INDEX OF PLANS

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21-30	ELECTRICAL PLANS
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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

ACNHPI-000C(371)E

PROJECT PLANS FOR CONSTRUCTION ON

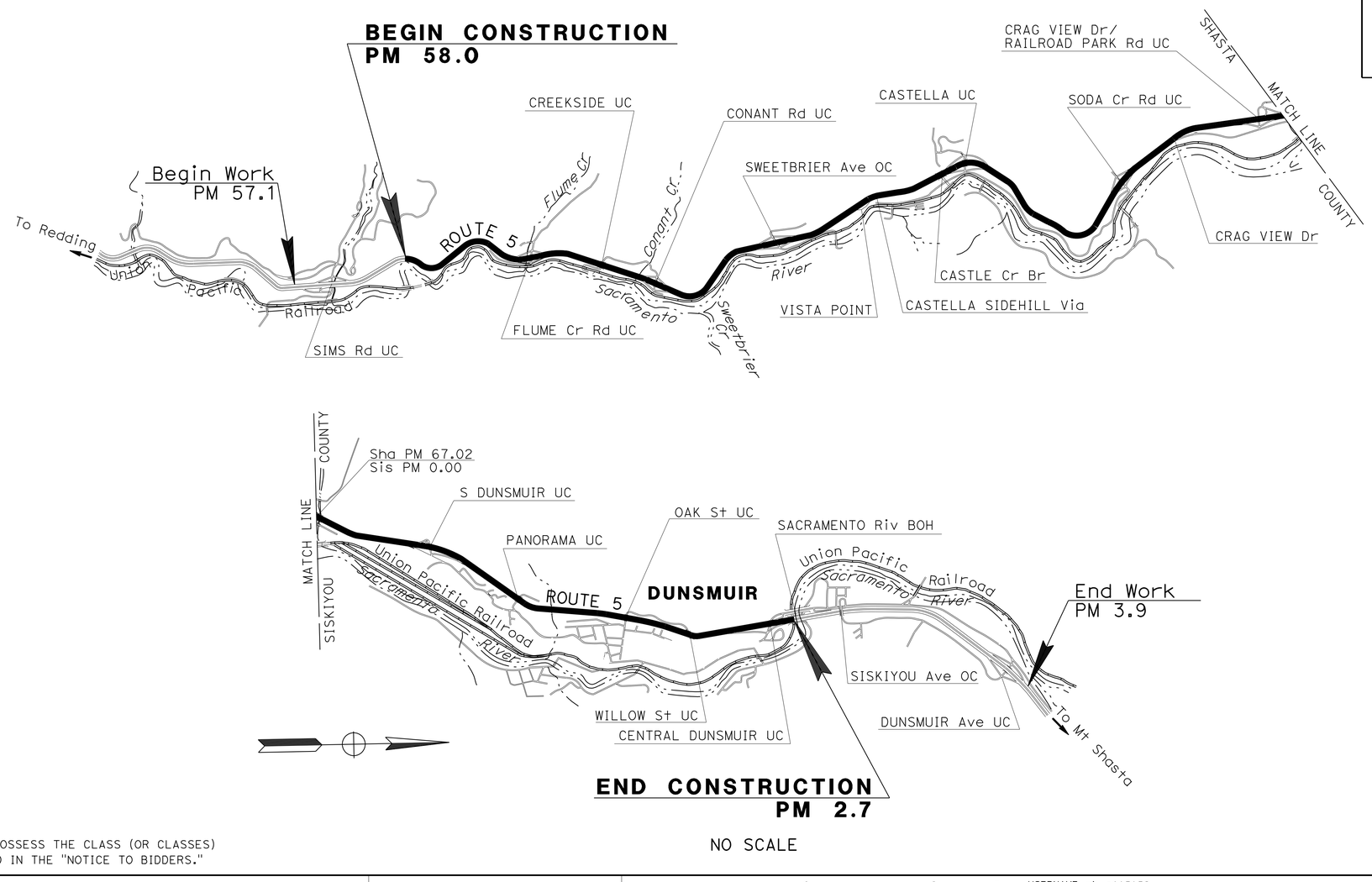
STATE HIGHWAY

IN SHASTA AND SISKIYOU COUNTIES FROM 0.6 MILE NORTH OF SIMS UNDERCROSSING TO SACRAMENTO RIVER BRIDGE OVERHEAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	1	49

LOCATION MAP



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

02-03-14
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

February 03,2014
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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

CONTRACT No.	02-4G1604
PROJECT ID	0213000085

LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

DESIGN ENGINEER: LANCE BROWN
PROJECT MANAGER: LANCE BROWN

P:\proj1\02\4G1604_plans\pse\24g160ab001.dgn

BORDER LAST REVISED 7/2/2010 | CALTRANS WEB SITE IS: HTTP//WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s115152 DGN FILE => 24g160ab001.dgn | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	2	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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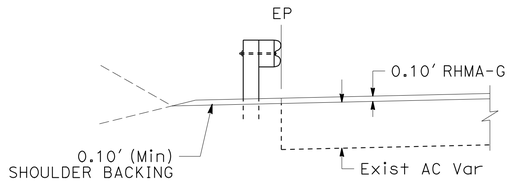
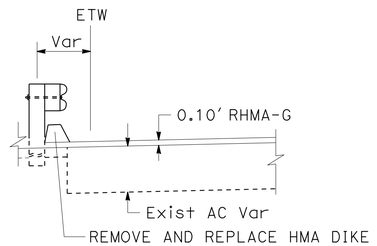
NOTES:

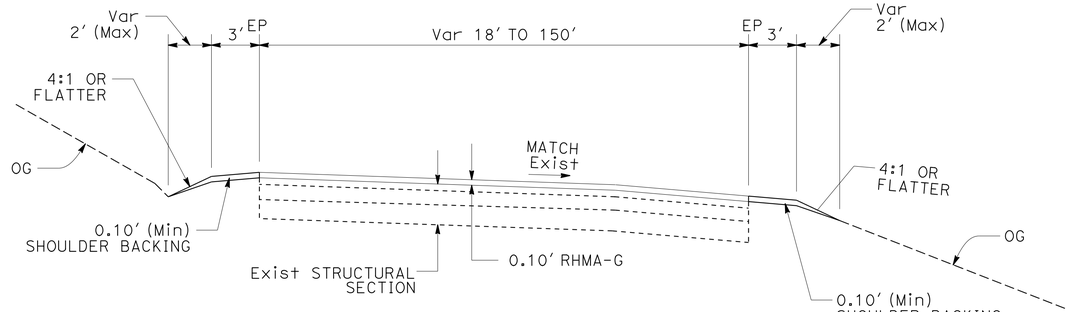
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. NO WORK ON BRIDGE DECKS.



GUARDRAIL LOCATION
WITHOUT DIKE
TYPICAL BOTH SIDES OF RAMPS



AC DIKE LOCATION
WITH OR WITHOUT GUARDRAIL
TYPICAL BOTH SIDES OF RAMPS

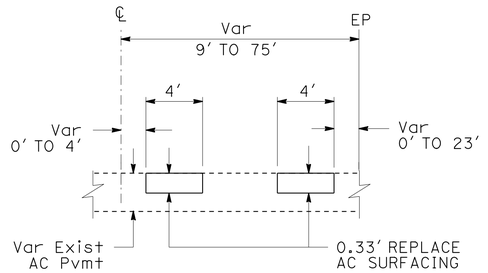


TYPICAL RAMP

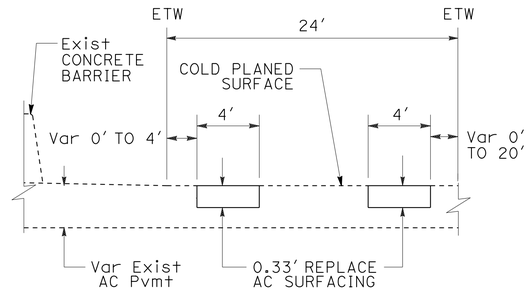
ABBREVIATIONS:

RHMA-G RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

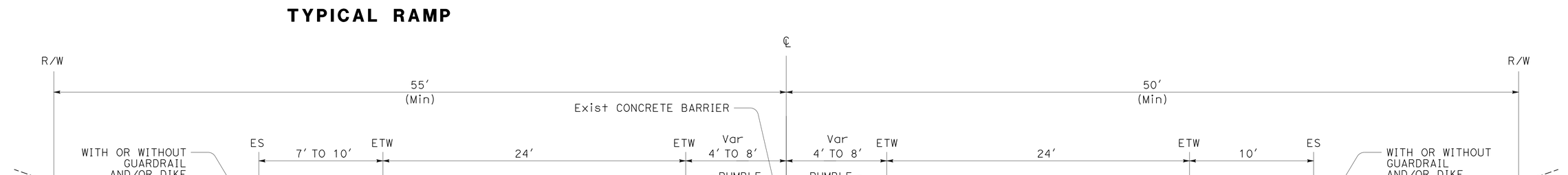
PAVEMENT CLIMATE REGION
LOW MOUNTAIN
HIGH MOUNTAIN



REPLACE AC SURFACING
(TYPICAL RAMPS)



REPLACE AC SURFACING
(TYPICAL BOTH DIRECTIONS MAINLINE)



SOUTHBOUND NORTHBOUND

ROUTE 5
Sha PM 58.0 TO 67.0
Sis PM 0.0 TO 2.7

TYPICAL CROSS SECTIONS

NO SCALE **X-1**

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL CONNER
CHECKED BY: KARLIE SMITH
FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj\02\4G160_plans\pse\24g160ca001.dgn

LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160ca001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0156
PROJECT NUMBER & PHASE 02-1300-0085-1
EA 02-4G160

NOTE:

1. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.

ABBREVIATIONS:

RHMA-G RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

LEGEND:

COLD PLANE AC PAVEMENT (0.00′ TO 0.10′)

COLD PLANE AC PAVEMENT (0.10′)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	3	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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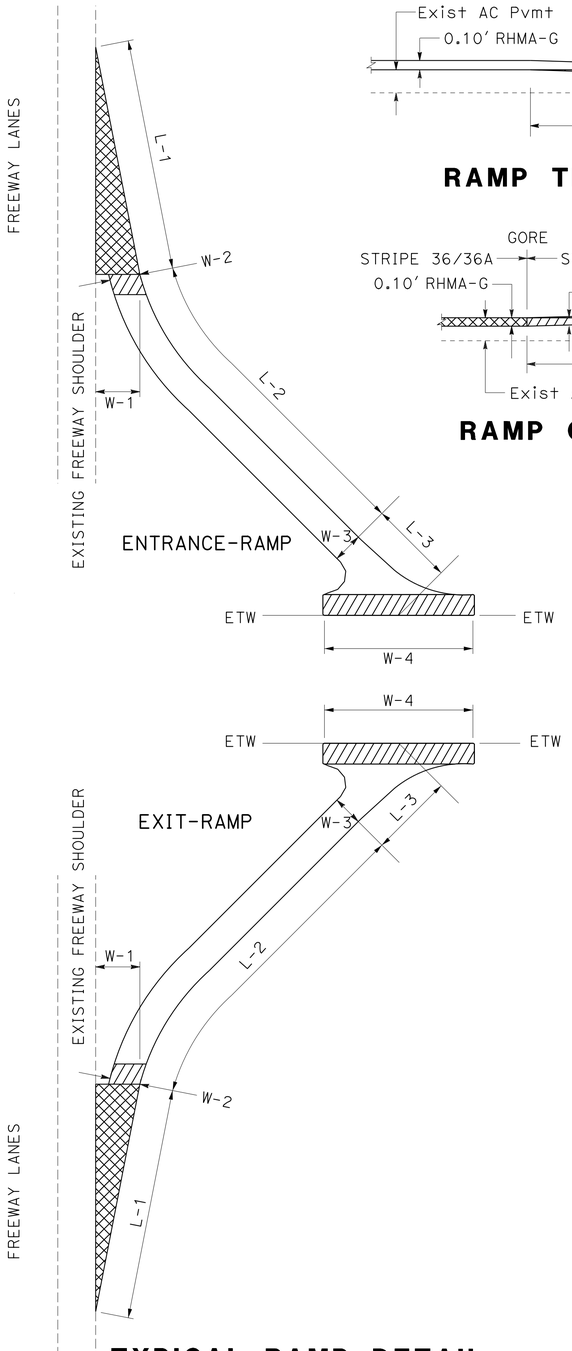
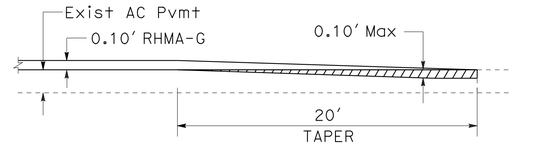
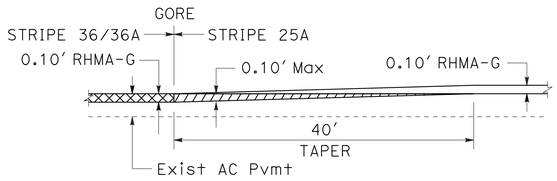


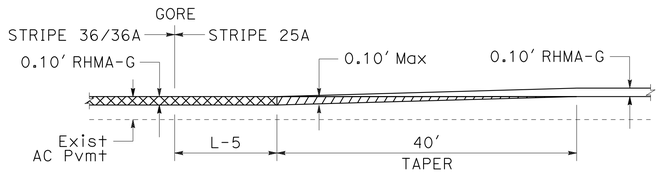
TYPICAL RAMP DETAIL



RAMP TERMINI TAPER
TYPICAL



RAMP GORE TAPER
TYPICAL

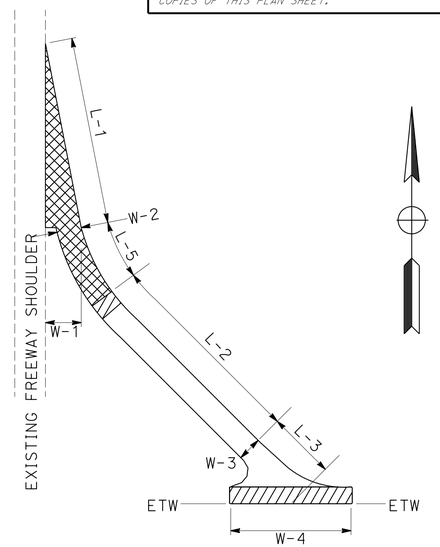


RAMP GORE TAPER
CONANT Rd NB ENTRANCE
SODA CREEK Rd NB EXIT
CENTRAL DUNSMUIR NB ENTRANCE

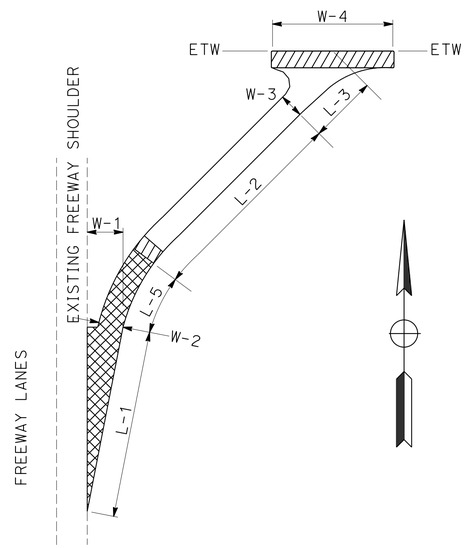
RAMPS

OVERCROSSING/ UNDERCROSSING	DIRECTION OF TRAVEL		ENTRANCE RAMP	EXIT RAMP	POST MILE	DIMENSIONS								
						WIDTH IN FEET				LENGTH IN FEET				
	NB	SB				W-1	W-2	W-3	W-4	L-1	L-2	L-3	L-4	L-5
FLUME CREEK Rd		X	X		59.23	28	20	40	150	530	530	70		
	X			X	59.24	34	24	20	40	700	458		100	
	X		X		59.45	28	24	28	34	500	350	145		
		X		X	59.48	36	28	30	140	380	490	84		
CONANT Rd		X	X		60.41	36	30	20	54	710	340	54		
	X			X	60.42	36	23	25	83	505	400	75		
		X		X	60.60	32	24	25	58	700	440	83		
	X		X		60.69	36	28	24	81	500	690	87		70
SWEETBRIER Ave		X	X		61.58	36	24	26	80	690	585	57		
	X			X	61.64	36	28	25	85	630	505	81		
	X		X		61.84	36	25	27	85	520	305	64		
		X		X	61.88	34	25	24	70	590	625	70		
VISTA POINT	X			X	62.36	35				670				
	X		X		62.49	34				450				
CASTELLA	X			X	63.46	34	25	23	72	420	510	48		
		X	X		63.48	30	28	24	120	600	420	70		
	X		X		63.72	24	22	24	75	510	605	48		
		X		X	63.73	40	24	22	95	700	715	55		
SODA CREEK Rd	X			X	65.22	30	23	20	80	620	790	62		80
		X	X		65.31	24	24	24	65	700	510	45		
		X		X	65.55	38	26	25	90	694	522	74		
	X		X		65.56	28	28	25	95	470	550	54		
CRAG VIEW Dr	X			X	66.00	32	24	24		745	835			
CRAG VIEW Dr/ RAILROAD PARK Rd	X			X	66.63	25	18	21	94	655	956	74		
	X		X		66.95	34	22	26	117	350	470	80		
		X	X		66.91	*	*	*	*	*	*	*	*	*
		X		X	67.00	*	*	*	*	*	*	*	*	*
SOUTH DUNSMUIR	X			X	0.55	30	20	24		640	690			
		X	X		0.57	*	*	*	*	*	*	*	*	*
		X		X	0.73	*	*	*	*	*	*	*	*	*
	X		X		0.91	32	22	24	35	620	850	90		
CENTRAL DUNSMUIR	X			X	2.22	32	20	20	90	690	1260	70		
	X		X		* 2.58	24	24	20	46	375	310		80	120
		X	X		2.62	30	30	36	90	492	122	45		

* SEE DETAIL ON C-2 FOR DIMENSIONS/DETAIL



RAMP DETAIL
CONANT Rd NB ENTRANCE



RAMP DETAIL
SODA CREEK Rd NB EXIT

CONSTRUCTION DETAILS

NO SCALE

C-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL CONNER
CHECKED BY: KARLIE SMITH
FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj1\02\4G160_plans\pse\24g160ga001.dgn

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ga001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	4	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

MICHAEL A. CONNER No. C73123 Exp. 12-31-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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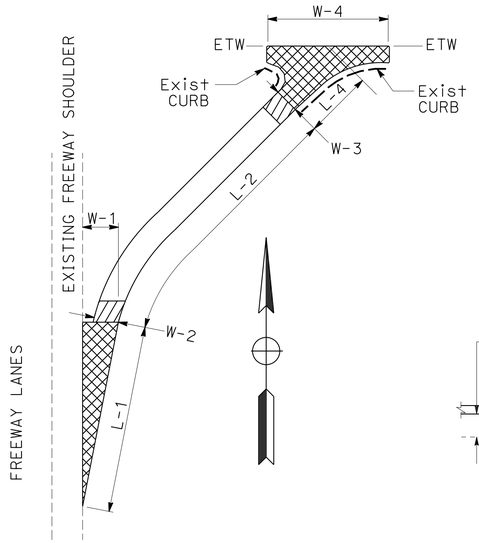
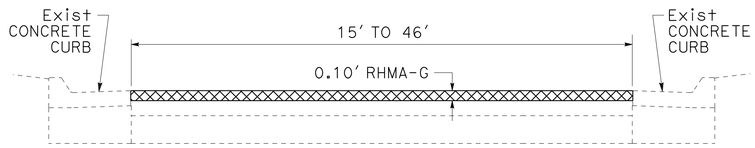
NOTE:

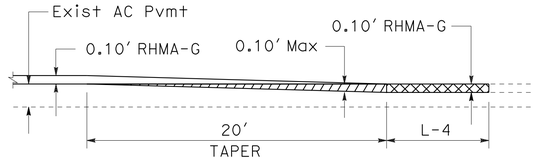
1. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.



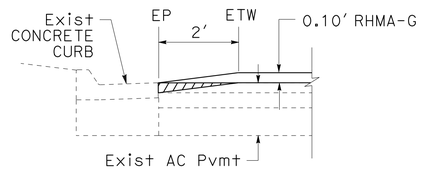
RAMP DETAIL
FLUME CREEK Rd NB EXIT-RAMP



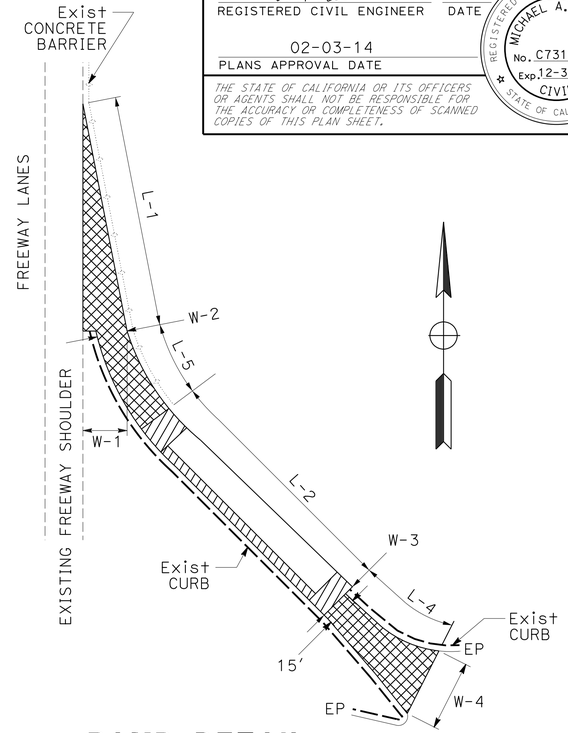
RAMP TERMINI
FLUME CREEK Rd NB EXIT
CENTRAL DUNSMUIR NB ENTRANCE



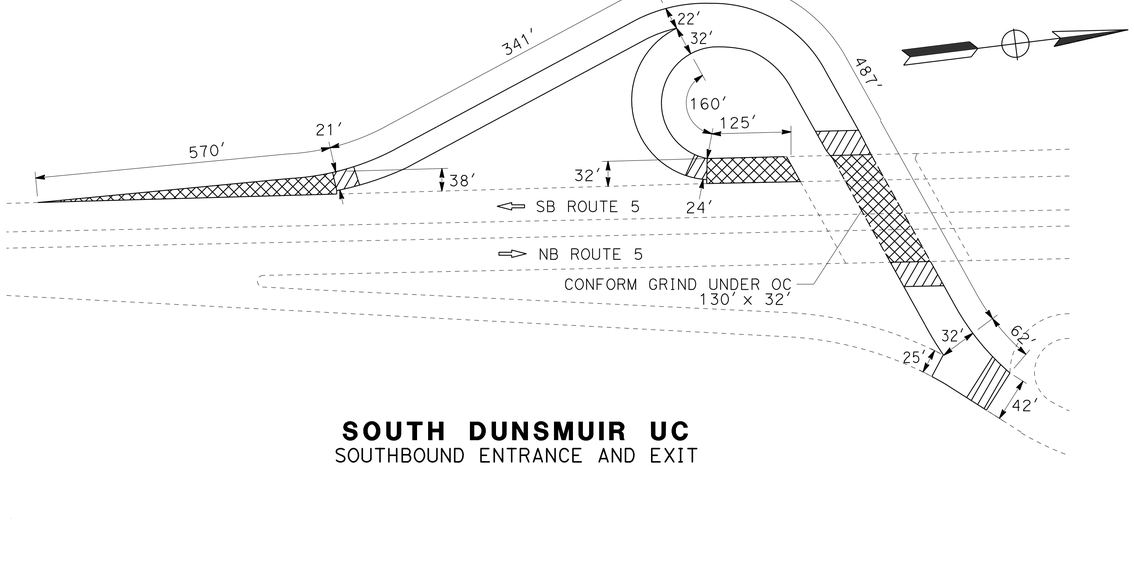
RAMP TERMINI TAPER
FLUME CREEK Rd NB EXIT
CENTRAL DUNSMUIR NB ENTRANCE



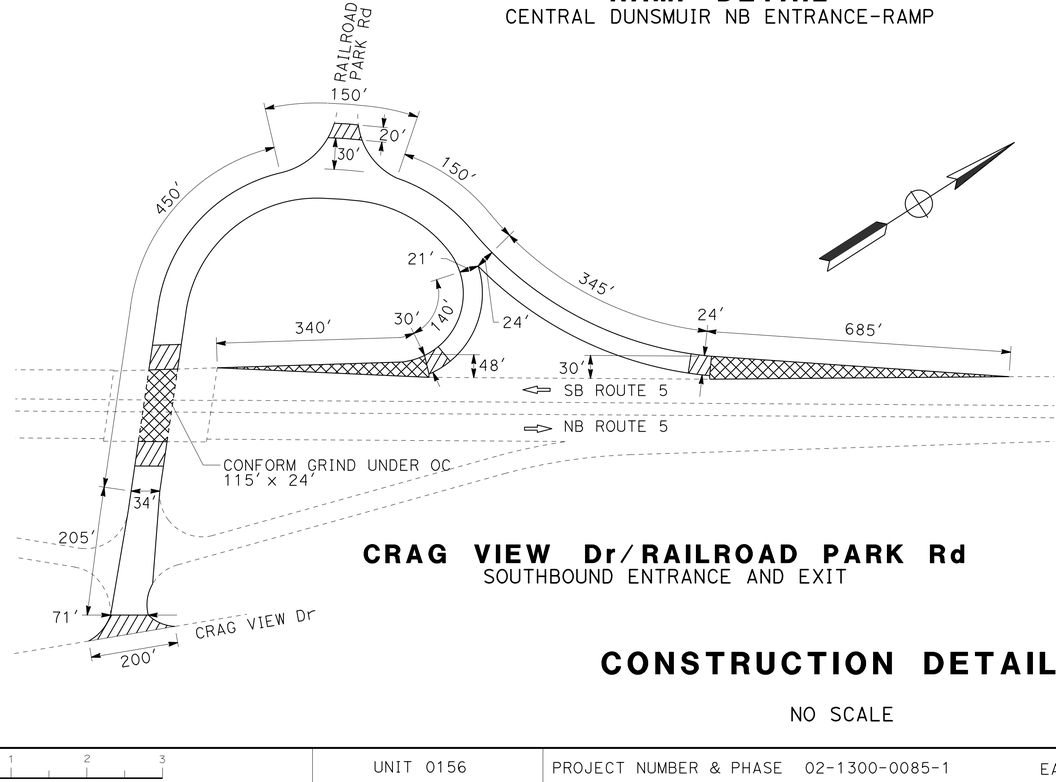
HMA TO CONCRETE CURB
CENTRAL DUNSMUIR NB ENTRANCE RAMP



RAMP DETAIL
CENTRAL DUNSMUIR NB ENTRANCE-RAMP



SOUTH DUNSMUIR UC
SOUTHBOUND ENTRANCE AND EXIT



CRAG VIEW Dr/RAILROAD PARK Rd
SOUTHBOUND ENTRANCE AND EXIT

CONSTRUCTION DETAILS

NO SCALE

C-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL CONNER
CHECKED BY: KARLIE SMITH
FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

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LAST REVISION => DATE PLOTTED => 13-FEB-2014
02-03-14 TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160ga002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0156
PROJECT NUMBER & PHASE 02-1300-0085-1
EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	5	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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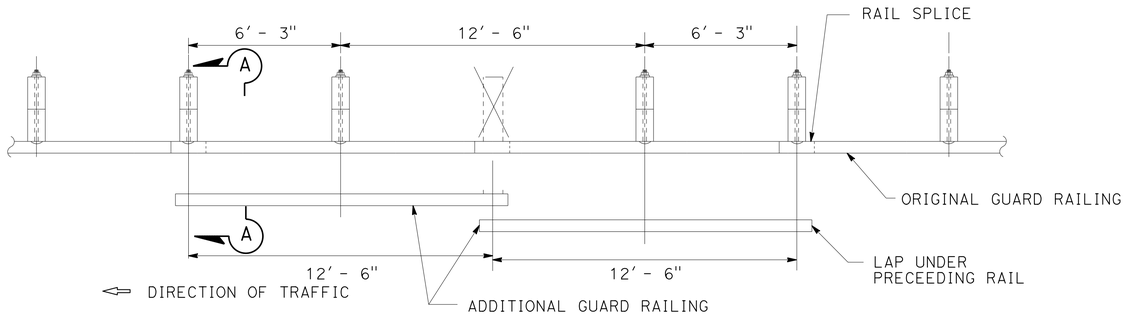
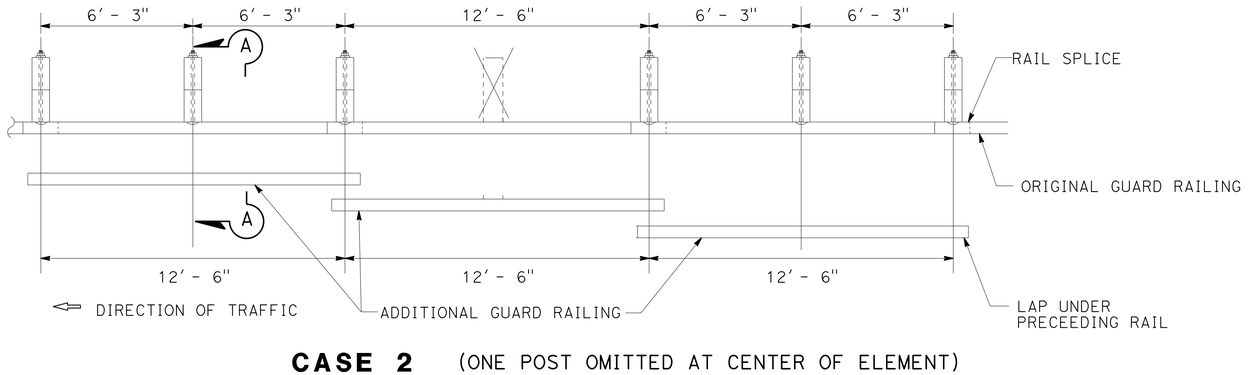
NOTES:

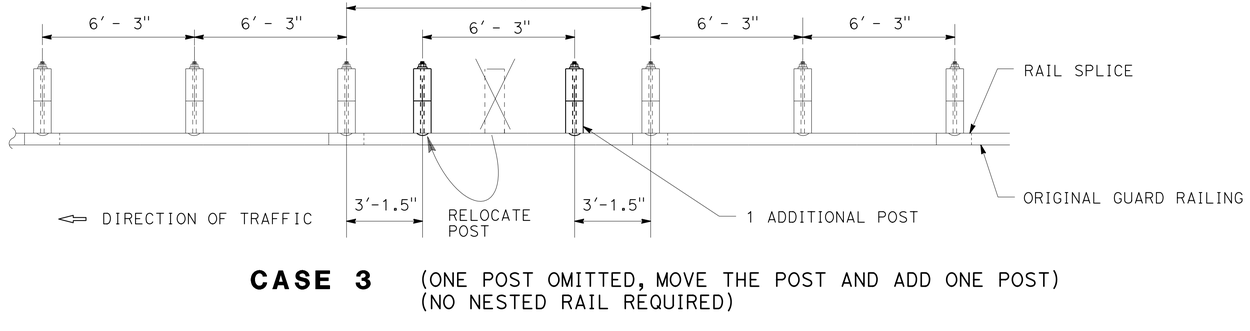
1. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.
2. LAP ALL RAILS AT EXISTING RAIL LAPS
3. A 2-POST OPTION IS AVAILABLE, BUT NOT SHOWN
4. WHEN A POST IS REMOVED AND THE RAIL ELEMENTS ARE LAPPED, THEN THE LAPPED ELEMENTS MUST BE SUPPORTED BY A MIN OF 2 POST OR ADD ADDITIONAL LENGTH OF LAPPED ELEMENTS.



CASE 1 (ONE POST OMITTED AT JUNCTION OF TWO ELEMENTS)

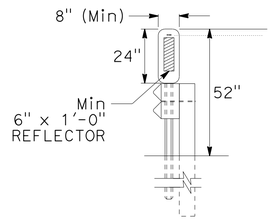


CASE 2 (ONE POST OMITTED AT CENTER OF ELEMENT)

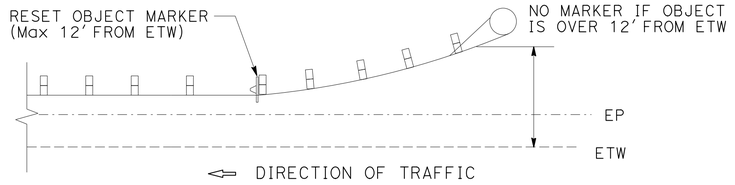


CASE 3 (ONE POST OMITTED, MOVE THE POST AND ADD ONE POST)
(NO NESTED RAIL REQUIRED)

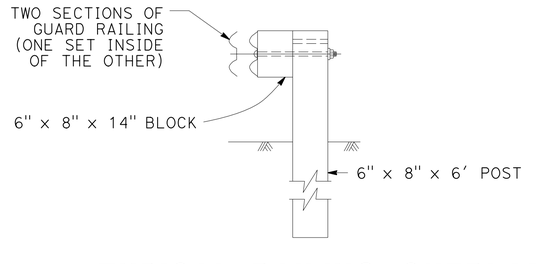
LONG SPAN NESTED GUARD RAILING



PLACE NEAR EDGE OF OBJECT MARKER
IN LINE WITH THE EDGE OF OBJECT

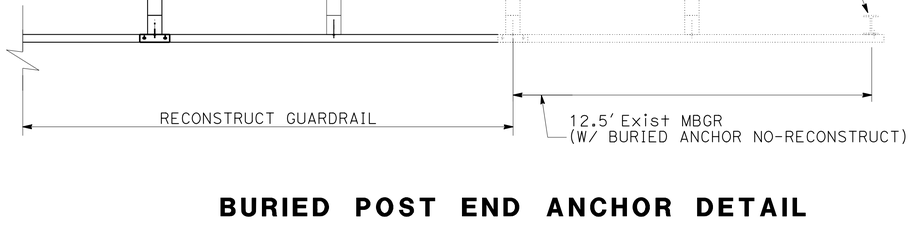


TYPICAL GUARDRAIL OBJECT MARKERS



TYPICAL RAILING OVERLAP INSTALLATION AT POST

SECTION A-A



BURIED POST END ANCHOR DETAIL

CONSTRUCTION DETAILS

NO SCALE

C-3

REVISED BY	DATE REVISED
MICHAEL CONNER	KARLIE SMITH
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

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LAST REVISION DATE PLOTTED => 13-FEB-2014
02-03-14 TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ga003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	6	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
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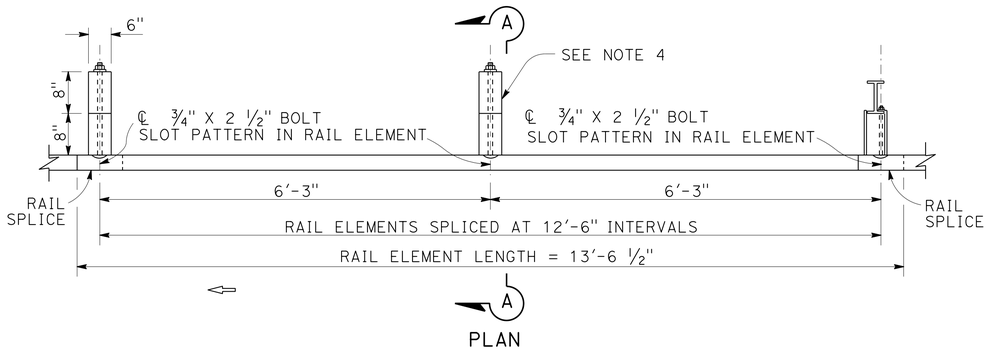
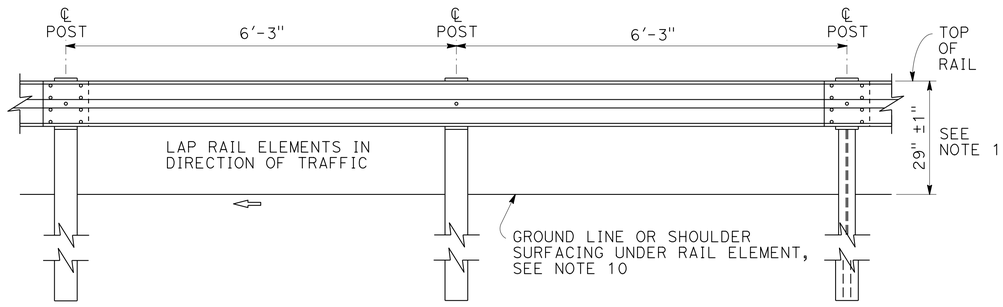
NOTES:

1. SEE MEASURE HEIGHT DETAIL.
2. FOR DETAILS OF STANDARD HARDWARE USED TO CONSTRUCT GUARD RAILING, SEE STANDARD PLAN A77M1.
3. FOR DETAILS OF POSTS (WOOD OR STEEL) AND BLOCKS (WOOD OR COMPOSITE) USED TO CONSTRUCT GUARD RAILING SEE STANDARD PLAN A77N1 OR A77N2.
4. A SINGLE LINE POST POST MAY BE OFFSET UP TO 12" INLINE WITH THE GUARDRAIL.
5. DIRECTION OF ADJACENT TRAFFIC INDICATED BY ⇨.
6. PLACE TYPE F DIKE UNDER GUARDRAIL AND PLACE TYPE C DIKE IF MORE THAN 2" INFRONT OF FACE OF GUARDRAIL.
7. SLOTTED HOLE FOR BOLTED CONNECTION OF RAIL ELEMENT TO BLOCK AND POST. SEE "RAIL ELEMENT SPLICE DETAIL".
8. SLOTTED HOLES FOR SPLICE BOLTS TO OVERLAP ENDS OF RAIL ELEMENT. SEE "RAIL ELEMENT SPLICE DETAIL".
9. ADDITIONAL HOLE IN UPPERMOST PORTION OF LINE POST IS FOR POTENTIAL FUTURE ADJUSTMENTS OF RAILING HEIGHT. SEE STANDARD PLAN A77N1, A77N2.
10. INSTALL POST IN SOIL.
11. TO CONNECT RAILING TO TERMINAL SYSTEM END TREATMENT, TRANSITION THE TOP OF RAILING HEIGHT AT A RATIO OF 120:1 TO TERMINAL SYSTEM END TREATMENT HEIGHT PLUS ONE 12'-6" STANDARD RAILING SECTION AT THE TRANSITIONED HEIGHT FOR A HORIZONTAL CONNECTION TO THE END TREATMENT.
12. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.
13. PLACE RUB RAIL (GUARD RAIL ELEMENT) AND ATTACH TO POST WITH NO BLOCK WHEN MEASURED HEIGHT OF GUARDRAIL IS ABOVE 32".

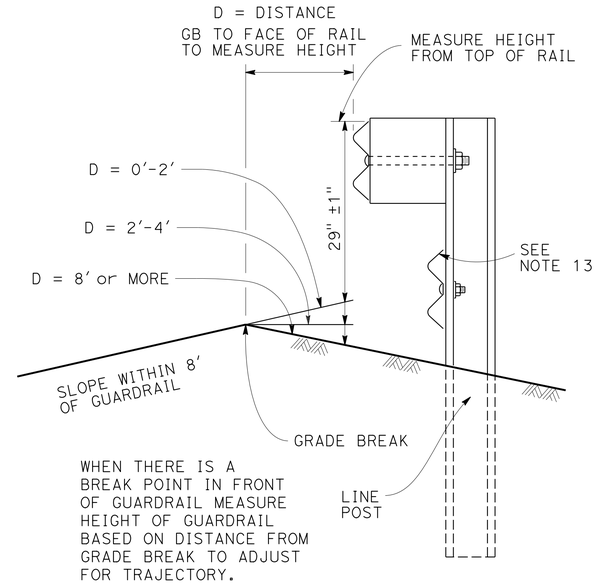


PLAN



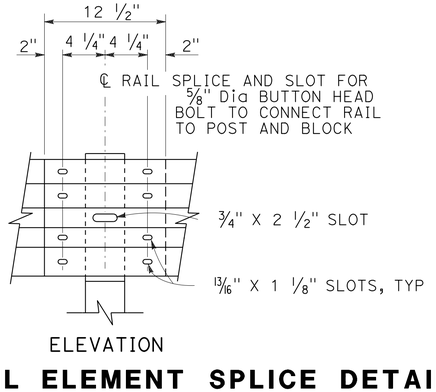
ELEVATION

GUARD RAILING



WHEN THERE IS A BREAK POINT IN FRONT OF GUARDRAIL MEASURE HEIGHT OF GUARDRAIL BASED ON DISTANCE FROM GRADE BREAK TO ADJUST FOR TRAJECTORY.

MEASURE HEIGHT DETAIL AT GRADE BREAK (GB)



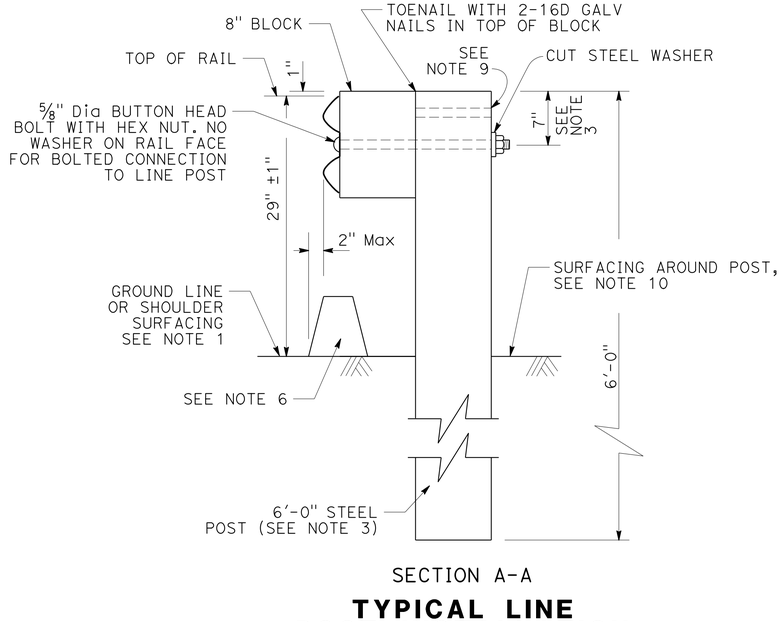
ELEVATION

RAIL ELEMENT SPLICE DETAIL

A) CONNECT THE OVER LAPPED END OF THE RAIL ELEMENTS WITH ⅝" Dia X 1 ¾" BUTTON HEAD OVAL SHOULDER SPLICE BOLTS INSERTED INTO THE 13/16" X 1 ⅛" SLOTS AND BOLTED TOGETHER WITH ⅝" Dia 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.

B) THE ENDS OF THE RAIL ELEMENTS ARE TO BE OVERLAPPED IN THE DIRECTION OF TRAFFIC (SEE DETAILS).

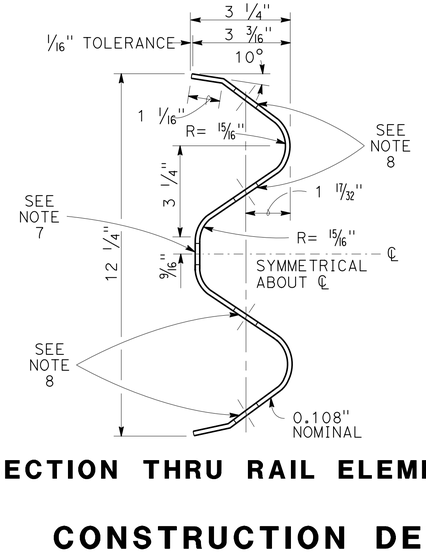
C) WHERE END CAP IS TO BE ATTACHED TO THE END OF A RAIL ELEMENT, A TOTAL OF 4 OF THE ABOVE DESCRIBED SPLICE BOLTS AND NUTS ARE TO BE USED.



SECTION A-A

TYPICAL LINE POST INSTALLATION

SEE NOTE 4



SECTION THRU RAIL ELEMENT

CONSTRUCTION DETAILS

NO SCALE **C-4**

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BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ga004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	7	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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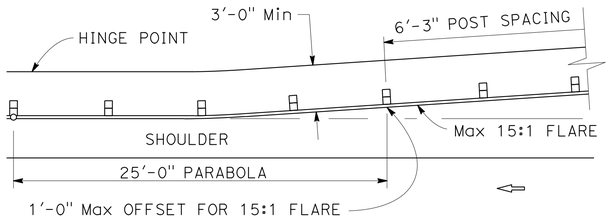
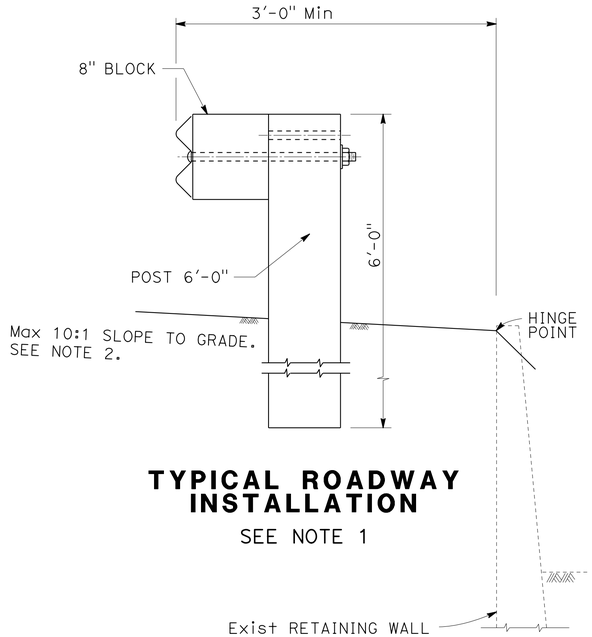
NOTES:

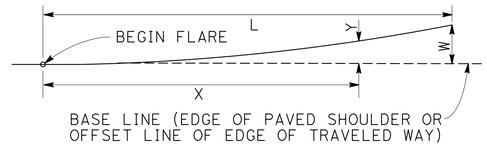
1. THESE INSTALLATION DETAILS APPLICABLE TO WOOD AND STEEL LINE POST INSTALLATIONS.
2. SLOPE INFRONT OF GUARDRAIL MUST BE 10:1 OR FLATTER.
3. W6 x 15 STEEL POST, 8'-0" IN LENGTH, WITH 8" NOTCHED BLOCKS MAY BE USED IN PLACE OF THE 10" x 10" x 8'-0" WOOD POST WITH 8" BLOCK SHOWN IN THE "STRENGTHENED RAILING SECTIONS DETAILS".
4. DIRECTION OF ADJACENT TRAFFIC INDICATED BY ⇦ .
5. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.



GUARDRAIL WITH FLARED ALIGNMENT



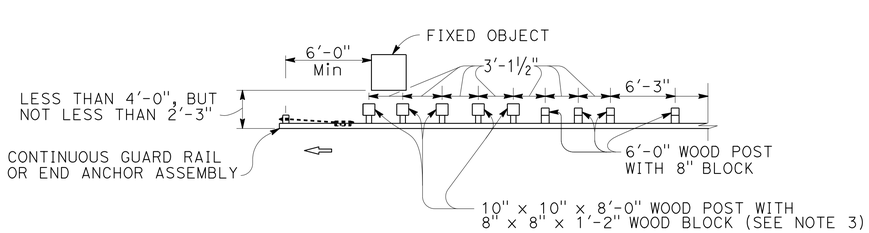
TYPICAL ROADWAY INSTALLATION
SEE NOTE 1



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

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

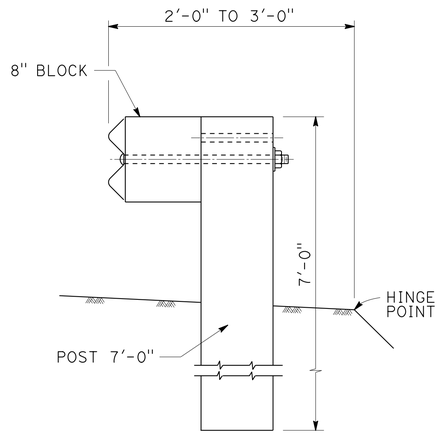
PARABOLIC FLARE OFFSETS



NOTE A: FOR A SERIES OF FIXED OBJECTS (BRIDGE COLUMNS, OVERHEAD SIGN SUPPORTS, Etc) ADDITIONAL 10" X 10" X 8'-0" WOOD POST WITH 8" X 8" X 1'-2" WOOD BLOCKS AT 3'-1 ½" CENTER TO CENTER SPACING ARE TO BE USED BETWEEN FIXED OBJECTS.

STRENGTHENED RAILING SECTIONS FOR FIXED OBJECT

USE STRENGTHENED RAILING SECTIONS WHERE MINIMUM CLEARANCE BETWEEN THE FACE OF THE GUARD RAILING AND FIXED OBJECT(S) IS LESS THAN 4'-0", BUT NOT LESS THAN 2'-3".



NARROW ROADWAY INSTALLATION
SEE NOTE 1

POST EMBEDMENT

CONSTRUCTON DETAILS

NO SCALE

C-5

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02-03-14 | TIME PLOTTED => 12:54

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	8	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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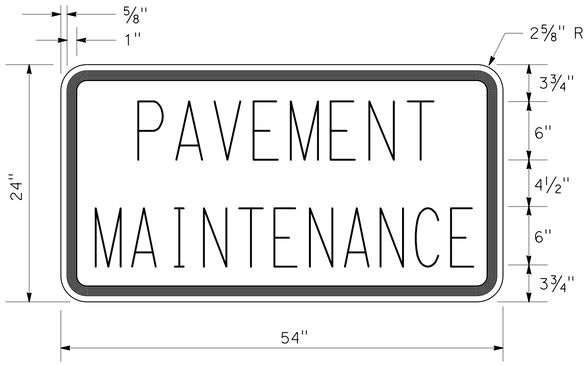
NOTES:

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. INTERMEDIATE C11 SIGNS SHOULD BE PLACED EVERY 3-5 MILES AS NECESSARY.
3. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.

LEGEND:

⊗ BARRIER MOUNTED SIGN



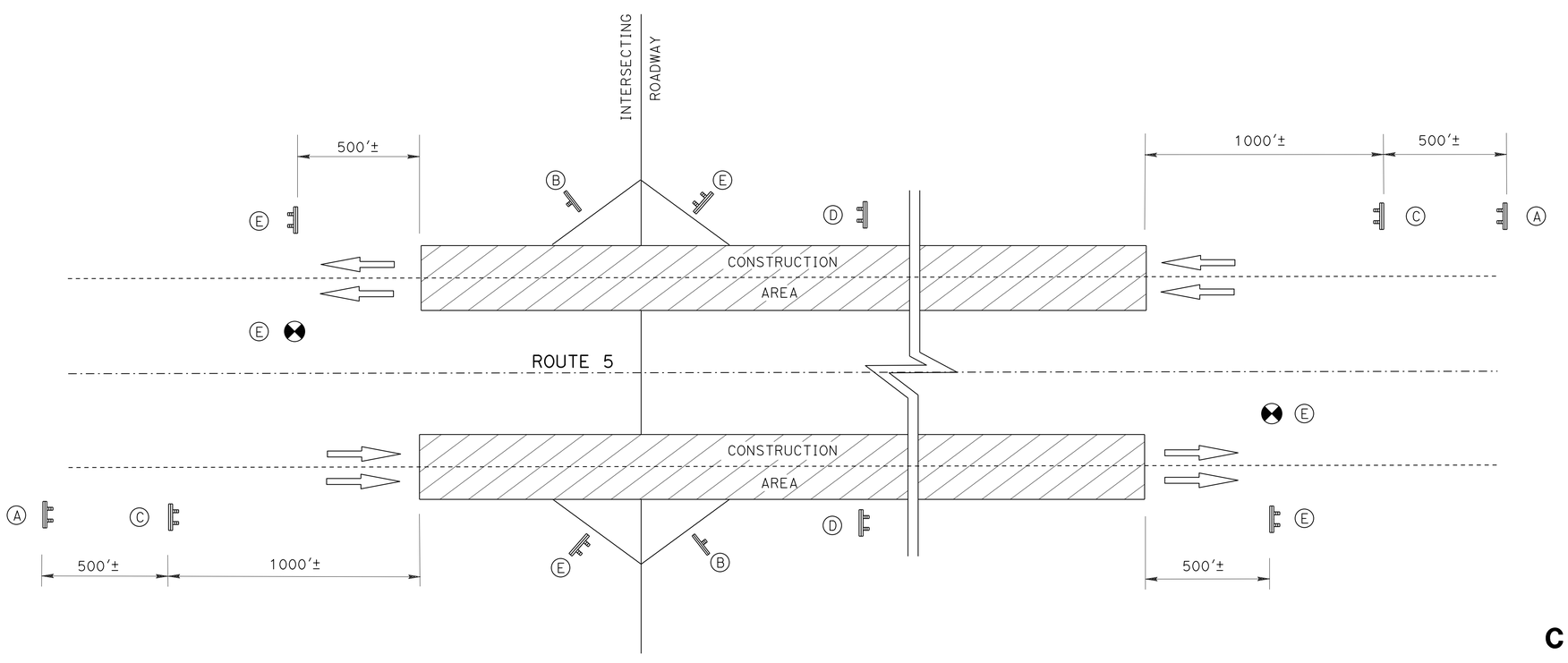
C23B(CA) SIGN PANEL DETAIL

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

○	TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
A	C40(CA)	108" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2- 4" x 6"	2
B	W20-1 C23B(CA)	48" x 48" 54" x 24"	ROAD WORK AHEAD "PAVEMENT MAINTENANCE"	1- 6" x 6"	17
C	C11(CA) C23B(CA)	90" x 48" 54" x 24"	ROAD CONSTRUCTION NEXT XX MILES "PAVEMENT MAINTENANCE"	2- 4" x 6"	2
D	C11(CA)	90" x 48"	ROAD CONSTRUCTION NEXT XX MILES	2- 4" x 6"	4
E	C14(CA)	48" x 24"	END ROAD WORK	1- 4" x 4" OR BARRIER MOUNT	21

ENTRANCE/EXIT RAMPS

Co	PM	LOCATION
Sha	59.24	FLUME CREEK Rd NB EXIT
	59.45	FLUME CREEK Rd NB ENTRANCE
	59.23	FLUME CREEK Rd SB ENTRANCE
	59.48	FLUME CREEK Rd SB EXIT
	60.42	CONANT Rd NB EXIT
	60.69	CONANT Rd NB ENTRANCE
	60.41	CONANT Rd SB ENTRANCE
	60.60	CONANT Rd SB EXIT
	61.64	SWEETBRIER Ave NB EXIT
	61.84	SWEETBRIER Ave NB ENTRANCE
	61.58	SWEETBRIER Ave SB ENTRANCE
	61.88	SWEETBRIER Ave SB EXIT
	62.36	VISTA POINT NB EXIT
	62.49	VISTA POINT NB ENTRANCE
	63.46	CASTELLA NB EXIT
	63.72	CASTELLA NB ENTRANCE
	63.48	CASTELLA SB ENTRANCE
	63.73	CASTELLA SB EXIT
	65.22	SODA CREEK Rd NB EXIT
	65.56	SODA CREEK Rd NB ENTRANCE
	65.31	SODA CREEK Rd SB ENTRANCE
	65.55	SODA CREEK Rd SB EXIT
	66.00	CRAG VIEW Dr NB EXIT
	66.63	CRAG VIEW Dr/ RAILROAD PARK Rd NB EXIT
	66.95	CRAG VIEW Dr/ RAILROAD PARK Rd NB ENTRANCE
	66.91	CRAG VIEW Dr/ RAILROAD PARK Rd SB ENTRANCE
	67.00	CRAG VIEW Dr/ RAILROAD PARK Rd SB EXIT
Sis	0.55	S DUNSMUIR Ave NB EXIT
	0.91	S DUNSMUIR Ave NB ENTRANCE
	0.57	S DUNSMUIR Ave SB ENTRANCE
	0.73	S DUNSMUIR Ave SB EXIT
	2.22	CENTRAL DUNSMUIR NB EXIT
	2.58	CENTRAL DUNSMUIR NB ENTRANCE
	2.62	CENTRAL DUNSMUIR SB ENTRANCE



CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

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BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160la001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	9	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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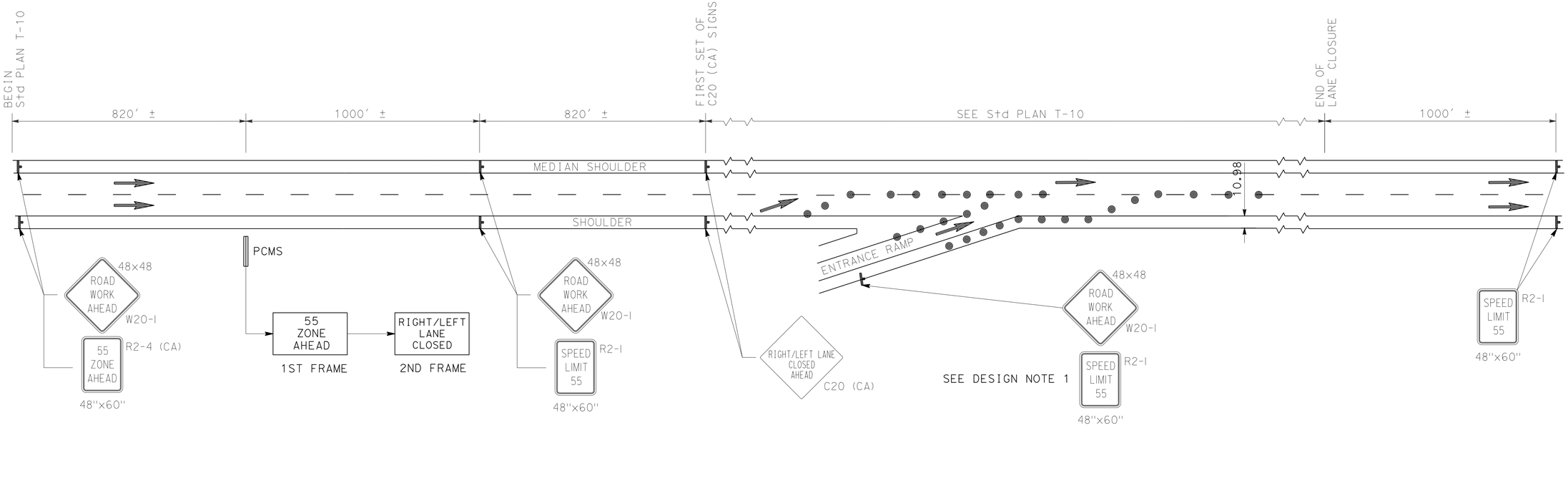
NOTES:

1. EXACT SIGN & PCMS LOCATIONS TO BE DETERMINED BY ENGINEER
2. SEE STANDARD PLANS FOR TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE.
3. COVER EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE.

LEGEND:

- PORTABLE SIGN
- DIRECTION OF TRAVEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC CONE



TYPICAL SIGN LAYOUT FOR TEMPORARY REDUCED SPEED ZONE

CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

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USERNAME => s115152
DGN FILE => 24g160la002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0156
PROJECT NUMBER & PHASE 02-1300-0085-1
EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	10	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

NOTES:

① PRE-NOTIFICATION PCMS: PLACE NEAR RAMP AND ACTIVATE APPROXIMATELY 12 HOURS PRIOR TO RAMP CLOSURE.

EXIT WILL BE CLOSED	TODAY (or TONIGHT) XX:XXPM - XX:XXAM
FRAME 1	FRAME 2

② RAMP CLOSED PCMS: MOVE PRE-NOTIFICATION PCMS APPROXIMATELY 1000 FEET BEFORE RAMP AND ACTIVATE DURING RAMP CLOSURE.

EXIT XXX CLOSED	FOLLOW DETOUR
FRAME 1	FRAME 2

③ PLACE 7 DAYS PRIOR TO RAMP CLOSURE.

4. IF AVAILABLE, EXISTING ROUTE SHIELDS AND DIRECTIONS MAY BE USED IN PLACE OF SIGNS SHOWN.

⑤ RAMP CLOSED PCMS: PLACE BEFORE OPEN ENTRANCE RAMP AND ACTIVATE DURING RAMP CLOSURE.

NB (OR SB) I-5 ONRAMP CLOSED	FOLLOW DETOUR
FRAME 1	FRAME 2

6. EXIT NUMBER SHOWN AS FOLLOWS.

EXIT NAME	EXIT NUMBER
FLUME CREEK Rd	720
CONANT Rd	721
SWEETBRIER Ave	723
CASTELLA	724
SODA CREEK Rd	726
CRAG VIEW Dr	727
CRAG VIEW Dr/RAILROAD PARK Rd	728
S DUNSMUIR Ave	729
CENTRAL DUNSMUIR	730

7. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS (PORTABLE)

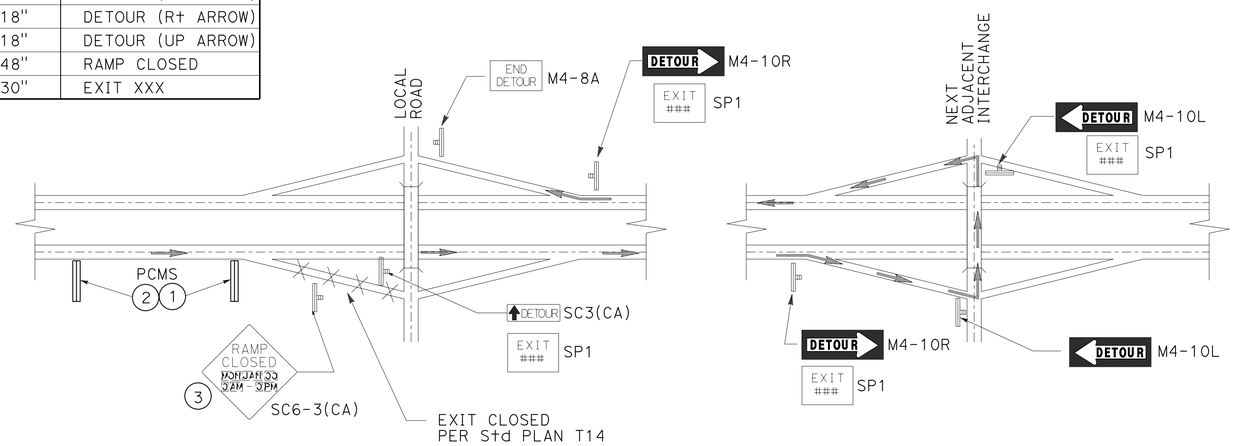
CODE	PANEL SIZE	PANEL MESSAGE
G27-2 (5) (CA)	24" x 24"	I-5
M3-1	24" x 12"	NORTH
M3-3	24" x 12"	SOUTH
M4-8A	24" x 18"	END DETOUR
M4-10L	48" x 18"	DETOUR (Lt ARROW)
M4-10R	48" x 18"	DETOUR (Rt ARROW)
SC3 (CA)	48" x 18"	DETOUR (UP ARROW)
SC6-3 (CA)	48" x 48"	RAMP CLOSED
SP1	24" x 30"	EXIT XXX

LEGEND:

PORTABLE CHANGABLE MESSAGE SIGN

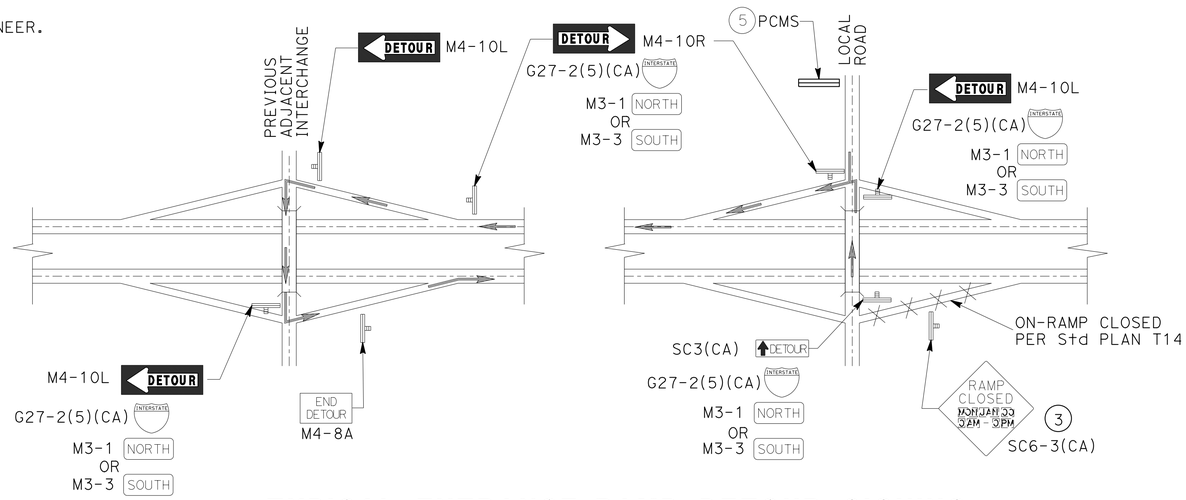
CONSTRUCTION AREA SIGN (PORTABLE)

DIRECTION OF TRAFFIC



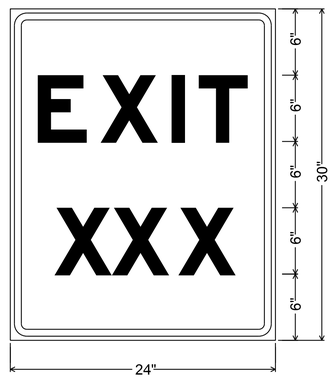
TYPICAL EXIT-RAMP DETOUR SIGNING

FLUME CREEK Rd NB
CONANT Rd NB AND SB
SWEETBRIER Ave NB AND SB
CASTELLA NB AND SB
SODA CREEK Rd SB



TYPICAL ENTRANCE-RAMP DETOUR SIGNING

FLUME CREEK Rd SB
CONANT Rd NB AND SB
SWEETBRIER Ave NB AND SB
CASTELLA NB AND SB
SODA CREEK Rd NB



1.5" Radius, 0.6" Border, 0.4" Indent, Black on Orange;
[EXIT] E Mod; [XXX] E Mod;

EXIT NUMBER SIGN (SP1) DETAIL

(SEE NOTE 6)

DETOUR PLAN

NO SCALE

DE-1

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CALCULATED-DESIGNED BY | CHECKED BY
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02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160mg001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

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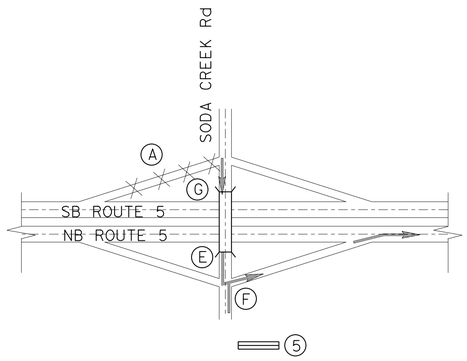
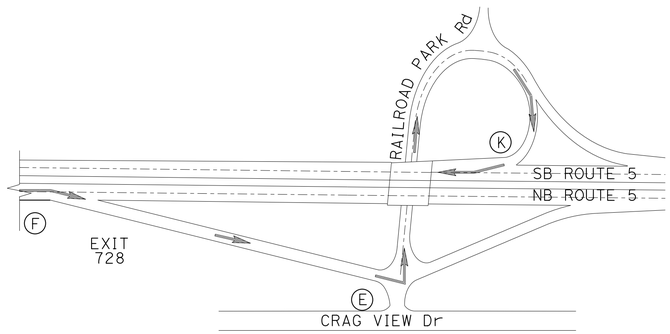
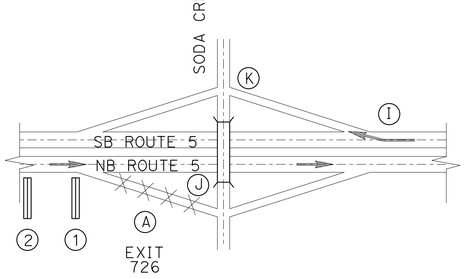
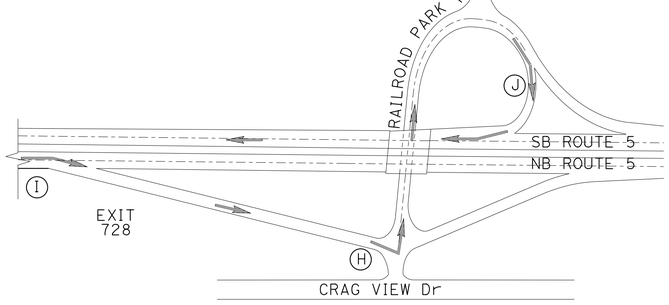




DETOUR FOR CLOSURE OF SB ROUTE 5 ENTRANCE RAMP FROM SODA CREEK Rd



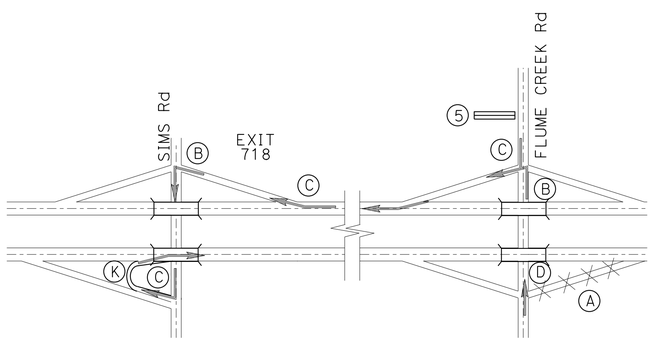


DETOUR FOR CLOSURE OF NB ROUTE 5 EXIT RAMP TO SODA CREEK Rd

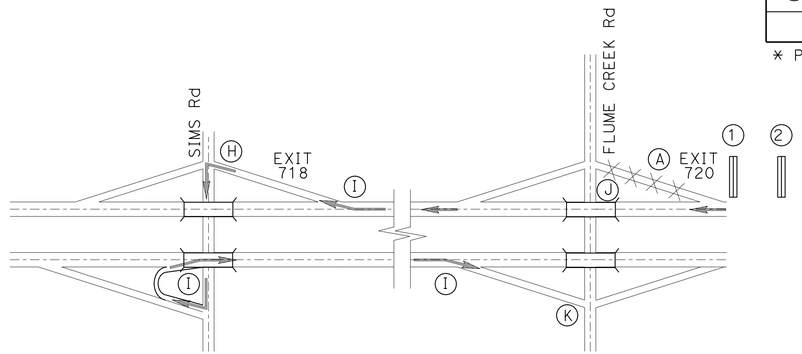
CONSTRUCTION AREA SIGNS (PORTABLE SIGNS)

SIGN No. ◯	CODE	PANEL SIZE (INCH)	REMARKS	No. (EA)
(A) *	SC6-3 (CA)	48" x 48"	"RAMP CLOSED" "DATE-TIME"	4
(B)	M4-10L G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) NORTH	2
(C)	M4-10R G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) NORTH	3
(D)	SC3 (CA) G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) NORTH	1
(E)	M4-10L G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) SOUTH	2
(F)	M4-10R G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) SOUTH	2
(G)	SC3 (CA) G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) SOUTH	1
(H)	M4-10L SP1	48" x 18" 24" x 30"	DETOUR (L↑ ARROW) EXIT XXX	2
(I)	M4-10R SP1	48" x 18" 24" x 30"	DETOUR (R↑ ARROW) EXIT XXX	5
(J)	SC3 (CA) SP1	48" x 18" 24" x 30"	DETOUR (UP ARROW) EXIT XXX	3
(K)	M4-8A	24" x 18"	END DETOUR	4
			TOTAL	29

* PLACE 7 DAYS PRIOR TO RAMP CLOSURE



DETOUR FOR CLOSURE OF NB ROUTE 5 ENTRANCE RAMP FROM FLUME CREEK Rd



DETOUR FOR CLOSURE OF SB ROUTE 5 EXIT RAMP TO FLUME CREEK Rd

DETOUR PLAN

NO SCALE

DE-2

REVISED BY	DATE REVISED

CALCULATED-
DESIGNED BY

CHECKED BY

MICHAEL CONNER

KARLIE SMITH

FUNCTIONAL SUPERVISOR

LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj\02\4G160_plans\pse\24g160mg002.dgn

LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010

USERNAME => s115152
DGN FILE => 24g160mg002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0156

PROJECT NUMBER & PHASE 02-1300-0085-1

EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	12	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

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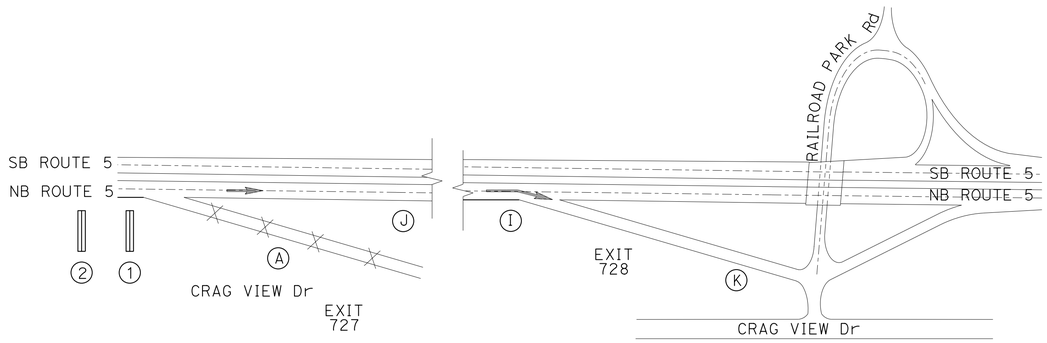
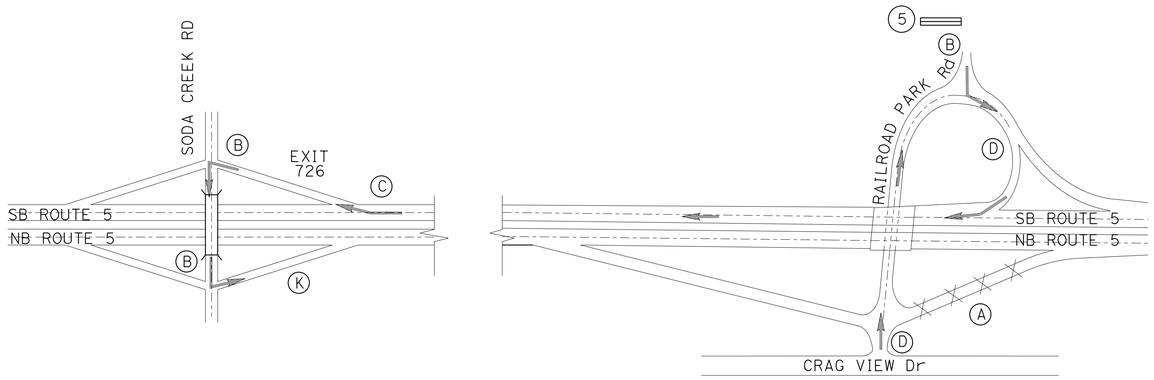
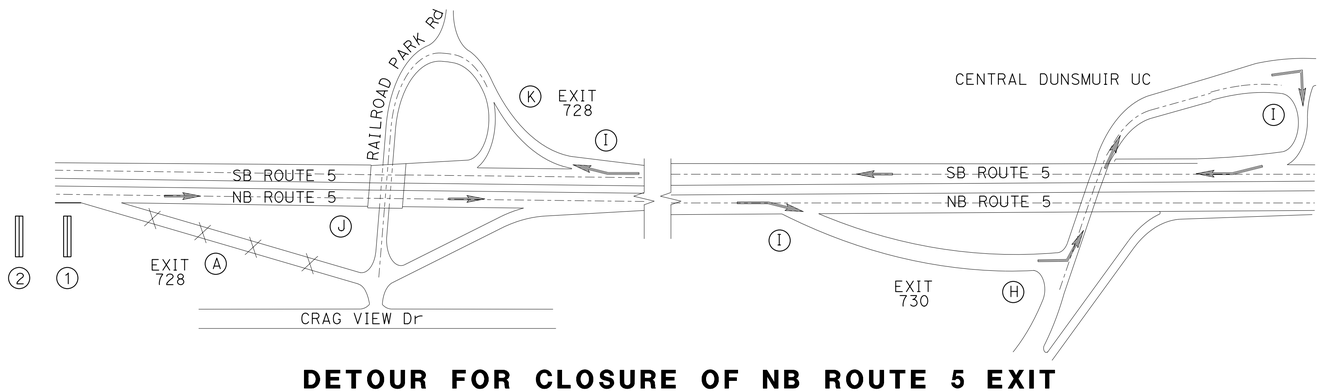
REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA



DETOUR FOR CLOSURE OF NB ROUTE 5 EXIT RAMP TO CRAG VIEW Dr



DETOUR FOR CLOSURE OF NB ROUTE 5 ENTRANCE RAMP FROM CRAG VIEW Dr/RAILROAD PARK Rd



DETOUR FOR CLOSURE OF NB ROUTE 5 EXIT RAMP TO CRAG VIEW Dr/RAILROAD PARK Rd

CONSTRUCTION AREA SIGNS (PORTABLE SIGNS)

SIGN No. ◯	CODE	PANEL SIZE (INCH)	REMARKS	No. (EA)
(A) *	SC6-3 (CA)	48" x 48"	"RAMP CLOSED" "DATE-TIME"	3
(B)	M4-10L G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) NORTH	3
(C)	M4-10R G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) NORTH	1
(D)	SC3 (CA) G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) NORTH	2
(E)	M4-10L G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) SOUTH	
(F)	M4-10R G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) SOUTH	
(G)	SC3 (CA) G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) SOUTH	
(H)	M4-10L SP1	48" x 18" 24" x 30"	DETOUR (L↑ ARROW) EXIT XXX	1
(I)	M4-10R SP1	48" x 18" 24" x 30"	DETOUR (R↑ ARROW) EXIT XXX	4
(J)	SC3 (CA) SP1	48" x 18" 24" x 30"	DETOUR (UP ARROW) EXIT XXX	2
(K)	M4-8A	24" x 18"	END DETOUR	3
			TOTAL	19

* PLACE 7 DAYS PRIOR TO RAMP CLOSURE

DETOUR PLAN

NO SCALE

DE-3

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL CONNER
CHECKED BY: KARLIE SMITH
FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj1\02\4G160_plans\pse\24g160mg003.dgn

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160mg003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	13	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

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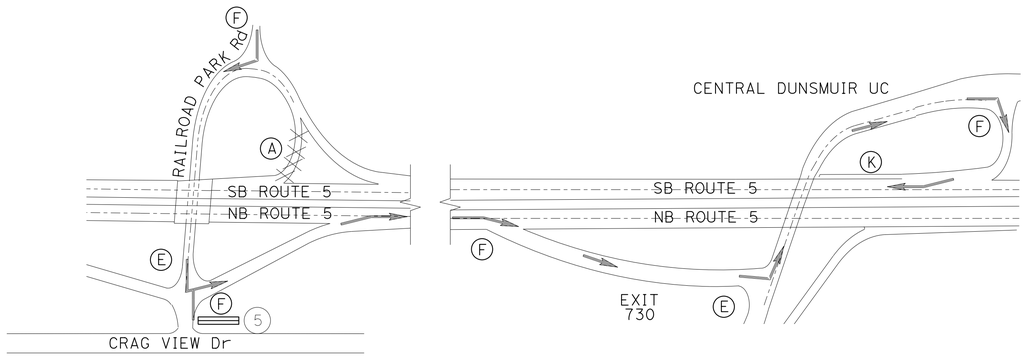
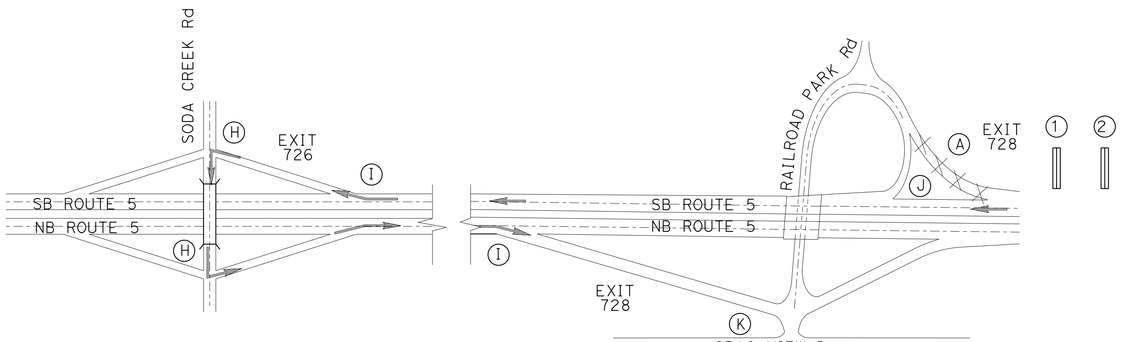
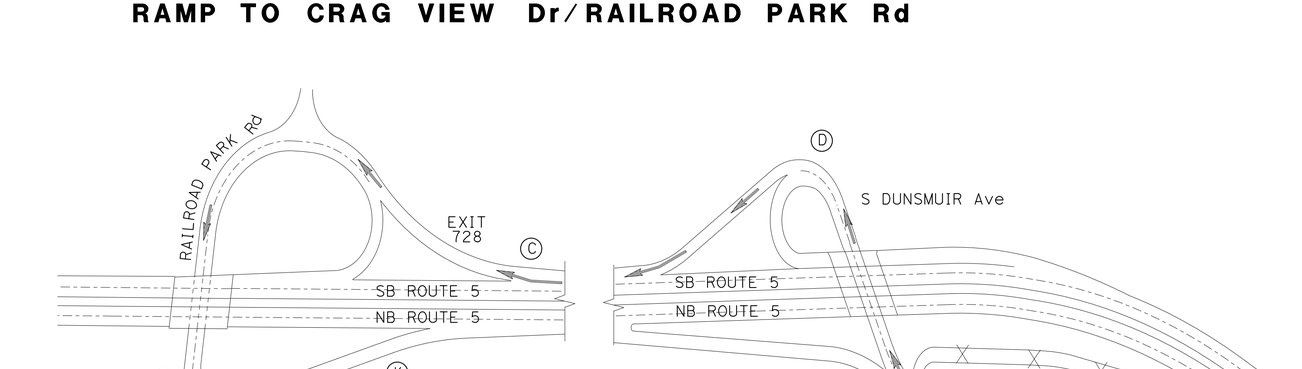
REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA



DETOUR FOR CLOSURE OF SB ROUTE 5 ENTRANCE RAMP FROM CRAG VIEW Dr/RAILROAD PARK Rd



DETOUR FOR CLOSURE OF SB ROUTE 5 EXIT RAMP TO CRAG VIEW Dr/RAILROAD PARK Rd



DETOUR FOR CLOSURE OF NB ROUTE 5 ENTRANCE RAMP FROM S DUNSMUIR Ave

CONSTRUCTION AREA SIGNS (PORTABLE SIGNS)

SIGN No. ◯	CODE	PANEL SIZE (INCH)	REMARKS	No. (EA)
Ⓐ *	SC6-3 (CA)	48" x 48"	"RAMP CLOSED" "DATE-TIME"	3
Ⓑ	M4-10L G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) NORTH	1
Ⓒ	M4-10R G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) NORTH	1
Ⓓ	SC3 (CA) G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) NORTH	2
Ⓔ	M4-10L G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) SOUTH	2
Ⓕ	M4-10R G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) SOUTH	4
Ⓖ	SC3 (CA) G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) SOUTH	
Ⓗ	M4-10L SP1	48" x 18" 24" x 30"	DETOUR (L↑ ARROW) EXIT XXX	2
Ⓘ	M4-10R SP1	48" x 18" 24" x 30"	DETOUR (R↑ ARROW) EXIT XXX	2
Ⓙ	SC3 (CA) SP1	48" x 18" 24" x 30"	DETOUR (UP ARROW) EXIT XXX	1
Ⓚ	M4-8A	24" x 18"	END DETOUR	3
			TOTAL	21

* PLACE 7 DAYS PRIOR TO RAMP CLOSURE

DETOUR PLAN

NO SCALE

DE-4

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL CONNER
CHECKED BY: KARLIE SMITH
FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
MAINTENANCE

P:\proj1\02\4g160_plans\pse\24g160mg004.dgn

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160mg004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	14	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

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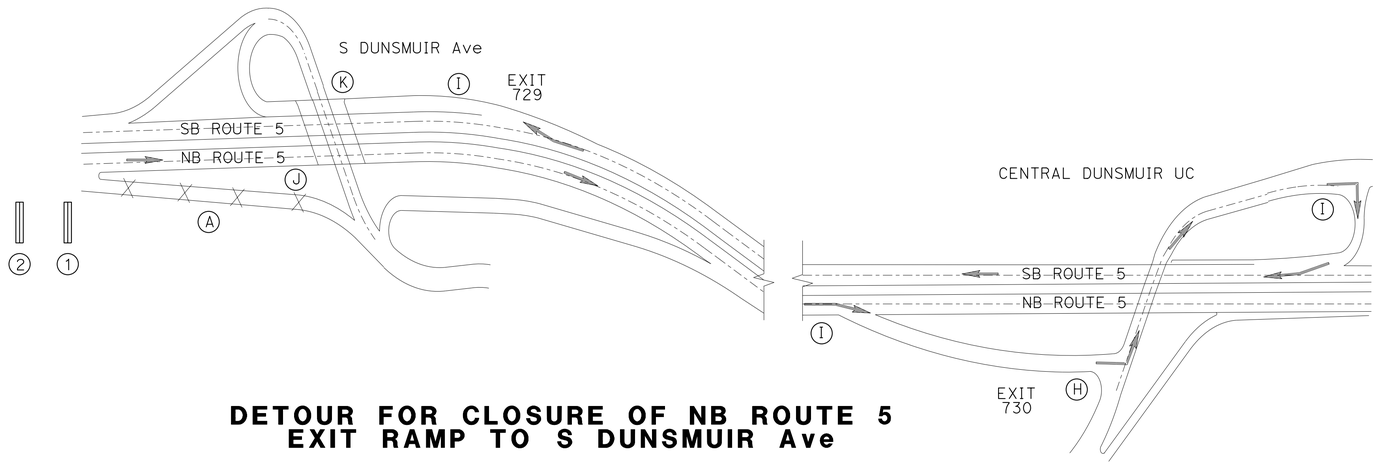
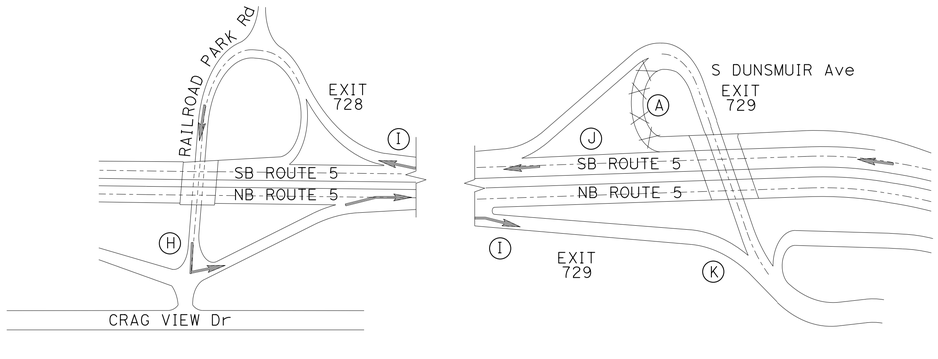
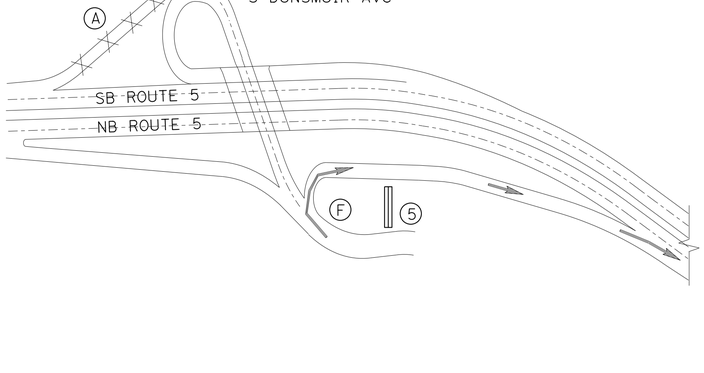
REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

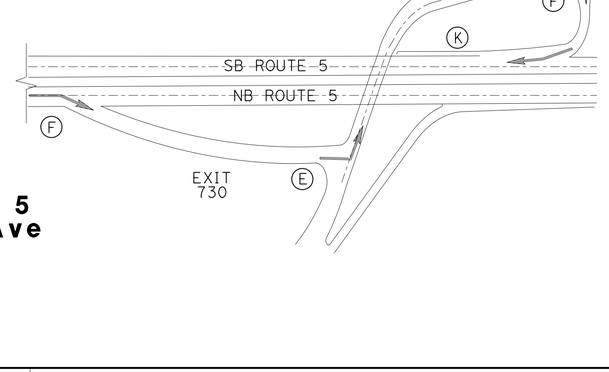


DETOUR FOR CLOSURE OF NB ROUTE 5 EXIT RAMP TO S DUNSMUIR Ave



DETOUR FOR CLOSURE OF SB ROUTE 5 EXIT RAMP TO S DUNSMUIR Ave





DETOUR FOR CLOSURE OF SB ROUTE 5 ENTRANCE RAMP FROM S DUNSMUIR Ave

CONSTRUCTION AREA SIGNS (PORTABLE SIGNS)

SIGN No. ◯	CODE	PANEL SIZE (INCH)	REMARKS	No. (EA)
Ⓐ *	SC6-3 (CA)	48" x 48"	"RAMP CLOSED" "DATE-TIME"	3
Ⓑ	M4-10L G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (L† ARROW) ROUTE SHIELD (5) NORTH	
Ⓒ	M4-10R G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (R† ARROW) ROUTE SHIELD (5) NORTH	
Ⓓ	SC3 (CA) G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) NORTH	
Ⓔ	M4-10L G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (L† ARROW) ROUTE SHIELD (5) SOUTH	1
Ⓕ	M4-10R G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (R† ARROW) ROUTE SHIELD (5) SOUTH	3
Ⓖ	SC3 (CA) G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) SOUTH	
Ⓗ	M4-10L SP1	48" x 18" 24" x 30"	DETOUR (L† ARROW) EXIT XXX	2
Ⓘ	M4-10R SP1	48" x 18" 24" x 30"	DETOUR (R† ARROW) EXIT XXX	5
Ⓙ	SC3 (CA) SP1	48" x 18" 24" x 30"	DETOUR (UP ARROW) EXIT XXX	2
Ⓚ	M4-8A	24" x 18"	END DETOUR	3
			TOTAL	19

* PLACE 7 DAYS PRIOR TO RAMP CLOSURE

DETOUR PLAN

NO SCALE

DE-5

REVISED BY | DATE REVISED
MICHAEL CONNER | KARLIE SMITH
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LANCE BROWN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

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LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160mg005.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	15	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

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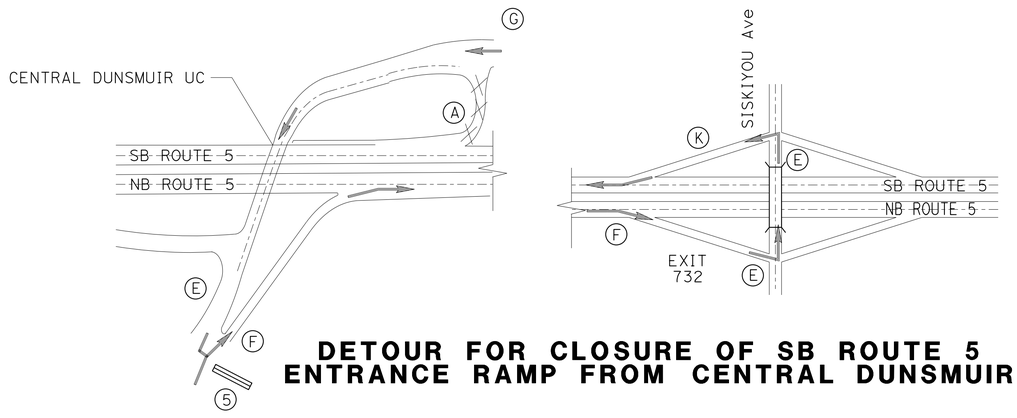
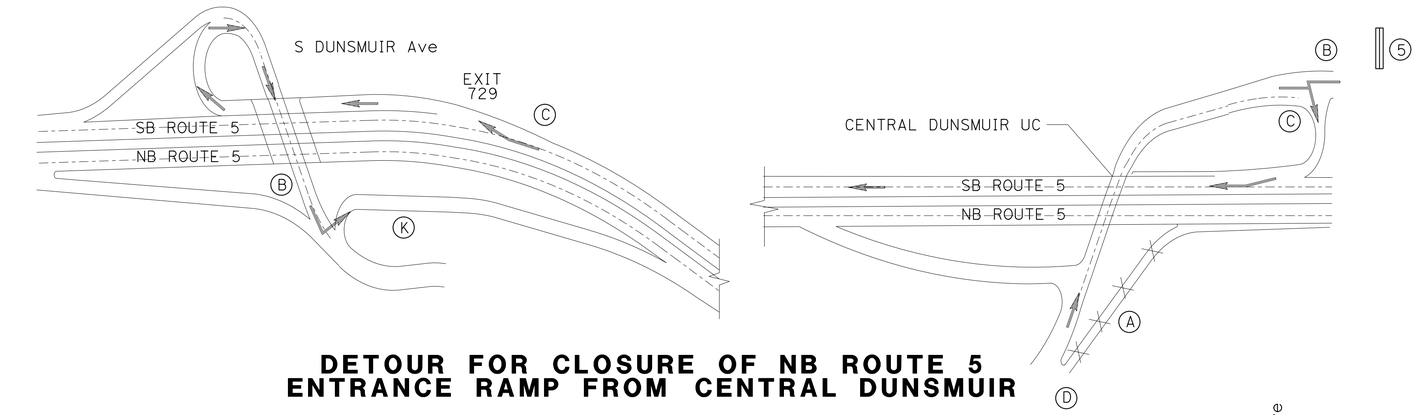
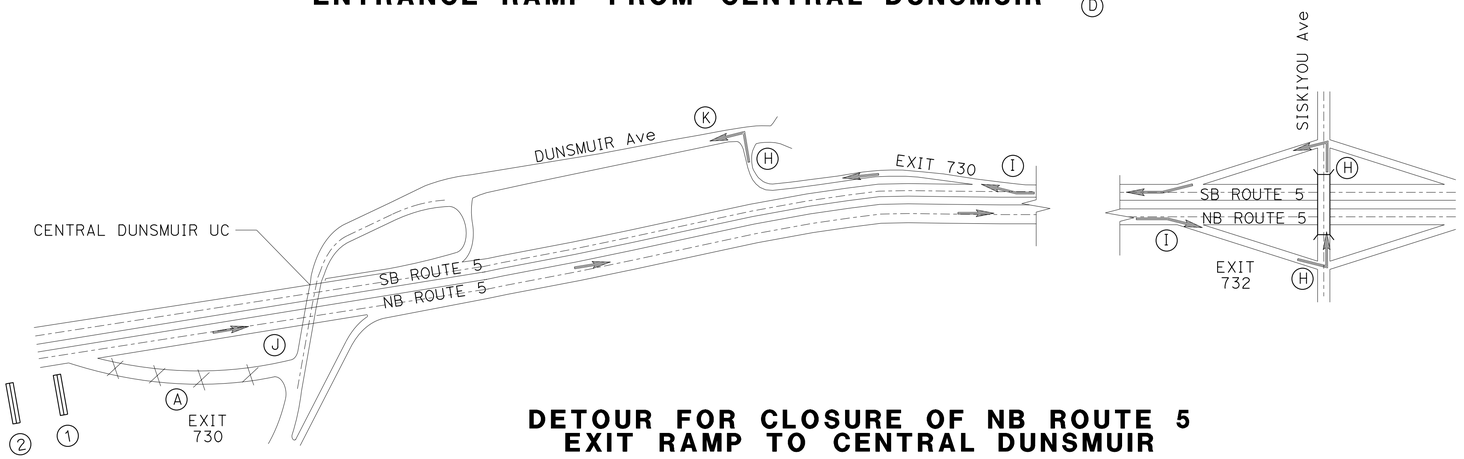
REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA



DETOUR FOR CLOSURE OF SB ROUTE 5 ENTRANCE RAMP FROM CENTRAL DUNSMUIR



DETOUR FOR CLOSURE OF NB ROUTE 5 ENTRANCE RAMP FROM CENTRAL DUNSMUIR



DETOUR FOR CLOSURE OF NB ROUTE 5 EXIT RAMP TO CENTRAL DUNSMUIR

CONSTRUCTION AREA SIGNS (PORTABLE SIGNS)

SIGN No. ◯	CODE	PANEL SIZE (INCH)	REMARKS	No. (EA)
Ⓐ *	SC6-3 (CA)	48" x 48"	"RAMP CLOSED" "DATE-TIME"	3
Ⓑ	M4-10L G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) NORTH	3
Ⓒ	M4-10R G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) NORTH	2
Ⓓ	SC3 (CA) G27-2 (5) (CA) M3-1	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) NORTH	1
Ⓔ	M4-10L G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (L↑ ARROW) ROUTE SHIELD (5) SOUTH	3
Ⓕ	M4-10R G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (R↑ ARROW) ROUTE SHIELD (5) SOUTH	2
Ⓖ	SC3 (CA) G27-2 (5) (CA) M3-3	48" x 18" 24" x 24" 24" x 12"	DETOUR (UP ARROW) ROUTE SHIELD (5) SOUTH	1
Ⓗ	M4-10L SP1	48" x 18" 24" x 30"	DETOUR (L↑ ARROW) EXIT XXX	3
Ⓘ	M4-10R SP1	48" x 18" 24" x 30"	DETOUR (R↑ ARROW) EXIT XXX	2
Ⓙ	SC3 (CA) SP1	48" x 18" 24" x 30"	DETOUR (UP ARROW) EXIT XXX	1
Ⓚ	M4-8A	24" x 18"	END DETOUR	3
			TOTAL	24

* PLACE 7 DAYS PRIOR TO RAMP CLOSURE

DETOUR PLAN

NO SCALE

DE-6

REVISED BY | DATE REVISED
MICHAEL CONNER | KARLIE SMITH
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LANCE BROWN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj1\02\4g160_plans\pse\24g160mg006.dgn

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160mg006.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	16	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

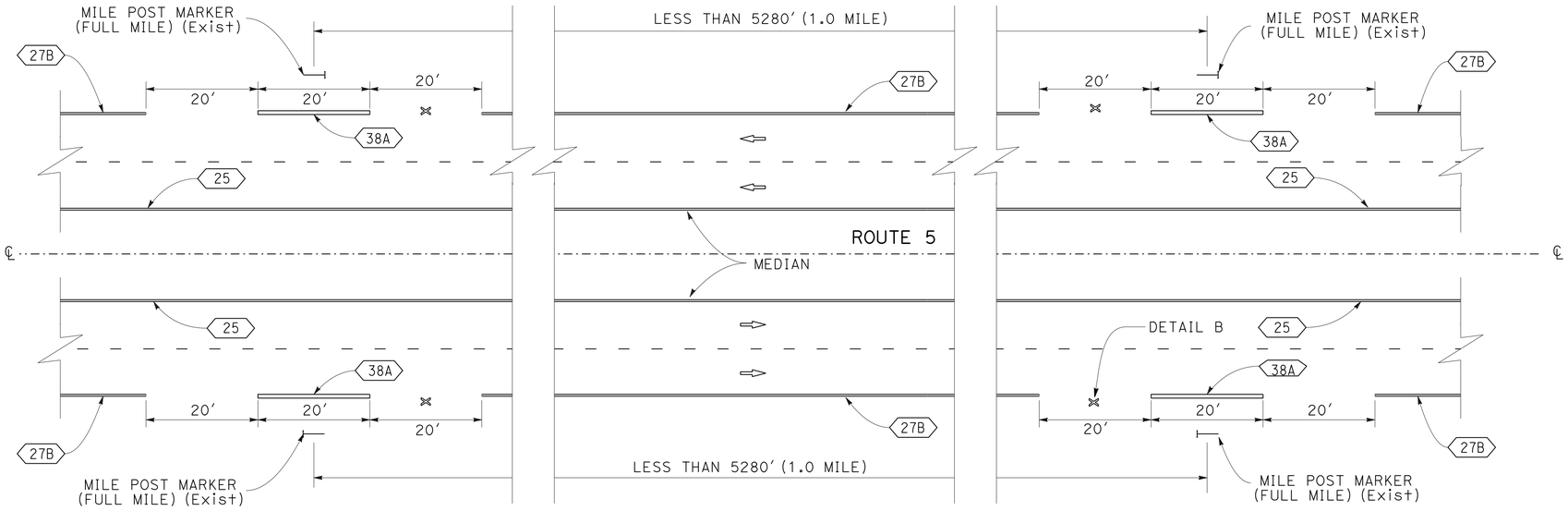
02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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

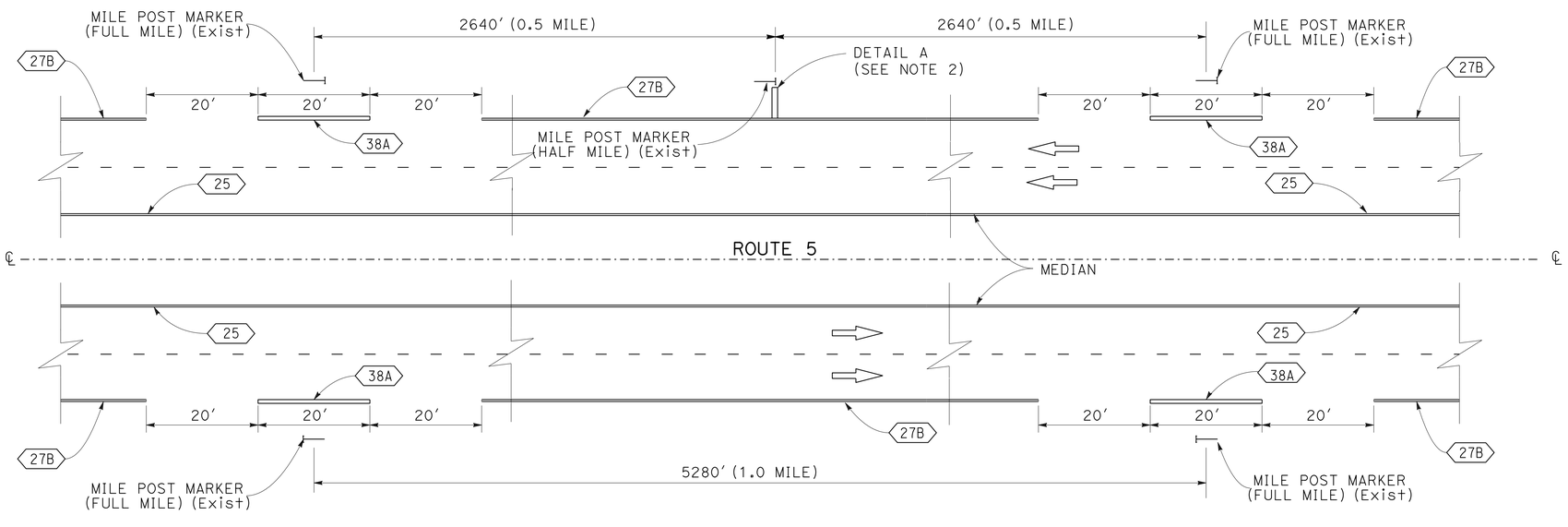
NOTE:

1. PLACE "DETAIL A" ON NB AND SB SHOULDER WHEN ALIGNMENTS ARE SEPARATE.

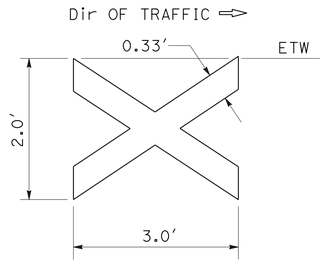


TYPICAL MILE POST STRIPE FOR EQUATIONS (FREEWAYS)

(NO DETAIL A WITHIN AN EQUATION)

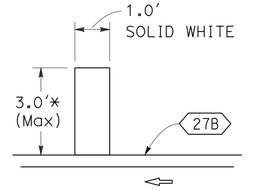


TYPICAL HALF MILE AND MILE POST STRIPE



DETAIL B

0.33' SOLID WHITE THERMOPLASTIC



DETAIL A

* ACTUAL LENGTH MAY VARY DUE TO PAVEMENT WIDTH

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-1

REVISED BY | DATE REVISED

MICHAEL CONNER | KARLIE SMITH

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

P:\proj\02\4G160_plans\pse\24g160nb001.dgn

LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160nb001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0156
PROJECT NUMBER & PHASE 02-1300-0085-1
EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	17	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

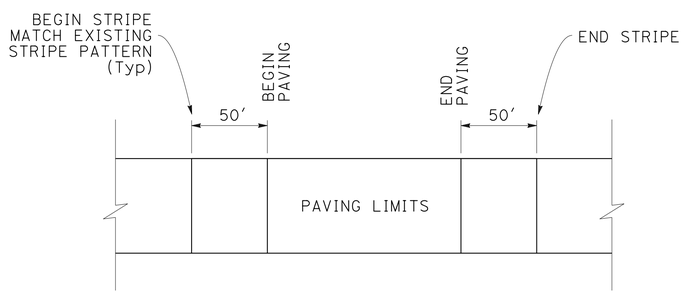
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. NO RUMBLE STRIP TO BE INSTALLED ON CONCRETE BRIDGES OR APPROACH SLABS.

ABBREVIATIONS:

Dir DIRECTION



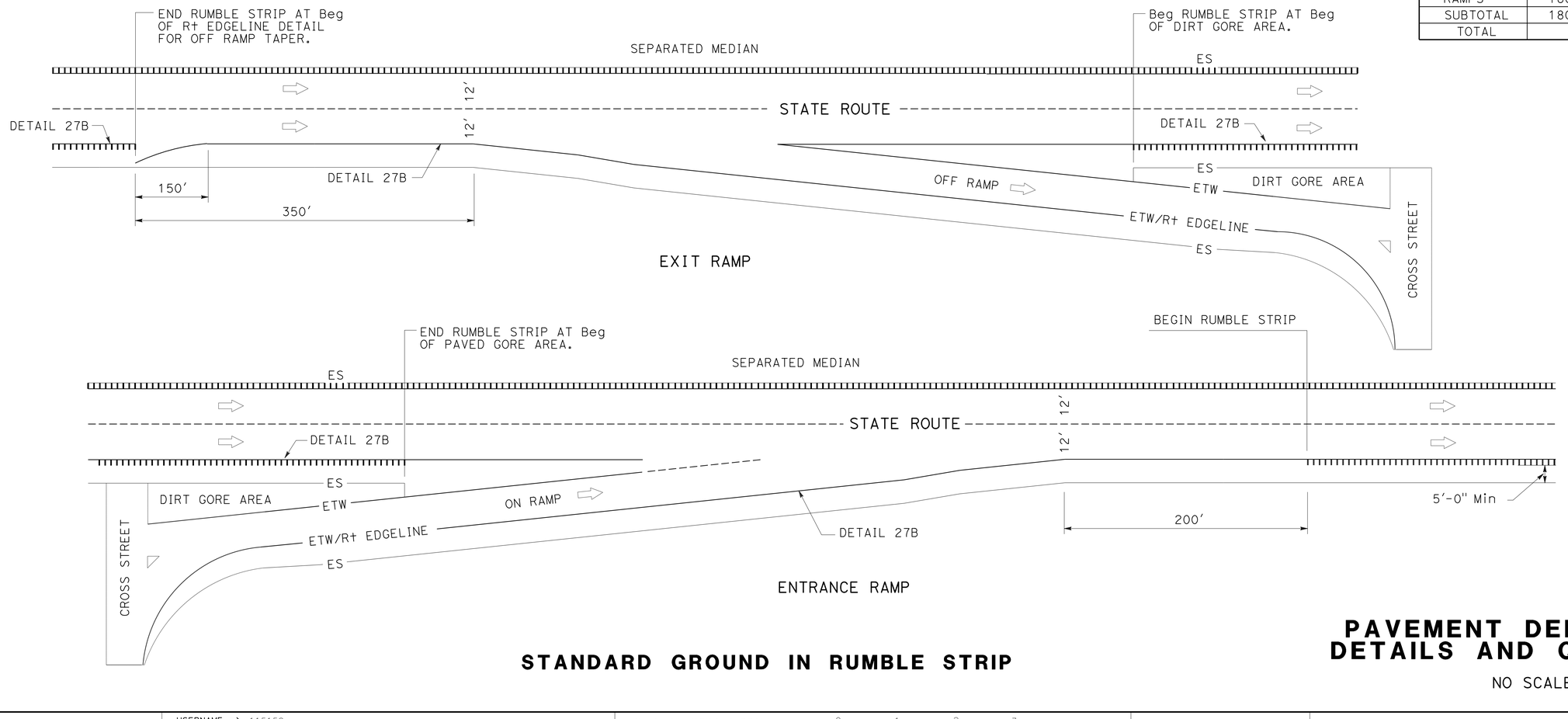
TRAFFIC STRIPE MATCH DETAIL

THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)

Dir	DESCRIPTION	DETAIL 8	DETAIL 12	DETAIL 14A	DETAIL 25	DETAIL 25A	DETAIL 27B	DETAIL 36	DETAIL 36A	DETAIL 38A
		LF	LF	LF	LF	LF	LF	LF	LF	LF
NB	MAINLINE		57,774	3897	61,664	5596	61,664			200
	RAMPS	2995				11,149	11,149	5924	2995	40
SB	MAINLINE		59,073	2598	61,664	2503	61,664			200
	RAMPS	2890				7636	7636	4478	2890	40
SUBTOTAL		5885	116,847	6495	123,328	26,884	142,113	10,402	5885	480
TOTAL		438,319								

PAVEMENT MARKER (RETROREFLECTIVE-RECESSED)

DESCRIPTION	TYPE C	TYPE G	TYPE H
	EA	EA	EA
MAINLINE		2434	2909
RAMPS	180	1117	783
SUBTOTAL	180	3551	3692
TOTAL	7423		



STANDARD GROUND IN RUMBLE STRIP

PAVEMENT DELINEATION DETAILS AND QUANTITIES

NO SCALE **PDQ-1**

REVISED BY | DATE REVISED
MICHAEL CONNER | KARLIE SMITH
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | LANCE BROWN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

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LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160nc001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	18	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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THERMOPLASTIC PAVEMENT MARKING

Dir	Co	PM	DESCRIPTION	EA	SQFT	REMARKS
NB	Sha	58.50-66.50	MAINLINE	9	27.0	DETAIL A
		59.24	FLUME CREEK Rd EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	27.0	LIMIT LINE
		59.45	FLUME CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		60.42	CONANT Rd EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	62.0	LIMIT LINE
		60.69	CONANT Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		61.64	SWEETBRIER Ave EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	60.0	LIMIT LINE
		61.84	SWEETBRIER Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		63.46	CASTELLA EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	52.0	LIMIT LINE
		63.72	CASTELLA ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		65.22	SODA CREEK Rd EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	62.0	LIMIT LINE
		65.56	SODA CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		66.00	CRAG VIEW Dr EXIT	2	66.0	TYPE V ARROW
		66.63	CRAG VIEW Dr/RR PARK Rd EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	70.0	LIMIT LINE
		66.95	CRAG VIEW Dr/RR PARK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
	Sis	0.00	MAINLINE	1	2.4	DETAIL B
		0.50-2.50	MAINLINE	2	6.0	DETAIL A
		0.55	S DUNSMUIR Ave EXIT	2	66.0	TYPE V ARROW
		0.91	S DUNSMUIR Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		2.22	CENTRAL DUNSMUIR EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	142.0	CROSSWALK
		2.58	CENTRAL DUNSMUIR ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
SB	Sha	58.50-66.50	MAINLINE	9	27.0	DETAIL A
		59.23	FLUME CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		59.48	FLUME CREEK Rd EXIT	1	80.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		60.41	CONANT Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		60.60	CONANT Rd EXIT	1	56.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		61.58	SWEETBRIER Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		61.88	SWEETBRIER Ave EXIT	1	60.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		63.48	CASTELLA ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		63.73	CASTELLA EXIT	1	66.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		65.31	SODA CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		65.55	SODA CREEK Rd EXIT	1	45.0	LIMIT LINE
				1	22.0	STOP
				2	66.0	TYPE V ARROW
		66.91	CRAG VIEW Dr/RR PARK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		67.00	CRAG VIEW Dr/RR PARK Rd EXIT	2	66.0	TYPE V ARROW
	Sis	0.00	MAINLINE	1	2.4	DETAIL B
		0.50-2.50	MAINLINE	2	6.0	DETAIL A
		0.57	S DUNSMUIR Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		0.73	S DUNSMUIR Ave EXIT	1	12.0	LIMIT LINE
				1	22.0	STOP
				2	66.0	TYPE V ARROW
		2.62	CENTRAL DUNSMUIR ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
TOTAL					2878.8	

REMOVE THERMOPLASTIC PAVEMENT MARKING

Dir	Co	PM	DESCRIPTION	EA	SQFT	REMARKS
NB	Sha	59.24	FLUME CREEK Rd EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	27.0	LIMIT LINE
		59.45	FLUME CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		60.42	CONANT Rd EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	62.0	LIMIT LINE
		60.69	CONANT Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		61.64	SWEETBRIER Ave EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	60.0	LIMIT LINE
		61.84	SWEETBRIER Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		63.46	CASTELLA EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	52.0	LIMIT LINE
		63.72	CASTELLA ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		65.22	SODA CREEK Rd EXIT	2	66.0	TYPE V ARROW
				1	22.0	STOP
				1	62.0	LIMIT LINE
		65.56	SODA CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		66.00	CRAG VIEW Dr EXIT	2	66.0	TYPE V ARROW
		66.63	CRAG VIEW Dr/RR PARK Rd EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	70.0	LIMIT LINE
		66.95	CRAG VIEW Dr/RR PARK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
	Sis	0.55	S DUNSMUIR Ave EXIT	2	66.0	TYPE V ARROW
		0.91	S DUNSMUIR Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		2.22	CENTRAL DUNSMUIR EXIT	2	66.0	TYPE V ARROW
				2	44.0	STOP
				1	142.0	CROSSWALK
		2.58	CENTRAL DUNSMUIR ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
SB	Sha	59.23	FLUME CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		59.48	FLUME CREEK Rd EXIT	1	80.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		60.41	CONANT Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		60.60	CONANT Rd EXIT	1	56.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		61.58	SWEETBRIER Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		61.88	SWEETBRIER Ave EXIT	1	60.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		63.48	CASTELLA ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		63.73	CASTELLA EXIT	1	66.0	LIMIT LINE
				2	44.0	STOP
				2	66.0	TYPE V ARROW
		65.31	SODA CREEK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		65.55	SODA CREEK Rd EXIT	1	45.0	LIMIT LINE
				1	22.0	STOP
				2	66.0	TYPE V ARROW
		66.91	CRAG VIEW Dr/RR PARK Rd ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		67.00	CRAG VIEW Dr/RR PARK Rd EXIT	2	66.0	TYPE V ARROW
	Sis	0.57	S DUNSMUIR Ave ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
		0.73	S DUNSMUIR Ave EXIT	1	12.0	LIMIT LINE
				1	22.0	STOP
				2	66.0	TYPE V ARROW
		2.62	CENTRAL DUNSMUIR ENTRANCE	1	31.0	TYPE I 24'-0" ARROW
TOTAL					2808.0	

ABBREVIATIONS:
Dir DIRECTION

PAVEMENT DELINEATION QUANTITIES

PDQ-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
MICHAEL CONNER	KARLIE SMITH

FUNCTIONAL SUPERVISOR: LANCE BROWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

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LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160nc002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0156
PROJECT NUMBER & PHASE 02-1300-0085-1
EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	19	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

02-03-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. CONNER
No. C73123
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

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NOTE:

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

ABBREVIATIONS:

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

GUARDRAIL ITEMS

Dir	Co	POST MILE	SIDE	RECONSTRUCT GUARDRAIL ***	RECONSTRUCT GUARDRAIL (7' POST) ***	RECONSTRUCT TERMINAL SYSTEM	RECONSTRUCT END ANCHOR ASSEMBLY (TYPE SFT)	ADJUST GUARDRAIL	ALTERNATIVE FLARED TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	Exist BURIED POST END ANCHOR (N) *	CONNECT TO Exist (N)	RESET OBJECT MARKER	TREATED WOOD WASTE	REMARKS
			Rt/Lt	LF	LF	EA	EA	LF	EA	EA	EA	EA	EA	LB	
NB	Sha	59.24	Rt				1	525				1	1		FLUME CREEK Rd EXIT RAMP **
		60.42	Rt				1	75				1	1		CONANT Rd EXIT RAMP **
		61.64	Rt				1	625				1	1		SWEETBRIER Ave EXIT RAMP **
		61.84	Rt			SRT	1	275					1		SWEETBRIER Ave ENTRANCE RAMP
		65.56	Rt	275	250	SRT						1	1	6827	SODA CREEK Rd ENTRANCE RAMP **
		66.00	Rt					200					1		CRAG VIEW Dr EXIT RAMP
		66.63	Lt				1	150					1		CRAG VIEW Dr/RR PARK Rd EXIT RAMP
		66.63	Rt			SRT	1	200					1		CRAG VIEW Dr/RR PARK Rd EXIT RAMP
		66.95	Rt	200	100	ET-PLUS						1	1	3821	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP **
	Sis	0.55	Rt					525				2	1		SOUTH DUNSMUIR EXIT RAMP **
		0.91	Rt			SRT	1	438					1		SOUTH DUNSMUIR ENTRANCE RAMP
		2.22	Rt	500	50		1					1	1	6727	CENTRAL DUNSMUIR EXIT **
SB	Sha	59.23	Rt	100	25	SRT	1						1	1566	FLUME CREEK Rd ENTRANCE RAMP
		61.58	Lt	200	75	SRT	1						1	3470	SWEETBRIER Ave ENTRANCE RAMP
		65.55	Rt			ET-PLUS	1	212					1		SODA CREEK Rd EXIT RAMP
		66.91	Rt	500	75	SRT						1	1	7078	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP **
		67.00	Rt	500	25		1					1	1	6376	CRAG VIEW Dr/RR PARK Rd EXIT RAMP **
		67.00	Rt					125	1	1			1		CRAG VIEW Dr/RR PARK Rd EXIT RAMP
	Sis	0.69	Rt			SRT		200			1		1		SOUTH DUNSMUIR EXIT RAMP (UNDER I-5)
		0.69	Rt			SRT		200			1		1		SOUTH DUNSMUIR ENTRANCE RAMP (UNDER I-5)
TOTAL				2275	600	11	12	3750	1	1			20	35,865	

* SEE BURIED POST END ANCHOR DETAIL ON SHEET C-3
** RECONSTRUCT/ADJUST GUARDRAIL MEASUREMENTS STARTED AT GORE
*** USE STEEL POSTS FOR RECONSTRUCT GUARDRAIL

ROADWAY QUANTITIES

Dir	Co	POST MILE LIMITS	DESCRIPTION	RHMA-G	SHOULDER BACKING	TACK COAT
				TON	TON	TON
NB	Sha	58.00-67.02	MAINLINE	14,271		60.9
		59.24	RAMP-FLUME CREEK Rd EXIT	190	30.8	1.2
		59.45	RAMP-FLUME CREEK Rd ENTRANCE	157	33.3	1.0
		60.42	RAMP-CONANT Rd EXIT	173	31.9	1.1
		60.69	RAMP-CONANT Rd ENTRANCE	254	52.2	1.5
		61.64	RAMP-SWEETBRIER Ave EXIT	222	39.4	1.4
		61.84	RAMP-SWEETBRIER Ave ENTRANCE	159	24.8	1.0
		62.36	RAMP-VISTA POINT EXIT	89		0.5
		62.49	RAMP-VISTA POINT ENTRANCE	58		0.4
		63.46	RAMP-CASTELLA EXIT	165	37.5	1.0
		63.72	RAMP-CASTELLA ENTRANCE	170	43.9	1.0
		65.22	RAMP-SODA CREEK Rd EXIT	237	57.3	1.4
		65.56	RAMP-SODA CREEK Rd ENTRANCE	185	40.6	1.1
		66.00	RAMP-CRAG VIEW Dr EXIT	243	56.1	1.5
		66.63	RAMP-CRAG VIEW Dr/RR PARK Rd EXIT	236	69.2	1.4
		66.95	RAMP-CRAG VIEW Dr/RR PARK Rd ENTRANCE	174	37.0	1.1
	Sis	0.00-2.65	MAINLINE	4139		17.6
		0.55	RAMP-S DUNSMUIR Ave EXIT	188	44.7	1.1
		0.91	RAMP-S DUNSMUIR Ave ENTRANCE	244	52.4	1.5
		2.22	RAMP-CENTRAL DUNSMUIR EXIT	305	67.9	1.9
		2.58	RAMP-CENTRAL DUNSMUIR ENTRANCE	126	29.7	0.8
NB SUBTOTAL				21,985	748.7	100.4

ROADWAY QUANTITIES (CONTINUED)

Dir	Co	POST MILE LIMITS	DESCRIPTION	RHMA-G	SHOULDER BACKING	TACK COAT
				TON	TON	TON
SB	Sha	58.00-67.02	MAINLINE	14,326		61.1
		59.23	RAMP-FLUME CREEK Rd ENTRANCE	228	10.3	1.4
		59.48	RAMP-FLUME CREEK Rd EXIT	214	38.6	1.3
		60.41	RAMP-CONANT Rd ENTRANCE	177	26.5	1.1
		60.60	RAMP-CONANT Rd EXIT	193	35.1	1.2
		61.58	RAMP-SWEETBRIER Ave ENTRANCE	229	43.1	1.4
		61.88	RAMP-SWEETBRIER Ave EXIT	218	46.7	1.3
		63.48	RAMP-CASTELLA ENTRANCE	190	32.9	1.2
		63.73	RAMP-CASTELLA EXIT	256	51.7	1.6
		65.31	RAMP-SODA CREEK Rd ENTRANCE	172	37.3	1.0
		65.55	RAMP-SODA CREEK Rd EXIT	234	40.1	1.4
		66.91	RAMP-CRAG VIEW Dr/RR PARK Rd ENTRANCE	587	68.5	3.6
		67.00	RAMP-CRAG VIEW Dr/RR PARK Rd EXIT			
	Sis	0.00-2.65	MAINLINE	4139		17.6
		0.57	RAMP-S DUNSMUIR Ave ENTRANCE	361	61.8	2.2
		0.73	RAMP-S DUNSMUIR Ave EXIT			
		2.62	RAMP-CENTRAL DUNSMUIR ENTRANCE	108	22.1	0.7
DIKE				59		
NB SUBTOTAL				21,986	748.7	100.4
TOTAL				43,676	1293.4	198.5

SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
MICHAEL CONNER | KARLIE SMITH
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LANCE BROWN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

LAST REVISION 02-03-14 | DATE PLOTTED => 13-FEB-2014 | TIME PLOTTED => 12:54

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BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160pa001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0 0.0/2.7	20	49

02-03-14
REGISTERED CIVIL ENGINEER DATE

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NOTES:

1. (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
2. EXACT LOCATIONS OF REPLACE ASPHALT CONCRETE SURFACING TO BE DETERMINED BY THE ENGINEER.

DIKE QUANTITIES

Dir	Co	POST MILE LIMITS	PLACE HMA DIKE (TYPE F)	REMOVE AC DIKE	COMMENTS
			LF	LF	
NB	SHA	59.25-59.36	530	530	FLUME CREEK Rd EXIT RAMP
		61.66-61.77	550	550	SWEETBREIR Ave EXIT RAMP
		65.43-65.53	485	485	SODA CREEK Rd ENTRANCE RAMP
		66.00-66.05	238	238	CRAG VIEW Dr EXIT RAMP
		66.92-66.95	152	152	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP
	SIS	0.58-0.72	502	502	S DUNSMUIR Ave EXIT RAMP
		0.83-0.91	430	430	S DUNSMUIR Ave ENTRANCE RAMP
		2.25-2.36	500	500	CENTRAL DUNSMUIR EXIT RAMP
SB	SHA	66.90-66.91	385	385	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP
		66.90-67.00	475	475	CRAG VIEW Dr/RR PARK Rd EXIT RAMP
		66.97-67.00	162	162	CRAG VIEW Dr/RR PARK Rd EXIT RAMP
TOTAL			4409	4409	

RUMBLE STRIP

Dir	Co	POST MILE LIMITS	Sta	REMARKS
NB	Sha	58.00-67.02	954	MEDIAN AND OUTSIDE
	Sis	0.00-2.65	280	MEDIAN AND OUTSIDE
SB	Sha	58.00-67.02	954	MEDIAN AND OUTSIDE
	Sis	0.00-2.65	280	MEDIAN AND OUTSIDE
TOTAL			2468	

Exist DRAINAGE (N)

Dir	Co	POST MILE LIMITS	DI	SLOTTED DRAIN
			EA	LF
NB	Sha	58.00-67.02	52	238
	Sis	0.00-2.65	18	154
SB	Sha	58.00-67.02	56	479
	Sis	0.00-2.65	13	155

REPLACE ASPHALT CONCRETE SURFACING

Dir	Co	POST MILE LIMITS	(N) No. OF DIGOUTS	(N) Avg LENGTH	(N) WIDTH	(N) DEPTH	REPLACE AC SURFACING
		PM - PM		LF	LF	LF	CY
NB	Sha	58.00-67.02	70	100	4	0.33	343
	Sis	0.00-2.65	20	100	4	0.33	98
SB	Sha	58.00-67.02	70	100	4	0.33	343
	Sis	0.00-2.65	20	100	4	0.33	98
TOTAL							882

COLD PLANE ASPHALT CONCRETE PAVEMENT

Dir	Co	POST MILE	(N) LENGTH	(N) WIDTH	AREA	REMARKS
			LF	LF	SQYD	
NB	Sha	58.00-67.02	47,620	39-41	208,643	NB MAINLINE
		59.24	740	0-34	1429	FLUME CREEK Rd EXIT RAMP GORE TAPER
			120	20-40	378	FLUME CREEK Rd EXIT RAMP TERMINI TAPER
		59.45	540	0-28	884	FLUME CREEK Rd ENTRANCE RAMP GORE TAPER
			20	34	76	FLUME CREEK Rd ENTRANCE RAMP TERMINI TAPER
		60.42	545	0-36	1112	CONANT Rd EXIT RAMP GORE TAPER
			20	83	184	CONANT Rd EXIT RAMP TERMINI TAPER
		60.69	610	0-36	1342	CONANT Rd ENTRANCE RAMP GORE TAPER
			20	81	180	CONANT Rd ENTRANCE RAMP TERMINI TAPER
		61.64	670	0-36	1384	SWEETBRIER Ave EXIT RAMP GORE TAPER
			20	85	189	SWEETBRIER Ave EXIT RAMP TERMINI TAPER
		61.84	560	0-36	1151	SWEETBRIER Ave ENTRANCE RAMP GORE TAPER
			20	85	189	SWEETBRIER Ave ENTRANCE RAMP TERMINI TAPER
		62.36	670	0-35	1303	VISTA POINT EXIT RAMP GORE TAPER
		62.49	450	0-34	850	VISTA POINT ENTRANCE RAMP GORE TAPER
		63.46	460	0-34	904	CASTELLA EXIT RAMP GORE TAPER
			20	72	160	CASTELLA EXIT RAMP TERMINI TAPER
		63.72	550	0-24	778	CASTELLA ENTRANCE RAMP GORE TAPER
			20	75	167	CASTELLA ENTRANCE RAMP TERMINI TAPER
		65.22	740	0-30	1340	SODA CREEK Rd EXIT RAMP GORE TAPER
			20	80	178	SODA CREEK Rd EXIT RAMP TERMINI TAPER
		65.56	510	0-28	856	SODA CREEK Rd ENTRANCE RAMP GORE TAPER
			20	95	211	SODA CREEK Rd ENTRANCE RAMP TERMINI TAPER
		66.00	785	0-32	1431	CRAG VIEW Dr EXIT RAMP GORE TAPER
			20	24	53	CRAG VIEW Dr EXIT RAMP TERMINI TAPER
		66.63	695	0-25	990	CRAG VIEW Dr/RR PARK Rd EXIT RAMP GORE TAPER
			20	94	209	CRAG VIEW Dr/RR PARK Rd EXIT RAMP TERMINI TAPER
		66.95	390	0-34	759	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP GORE TAPER
			20	117	260	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP TERMINI TAPER
	Sis	0.00-2.65	13,992	38-39	60,512	NB MAINLINE
		0.55	680	0-30	1156	S DUNSMUIR Ave EXIT RAMP GORE TAPER
			20	24	53	S DUNSMUIR Ave EXIT RAMP TERMINI TAPER
		0.91	660	0-32	1200	S DUNSMUIR Ave ENTRANCE RAMP GORE TAPER
			20	35	78	S DUNSMUIR Ave ENTRANCE RAMP TERMINI TAPER
		2.22	730	0-32	1316	CENTRAL DUNSMUIR EXIT RAMP GORE TAPER
			20	90	200	CENTRAL DUNSMUIR EXIT RAMP TERMINI TAPER
		2.58	535	0-24	927	CENTRAL DUNSMUIR ENTRANCE RAMP GORE TAPER
			310	2	69	CENTRAL DUNSMUIR ENTRANCE RAMP LEFT CURB TAPER
			100	15-46	316	CENTRAL DUNSMUIR ENTRANCE RAMP TERMINI TAPER
NB TOTAL					293,417	

COLD PLANE ASPHALT CONCRETE PAVEMENT (CONTINUED)

Dir	Co	POST MILE	(N) LENGTH	(N) WIDTH	AREA	REMARKS
			LF	LF	SQYD	
SB	Sha	58.00-67.02	47,620	39-41	209,446	SB MAINLINE
		59.23	570	0-28	913	FLUME CREEK ENTRANCE RAMP GORE TAPER
			20	150	333	FLUME CREEK ENTRANCE RAMP TERMINI TAPER
		59.48	420	0-36	884	FLUME CREEK Rd EXIT RAMP GORE TAPER
			20	140	311	FLUME CREEK Rd EXIT RAMP TERMINI TAPER
		60.41	750	0-36	1553	CONANT Rd ENTRANCE RAMP GORE TAPER
			20	54	120	CONANT Rd ENTRANCE RAMP TERMINI TAPER
		60.60	740	0-32	1351	CONANT Rd EXIT RAMP GORE TAPER
			20	58	129	CONANT Rd EXIT RAMP TERMINI TAPER
		61.58	730	0-36	1487	SWEETBRIER Ave ENTRANCE RAMP GORE TAPER
			20	80	178	SWEETBRIER Ave ENTRANCE RAMP TERMINI TAPER
		61.88	630	0-34	1226	SWEETBRIER Ave EXIT RAMP GORE TAPER
			20	70	156	SWEETBRIER Ave EXIT RAMP TERMINI TAPER
		63.48	640	0-30	1124	CASTELLA ENTRANCE RAMP GORE TAPER
			20	120	267	CASTELLA ENTRANCE RAMP TERMINI TAPER
		63.73	740	0-40	1662	CASTELLA EXIT RAMP GORE TAPER
			20	95	211	CASTELLA EXIT RAMP TERMINI TAPER
		65.31	740	0-24	1040	SODA CREEK Rd ENTRANCE RAMP GORE TAPER
			20	65	144	SODA CREEK Rd ENTRANCE RAMP TERMINI TAPER
		65.55	734	0-38	1581	SODA CREEK Rd EXIT RAMP GORE TAPER
			20	90	200	SODA CREEK Rd EXIT RAMP TERMINI TAPER
		66.91	380	0-48	1040	CRAG VIEW Dr/RR PARK Rd ENTRANCE RAMP GORE TAPER
			24	115	609	CRAG VIEW Dr/RR PARK Rd ENTRANCE/EXIT RAMP UNDER OC
			20	42	368	CRAG VIEW Dr/RR PARK Rd ENTRANCE/EXIT RAMP TERMINI TAPER
		67.00	725	0-30	1248	CRAG VIEW Dr/RR PARK Rd EXIT RAMP GORE TAPER
	Sis	0.00-2.65	13,992	35-39	60,506	SB MAINLINE
		0.57	610	0-38	1372	S DUNSMUIR Ave ENTRANCE RAMP GORE TAPER
			32	130	747	S DUNSMUIR Ave ENTRANCE/EXIT RAMP UNDER OC
			20	42	93	S DUNSMUIR Ave ENTRANCE/EXIT RAMP TERMINI TAPER
		0.73	165	32	551	S DUNSMUIR Ave EXIT RAMP GORE TAPER
		2.62	532	0-30	953	CENTRAL DUNSMUIR ENTRANCE RAMP GORE TAPER
			20	90	200	CENTRAL DUNSMUIR ENTRANCE RAMP TERMINI TAPER
SB TOTAL					292,003	
TOTAL					585,420	

SUMMARY OF QUANTITIES

Q-2

REVISED BY | DATE REVISED
MICHAEL CONNER | KARLIE SMITH
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LANCE BROWN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

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BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160pa002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0156 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G160

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	21	49

02-03-14
REGISTERED ENGINEER — DATE

KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
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.

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.

NOTES (THIS SHEET):

3 Exist 3"C, 4 SLI, REMOVE 4 SLI, REPLACE WITH 3 NEW SLI.

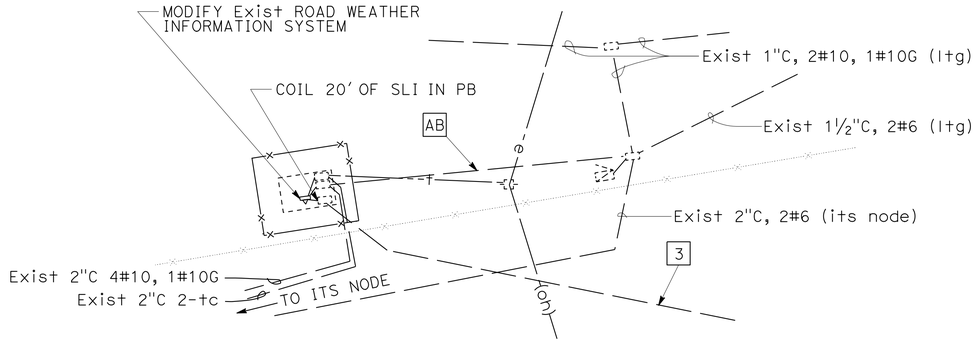
4 2"C, 2 SLI.

LEGEND:

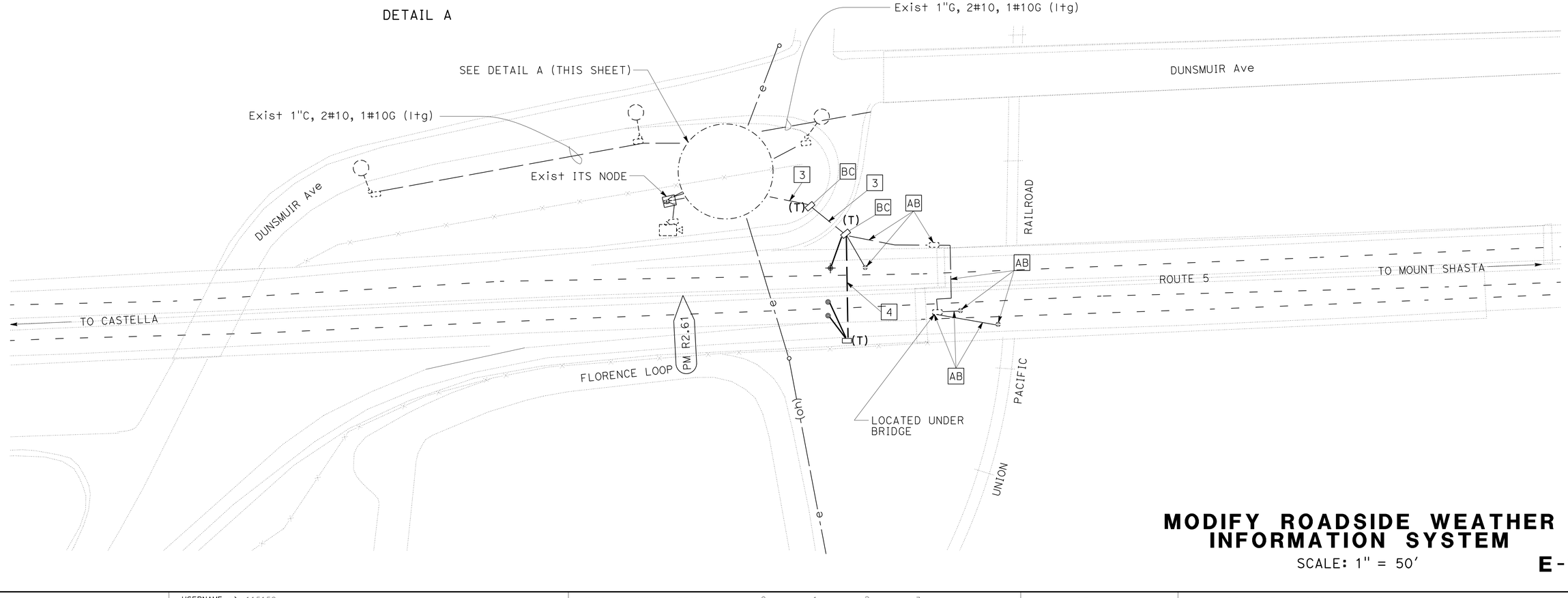
- IN PAVEMENT SENSOR
- IN PAVEMENT SENSOR WITH SUBSURFACE PROBE

ABBREVIATIONS:

SLI	SENSOR LEAD-IN CABLE
TCS	TRAFFIC COUNT STATION
tc	EXISTING TELEPHONE CABLE
ITS	INTELLIGENT TRANSPORTATION SYSTEM



DETAIL A



MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

SCALE: 1" = 50'

E-1

CALCULATED-DESIGNED BY	KK	10/1/13	12/30/13
CHECKED BY	KK	11/13/13	
FUNCTIONAL SUPERVISOR	KK		
REVISED BY			
DATE REVISED			
KEITH KOEPPEN			
JEREMIAH PEARCE			
IAN TURNBULL			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ITS ENGINEERING
Caltrans

P:\proj\02\4G1601_plans\pse\24g160ua001.dgn

LAST REVISION: DATE PLOTTED => 13-FEB-2014, TIME PLOTTED => 12:54, 02-03-14

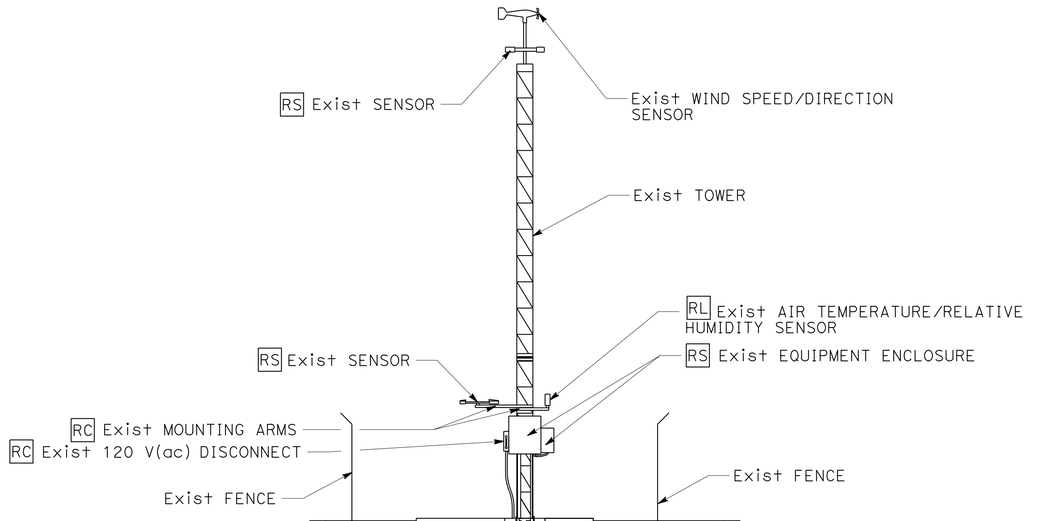
BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	22	49

02-03-14
REGISTERED ENGINEER — DATE

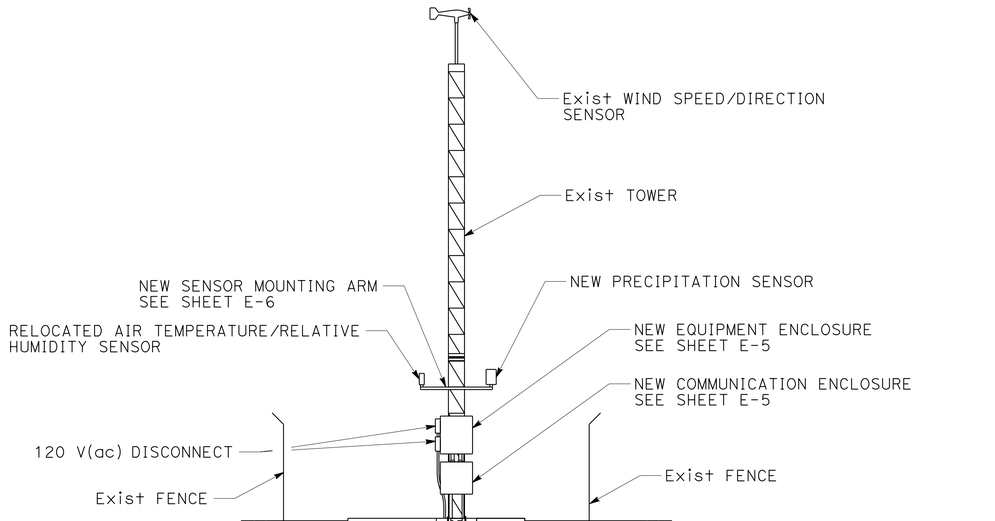
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE



FRONT VIEW

EXISTING RWIS TOWER AND SENSOR CONFIGURATION



FRONT VIEW

MODIFIED RWIS TOWER AND SENSOR CONFIGURATION

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

NO SCALE

E-2

CALCULATED-DESIGNED BY	KEITH KOEPPEN
CHECKED BY	JEREMIAH PEARCE
FUNCTIONAL SUPERVISOR	IAN TURNBULL
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	ITS ENGINEERING

REVISED BY	DATE REVISED
KK	10/1/13
KK	11/13/13

LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

P:\proj\02\4G160_plans\pse\24g160ua002.dgn

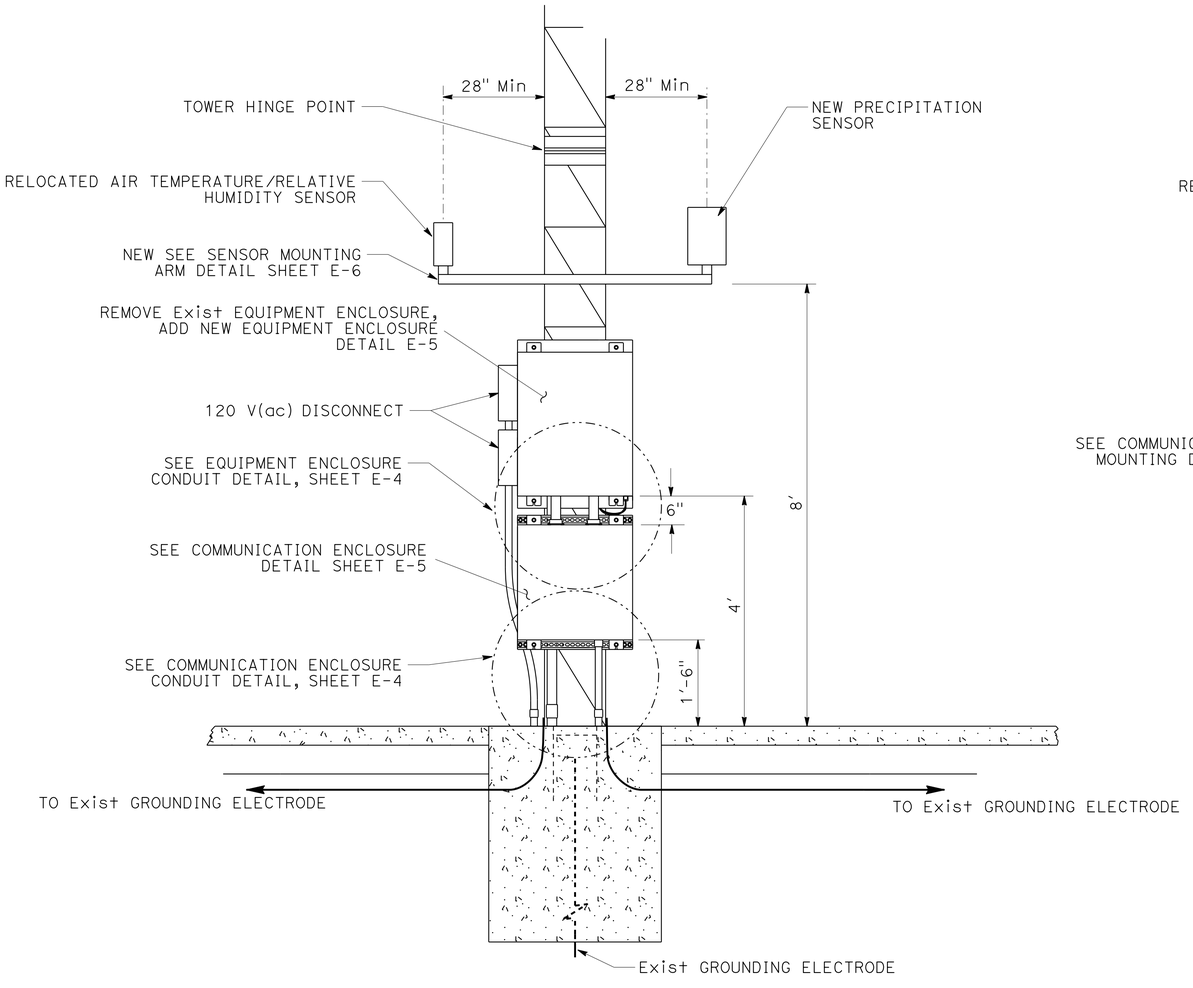
BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	23	49

02-03-14
REGISTERED ENGINEER — DATE

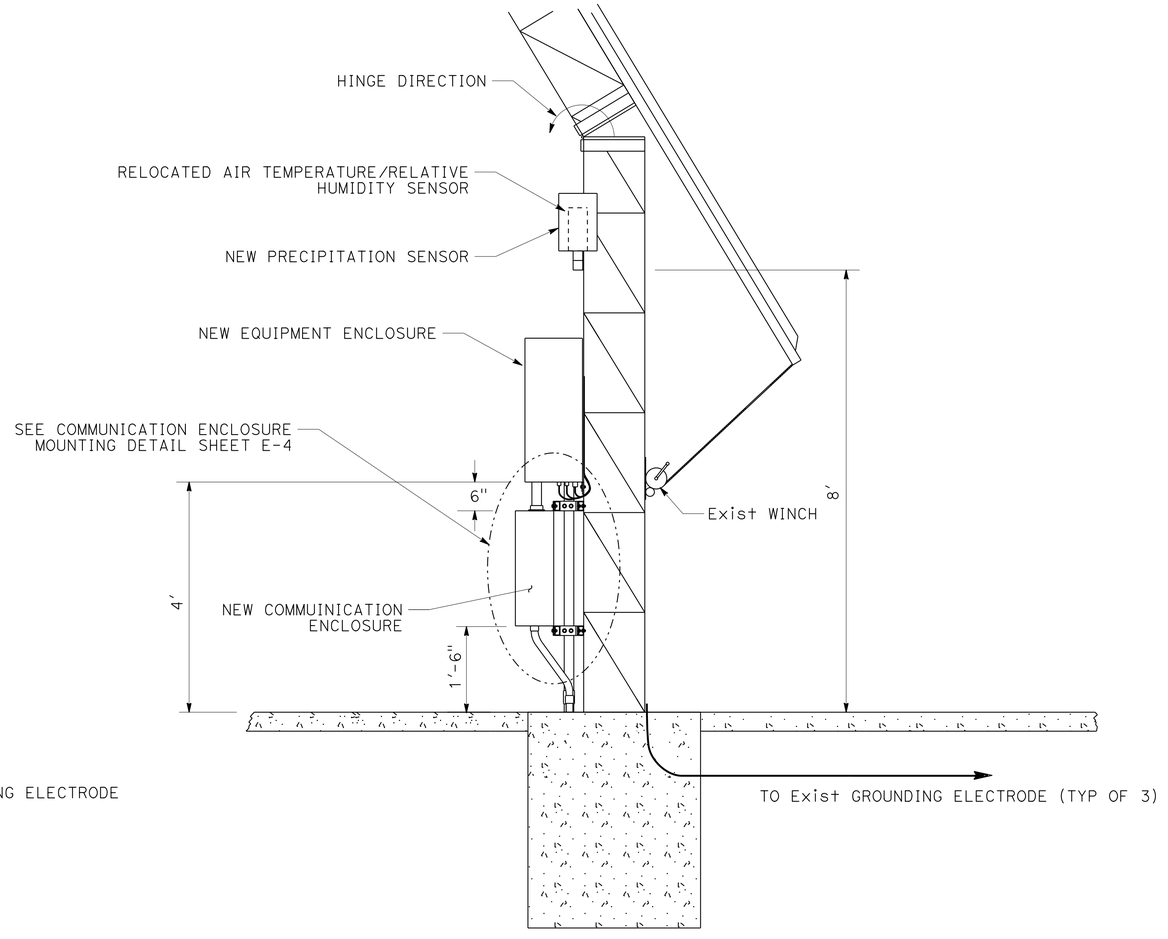
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE



FRONT

MODIFY RWIS TOWER



SIDE

MODIFY RWIS TOWER

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

NO SCALE

E-3

KEITH KOEPPEN	KK	KK	KK
JEREMIAH PEARCE	10/1/13	11/13/13	12/30/13
REVISED BY	DATE REVISED		
CALCULATED-DESIGNED BY			
CHECKED BY			
FUNCTIONAL SUPERVISOR	IAN TURNBULL		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ITS ENGINEERING
Caltrans

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LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160ua003.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0151
PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	24	49

02-03-14
REGISTERED ENGINEER — DATE

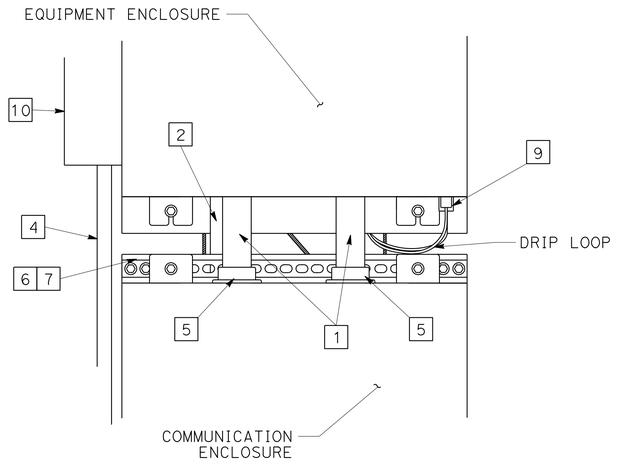
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
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.

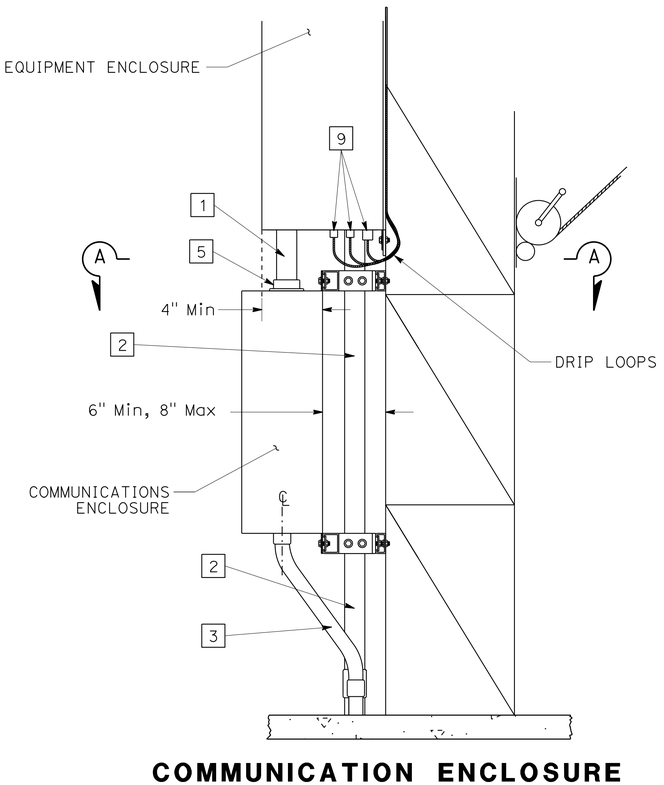
NOTES (THIS SHEET):

1. 2"C, MT, EQUIPMENT ENCLOSURE TO COMMUNICATION ENCLOSURE.
2. Exist 2"C, REMOVE 4 SLI.
3. REMOVE Exist 1"C, 3-tc, REPLACE WITH 1"C (TYPE 4), 3-tc TO COMMUNICATION ENCLOSURE.
4. 1"C, MT.
5. 2" HUB. WATERTIGHT FITTING.
6. 1⅝" STRUT CHANNEL.
7. 13/16" STRUT CHANNEL.
8. CHANNEL ANGLE PLATE 90 DEGREE STEEL, ELECTROGALVANIZED.
9. Exist LIQUIDTIGHT CORD CONNECTOR.
10. 120 V(AC) DISCONNECT (TYP OF 2).



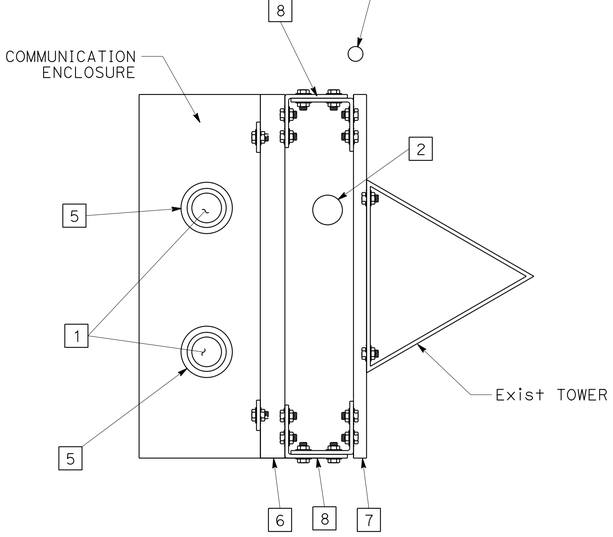
EQUIPMENT ENCLOSURE CONDUIT DETAIL

FRONT VIEW



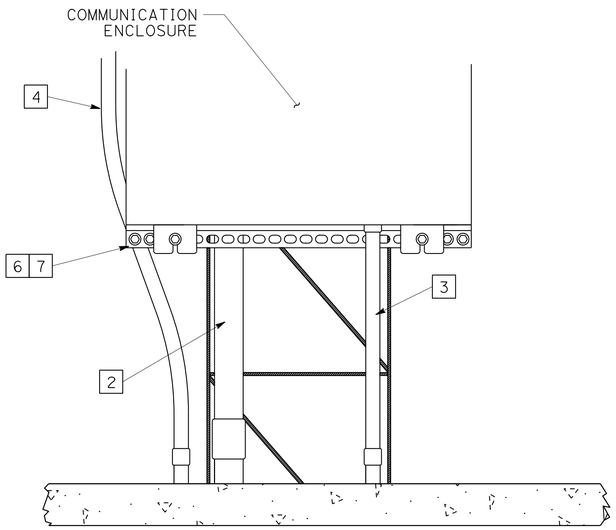
COMMUNICATION ENCLOSURE MOUNTING DETAIL

SIDE VIEW



SECTION A-A

ALL HARDWARE IS STAINLESS STEEL UNLESS OTHERWISE NOTED



COMMUNICATION ENCLOSURE CONDUIT DETAIL

FRONT VIEW

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

NO SCALE

E-4

CALCULATED-DESIGNED BY	KK	12/30/13	
CHECKED BY	KK	11/13/13	
	KK	10/1/13	
REVISED BY		DATE REVISED	
KEITH KOEPPEN			
JEREMIAH PEARCE			
FUNCTIONAL SUPERVISOR			
IAN TURNBULL			
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			
ITS ENGINEERING			

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LAST REVISION: DATE PLOTTED => 13-FEB-2014
02-03-14 TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	25	49

02-03-14
REGISTERED ENGINEER — DATE

KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE

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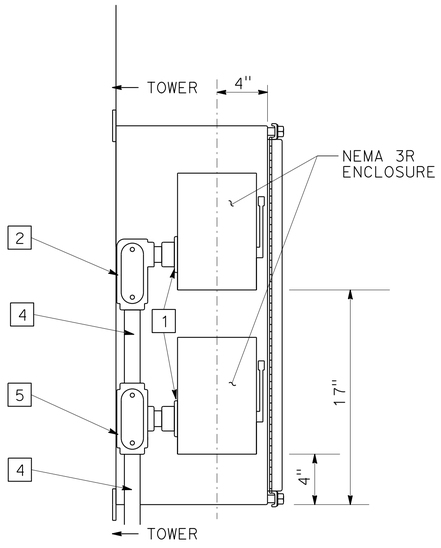
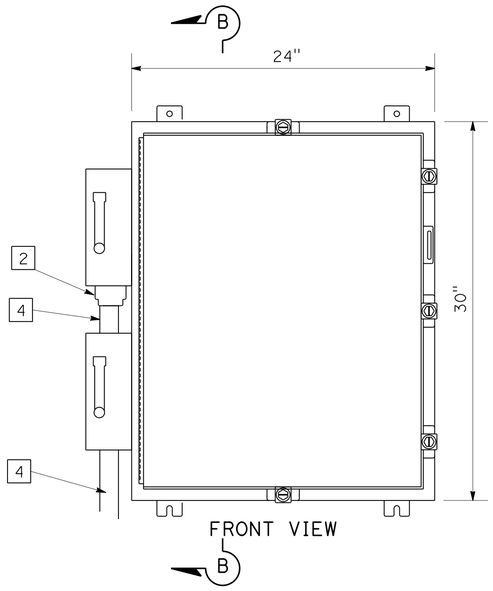
NOTES (THIS SHEET):

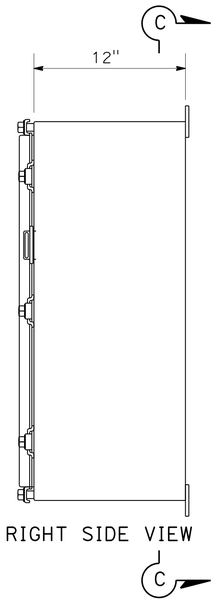
1. 1" HUB WATER TIGHT FITTING.
2. 1" CONDUIT BODY (TYPE LL) WITH COVER.
3. INSTALL METAL DUPLEX COVER.
4. 1"C, MT.
5. 1"CONDUIT BODY (TYPE T) WITH COVER.



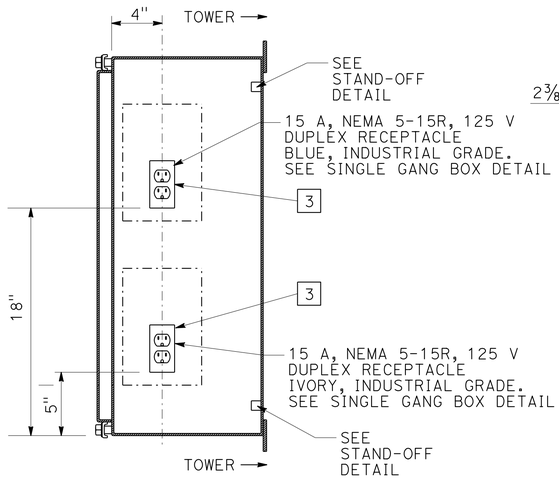
LEFT SIDE VIEW



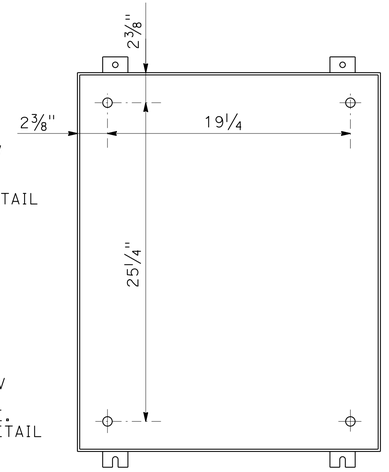
FRONT VIEW



RIGHT SIDE VIEW

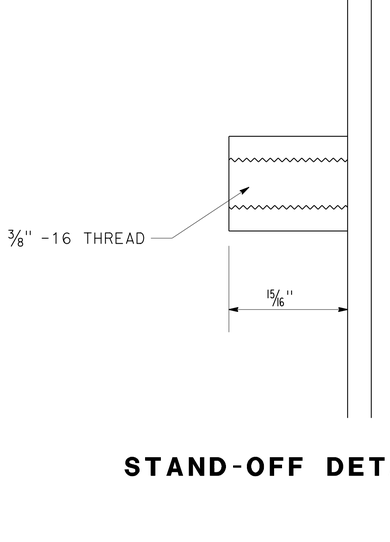


SECTION B-B
INSIDE VIEW

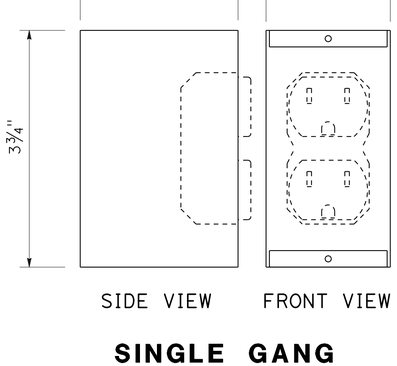


SECTION C-C
INSIDE VIEW

EQUIPMENT ENCLOSURE DETAIL

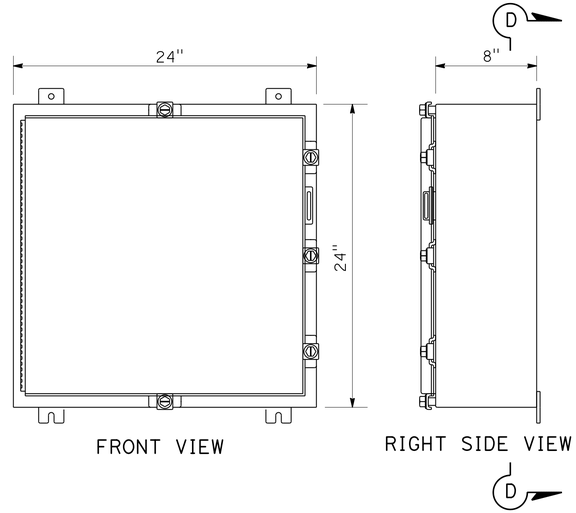


STAND-OFF DETAIL

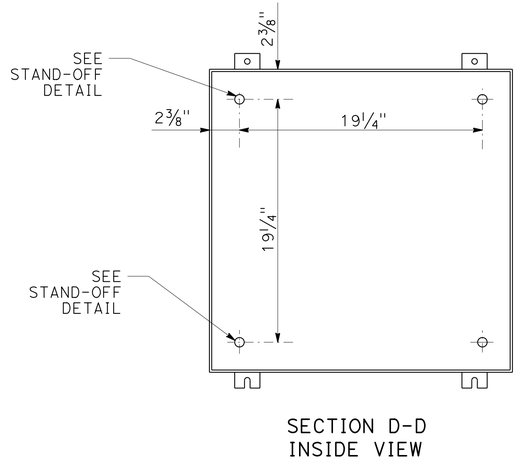


SIDE VIEW FRONT VIEW

SINGLE GANG BOX DETAIL



FRONT VIEW RIGHT SIDE VIEW



SECTION D-D
INSIDE VIEW

COMMUNICATION ENCLOSURE DETAIL

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM DETAILS

NO SCALE

E-5

KK	KK	KK	KK
12/30/13	11/13/13	10/1/13	DATE REVISED
			REVISED BY
KEITH KOEPPEN			
JEREMIAH PEARCE			
			CALCULATED-DESIGNED BY
			CHECKED BY

FUNCTIONAL SUPERVISOR: IAN TURNBULL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ITS ENGINEERING
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P:\proj1\02\4G160_plans\pse\24g160ua005.dgn

LAST REVISION DATE PLOTTED => 13-FEB-2014
02-03-14 TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua005.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

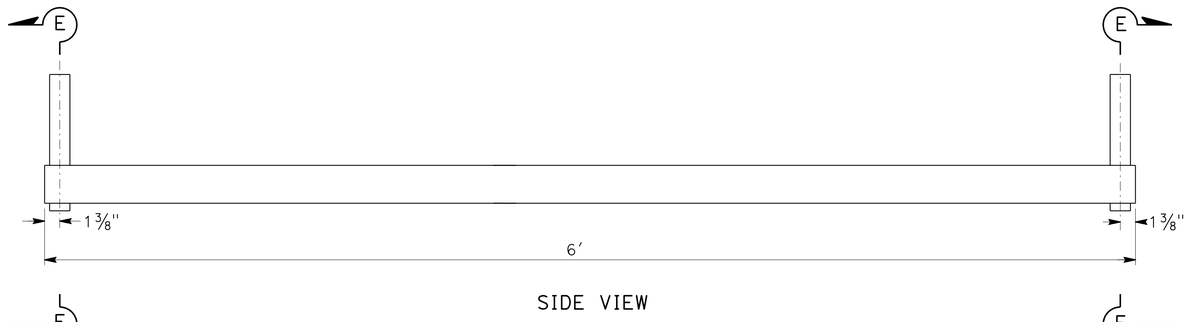
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	26	49

REGISTERED ENGINEER — DATE: 02-03-14

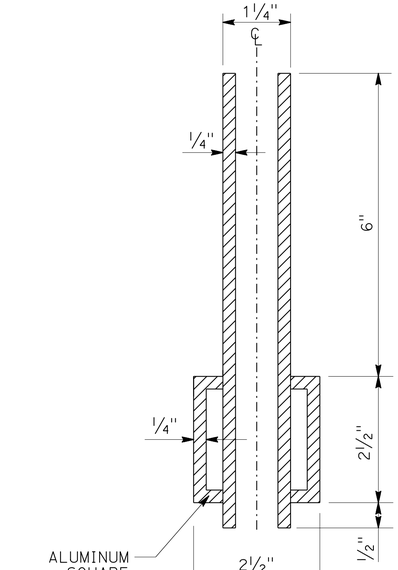
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

PLANS APPROVAL DATE: 02-03-14

TOP VIEW



SIDE VIEW



SECTION E-E

SENSOR MOUNTING ARM DETAIL

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM DETAILS

NO SCALE

E-6

	REVISED BY	KK	KK	KK
	DATE REVISED	11/13/13	10/1/13	

CALCULATED-DESIGNED BY: KEITH KOEPPEN
CHECKED BY: JEREMIAH PEARCE
FUNCTIONAL SUPERVISOR: IAN TURNBULL

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LAST REVISION | DATE PLOTTED => 13-FEB-2014
02-03-14 | TIME PLOTTED => 12:54

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	27	49

02-03-14
REGISTERED ENGINEER — DATE

KEITH KOEPPEN
No. E19870
Exp. 3-31-16
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE

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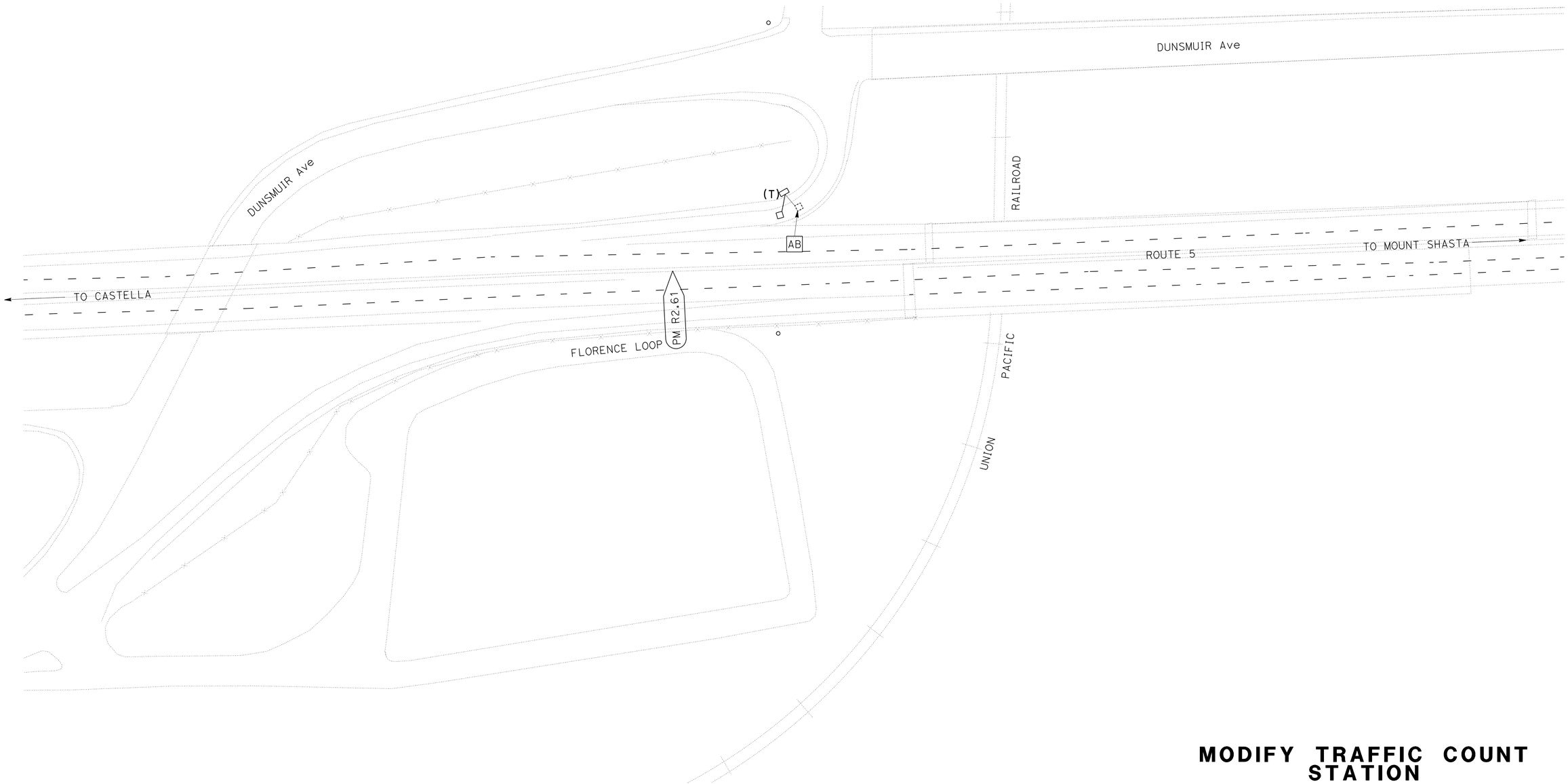
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.



MODIFY TRAFFIC COUNT STATION

SCALE: 1" = 50'

E-7

REVISED BY	KK	KK	KK	KEITH KOEPPEN	CALCULATED-DESIGNED BY
DATE REVISED	10/1/13	11/13/13	12/30/13	JEREMIAH PEARCE	CHECKED BY

FUNCTIONAL SUPERVISOR: IAN TURNBULL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION | DATE PLOTTED => 13-FEB-2014 | TIME PLOTTED => 12:54 | 02-03-14

P:\proj1\02\4G160_plans\pse\24g160ua007.dgn

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua007.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 | EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	28	49

02-03-14
REGISTERED ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE

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NOTE:

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

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

SHEET No.	2" PVC CONDUIT	No. 5(T) PULL BOX	RWIS (MODIFY SYSTEM)	SENSOR LEAD-IN CABLE	PAVEMENT SENSOR	SUB-SURFACE SENSOR
	(N)	(N)	(N)	(N)	(N)	(N)
	LF	EA	EA	EA	EA	EA
E-1	100	3	1	700	3	1

MODIFY ROADSIDE WEATHER INFORMATION SYSTEM

E-8

REVISED BY	KK	KK	KK	KK
DATE REVISED	10/1/13	11/13/13	12/30/13	
CALCULATED-DESIGNED BY	KEITH KOEPPEN			
CHECKED BY	JEREMIAH PEARCE			
FUNCTIONAL SUPERVISOR	IAN TURNBULL			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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P:\proj1\02\4G1601_plans\pse\24g160ua008.dgn

LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

BORDER LAST REVISED 7/2/2010
USERNAME => s115152
DGN FILE => 24g160ua008.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0151
PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	29	49

02-03-14
REGISTERED ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE

NOTE:

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

MODIFY TRAFFIC COUNT STATION

SHEET No.	(N) TRAFFIC COUNT STATION
	EA
E-7	1

MODIFY TRAFFIC COUNT STATION

E-9

REVISED BY	KK	KK	KK	KK
DATE REVISED	10/1/13	11/13/13	12/30/13	
CALCULATED-DESIGNED BY	KEITH KOEPPEN			
CHECKED BY	JEREMIAH PEARCE			
FUNCTIONAL SUPERVISOR	IAN TURNBULL			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION 02-03-14
DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
2	Sha, Sis	5	58.0/67.0, 0.0/2.7	30	49

02-03-14
REGISTERED ENGINEER — DATE

KEITH KOEPPEN
No. E19870
Exp. 3-31-16
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

02-03-14
PLANS APPROVAL DATE

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NOTE:

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

EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS MAINTAINED

TYPE	PM	DESCRIPTION
CCTV	SIS-5 2.61	DUNSMUIR CCTV

EXISTING LOOP DETECTORS TO BE MAINTAINED (N)

ID	PM	TYPE	DESCRIPTION
R82	Sha-5 59.23	1-Ramp Loop	Flume Creek SB ENTRANCE
R83	Sha-5 59.24	1-Ramp Loop	Flume Creek NB EXIT
R84	Sha-5 59.45	1-Ramp Loop	Flume Creek NB ENTRANCE
R85	Sha-5 59.48	1-Ramp Loop	Flume Creek SB EXIT
R86	Sha-5 60.41	1-Ramp Loop	Conant Road SB ENTRANCE
R87	Sha-5 60.42	1-Ramp Loop	Conant Road NB EXIT
R88	Sha-5 60.60	1-Ramp Loop	Conant Road SB EXIT
R89	Sha-5 60.69	1-Ramp Loop	Conant Road NB ENTRANCE
R240	Sha-5 61.58	1-Ramp Loop	Sweetbrier Avenue SB ENTRANCE
R241	Sha-5 61.64	1-Ramp Loop	Sweetbrier Avenue NB EXIT
R242	Sha-5 61.84	1-Ramp Loop	Sweetbrier Avenue NB ENTRANCE
R243	Sha-5 61.88	1-Ramp Loop	Sweetbrier Avenue SB EXIT
R244	Sha-5 62.36	1-Ramp Loop	Vista Point NB EXIT
R245	Sha-5 63.46	1-Ramp Loop	Castella NB EXIT
R246	Sha-5 63.48	1-Ramp Loop	Castella SB ENTRANCE
R247	Sha-5 63.72	1-Ramp Loop	Castella NB ENTRANCE
R248	Sha-5 63.73	1-Ramp Loop	Castella NB EXIT
R249	Sha-5 65.23	1-Ramp Loop	Soda Creek NB EXIT
R250	Sha-5 65.31	1-Ramp Loop	Soda Creek SB ENTRANCE
R251	Sha-5 65.55	1-Ramp Loop	Soda Creek SB EXIT
R252	Sha-5 65.56	1-Ramp Loop	Soda Creek NB ENTRANCE
R253	Sha-5 60.00	1-Ramp Loop	Crag View Drive NB EXIT
R254	Sha-5 66.63	1-Ramp Loop	Castle Crags NB EXIT
R255	Sha-5 66.91	1-Ramp Loop	Castle Crags SB ENTRANCE
R256	Sha-5 65.95	1-Ramp Loop	Castle Crags NB ENTRANCE
R257	Sha-5 66.00	1-Ramp Loop	Castle Crags SB EXIT
R258	Sis-5 0.55	1-Ramp Loop	South Dunsmuir NB EXIT
R259	Sis-5 0.57	1-Ramp Loop	South Dunsmuir SB ENTRANCE
R260	Sis-5 0.73	1-Ramp Loop	South Dunsmuir SB EXIT
R261	Sis-5 0.91	1-Ramp Loop	South Dunsmuir NB ENTRANCE
R262	Sis-5 2.22	1-Ramp Loop	Central Dunsmuir NB EXIT
R263	Sis-5 2.58	1-Ramp Loop	Central Dunsmuir NB ENTRANCE

REVISED BY	DATE REVISED
KK	10/1/13
KK	11/13/13
KK	12/30/13

CALCULATED-DESIGNED BY: KEITH KOEPPEN
CHECKED BY: JEREMIAH PEARCE
FUNCTIONAL SUPERVISOR: IAN TURNBULL

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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ELECTRICAL DETAILS

E-10

LAST REVISION: DATE PLOTTED => 13-FEB-2014, TIME PLOTTED => 12:54, 02-03-14

BORDER LAST REVISED 7/2/2010 | USERNAME => s115152 | DGN FILE => 24g160ua010.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0151 | PROJECT NUMBER & PHASE 02-1300-0085-1 EA 02-4G1601

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
Mtl	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

Oblr	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 Mtl	PERMEABLE MATERIAL

P continued

PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
℄,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
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

T continued

TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL

U

UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS

V

V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME

W

W	WEST, WIDTH
WB	WESTBOUND
WH	WEEP HOLE
WM	WIRE MESH
WS	WATER SURFACE
WSP	WELDED STEEL PIPE
Wt	WEIGHT
WV	WATER VALVE
WW	WINGWALL
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
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	31	49

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 02-03-14

UNIT OF MEASUREMENT SYMBOLS:

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

TABLE A

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

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

TABLE B

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft^3, pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
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

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:54

USERNAME => s115152
DGN FILE => 24g160va001.dgn

P:\proj1\02\4G160_plans\pse\24g160va001.dgn

6-7-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	32	49

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-15
CIVIL
STATE OF CALIFORNIA

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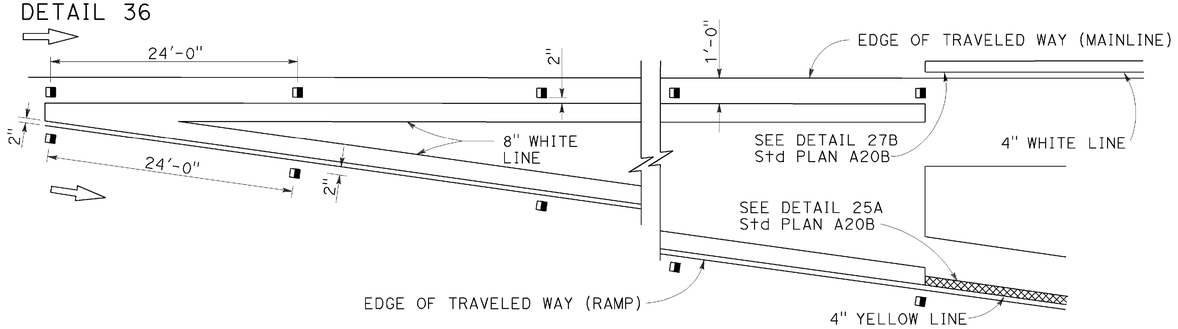
TO ACCOMPANY PLANS DATED 02-03-14

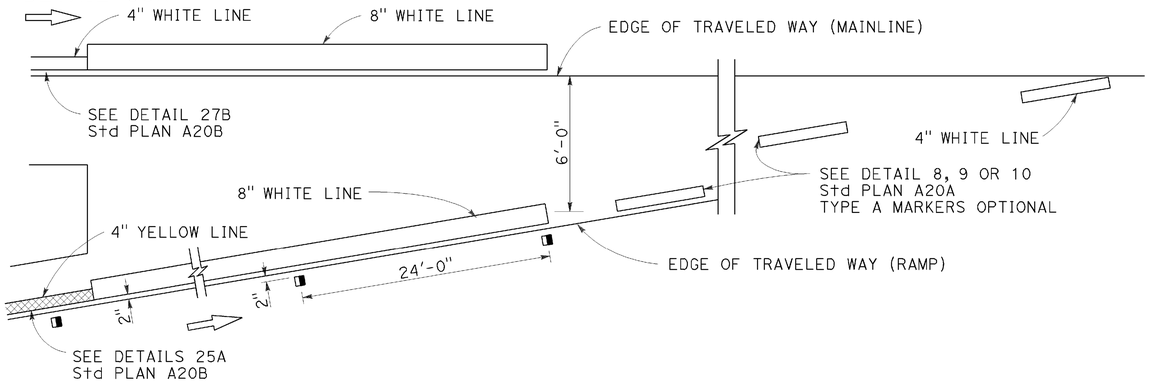
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT

DETAIL 36



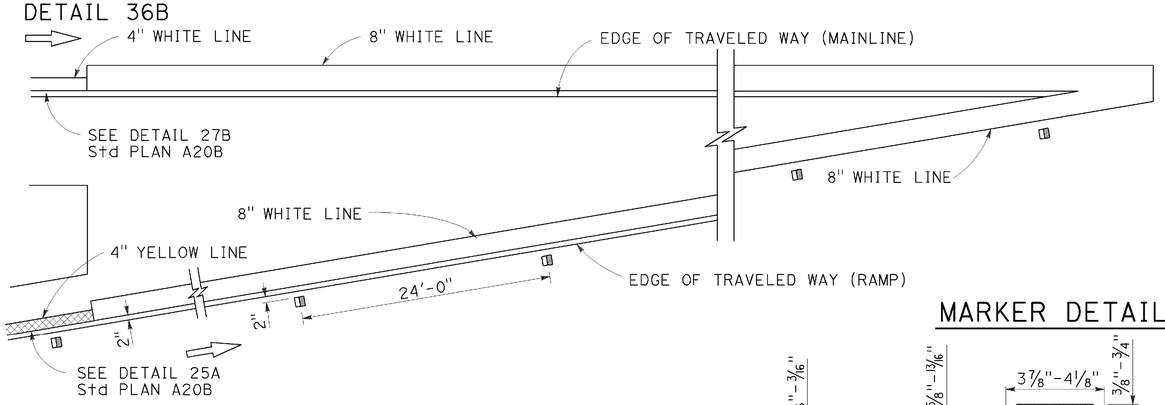
ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT

DETAIL 36A



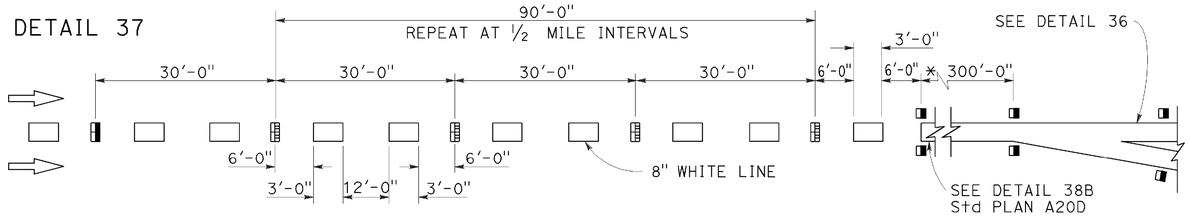
ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

DETAIL 36B

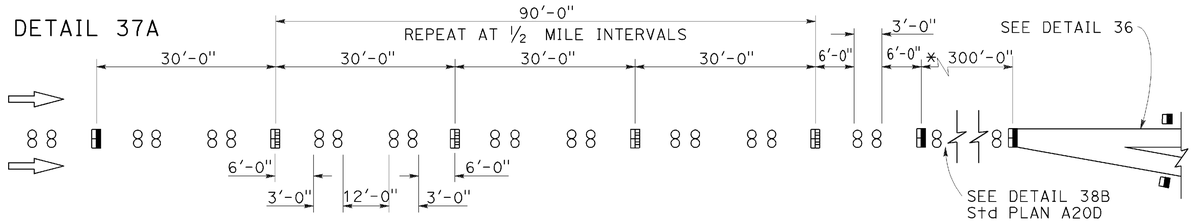


LANE DROP AT EXIT RAMPS

DETAIL 37



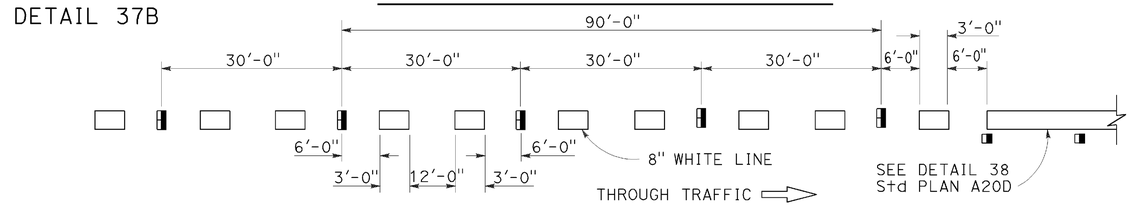
DETAIL 37A



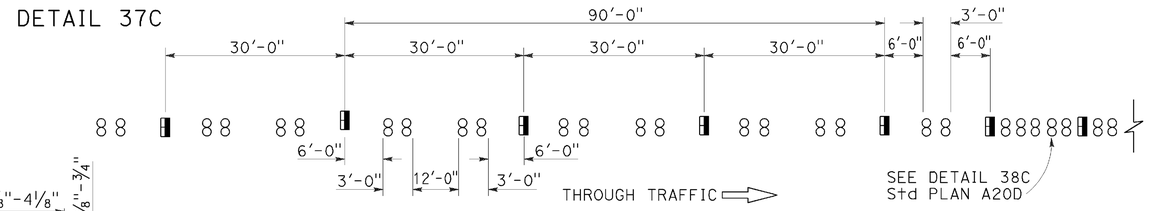
* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

LANE DROP AT INTERSECTIONS

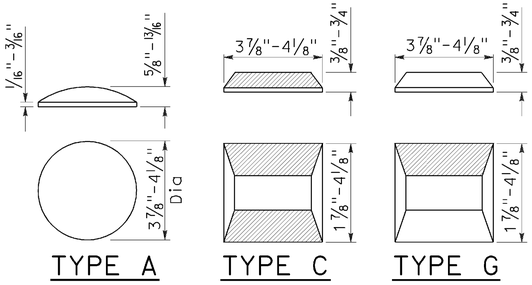
DETAIL 37B



DETAIL 37C



MARKER DETAILS



LEGEND:

MARKERS

- ○ TYPE A WHITE NON-REFLECTIVE
- ▥ TYPE C RED-CLEAR RETROREFLECTIVE
- ◨ TYPE G ONE-WAY CLEAR RETROREFLECTIVE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A20C

2010 REVISED STANDARD PLAN RSP A20C

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va002.dgn

P:\proj1\02\4G160_plans\pse\24g160va002.dgn

4-29-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	33	49

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

April 20, 2012
PLANS APPROVAL DATE

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

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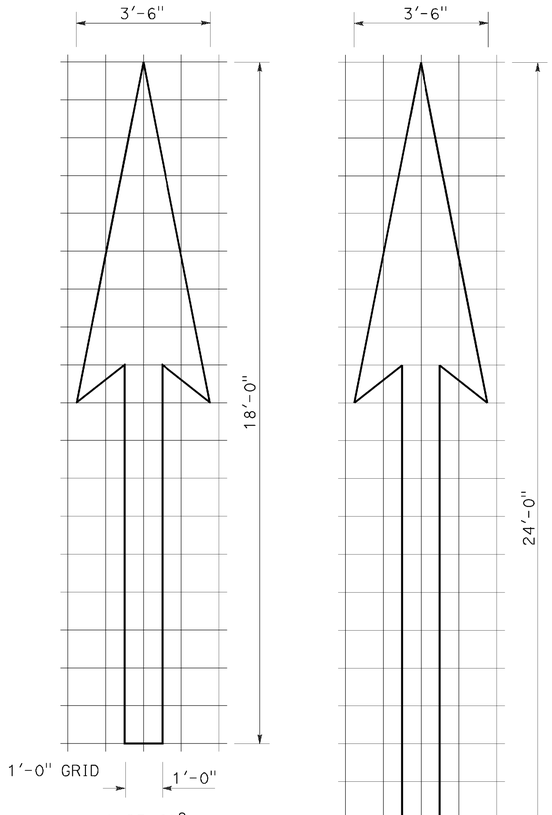
TO ACCOMPANY PLANS DATED 02-03-14

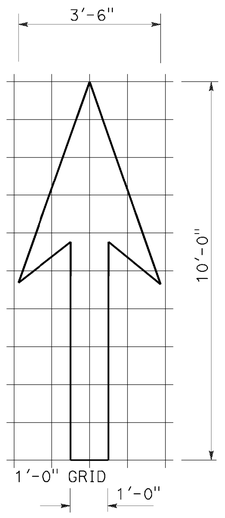


A=25 ft²

TYPE I 18'-0" ARROW

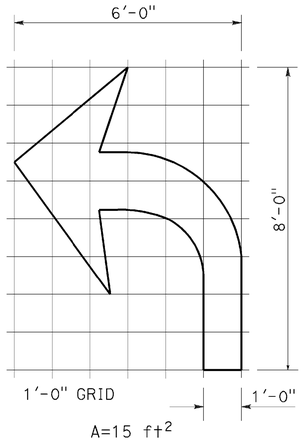
A=31 ft²

TYPE I 24'-0" ARROW



A=14 ft²

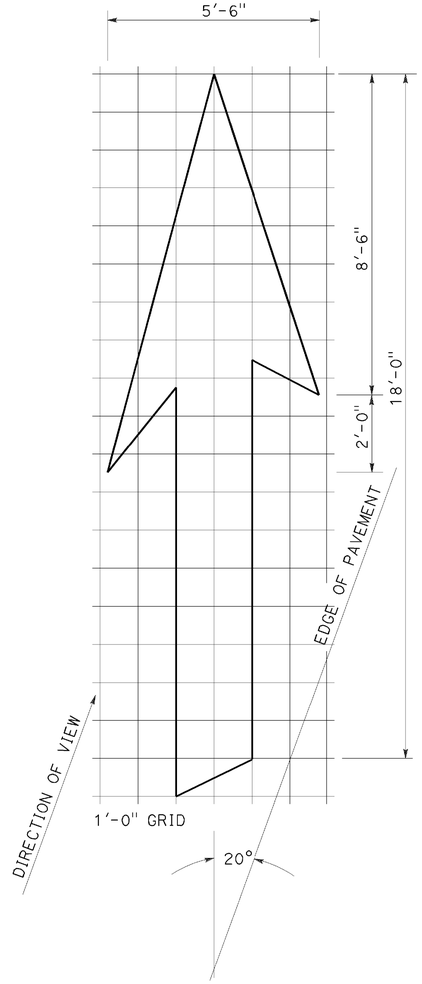
TYPE I 10'-0" ARROW



A=15 ft²

TYPE IV (L) ARROW

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



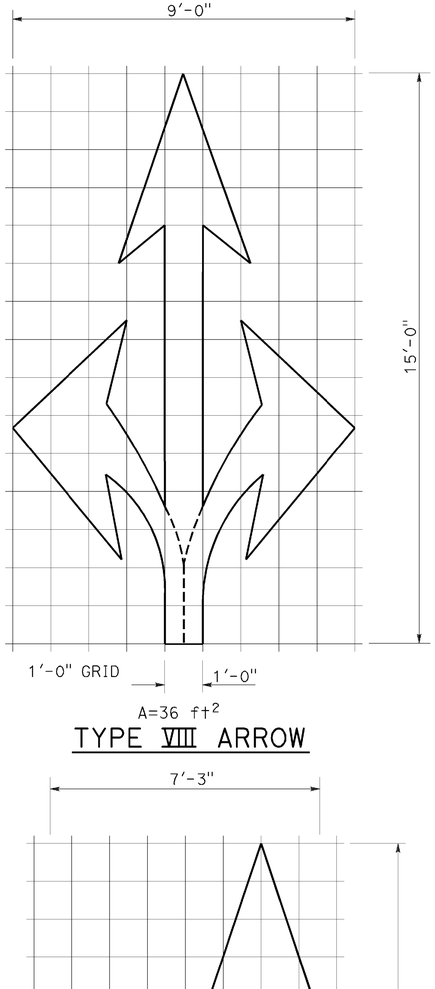
A=42 ft²

TYPE VI ARROW

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

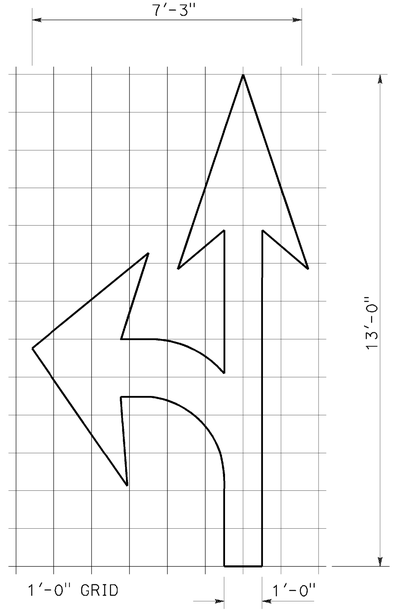
A=3.5 ft²

BIKE LANE ARROW



A=36 ft²

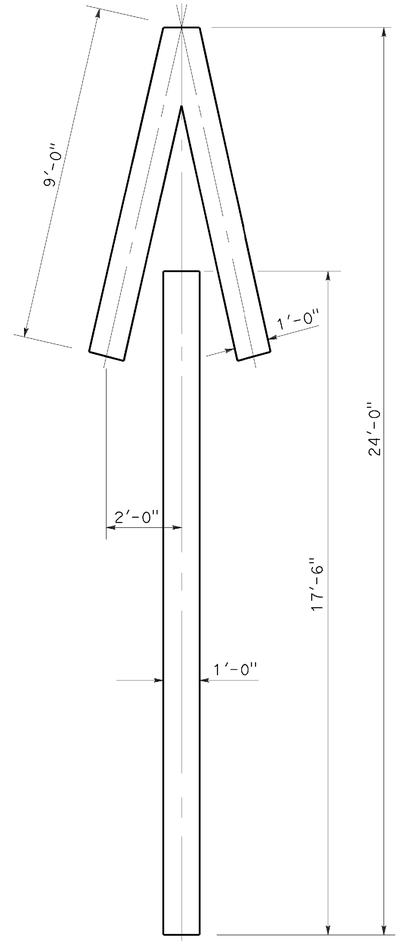
TYPE VIII ARROW



A=27 ft²

TYPE VII (L) ARROW

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



A=33 ft²

TYPE V ARROW

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS ARROWS

NO SCALE

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

REVISED STANDARD PLAN RSP A24A

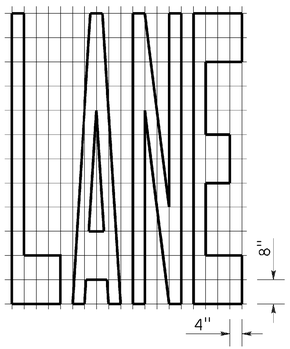
2010 REVISED STANDARD PLAN RSP A24A

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

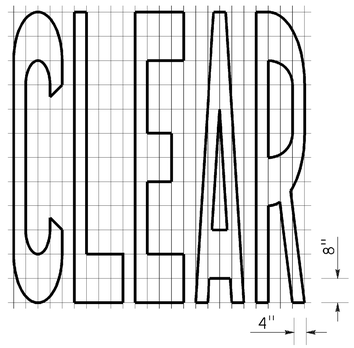
USERNAME => s115152
DGN FILE => 24g160va003.dgn

P:\proj1\02\4G160_plans\pse\24g160va003.dgn

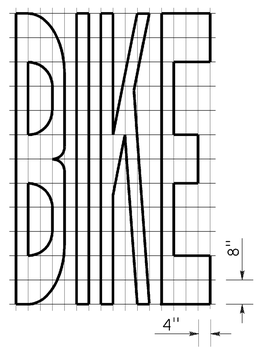
3-14-12



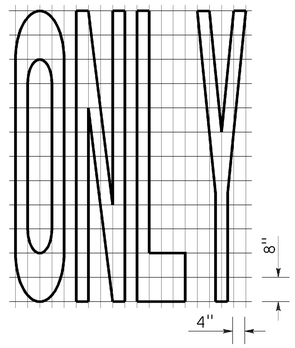
A=24 ft^2



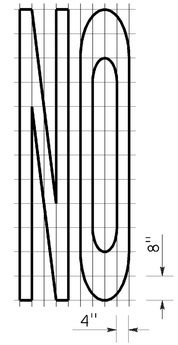
A=27 ft^2



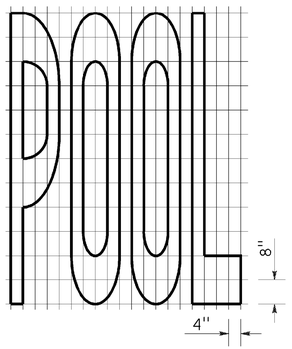
A=21 ft^2



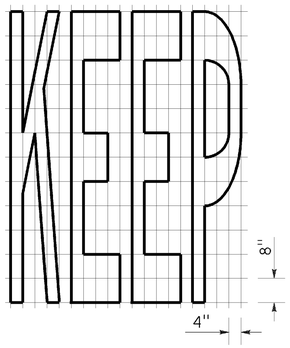
A=22 ft^2



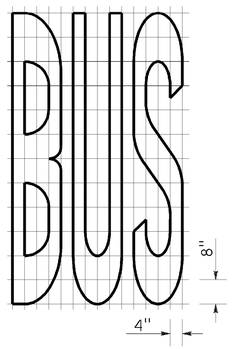
A=14 ft^2



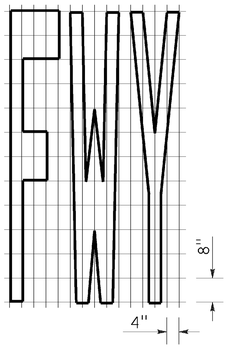
A=23 ft^2



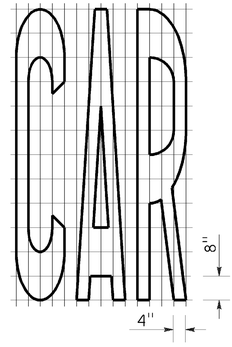
A=24 ft^2



A=20 ft^2

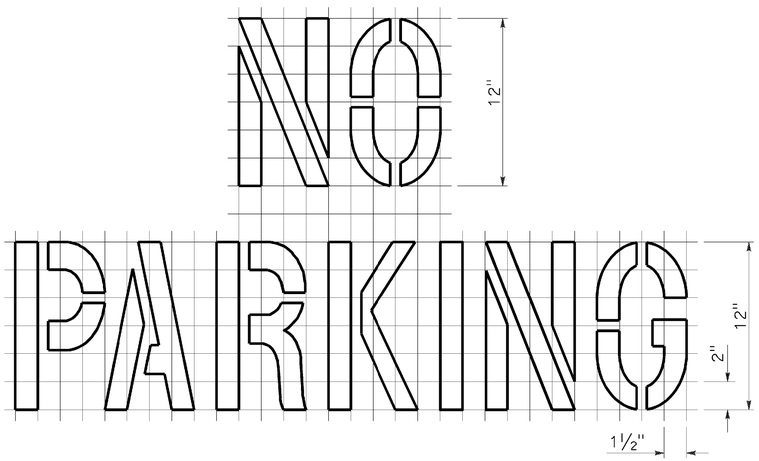


A=16 ft^2



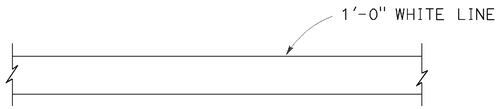
A=17 ft^2

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

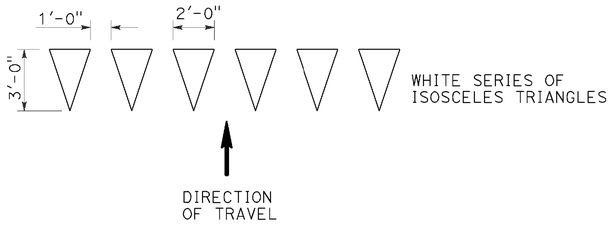


A=2 ft^2

See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

NOTES:

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	34	49

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 02-03-14

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES

NO SCALE

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

REVISED STANDARD PLAN RSP A24E

2010 REVISED STANDARD PLAN RSP A24E

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va004.dgn

P:\proj1\02\4G160_plans\pse\24g160va004.dgn

6-12-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	35	49

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

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

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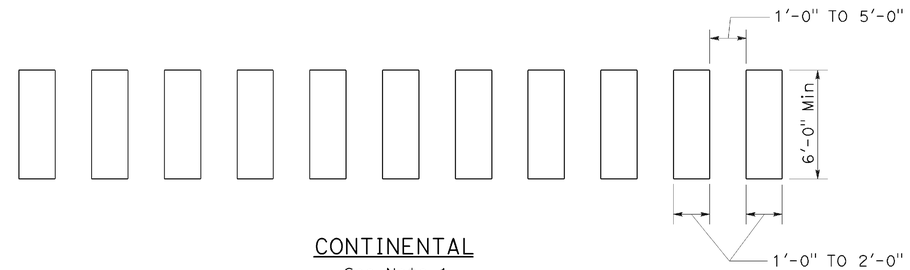
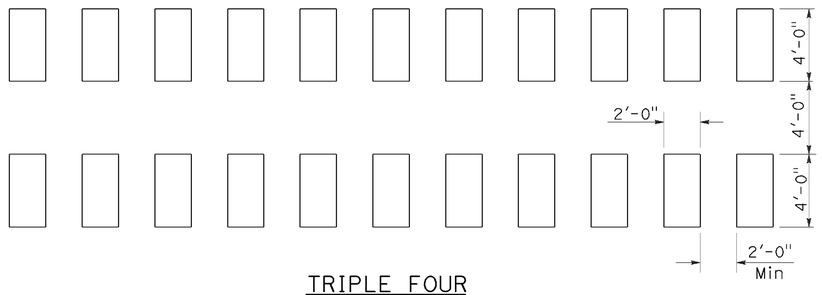
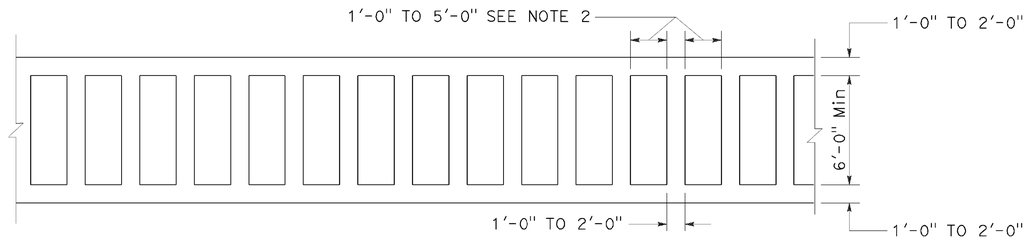
TO ACCOMPANY PLANS DATED 02-03-14



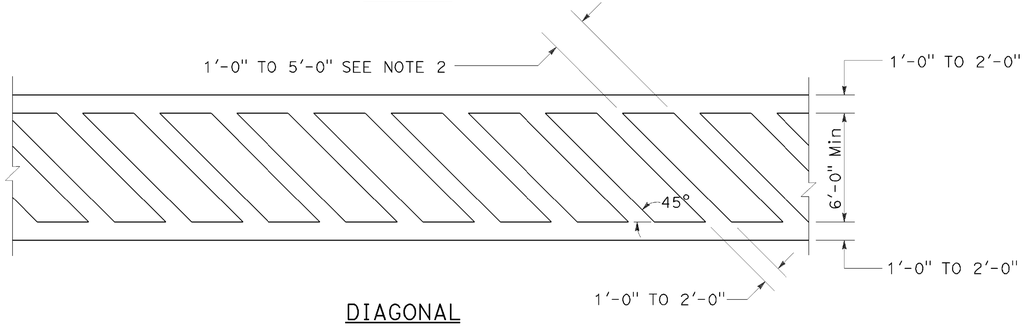
CONTINENTAL
See Note 1



TRIPLE FOUR
See Note 1



LADDER

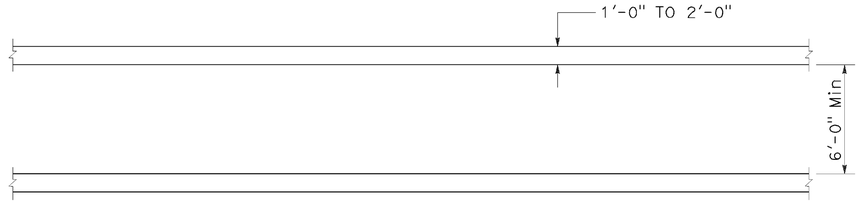


DIAGONAL

HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS CROSSWALKS

NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24F

2010 REVISED STANDARD PLAN RSP A24F

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va005.dgn

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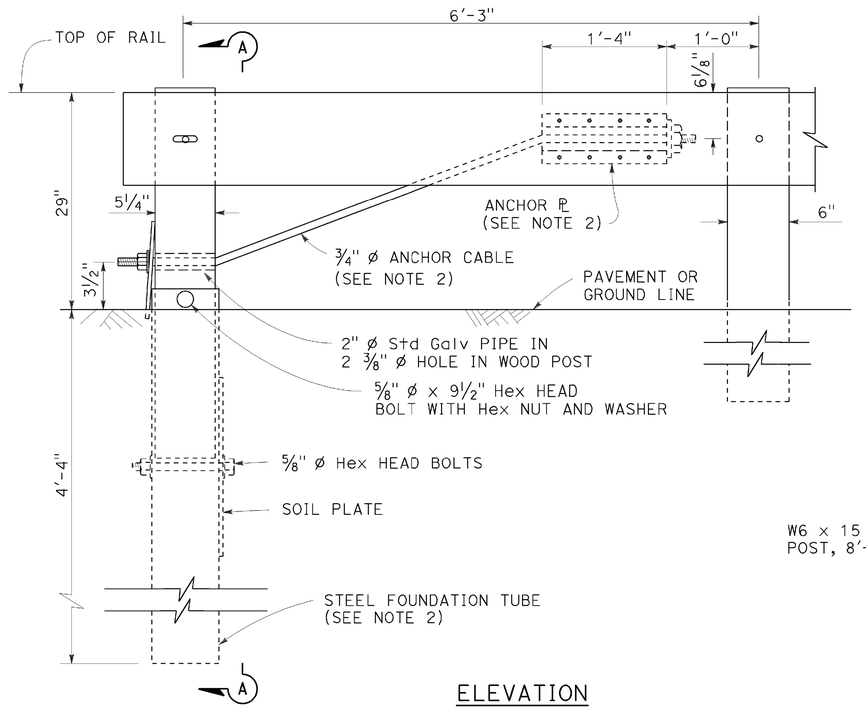
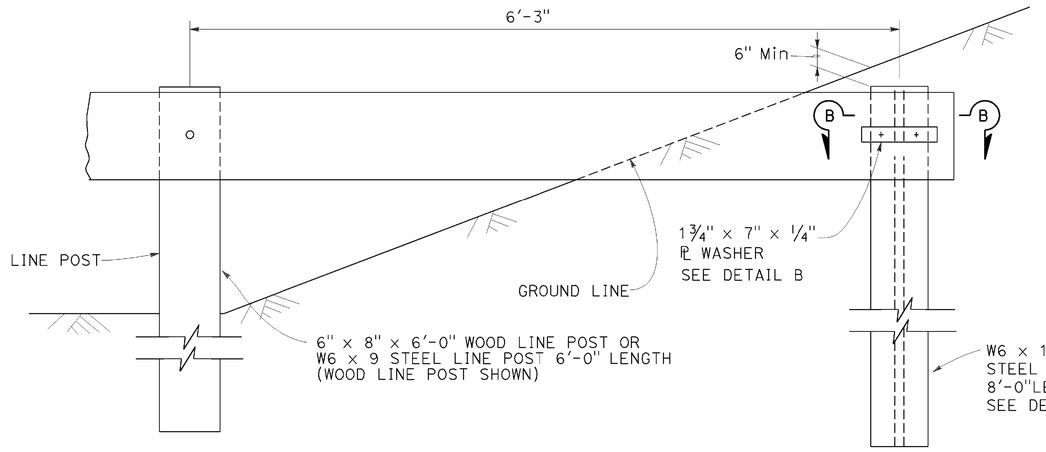
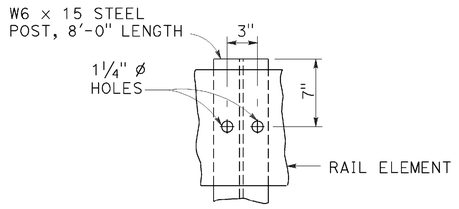
6-28-12



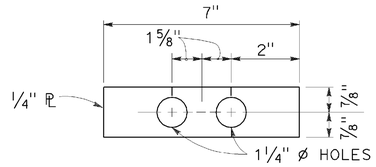
ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)



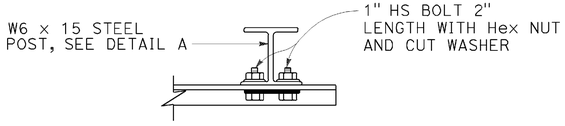
BURIED POST END ANCHOR



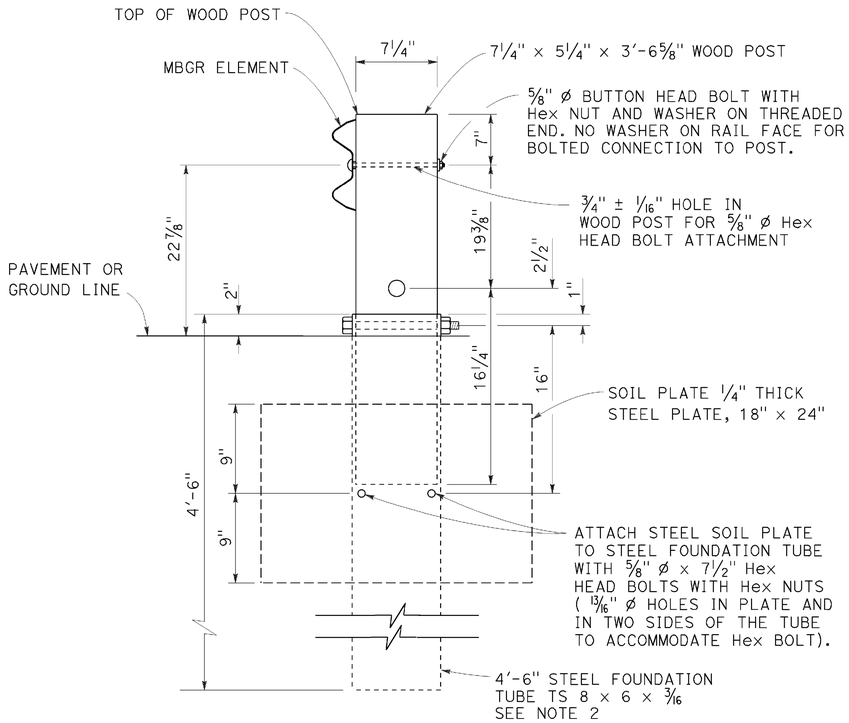
DETAIL A



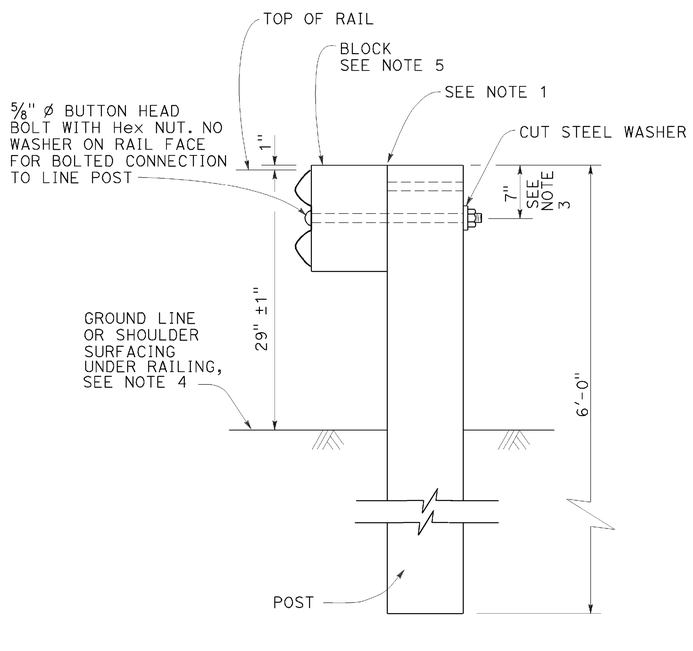
DETAIL B



SECTION B-B



SECTION A-A



TYPICAL LINE
POST INSTALLATION

NOTES:

1. For wood post and wood block, toenail with 2-16d Galv nails in top of block. For steel post and notched wood or plastic block, notched face of block faces steel post.
2. 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 embadment of the 6'-0" length tube shall be 5'-9". A 5/8" ø 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.
3. To connect railing to 27" terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system end treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
4. Install posts in soil.
5. See Revised Standard Plans RSP A77N1 and RSP A77N2 for details.
6. 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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	36	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — 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 02-03-14

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING RECONSTRUCT INSTALLATION

NO SCALE

RSP A77L3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L3

2010 REVISED STANDARD PLAN RSP A77L3

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va006.dgn

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7-16-13

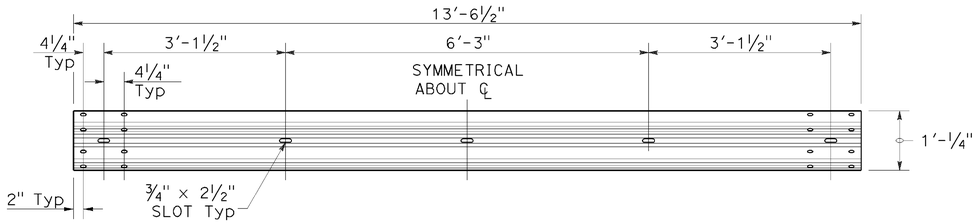
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	37	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

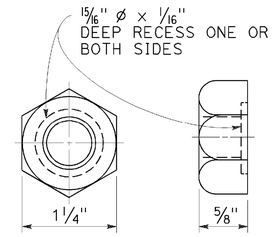
TO ACCOMPANY PLANS DATED 02-03-14



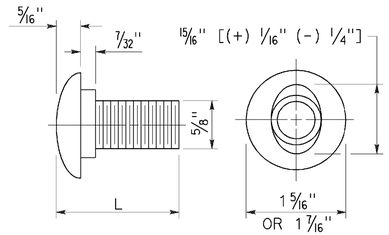
TYPICAL RAIL ELEMENT

NOTE:

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



⅝" ø RECESS NUT

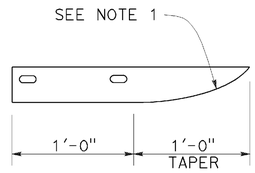


⅝" ø BUTTON HEAD BOLT

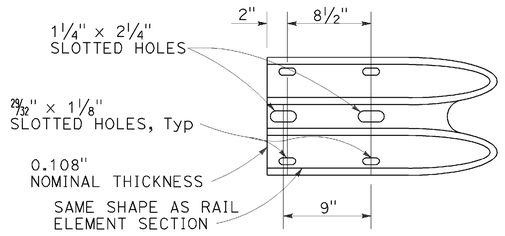
BUTTON HEAD BOLT

L	THREAD LENGTH
1⅜"	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
** 2¾"	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

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va007.dgn

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7-3-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	38	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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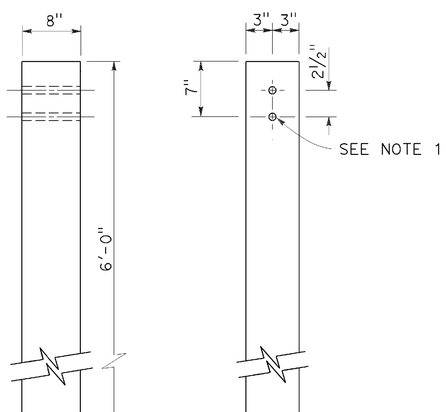
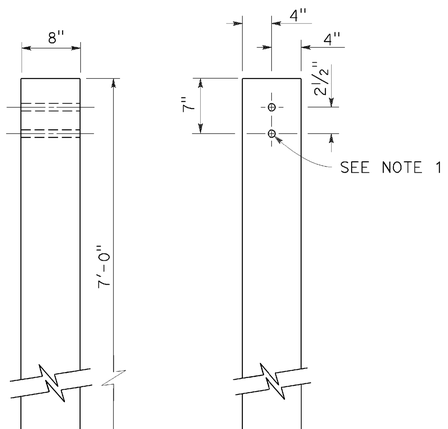
TO ACCOMPANY PLANS DATED 02-03-14



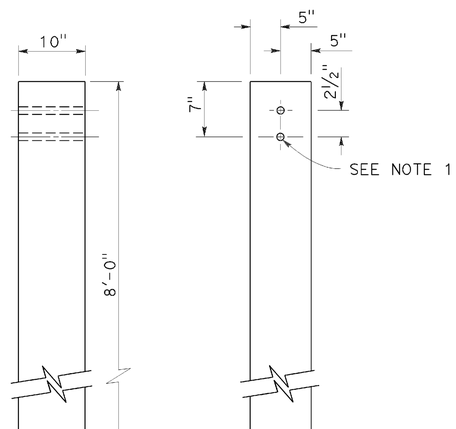
SIDE FRONT

6" x 8" WOOD POST
See Note 3



SIDE FRONT

8" x 8" WOOD POST
See Note 4

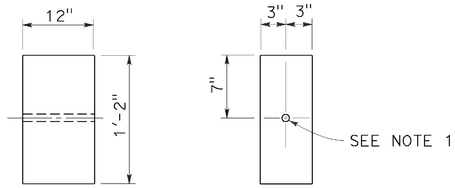


SIDE FRONT

10" x 10" WOOD POST
See Note 5

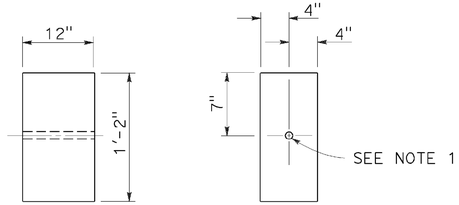
NOTES:

1. All holes in wood posts and blocks shall be ¾" 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.



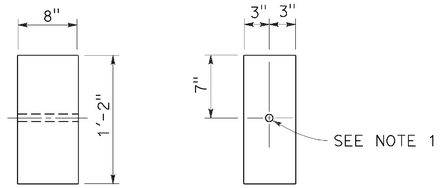
SIDE FRONT

6" x 12" WOOD BLOCK
See Note 3



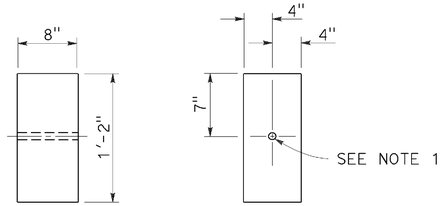
SIDE FRONT

8" x 12" WOOD BLOCK



SIDE FRONT

6" x 8" WOOD BLOCK
Only for use with metal beam guard rail see Note 6



SIDE FRONT

8" x 8" WOOD BLOCK
Only for use with metal beam guard rail see Note 6

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

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

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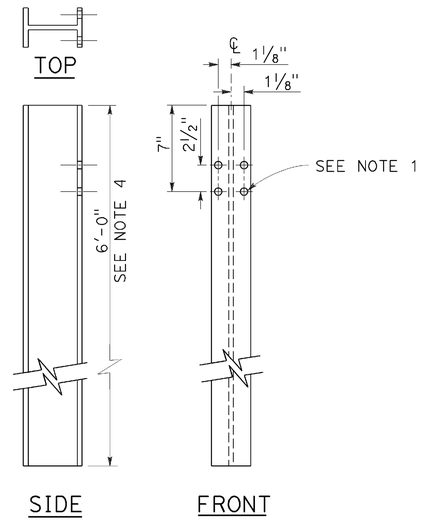
7-3-13

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

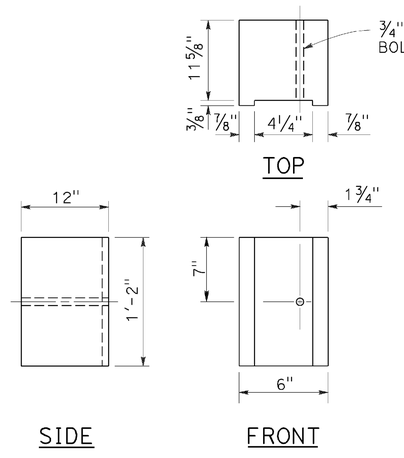
REGISTERED PROFESSIONAL ENGINEER — Randell D. Hiatt — No. C50200 — Exp. 6-30-15 — CIVIL — STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 02-03-14



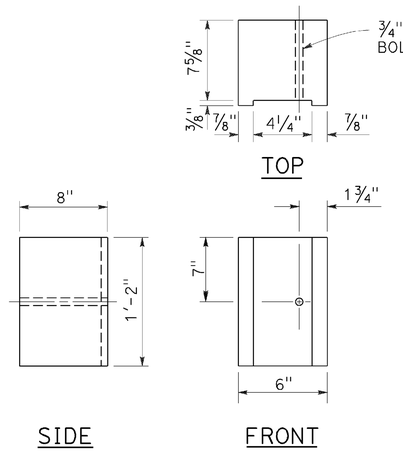
W6 x 9 OR W6 x 8.5 STEEL POST

See Note 4



6" x 12" NOTCHED WOOD BLOCK

See Notes 2 and 3

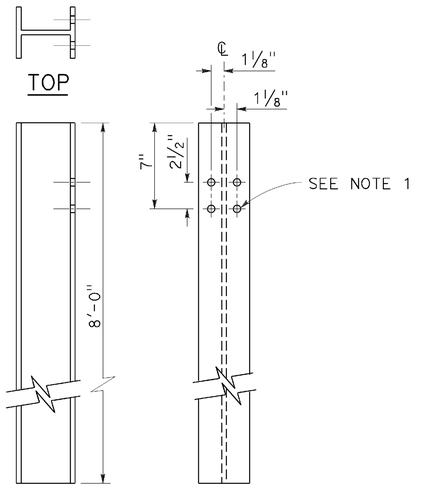


6" x 8" NOTCHED WOOD BLOCK

Only for use with metal beam guard railing. See Note 5

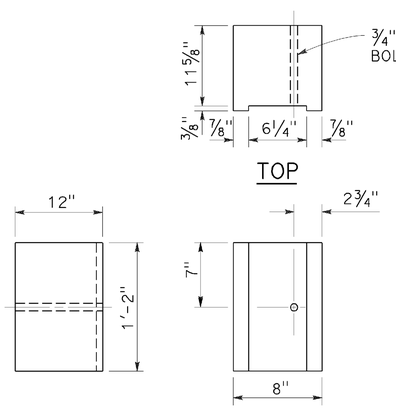
NOTES:

1. All holes in steel post shall be 13/16" 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.



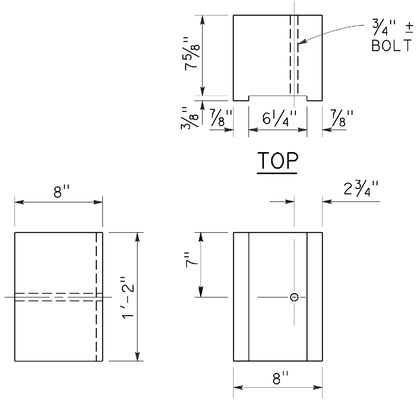
W6 x 15 STEEL POST

See Note 6



8" x 12" NOTCHED WOOD BLOCK

See Notes 2 and 3



8" x 8" NOTCHED WOOD BLOCK

Only for use with metal beam guard railing. See Note 5

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

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:55

USERNAME => s115152
DGN FILE => 24g160va009.dgn

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10-29-13

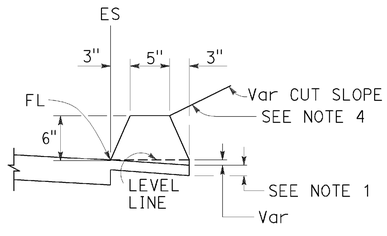
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	40	49

REGISTERED CIVIL ENGINEER

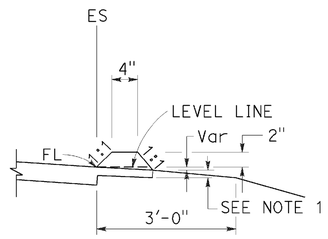
July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Michael Janzen
No. 44788
Exp. 03-31-14
CIVIL
STATE OF CALIFORNIA

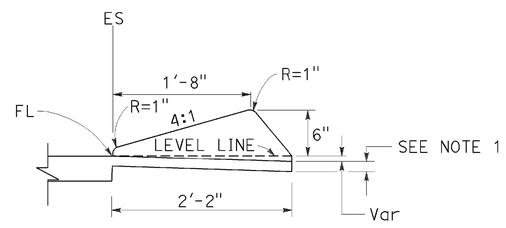
TO ACCOMPANY PLANS DATED 02-03-14



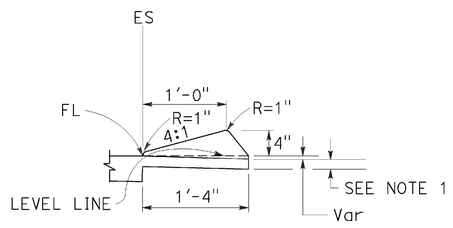
TYPE A
See Note 3



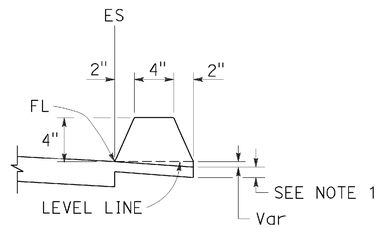
TYPE C



TYPE D

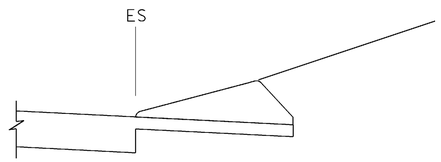


TYPE E

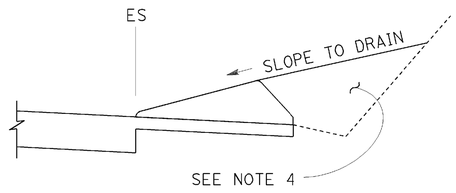


TYPE F
See Note 5

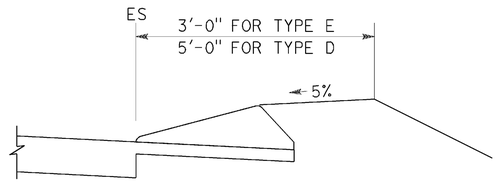
DIKES



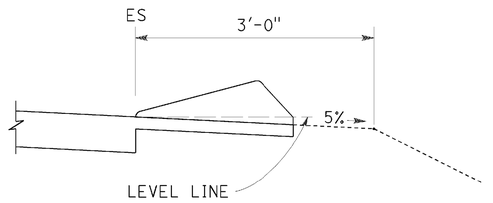
CASE C-1
Cut Slope



CASE C-2
Cut Slope



CASE F



CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

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

DIKE QUANTITIES

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

Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT DIKES

NO SCALE

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

REVISED STANDARD PLAN RSP A87B

2010 REVISED STANDARD PLAN RSP A87B

DATE PLOTTED => 13-FEB-2014
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USERNAME => s115152
DGN FILE => 24g160va010.dgn

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6-27-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	41	49

REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 02-03-14

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
					X	Y	Z **
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	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%
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 recommmended distances.

2010 REVISED STANDARD PLAN RSP T9

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

DATE PLOTTED => 13-FEB-2014
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USERNAME => s115152
DGN FILE => 24g160va011.dgn

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4-30-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	42	49

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

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TO ACCOMPANY PLANS DATED 02-03-14

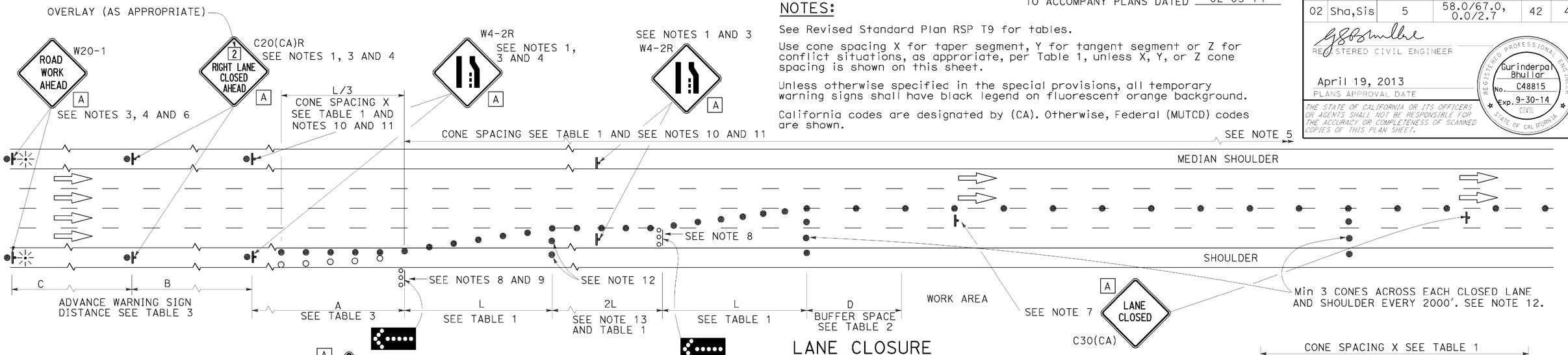
NOTES:

See Revised Standard Plan RSP T9 for tables.

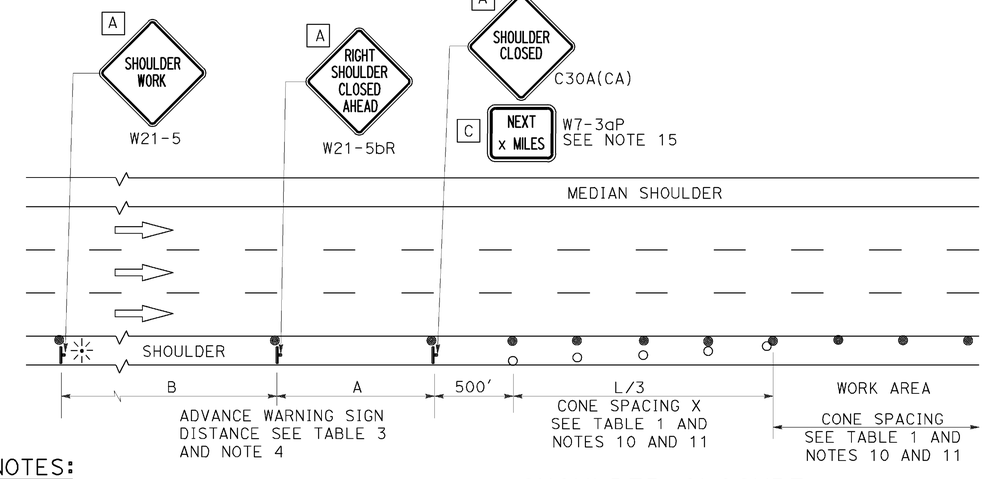
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as approriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

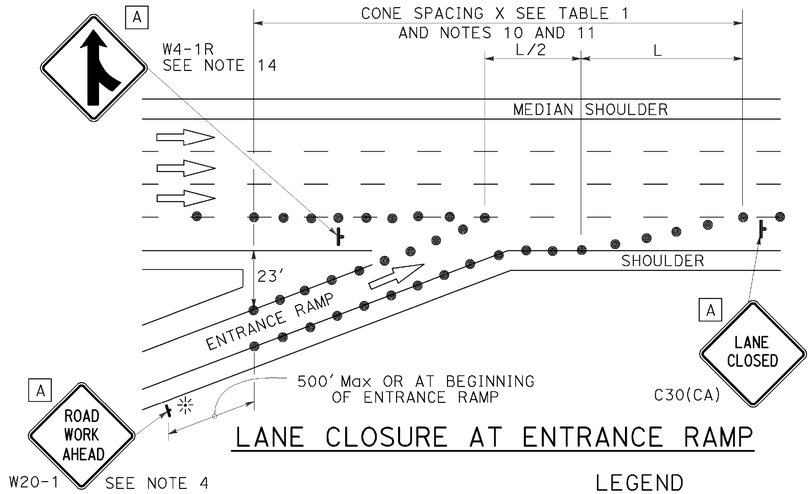
Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

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

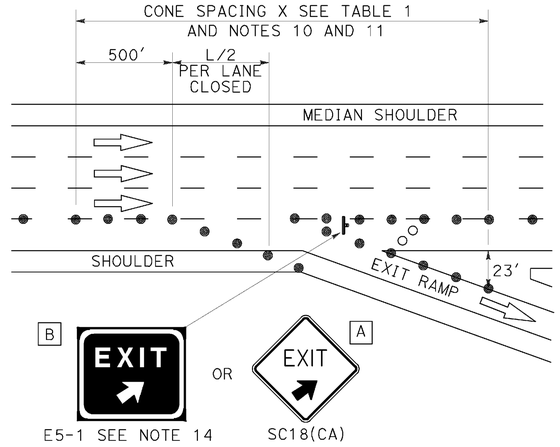


LANE CLOSURE





LANE CLOSURE AT ENTRANCE RAMP



LANE CLOSURE AT EXIT RAMP

NOTES:

1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

SHOULDER CLOSURE

6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
7. Place a C30(CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT___ MILES" plaque must be used if theshoulder closure extends beyond the distance that can be perceived by road users.

LEGEND

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

SIGN PANEL SIZE (Min)

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:56

USERNAME => s115152
DGN FILE => 24g160va012.dgn

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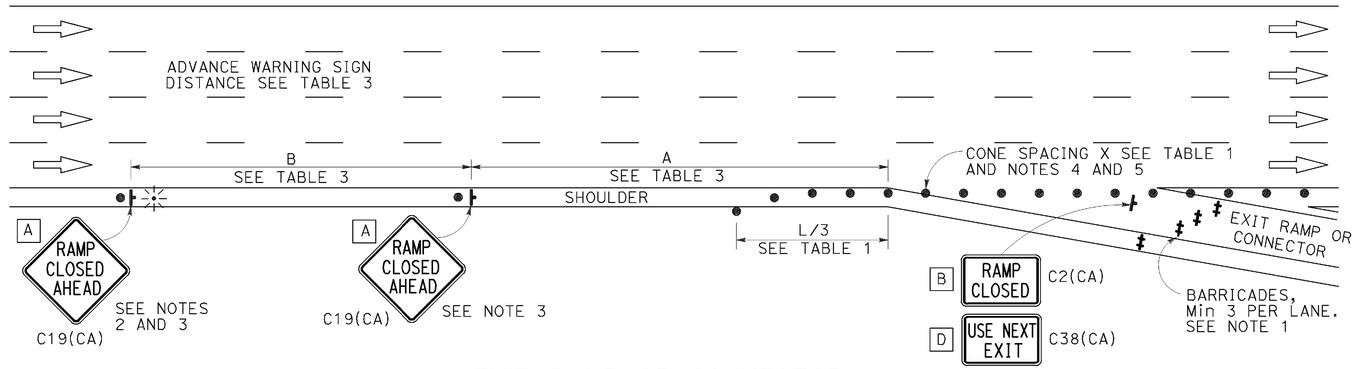
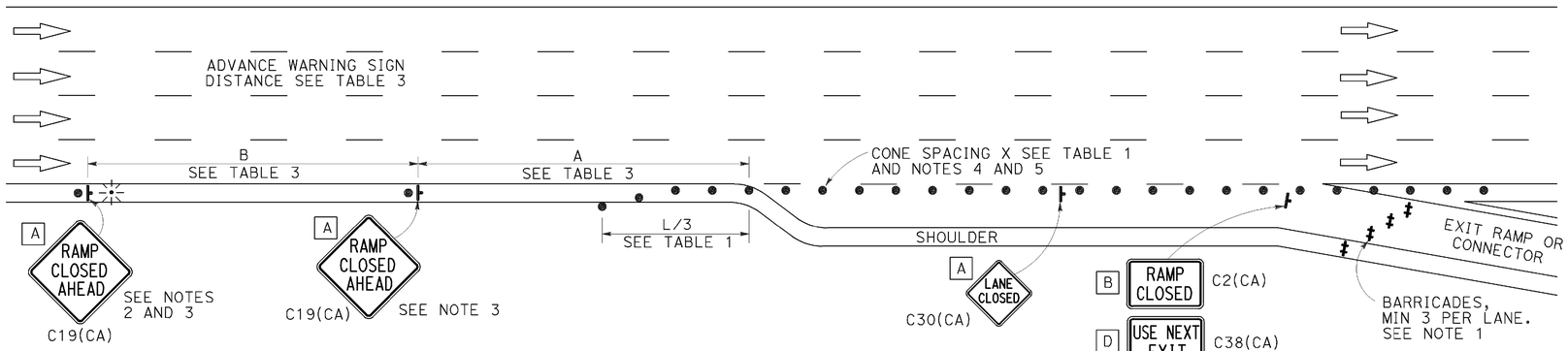
12-18-13

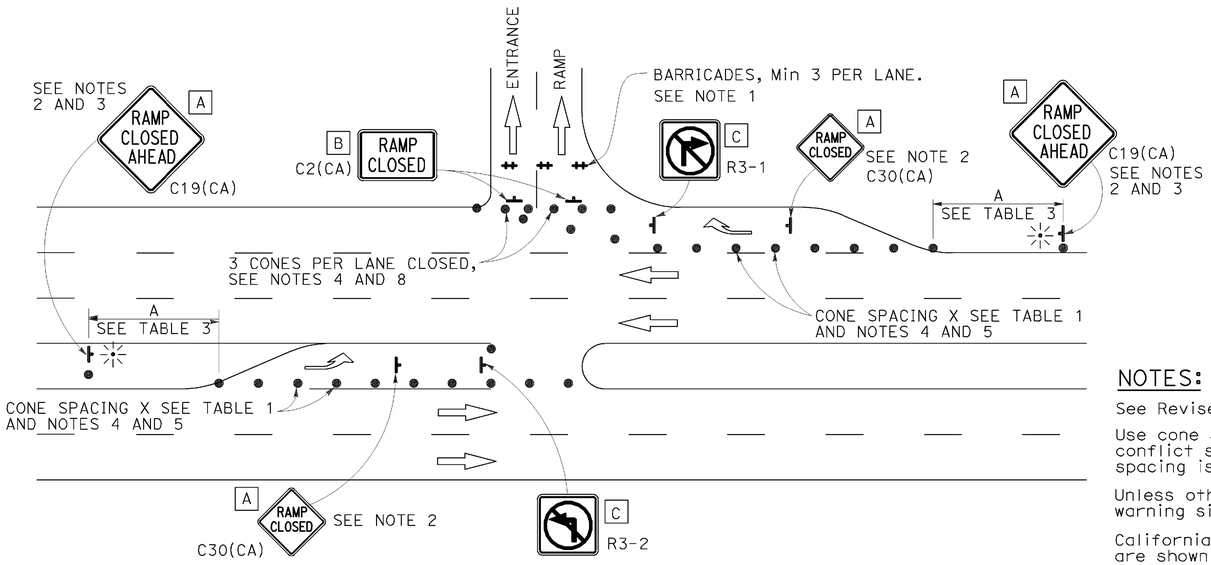
TYPICAL RAMP CLOSURES



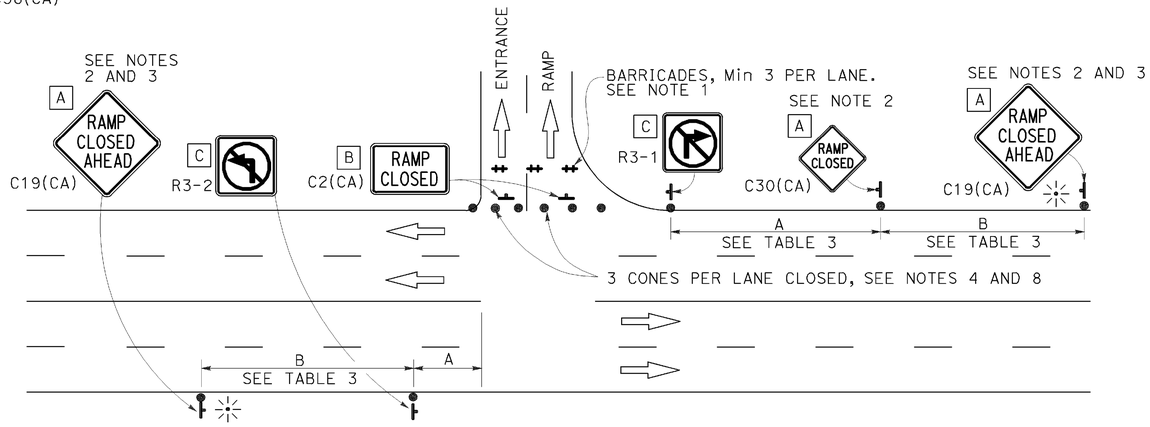
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

SIGN PANEL SIZE (Min)

A	48" × 48"
B	48" × 30"
C	36" × 36"
D	48" × 36"

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- BARRICADES
- PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	43	49

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 02-03-14

NOTES:

1. Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
2. In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
3. Each advance C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" × 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" signs shall be covered during ramp closures.
8. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.

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 approriate, 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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14
DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T14

2010 REVISED STANDARD PLAN RSP T14

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:56

USERNAME => s115152
DGN FILE => 24g160va013.dgn

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12-18-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	44	49

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

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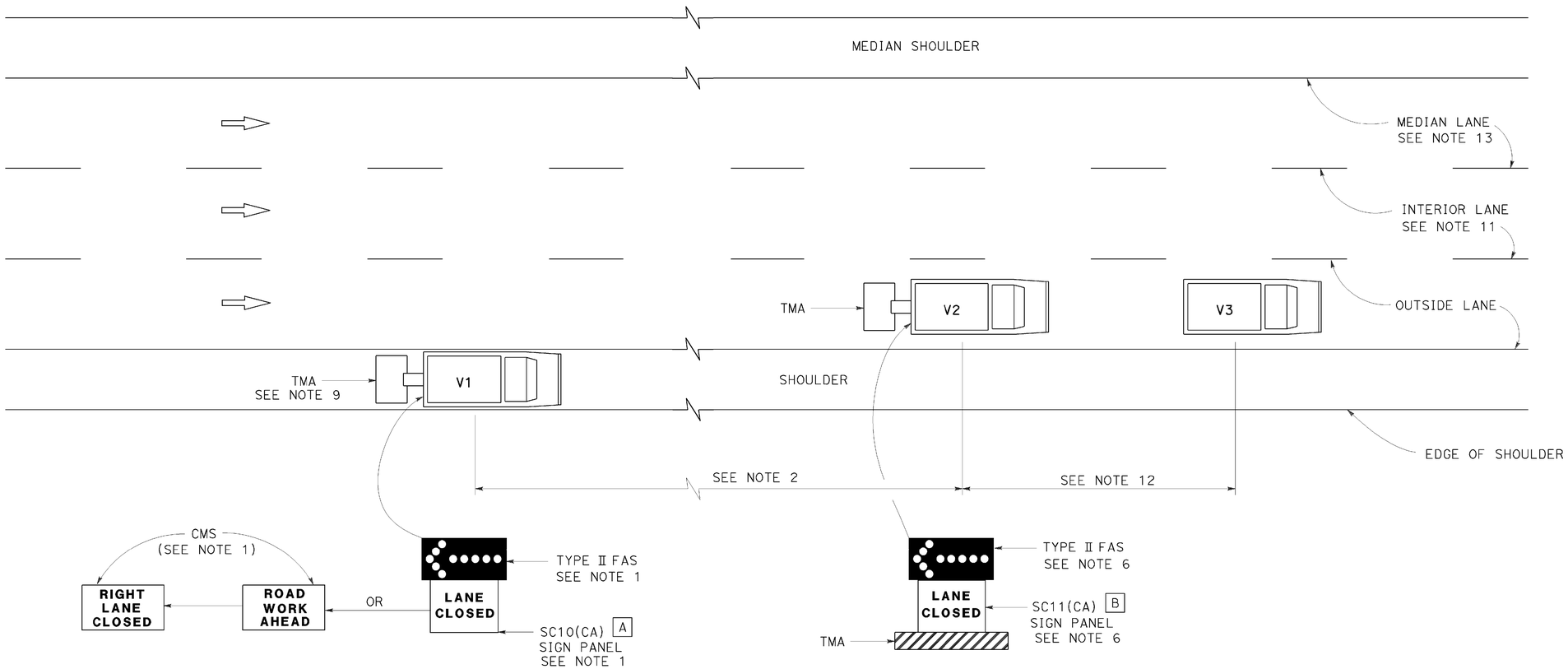
TO ACCOMPANY PLANS DATED 02-03-14



SIGN PANEL SIZE (Min)

A 66" x 36"

B 54" x 42"

LEGEND

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

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

NOTES:

1. Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500′ should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500′.
5. 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.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
7. 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.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. 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.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
13. When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

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

REVISED STANDARD PLAN RSP T15

2010 REVISED STANDARD PLAN RSP T15

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12-18-12

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	45	49

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

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

July 19, 2013
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 02-03-14

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
- (M) 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

MISCELLANEOUS ELECTROLIERS

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

NOTES:

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

STANDARD ELECTROLIER

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

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

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7-15-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	46	49

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

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

July 19, 2013
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TO ACCOMPANY PLANS DATED 02-03-14

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
R	r	CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION

TYPE H SERVICE, 28'-10" — TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE

FLASHING BEACON

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

SIGNAL EQUIPMENT

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

SIGNAL EQUIPMENT Cont

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

NOTES:

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

ILLUMINATED OVERHEAD SIGN

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1B

2010 REVISED STANDARD PLAN RSP ES-1B

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7-15-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	47	49

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

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

July 19, 2013
PLANS APPROVAL DATE

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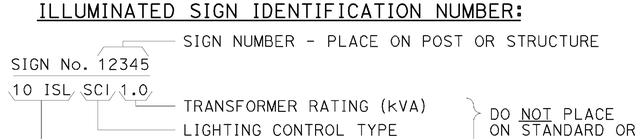
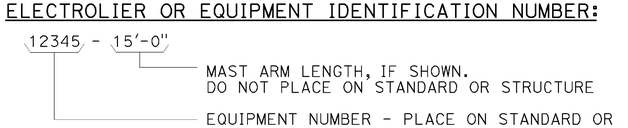
TO ACCOMPANY PLANS DATED 02-03-14

EQUIPMENT IDENTIFICATION

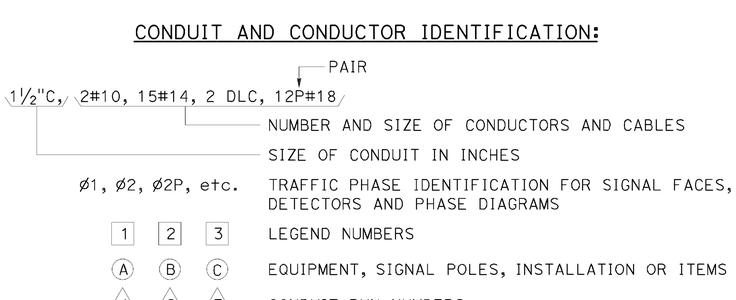
ILLUMINATED SIGN IDENTIFICATION NUMBER:



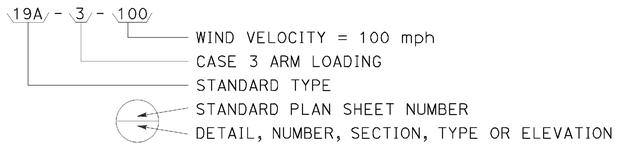
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



CONDUIT AND CONDUCTOR IDENTIFICATION:



SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



MISCELLANEOUS EQUIPMENT

NEW	EXISTING	
CMS	cms	CHANGEABLE MESSAGE SIGN
		CLOSED CIRCUIT TELEVISION CAMERA
		HIGHWAY ADVISORY RADIO POLE AND ANTENNA
EMS	ems	EXTINGUISHABLE MESSAGE SIGN
M V	m v	DETECTION DEVICE M = MICROWAVE SENSOR V = VIDEO IMAGE SENSOR

WIRING DIAGRAM LEGEND

----	EXTERNAL CONDUCTOR
———	CONDUCTOR OR BUS
	TIE POINT
	CONTACTOR COIL
	CONTACTOR, NO CONTACT
	TERMINAL BLOCKS
	CONTACTOR, NC CONTACT
	ENCLOSURE BOND
	GROUNDING ELECTRODE
	CIRCUIT BREAKER
	RECEPTACLE

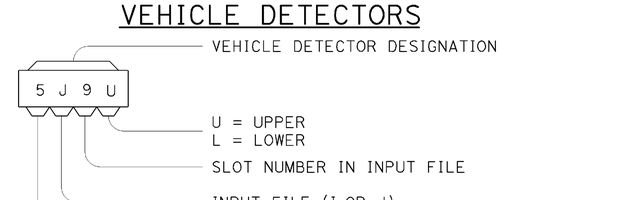
PULL BOXES

NEW	EXISTING	
		PULL BOX, No. 5 UNLESS OTHERWISE INDICATED OR NOTED
3	9A(21)	PULL BOX, ADDITIONAL DESIGNATIONS OR DESCRIPTIONS

3 No. 3½ PULL BOX
5 No. 5 PULL BOX
6 No. 6 PULL BOX
7 No. 7 (CEILING PULL BOX)
8 No. 8 (PENDANT SOFFIT PULL BOX)
9 No. 9 PULL BOX
9A No. 9A PULL BOX

(C) COMMUNICATIONS PULL BOX
(E) PULL BOX WITH EXTENSION
(S) SPRINKLER CONTROL PULL BOX
(21) ANCHOR BOLTS AND CONDUIT FOR FUTURE INSTALLATION OF TYPE 21 STANDARD
(T) TRAFFIC PULL BOX

VEHICLE DETECTORS



NEW	EXISTING	
		TYPE A DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE B DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE C DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE D DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE E DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE Q DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		MAGNETIC DETECTOR
DH	dh	DETECTOR HANDHOLE
		MICROWAVE OR VIDEO DETECTION ZONE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1C

2010 REVISED STANDARD PLAN RSP ES-1C

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:57

USERNAME => s115152
DGN FILE => 24g160va017.dgn

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7-11-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	48	49

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

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

July 19, 2013
PLANS APPROVAL DATE

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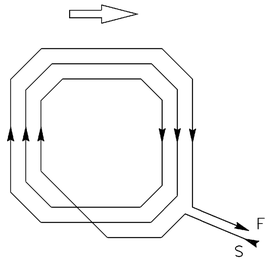
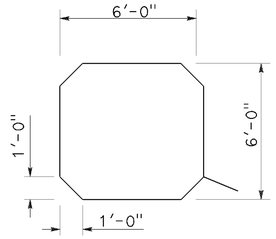
TO ACCOMPANY PLANS DATED 02-03-14

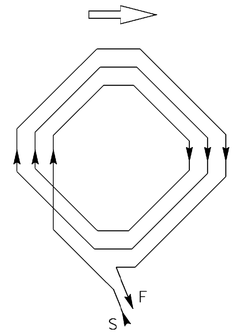


WINDING DETAIL

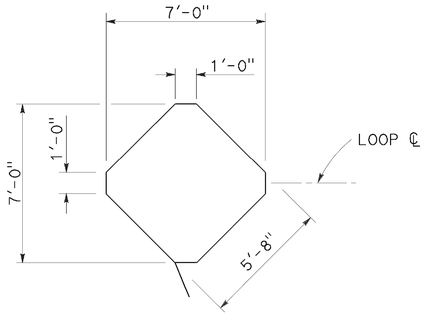


SAWCUT DETAIL

TYPE A LOOP DETECTOR CONFIGURATION

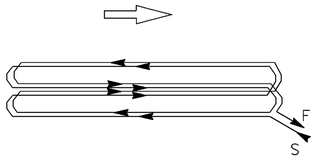


WINDING DETAIL

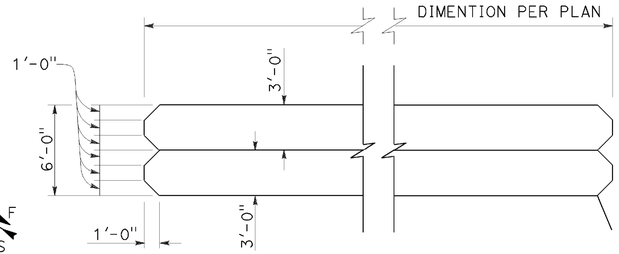


SAWCUT DETAIL

TYPE B LOOP DETECTOR CONFIGURATION

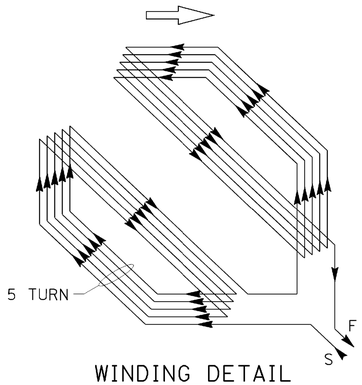


WINDING DETAIL



SAWCUT DETAIL

TYPE C LOOP DETECTOR CONFIGURATION



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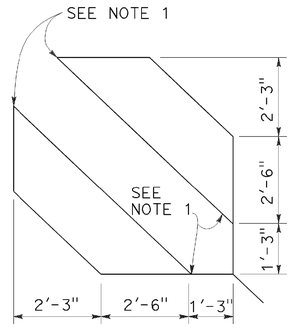
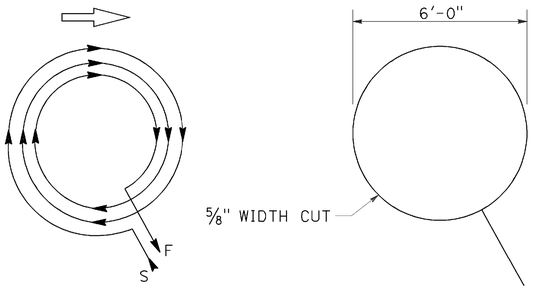


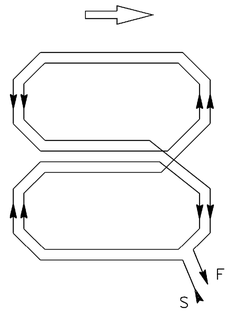
SAWCUT DETAIL

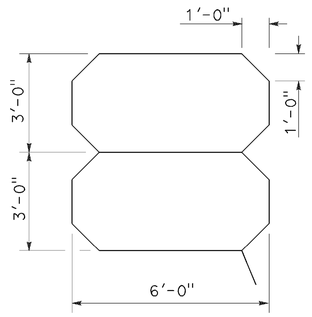
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL SAWCUT DETAIL

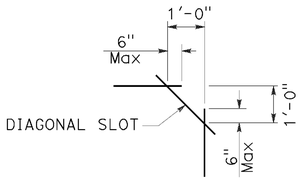
TYPE E LOOP DETECTOR CONFIGURATION





WINDING DETAIL SAWCUT DETAIL

TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

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.

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

2010 REVISED STANDARD PLAN RSP ES-5B

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:57

USERNAME => s115152
DGN FILE => 24g160va018.dgn

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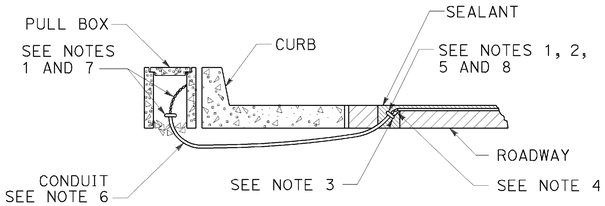
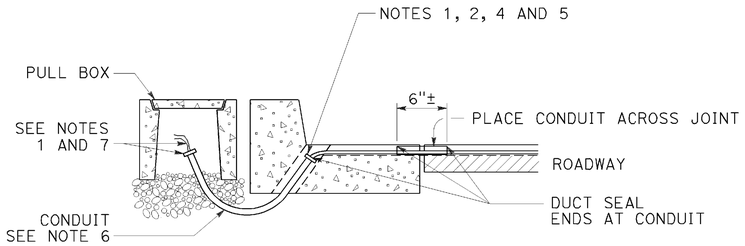
7-9-13

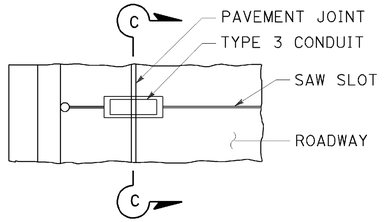


TYPE A

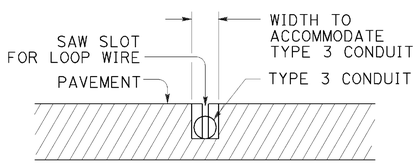
CURB TERMINATION DETAIL



CROSS SECTION



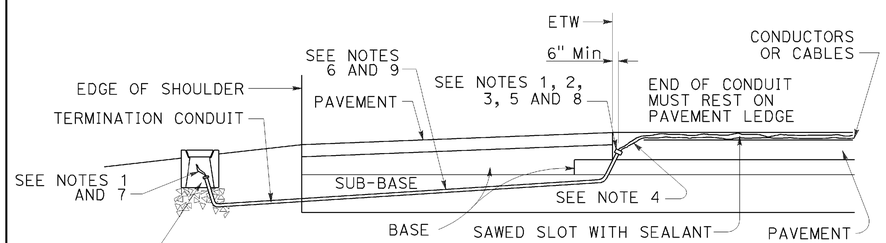
PLAN VIEW



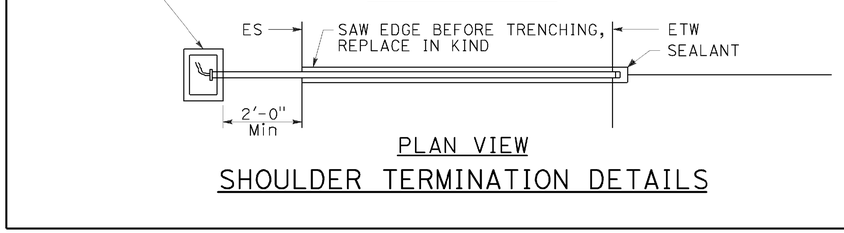
SECTION C-C

TYPE B

CURB TERMINATION DETAIL

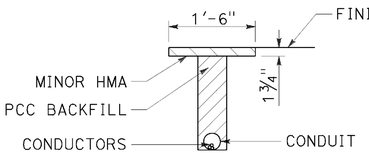


CROSS SECTION

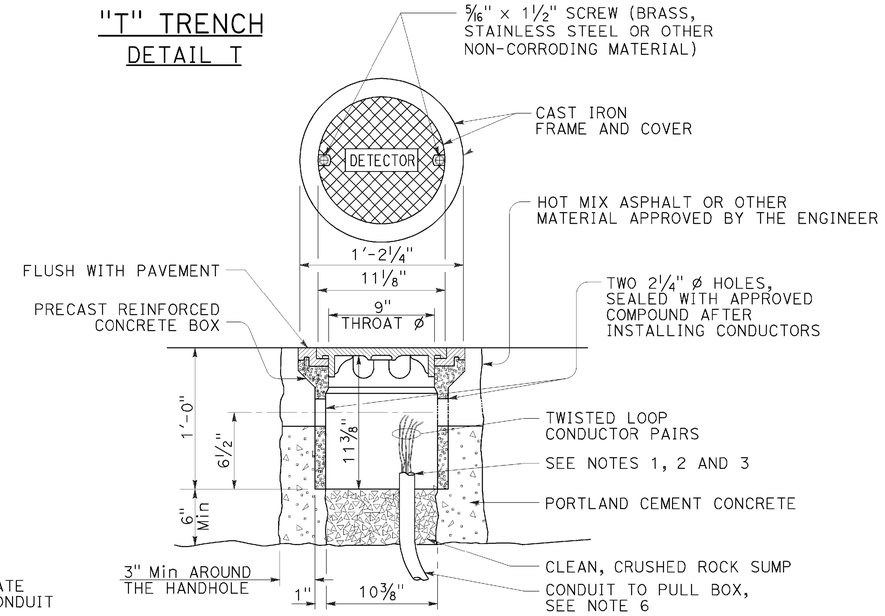


PLAN VIEW

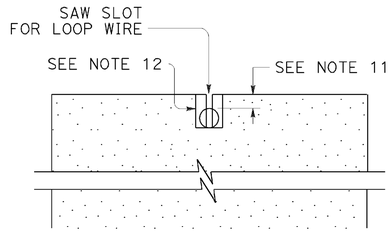
SHOULDER TERMINATION DETAILS



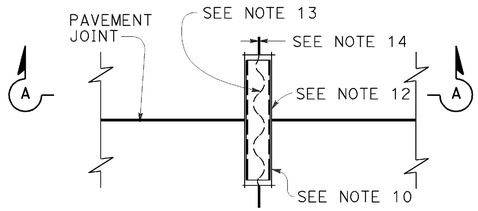
"T" TRENCH DETAIL T



DETECTOR HANDHOLE DETAIL

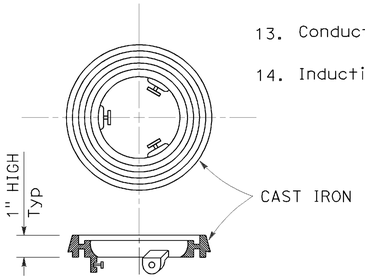


SECTION A-A



PLAN VIEW

TYPICAL LOOP LEAD-IN DETAIL AT PAVEMENT JOINT



LOCKING GRADE RING

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis	5	58.0/67.0, 0.0/2.7	49	49

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 02-03-14

NOTES:

1. Bushing shall be used at end of conduit.
2. Tape detector conductors or cables 3" each side of bushings.
3. Install duct seal compound to each end of termination conduit before installing sealant.
4. Round all sharp edges where detector conductors or cables have to pass.
5. End of conduit shall be 3⅛" below roadway surface.
6.

Conduit size	Loop conductors
1"C minimum	1 to 2 pairs
1½"C minimum	3 to 4 pairs
2"C minimum	5 or more pairs

7. Splice detector conductors or cables to detector lead-in-cable.
8. Location of detector handhole when shown on plans.
9. 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.
10. ¾"C, Type 3 conduit 6" long minimum, plug both ends with duct compound to keep out sealant.
11. ½" Minimum between top of conduit and pavement surface.
12. Sawcut shall not exceed 1" in width and ⅛" longer than conduit to be installed.
13. Conductors with ½" minimum slack inside conduit.
14. Inductive loop detector saw slot.

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

DATE PLOTTED => 13-FEB-2014
TIME PLOTTED => 12:57

USERNAME => s115152
DGN FILE => 24g160va019.dgn

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7-9-13