

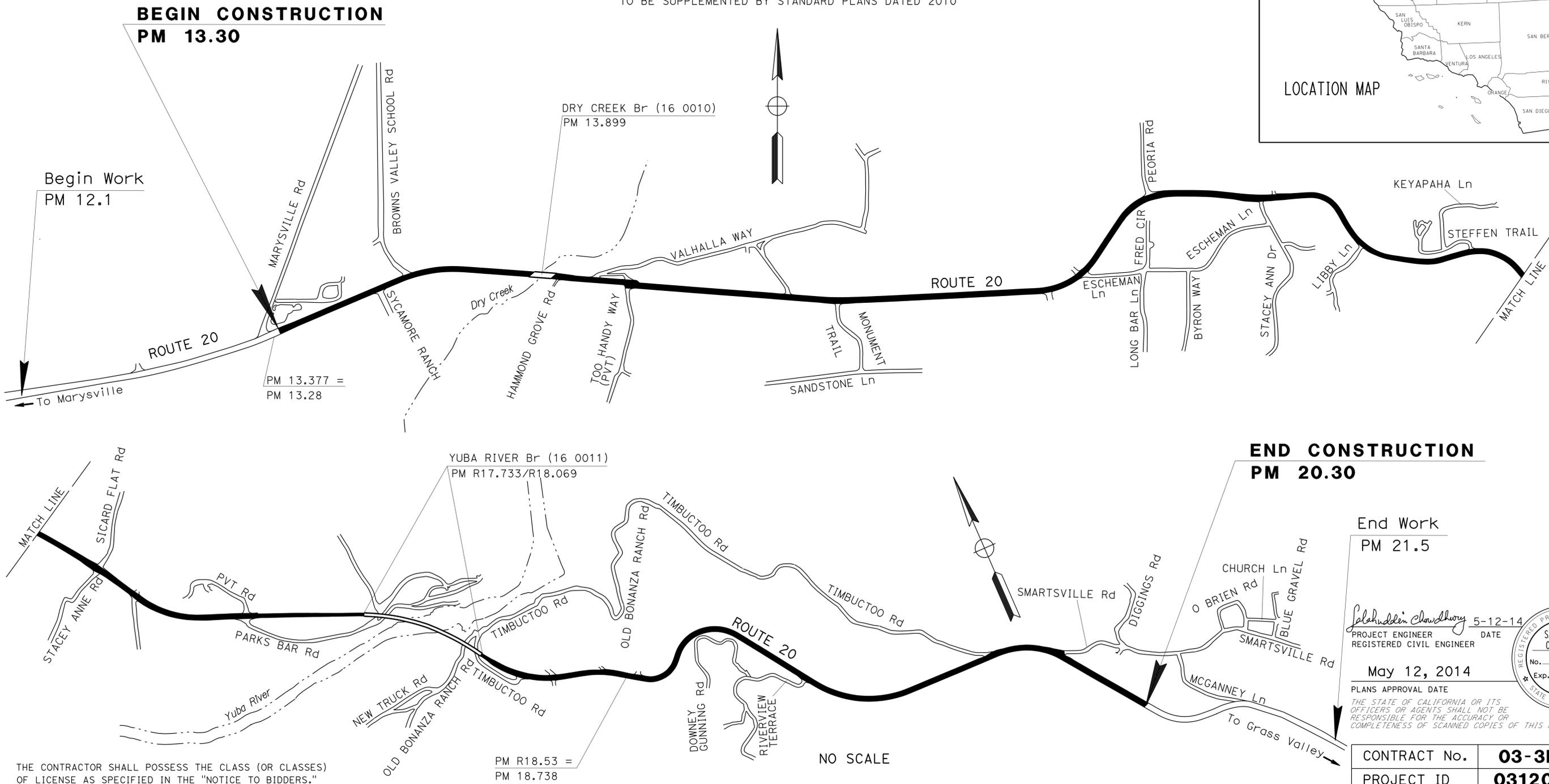
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-4	TYPICAL CROSS SECTIONS
5-16	CONSTRUCTION DETAILS
17	CONSTRUCTION AREA SIGNS
18	PAVEMENT DELINEATION DETAILS
19-22	PAVEMENT DELINEATION QUANTITIES
23-26	SUMMARY OF QUANTITIES
27-28	ELECTRICAL PLANS
29-65	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACNH-P020(171)
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN YUBA COUNTY
ABOUT 12 MILES EAST OF MARYSVILLE FROM
MARYSVILLE ROAD TO 0.3 MILE EAST
OF LOWER SMARTVILLE ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER
MICHAEL BARTLETT
 DESIGN ENGINEER
FERMIN BARRIGA

END CONSTRUCTION
PM 20.30

End Work
 PM 21.5

Salahuddin Chowdhury 5-12-14
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER

May 12, 2014
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER

SALAHUDDIN CHOWDHURY

No. C75140
Exp. 12-31-15
CIVIL

STATE OF CALIFORNIA

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

NO SCALE

DATE PLOTTED => 28-AUG-2014
 TIME PLOTTED => 08:33
 04-03-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	2	65

SALAHUDDIN CHOWDHURY		5-12-14
REGISTERED CIVIL ENGINEER	DATE	
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER	SALAHUDDIN CHOWDHURY
No. C75140	Exp. 12-31-15
CIVIL	

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

NOTES:

- DIMENSIONS OF PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL VARY THE WIDTH OF THE PAVING OPERATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- THE EXACT LOCATIONS/LIMITS OF REPLACE AC SURFACING TO BE DETERMINED BY THE ENGINEER, SEE CONSTRUCTION DETAILS C-1 FOR REPLACE AC SURFACING DETAILS.
- SEE CONSTRUCTION DETAILS SHEET C-9 FOR CENTERLINE RUMBLE STRIP (HMA, GROUND-IN IDENTATIONS).
- SEE CONSTRUCTION DETAILS SHEETS C-1 TO C-3 FOR COLD PLANE AC PAVEMENT CONFORM DETAILS.
- FOR REMOVE AND PLACE HMA DIKE LOCATIONS AND QUANTITIES, SEE SUMMARY OF QUANTITY SHEET Q-2.
- FOR MIDWEST GUARDRAIL SYSTEM (MGS) LOCATIONS AND QUANTITY, SEE SUMMARY OF QUANTITY SHEET Q-4. SEE SHEET C-12 FOR DETAILS.
- SAFETY EDGE WILL NOT BE INCORPORATED IN LOCATIONS OF HMA DIKES AND MGS LOCATIONS. SEE RSP P74 AND RSP P75.
- FOR PAVING CONFORM LOCATIONS AT DRIVEWAYS AND CROSS ROADS, SEE CONSTRUCTION DETAILS C-3 TO C-8.

ABBREVIATIONS:

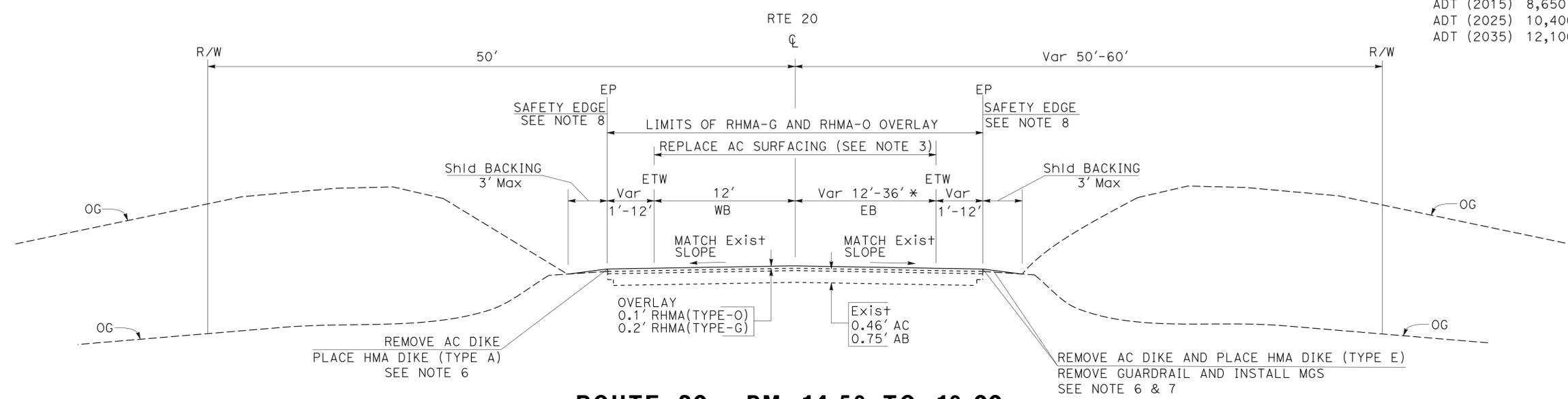
- RHMA-G — RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
- RHMA-O — RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)

PAVEMENT CLIMATE REGION

INLAND VALLEY AND LOW MOUNTAIN

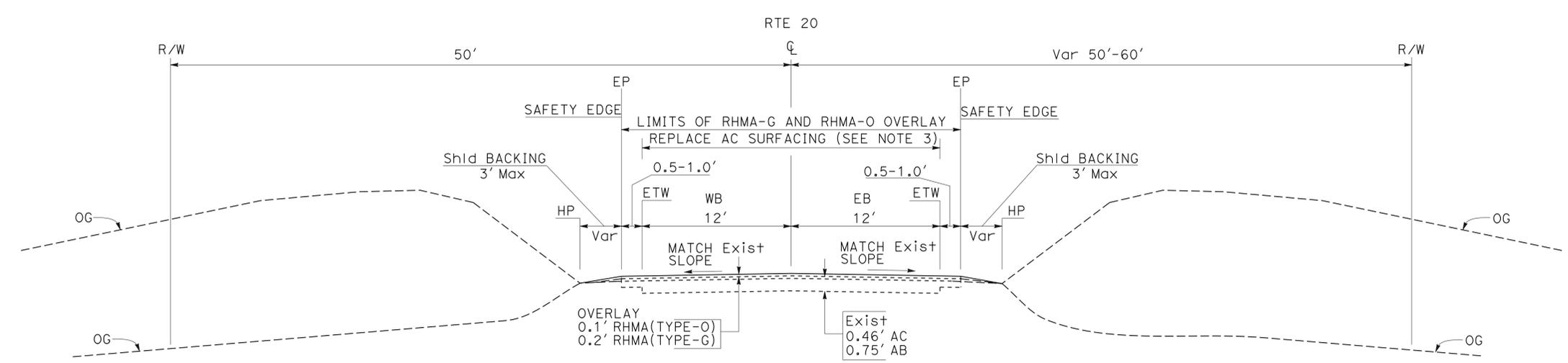
DESIGN DESIGNATION

ADT (2009)	7,600	D = 66%
ADT (2015)	8,650	DH TRUCK = 4%
ADT (2025)	10,400	10-YEAR TI = 9.0
ADT (2035)	12,100	20-YEAR TI = 9.5



ROUTE 20 - PM 14.56 TO 16.00

- * EB PASSING LANE FROM PM 15.69 TO 16.00
- * EB RT TURN LANE AT PM 15.92 TO PM 15.95 (TO STACEY ANN Dr-RT)



ROUTE 20 - PM 13.3 TO 14.56

CONFORM AT BEGIN AND END OF DRY CREEK Br (16 0010) STRUCTURE
NO REPLACE AC SURFACING AND OVERLAY AT DRY CREEK Br (PM 13.93/13.99)

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION DIVISION OF ENGINEERING
FERMIN BARRIGA
FUNCTIONAL SUPERVISOR
CHECKED BY
CALCULATED-DESIGNED BY
CARMEN RODRIGUEZ
REVISOR
SALAHUDDIN CHOWDHURY
DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	3	65

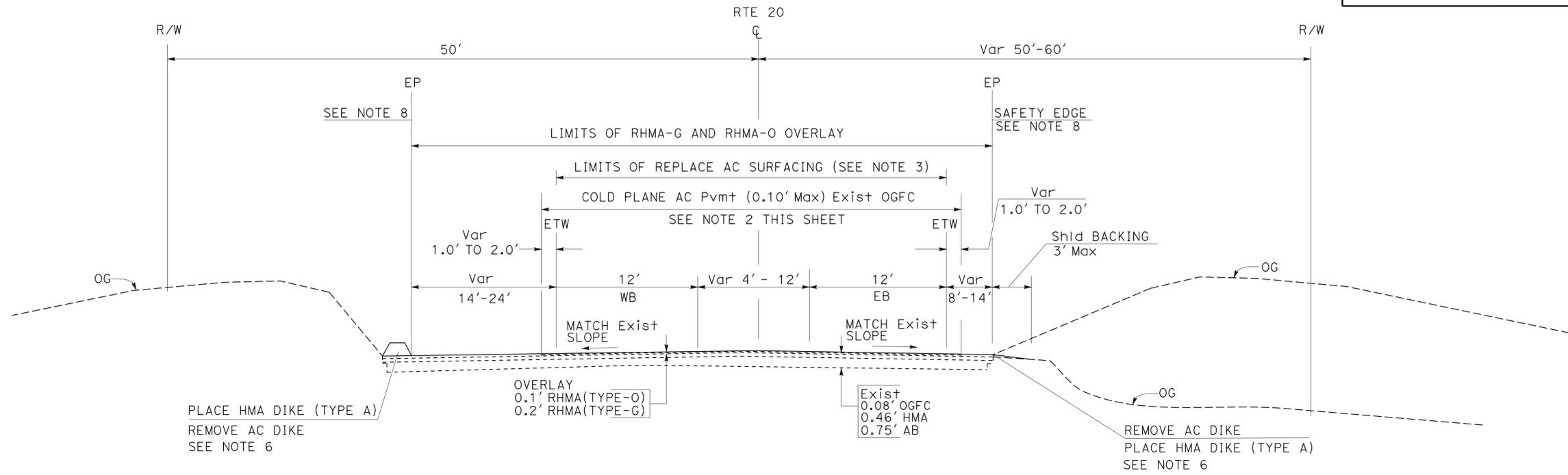
Salahuddin Chowdhury 5-12-14
REGISTERED CIVIL ENGINEER DATE

5-12-14
PLANS APPROVAL DATE

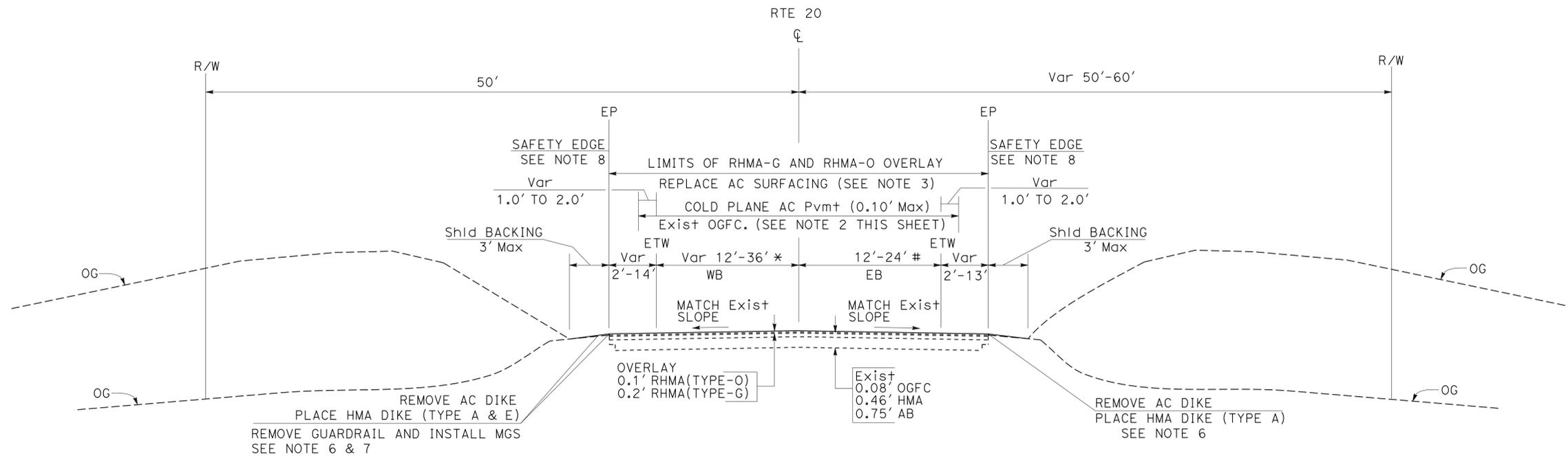
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES (THIS SHEET ONLY):

1. DIMENSIONS OF PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FROM PM 16.92 TO PM R17.21, COLD PLANE AC PAVEMENT (0.10' Max) TO REMOVE Exist OPEN GRADE ASPHALT/OGFC BEFORE REPLACE AC SURFACING AND OVERLAY.



ROUTE 20 - PM R17.07 TO R17.21



ROUTE 20 - PM 16.00 TO R17.07

- * WB LT TURN LANE FROM PM 16.98 TO PM R17.05 (STACEY ANNE Rd-RT)
- # EB LT TURN LANE FROM PM 16.92 TO PM 16.95 (TO SICARD FLAT Rd-LT)
- * WB PASSING LANE FROM PM 16.49 TO PM R17.01

TYPICAL CROSS SECTIONS

NO SCALE

X-2

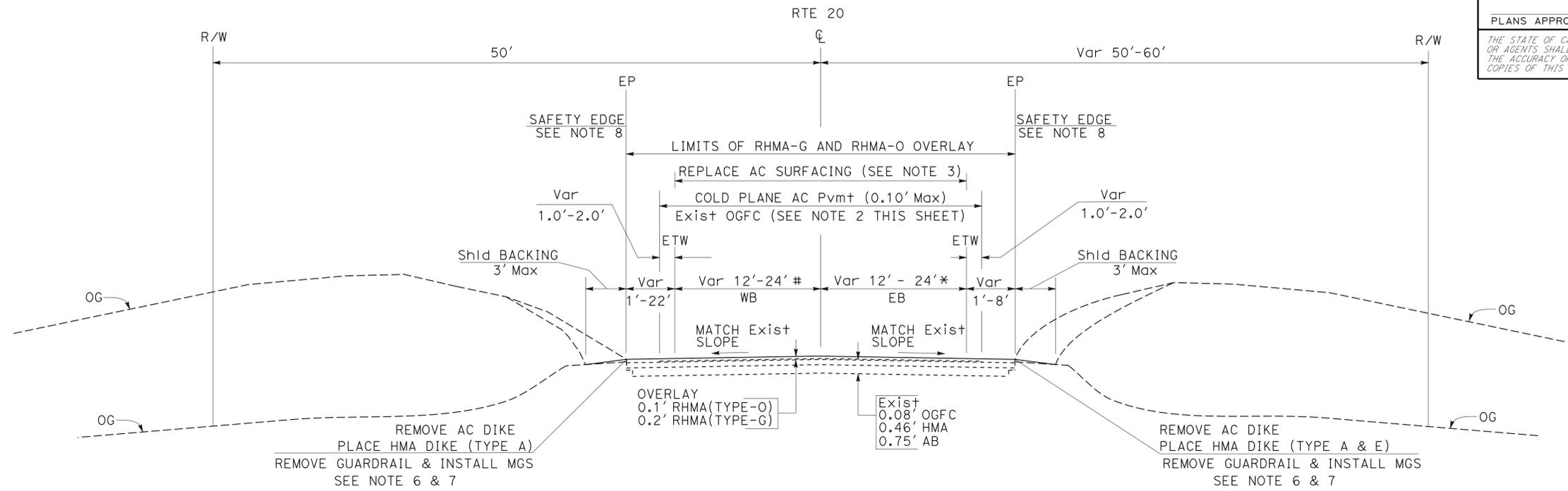
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 FUNCTIONAL SUPERVISOR
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 REVISOR BY DATE REVISOR
 CALCULATED-DESIGNED BY CHECKED BY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	4	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

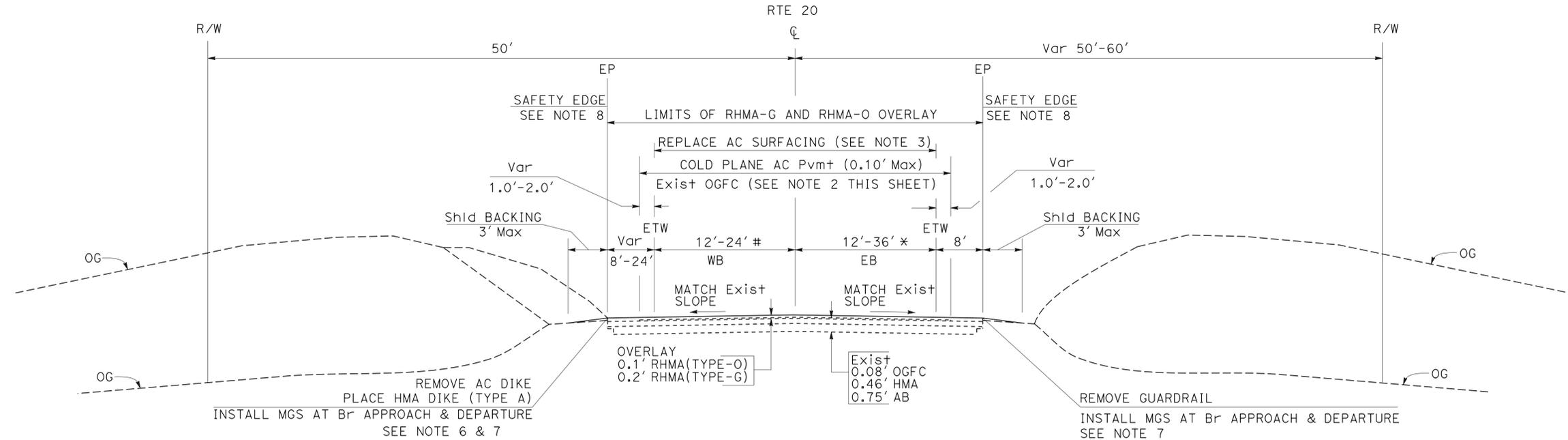
NOTES (THIS SHEET ONLY):

- DIMENSIONS OF PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- FROM PM R17.21 TO PM R18.53 (EXCLUDING YUBA RIVER Br), COLD PLANE (0.10' Max) TO REMOVE Exist OGFC BEFORE REPLACE AC SURFACING AND RHMA-G/RHMA-O OVERLAY.



ROUTE 20 - PM R18.09 TO 20.3

- # WB LT TURN LANE FROM PM R18.20 TO PM R18.25 (TO TIMBUCTOO Rd)
- * EB PASSING LANE FROM PM R18.12 TO R18.46



ROUTE 20 - PM R17.21 TO R18.09

- * EB RT TURN LANE FROM PM R17.34 TO PM R17.41 (TO PARKS BAR Rd-RT)
- * TWO-WAY LT TURN LANE FROM PM R17.37 TO PM R17.41
- # WB LT TURN LANE FROM PM R17.42 TO R17.50 (TO PARKS BAR Rd-RT)
- NO COLD PLANE AND OVERLAY ON YUBA RIVER Br FROM PM R17.73 TO PM R18.07
- CONFORM AT BEGIN AND END OF YUBA RIVER Br (16 0011) STRUCTURE

TYPICAL CROSS SECTIONS

NO SCALE

X-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 REVISOR BY DATE REVISOR
 CALCULATED-DRAWN BY CHECKED BY
 BORDER LAST REVISED 7/2/2010

USERNAME => s130875
 DGN FILE => 0312000028ca003.dgn



UNIT 0305

PROJECT NUMBER & PHASE

03120000281

LAST REVISION DATE PLOTTED => 05-JUN-2014
 04-28-14 TIME PLOTTED => 15:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	5	65

REGISTERED CIVIL ENGINEER		5-12-14		DATE	
PLANS APPROVAL DATE		5-12-14		DATE	

REGISTERED PROFESSIONAL ENGINEER		SALAHUDDIN CHOWDHURY		No. C75140	
Exp. 12-31-15		CIVIL		STATE OF CALIFORNIA	

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

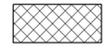
NOTES:

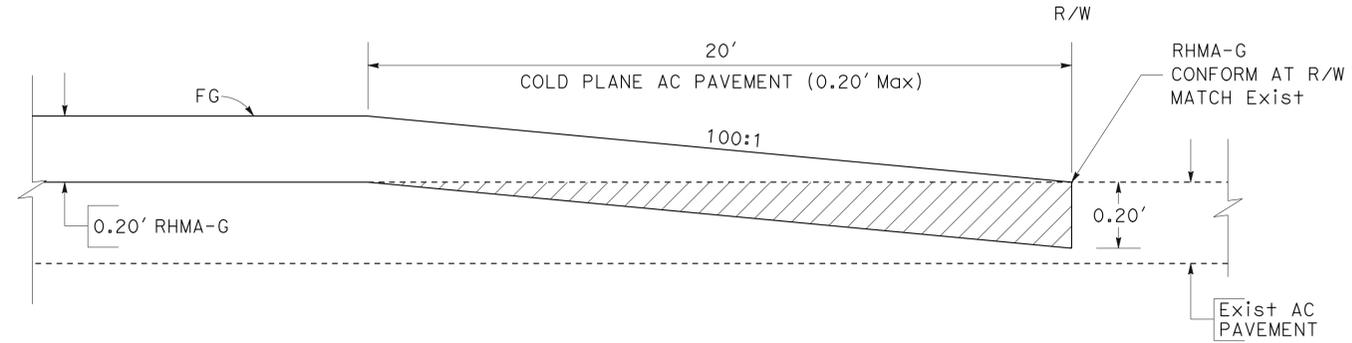
1. EXACT LOCATIONS OF REPLACE AC SURFACING TO BE DETERMINED BY THE ENGINEER.
2. CONFORM LOCATIONS AT LOCAL CROSS ROADS FOR PLACING RHMA-G AND RHMA-O OVERLAYS, SEE CONSTRUCTION DETAILS SHEETS C-4 TO C-8.
3. COLD PLANE (0.1' Max) EXISTING OGAC PRIOR TO REPLACE AC SURFACING.

ABBREVIATIONS:

- RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
- HMA-A - HOT MIX ASPHALT (TYPE A)
- RHMA-O - RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)

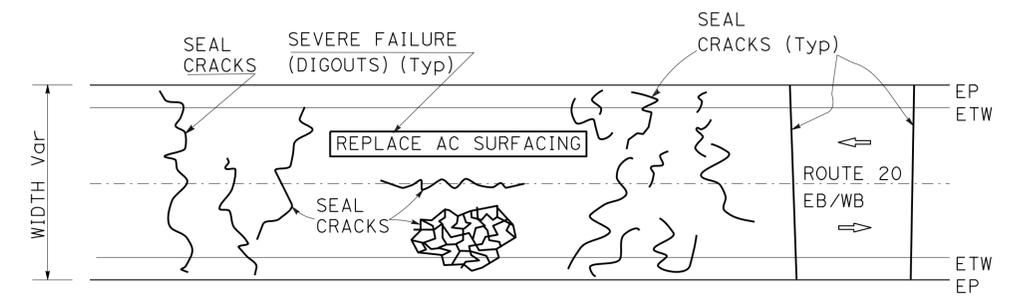
LEGEND:

-  REPLACE AC SURFACING
-  COLD PLANE AC PAVEMENT

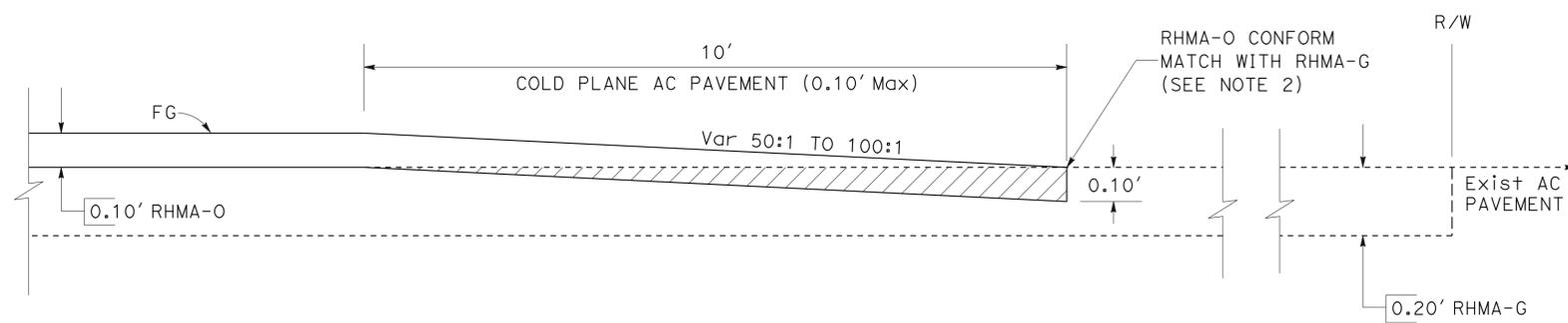


RHMA-G CONFORM DETAIL AT LOCAL ROADS

- AT SYCAMORE RANCH-RT (PM 13.51), BROWNS VALLEY SCHOOL Rd-LT (PM 13.58)
- AT HAMMOND GROVE Rd-RT (PM 13.97), VALHALLA WAY-LT (PM 14.10)
- AT TOO HANDY WAY-RT (PM 14.14), VALHALLA WAY-LT (PM 14.58), MONUMENT TRAIL-RT (PM 14.71)
- AT ESCHEMAN Ln-RT (PM 15.39), PEORIA Rd-LT (PM 15.66), STACEY ANN Dr-RT (PM 15.95)
- AT LIBBY Ln-RT (PM 16.31), STEFFEN TRAIL-LT (PM 16.60), SICARD FLAT Rd-LT (PM 16.98)
- AT STACEY ANNE Rd-RT (PM 16.98), PVT Rd-LT/PARKS BAR Rd-RT (PM R17.41), TIMBUCTOO Rd-RT (PM R18.19)
- AT RIVERVIEW TERRACE-RT (PM 19.28), TIMBUCTOO Rd-LT (PM 19.82), SMARTSVILLE Rd-LT (PM 19.99)

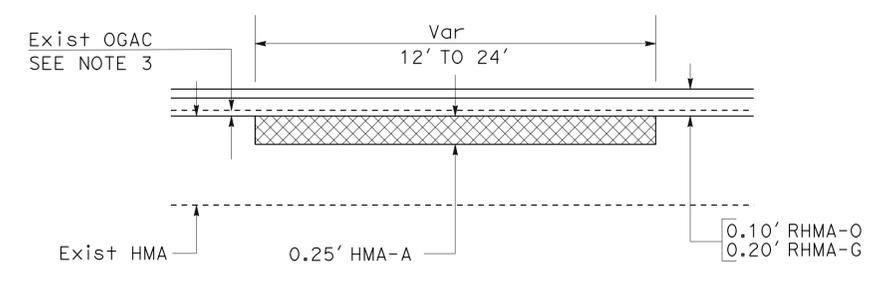


CRACK TREATMENT REPLACE AC SURFACING PLAN



RHMA-O CONFORM DETAIL AT LOCAL ROADS

- AT SYCAMORE RANCH-RT (PM 13.51), BROWNS VALLEY SCHOOL Rd-LT (PM 13.58)
- AT HAMMOND GROVE Rd-RT (PM 13.97), VALHALLA WAY-LT (PM 14.10)
- AT TOO HANDY WAY-RT (PM 14.14), VALHALLA WAY-LT (PM 14.58), MONUMENT TRAIL-RT (PM 14.71)
- AT ESCHEMAN Ln-RT (PM 15.39), PEORIA Rd-LT (PM 15.66), STACEY ANN Dr-RT (PM 15.95)
- AT LIBBY Ln-RT (PM 16.31), STEFFEN TRAIL-LT (PM 16.60), SICARD FLAT Rd-LT (PM 16.98)
- AT STACEY ANNE Rd-RT (PM 16.98), PVT Rd-LT/PARKS BAR Rd-RT (PM R17.41), TIMBUCTOO Rd-RT (PM R18.19)
- AT RIVERVIEW TERRACE-RT (PM 19.28), TIMBUCTOO Rd-LT (PM 19.82), SMARTSVILLE Rd-LT (PM 19.99)



REPLACE AC SURFACING-MAINLINE

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 REVISIONS:

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING

REVISOR: SALAHUDDIN CHOWDHURY
 DATE: CARMEN RODRIGUEZ

DESIGNER: FERMIN BARRICA
 CHECKER:

FUNCTIONAL SUPERVISOR: FERMIN BARRICA

NOTES:

1. CONFORM LOCATION PM IS APPROXIMATE. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
2. COLD PLANE AC Pvm+ (0.10' Max) Exist OGFC BEFORE RHMA-G AND RHMA-O OVERLAY.
3. FOR PAVEMENT DELINEATION WORK ON BRIDGES, SEE SHEETS PDD-1, PDQ-1 AND PDQ-2.

LEGEND:

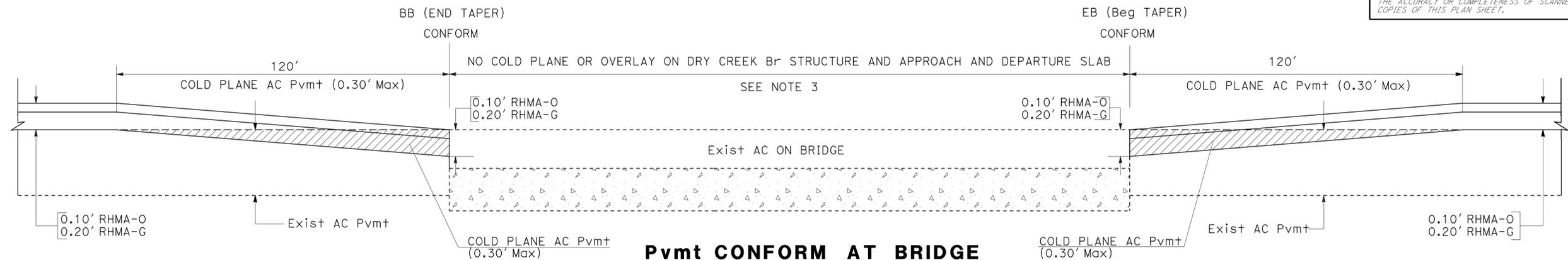
 COLD PLANE AC Pvm+

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	6	65

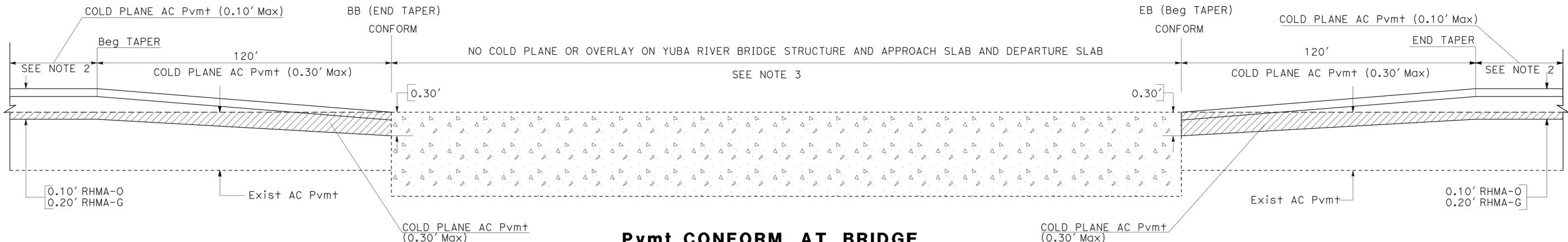
REGISTERED CIVIL ENGINEER: *Salahuddin Chowdhury* 5-12-14
 DATE: 5-12-14
 PLANS APPROVAL DATE: 5-12-14

REGISTERED PROFESSIONAL ENGINEER: SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

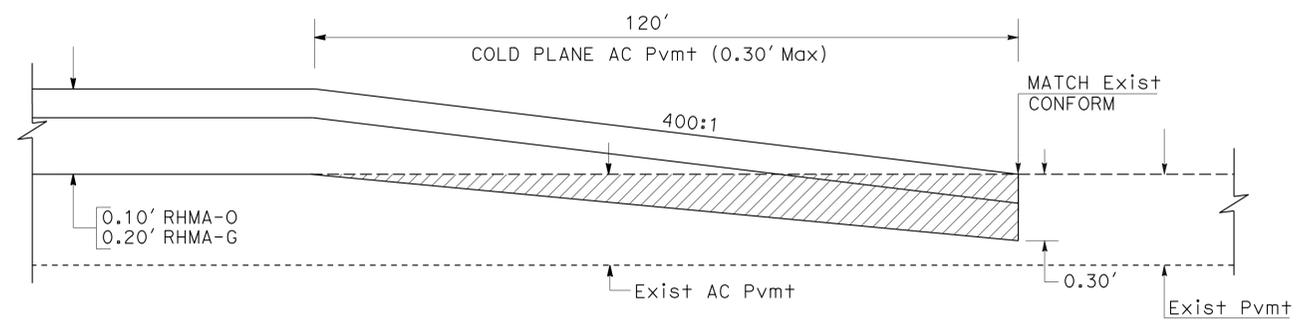
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



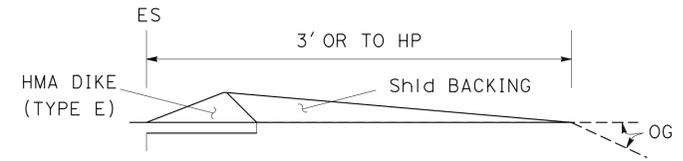
Pvmt CONFORM AT BRIDGE
 DRY CREEK Br - Br No. 16-0010 (PM 13.93/13.99)



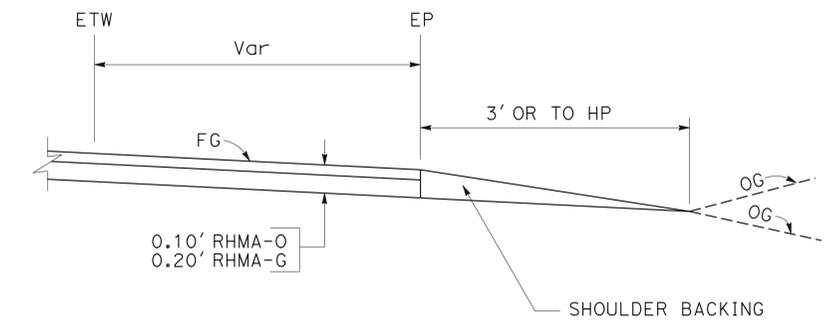
Pvmt CONFORM AT BRIDGE
 YUBA RIVER BRIDGE - Br No. 16-0011 (PM R17.73/R18.07)



MAINLINE PAVEMENT CONFORM
 PM 13.3 (BEGIN CONSTRUCTION)
 PM 20.3 (END CONSTRUCTION)



SHOULDER BACKING AT HMA DIKE (TYPE E)



SHOULDER BACKING

CONSTRUCTION DETAILS

NO SCALE

C-2

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.

LEGEND:

 COLD PLANE AC PAVEMENT

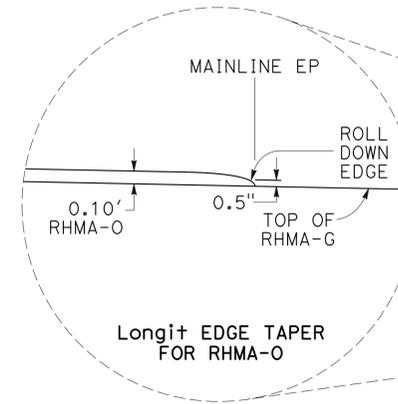
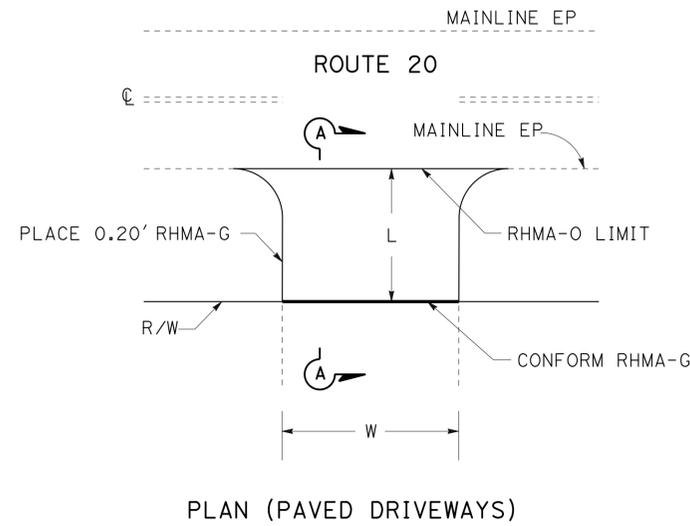
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	7	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE

5-12-14
 PLANS APPROVAL DATE

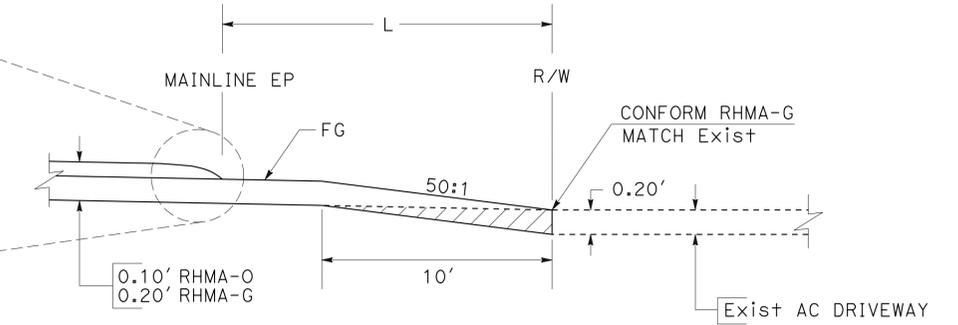
REGISTERED PROFESSIONAL ENGINEER
SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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



RHMA-O DETAIL

PRIVATE PAVED DRIVEWAYS
DRIVEWAY CONFORM DETAIL-RHMA-G



SECTION A-A

EB DRIVEWAY LOCATION

LOCATION	WIDTH (W)		LENGTH (L)	
	LF	LF	LF	LF
EB DRIVEWAY AT PM 13.46	13.0		37.0	
EB DRIVEWAY AT PM 14.21	10.0		37.0	
EB DRIVEWAY AT PM 14.31	11.0		37.0	
EB DRIVEWAY AT PM 15.28	21.0		36.0	
EB DRIVEWAY AT PM 15.45	18.0		33.0	
EB DRIVEWAY AT PM 15.48	31.0		33.0	
EB DRIVEWAY AT PM 15.55	14.0		34.0	
EB DRIVEWAY AT PM 16.66	13.0		35.0	
EB DRIVEWAY AT PM R17.09	23.0		75.0	
EB DRIVEWAY AT PM R18.30	12.0		77.0	
PM R18.53 EQUATES TO PM18.738				
EB DRIVEWAY AT PM 18.89	14.0		72.0	
EB DRIVEWAY AT PM 19.18	10.0		37.0	

WB DRIVEWAY LOCATION

LOCATION	WIDTH (W)		LENGTH (L)	
	LF	LF	LF	LF
WB DRIVEWAY AT PM 14.14	22.0		37.0	
WB DRIVEWAY AT PM 14.31	12.0		37.0	
WB DRIVEWAY AT PM 15.43	31.0		34.0	
WB DRIVEWAY AT PM 15.97	14.0		33.5	
WB DRIVEWAY AT PM 16.00	12.0		33.0	
WB DRIVEWAY AT PM R17.09	21.0		68.0	
WB DRIVEWAY AT PM R18.30	19.0		133.0	
WB DRIVEWAY AT PM R18.42	15.0		69.0	
WB DRIVEWAY AT PM R18.51	15.0		36.0	
PM R18.53 EQUATES TO PM18.738				
WB DRIVEWAY AT PM 19.27	12.0		63.0	

CONSTRUCTION DETAILS

NO SCALE

C-3

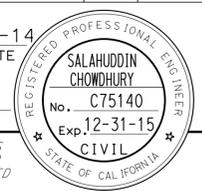
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 FUNCTIONAL SUPERVISOR
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 REVISOR BY DATE REVISOR
 CALCULATED-DESIGNED BY CHECKED BY
 DISTRICT OFFICE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	8	65

<i>Salahuddin Chowdhury</i>	5-12-14
REGISTERED CIVIL ENGINEER	DATE

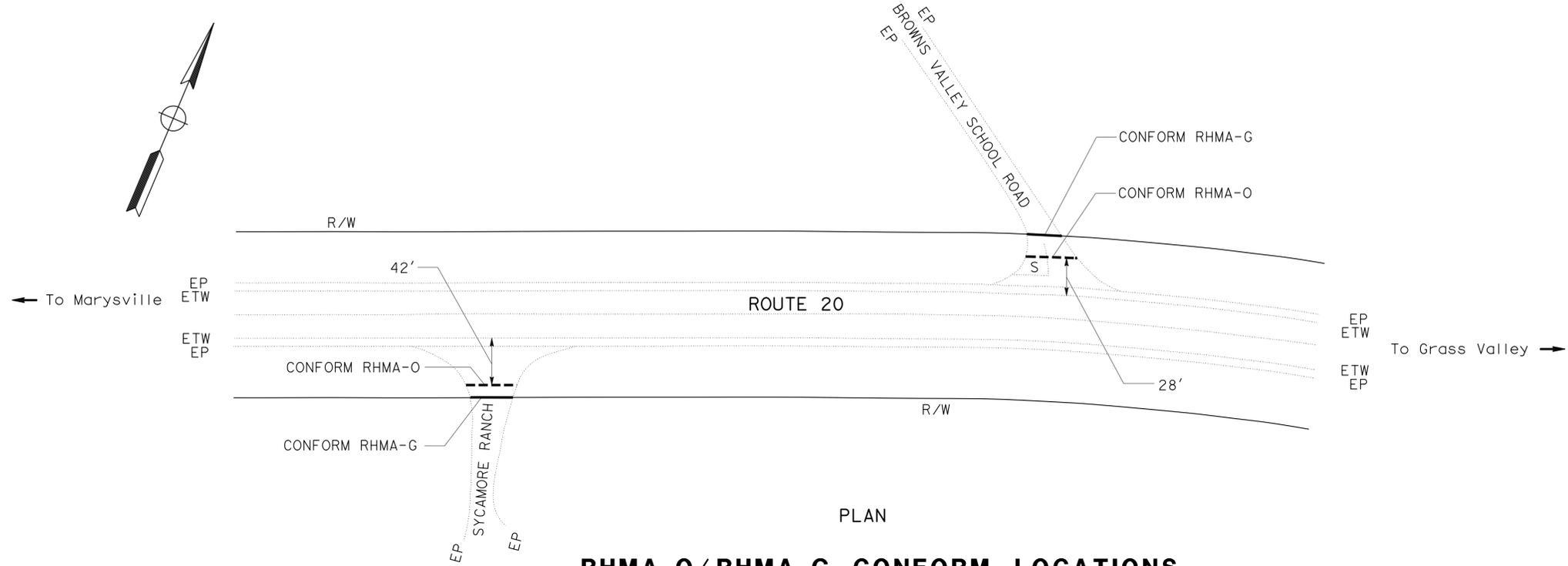
5-12-14
PLANS APPROVAL DATE

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

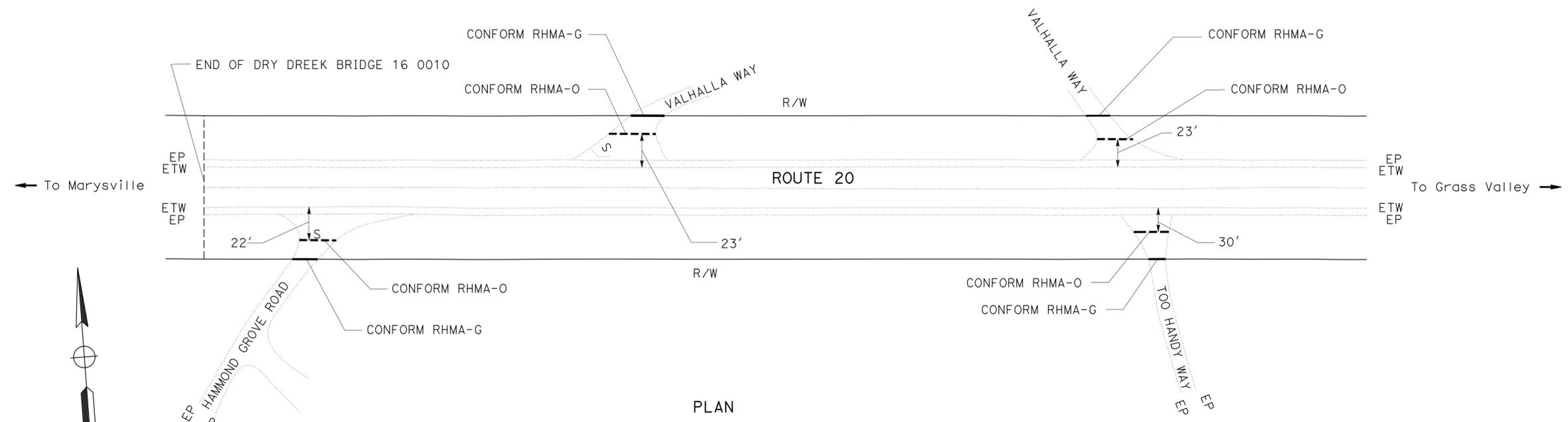


NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.



RHMA-O/RHMA-G CONFORM LOCATIONS AT SYCAMORE RANCH (PM 13.51) AND AT BROWNS VALLEY SCHOOL ROAD (PM 13.58)



RHMA-O/RHMA-G CONFORM LOCATIONS AT HAMMOND GROVE Rd (PM 13.97), VALHALLA WAY (PM 14.10) AND AT TOO HANDY WAY (PM 14.14)

CONSTRUCTION DETAILS

NO SCALE

C-4

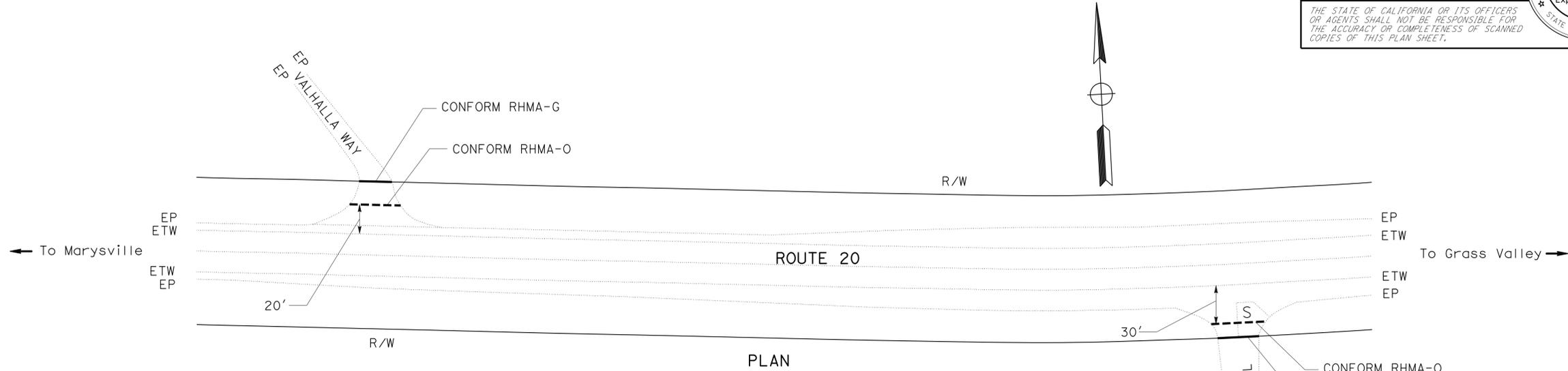
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT
 FERMIN BARRIGA
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 SALAHUDDIN CHOWDHURY
 KATHY SUITS
 DESIGNED BY
 REVISOR BY
 DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	9	65

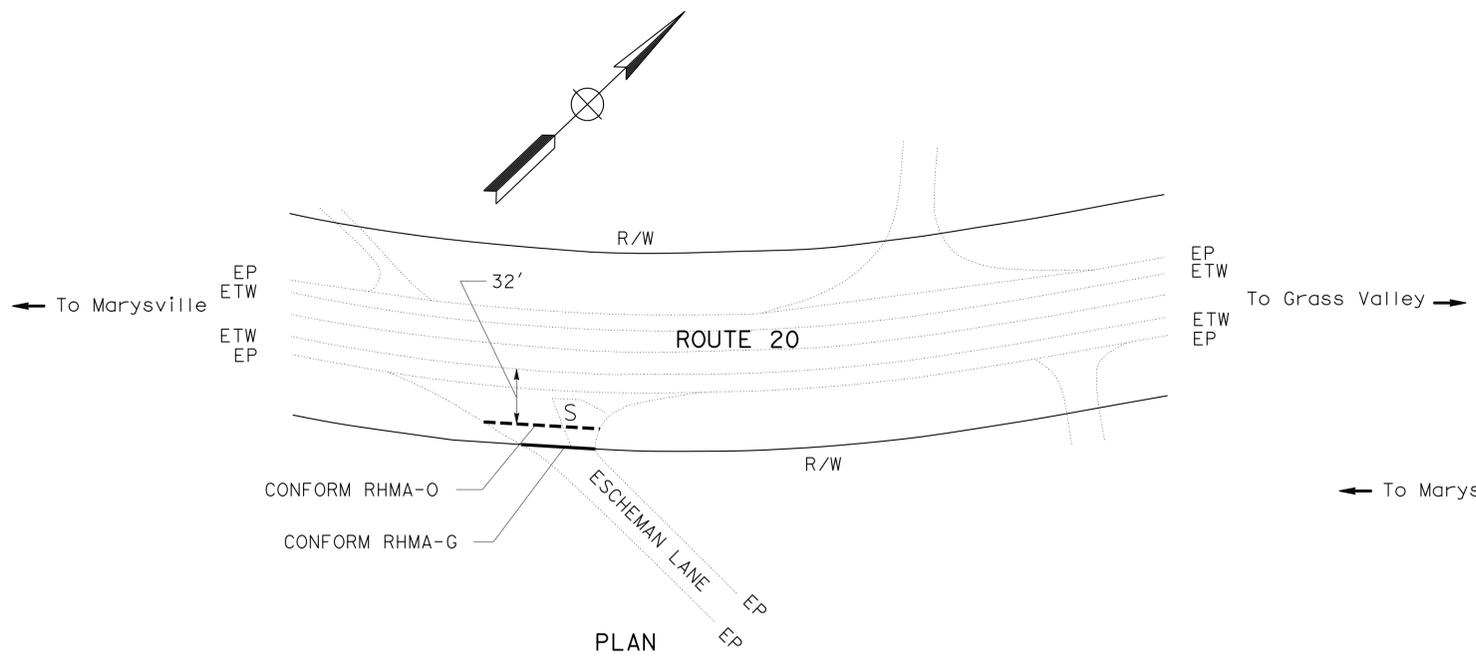
5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

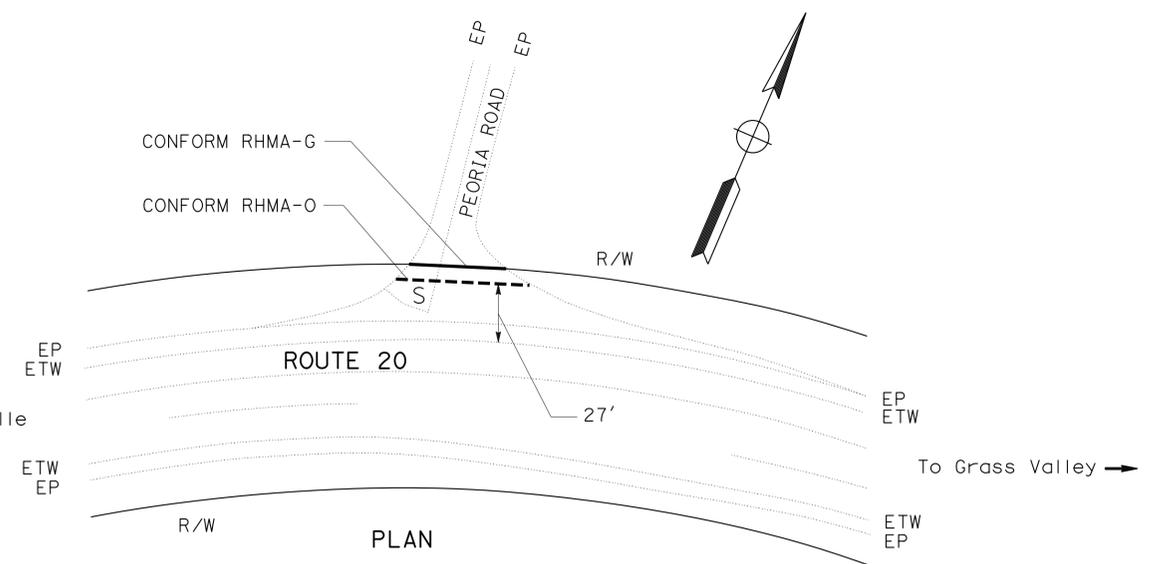
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.



RHMA-O/RHMA-G CONFORM LOCATIONS AT VALHALLA WAY (PM 14.58) AND AT MONUMENT TRAIL (PM 14.71)



RHMA-O/RHMA-G CONFORM LOCATIONS AT ESCHEMAN LANE (PM 15.39)



RHMA-O/RHMA-G CONFORM LOCATIONS AT PEORIA ROAD (PM 15.66)

CONSTRUCTION DETAILS

NO SCALE

C-5

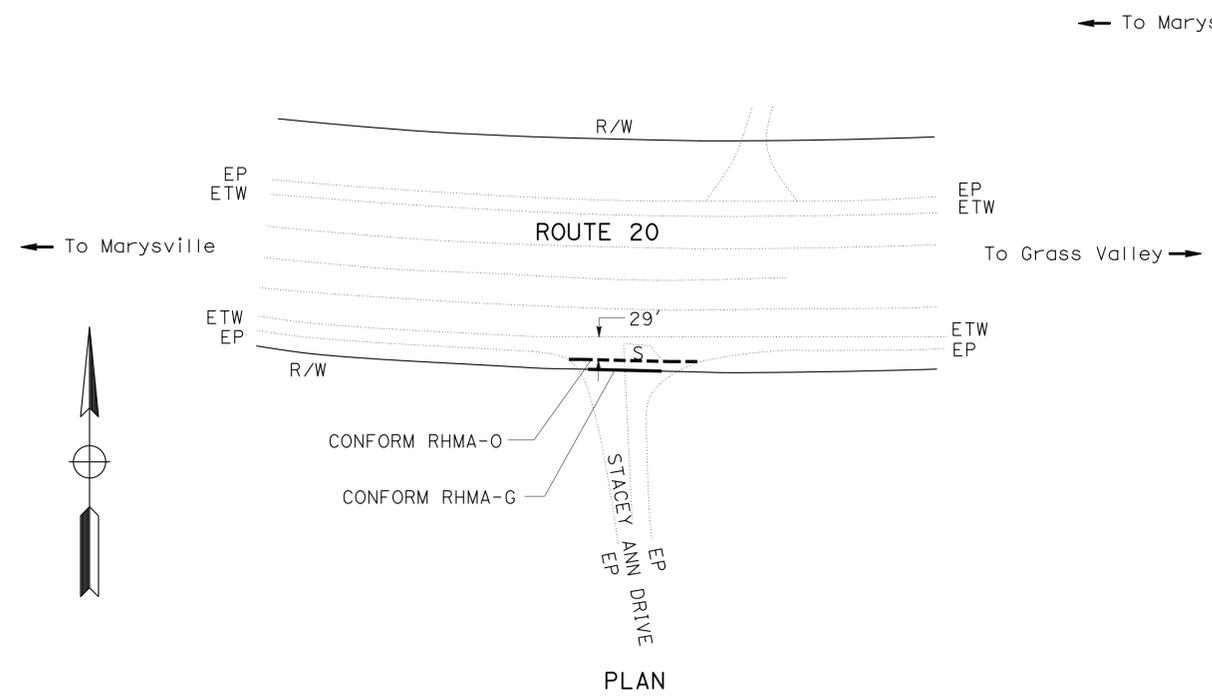
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	10	65

<i>Salahuddin Chowdhury</i> 5-12-14 REGISTERED CIVIL ENGINEER DATE	
PLANS APPROVAL DATE 5-12-14	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

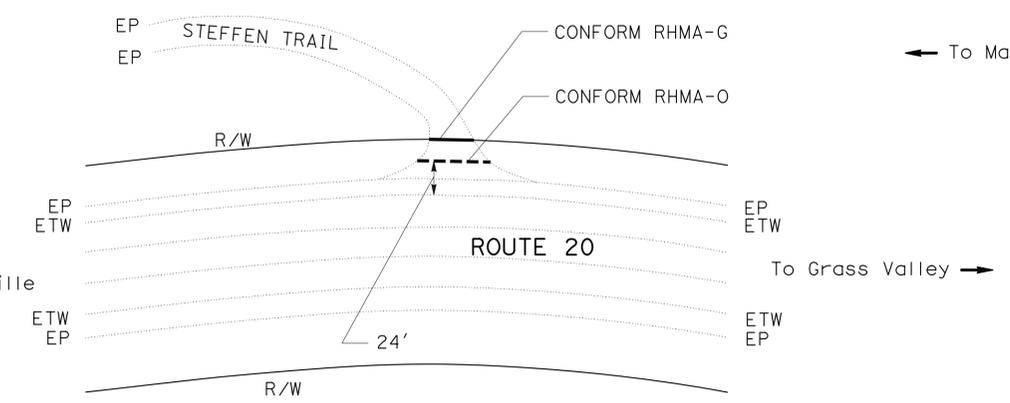
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

NOTES:

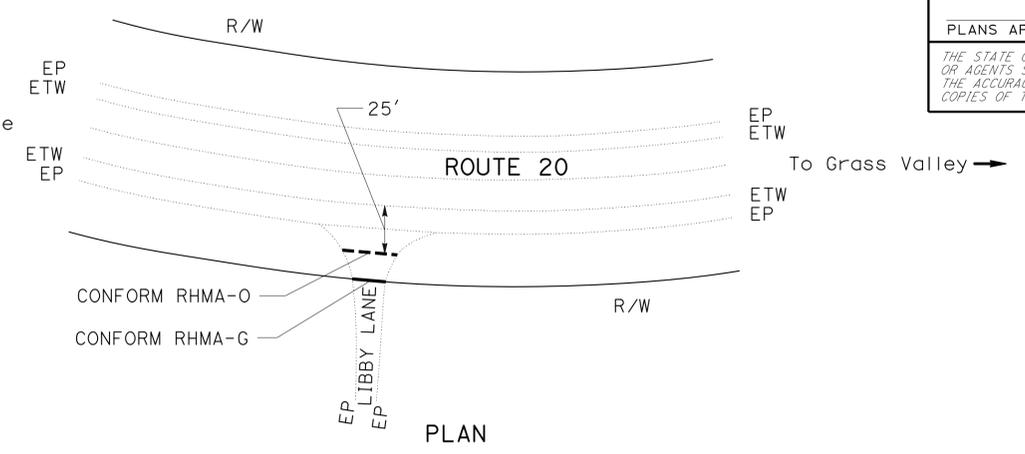
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.



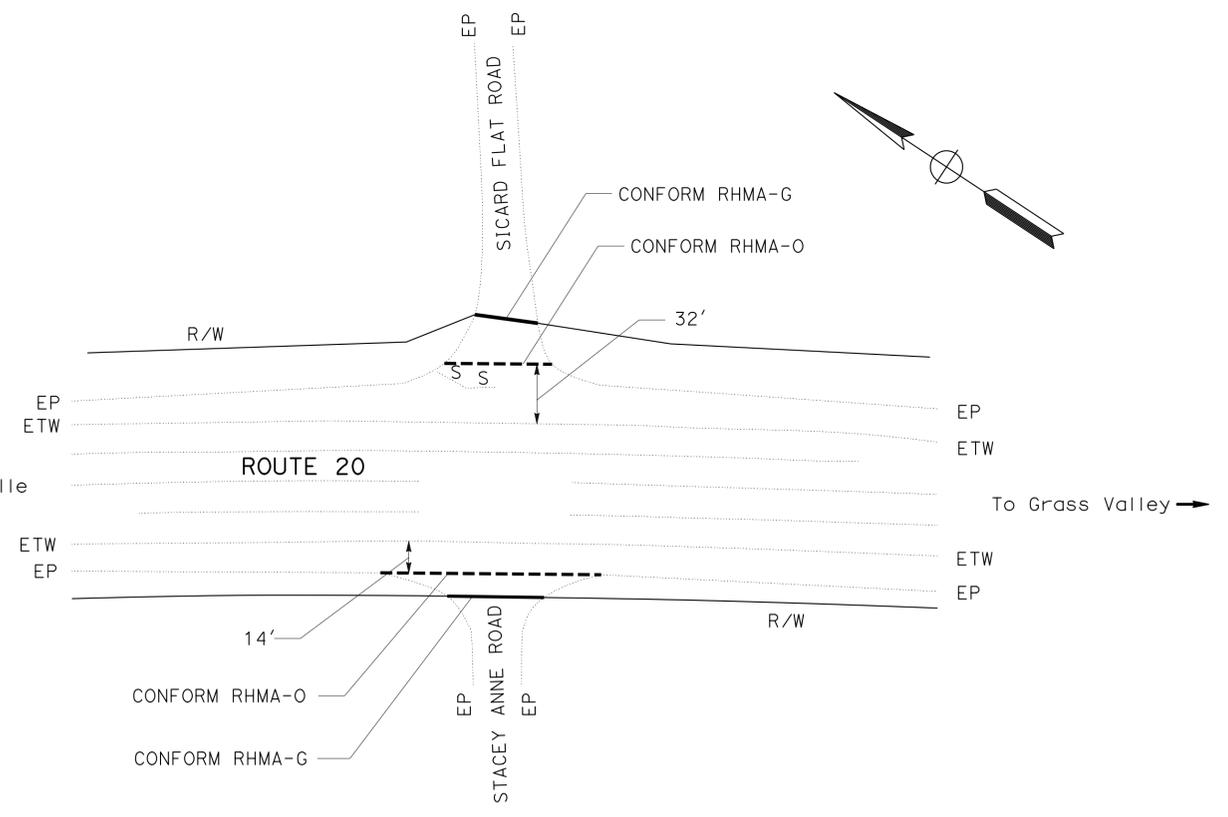
RHMA-O/RHMA-G CONFORM LOCATIONS AT STACEY ANN DRIVE (PM 15.95)



RHMA-O/RHMA-G CONFORM LOCATIONS AT STEFFEN TRAIL (PM 16.60)



RHMA-O/RHMA-G CONFORM LOCATIONS AT LIBBY LANE (PM 16.31)



RHMA-O/RHMA-G CONFORM LOCATIONS AT SICARD FLAT ROAD (PM 16.98) AND AT STACEY ANNE ROAD (PM 16.98)

CONSTRUCTION DETAILS
NO SCALE **C-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT
 FERMIN BARRIGA
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 CALCULATED-DESIGNED BY
 KATHY SUITS
 SALAHUDDIN CHOWDHURY
 REVISOR BY
 DATE REVISOR

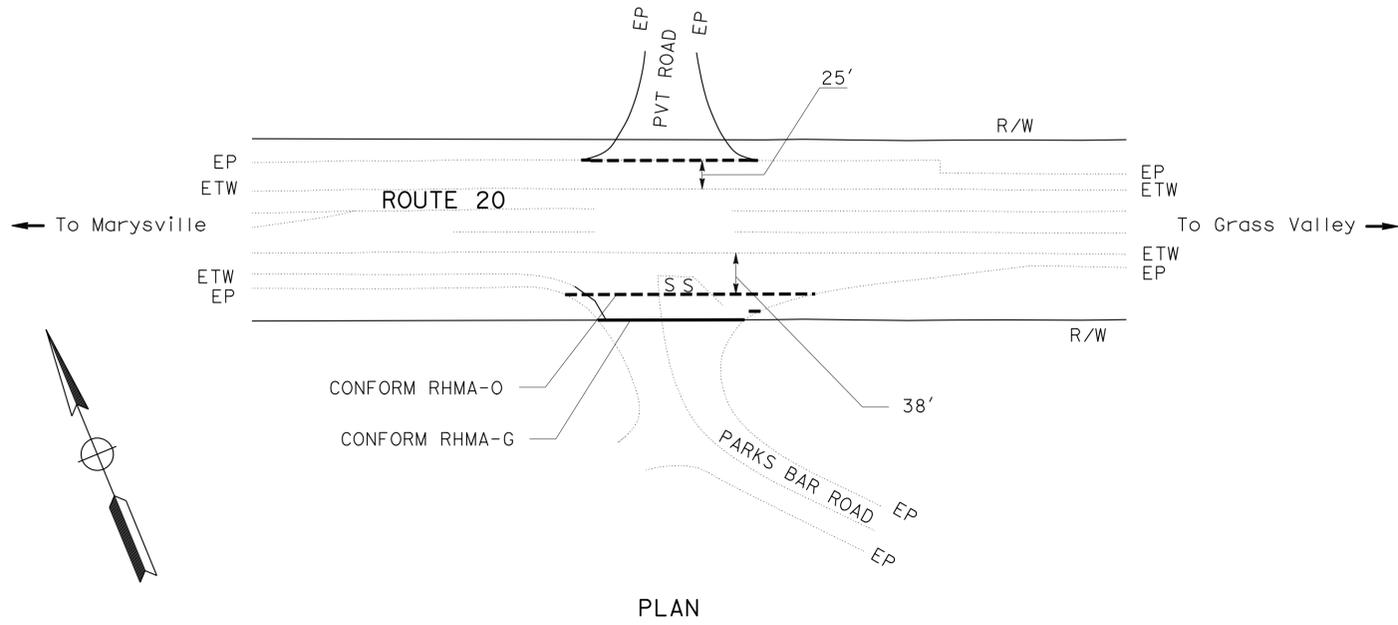
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	11	65

<i>Salahuddin Chowdhury</i> REGISTERED CIVIL ENGINEER		5-12-14 DATE
5-12-14 PLANS APPROVAL DATE		

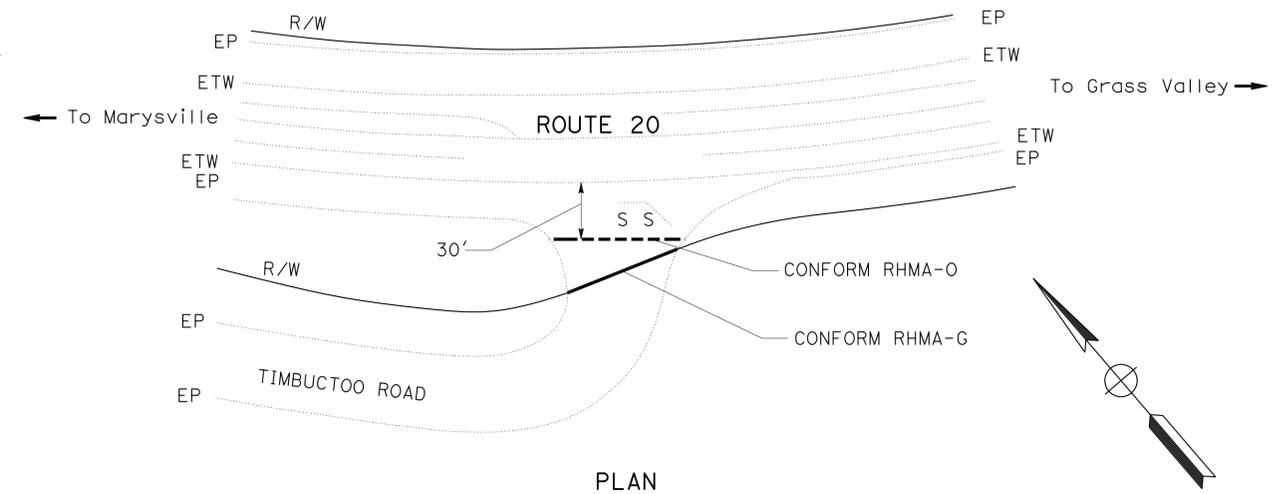
REGISTERED PROFESSIONAL ENGINEER
SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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

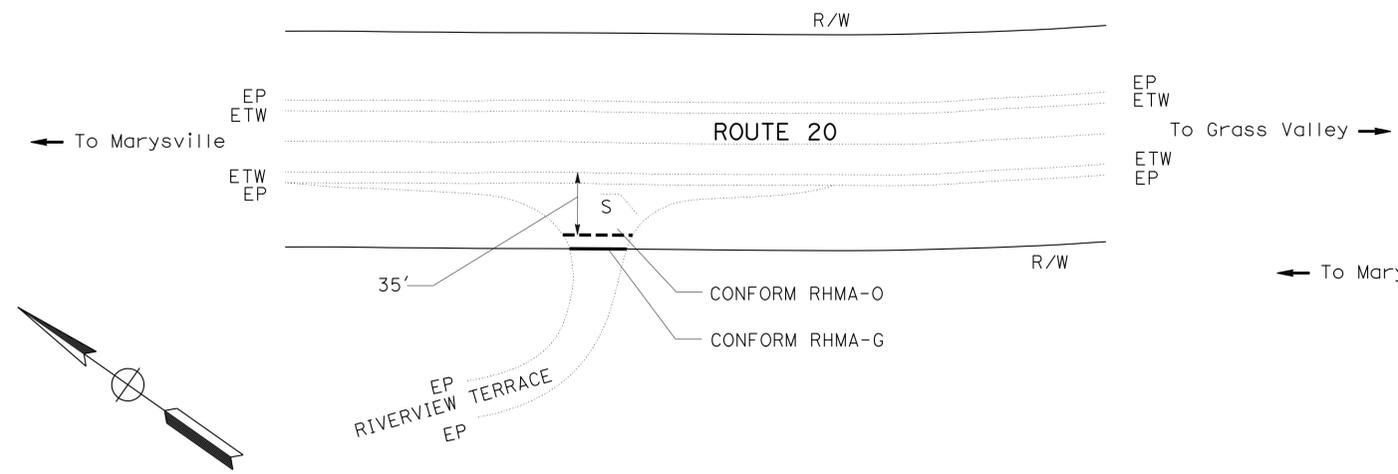
- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.



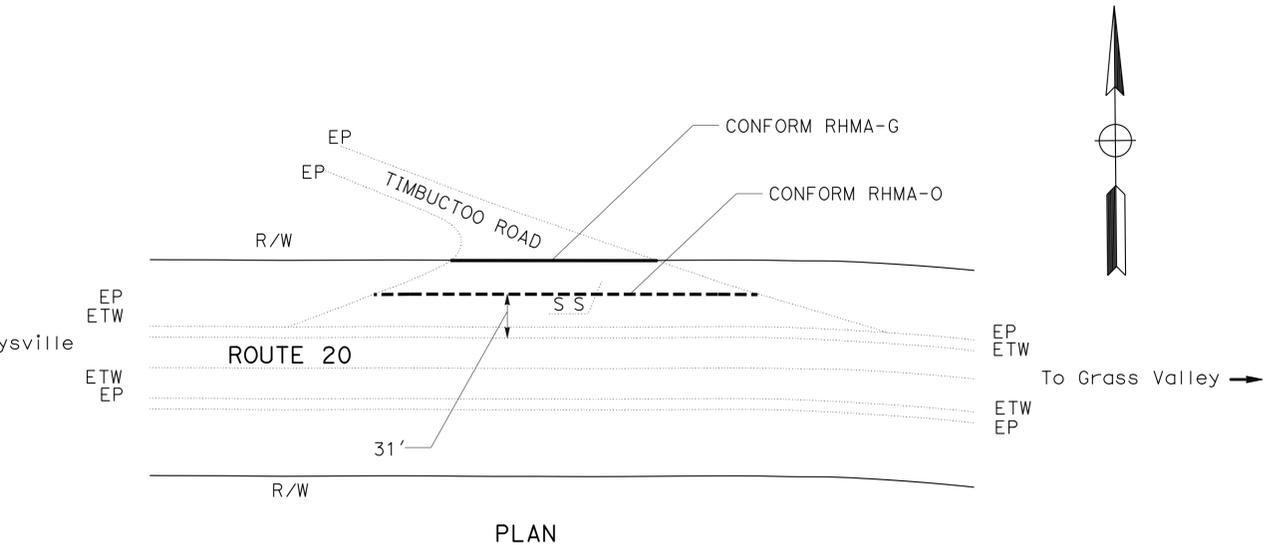
**RHMA-O-/RHMA-G CONFORM LOCATIONS
AT PVT ROAD (PM R17.41) AND
AT PARKS BAR ROAD (PM R17.41)**



**RHMA-O/RHMA-G CONFORM LOCATIONS
AT TIMBUCTOO ROAD (PM R18.19)**



**RHMA-O/RHMA-G CONFORM LOCATIONS
AT RIVERVIEW TERRACE (PM 19.28)**



**RHMA-O/RHMA-G CONFORM LOCATIONS
AT TIMBUCTOO ROAD (PM 19.82)**

CONSTRUCTION DETAILS
NO SCALE
C-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT
 FERMIN BARRIGA
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 SALAHUDDIN CHOWDHURY
 KATHY SUITS
 DESIGNED BY
 REVISOR BY
 DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	12	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE

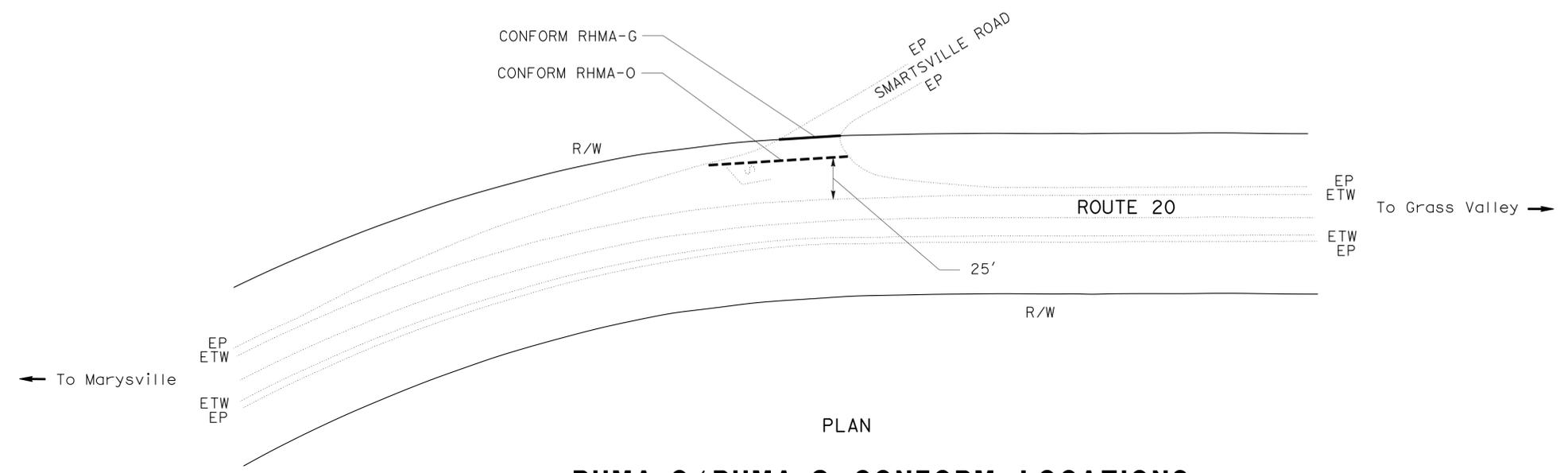
5-12-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CONFORM LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.



RHMA-O/RHMA-G CONFORM LOCATIONS AT SMARTSVILLE ROAD (PM 19.99)

EB CROSS ROADS LOCATION

POST MILE	LOCATION
13.51	SYCAMORE RANCH-RT
13.97	HAMMOND GROVE ROAD-RT
14.14	TOO HANDY WAY-RT
14.71	MONUMENT TRAIL-RT
15.39	ESCHEMAN LANE-RT
15.95	STACEY ANN DR-RT
16.31	LIBBY LANE-RT
16.98	STACEY ANNE ROAD-RT
R17.41	PARKS BAR ROAD-RT
R18.19	TIMBUCTOO ROAD-RT
19.28	RIVERVIEW TERRACE-RT

WB CROSS ROADS LOCATION

POST MILE	LOCATION
13.58	BROWNS VALLEY SCHOOL Rd-LT
14.10	VALHALLA WAY-LT
14.58	VALHALLA WAY-LT
15.66	PEORIA ROAD-LT
16.60	STEFFEN TRAIL-LT
16.98	SICARD FLAT ROAD-LT
R17.41	PVT ROAD-LT
19.82	TIMBUCTOO ROAD-LT
19.99	SMARTSVILLE ROAD-LT

CONSTRUCTION DETAILS
NO SCALE **C-8**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT
 FUNCTIONAL SUPERVISOR
 FERMIN BARRIGA
 CALCULATED-DESIGNED BY
 SALAHUDDIN CHOWDHURY
 CHECKED BY
 KATHY SUITS
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	13	65

<i>Salahuddin Chowdhury</i> REGISTERED CIVIL ENGINEER DATE		5-12-14 DATE
PLANS APPROVAL DATE 5-12-14		

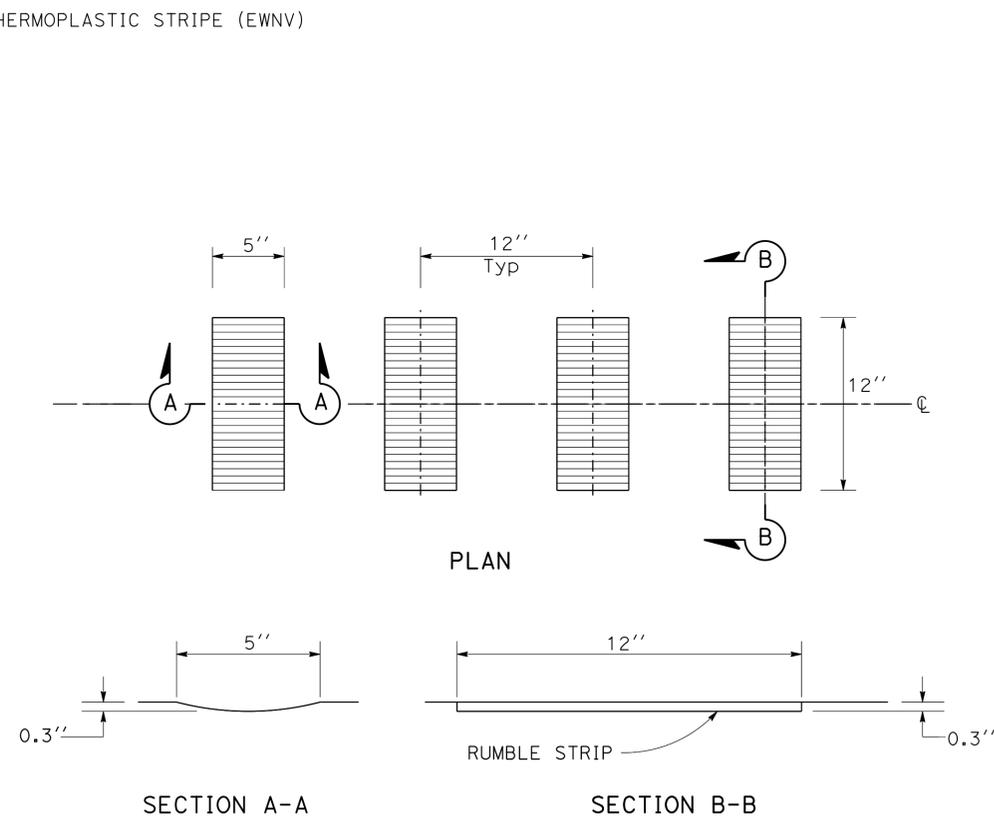
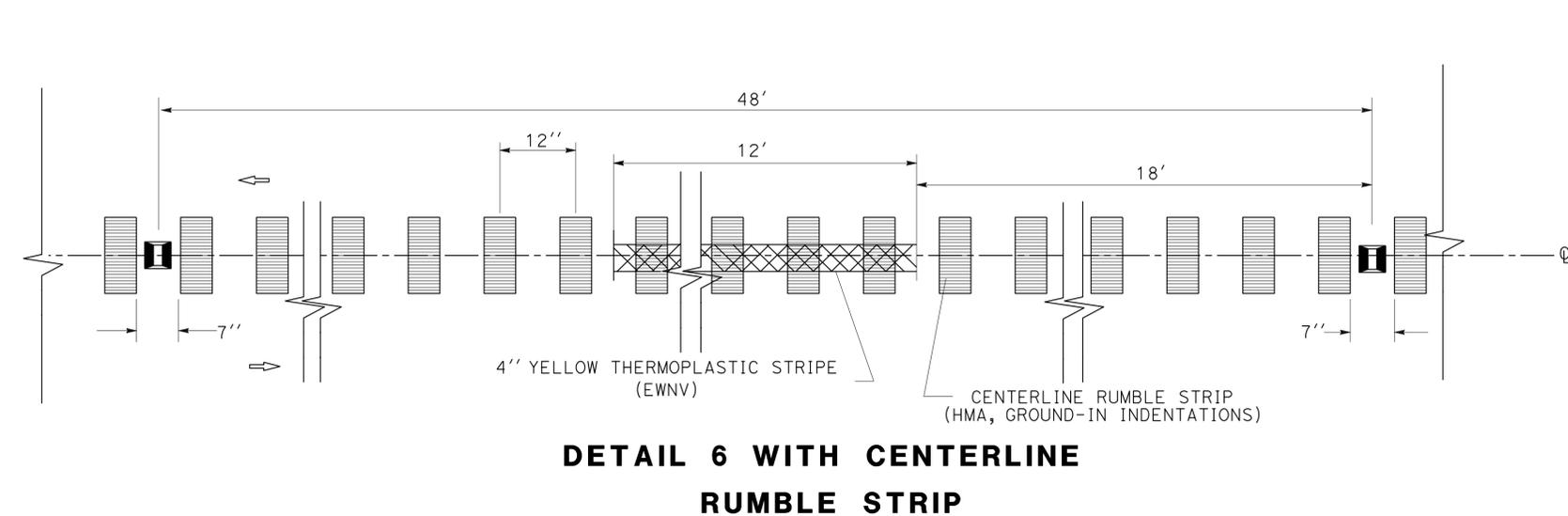
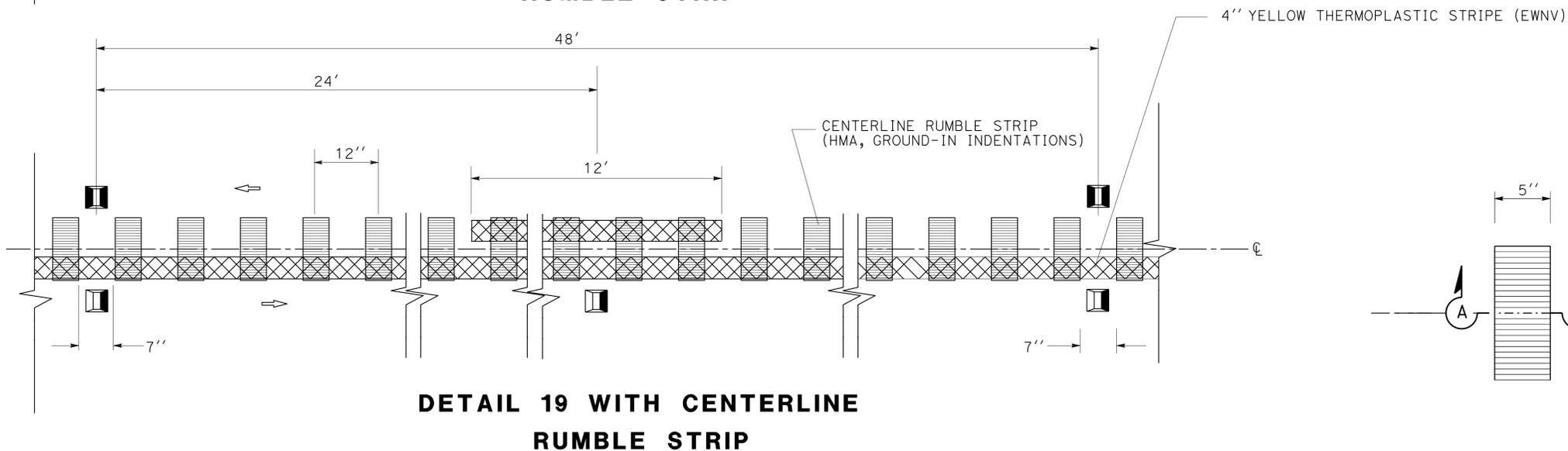
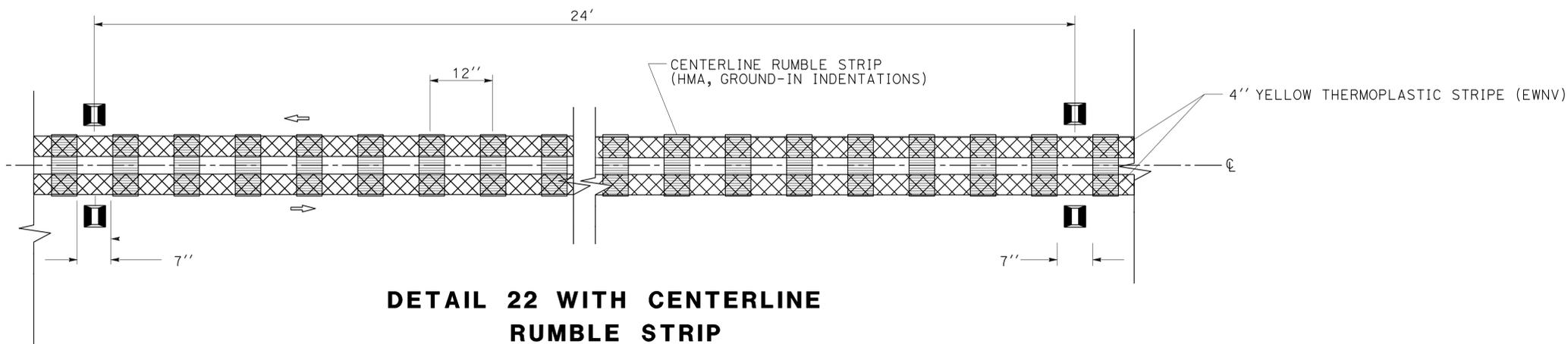
REGISTERED PROFESSIONAL ENGINEER SALAHUDDIN CHOWDHURY No. C75140 Exp. 12-31-15 CIVIL STATE OF CALIFORNIA

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

NOTES:

- CENTERLINE RUMBLE STRIP MUST BE CONSTRUCTED PRIOR TO INSTALLING FINAL TRAFFIC STRIPES.
- SEE SHEET PDQ-1, PDQ-2 FOR CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS) QUANTITIES.

- ➔ DIRECTION OF TRAVEL
- ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
- ▣ TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER



CONSTRUCTION DETAILS
NO SCALE **C-9**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

REVISOR: SALAHUDDIN CHOWDHURY
 CHECKED BY: JOHN KEBER
 FUNCTIONAL SUPERVISOR: FERMIN BARRIGA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

REVISOR: SALAHUDDIN CHOWDHURY
 CHECKED BY: JOHN KEBER

FUNCTIONAL SUPERVISOR: FERMIN BARRIGA

REVISIONS:

DATE: 04-03-14
 TIME: 15:03

NOTE:

1. CENTERLINE RUMBLE STRIP AS SHOWN ON THE PLANS WILL CONTINUE THROUGH LOCATIONS WITH PRIVATE DRIVEWAYS UNLESS OTHERWISE NOTED ON THE PLANS.

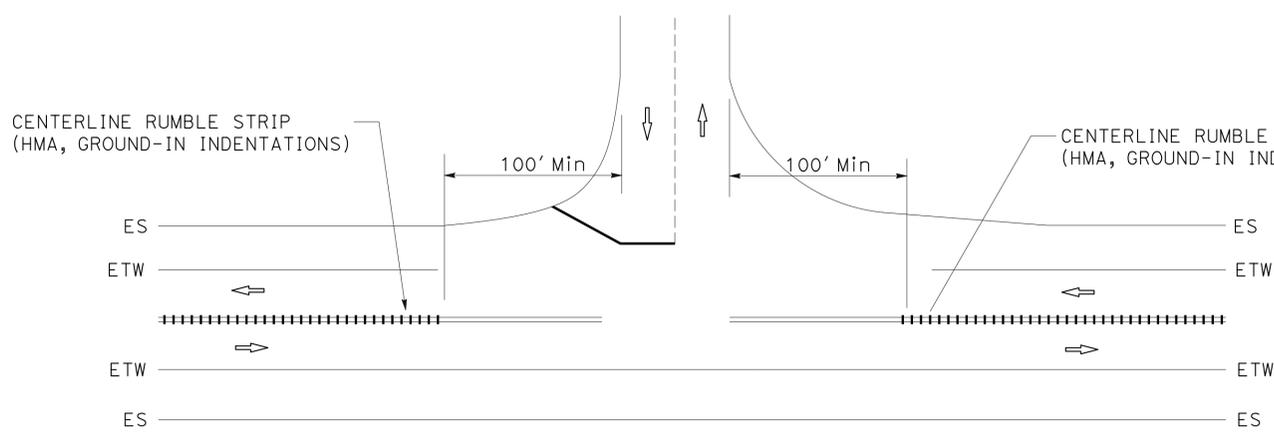
LEGEND:

⇨ DIRECTION OF TRAVEL

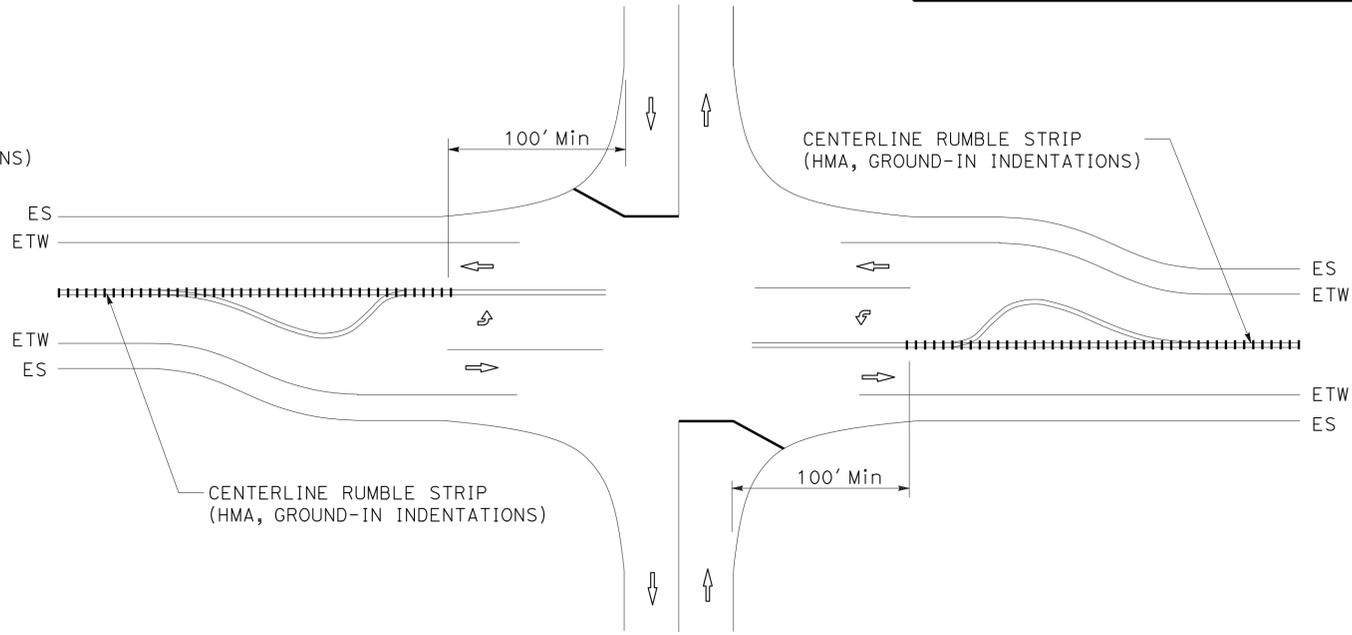
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	14	65

REGISTERED CIVIL ENGINEER: *Salahuddin Chowdhury* 5-12-14
 PLANS APPROVAL DATE: 5-12-14
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

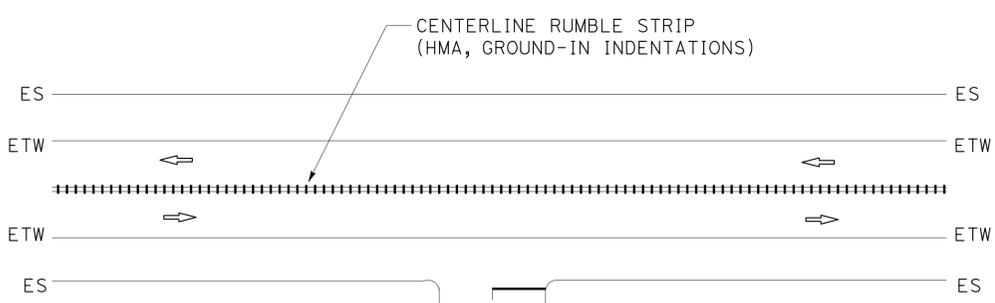
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CENTERLINE RUMBLE STRIP AT PUBLIC ROAD T-INTERSECTION



CENTERLINE RUMBLE STRIP AT INTERSECTION WITH LEFT TURN POCKETS



CENTERLINE RUMBLE STRIP AT DRIVEWAY/PRIVATE ROAD APPROACH

CONSTRUCTION DETAILS

NO SCALE

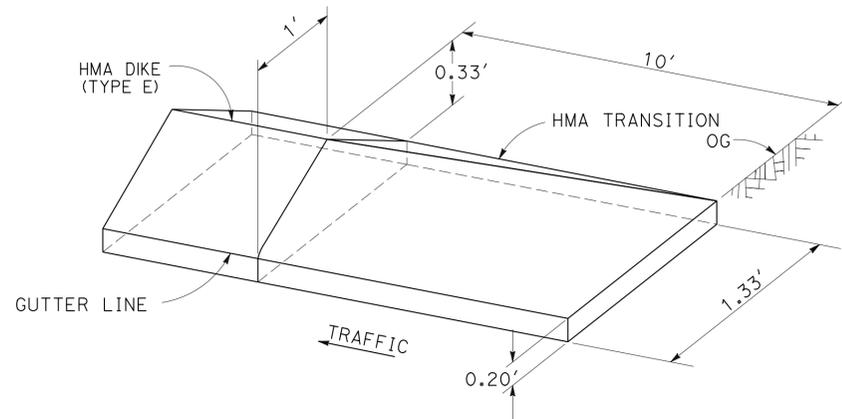
C-10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	15	65

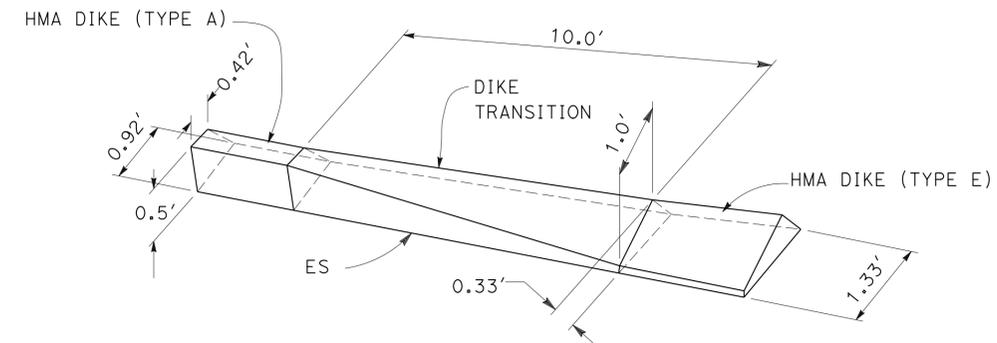
Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

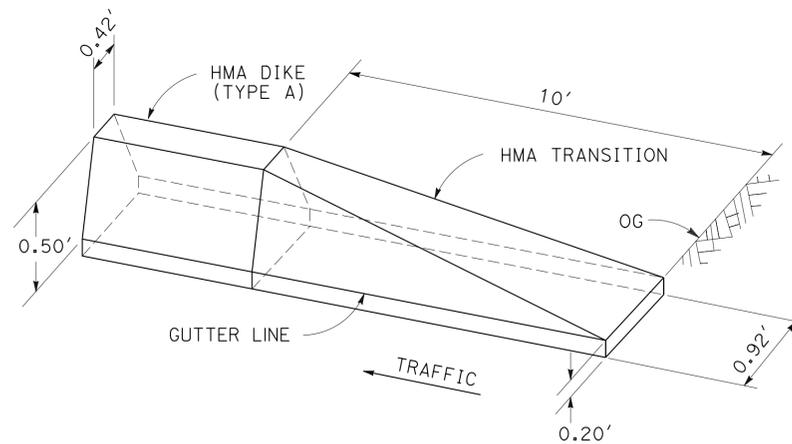
- FOR DIMENSIONS NOT SHOWN, SEE STANDARD PLAN RSP A87B.
- FOR LOCATIONS, LENGTH AND TYPE OF PLACE HMA DIKE, SEE SHEET Q-2.



**HMA DIKE (TYPE E)
APPROACH TRANSITION**



HMA DIKE (TYPE A) TO HMA DIKE (TYPE E)



**HMA DIKE (TYPE A)
APPROACH TRANSITION**

HMA DIKE TRANSITION DETAILS

CONSTRUCTION DETAILS

NO SCALE

C-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR
 FERMIN BARRIGA

CALCULATED-DESIGNED BY
 CHECKED BY

SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ

REVISED BY
 DATE REVISED

REVISIONS

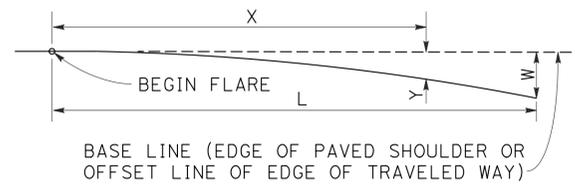


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	16	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

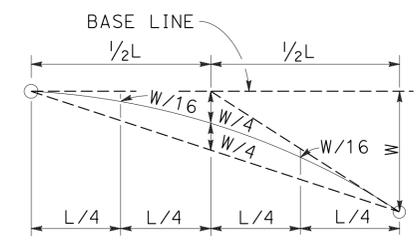
- LINE POST, BLOCKS AND HARDWARE TO BE USED ARE SHOWN ON REVISED STANDARD PLANS RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 AND RSP A77N2.
- MGS POST SPACING TO BE 6'-3" CENTER TO CENTER, EXCEPT AS OTHERWISE NOTED.
- EXCEPT AS NOTED, LINE POSTS ARE 6" X 8" X 6'-0" WOOD WITH 6" X 12" X 1'-2" WOOD BLOCKS. W6 X 8.5 OR W6 X 9 STEEL POSTS, 6'-0" IN LENGTH, WITH 6" X 12" X 1'-2" NOTCHED WOOD BLOCKS OR NOTCHED RECYCLED PLASTIC BLOCKS MAY BE USED FOR 6" X 8" X 6'-0" WOOD LINE POSTS WITH 6" X 12" X 1'-2" WOOD BLOCKS WHERE APPLICABLE AND WHEN SPECIFIED.
- TYPE 12EE LAYOUT IS TYPICALLY USED TO THE RIGHT OF TRAFFIC DEPARTING A STRUCTURE ON TWO-WAY CONVENTIONAL HIGHWAYS WHERE THE ROADBED WIDTH ACROSS THE STRUCTURE IS EQUAL TO OR GREATER THAN 40 FEET AND MGS IS RECOMMENDED (EMBANKMENT HEIGHT, SIDE SLOPES, OTHER FIXED OBJECTS). LENGTH OF RAILING TO BE EQUAL TO MULTIPLES OF 12'-6". FOR MGS CONNECTION DETAILS TO BRIDGE RAIL, SEE REVISED STANDARD PLANS RSP A77U1.
- THE 15:1 OR FLATTER FLARE FOR TYPE 12EE LAYOUT IS BASED ON THE EDGE OF THE PAVED SHOULDER OR OFFSET LINE OF EDGE OF THE TRAVELED WAY. THE LENGTH OF MGS WITHIN THE 15:1 OR FLATTER FLARE IS BASED ON SITE CONDITIONS AND SHOULD BE A LENGTH EQUAL TO MULTIPLES OF 12'-6".
- FOR DETAILS OF THE BURIED POST END ANCHOR USED WITH TYPE 12EE LAYOUT, SEE REVISED STANDARD PLAN RSP A77T2.
- WHERE PLACEMENT OF DIKE IS REQUIRED WITH MGS INSTALLATIONS, SEE REVISED STANDARD PLAN RSP A77N4 FOR DIKE POSITIONING DETAILS.
- FOR ADDITIONAL DETAILS OF A TYPICAL CONNECTION TO BRIDGE RAIL FOR LAYOUT TYPE 12EE, SEE CONNECTION DETAIL BB ON REVISED STANDARD PLAN RSP A77U1.
- FOR TYPICAL FLARE OFFSETS FOR 25'-0" LENGTH PARABOLA WITH MAXIMUM OFFSET OF 1'-0", SEE REVISED STANDARD PLAN RSP A77P1.



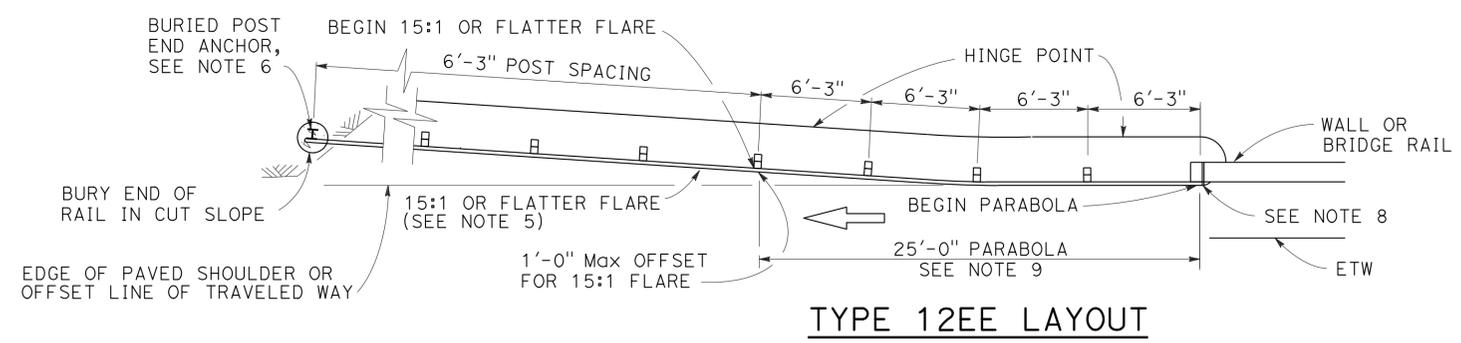
$$Y = \frac{WX^2}{L^2}$$

Y = OFFSET FROM BASE LINE
 W = MAXIMUM OFFSET
 X = DISTANCE ALONG BASE LINE
 L = LENGTH OF FLARE

PARABOLIC FLARE OFFSETS



TYPICAL PARABOLIC LAYOUT



(MGS INSTALLATION AT STRUCTURE DEPARTURE WITH A BURIED END ANCHOR TREATMENT AT TRAILING END OF RAILING) SEE NOTES 4 AND 7

**MIDWEST GUARDRAIL SYSTEM
 TYPICAL LAYOUT FOR
 STRUCTURE DEPARTURE**

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	G20-1 [Spec] (7)		60" x 30"	ROAD WORK NEXT 7 MILES	2 - 4" x 6"	2
(B)		C40(Mod)	72" x 42"	TRAFFIC FINES DOUBLED IN WORK ZONES	2 - 4" x 6"	2
(C)	W20-1	C23	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	14
(D)	G20-2	C14	36" x 18"	END ROAD WORK	1 - 4" x 4"	14
(E)		C14	48" x 24"	END ROAD WORK	1 - 4" x 6"	2

SIGN DETAILS

(A) G20-1 [Spec] (7)

**ROAD WORK
NEXT 7 MILES**

6" C
SERIES
LETTERS

60"X30"
RETROREFLECTIVE ORANGE
BACKGROUND WITH BLACK
LEGEND AND BORDER.

(B) C40(Mod) (CA)

**TRAFFIC FINES
DOUBLED IN
WORK ZONES**

6" D
SERIES
LETTERS

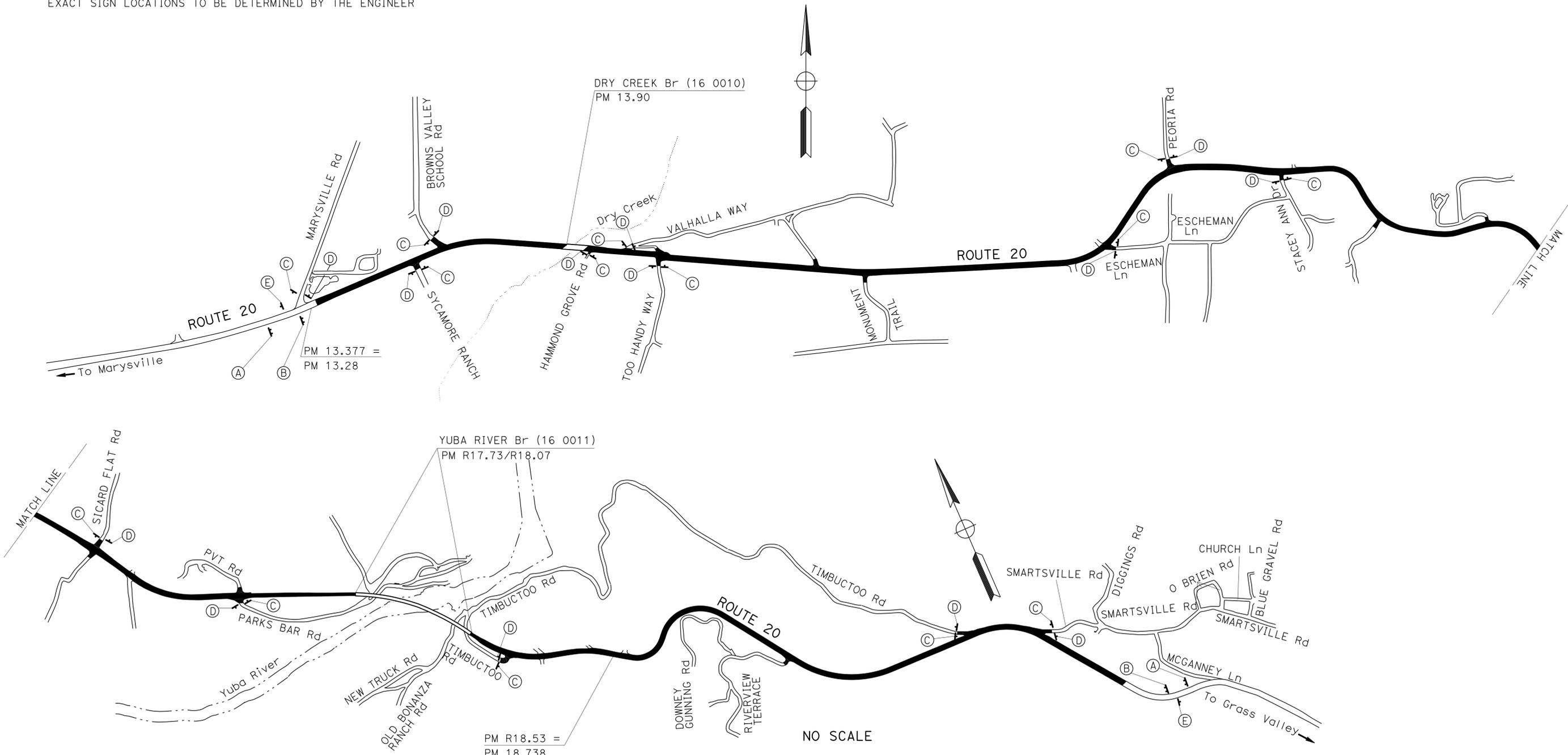
72"X42"
RETROREFLECTIVE WHITE
BACKGROUND WITH BLACK
LEGEND AND BORDER.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	17	65

5-12-14
 REGISTERED CIVIL ENGINEER DATE
 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.

SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

NOTE:
EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER



CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION
 DIVISION OF ENGINEERING
 Fermin Barriga
 Functional Supervisor
 John Keber
 SALAHUDDIN CHOWDHURY
 REVISOR
 DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	18	65

SALAHUDDIN CHOWDHURY		5-12-14
REGISTERED CIVIL ENGINEER	DATE	
5-12-14		
PLANS APPROVAL DATE		

SALAHUDDIN CHOWDHURY	
No. C75140	Exp. 12-31-15
CIVIL	

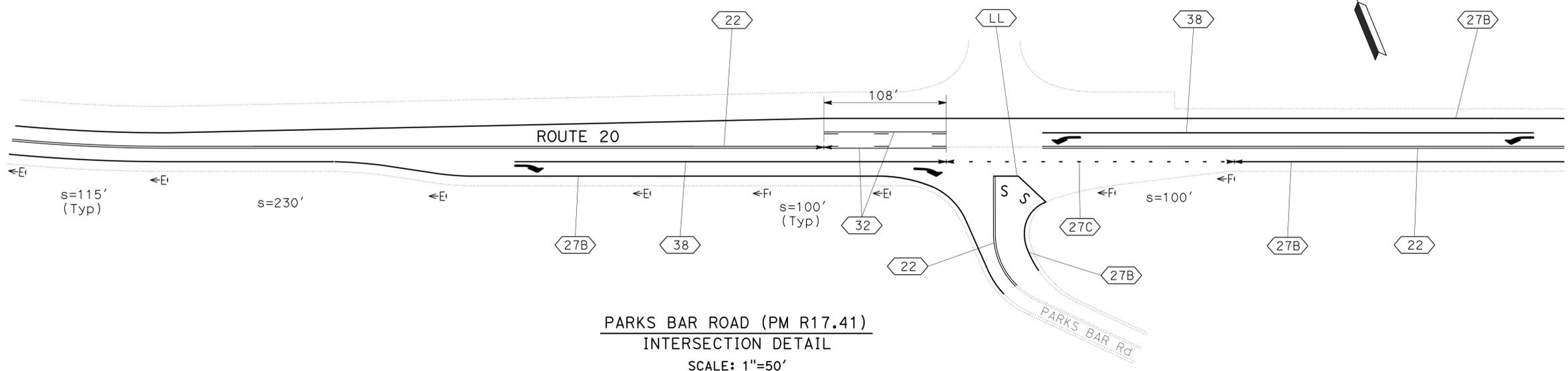
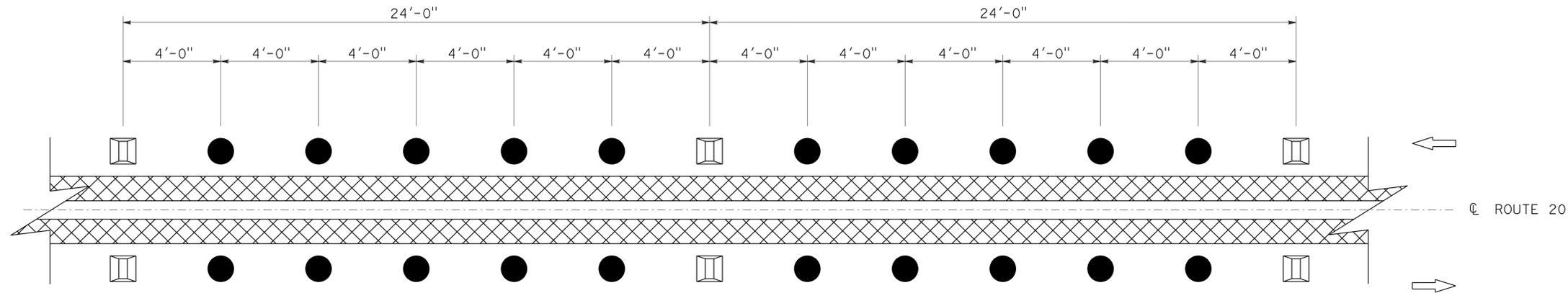
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. REPLACE THE EXISTING LEFT TURN LANE ON THE WEST SIDE OF THE INTERSECTION WITH A TWO-WAY LEFT TURN LANE AS SHOWN.
2. ALL LANES SHALL BE 12' WIDE.
3. SEE PDQ-2, PDQ-3 AND PDQ-4 FOR PAVEMENT DELINEATION QUANTITIES.
4. REMOVE EXISTING PAVEMENT MARKERS ON BRIDGES PRIOR TO PLACING NEW PAVEMENT MARKERS.

LEGEND

- BLACK NON-REFLECTIVE MARKER
- ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
- ▨ 4" YELLOW THERMOPLASTIC STRIPE (EWNV)
- ⬠(No.) PAVEMENT DELINEATION DETAIL NUMBER
- ⬠(LL) LIMIT LINE
- TYPE III ARROW
- S "STOP" PAVEMENT MARKING
- LIMIT OF STRIPING PATTERN
- ⬠(E) DELINEATOR (CLASS 1) - TYPE E
- ⬠(F) DELINEATOR (CLASS 1) - TYPE F
- S= DELINEATOR SPACING



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 JOHN KEBER
 SALAHUDDIN CHOWDHURY
 REVISOR BY DATE REVISOR BY DATE
 CALCULATED-DISIGNED BY CHECKED BY
 REVISIONS: x x x x x

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

PAVEMENT DELINEATION DETAILS
PDD-1

DATE PLOTTED => 05-JUN-2014
 TIME PLOTTED => 15:03
 LAST REVISION 04-28-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	19	65

REGISTERED CIVIL ENGINEER DATE 5-12-14

PLANS APPROVAL DATE 5-12-14

REGISTERED PROFESSIONAL ENGINEER SALAHUDDIN CHOWDHURY No. C75140 Exp. 12-31-15 CIVIL STATE OF CALIFORNIA

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

ABBREVIATION:
EWNV - ENHANCED WET NIGHT VISIBILITY

- NOTES:**
- EXISTING CENTERLINE STRIPING GAPS FOR PRIVATE ROADS/DRIVEWAYS SHALL REMAIN AT LEFT TURN CHANNELIZATION LOCATIONS.
 - PM IS APPROXIMATE. EXACT LOCATION (START AND END) OF STRIPING DETAILS TO BE DETERMINED BY THE ENGINEER.
 - SEE CONSTRUCTION DETAILS C-9 FOR CENTERLINE RUMBLE STRIP WITH TRAFFIC CENTERLINES DETAIL 22, DETAIL 19 AND DETAIL 6.
 - REPLACE THE EXISTING DETAIL 27C BEFORE AND AFTER THE HISTORIC MONUMENT-RT AT PM 14.89 WITH DETAIL 27B.
 - SEE SHEET PDD-1 FOR REPLACING THE LEFT TURN LANE TO THE PRIVATE DRIVEWAY AT THE PARKS BAR Rd INTERSECTION WITH A TWO-WAY LEFT TURN LANE.
 - REPLACE THE EXISTING DETAIL 19 (NO PASSING ZONE IN EB DIRECTION) BETWEEN PM 13.30 AND PM 13.50 WITH DETAIL 22.

PAVEMENT DELINEATION QUANTITIES

POST MILE Yub-20	(N)	4" THERMOPLASTIC TRAFFIC STRIPE (EWNV)					4" THERMOPLASTIC TRAFFIC STRIPE (EWNV)				8" THERMO-PLASTIC TRAFFIC STRIPE (EWNV)	PAVEMENT MARKER (RETRO-REFLECTIVE)			PAVEMENT MARKER (BLACK NON-REFLECTIVE)	CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	COMMENTS
		BROKEN 36-12		BROKEN 12-3	SOLID			SOLID	TYPE D	TYPE G	TYPE H						
		DETAIL 6	DETAIL 12	DETAIL 19	DETAIL 32	DETAIL 27C	DETAIL 19	DETAIL 27B				DETAIL 22	DETAIL 32	DETAIL 38			
LENGTH	FT	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	STA		
PM TO PM	FT	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	STA		
13.30 -- 13.50	1056								2,112		90				10.56	NO PASSING ZONES- TWO DIRECTIONS FROM START CONSTRUCTION UP TO SYCAMORE RANCH-RT.	
EB-13.30 -- EB-13.54	1267					252		1,015								EB RIGHT EDGELINE (DETAIL 27C THROUGH SYCAMORE RANCH-RT AT PM 13.51).	
WB-13.30 -- WB-13.59	1531					127		1,404								WB RIGHT EDGELINE (DETAIL 27C THROUGH BROWNS VALLEY SCHOOL Rd-LT AT PM 13.58).	
13.58 AT B.V. SCHOOL Rd-LT	39									78						CENTERLINE (DETAIL 22) AT BROWNS VALLEY SCHOOL Rd -LT UP TO CONFORM AT R/W.	
13.50 -- 13.69	1003								1,862		80				9.31	NO PASSING ZONES-TWO DIRECTIONS. 36' CENTERLINE GAPS AT BOTH SYCAMORE RANCH AND BV SCHOOL Rd.	
13.69 -- 13.93	1267			1267							28		56		12.67	NO PASSING ZONE FROM WB DIRECTION UP TO DRY CREEK Br (16 0010).	
EB-13.54 -- EB-13.93	2059							2,059								EB RIGHT EDGELINE UP TO BEGIN DRY CREEK BRIDGE (16 0010).	
WB-13.59 -- WB-13.93	1795							1,795								WB RIGHT EDGELINE UP TO BEGIN DRY CREEK BRIDGE (16 0010).	
13.93 -- 13.99	316								632		28			132		CENTERLINE AT DRY CREEK BRIDGE (16 0010). REMOVE EXISTING PAVEMENT MARKERS. SEE SHEET PDD-1.	
EB-13.93 -- EB-13.99	316							316								EB RIGHT EDGELINE AT DRY CREEK BRIDGE (16 0010).	
WB-13.93 -- WB-13.99	316							316								WB RIGHT EDGELINE AT DRY CREEK BRIDGE (16 0010).	
13.99 -- 14.14	792								1,386		60				6.93	CENTERLINE STRIPING GAP AT HAMMOND GROVE Rd (35'), VALHALLA WY (28') AND TOO HANDY WY (36').	
EB-13.99 -- EB-14.15	845					349		496								EB RT EDGELINE-DETAIL 27C THROUGH HAMMOND GROVE Rd-RT(235') AND TOO HANDY WAY-RT (114').	
WB-13.99 -- WB-14.15	845					158		687								WB RIGHT EDGELINE (DETAIL 27C THROUGH VALHALLA WAY-LT).	
14.14 --14.21	370			370							8		16		3.70	NO PASSING ZONES IN WB DIRECTION (START AFTER TOO HANDY WAY-RT UP TO DRIVEWAY-RT AT PM 14.21).	
14.21 --14.48	1426	1426									31				14.26	CENTERLINE (DETAIL 6) STRIPING.	
14.48 --14.71	1215			1215							26		52		12.15	NO PASSING ZONES FROM EB DIRECTION UP TO MONUMENT TRAIL-RT.	
14.71 --14.92	1109			1109							24		48		11.09	NO PASSING ZONES FROM WB DIRECTION PAST HISTORIC MONUMENT RT.	
14.92 --15.10	950			950							20		40		9.50	NO PASSING ZONES FROM EB DIRECTION. NO PASSING ZONES-TWO DIRECTION (DETAIL 22) START.	
15.10 --15.56	2429								4,694		198				23.47	NO PASSING ZONES-TWO DIRECTION. 82' STRIPING (DETAIL 22) GAP AT ESCHEMAN LANE RT.	
15.56 --15.63	392								1,588		68				3.92	DOUBLE DETAIL 22 (ISLAND), 392' CENTERLINE LENGTH.	
15.63 --15.66	138								276		14				1.38	NO PASSING ZONES-TWO DIRECTIONS UP TO PEORIA Rd-LT. 75' STRIPING GAP AT PEORIA Rd-LT INTERSECTION.	
EB-15.63 --EB-15.65	100									100		5				EB LT CHANNELIZING LINE (EB LT TURN TO PEORIA Rd).	
EB-14.15 --EB-14.92	4066							4,066								EB RIGHT EDGELINE.	
EB-14.92 --EB-15.66	3907					202		3,705								EB RIGHT EDGELINE (DETAIL 27C THROUGH ESCHEMAN LANE- RT).	
WB-14.15 --WB-15.69	8132					165		7,967								WB RIGHT EDGELINE (DETAIL 27C THROUGH PEORIA Rd- LT).	
15.66 AT PEORIA Rd -LT	78								156		8					CENTERLINE (DETAIL 22) AT PEORIA Rd -LT UP TO CONFORM AT R/W.	
15.66 --15.73	330								1,340		60				3.30	330' DOUBLE DETAIL 22 (ISLAND) PAST PEORIA Rd.	
EB-15.66 --EB-15.98	1690					134		1,556								EB RIGHT EDGELINE (DETAIL 27C THROUGH STACEY ANN Dr- RT).	
15.95 AT STACEY ANN Dr-LT	105								208		10					CENTERLINE (DETAIL 22) AT STACEY ANN Dr -RT UP TO CONFORM AT R/W.	
WB-15.69--WB-16.62	4911							4,911								WB RIGHT EDGELINE UP TO STEFFEN TRAIL-LT.	
15.73 --16.83	5808								11,456		480				57.28	NO PASSING ZONES-TWO DIRECTIONS (DOUBLE DETAIL 22 START). 80' GAP AT STACEY ANN Dr INTERSECTION.	
EB-15.69 --EB-16.00	1637		1557									34				EB PASSING LANELINE AFTER PEORIA Rd TO PAST STACEY ANN Dr-RT. 80' GAP AT INTERSECTION.	
EB-15.92 --EB-15.95	144									144		7				EB CHANNELIZING LINE (RT TURN TO STACEY ANN Dr-RT).	
WB-16.49 --WB-R17.01	2745		2660									56				WB PASSING LANELINE UP TO PAST SICARD FLAT Rd-LT. 85' GAP AT SICARD FLAT Rd INTERSECTION.	
16.83 --16.92	451								1,824		80				4.51	DOUBLE DETAIL 22 (ISLAND), SICARD FLAT Rd-LT INTERSECTION AHEAD.	
SUBTOTAL THIS SHEET		1426	4217	4911		1387	4911	30,293	27,612		244	1319	102	212	132	184.03	

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

PAVEMENT DELINEATION QUANTITIES
PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION DIVISION OF ENGINEERING
FERMIN BARRIGA
CALCULATED-DRAWN BY
CHECKED BY
SALAHUDDIN CHOWDHURY
JOHN KEBER
REVISOR BY
DATE REVISED

DATE PLOTTED => 05-JUN-2014
TIME PLOTTED => 15:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	21	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. REPLACE ALL EXISTING TYPE V ARROWS WITH TYPE I (24'-0") ARROWS EXCEPT AS NOTED IN NOTE 2 BELOW.
2. DO NOT REPLACE THE EXISTING TYPE V ARROWS IN THE TWO EB LANES AT THE TIMBUCTOO Rd INTERSECTION.
3. DO NOT REPLACE THE EXISTING TYPE III (L) ARROW AT EB LT TURN LANE TO THE PRIVATE DRIVEWAY AT THE PARKS BAR Rd INTERSECTION.

ABBREVIATION:

EWNV- ENHANCED WET NIGHT VISIBILITY

PAVEMENT MARKINGS

LOCATION Yub-20	THERMOPLASTIC PAVEMENT MARKING (EWNV)						DESCRIPTION	
	ARROWS				WORD	LIMIT LINE		
	TYPE I 24'-0"	TYPE III (L+)	TYPE III (R+)	TYPE VI	"STOP"			
	SQFT				SQFT	SQFT		
WB-PM 13.58 AT BROWNS VALLEY SCHOOL Rd-LT					22	27	1 "STOP" AND 27 FT LIMIT LINE AT BROWNS VALLEY SCHOOL Rd-LT.	
EB-PM 13.97 AT HAMMOND GROVE Rd-RT					22	23	1 "STOP" AND 23 FT LIMIT LINE AT HAMMOND GROOVE Rd-RT.	
WB-PM 14.10 AT VALHALLA WAY-LT					22	19	1 "STOP" AND 19 FT LIMIT LINE AT VALHALLA WAY-LT.	
EB-PM 14.71 AT MONUMENT TRAIL-RT					22	35	1 "STOP" AND 35 FT LIMIT LINE AT MONUMENT TRAIL-RT.	
EB-PM 15.39 AT ESCHEMAN LANE-RT					22	32	1 "STOP" AND 32 FT LIMIT LINE AT ESCHEMAN LANE -RT.	
EB-PM 15.65 WEST OF PEORIA Rd-LT		42					1 TYPE III (L) ARROW AT EB LT TURN LANE TO PEORIA Rd.	
EB-PM 15.66 AT PEORIA Rd-LT					22	29	1 "STOP" AND 29 FT LIMIT LINE AT PEORIA Rd.	
EB-PM 15.92 WEST OF STACEY ANN Dr-RT			42				1 TYPE III (R) ADVANCE ARROW AT EB RT TURN LANE TO STACEY ANN Dr.	
EB-PM 15.94 WEST OF STACEY ANN Dr-RT			42				1 TYPE III (R) ARROW AT EB RT TURN LANE TO STACEY ANN Dr.	
EB-PM 15.95 AT STACEY ANN Dr-RT					22	34	1 "STOP" AND 34 FT LIMIT LINE AT STACEY ANN Dr.	
EB-PM 15.99 EAST OF STACEY ANN Dr-RT				42			1 TYPE VI EB PASSING LANE DROP ADVANCE ARROW PAST STACEY ANN Dr.	
EB-PM 16.00 EAST OF STACEY ANN Dr-RT				42			1 TYPE VI EB PASSING LANE DROP ARROW PAST STACEY ANN Dr.	
WB-PM 16.49 WEST OF STEFFEN TRAIL-LT				42			1 TYPE VI WB PASSING LANE DROP ARROW.	
WB-PM 16.52 WEST OF STEFFEN TRAIL-LT				42			1 TYPE VI WB PASSING LANE DROP ADVANCE ARROW.	
WB-PM 16.55 WEST OF STEFFEN TRAIL-LT				42			1 TYPE VI WB PASSING LANE DROP ADVANCE ARROW.	
EB-PM 16.93 WEST OF SICARD FLAT Rd-LT		42					1 TYPE III (L) ADVANCE ARROW AT EB LT TURN LANE TO SICARD FLAT Rd-LT.	
EB-PM 16.95 WEST OF SICARD FLAT Rd-LT		42					1 TYPE III (L) ARROW AT EB LT TURN LANE TO SICARD FLAT Rd-LT.	
WB-PM 16.98 AT SICARD FLAT Rd-LT					44	37	2 "STOP" AND 37 FT LIMIT LINE AT SICARD FLAT Rd-LT.	
WB-PM R17.01 EAST OF SICARD FLAT Rd-LT		42					1 TYPE III (L) ARROW AT WB LT TURN TO STACEY ANNE Rd.	
WB-PM R17.03 EAST OF SICARD FLAT Rd-LT	62						2 TYPE I (24'-0") ARROWS AT WB LANE LINE.	
WB-PM R17.05 EAST OF SICARD FLAT Rd-LT		42					1 TYPE III (L) ADVANCE ARROW AT WB LT TURN LANE TO STACEY ANNE Rd.	
EB-PM R17.34 WEST OF PARKS BAR Rd-RT			42				1 TYPE III (R) ADVANCE ARROW AT EB RT TURN LANE TO PARKS BAR Rd-RT.	
EB-PM R17.41 WEST OF PARKS BAR Rd-RT			42				1 TYPE III (R) ARROW AT EB RT TURN LANE TO PARKS BAR Rd-RT.	
EB-PM R17.41 AT PARKS BAR Rd-RT					44	45	2 "STOP" AND 45 FT LIMIT LINE AT PARKS BAR Rd-RT.	
WB-PM R17.42 EAST OF PVT Rd-LT		42					1 TYPE III (L) ARROW AT WB LT TURN LANE TO PARKS BAR Rd-RT.	
WB-PM R17.50 EAST OF PVT Rd-LT		42					1 TYPE III (L) ADVANCE ARROW AT WB LT TURN LANE TO PARKS BAR Rd-RT.	
EB-PM R18.13 EAST OF YUBA RIVER BRIDGE	62						2 TYPE I (24'-0") EB ADVANCE THROUGH TRAFFIC ARROWS FOR EB PASSING LANE EAST SIDE OF YUBA RIVER BRIDGE.	
EB-PM R18.19 AT TIMBUCTOO Rd-RT					44	31	2 "STOP" AND 31 FT LIMIT LINE AT TIMBUCTOO Rd-RT.	
WB-PM R18.20 EAST OF TIMBUCTOO Rd		42					1 TYPE III (L) ARROW AT WB LT TURN LANE TO TIMBUCTOO Rd (PM R18.19).	
WB-PM R18.25 EAST OF TIMBUCTOO Rd		42					1 TYPE III (L) ADVANCE ARROW AT WB LT TURN LANE TO TIMBUCTOO Rd (PM R18.19).	
EB-PM R18.38 EAST OF TIMBUCTOO Rd				42			1 TYPE VI EB PASSING LANE DROP ADVANCE ARROW.	
EB-PM R18.42 EAST OF TIMBUCTOO Rd				42			1 TYPE VI EB PASSING LANE DROP ADVANCE ARROW.	
EB-PM R18.46 EAST OF TIMBUCTOO Rd				42			1 TYPE VI EB PASSING LANE DROP ARROW. EB PASSING LANE ENDS.	
EB-PM 19.28 AT RIVERVIEW TERRACE-RT					22	28	1 "STOP" AND 28 FT LIMIT LINE AT RIVERVIEW TERRACE-RT.	
WB-PM 19.82 AT TIMBUCTOO Rd-LT					44	69	2 "STOP" AND 69 FT LIMIT LINE AT TIMBUCTOO Rd-LT.	
WB-PM 19.99 AT SMARTSVILLE Rd-LT					22	37	1 "STOP" AND 37 FT LIMIT LINE AT SMARTSVILLE Rd-LT.	
TOTAL	124	378	168	336	374	446		
GRAND TOTAL							1826	FROM PM 13.3 TO PM 20.3

PAVEMENT DELINEATION QUANTITIES

PDQ-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 Salahuddin Chowdhury
 JOHN KEBER
 FERMIN BARRIGA

DATE PLOTTED => 05-JUN-2014 TIME PLOTTED => 15:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	22	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE

5-12-14
 PLANS APPROVAL DATE

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

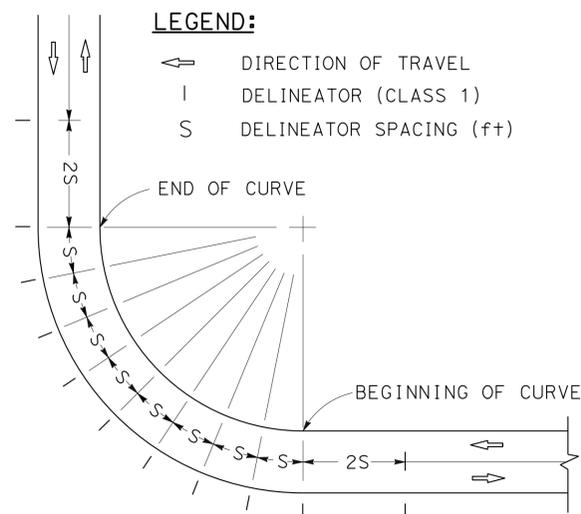
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

NOTE:

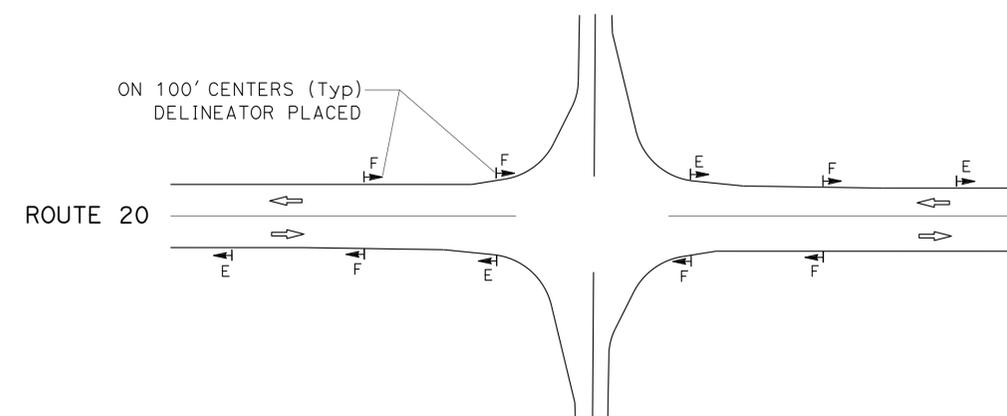
1. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

DELINEATOR

COUNTY ROUTE	POST MILE	LOCATION	DELINEATOR (CLASS 1)		DELINEATOR SPACING (FT)	
			TYPE E (EA)	TYPE F (EA)		
Yub-20	PM 13.51 FEBT	SYCAMORE RANCH-RT INTERSECTION	2	3	100	
	PM 13.54 TO PM 13.75 FWBT	ON CURVE FWBT	10		130	
	PM 14.01 FEBT	HAMMOND GROVE Rd-RT INTERSECTION	1	2	100	
	PM 14.05 FWBT	VALHALLA WAY-LT INTERSECTION	2	3	100	
	PM 14.14 FEBT	TOO HANDY WAY-RT INTERSECTION	2	3	100	
	PM 15.20 TO PM 15.49 FEBT	ON CURVE FEBT	13		90	
	PM 15.53 TO PM 15.79 FWBT	ON CURVE FWBT	12		85	
	PM 15.85 TO PM 16.06 FEBT	STACEY ANN Dr-RT INTERSECTION AND ON CURVE FEBT	4	3	160	
	PM 16.07 TO PM 16.23 FWBT	ON CURVE FWBT	16		40	
	PM 16.20 TO PM 16.42 FEBT	ON CURVE FEBT	11		80	
	PM 16.45 TO PM 16.57 FEBT	ON CURVE FEBT	6		95	
	PM 16.38 TO PM 16.49 FWBT	ON CURVE AT LANE DROP FWBT		4	175	
	PM 16.55 TO PM 16.79 FWBT	ON CURVE FWBT	15		80	
	PM 16.98 FWBT	SICARD FLAT Rd-LT INTERSECTION	2	3	100	
	PM R17.06 TO R17.30 FEBT	ON CURVE FEBT	10		115	
	PM R17.41 FEBT	PARKS BAR Rd-RT INTERSECTION	2	3	100	
	PM R17.62 TO R17.68 FWBT	ON CURVE FWBT	2		320	
	PM R18.13 TO R18.38 FEBT	ON CURVE FEBT	11		110	
	PM R18.31 TO R18.50 FWBT	ON CURVE FWBT	7		110	
	PM R18.47 TO R18.50 FEBT	ON CURVE FEBT	2		155	
	PM R18.51 TO 18.88 FEBT	ON CURVE FEBT	18		40	
	PM 18.87 TO PM 19.08 FWBT	ON CURVE FWBT	28		40	
	PM 19.25 TO PM 19.60 FEBT	ON CURVE FEBT	16		110	
	PM 19.78 TO PM 19.80 FWBT	WEST SIDE OF TIMBUCTOO Rd INTERSECTION FWBT		2	100	
	PM 19.84 TO PM 19.99 FWBT	ON CURVE FWBT	10		90	
	PM 20.04 TO PM 20.08 FWBT	EAST OF SMARTSVILLE Rd-LT INTERSECTION FWBT	2	1	100	
	SUBTOTAL			204	27	
	TOTAL (PM 13.3 TO 20.3)			231		



DELINEATOR SPACING ON CURVES



TYPICAL DELINEATOR PLACEMENT AT INTERSECTIONS

PAVEMENT DELINEATION QUANTITIES

PDQ-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 FERMIN BARRIGA
 SALAHUDDIN CHOWDHURY
 JOHN KEBER
 REVISOR BY DATE REVISOR BY DATE
 CALCULATED-DESIGNED BY CHECKED BY
 FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 DIVISION OF ENGINEERING

SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ

CALCULATED-DESIGNED BY
 CHECKED BY

FUNCTIONAL SUPERVISOR
 FERMIN BARRIGA

REVISOR BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	23	65

Registered Civil Engineer: *Salahuddin Chowdhury* 5-12-14
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE: 5-12-14

No. C75140
 Exp. 12-31-15
 CIVIL

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

NOTES:

- FOR RHMA-G AND RHMA-O CONFORM LOCATIONS AT CROSS ROADS, SEE CONSTRUCTION DETAILS C-4 TO C-8.
- FOR DIMENSIONS OF EB/WB DRIVEWAYS AND CONFORM DETAILS, SEE CONSTRUCTION DETAILS C-3.
- QUANTITY OF RHMA-G TO PLACE SAFETY EDGE IS INCLUDED IN RHMA-G QUANTITY SHOWN IN TABLE BELOW.

**RUBBERIZED HOT MIX ASPHALT
(GAP GRADED)**

TABLE -1

YUB-20	LOCATION	RHMA-G
		TON
MAINLINE (EP TO EP)	EB/WB ROUTE 20 PM 13.3 TO PM 13.5	477
	EB/WB ROUTE 20 PM 13.5 TO PM 13.9	953
	EB/WB ROUTE 20 PM 13.96 TO PM 14.0	94
	EB/WB ROUTE 20 PM 14.0 TO PM 14.5	1193
	EB/WB ROUTE 20 PM 14.5 TO PM 15.0	1588
	EB/WB ROUTE 20 PM 15.0 TO PM 15.5	1382
	EB/WB ROUTE 20 PM 15.5 TO PM 16.0	2106
	EB/WB ROUTE 20 PM 16.0 TO PM 16.5	1748
	EB/WB ROUTE 20 PM 16.5 TO PM 17.0	2512
	EB/WB ROUTE 20 PM 17.0 TO PM R17.73	3773
	EB/WB ROUTE 20 PM R18.07 TO PM R18.53	2889
	PM R18.53 EQUATES TO PM 18.738	
	EB/WB ROUTE 20 PM 18.74 TO PM 19.0	640
	EB/WB ROUTE 20 PM 19.0 TO PM 19.5	1192
	EB/WB ROUTE 20 PM 19.5 TO PM 20.0	1191
EB/WB ROUTE 20 PM 20.0 TO PM 20.3	824	
EB CROSS ROADS AND DRIVEWAYS	EB DRIVEWAY AT PM 13.46	19
	EB SYCAMORE RANCH AT PM 13.51	35
	EB HAMMOND GROVE ROAD AT PM 13.97	35
	EB TOO HANDY WAY AT PM 14.14	29
	EB DRIVEWAY AT PM 14.21	14
	EB DRIVEWAY AT PM 14.31	21
	EB MONUMENT TRAIL AT PM 14.71	24
	EB DRIVEWAY AT PM 15.28	39
	EB ESCHEMAN LANE AT PM 15.39	42
	EB DRIVEWAY AT PM 15.45	14
	EB DRIVEWAY AT PM 15.48	27
	EB DRIVEWAY AT PM 15.55	18
	EB STACEY ANN DRIVE AT PM 15.95	57
	EB LIBBY LANE AT PM 16.31	17
	EB DRIVEWAY AT PM 16.66	15
	EB STACEY ANNE ROAD AT PM 16.98	31
	EB DRIVEWAY AT PM R17.09	37
	EB PARKS BAR ROAD AT PM R17.41	155
	EB TIMBUCTOO ROAD AT PM R18.19	55
	EB DRIVEWAY AT PM R18.30	30
EB DRIVEWAY AT PM 18.89	24	
EB DRIVEWAY AT PM 19.18	19	
EB RIVERVIEW TERRACE AT PM 19.28	100	
SUBTOTAL (TABLE -1)		23,419

**RUBBERIZED HOT MIX ASPHALT
(GAP GRADED)**

TABLE -2

YUB-20	LOCATION	RHMA-G
		TON
WB CROSS ROADS AND DRIVEWAYS	WB BROWNS VALLEY SCHOOL Rd AT PM 13.58	31
	WB VALHALLA WAY AT PM 14.10	27
	WB DRIVEWAY AT PM 14.14	23
	WB DRIVEWAY AT PM 14.31	21
	WB VALHALLA WAY AT PM 14.58	29
	WB DRIVEWAY AT PM 15.43	47
	WB PEORIA ROAD AT PM 15.66	82
	WB DRIVEWAY AT PM 15.97	17
	WB DRIVEWAY AT PM 16.0	20
	WB STEFFEN TRAIL AT PM 16.60	22
	WB SICARD FLAT ROAD AT PM 16.98	47
	WB DRIVEWAY AT PM R17.09	38
	WB PVT ROAD AT PM R17.41	58
	WB DRIVEWAY AT PM R18.30	57
	WB DRIVEWAY AT PM R18.42	55
	WB DRIVEWAY AT PM R18.51	24
	WB DRIVEWAY AT PM 19.27	14
	WB TIMBUCTOO ROAD AT PM 19.82	163
	WB LOWER SMARTVILLE ROAD AT PM 19.99	106
	SUBTOTAL (TABLE -2)	
SUBTOTAL (TABLE -1)		23,419
TOTAL (PM 13.3 TO PM 20.3)		24,300

PREPAVING GRINDING DAY

TOTAL 3 EACH

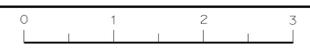
**RUBBERIZED HOT MIX ASPHALT
(OPEN GRADED)**

YUB-20	LOCATION	RHMA-O
		TON
MAINLINE (EP TO EP)	EB/WB ROUTE 20 PM 13.3 TO PM 13.5	204
	EB/WB ROUTE 20 PM 13.5 TO PM 13.9	408
	EB/WB ROUTE 20 PM 13.96 TO PM 14.0	41
	EB/WB ROUTE 20 PM 14.0 TO PM 14.5	510
	EB/WB ROUTE 20 PM 14.5 TO PM 15.0	681
	EB/WB ROUTE 20 PM 15.0 TO PM 15.5	592
	EB/WB ROUTE 20 PM 15.5 TO PM 16.0	906
	EB/WB ROUTE 20 PM 16.0 TO PM 16.5	753
	EB/WB ROUTE 20 PM 16.5 TO PM 17.0	1082
	EB/WB ROUTE 20 PM 17.0 TO PM R17.73	1627
	EB/WB ROUTE 20 PM R18.07 TO PM R18.53	1249
	PM R18.53 EQUATES TO PM 18.738	
	EB/WB ROUTE 20 PM 18.74 TO PM 19.0	275
	EB/WB ROUTE 20 PM 19.0 TO PM 19.5	510
	EB/WB ROUTE 20 PM 19.5 TO PM 20.0	510
EB/WB ROUTE 20 PM 20.0 TO PM 20.3	355	
EB CROSS ROADS	EB SYCAMORE RANCH AT PM 13.51	16
	EB HAMMOND GROVE ROAD AT PM 13.97	9
	EB TOO HANDY WAY AT PM 14.14	8
	EB MONUMENT TRAIL AT PM 14.71	9
	EB ESCHEMAN LANE AT PM 15.39	18
	EB STACEY ANN DRIVE AT PM 15.95	8
	EB LIBBY LANE AT PM 16.31	5
	EB STACEY ANNE ROAD AT PM 16.98	1
EB PARKS BAR ROAD AT PM R17.41	21	
EB TIMBUCTOO ROAD AT PM R18.19	19	
EB RIVERVIEW TERRACE AT PM 19.28	25	
WB CROSS ROADS	WB BROWNS VALLEY SCHOOL Rd AT PM 13.58	9
	WB VALHALLA WAY AT PM 14.10	9
	WB VALHALLA WAY AT PM 14.58	9
	WB PEORIA ROAD AT PM 15.66	21
	WB STEFFEN TRAIL AT PM 16.60	7
	WB SICARD FLAT ROAD AT PM 16.98	9
	WB PVT ROAD AT PM R17.41	2
WB TIMBUCTOO ROAD AT PM 19.82	73	
WB SMARTVILLE ROAD AT PM 19.99	43	
TOTAL (PM 13.3 TO PM 20.3)		10,024

SUMMARY OF QUANTITIES

NO SCALE

Q-1



NOTE:

1. EXACT LIMITS/LOCATIONS OF THE REPLACE AC SURFACING WILL BE DETERMINED BY THE ENGINEER.

ABBREVIATIONS:

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
HMA-A - HOT MIX ASPHALT (TYPE A)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	24	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE

5-12-14
 PLANS APPROVAL DATE

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

TACK COAT (TABLE 1)

LOCATION	FOR RHMA-G	FOR RHMA-O
	(TON)	(TON)
EB/WB ROUTE 20 PM 13.3 TO PM 13.5	1.54	0.98
EB/WB ROUTE 20 PM 13.5 TO PM 13.9	3.10	1.96
EB/WB ROUTE 20 PM 13.96 TO PM 14.0	0.31	0.20
EB/WB ROUTE 20 PM 14.0 TO PM 14.5	3.85	2.45
EB/WB ROUTE 20 PM 14.5 TO PM 15.0	5.13	3.27
EB/WB ROUTE 20 PM 15.0 TO PM 15.5	4.47	2.84
EB/WB ROUTE 20 PM 15.5 TO PM 16.0	6.83	4.35
EB/WB ROUTE 20 PM 16.0 TO PM 16.5	5.68	3.61
EB/WB ROUTE 20 PM 16.5 TO PM 17.0	8.16	5.19
EB/WB ROUTE 20 PM 17.0 TO PM R17.73	11.92	7.81
EB/WB ROUTE 20 PM R18.07 TO PM R18.53	9.42	5.99
PM R18.53 EQUATES TO PM 18.738		
EB/WB ROUTE 20 PM 18.74 TO PM 19.0	2.07	1.32
EB/WB ROUTE 20 PM 19.0 TO PM 19.5	3.85	2.45
EB/WB ROUTE 20 PM 19.5 TO PM 20.0	3.85	2.45
EB/WB ROUTE 20 PM 20.0 TO PM 20.3	2.68	1.71
EB DRIVEWAY AT PM 13.46	0.06	
EB SYCAMORE RANCH AT PM 13.51	0.15	0.08
EB HAMMOND GROVE ROAD AT PM 13.97	0.12	0.05
EB TOO HANDY WAY AT PM 14.14	0.10	0.04
EB DRIVEWAY AT PM 14.21	0.05	
EB DRIVEWAY AT PM 14.31	0.07	
EB MONUMENT TRAIL AT PM 14.71	0.08	0.05
EB DRIVEWAY AT PM 15.28	0.13	
EB ESCHEMAN LANE AT PM 15.39	0.14	0.10
EB DRIVEWAY AT PM 15.45	0.04	
EB DRIVEWAY AT PM 15.48	0.09	
EB DRIVEWAY AT PM 15.55	0.06	
EB STACEY ANN DRIVE AT PM 15.95	0.19	0.04
EB LIBBY LANE AT PM 16.31	0.05	0.02
EB DRIVEWAY AT PM 16.66	0.05	
EB STACEY ANNE ROAD AT PM 16.98	0.10	0.01
EB DRIVEWAY AT PM R17.09	0.12	
EB PARKS BAR ROAD AT PM R17.41	0.51	0.11
EB TIMBUCTOO ROAD AT PM R18.19	0.18	0.10
EB DRIVEWAY AT PM R18.30	0.10	
EB DRIVEWAY AT PM 18.89	0.08	
EB DRIVEWAY AT PM 19.18	0.06	
EB RIVERVIEW TERRACE AT PM 19.28	0.32	0.13
SUBTOTAL (TABLE-1)	75.71	47.31

CRACK TREATMENT

LOCATION	LANE MILE
EB ROUTE 20 PM 13.3 TO PM 20.3 INCLUDING PASSING LANE	7.05
WB ROUTE 20 PM 13.3 TO PM 20.3 INCLUDING PASSING LANE	6.92
TOTAL	13.97

TACK COAT (TABLE 2)

LOCATION	FOR RHMA-G	FOR RHMA-O
	(TON)	(TON)
WB BROWNS VALLEY SCHOOL Rd AT PM 13.58	0.11	0.05
WB VALHALLA WAY AT PM 14.10	0.09	0.05
WB DRIVEWAY AT PM 14.14	0.08	
WB DRIVEWAY AT PM 14.31	0.07	
WB VALHALLA WAY AT PM 14.58	0.10	0.05
WB DRIVEWAY AT PM 15.43	0.15	
WB PEORIA ROAD AT PM 15.66	0.27	0.11
WB DRIVEWAY AT PM 15.97	0.06	
WB DRIVEWAY AT PM 16.0	0.07	
WB STEFFEN TRAIL AT PM 16.60	0.07	0.03
WB SICARD FLAT ROAD AT PM 16.98	0.15	0.05
WB DRIVEWAY AT PM R17.09	0.12	
WB PVT ROAD AT PM R17.41	0.19	0.01
WB DRIVEWAY AT PM R18.30	0.19	
WB DRIVEWAY AT PM R18.42	0.18	
WB DRIVEWAY AT PM R18.51	0.08	
WB DRIVEWAY AT PM 19.27	0.04	
WB TIMBUCTOO ROAD AT PM 19.82	0.53	0.38
WB SMARTSVILLE ROAD AT PM 19.99	0.35	0.23
SUBTOTAL (TABLE-2)	2.90	0.96
SUBTOTAL (TABLE-1)	75.71	47.31
TOTAL (PM 13.3 TO PM 20.3)	78.61	48.27
GRAND TOTAL (PM 13.3 TO PM 20.3)	126.88	

SHOULDER BACKING

LOCATION	TON
EB/WB ROUTE 20 PM 13.3 TO 13.5	137.0
EB/WB ROUTE 20 PM 13.5 TO 13.9	271.0
EB/WB ROUTE 20 PM 13.96 TO 14.0	49.0
EB/WB ROUTE 20 PM 14.0 TO 14.5	345.0
EB/WB ROUTE 20 PM 14.5 TO 15.0	353.0
EB/WB ROUTE 20 PM 15.0 TO 15.5	322.0
EB/WB ROUTE 20 PM 15.5 TO 16.0	345.0
EB/WB ROUTE 20 PM 16.0 TO 16.5	251.0
EB/WB ROUTE 20 PM 16.5 TO 17.0	260.0
EB/WB ROUTE 20 PM 17.0 TO R17.73	256.0
EB/WB ROUTE 20 PM R18.07 TO R18.53	92.0
PM R18.53 EQUATES TO PM 18.738	
EB/WB ROUTE 20 PM 18.74 TO 19.0	178.0
EB/WB ROUTE 20 PM 19.0 TO 19.5	342.0
EB/WB ROUTE 20 PM 19.5 TO 20.0	324.0
EB/WB ROUTE 20 PM 20.0 TO 20.3	204.0
TOTAL	3729.0

REPLACE AC SURFACING

LOCATION	EASTBOUND	WESTBOUND	COMMENTS
	CY	CY	
PM 13.3 TO PM 20.3	830	820	REPLACE AC SURFACING (DIGOUTS) IS ASSUMED 20% OF TOTAL RHMA-G EB/WB LANE AREA.
SUBTOTAL	830	820	SEE NOTE 1 AND DETAILS IN C-1.
TOTAL	1,650		

REMOVE/PLACE HMA DIKE

LOCATION	DIRECTION	REMOVE AC DIKE	PLACE HMA DIKE (TYPE A)	PLACE HMA DIKE (TYPE E)	HMA-A	COMMENTS
		(LF)	(LF)	(LF)	(TON)	
ROUTE 20 PM 15.32 TO PM 15.37	WB	271	271		8.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM 15.68 TO PM 15.76	EB	432		432	13.0	Exist TYPE A DIKE REPLACE WITH TYPE E DIKE.
ROUTE 20 PM 16.17 TO PM 16.22	EB	285	285		9.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM 16.23 TO PM 16.30	WB	352		352	11.0	Exist TYPE D DIKE REPLACE WITH TYPE E DIKE.
ROUTE 20 PM 16.29 TO PM 16.53	WB	1232	1232		38.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM 16.69 TO PM 16.91	EB	1162	1162		36.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM 17.00 TO PM R17.10	EB	555	555		17.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R17.01 TO PM R17.09	WB	400	400		12.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R17.11 TO PM R17.44	WB	1731	1731		54.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R17.45 TO PM R17.47	WB	178	178		6.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R17.63 TO PM R17.73	WB	560	560		17.5	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R18.08 TO PM R18.30	WB	1024	1024		32.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
ROUTE 20 PM R18.30 TO PM R18.42	WB	858	858		27.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
PM R18.19 AT TIMBUCTOO Rd-RT	EB	30		30	1.0	Exist TYPE A DIKE REPLACE WITH TYPE E DIKE.
ROUTE 20 PM R18.26 TO PM R18.50	EB	1250	1250		39.0	REMOVE AND REPLACE EXISTING TYPE A DIKE.
TOTAL		10,320	9,506	814	323.0	

SUMMARY OF QUANTITIES

NO SCALE

Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 FERMIN BARRIGA



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	25	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE 5-12-14
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. REPLACE EXISTING HIGHWAY POST MARKERS. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

COLD PLANE AC PAVEMENT

LOCATION	(0.10' Max)	(0.20' Max)	(0.30' Max)
	(SQYD)	(SQYD)	(SQYD)
EB/WB ROUTE 20 PM 16.92 TO PM R17.73	23,970		
EB/WB ROUTE 20 PM R18.07 TO PM R18.53	14,320		
PM R18.53 EQUATES TO PM 18.738			
CONFORM EB/WB ROUTE 20 PM 13.3			174
CONFORM EB/WB ROUTE 20 PM 20.3			174
CONFORM EB SYCAMORE RANCH AT PM 13.51	37	74	
CONFORM EB HAMMOND GROVE ROAD AT PM 13.97	45	69	
CONFORM EB TOO HANDY WAY AT PM 14.14	33	24	
CONFORM EB MONUMENT TRAIL AT PM 14.71	50	100	
CONFORM EB ESCHAMAN LANE AT PM 15.39	72	102	
CONFORM EB STACEY ANN DRIVE AT PM 15.95	62	56	
CONFORM EB LIBBY LANE AT PM 16.31	38	59	
CONFORM EB STACEY ANNE ROAD AT PM 16.98	134	77	
CONFORM EB PARKS BAR ROAD AT PM R17.41	89	156	
CONFORM EB TIMBUCTOO ROAD AT PM R18.19	77	141	
CONFORM EB RIVERVIEW TERRACE AT PM 19.28	49	109	
CONFORM WB BROWNS VALLEY SCHOOL Rd AT PM 13.58	38	65	
CONFORM WB VALHALLA WAY AT PM 14.10	53	66	
CONFORM WB VALHALLA WAY AT PM 14.58	65	73	
CONFORM WB PEORIA ROAD AT PM 15.66	65	88	
CONFORM WB STEFFEN TRAIL AT PM 16.60	37	59	
CONFORM WB SICARD FLAT ROAD AT PM 16.98	82	85	
CONFORM WB PVT ROAD AT PM R17.41	89	68	
CONFORM WB TIMBUCTOO ROAD AT PM 19.82	320	84	
CONFORM WB SMARTSVILLE ROAD AT PM 19.99	159	129	
CONFORM EB DRIVEWAY AT PM 13.46		18	
CONFORM EB DRIVEWAY AT PM 14.21		13	
CONFORM EB DRIVEWAY AT PM 14.31		18	
CONFORM EB DRIVEWAY AT PM 15.28		31	
CONFORM EB DRIVEWAY AT PM 15.45		21	
CONFORM EB DRIVEWAY AT PM 15.48		39	
CONFORM EB DRIVEWAY AT PM 15.55		19	
CONFORM EB DRIVEWAY AT PM 16.66		15	
CONFORM EB DRIVEWAY AT PM R17.09		27	
CONFORM EB DRIVEWAY AT PM R18.30		14	
CONFORM EB DRIVEWAY AT PM 18.89		16	
CONFORM EB DRIVEWAY AT PM 19.18		16	
CONFORM WB DRIVEWAY AT PM 14.14		24	
CONFORM WB DRIVEWAY AT PM 14.31		16	
CONFORM WB DRIVEWAY AT PM 15.43		43	
CONFORM WB DRIVEWAY AT PM 15.97		19	
CONFORM WB DRIVEWAY AT PM 16.0		14	
CONFORM WB DRIVEWAY AT PM R17.09		23	
CONFORM WB DRIVEWAY AT PM R18.30		22	
CONFORM WB DRIVEWAY AT PM R18.42		20	
CONFORM WB DRIVEWAY AT PM R18.51		20	
CONFORM WB DRIVEWAY AT PM 19.27		13	
SUBTOTAL	39,884	2,145	348
TOTAL		42,377	

TEMPORARY DRAINAGE INLET PROTECTION

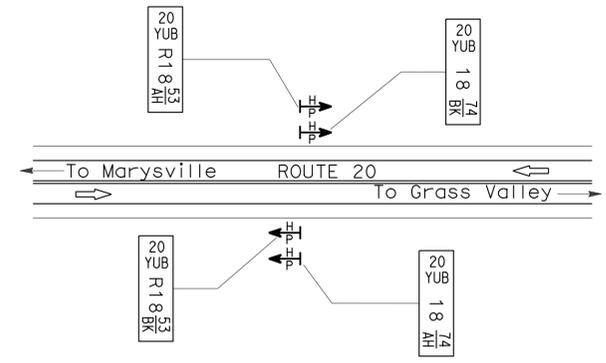
POST MILE	DIRECTION	TEMPORARY DRAINAGE INLET PROTECTION	
		(EA)	
AT PM 16.23	WB SIDE	1	
AT PM 16.30	WB SIDE	1	
AT PM 16.68	EB SIDE	1	
AT PM 16.87	EB SIDE	1	
AT PM R17.15	WB SIDE	1	
AT PM R17.26	WB SIDE	1	
AT PM R17.31	WB SIDE	1	
AT PM R17.35	WB SIDE	1	
AT PM R18.26	WB SIDE	1	
AT PM R18.30	WB SIDE	1	
AT PM R18.44	EB SIDE	1	
TOTAL		11	

ADJUST INLET

POST MILE	DIRECTION	ADJUST INLET		DESCRIPTION
		(EA)		
AT PM 16.23	WB SIDE	1		ADJUST PIPE INLET AT Beg OF DIKE (TYPE E) TO GRADE
AT PM 16.30	WB SIDE	1		ADJUST INLET AT AC DRAIN AT Beg DIKE (TYPE A) TO GRADE
AT PM 16.68	EB SIDE	1		ADJUST EXISTING DRAINAGE INLET (DI) TO GRADE (BEYOND EP)
AT PM 16.87	EB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R17.15	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R17.26	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R17.31	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R17.35	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R18.26	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
AT PM R18.30	WB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CORNER-Beg Dwy)
AT PM R18.44	EB SIDE	1		ADJUST Exist DI TO GRADE WITH TYPE A DIKE (CUT SLOPE)
TOTAL		11		

HIGHWAY POST MARKER

POST MILE	HIGHWAY POST MARKER	
	EAST BOUND TRAFFIC (EA)	WEST BOUND TRAFFIC (EA)
AT PM 13.50		1
AT PM 14.00	1	
AT PM 14.50		1
AT PM 15.00	1	
AT PM 15.50		1
AT PM 16.00	1	
AT PM 16.50		1
AT PM 17.00	1	
AT PM R17.50		1
AT PM R18.50		1
AT PM R18.53 BK	1	
AT PM 18.74 AH	1	
AT PM R18.53 AH		1
AT PM 18.74 BK		1
AT PM 19.00	1	
AT PM 19.50		1
AT PM 20.00	1	
SUBTOTAL	8	9
TOTAL		17



HIGHWAY POST MARKER AT EQUATION DETAIL

SUMMARY OF QUANTITIES

NO SCALE

Q-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION DIVISION OF ENGINEERING
 SALAHUDDIN CHOWDHURY
 CARMEN RODRIGUEZ
 FERMIN BARRIGA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR FERMIN BARRIGA
 CALCULATED/DESIGNED BY CHECKED BY
 SALAHUDDIN CHOWDHURY FERMIN BARRIGA
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

NOTES:

- SEE STANDARD PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL DETAILS.
- USING LAYOUT 12B, TAPER MGS AT 15:1 SO AFTS IS NEXT TO ROCK SLOPE.
- REPLACE EXISTING MARKERS (CULVERT). REMOVE EXISTING MARKERS (CULVERT) ARE NOT A SEPARATE PAY ITEM.

ALTERNATIVE TERMINAL SYSTEMS	
FLARED TERMINAL SYSTEMS	IN-LINE TERMINAL SYSTEMS
TYPE SRT-31	TYPE ET-PLUS 31
TYPE FLEAT-MGS	TYPE SKT-MGS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	26	65

Salahuddin Chowdhury 5-12-14
 REGISTERED CIVIL ENGINEER DATE
 5-12-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

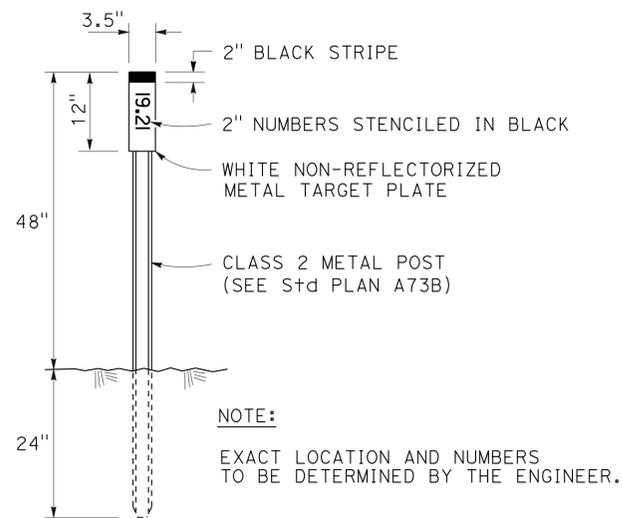
MARKER (CULVERT)

POST MILE	EB SIDE	WB SIDE
	(EA)	(EA)
AT PM 13.32	1	1
AT PM 13.49	1	1
AT PM 13.51	1	1
AT PM 13.53	1	1
AT PM 13.72	1	1
AT PM 13.97	1	1
AT PM 14.21	1	1
AT PM 14.24	1	1
AT PM 14.26	1	1
AT PM 14.27	1	1
AT PM 14.41	1	1
AT PM 15.41	1	1
AT PM 14.60	1	1
AT PM 14.82	1	1
AT PM 14.83	1	1
AT PM 14.92	1	1
AT PM 15.24	1	1
AT PM 15.41	1	1
AT PM 15.42	1	1
AT PM 15.56	1	1
AT PM 15.95	1	1
AT PM 15.96	1	1
AT PM 16.27	1	1
AT PM 16.61	1	1
AT PM 16.66	1	1
AT PM 16.67	1	1
AT PM 16.87	1	1
AT PM 16.97	1	1
AT PM 16.98	1	1
AT PM R17.14	1	1
AT PM R17.27	1	1
AT PM R17.32	1	1
AT PM R17.35	1	1
AT PM R17.45	1	1
AT PM R17.57	1	1
AT PM R18.24	1	1
AT PM R18.30	1	1
AT PM R18.33	1	1
AT PM R18.43	1	1
AT PM R18.50	1	1
AT PM 18.79	1	1
AT PM 18.82	1	1
AT PM 18.88	1	1
AT PM 19.15	1	1
AT PM 19.21	1	1
AT PM 19.25	1	1
AT PM 19.29	1	1
AT PM 19.30	1	1
AT PM 19.37	1	1
AT PM 19.43	1	1
AT PM 19.57	1	1
AT PM 19.72	1	1
AT PM 19.85	1	1
AT PM 20.02	1	1
AT PM 20.13	1	1
AT PM 20.22	1	1
SUBTOTAL	56	56
TOTAL	112	

MIDWEST GUARDRAIL SYSTEM (MGS) QUANTITIES

LOCATION (YUB-20)	DIRECTION	EXIST SHOULDER (N) WIDTH	EXIST GR LENGTH (N) (LF)	REMOVE GUARDRAIL (LF)	MIDWEST GUARDRAIL SYSTEM (LF)	MIDWEST GUARDRAIL SYSTEM (7' POST) (LF)	VEGETATION CONTROL (MINOR CONCRETE) (SQYD)	TRANSITION RAILING (TYPE WB-31) (EA)	END CAP		END ANCHOR ASSEMBLY (TYPE SFT) (EA)	ALTERNATIVE FLARED TERMINAL SYSTEM (EA)	ALTERNATIVE IN-LINE TERMINAL SYSTEM (EA)	BURIED POST (N) END ANCHOR (EA)	OBJECT MARKER (TYPE L-1) (EA)	MGS LAYOUT TYPE (N)	COMMENTS
									(TYPE A) (EA)	(TYPE TC)(N) (EA)							
Beg PM	END PM	(FT)	(LF)	(LF)	(LF)	(LF)	(SQYD)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)		
13.86	13.89	EB 1	154	154	87.5		83.0	1		1		1			1	12B	EB APPROACH TO DRY CREEK BRIDGE (16 0010)
13.87	13.89	WB 1	156	156	75.0		85.0	1		1			1			12AA	WB DEPARTURE FROM DRY CREEK BRIDGE (16 0010)
13.95	13.97	EB 1	80	80			46.0	1		1						12AA	EB DEPARTURE FROM DRY CREEK BRIDGE (16 0010)
13.95	13.98	WB 1	156	156	75.0		85.0	1		1						12A	WB APPROACH TO DRY CREEK BRIDGE (16 0010)
15.29	15.36	EB 4	376	376	337.5		205.0				1	1			1	11B	EB APPROACHING ESCHEMAN LANE
16.08	16.15	WB 2	354	354	175.0	75.0	195.0						2			11D	USE LONGER POSTS IN NARROW CHOKER AREAS
R17.70	R17.73	EB 8	138	138	75.0		77.0	1		1		1			1	12B	EB APPROACH TO YUBA RIVER BRIDGE (16 0011)
R17.72	R17.73	WB 8	75	75	75.0		39.0		1							12EE	WB DEPARTURE FROM YUBA RIVER Br: SEE SHEET C-12 FOR LAYOUT 12EE
R18.07	R18.08	EB 8	64	64	62.5		38.0				1					12DD	EB DEPARTURE FROM YUBA RIVER BRIDGE (16 0011)
R18.07	R18.09	WB 8	100	100	62.5		70.0	1	1	1		1			1	12B	WB APPROACH TO YUBA RIVER BRIDGE (16 0011): SEE NOTE 2
18.77	18.88	EB 0	595	595	250.0	300.0	318.0						1	1		11K	USE LONGER POSTS IN NARROW CHOKER AREAS
18.90	18.93	WB 0	150	150	100.0		85.0						1	1		11K	
19.00	19.07	WB 1	400	400	450.0		233.0							2		11F	MGS TO EXTEND 25 LF BEYOND BOTH ENDS OF EXIST GR LIMITS
TOTAL			2798	2798	1825.0	375.0	1559.0	6	2	6	2	4	7	5	4		

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



MARKER (CULVERT) DETAIL

TREATED WOOD WASTE
TOTAL 38,700 LB

SUMMARY OF QUANTITIES

NO SCALE

Q-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED-DESIGNED BY
 CHECKED BY

NATHAN DEKENS
 HABIB GOLBAN

REVISED BY
 DATE REVISED

ITEMS SHOWN IN THIS TABLE ARE NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	28	65

H. Galban 5-12-14
 REGISTERED ELECTRICAL ENGINEER DATE

5-12-14
 PLANS APPROVAL DATE

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

TRAFFIC MONITORING STATION (COUNT)

SHEET No.	No. 6(T) PB	TYPE A LOOP	DH
	EA	EA	EA
E-1	2	4	2

ELECTRICAL QUANTITIES

E-2



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

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

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

	T continued	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	U
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	V
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	W
W	WEST, WIDTH	
WB	WESTBOUND	
WH	WEEP HOLE	
WM	WIRE MESH	
WS	WATER SURFACE	
WSP	WELDED STEEL PIPE	
Wt	WEIGHT	
WV	WATER VALVE	
WW	WINGWALL	
WWLOL	WINGWALL LAYOUT LINE	X
X Sec	CROSS SECTION	
Xing	CROSSING	Y
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	29	65



REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 5-12-14

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

TABLE A

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

TABLE B

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
 (SHEET 2 OF 2)**

NO SCALE

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

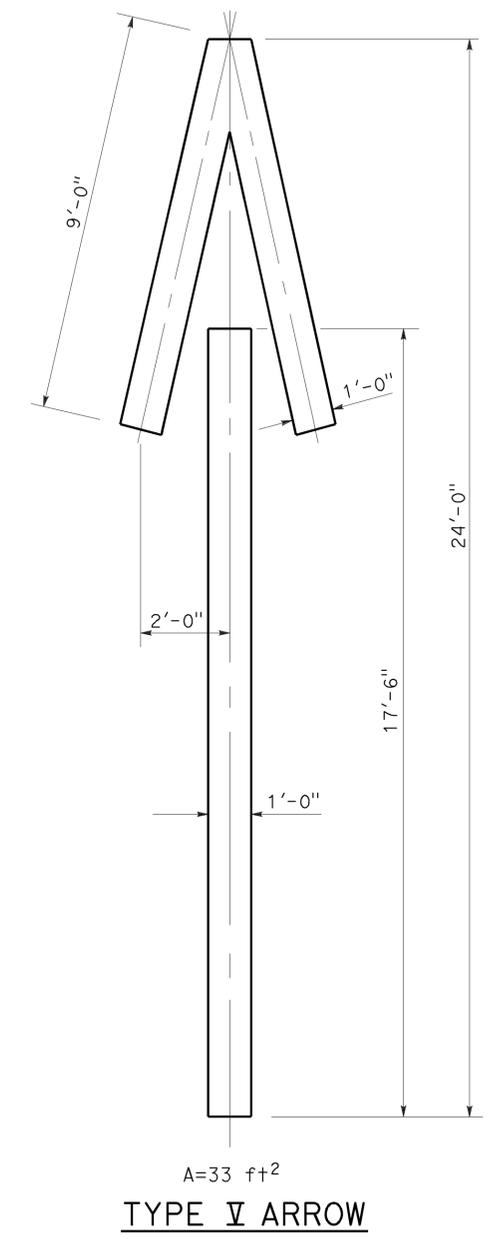
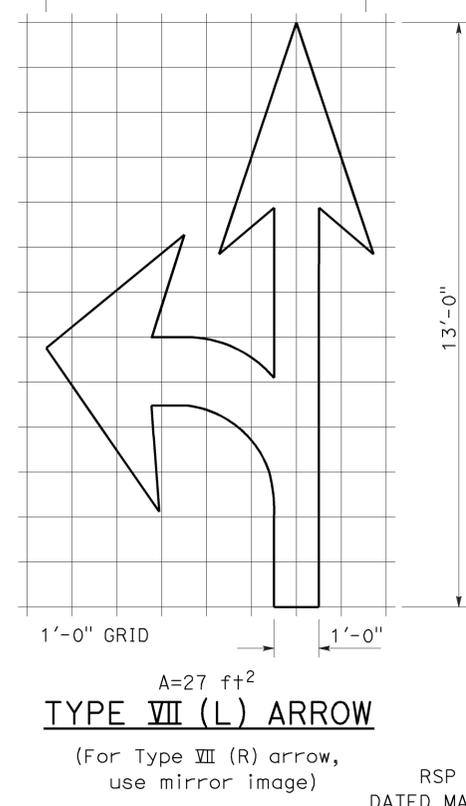
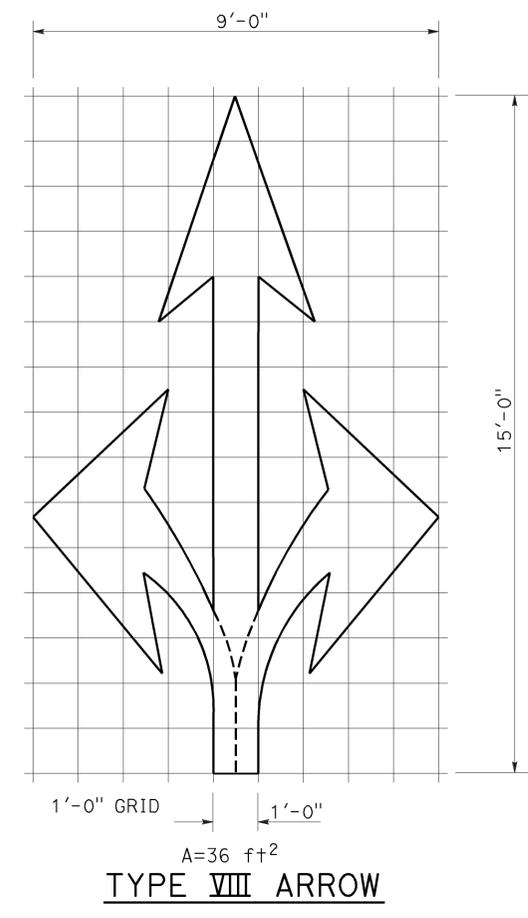
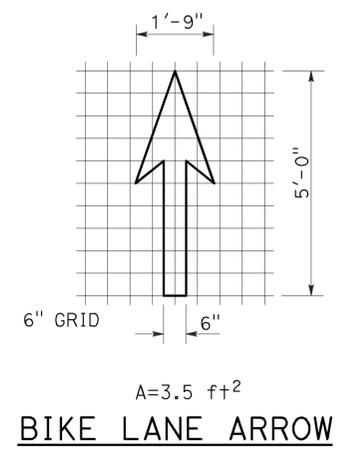
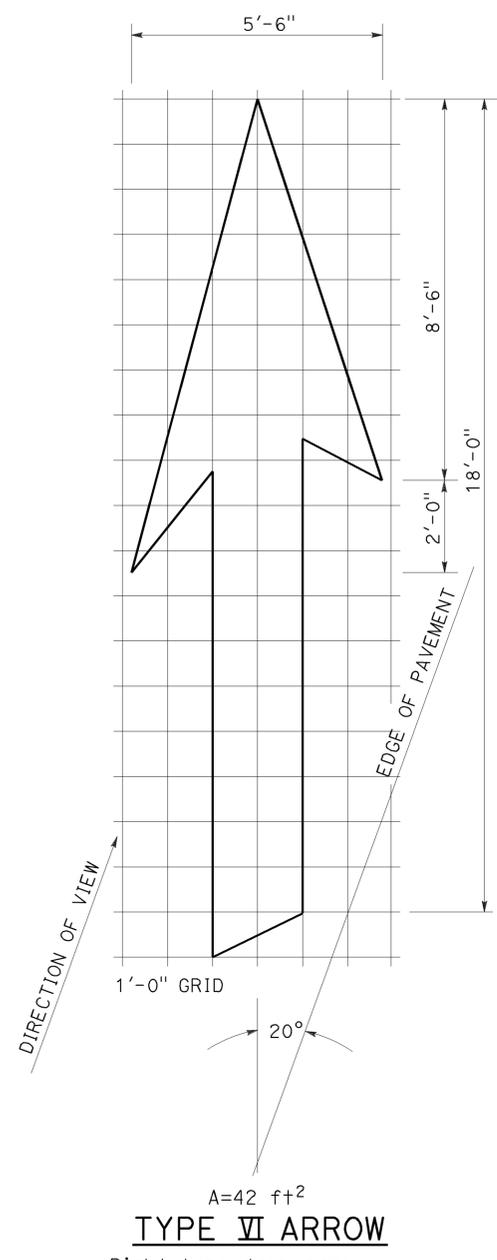
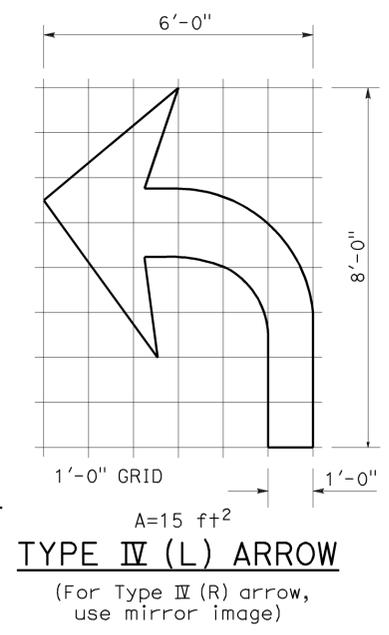
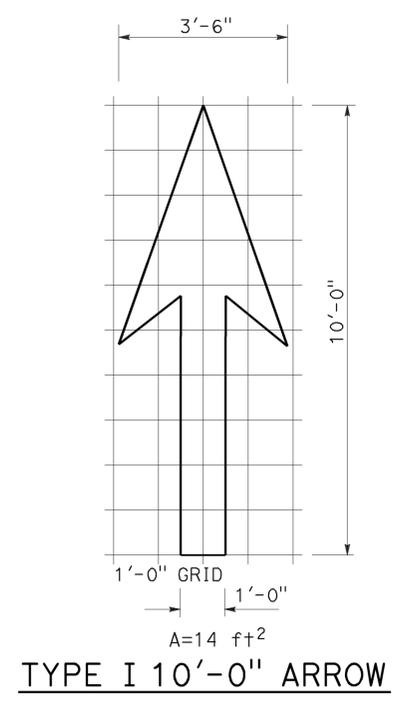
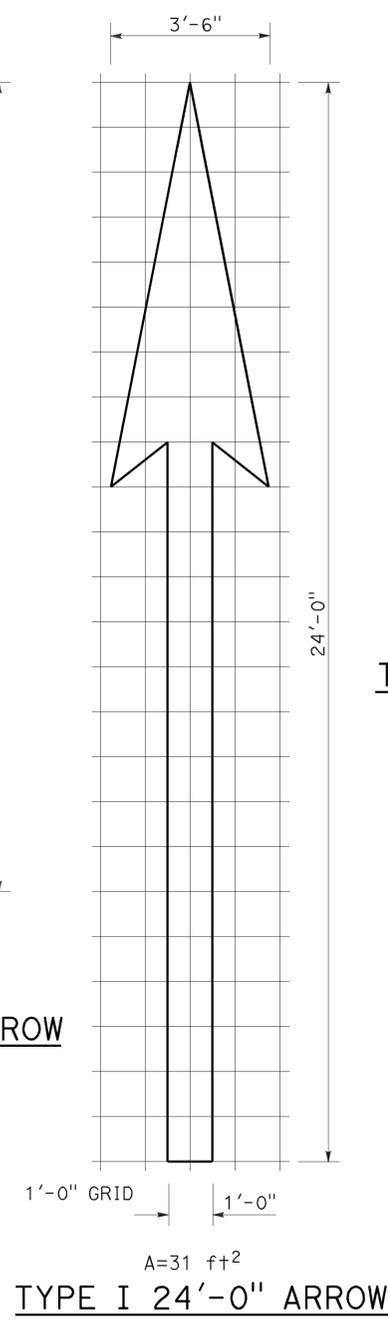
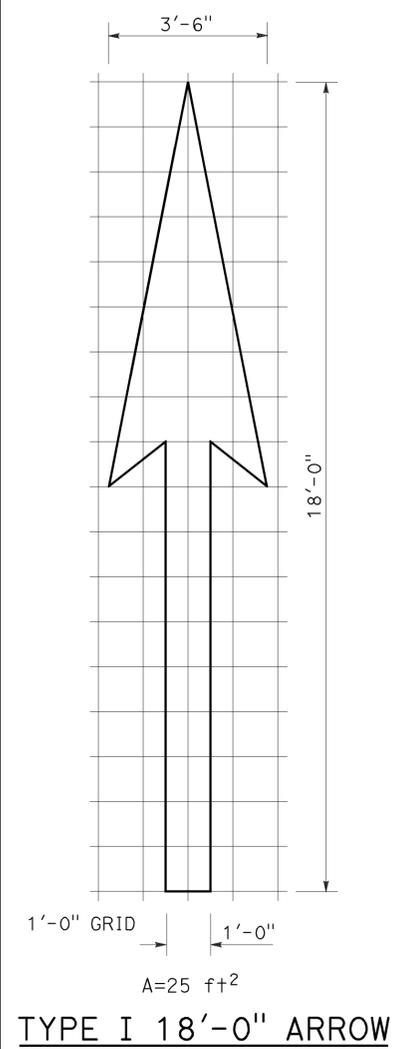
REVISED STANDARD PLAN RSP A10B

2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	30	65

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

TO ACCOMPANY PLANS DATED 5-12-14



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

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

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

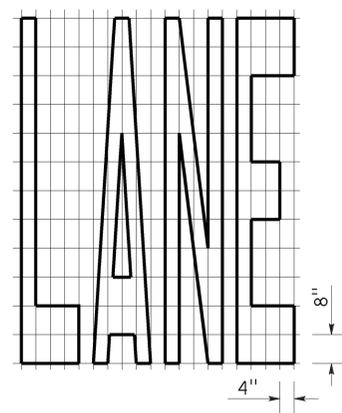
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	31	65

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

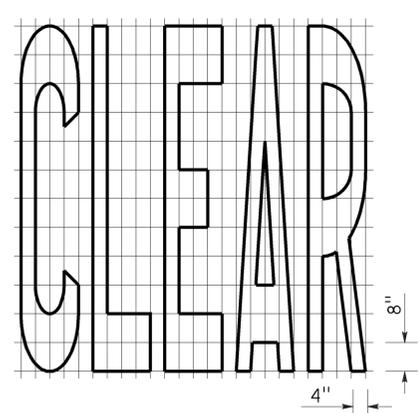
July 20, 2012
 PLANS APPROVAL DATE

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

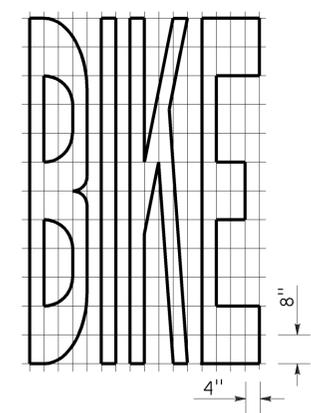
TO ACCOMPANY PLANS DATED 5-12-14



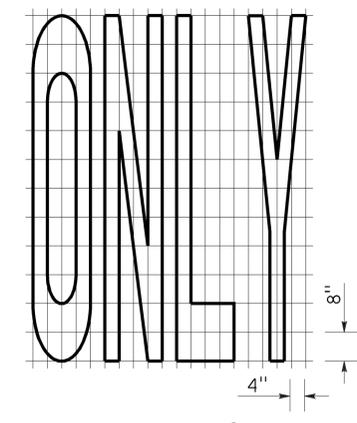
A=24 ft²



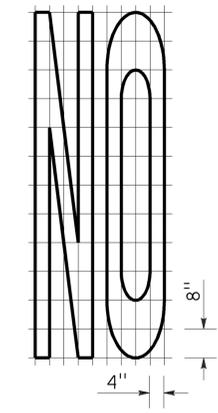
A=27 ft²



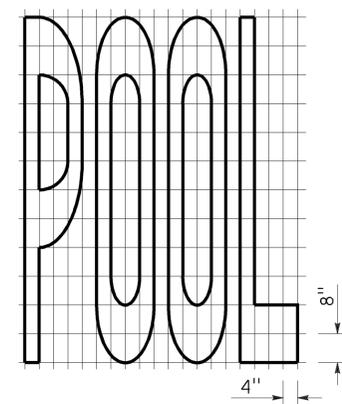
A=21 ft²



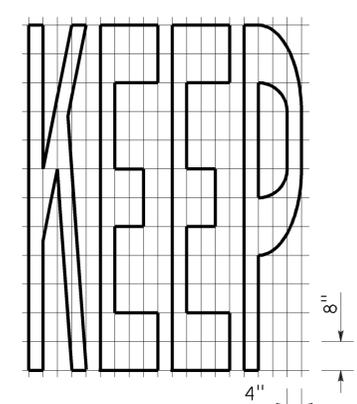
A=22 ft²



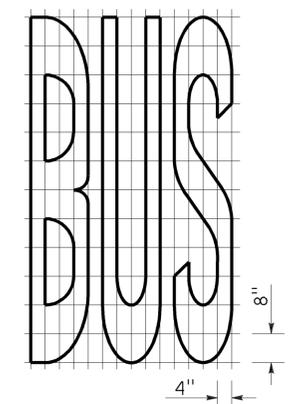
A=14 ft²



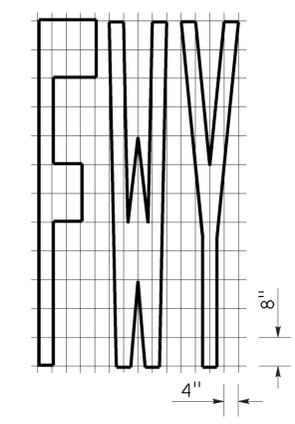
A=23 ft²



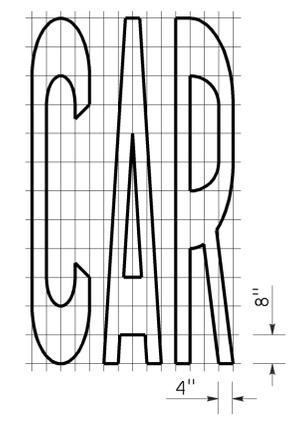
A=24 ft²



A=20 ft²



A=16 ft²

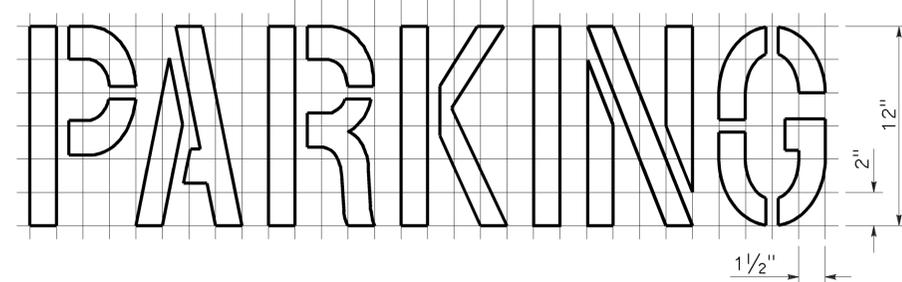
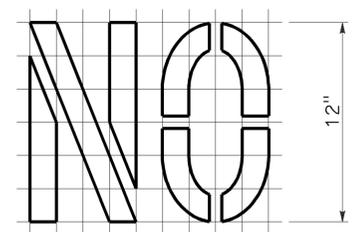


A=17 ft²

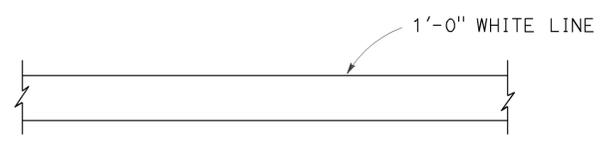
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16

NOTES:

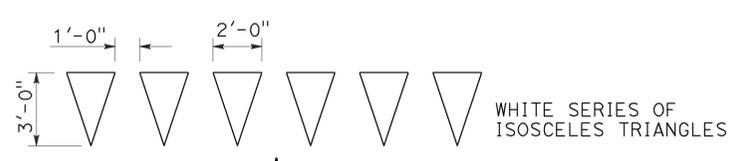
1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be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



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**

NO SCALE

2010 REVISED STANDARD PLAN RSP A24E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	32	65

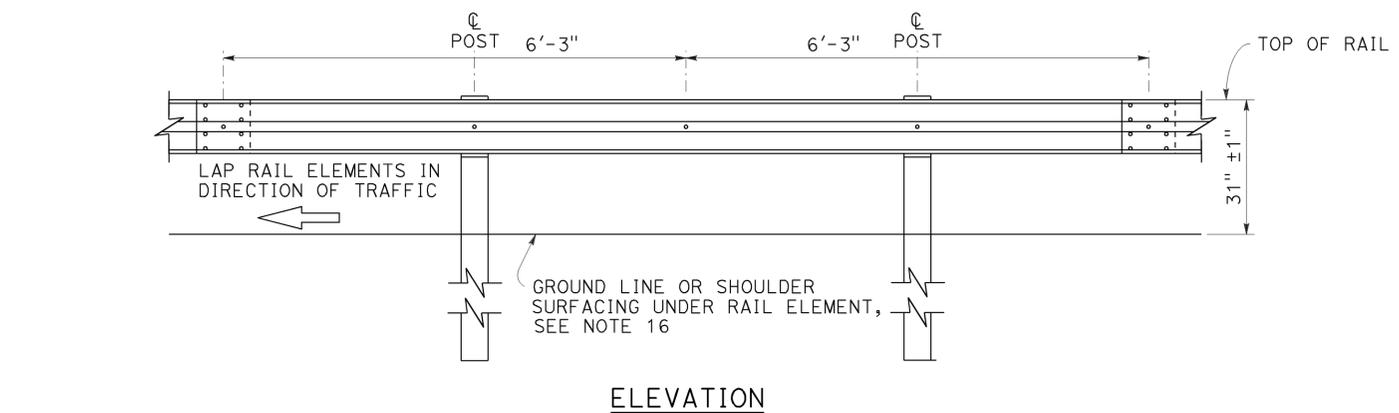
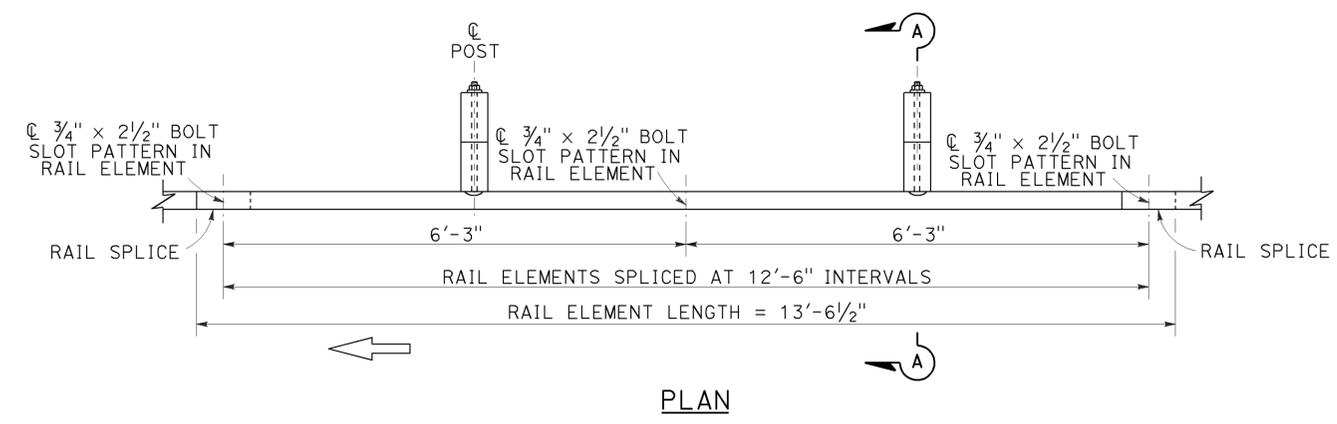
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

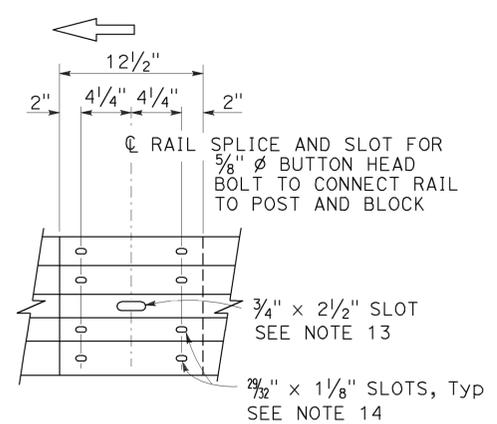
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

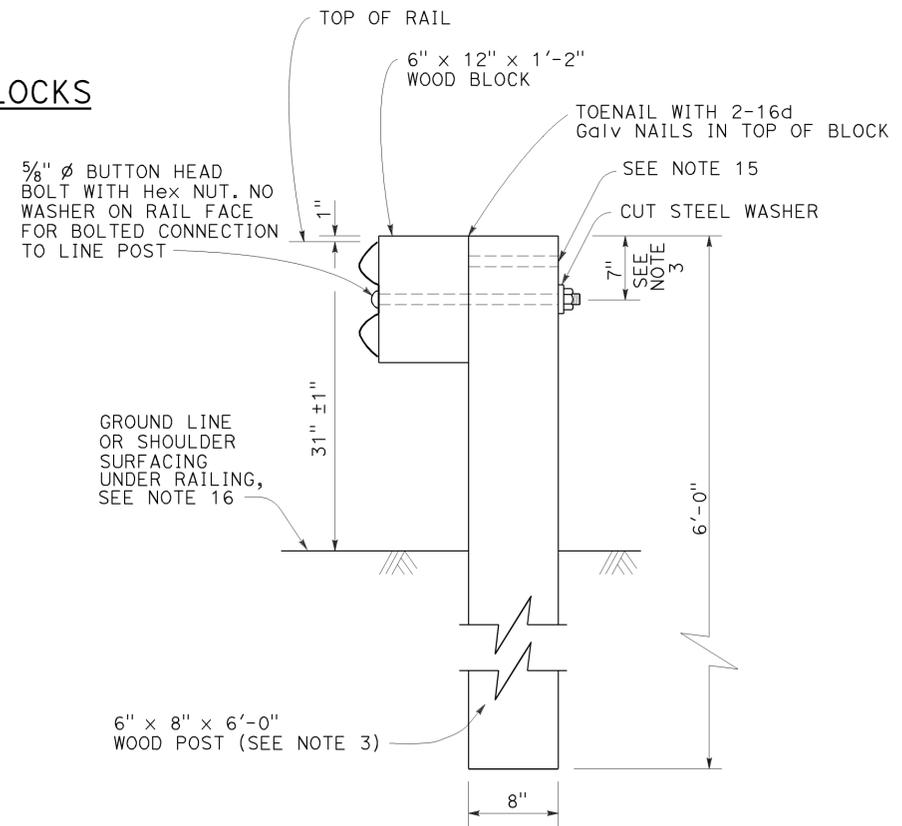
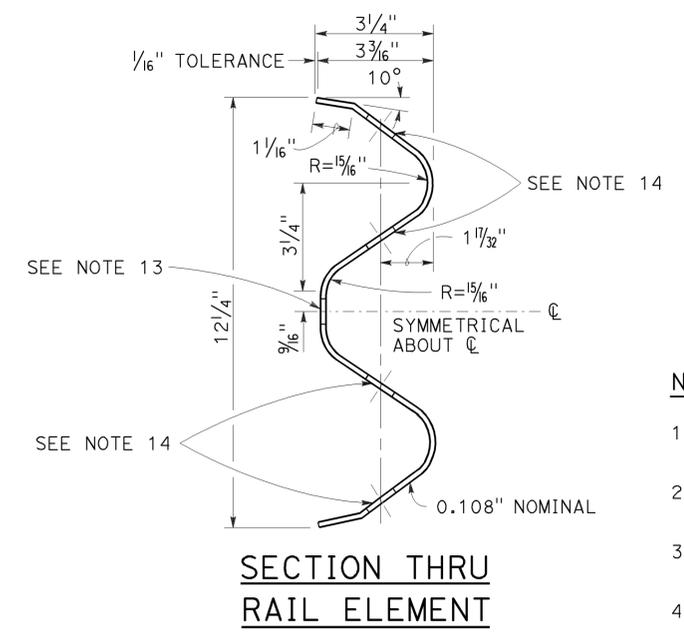
TO ACCOMPANY PLANS DATED 5-12-14



MIDWEST GUARDRAIL SYSTEM WITH WOOD POST AND BLOCKS



- Connect the over lapped end of the rail elements with 5/8" Ø x 1 3/8" button head oval shoulder splice bolts inserted into the 2 3/32" x 1 1/8" slots and bolted together with 5/8" Ø recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.



SECTION A-A
TYPICAL WOOD LINE
POST INSTALLATION
See Note 4

NOTES:

- For details of steel post installations, see Revised Standard Plan RSP A77L2.
- For details of standard hardware used to construct MGS, see Revised Standard Plan RSP A77M1.
- For details of wood posts and wood blocks used to construct MGS, see Revised Standard Plan RSP A77N1.
- For additional installation details, see Revised Standard Plan RSP A77N3.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- For MGS typical layouts, see the A77P, A77Q and A77R Series of Standard Plans.
- If railing is connected to terminal system end treatment, use 31" height terminal system end treatment.
- For MGS end anchor details, see Revised Standard Plans RSP A77S1 and RSP A77T2.
- For details of MGS transition to bridge railing, see Revised Standard Plan RSP A77U4.
- For additional details of MGS connection to bridge railing, see Revised Standard Plans RSP A77U1, RSP A77U2 and RSP A77V1.
- For MGS connection details to abutments and walls, see Revised Standard Plan RSP A77U3.
- For typical MGS delineation and dike positioning details, see Revised Standard Plan RSP A77N4.
- Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".
- Additional hole in uppermost portion of line post is for potential future adjustments of railing height. See Revised Standard Plan RSP A77N1.
- Install posts in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STANDARD RAILING SECTION
(WOOD POST WITH
WOOD BLOCK)**

NO SCALE

RSP A77L1 DATED JULY 19, 2013 SUPPLEMENTS STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L1

2010 REVISED STANDARD PLAN RSP A77L1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	33	65

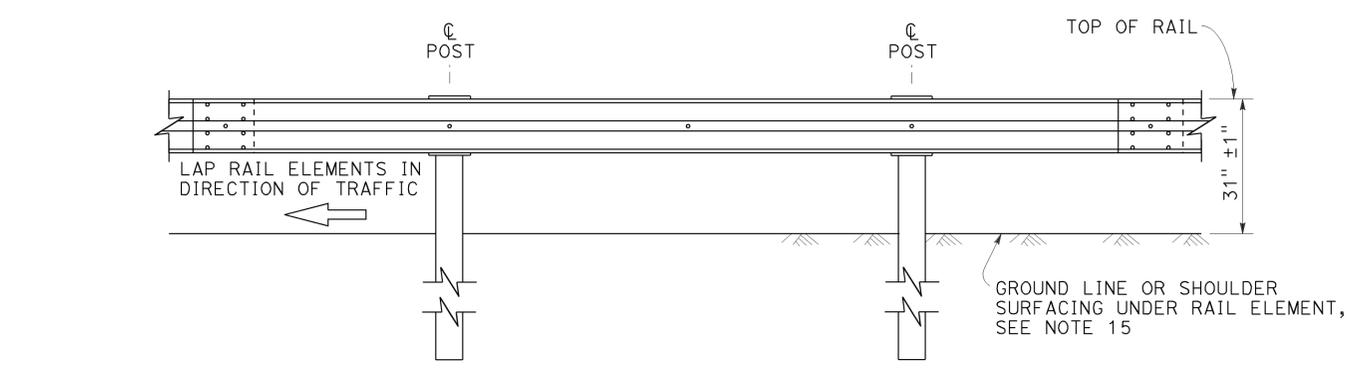
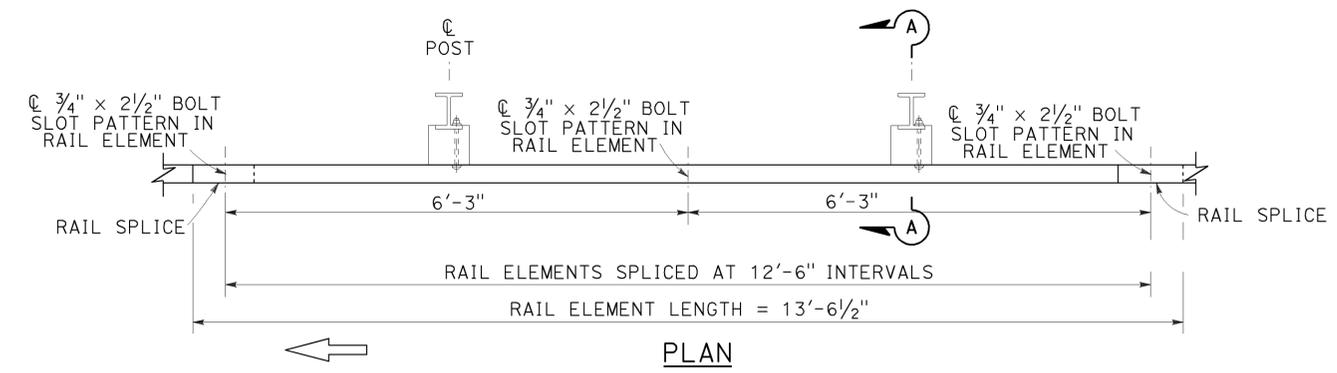
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

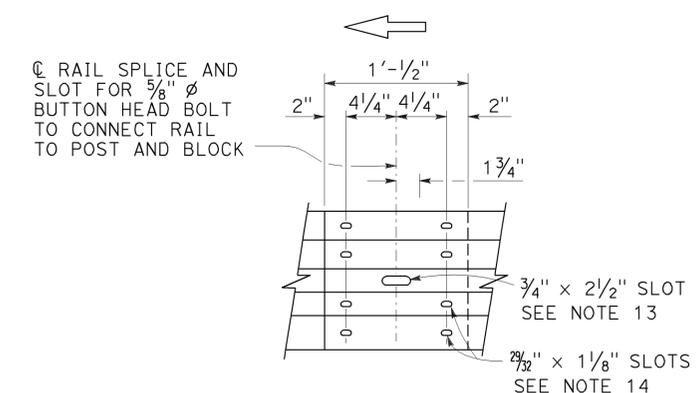
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

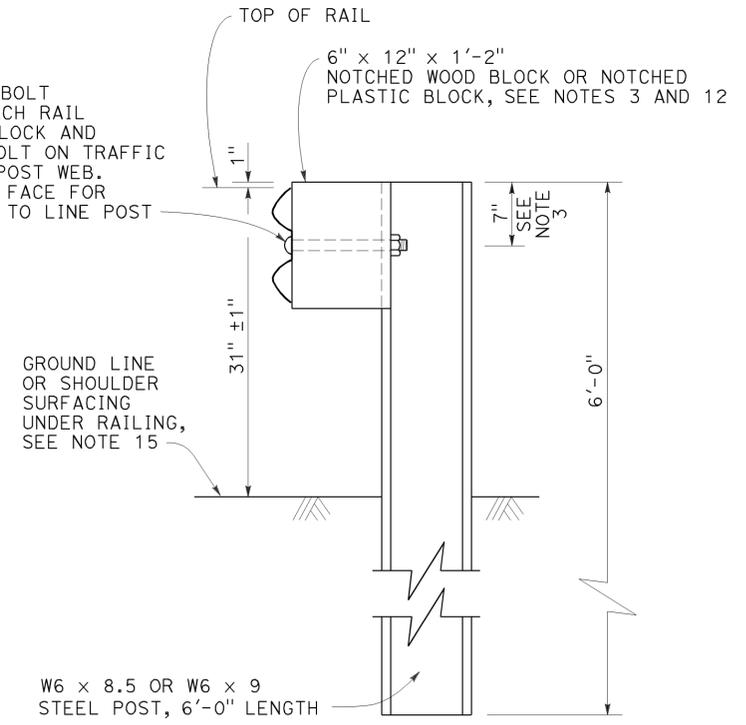
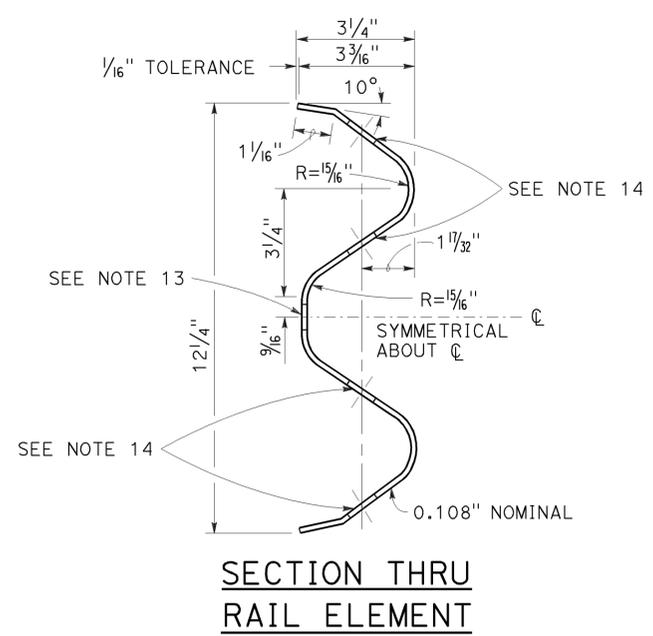
TO ACCOMPANY PLANS DATED 5-12-14



MIDWEST GUARDRAIL SYSTEM WITH STEEL POSTS AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS



- Connect the over lapped end of the rail elements with $\frac{5}{8}$ " ϕ x $1\frac{3}{8}$ " button head oval shoulder splice bolts inserted into the $\frac{2}{32}$ " x $1\frac{1}{8}$ " slots and bolted together with $\frac{5}{8}$ " ϕ recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.



See Note 4

NOTES:

- For details of wood post installations, see Revised Standard Plan RSP A77L1.
- For details of standard hardware used to construct MGS, see Revised Standard Plan RSP A77M1.
- For details of steel posts and notched wood blocks used to construct MGS, see Revised Standard Plan RSP A77N2.
- For additional installation details, see Revised Standard Plan RSP A77N3.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- For MGS typical layouts, see the A77P, A77Q and A77R Series of Standard Plans.
- If railing is connected to terminal system end treatment, use 31" height terminal system end treatment.
- For MGS end anchor details, see Revised Standard Plans RSP A77S1 and RSP A77T2.
- For details of MGS transition to bridge railing, see Revised Standard Plan RSP A77U4.
- For additional details of MGS connection to bridge railings, see Revised Standard Plans RSP A77U1, RSP A77U2 and RSP A77V1.
- For dike positioning and MGS delineation details, see Revised Standard Plan RSP A77N4.
- Notched face of block faces steel post.
- Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".
- Install posts in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (STEEL POST WITH NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)

NO SCALE

RSP A77L2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L2

2010 REVISED STANDARD PLAN RSP A77L2

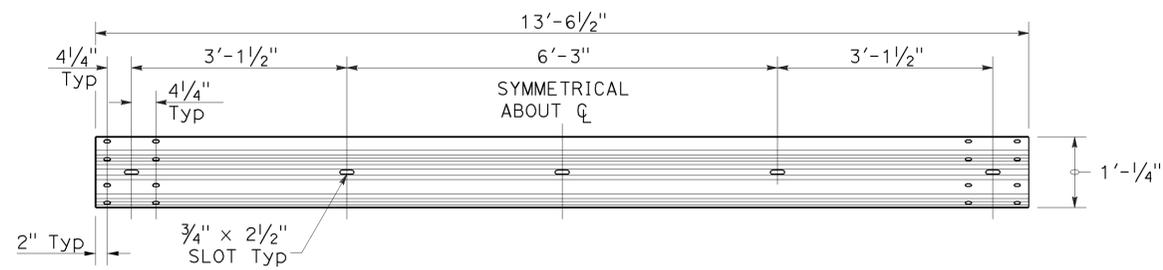
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	34	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

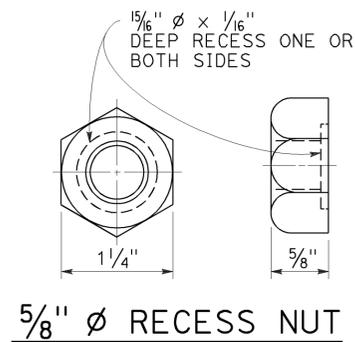
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



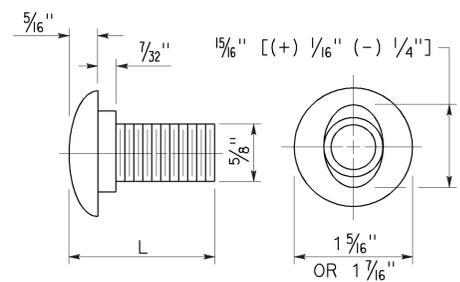
TYPICAL RAIL ELEMENT

NOTE:

1. Slotted holes for splice bolts to overlap ends of rail element.



5/8" Ø RECESS NUT

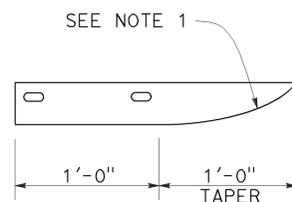


5/8" Ø BUTTON HEAD BOLT

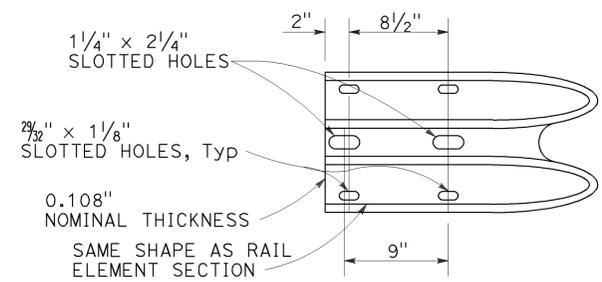
BUTTON HEAD BOLT

L	THREAD LENGTH
1 3/8"	FULL THREAD LENGTH
2"	FULL THREAD LENGTH
10"	4" Min THREAD LENGTH
18"	4" Min THREAD LENGTH
20"	4" Min THREAD LENGTH
22"	4" Min THREAD LENGTH
26"	4" Min THREAD LENGTH
36"	4" Min THREAD LENGTH
** 2 3/4"	2" Min THREAD LENGTH
** 19"	4" Min THREAD LENGTH

** For nested rail applications.



PLAN



**ELEVATION
END CAP
(TYPE A)**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STANDARD HARDWARE**

NO SCALE

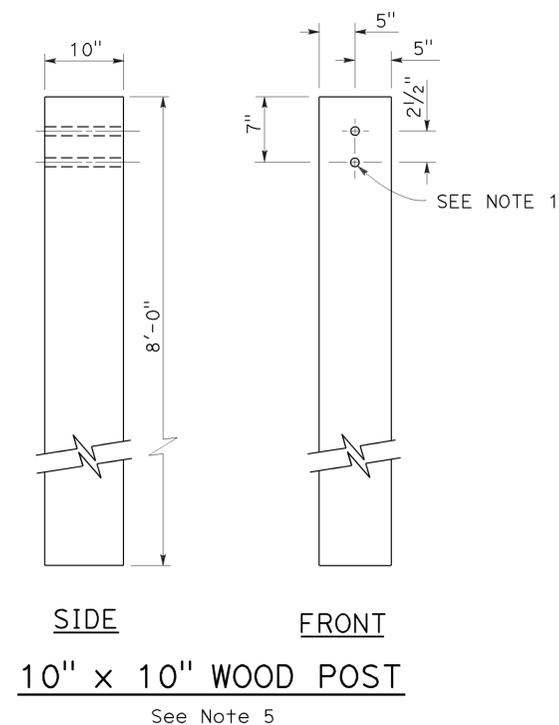
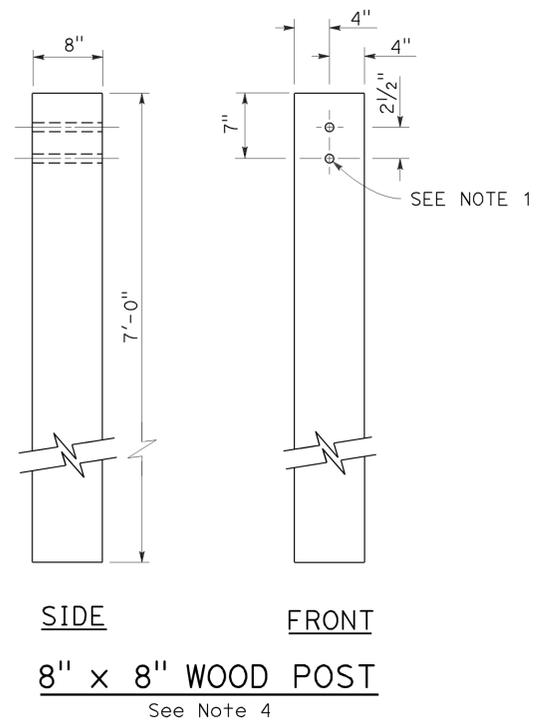
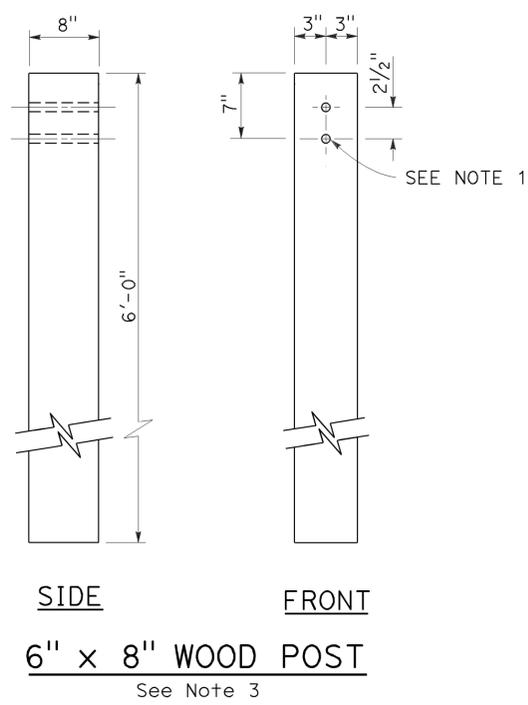
RSP A77M1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77M1

2010 REVISED STANDARD PLAN RSP A77M1

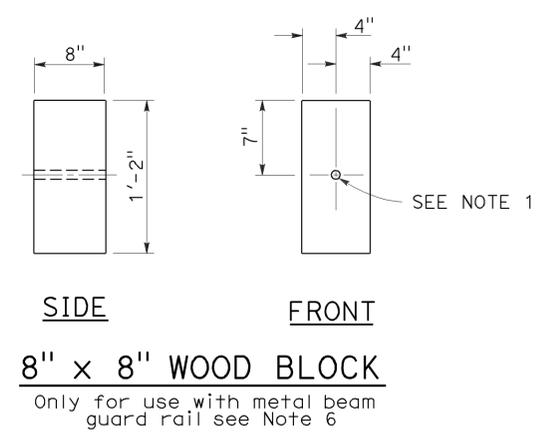
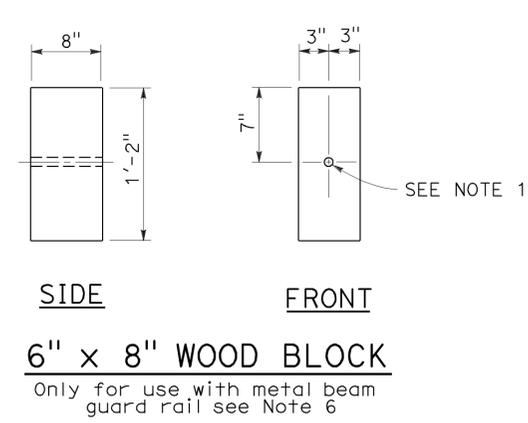
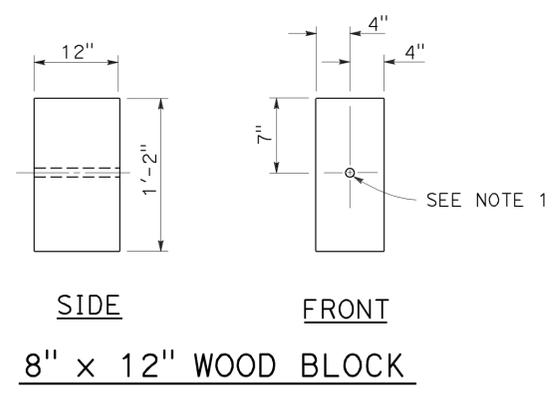
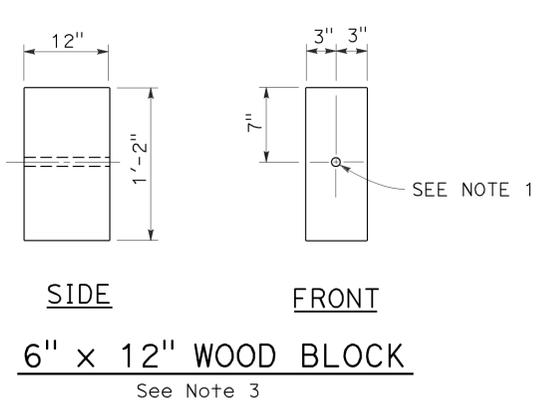
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	35	65
<i>Randell D. Hiatt</i> REGISTERED CIVIL ENGINEER No. C50200 Exp. 6-30-15 CIVIL STATE OF CALIFORNIA					
July 19, 2013 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

TO ACCOMPANY PLANS DATED 5-12-14



NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N1

2010 REVISED STANDARD PLAN RSP A77N1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	36	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

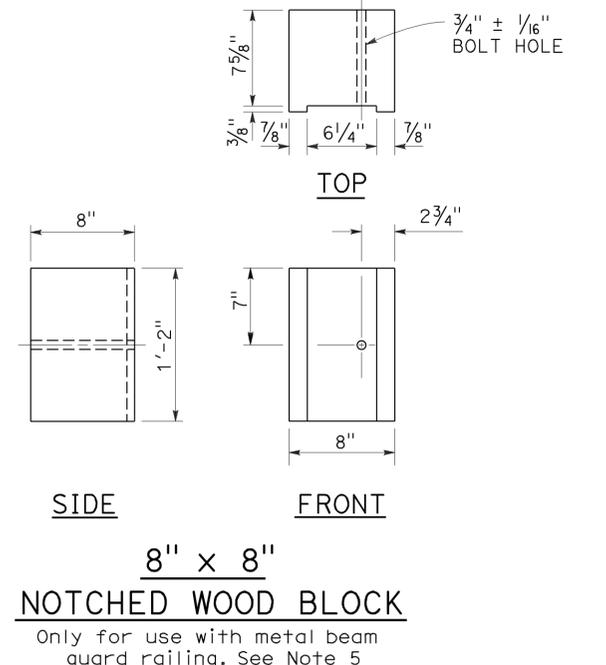
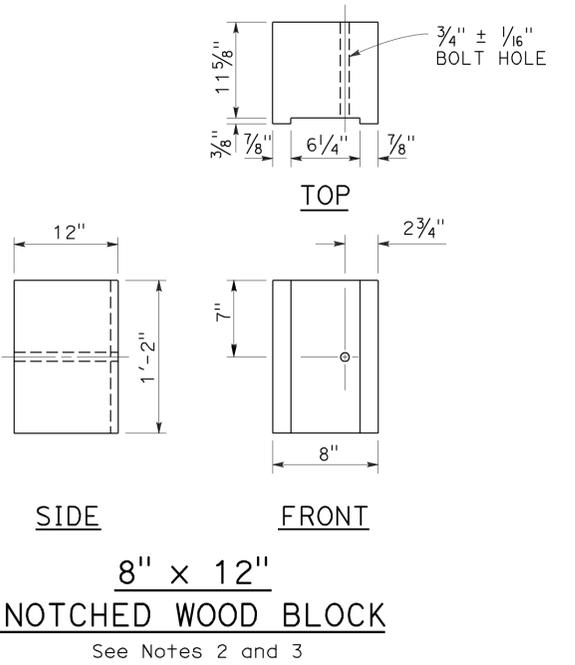
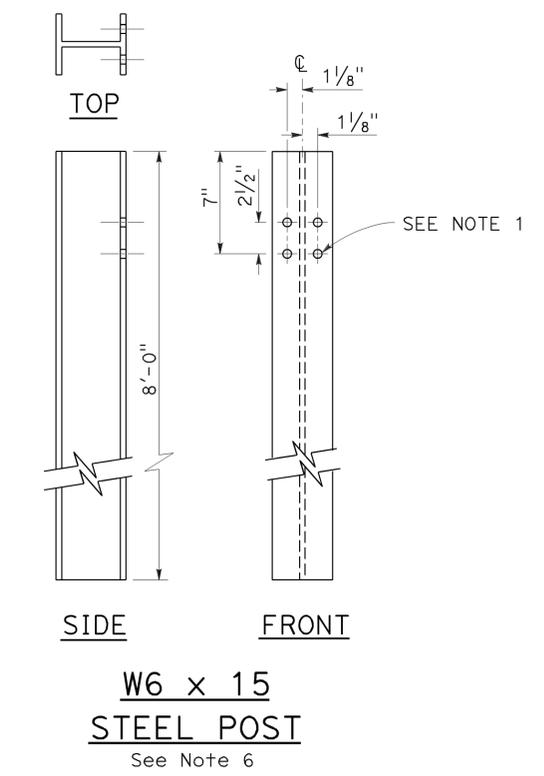
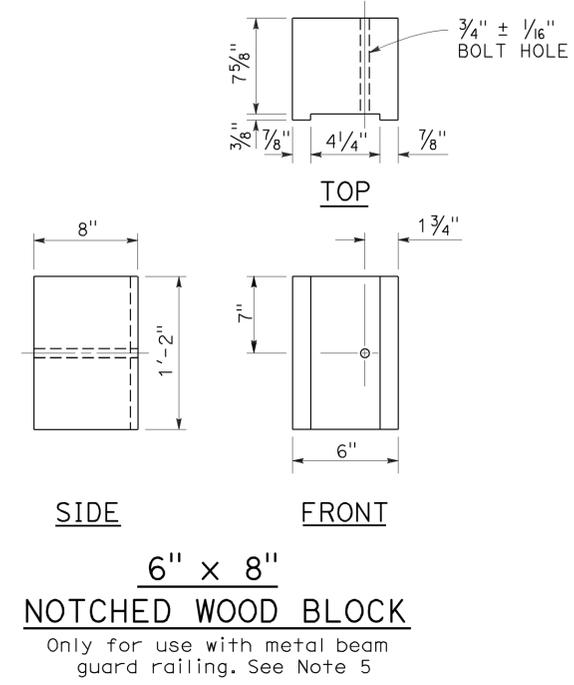
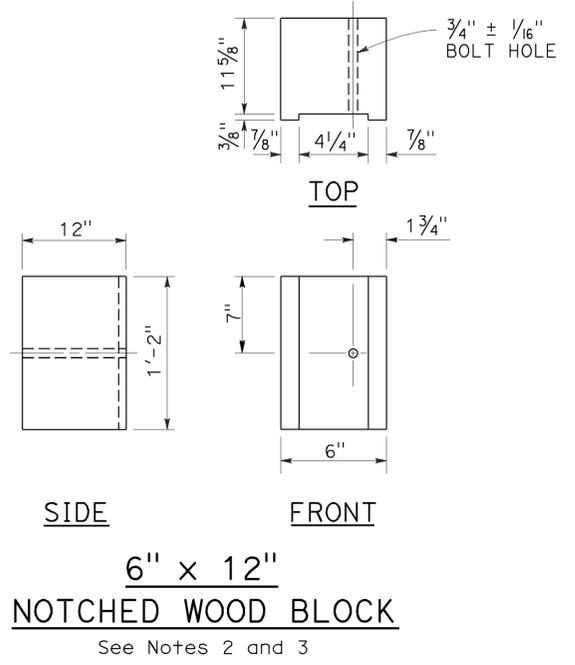
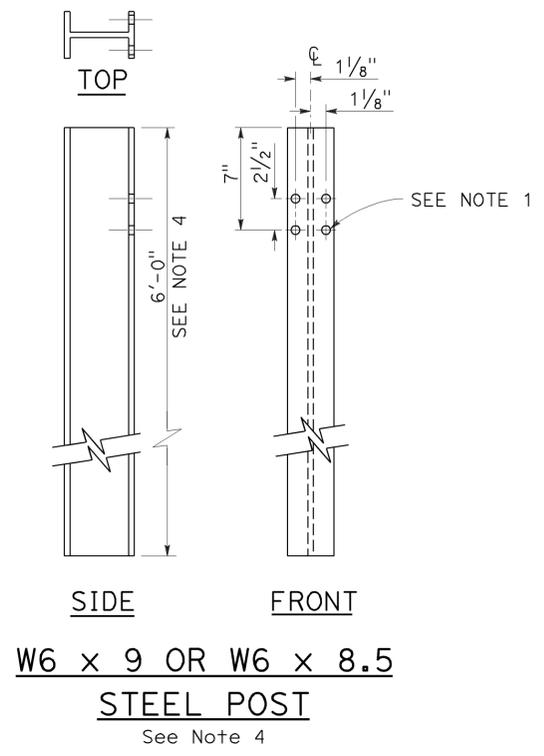
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

TO ACCOMPANY PLANS DATED 5-12-14

NOTES:

1. All holes in steel post shall be $1\frac{3}{16}$ " Dia maximum.
2. Dimensions shown for wood block are nominal.
3. Notched face of block faces steel post.
4. 6'-0" length posts to be used for typical roadway installation. See Revised Standard Plan RSP A77N3.
5. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" notched wood blocks.
6. This post and 8" x 12" block combination to be used for line post sections of MGS on narrow roadways and where strengthened line post sections of MGS are warranted to shield fixed objects.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STEEL POST AND
NOTCHED WOOD BLOCK DETAILS**

NO SCALE

RSP A77N2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N2
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N2

2010 REVISED STANDARD PLAN RSP A77N2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	37	65

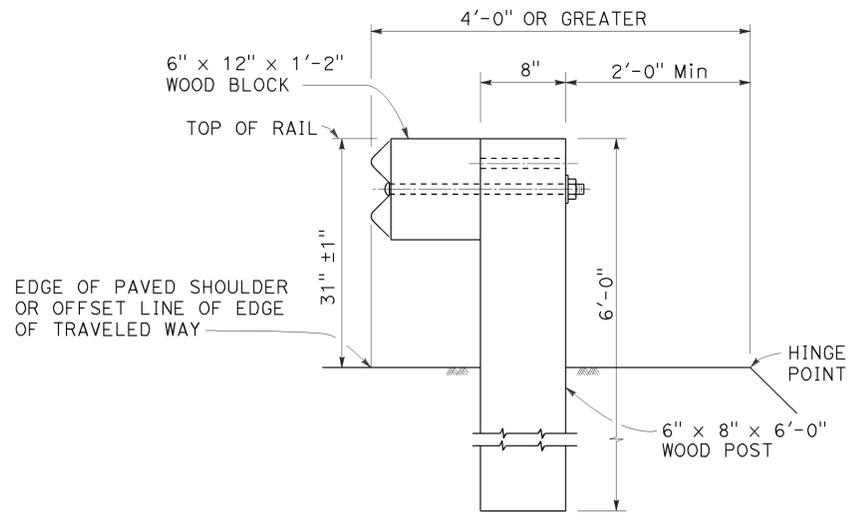
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

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

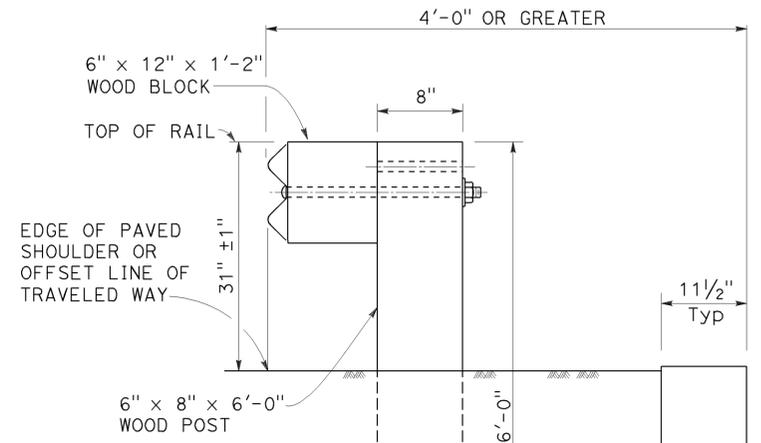
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14



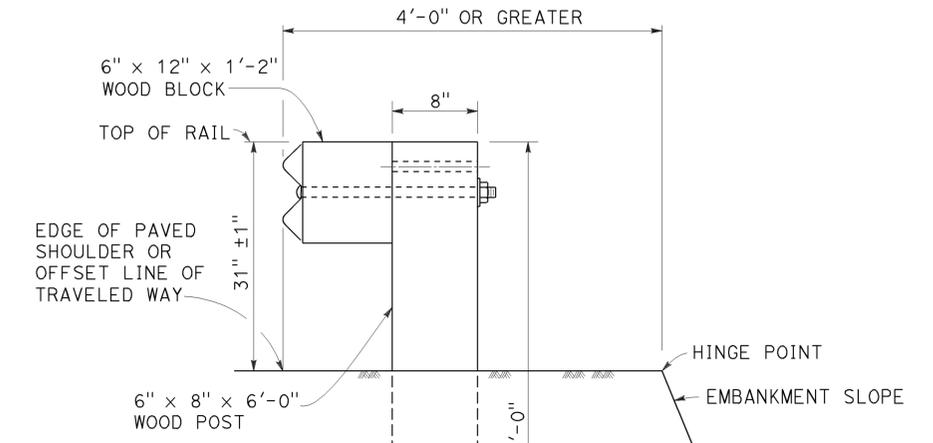
DETAIL A
TYPICAL ROADWAY
INSTALLATION

See Note 1

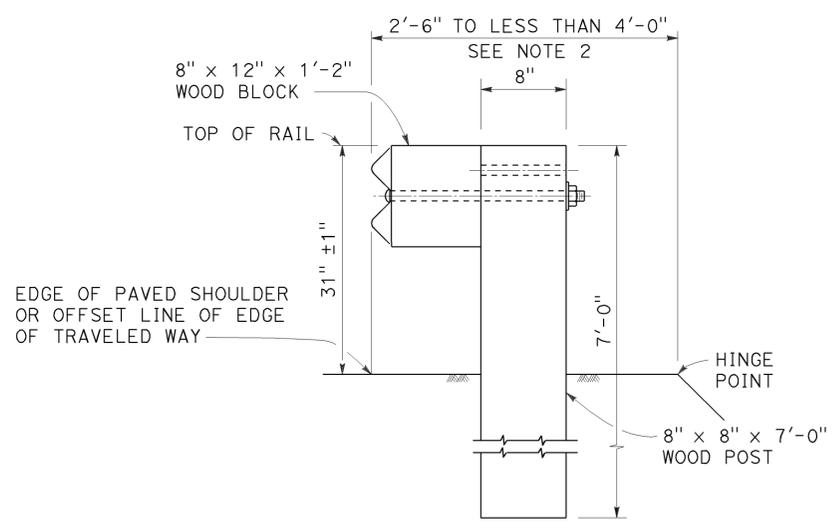


DETAIL C

INSTALLATION AT EARTH RETAINING WALLS



DETAIL D



DETAIL B
NARROW ROADWAY
INSTALLATION

See Note 1

POST EMBEDMENT

NOTES:

1. These installation details also applicable to steel line post installations. For Detail A, C, and D, where steel line post installations are constructed, W6 x 8.5 or W6 x 9 steel post, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For Detail B, where steel line post installations are constructed, W6 x 15 steel post, 8'-0" in length, with 8" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For additional installation details, see Revised Standard Plan RSP A77L1 and RSP A77L2.
2. Where the distance between the face of the rail and the hinge point is less than 2'-6", see the Project Plans for special details.
3. For dike positioning with MGS installations, see Revised Standard Plan RSP A77N4.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST
EMBEDMENT AND
HINGE POINT OFFSET DETAILS

NO SCALE

RSP A77N3 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N3
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N3

2010 REVISED STANDARD PLAN RSP A77N3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	38	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

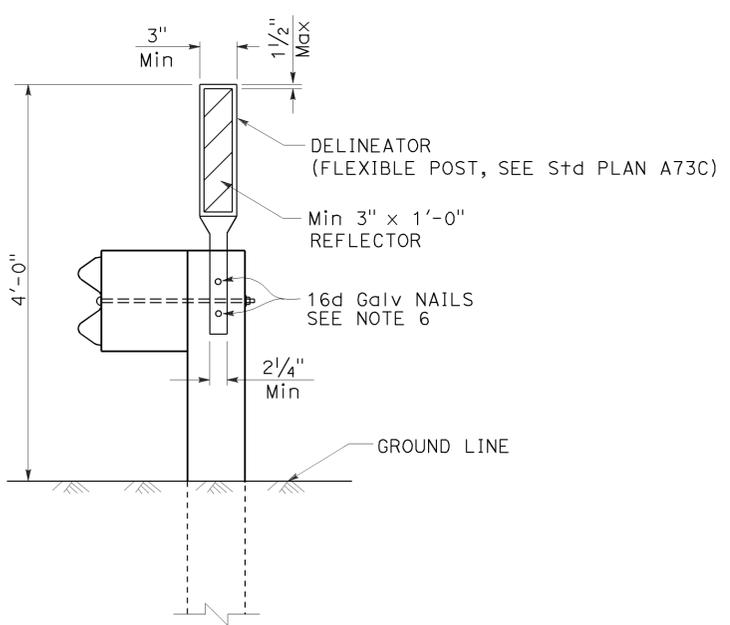
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

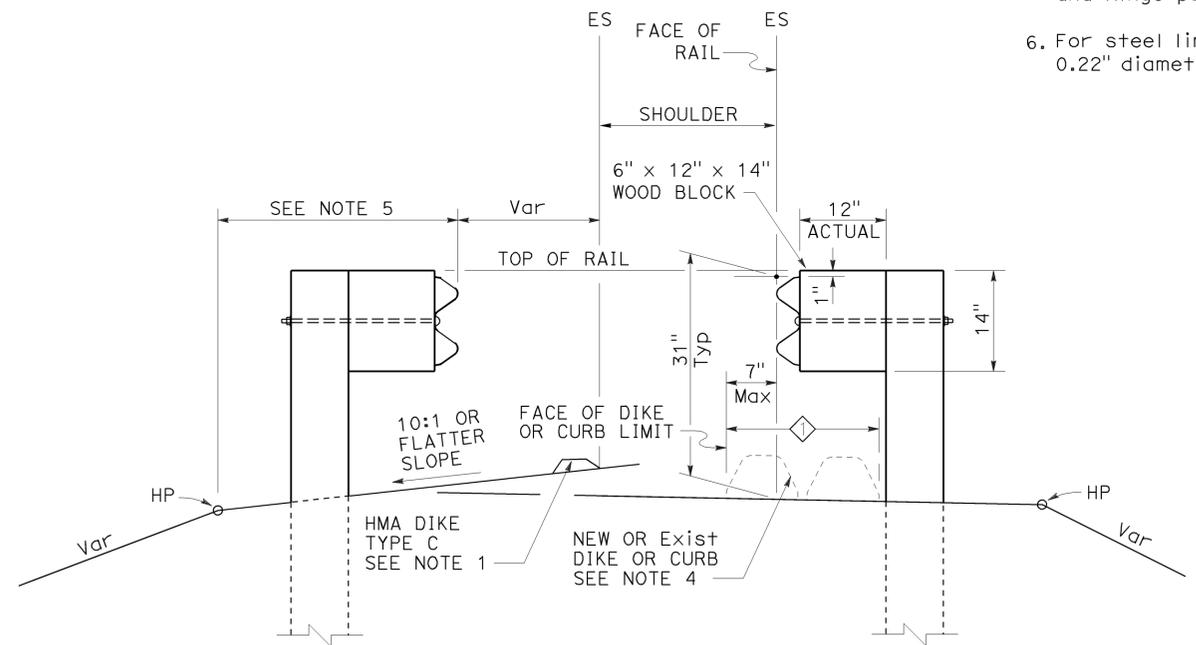
TO ACCOMPANY PLANS DATED 5-12-14

NOTES:

- When necessary to place dike more than 7" in front of face of MGS, only Type C dike may be used. For dike details, see Revised Standard Plan RSP A87B.
- For standard railing post embedment, see Revised Standard Plan RSP A77N3.
- MGS delineation to be used where shown on the Project Plans.
- When dike or curb is placed under MGS, the maximum height of the dike or curb shall be 6". Mountable dike should not be used. For dike and curb details, see Revised Standard Plans RSP A87A and RSP A87B.
- For details of typical distance between the face of rail and hinge point, see Revised Standard Plan RSP A77N3.
- For steel line posts, use 1/4" - 20 self-tapping screws in 0.22" diameter holes or 1/4" bolts in 3/32" diameter holes.



MGS DELINEATION
See Note 3



DIKE POSITIONING
See Note 1

◊ PERMISSIBLE DIKE OR CURB PLACEMENT AREA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL RAILING DELINEATION
AND DIKE POSITIONING DETAILS**

NO SCALE

RSP A77N4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N4

2010 REVISED STANDARD PLAN RSP A77N4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	39	65

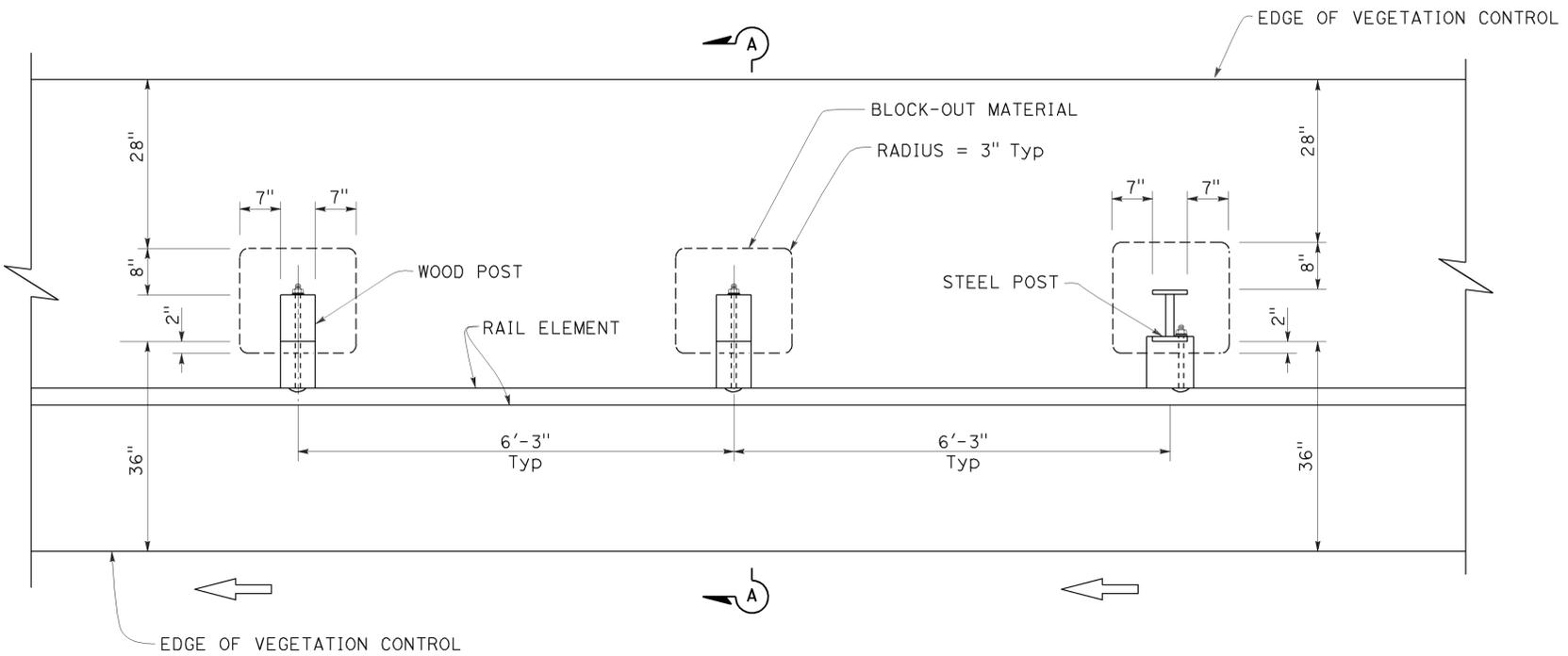
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

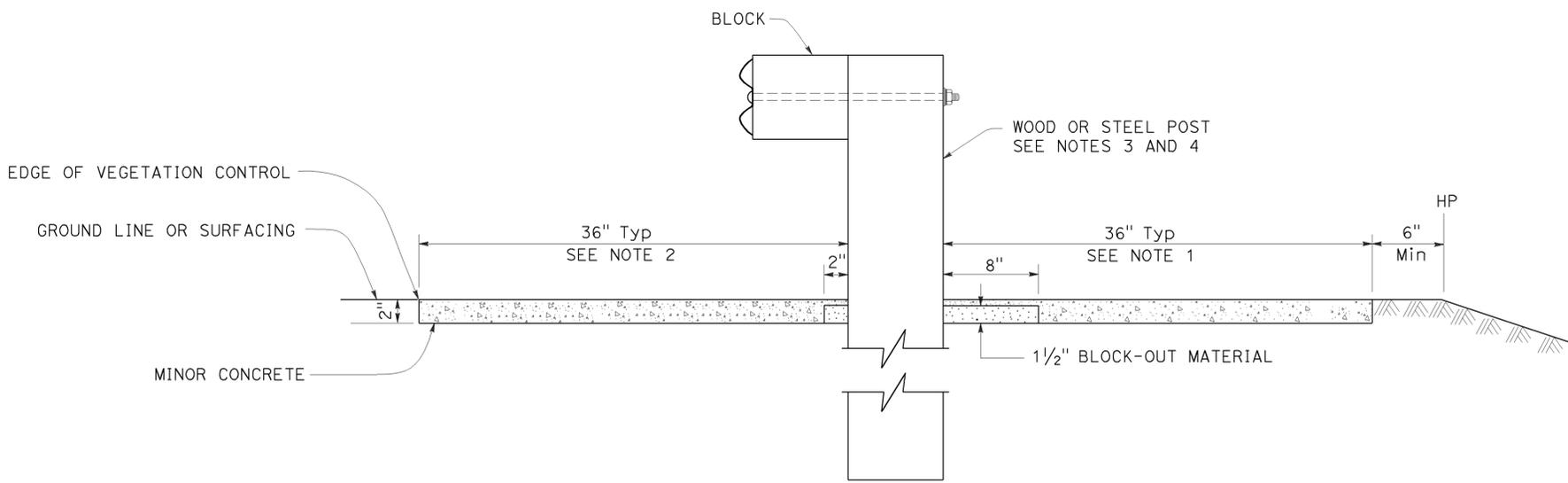
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14



PLAN



SECTION A-A

NOTES:

1. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. For wood post sizes, see Revised Standard Plan RSP A77N1.
4. For steel post sizes, see Revised Standard Plan RSP A77N2.
5. For details not shown, see Revised Standard Plans RSP A77L1 and RSP A77L2.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL VEGETATION CONTROL
STANDARD RAILING SECTION**

NO SCALE

RSP A77N5 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N5

2010 REVISED STANDARD PLAN RSP A77N5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	40	65

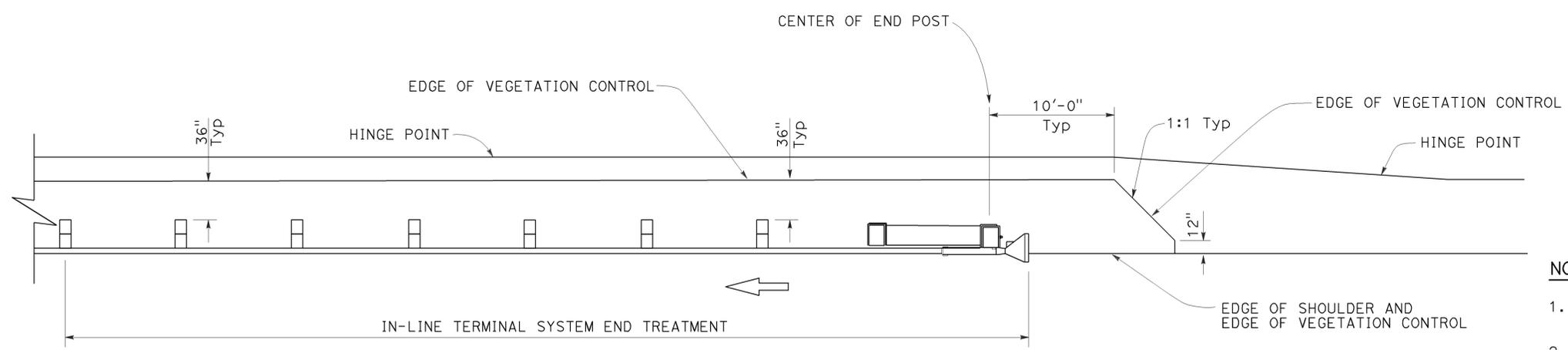
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

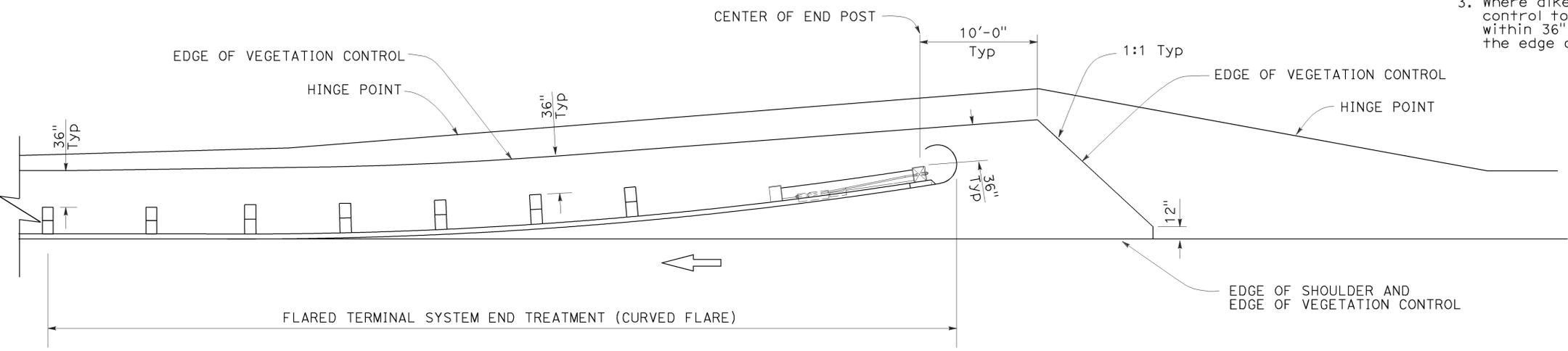
TO ACCOMPANY PLANS DATED 5-12-14



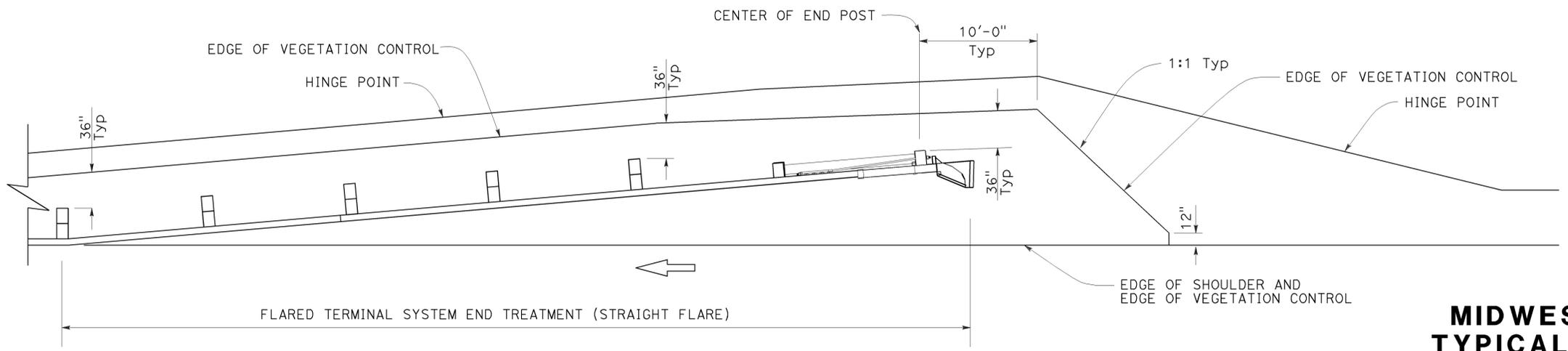
PLAN

NOTES:

1. See Revised Standard Plan RSP A77N5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



PLAN



PLAN

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL VEGETATION CONTROL
FOR TERMINAL SYSTEM END TREATMENTS**

NO SCALE

RSP A77N6 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N6

2010 REVISED STANDARD PLAN RSP A77N6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	41	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

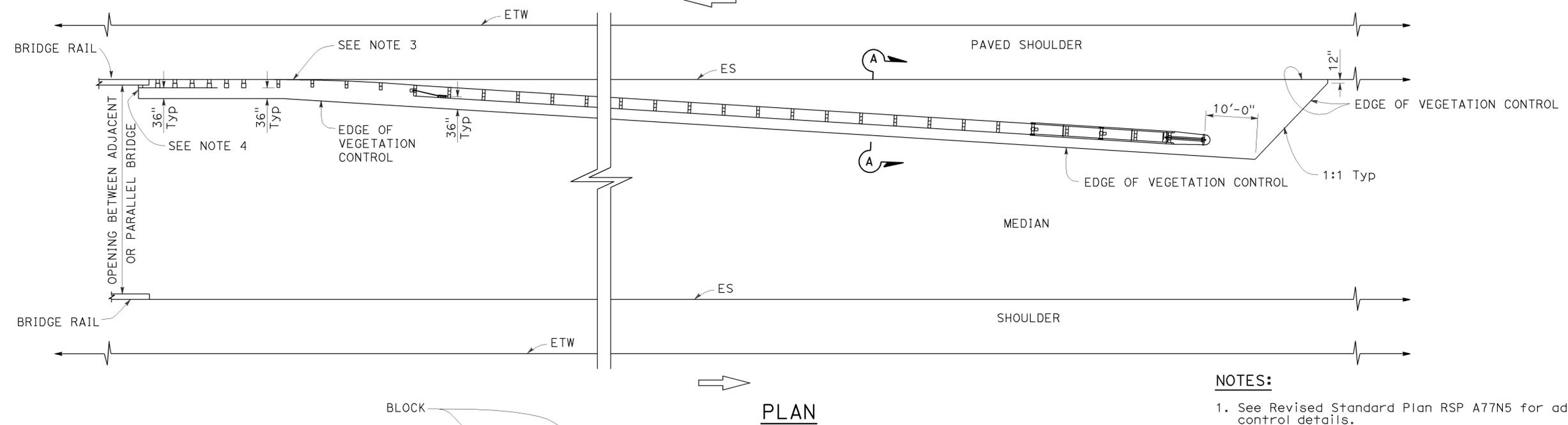
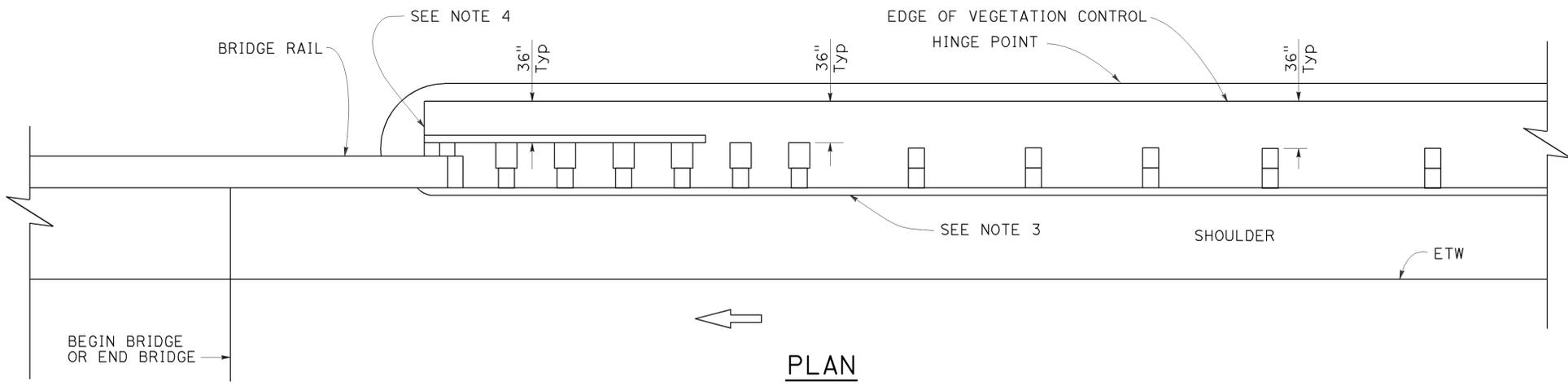
July 19, 2013
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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

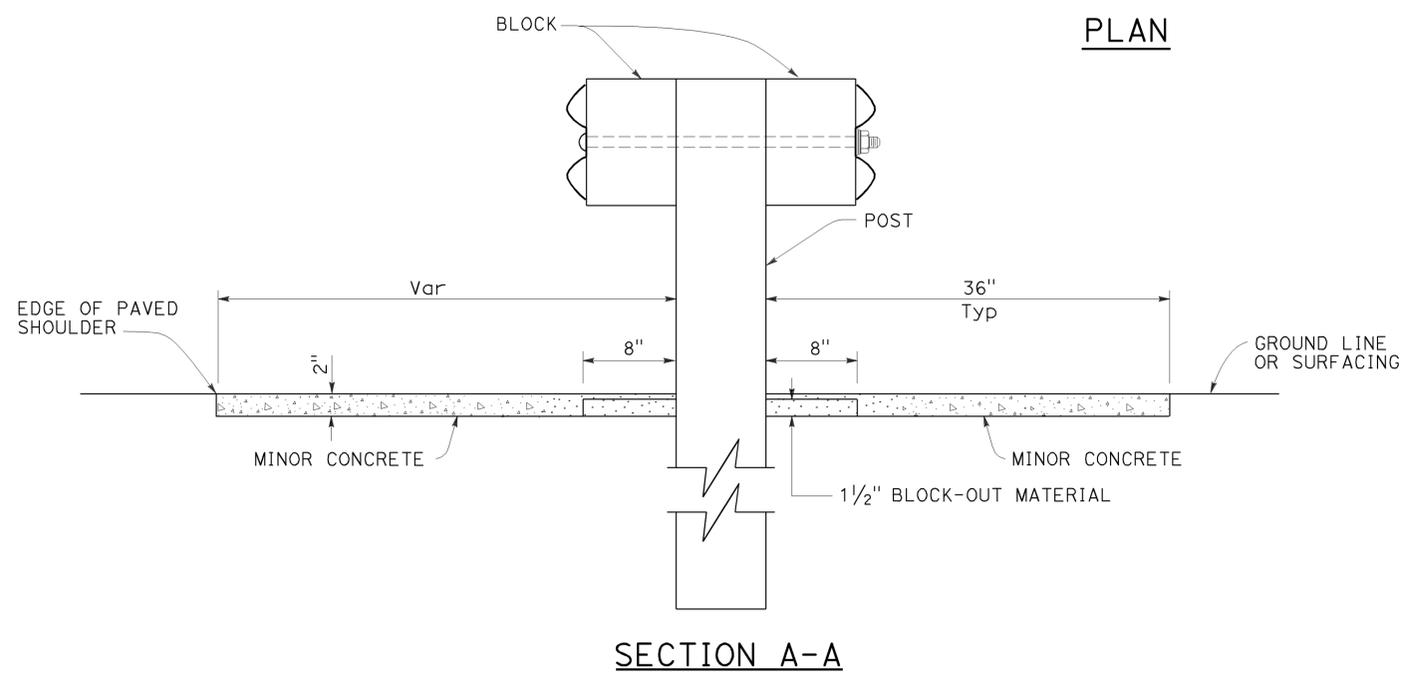
TO ACCOMPANY PLANS DATED 5-12-14

2010 REVISED STANDARD PLAN RSP A77N7



NOTES:

1. See Revised Standard Plan RSP A77N5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
4. End vegetation control at end of backside rail element.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL VEGETATION CONTROL
AT STRUCTURE APPROACH**

NO SCALE

RSP A77N7 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N7

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	42	65

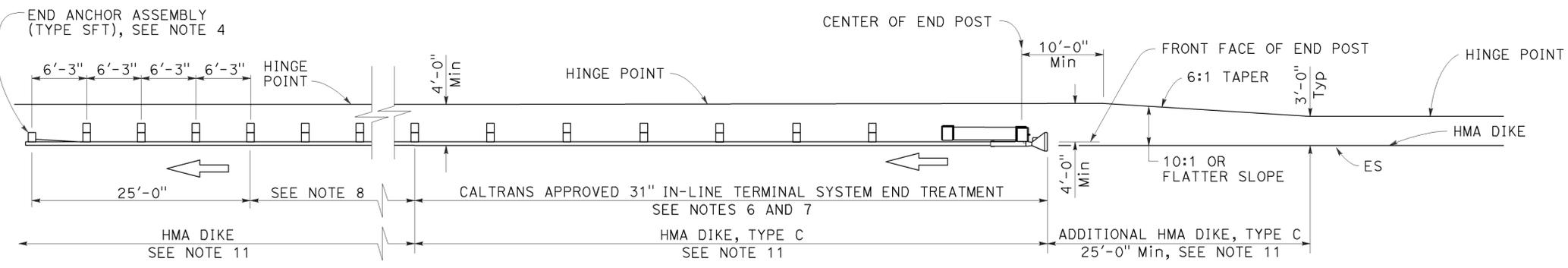
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

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

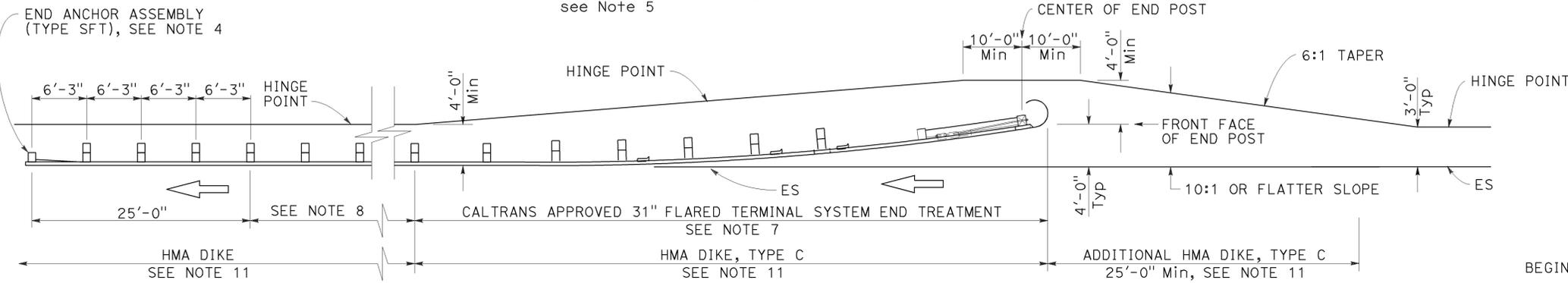
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14



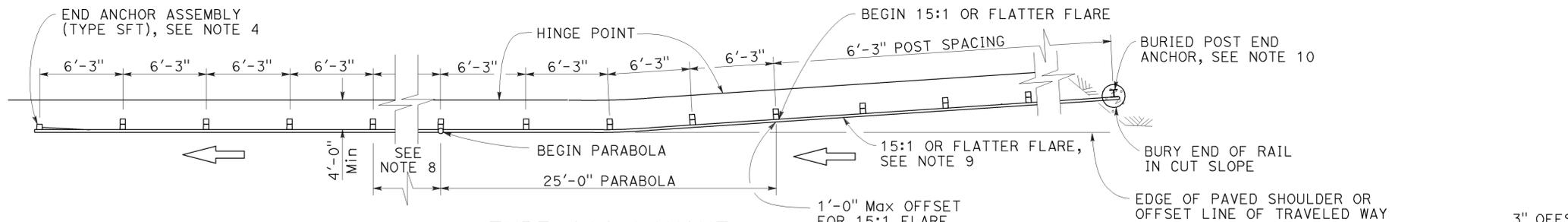
TYPE 11A LAYOUT

(Embankment MGS installation with 31" in-line end treatment at traffic approach end of railing) see Note 5



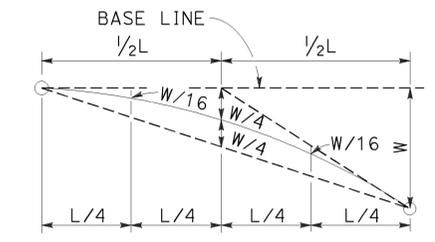
TYPE 11B LAYOUT

(Embankment MGS installation with 31" flared end treatment at traffic approach end of railing) see Note 5

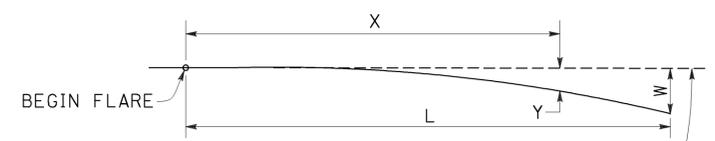


TYPE 11C LAYOUT

(Embankment MGS installation with buried end anchor treatment at traffic approach end of railing) see Notes 5 and 11



TYPICAL PARABOLIC LAYOUT

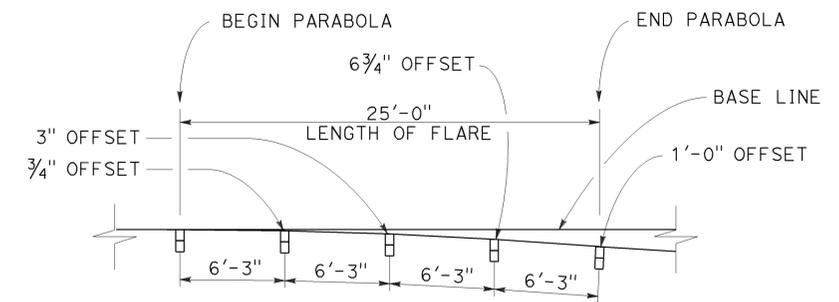


BASE LINE (EDGE OF PAVED SHOULDER OR OFFSET LINE OF EDGE OF TRAVELED WAY)

$$Y = \frac{WX^2}{L^2}$$

Y = OFFSET FROM BASE LINE
W = MAXIMUM OFFSET
X = DISTANCE ALONG BASE LINE
L = LENGTH OF FLARE

PARABOLIC FLARE OFFSETS



TYPICAL FLARE OFFSETS FOR 1 FOOT Max END OFFSET

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM TYPICAL LAYOUTS FOR EMBANKMENTS

NO SCALE

RSP A77P1 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77P1 DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P1

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or recycled plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- For End Anchor Assembly (Type SFT) details, see Revised Standard Plan RSP A77S1.
- Layout Types 11A, 11B or 11C are typically used where MGS is recommended to shield embankment slopes and a crashworthy end treatment is required for only one direction of traffic.
- 31" in-line terminal system end treatments are used where site conditions will not accommodate a flared end treatment.
- The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11C Layout, see Revised Standard Plan RSP A77T2.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

2010 REVISED STANDARD PLAN RSP A77P1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	43	65

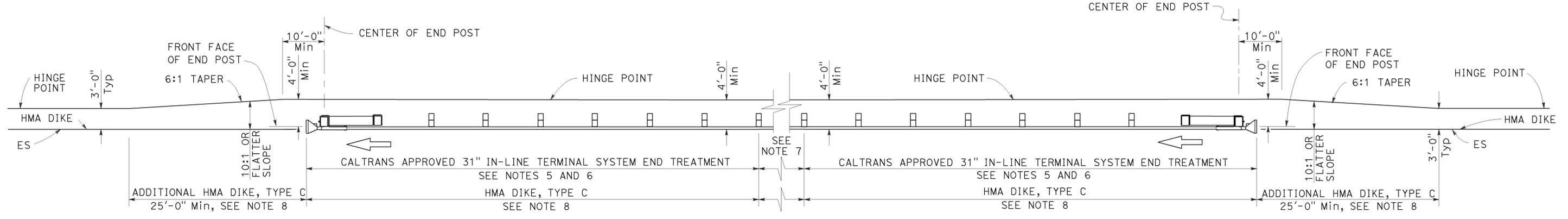
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

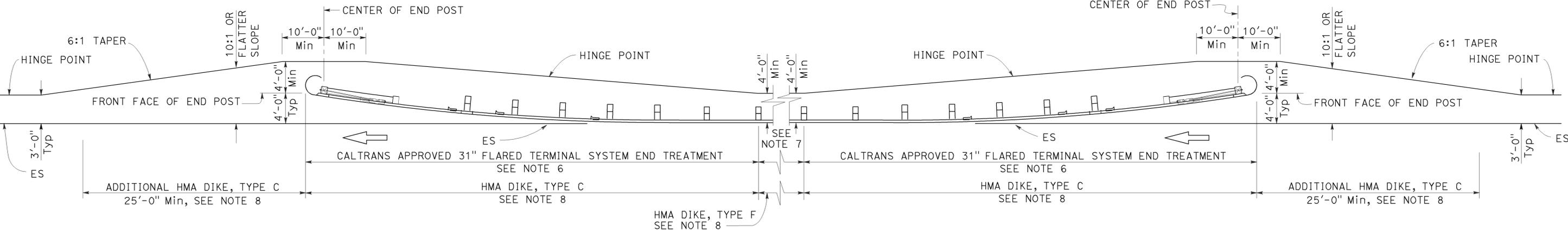
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14



TYPE 11D LAYOUT
(Embankment MGS installation with 31" in-line end treatment at each end of railing)
See Note 4



TYPE 11E LAYOUT
(Embankment MGS installation with 31" flared end treatment at each end of railing)
See Note 4

- NOTES:**
- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
 - MGS post spacing to be 6'-3" center to center, except as otherwise noted.
 - Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
 - Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
 - 31" in-line terminal system end treatments are used where site conditions will not accommodate a flared end treatment.
 - The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
 - Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
 - Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77P2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P2

2010 REVISED STANDARD PLAN RSP A77P2

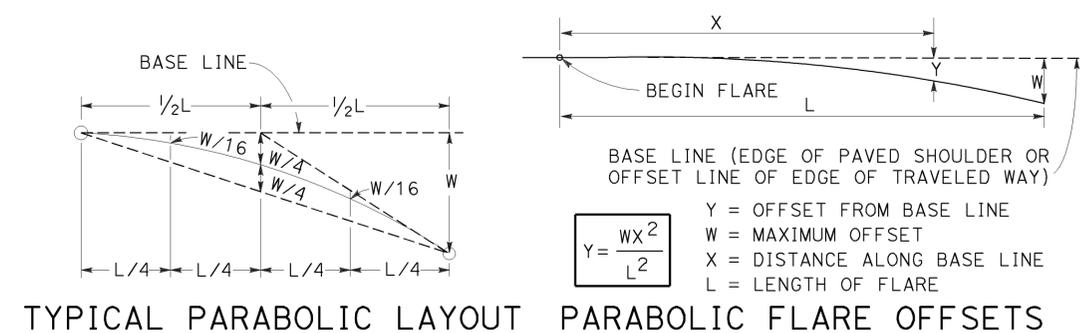
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	44	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

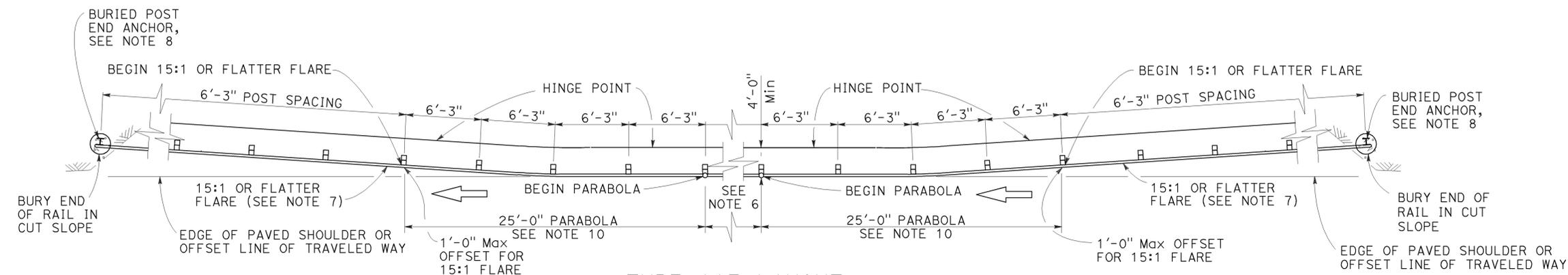
July 19, 2013
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

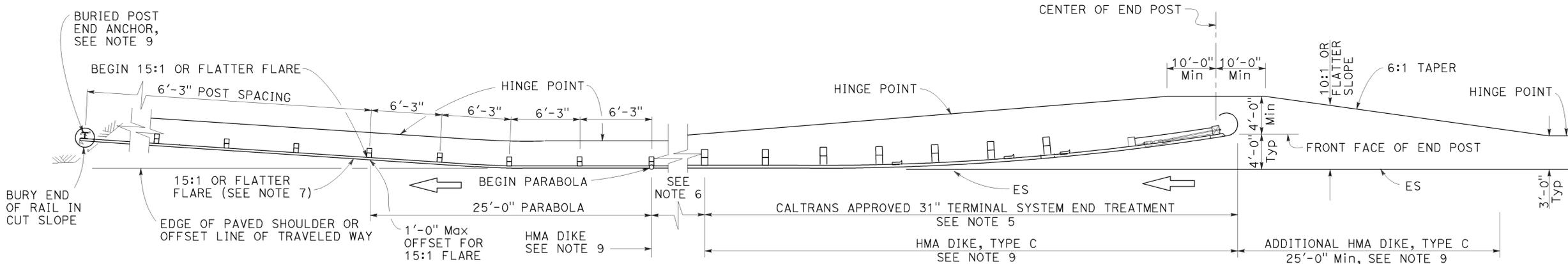


TO ACCOMPANY PLANS DATED 5-12-14



TYPE 11F LAYOUT

(Embankment MGS installation with a buried end anchor treatment at each end of railing)
See Notes 4 and 9



TYPE 11G LAYOUT

(Embankment MGS installation with 31" flared end treatment and a buried end anchor treatment at the ends of railing)
See Notes 4 and 9

NOTES:

1. Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
2. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
4. Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.

5. The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
6. Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
7. The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
8. For details of the buried post end anchor used with Type 11F and 11G Layouts, see Revised Standard Plan RSP A77T2.
9. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
10. For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77P3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P3

2010 REVISED STANDARD PLAN RSP A77P3

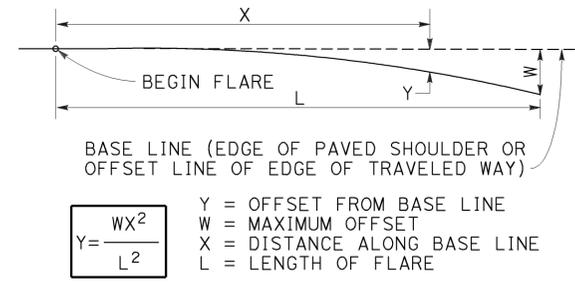
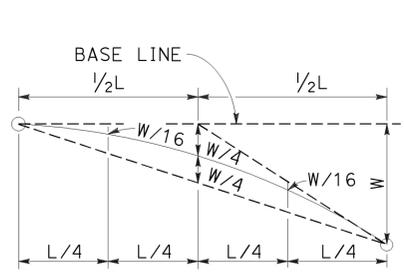
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	45	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

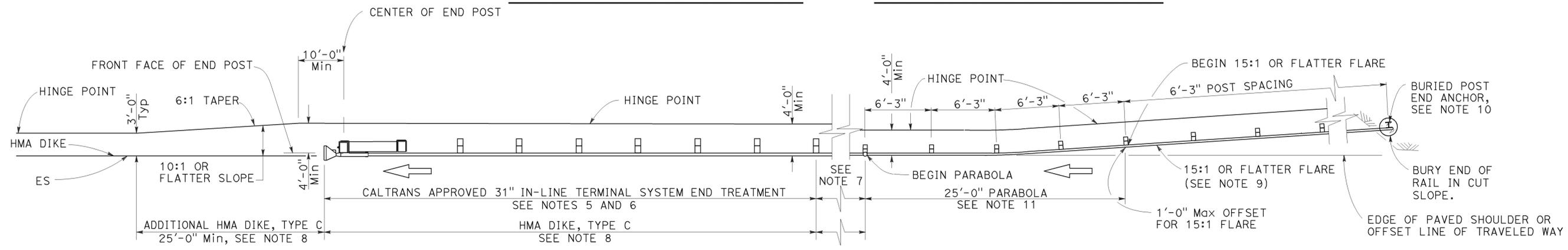
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



TYPICAL PARABOLIC LAYOUT

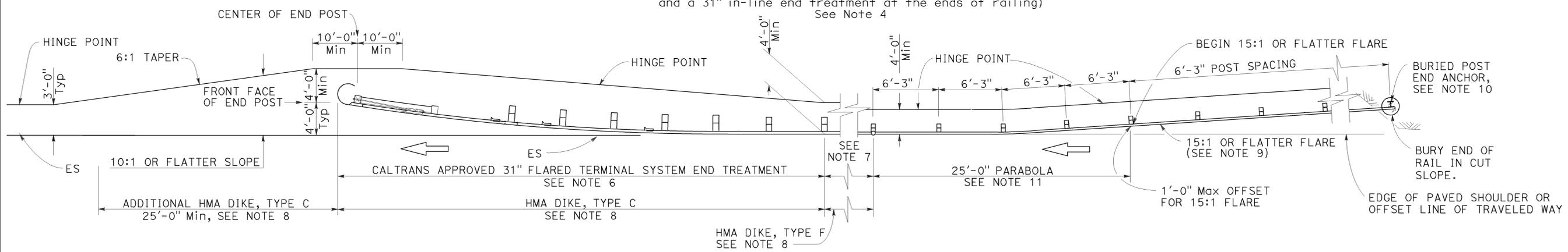
PARABOLIC FLARE OFFSETS

TO ACCOMPANY PLANS DATED 5-12-14



TYPE 11K LAYOUT

(Embankment MGS installation with a buried end anchor treatment and a 31 inch in-line end treatment at the ends of railing)
See Note 4



TYPE 11L LAYOUT

(Embankment MGS installation with a buried end anchor treatment and a 31 inch flared end treatment at the ends of railing)
See Note 4

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
- 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11K and 11L Layouts, see Revised Standard Plan RSP A77T2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

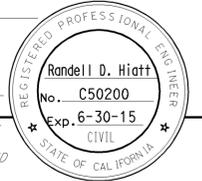
NO SCALE

RSP A77P6 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P6

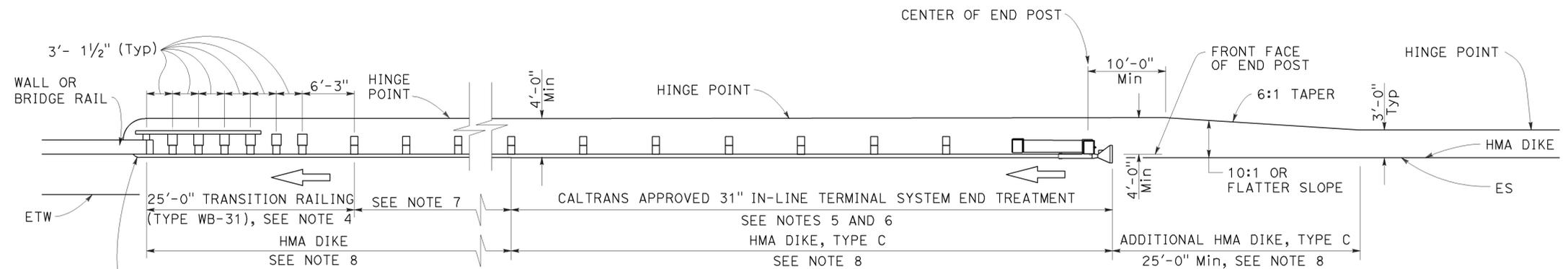
2010 REVISED STANDARD PLAN RSP A77P6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	46	65
<i>Randell D. Hiatt</i> REGISTERED CIVIL ENGINEER					
July 19, 2013 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



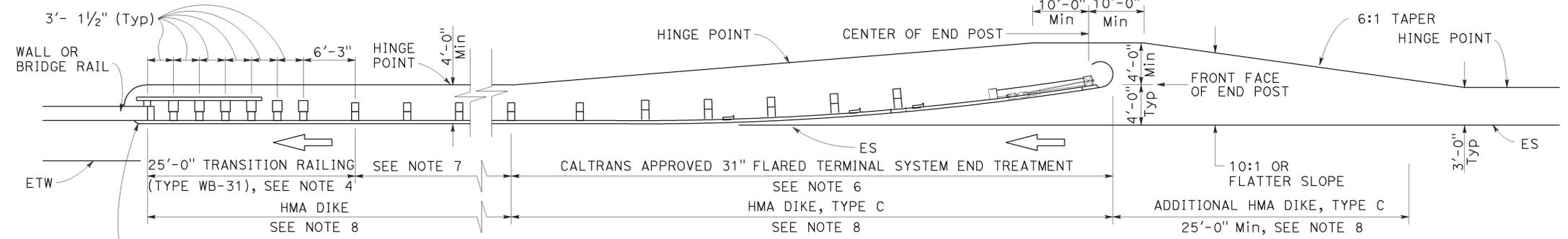
TO ACCOMPANY PLANS DATED 5-12-14

2010 REVISED STANDARD PLAN RSP A77Q1



TYPE 12A LAYOUT

(MGS installation at structure approach with 31" in-line end treatment at traffic approach end of railing)
See Notes 9



TYPE 12B LAYOUT

(MGS installation at structure approach with 31" Flared end treatment at traffic approach end of railing)
See Notes 9

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood posts with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Revised Standard Plan RSP A77U4.
- 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type 31" of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment. A 12.5 degree angle of departure can be drawn on the Project Plans from the edge of traveled way through the outer most point of the fixed object to determine the additional length of railing needed.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used:
 - To the right of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
 - To the left of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
 - To the right of approaching traffic at the end of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
 - To the right of approaching traffic at the end of the structure on multilane freeways or expressways with decked median on the bridge.
- See Revised Standard Plan RSP A77Q3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
- For additional details of typical connections to bridge rail, see Connection Detail AA on Revised Standard Plans RSP A77U1 and RSP A77U2 and Connection Detail FF on Revised Standard Plans RSP A77V1 and RSP A77V2.
- For additional details of a typical connection to walls or abutments, see Revised Standard Plan RSP A77U3.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE

RSP A77Q1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77Q1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	47	65

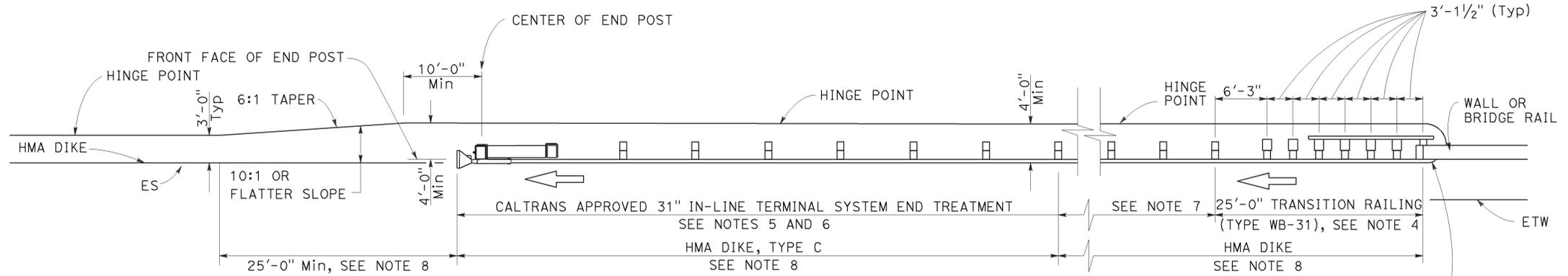
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

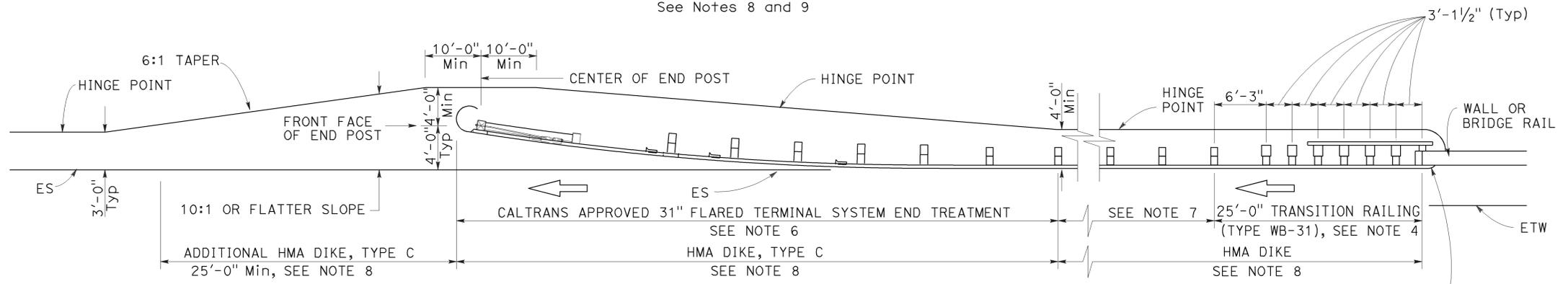
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14



TYPE 12AA LAYOUT

(MGS installation at structure departure with 31" in-line end treatment at trailing end of railing)
See Notes 8 and 9



TYPE 12BB LAYOUT

(MGS installation at structure departure with 31" flared end treatment at trailing end of railing)
See Notes 8 and 9

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks may be used for 6" x 8" x 6'-0" wood posts with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- For Transition Railing (Type WB-31) details for Types 12AA and 12BB Layouts, see Revised Standard Plan RSP A77U4.
- 31" in-line terminal system treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type of 31" terminal system to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, other fixed objects), it may be advisable to construct additional MGS (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and 31" end treatments.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12AA or Type 12BB Layouts are typically used to the right of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of typical connections to bridge rail, see Connection Detail CC on Revised Standard Plan RSP A77U2 and Connection Detail HH on Revised Standard Plan RSP A77V2.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE DEPARTURE**
NO SCALE

RSP A77Q4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77Q4

2010 REVISED STANDARD PLAN RSP A77Q4

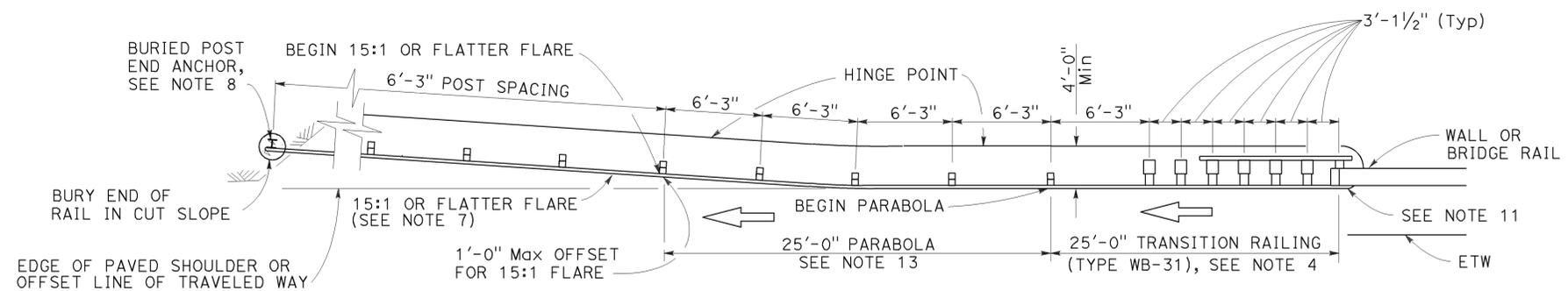
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	48	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

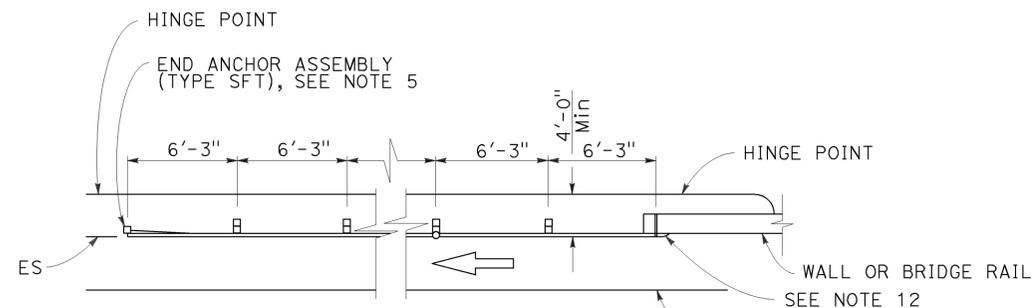
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



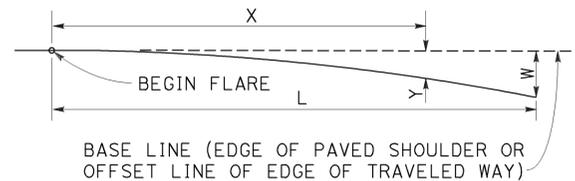
TYPE 12CC LAYOUT

(MGS installation at structure departure with a Buried end anchor treatment at trailing end of railing)
See Notes 9 and 10



TYPE 12DD LAYOUT

(MGS installation at structure departure With end anchor assembly at trailing end of railing)
See Notes 6 and 9

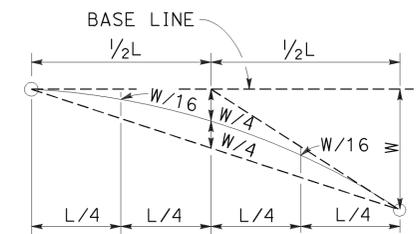


BASE LINE (EDGE OF PAVED SHOULDER OR OFFSET LINE OF EDGE OF TRAVELED WAY)

$$Y = \frac{WX^2}{L^2}$$

Y = OFFSET FROM BASE LINE
W = MAXIMUM OFFSET
X = DISTANCE ALONG BASE LINE
L = LENGTH OF FLARE

PARABOLIC FLARE OFFSETS



TYPICAL PARABOLIC LAYOUT

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MSG post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks may be used for 6" x 8" x 6'-0" wood line posts with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- For Transition Railing (Type WB-31) details for Type 12CC Layout, see Revised Standard Plan RSP A77U4.
- For details of End Anchor Assembly (Type SFT) used with Type 12DD Layout, see Revised Standard Plan RSP A77S1.
- Type 12DD layout is typically used to the right of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is equal to or greater than 40 feet and MGS is recommended (embankment height, side slopes, other fixed objects). Length of railing to be equal to multiples of 12'-6". For MGS connection details to bridge rail, see Revised Standard Plans RSP A77U1 and RSP A77V1. For MGS connection details to wall, see Revised Standard Plan RSP A77U3.
- The 15:1 or flatter flare for Type 12CC Layout is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 12CC Layout, see Revised Standard Plan RSP A77T2.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12CC Layout is typically used to the right of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of a typical connection to bridge rail for Layout Type 12CC, see Connection Detail CC on Revised Standard Plan RSP A77U2 and Connection Detail HH on Revised Standard Plan RSP A77V2.
- For additional details of a typical connection to bridge rail for Layout Type 12DD, see Connection Detail BB on Revised Standard Plan RSP A77U1 and Connection Detail GG on Revised Standard Plan RSP A77V1.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE DEPARTURE**

NO SCALE

RSP A77Q5 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77Q5

2010 REVISED STANDARD PLAN RSP A77Q5

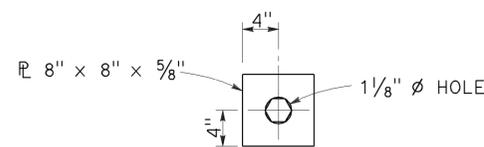
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	49	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

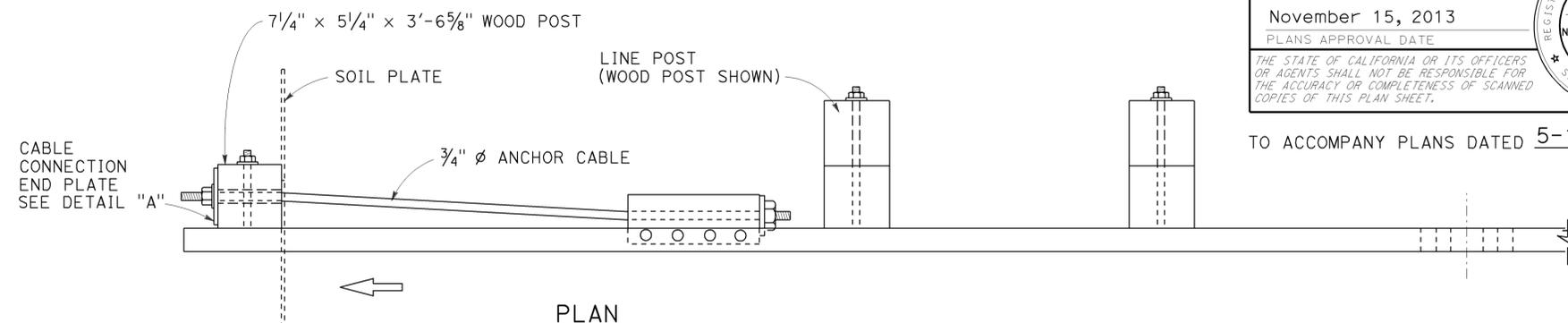
November 15, 2013
PLANS APPROVAL DATE

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

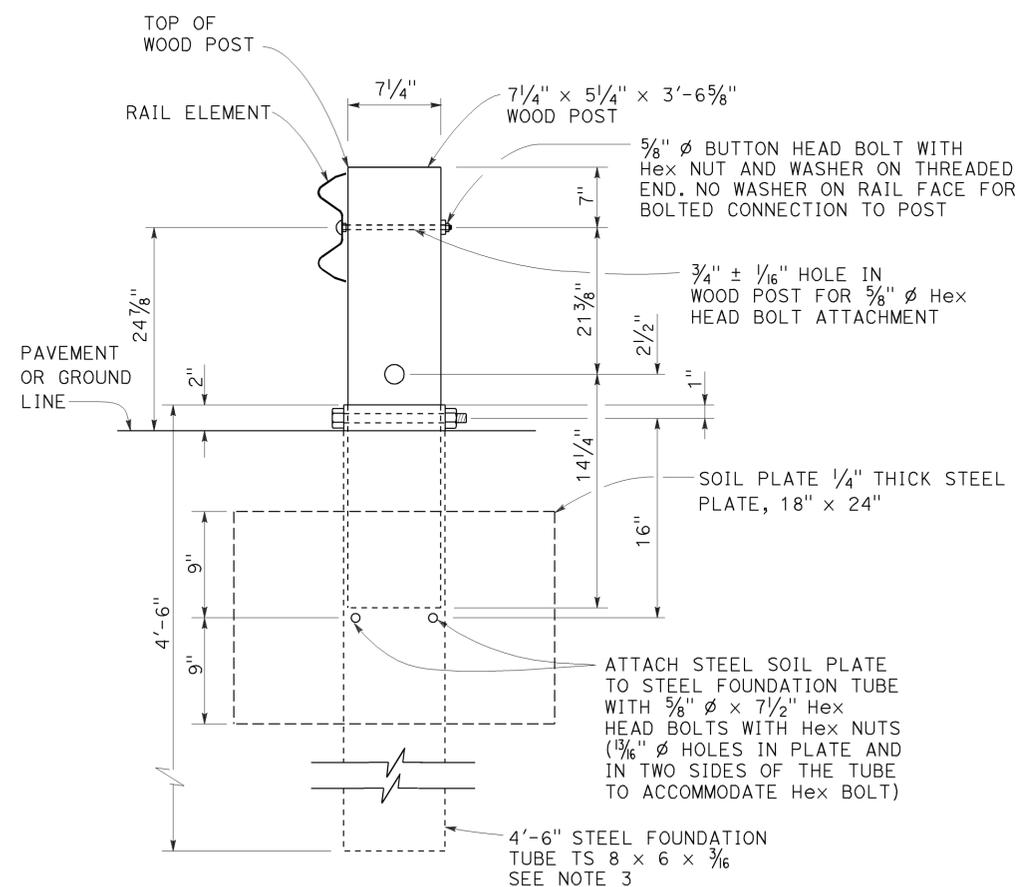
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



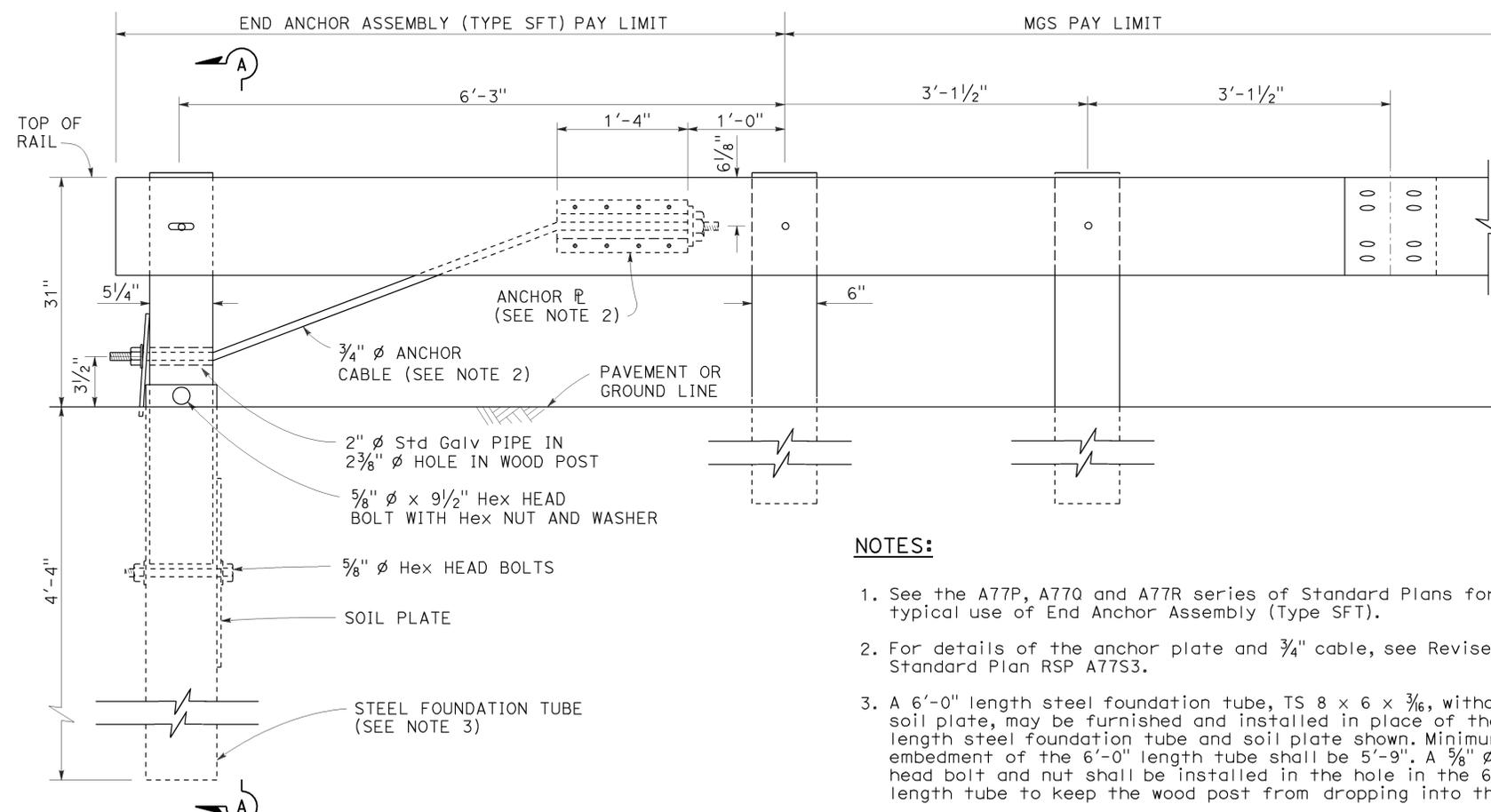
DETAIL "A"
CABLE CONNECTION
END PLATE



PLAN



SECTION A-A



ELEVATION

END ANCHOR
ASSEMBLY (TYPE SFT)
See Note 1

NOTES:

1. See the A77P, A77Q and A77R series of Standard Plans for typical use of End Anchor Assembly (Type SFT).
2. For details of the anchor plate and 3/4" cable, see Revised Standard Plan RSP A77S3.
3. A 6'-0" length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" diameter hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
4. Install line post, steel foundation tube and soil plate in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM
END ANCHOR ASSEMBLY
(TYPE SFT)

NO SCALE

RSP A77S1 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77S1
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77S1

2010 REVISED STANDARD PLAN RSP A77S1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	50	65

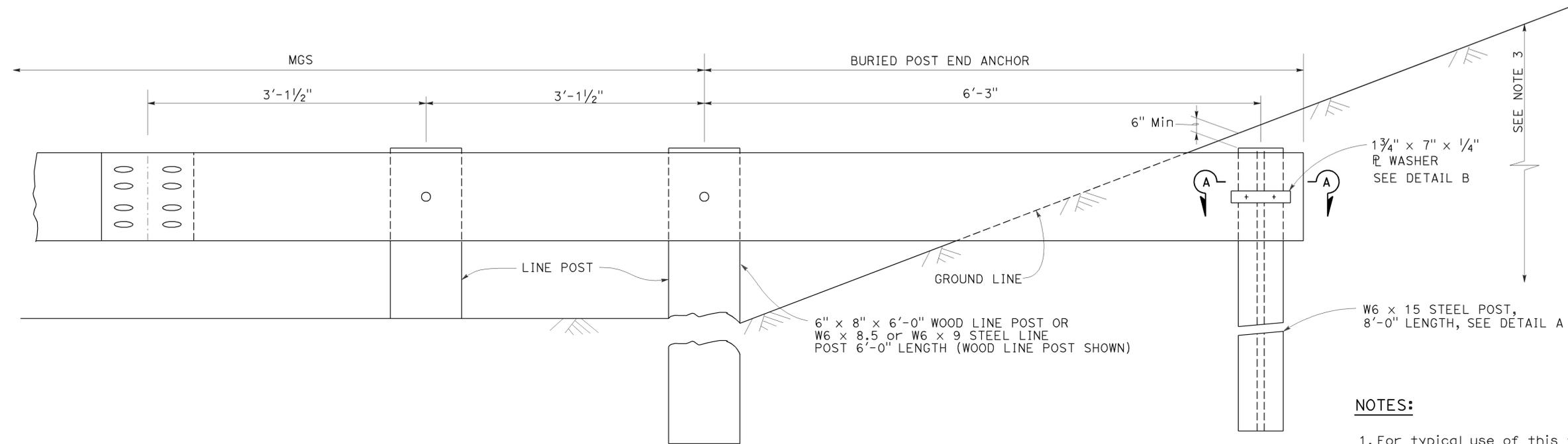
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-12-14

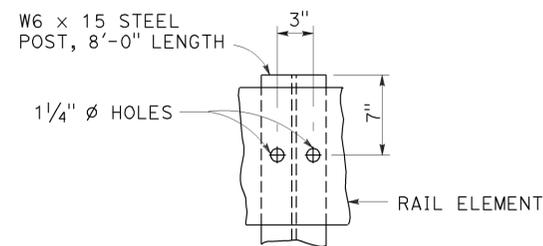


BURIED POST END ANCHOR

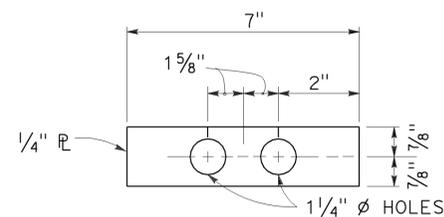
See Note 3

NOTES:

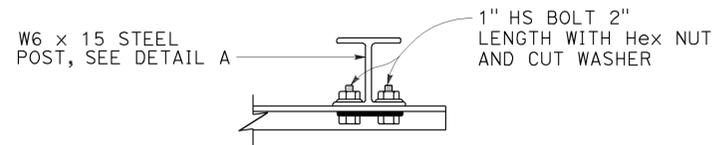
1. For typical use of this type of end anchor with MGS see the A77P, A77Q and A77R Series of the Standard Plans.
2. Holes excavation in the slope to construct the buried post end anchor shall be backfilled with selected earth, placed in layers approximately 1'-0" thick. Each layer shall be moistened and thoroughly compacted.
3. The buried post end anchor shall only be constructed at those locations where the slope perpendicular to the roadway is non-traversable.



DETAIL A



DETAIL B



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
BURIED POST END ANCHOR**

NO SCALE

RSP A77T2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77T2 DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77T2

2010 REVISED STANDARD PLAN RSP A77T2

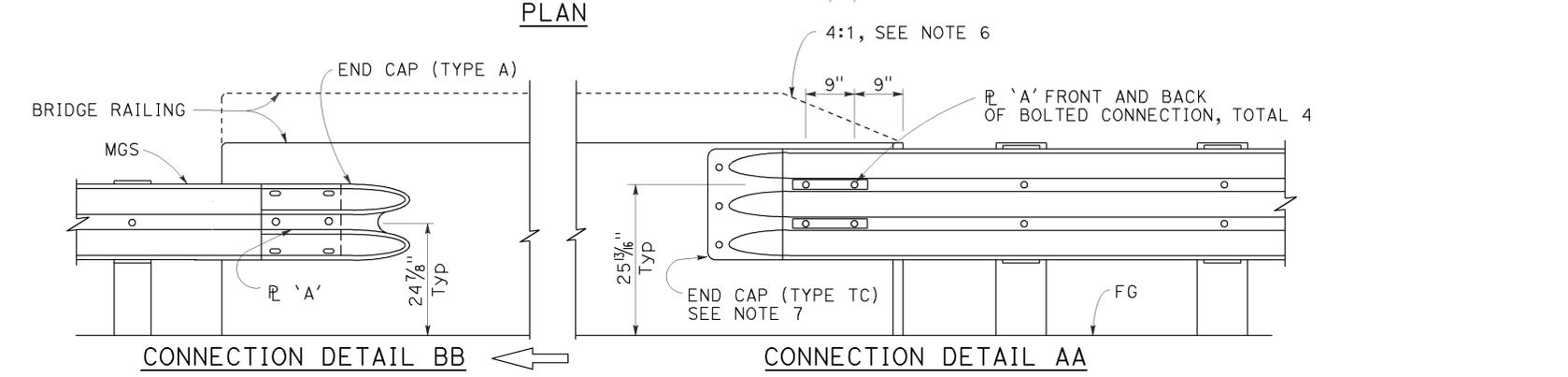
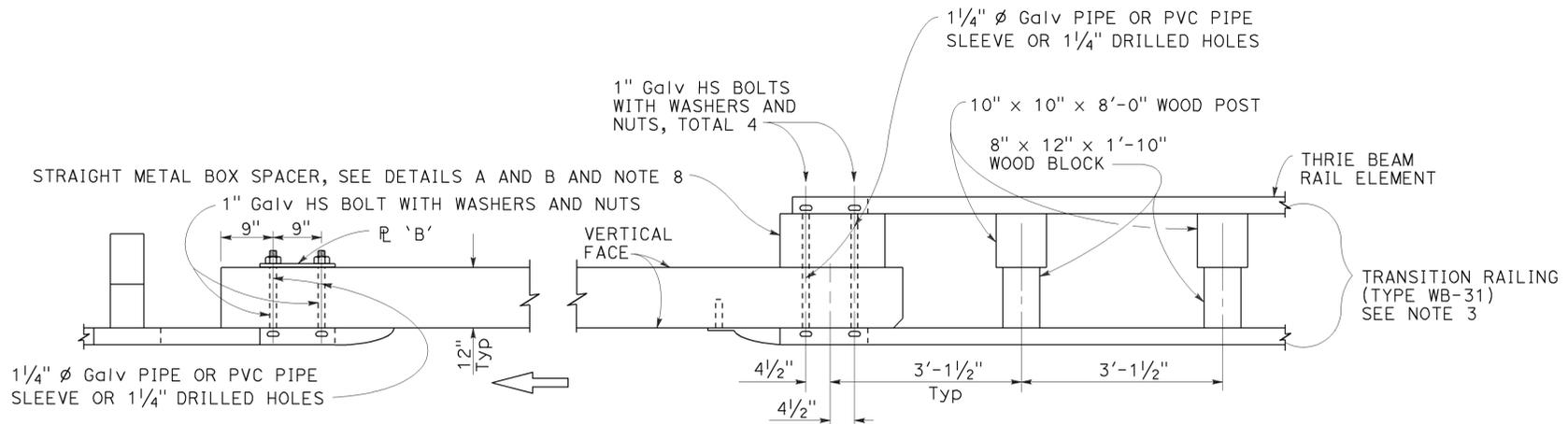
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	51	65

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

No. C50200
Exp. 6-30-15
CIVIL

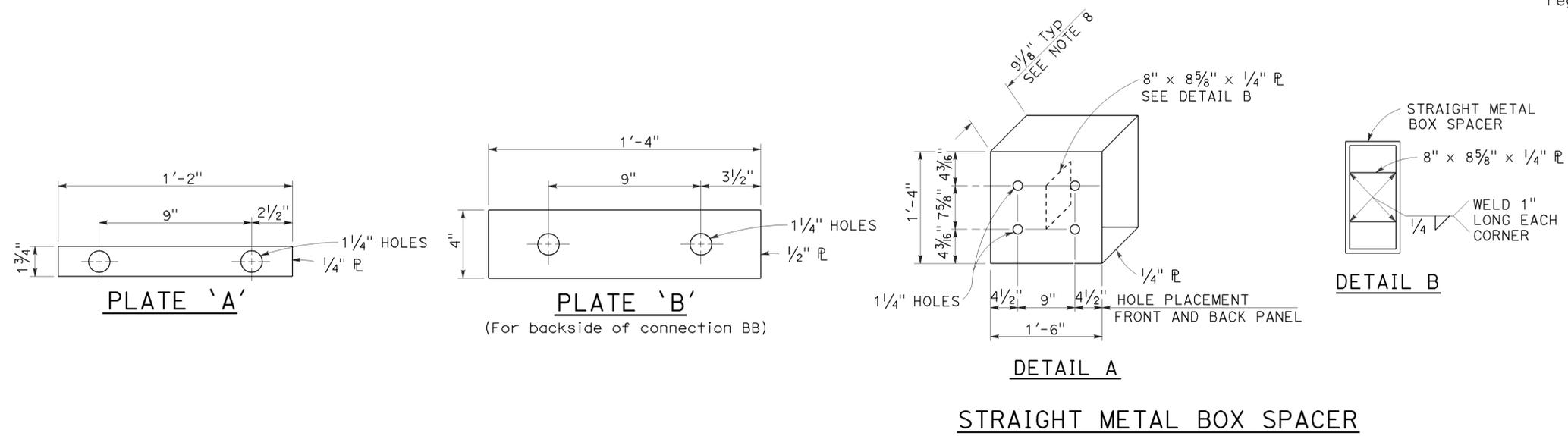
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



MIDWEST GUARDRAIL SYSTEM CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77U2 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Revised Standard Plans RSP A77M1, RSP A77N1 and RSP A77N2.
3. For additional details of Transition Railing (Type WB-31), see Revised Standard Plan RSP A77U4. Transition Railing (Type WB-31) transitions the 12 gauge MGS railing section to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
4. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77Q1, Layout Types 12C and 12D on Revised Standard Plan RSP A77Q2, and Layout Type 12E on Revised Standard Plan RSP A77Q3.
5. For typical use of Connection Detail BB, see Layout Type 12D (structure departure railing connection) on Revised Standard Plan RSP A77Q2 and Layout Type 12DD on Revised Standard Plan RSP A77Q5.
6. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail.
7. For details of End Cap (Type TC), see Revised Standard Plan RSP A77U4.
8. See Revised Standard Plan RSP A77U4 for additional details regarding depth dimension for straight metal box spacer.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS
DETAILS No. 1

NO SCALE

RSP A77U1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77U1

2010 REVISED STANDARD PLAN RSP A77U1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	52	65

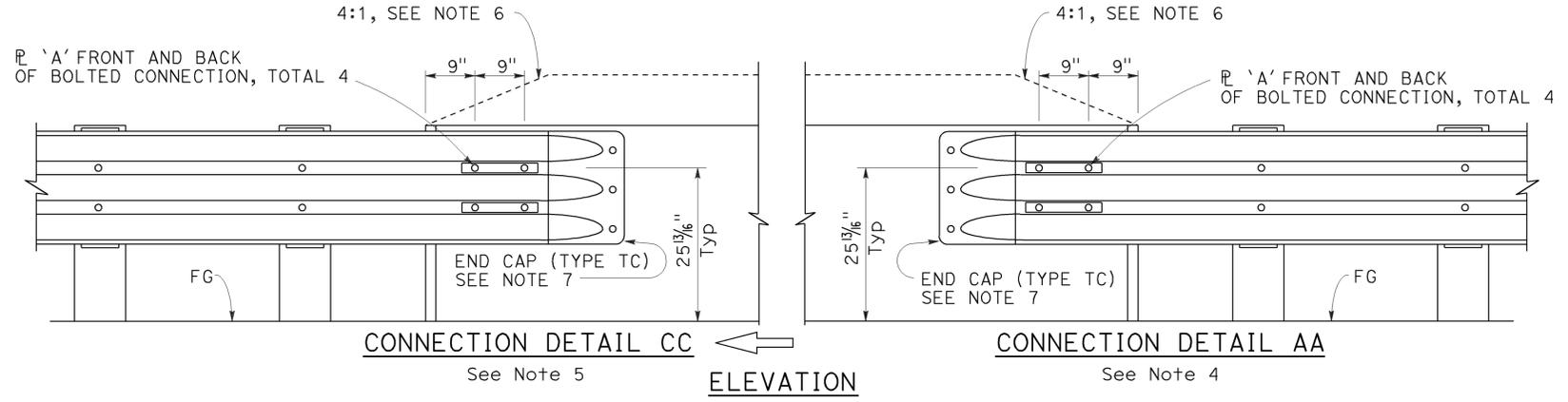
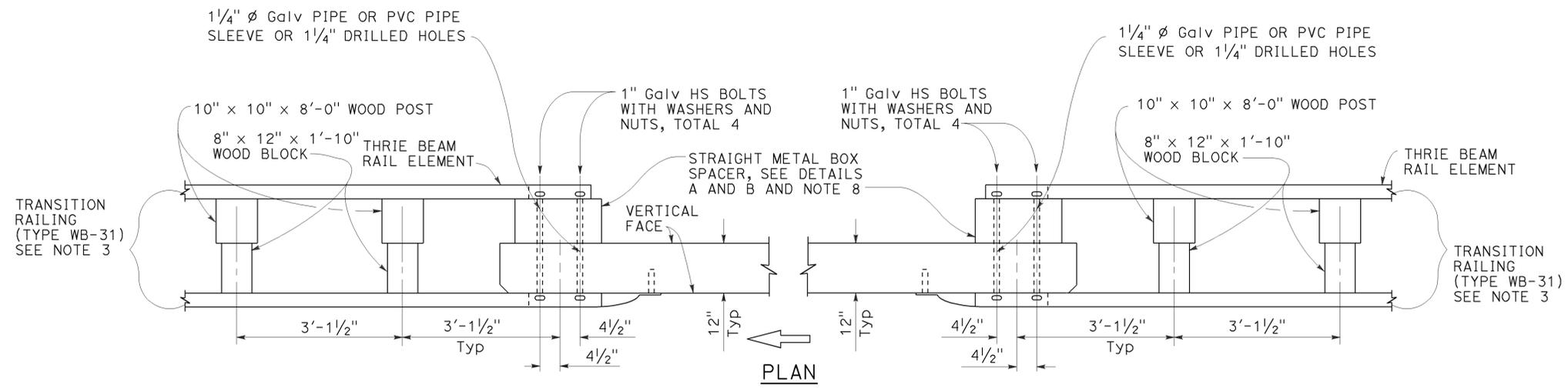
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

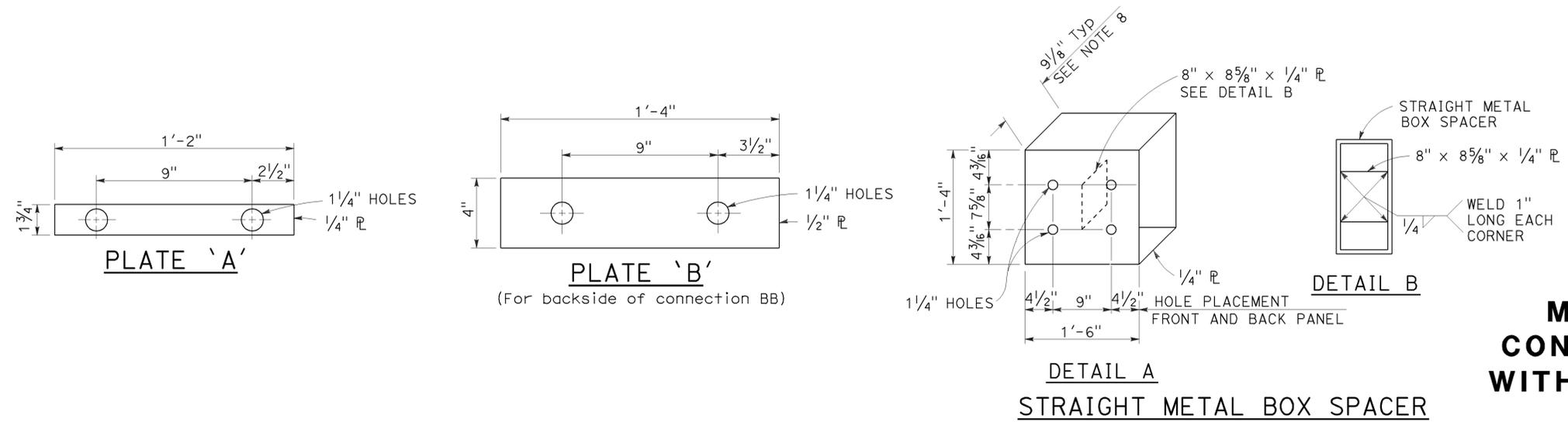
TO ACCOMPANY PLANS DATED 5-12-14



MIDWEST GUARDRAIL SYSTEM CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77U1 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Revised Standard Plans RSP A77M1, RSP A77N1 and RSP A77N2.
3. For additional details of Transition Railing (Type WB-31), see Revised Standard Plan RSP A77U4. Transition Railing (Type WB-31) transitions the 12 gauge MGS railing section to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
4. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77U1, Layout Types 12C and 12D on Revised Standard Plan RSP A77Q2, and Layout Type 12E on Revised Standard Plan RSP A77Q3.
5. For typical use of Connection Detail CC, see Layout Types 12AA and 12BB on Revised Standard Plan RSP A77Q4 and Layout Type 12CC on Revised Standard Plan RSP A77Q5.
6. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA and connection Detail CC, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam railing.
7. For details of End Cap (Type TC), see Revised Standard Plan RSP A77U4.
8. See Revised Standard Plan RSP A77U4 for additional details regarding depth dimension for straight metal box spacer.



MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No. 2

NO SCALE

RSP A77U2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

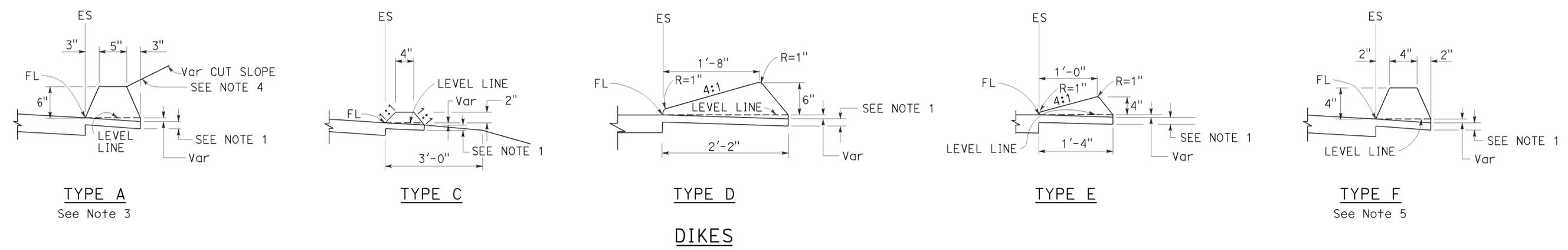
REVISED STANDARD PLAN RSP A77U2

2010 REVISED STANDARD PLAN RSP A77U2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	54	65

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

TO ACCOMPANY PLANS DATED 5-12-14



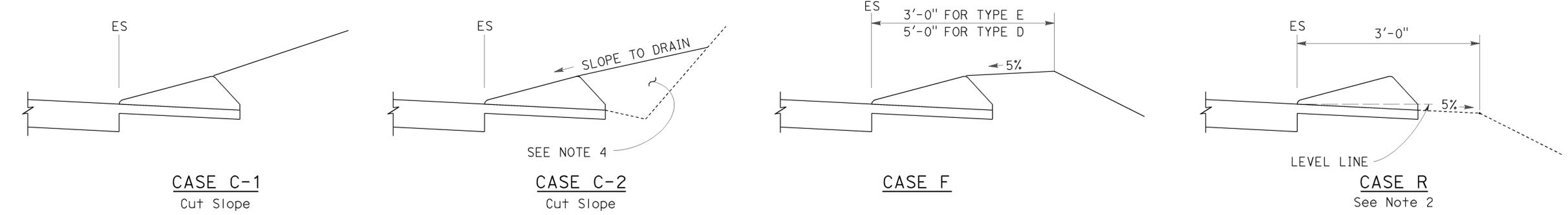
TYPE A
See Note 3

TYPE C

TYPE D

TYPE E

TYPE F
See Note 5



CASE C-1
Cut Slope

CASE C-2
Cut Slope

CASE F

CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

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

DIKE QUANTITIES

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

Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT DIKES

NO SCALE

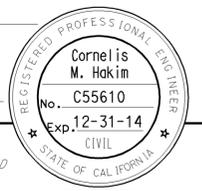
RSP A87B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A87B
DATED MAY 20, 2011 - PAGE 120 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A87B

2010 REVISED STANDARD PLAN RSP A87B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	55	65

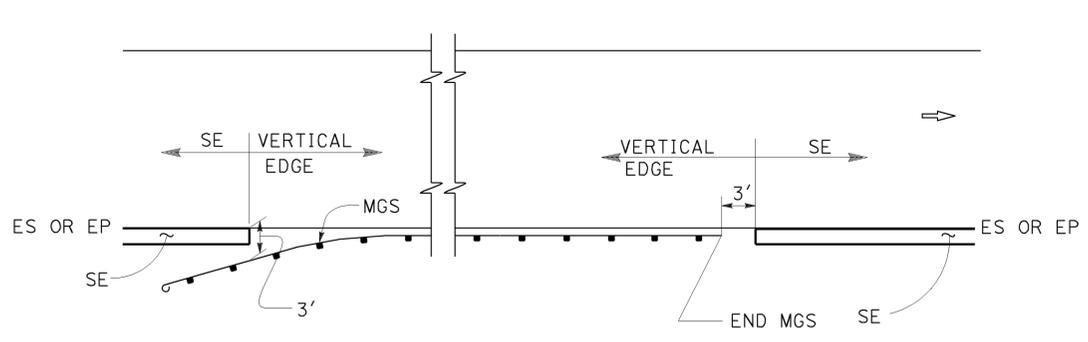

 REGISTERED CIVIL ENGINEER
 November 15, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



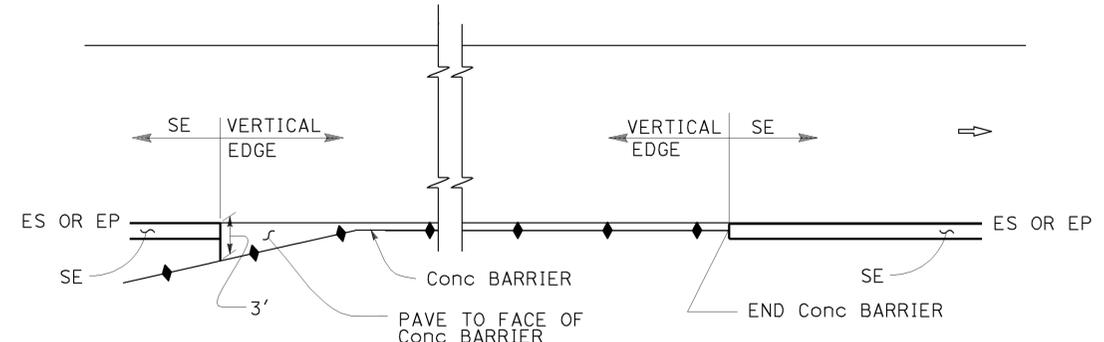
TO ACCOMPANY PLANS DATED 5-12-14

ABBREVIATIONS:

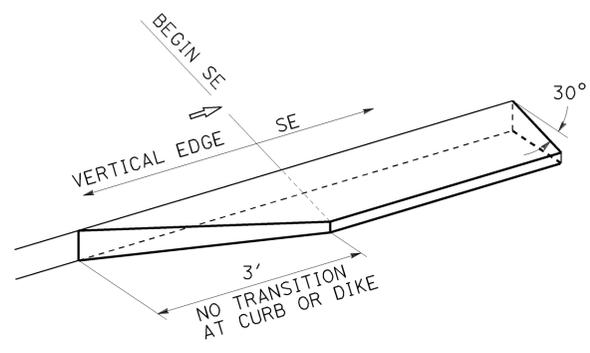
SE SAFETY EDGE



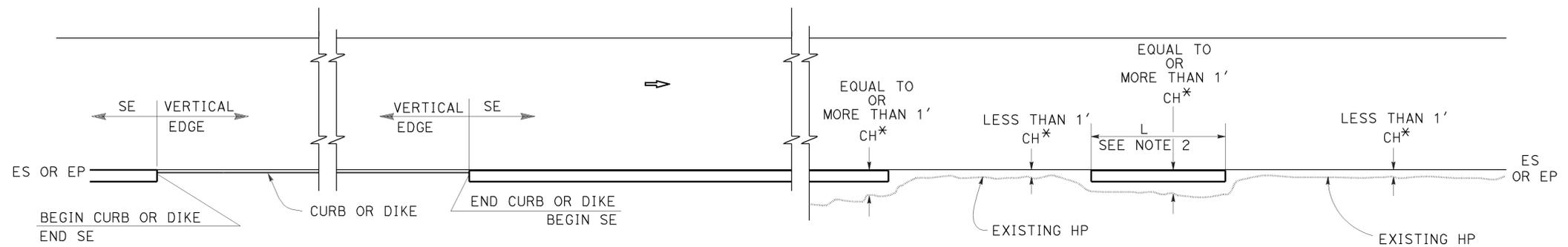
MGS



CONCRETE BARRIER



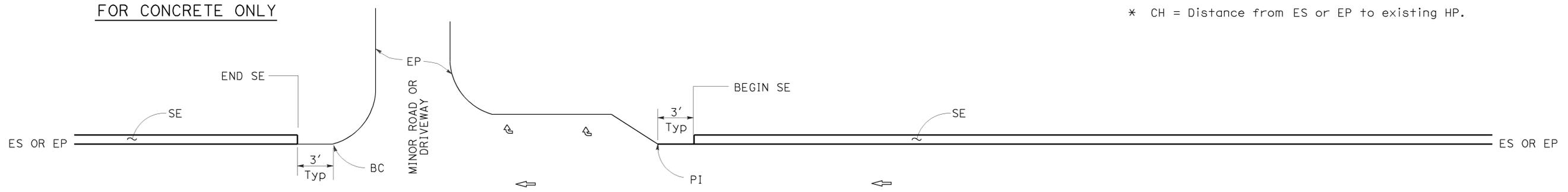
TRANSITION DETAIL FOR CONCRETE ONLY



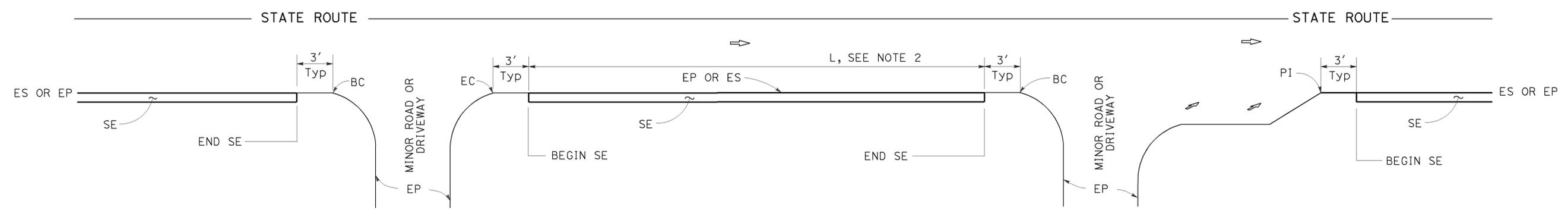
CURB OR DIKE

NARROW SIDE SLOPE

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



INTERSECTION



DRIVEWAY AND INTERSECTION

MINOR ROADWAY OR DRIVEWAY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS
NO SCALE

NOTES:

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

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

REVISED STANDARD PLAN RSP P74

2010 REVISED STANDARD PLAN RSP P74

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	56	65



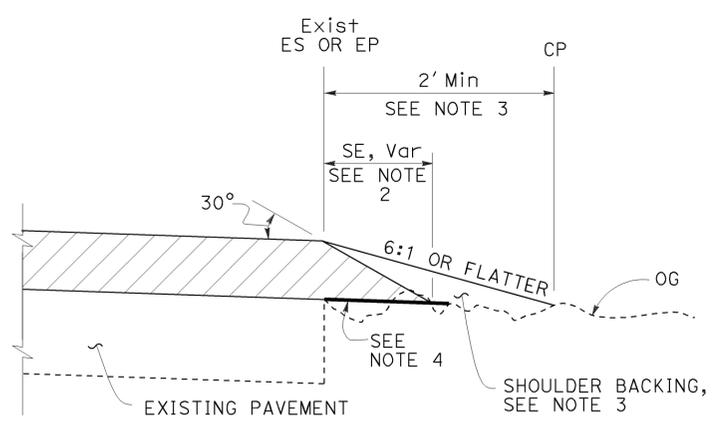
 REGISTERED CIVIL ENGINEER
 November 15, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-12-14

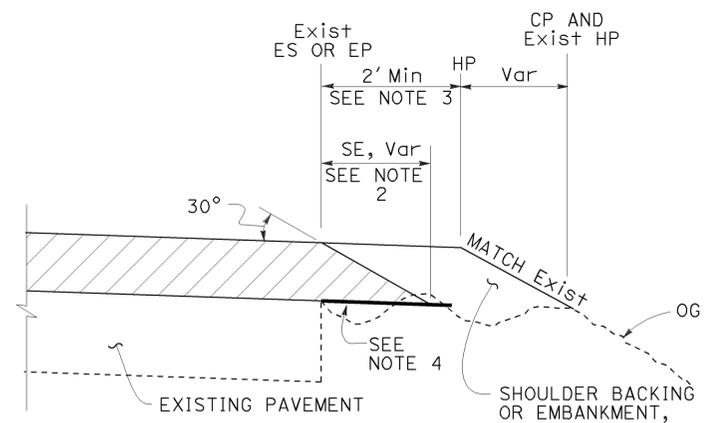
ADDITIONAL HMA OR CONCRETE QUANTITIES FOR SE/SIDE/MILE

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

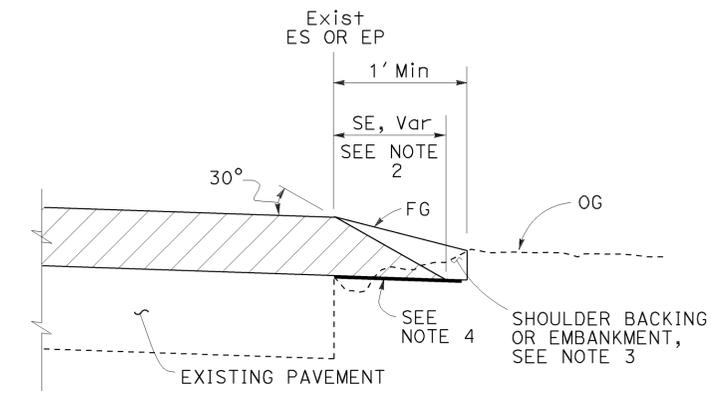
* For Detail "A"
 ** For Optional Detail "A"



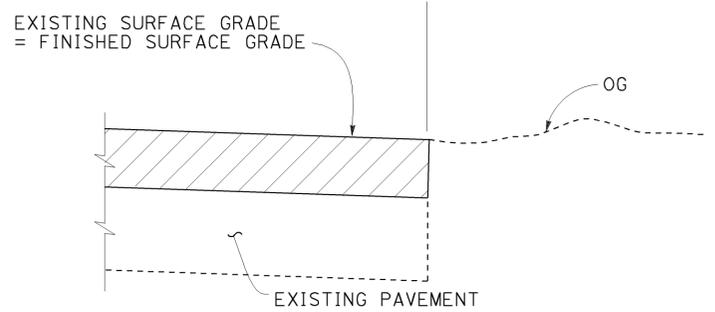
CASE A
Safety Edge



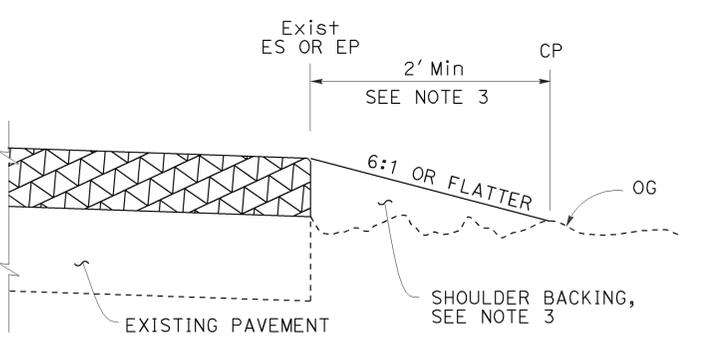
CASE B
Safety Edge



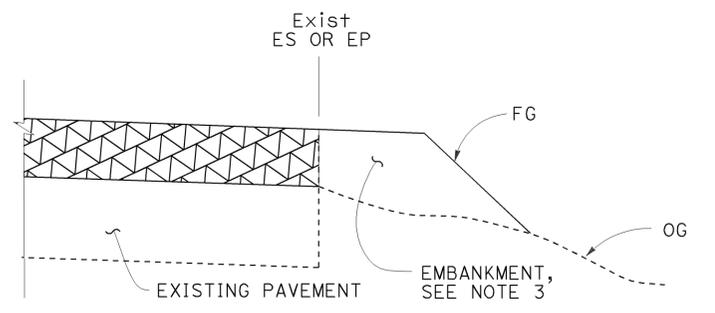
CASE C
Safety Edge



CASE D
Vertical Edge



CASE E
Vertical Edge



CASE F
Vertical Edge

* See Table A and Revised Std Plan RSP P74

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

LEGEND:

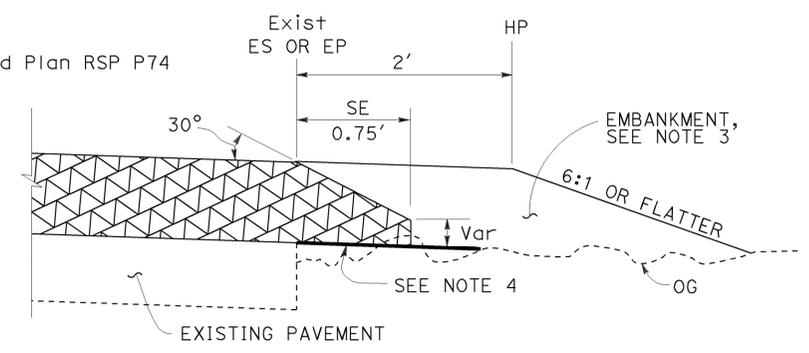
-  HMA OVERLAY
-  HMA OR CONCRETE OVERLAY
-  CONCRETE OVERLAY

ABBREVIATIONS:

- SE SAFETY EDGE
- TT TOTAL THICKNESS OF SE

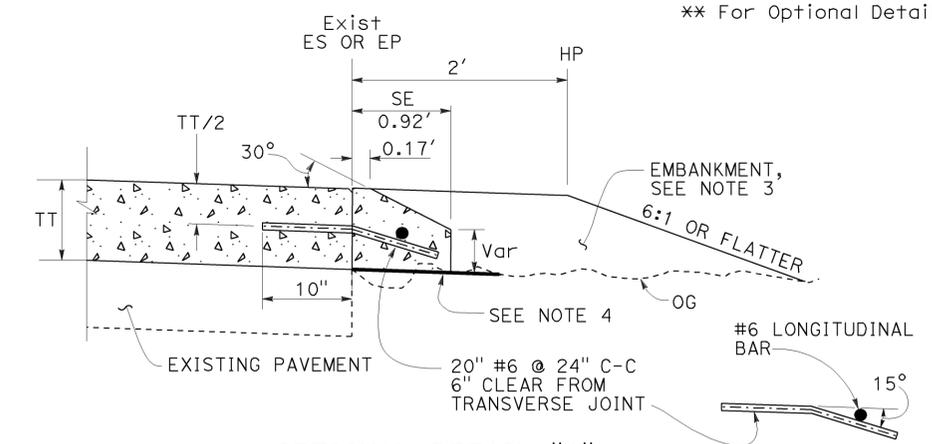
TABLE A
EDGE TREATMENT FOR VARIOUS OVERLAY THICKNESS AND CONDITIONS

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



DETAIL "A"

For HMA overlay thickness more than 0.43' or concrete overlay



OPTIONAL DETAIL "A"

For concrete overlay
See Note 5

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS- OVERLAYS

NO SCALE

RSP P75 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P75 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P75

2010 REVISED STANDARD PLAN RSP P75

TO ACCOMPANY PLANS DATED 5-12-14

TABLE 1

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

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

Where: L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

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

TABLE 2

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

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

** - Longitudinal buffer space or flagger station spacing

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

TABLE 3

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

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	58	65

 REGISTERED CIVIL ENGINEER		
April 19, 2013 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

See Revised Standard Plan RSP T9 for tables.

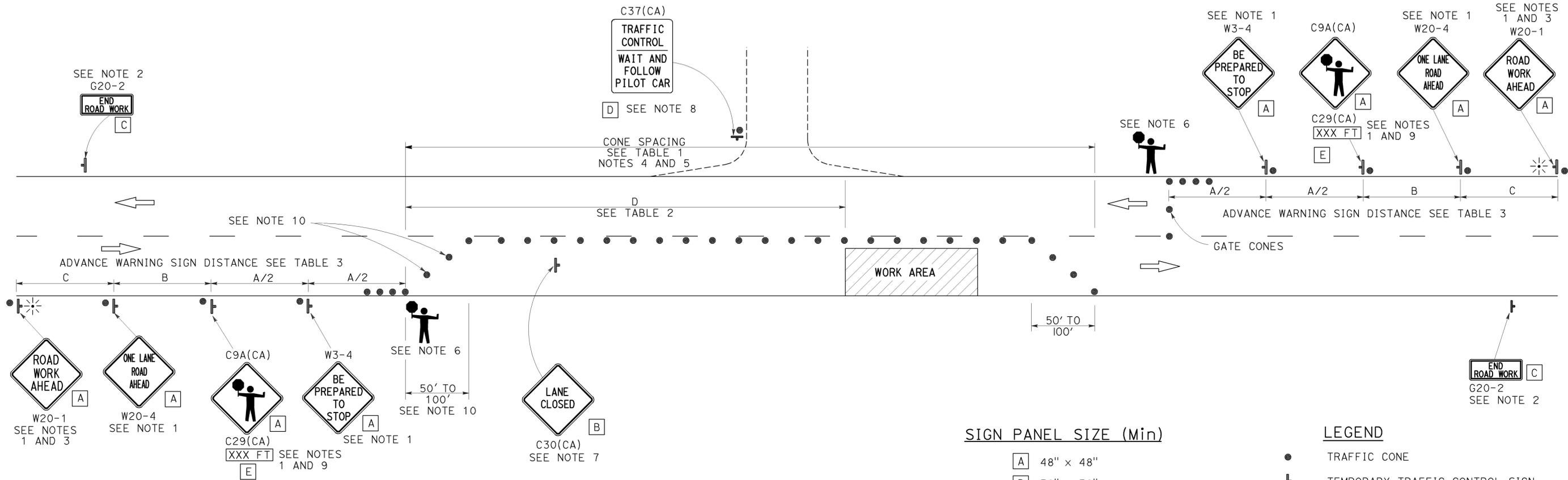
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 5-12-14



NOTES:

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

SIGN PANEL SIZE (Min)

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

LEGEND

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

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

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

REVISED STANDARD PLAN RSP T13

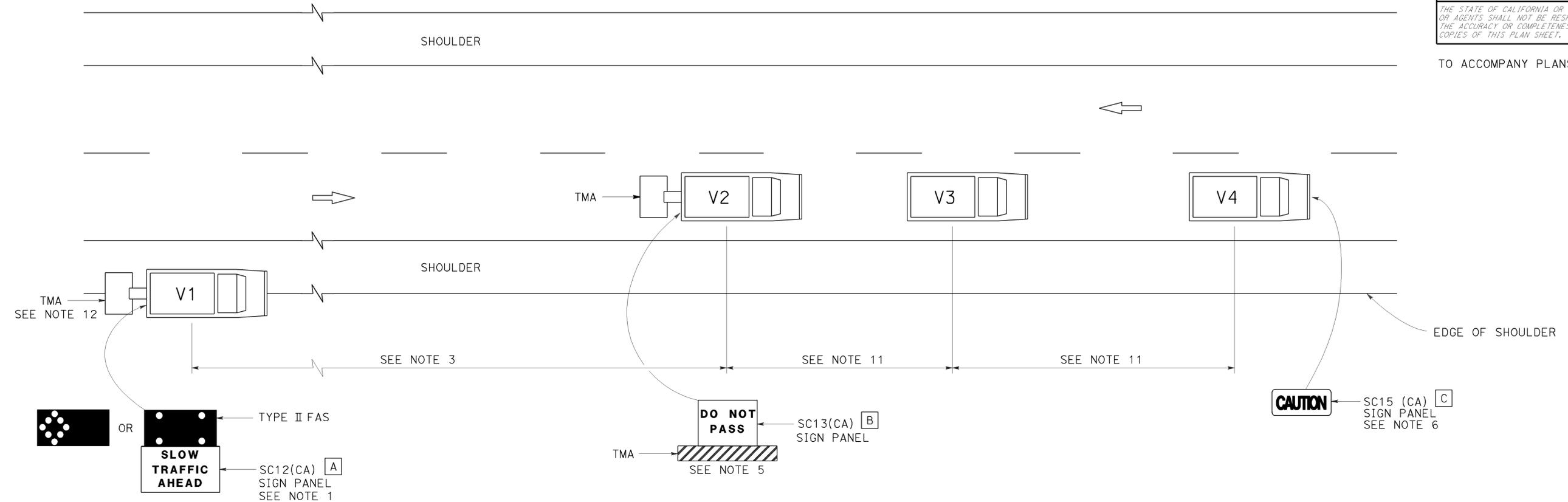
2010 REVISED STANDARD PLAN RSP T13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	59	65


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



TO ACCOMPANY PLANS DATED 5-12-14



NOTES:

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

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

LEGEND

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

SIGN PANEL SIZE (Min)

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

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

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

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

LEGEND:

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

ABBREVIATIONS

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

MISCELLANEOUS ELECTROLIERS

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

NOTES:

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

STANDARD ELECTROLIER

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	60	65

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 5-12-14

SOFFIT AND WALL MOUNTED LUMINAIRES

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

NOTE:

Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	61	65

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

TO ACCOMPANY PLANS DATED 5-12-14

CONDUIT

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

SIGNAL EQUIPMENT

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

SIGNAL EQUIPMENT Cont

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

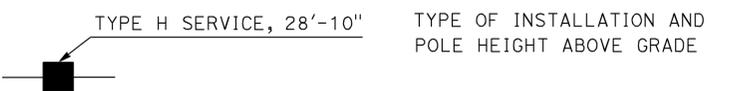
SERVICE EQUIPMENT

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

NOTES:

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

POLE-MOUNTED SERVICE DESIGNATION



FLASHING BEACON

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

		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

ILLUMINATED OVERHEAD SIGN

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

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

NO SCALE

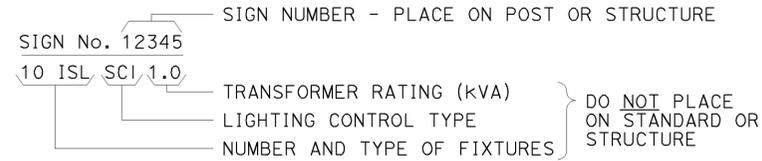
RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

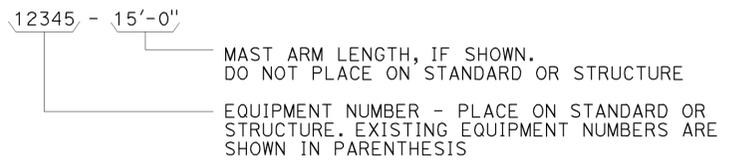
2010 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

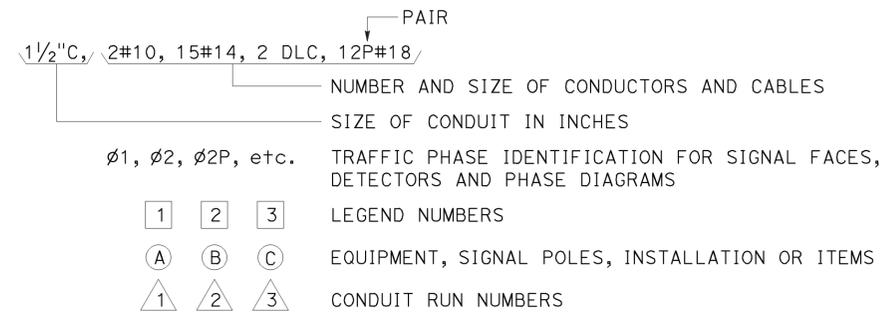
ILLUMINATED SIGN IDENTIFICATION NUMBER:



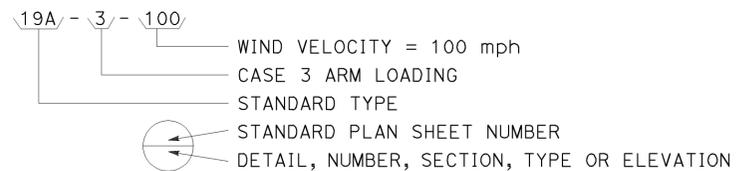
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



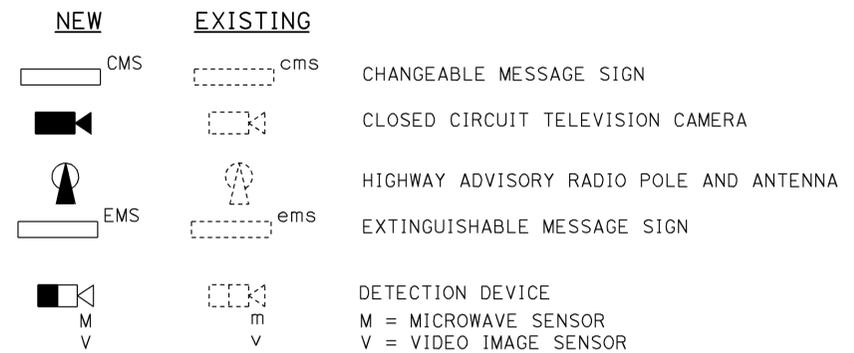
CONDUIT AND CONDUCTOR IDENTIFICATION:



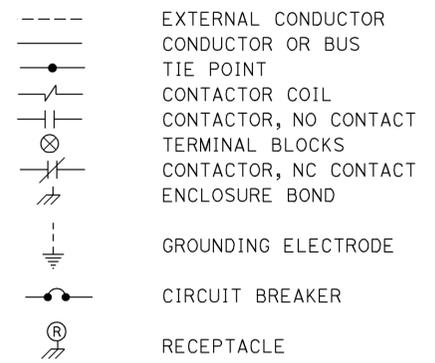
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



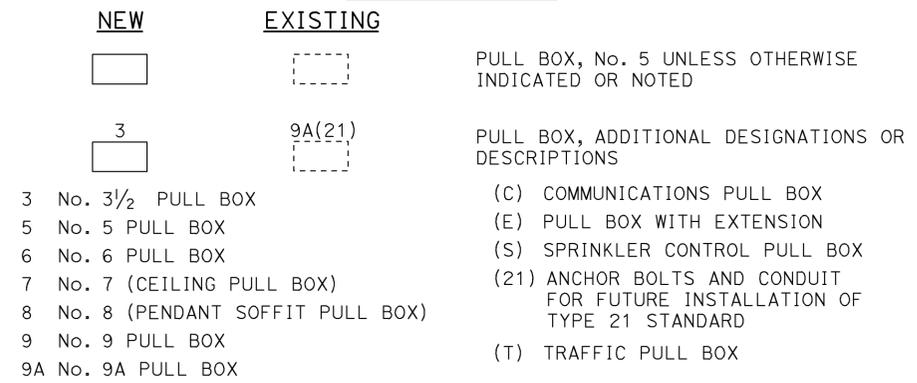
MISCELLANEOUS EQUIPMENT



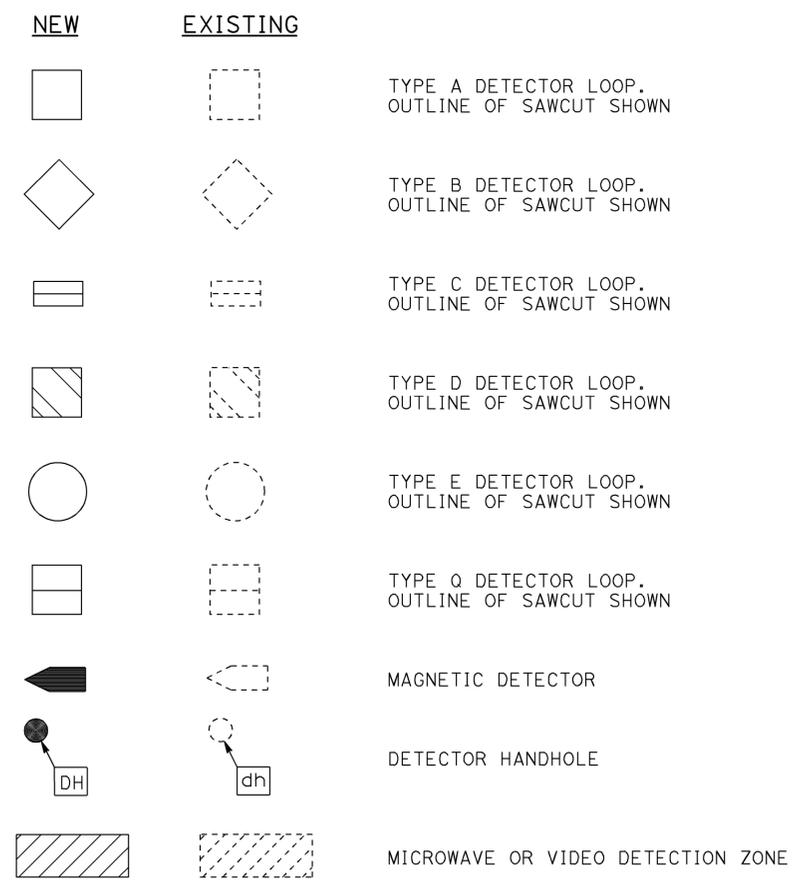
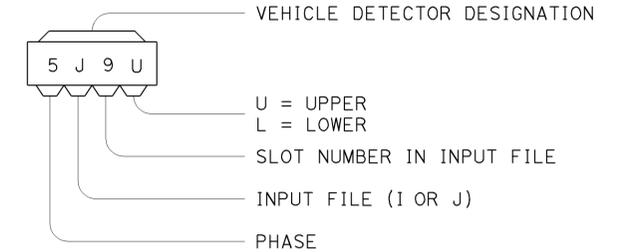
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

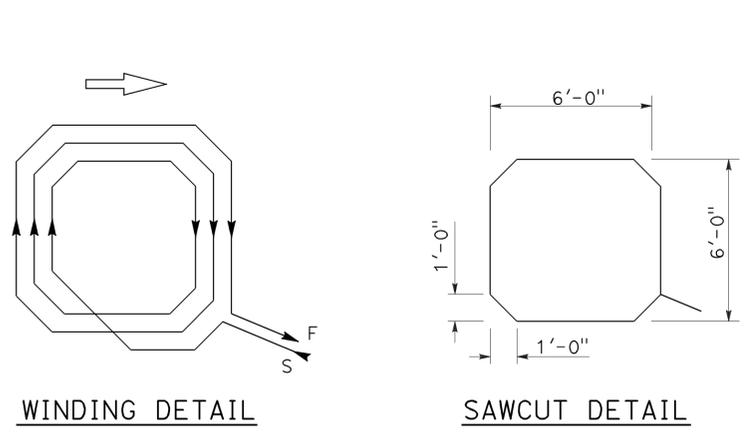
RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-1C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	63	65

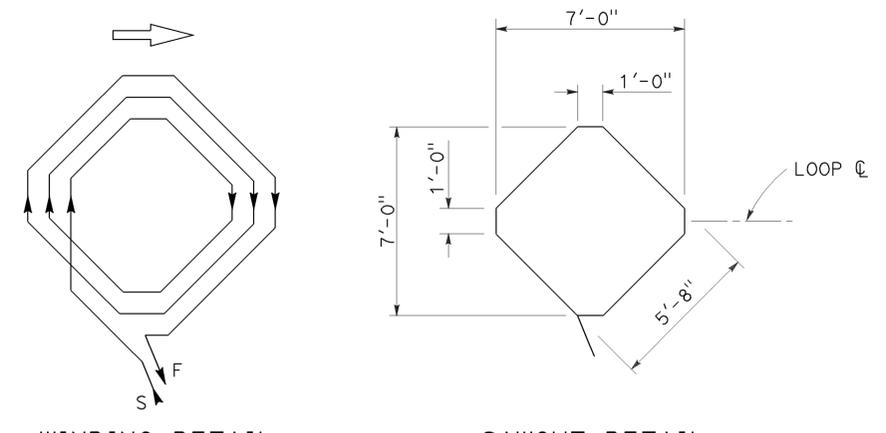
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-12-14



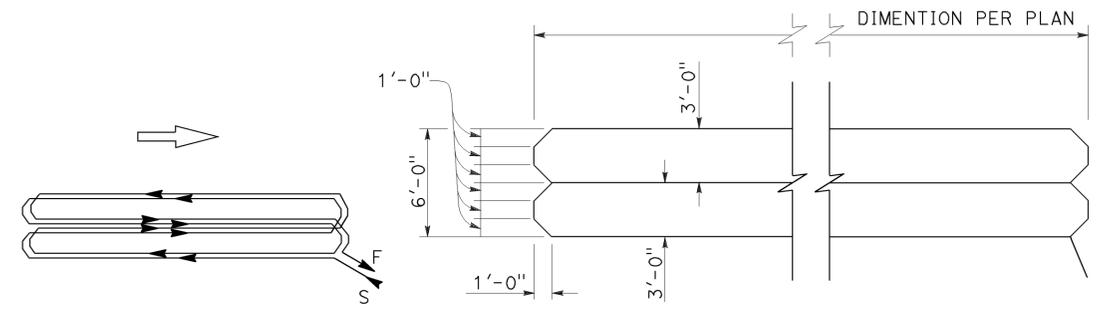
WINDING DETAIL SAWCUT DETAIL

TYPE A LOOP DETECTOR CONFIGURATION



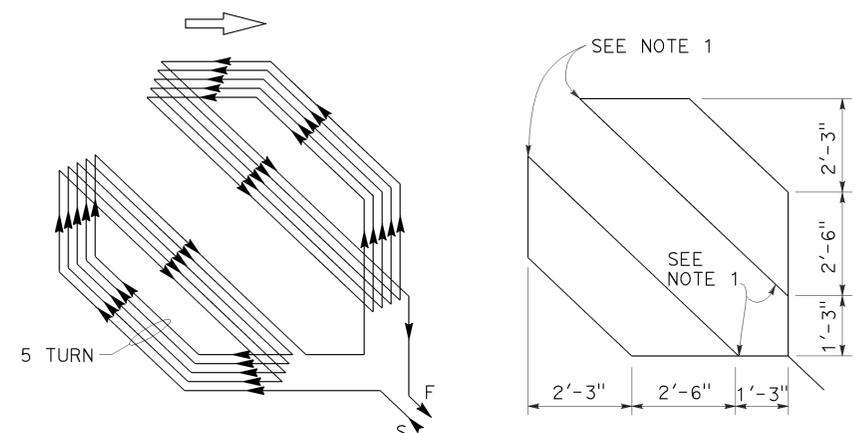
WINDING DETAIL SAWCUT DETAIL

TYPE B LOOP DETECTOR CONFIGURATION



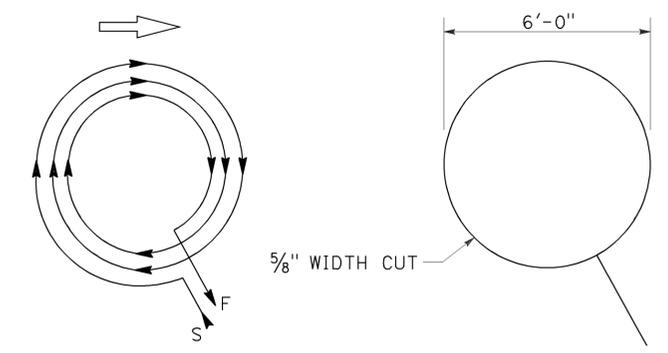
WINDING DETAIL SAWCUT DETAIL

TYPE C LOOP DETECTOR CONFIGURATION



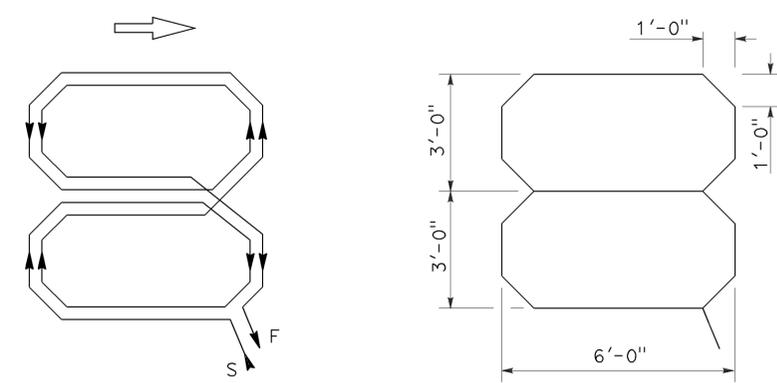
WINDING DETAIL SAWCUT DETAIL

TYPE D LOOP DETECTOR CONFIGURATION



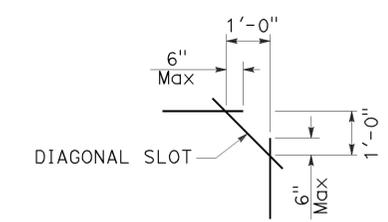
WINDING DETAIL SAWCUT DETAIL

TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL SAWCUT DETAIL

TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-5B

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

2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	13.3/20.3	64	65

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

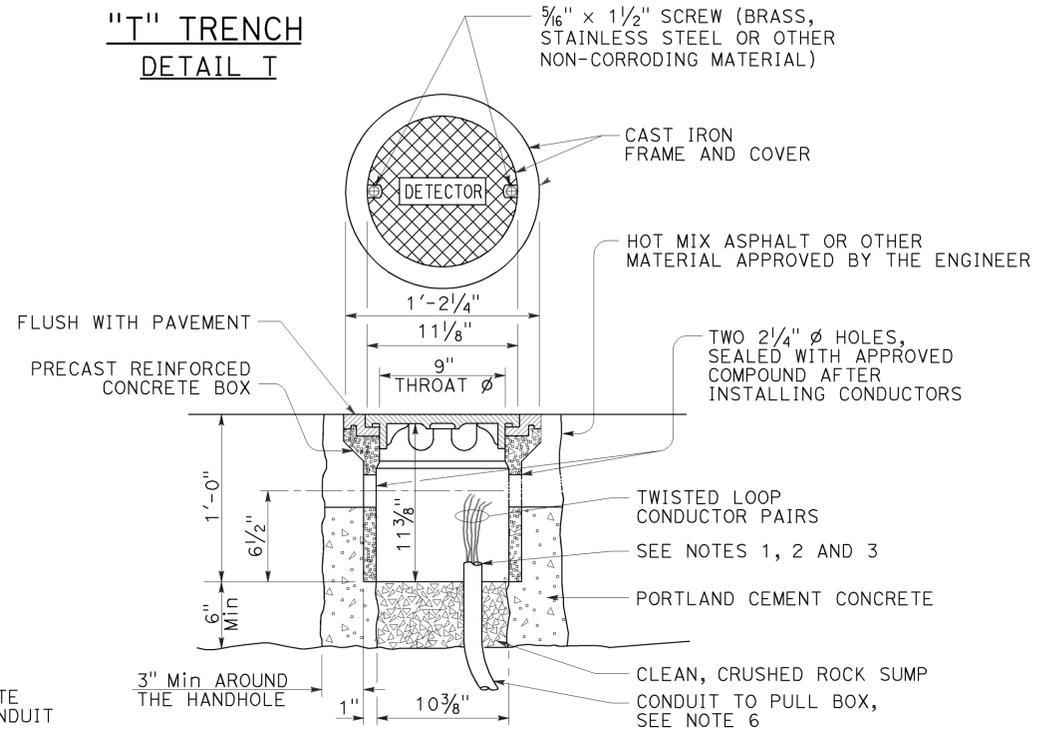
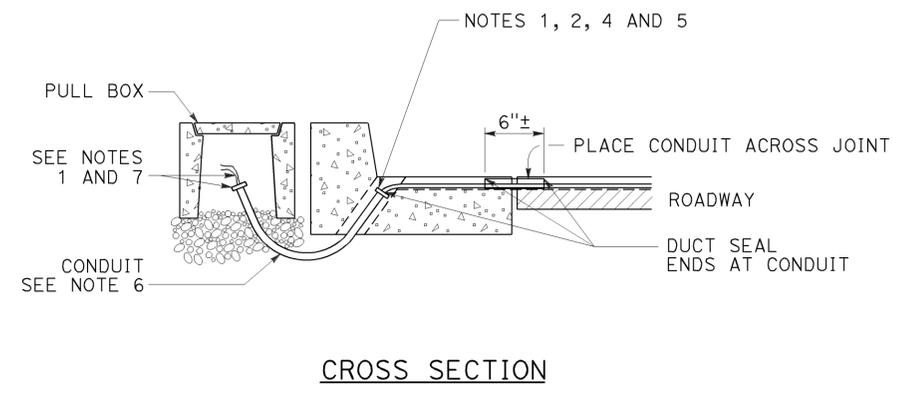
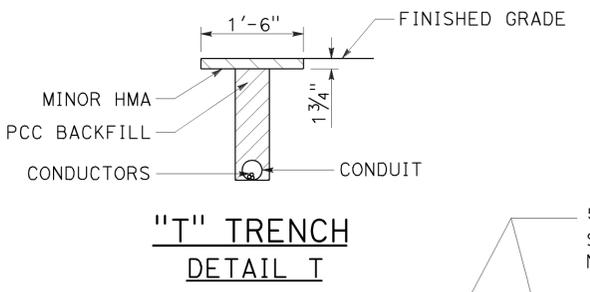
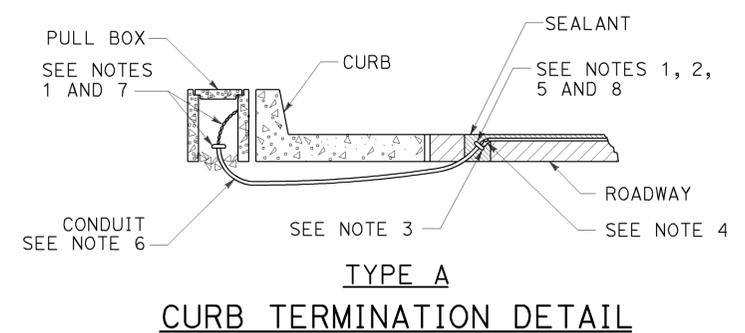
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

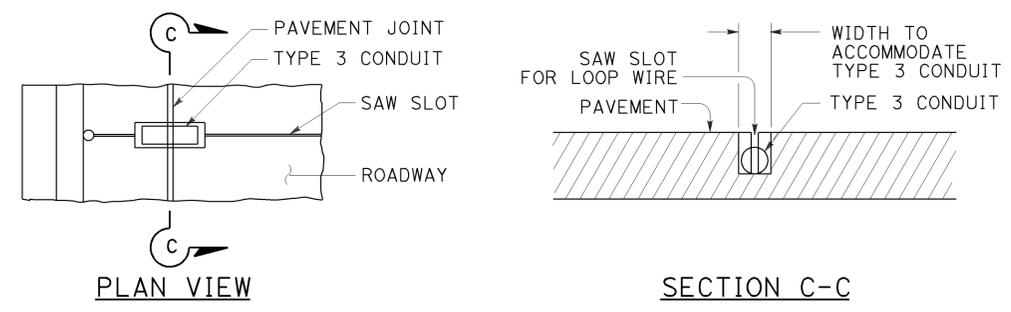
TO ACCOMPANY PLANS DATED 5-12-14

NOTES:

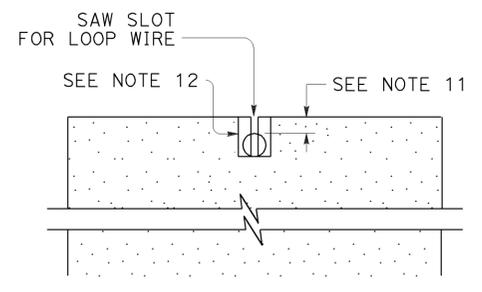
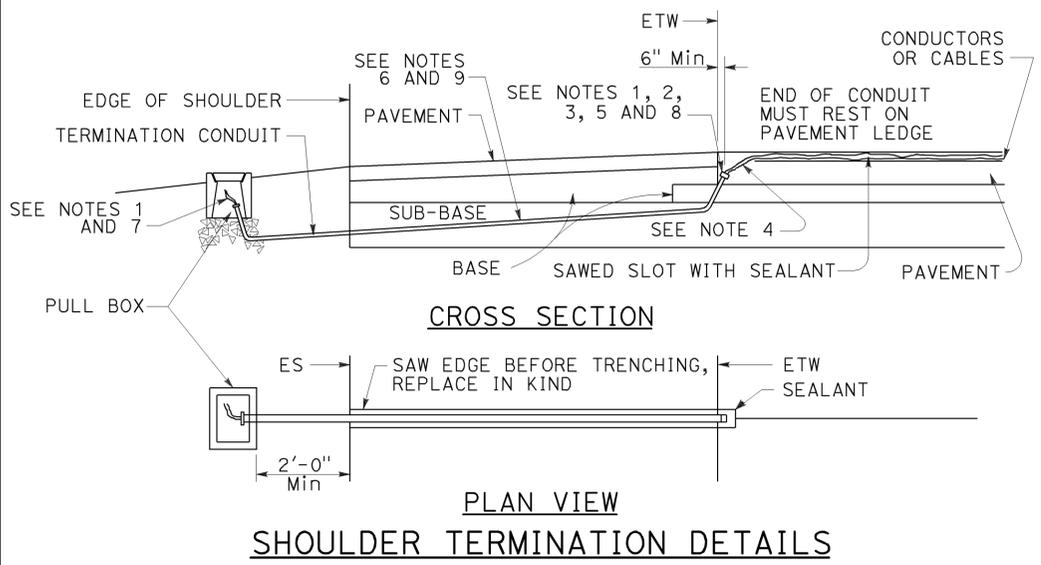
- Bushing shall be used at end of conduit.
- Tape detector conductors or cables 3" each side of bushings.
- Install duct seal compound to each end of termination conduit before installing sealant.
- Round all sharp edges where detector conductors or cables have to pass.
- End of conduit shall be 3/8"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



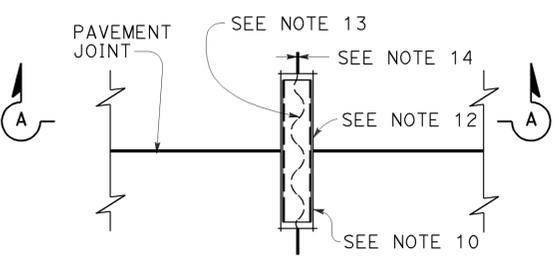
DETECTOR HANDHOLE DETAIL



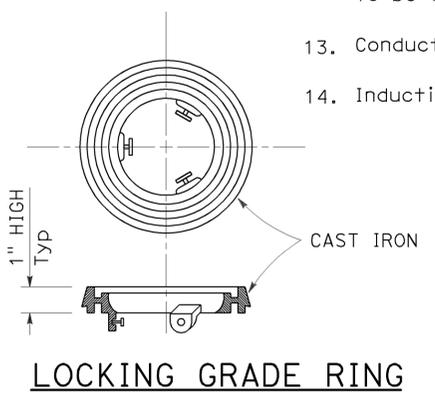
TYPE B CURB TERMINATION DETAIL



SECTION A-A



TYPICAL LOOP LEAD-IN DETAIL AT PAVEMENT JOINT



LOCKING GRADE RING

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

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

REVISED STANDARD PLAN RSP ES-5D

2010 REVISED STANDARD PLAN RSP ES-5D

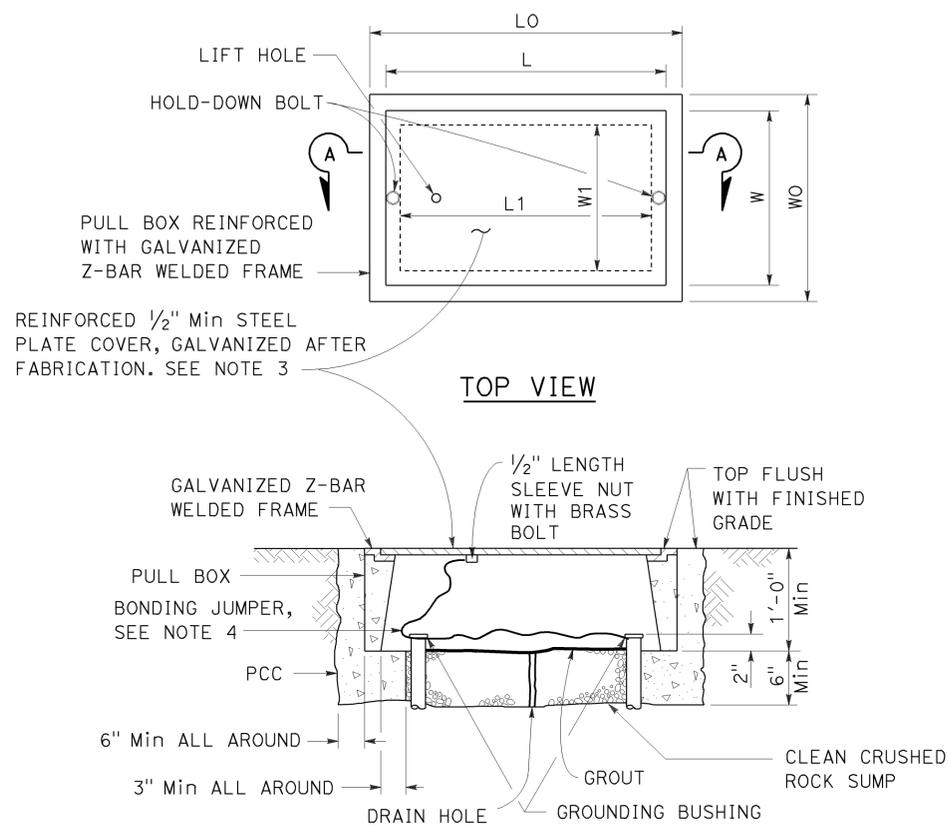
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20	13.3/20.3	65	65

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

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



TO ACCOMPANY PLANS DATED 5-12-14



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

NOTES:

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

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

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

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

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

REVISED STANDARD PLAN RSP ES-8B

2010 REVISED STANDARD PLAN RSP ES-8B