

INDEX OF PLANS

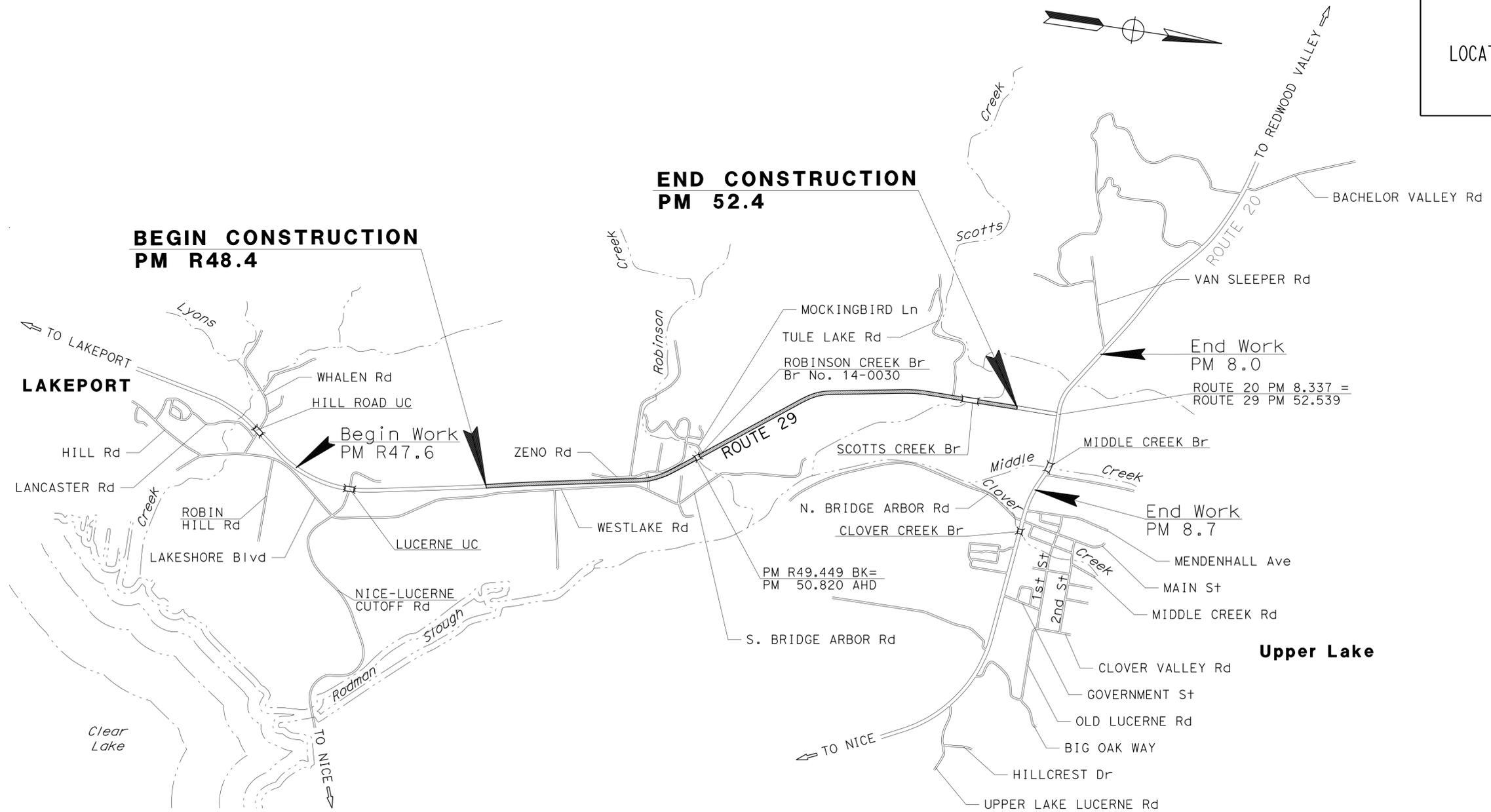
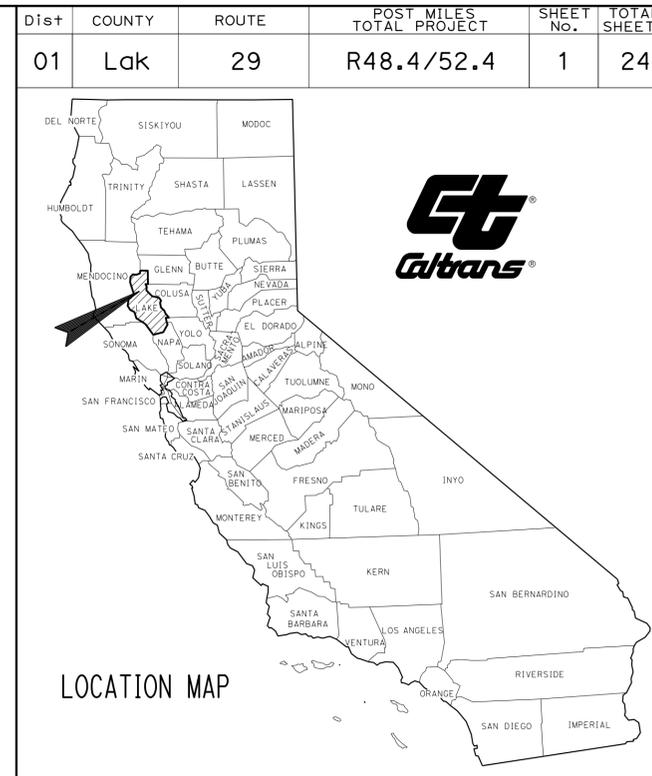
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	TYPICAL CROSS SECTIONS
4-7	CONSTRUCTION DETAILS
8	CONSTRUCTION AREA SIGNS
9-10	PAVEMENT DELINEATION QUANTITIES
11-13	SUMMARY OF QUANTITIES
14-24	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LAKE COUNTY NEAR UPPER LAKE
FROM 0.5 MILE NORTH OF LUCERNE UNDERCROSSING
TO 0.2 MILE NORTH OF SCOTTS CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



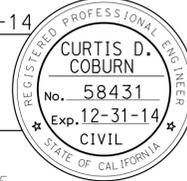
PROJECT MANAGER
R. MCCARTHY

DESIGN ENGINEER
R. MCCARTHY

Curtis D. Coburn 01-29-14
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

February 3, 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.



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

NO SCALE

DATE PLOTTED => 05-FEB-2014 TIME PLOTTED => 09:05

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: ROYAL MCCARTHY
 CALCULATED/DESIGNED BY: JOHNATHON JACKSON
 CHECKED BY: GAVIN KEATING
 REVISED BY: DATE REVISION

NOTES

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- IN AREAS WHERE THE WIDTH OF THE EXISTING SURFACING VARIES FROM THAT SHOWN, VARY THE WIDTH OF THE PAVING OPERATIONS AS DIRECTED BY THE ENGINEER.
- AREAS OF REPLACE AC SURFACING ARE SHOWN IN CONSTRUCTION DETAILS AND QUANTITIES.

PAVEMENT CLIMATE REGION

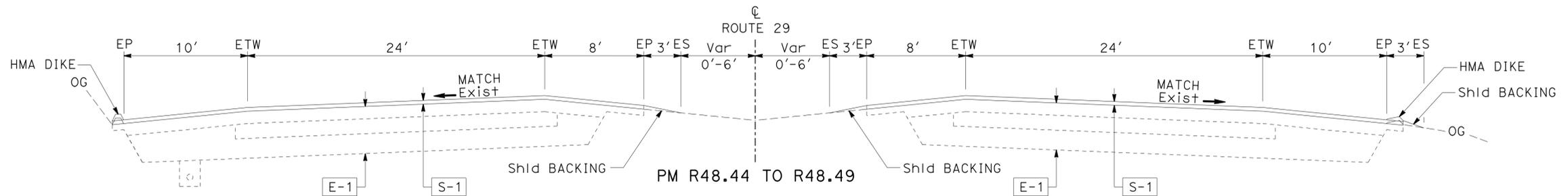
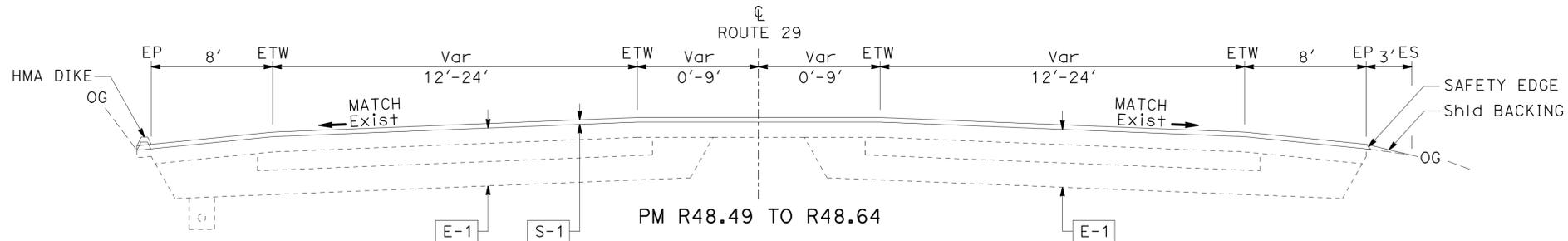
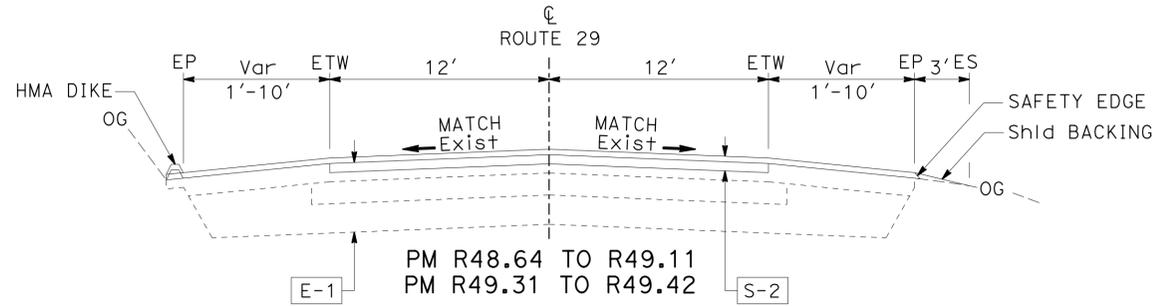
LOW MOUNTAIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	2	24

Curtis D. Coburn
 REGISTERED CIVIL ENGINEER DATE 1-29-14
 February 3, 2014
 PLANS APPROVAL DATE
 No. 58431
 Exp. 12-31-14
 CIVIL
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TYPICAL PAVEMENT STRUCTURAL SECTIONS

- S-1 0.15' HMA (TYPE A)
- S-2 0.15' HMA (TYPE A)
0.25' COLD IN-PLACE RECYCLE
- S-3 0.15' COLD PLANE AC PAVEMENT
0.15' HMA (TYPE A)
- E-1 Exist
Var AC
0.60' CTB
0.80' AS
- E-2 Exist
Var AC
0.50' AB
1.00' AS
- E-3 Exist
0.08' OGAC
0.52' AC (TYPE B)
1.15' AB (CLASS 2)
- E-4 Exist
Var AC
0.50' AB
1.30' AS



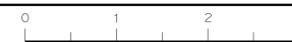
ROUTE 29

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

TYPICAL CROSS SECTIONS

NO SCALE

X-1

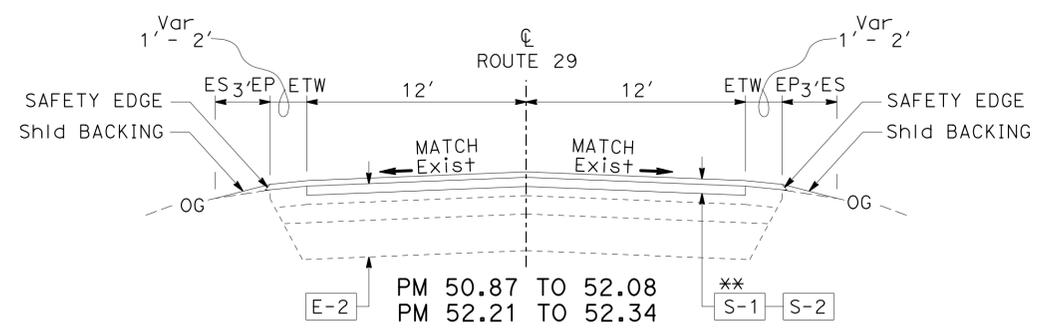


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	3	24

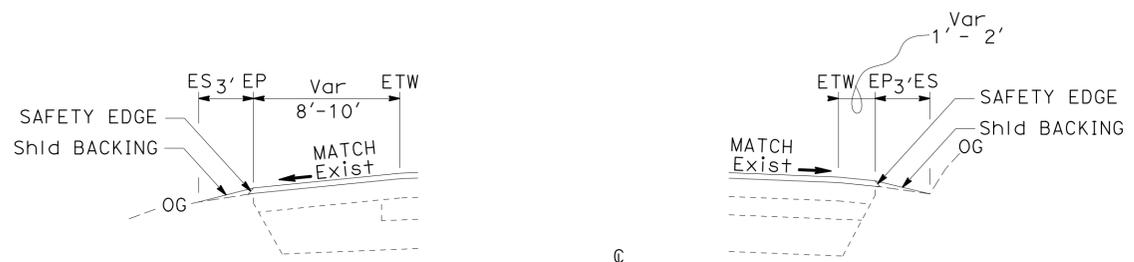
Curtis D. Coburn
 REGISTERED CIVIL ENGINEER DATE 1-29-14
 February 3, 2014
 PLANS APPROVAL DATE

No. 58431
 Exp 12-31-14
 CIVIL

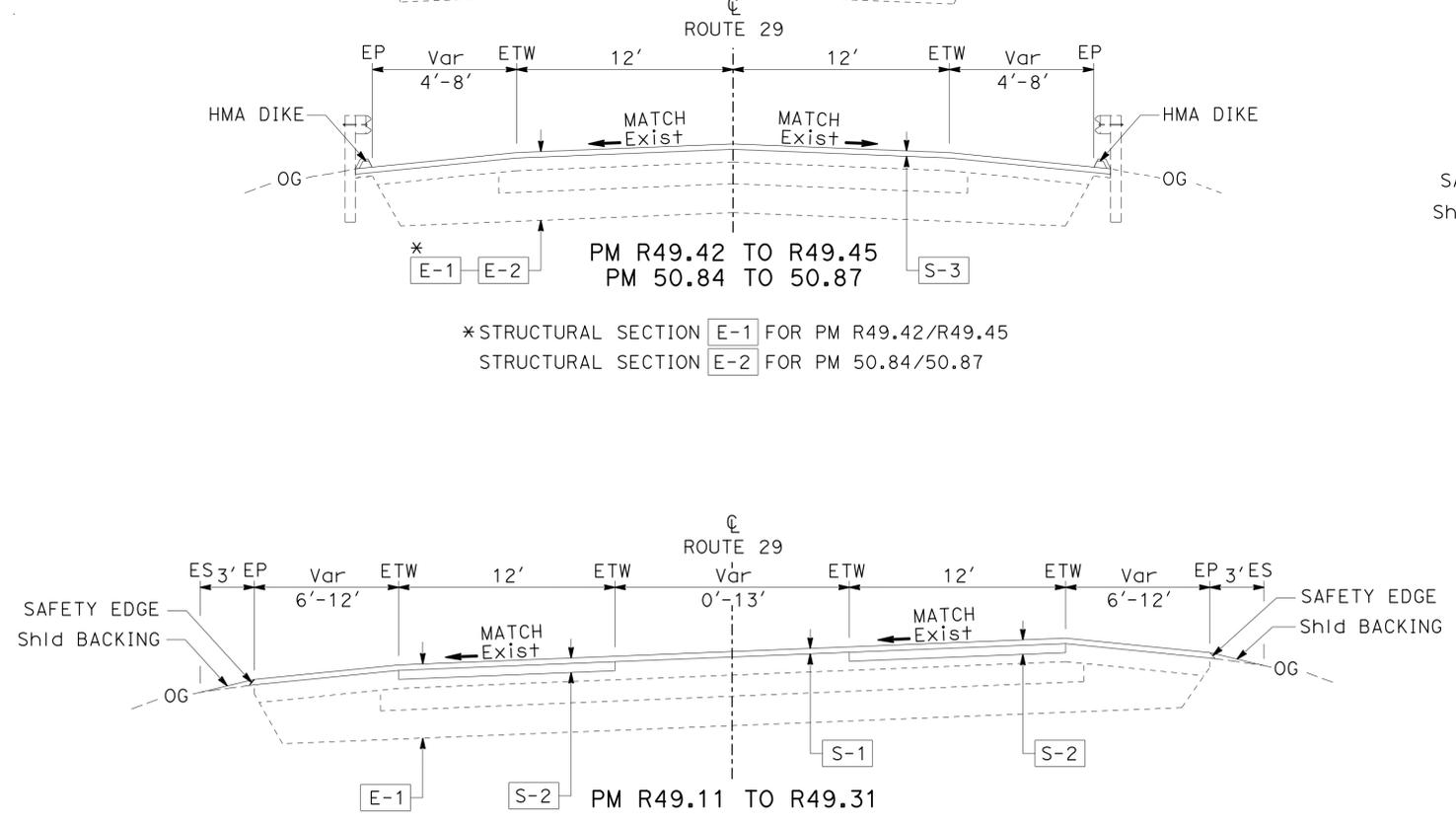
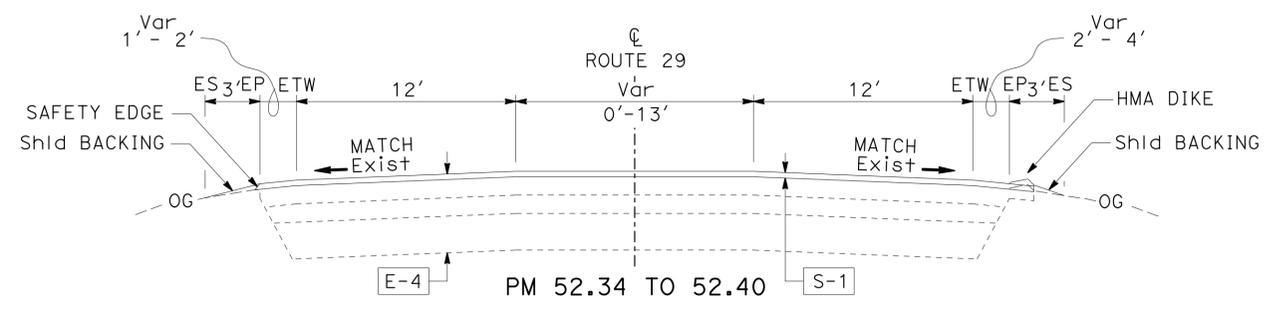
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**STRUCTURAL SECTION S-1 FOR PM 50.87/51.05
 PM 51.23/51.41
 PM 51.52/51.66
 STRUCTURAL SECTION S-2 FOR PM 51.05/51.23
 PM 51.41/51.52
 PM 51.66/52.08
 PM 52.21/52.34



*STRUCTURAL SECTION E-1 FOR PM R49.42/R49.45
 STRUCTURAL SECTION E-2 FOR PM 50.84/50.87



ROUTE 29

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

TYPICAL CROSS SECTIONS

NO SCALE

X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 FUNCTIONAL SUPERVISOR ROYAL MCCARTHY
 CALCULATED/DESIGNED BY
 CHECKED BY
 JOHNATHON JACKSON
 GAVIN KEATING
 REVISED BY
 DATE REVISED

USERNAME => johnathon_jackson
 DGN FILE => 10c830ca002.dgn



UNIT 0052

PROJECT NUMBER & PHASE

01130000641

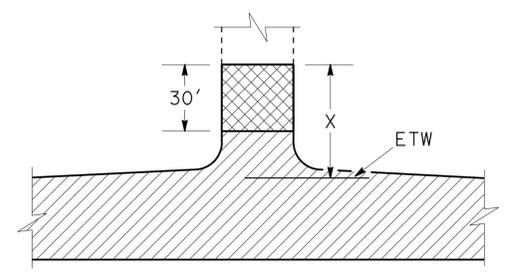
LAST REVISION DATE PLOTTED => 05-FEB-2014
 01-16-14 TIME PLOTTED => 09:05

NOTES

- FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- IN AREAS WHERE THE WIDTH OF THE EXISTING SURFACING VARIES FROM THAT SHOWN, VARY THE WIDTH OF THE PAVING OPERATIONS AS DIRECTED BY THE ENGINEER.

LEGEND

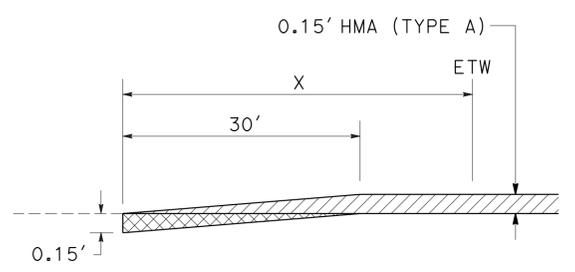
- LIMITS OF COLD PLANE AC PAVEMENT PRIOR TO HMA (TYPE A) OVERLAY
- LIMITS OF COLD PLANE PCC APPROACH SLAB AND PLACE POLYESTER CONCRETE
- LIMITS OF REPLACE AC SURFACING TO A DEPTH OF 0.25'
- LIMITS OF COLD PLANE AC ON APPROACH SLAB AND PLACE POLYESTER CONCRETE
- LIMITS OF REMOVE AC AND PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)
- LIMITS OF COLD IN-PLACE RECYCLE
- LIMITS OF HMA (TYPE A)



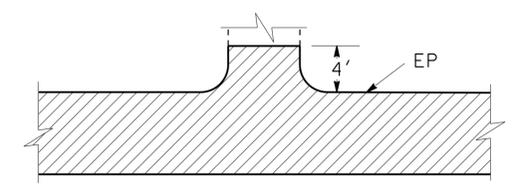
PUBLIC ROAD CONNECTION

LOCATION	PM	X FT
WESTLAKE Rd	R49.21 R+	145
MOCKINGBIRD Ln	R49.21 L+	100
TULE LAKE Rd	52.04 L+	58

LIMITS OF SURFACING FOR PUBLIC ROAD CONNECTIONS



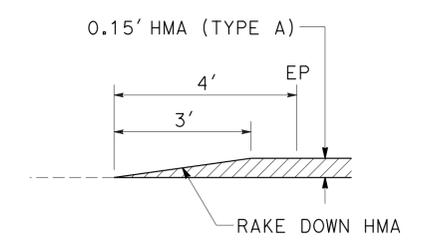
COLD PLANE AC PAVEMENT AT PUBLIC ROAD CONNECTIONS



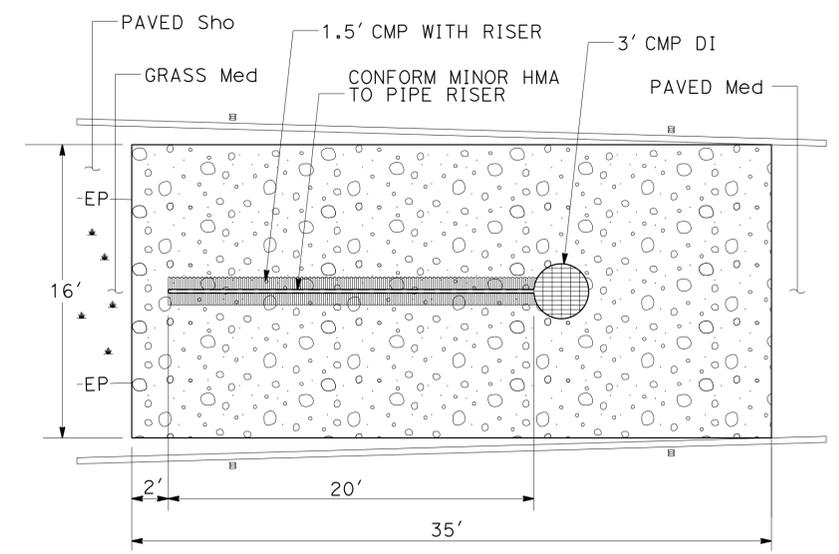
PRIVATE ROAD CONNECTION

DESCRIPTION	PM
PRIVATE Rd	50.84 L+
PRIVATE Rd	51.08 L+
PRIVATE ACCESS	51.09 R+
PRIVATE Dr	51.22 R+
PRIVATE Dr	51.73 L+
PRIVATE Dr	51.74 R+
PRIVATE Dr	51.81 R+

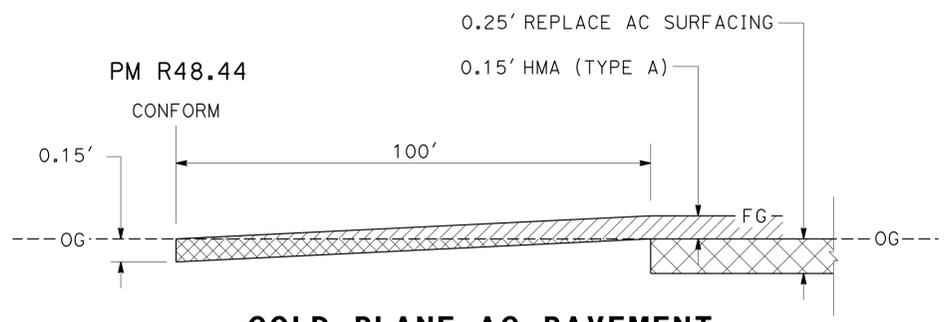
LIMITS OF SURFACING FOR PRIVATE ROAD CONNECTIONS



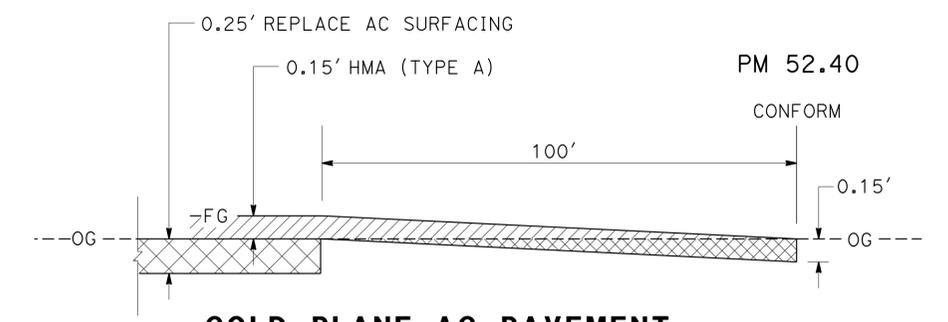
HMA CONFORM AT PRIVATE ROAD CONNECTIONS



REMOVE AC PLACE HMA (MISC AREA)



COLD PLANE AC PAVEMENT AT SOUTH PROJECT CONFORM



COLD PLANE AC PAVEMENT AT NORTH PROJECT CONFORM

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

CONSTRUCTION DETAILS
NO SCALE

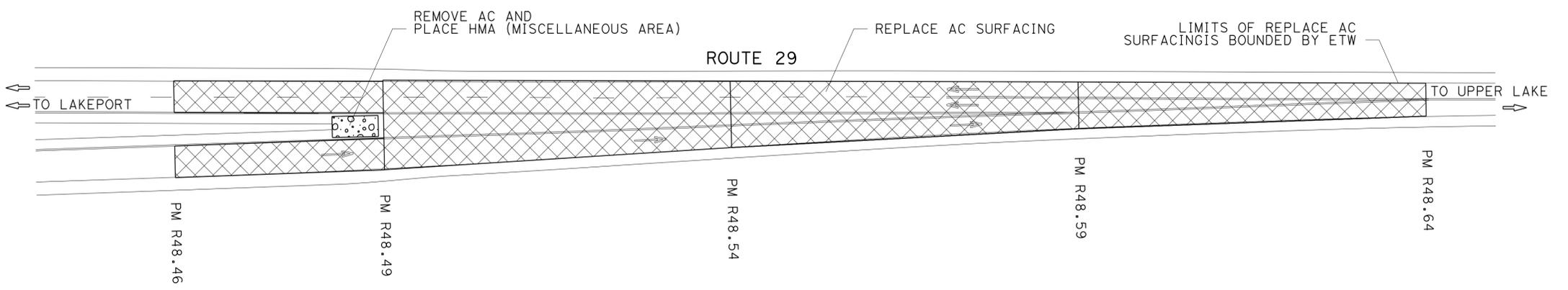
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans
 FUNCTIONAL SUPERVISOR: ROYAL MCCARTHY
 CALCULATED/DESIGNED BY: JOHNATHON JACKSON
 CHECKED BY: GAVIN KEATING
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32,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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	6	24

Curtis D. Coburn
 REGISTERED CIVIL ENGINEER DATE 1-29-14
 February 3, 2014
 PLANS APPROVAL DATE

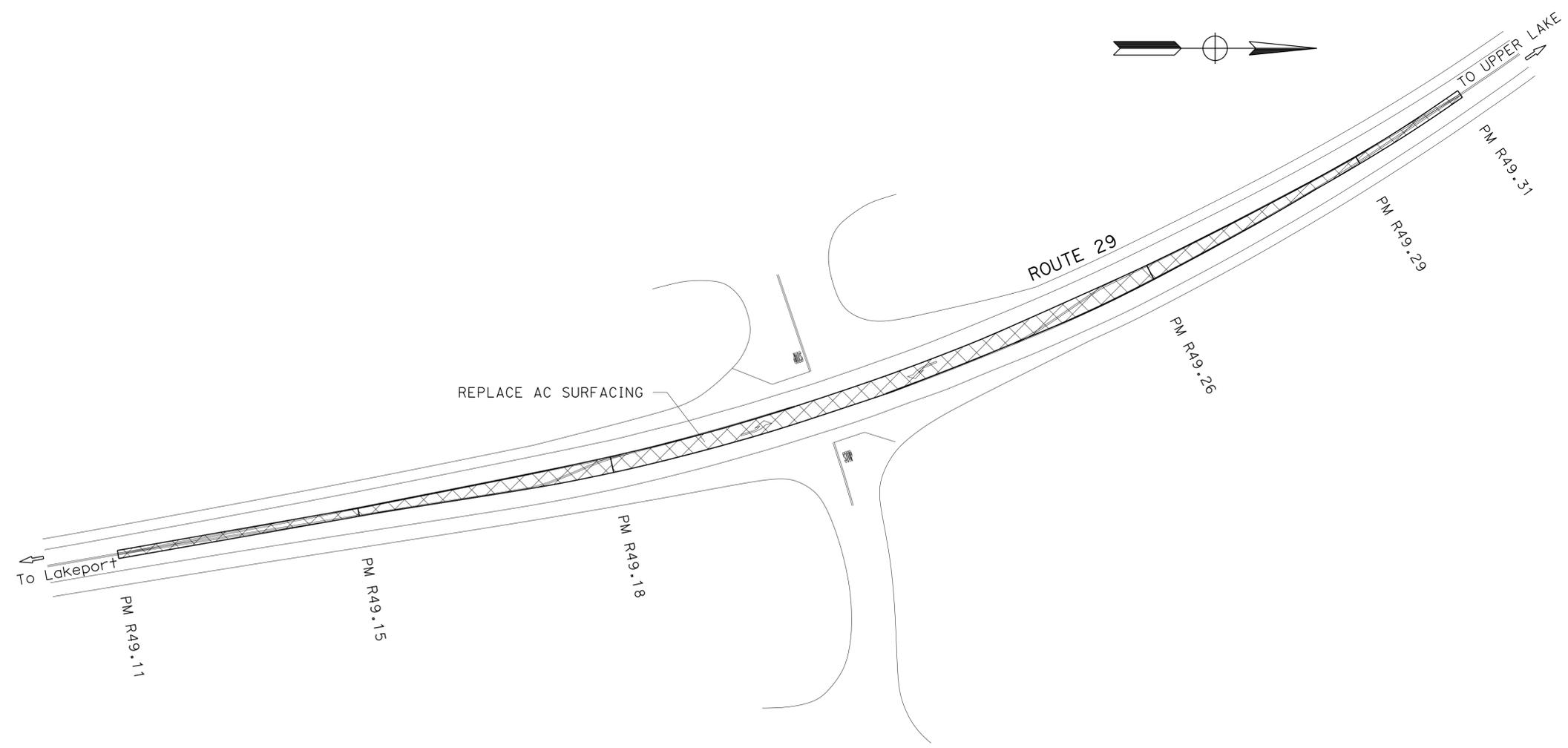
REGISTERED PROFESSIONAL ENGINEER
 CURTIS D. COBURN
 No. 58431
 Exp. 12-31-14
 CIVIL
 STATE OF CALIFORNIA

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



MISCELLANEOUS HMA
PM R48.48 TO R48.49

REPLACE AC SURFACING
PM R48.49 TO R48.64



REPLACE AC SURFACING
PM R49.11 TO R49.31

CONSTRUCTION DETAILS
NO SCALE
C-3

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FUNCTIONAL SUPERVISOR ROYAL MCCARTHY
CALCULATED/DESIGNED BY CHECKED BY
JOHNATHON JACKSON GAVIN KEATING
REVISED BY DATE REVISED

USERNAME => johnathon_jackson
DGN FILE => 10c830ga003.dgn

RELATIVE BORDER SCALE
1" = 15' IN INCHES

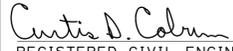
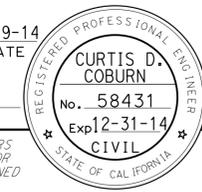
UNIT 0052

PROJECT NUMBER & PHASE

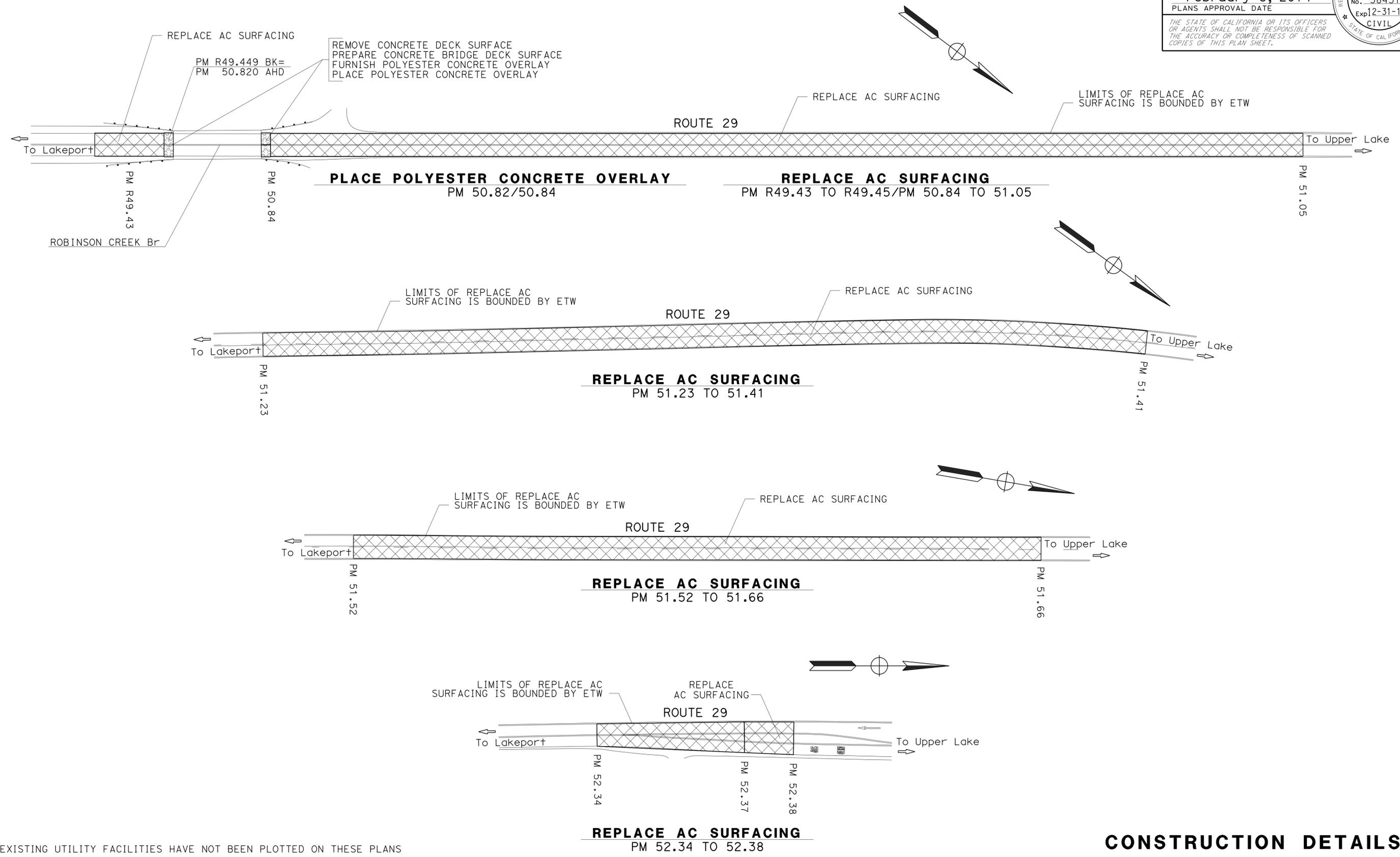
01130000641

LAST REVISION DATE PLOTTED => 05-FEB-2014
01-13-14 TIME PLOTTED => 09:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	7	24

 REGISTERED CIVIL ENGINEER DATE 1-29-14		
February 3, 2014 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. PREPARE CONCRETE BRIDGE DECK SURFACE WORK ONLY APPLIES TO THE ROBINSON CREEK BRIDGE APPROACH SLABS.



EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

CONSTRUCTION DETAILS
 NO SCALE
C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR ROYAL MCCARTHY
CALCULATED/DESIGNED BY GAVIN KEATING
CHECKED BY JOHNATHAN JACKSON
REVISOR DATE

USERNAME => johnathon_jackson
 DGN FILE => 10c830ga004.dgn



UNIT 0052

PROJECT NUMBER & PHASE

01130000641

LAST REVISION DATE PLOTTED => 05-FEB-2014
 01-13-14 TIME PLOTTED => 09:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	9	24

Curtis D. Coburn
 REGISTERED CIVIL ENGINEER 1-29-14 DATE
 February 3, 2014
 PLANS APPROVAL DATE

No. 58431
 Exp 12-31-14
 CIVIL

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

NOTES:

1. WHEN DETAIL 19 IS SHOWN, THE SOLID BARRIER SHALL BE PLACED ON THE SIDE DESIGNATED (R=RIGHT, L=LEFT) AS PM'S INCREASE.
2. (N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

PAVEMENT MARKING QUANTITIES

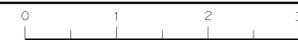
LOCATION (PM)	ORIENTATION	LEGEND	REMOVE THERMOPLASTIC PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING (PAINT)	THERMOPLASTIC PAVEMENT MARKING	REMARKS
			SQFT			
48.50 R+	FNBT	TYPE V ARROW		33	33	NB LANE
48.54 R+	FNBT	TYPE V ARROW		33	33	NB LANE
48.58 L+	FSBT	TYPE V ARROW		33	33	SB No. 1 LANE
48.58 L+	FSBT	TYPE V ARROW		33	33	SB No. 2 LANE
48.58 R+	FNBT	TYPE V ARROW		33	33	NB LANE
48.68 L+	FSBT	TYPE V ARROW		33	33	SB LANE
48.68 R+	FNBT	TYPE V ARROW		33	33	NB LANE
48.78 L+	FSBT	TYPE V ARROW		33	33	SB LANE
48.78 R+	FNBT	TYPE V ARROW		33	33	NB LANE
49.20 R+	FNBT	TYPE III (L) ARROW		42	42	LEFT TURN LANE TO MOCKINGBIRD Ln
49.21 L+	FEBT	LIMIT LINE	62		62	MOCKINGBIRD Ln
49.21 L+	FEBT	STOP	22		22	MOCKINGBIRD Ln
49.21 R+	FWBT	LIMIT LINE	48		48	WESTLAKE Rd
49.21 R+	FWBT	STOP	22		22	WESTLAKE Rd
49.22 L+	FSBT	TYPE III (L) ARROW		42	42	LEFT TURN LANE TO WESTLAKE Rd
52.04 L+	FEBT	LIMIT LINE	24		24	TULE LAKE Rd
52.04 L+	FEBT	STOP	22		22	TULE LAKE Rd
52.39 R+	FNBT	STOP		22	22	
52.39 R+	FNBT	AHEAD		31	31	
52.40 L+	FSBT	TYPE I (24') ARROW		31	31	
TOTALS			200	465	665	

TRAFFIC STRIPE AND PAVEMENT MARKER QUANTITIES

LOCATION (PM)	DETAIL NUMBER	DETAIL LENGTH	THERMOPLASTIC TRAFFIC STRIPE					TEMPORARY TRAFFIC STRIPE (PAINT)			PAVEMENT MARKER				REMOVE PAVEMENT MARKERS (N)	REMARKS	
			8 INCH WHITE	4 INCH YELLOW	4 INCH WHITE	4 INCH WHITE (BROKEN 12-3)	4 INCH YELLOW (BROKEN 36-12)	4 INCH WHITE (BROKEN 36-12)	8 INCH WHITE	4 INCH YELLOW	4 INCH WHITE (BROKEN 36-12)	NON-REFLECTIVE		RETROREFLECTIVE			
FROM	TO		LF						EA								
R48.44 R+	R48.50 R+	25	317							317					8	8	
R48.44 L+	R48.50 L+	25	317		317					317					8	8	
R48.44 R+	R49.19 R+	27B	3960			3960											
R48.44 L+	R49.18 L+	27B	3908			3908											
R48.44 L+	R48.58 L+	11/13	740					740			740	68		17			85
R48.50	R48.60	29	529		2116					529			48				48
R48.58	R48.66	29	423		1692					423			38				38
R48.66	R48.68	22	106		212					106			12				12
R48.68	R48.77	19R	476		476			476		476			11		21		32
R48.77	R49.00	6	1215					1215		1215			27				27
R49.00	R49.08	19L	423		423			423		423			10		19		29
R49.08	R49.09	22	53		106					53			8				8
R49.09	R49.17	29	423		1692					423			38				38
R49.17	R49.20	22	159		318					159			16				16
R49.17 R+	R49.19 R+	38	125	125					125					7			7
SUBTOTAL			125	7669	7868	0	2114	740	125	4441	740	68	208	24	56		356
TOTAL SHEET PDQ-1			125	15537		0	2854		125	5306		68	288				356

PAVEMENT DELINEATION QUANTITIES

PDQ-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	10	24

Curtis D. Coburn
REGISTERED CIVIL ENGINEER DATE 1-29-14
February 3, 2014
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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

TRAFFIC STRIPE AND PAVEMENT MARKER QUANTITIES

LOCATION (PM)	DETAIL NUMBER	DETAIL LENGTH	THERMOPLASTIC TRAFFIC STRIPE						TEMPORARY TRAFFIC STRIPE (PAINT)			PAVEMENT MARKER				REMOVE PAVEMENT MARKERS (N)	REMARKS
			8 INCH WHITE	4 INCH YELLOW	4 INCH WHITE	4 INCH WHITE (BROKEN 12-3)	4 INCH YELLOW (BROKEN 36-12)	4 INCH WHITE (BROKEN 36-12)	8 INCH WHITE	4 INCH YELLOW	4 INCH WHITE (BROKEN 36-12)	NON-REFLECTIVE TYPE A	RETROREFLECTIVE TYPE D TYPE G TYPE H				
FROM TO			LF						EA								
R49.18 Lt R49.23 Lt	27C	264				264											MOCKINGBIRD Ln
R49.19 Rt R49.24 Rt	27C	264				264											WESTLAKE Rd
R48.21 Lt	22	100		200					100			12			12		MOCKINGBIRD Ln
R49.21 Rt	22	145		290					145			16			16		WESTLAKE Rd
R49.21 R49.23	22	106		212					106			12			12		
R49.21 Lt R49.23 Lt	38	98	98					98					6		6		LEFT TURN LANE TO WESTLAKE Rd
R49.23 R49.31	29	423		1692					423			38			38		
R49.23 Lt R49.45 Lt	27B	1162				1162											
R49.24 Rt R49.45 Rt	27B	1109				1109											
R49.31 R49.45	22	740		1480					740			64			64		
EQUATION Sta R49.449 Bk = 50.820 Ahd																	
50.82 50.84	22	96		192					96			10			10		ROBINSON CREEK BRIDGE
50.82 Rt 52.40 Rt	27B	8343				8343											
50.82 Lt 52.02 Lt	27B	6337				6337											
50.84 50.97	22	697		1394					697			62			62		
50.97 51.21	6	1268						1268	1268			28			28		
51.21 51.42	19R	1109		1109				1109	1109			25		48	73		
51.42 51.46	22	212		424					212			20			20		
51.46 51.64	19L	951		951				951	951			21		41	62		
51.64 51.76	6	634						634	634			15			15		
51.76 51.90	19R	740		740				740	740			17		32	49		
51.90 52.00	6	529						529	529			13			13		
52.00 52.03	22	159		318					159			16			16		
52.02 Lt 52.04 Lt	27C	106				106											TULE LAKE Rd
52.04 Lt	22	58		116					58			8			8		TULE LAKE Rd
52.04 52.11	22	370		740					370			34			34		
52.04 Lt 52.40 Lt	27B	1901				1901											
52.11 52.17	22	337		674					337			32			32		SCOTTS CREEK BRIDGE
52.17 52.34	22	878		1756					878			76			76		
52.34 52.40	29	317		1268					317			30			30		
SUBTOTAL			98	13556	18852	634	5231	0	98	9869	0	0	549	6	121	676	
TOTAL SHEET PDQ-2			98	32408		634	5231			9967		0		676		676	
TOTAL SHEET PDQ-1			125	15537		0	2854			5306		68		288		356	
TOTAL			223	47945		634	8085			15273		68		964		1032	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FUNCTIONAL SUPERVISOR: ROYAL MCCARTHY
CALCULATED/DESIGNED BY: JOHNATHON JACKSON
CHECKED BY: GAVIN KEATING
REVISED BY: DATE
DATE REVISION: 01-13-14 TIME PLOTTED => 09:06

PAVEMENT DELINEATION QUANTITIES

PDQ-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	12	24

Curtis D. Coburn
REGISTERED CIVIL ENGINEER DATE 1-29-14
February 3, 2014
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp 12-31-14
CIVIL
STATE OF CALIFORNIA

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

ROADWAY

LOCATION (PM)	Avg WIDTH	LENGTH	REPLACE ASPHALT CONCRETE SURFACING	COLD PLANE ASPHALT CONCRETE PAVEMENT	COLD IN-PLACE RECYCLING	EMULSIFIED RECYCLING AGENT (COLD IN-PLACE RECYCLING)	CEMENT (COLD IN-PLACE RECYCLING)	SAND COVER (COLD IN-PLACE RECYCLING)	ASPHALTIC EMULSION (COLD IN-PLACE RECYCLING)	HMA (TYPE A)	TACK COAT	REMARKS
R48.44 R+	R48.46 R+	40.0	100		445							COLD PLANE - TAPER 0.00' TO 0.15' DEPTH OVER 100'
R48.44 L+	R48.46 L+	40.0	100		445							COLD PLANE - TAPER 0.00' TO 0.15' DEPTH OVER 100'
R48.44 R+	R48.50 R+	40.0	317							167.7	0.6	
R48.44 L+	R48.50 L+	40.0	317							167.7	0.6	
R48.46 R+	R49.49 R+	24.0	159	36								NB LANE
R48.46 L+	R48.49 L+	24.0	159	36								SB No. 1 & No. 2 LANES
R48.49	R48.54	59.5	264	146								Med & NB/SB TRAVEL WAY - TAPER 68' TO 51' WIDTH
R48.50	R48.64	59.0	740							578.8	2.0	
R48.54	R48.59	43.5	264	107								Med & NB/SB TRAVEL WAY - TAPER 51' TO 36' WIDTH
R48.59	R48.64	30.5	264	75								Med & NB/SB TRAVEL WAY - TAPER 36' TO 25' WIDTH
R48.64 R+	R49.42 R+	12.0	4119			5492	34.6	8.7	5.5	1.5		NB LANE
R48.64 L+	R49.42 L+	12.0	4119			5492	34.6	8.7	5.5	1.5		SB LANE
R48.64	R49.02	38.0	2007							1018.4	3.5	
R49.02	R49.18	49.0	845							550.6	1.9	
R49.11	R49.15	6.0	185	11								L+ TURN LANE TO MOCKINGBIRD Ln - HOLD 6' WIDTH
R49.15	R49.18	9.5	185	17								L+ TURN LANE TO MOCKINGBIRD Ln - TAPER 6' TO 13' WIDTH
R49.18	R49.26	13.0	422	51								L+ TURN LANE - HOLD 13' WIDTH
R49.18	R49.24	60.0	317							252.2	0.9	
R49.21 R+		140.0	145		207					266.2	0.9	WESTLAKE Rd
R49.21 L+		99.0	95		328					123.3	0.4	MOCKINGBIRD Ln
R49.24	R49.32	54.0	423							303.1	1.1	
R49.26	R49.29	9.5	159	14								L+ TURN LANE TO WESTLAKE Rd - TAPER 13' TO 6' WIDTH
R49.29	R49.31	6.0	106	6								L+ TURN LANE TO WESTLAKE Rd - HOLD 6' WIDTH
R49.32	R49.44	48.0	634							404.8	1.4	
R49.42	R49.43	48.0	100		534							COLD PLANE - TAPER 0.00' TO 0.15' DEPTH OVER 100'
R49.43	R49.45	39.0	75		326							COLD PLANE - 0.15' DEPTH OVER 75'
R49.43	R49.45	25.0	75	18								REPLACE AC SURFACING AFTER COLD PLANE
R49.44	R49.45	34.5	53							24.4	0.1	ROBINSON CREEK BRIDGE SOUTH APPROACH
EQUATION Sta R49.449 Bk = 50.820 Ahd												
50.84	50.85	34.0	55		208							COLD PLANE - 0.15' DEPTH OVER 55'
50.84	51.05	24.0	1109	247						24.1	0.1	REPLACE AC SURFACING AFTER COLD PLANE
50.84	50.85	34.0	53									ROBINSON CREEK BRIDGE NORTH APPROACH
50.85	50.87	38.0	100		423							COLD PLANE - TAPER 0.15' TO 0.00' DEPTH OVER 100'
50.85	50.86	33.0	53							23.4	0.1	
50.86	51.38	28.0	2746							1033.6	3.6	
51.05 R+	51.23 R+	12.0	951			1268	8.0	2.0	1.3	0.3		NB LANE
51.05 L+	51.23 L+	12.0	951			1268	8.0	2.0	1.3	0.3		SB LANE
51.23	51.41	24.0	951	212								
51.38	51.52	32.0	740							317.2	1.1	
51.41 R+	51.52 R+	12.0	581			775	4.9	1.3	0.8	0.2		NB LANE
51.41 L+	51.52 L+	12.0	581			775	4.9	1.3	0.8	0.2		SB LANE
51.41 L+	51.45 L+	12.0	200							31.5	0.1	WIDE Shld
TOTAL SHEET Q-2			976	2916	15070	95.0	24.0	15.2	4.0	5287.0	18.4	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

REVISOR BY: JOHNATHON JACKSON
DATE REVISOR: GAVIN KEATING

CALCULATED BY: ROYAL MCCARTHY
DESIGNED BY: ROYAL MCCARTHY

**SUMMARY OF QUANTITIES
Q-2**

LAST REVISION DATE PLOTTED => 05-FEB-2014 01-16-14 TIME PLOTTED => 09:06

P:\PROJ\01\0830\draft\ing\sheet\10e830va001.dgn

	M	
Maint	MAINTENANCE	
Max	MAXIMUM	
MB	METAL BEAM	
MBB	METAL BEAM BARRIER	
MBGR	METAL BEAM GUARD RAILING	
Med	MEDIAN	
MGS	MIDWEST GUARDRAIL SYSTEM	
MH	MANHOLE	
Min	MINIMUM	
Misc	MISCELLANEOUS	
Misc I & S	MISCELLANEOUS IRON AND STEEL	
Mkr	MARKER	
Mod	MODIFIED, MODIFY	
Mon	MONUMENT	
MP	METAL PLATE	
MPGR	METAL PLATE GUARD RAILING	
MR	MOVEMENT RATING	
MSE	MECHANICALLY STABILIZED EMBANKMENT	
Mt	MOUNTAIN, MOUNT	
MtI	MATERIAL	
MVP	MAINTENANCE VEHICLE PULLOUT	
	N	
N	NORTH	
NB	NORTHBOUND	
No.	NUMBER (MUST HAVE PERIOD)	
Nos.	NUMBERS (MUST HAVE PERIOD)	
NPS	NOMINAL PIPE SIZE	
NS	NEAR SIDE	
NSP	NEW STANDARD PLAN	
NTS	NOT TO SCALE	
	O	
Obir	OBLITERATE	
OC	OVERCROSSING	
OD	OUTSIDE DIAMETER	
OF	OUTSIDE FACE	
OG	ORIGINAL GROUND	
OGAC	OPEN GRADED ASPHALT CONCRETE	
OGFC	OPEN GRADED FRICTION COURSE	
OH	OVERHEAD	
OHWM	ORDINARY HIGH WATER MARK	
O-O	OUT TO OUT	
Opp	OPPOSITE	
OSD	OVERSIDE DRAIN	
	P	
p	PAGE	
PAP	PERFORATED ALUMINUM PIPE	
PB	PULL BOX	
PC	POINT OF CURVATURE, PRECAST	
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE	
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN	
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE	
PCVC	POINT OF COMPOUND VERTICAL CURVE	
PEC	PERMIT TO ENTER AND CONSTRUCT	
Ped	PEDESTRIAN	
Ped OC	PEDESTRIAN OVERCROSSING	
Ped UC	PEDESTRIAN UNDERCROSSING	
Perm MtI	PERMEABLE MATERIAL	

	P continued	
PG	PROFILE GRADE	
PI	POINT OF INTERSECTION	
PJP	PARTIAL JOINT PENETRATION	
Pkwy	PARKWAY	
PL, PL	PLATE	
P/L	PROPERTY LINE	
PM	POST MILE, TIME FROM NOON TO MIDNIGHT	
PN	PAVING NOTCH	
POC	POINT OF HORIZONTAL CURVE	
POT	POINT OF TANGENT	
POVC	POINT OF VERTICAL CURVE	
PP	PIPE PILE, PLASTIC PIPE, POWER POLE	
PPL	PREFORMED PERMEABLE LINER	
PPP	PERFORATED PLASTIC PIPE	
PRC	POINT OF REVERSE CURVE	
PRF	PAVEMENT REINFORCING FABRIC	
PRVC	POINT OF REVERSE VERTICAL CURVE	
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES	
PS, P/S	PRESTRESSED	
PSP	PERFORATED STEEL PIPE	
PT	POINT OF TANGENCY	
PVC	POLYVINYL CHLORIDE	
Pvmt	PAVEMENT	
	Q	
Qty	QUANTITY	
	R	
R	RADIUS	
R & D	REMOVE AND DISPOSE	
R & S	REMOVE AND SALVAGE	
R/C	RATE OF CHANGE	
RCA	REINFORCED CONCRETE ARCH	
RCB	REINFORCED CONCRETE BOX	
RCP	REINFORCED CONCRETE PIPE	
RCPA	REINFORCED CONCRETE PIPE ARCH	
Rd	ROAD	
Reinf	REINFORCED, REINFORCEMENT, REINFORCING	
Rel	RELOCATE	
Repl	REPLACEMENT	
Ret	RETAINING	
Rev	REVISED, REVISION	
Rdwy	ROADWAY	
RHMA	RUBBERIZED HOT MIX ASPHALT	
Riv	RIVER	
RM	ROAD-MIXED	
RP	RADIUS POINT, REFERENCE POINT	
RR	RAILROAD	
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN	
Rt	RIGHT	
Rte	ROUTE	
RW	REDWOOD, RETAINING WALL	
R/W	RIGHT OF WAY	
Rwy	RAILWAY	

	S	
S	SOUTH, SUPPLEMENT	
SAE	STRUCTURE APPROACH EMBANKMENT	
Salv	SALVAGE	
SAPP	STRUCTURAL ALUMINUM PLATE PIPE	
SB	SOUTHBOUND	
SC	SAND CUSHION	
SCSP	SLOTTED CORRUGATED STEEL PIPE	
SD	STORM DRAIN	
Sec	SECOND, SECTION	
Sep	SEPARATION	
SG	SUBGRADE	
Shld	SHOULDER	
Sht	SHEET	
Sim	SIMILAR	
SL	STATION LINE	
SM	SELECTED MATERIAL	
Spec	SPECIAL, SPECIFICATIONS	
SPP	SLOTTED PLASTIC PIPE	
SS	SLOPE STAKE	
SSBM	STRAP AND SADDLE BRACKET METHOD	
SSD	STRUCTURAL SECTION DRAIN	
SSPA	STRUCTURAL STEEL PLATE ARCH	
SSPP	STRUCTURAL STEEL PLATE PIPE	
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH	
SSRP	STEEL SPIRAL RIB PIPE	
St	STREET	
Sta	STATION	
STBB	SINGLE THRIE BEAM BARRIER	
Std	STANDARD	
Str	STRUCTURE	
Surf	SURFACING	
SW	SIDEWALK, SOUND WALL	
Swr	SEWER	
Sym	SYMMETRICAL	
S4S	SURFACE 4 SIDES	
	T	
T	SEMI-TANGENT	
Tan	TANGENT	
TBB	THRIE BEAM BARRIER	
Tbr	TIMBER	
TC	TOP OF CURB	
TCB	TRAFFIC CONTROL BOX	
TCE	TEMPORARY CONSTRUCTION EASEMENT	
TeI	TELEPHONE	
Temp	TEMPORARY	
TG	TOP OF GRADE	
ToI	TOTAL	
TP	TELEPHONE POLE	
TPB	TREATED PERMEABLE BASE	
TPM	TREATED PERMEABLE MATERIAL	
Trans	TRANSITION	

	T continued	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	U
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	V
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	W
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
X Sec	CROSS SECTION	
Xing	CROSSING	Y
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	14	24

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Grace M. Tsushima
 No. C49814
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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

TO ACCOMPANY PLANS DATED 02-03-14

UNIT OF MEASUREMENT SYMBOLS:

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

TABLE A

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:

TABLE B

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
ø	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.

2010 REVISED STANDARD PLAN RSP A10B

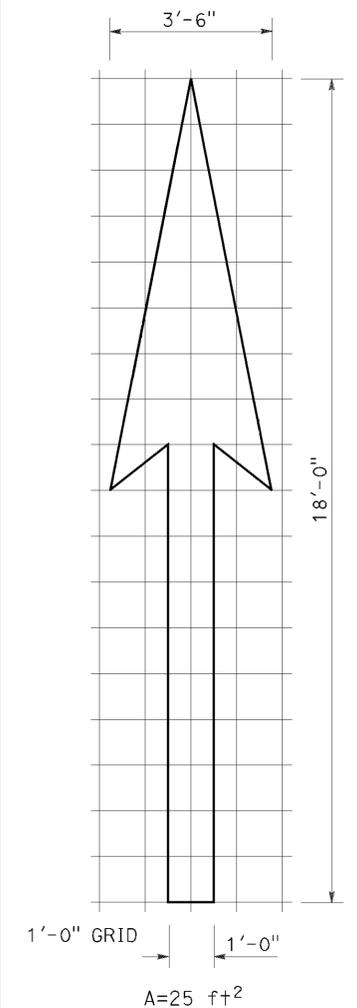
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	15	24

Registered Professional Engineer
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

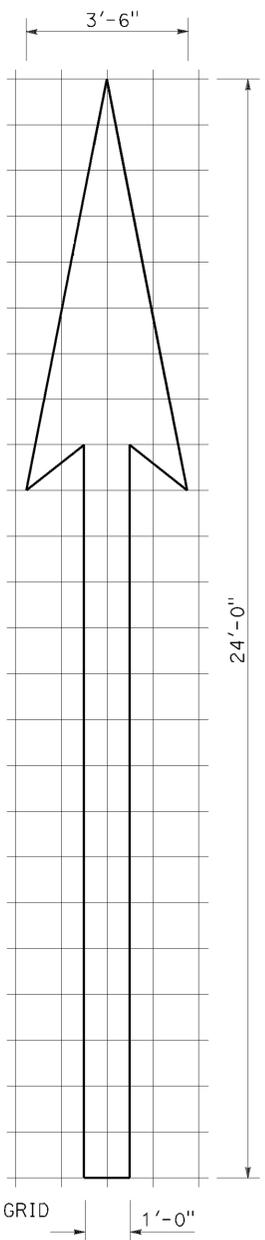
April 20, 2012
 PLANS APPROVAL DATE

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.

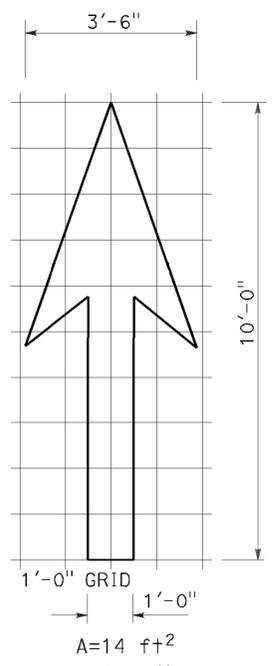
TO ACCOMPANY PLANS DATED 02-03-14



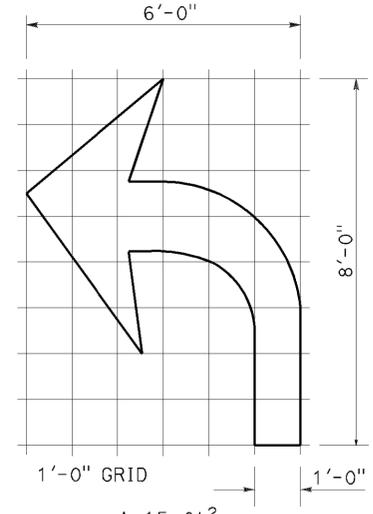
TYPE I 18'-0" ARROW



TYPE I 24'-0" ARROW

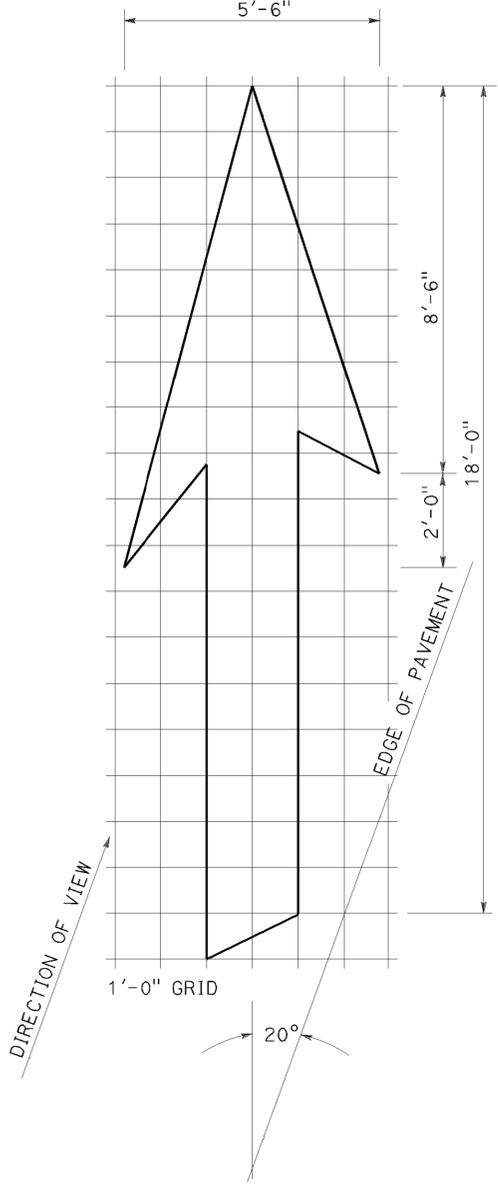


TYPE I 10'-0" ARROW



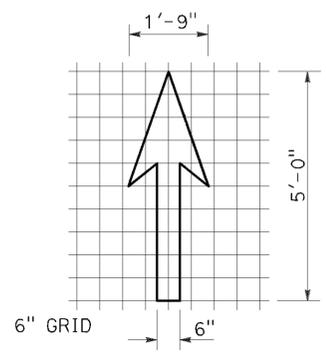
TYPE IV (L) ARROW

(For Type IV (R) arrow, use mirror image)

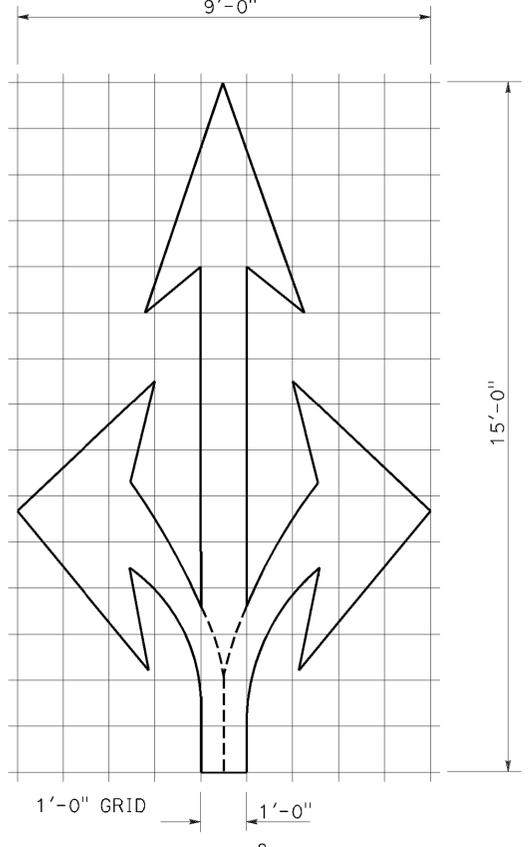


TYPE VI ARROW

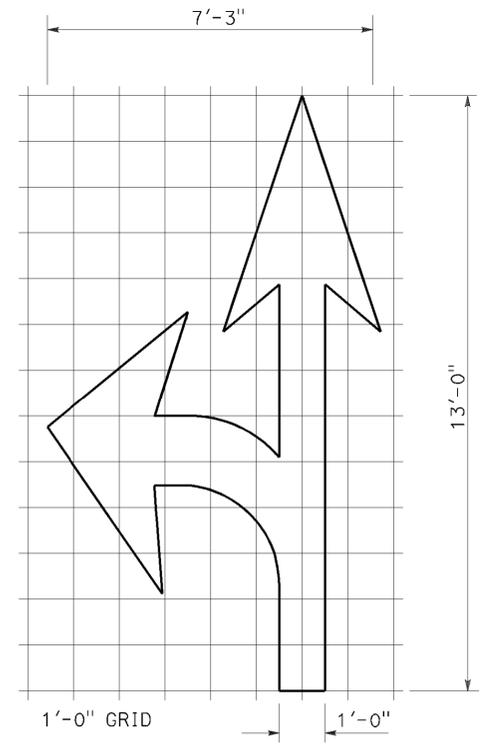
Right lane drop arrow
(For left lane, use mirror image)



BIKE LANE ARROW

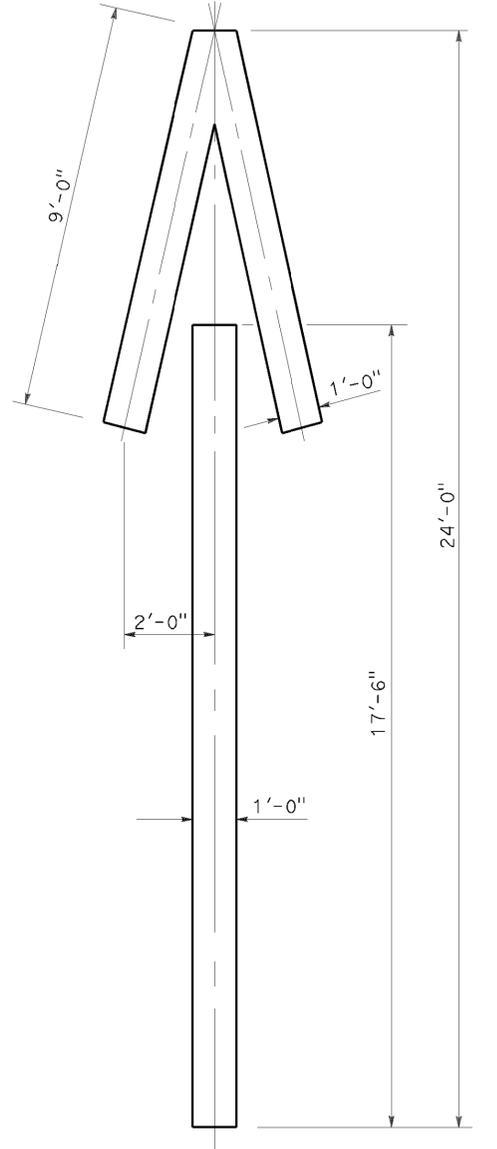


TYPE VIII ARROW



TYPE VII (L) ARROW

(For Type VII (R) arrow, use mirror image)



TYPE V ARROW

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

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

P:\PROJ\01\0830\Drawings\Sheets\10e830va002.dgn

2010 REVISED STANDARD PLAN RSP A24A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	16	24

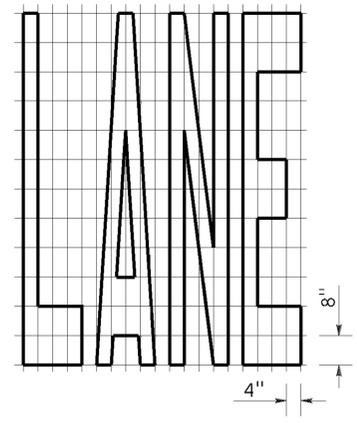
REGISTERED CIVIL ENGINEER
 Roberta L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

July 20, 2012
 PLANS APPROVAL DATE

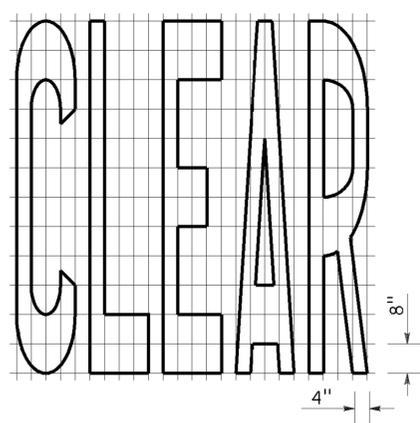
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 02-03-14

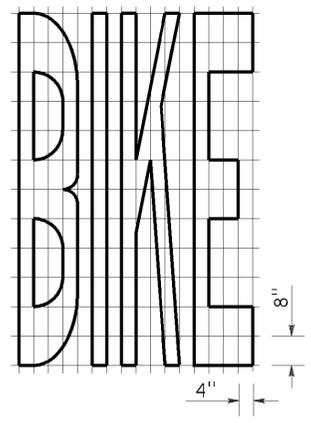
2010 REVISED STANDARD PLAN RSP A24E



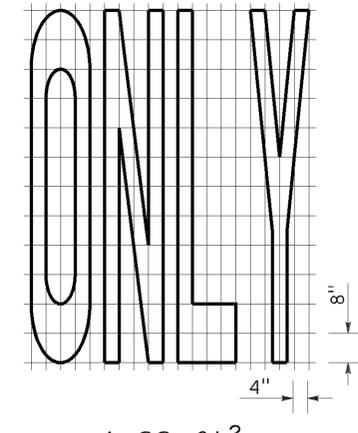
A=24 ft²



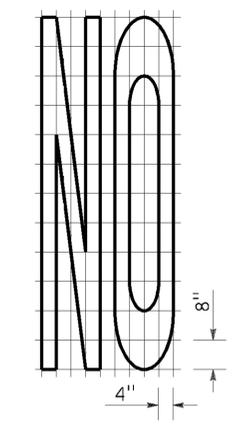
A=27 ft²



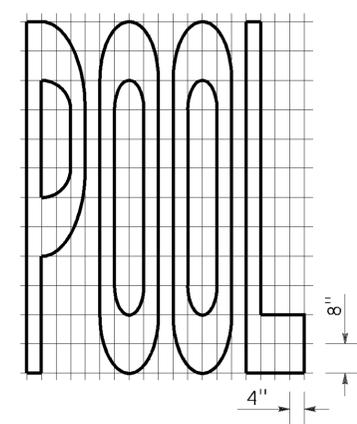
A=21 ft²



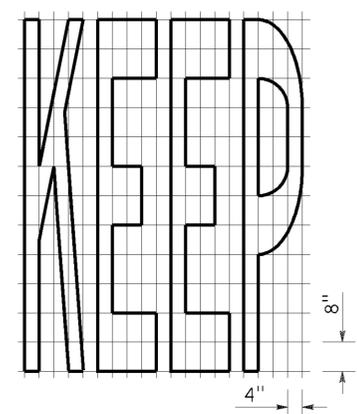
A=22 ft²



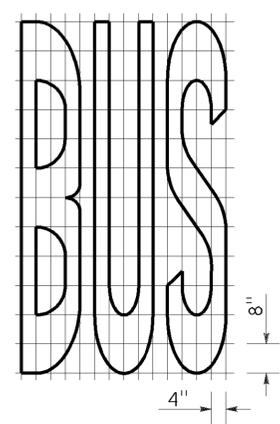
A=14 ft²



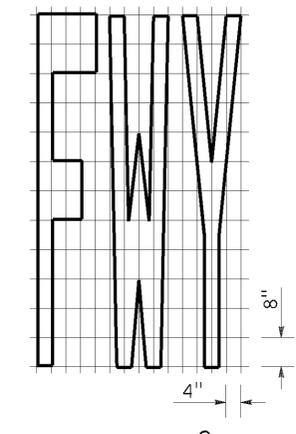
A=23 ft²



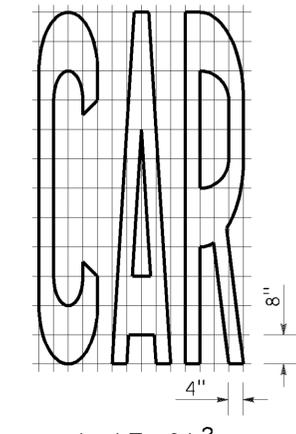
A=24 ft²



A=20 ft²

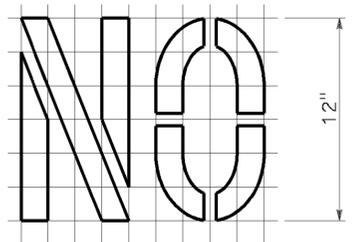


A=16 ft²



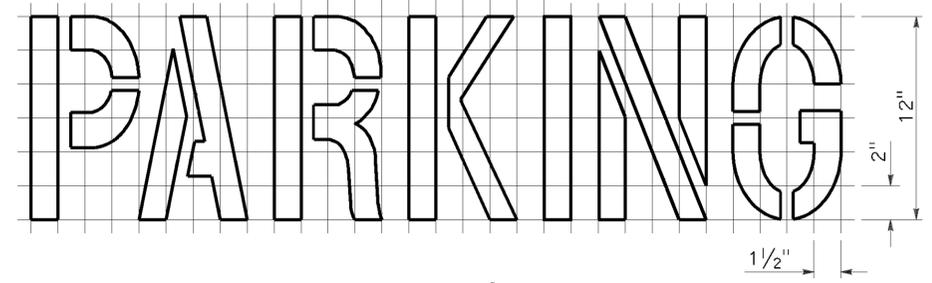
A=17 ft²

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



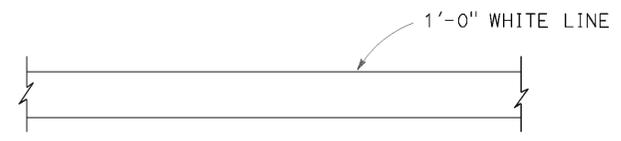
A=2 ft²

See Notes 6 and 7

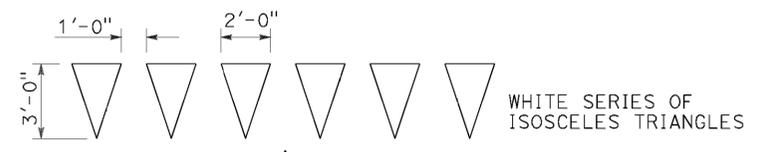


A=2 ft²

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

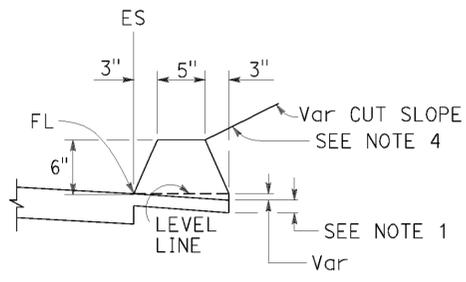
RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24E

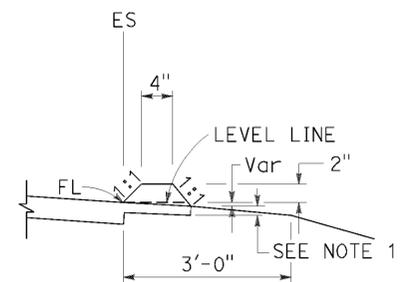
P:\PROJ\01\0830\drafting\sheet\10e830va003.dgn



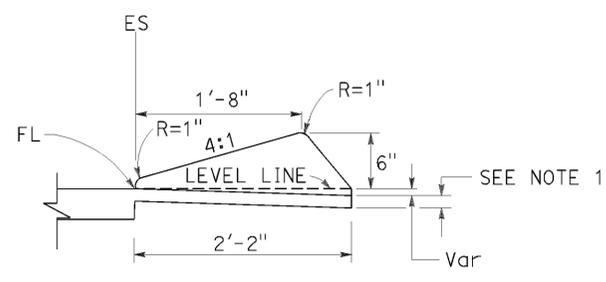
TO ACCOMPANY PLANS DATED 02-03-14



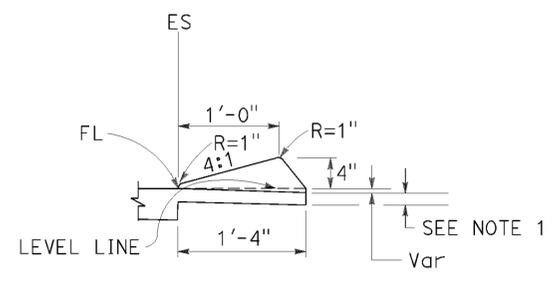
TYPE A
See Note 3



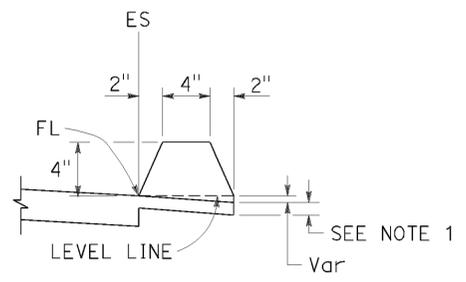
TYPE C



TYPE D

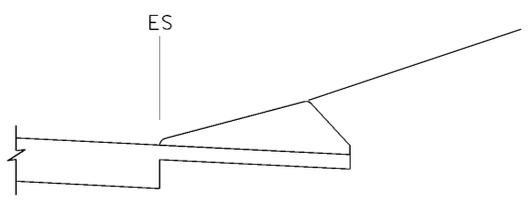


TYPE E

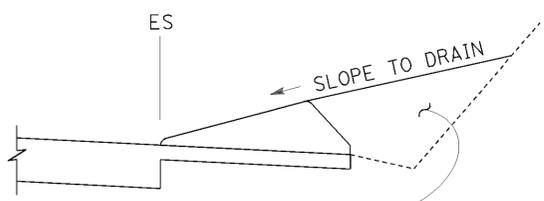


TYPE F
See Note 5

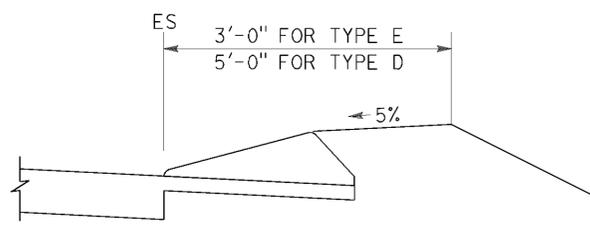
DIKES



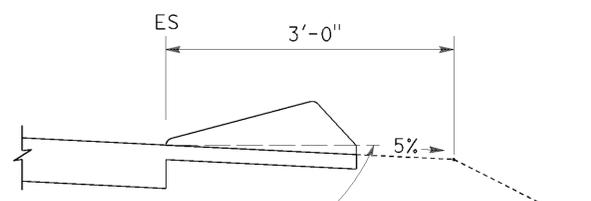
CASE C-1
Cut Slope



CASE C-2
Cut Slope



CASE F



CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

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

DIKE QUANTITIES

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

Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT DIKES

NO SCALE

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

REVISED STANDARD PLAN RSP A87B

P:\PROJ\01\0830\drafting\sheet\10e830va004.dgn

2010 REVISED STANDARD PLAN RSP A87B

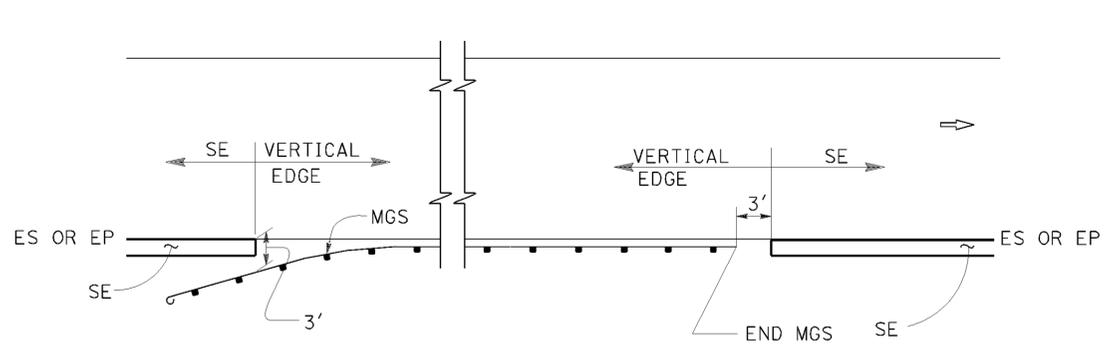
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	18	24

REGISTERED CIVIL ENGINEER
 November 15, 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.

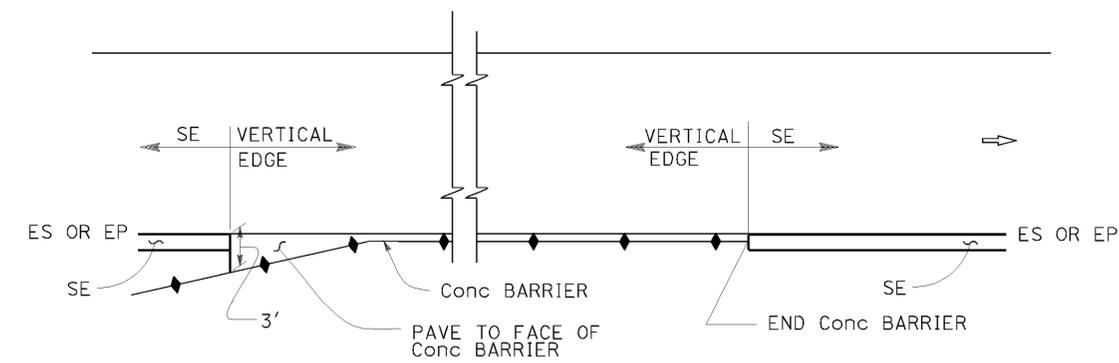
REGISTERED PROFESSIONAL ENGINEER
 Cornelis M. Hakim
 No. C55610
 Exp. 12-31-14
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 02-03-14

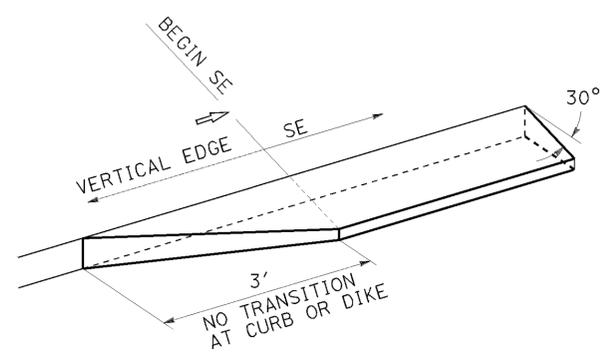
ABBREVIATIONS:
SE SAFETY EDGE



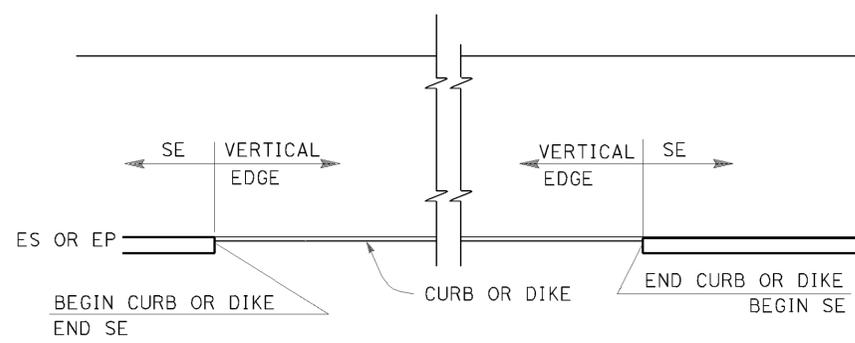
MGS



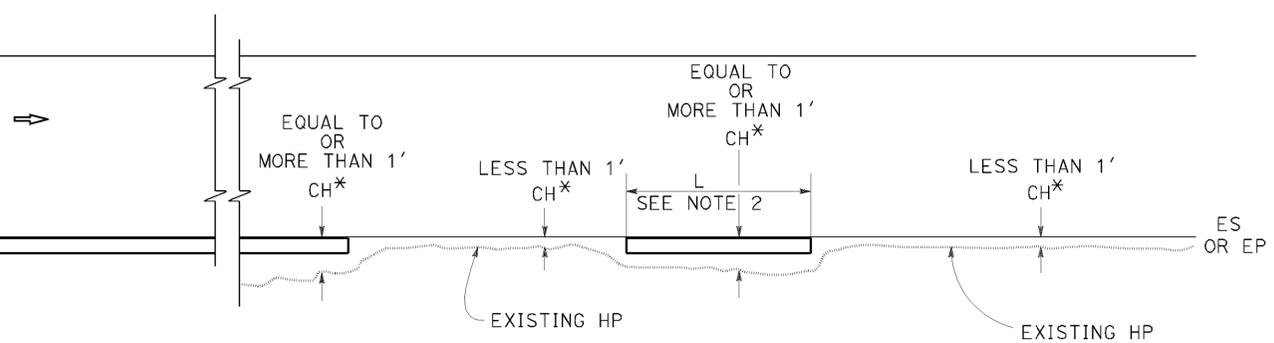
CONCRETE BARRIER



TRANSITION DETAIL FOR CONCRETE ONLY

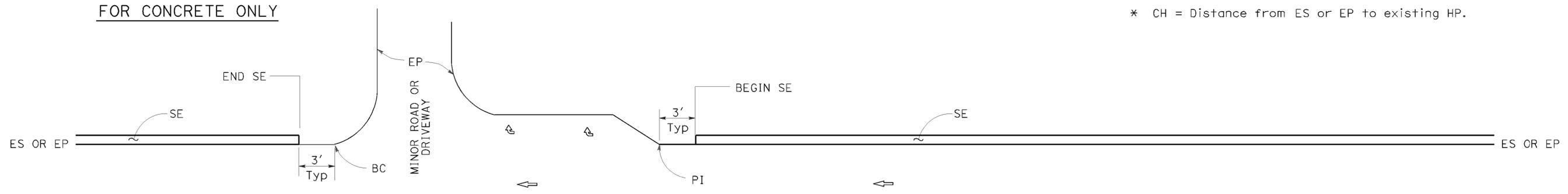


CURB OR DIKE



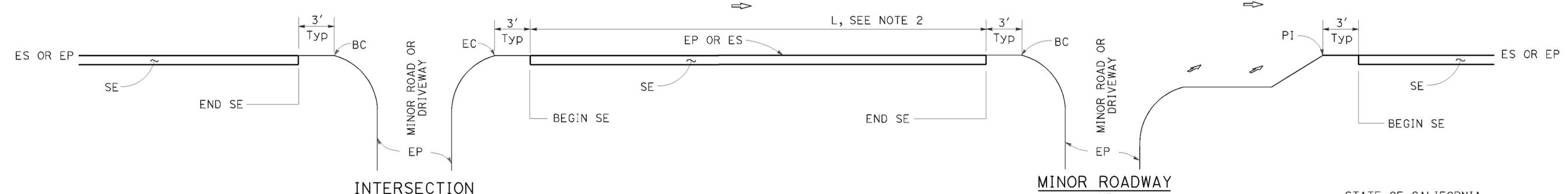
NARROW SIDE SLOPE

* CH = Distance from ES or EP to existing HP.



STATE ROUTE

STATE ROUTE



INTERSECTION

DRIVEWAY AND INTERSECTION

MINOR ROADWAY OR DRIVEWAY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS

NO SCALE

NOTES:

1. For details not shown, see Revised Standard Plans RSP P75 and RSP P76.
2. Safety edge is optional when L is less than 30'.

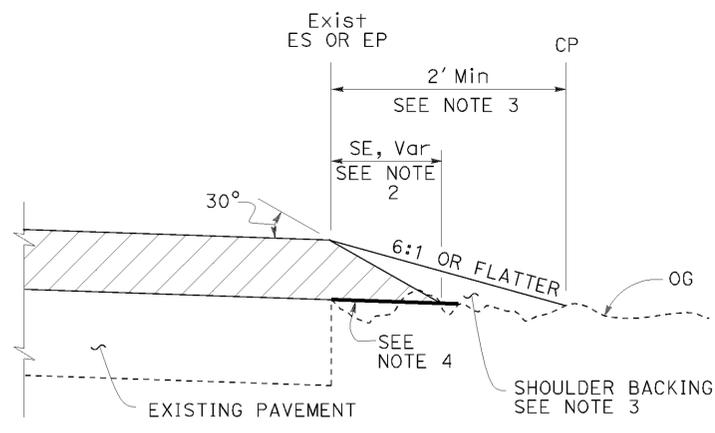
RSP P74 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P74 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P74

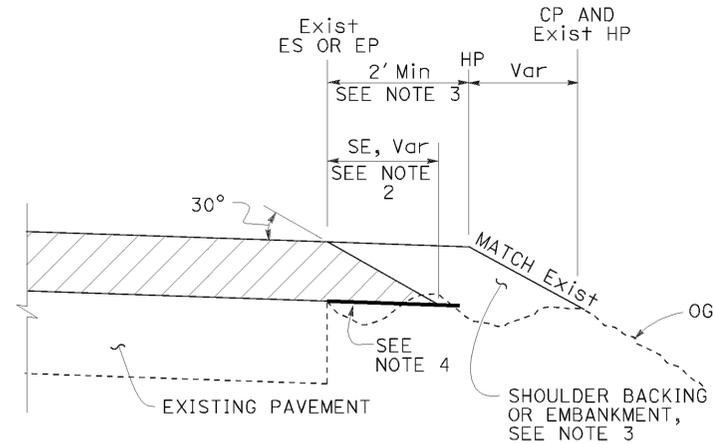
P:\PROJ\01\0830\drafting\sheet\10e830va005.dgn

2010 REVISED STANDARD PLAN RSP P74

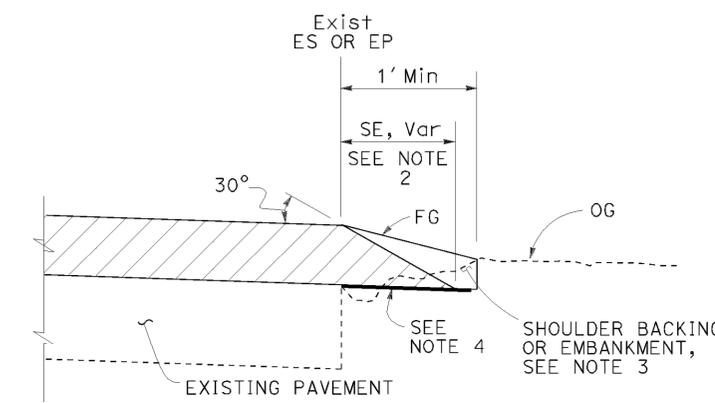
2010 REVISED STANDARD PLAN RSP P75



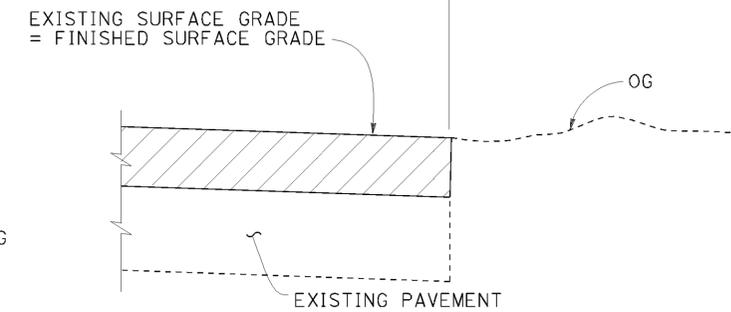
CASE A
Safety Edge



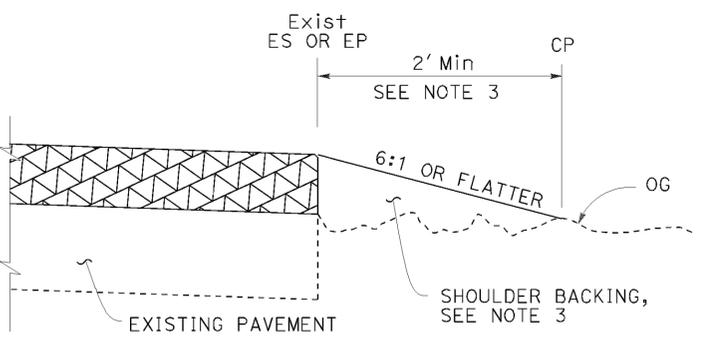
CASE B
Safety Edge



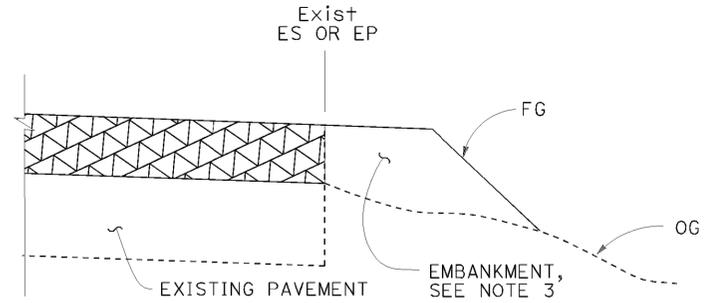
CASE C
Safety Edge



CASE D
Vertical Edge



CASE E
Vertical Edge



CASE F
Vertical Edge
* See Table A and Revised Std Plan RSP P74

- NOTES:**
- For limits of safety edge and vertical edge treatments, see Revised Standard Plan RSP P74.
 - Details shown for HMA overlay thickness less than 0.43'. See Detail "A" for HMA overlay thickness more than 0.43' or concrete overlay.
 - For locations and limits of shoulder backing or embankment see project plans.
 - Grade existing ground to place safety edge. 1' minimum width
 - Safety edge transverse joint must match overlay transverse joint. End of #6 longitudinal bar must be 2" ± 1/2" clear from transverse joint.
 - Safety edge is not needed in the area of MGS, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.

LEGEND:

- HMA OVERLAY
- HMA OR CONCRETE OVERLAY
- CONCRETE OVERLAY

ABBREVIATIONS:

- SE SAFETY EDGE
- TT TOTAL THICKNESS OF SE

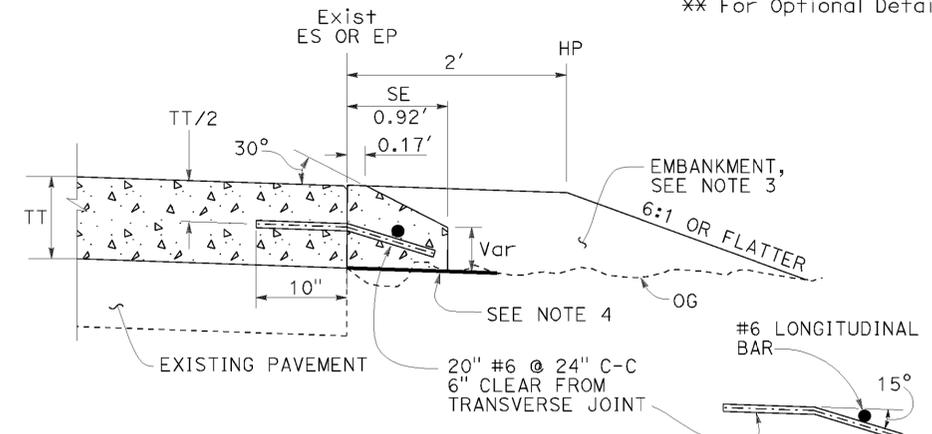
TABLE A
EDGE TREATMENT FOR VARIOUS OVERLAY THICKNESS AND CONDITIONS

FIELD CONDITION	OVERLAY THICKNESS	
	LESS THAN 0.15'	0.15' OR MORE
Exist SLOPE 6:1 OR FLATTER	CASE E	CASE A
Exist SLOPE 3:1 TO 6:1	CASE E	CASE B
Exist SLOPE STEEPER THAN 3:1	CASE F	CASE F
CUT SECTION (REPLACE, COLD PLANE, MILL PAVEMENT)	CASE D	CASE C

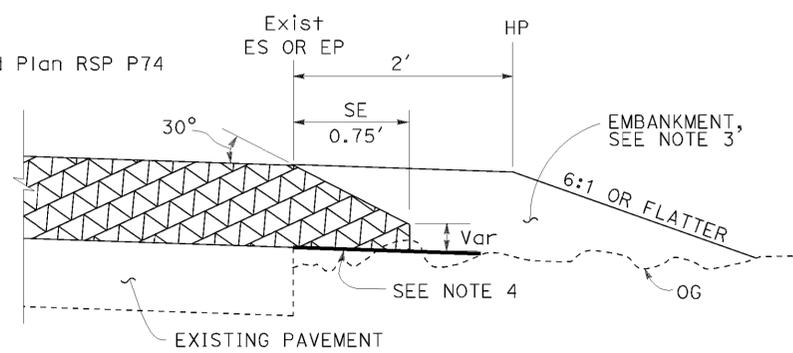
TO ACCOMPANY PLANS DATED 02-03-14
ADDITIONAL HMA OR CONCRETE QUANTITIES FOR SE/SIDE/MILE

TYPICAL CROSS SECTION	TT	TOTAL ADDITIONAL MATERIAL FOR SE/SIDE/MILE		
		HMA (TON)	CONCRETE (CY)*	CONCRETE (CY)**
	0.15'	NA	NA	NA
	0.20'	13.7	NA	NA
	0.30'	30.9	NA	NA
	0.40'	54.9	NA	NA
	0.45'	69.4	NA	NA
	0.50'	84.2	NA	NA
	0.60'	113.9	NA	NA
	0.70'	143.6	70.9	94.2
	0.80'	173.3	85.6	112.2
	0.90'	203.0	100.3	130.2
	1.00'	232.7	114.9	148.2
	1.20'	292.1	144.3	184.2

* For Detail "A"
 ** For Optional Detail "A"



OPTIONAL DETAIL "A"
 For concrete overlay
 See Note 5

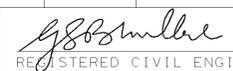


DETAIL "A"
 For HMA overlay thickness more than 0.43' or concrete overlay

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT EDGE TREATMENTS - OVERLAYS
 NO SCALE

P:\PROJ\01\00830\drafting\sheet\10e830va006.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	20	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 02-03-14

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

P:\PROJ\01\0830\drafting\sheet1\0e830va007.dgn

2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	21	24

TO ACCOMPANY PLANS DATED 02-03-14

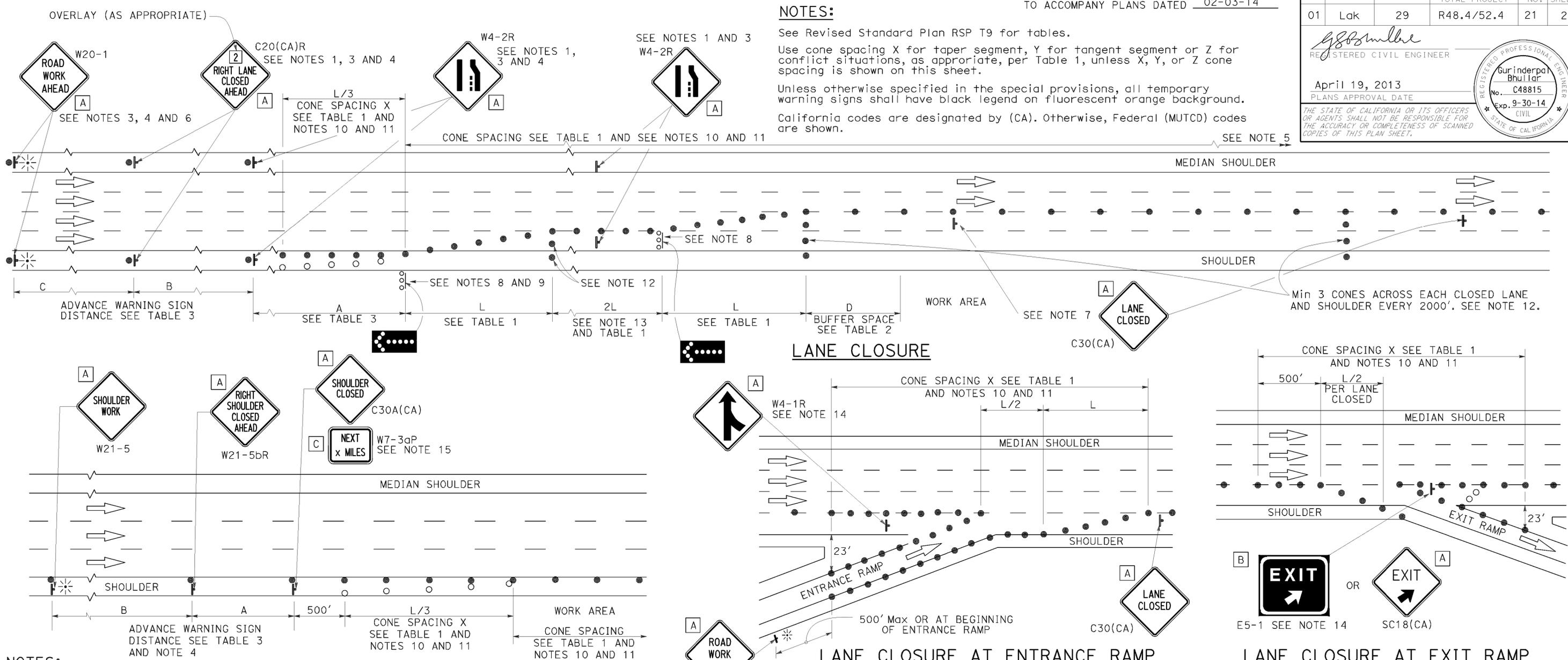
REGISTERED CIVIL ENGINEER
Gurinderpal Bhullar
No. C48815
Exp. 9-30-14
STATE OF CALIFORNIA

April 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.

NOTES:

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



NOTES:

- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Duplicate sign installations are not required:
 - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
- Each advance warning sign on each side of the roadway 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, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

SHOULDER CLOSURE

- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA)L and W4-2L signs shall be used.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
- 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.

LANE CLOSURE AT ENTRANCE RAMP

- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
- A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⬢ FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 72" x 60"
- C 36" x 30"

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE
RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

P:\PROJ\01\06830\Drawings\Sheets\10e830va008.dgn

2010 REVISED STANDARD PLAN RSP T10

NOTES:

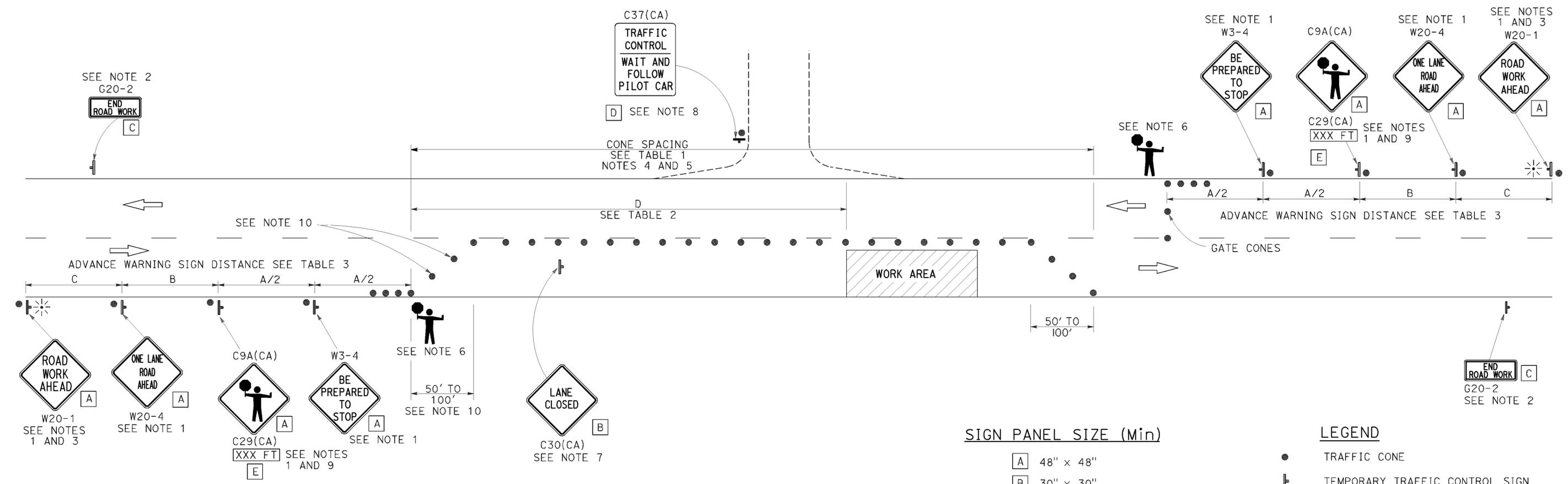
See Revised Standard Plan RSP T9 for tables.

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



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.

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

REVISED STANDARD PLAN RSP T13

2010 REVISED STANDARD PLAN RSP T13

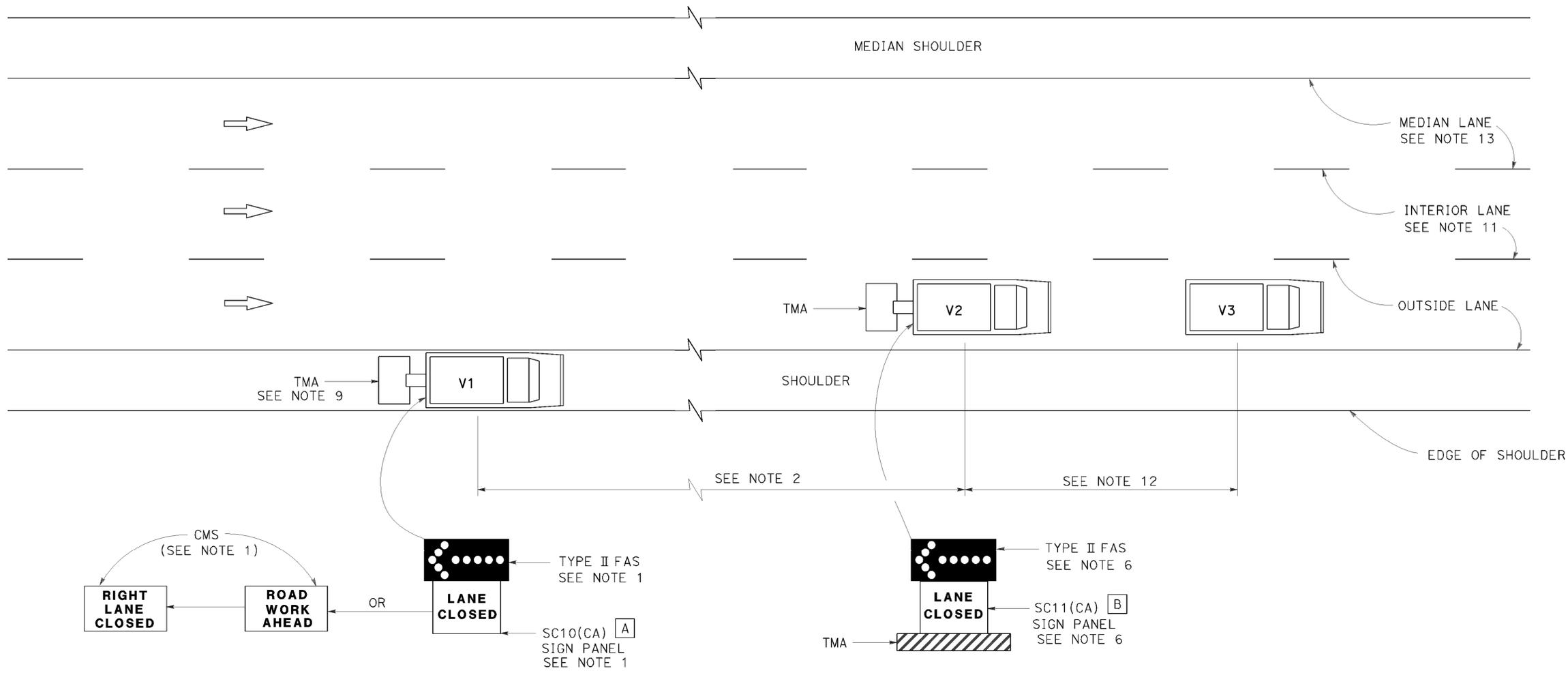
P:\PROJ\01\06830\drafting\sheet\10e830va009.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	R48.4/52.4	23	24

Registered Civil Engineer
 April 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 02-03-14



SIGN PANEL SIZE (Min)

- A 66" x 36"
- B 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS)
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

NOTES:

- Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
- If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
- A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
- Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
- 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.
- Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
- 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.
- All vehicles shall be equipped with flashing or rotating amber lights.
- 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.
- Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
- For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
- The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
- When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS
NO SCALE

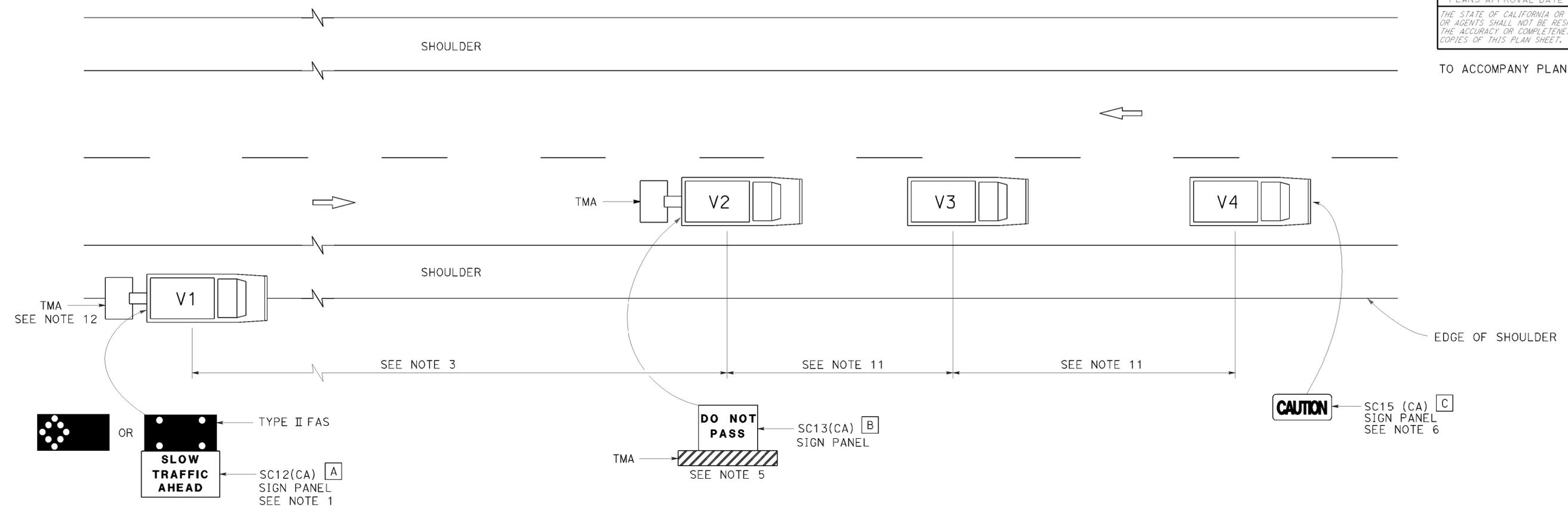
RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T15

P:\PROJ\01\00830\drafting\sheet\10e830va010.dgn

2010 REVISED STANDARD PLAN RSP T15

TO ACCOMPANY PLANS DATED 02-03-14



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

P:\PROJ\01\06830\drafting\sheet\10e830va011.dgn

2010 REVISED STANDARD PLAN RSP T17