Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	1	46

HSSTPG-P162(037)E

INDEX OF PLANS

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

STATE OF CALIFORNIA

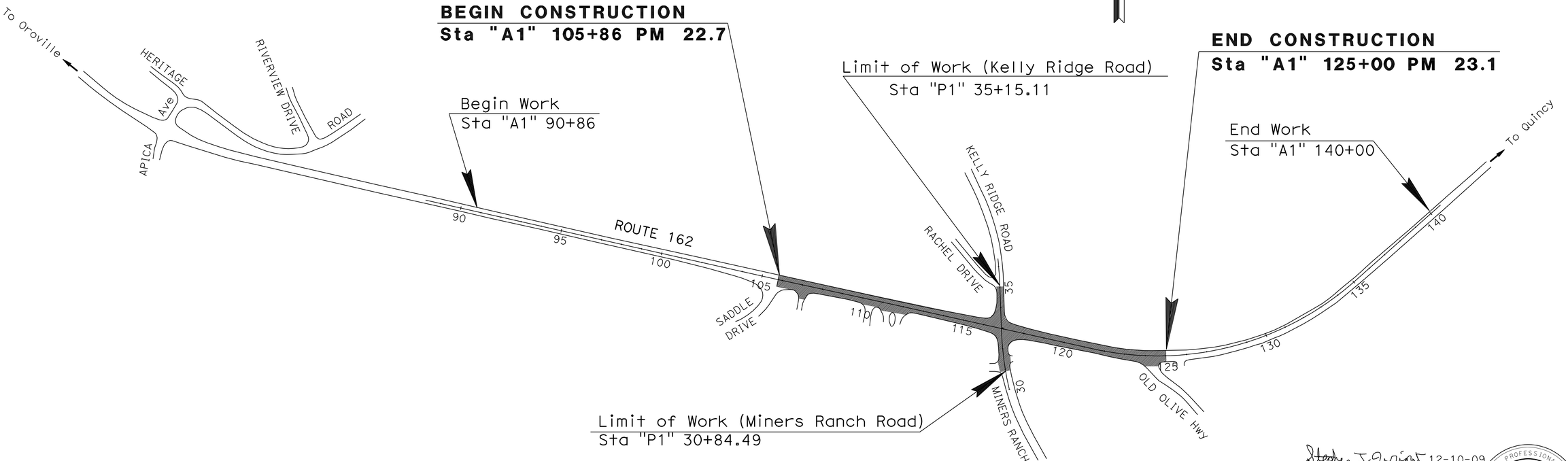
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN BUTTE COUNTY
NEAR OROVILLE
FROM 0.2 MILE WEST OF KELLY RIDGE ROAD
TO 0.2 MILE EAST OF KELLY RIDGE ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



NO SCALE

PROJECT MANAGER: JOHN HOLDER

DESIGN ENGINEER: SHAUN RICE

Stephen T. Wright 12-10-09
PROJECT ENGINEER — DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

March 1, 2010
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."

CONTRACT No.	03-0F6404
CONTRACT No.	0300000097

LAST REVISION: 08-31-09 DATE PLOTTED => 04-AUG-2010 TIME PLOTTED => 05:47

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	2	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

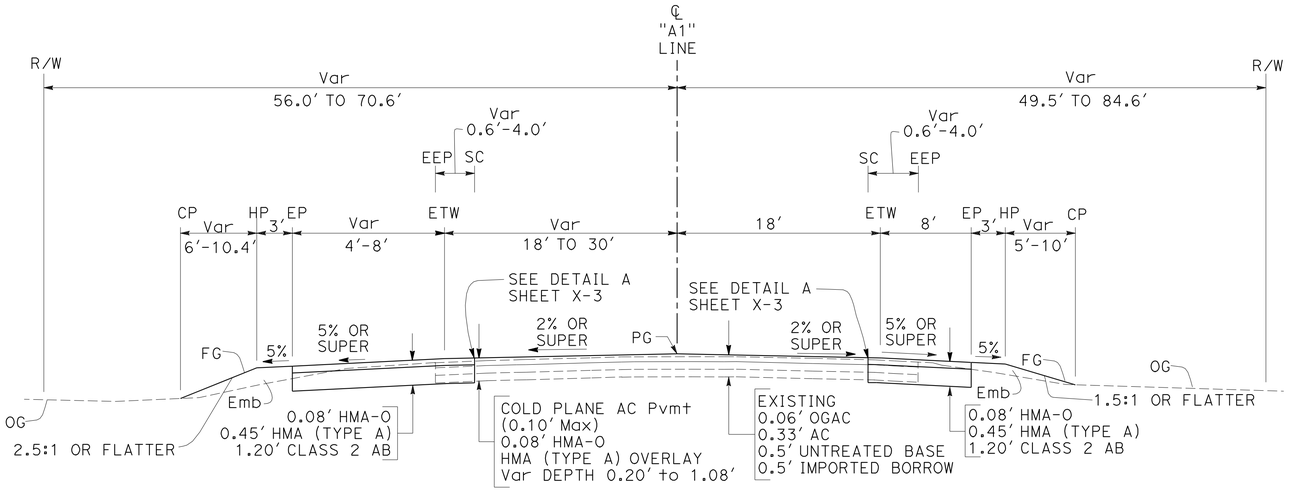
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.

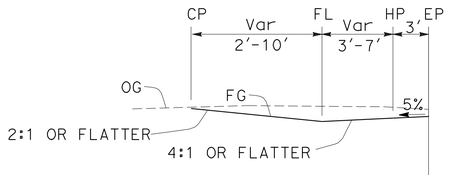
ABBREVIATIONS

EEP - EXISTING EDGE OF PAVEMENT
CP - CATCH POINT
SC - SAW CUT
HMA-O - HOT MIX ASPHALT(OPEN GRADED)

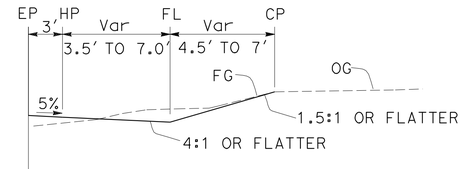


ROUTE 162

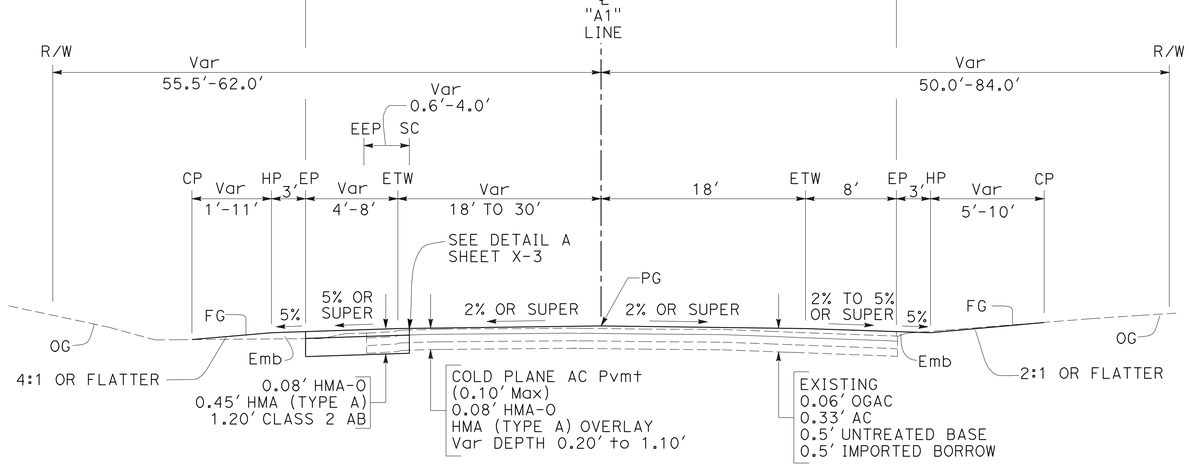
Sta "A1" 118+43.17 TO 123+18.09
Sta "A1" 112+59.35 TO 115+20.82
Sta "A1" 107+57.49 TO 108+94.68



Sta "A1" 117+58 TO 121+22
Sta "A1" 107+64 TO 107+79



Sta "A1" 117+75 TO 121+22
Sta "A1" 112+23 TO 114+25



ROUTE 162

Sta "A1" 123+18.09 TO 123+26.46
Sta "A1" 117+58.00 TO 118+43.17
Sta "A1" 108+94.68 TO 112+59.35
Sta "A1" 105+86.00 TO 107+57.49

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: STEPHEN WRIGHT
CHECKED BY: DEANN SPANGLER
REVISED BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
12-10-09 | TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
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DGN FILE => 30f640ca001.dgn
CU 03365
EA 0F6401

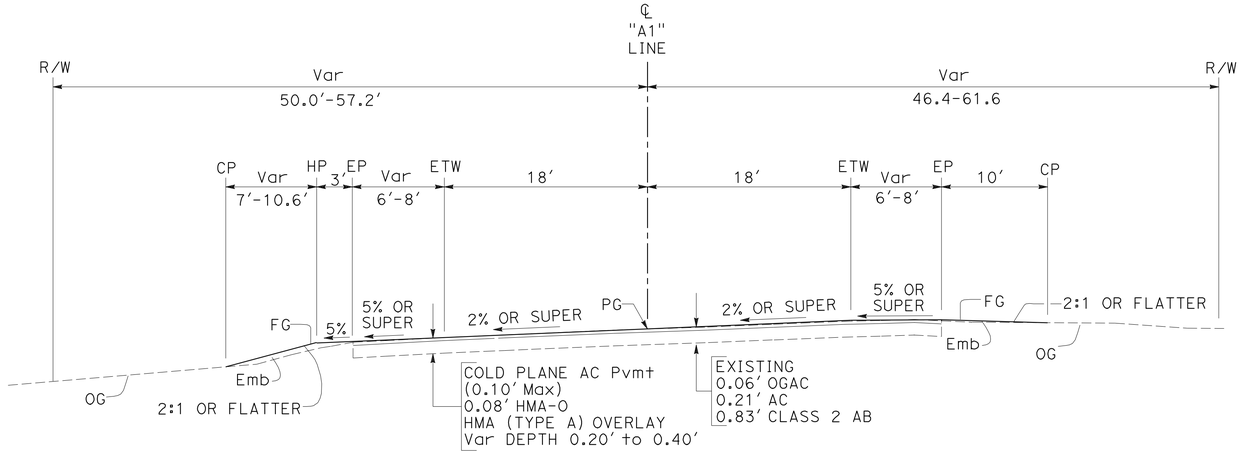
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	3	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

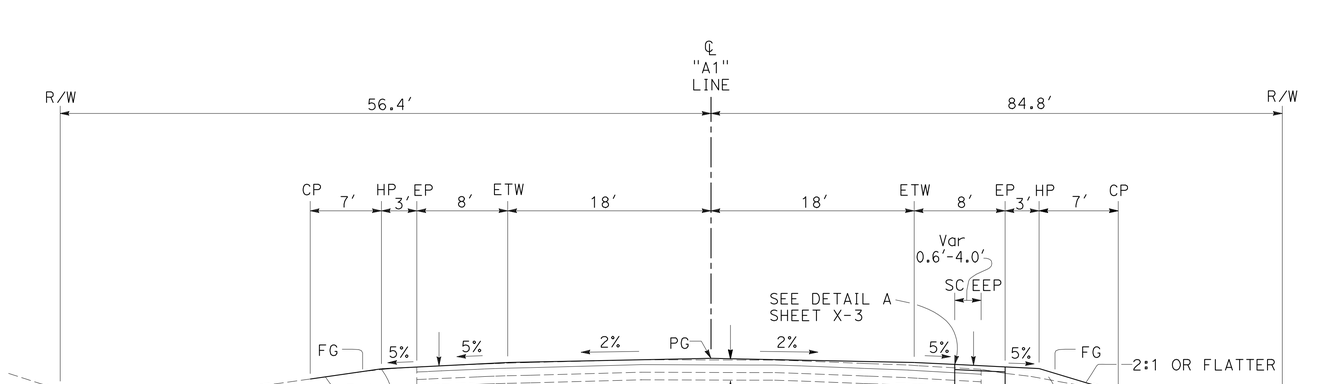
3-1-10
PLANS APPROVAL DATE

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.



ROUTE 162

Sta "A1" 123+26.46 TO Sta "A1" 125+00.00
Sta "A1" 115+73.77 TO Sta "A1" 117+58.00



ROUTE 162

Sta "A1" 115+20.82 TO Sta "A1" 115+73.77

TYPICAL CROSS SECTIONS

NO SCALE

X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY:
CHECKED BY:
STEPHEN WRIGHT
DEANN SPANGLER
REVISED BY
DATE REVISED

LAST REVISION 12-10-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
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DGN FILE => 30f640ca002.dgn
CU 03365
EA 0F6401

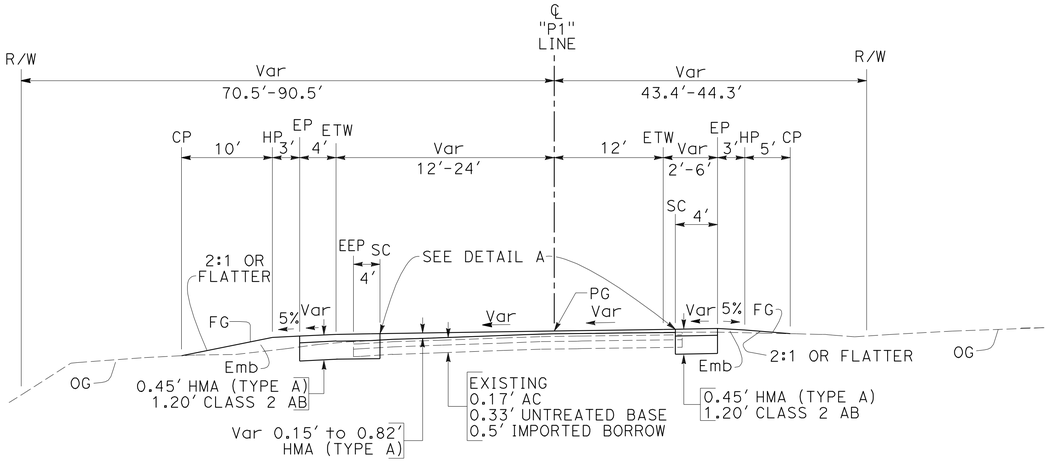
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	4	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

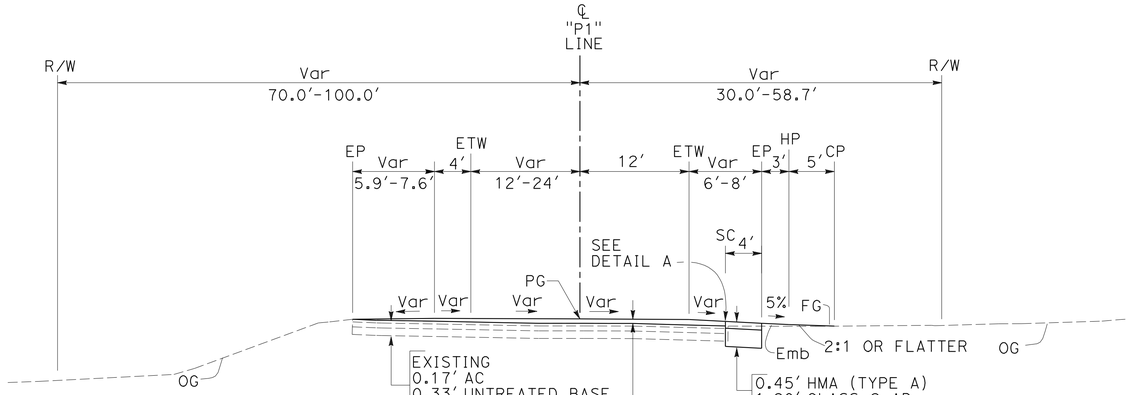
3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

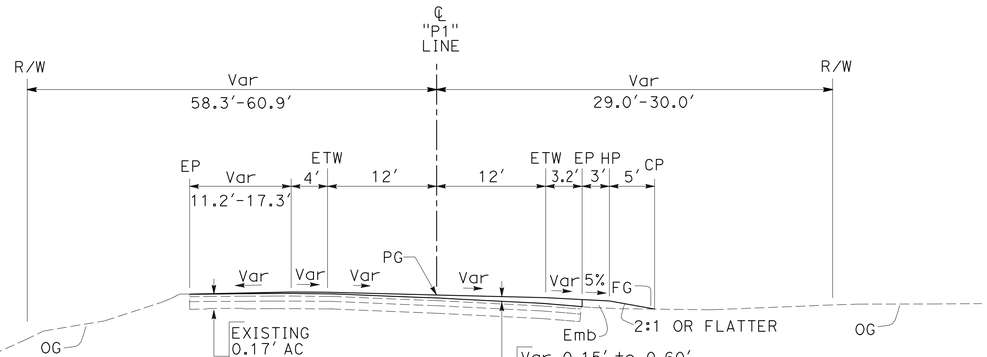
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



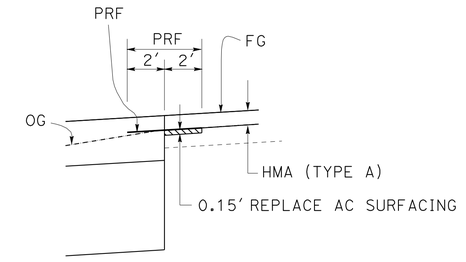
Sta "P1" 33+82.61 TO 34+85.97



Sta "P1" 31+69.73 TO 33+82.61



Sta "P1" 34+85.97 TO 35+15.11
Sta "P1" 30+84.49 TO 31+69.73



GEOSYNTHETIC PAVEMENT INTERLAYER DETAIL "A"

TYPICAL CROSS SECTIONS

NO SCALE

X-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: STEPHEN WRIGHT
CHECKED BY: DEANN SPANGLER
REVISED BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
12-10-09 | TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
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CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	5	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
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. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. WHERE NO ROADWAY WIDENING OCCURS OVERLAY TO EXISTING EP, SEE EMBANKMENT DETAIL ON SHEET C-1.
3. SEE SHEET C-1 FOR DRIVEWAY DETAILS.
4. SEE SHEET C-2 FOR INTERSECTION DETAILS.

LEGEND

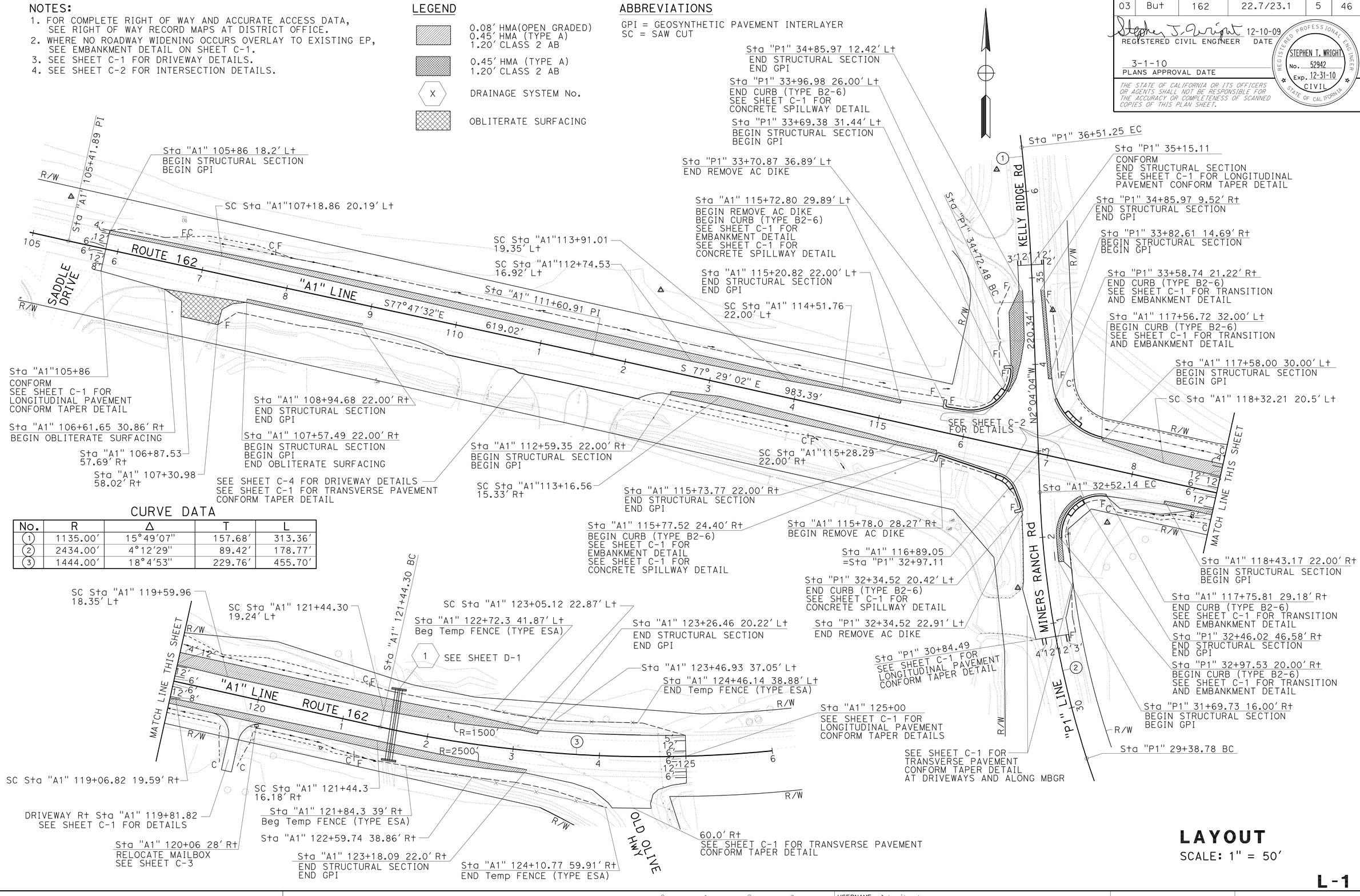
- 0.08′ HMA(OPEN GRADED) 0.45′ HMA (TYPE A) 1.20′ CLASS 2 AB
- 0.45′ HMA (TYPE A) 1.20′ CLASS 2 AB
- X — DRAINAGE SYSTEM No.
- OBLITERATE SURFACING

ABBREVIATIONS

GPI = GEOSYNTHETIC PAVEMENT INTERLAYER
SC = SAW CUT

CURVE DATA

No.	R	Δ	T	L
(1)	1135.00′	15°49′07"	157.68′	313.36′
(2)	2434.00′	4°12′29"	89.42′	178.77′
(3)	1444.00′	18°4′53"	229.76′	455.70′



LAYOUT

SCALE: 1" = 50′

L-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

REVISED BY	DATE REVISED
STEPHEN WRIGHT	
DEANN SPANGLER	
CALCULATED-DESIGNED BY	
CHECKED BY	
FUNCTIONAL SUPERVISOR	
SHAUN RICE	

LAST REVISION 12-08-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:28

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EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	6	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

3-1-10
PLANS APPROVAL DATE

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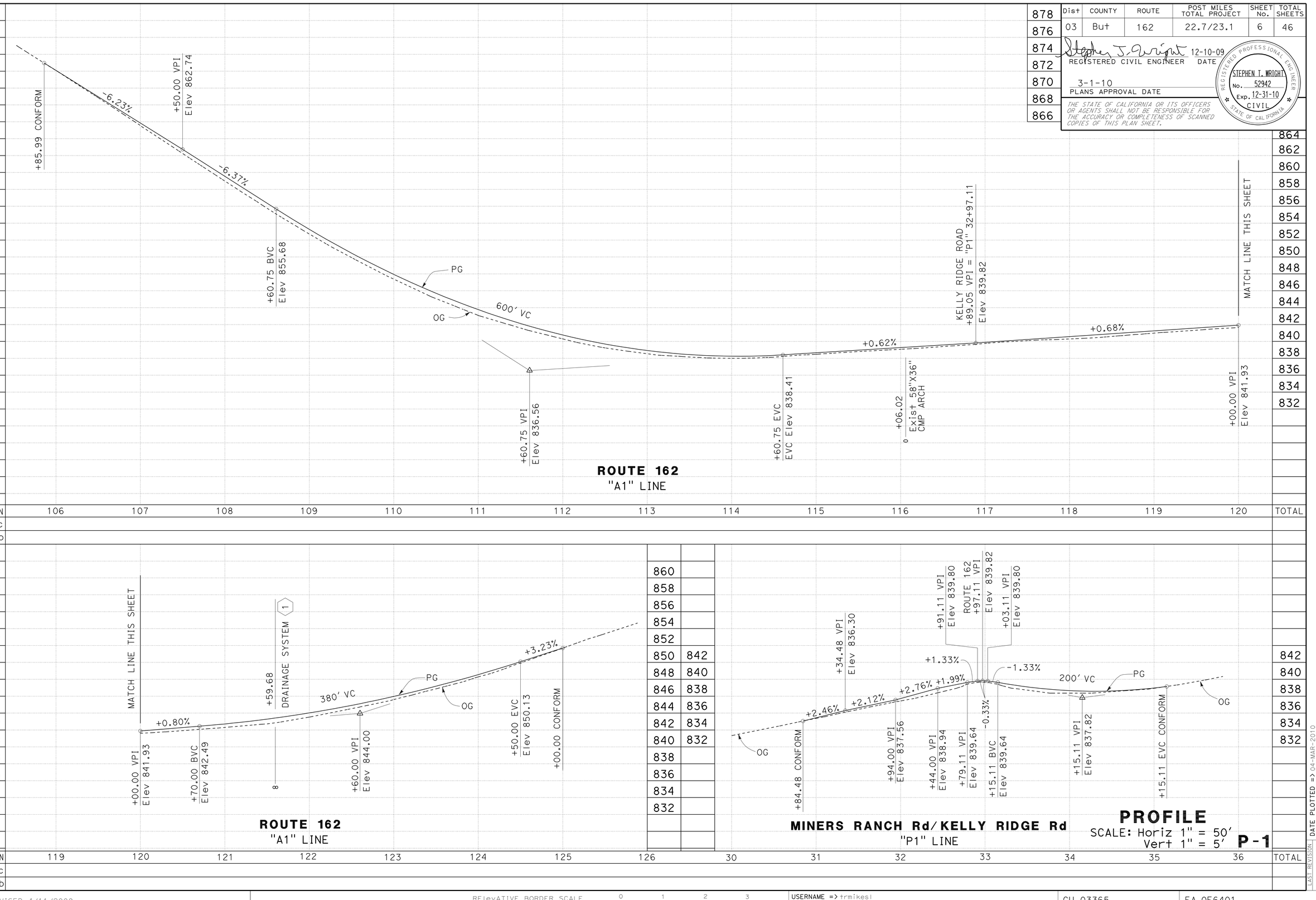

PROFILE
SCALE: Horiz 1" = 50'
Vert 1" = 5'
P-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: AL CHIN
CHECKED BY: STEPHEN WRIGHT
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 04-MAR-2010
12-13-09 TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RElevATIVE BORDER SCALE IS IN INCHES 0 1 2 3
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CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	7	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

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STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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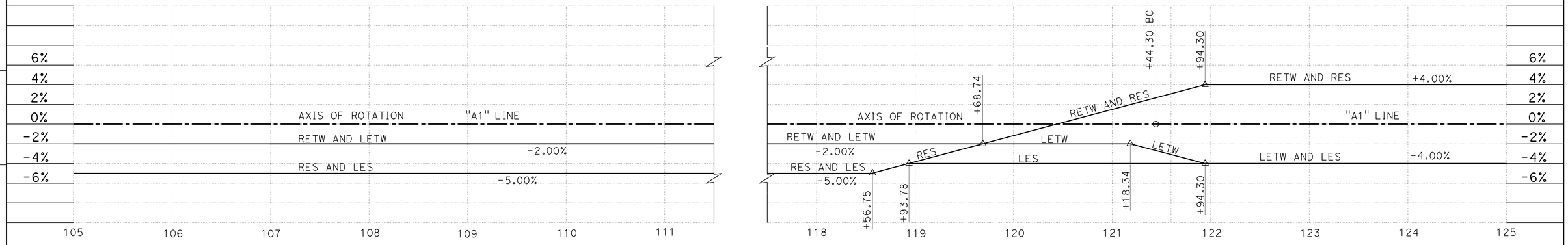
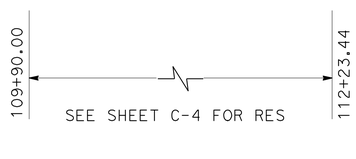
ABBREVIATIONS

RETW = RIGHT EDGE OF TRAVELLED WAY
LETW = LEFT EDGE OF TRAVELLED WAY
RES = RIGHT EDGE OF SHOULDER
LES = LEFT EDGE OF SHOULDER





ROUTE 162
"A1" LINE

SUPERELEVATION DIAGRAM

SCALE: 1" = 50'

SE-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

CALCULATED-DESIGNED BY: STEPHEN WRIGHT
CHECKED BY: DEANN SPANGLER
FUNCTIONAL SUPERVISOR: SHAUN RICE
REVISED BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
12-13-09 | TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
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EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	8	46

Stephen J. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — STEPHEN T. WRIGHT — No. 52942 — Exp. 12-31-10 — CIVIL — STATE OF CALIFORNIA

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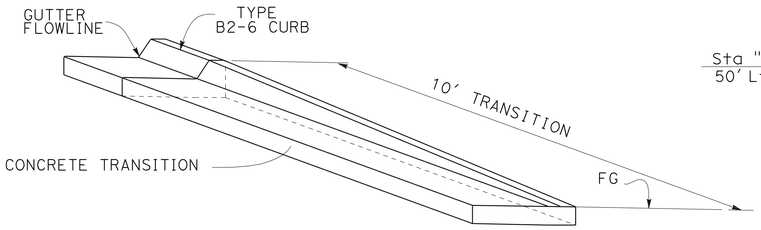
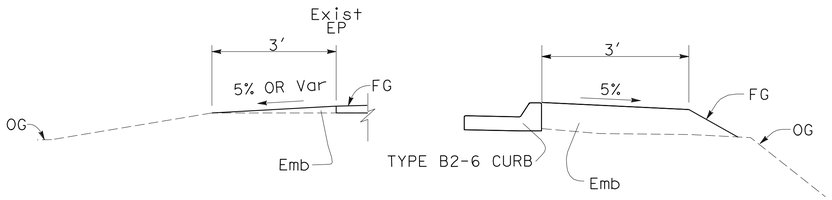
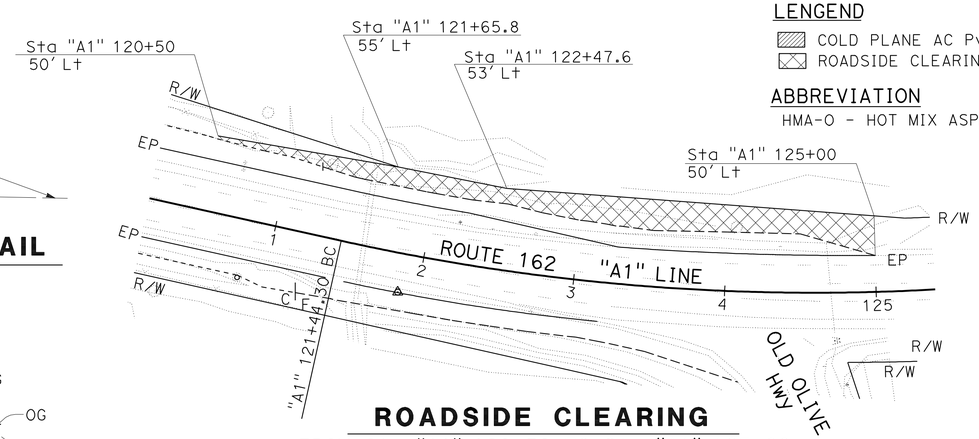


TYPE B2-6 CURB TRANSITION DETAIL



EMBANKMENT DETAIL



LENGEND

COLD PLANE AC Pvmt

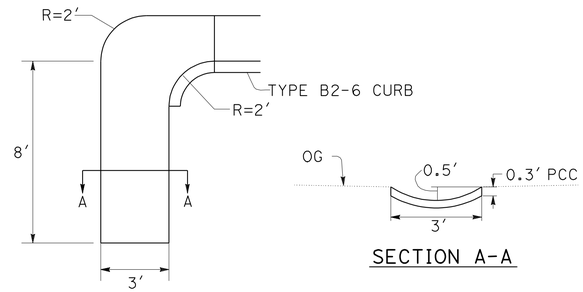
ROADSIDE CLEARING

ABBREVIATION

HMA-O - HOT MIX ASPHALT (TYPE O)

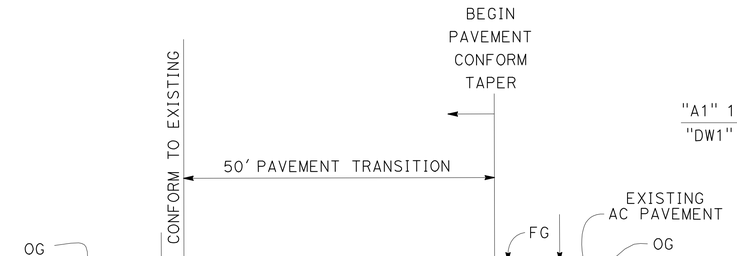
ROADSIDE CLEARING

FROM Sta "A1" 120+50 TO Sta "A1" 125+00
BETWEEN THE CALLOUTS SHOWN AND CATCH LINE.



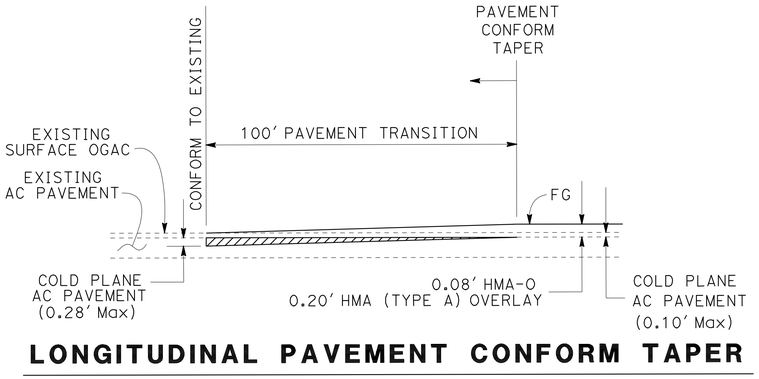
SECTION A-A

CONCRETE SPILLWAY



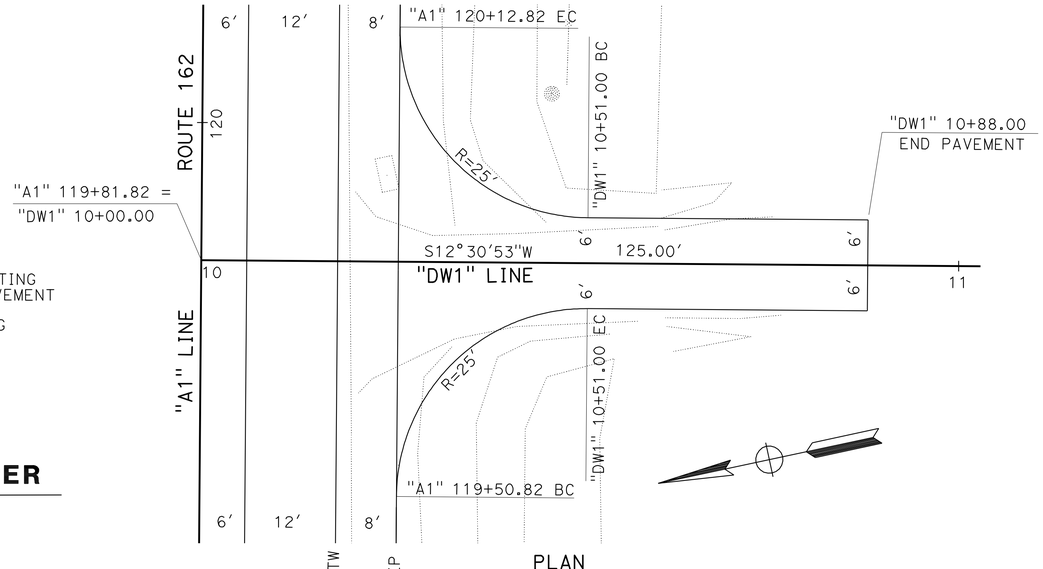
LONGITUDINAL PAVEMENT CONFORM TAPER

"P1" LINE

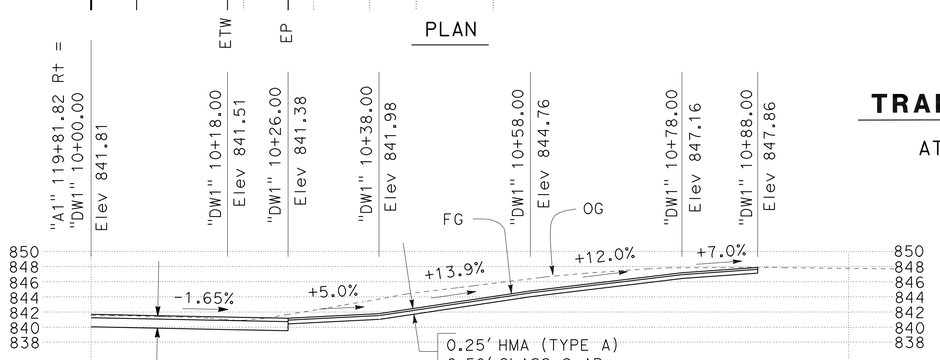


LONGITUDINAL PAVEMENT CONFORM TAPER

"A1" LINE



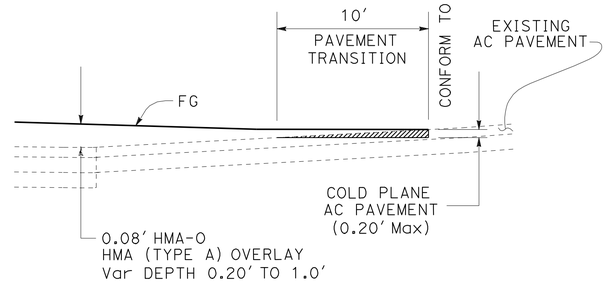
PLAN



PROFILE

DRIVEWAY DETAILS

R+ "A1" 119+81.82



TRANSVERSE PAVEMENT CONFORM TAPER

AT ROAD APPROACHES, DRIVEWAYS AND ALONG MBGR.

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: AL CHIN
CHECKED BY: STEPHEN WRIGHT
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 04-MAR-2010
12-09-09 TIME PLOTTED => 10:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ga001.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	9	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

3-1-10
PLANS APPROVAL DATE

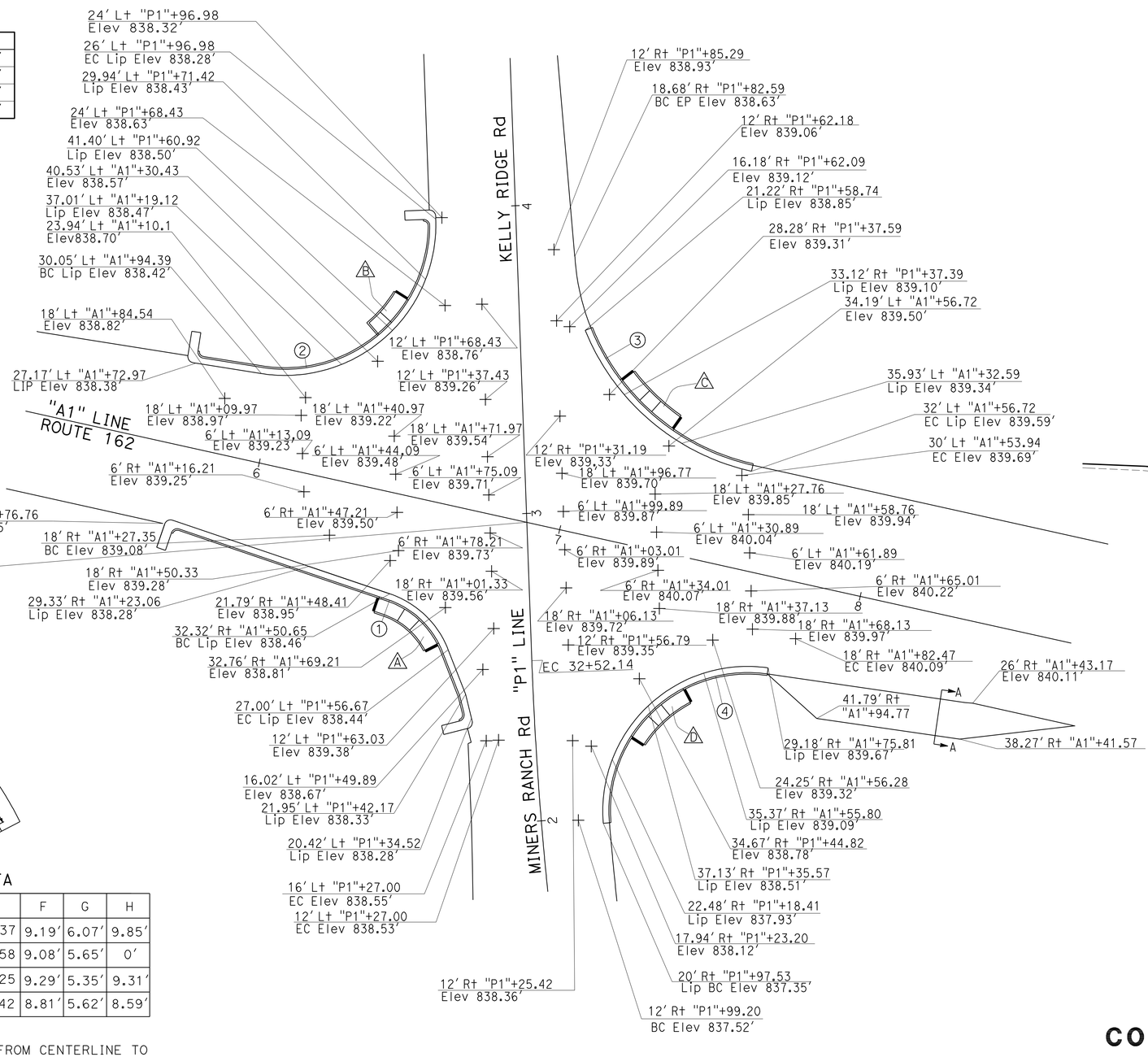
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

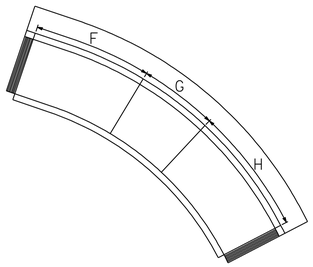
ABBREVIATIONS

EEP - EXISTING EDGE OF PAVEMENT
LIP - LIP OF PAN

CURVE DATA

No.	R	Δ	T	L
①	29.00′	50°6′09"	13.55′	25.36′
②	47.00′	101°6′07"	57.12′	82.93′
③	74.00′	74°2′55"	55.81′	95.64′
④	45.00′	103°2′14"	56.61′	80.93′

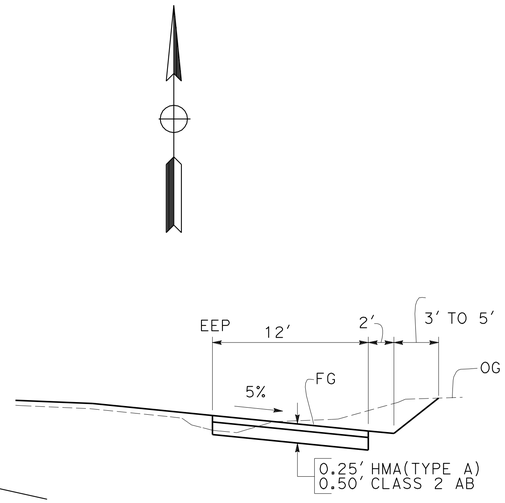




CURB RAMP DATA

RAMP	CASE	LOCATION	F	G	H
Ⓐ	C	51.40′ Rt "A1" 116+59.37	9.19′	6.07′	9.85′
Ⓑ	C-MOD	36.76′ Lt "A1" 116+30.58	9.08′	5.65′	0′
Ⓒ	C	44.79′ Lt "A1" 117+18.25	9.29′	5.35′	9.31′
Ⓓ	C	50.33′ Lt "A1" 117+42.42	8.81′	5.62′	8.59′

NOTE : STATION AND OFFSETS ARE FROM CENTERLINE TO GUTTER FLOWLINE, AT CENTER OF CURB RAMP. SEE STANDARD PLANS FOR DETAILS NOT SHOWN.



SECTION A-A

CONSTRUCTION DETAILS

SCALE: 1" = 20′

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: STEPHEN WRIGHT
CHECKED BY: DEANN SPANGLER
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 04-MAR-2010
09-01-09 TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ga002.dgn
CU 03365
EA 0F6401

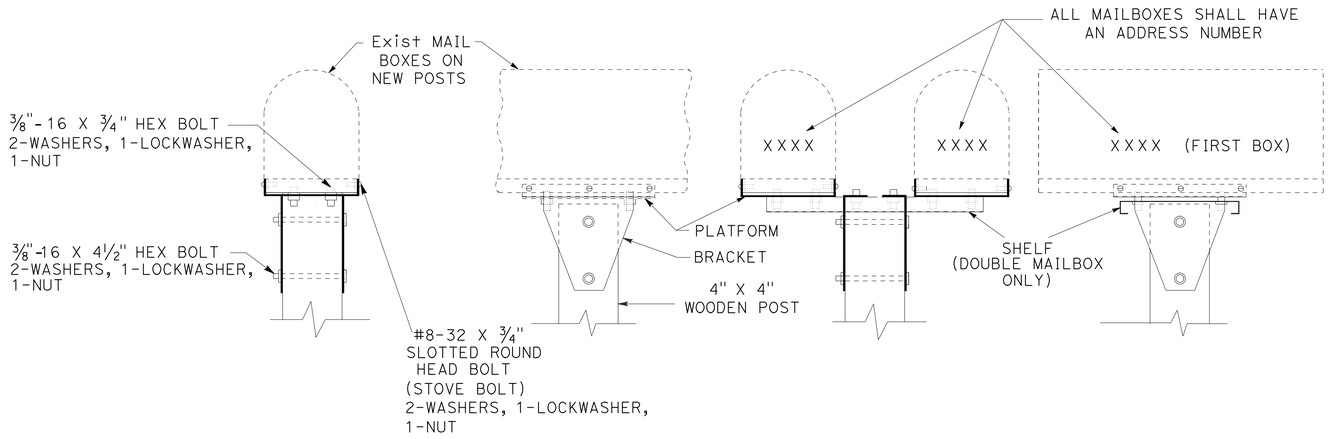
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	10	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

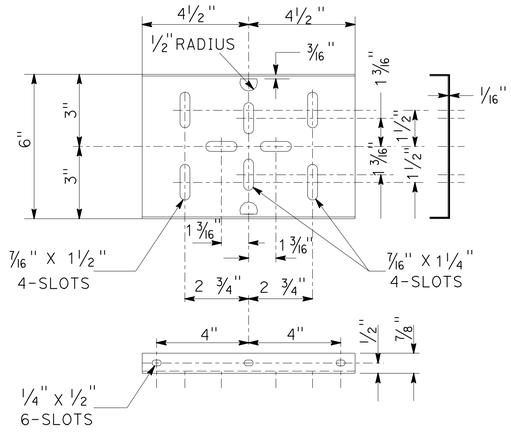
3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — STEPHEN T. WRIGHT No. 52942 Exp. 12-31-10 CIVIL — STATE OF CALIFORNIA

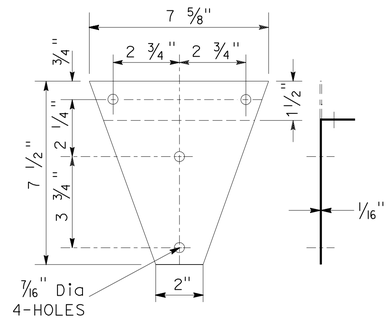
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



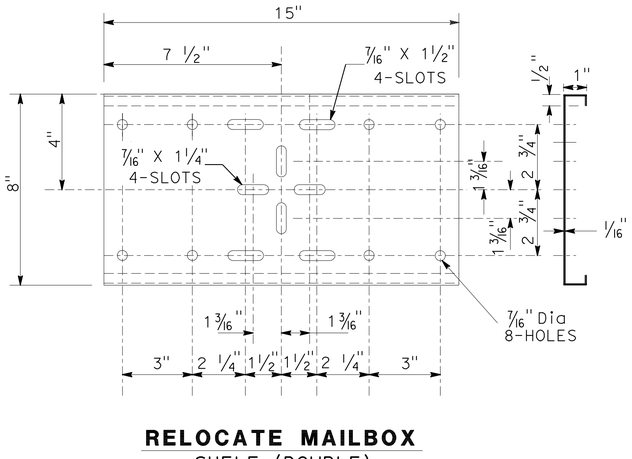
RELOCATE MAILBOX
SINGLE AND DOUBLE MAILBOX ASSEMBLIES



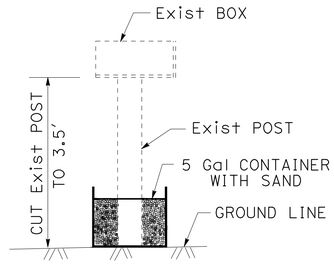
RELOCATE MAILBOX
PLATFORM (SINGLE)



RELOCATE MAILBOX
BRACKET



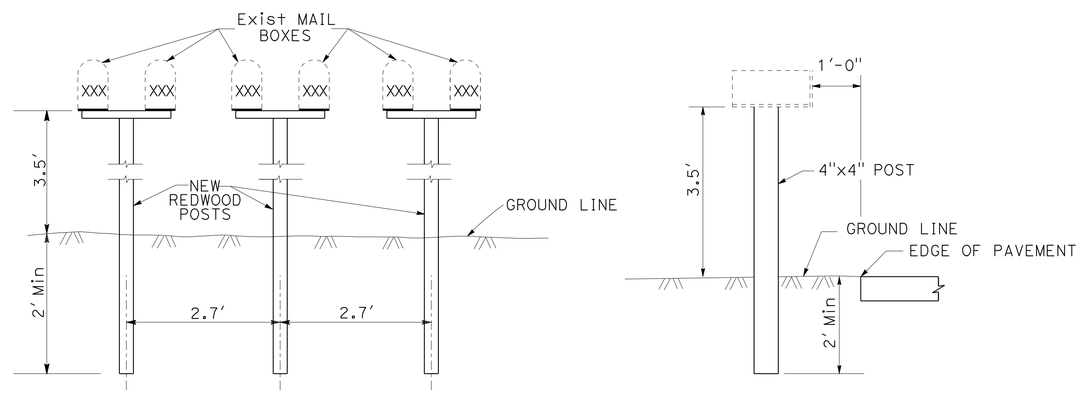
RELOCATE MAILBOX
SHELF (DOUBLE)



RELOCATE MAILBOX
TEMPORARY MAILBOX DETAIL

NOTES:

1. NEWSPAPER RECEPTACLES ATTACHED TO EXISTING MAILBOX POST WILL ALSO BE RESET TO THE NEW POST.
2. DETAILS SHOWN ARE FOR 6" WIDTH MAIL BOXES. ADJUST DIMENSIONS FOR BOXES OF DIFFERENT WIDTHS. CONTRACTOR SHALL VERIFY DIMENSIONS IN THE FIELD.
3. MAILBOX SUPPORT HARDWARE SHALL BE GALVANIZED STEEL.



RELOCATE MAILBOX
SETTING AND SPACING

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY: AL CHIN
CHECKED BY: STEPHEN WRIGHT
REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
10-29-09 | TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ga003.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	11	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

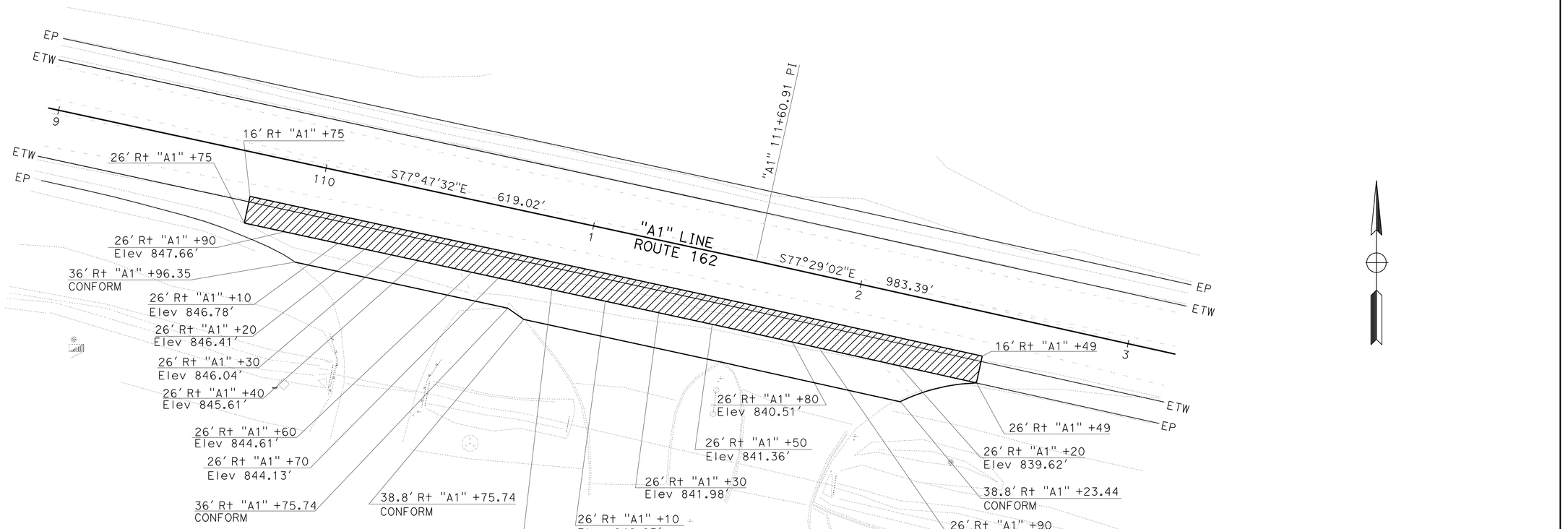
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. SEE SHEET C-1 FOR TRANSVERSE PAVEMENT CONFORM TAPER DETAIL.

LEGEND

REPLACE AC SURFACING



CONSTRUCTION DETAILS

SCALE: 1"=20′

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

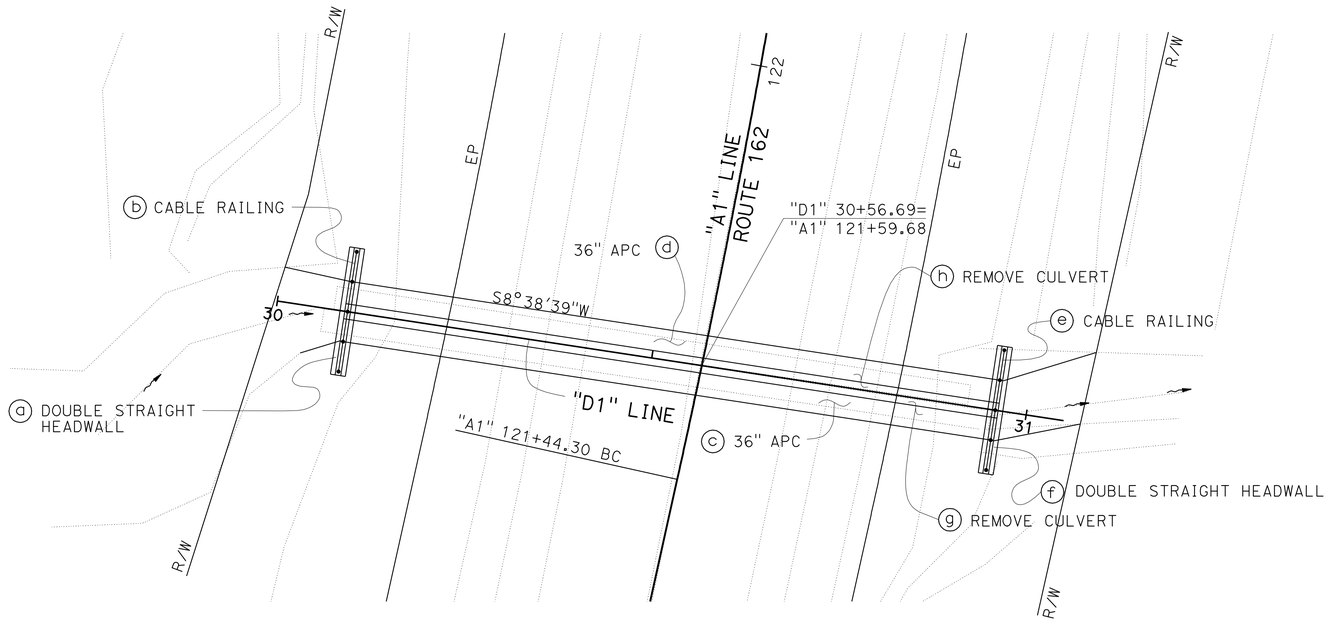
FUNCTIONAL SUPERVISOR: SHAUN RICE
CALCULATED-DESIGNED BY:
CHECKED BY:
REVISED BY: STEPHEN WRIGHT
DATE REVISED: AL CHIN

LAST REVISION 12-03-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ga004.dgn
CU 03365
EA 0F6401

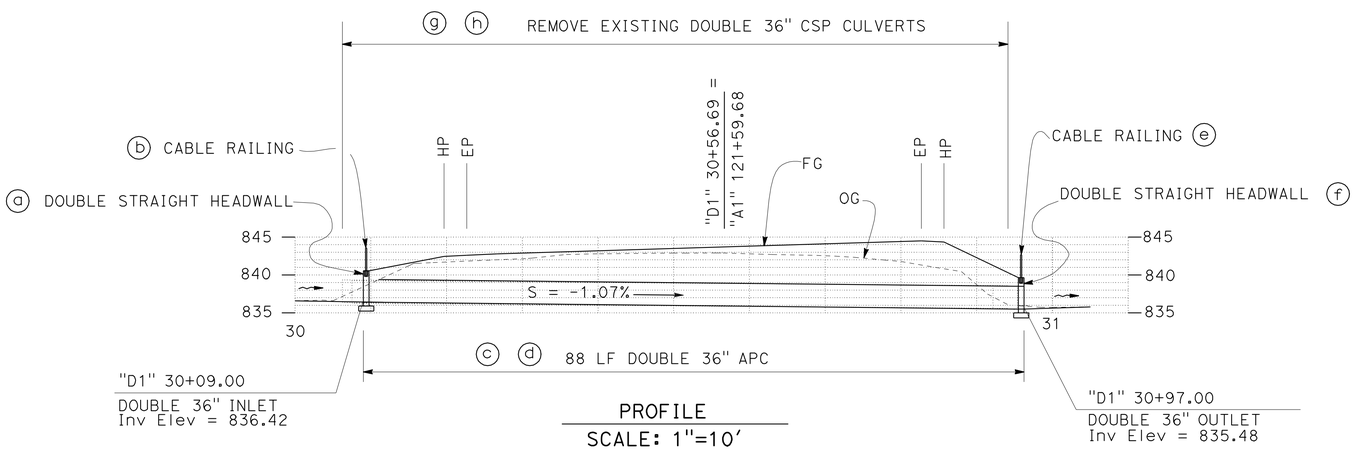
NOTE:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



PLAN

SCALE: 1"=10'



PROFILE

SCALE: 1"=10'

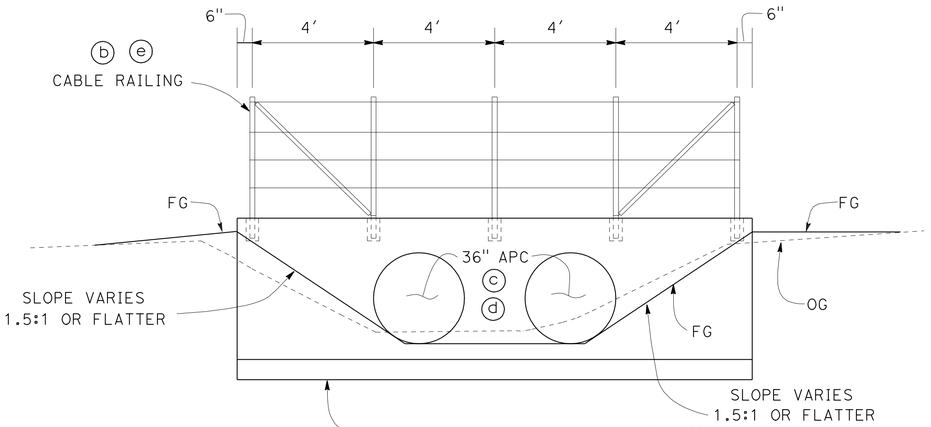
APC ALLOWABLE PIPE MATERIALS

1. RCP
2. HDPE (TYPE S) ***

*** HDPE = HIGH DENSITY POLYETHYLENE CORRUGATED PIPE, SMOOTH INTERIOR.

DRAINAGE QUANTITIES

⬡ DRAINAGE SYSTEM No.	○ DRAINAGE UNIT	REMOVE CULVERT	36" ALTERNATIVE PIPE CULVERT	MINOR CONCRETE (MINOR STRUCTURE)	CABLE RAILING
		LF	LF	CY	LF
1	a			2.65	
	b				16
	c		88		
	d		88		
	e				16
	f			2.65	
	g	88			
	h	85			
	TOTAL	173	176	5.30	32



TYPICAL INLET AND OUTLET DETAILS

NO SCALE

NOTES : 1. FOR HEADWALL DETAILS SEE STANDARD PLAN D89.
2. FOR CABLE RAILING DETAILS SEE STANDARD PLAN B11-47.

DRAINAGE SYSTEM No. ⬡ 1

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

DRAINAGE PLAN, DETAILS AND QUANTITIES

SCALE AS SHOWN

D-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	12	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
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.

REVISED BY | DATE REVISED
AL CHIN | STEPHEN WRIGHT
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: SHAUN RICE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 12-09-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:29

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	13	46

REGISTERED CIVIL ENGINEER — 12-10-09 DATE

PATRICK BISHOP No. 59860 Exp. 12/31/11 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-1-10
PLANS APPROVAL DATE

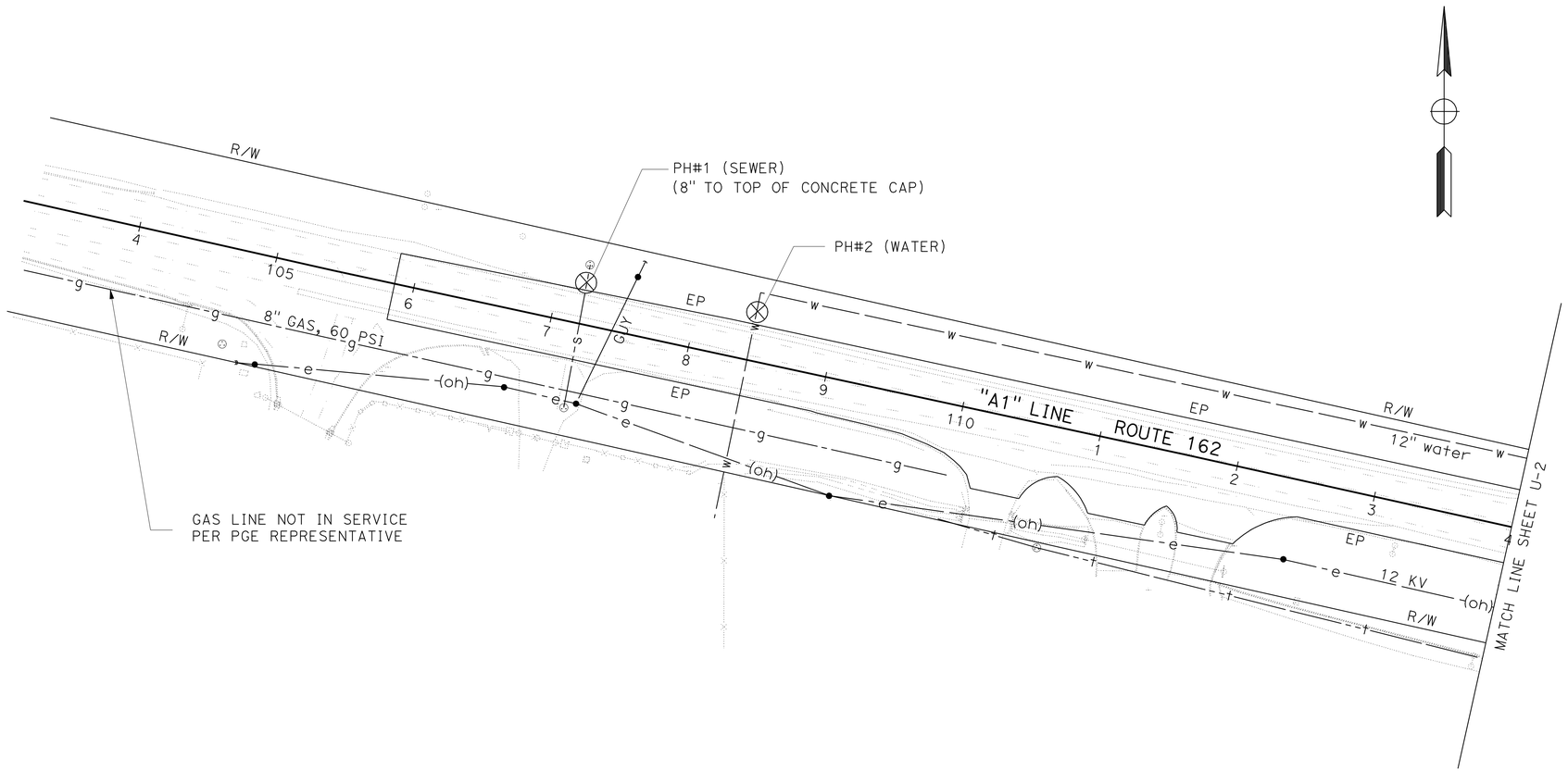
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

LEGEND

UTILITY		OWNERSHIP
ELECTRIC	——-e——-(oh)——	PG&E
GAS	——-g——-g——	PG&E
TELEPHONE	——-t——-t——	AT&T
WATER	——W——W——	So. FEATHER WATER & POWER
SEWER	——-s——-s——	LAKE OROVILLE PUD



POTHOLE LOCATION TABLE

⊗	UTILITY	STATION	OFFSET	DEPTH
PH#1	SEWER	"A1" 107+20	L+ 30′	6′-5″
PH#2	WATER	"A1" 108+43	L+ 35′	4′-1″

UTILITY PLAN

SCALE: 1"=50′ **U-1**

THIS PLAN ACCURATE FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF MARYSVILLE DESIGN
UTILITY DESIGN BRANCH

FUNCTIONAL SUPERVISOR: TOM WOOD
CALCULATED-DESIGNED BY: OLAWALE AJAYI
CHECKED BY: PATRICK BISHOP
REVISED BY
DATE REVISED

LAST REVISION 10-26-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ka001.dgn
CU 03229
EA 0F6401

NOTE:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	14	46

REGISTERED CIVIL ENGINEER — 12-10-09 DATE

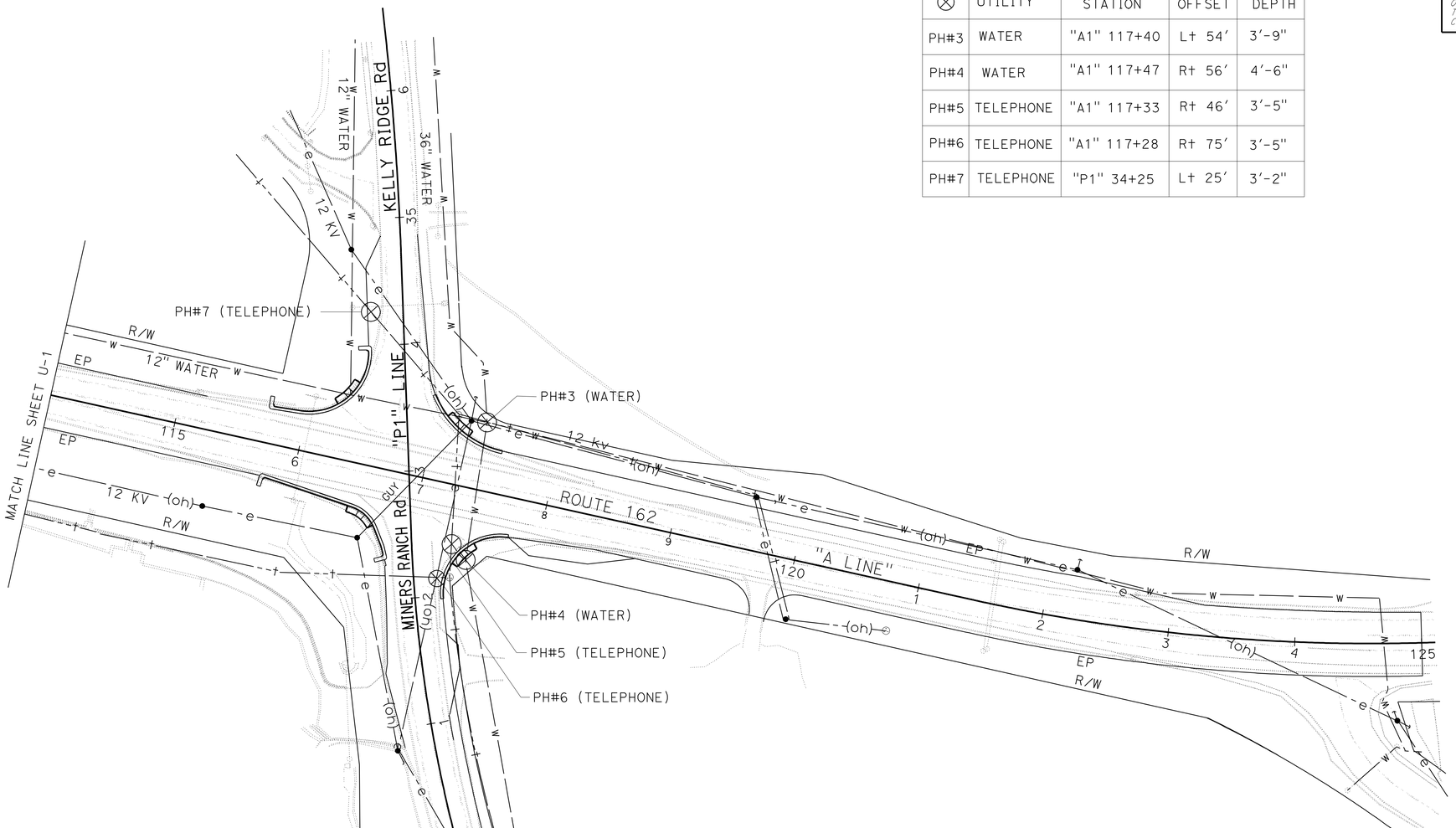
3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PATRICK BISHOP — No. 59860 — Exp. 12/31/11 — 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.

POTHOLE LOCATION TABLE

⊗	UTILITY	STATION	OFFSET	DEPTH
PH#3	WATER	"A1" 117+40	Lt 54'	3'-9"
PH#4	WATER	"A1" 117+47	Rt 56'	4'-6"
PH#5	TELEPHONE	"A1" 117+33	Rt 46'	3'-5"
PH#6	TELEPHONE	"A1" 117+28	Rt 75'	3'-5"
PH#7	TELEPHONE	"P1" 34+25	Lt 25'	3'-2"



UTILITY PLAN

SCALE: 1"=50'

U-2

THIS PLAN ACCURATE FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF MARYSVILLE DESIGN
UTILITY DESIGN BRANCH

FUNCTIONAL SUPERVISOR: TOM WOOD

CALCULATED-DESIGNED BY: OLAWALE AJAYI
CHECKED BY: PATRICK BISHOP

REVISED BY	DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
10-26-09 | TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => 30f640ka002.dgn

CU 03229

EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	15	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1	C23	48" X 48"	ROAD WORK AHEAD	1 - 6" X 6"	7
(B)		C40(Mod)	48" X 36"	TRAFFIC FINES DOUBLED IN WORK ZONES	1 - 4" X 6"	2
(C)	G20-2	C14	36" X 18"	END ROAD WORK	1 - 4" X 4"	5

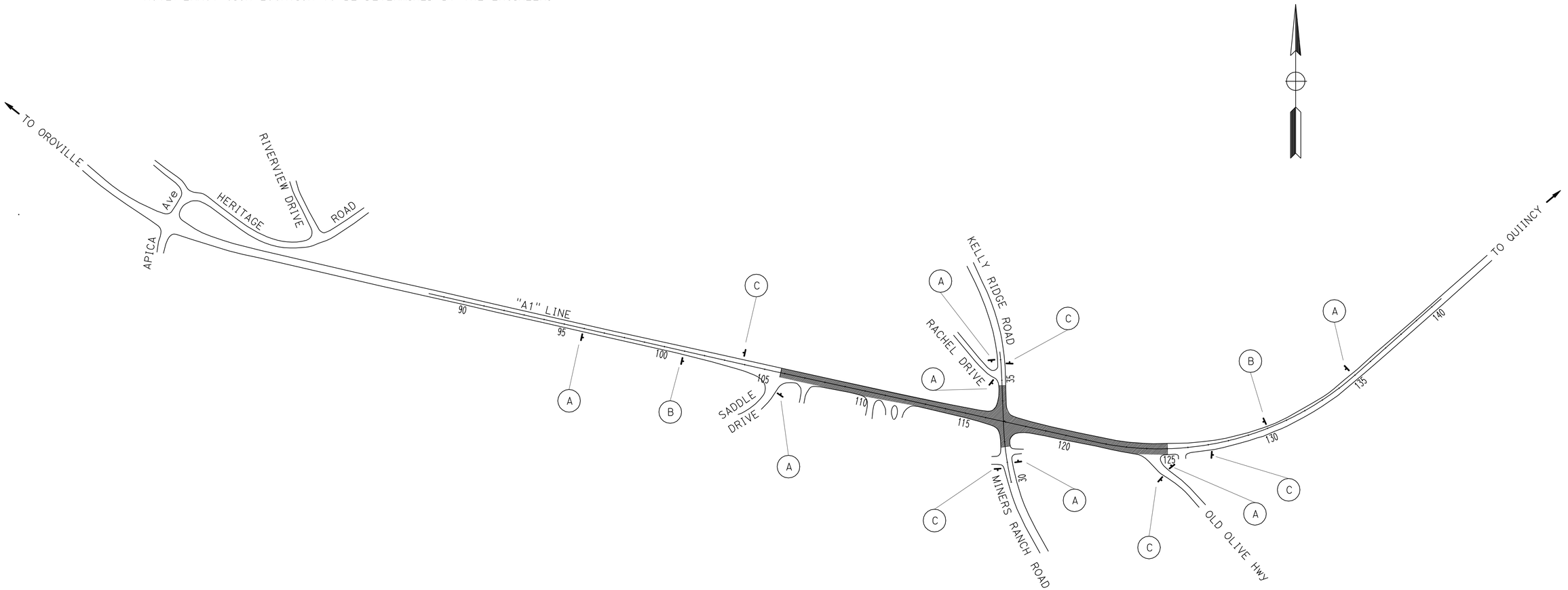
NOTE: EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER.

(B) C40(Mod)<CA> 48"x36"

TRAFFIC FINES DOUBLED IN WORK ZONES

4"D SERIES LETTERS

RETROREFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND AND BORDER



CONSTRUCTION AREA SIGNS

NO SCALE

NOTE: THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGNS ONLY.

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: SHAUN A. RICE

CALCULATED-DESIGNED BY
CHECKED BY

CHUCK COOK
STEPHEN WRIGHT

REVISED BY
DATE REVISED

LAST REVISION 11-9-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => 30f6401a001.dgn

CU 03365

EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	16	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

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STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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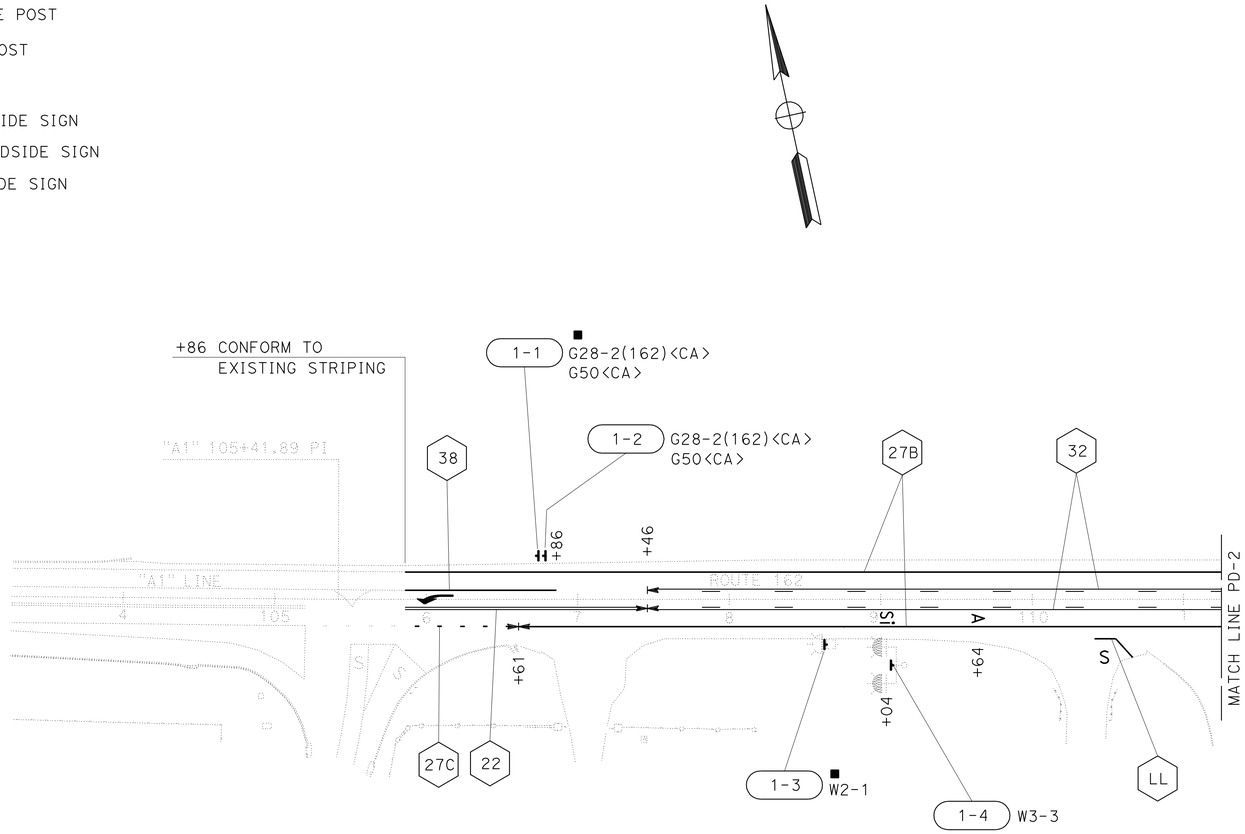
LEGEND:

⊢	LIMIT OF STRIPING PATTERN
⊢⊣	CHANGE IN STRIPING PATTERN
No.	PAVEMENT DELINEATION DETAIL NUMBER
LL	LIMIT LINE
XW	CROSSWALK
RPM	REMOVE PAVEMENT MARKING
⊢►	DELINEATOR (CLASS 1)
S=	DELINEATOR SPACING
H/P	HIGHWAY POST MARKER
→	TYPE 1(24′) ARROW
⤳	TYPE II ARROW
⇆	TYPE II(B) ARROW
⤳	TYPE III ARROW
S	"STOP" PAVEMENT MARKING
Si	"SIGNAL" PAVEMENT MARKING
A	"AHEAD" PAVEMENT MARKING

Sht-No.	ROADSIDE SIGN NUMBER
<CA>	CALIFORNIA SIGN CODE
SNS	STREET NAME SIGN
SPECR	SPECIAL REGULATORY (Vending Sign)
⊣	SIGN - SINGLE POST
⊣⊣	SIGN - TWO POST
⊣▯	SIGN - SSBM
■	REMOVE ROADSIDE SIGN
*	RELOCATE ROADSIDE SIGN
▲	RESET ROADSIDE SIGN



NOTES:

1. ALL LANES SHALL BE 12′ WIDE UNLESS OTHERWISE SHOWN.
2. ALL DELINEATORS (CLASS 1) SHALL BE TYPE E-1 UNLESS OTHERWISE SHOWN.
3. ALL DELINEATORS SHALL BE PLACED 100′ ON CENTER UNLESS OTHERWISE SHOWN.
4. ALL EXISTING SIGNS NOT SHOWN FOR REMOVAL, RELOCATION OR RESETTING SHALL REMAIN IN PLACE.
5. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
6. THIS PLAN ACCURATE FOR PAVEMENT DELINEATION AND SIGNING ONLY.

PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 50′

PD-1

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY: CHUCK COOK | CHECKED BY: STEPHEN WRIGHT
FUNCTIONAL SUPERVISOR: SHAUN A. RICE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC DESIGN

LAST REVISION 11-9-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:29

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640na001.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	17	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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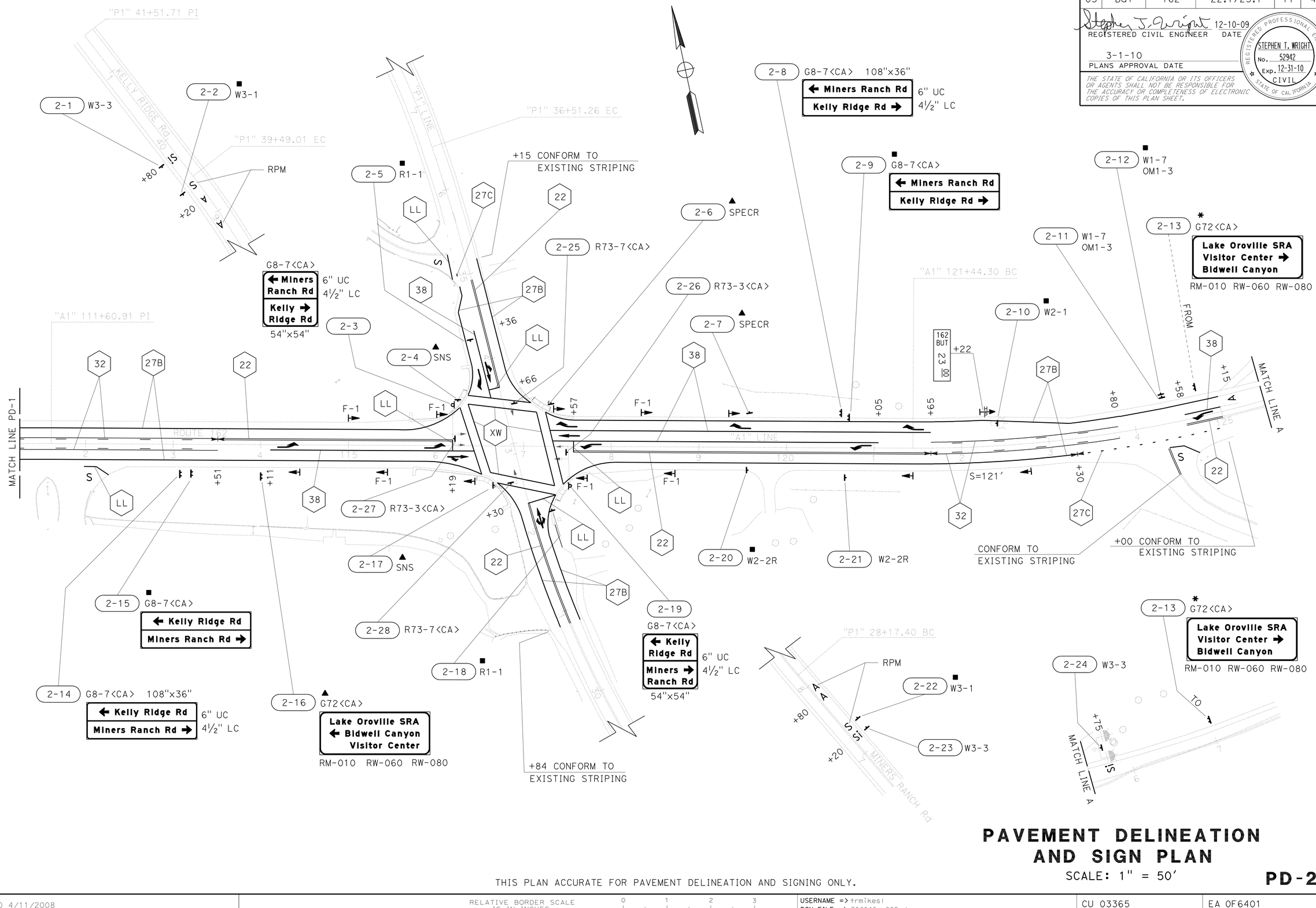

PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 50'

PD-2

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION AND SIGNING ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAUN A. RICE
CALCULATED-DESIGNED BY: CHUCK COOK
CHECKED BY: STEPHEN WRIGHT
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:30
11-9-09

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640na002.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	18	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

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STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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4" THERMOPLASTIC TRAFFIC STRIPE

DETAIL NUMBER	LINEAR FEET
22	2,348
27B	4,003
27C	275
32	3,280
TOTAL	9,906

PAVEMENT MARKER

DETAIL NUMBER	RETROREFLECTIVE	
	TYPE D (EACH)	TYPE G (EACH)
22	101	
32	89	
38		53
SUBTOTAL	190	53
TOTAL	243	

DELINEATOR - HIGHWAY POST MARKER

SHEET NUMBER	DELINEATOR (CLASS 1)		HIGHWAY POST MARKER (EACH)
	TYPE E-1 (EACH)	TYPE F-1 (EACH)	
PD-2	6	6	1
SUBTOTAL	6	6	1
TOTAL	12		1

8" THERMOPLASTIC TRAFFIC STRIPE

DETAIL NUMBER	LINEAR FEET
38	1,245
TOTAL	1,245

THERMOPLASTIC PAVEMENT MARKING

DESCRIPTION	NUMBER	SQUARE FEET
"STOP"	4	88
"SIGNAL"	4	128
"AHEAD"	4	124
TYPE I (24') ARROW	1	31
TYPE II ARROW	2	90
TYPE II(B) ARROW	1	59
TYPE III ARROW	10	420
LIMIT LINE	6	170
CROSS WALK	4	625
TOTAL		1,735

REMOVE THERMOPLASTIC PAVEMENT MARKING

DESCRIPTION	NUMBER	SQUARE FEET
"STOP"	2	44
"AHEAD"	2	62
TOTAL		106

PAVEMENT DELINEATION QUANTITIES

PDQ-1

REVISED BY | DATE REVISED
CHUCK COOK | STEPHEN WRIGHT
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: SHAUN A. RICE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
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CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	19	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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

ROADSIDE SIGN QUANTITIES

SIGN NUMBER (SHT-NO.)	SIGN CODE		PANEL SIZE	"C" DIM IN FEET	POST SIZE AND LENGTH		ROADSIDE SIGN		INSTALL SIGN (SSBM) (EACH)	REMOVE ROADSIDE SIGN (EACH)	RESET ROADSIDE SIGN (EACH)	RELOCATE ROADSIDE SIGN (EACH)	REMARKS
	FEDERAL	CALIFORNIA			4" X 4"	4" X 6"	ONE POST (EACH)	TWO POST (EACH)					
1-1		G28-2(162) G50								1			
1-2		G28-2(162) G50	28" x 25" 24" x 12"	5	14′		1						
1-3	W2-1	W9								1			
1-4	W3-3	W41	48" x 48"										SEE NOTE 4 AND 5
2-1	W3-3	W41	36" x 36"	5		14′	1						
2-2	W3-1	W17								1			
2-3		G8-7	54" x 54"						1				SEE NOTE 6
2-4		SNS									1		
2-5	R1-1	R1								1			
2-6		SPECR									1		
2-7		SPECR									1		
2-8		G8-7	108" x 36"	5		14′		1					
2-9		G8-7								1			
2-10	W2-1	W9								1			
2-11	W1-7 OM1-3	W56 N-1	48" x 24" 18" x 18"	4		14′	1						
2-12	W1-7 OM1-3	W56 N-1								1			
2-13		G72										1	
2-14		G8-7	108" x 36"	5		14′		1					
2-15		G8-7								1			
2-16		G72									1		
2-17		SNS									1		
2-18	R1-1	R1								1			
2-19		G8-7	54" x 54"						1				SEE NOTE 6
2-20	W2-2R	W7A(R+)								1			
2-21	W2-2R	W7A(R+)	36" x 36"	5		14′	1						
2-22	W3-1	W17								1			
2-23	W3-3	W41	36" x 36"	5		14′	1						
2-24	W3-3	W41	48" x 48"										SEE NOTE 4 AND 5
2-25		R73-7	24" x 30"										SEE NOTE 4 AND 7
2-26		R73-3	24" x 24"										SEE NOTE 4 AND 7
2-27		R73-3	24" x 24"										SEE NOTE 4 AND 7
2-28		R73-7	24" x 30"										SEE NOTE 4 AND 7
						TOTAL	5	2	2	11	5	1	

NOTES:

1. EXACT LOCATION AND POSITION OF ROADSIDE SIGNS TO BE DETERMINED BY THE ENGINEER.
2. POST LENGTHS GIVEN ARE APPROXIMATE.
3. "C" DIM = VERTICAL CLEARANCE EP TO BOTTOM OF SIGN PANEL.
4. (N) - NOT A SEPARATE PAY ITEM. FOR INFORMATION ONLY.
5. SIGN PANEL TO BE MOUNTED ON ADVANCED FLASHING BEACON STANDARD. SEE ELECTRICAL PLANS.
6. SIGN PANEL TO BE MOUNTED ON SIGNAL STANDARD DIRECTLY ABOVE THE SIGNAL MAST ARM CONNECTION.
7. SIGN PANEL TO BE MOUNTED ON SIGNAL MAST ARM, SEE ELECTRICAL PLANS.

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: CHUCK COOK
CHECKED BY: STEPHEN WRIGHT
FUNCTIONAL SUPERVISOR: SHAUN A. RICE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC DESIGN

SIGN QUANTITIES

SQ-1

LAST REVISION 11-9-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:30

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640oc001.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	20	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

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

ROADSIDE SIGN PANEL QUANTITIES (CONTRACTOR-FURNISHED)

SIGN CODE	SIGN MESSAGE/DESCRIPTION	SIGN SIZE L X D	SIGN AREA (SQFT)	NUMBER OF SIGNS	BACKGROUND		LEGEND		PROTECTIVE OVERLAY	FURNISH SINGLE SHEET ALUMINUM SIGN			REMARKS
					SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	PREMIUM FILM	UNFRAMED 0.063"	UNFRAMED 0.080"	FRAMED 0.080"	
										SQFT	SQFT	SQFT	
R73-3<CA>	LEFT TURN(Symbol)/NO U TURN	24" x 24"	4.00	2	WHITE	III	BLACK		X	8.00			
R73-7<CA>	LEFT TURN YIELD ON GREEN (Green Ball Symbol)	24" x 30"	5.00	2	WHITE	III	BLACK GREEN	 III	X	10.00			
W1-7	Two-Direction Large Arrow	48" x 24"	8.00	1	YELLOW	III	BLACK		X		8.00		
W2-2R	Side Road (Symbol)	36" x 36"	9.00	1	YELLOW	III	BLACK		X	9.00			
W3-3	Signal Ahead (Symbol)	48" x 48"	16.00	2	YELLOW	VII	BLACK RED,GREEN	 VII	X		32.00		
W3-3	Signal Ahead (Symbol)	36" x 36"	9.00	2	YELLOW	VII	BLACK RED,GREEN	 VII	X	18.00			
OM1-3	Object Marker	18" x 18"	2.25	1	YELLOW					2.25			
G50<CA>	WEST	24" x 12"	2.00	1	GREEN	III	WHITE	III	X	2.00			
G8-7<CA>	← Miners Ranch Rd Kelly → Ridge Rd	54" x 54"	20.25	1	GREEN	IV	WHITE	IX	X		20.25		SIGN 2-3
G8-7<CA>	← Kelly Ridge Rd Miners → Ranch Rd	54" x 54"	20.25	1	GREEN	IV	WHITE	IX	X		20.25		SIGN 2-19
G8-7<CA>	← Miners Ranch Rd Kelly Ridge Rd →	108" x 36"	27.00	1	GREEN	IV	WHITE	IX	X			27.00	SIGN 2-8
G8-7<CA>	←Kelly Ridge Rd Miners Ranch Rd →	108" x 36"	27.00	1	GREEN	IV	WHITE	IX	X			27.00	SIGN 2-14
G28-2(162)<CA>	CALIFORNIA 162 (Route Marker)	28" x 25"	4.86	1	GREEN	III	WHITE	III	X	4.86			
								TOTAL		54.11	80.50	54.00	———

L = LENGTH OF SIGN
D = DEPTH OF SIGN

NOTES:

1. CALIFORNIA SIGN CODES ARE DESIGNATED BY <CA>. OTHERWISE, FEDERAL SIGN CODES ARE SHOWN.
2. DETAILED SIGN PANEL FABRICATION DRAWINGS SHOWING EXACT PANEL LAYOUTS WILL BE FURNISHED TO THE CONTRACTOR.

SIGN QUANTITIES

SQ-2

CALCULATED-DESIGNED BY
CHECKED BY
CHUCK COOK
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR
SHAUN A. RICE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
Caltrans
STEPHEN WRIGHT

LAST REVISION 11-9-09
DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:30

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640oc002.dgn
CU 03365
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	21	46

Stephen T. Wright 12-10-09
REGISTERED CIVIL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. WRIGHT
No. 52942
Exp. 12-31-10
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. (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
2. EXACT LOCATION OF FIBER ROLL TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

ROADWAY QUANTITIES SUMMARY

LOCATION	HMA (TYPE A)				HMA (OPEN GRADED)	CLASS 2 AGGREGATE BASE	ROADWAY EXCAVATION	(N) ROADWAY EMBANKMENT	PAVING ASPHALT (BINDER-PAVEMENT REINFORCING FABRIC	GEOSYNTHETIC PAVEMENT INTERLAYER	COLD PLANE AC PAVEMENT			MINOR CONCRETE (CURB, SIDEWALK AND CURB RAMP)	RELOCATE MAILBOX	ASPHALTIC EMULSION	REMOVE AC DIKE	OBLITERATE SURFACING	REPLACE AC SURFACING	Temp FENCE (TYPE ESA)
	STRUCTURAL SECTION	OVERLAY	DRIVEWAY	VEHICLE PULLOUT							0.10' Max	0.20' Max	0.28' Max							
	TON				TON	CY	CY	CY	TON	SQYD	SQYD			CY	EA	TON	LF	SQYD	CY	LF
"A1" 105+86 TO 116+89	337	1855			252	411	393	250	0.65	616	5090	252	120	18.6		5.95	204	178	25	
"A1" 116+89 TO 125+00	419	1305	18	19	205	502	750	292	0.50	465	3801	50	120	12.7	1	4.78				403
"P1" 30+84.48 TO 32+80	7	183				9	14	6	0.04	40		261				0.52				
"P1" 32+80 TO 35+15.11	65	220				79	76	44	0.11	100		80				0.77				
SUB TOTAL	828	3563	18	19							8891	643	240							
TOTAL	4428				457	1001	1233	592	1.30	1221	9774			31.3	1	12.02	204	178	25	403

EROSION CONTROL QUANTITIES

ROADSIDE CLEARING (CHIPPED AREAS)	
STATION	SQFT (N)
"A1" 105+86 TO 116+86	19,630
"A1" 116+86 TO 125+00	18,560
"P1" 30+84.48 TO 32+80	520
"P1" 32+80 TO 34+85.97	2720
TOTAL	41,430

FIBER ROLLS		
STATION	LF	COMMENTS
"A1"105+86 TO 116+86	1296	
"A1"121+22 TO 125+00 L†	740	PLACE FIBER ROLLS AT TOP AND BOTTOM OF FILL SLOPE
"A1"121+22 TO 124+10 R†	594	PLACE FIBER ROLLS AT TOP AND BOTTOM OF FILL SLOPE
"P1"34+00 TO 35+00 L†	95	
TOTAL	2725	

REVISED BY | DATE REVISED
STEPHEN WRIGHT | DEANN SPANGLER
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: SHAUN RICE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN

SUMMARY OF QUANTITIES

Q-1

LAST REVISION | DATE PLOTTED => 04-MAR-2010
12-09-09 | TIME PLOTTED => 10:30

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => 30f640pa001.dgn | CU 03365 | EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	22	46

R. P. gill 12-10-09
REGISTERED ELECTRICAL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
RUPINDER PAL GILL
No. 16642
Exp. 06-30-10
ELECTRICAL
STATE OF CALIFORNIA

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

GENERAL NOTES:

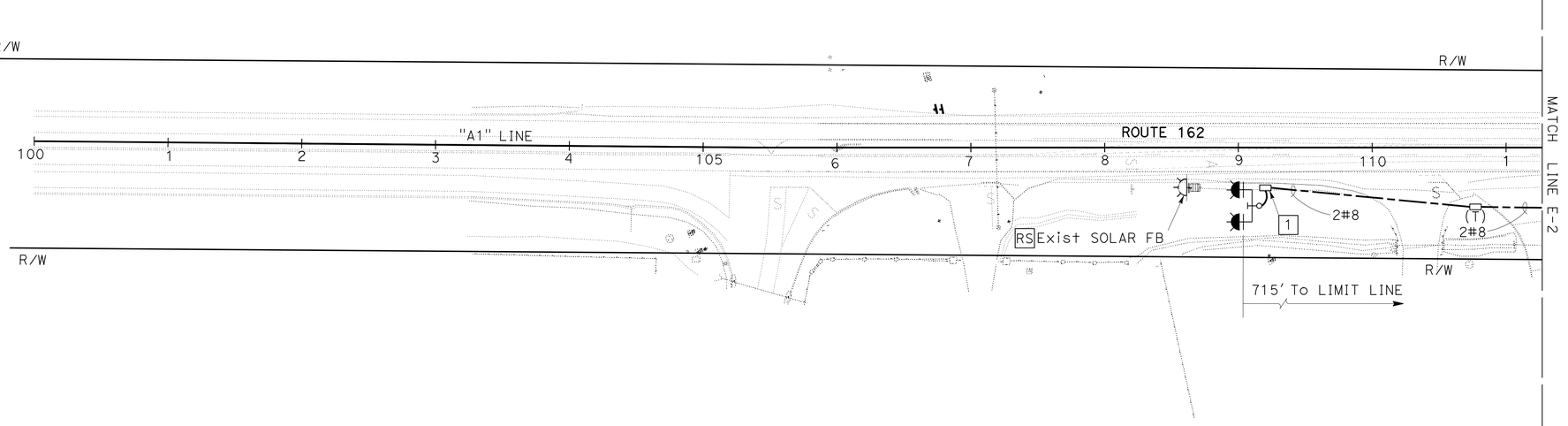
1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORDS AT DISTRICT OFFICE.
2. EXACT LOCATION AND ORIENTATION OF ELECTRICAL EQUIPMENT TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
3. INSTALL SIGN LIGHTING FIXTURE AT FLASHING BEACONS PER ES-7J.
4. FOR EXISTING UTILITY INFORMATION, SEE UTILITY SHEETS. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND PROTECT EXISTING UTILITIES DURING CONSTRUCTION.

PROJECT NOTE (THIS SHEET):

[1] INSTALL 15 A IN-LINE FUSE INSIDE PB PER ES-13B.

ABBREVIATIONS:

CTID	CALTRANS IDENTIFICATION
PG&E	PACIFIC GAS AND ELECTRIC



SIGNAL AND LIGHTING

SCALE: 1" = 50'

E-1

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

CALCULATED-DESIGNED BY: ALI HASSANI
CHECKED BY: RUPINDER PAL GILL
REVISED BY | DATE REVISED
FUNCTIONAL SUPERVISOR: STEVE S. LEE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC ELECTRICAL DESIGN MARYSVILLE

LAST REVISION | DATE PLOTTED => 04-MAR-2010
TIME PLOTTED => 10:30
08-27-09

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => 30f640ua001.dgn
CU 03390
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	23	46

R. P. Gill 12-10-09
REGISTERED ELECTRICAL ENGINEER DATE

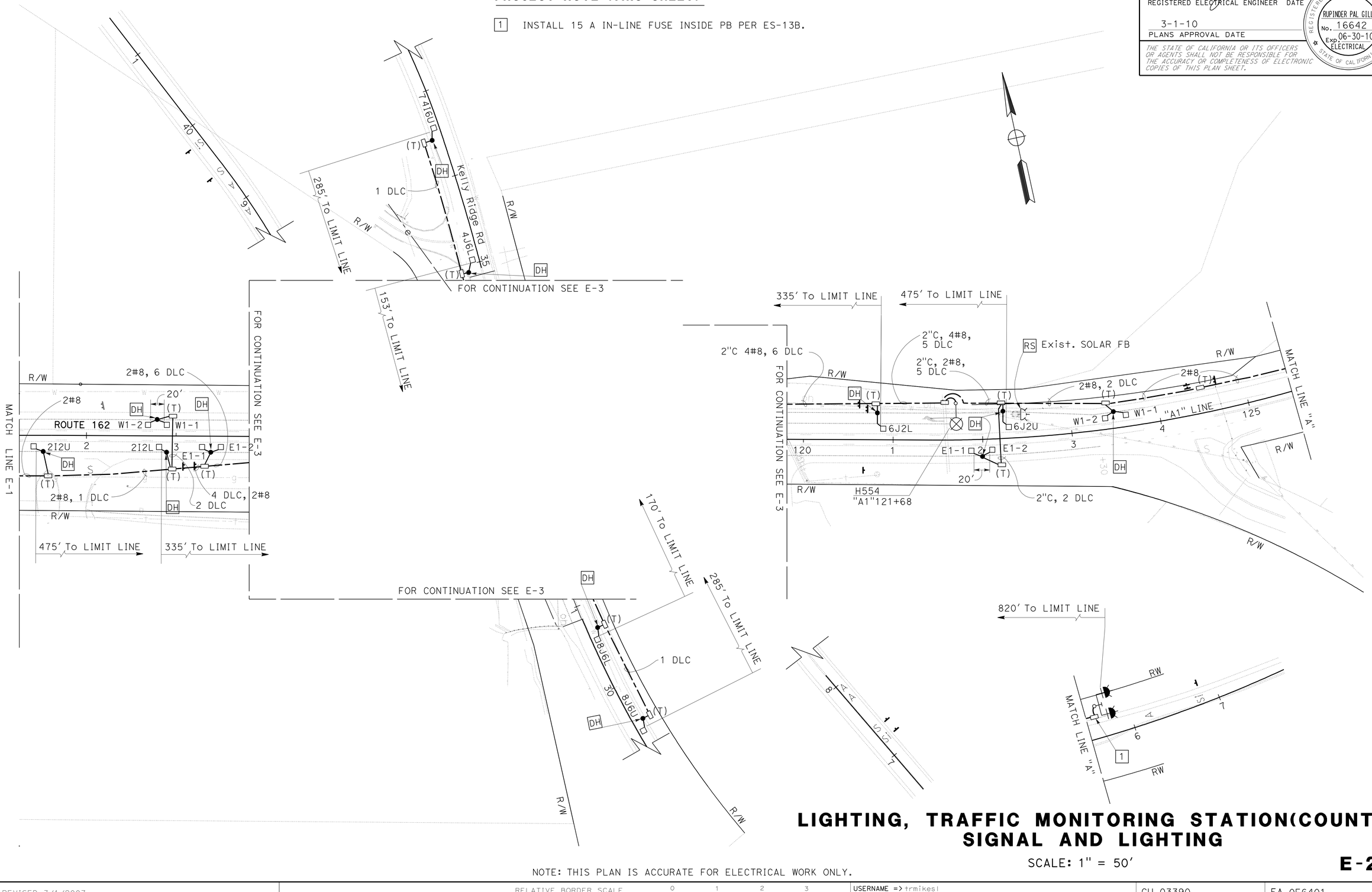
3-1-10
PLANS APPROVAL DATE

RUPINDER PAL GILL No. 16642 Exp. 06-30-10 ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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

PROJECT NOTE (THIS SHEET):

1 INSTALL 15 A IN-LINE FUSE INSIDE PB PER ES-13B.



LIGHTING, TRAFFIC MONITORING STATION(COUNT), SIGNAL AND LIGHTING

SCALE: 1" = 50'

E-2

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

CALCULATED-DESIGNED BY: ALI HASSANI
CHECKED BY: RUPINDER PAL GILL
FUNCTIONAL SUPERVISOR: STEVE S. LEE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC ELECTRICAL DESIGN MARYSVILLE

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
10-05-09 | TIME PLOTTED => 10:30

P:\proj4\03\0f640_plans\pse\30f640ua002.dgn

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => 30f640ua002.dgn

CU 03390

EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	24	46

R. P. Gill 12-10-09
REGISTERED ELECTRICAL ENGINEER DATE

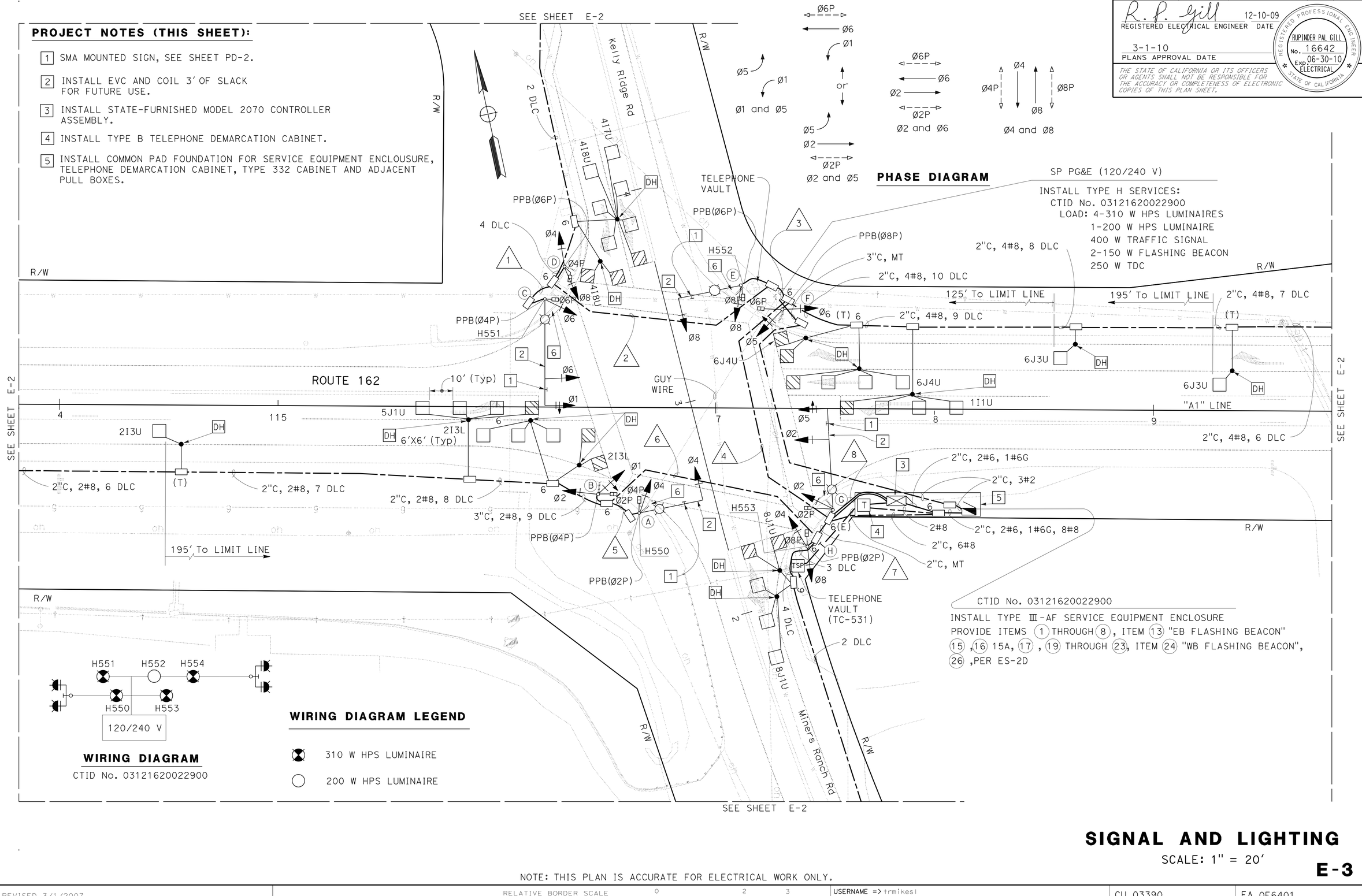
3-1-10
PLANS APPROVAL DATE

RUPINDER PAL GILL No. 16642 Exp. 06-30-10 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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

PROJECT NOTES (THIS SHEET):

1. SMA MOUNTED SIGN, SEE SHEET PD-2.
2. INSTALL EVC AND COIL 3' OF SLACK FOR FUTURE USE.
3. INSTALL STATE-FURNISHED MODEL 2070 CONTROLLER ASSEMBLY.
4. INSTALL TYPE B TELEPHONE DEMARCATION CABINET.
5. INSTALL COMMON PAD FOUNDATION FOR SERVICE EQUIPMENT ENCLOSURE, TELEPHONE DEMARCATION CABINET, TYPE 332 CABINET AND ADJACENT PULL BOXES.



PHASE DIAGRAM

SP PG&E (120/240 V)

INSTALL TYPE H SERVICES:
CTID No. 03121620022900
LOAD: 4-310 W HPS LUMINAIRES
1-200 W HPS LUMINAIRE
400 W TRAFFIC SIGNAL
2-150 W FLASHING BEACON
250 W TDC

CTID No. 03121620022900
INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE
PROVIDE ITEMS (1) THROUGH (8), ITEM (13) "EB FLASHING BEACON" (15), (16) 15A, (17), (19) THROUGH (23), ITEM (24) "WB FLASHING BEACON", (26), PER ES-2D

WIRING DIAGRAM

CTID No. 03121620022900

WIRING DIAGRAM LEGEND

- 310 W HPS LUMINAIRE
- 200 W HPS LUMINAIRE

SIGNAL AND LIGHTING

SCALE: 1" = 20'

E-3

NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC ELECTRICAL DESIGN MARYSVILLE
FUNCTIONAL SUPERVISOR: STEVE S. LEE
CHECKED BY: RUPINDER PAL GILL
CALCULATED-DESIGNED BY: ALI HASSANI
REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 04-MAR-2010
09-14-09 | TIME PLOTTED => 10:30

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE IS IN INCHES 0 2 3
USERNAME => trmikesl
DGN FILE => 30f640ua003.dgn
CU 03390
EA 0F6401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	162	22.7/23.1	25	46

R. P. gill 12-10-09
REGISTERED ELECTRICAL ENGINEER DATE

3-1-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
RUPINDER PAL GILL
No. 16642
Exp. 06-30-10
ELECTRICAL
STATE OF CALIFORNIA

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POLE AND EQUIPMENT SCHEDULE

No.	STANDARD Type	SMA	LMA	VEH SIG MTG Ø	M†g	PED SIGNAL Ø	M†g	PPB Ø	ARROW	HPS LUMINAIRE	SPECIAL REQUIREMENTS
Ⓐ	19A-2-100	30	15	4 4	MAS SV-1-T	4	SP-1-T	2	←	310 W	PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓑ	1-B			1 2	TV-2-T	2	SP-1-T	4	→		PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓒ	29A-5-100	50	15	1 6 6	MAT MAS SV-1-T	6	SP-1-T	2	←	310 W	PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓓ	1-B			8 4	TV-2-T	4	SP-1-T		→		PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓔ	19-2-100	30	15	8 8	MAS SV-1-T	8	SP-1-T	6	←	200 W	PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓕ	1-B			6 5	TV-2-T	6	SP-1-T	8	→		PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓖ	26A-3-100	45	15	5 2 2	MAT MAS SV-1-T	2	SP-1-T	8	←	310 W	PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE
Ⓗ	1-B			4 6	TV-2-T	8	SP-1-T	2	→		PEDESTRIAN SIGNAL HEAD SHALL BE COUNTDOWN TYPE

CONDUCTOR AND CONDUIT SCHEDULE

CABLE	STD	PHASE	1	2	3	4	5	6	7	8
VEH-PED 12CSC	Ⓐ	4,4P 2					1 1	1 1	1 1	1 1
	Ⓑ	1,2,2P 4						1 1	1 1	1 1
	Ⓒ	1,6,6P 4	1 1	1 1	1 1	1 1				1 1
	Ⓓ	4,8,4P 6		1 1	1 1	1 1				1 1
	Ⓔ	8,8P 6			1 1	1 1				1 1
	Ⓕ	5,6,6P 8				1 1				1 1
PPB 3CSC	Ⓖ	5,2,2P 8								1 1
	Ⓗ	4,6,8P 2							1 1	1 1
SPARE										
		TOTAL	1 1	2 2	3 3	4 4	1 1	2 2	3 3	8 8
AWG		CIRCUIT								
#8		LIGHTING	2	2	2	2	2	2	2	
#8		FLASHING BEACON				2		2	2	
DETECTORS										
PHASE										
Ø1						1				1
Ø2								4	4	4
Ø3										
Ø4				4	4	4				4
Ø5								1	1	1
Ø6						5				5
Ø7										
Ø8									3	3
TOTAL				4	4	10		5	8	18
COUNT LOOPS						4		4	4	8
BICYCLE LOOPS				2	2	4		2	4	8
EVC *			1	1	2	2	1	1	1	4
VIDEO CABLE *			1	1	2	2	1	1	1	4
CONDUIT SIZE			3"	3"	3"	2-3"	2-3"	2-3"	4"	2-4"

* FOR FUTURE USE.

SIGNAL AND LIGHTING

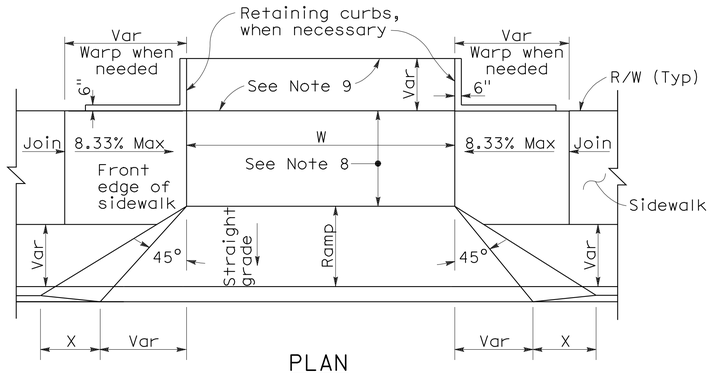
NOTE: THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

E-4

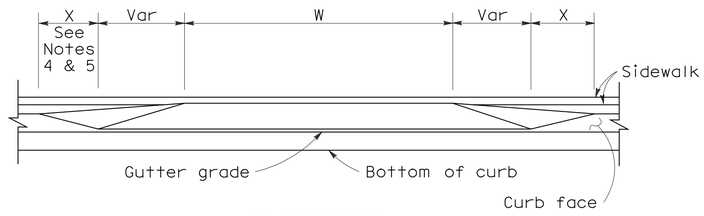
REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY: ALI HASSANI
CHECKED BY: RUPINDER PAL GILL
FUNCTIONAL SUPERVISOR: STEVE S. LEE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC ELECTRICAL DESIGN MARYSVILLE

LAST REVISION 09-14-09 | DATE PLOTTED => 04-MAR-2010 | TIME PLOTTED => 10:31

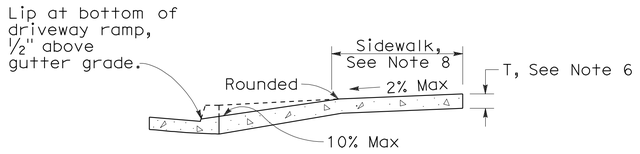
BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => 30f640ua004.dgn | CU 03390 | EA 0F6401



PLAN

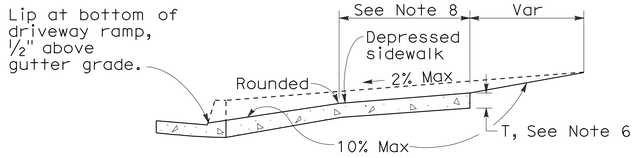


ELEVATION



CASE A

Typical driveway, sidewalk not depressed



CASE B

Driveway with depressed sidewalk

SECTIONS

CURB QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06804
E	0.06661

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	26	46

REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Michael Janzen — No. 44788 — Exp. 03-31-08 CIVIL — STATE OF CALIFORNIA

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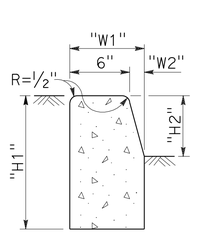
To accompany plans dated 3-1-10

TABLE A

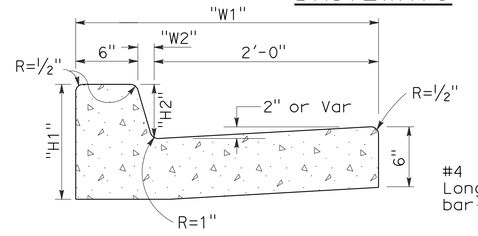
CURB TYPE	DIMENSIONS "H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7½"	1½"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-0"	6"	2'-7½"	1½"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7¼"	1¼"
A3-8	8"	7"	7¾"	1¾"
B1-4	1'-0"	4"	7½"	2½"
B1-6	1'-2"	6"	9"	4"
B2-4	10"	4"	2'-7½"	2½"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8½"	3½"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-8"

DRIVEWAYS



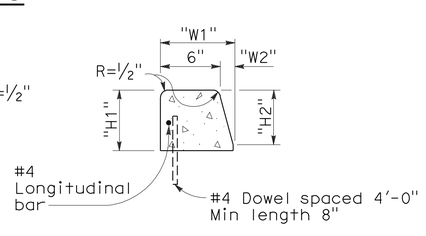
TYPE A1 CURBS

See Table A



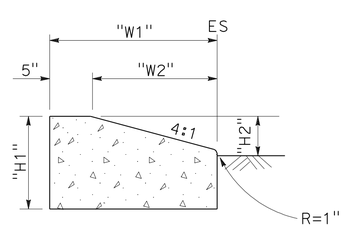
TYPE A2 CURBS

See Table A



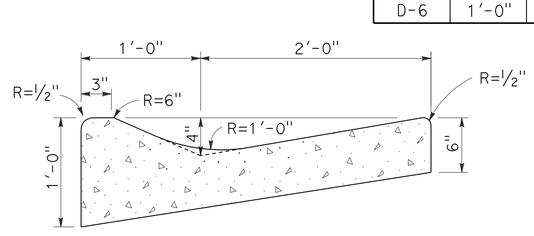
TYPE A3 CURBS

Superimposed on existing pavement
See Table A

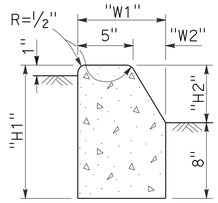


TYPE D CURBS

See Table A

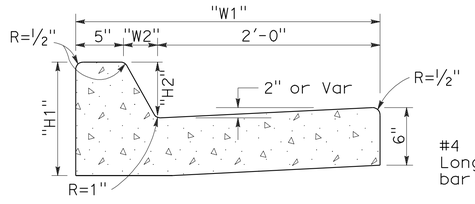


TYPE E CURB



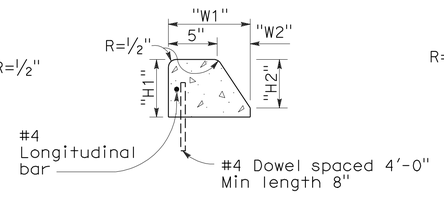
TYPE B1 CURBS

See Table A



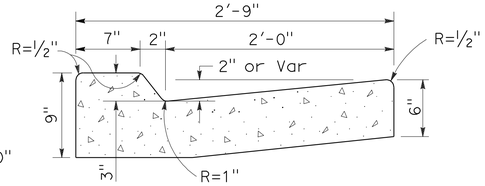
TYPE B2 CURBS

See Table A

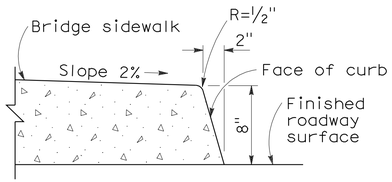


TYPE B3 CURBS

Superimposed on existing pavement
See Table A



TYPE B4 CURBS



TYPE H CURB

On Bridges

NOTES:

1. Case A driveway section typically applies.
2. Use Case B driveway section when ramp slopes would exceed 10% in Case A.
3. Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
4. X=3'-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.

CURBS

5. X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
6. Sidewalk and ramp thickness "T" at driveway shall be 4" for residental and 6" for commercial.
7. Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
8. Minimum width of clear passageway for sidewalk shall be 4'-0".
9. Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
10. Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURBS AND DRIVEWAYS

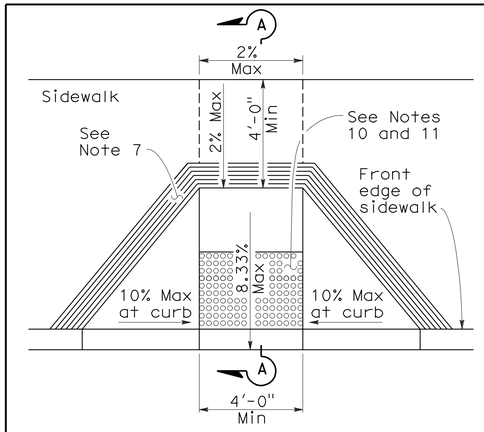
NO SCALE

RSP A87A DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A87A
DATED MAY 1, 2006 - PAGE 113 OF THE STANDARD PLANS BOOK DATED MAY 2006.

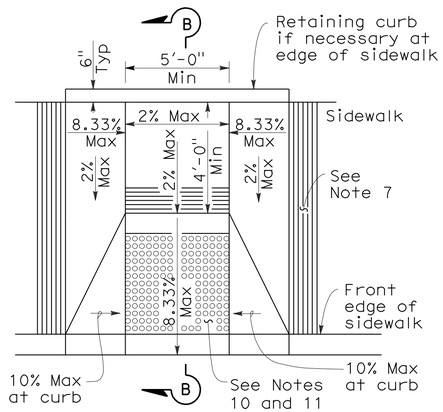
REVISED STANDARD PLAN RSP A87A

2006 REVISED STANDARD PLAN RSP A87A

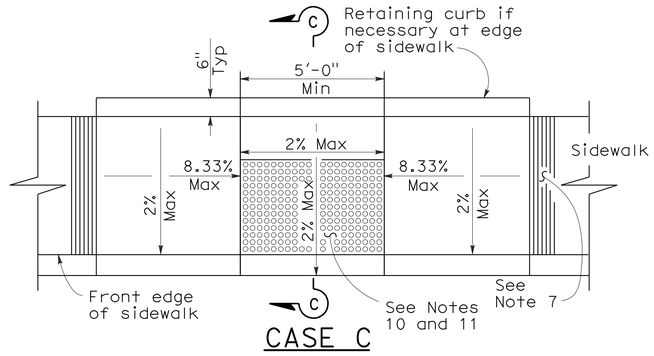
10-25-06



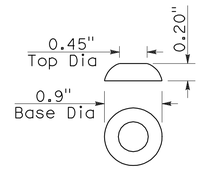
CASE A



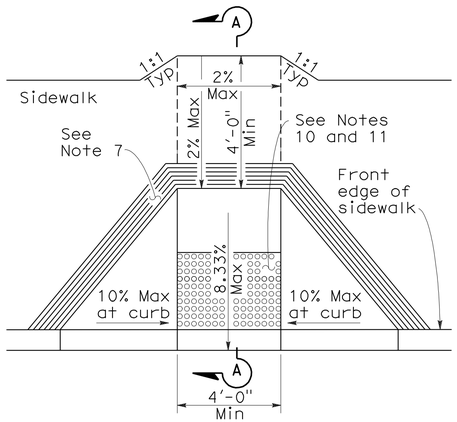
CASE B



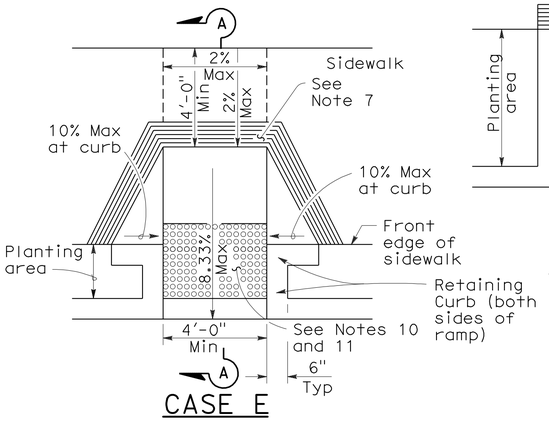
CASE C



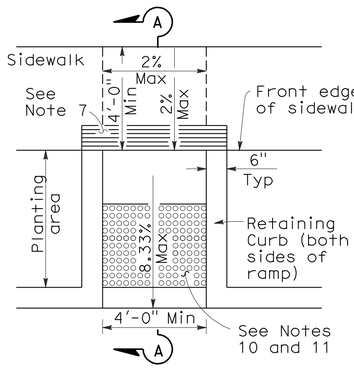
RAISED TRUNCATED DOME



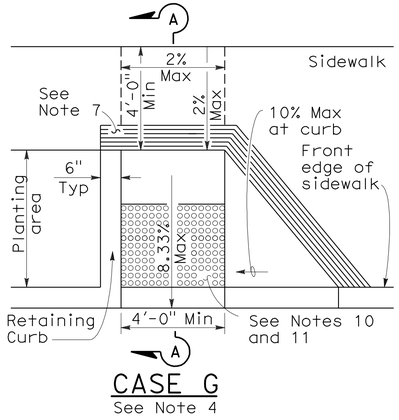
CASE D



CASE E



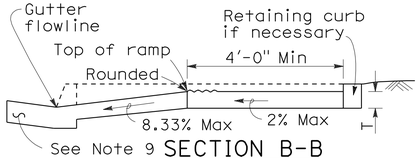
CASE F



CASE G

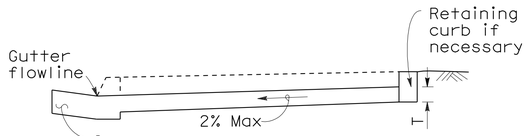
See Note 4

SECTION A-A



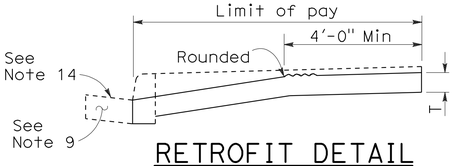
SECTION B-B

Depress entire sidewalk as required



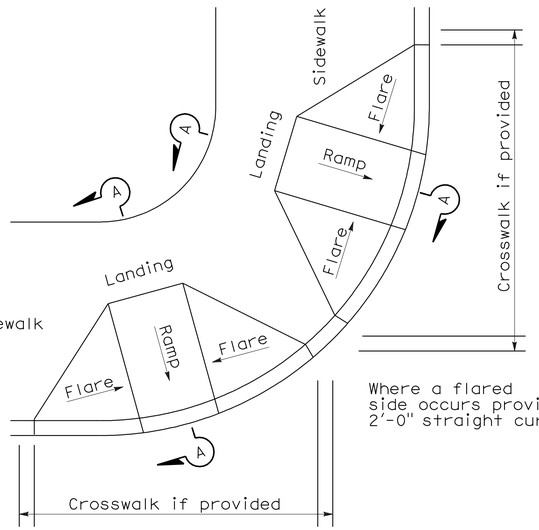
SECTION C-C

GROOVING DETAIL



RETROFIT DETAIL

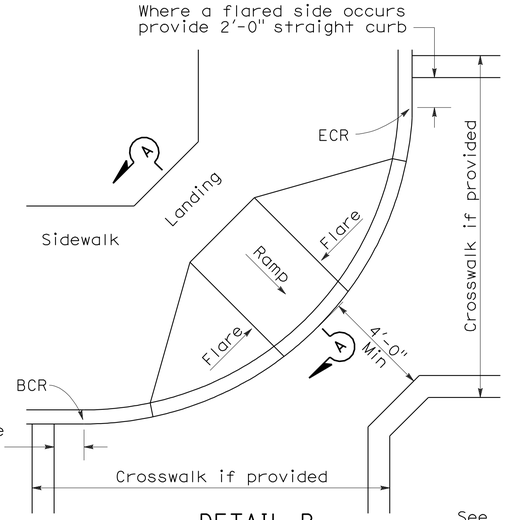
Existing curb and sidewalk



DETAIL A

TYPICAL TWO-RAMP CORNER INSTALLATION

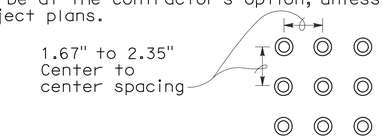
See Note 1



DETAIL B

TYPICAL ONE-RAMP CORNER INSTALLATION

See Notes 1 and 3



RAISED TRUNCATED DOME PATTERN (IN-LINE)

DETECTABLE WARNING SURFACE

See Note 10

NOTES:

1. As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate.
2. If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-0" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B, or C or may be widened as in Case D.
3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
4. As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
5. If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'-0".
6. Side slope of ramp flares vary uniformly from a maximum of 10% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
7. The curb ramp shall be outlined, as shown, with a 1'-0" wide border with 1/4" grooves approximately 3/4" on center. See grooving detail.
8. Transitions from ramps and landing to walks, gutters or streets shall be flush and free of abrupt changes.
9. Maximum slopes of adjoining gutters, the road surface immediately adjacent to the curb ramp or accessible route shall not exceed 5 percent within 4'-0" of the top and bottom of the curb ramp.
10. Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable Warning Surfaces shall conform to the details on this plan and the requirements in the Special Provisions.
11. The edge of the detectable warning surface nearest the street shall be between 6" and 8" from the gutter flowline.
12. Sidewalk and ramp thickness, "T", shall be 3 1/2" minimum.
13. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
14. For retrofit conditions, removal and replacement of curb apron will be at the Contractor's option, unless otherwise shown on project plans.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	27	46

H. David Cordova
REGISTERED CIVIL ENGINEER

September 1, 2006
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Hector David Cordova — No. C41957 — Exp. 3-31-08 CIVIL — STATE OF CALIFORNIA

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

To accompany plans dated 3-1-10

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS

NO SCALE

RSP A88A DATED SEPTEMBER 1, 2006 SUPERSEDES STANDARD PLAN A88A
DATED MAY 1, 2006 - PAGE 115 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A88A

2006 REVISED STANDARD PLAN RSP A88A

8-3-06

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	28	46

Raymond Don Tsztoo
REGISTERED CIVIL ENGINEER

March 7, 2008
PLANS APPROVAL DATE

Raymond Don Tsztoo No. C37332 Exp. 6-30-08 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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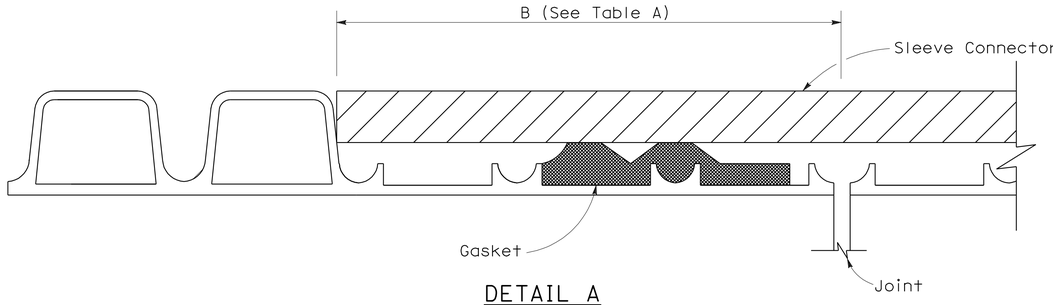
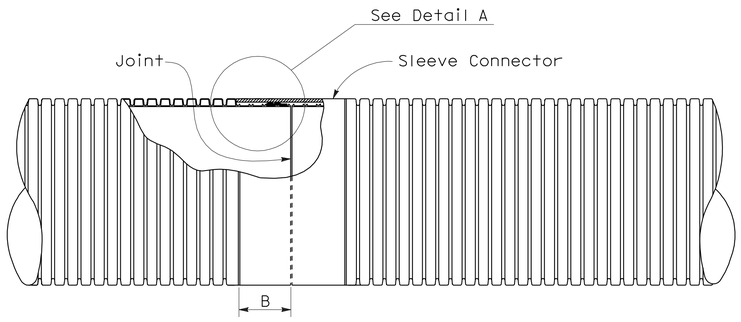
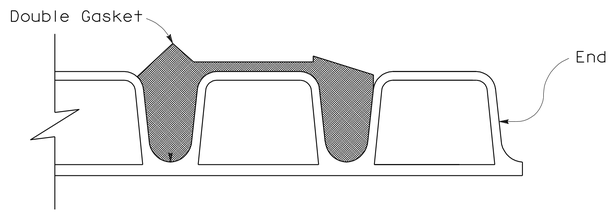
To accompany plans dated 3-1-10



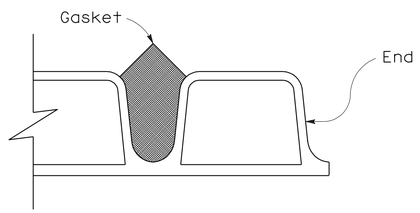
DETAIL A



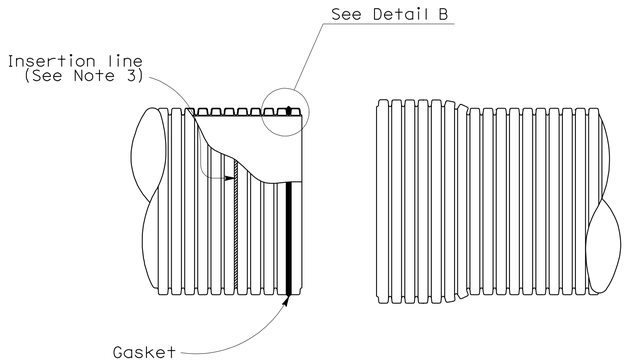
PLAN VIEW
Liner Insert
See Note 4



Double Gasket



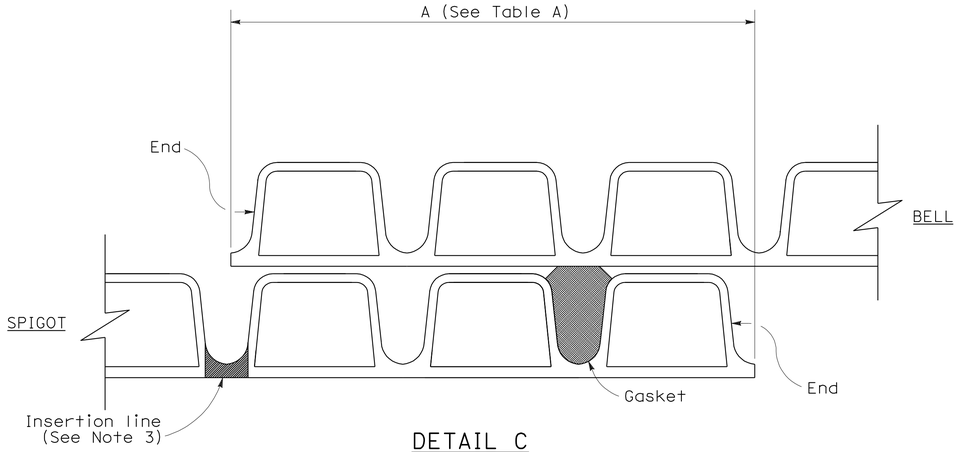
Single Gasket



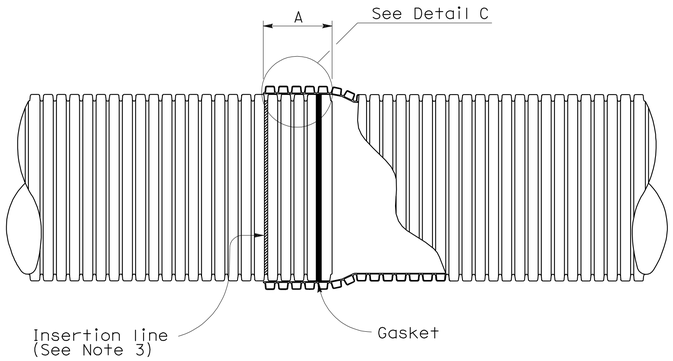
SPIGOT

BELL

DETAIL B



DETAIL C
(Single gasket shown)



BELL AND SPIGOT JOINT

NOTES:

1. For pipe sections installed on straight alignment, the pipe sections shall be joined to achieve maxium joint overlap at all points on the periphery as indicated in Table A where the plans call for positive or watertight joints. Maxium joint overlap is recommended where the plans call for standard joints, but in no case shall the joint overlap be less than 3½".
2. For pipe sections installed on curved alignment, the maxium angle of deflection from straight alignment at any joint shall not exceed two degrees. Where the plans call for watertightness, field testing for compliance is required. Where plans call for positive joints, the pipe sections shall be joined to achieve Table A Dimensions on one side of the joint. Joints classified as standard shall have no less than 3½" joint overlap at any point on the periphery.
3. Factory applied insertion line limit shall be placed on spigot.
4. Liner insert to be used inside of existing pipe.

TABLE A

JOINT OVERLAP DIMENSIONS		
PIPE Dia (NOMINAL)	A	B
12"	5¾"	4¼"
15"	6¾"	5⅝"
18"	6¾"	5⅝"
21"	8½"	5⅝"
24"	8½"	6⅛"
30"	8½"	7⅛"
36"	8½"	8⅛"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CORRUGATED POLYVINYL CHLORIDE PIPE WITH SMOOTH INTERIOR STANDARD AND POSITIVE JOINTS

NO SCALE

NSP D97I DATED MARCH 7, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP D97I

2006 NEW STANDARD PLAN NSP D97I

2-13-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	29	46

LICENSED LANDSCAPE ARCHITECT

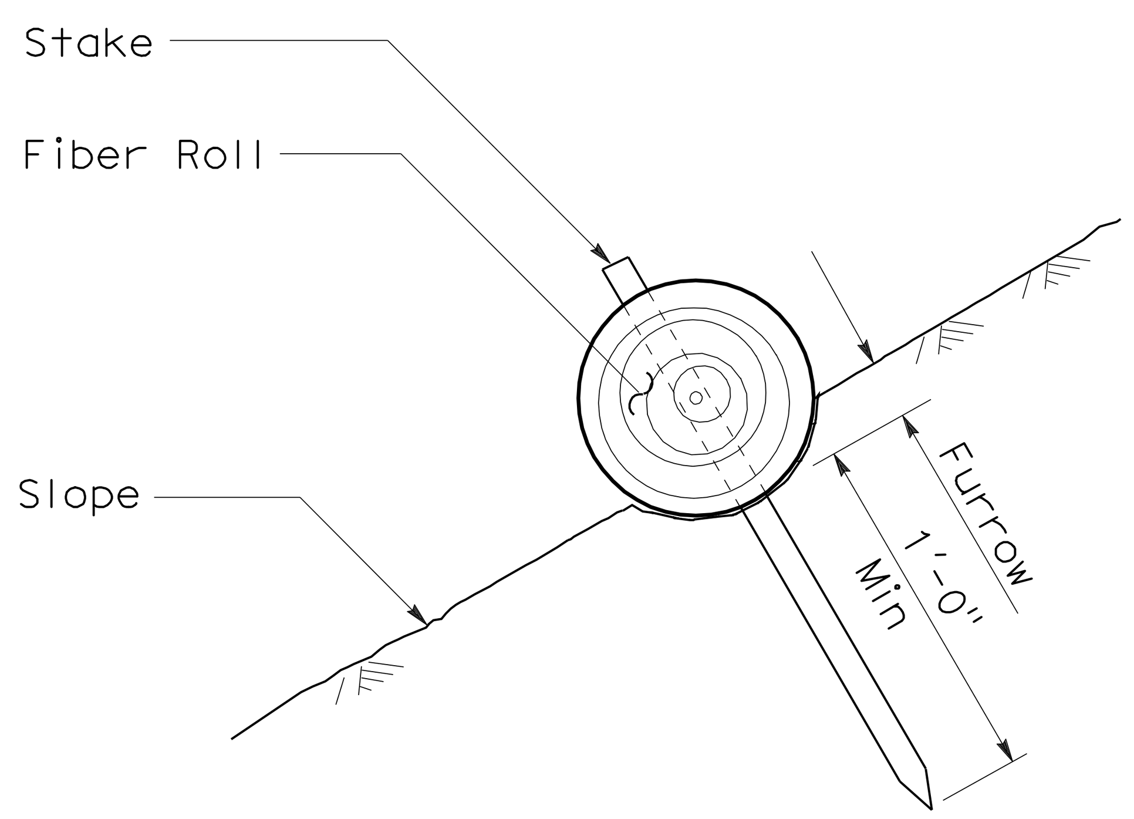
April 3, 2009
PLANS APPROVAL DATE

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

LICENSED LANDSCAPE ARCHITECT Gregory A. Balzer 2576 Signature 02-28-11 Renewal Date 03-04-09 Date STATE OF CALIFORNIA

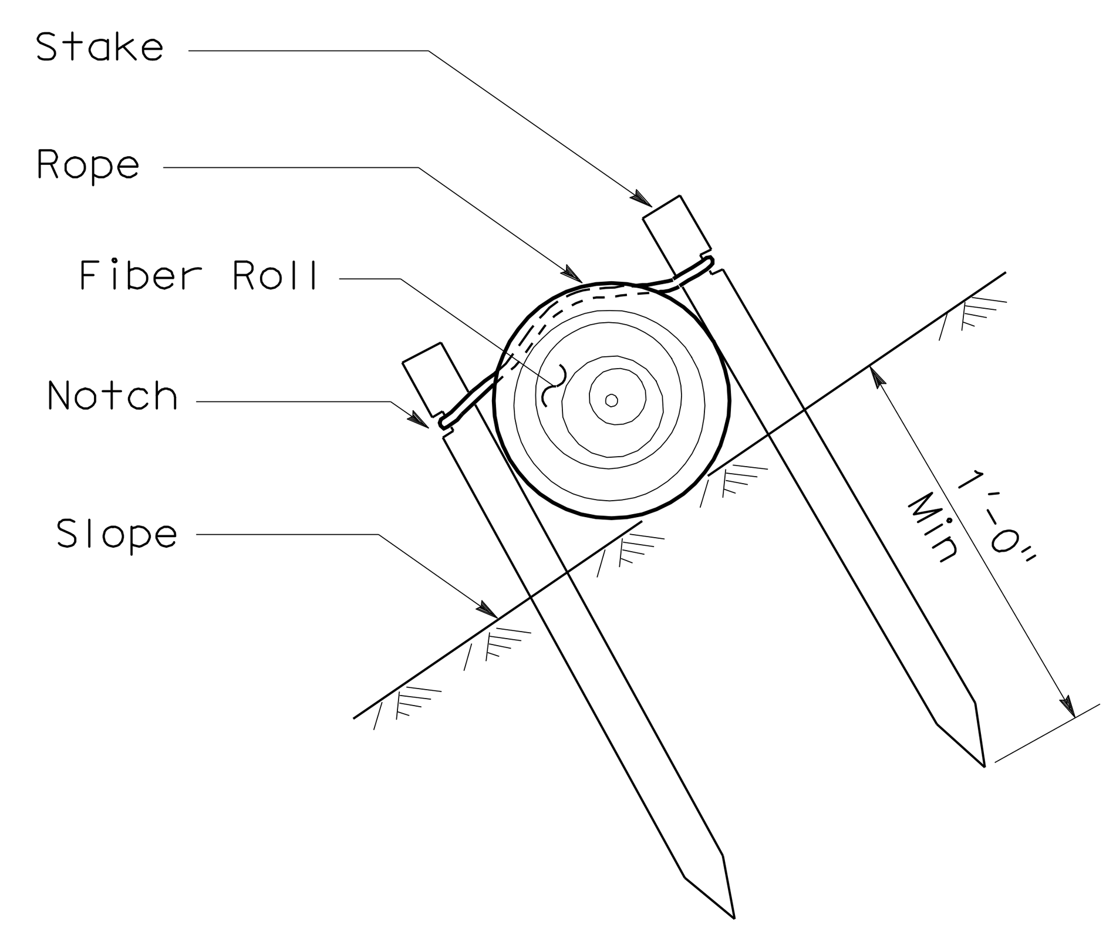
To accompany plans dated 3-1-10

2006 REVISED NEW STANDARD PLAN RNSP H51

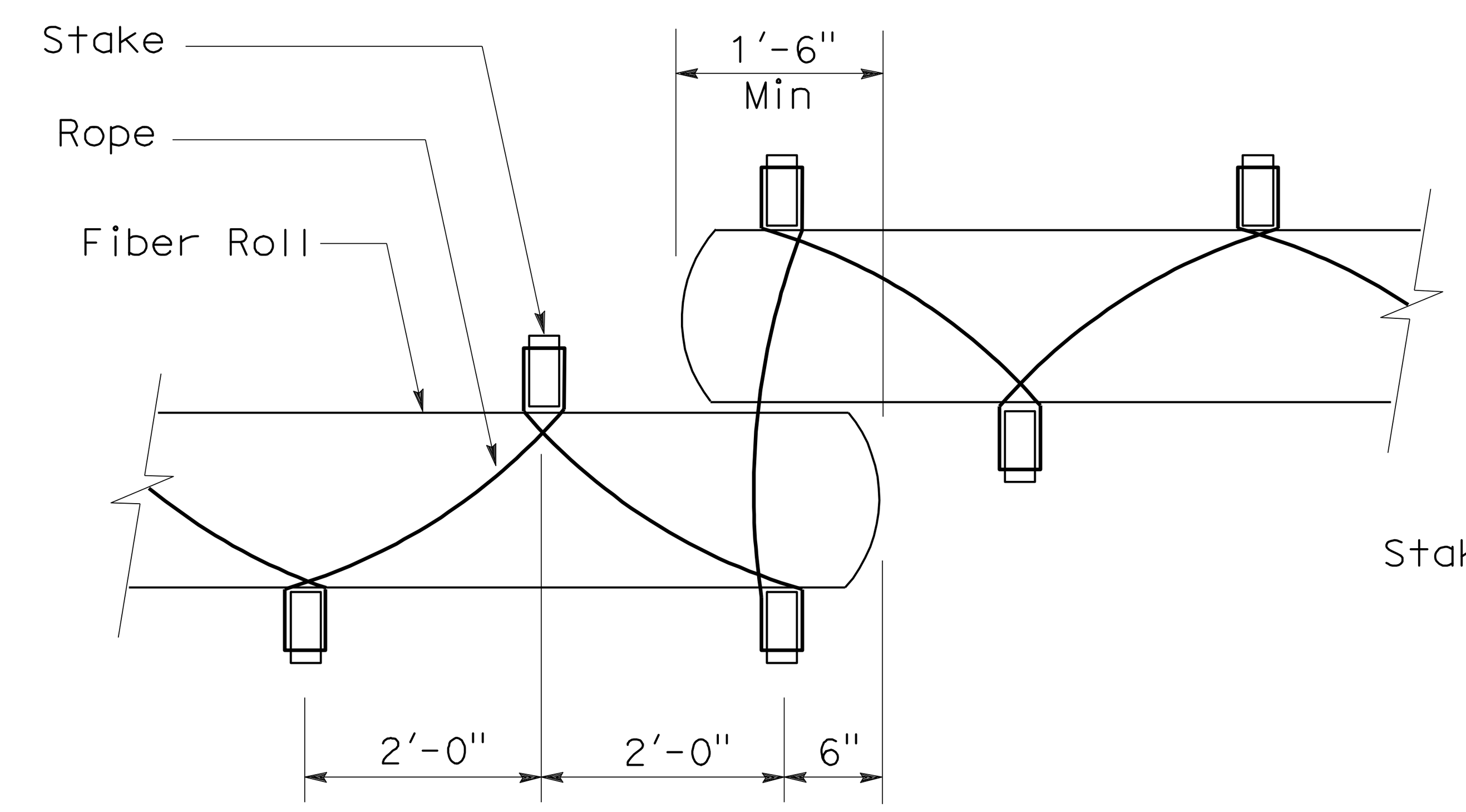


SECTION

FIBER ROLL (TYPE 1)

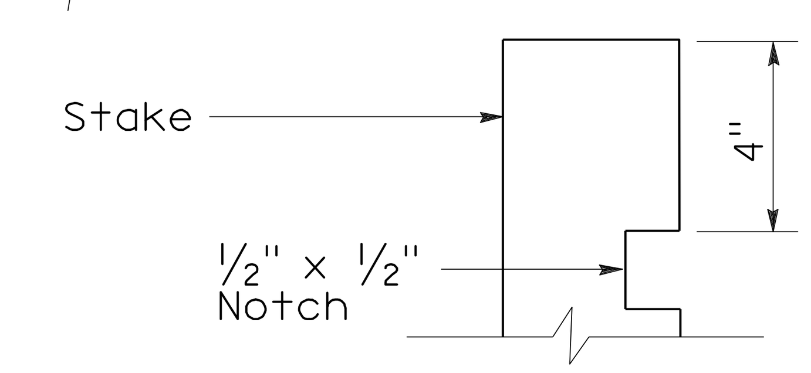


SECTION



PLAN

FIBER ROLL (TYPE 2)

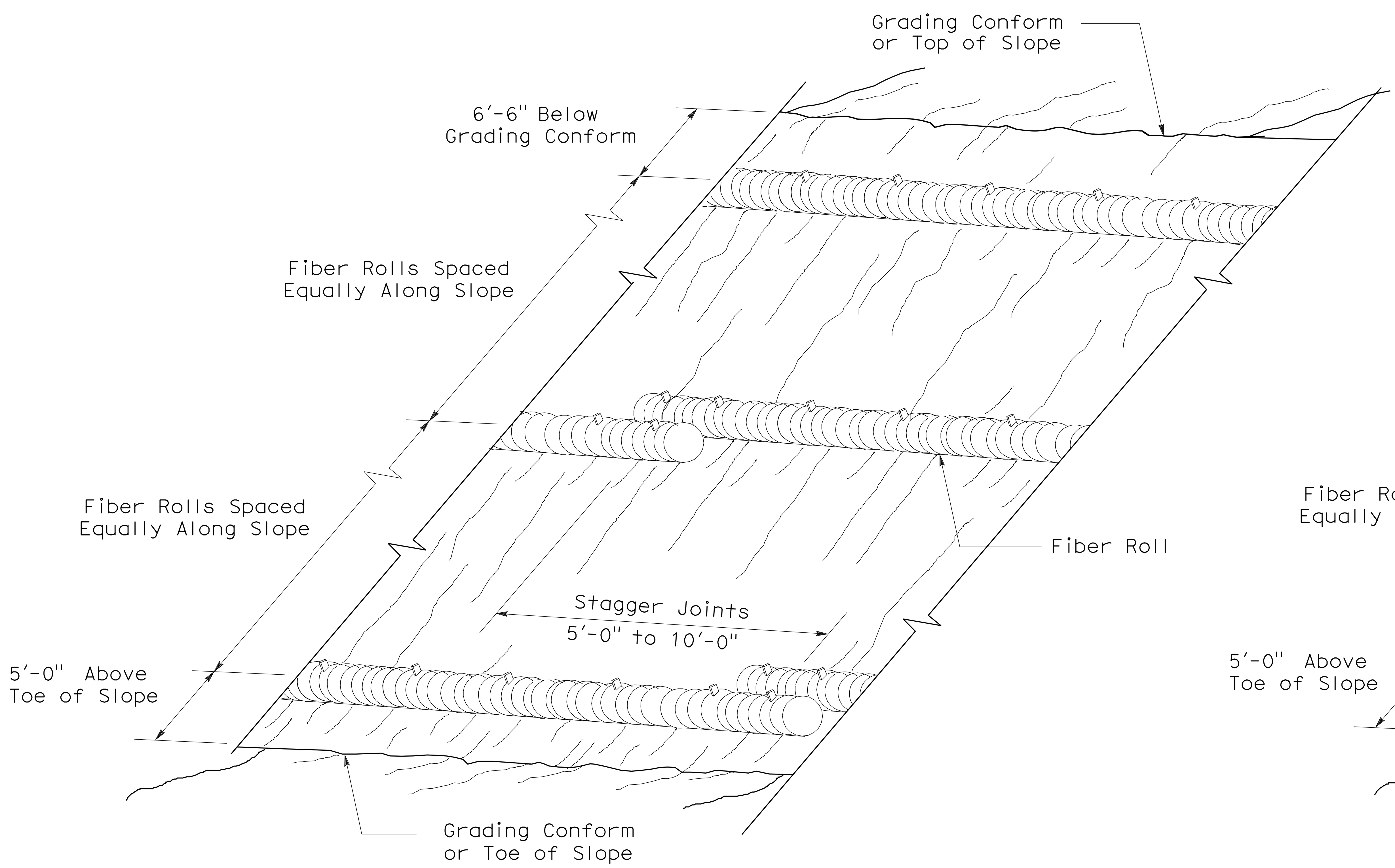


ELEVATION

STAKE NOTCH DETAIL

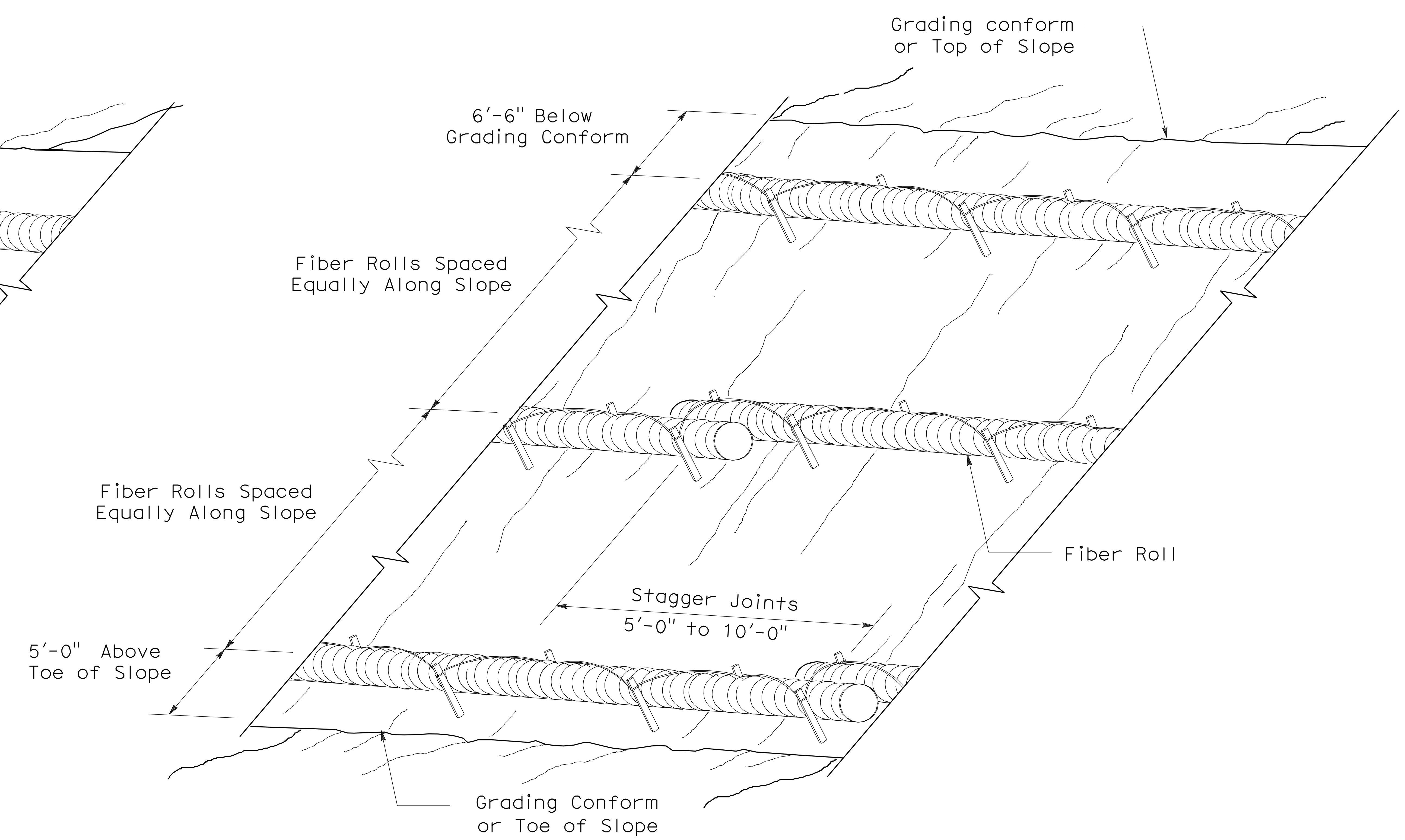
NOTES:

1. Fiber roll spacing varies depending upon slope inclination.
2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



PERSPECTIVE

FIBER ROLL (TYPE 1)



PERSPECTIVE

FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS (FIBER ROLL)

NO SCALE

RNSP H51 DATED APRIL 3, 2009 SUPERSEDES NSP H51 DATED DECEMBER 1, 2006 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED NEW STANDARD PLAN RNSP H51

3-4-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	30	46

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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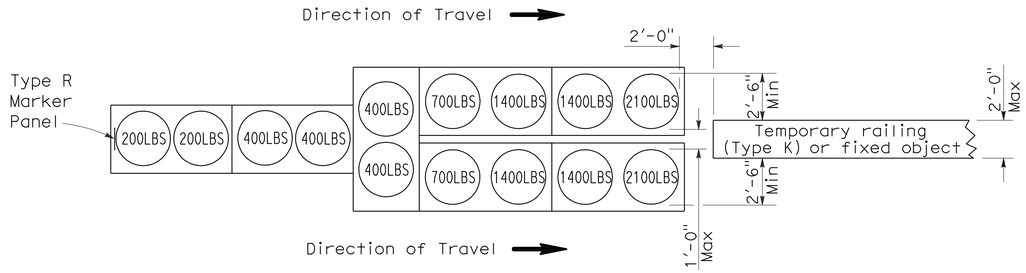
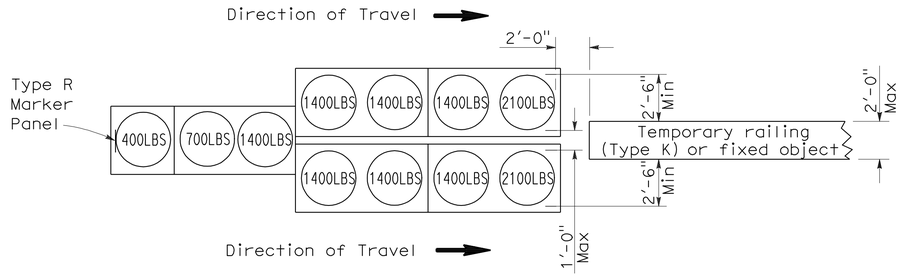
To accompany plans dated 3-1-10



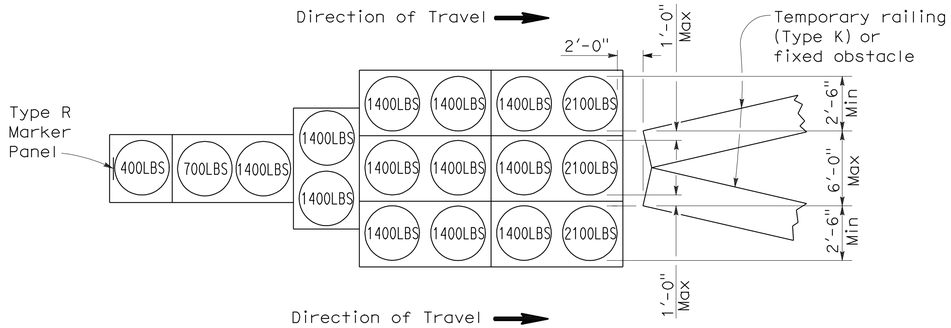
ARRAY 'TU14'

Approach speed 45 mph or more



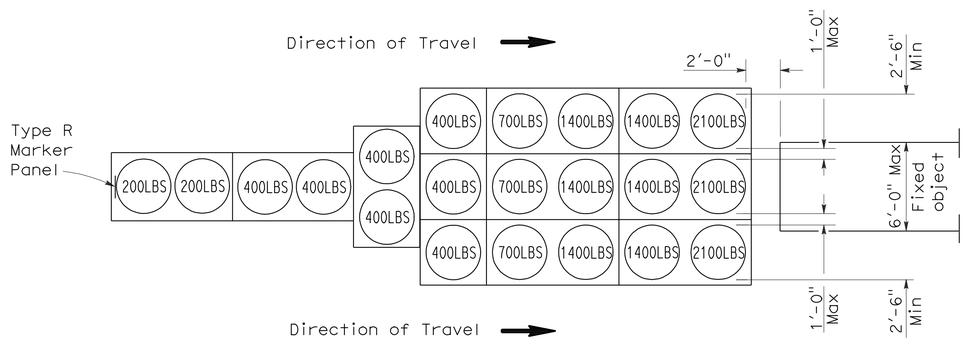
ARRAY 'TU11'

Approach speed less than 45 mph



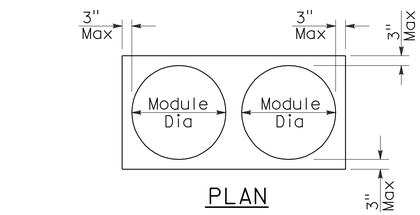
ARRAY 'TU17'

Approach speed less than 45 mph

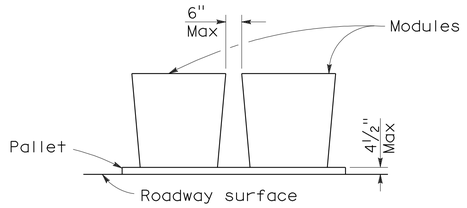


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (UNIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	31	46

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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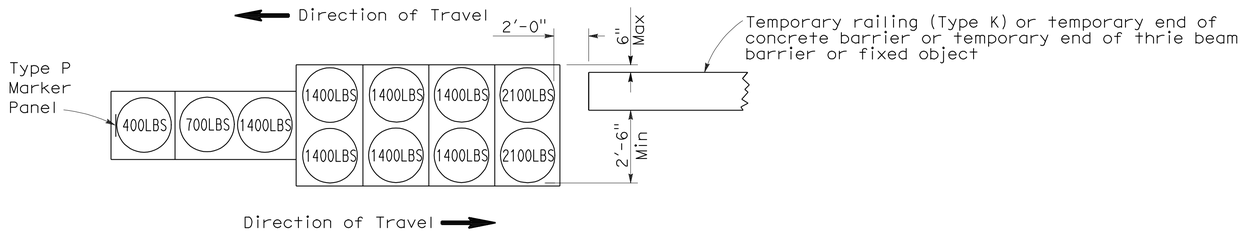
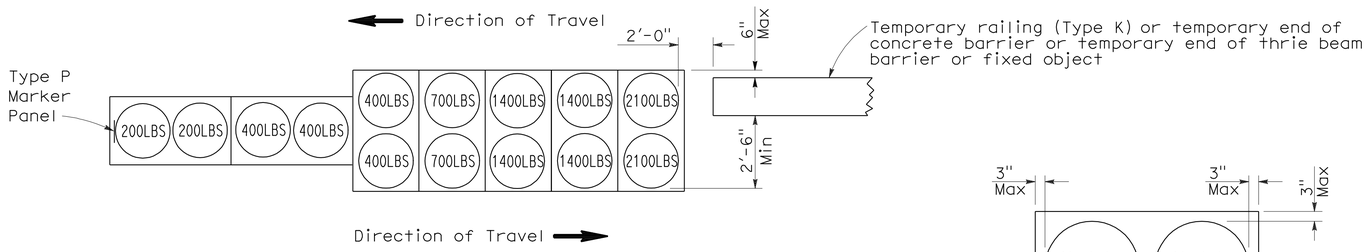
To accompany plans dated 3-1-10



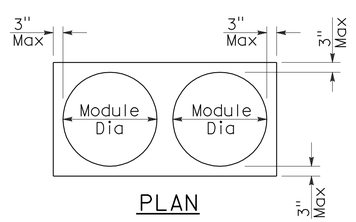
ARRAY 'TB11'

Approach speed less than 45 mph

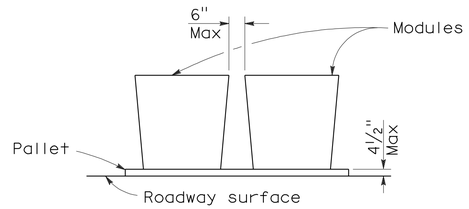


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	32	46

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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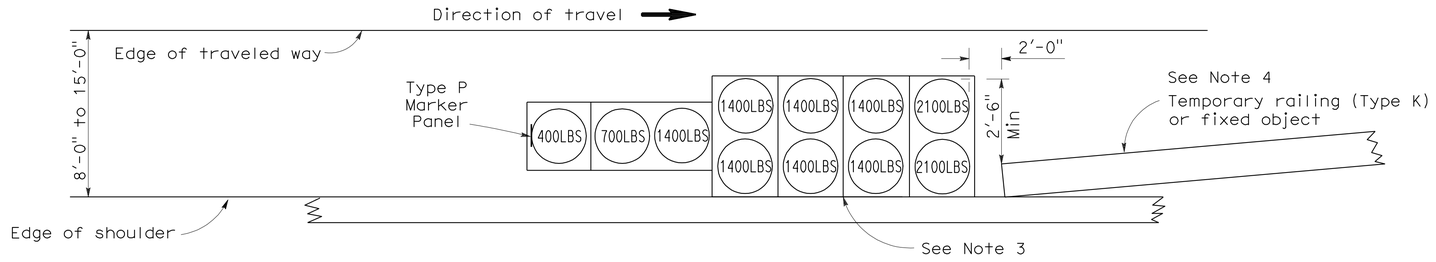
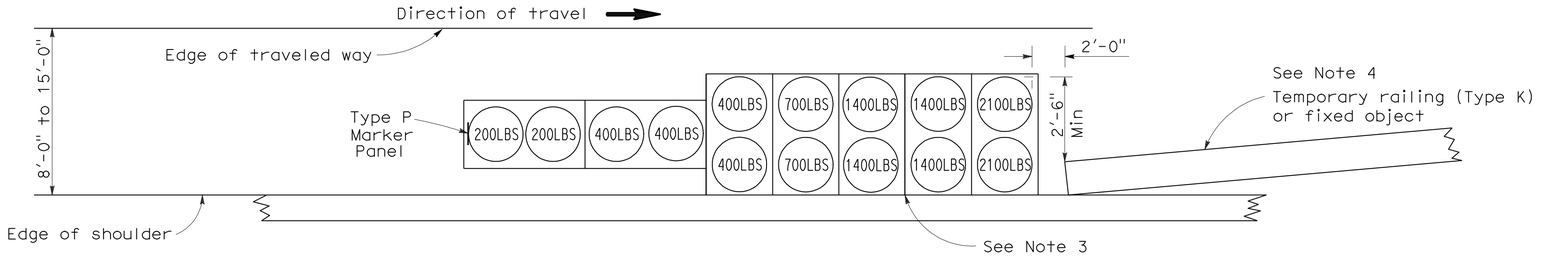
To accompany plans dated 3-1-10



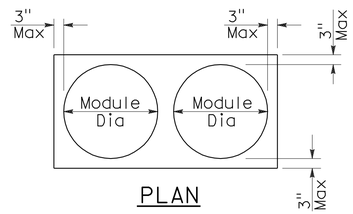
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

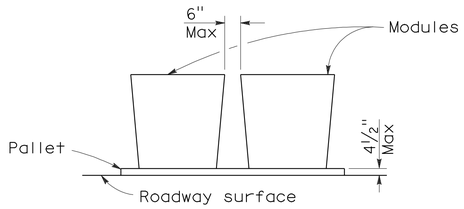


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
4. If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	33	46

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3025 — Signature — 11-30-10 Renewal Date — 2-25-09 Date — STATE OF CALIFORNIA

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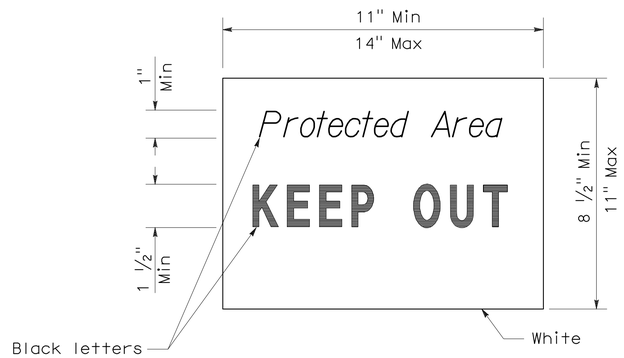
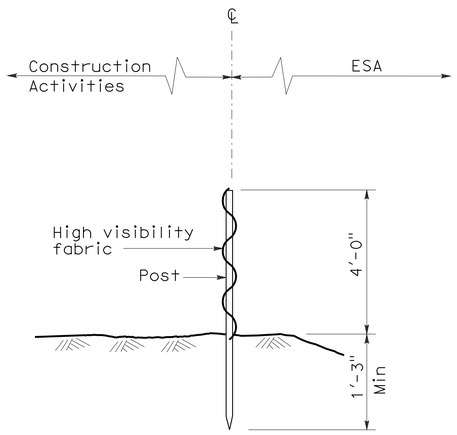
To accompany plans dated 3-1-10



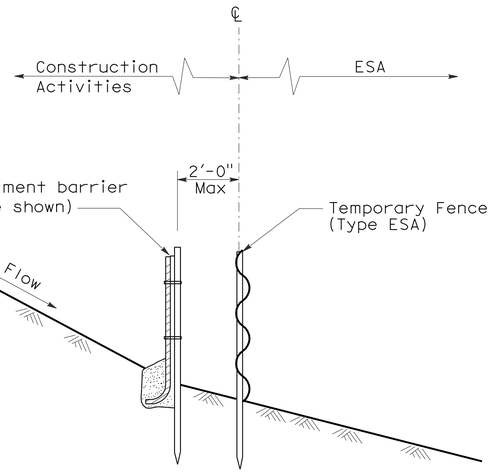
SIGN DETAIL

NOTE:

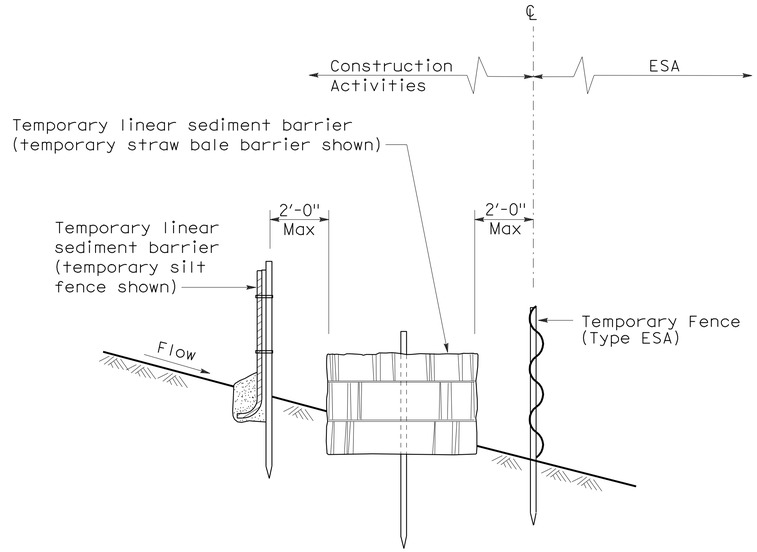
1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.



SECTION
TEMPORARY FENCE (TYPE ESA)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY
FENCE (TYPE ESA)
(See Note 1)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY SILT FENCE
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)
(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS [TEMPORARY FENCE (TYPE ESA)]

NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T65

2006 NEW STANDARD PLAN NSP T65

1-7-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	34	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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To accompany plans dated 3-1-10

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast light pole

Double Arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES:

1. Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
2. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
3. Variations noted adjacent to symbol on project plans.

Electrolier (see project notes or project plans)

Luminaire on wood pole

STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

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

SOFFIT AND WALL MOUNTED LUMINAIRES

Pendant, 70 W HPS unless otherwise specified.

Flush, 70 W HPS unless otherwise specified.

Wall surface, 70 W HPS unless otherwise specified.

Existing soffit or wall luminaire to remain unmodified.

Existing soffit or wall luminaire to be modified as specified.

NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	35	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-08 — ELECTRICAL — STATE OF CALIFORNIA

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To accompany plans dated 3-1-10

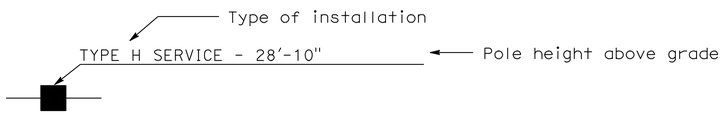
CONDUIT

PROPOSED	EXISTING	
— — —	— — —	Lighting Conduit, unless otherwise indicated or noted
— - — - —	— - — - —	Traffic signal conduit
—C— —	—c— —	Communication conduit
—T— —	—t— —	Telephone conduit
—F— —	—f— —	Fire alarm conduit
—FO— —	—fo— —	Fiber optic conduit
— — —]	— — —]	Conduit termination (RSP ES-9A C)
R	r	Conduit riser in/on structure or service pole

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
PV	PV	Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" Indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
R	Y	Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

SIGNAL EQUIPMENT Cont

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

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1B

2006 REVISED STANDARD PLAN RSP ES-1B

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	36	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-08 — ELECTRICAL — STATE OF CALIFORNIA

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To accompany plans dated 3-1-10

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345
10 ISL SCI 1.0

- Sign number - Place on post or structure
- Transformer rating (kVA)
- Lighting control type
- Number and type of fixtures

Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"

- Mast arm length, if shown. Do not place on standard or structure.
- Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC

- Number and size of conductors and cables
- Size of conduit in inches

Ø1, Ø2, Ø2P, etc.	Traffic phase identification for signal faces, detectors and phase diagrams
1 2 3	Project note numbers
A B C	Equipment description, installation or item numbers
1 2 3	Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100

- Wind velocity = 100 mph
- Case 3 arm loading
- Standard type
- Standard Plan sheet number
- Detail number or letter

MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
		Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

- External conductor
- Conductor or bus
- Tie point
- Contactor coil
- Contactor, Contact NO
- Terminal blocks
- Contactor, Contact NC
- Enclosure bond
- Grounding electrode
- Circuit breaker
- Receptacle

PULL BOXES

PROPOSED	EXISTING
3	9A(21)

Pull box-No. 5 unless otherwise indicated or noted.

Pull box-Additional designations or descriptions

- (C) = Communications pull box
- (E) = Pull box with extension
- (S) = Sprinkler control pull box
- (21) = Anchor bolts and conduit for future installation of Type 21 Standard
- (T) = Traffic pull box

- 3 = No. 3½ pull box
- 5 = No. 5 pull box
- 6 = No. 6 pull box
- 7 = No. 7 (Ceiling pull box)
- 8 = No. 8 (Pendant soffit pull box)
- 9 = No. 9 pull box
- 9A = No. 9A pull box

VEHICLE DETECTORS

5 J 9 U

- Vehicle detector designation
- U = Upper, L = Lower
- Slot number in input file
- Input file (I or J)
- Phase

PROPOSED	EXISTING	
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
DH	dh	Detector handhole
		Microwave or video detection zone

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	37	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
STATE OF CALIFORNIA

October 5, 2007
PLANS APPROVAL DATE

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

To accompany plans dated 3-1-10

NOTES-TYPE III SERVICE EQUIPMENT ENCLOSURES:

1. Service equipment enclosure and metering equipment shall meet the requirements of the service utility. The meter area shall have a sealable, lockable, weathertight cover that can be removed without the use of tools.

2. Service equipment enclosures shall be factory wired and conform to NEMA standards.

3. Dimensions of service equipment enclosures shall meet the requirements of the service utility.

4. The dead front panels on Type III service equipment enclosures shall have a continuous stainless steel or aluminum piano hinge. The panel in front of the breakers shall be secured with a latch or captive screws. No live parts shall be mounted on the dead front panel.

5. The exterior door shall have provisions for padlocking. The padlock hole shall be a minimum diameter of 7/16".

6. Enclosures housing transformers of more than one kVA shall have effective screened ventilation louver of not less than 50 square inches. Screen shall be stainless steel No. 304, with a No. 10 size mesh. Framed screen shall be secured with at least four bolts.

7. Fasteners on the exterior of the enclosure shall be vandal-resistant and shall not be removable from the exterior. Exterior screws, nuts, bolts and washers shall be stainless steel.

8. Landing lugs for incoming service conductors shall be compatible with either copper or aluminum conductors sized to suit the conductors shown on the plan. Landing lugs shall be copper or tin-plated aluminum. Neutral bus shall be rated for 125 A and be suitable for copper or aluminum conductors unless otherwise specified. The terminal shall include but not be limited to:

   a) Incoming terminals (landing lugs)
   b) Neutral lugs
   c) Solid neutral terminal strip

9. At least 6 standard single pole circuit breaker spaces, 3/4" nominal, shall be provided for branch circuits. Circuit breaker interiors shall be copper. Interiors of enclosure shall accept plug-in or cable-in/cable-out circuit breakers.

10. Control wiring shall be 600 V, 14 stranded machine tool wire. Where subject to flexing, 19 strand wire shall be used.

11. Main bus shall be rated for 125 A and shall be tin-plated copper.

12. A plastic laminated wiring diagram shall be provided with brass mounting eyelets and attached to the inside of the enclosure and the wiring diagram shall be affixed to the interior with a UL or ETL approved method.

13. An engraved phenolic nameplate on the dead front panel indicating the function of each circuit or device shall be installed with stainless steel rivets or stainless steel screws:

    a) Adjacent to the breaker or device with character size a minimum of 1/8".

    b) At the top of the exterior door panel indicating State system number, voltage level and number of phases with character size a minimum of 3/16".

14. The plan shows the approximate location of devices within the enclosure. Components may be rearranged, however, the "working" clearances within the service equipment enclosure shall be maintained.

15. In unpaved areas a raised portland cement concrete pad 2'-0" x 4" x width of foundation shall be constructed in front of new service equipment enclosure installation. Pad shall be set to elevation of foundation.

16. Foundation shall extend 2" minimum beyond edge of service equipment enclosure.

17. Internal bus, where shown, is typical only. Alternative design of proposed service equipment enclosure shall be submitted to the Engineer for approval.

18. Plug-in circuit breakers may be mounted in the vertical or horizontal position. Cable-in/cable-out circuit breakers shall be mounted in the vertical position.

19. Type III-AF and Type III-BF service equipment enclosures shall have the meter viewing windows located on the front side of the service equipment enclosures.

20. Type III-AR and Type III-BR service equipment enclosures shall be similarly constructed as Type III-AF and Type III-BF respectively, except the meter viewing windows shall be located on the back side of the service equipment enclosures.

21. Minimum clearance shall be required for front and back of service equipment enclosure per National Electrical Code, Article 110.26, "Spaces About Electric Equipment (600 Volts, Nominal, or Less)."

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SERVICE EQUIPMENT NOTES TYPE III SERIES)

NO SCALE

RSP ES-2C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2C
DATED MAY 1, 2006 - PAGE 405 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2C

2006 REVISED STANDARD PLAN RSP ES-2C

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	38	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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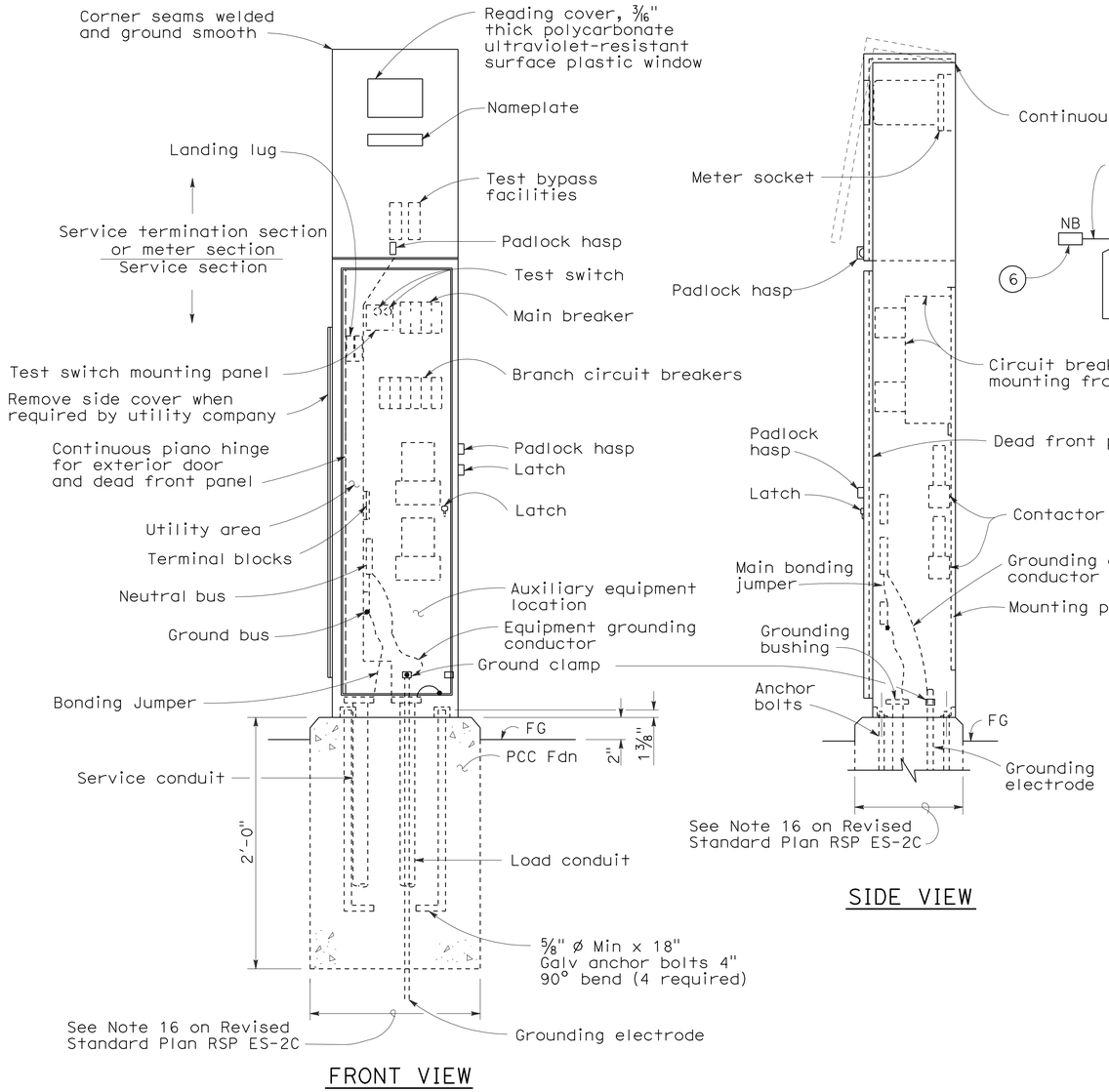
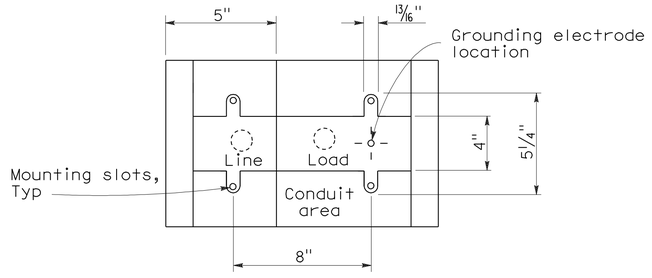
To accompany plans dated 3-1-10



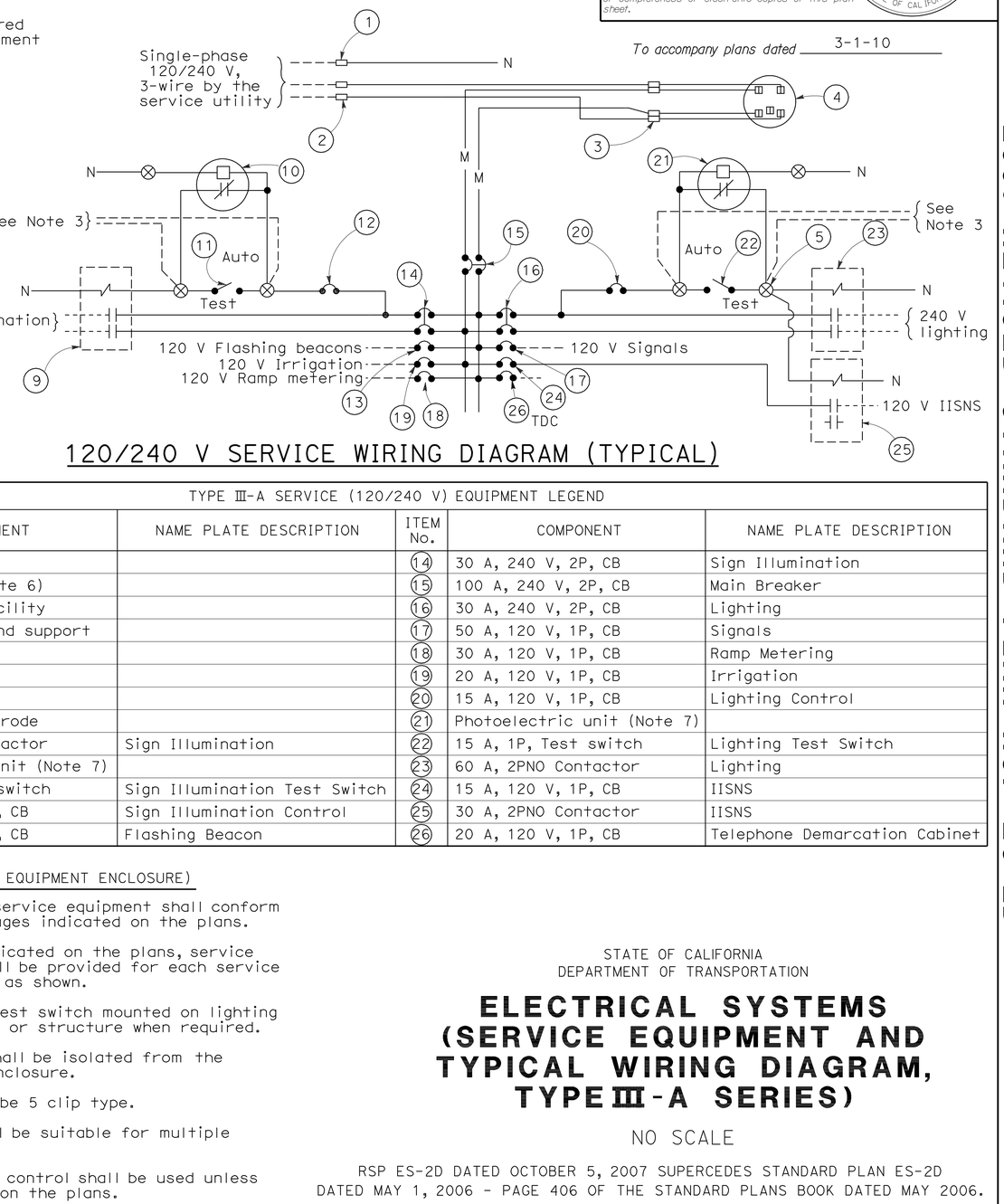
FRONT VIEW

SIDE VIEW

TYPE Ⅲ-AF SERVICE EQUIPMENT ENCLOSURE (TYPICAL)



BASE FOR TYPE Ⅲ-A SERVICE EQUIPMENT ENCLOSURE



120/240 V SERVICE WIRING DIAGRAM (TYPICAL)

TYPE Ⅲ-A SERVICE (120/240 V) EQUIPMENT LEGEND

ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	ITEM No.	COMPONENT	NAME PLATE DESCRIPTION
(1)	Neutral lug		(14)	30 A, 240 V, 2P, CB	Sign Illumination
(2)	Landing lug (Note 6)		(15)	100 A, 240 V, 2P, CB	Main Breaker
(3)	Test bypass facility		(16)	30 A, 240 V, 2P, CB	Lighting
(4)	Meter socket and support		(17)	50 A, 120 V, 1P, CB	Signals
(5)	Terminal blocks		(18)	30 A, 120 V, 1P, CB	Ramp Metering
(6)	Neutral bus		(19)	20 A, 120 V, 1P, CB	Irrigation
(7)	Ground bus		(20)	15 A, 120 V, 1P, CB	Lighting Control
(8)	Grounding electrode		(21)	Photoelectric unit (Note 7)	
(9)	30 A, 2PNO Contactor	Sign Illumination	(22)	15 A, 1P, Test switch	Lighting Test Switch
(10)	Photoelectric unit (Note 7)		(23)	60 A, 2PNO Contactor	Lighting
(11)	15 A, 1P, Test switch	Sign Illumination Test Switch	(24)	15 A, 120 V, 1P, CB	IISNS
(12)	15 A, 120 V, 1P, CB	Sign Illumination Control	(25)	30 A, 2PNO Contactor	IISNS
(13)	15 A, 120 V, 1P, CB	Flashing Beacon	(26)	20 A, 120 V, 1P, CB	Telephone Demarcation Cabinet

NOTES: (FOR SERVICE EQUIPMENT ENCLOSURE)

1. Voltage ratings of service equipment shall conform to the service voltages indicated on the plans.
2. Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
3. Connect to remote test switch mounted on lighting standards, sign post or structure when required.
4. Items No. (1) and (6) shall be isolated from the service equipment enclosure.
5. Meter sockets shall be 5 clip type.
6. The landing lug shall be suitable for multiple conductors.
7. Type Ⅴ photoelectric control shall be used unless otherwise indicated on the plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SERVICE EQUIPMENT AND TYPICAL WIRING DIAGRAM, TYPE Ⅲ-A SERIES)

NO SCALE

RSP ES-2D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2D DATED MAY 1, 2006 - PAGE 406 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2D

2006 REVISED STANDARD PLAN RSP ES-2D

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	39	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-08 — ELECTRICAL — STATE OF CALIFORNIA

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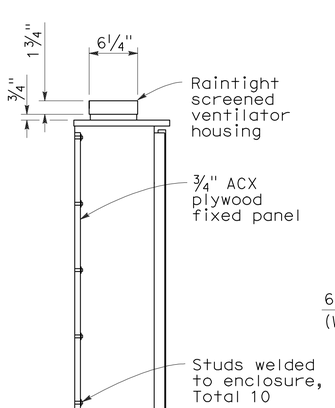
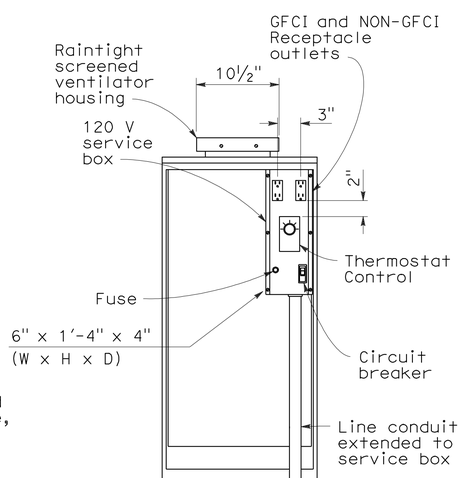
To accompany plans dated 3-1-10

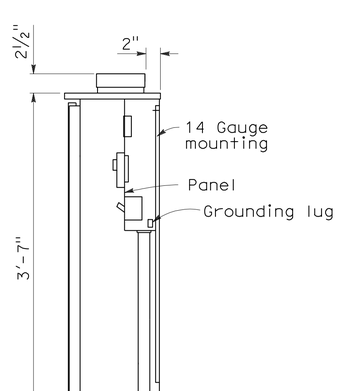


SECTION A-A

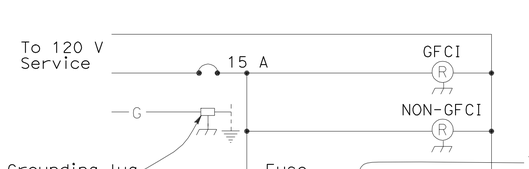


FRONT VIEW

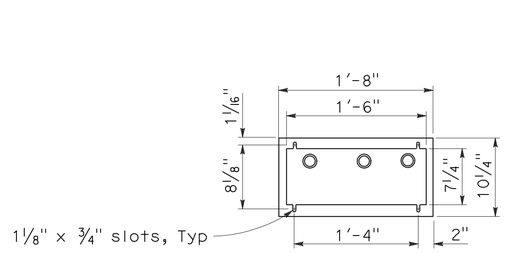
(Exterior door removed for clarity)



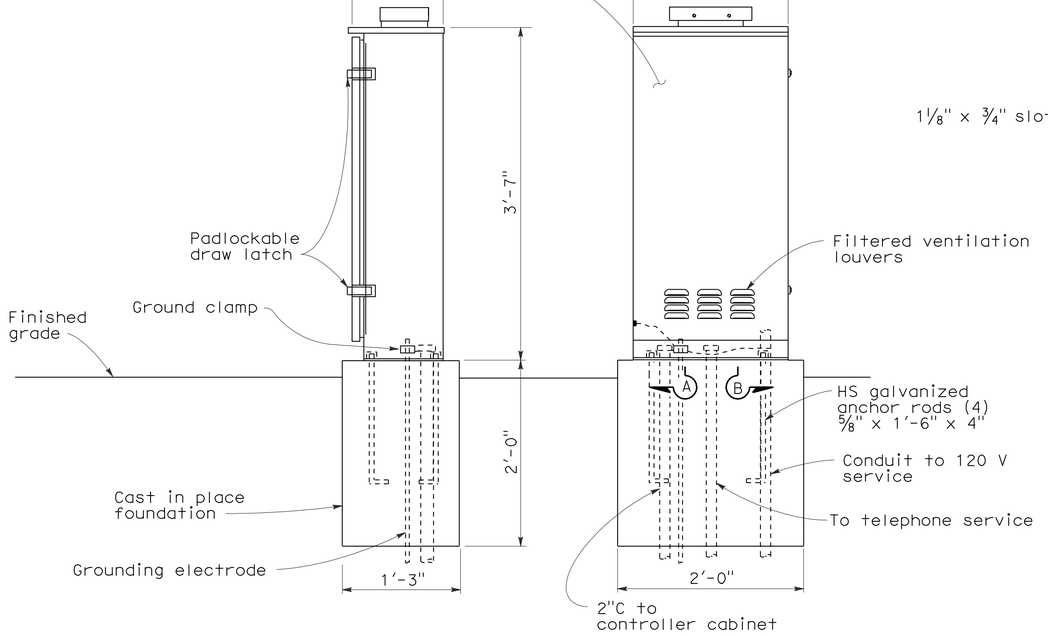
SECTION B-B



WIRING DIAGRAM



BASE PLAN



SIDE VIEW FRONT VIEW

NOTES:

1. Telephone demarcation cabinet shall be furnished with a mounting panel, outlets, circuit breaker and deadfront plates in place. Dimensions are nominal.
2. An approved mastic or caulking compound shall be placed on the foundation prior to placing the cabinet to seal openings between the bottom of the cabinet and the foundation.
3. In unpaved areas, a raised PCC pad shall be placed in front of the telephone demarcation cabinet. Pad shall be 2'-0" x 1'-10" x 4" thick, with 2" above the finished grade.
4. All conduits shall be bonded to the enclosure.
5. Telephone demarcation cabinet:
   a) Material shall be anodized aluminum (⅛" thick).
   b) Fabrication shall conform to the requirements of the Standard Specifications.
   c) The exterior door shall be side hung and secured with a padlockable draw latch, the padlock hole shall be a minimum diameter of 7/16" to receive a padlock.
   d) Ventilation louvers shall be located on the door.
   e) Fan shall be mounted in a ventilator housing.
   f) Fan shall be thermostatically controlled and adjustable to turn on between 80°F and 130°F.
   g) Fan circuit shall be fused at 175 percent of the fan motor capacity.
   h) Fan capacity shall be at least 25 cubic feet per minute.
   i) Fasten fixed mounting panels with nuts, lock and flat washers to 3/16" ø x 1" studs welded to enclosure.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (TELEPHONE DEMARCATION CABINET, TYPE B)

NO SCALE

RSP ES-3E DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-3E
DATED MAY 1, 2006 - PAGE 414 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-3E

2006 REVISED STANDARD PLAN RSP ES-3E

8-17-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	40	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-10
ELECTRICAL
STATE OF CALIFORNIA

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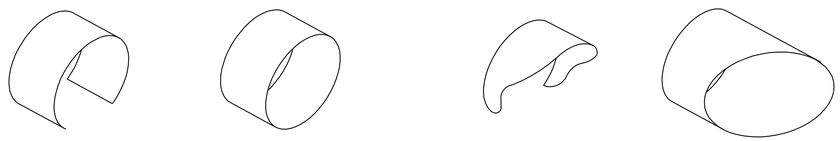
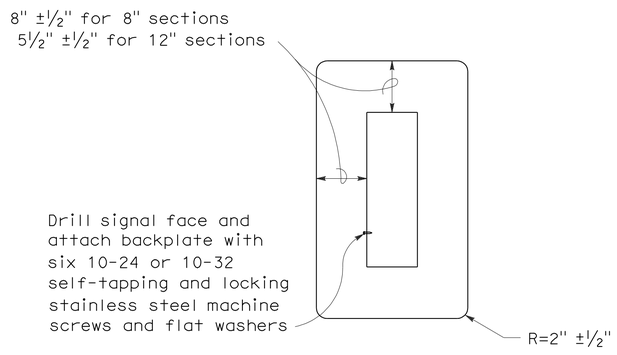
To accompany plans dated 3-1-10



(Right angle is reversed of figure)

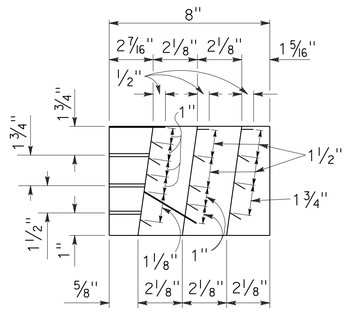
VISORS



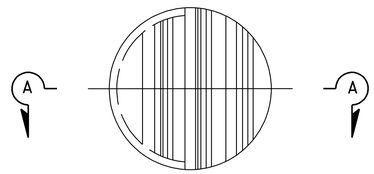
8" AND 12" SECTIONS

BACKPLATE

1/16" minimum thickness
3001-14 aluminum, or plastic when specified



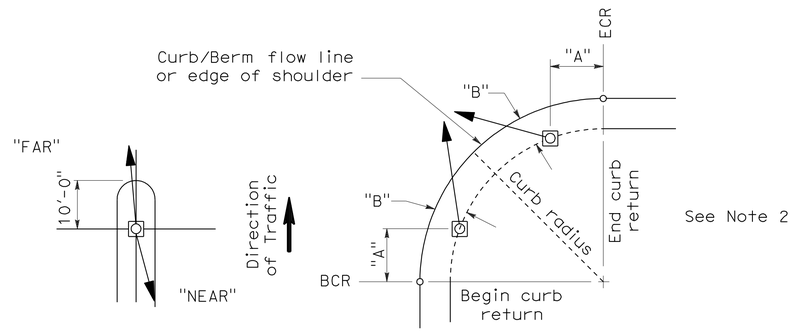
SECTION A-A



FRONT VIEW

DIRECTIONAL LOUVER

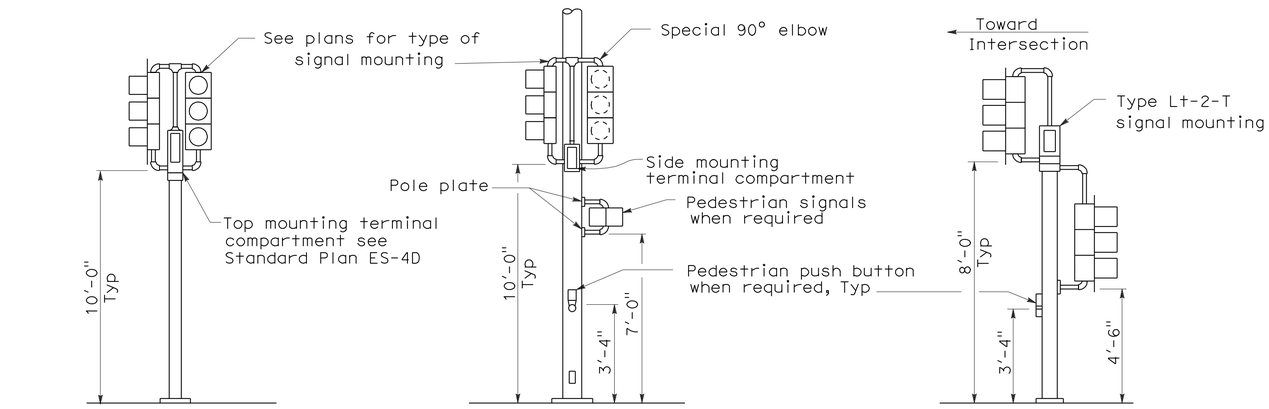
Directional louvers shall be oriented as directed by the Engineer and secured in place with one plated brass machine screw and nut.



NOTES:

1. Typical signal pole placement unless dimensioned on plans.
2. For "A" and "B" dimensions, see Pole Schedule, or as directed by the Engineer.

SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



TOP MOUNTED SIGNALS (TV)

Type 1-A, 1-B, 1-C and 1-D standard as indicated on the plans

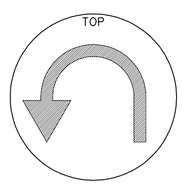
SIDE MOUNTED SIGNALS (SV AND SP)

Normally used on standards with luminaire or signal mast arm

LEFT TURN LANE SIGNAL

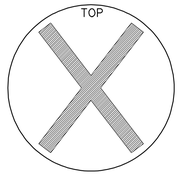
Type 1-A, 1-B, 1-C and 1-D standard as indicated on plans

TYPICAL SIGNAL INSTALLATIONS

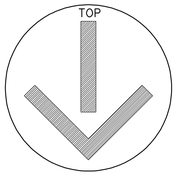


U-TURN SIGNAL FACE

BICYCLE SIGNAL FACE



LANE CONTROL SIGNAL FACE



LANE CONTROL SIGNAL FACE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN ES-4C DATED MAY 1, 2006 - PAGE 420 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4C

2006 REVISED STANDARD PLAN RSP ES-4C

5-19-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	41	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jeffery G. McRae — No. E14512 — Exp. 6-30-10 — ELECTRICAL — STATE OF CALIFORNIA

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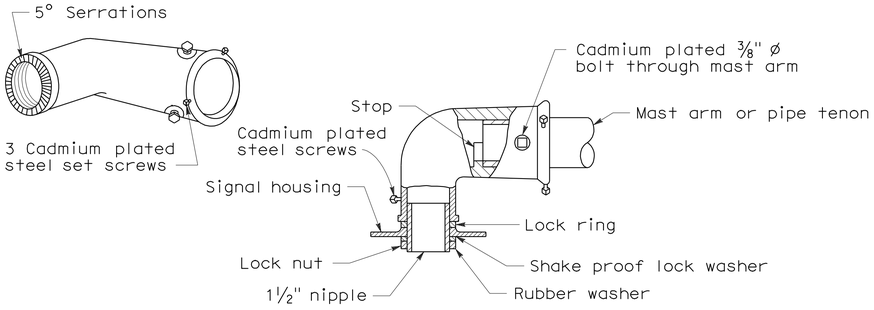
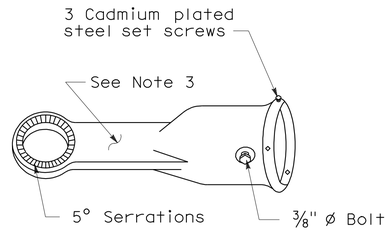
To accompany plans dated 3-1-10



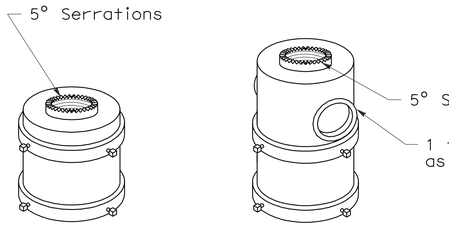
MAST ARM MOUNTING - TYPE "MAT"

For 2 NPS pipe, see Note 1.



MAST ARM MOUNTING - TYPE "MAS"

For 2 NPS pipe. See Note 1.



For one mounting — For mulitiple mountings

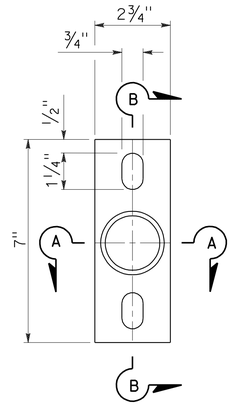
TOP MOUNTINGS

For 4 NPS pipe, see Note 2.

NOTES:

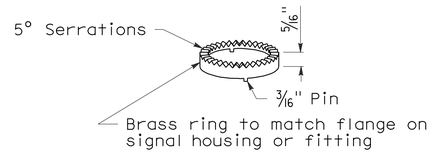
1. After mast arm signal has been plumbed and secured, drill 7/16" hole through mast arm tenon in line with slip fitter hole. Place a cadmium plated ⅜" ø galvanized bolt with washer under bolt head through hole and secure with washer, nut, and locknut. Seal openings between mast arm mountings and mast arm with mastic.
2. (a) Threaded top mounted slip fitter openings shall be 1½ NPS.
   (b) Serrations in fittings shall match those on bottom of signal heads or in lock ring.
   (c) Top opening shall be offset when backplate is used.
3. Wireway shall have a cross section area of 0.95 square inch minimum. Minimum width of ½".

SIGNAL SLIP FITTERS



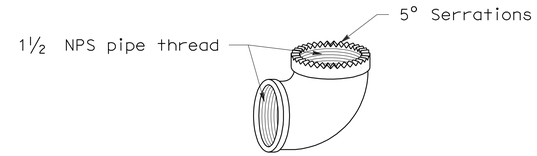
POLE PLATE

For side mountings



LOCK RING

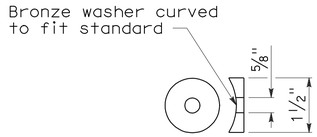
Use where locking ring is not integral with signal housing or fitting.



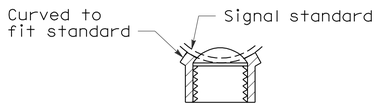
SPECIAL 90° ELBOW

One for each signal head, except those with special slip fitter mounting

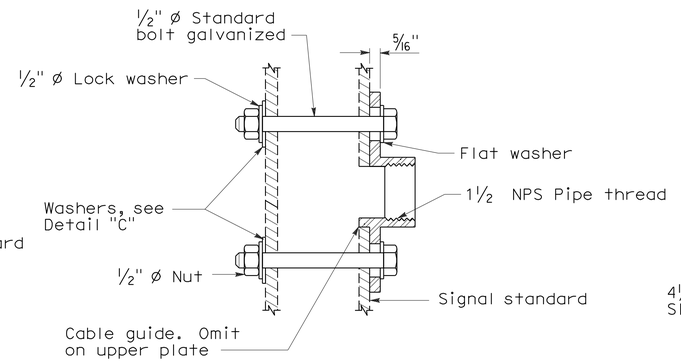
MISCELLANEOUS MOUNTING HARDWARE



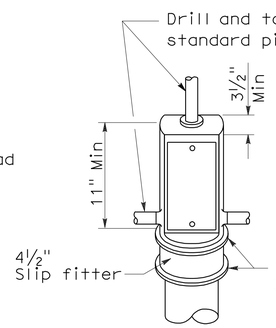
DETAIL "C"



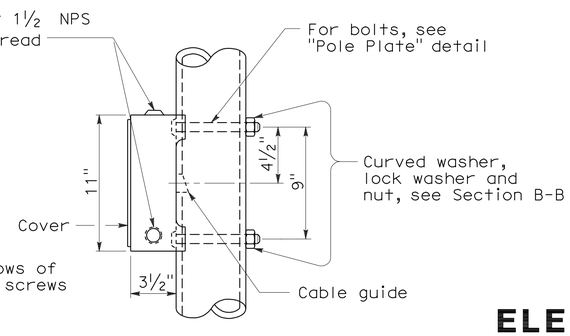
SECTION A-A



SECTION B-B



TOP MOUNTING



SIDE MOUNTING

TERMINAL COMPARTMENTS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4D DATED June 6, 2008 SUPERSEDES STANDARD PLAN ES-4D
DATED MAY 1, 2006 - PAGE 421 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4D

2006 REVISED STANDARD PLAN RSP ES-4D

5-19-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	42	46

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

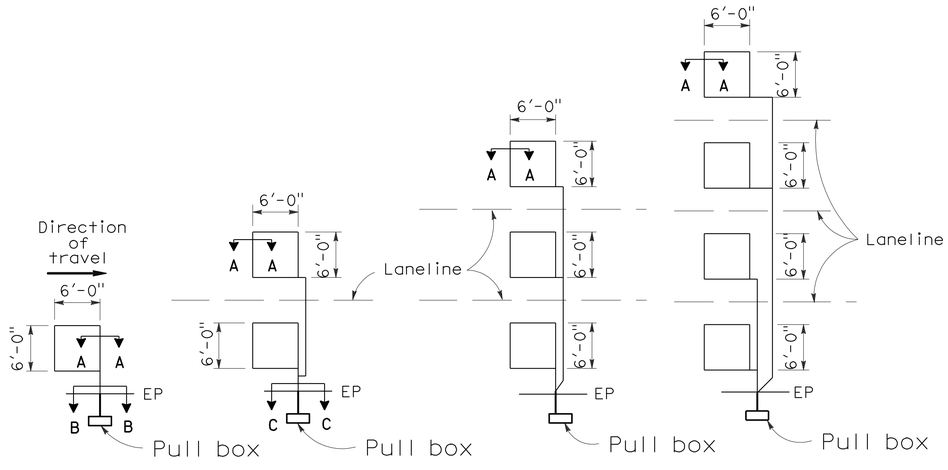
October 5, 2007
PLANS APPROVAL DATE

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

To accompany plans dated 3-1-10

LOOP INSTALLATION PROCEDURE

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

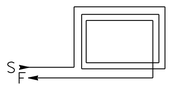


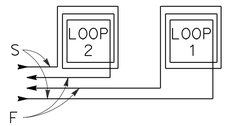
TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

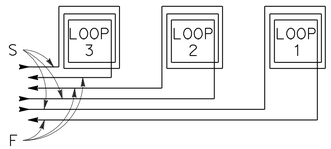
SAWCUT DETAILS

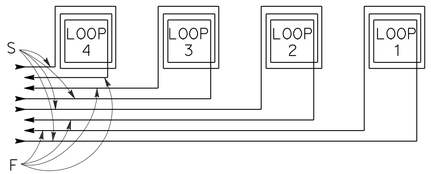
(Type A loop detector configurations illustrated)

1. 1A thru 4A = 1 Type A loop configuration in each lane.
2. 1B thru 4B = 1 Type B loop configuration in each lane.
3. 1C = 1 Type C loop configuration entering lanes as required.
4. 1D thru 4D = 1 Type D loop configuration in each lane.
5. 1E thru 4E = 1 Type E loop configuration in each lane.
6. 1Q thru 4Q = 1 Type Q loop configuration in each lane. (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



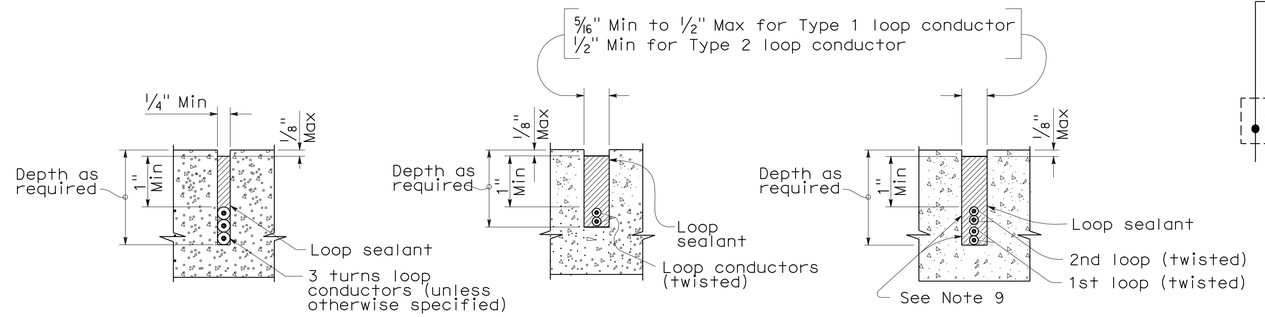






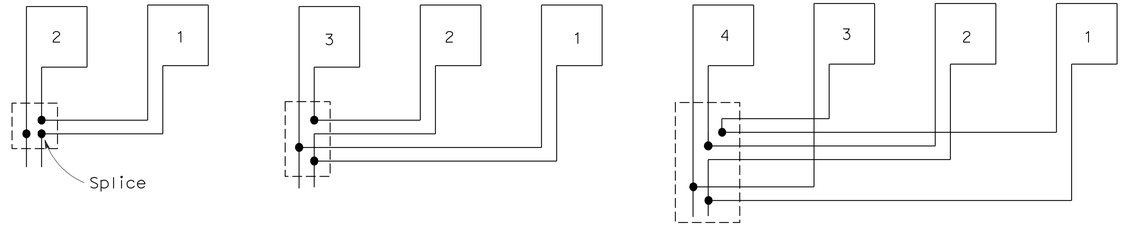
WINDING DETAILS

See Notes 6 and 7



SECTION A-A | SECTION B-B | SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-5A

2006 REVISED STANDARD PLAN RSP ES-5A

8-17-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	43	46

REGISTERED CIVIL ENGINEER

January 18, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Stanley P. Johnson — No. C57793 — Exp. 03-31-08 — CIVIL — STATE OF CALIFORNIA

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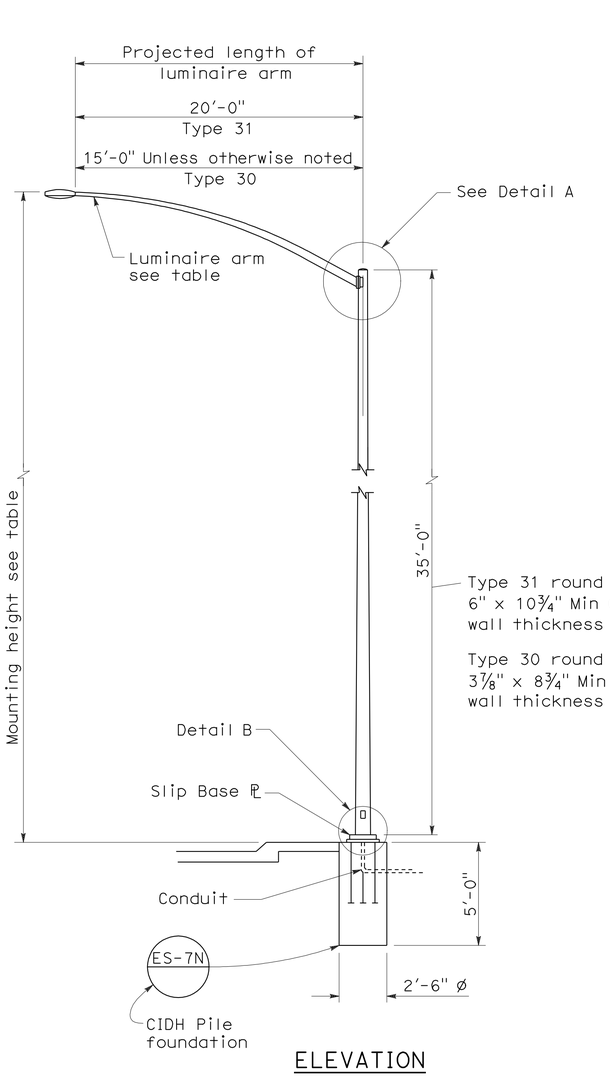
To accompany plans dated 3-1-10

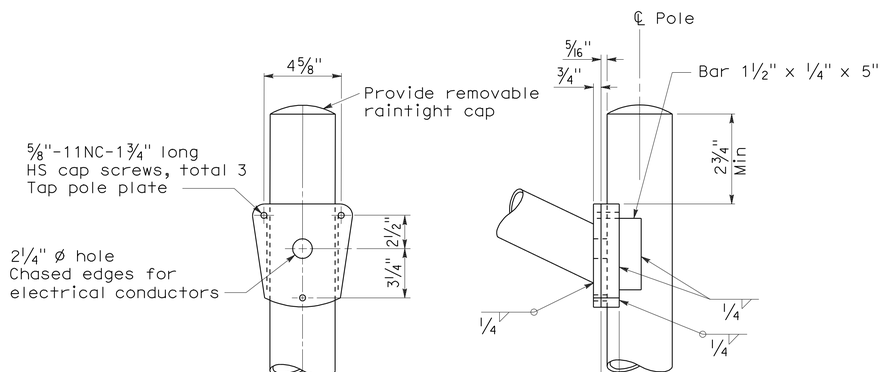
LUMINAIRE ARM DATA

PROJECTED LENGTH	THICKNESS	MINIMUM OD @ POLE	MOUNTING HEIGHT
* 6'-0"	0.1196"	3 1/4"	36'-9"±
8'-0"		3 1/2"	37'-3"±
10'-0"		3 3/4"	38'-0"±
12'-0"		3 3/4"	39'-0"±
15'-0"		4 1/4"	39'-6"±
** 20'-0"	0.1793"	5"	37'-0"±

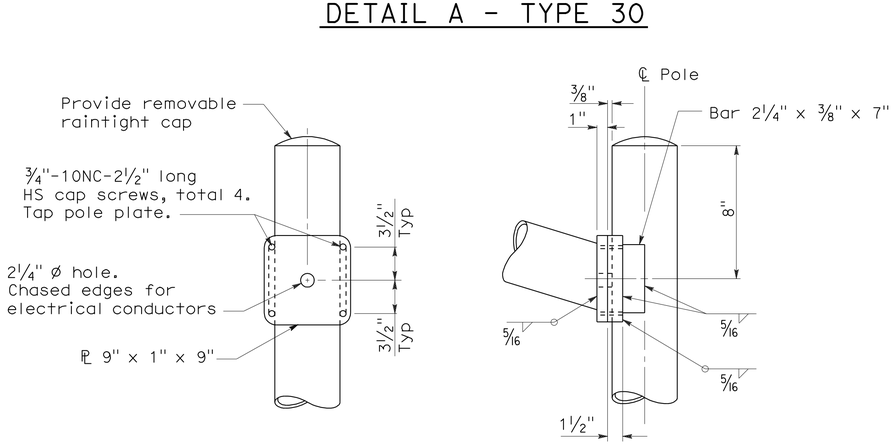
* Type 30 - arm length 6'-0" - 15'-0" maximum
** Type 31 - arm lengths 20'-0"



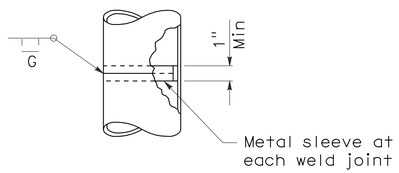
ELEVATION



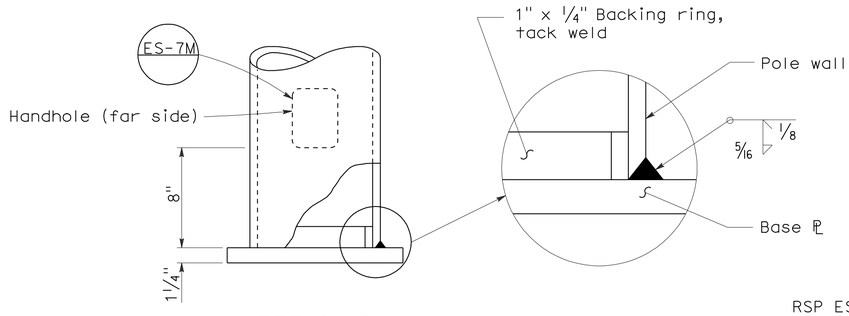
DETAIL A - TYPE 30



DETAIL A - TYPE 31



POLE SPLICE



DETAIL B

NOTES:

1. Sheet steel shall have a minimum yield of 48,000 psi.
2. For slip base details see Standard Plan ES-6F.
3. For Type 30 fixed base use Type 15 base plate, and foundation shown on Revised Standard Plan RSP ES-6A. Use 1 1/4" Dia x 3'-6" x 4" anchor bolts.
4. For Type 31 fixed base use Type 32 base plate, anchor bolts and foundation on Standard Plan ES-6G.
5. Handhole shall be located on downstream side of traffic unless noted otherwise on plans.
6. For additional general notes refer to Standard Plan ES-7M.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LIGHTING STANDARD TYPES 30 AND 31)

NO SCALE

RSP ES-6E DATED JANUARY 18, 2008 SUPERCEDES STANDARD PLAN ES-6E
DATED MAY 1, 2006 - PAGE 430 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-6E

2006 REVISED STANDARD PLAN RSP ES-6E

11-19-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	44	46

REGISTERED CIVIL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Stanley P. Johnson
No. C57793
Exp. 3-31-08
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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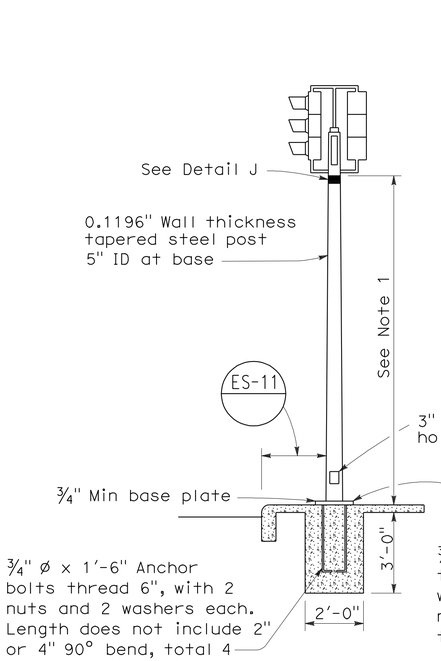
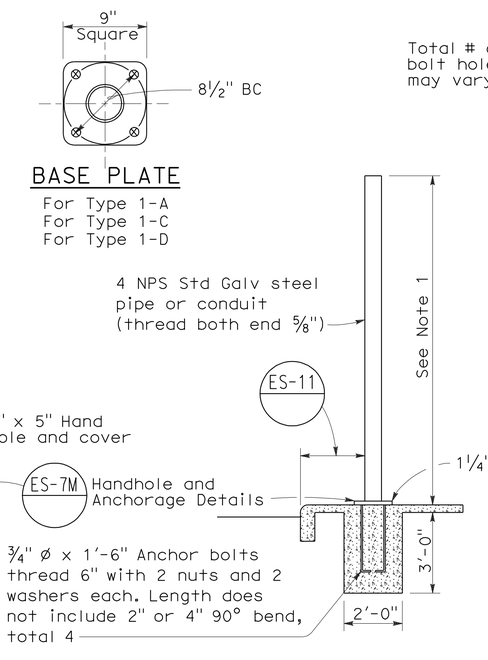
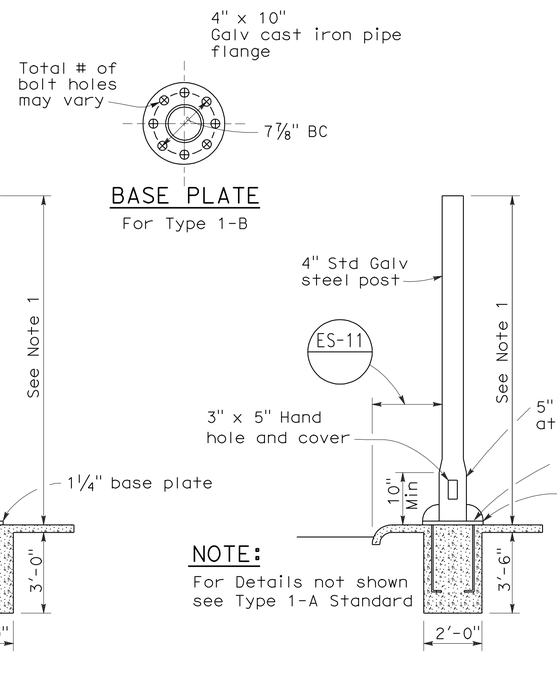
To accompany plans dated 3-1-10



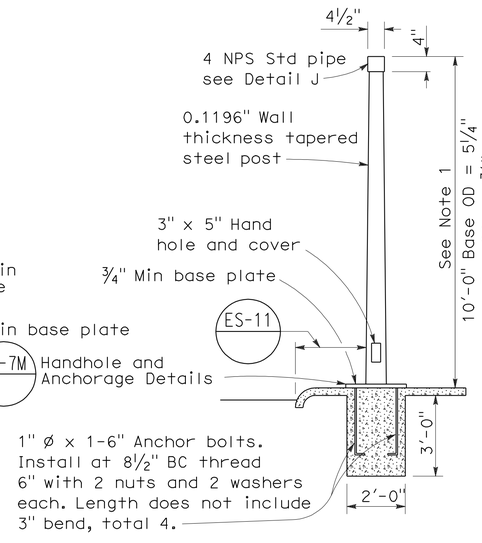
TYPE 1-A STANDARD



TYPE 1-B STANDARD



TYPE 1-C STANDARD

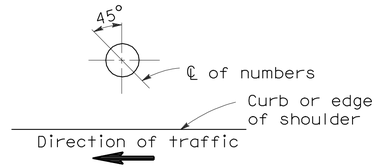


TYPE 1-D STANDARD

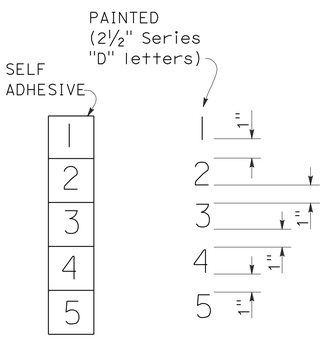
TYPE 1 SIGNAL STANDARDS

NOTES:

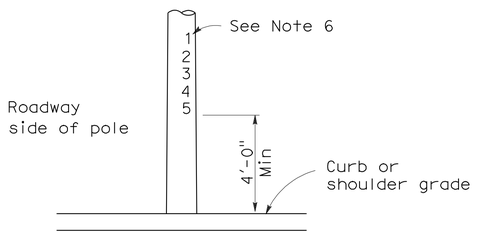
1. Standards shall be 10'-0" ± 2" for vehicle signals and 7'-0" ± 2" for pedestrian signals unless otherwise noted on plans.
2. Top of standards shall be 4½" OD.
3. Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
4. Anchor bolts shall be bonded to conduit or grounding conductor.
5. Conduit between standard and adjacent pull box shall be 2" minimum.
6. Paint numbers on roadway side facing traffic when electrolier or post is left of direction of traffic.



PLAN

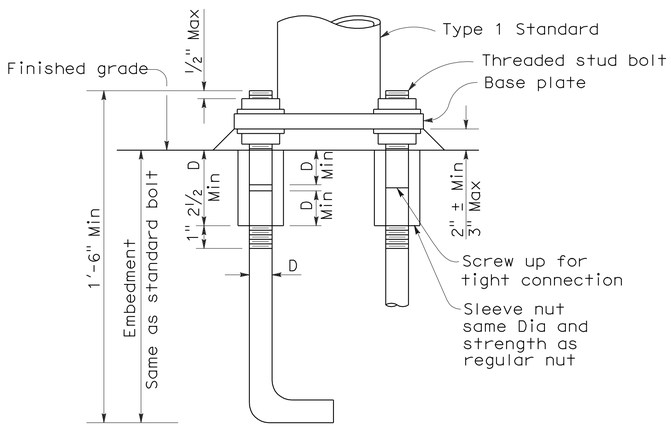


NUMBER DETAIL



TYPICAL NUMBER FORMAT

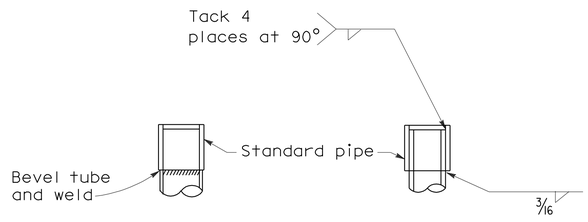
LOCATION OF EQUIPMENT NUMBERS ON STANDARDS AND POSTS



ANCHOR BOLTS WITH SLEEVE NUTS

Sleeve nuts to be used only when shown or specified on Project Plans

D = Diameter of anchor bolt



DETAIL J

Tube may be inserted into pipe or butted as required

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD TYPE 1 STANDARD AND EQUIPMENT NUMBERING)

NO SCALE

RSP ES-7B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-7B DATED MAY 1, 2006 - PAGE 438 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7B

2006 REVISED STANDARD PLAN RSP ES-7B

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	45	46

REGISTERED CIVIL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Stanley P. Johnson
No. C57793
Exp. 3-31-08
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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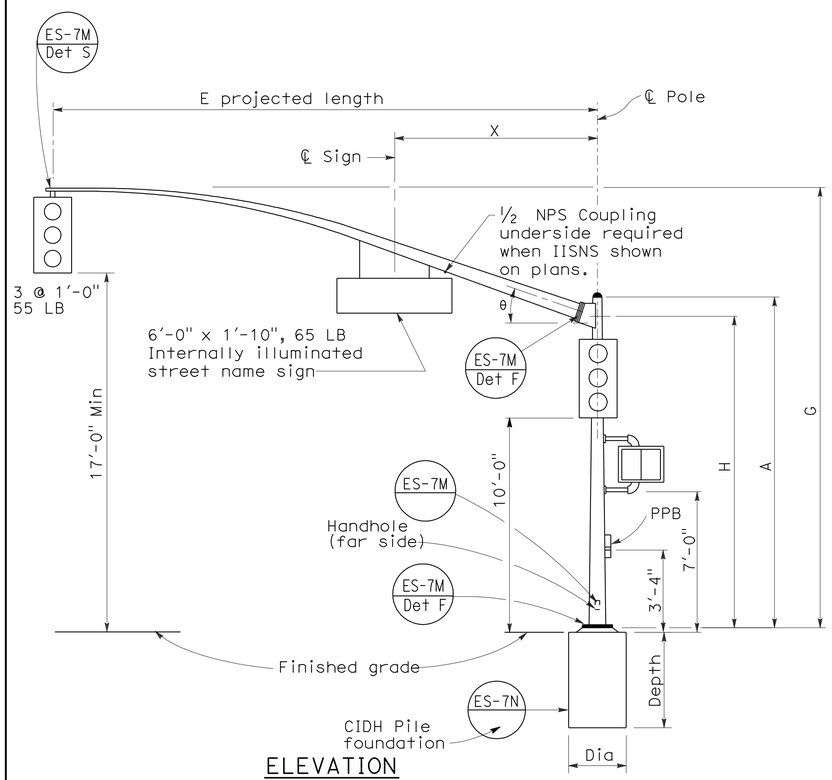
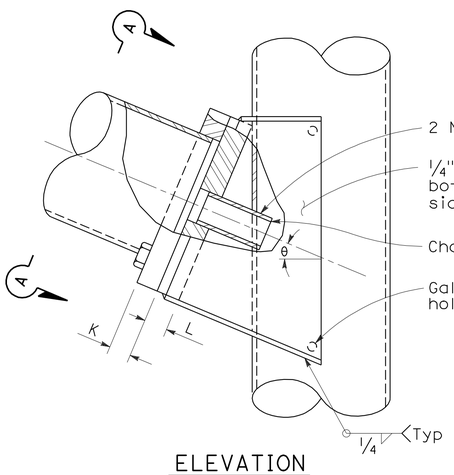
To accompany plans dated 3-1-10

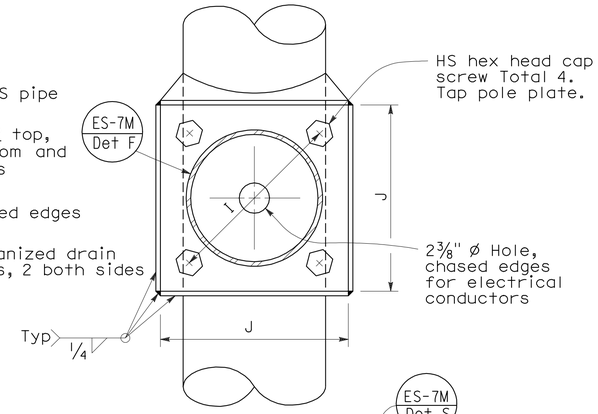


ELEVATION

TYPE 16-2-100, 18-2-100

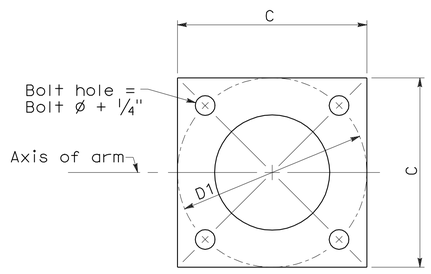


ELEVATION

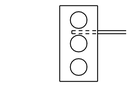


VIEW A-B

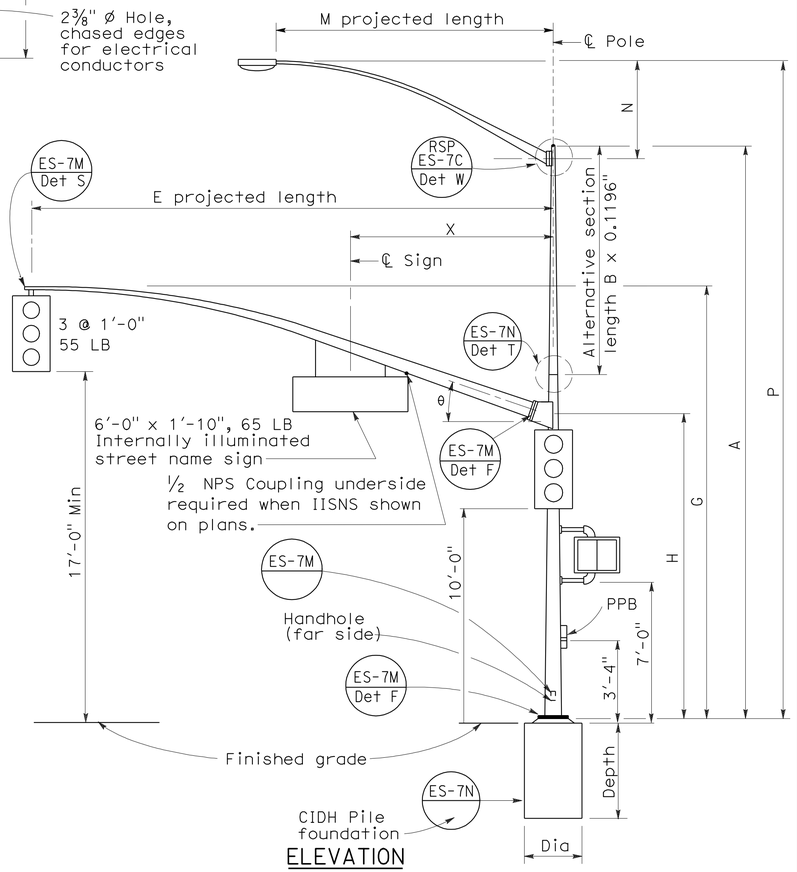
SIGNAL ARM CONNECTION DETAILS



BASE PLATE



Required for Type 17-2-100 Type 17A-2-100



ELEVATION

TYPE 17-2-100, 17A-2-100, 19-2-100, 19A-2-100

SIGNAL ARM DATA											
E Projected Length	G Mounting Height	H	Min OD At Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm ℙ Thickness	L Pole ℙ Thickness	θ	X Max
15'-0"	21'-8"±	17'-6"	6⅝"	0.1793"	12"	1¼"-7NC-3"	1'-0"	1¼"	1½"	23°	10'-6"
20'-0"	21'-8"±		6⅝"								
25'-0"	22'-8"±	16'-0"	7⅝"								
30'-0"	23'-0"±		8"								

LUMINAIRE ARM DATA					
M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height 30'-0" Pole	P Mounting Height 35'-0" Pole
6'-0"	2'-0"±	3¼"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3½"		32'-0"±	37'-0"±
10'-0"	3'-3"±	3⅞"		32'-9"±	37'-9"±
12'-0"	4'-3"±			33'-9"±	38'-9"±
15'-0"	4'-9"±	4¼"		34'-3"±	39'-3"±

POLE DATA									BASE PLATE DATA				LUMINAIRE ARM	SIGNAL ARM	CIDH PILE FOUNDATION		
Pole Type	Load Case	Wind Velocity mph	A Height	Min OD Base	Min OD Top	Thickness	Alternative Section B Length	Alternative Section Bottom	Alternative Section Top	C	D1 Bolt Circle	Thickness	Anchor Bolts Size			Diameter	Depth	Reinforced
16-2-100	2	100	18'-6"	10¾"	8¼"	0.1793"	None			1'-6"	1'-5½"	1½"	2"ø x 42" x 6"	None	15'-0", 20'-0"	2'-6"	7'-2"	Yes
17-2-100			30'-0"		6⅝"		10'-0"	8"	6⅝"					6'-15' 12'-0"				
17A-2-100			35'-0"		5¹⁵⁄₁₆"		15'-0"		5¹⁵⁄₁₆"					6'-15' 15'-0"				
18-2-100			17'-0"		8⅞"		None							None	25'-0", 30'-0"			
19-2-100			30'-0"		6⅝"	0.2391"	10'-0"	8"	6⅝"					6'-15' 12'-0"				
19A-2-100			35'-0"		5¹⁵⁄₁₆"		15'-0"		5⅝"					6'-15' 15'-0"				

☐ Indicates arm length to be used unless otherwise noted on plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD CASE 2 ARM LOADING WIND VELOCITY=100 MPH ARM LENGTHS 15' TO 30')

NO SCALE

RSP ES-7D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-7D DATED MAY 1, 2006 - PAGE 440 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7D

2006 REVISED STANDARD PLAN RSP ES-7D

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	But	162	22.7/23.1	46	46

Jeffrey B. Woody
REGISTERED CIVIL ENGINEER

June 30, 2006
PLANS APPROVAL DATE

Jeffrey B. Woody
No. C41260
Exp. 3-31-07
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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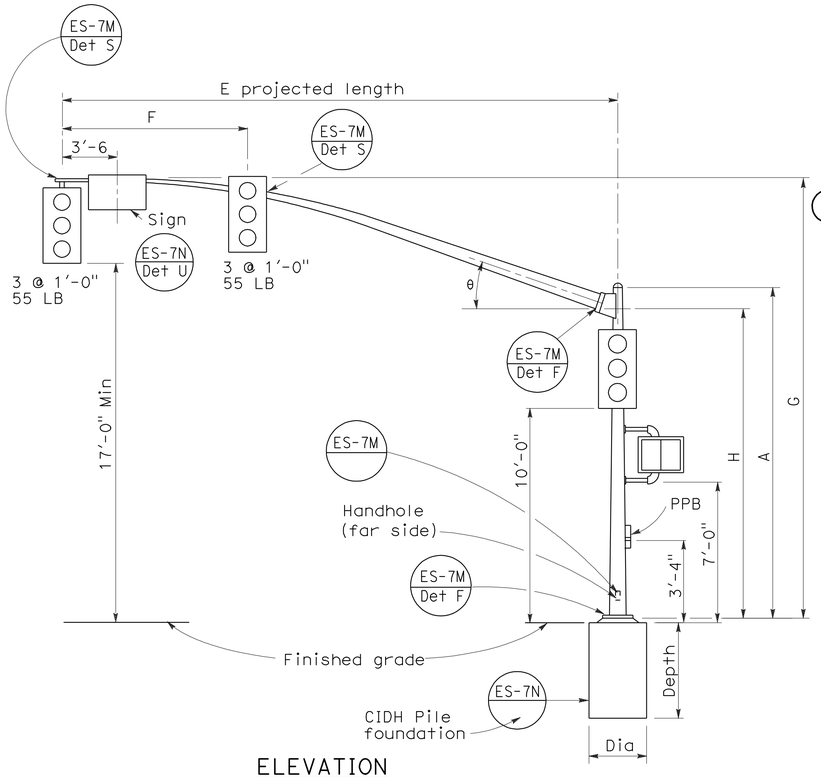
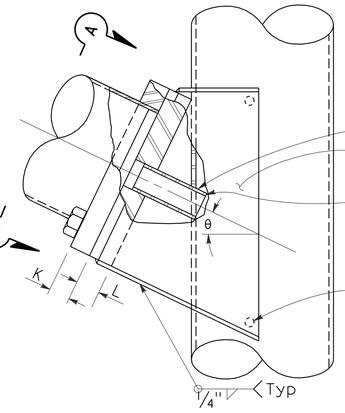
To accompany plans dated 3-1-10

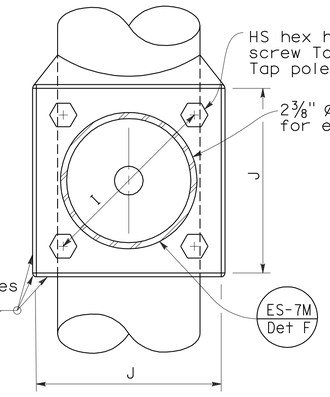


ELEVATION

TYPE 16-3-100, 18-3-100, 23-3-100, 27-3-100

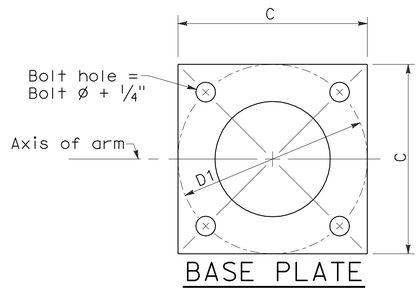


ELEVATION

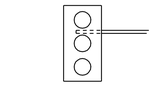


VIEW A-A

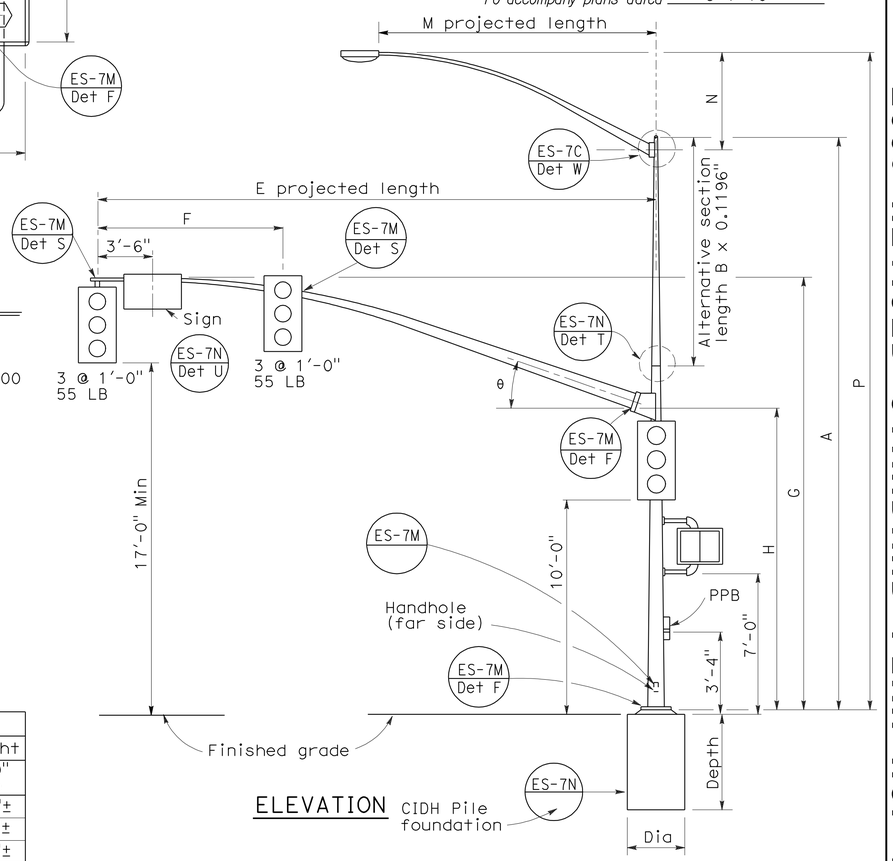
SIGNAL ARM CONNECTION DETAILS



BASE PLATE



Type 17-3-100



ELEVATION

TYPE 17-3-100, 24A-3-100, 19-3-100, 26-3-100, 19A-3-100, 26A-3-100, 24-3-100

SIGNAL ARM DATA											
E Projected Length	F Min Spacing	G Mounting Height	H	Min OD At Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm ℄ Thickness	L Pole ℄ Thickness	θ
15'-0"	8'-0"	21'-8"±	17'-6"	6 5/8"	0.1793"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°
20'-0"		21'-8"±		7"							
25'-0"	12'-0"	22'-8"±	16'-6"	7 5/16"	0.2391"						
30'-0"				8"							
35'-0"	14'-0"	23'-0"±		8 3/4"		13"		1'-1"	1 1/2"	1 3/4"	21°
40'-0"	15'-0"			9 3/8"							15°
45'-0"		23'-8"±		10 1/16"							

LUMINAIRE ARM DATA					
M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height 30'-0" Pole	P Mounting Height 35'-0" Pole
6'-0"	2'-0"±	3 1/4"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3 1/2"		32'-0"±	37'-0"±
10'-0"	3'-3"±	3 3/8"		32'-9"±	37'-9"±
12'-0"	4'-3"±			33'-9"±	38'-9"±
15'-0"	4'-9"±	4 1/4"		34'-3"±	39'-3"±

POLE DATA									BASE PLATE DATA						CIDH PILE FOUNDATION		
Pole Type	Load Case	Wind Velocity mph	A Height	Min OD Base	Min OD Top	Thickness	Alternative Section B Length	Alternative Section Bottom	Alternative Section Top	C	D1 Bolt Circle	Thickness	Anchor Bolts Size	Luminaire Arm	Signal Arm	Diameter	Depth	Reinforced
16-3-100	3	100	18'-6"	10 3/4"	8 1/4"	0.1793"	None			1'-6"	1'-5 1/2"	1 1/2"	2"ø x 42" x 6"	None	15'-0", 20'-0"	3'-0"	9'-0"	Yes
17-3-100			30'-0"		6 5/8"		10'-0"	8"	7 5/16"					6'-15' 12'-0"				
18-3-100			17'-0"		8 7/16"	0.2391"	None							None	25'-0", 30'-0"			
19-3-100			30'-0"	1'-0"	7 7/8"		10'-0"	9 1/4"	7 7/8"					6'-15' 12'-0"				
19A-3-100			35'-0"		7 3/16"		15'-0"		7 3/16"					6'-15' 15'-0"				
23-3-100			17'-0"		9 5/8"		None							None	35'-0"			
24-3-100			30'-0"		7 7/8"		10'-0"	9 1/4"	7 7/8"					6'-15' 12'-0"				
24A-3-100			35'-0"		7 3/16"		15'-0"		7 3/16"					6'-15' 15'-0"				
26-3-100			30'-0"		8"	0.3125"	10'-0"	9 3/8"	8"					6'-15' 12'-0"	40'-0", 45'-0"			
26A-3-100			35'-0"	1'-1/8"	7 5/16"		15'-0"		7 5/16"					6'-15' 15'-0"				
27-3-100			17'-0"		9 3/4"		None							None				

☐ Indicates arm length to be used unless otherwise noted on plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD CASE 3 ARM LOADING WIND VELOCITY=100 MPH ARM LENGTHS 15' TO 45')

NO SCALE

RSP ES-7E DATED JUNE 30, 2006 SUPERSEDES STANDARD PLAN DATED MAY 1, 2006 - PAGE 441 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7E

2006 REVISED STANDARD PLAN RSP ES-7E

5-9-06