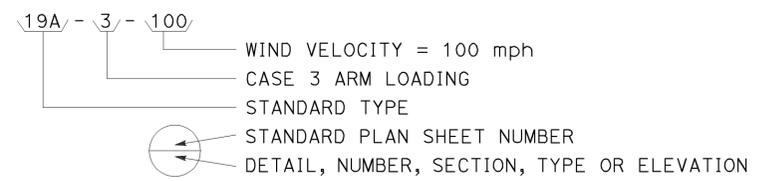
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



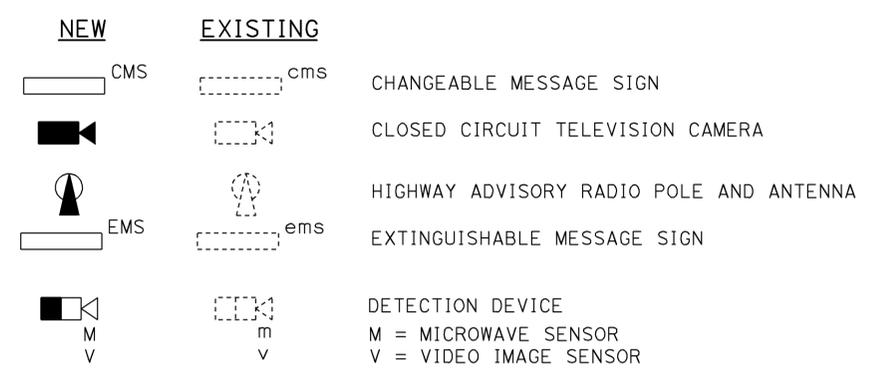
CONDUIT AND CONDUCTOR IDENTIFICATION:



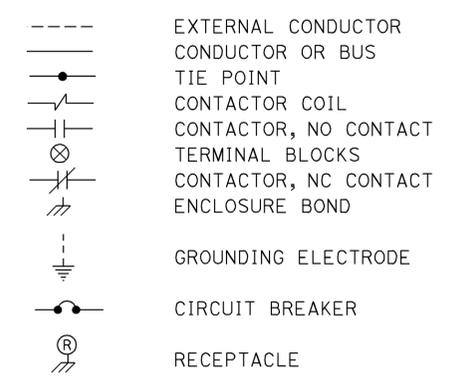
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



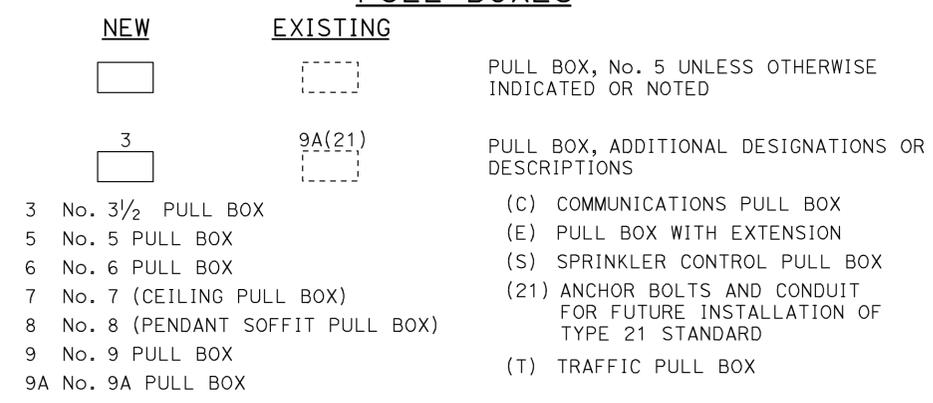
MISCELLANEOUS EQUIPMENT



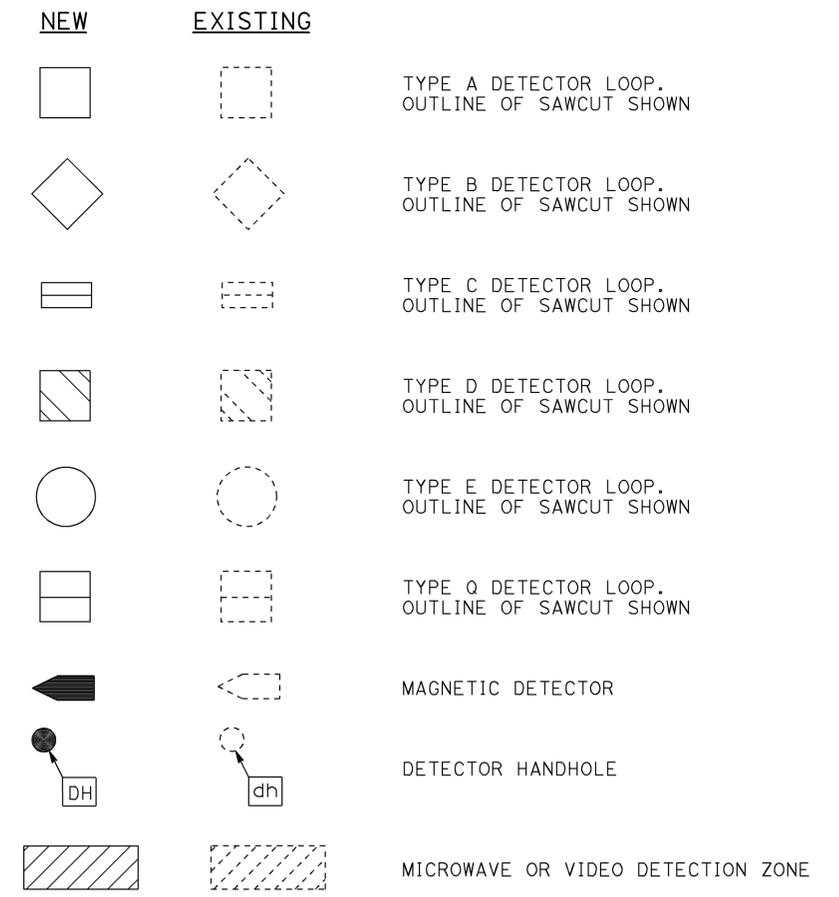
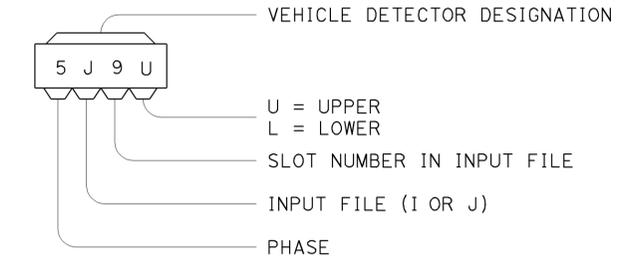
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

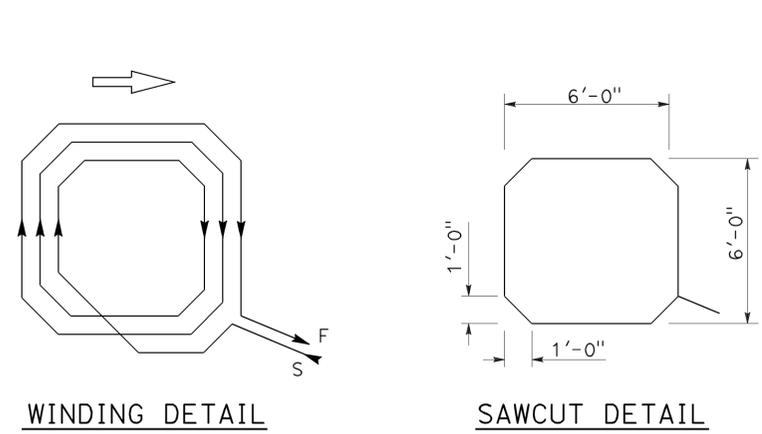
2010 REVISED STANDARD PLAN RSP ES-1C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	22	24

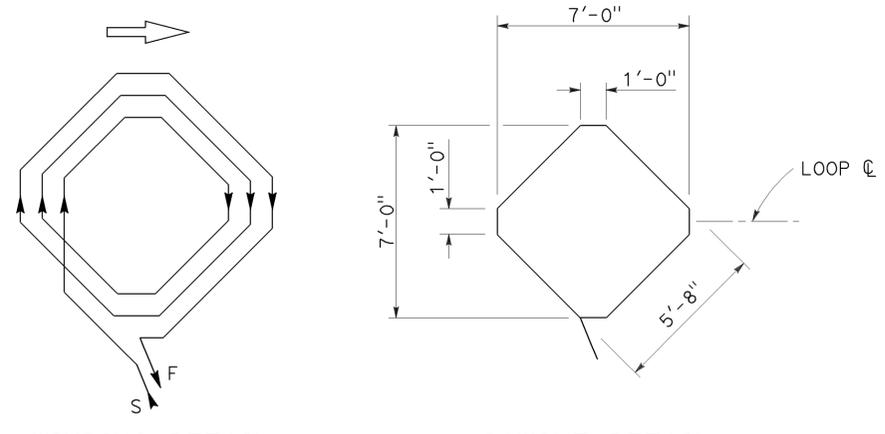
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

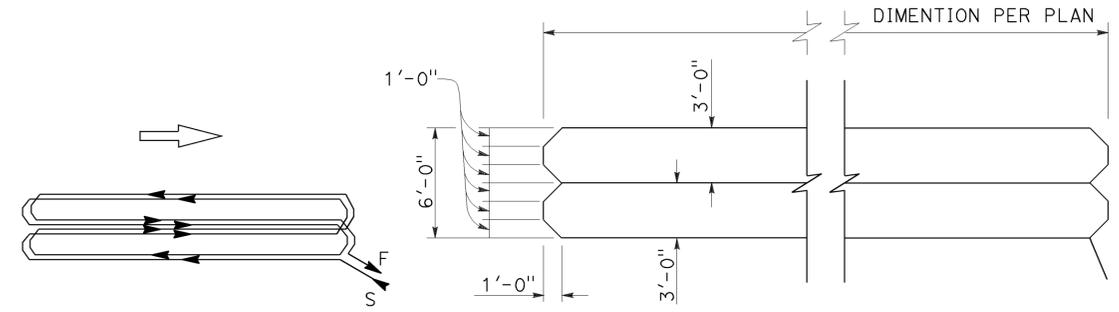
TO ACCOMPANY PLANS DATED 11-10-14



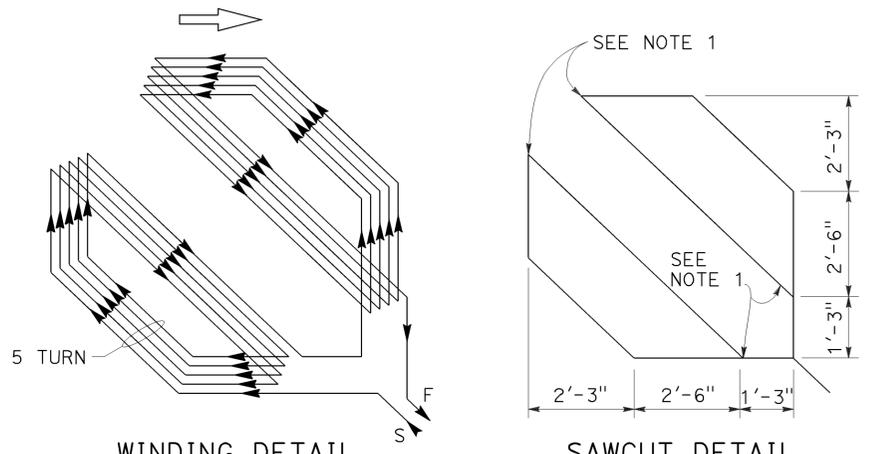
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



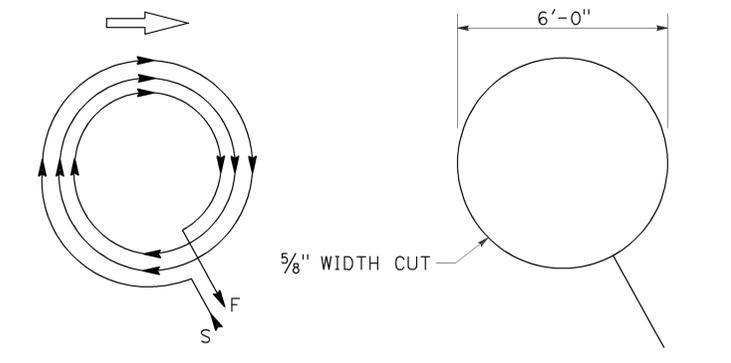
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



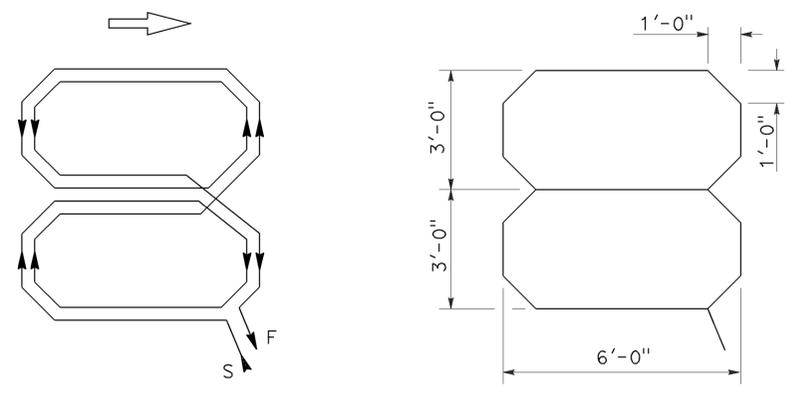
WINDING DETAIL
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



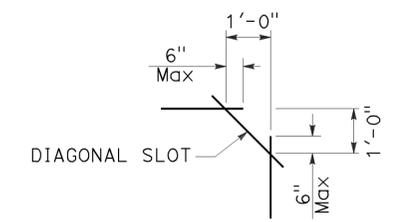
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

- NOTES:**
1. Round corners of acute angle sawcuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

RSP ES-5B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-5B DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.

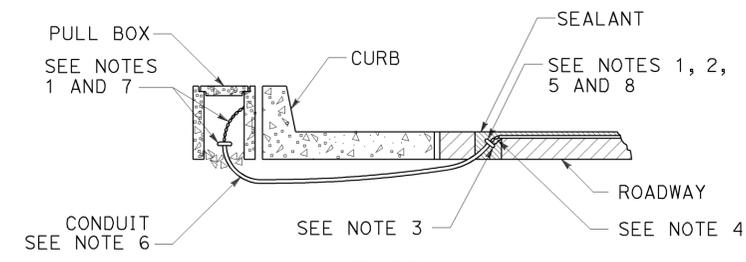
2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Amc	88	38.0/46.9	23	24

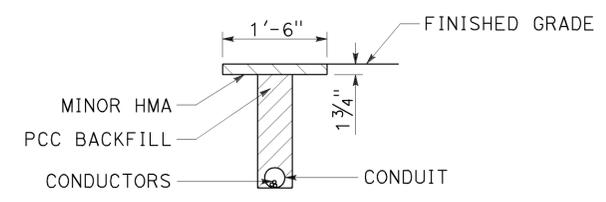
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
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TO ACCOMPANY PLANS DATED 11-10-14

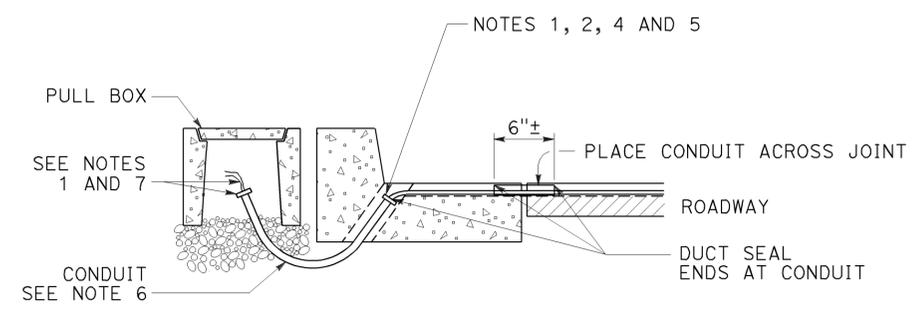
2010 REVISED STANDARD PLAN RSP ES-5D



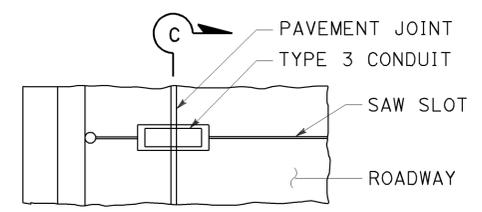
TYPE A
CURB TERMINATION DETAIL



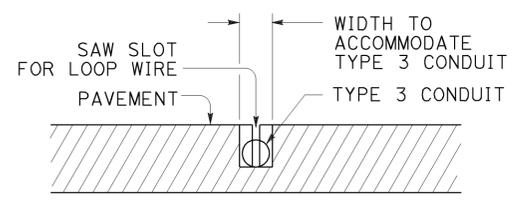
"T" TRENCH
DETAIL T



CROSS SECTION

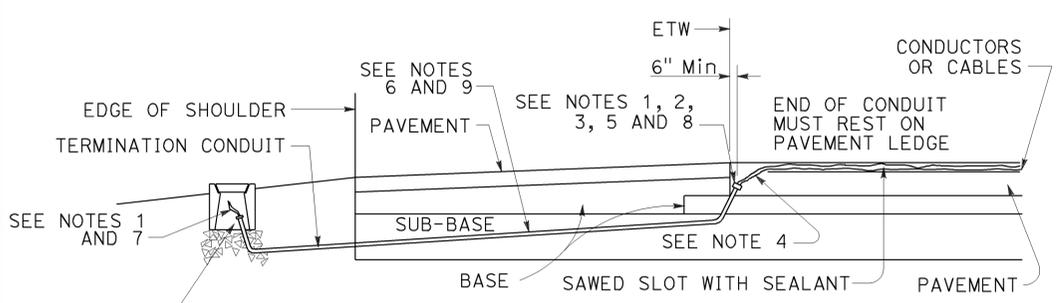


PLAN VIEW

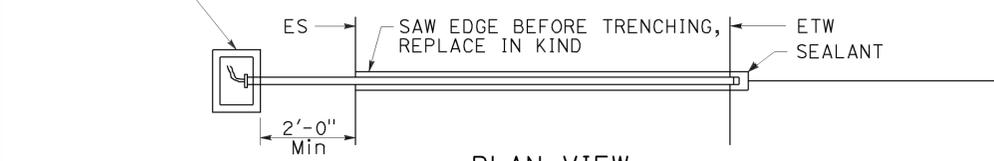


SECTION C-C

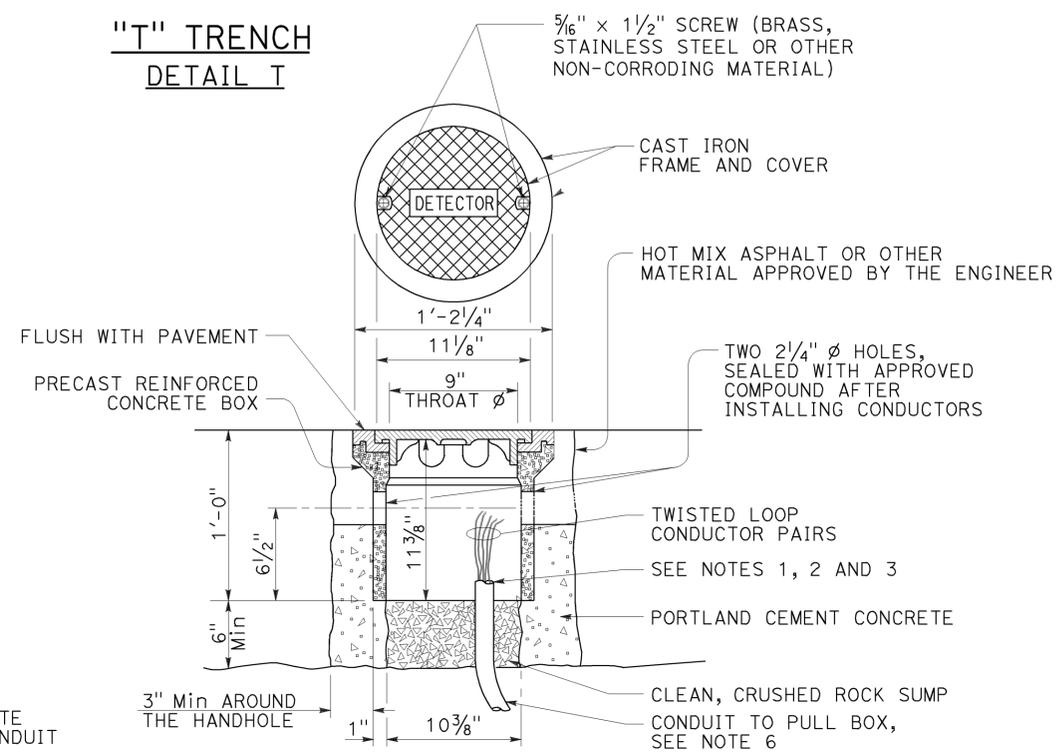
TYPE B
CURB TERMINATION DETAIL



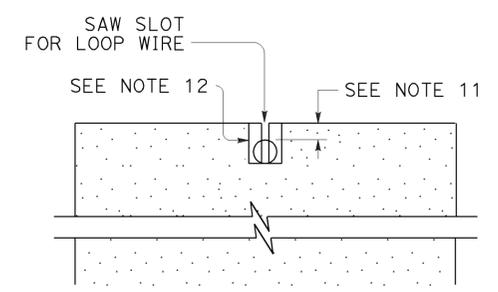
CROSS SECTION



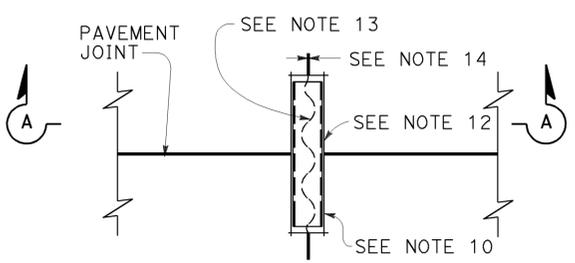
PLAN VIEW
SHOULDER TERMINATION DETAILS



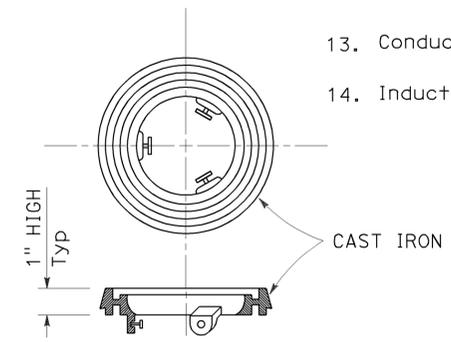
DETECTOR HANDHOLE DETAIL



SECTION A-A



PLAN VIEW
TYPICAL LOOP LEAD-IN DETAIL
AT PAVEMENT JOINT



LOCKING GRADE RING

NOTES:

- Bushing shall be used at end of conduit.
- Tape detector conductors or cables 3" each side of bushings.
- Install duct seal compound to each end of termination conduit before installing sealant.
- Round all sharp edges where detector conductors or cables have to pass.
- End of conduit shall be 3/8" below roadway surface.
- | | |
|-----------------|-----------------|
| Conduit size | Loop conductors |
| 1"C minimum | 1 to 2 pairs |
| 1 1/2"C minimum | 3 to 4 pairs |
| 2"C minimum | 5 or more pairs |
- Splice detector conductors or cables to detector lead-in-cable.
- Location of detector handhole when shown on plans.
- When the shoulder and traveled way are paved with the same material and there is no joint between them, the conduit shall extend only 2'-0" into the shoulder pavement.
- 3/4"C, Type 3 conduit 6" long minimum, plug both ends with duct compound to keep out sealant.
- 1/2" Minimum between top of conduit and pavement surface.
- Sawcut shall not exceed 1" in width and 1/8" longer than conduit to be installed.
- Conductors with 1/2" minimum slack inside conduit.
- Inductive loop detector saw slot.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(CURB TERMINATION
AND HANDHOLE)
 NO SCALE

RSP ES-5D DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-5D
 DATED MAY 20, 2011 - PAGE 451 OF THE STANDARD PLANS BOOK DATED 2010.

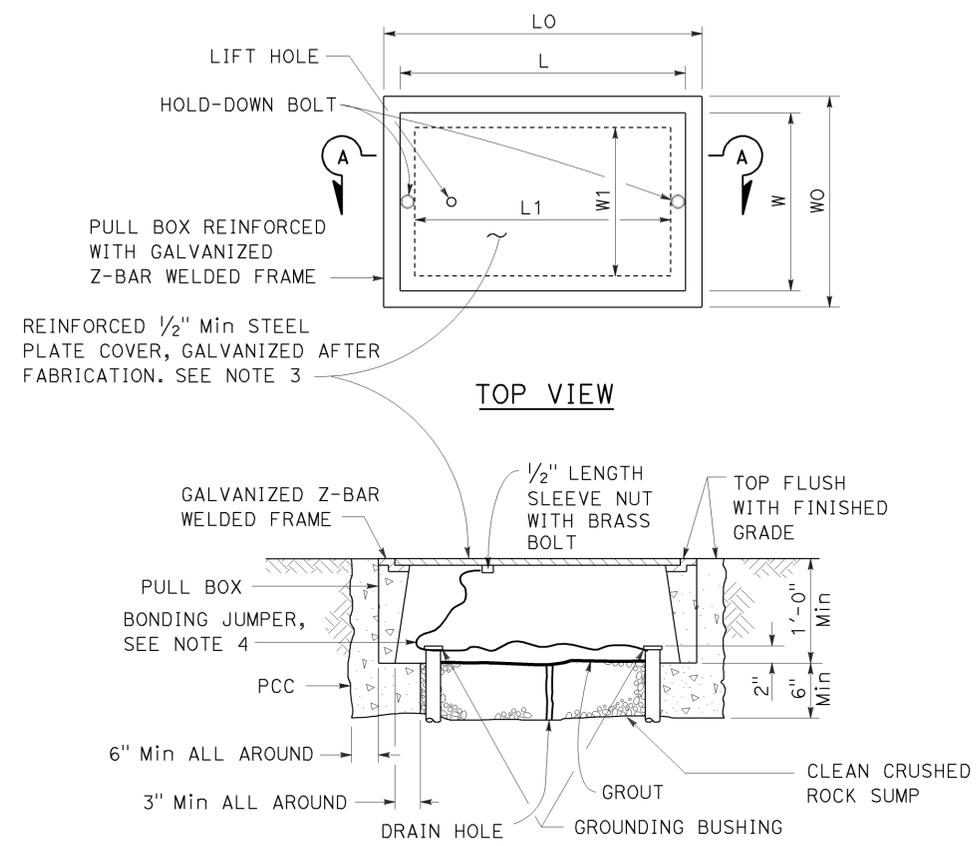
REVISED STANDARD PLAN RSP ES-5D

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Amc	88	38.0/46.9	24	24

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 11-10-14



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

NOTES:

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

DIMENSION TABLE											
PULL BOX	PULL BOX						COVER				
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	W0	L0	L1	W1	L **	W **	R	EDGE THICKNESS	EDGE TAPER
No. 3 1/2(T)	1 1/2"	1'-0"	1'-5"± 1"	1'-8 3/8"±	1'-2 1/2"±	10 5/8"± 1"	1'-8"±	1'-1 3/4"±	0"	1/2"	NONE
No. 5(T)	1 3/4"	1'-0"	1'-11 1/2"± 1"	2'-5 1/2"±	1'-7"±	1'-1"± 1"	2'-3"±	1'-4"±	0"	1/2"	NONE
No. 6(T)	2"	1'-0"	2'-6"± 1"	2'-11 1/2"±	1'-11 1/2"±	1'-5"± 1"	2'-9"±	1'-8"±	0"	1/2"	NONE

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

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

RSP ES-8B DATED JULY 19, 2013 SUPERSEDES RSP ES-8B DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-8B