

INDEX OF PLANS

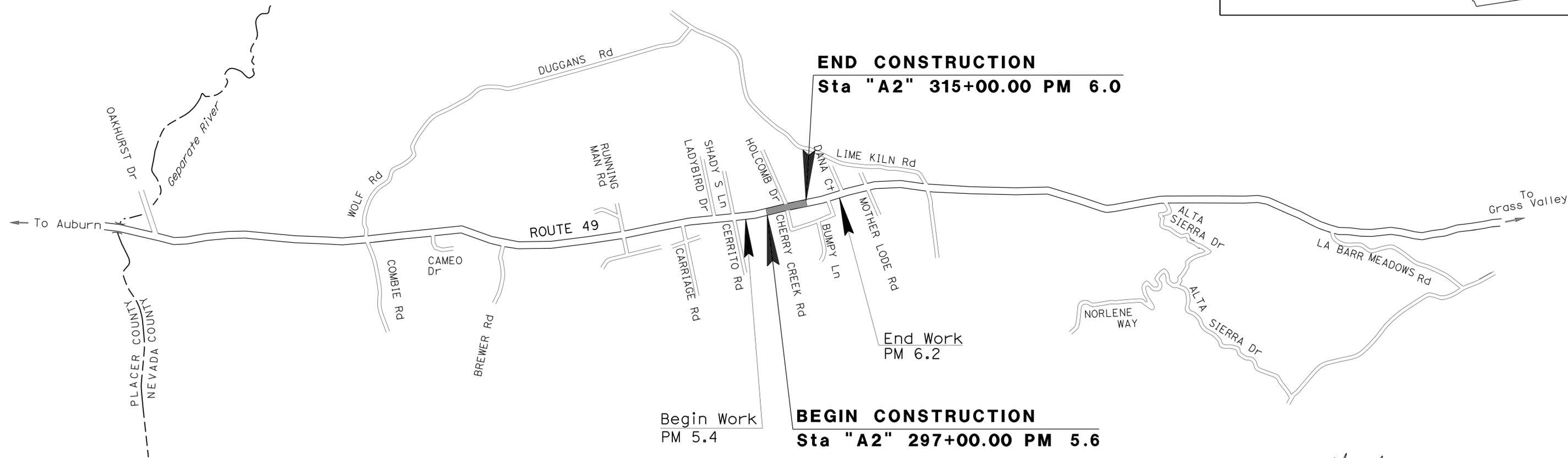
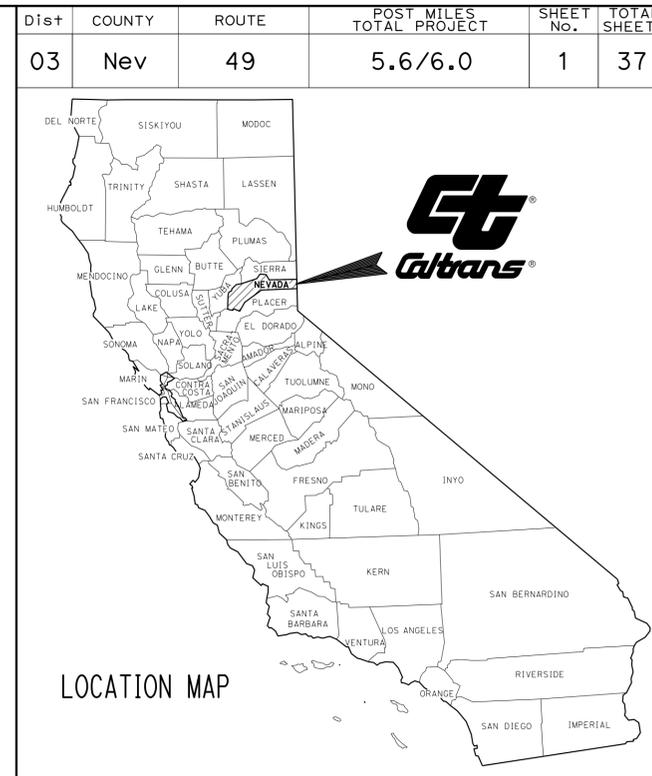
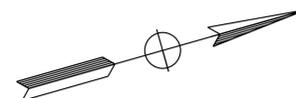
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	TYPICAL CROSS SECTIONS
4-5	LAYOUTS
6-8	CONSTRUCTION DETAILS
9	UTILITY PLANS
10	CONSTRUCTION AREA SIGNS
11-12	TRAFFIC HANDLING PLANS
13	PAVEMENT DELINEATION PLANS
14	PAVEMENT DELINEATION DETAILS
15	PAVEMENT DELINEATION QUANTITIES
16-17	SIGN DETAILS
18	SIGN QUANTITIES
19-20	SUMMARY OF QUANTITIES
21	EROSION CONTROL DETAILS
22-24	ELECTRICAL PLANS
25-37	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 NEVADA COUNTY
NEAR GRASS VALLEY FROM 0.2 MILE
SOUTH OF HOLCOMB DRIVE/CHERRY CREEK ROAD TO 0.2 MILE
NORTH OF HOLCOMB DRIVE/CHERRY CREEK ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER NAJED DAKAK
DESIGN ENGINEER NESAR FORMOLI

PROJECT ENGINEER: *[Signature]* DATE: 3-3-14
REGISTERED CIVIL ENGINEER

March 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.

CONTRACT No.	03-3F9504
PROJECT ID	0313000250

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	2	37

REGISTERED CIVIL ENGINEER		DATE
3-3-14		3-3-14
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER	
NARAYAN SELWAL	
No. 74816	
Exp. 12-31-15	
CIVIL	
STATE OF CALIFORNIA	

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

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SEE CONSTRUCTION DETAIL SHEET C-1 FOR INTERSECTION.
3. SEE CONSTRUCTION DETAIL SHEET C-3 FOR DETAILS OF RUMBLE STRIP.
4. SEE PAVEMENT DELINEATION SHEETS FOR FINAL LANE WIDTH.

ABBREVIATIONS

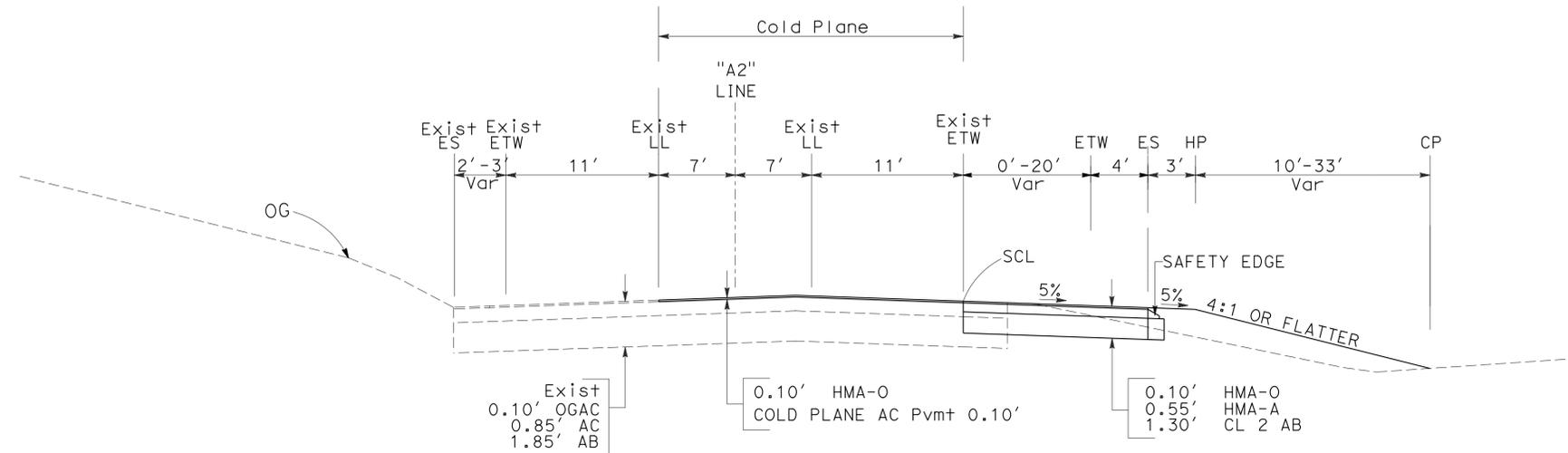
- HMA-O HOT MIX ASPHALT (OPEN GRADED)
HMA-A HOT MIX ASPHALT (TYPE A)
SCL SAW CUT LINE

DESIGN DESIGNATION - ROUTE 49

2013 ADT = 24,500 D = 54%
2033 ADT = 36,800 T = 4%
2033 DHV = 3,420 V = 55 MPH
TI(20) = 10.5 ESAL = 3,652,400

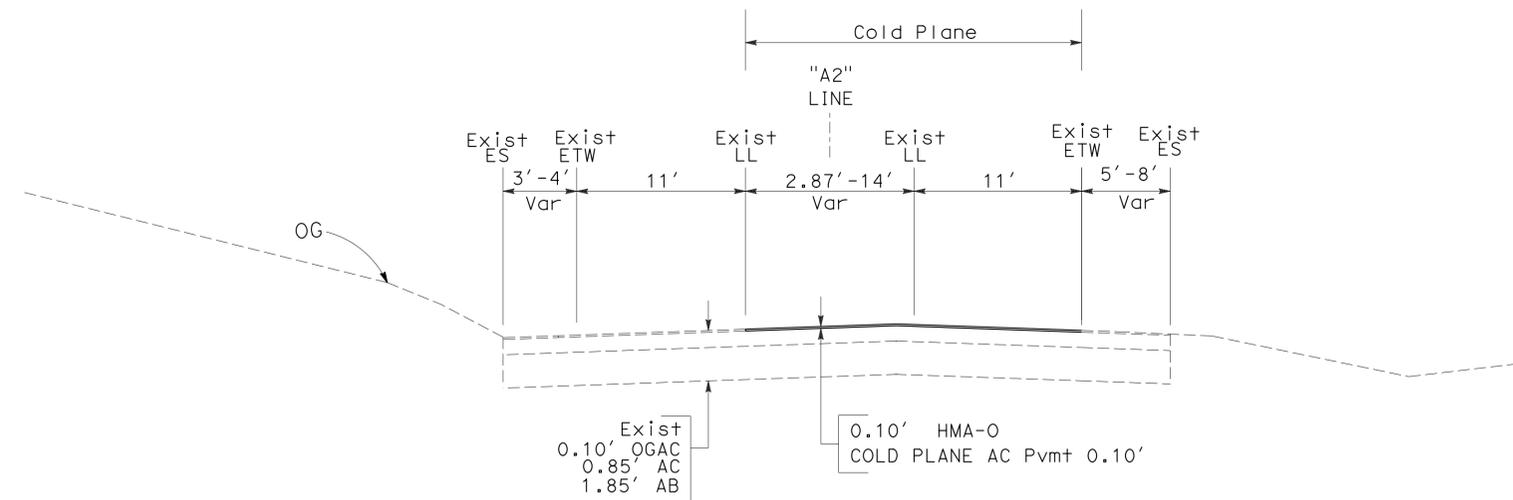
PAVEMENT CLIMATE REGION

LOW MOUNTAIN



ROUTE 49

'A2' 298+94.80 TO 305+80.00



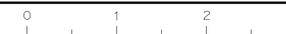
ROUTE 49

'A2' 297+00.00 TO 298+94.80

TYPICAL CROSS SECTIONS

NO SCALE

X-1



NOTES:
SEE PD SHEETS FOR FINAL LANE WIDTH.

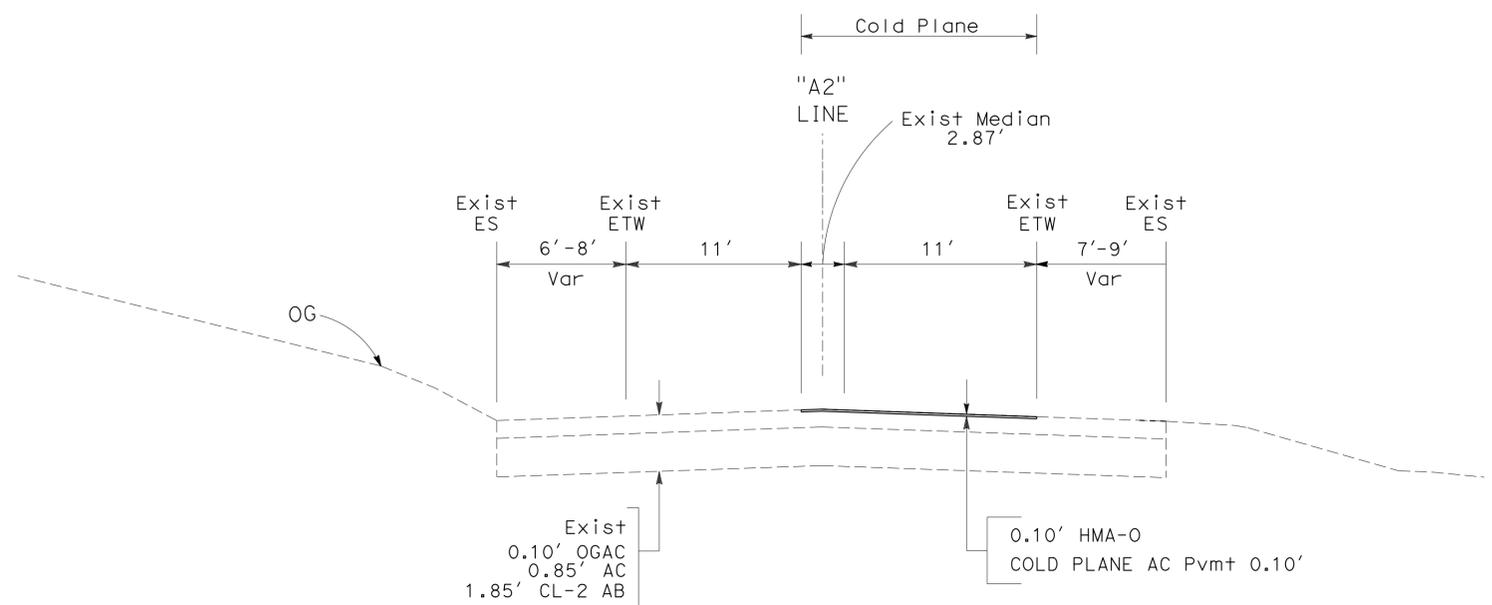
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	NeV	49	5.6/6.0	3	37

REGISTERED CIVIL ENGINEER DATE 3-3-14

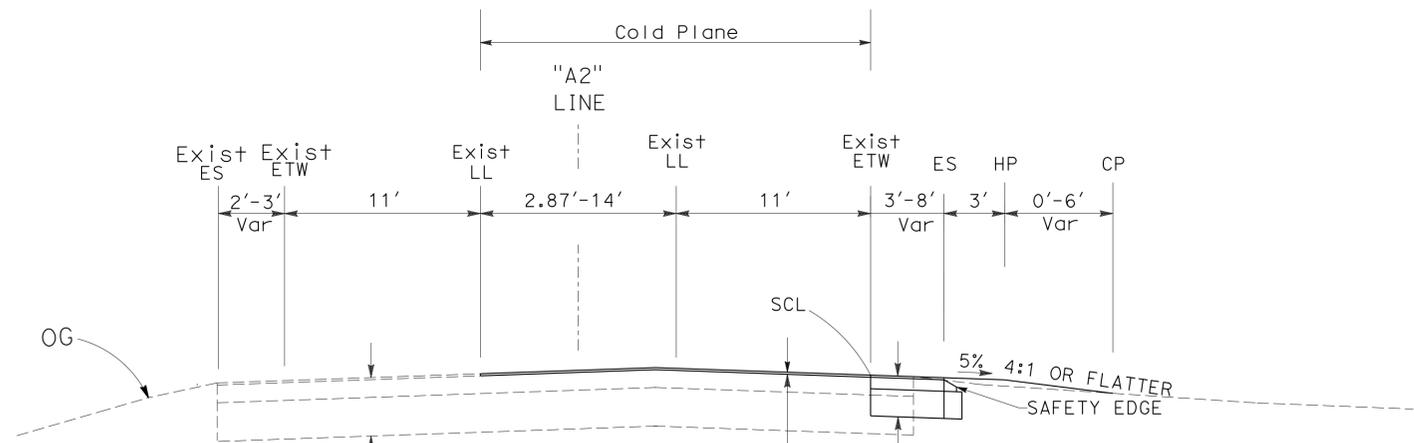
PLANS APPROVAL DATE 3-3-14

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NARAYAN SELWAL
No. 74816
Exp. 12-31-15
CIVIL
STATE OF CALIFORNIA



ROUTE 49
'A2' 314+34.14 TO 315+00.00



ROUTE 49
'A2' TO 305+80.00 TO 314+34.14

TYPICAL CROSS SECTIONS
NO SCALE
X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR NESAR FORMOLI

REVISOR BY BIP KAUSHAL
DATE REVISED NARAYAN SELWAL

CALCULATED/DESIGNED BY CHECKED BY

DATE PLOTTED => 04-MAR-2014
TIME PLOTTED => 13:33

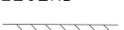
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	4	37

REGISTERED CIVIL ENGINEER	DATE
<i>Narayan Selwal</i>	3-3-14
PLANS APPROVAL DATE	
	3-3-14

REGISTERED PROFESSIONAL ENGINEER	
NARAYAN SELWAL	
No. 74816	
Exp. 12-31-15	
CIVIL	
STATE OF CALIFORNIA	

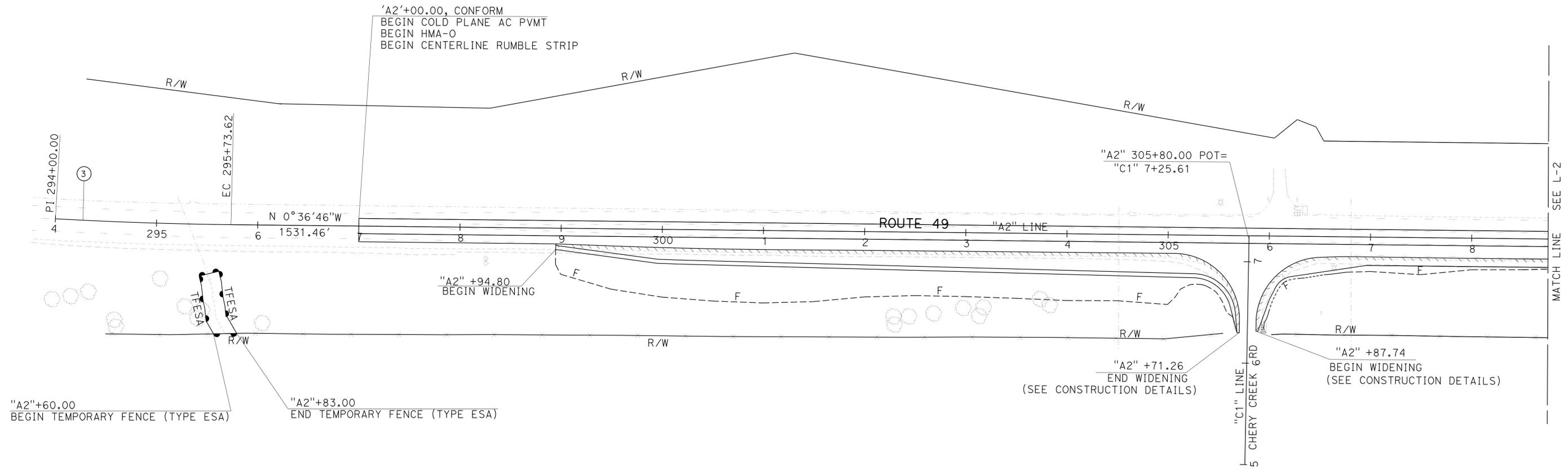
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

- NOTE:
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
 - FOR RUMBLE STRIP AT INTERSECTION, SEE CONSTRUCTION DETAIL SHEET.

LEGEND
 SAWCUT LINE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR
 NESAR FORMOLI
 CALCULATED/DESIGNED BY
 CHECKED BY
 BIP KAUSHAL
 NARAYAN SELWAL
 REVISED BY
 DATE REVISED



CURVE DATA

No.	R	Δ	T	L
③	3850.00'	2° 35' 02'	86.83'	173.62'

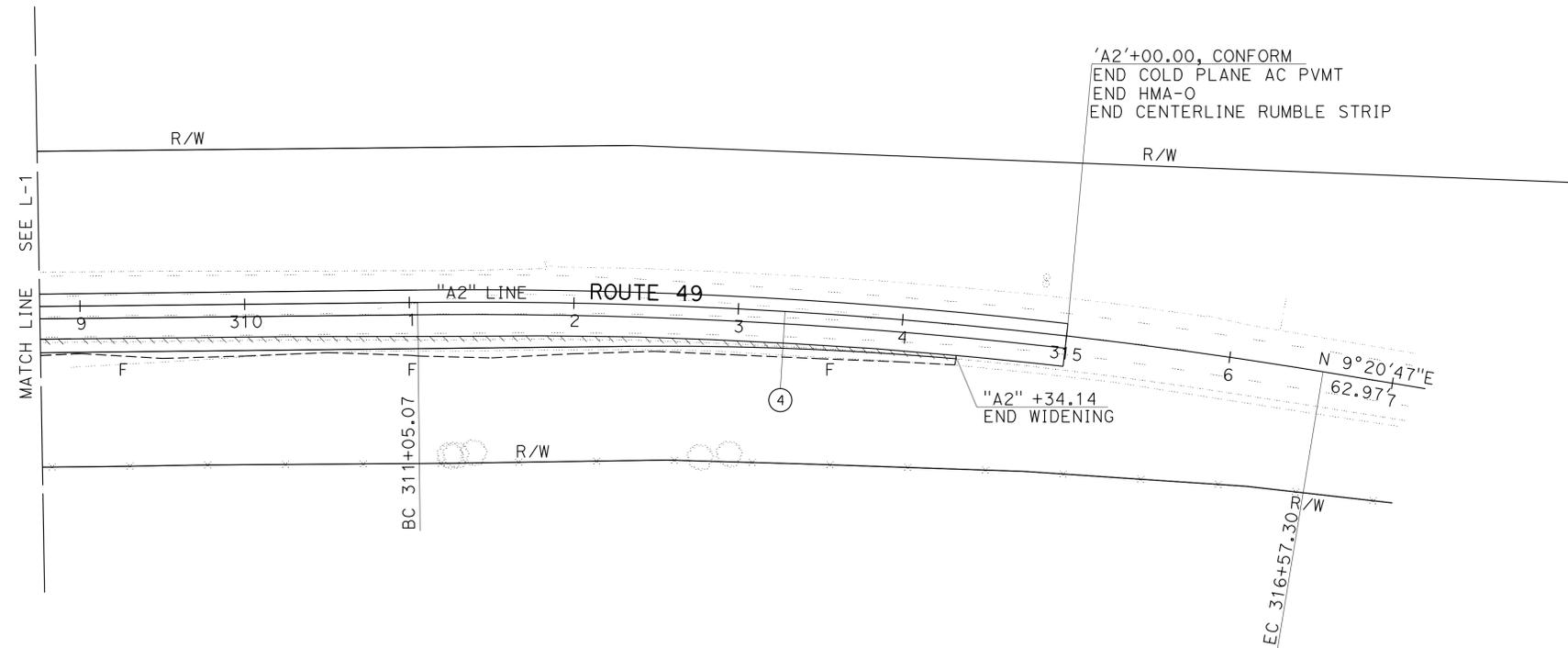
LAYOUT
 SCALE 1"=50'

L-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	5	37
		REGISTERED CIVIL ENGINEER DATE		3-3-14	
		PLANS APPROVAL DATE		3-3-14	
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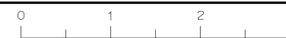
NOTE:
1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



CURVE DATA

No.	R	Δ	T	L
(4)	3177.00'	9° 57' 33"	276.81'	552.23'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR
 NESAR FORMOLI
 CALCULATED/DESIGNED BY
 CHECKED BY
 BIP KAUSHAL
 NARAYAN SELWAL
 REVISED BY
 DATE REVISED



LAYOUT
SCALE 1"=50'

L-2

LAST REVISION: 00-00-00
 DATE PLOTTED => 04-MAR-2014
 TIME PLOTTED => 13:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	6	37

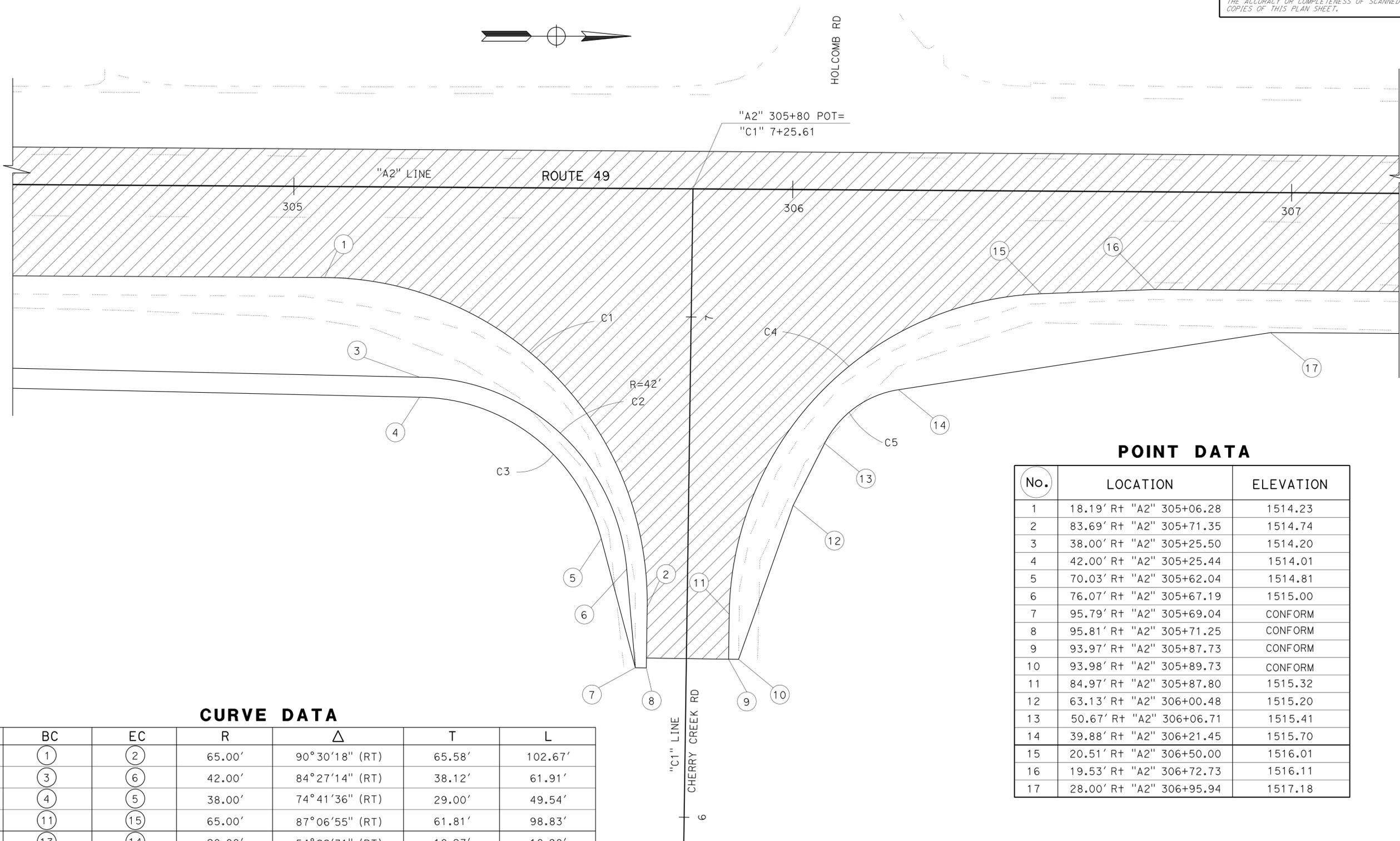
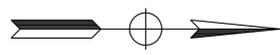
REGISTERED CIVIL ENGINEER DATE 3-3-14
 PLANS APPROVAL DATE 3-3-14

REGISTERED PROFESSIONAL ENGINEER
 NARAYAN SELWAL
 No. 74816
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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LEGEND

 0.10' COLD PLANE AC PVMT AND 0.10' HMA-0



CURVE DATA

No.	BC	EC	R	Δ	T	L
C1	①	②	65.00'	90°30'18" (RT)	65.58'	102.67'
C2	③	⑥	42.00'	84°27'14" (RT)	38.12'	61.91'
C3	④	⑤	38.00'	74°41'36" (RT)	29.00'	49.54'
C4	⑪	⑮	65.00'	87°06'55" (RT)	61.81'	98.83'
C5	⑬	⑭	20.00'	54°22'31" (RT)	10.27'	18.98'

POINT DATA

No.	LOCATION	ELEVATION
1	18.19' Rt "A2" 305+06.28	1514.23
2	83.69' Rt "A2" 305+71.35	1514.74
3	38.00' Rt "A2" 305+25.50	1514.20
4	42.00' Rt "A2" 305+25.44	1514.01
5	70.03' Rt "A2" 305+62.04	1514.81
6	76.07' Rt "A2" 305+67.19	1515.00
7	95.79' Rt "A2" 305+69.04	CONFORM
8	95.81' Rt "A2" 305+71.25	CONFORM
9	93.97' Rt "A2" 305+87.73	CONFORM
10	93.98' Rt "A2" 305+89.73	CONFORM
11	84.97' Rt "A2" 305+87.80	1515.32
12	63.13' Rt "A2" 306+00.48	1515.20
13	50.67' Rt "A2" 306+06.71	1515.41
14	39.88' Rt "A2" 306+21.45	1515.70
15	20.51' Rt "A2" 306+50.00	1516.01
16	19.53' Rt "A2" 306+72.73	1516.11
17	28.00' Rt "A2" 306+95.94	1517.18

DETAILS AT HOLCOMB/CHERRY CREEK INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-1

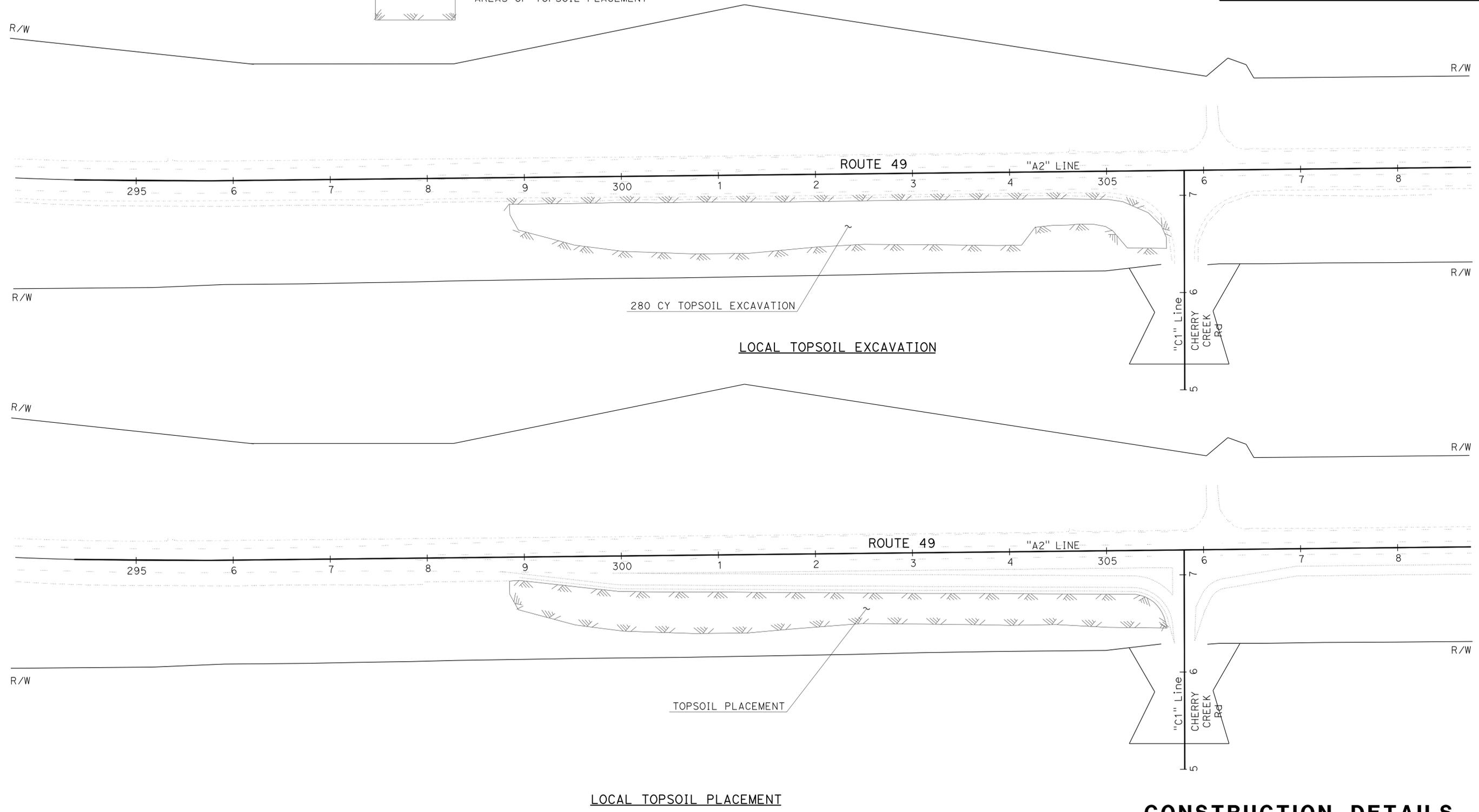
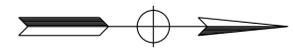
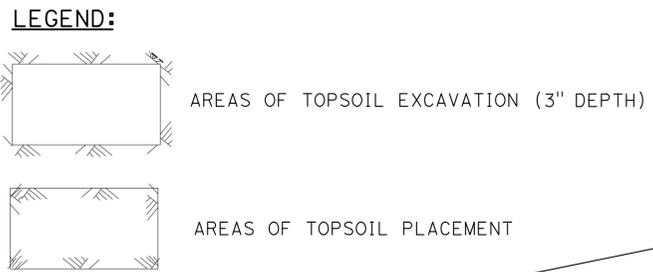


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	7	37

Signature: *James G. Williamson*
 LICENSED LANDSCAPE ARCHITECT
 No. 5415
 Signature Date: 02-29-16
 Renewal Date: 3-3-14
 Date: 3-3-14
 STATE OF CALIFORNIA

3-3-14
 PLANS APPROVAL DATE
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NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CONSTRUCTION DETAILS
 SCALE 1" = 50'

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	REVISOR
Stantec LANDSCAPE ARCHITECTURE	T. CHRIS JOHNSON	CHECKED BY	J. KURTH
			J. WILLIAMSON
			DATE REVISION

DATE PLOTTED => 04-MAR-2014
 TIME PLOTTED => 13:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	9	37

Thien H. Slocum 3-3-14
 REGISTERED CIVIL ENGINEER DATE
 3-3-14
 PLANS APPROVAL DATE

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NOTES:

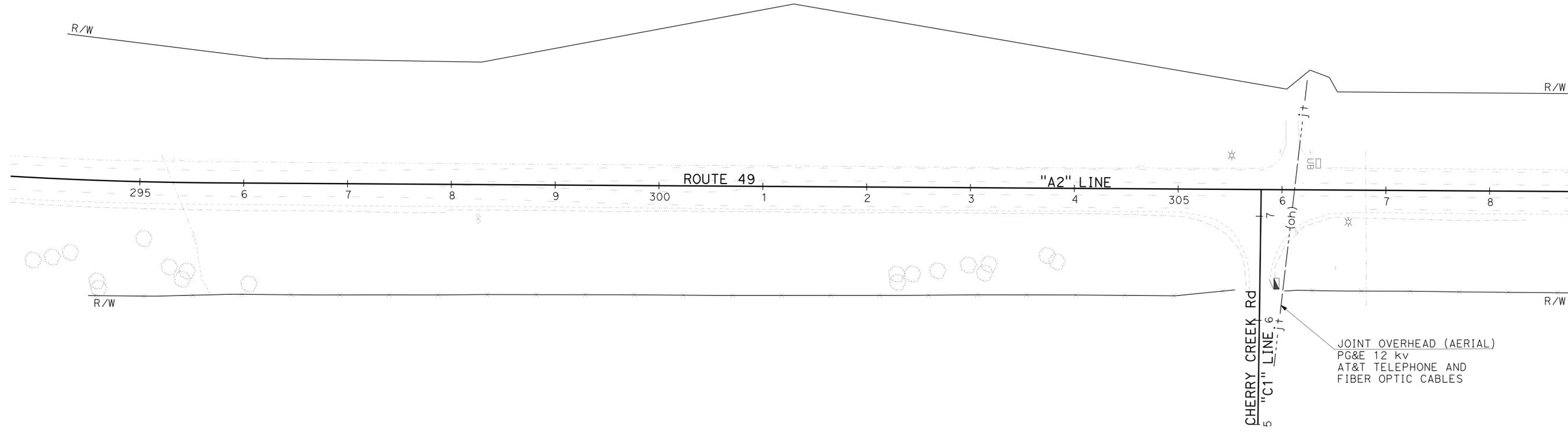
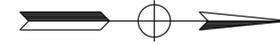
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- UTILITY OWNERSHIP:
 ELECTRICAL - PACIFIC GAS & ELECTRICAL (PG&E)
 TELEPHONE - AT&T
 FIBER OPTIC - AT&T

LEGEND:

- j+-- JOINT OVERHEAD (AERIAL) - EXISTING
 ✱ LIGHT POLE

ABBREVIATIONS:

kv KILO-VOLT



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR
 CHARLES W. LAUGHLIN
 CALCULATED/DESIGNED BY
 CHECKED BY
 THIEH SLOCUM
 RUSS PETTY
 REVISED BY
 DATE REVISED

APPROVED FOR UTILITY INFORMATION ONLY

UTILITY PLAN

SCALE 1"=50'

U-1



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR
 NESAR FORMOLI
 CALCULATED/DESIGNED BY
 CHECKED BY
 BIP KAUSHAL
 NARAYAN SELWAL
 REVISED BY
 DATE REVISED

NOTES:

1. CONSTRUCTION (WORK TO BE PERFORMED) NOTES DO NOT REPRESENT AN ORDER OF WORK AS SHOWN.
2. CONTRACTOR SHALL PROVIDE TEMPORARY PUBLIC ACCESS TO DRIVEWAYS AND ROADWAY CONNECTIONS THROUGH WORK AT ALL TIMES.
3. TEMPORARY RAILING (TYPE K) END TAPER 10:1 OR FLATTER.
4. ALL CHANNELIZERS (SURFACE MOUNTED) SHALL BE INSTALLED AT 50' C-C UNLESS OTHERWISE SHOWN.
5. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE SHEET CS-1.
6. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA CODES

LEGENDS:

-  CONSTRUCTION AREA SIGN LETTER
-  PAVEMENT DELINEATION DETAIL NUMBER
P=PAINT
-  CONSTRUCTION WORK AREA
-  SAW CUT LINE
-  DIRECTION OF TRAFFIC
-  Temp CRASH CUSHION (ABSORB 350)
-  ADDITIONAL STATIONARY MOUNTED CONSTRUCTION AREA SIGN

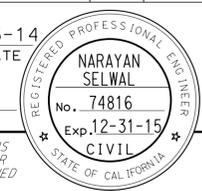
-  DIRECTION OF TRAFFIC
-  CALIFORNIA SIGN CODE
-  CHANNELIZER (SURFACE MOUNTED)
-  TEMPORARY RAILING (TYPE K)

CONSTRUCTION (WORK TO BE PERFORMED):

- (A) COLD PLANE 0.10' AC AS SHOWN, PLACE TEMPORARY STRIPE (PAINT), PLACE Temp RAILING (TYPE K) PER STANDARD PLAN T3B AND TEMPORARY CRASH CUSHION (ABSORB 350) AS SHOWN.
- (B) RELOCATE LIGHTING POLE
- (C) SAW CUT, ROADWAY EXCAVATION AND PLACE STRUCTURAL SECTION, PAVE 0.1 HMA.
- (D) REMOVE K RAIL, CRASH CUSHION
- (E) FINAL SIGNING AND STRIPING (SEE PAVEMENT DELINEATION AND SIGN PLANS).

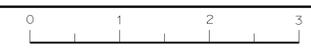
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	11	37

REGISTERED CIVIL ENGINEER DATE 3-3-14
 PLANS APPROVAL DATE 3-3-14



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TRAFFIC HANDLING PLAN
 SCALE: 1"=50'
TH-1

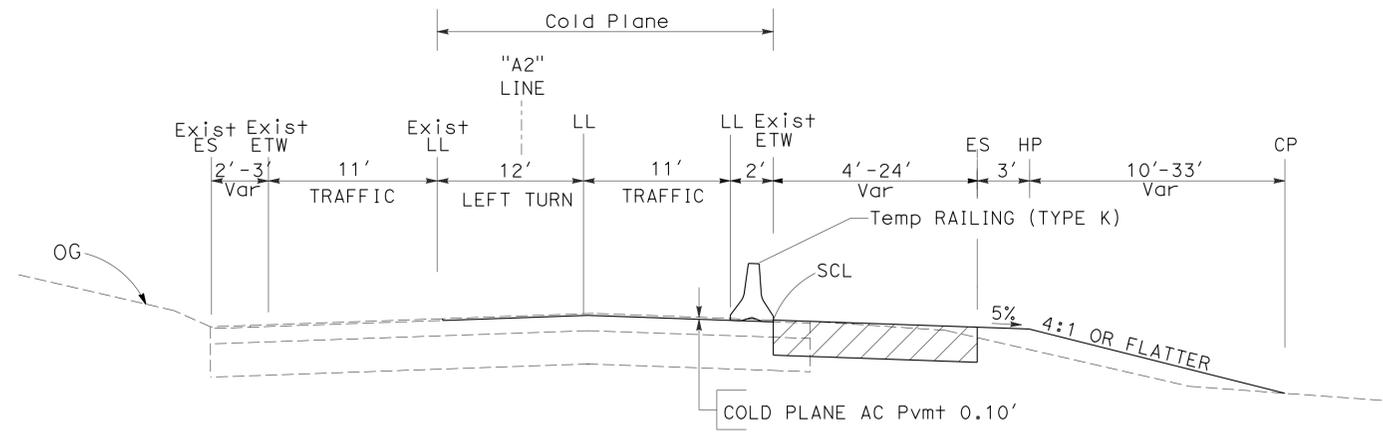


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	12	37

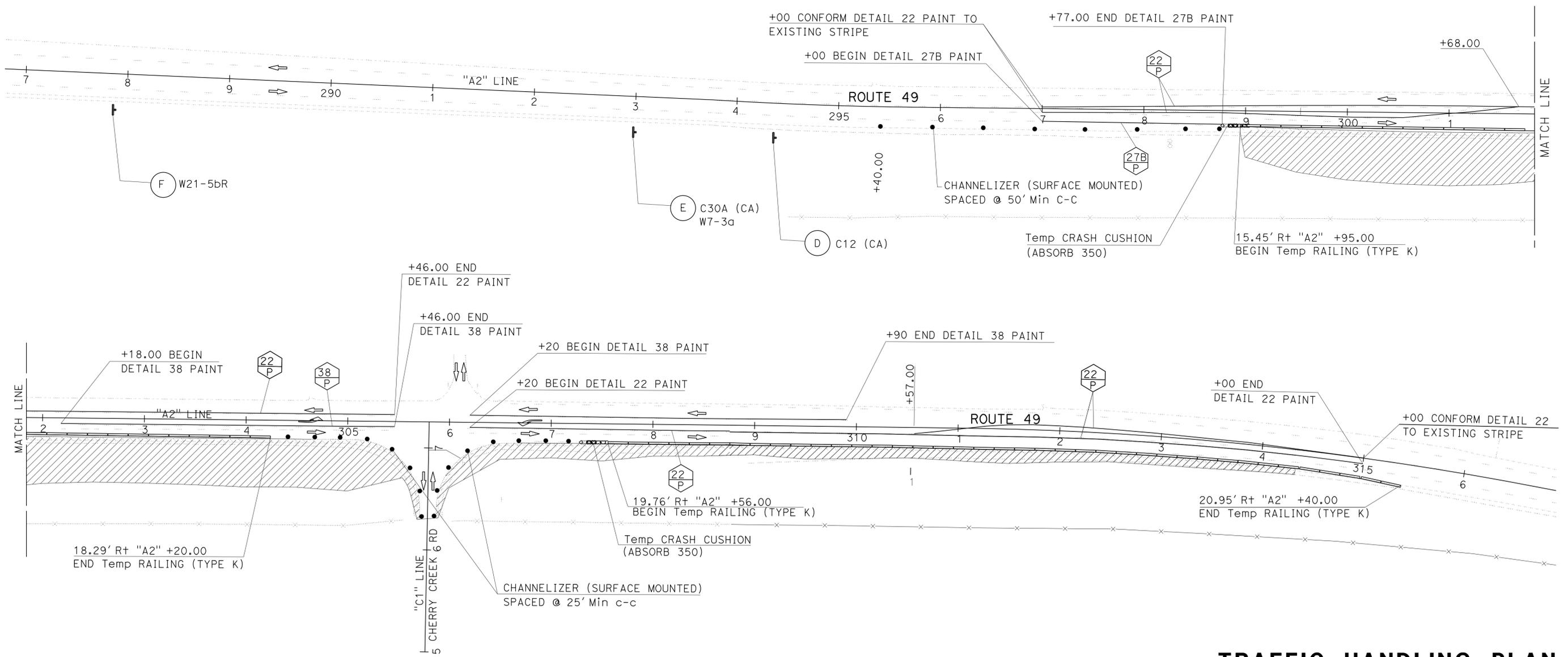
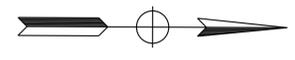
REGISTERED CIVIL ENGINEER	DATE
<i>Narayan Selwal</i>	3-3-14
PLANS APPROVAL DATE	
	3-3-14

REGISTERED PROFESSIONAL ENGINEER
NARAYAN SELWAL
No. 74816
Exp. 12-31-15
CIVIL
STATE OF CALIFORNIA

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ROUTE 49
TYPICAL SECTION



TRAFFIC HANDLING PLAN
SCALE: 1"=50'

APPROVED FOR TRAFFIC HANDLING WORK ONLY

TH-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

BIP KAUSHAL (DESIGNED BY) / NARAYAN SELWAL (CHECKED BY)

REVISOR: BIP KAUSHAL / DATE: [REVISOR]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	13	37

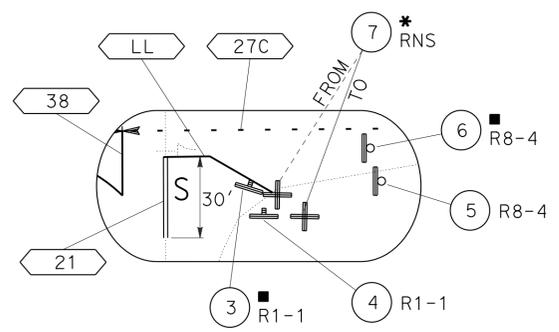
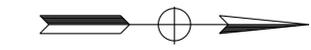
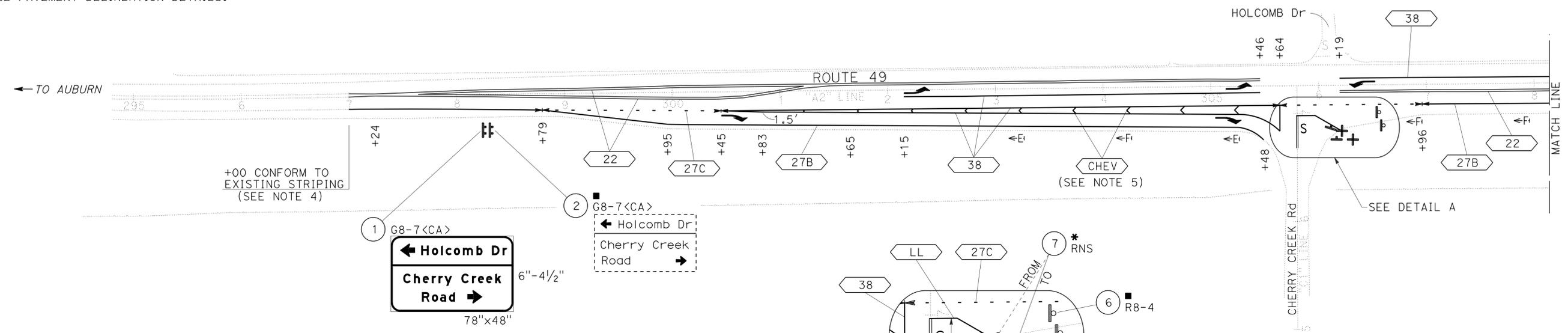
KRIS M. ALBERS 3-3-14
 REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE 3-3-14
 No. 49986
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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NOTES:

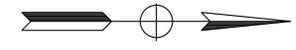
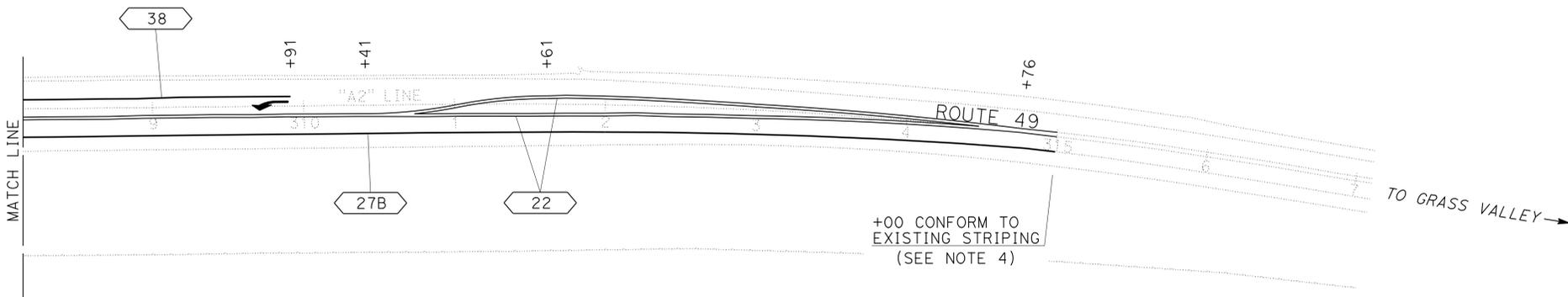
- ALL EXISTING SIGNS NOT SHOWN FOR REMOVAL OR RELOCATION SHALL REMAIN IN PLACE.
- ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
- ALL DELINEATORS SHALL BE CLASS 1 PLACED ON 100' CENTERS.
- FOR ADDITIONAL CENTERLINE STRIPING INFORMATION, SEE PAVEMENT DELINEATION DETAILS.
- FOR ADDITIONAL CHEVRON INSTALLATION INFORMATION, SEE PAVEMENT DELINEATION DETAILS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: SERGIO ACEVES
 JACK KEMMERLY
 KRIS ALBERS
 REVISOR: KRIS ALBERS
 DATE: 3-3-14
 CALCULATED/DESIGNED BY: KRIS ALBERS
 CHECKED BY:



LEGEND

- CHANGE IN STRIPING PATTERN
- No. PAVEMENT DELINEATION DETAIL NUMBER
- LL LIMIT LINE
- CHEV CHEVRON (SEE NOTE 5)
- E DELINEATOR (TYPE E)
- F DELINEATOR (TYPE F)
- S "STOP" PAVEMENT MARKING
- TYPE III ARROW
- No. ROADSIDE SIGN NUMBER
- <CA> CALIFORNIA SIGN CODE
- RNS ROAD NAME SIGN
- REMOVE ROADSIDE SIGN
- * RELOCATE ROADSIDE SIGN



PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1"=50'

PD-1

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	14	37

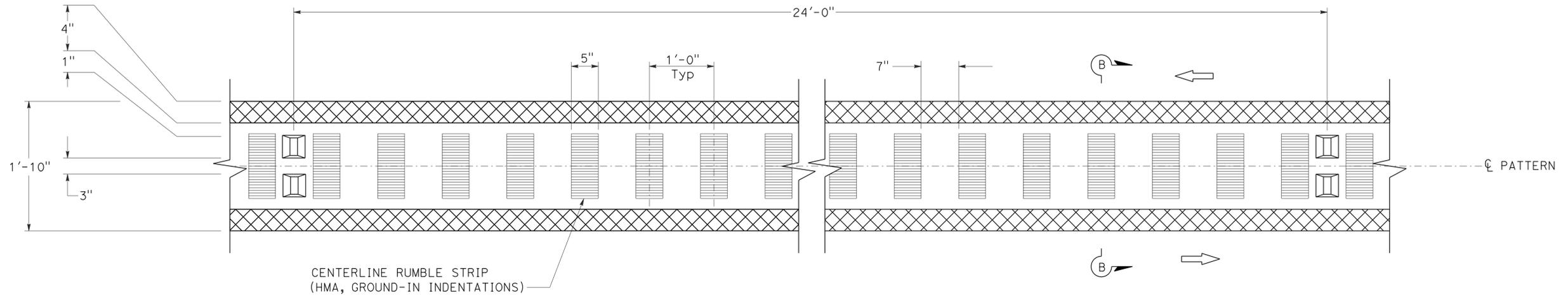
<i>Kris M. Albers</i>		3-3-14
REGISTERED CIVIL ENGINEER	DATE	
PLANS APPROVAL DATE 3-3-14		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

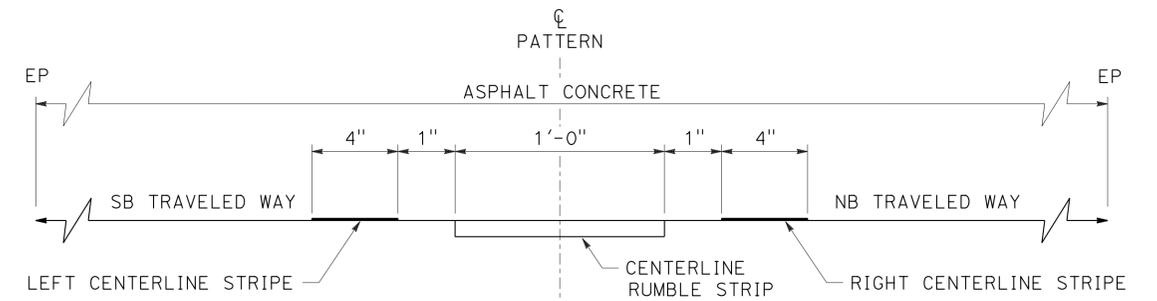
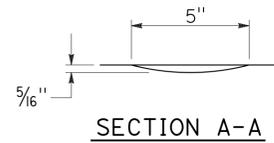
- CENTERLINE RUMBLE STRIP SHALL BE CONSTRUCTED PRIOR TO INSTALLING FINAL TRAFFIC STRIPES.
- FOR STRIPING DETAIL INFORMATION NOT SHOWN, SEE STANDARD PLANS.
- FOR ADDITIONAL RUMBLE STRIP INFORMATION NOT SHOWN, SEE LAYOUTS AND CONSTRUCTION DETAILS.
- THIS PLAN ACCURATE FOR CENTERLINE RUMBLE STRIP AND PAVEMENT DELINEATION DETAILS ONLY.

LEGEND

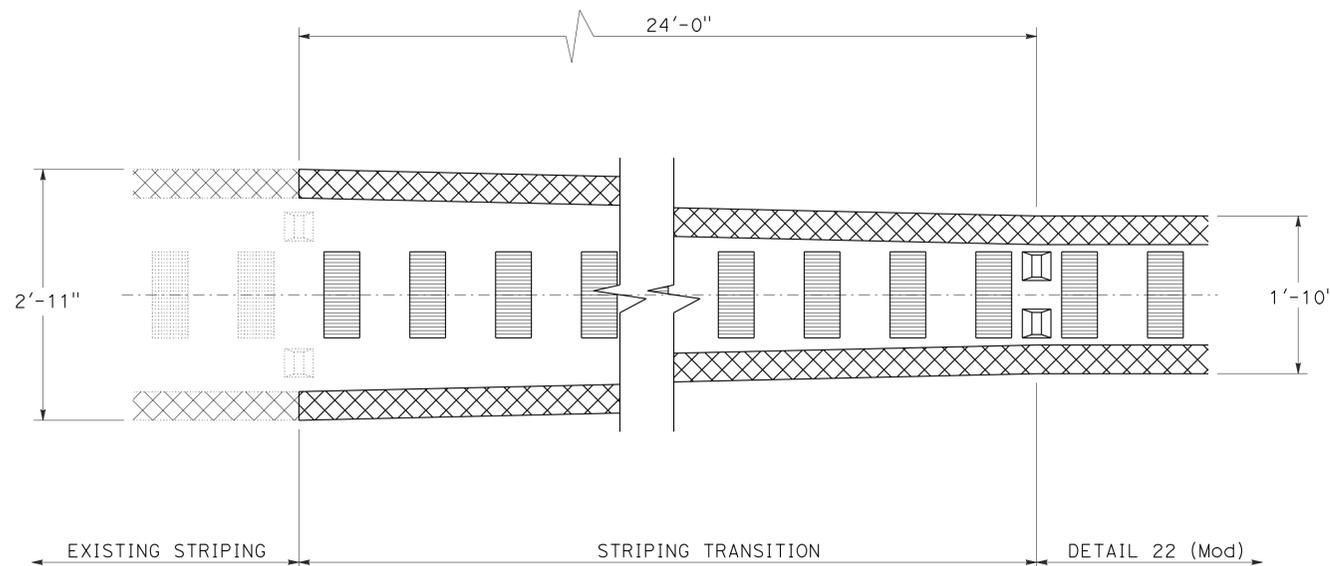
- TYPE D TWO-WAY YELLOW PAVEMENT MARKER (RETROREFLECTIVE)
- 4" YELLOW LINE



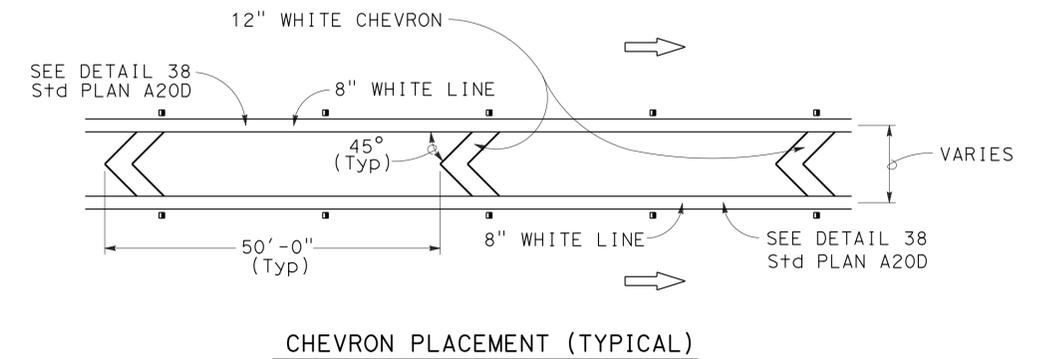
**DETAIL 22 (Mod) (TYPICAL)
ROADWAY CENTERLINE DETAIL**



SECTION B-B



**DETAIL 22 (Mod) WITH RUMBLE STRIPS
STRIPING TRANSITION**



CHEVRON PLACEMENT (TYPICAL)

**PAVEMENT DELINEATION
DETAILS
NO SCALE**

PDD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: SERGIO ACEVES
 JACK KEMMERLY
 KRIS ALBERS
 REVISOR: JACK KEMMERLY
 DATE: 3-3-14
 DESIGNED BY: JACK KEMMERLY
 CHECKED BY: KRIS ALBERS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	15	37

Kris M. Albers 3-3-14
REGISTERED CIVIL ENGINEER DATE

3-3-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Kris M. Albers
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

PAVEMENT DELINEATION QUANTITIES

LOCATION/STATION	4" THERMOPLASTIC TRAFFIC STRIPE					PAVEMENT MARKER (RETROREFLECTIVE)		THERMOPLASTIC PAVEMENT MARKING				DELINEATOR (CLASS 1)	
	DETAIL 21	DETAIL 22	DETAIL 27B	DETAIL 27C	DETAIL 38	TYPE D	TYPE G	STOP	LIMIT LINE	TYPE III ARROW	CHEVRON	TYPE E	TYPE F
	LF	LF	LF	LF	LF	EA	EA	SQFT	SQFT	SQFT	SQFT	EA	EA
"A2" 297+00 TO 297+24		48	24			4							
"A2" 297+24 TO 298+79		620	155			26							
"A2" 298+79 TO 300+45		664	166	166		28							
"A2" 300+45 TO 301+65		480	120		240	20	11			42	3		
"A2" 301+65 TO 302+15		100	50		100	4	4				4		
"A2" 302+15 TO 305+46		662	331		993	28	41			126	57	2	1
"A2" 305+46 TO 305+48			2		4								
"A2" 305+48 TO 305+64					32		2						
"A2" 305+64 TO 306+19				55	29		2						
CHERRY CREEK ROAD	60							22	44				
"A2" 306+19 TO 306+96		154		77	77	8	4			42			
"A2" 306+96 TO 309+91		590	295		295	24	12			42			2
"A2" 309+91 TO 310+41		100	50			4							
"A2" 310+41 TO 314+76		1,740	435			72							
"A2" 341+76 TO 315+00		48	24			2							
SUBTOTAL	60	5,206	1,652			220	76	22	44	252	64	2	3
TOTAL		6,918		298	1,770		296			382		5	

NOTE:

1. FOR ADDITIONAL STRIPING DETAIL INFORMATION, SEE PAVEMENT DELINEATION DETAILS.

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

JACK KEMMERLY
KRIS ALBERS

REVISOR BY
DATE REVISED

FUNCTIONAL SUPERVISOR
SERGIO ACEVES

TRAFFIC

FUNCTIONAL SUPERVISOR SERGIO ACEVES	CALCULATED/DESIGNED BY CHECKED BY	JACK KEMMERLY KRIS ALBERS	REVISED BY DATE REVISED
--	--------------------------------------	------------------------------	----------------------------

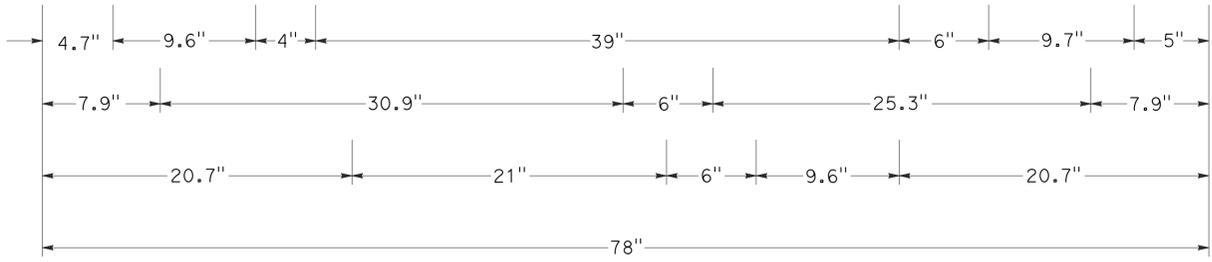
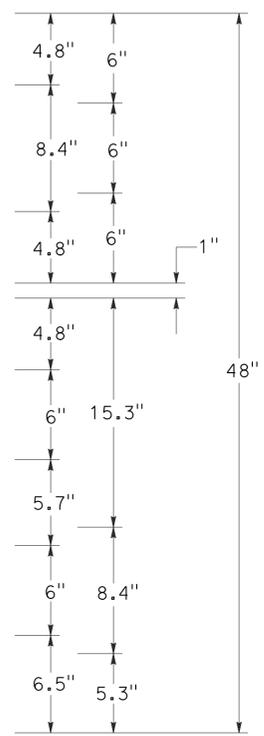
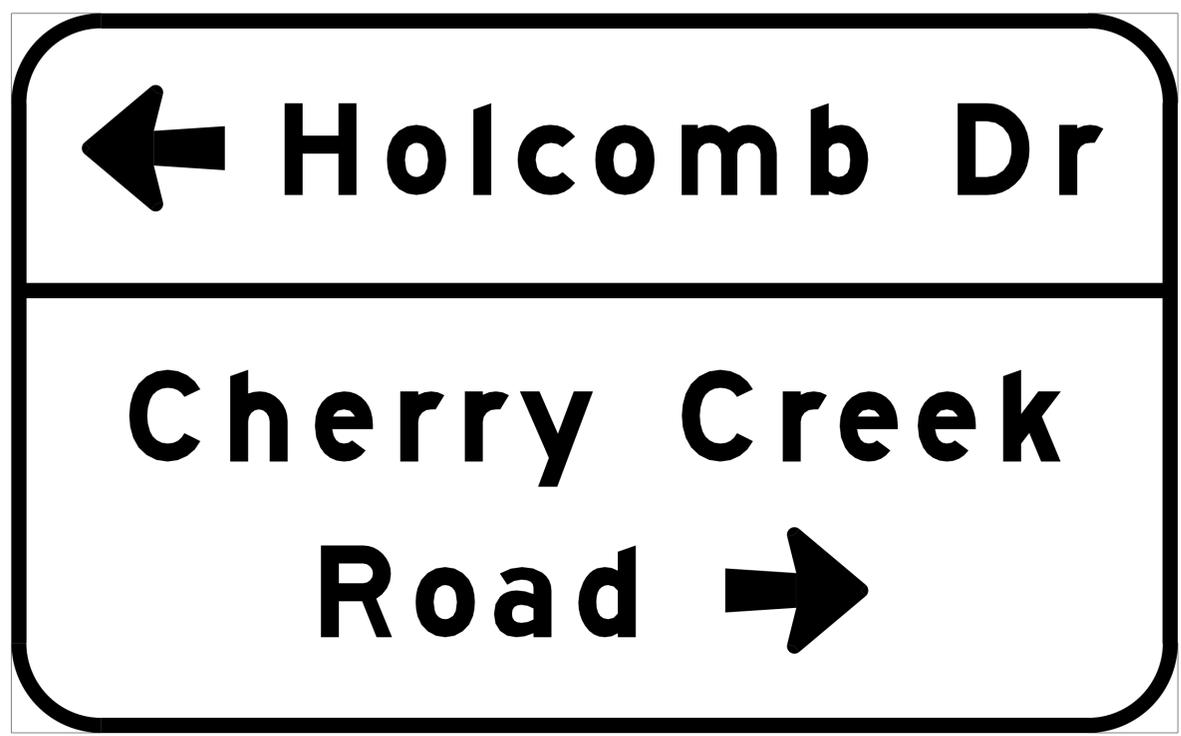
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	16	37

Kris M. Albers 3-3-14
 REGISTERED CIVIL ENGINEER DATE

3-3-14
 PLANS APPROVAL DATE

KRIS M. ALBERS
 No. 49986
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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



1" BORDER WITH 6" RADIUS
 ARROW 6"UC-1L - 9.6" 180°; "Holcomb Dr" E Mod
 "CHERRY CREEK" E Mod
 "Road" E Mod; ARROW 6"UC-1L - 9.6" 0°

1 G8-7<CA>
 Sta "A2" 298+25± FNBT

SIGN DETAILS

SD-1

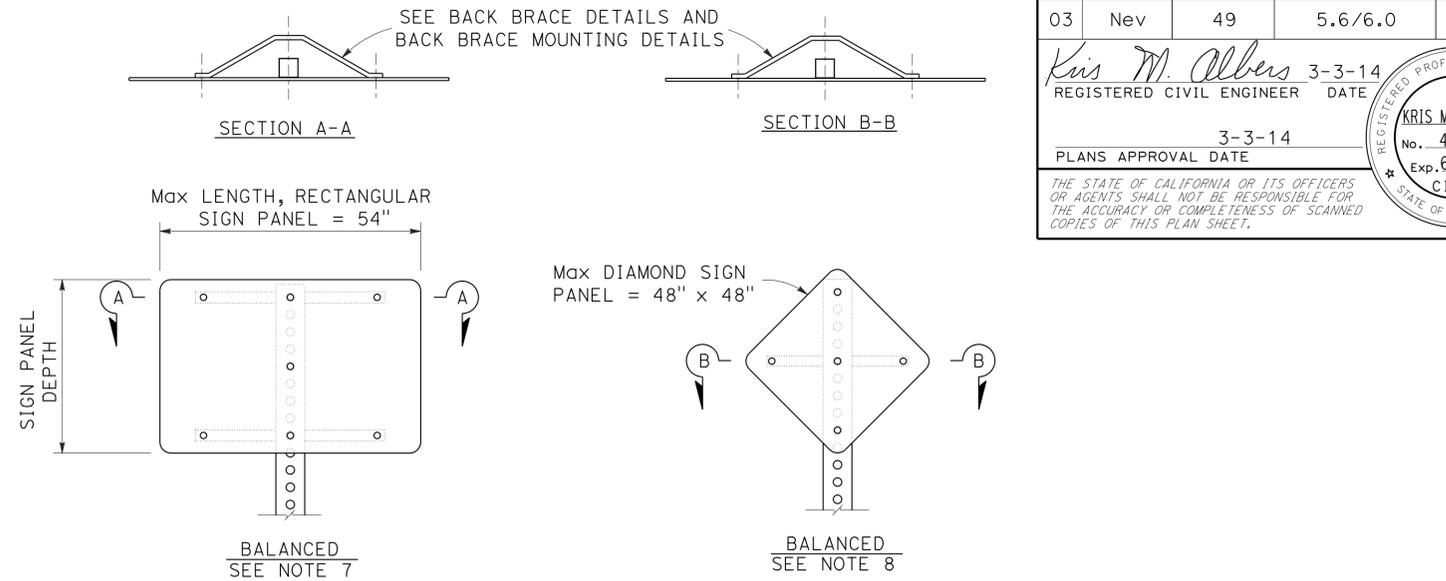


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	17	37

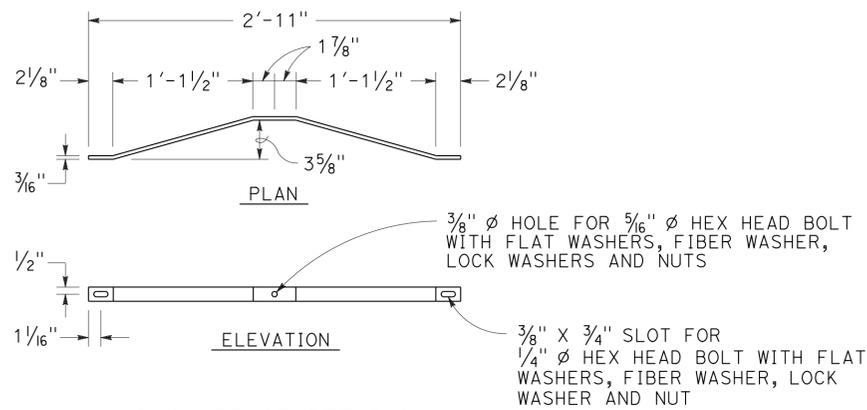
KRIS M. ALBERS 3-3-14
 REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE 3-3-14
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

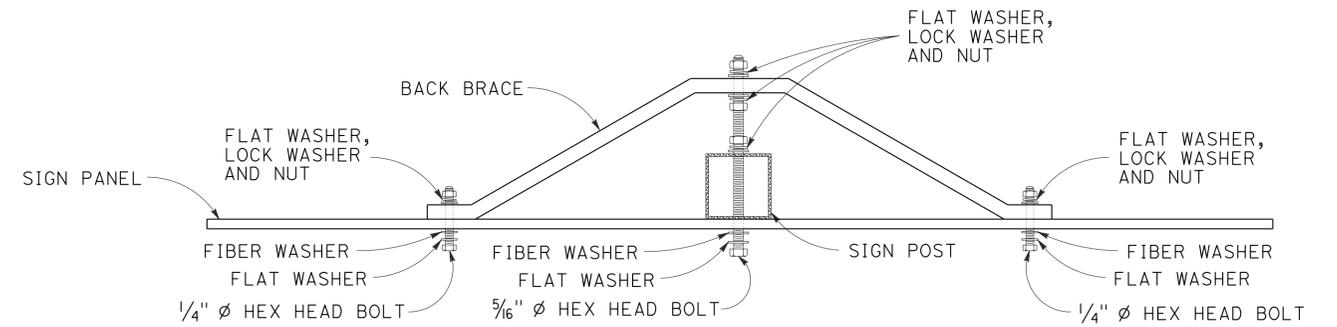
1. THE SIGN POST SHALL HAVE $\frac{7}{16}$ " DIAMETER PERFORATIONS 1" ON CENTER ON ALL FOUR SIDES FOR THE FULL LENGTH.
2. USE TWO DRIVE RIVETS TO FASTEN ASSEMBLED SIGN AND SIGN POST INTO ANCHOR SLEEVE. INSTALL DRIVE RIVETS INTO THE SIDES FACING TRAFFIC.
3. ALL METAL SIGN POSTS AND ANCHOR SLEEVES SHALL BE GALVANIZED.
4. ALL ANCHOR SLEEVES SHALL BE EMBEDDED IN PCC.
5. BALANCED SINGLE POST INSTALLATIONS OF SINGLE SHEET ALUMINUM PANEL SIGNS REQUIRE BACK BRACES WHEN 2'-10" OR MORE IN LENGTH.
6. WOOD BLOCK SPACERS ARE NOT REQUIRED FOR SIGNS MOUNTED ON METAL POSTS.
7. ATTACH RECTANGULAR SIGN PANEL TO SIGN POST WITH BOLTS AT TOP AND BOTTOM. CENTER MAY BE ATTACHED WITH EITHER BOLT OR $\frac{3}{8}$ " DRIVE RIVET.
8. ATTACH DIAMOND SIGN PANEL TO SIGN POST WITH BOLT AT CENTER. TOP AND BOTTOM MAY BE ATTACHED WITH EITHER BOLTS OR $\frac{3}{8}$ " DRIVE RIVETS.
9. FOR DETAILS NOT SHOWN, SEE STANDARD PLANS RS1 AND RS2.



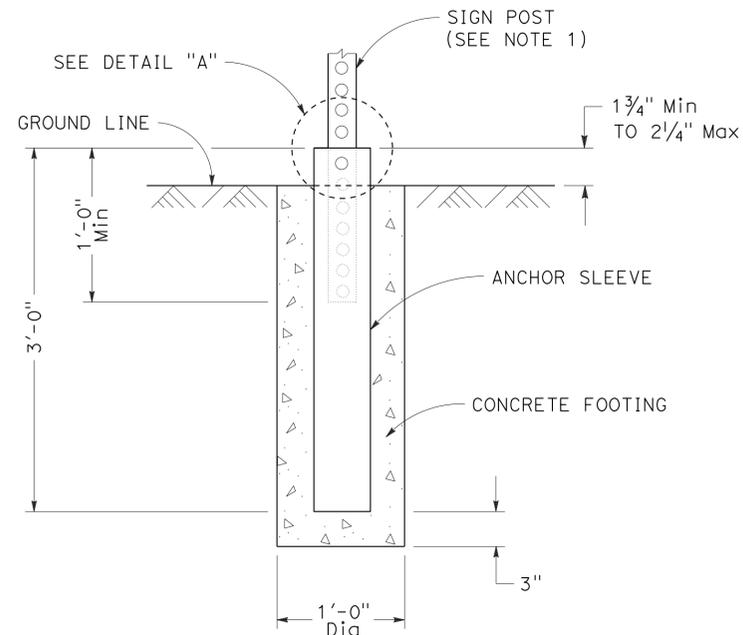
SINGLE POST INSTALLATION



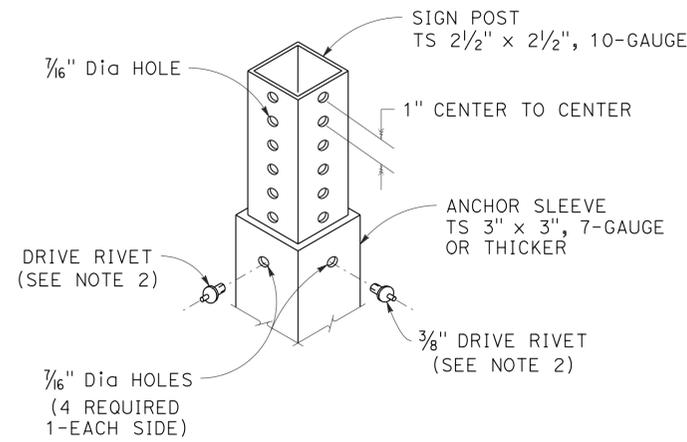
BACK BRACE DETAILS
SEE NOTE 5



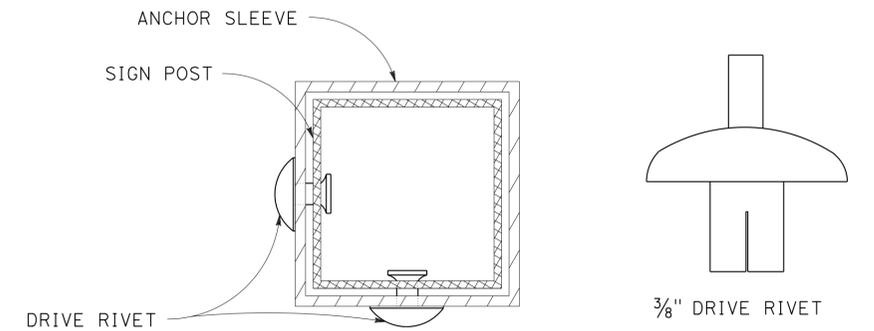
BACK BRACE MOUNTING DETAIL
SEE NOTES 6, 7 AND 8



ANCHOR SLEEVE DETAIL



DETAIL "A"



FASTENER DETAILS

SIGN DETAILS
NO SCALE

SD-2

APPROVED FOR SIGN WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	18	37

Kris M. Albers 3-3-14
REGISTERED CIVIL ENGINEER DATE

3-3-14
PLANS APPROVAL DATE

KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

ROADSIDE SIGN QUANTITIES

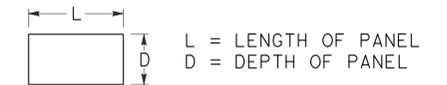
SIGN NUMBER (No.)	SIGN CODE		PANEL SIZE	"C" DIM IN FEET	POST SIZE AND LENGTH		ROADSIDE SIGN		INSTALL SIGN (SSBM)	REMOVE ROADSIDE SIGN	RELOCATE ROADSIDE SIGN	REMARKS	
	FEDERAL	CALIFORNIA	INCHES		WOOD POST	METAL POST	ONE POST	TWO POST					
					4"x6"	2 1/2" X 2 1/2"	EA	EA					
1		G8-7	78 x 48	5	14'			1				SEE NOTE 4	
2		G8-7								1			
3	R1-1									1			
4	R1-1		30	5	10'		1					SEE NOTE 4	
5	R8-4		48 x 36	5				1				SEE NOTE 5	
6	R8-4									1			
7		RNS									1	SEE NOTE 6	
TOTAL								1	1	1	3	1	

NOTES:

- EXACT LOCATION AND POSITION OF ROADSIDE SIGNS TO BE DETERMINED BY THE ENGINEER.
- POST LENGTHS GIVEN ARE APPROXIMATE.
- "C" DIM = VERTICAL CLEARANCE EP TO BOTTOM OF SIGN PANEL.
- FOR ADDITIONAL INFORMATION, SEE SIGN DETAIL PLANS.
- SIGN PANEL TO BE MOUNTED ON LUMINAIRE.
- RNS = ROAD NAME SIGN

ROADSIDE SIGN PANEL QUANTITIES

SIGN CODE		SIGN MESSAGE/DESCRIPTION	PANEL SIZE L x D	PANEL AREA SQFT	NUMBER OF PANELS	BACKGROUND		LEGEND		PROTECTIVE OVERLAY	FURNISH SINGLE SHEET ALUMINUM SIGN		
FEDERAL	CALIFORNIA					SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	PREMIUM	UNFRAMED	FRAMED	
			INCHES	SQFT							0.063"	0.080"	0.063"
											SQFT	SQFT	SQFT
	G8-7	180° ARROW~ Holcomb Dr Cherry Creek Road ~ 0° ARROW	78 x 48	26.00	1	GREEN	III	WHITE	IX	X			26.00
R1-1		STOP	30	5.18	1	RED	IX	WHITE	IX	X	5.18		
R8-4		EMERGENCY PARKING ONLY	48 x 36	12.00	1	WHITE	III	BLACK				12.00	
TOTAL											5.18	12.00	26.00



SIGN QUANTITIES

SQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC
FUNCTIONAL SUPERVISOR
SERGIO ACEVES
CALCULATED/DESIGNED BY
CHECKED BY
JACK KEMMERLY
KRIS ALBERS
REVISED BY
DATE REVISED

ROADWAY ITEMS SUMMARY

LINE	STATION		LOCATION R+/L+	ROADWAY EXCAVATION CY	(N) EMBANKMENT CY	IMPORTED BORROW CY	CLASS 2 AB CY	HOT MIX ASPHALT (TYPE A) TON	HOT MIX ASPHALT (OPEN GRADED) TON	TACK COAT TON	COLD PLANE AC PAVEMENT SQYD	TREATED WOOD WASTE LB	DESCRIPTION
	FROM	TO											
"A2"	297+00.00	298+94.80	R+						34	0.23	497		
	298+94.80	305+80.00	R+	395	1,608		622	510	232	0.97	2,124	130	
	305+80.00	314+34.14	R+	415	8	810	345	320	231	1.27	2,760	40	
	314+34.14	315+00.00	R+						13	0.10	190		
TOPSOIL EXCAVATION QUANTITIES				280									SEE SHEET C-2
TOPSOIL PLACEMENT QUANTITIES				280									SEE SHEET C-2
TOTAL				1370	-	810	967	830	510	3.00	5,571	170	

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	19	37
REGISTERED CIVIL ENGINEER DATE 3-3-14			PLANS APPROVAL DATE 3-3-14		
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.					

TEMPORARY PAVEMENT MARKER

LINE	STATION		DETAIL	TYPE	EA
	FROM	TO			
A2	297+00.00	301+68.00	22	D	39
	297+00.00	305+56.00	22	D	71
	306+20.00	315+00.00	22	D	74
	310+57.00	315+00.00	22	D	37
	302+18.70	305+46.00	38	G	14
	306+20.00	309+90.00	38	G	16
TOTAL TOTAL					251

TEMP TRAFFIC STRIPE (PAINT)

LINE	STATION		DETAIL	LF
	FROM	TO		
A2	297+00.00	298+77.00	27B	177.00
	297+00.00	301+68.00	22	468.00
	297+00.00	305+56.00	22	846.00
	306+20.00	315+00.00	22	880.00
	310+57.00	315+00.00	22	443.00
	302+18.70	305+46.00	38	328.00
	306+20.00	309+90.00	38	370.00
	TOTAL			

CHANNELIZERS-CRASH CUSHION

LINE	STATION		CHANNELIZER (SURFACE MOUNTED) EA	TEMP CRASH CUSHION (ABSORB 350) EA
	FROM	TO		
"A2"	295+40.00	298+95.00	8	1
	304+20.00	307+56.00	16	1
TOTAL			24	2

TEMPORARY RAILING (TYPE-K)

LINE	STATION		K-RAIL LF
	FROM	TO	
A2	298+95	304+20	525
	307+56	315+40	784
TOTAL			1,309

RUMBLE STRIP

LOCATION	STA	
"A2" 297+00 TO 305+04	8	
"A2" 306+92 TO 315+00	8	
TOTAL		16

SUMMARY OF QUANTITIES

Q-1



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR
 NESAR FORMOLI
 CALCULATED/DESIGNED BY
 CHECKED BY
 BIP KAUSHAL
 NARAYAN SELWAL
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	20	37

REGISTERED CIVIL ENGINEER DATE 3-3-14
 PLANS APPROVAL DATE 3-3-14

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TEMPORARY FIBER ROLL

LOCATION	LF
"A2" 299+00 TO 300+00	100
"A2" 300+00 TO 301+00	100
"A2" 301+00 TO 302+00	100
"A2" 302+00 TO 303+00	100
"A2" 303+00 TO 304+00	100
"A2" 304+00 TO 305+00	100
TOTAL	600

TEMPORARY DRAINAGE INLET PROTECTION

LOCATION	EA
"A2" 295+38 L+	1
"A2" 304+64 L+	1
"A2" 306+28 L+	1
"A2" 311+85 L+	1
TOTAL	4

TEMPORARY LARGE SEDIMENT BARRIER

LOCATION	LF
"A2" 297+00 TO 305+70	870
"A2" 306+87 TO 314+34	690
TOTAL	1560

TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)

LOCATION	SQYD
"A2" 298+95 TO 305+50	675
"A2" 305+50 TO 394+34	225
TOTAL	900

TEMPORARY FENCE (TYPE ESA)

LOCATION	LF
"A2" 295+60.00 TO 296+83.00	190
TOTAL	190

TEMPORARY CONSTRUCTION ENTRANCE

LOCATION	EA
"A2" 299+00 TO 314+35	2
TOTAL	2

TEMPORARY COVER

LOCATION	SQYD
"A2" 298+95 TO 305+50	675
"A2" 305+50 TO 394+34	225
TOTAL	900

SUMMARY OF QUANTITIES

Q-2



NOTE:

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

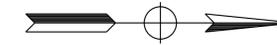
LEGEND:



EROSION CONTROL
 - HYDROSEED
 - STRAW
 - HYDROMULCH

EROSION CONTROL

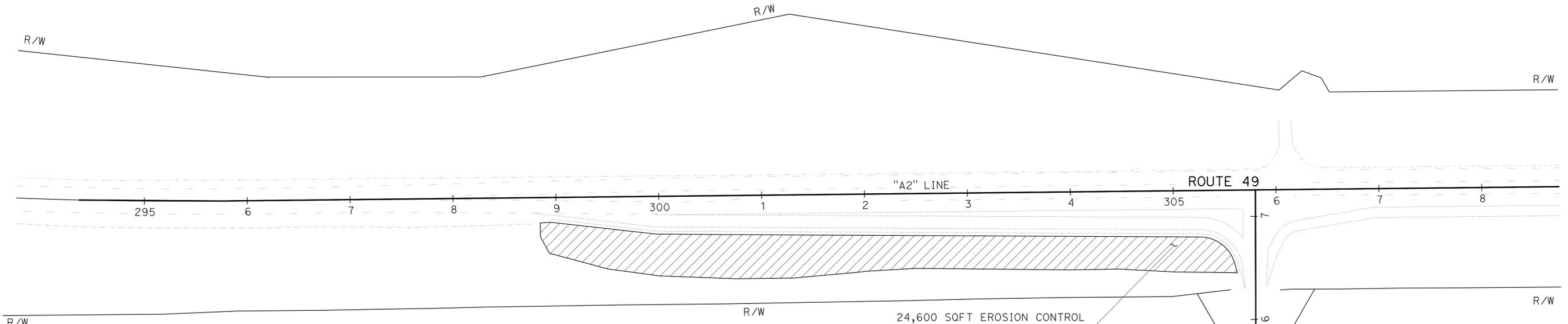
SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	HYDROSEED	SEED	---	45 LB/ACRE
		FIBER	WOOD	600 LB/ACRE
		FERTILIZER	ORGANIC	600 LB/ACRE
STEP 2	STRAW	STRAW	RICE	2 TONS/ACRE
		FIBER	WOOD	600 LB/ACRE
STEP 3	HYDROMULCH	TACKIFIER	PSYLLUM	150 LB/ACRE
		FERTILIZER	ORGANIC	600 LB/ACRE



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	21	37

LICENSED LANDSCAPE ARCHITECT
 3-3-14
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Stantec LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 T. CHRIS JOHNSON
 CALCULATED/DESIGNED BY
 CHECKED BY
 J. KURTH
 J. WILLIAMSON
 REVISED BY
 DATE REVISED



SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
BROMUS CARINATUS ¹ (CALIFORNIA BROME)	80	15
ESCHSCHOLZIA CALIFORNICUM (CALIFORNIA POPPY)	75	3
ELYMUS GLAUCUS ¹ (BLUE WILDRYE)	80	9
LUPINUS BICOLOR ¹ (PIGMY-LEAVED LUPINE)	80	9
NASSELLA PULCHRA ¹ (PURPLE NEEDLEGRASS)	70	9
		45

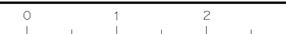
¹ SEED PRODUCED IN NORTHERN CALIFORNIA ONLY.

EROSION CONTROL QUANTITIES

SHEET	DESCRIPTION	HYDROSEED	STRAW	HYDROMULCH
		SQFT	SQFT	SQFT
ECD-1	EROSION CONTROL	24,600	24,600	24,600

EROSION CONTROL DETAIL
 SCALE 1"= 50'
ECD-1

APPROVED FOR EROSION CONTROL WORK ONLY



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	22	37

Sasharan Boparai 3-3-14
 REGISTERED ELECTRICAL ENGINEER DATE

3-3-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JASKARAN S. BOPARAI
 No. E15056
 Exp. 12-31-15
 ELECTRICAL
 STATE OF CALIFORNIA

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

NOTE:

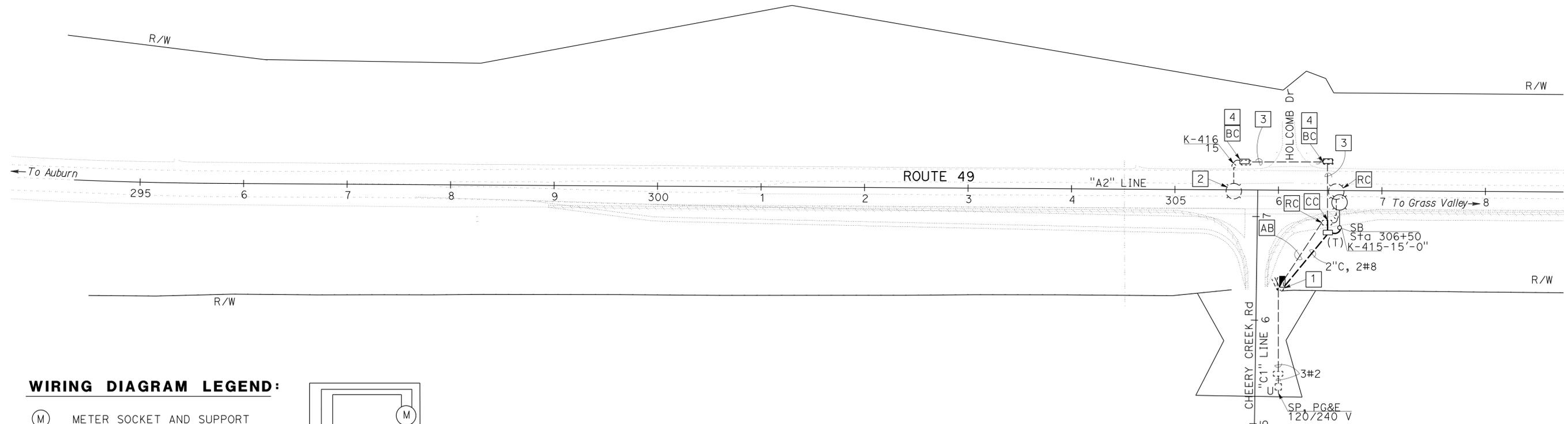
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND (THIS SHEET ONLY):

- 1 RC Exist SERVICE EQUIPMENT ENCLOSURE AND FOUNDATION
 INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE Ctid No. 03170490005790. FOR SERVICE WIRING DIAGRAM SEE THIS SHEET.
 Exist LOAD: 2-200 W HPS LUMINAIRE
 NEW LOAD: 2-165 W LED LUMINAIRE
- 2 RC LUMINAIRE, INSTALL LED LUMINAIRE
- 3 RC 2#10, ADD 2#8
- 4 RC EXISTING PULL BOX, INSTALL No. 5 TRAFFIC TYPE PULL BOX

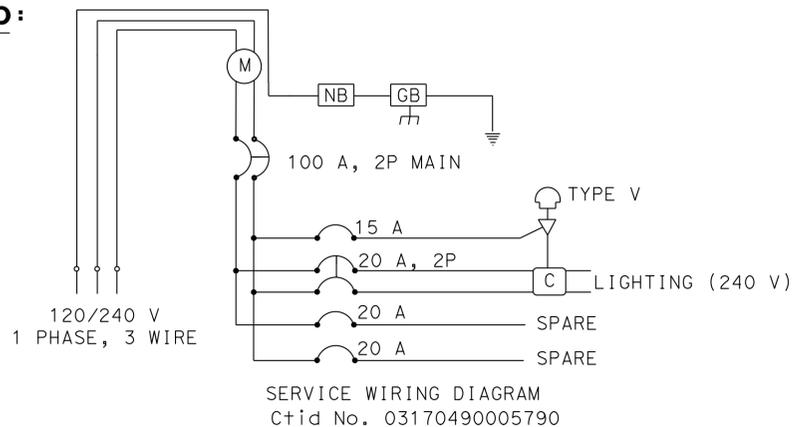
ABBREVIATION:

PG&E: PACIFIC GAS AND ELECTRIC



WIRING DIAGRAM LEGEND:

- (M) METER SOCKET AND SUPPORT
- (C) CONTACTOR
- (NB) SOLID NEUTRAL BUS
- ▽ AUTO TEST SWITCH
- ☐ PHOTOELECTRIC UNIT



MODIFY LIGHTING

SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

OANH D NGUYEN
 JASKARAN BOPARAI
 REVISIONS BY DATE
 CALCULATED/DESIGNED BY CHECKED BY
 FUNCTIONAL SUPERVISOR
 NELSON LEE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED-DESIGNED BY
 CHECKED BY

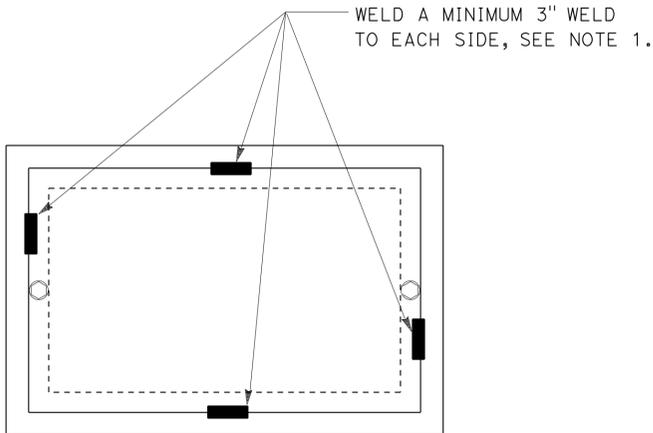
OANH D NGUYEN
 JASKARAN BOPARAI

REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Neu	49	5.6/6.0	23	37

Jaskaran Boparai 3-3-14
 REGISTERED ELECTRICAL ENGINEER DATE
 3-3-14
 PLANS APPROVAL DATE

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



TOP VIEW

TRAFFIC PULL BOX WELDING DETAIL

NOTES ON PULL BOXES:

1. WELDING MUST COMPLY WITH STANDARD SPECIFICATION SECTION 75.
2. CONDUITS ENTERING THE PULL BOX MUST BE ENCASED IN PCC (3" ALL AROUND). PCC ENCASEMENT MUST EXTEND 5'-6" FROM THE PULL BOX.
3. PULL BOXES FOR ELECTROLIERS, POST AND SIGNAL STANDARDS MUST BE LOCATED WITHIN 5'-0" FROM THE STATION OF THE ADJACENT ELECTROLIER, POST OR SIGNAL STANDARD.

ELECTRICAL DETAIL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR
 NELSON LEE
 CALCULATED/DESIGNED BY
 CHECKED BY
 OANH D NGUYEN
 JASKRAN BOPARAI
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	24	37

Jaskran Boparai 3-3-14
 REGISTERED ELECTRICAL ENGINEER DATE
 PLANS APPROVAL DATE 3-3-14

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.

MODIFY LIGHTING

SHEET No.	(N) LED LUMINAIRE	(N) STANDARD TYPE 15	(N) TYPE III SERVICE EQUIPMENT ENCLOSURE	(N) No. 5(T) PULL BOX	(N) #8 CONDUCTOR	(N) #2 CONDUCTOR
	EA	EA	EA	EA	FT	FT
E-1	2	1	1	1	1200	40

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

ELECTRICAL QUANTITIES

E-3

	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	
ObItr	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	
±	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	
Tel	TELEPHONE	
Temp	TEMPORARY	
TG	TOP OF GRADE	
To+	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
03	Nev	49	5.6/6.0	25	37

Grace M. Tsushima
REGISTERED CIVIL ENGINEER



July 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 3-3-14

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
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

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

REVISED STANDARD PLAN RSP A10B

2010 REVISED STANDARD PLAN RSP A10B

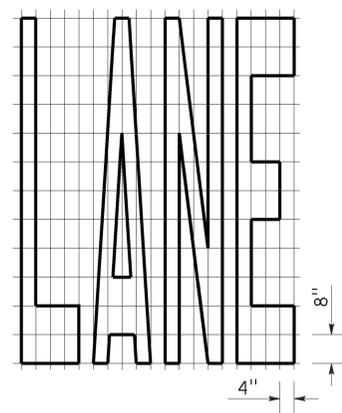
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	26	37

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

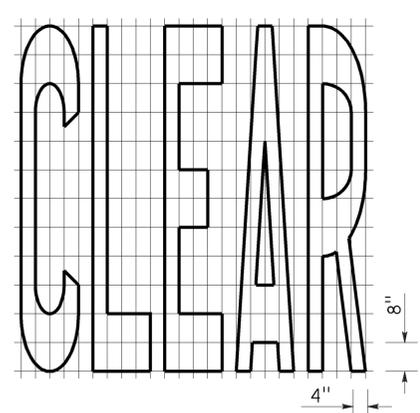
July 20, 2012
 PLANS APPROVAL DATE

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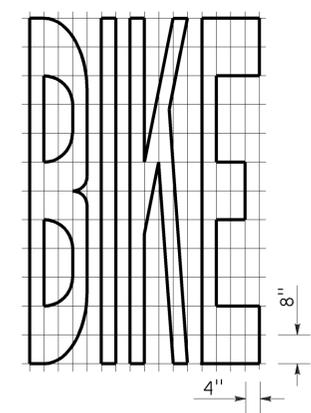
TO ACCOMPANY PLANS DATED 3-3-14



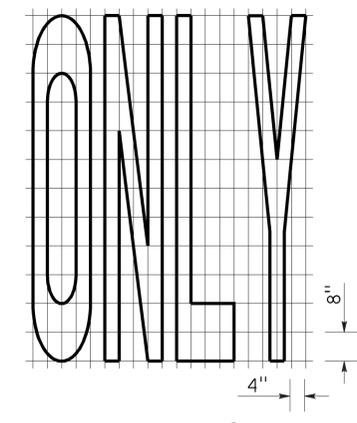
A=24 ft²



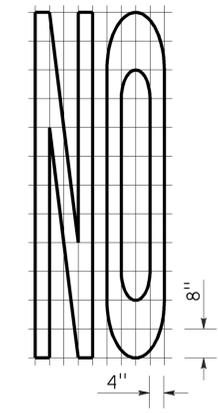
A=27 ft²



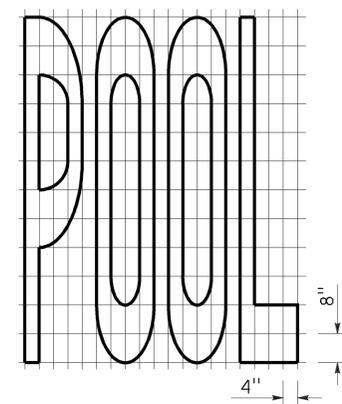
A=21 ft²



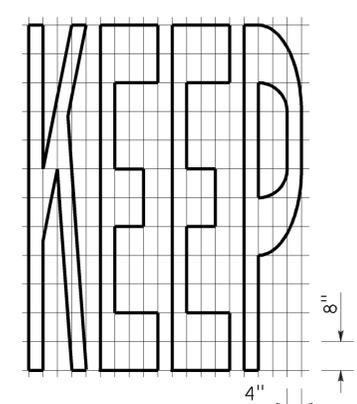
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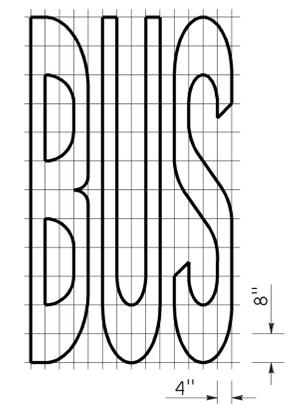
A=14 ft²



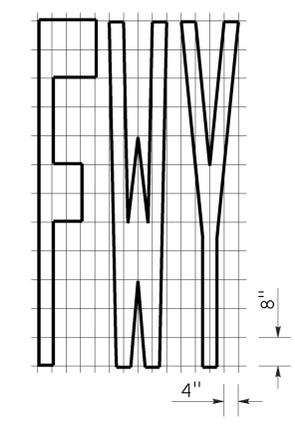
A=23 ft²



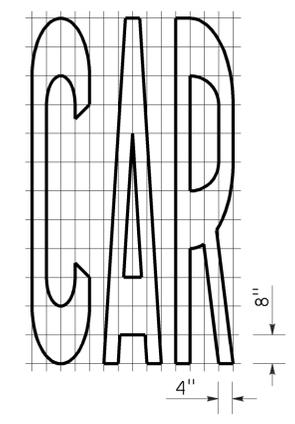
A=24 ft²



A=20 ft²

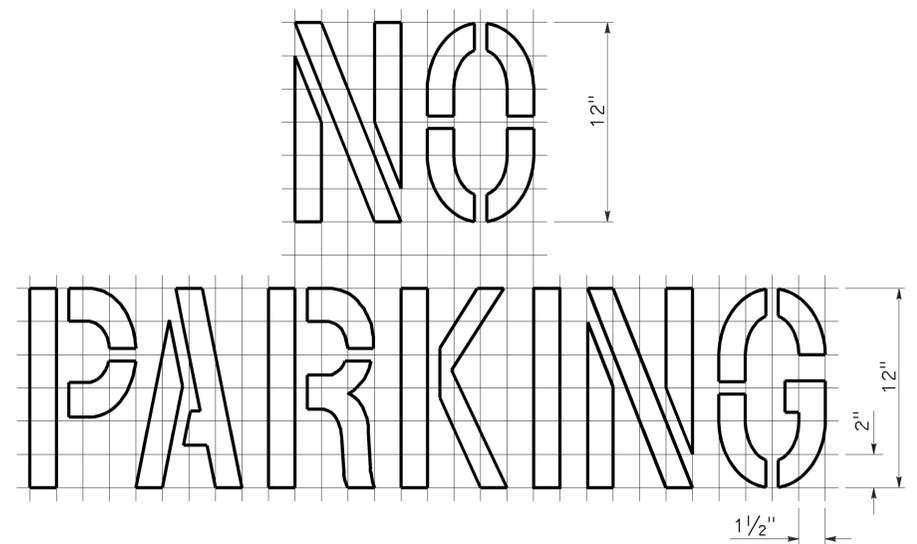


A=16 ft²

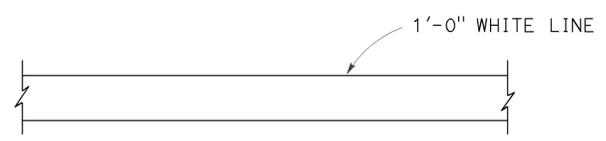


A=17 ft²

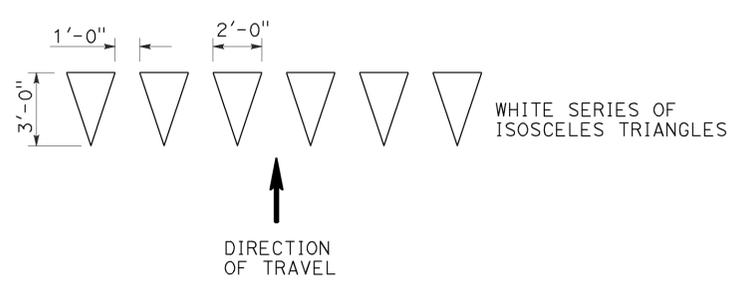
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



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

2010 REVISED STANDARD PLAN RSP A24E

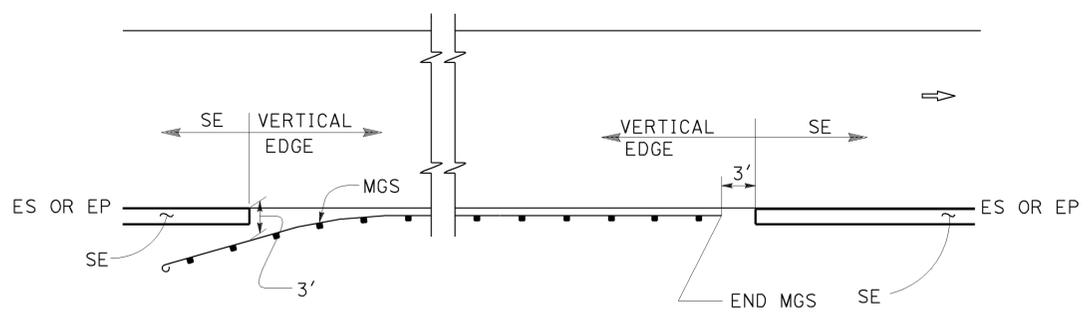
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	27	37

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.

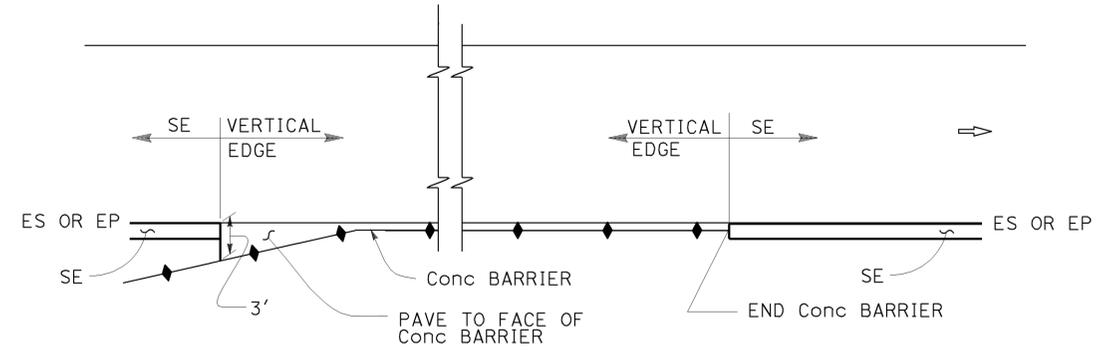
Cornelis M. Hakim
 No. C55610
 Exp. 12-31-14
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 3-3-14

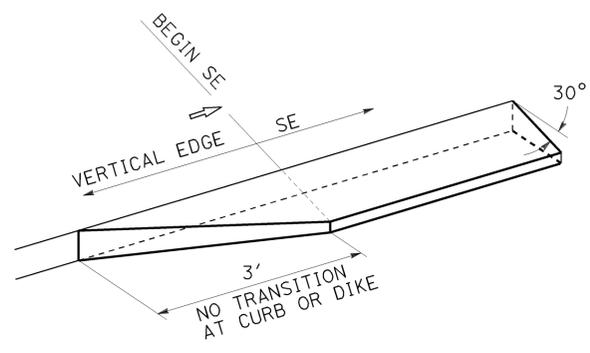
ABBREVIATIONS:
 SE SAFETY EDGE



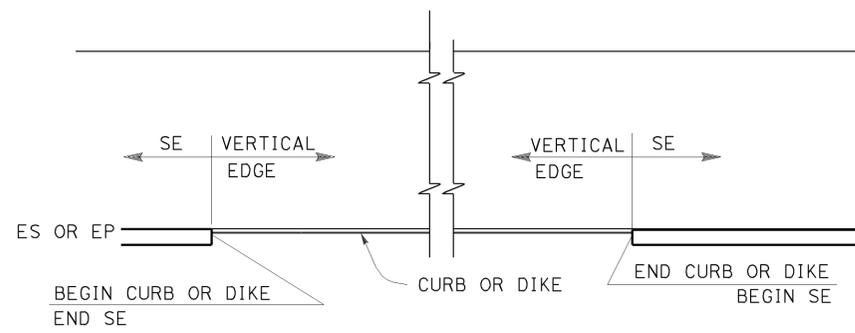
MGS



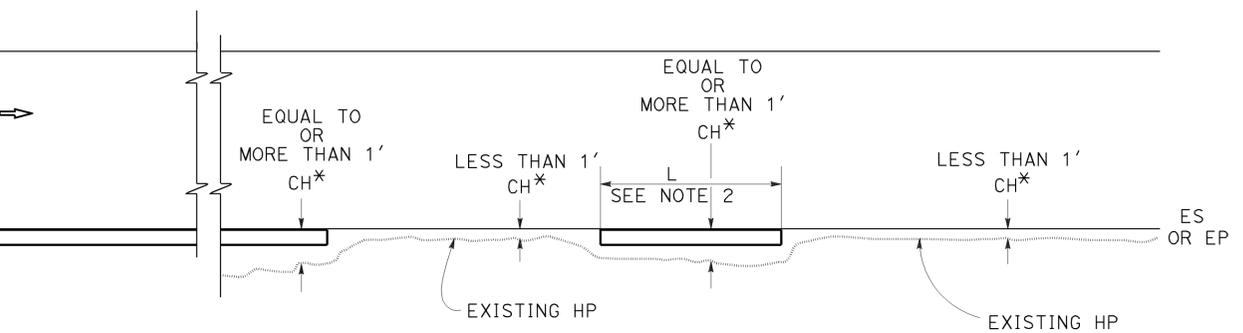
CONCRETE BARRIER



TRANSITION DETAIL FOR CONCRETE ONLY

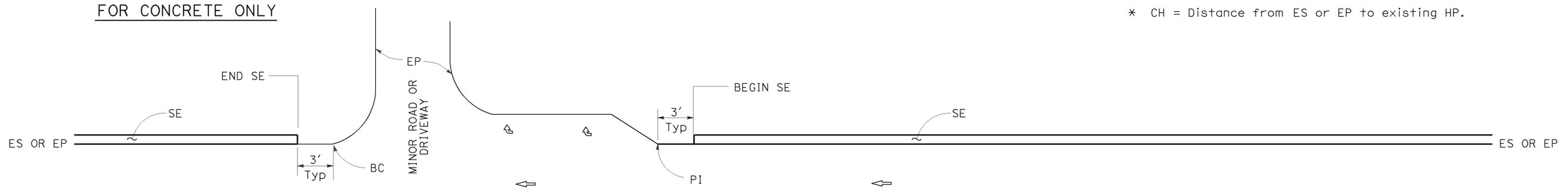


CURB OR DIKE

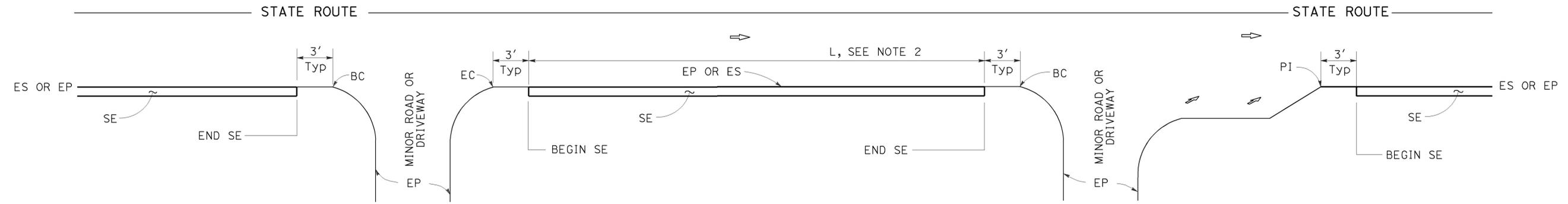


NARROW SIDE SLOPE

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



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'.

REVISED STANDARD PLAN RSP P74

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

2010 REVISED STANDARD PLAN RSP P74

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	28	37



 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.

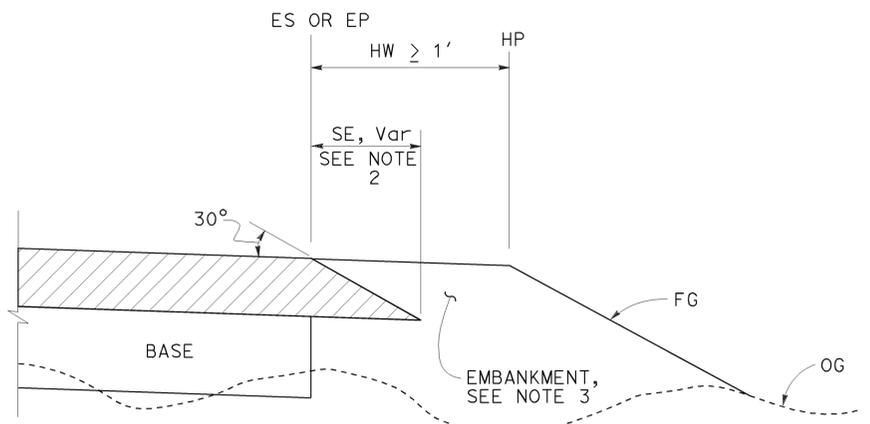
LEGEND:

-  HMA PAVEMENT
-  HMA OR CONCRETE PAVEMENT
-  CONCRETE PAVEMENT

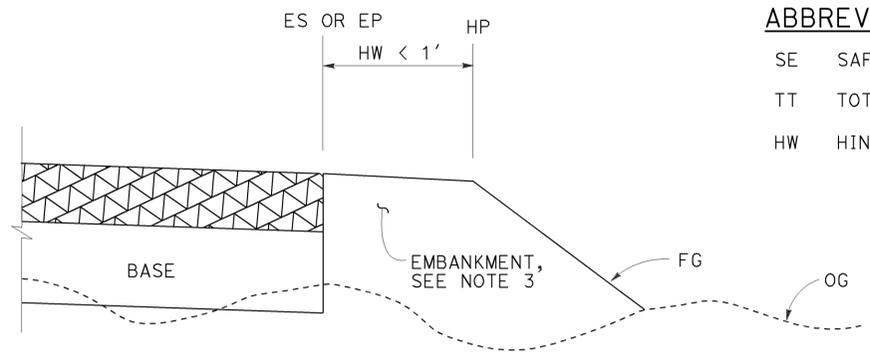
ABBREVIATIONS:

- SE SAFETY EDGE
- TT TOTAL THICKNESS OF SE
- HW HINGE WIDTH, DISTANCE FROM ES OR EP TO HP

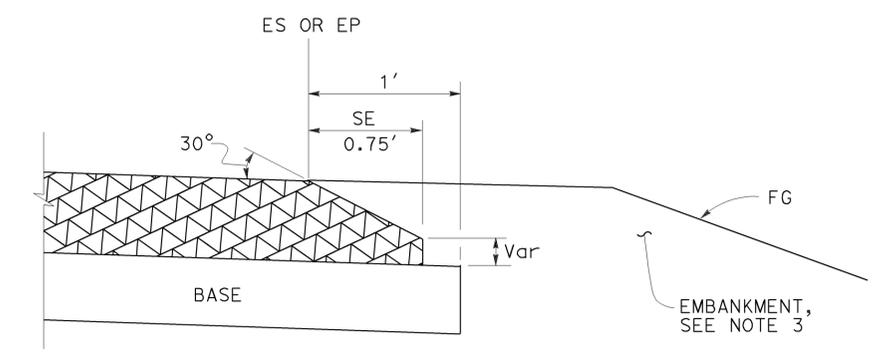
TO ACCOMPANY PLANS DATED 3-3-14



CASE K
Safety Edge - Fill Section, HW ≥ 1'

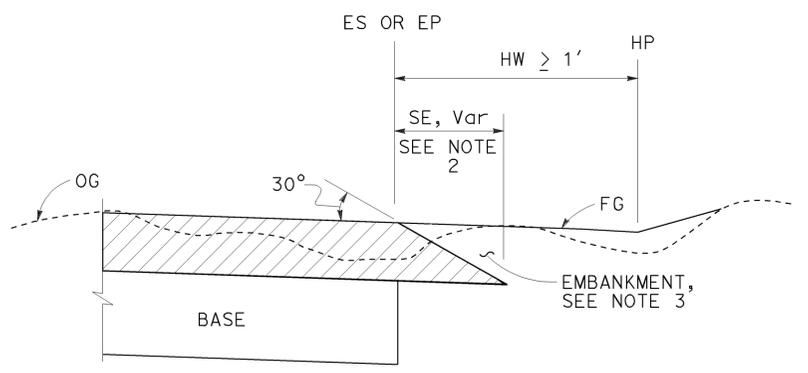


CASE L
Vertical Edge - Fill Section, HW < 1'

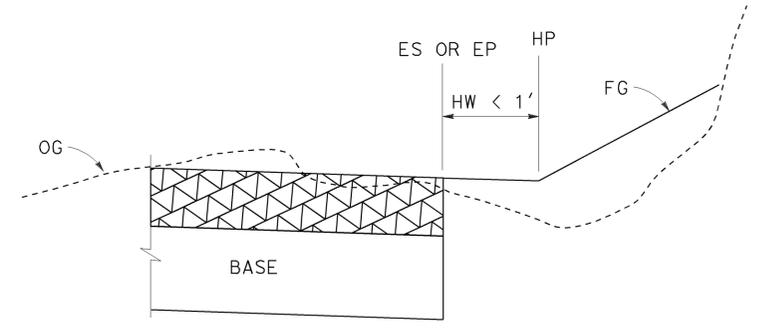


DETAIL "B"
For HMA pavement thickness more than 0.43' or concrete pavement

FILL SECTION

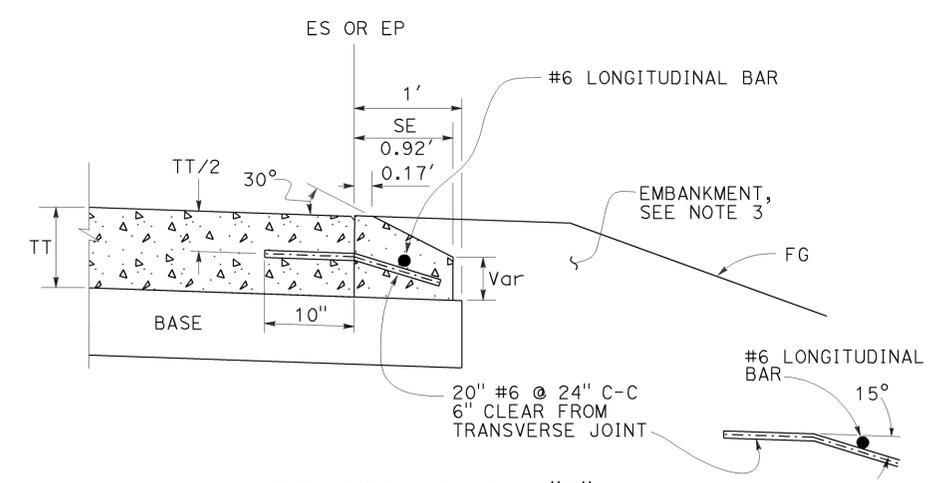


CASE M
Safety Edge - Cut Section, HW ≥ 1'



CASE N
Vertical Edge - Cut Section, HW < 1'

CUT SECTION



OPTIONAL DETAIL "B"
For concrete pavement
See Note 4

NOTES:

1. For limits of safety edge and vertical edge treatments, see Revised Standard Plan RSP P74
2. Details shown for HMA pavement thickness less than 0.43'. See Detail "B" for HMA pavement thickness more than 0.43' or concrete pavement.
3. For locations and limits of embankment see project plans.
4. Safety edge transverse joint must match pavement transverse joint. End of #6 longitudinal bar must be 2" ± 1/2" clear from transverse joint.
5. Safety edge is not needed in the area of MGS, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT EDGE TREATMENTS-
NEW CONSTRUCTION**
NO SCALE

RSP P76 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P76 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.
REVISED STANDARD PLAN RSP P76

2010 REVISED STANDARD PLAN RSP P76

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	29	37

Gurinderpal Bhuillar
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 3-3-14

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
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

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

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM TABLES
FOR LANE AND RAMP CLOSURES**

NO SCALE

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

REVISED STANDARD PLAN RSP T9

2010 REVISED STANDARD PLAN RSP T9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	30	37

 REGISTERED CIVIL ENGINEER		
April 19, 2013 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:

See Revised Standard Plan RSP T9 for tables.

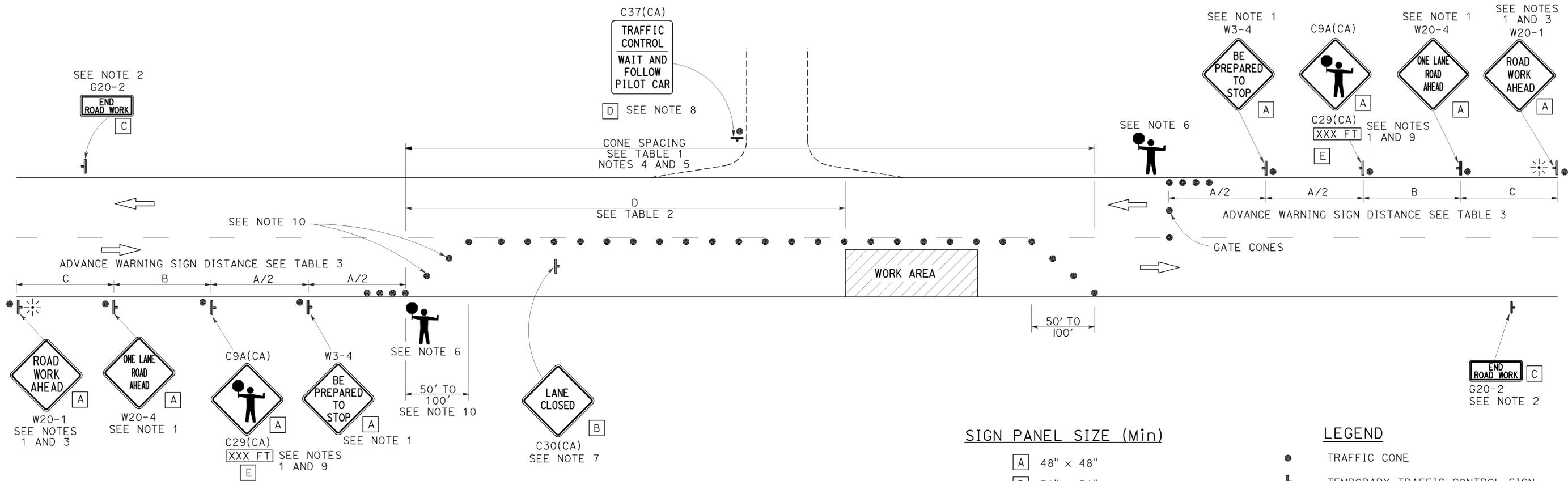
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 3-3-14



NOTES:

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

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.

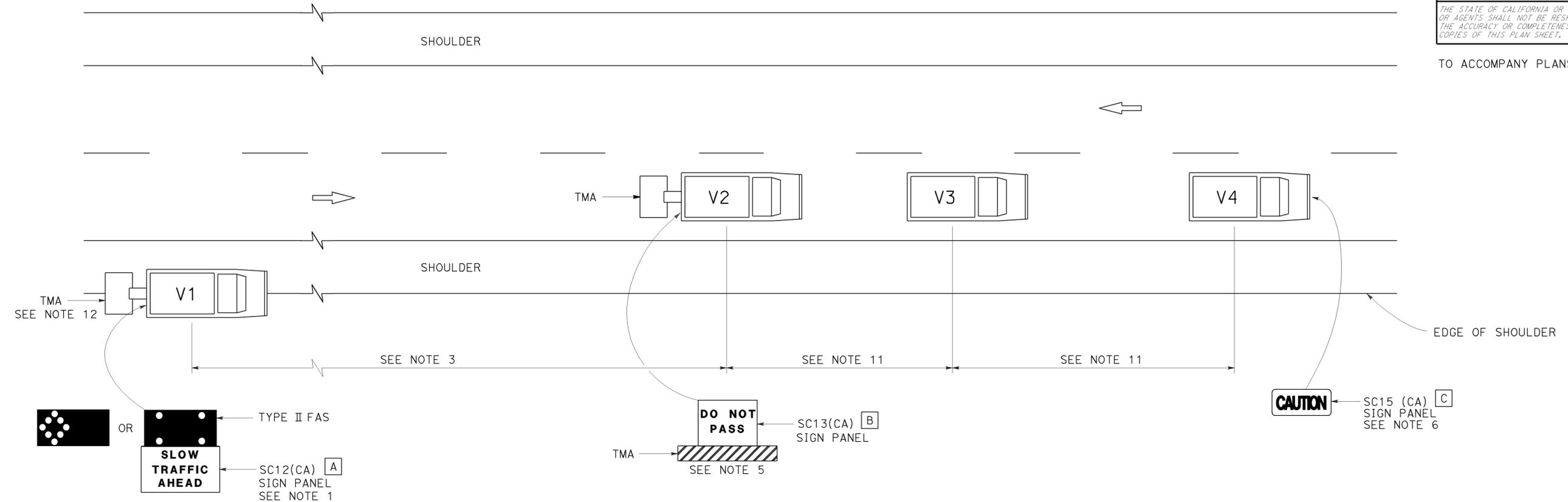
REVISED STANDARD PLAN RSP T13

2010 REVISED STANDARD PLAN RSP T13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	31	37

Gurinderpal Bhullar
 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 3-3-14



NOTES:

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

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

LEGEND

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

SIGN PANEL SIZE (Min)

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

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

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

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

LEGEND:

- AB** ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS
- BC** INSTALL PULL BOX IN EXISTING CONDUIT RUN
- BP** PEDESTRIAN BARRICADE, TYPE AS INDICATED ON PLAN
- CB** INSTALL CONDUIT INTO EXISTING PULL BOX
- CC** CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED
- CF** CONDUIT TO REMAIN FOR FUTURE USE. REMOVE CONDUCTORS. INSTALL PULL TAPE
- DH** DETECTOR HANDHOLE
- FA** FOUNDATION TO BE ABANDONED
- IS** INSTALL SIGN ON SIGNAL MAST ARM
- NS** NO SLIP BASE ON STANDARD
- PEC** PHOTOELECTRIC CONTROL
- PEU** PHOTOELECTRIC UNIT
- RC** EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR
- RE** REMOVE ELECTROLIER, FUSES AND BALLAST. TAPE ENDS OF CONDUCTORS
- RL** RELOCATE EQUIPMENT
- RR** REMOVE AND REUSE EQUIPMENT
- RS** REMOVE AND SALVAGE EQUIPMENT
- SC** SPLICE NEW TO EXISTING CONDUCTORS
- SD** SERVICE DISCONNECT
- TSP** TELEPHONE SERVICE POINT

MISCELLANEOUS ELECTROLIERS

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

NOTES:

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

ABBREVIATIONS

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

STANDARD ELECTROLIER

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	32	37

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 3-3-14

SOFFIT AND WALL MOUNTED LUMINAIRES

- PENDANT, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL SURFACE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO REMAIN UNMODIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:

Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	33	37

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 3-3-14

CONDUIT

NEW	EXISTING	
---	---	LIGHTING CONDUIT, UNLESS OTHERWISE INDICATED OR NOTED
---	---	TRAFFIC SIGNAL CONDUIT
---C---	---c---	COMMUNICATION CONDUIT
---T---	---t---	TELEPHONE CONDUIT
---F---	---f---	FIRE ALARM CONDUIT
---FO---	---fo---	FIBER OPTIC CONDUIT
---	---	CONDUIT TERMINATION
		CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

SIGNAL EQUIPMENT

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD "C" INDICATES COUNTDOWN PEDESTRIAN HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)

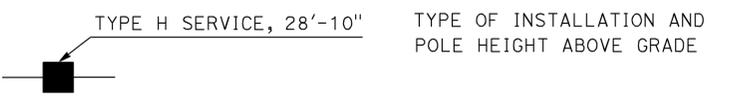
SIGNAL EQUIPMENT Cont

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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



FLASHING BEACON

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

		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

NOTES:

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

ILLUMINATED OVERHEAD SIGN

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

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

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1B

2010 REVISED STANDARD PLAN RSP ES-1B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	34	37

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

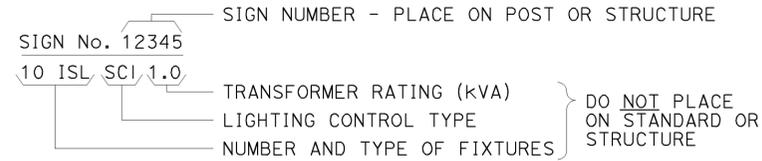
July 19, 2013
PLANS APPROVAL DATE

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

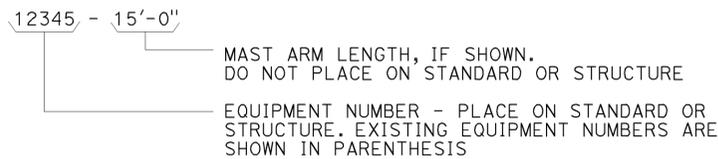
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

EQUIPMENT IDENTIFICATION

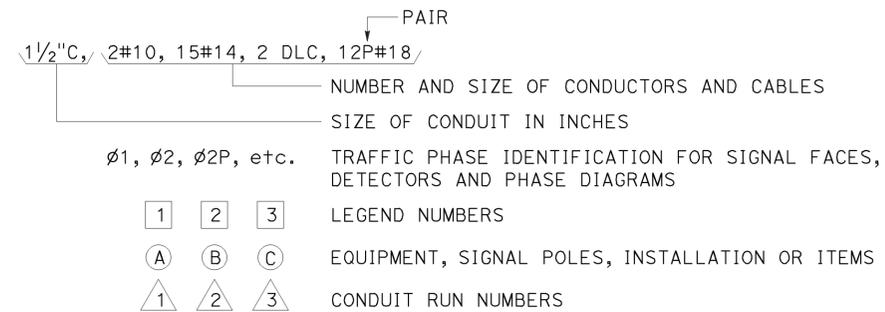
ILLUMINATED SIGN IDENTIFICATION NUMBER:



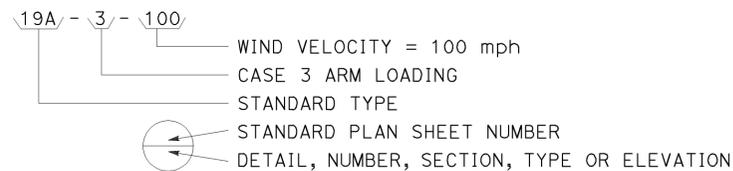
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



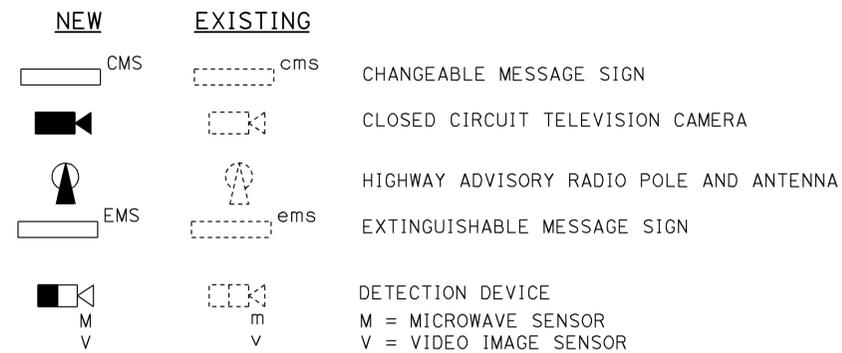
CONDUIT AND CONDUCTOR IDENTIFICATION:



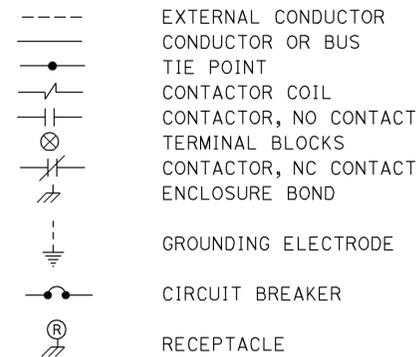
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



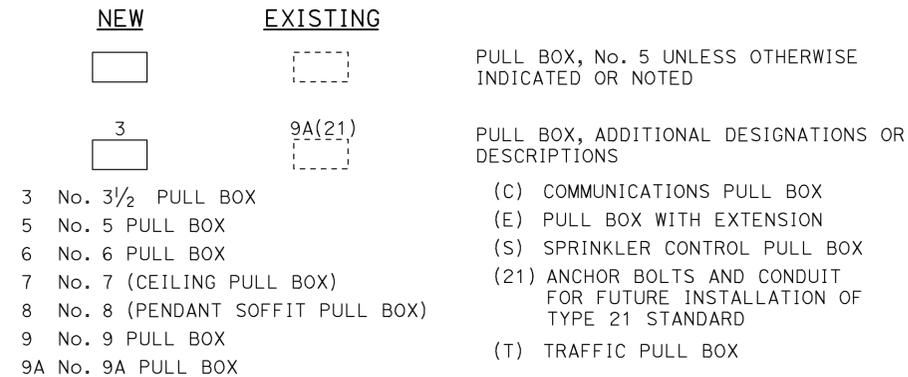
MISCELLANEOUS EQUIPMENT



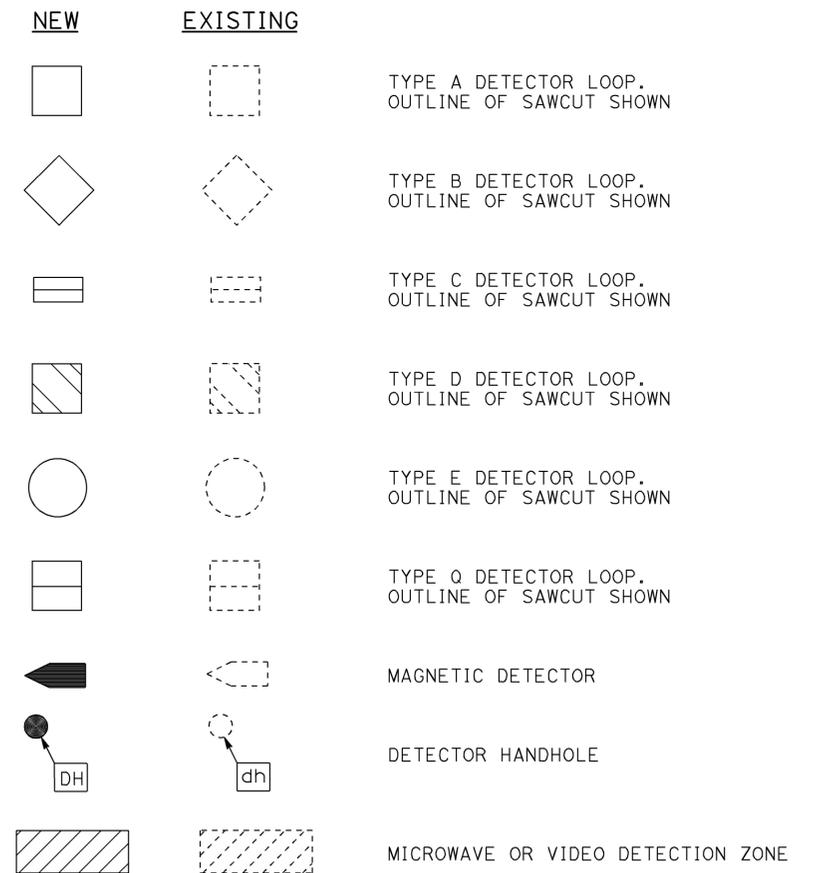
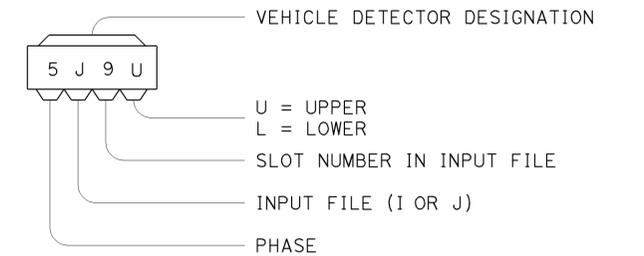
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

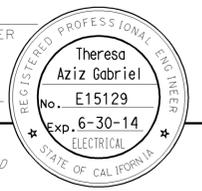
NO SCALE

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

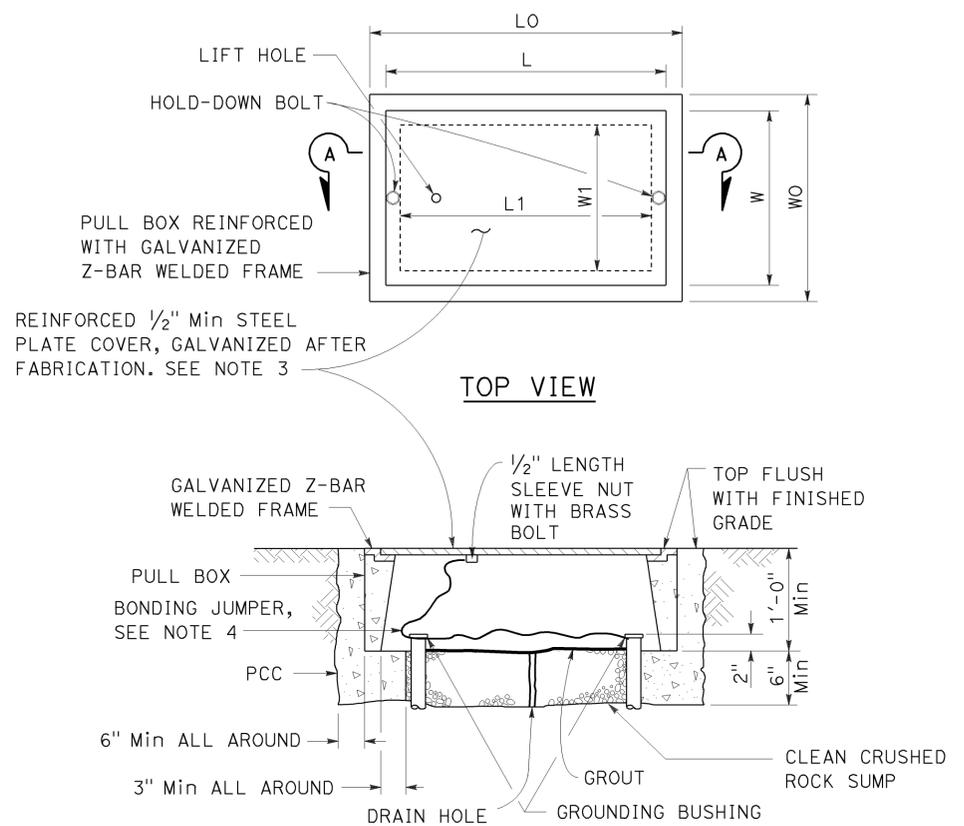
REVISED STANDARD PLAN RSP ES-1C

2010 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Nev	49	5.6/6.0	35	37
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER July 19, 2013 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>					



TO ACCOMPANY PLANS DATED 3-3-14



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

NOTES:

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

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

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

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

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

REVISED STANDARD PLAN RSP ES-8B

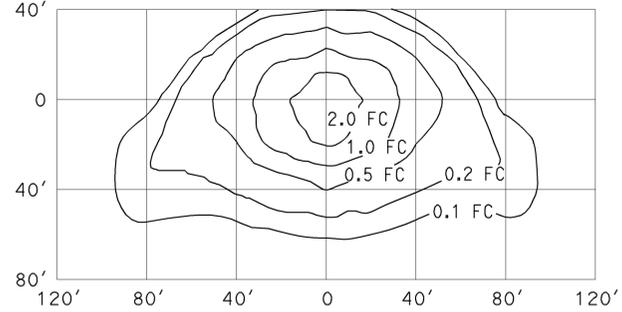
2010 REVISED STANDARD PLAN RSP ES-8B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	36	37

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

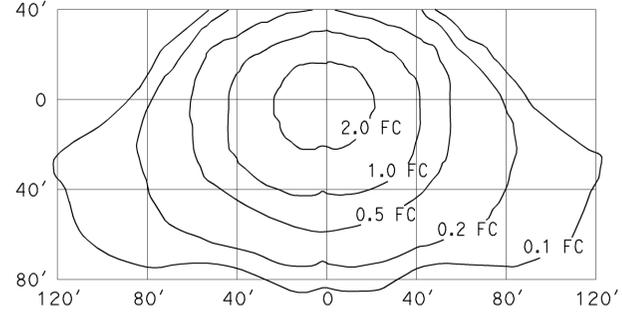
TO ACCOMPANY PLANS DATED 3-3-14

ISOFOOTCANDLE CURVE - MINIMUM



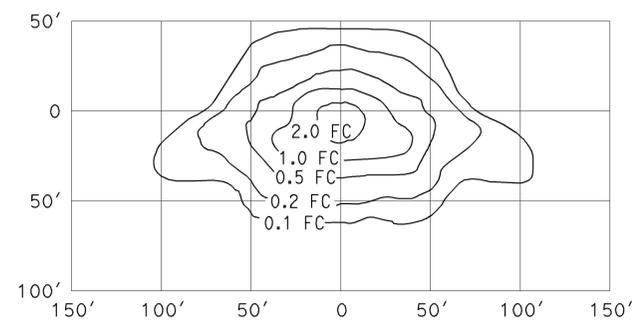
TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 34' Mounting Height
 Lamp operated at 22,000 lm
 200-W high pressure sodium lamp
 ANSI Designation S66

ISOFOOTCANDLE CURVE - MINIMUM



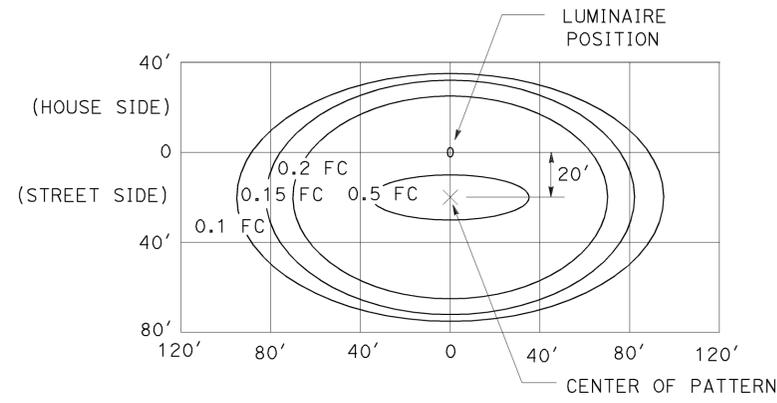
TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 40' Mounting Height
 Lamp operated at 37,000 lm
 310-W high pressure sodium lamp
 ANSI Designation S67

ISOFOOTCANDLE CURVE - MINIMUM



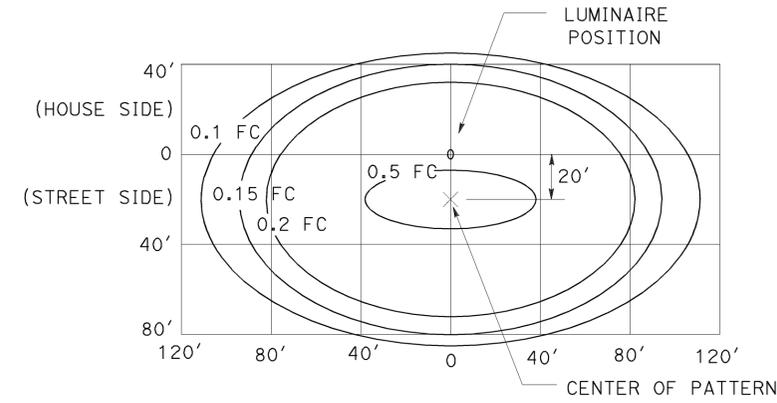
TYPE III MEDIUM CUTOFF
 Cutoff Luminaire
 30' Mounting Height
 Lamp operated at 16,000 lm
 150-W high pressure sodium lamp
 ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



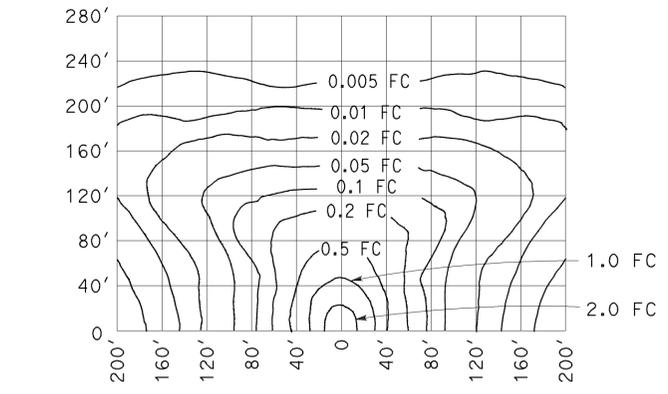
LED LUMINAIRE ROADWAY 1
 165-W at 34' Mounting Height

ISOFOOTCANDLE CURVE - MINIMUM



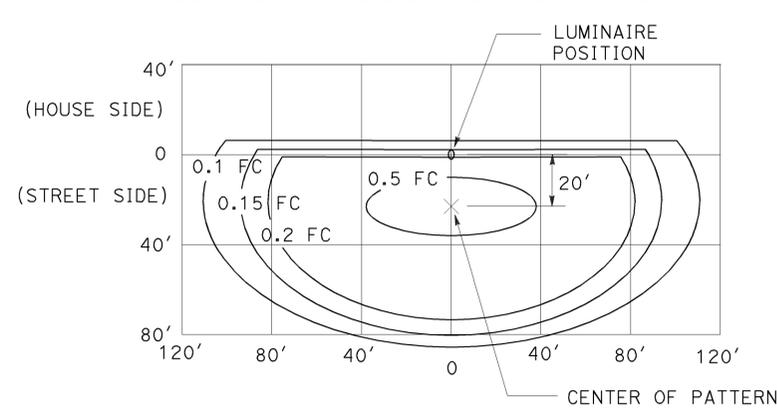
LED LUMINAIRE ROADWAY 2
 235-W at 40' Mounting Height

ISOFOOTCANDLE CURVE - MINIMUM



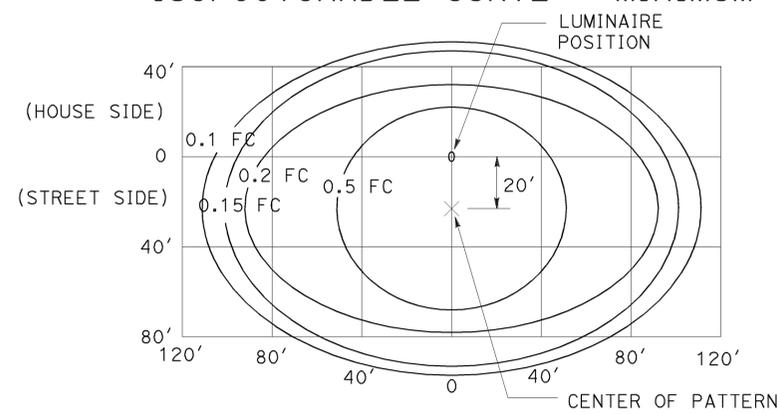
LOW PRESSURE SODIUM LUMINAIRE
 40' Mounting Height
 Lamp operated at 33,000 lm
 180-W low pressure sodium lamp

ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 3
 235-W at 40' Mounting Height
 with back side control

ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 4
 300-W at 40' Mounting Height

**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10A DATED JULY 19, 2013 SUPERSEDES RSP ES-10A DATED JULY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

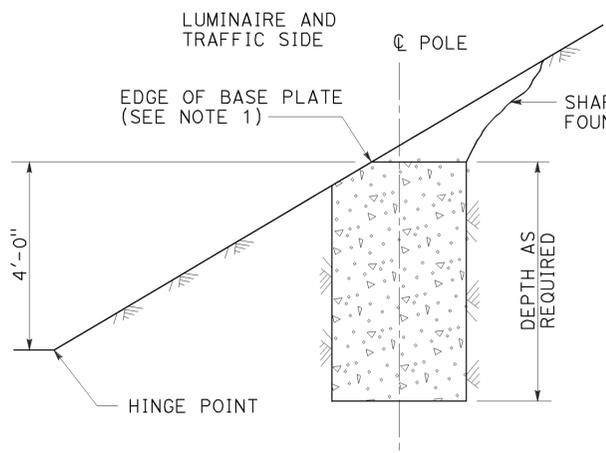
REVISED STANDARD PLAN RSP ES-10A

2010 REVISED STANDARD PLAN RSP ES-10A

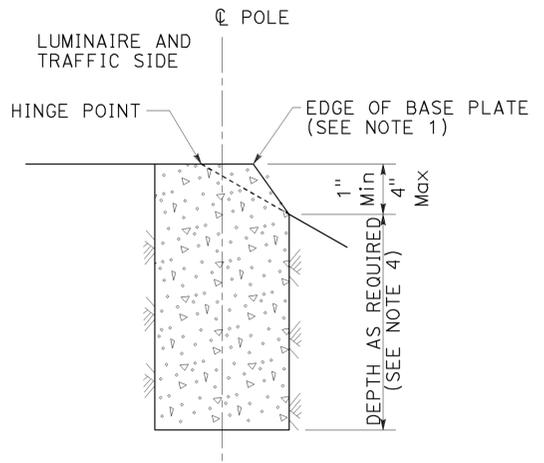
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Nev	49	5.6/6.0	37	37

Stanley P. Johnson
 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.

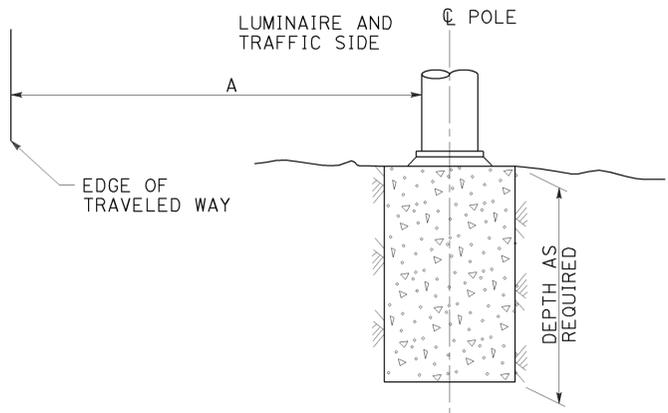
REGISTERED PROFESSIONAL ENGINEER
 Stanley P. Johnson
 No. C57793
 Exp. 3-31-14
 CIVIL
 STATE OF CALIFORNIA



CUT SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-1
 See Note 2 and 3



FILL SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-2
 See Note 2 and 3



FLAT SECTIONS, CUT OR FILL SLOPES
4:1 OR FLATTER
DETAIL A-3
 See Note 2

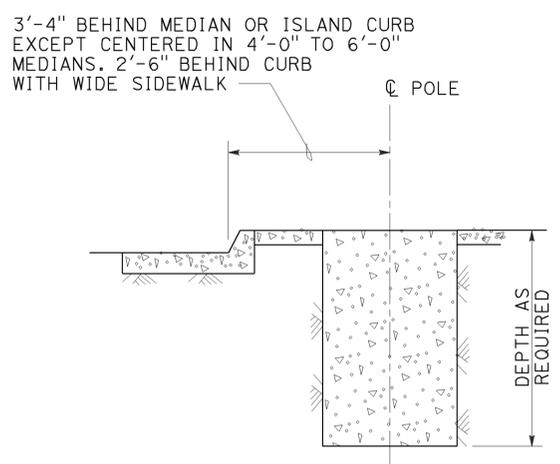
TO ACCOMPANY PLANS DATED 3-3-14

STANDARD TYPE	SETBACK (DIMENSION A)
32	30'-0" (Min)
31	20'-0" (Min)
15, 15D, 15-SB, 21, 21D, 30	ARM LENGTH (Min)

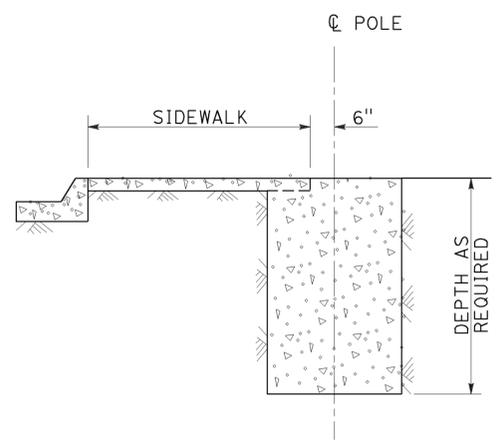
FOUNDATIONS ADJACENT TO ALL ROADWAYS EXCEPT
IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL A

NOTES:

1. Where a portion of the foundation is above grade, the top edges shall have a 1" chamfer.
2. Slopes shall be horizontal to vertical ratio (Horizontal : Vertical).
3. Horizontal setbacks on cut and fill slopes steeper than 4:1 shall not exceed the distance shown for flat sections.
4. CIDH embedment depth shall be increased beyond standard depths by the diameter of the CIDH.



MEDIAN, ISLAND
OR WIDE SIDEWALK
DETAIL B-1
 7' Wide and wider



NARROW SIDEWALK
DETAIL B-2
 Less than 7' wide

FOUNDATIONS IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS
(FOUNDATION INSTALLATIONS)

NO SCALE

RSP ES-11 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-11 DATED MAY 20, 2011 - PAGE 488 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-11

2010 REVISED STANDARD PLAN RSP ES-11