

INDEX OF PLANS

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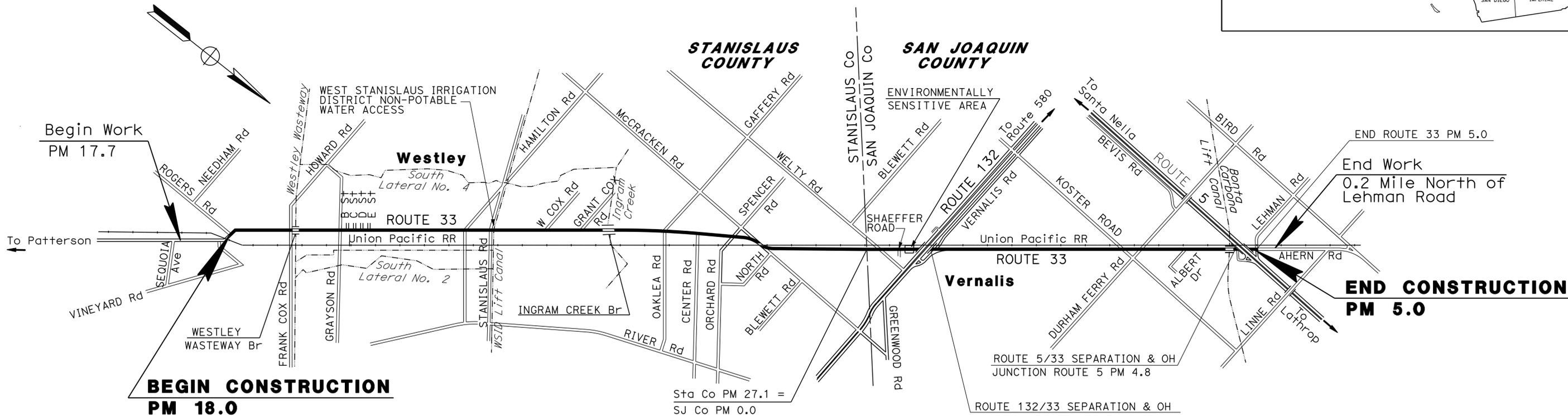
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA **ACSTP-P033(083)E**
DEPARTMENT OF TRANSPORTATION

**PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY
 IN STANISLAUS AND SAN JOAQUIN COUNTIES
 AT AND NEAR WESTLEY
 FROM ROGERS ROAD
 TO LEHMAN ROAD**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta, SJ	33	18.0/27.1, 0.0/5.0	1	14



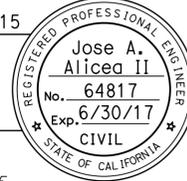
PROJECT MANAGER
ALVIN MANGINDIN

DESIGN MANAGER
ALVIN MANGINDIN

PROJECT ENGINEER: *JA Alicea II* DATE: 6/01/15
 REGISTERED CIVIL ENGINEER

January 19, 2016
 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

CONTRACT No. **10-1E0004**
 PROJECT ID **1015000060**

DATE PLOTTED => 22-FEB-2016 TIME PLOTTED => 09:46

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE

ALVIN MANGINDIN

BRUCE SUMIDA

JOSE A. ALICEA II

JAA

08-10-15

NOTES:

1. DIMENSIONS OF PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. FOR COLD PLANE AC PAVEMENT DIMENSIONS AND LOCATIONS, SEE SUMMARY OF QUANTITIES SHEETS.
5. FOR GUARDRAIL LOCATIONS, SEE SUMMARY OF QUANTITIES.
6. ENVIRONMENTALLY SENSITIVE AREA (ESA), NO WORK OR GROUND DISTURBANCE SHALL BE PERFORMED BEYOND SHOULDER BACKING.

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

PAVEMENT CLIMATE REGION
INLAND VALLEY

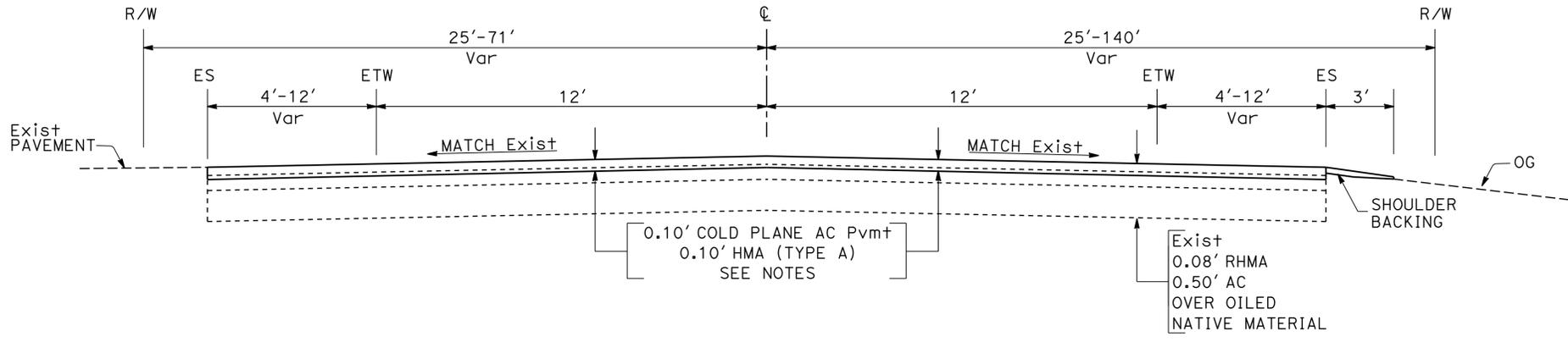
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta,SJ	33	18.0/27.1, 0.0/5.0	2	14

REGISTERED CIVIL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/17
 CIVIL

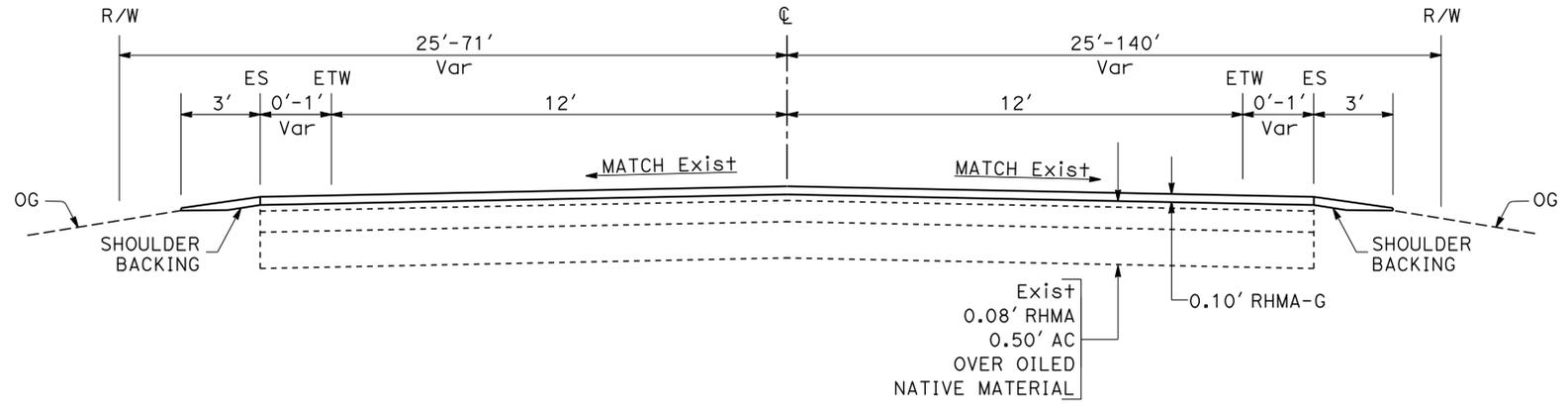
6/01/15
 DATE

1-19-16
 PLANS APPROVAL DATE

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STANISLAUS-PM 19.52/19.92



STANISLAUS-PM 18.00/19.52,
 PM 19.92/24.82,
 PM 24.84/27.10

ROUTE 33

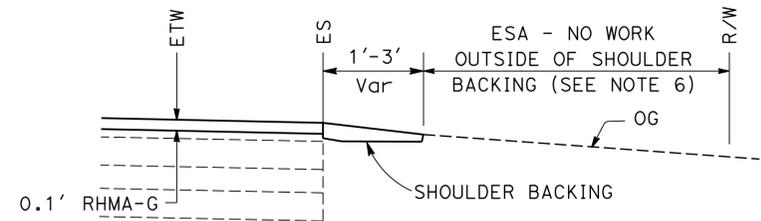
TYPICAL CROSS SECTIONS

NO SCALE

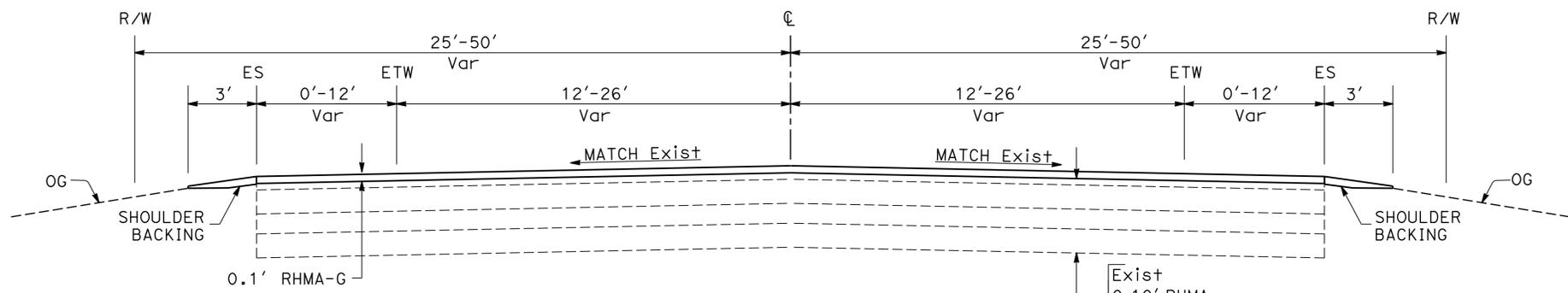
X-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta,SJ	33	18.0/27.1, 0.0/5.0	3	14

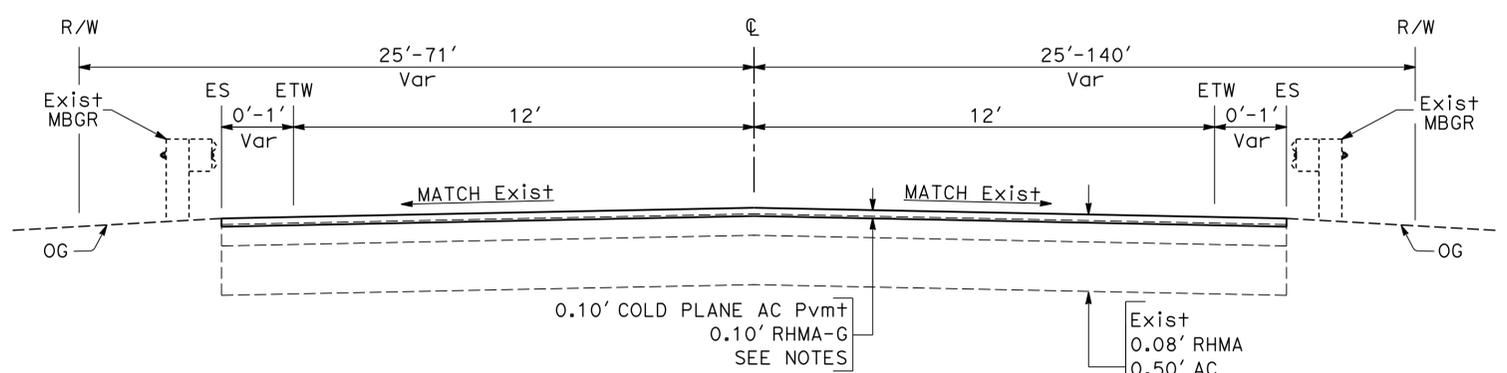
REGISTERED CIVIL ENGINEER DATE 6/01/15
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE 1-19-16
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SAN JOAQUIN-PM 0.65/0.79 (EB/WB)
ESA LOCATIONS



SAN JOAQUIN-PM 0.00/5.00
ROUTE 33



STANISLAUS-PM 24.82/24.84
GUARDRAIL LOCATIONS

TYPICAL CROSS SECTIONS

NO SCALE **X-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY	JAA
Caltrans MAINTENANCE	ALVIN MANGINDIN	CHECKED BY	DATE REVISED	08-10-15
			JOSE A. ALICEA II	
			BRUCE SUMIDA	

NOTES:

1. PRIVATE DRIVEWAY WIDTHS AND LOCATIONS ARE APPROXIMATE. THE ENGINEER DETERMINES THE ACTUAL LOCATIONS AND WIDTH.

ABBREVIATION:

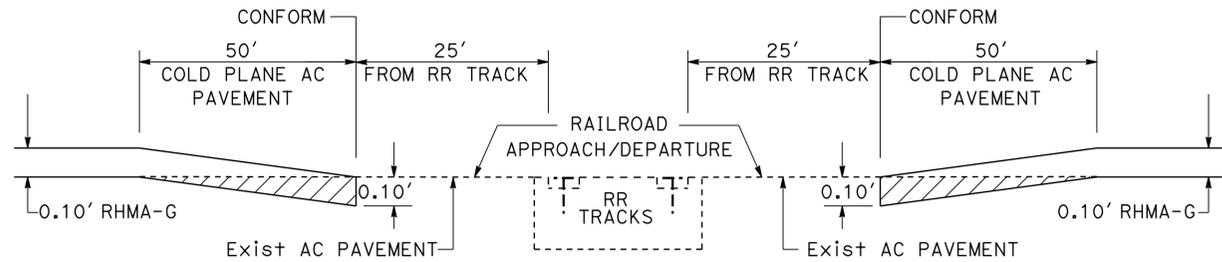
RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

LEGEND:

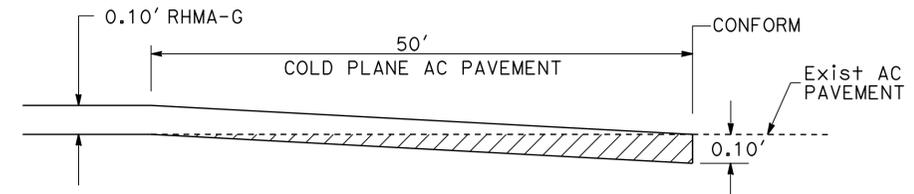
- COLD PLANE AC PAVEMENT
RHMA-G
- COLD PLANE AC PAVEMENT
HMA (TYPE A)
- HMA (TYPE A)

TABLE OF BRIDGES

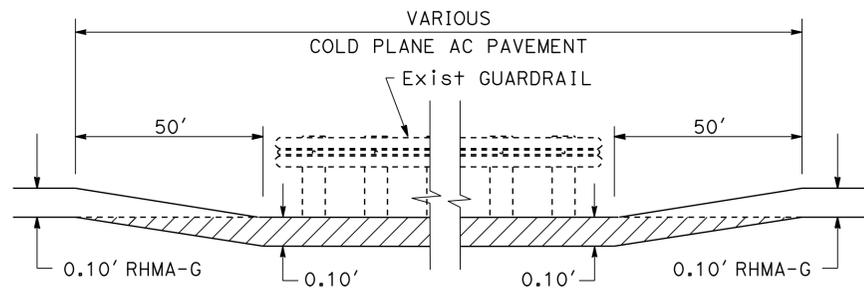
Co	PM	BRIDGE NAME
Sta	18.92	WESTLEY WASTEWAY
Sta	23.43	INGRAM CREEK
SJ	0.85	ROUTE 132 SEPARATION & OH
SJ	4.82	ROUTE 5 SOUTH/33 SEPARATION & OH
SJ	4.83	ROUTE 5 NORTH/33 SEPARATION & OH



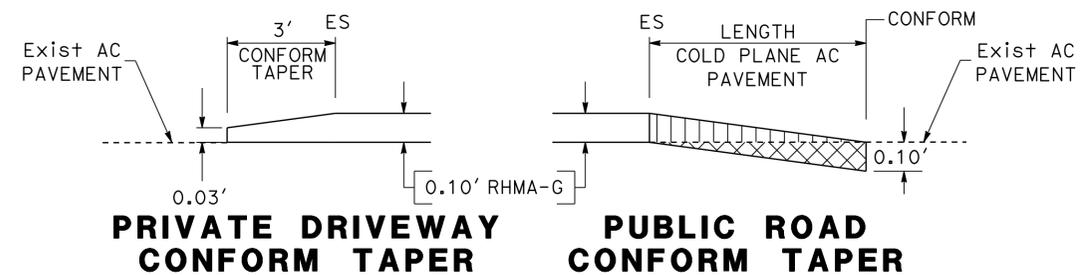
UNION PACIFIC RAILROAD Xing - STANISLAUS-PM 17.95 & PM 25.70
CONFORM TAPER AT RAILROAD APPROACH/DEPARTURE



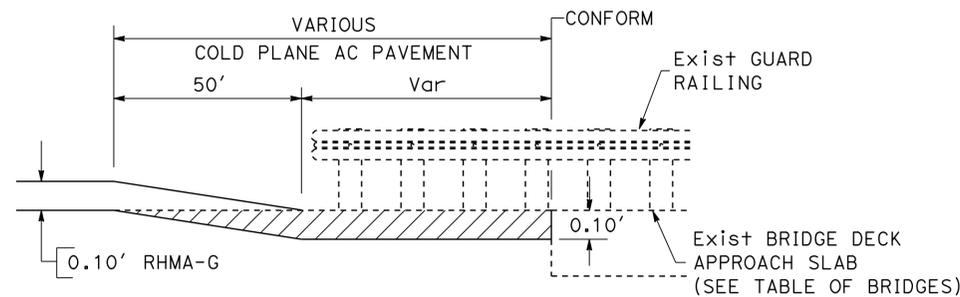
SEE SUMMARY OF QUANTITIES (LONGITUDINAL CONFORM TAPERS TABLE)
LONGITUDINAL CONFORM TAPER AT EXISTING AC LOCATIONS



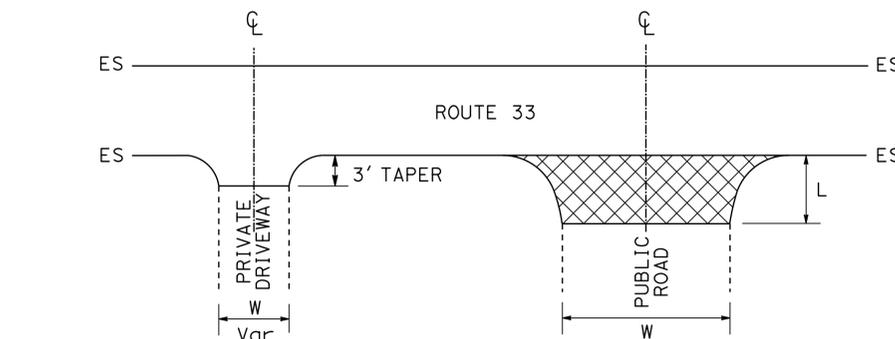
SEE SUMMARY OF QUANTITIES (CONFORM TAPER AT GUARDRAIL TABLE)
CONFORM TAPER AT GUARDRAIL



PRIVATE DRIVEWAY CONFORM TAPER **PUBLIC ROAD CONFORM TAPER**



SEE SUMMARY OF QUANTITIES (LONGITUDINAL CONFORM TAPERS TABLE)
CONFORM TAPER AT APPROACH/DEPARTURE BRIDGE DECK



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

PAVING LIMITS AT PRIVATE DRIVEWAYS AND PUBLIC ROAD INTERSECTIONS

CONSTRUCTION DETAILS

NO SCALE

C-1

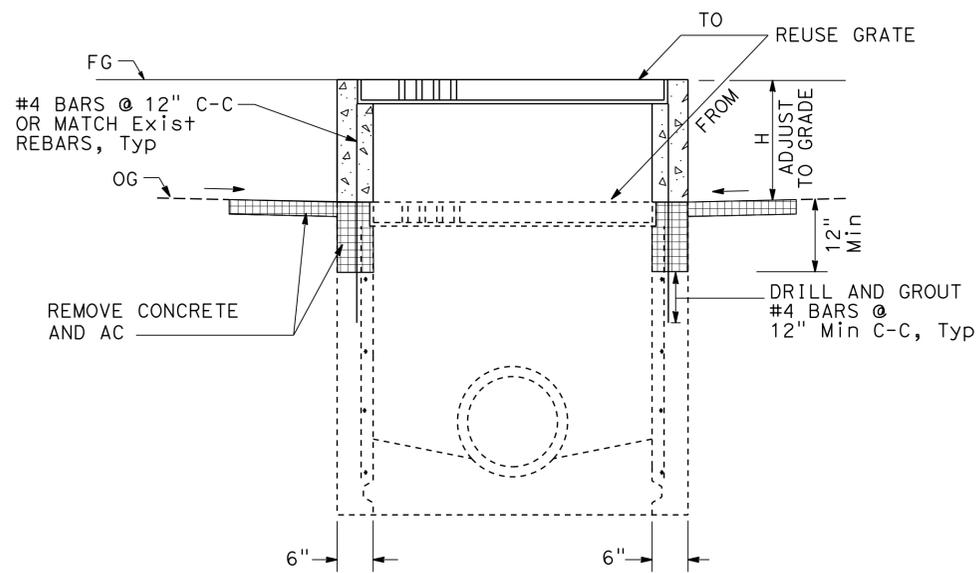
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	JOSE A. ALICEA II	REVISED BY	JAA
Caltrans MAINTENANCE	ALVIN MANGINDIN	CHECKED BY	BRUCE SUMIDA	DATE REVISED	08-10-15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta, SJ	33	18.0/27.1, 0.0/5.0	5	14

JAAlicea II 6/01/15
 REGISTERED CIVIL ENGINEER DATE
 1-19-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/17
 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.



SEE SUMMARY OF QUANTITIES, ADJUST INLET TABLE
ADJUST INLET

CONSTRUCTION DETAILS

NO SCALE

C-2

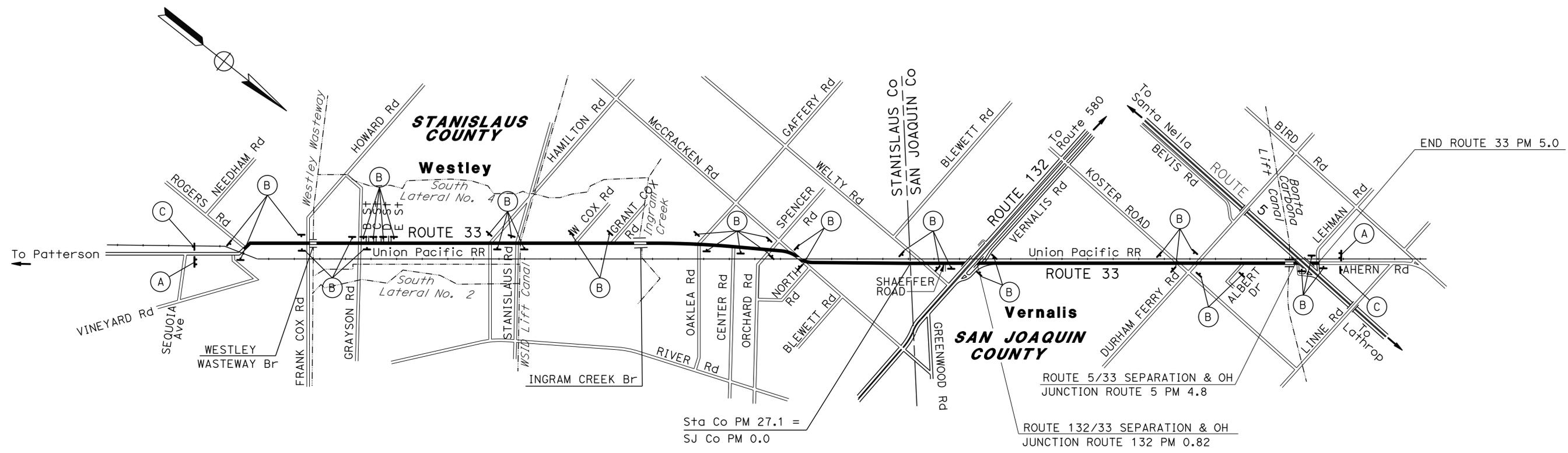
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta,SJ	33	18.0/27.1, 0.0/5.0	6	14

REGISTERED CIVIL ENGINEER DATE 6/01/15
 JOSE A. ALICEA II
 No. 64817
 Exp 6/30/17
 CIVIL
 STATE OF CALIFORNIA

1-19-16
 PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR ALVIN MANGINDIN
 CALCULATED/DESIGNED BY JOSE A. ALICEA II
 CHECKED BY BRUCE SUMIDA
 REVISED BY JAA
 DATE REVISED 06-01-15



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 15 MILES
(B)	W20-1	36" x 36"	1 - 4" x 6"	36	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.

CONSTRUCTION AREA SIGNS

NO SCALE **CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

LAST REVISION DATE PLOTTED => 25-JAN-2016
 06-01-15 TIME PLOTTED => 11:40

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJa,SJ	33	18.0/27.1, 0.0/5.0	7	14

REGISTERED CIVIL ENGINEER DATE 6/01/15
 1-19-16
 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 QUANTITIES TABLE.
- (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

ABBREVIATION:

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

CONFORM TAPER AT PUBLIC ROAD INTERSECTIONS

LOCATION				LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvm† SQYD	HMA (TYPE A) TON
Co	PM	SIDE	DESCRIPTION				
Sta	17.98	L+	ROGERS ROAD	25'	45'	237	16
Sta	18.90	R+	FRANK COX ROAD	25'	40'	188	13
Sta	18.90	L+	FRANK COX ROAD	30'	35'	209	15
Sta	19.55	R+	GRAYSON ROAD	55'	45'	474	32
Sta	19.55	L+	HOWARD ROAD	70'	26'	646	44
Sta	19.65	L+	B STREET	20'	40'	89	6
Sta	19.74	L+	C STREET	20'	30'	89	6
Sta	19.83	L+	D STREET	20'	40'	100	7
Sta	19.92	L+	E STREET	20'	40'	112	8
Sta	21.32	L+	HAMILTON ROAD	35'	25'	205	14
Sta	21.32	R+	HAMILTON ROAD	25'	35'	195	14
Sta	21.59	L+	STANISLAUS ROAD	30'	25'	167	12
Sta	22.24	L+	WEST COX ROAD	20'	20'	73	5
Sta	22.63	L+	GRANT COX ROAD	30'	20'	109	8
Sta	23.96	R+	OAKLEA ROAD	30'	45'	225	16
Sta	23.96	L+	GAFFERY ROAD	30'	40'	234	16
Sta	24.41	R+	CENTER ROAD	30'	35'	192	13
Sta	25.30	R+	ORCHARD ROAD	40'	30'	267	18
Sta	25.30	L+	SPENCER ROAD	30'	30'	175	12
Sta	25.71	L+	MCCRACKEN ROAD	40'	35'	278	19
Sta	25.71	R+	MCCRACKEN ROAD	40'	25'	256	18
SJ	0.16	R+	WELTY ROAD	25'	45'	209	15
SJ	0.16	L+	WELTY ROAD	40'	35'	278	19
SJ	0.46	R+	SCHAFFER ROAD	25'	20'	112	8
SJ	0.88	R+	CONN TO ROUTE 132	65'	40'	524	36
SJ	0.88	L+	CONN TO ROUTE 132	30'	54'	274	19
SJ	0.90	R+	ROUTE 132 OFF RAMP TO NB 33	30'	22'	74	5
SJ	3.26	R+	KOSTER ROAD	35'	30'	234	16
SJ	3.26	L+	KOSTER ROAD	35'	30'	234	16
SJ	3.51	R+	DURHAM FERRY ROAD	40'	25'	223	15
SJ	3.51	L+	DURHAM FERRY ROAD	40'	25'	212	15
SJ	4.00	R+	ALBERT DRIVE	25'	40'	181	13
SJ	4.79	R+	RAMP Conn TO ROUTE 5	30'	75'	342	24
SJ	5.00	R+	ROUTE 5 SB OFF RAMP	55'	45'	428	29
SJ	5.00	L+	LEHMAN ROAD	35'	45'	399	27
TOTAL						8,244*	569*

CONFORM TAPER AT PRIVATE DRIVEWAYS

LOCATION		SIDE	LENGTH	WIDTH	RHMA-G TON
Co	PM				
Sta	19.32	L+	3'	100'	2.2
Sta	20.06	L+	3'	35'	0.8
Sta	20.82	R+	3'	35'	0.8
Sta	23.39	L+	3'	35'	0.8
Sta	23.45	L+	3'	36'	0.8
Sta	26.76	L+	3'	60'	1.3
Sta	26.79	R+	3'	80'	1.8
SJ	0.05	R+	3'	35'	0.8
SJ	3.68	R+	3'	80'	1.8
SJ	3.73	R+	3'	70'	1.6
SJ	3.89	R+	3'	24'	0.5
SJ	4.08	R+	3'	44'	1.0
SJ	4.31	R+	3'	160'	3.6
TOTAL					17.6*

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

REPAIR FAILED AREAS

LOCATION		LENGTH	WIDTH	COLD PLANE AC Pvm† SQYD	HMA (TYPE A) TON
Co	PM/PM				
Sta	19.52/19.92	2112'	48'	11,265*	761*

CONFORM TAPER AT GUARDRAIL

LOCATION		LENGTH	WIDTH	COLD PLANE AC Pvm† SQYD	RHMA-G TON
Co	PM/PM				
Sta	24.82/24.84	230'	40'	1,023*	69*

LONGITUDINAL CONFORM TAPERS

LOCATION			LENGTH	WIDTH	COLD PLANE AC Pvm† SQYD	RHMA-G TON
Co	PM	DESCRIPTION				
Sta	18.0	BEGIN CONSTRUCTION	50'	125'	695	47
Sta	18.9	WESTLEY WASTEWAY Br (App)	110'	34'	416	28
Sta	18.9	WESTLEY WASTEWAY Br (Dep)	80'	34'	303	21
Sta	23.4	INGRAM CREEK BRIDGE (App)	140'	40'	623	42
Sta	23.4	INGRAM CREEK BRIDGE (Dep)	135'	40'	600	40
Sta	25.7	GX-SOLYO RR Xing (App)	30'	40'	134	9
Sta	25.7	GX-SOLYO RR Xing (Dep)	30'	65'	217	15
SJ	0.8	JUNCTION 132	280'	54'	1680	112
SJ	4.8	ROUTE 5/33 SEPARATION	350'	66'	2567	171
SJ	5.0	END CONSTRUCTION	50'	66'	367	25
TOTAL					7,602*	510*

**SUMMARY OF QUANTITIES
Q-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta,SJ	33	18.0/27.1, 0.0/5.0	8	14

REGISTERED CIVIL ENGINEER DATE 6/01/15
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/17
 CIVIL
 STATE OF CALIFORNIA

1-19-16
 PLANS APPROVAL DATE

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ADJUST INLET

LOCATION			TYPE	EA
Co	PM	DESCRIPTION		
Sta	23.43	RIGHT SHOULDER	GRATE	1
	23.43	LEFT SHOULDER	GRATE	1
	23.45	RIGHT SHOULDER	GRATE	1
	23.45	LEFT SHOULDER	GRATE	1
TOTAL				4

RESET ROADSIDE SIGN

LOCATION			TYPE	EA
Co	PM	DESCRIPTION		
Sta	19.55	MAINLINE	STOP	2

SURVEY MONUMENT (TYPE D)

LOCATION				TYPE	EA
Co	PM	DESCRIPTION			
SJ	0.10	Rte 33, E R/W LINE AND WELTY Rd INTERSECTION		MONUMENT WELL	1

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
Sta-PM 18.0/27.1, SJ-PM 0.0/5.0		15,299		28.7	4900
LONGITUDINAL CONFORM TAPERS	7,602	510		1.0	
REPAIR FAILED AREAS	11,265		761	0.2	
CONFORM TAPERS AT PUBLIC INTERSECTION	8,244		569	1.1	
CONFORM TAPERS AT PRIVATE DRIVEWAY		18		1.5	
CONFORM TAPER AT GUARDRAIL	1,023	69		0.1	
TOTAL	28,134	15,896	1330	32.3	4900

PAVEMENT DELINEATION ITEMS

LOCATION	REMOVE THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)							REMOVE PAVEMENT MARKER	PAVEMENT MARKER (RETROREFLECTIVE)					REMOVE THERMOPLASTIC PAVEMENT MARKING					THERMOPLASTIC PAVEMENT MARKING										
	8" WHITE	4" WHITE		4" YELLOW			8" WHITE	TYPE D			TYPE G	TYPE H	LIMIT LINE	STOP	AHEAD	RR Xing	RR Xing LIMIT LINES	TYPE III (L) ARROW	TYPE V ARROW	LIMIT LINE	STOP	AHEAD	RR Xing	RR XING LIMIT LINES	TYPE I ARROW	TYPE III (L) ARROW	TYPE V ARROW			
	DETAIL 38	DETAIL 27B	DETAIL 27C	DETAIL 6	DETAIL 19	DETAIL 22	DETAIL 29	DETAIL 38		DETAIL 6	DETAIL 19	DETAIL 22	DETAIL 29	DETAIL 38	DETAIL 19															
PM	LF	LF							EA	EA					SQFT					SQFT										
18.0/27.1,0.0/5.0	3132	148,896	4551	54,697	5249	17,020	6833	1566	3326	1152	124	1456	286	76	232	98	132	62	210	176	252	99	1077	836	62	350	450	31	252	165
TOTAL	3132	238,812							3326	3326					1029					3223										

SUMMARY OF QUANTITIES

Q-2

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

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

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

	T continued	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	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	
WWL	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
10	Sta, SJ	33	18.0/27.1, 0.0/5.0	9	14

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

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TO ACCOMPANY PLANS DATED 1-19-16

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

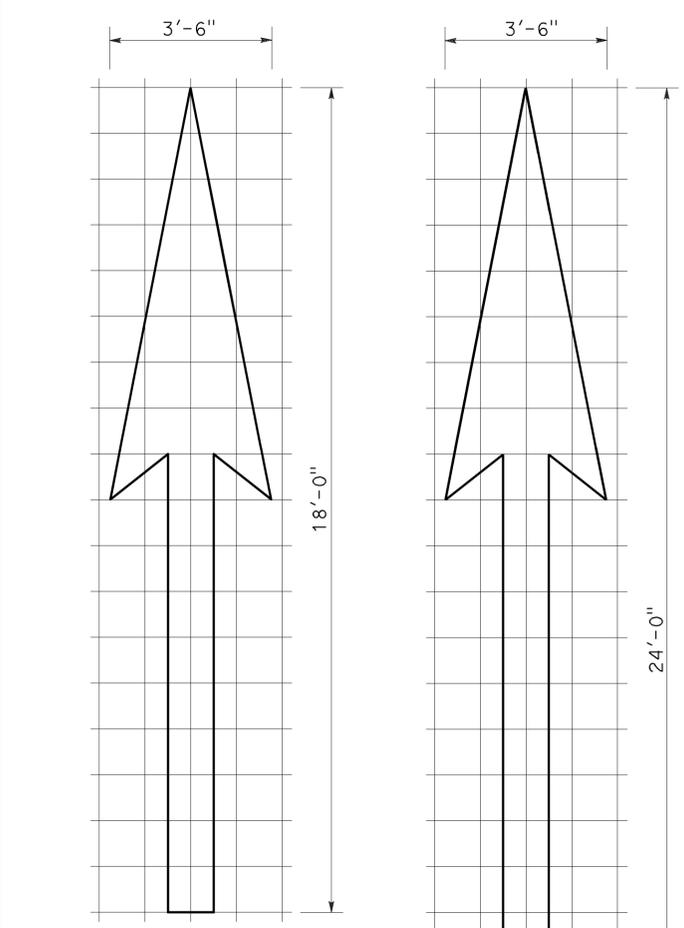
RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A10B

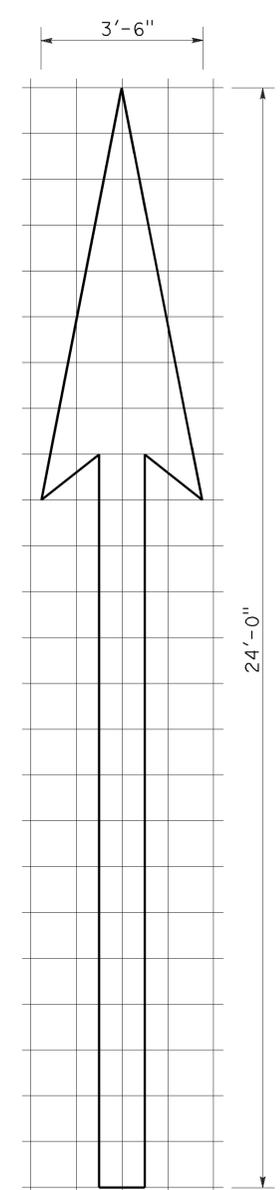
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta, SJ	33	18.0/27.1, 0.0/5.0	10	14

Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
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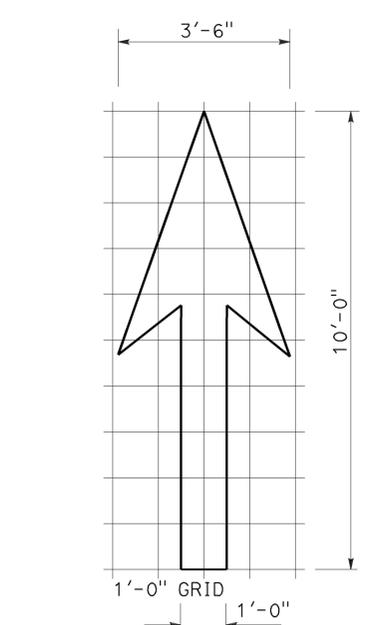
TO ACCOMPANY PLANS DATED 1-19-16



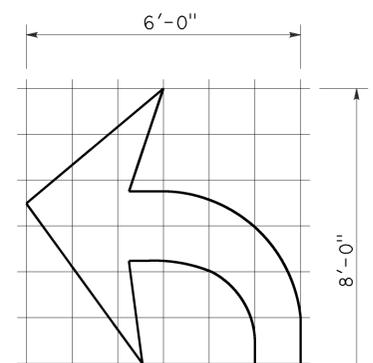
A=25 ft²
TYPE I 18'-0" ARROW



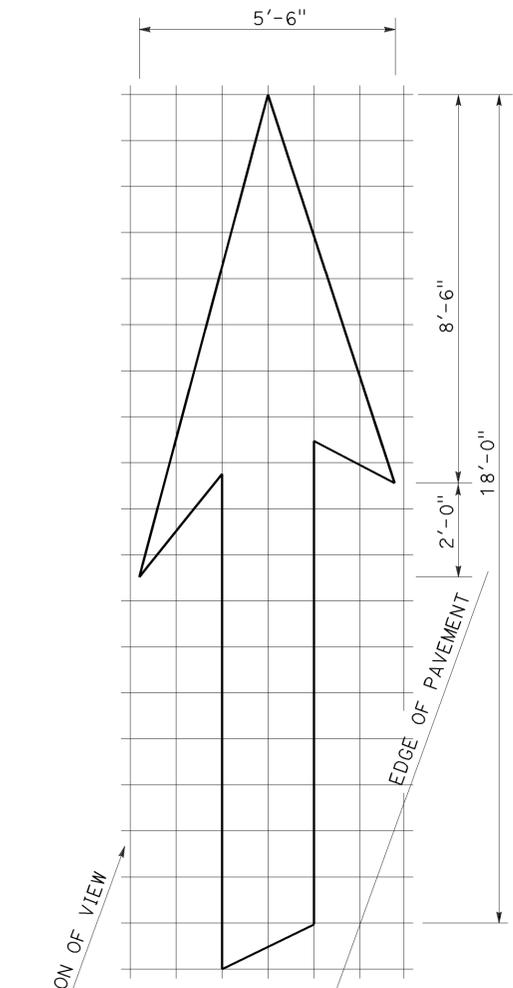
A=31 ft²
TYPE I 24'-0" ARROW



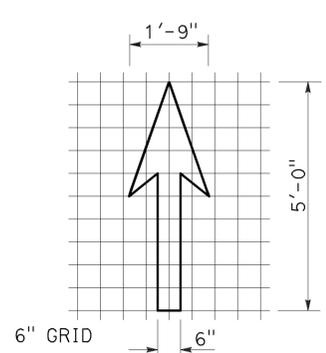
A=14 ft²
TYPE I 10'-0" ARROW



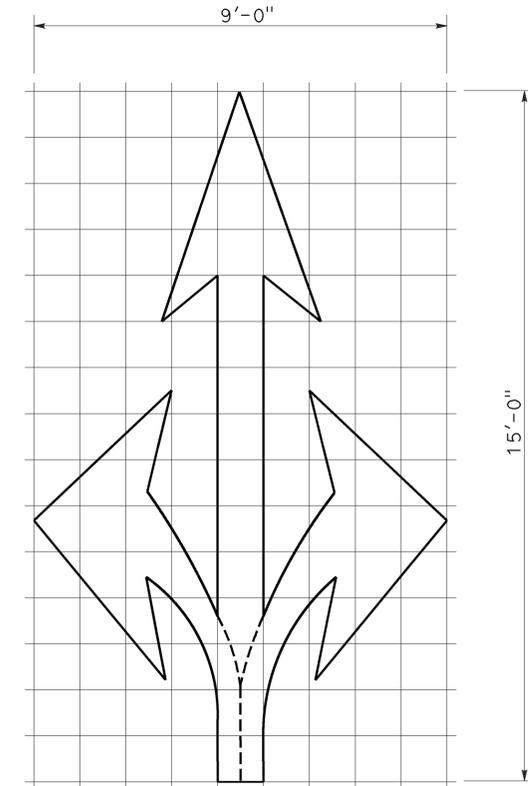
A=15 ft²
TYPE IV (L) ARROW
 (For Type IV (R) arrow, use mirror image)



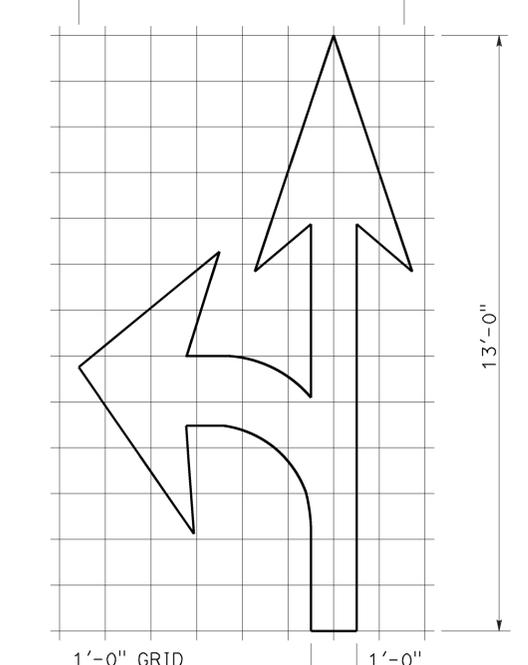
A=42 ft²
TYPE VI ARROW
 Right lane drop arrow
 (For left lane, use mirror image)



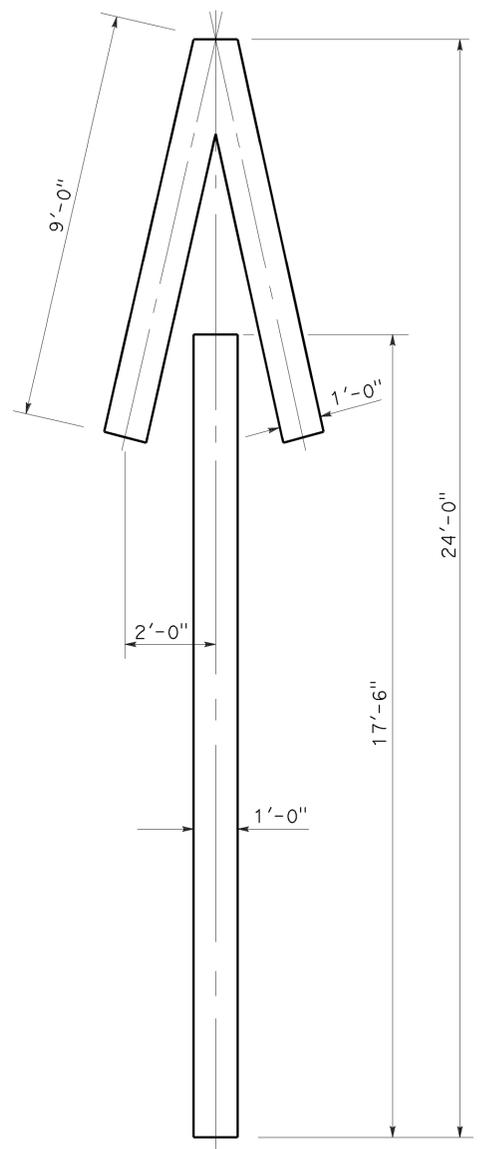
A=3.5 ft²
BIKE LANE ARROW



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

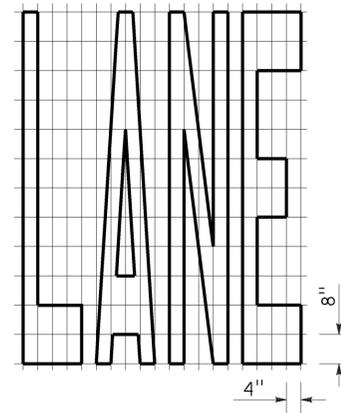
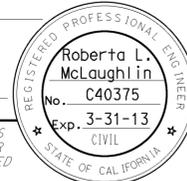
2010 REVISED STANDARD PLAN RSP A24A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta, SJ	33	18.0/27.1, 0.0/5.0	11	14

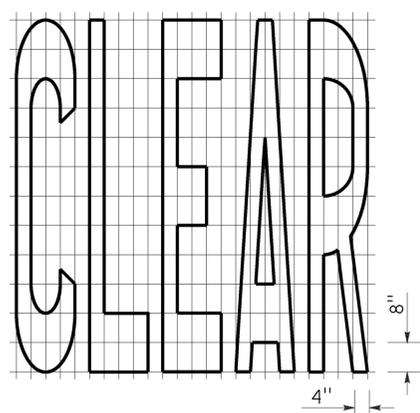
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE

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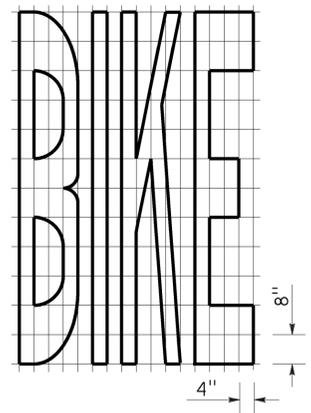
TO ACCOMPANY PLANS DATED 1-19-16



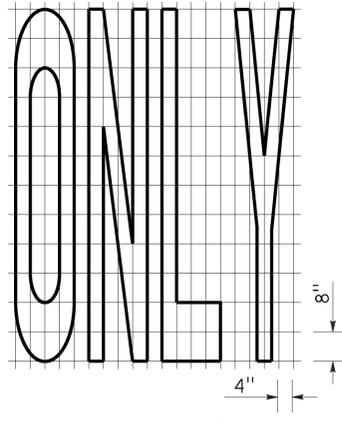
A=24 ft²



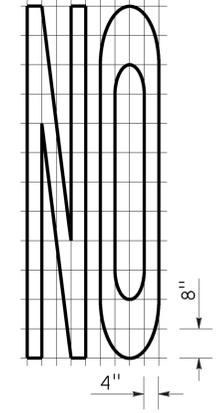
A=27 ft²



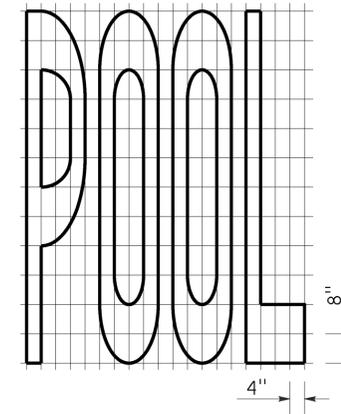
A=21 ft²



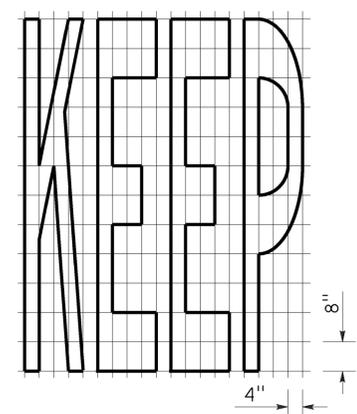
A=22 ft²



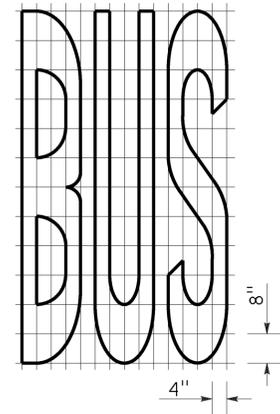
A=14 ft²



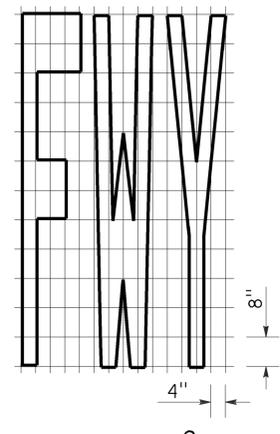
A=23 ft²



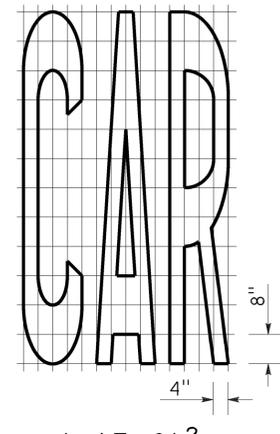
A=24 ft²



A=20 ft²

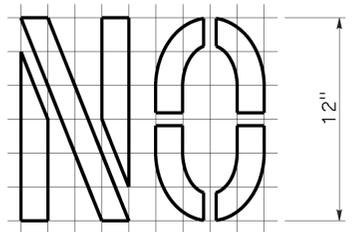


A=16 ft²



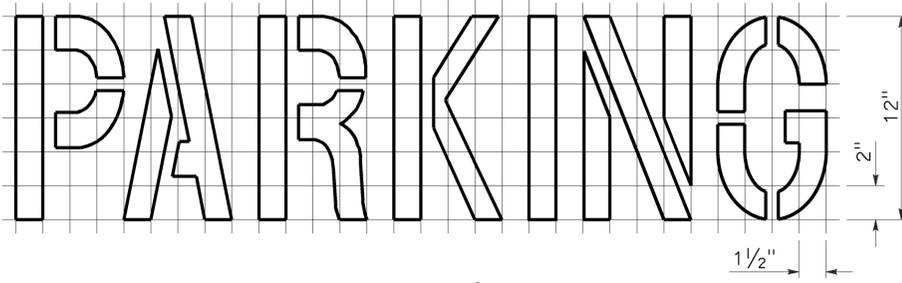
A=17 ft²

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



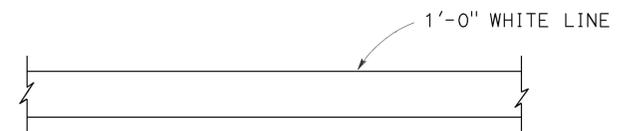
A=2 ft²

See Notes 6 and 7

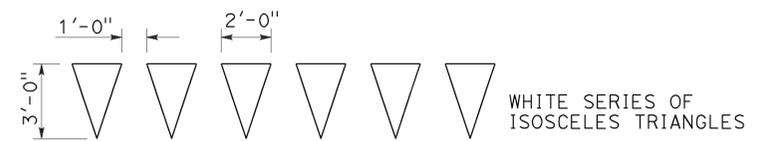


A=2 ft²

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.

2010 REVISED STANDARD PLAN RSP A24E

TO ACCOMPANY PLANS DATED 1-19-16

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.

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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta,SJ	33	18.0/27.1, 0.0/5.0	13	14

Devinder Singh
REGISTERED CIVIL ENGINEER

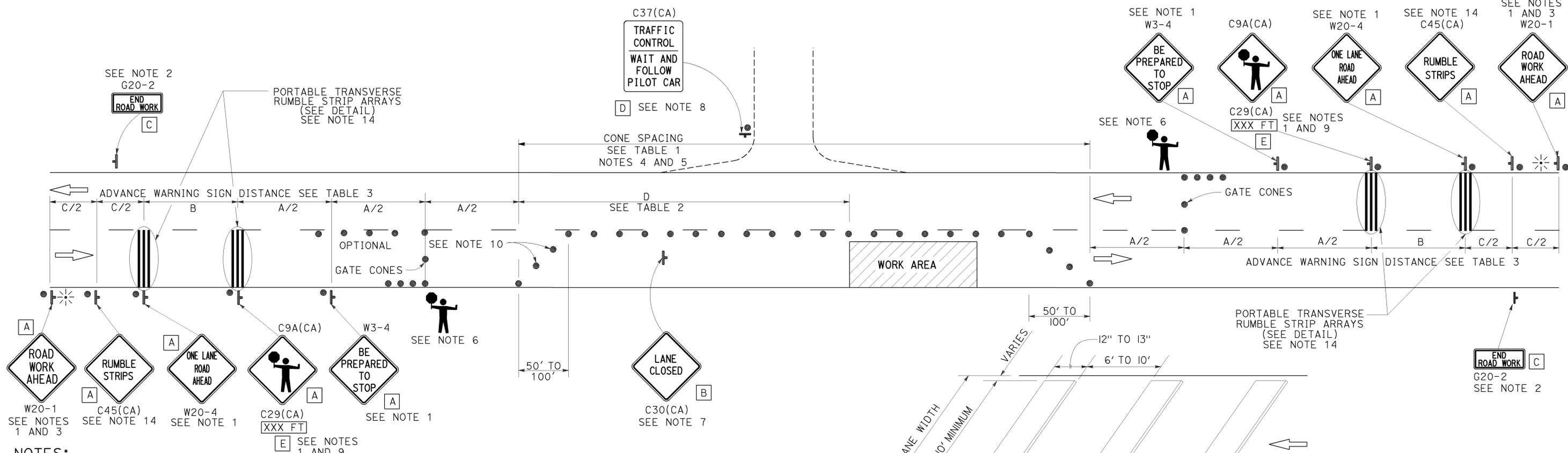
October 30, 2015
PLANS APPROVAL DATE

Devinder Singh
REGISTERED PROFESSIONAL ENGINEER
No. C50470
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

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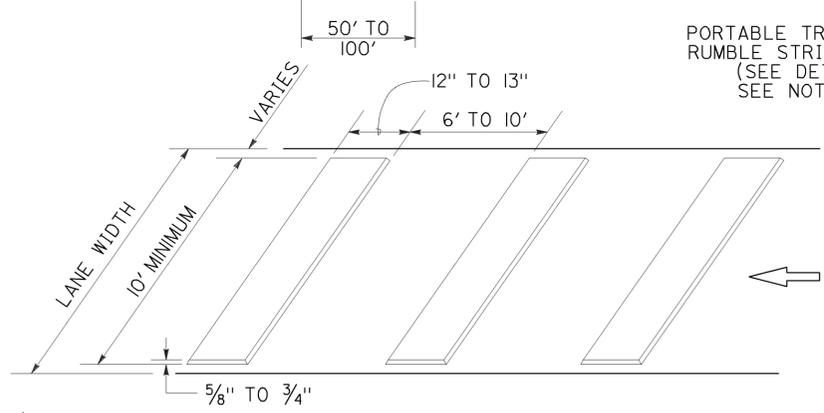
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 1-19-16



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



LEGEND

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

SIGN PANEL SIZE (Min)

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

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

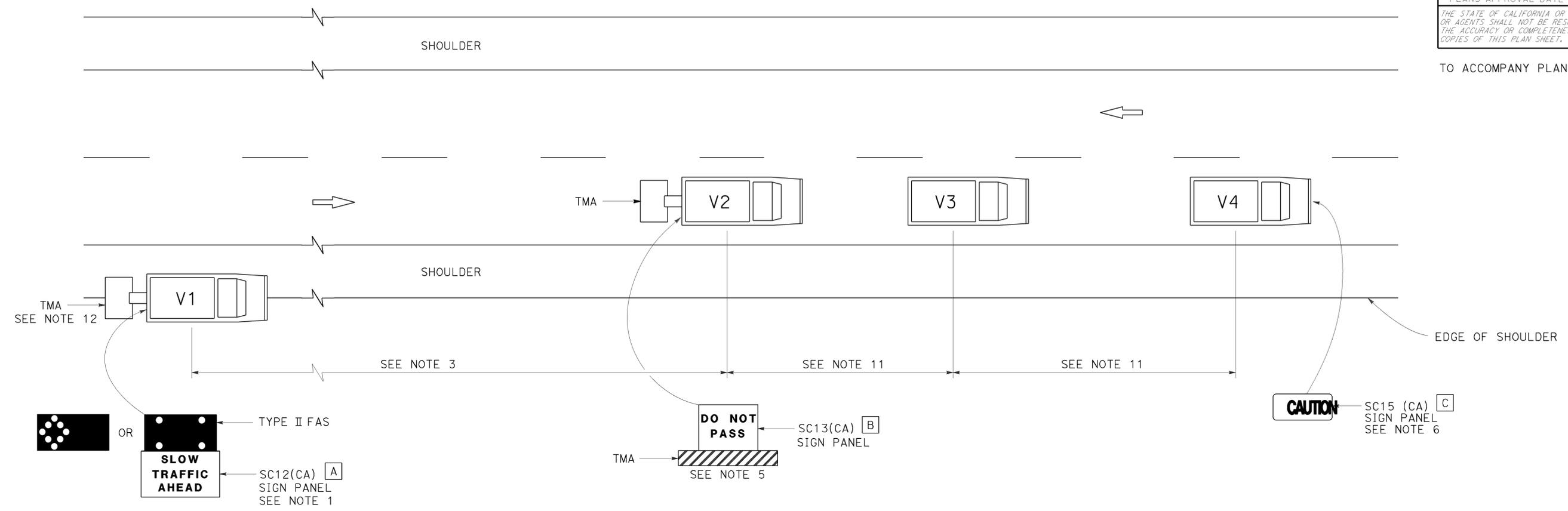
NO SCALE

RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES RSP T13 DATED OCTOBER 17, 2014, 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.

REVISED STANDARD PLAN RSP T13

2010 REVISED STANDARD PLAN RSP T13

TO ACCOMPANY PLANS DATED 1-19-16



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