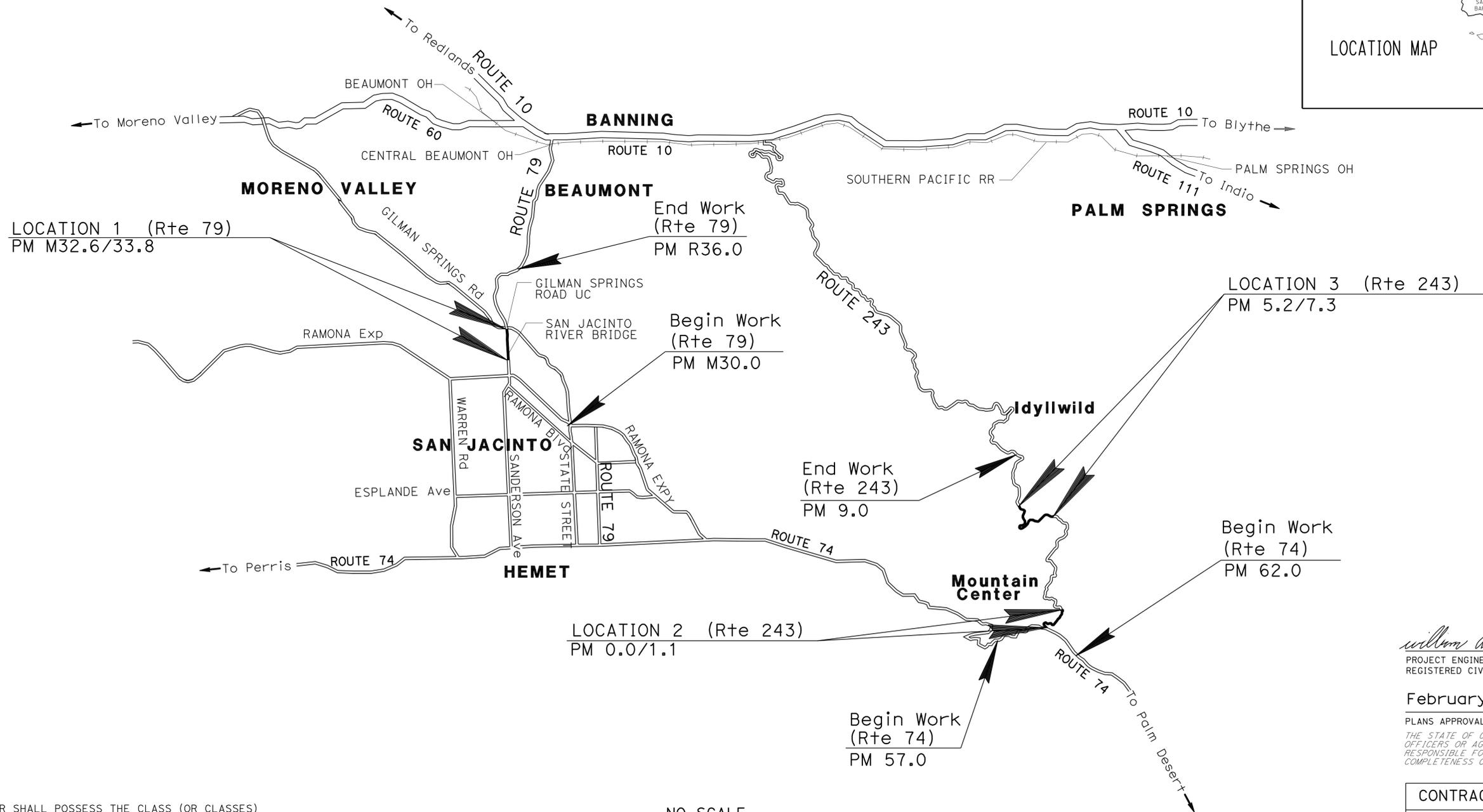
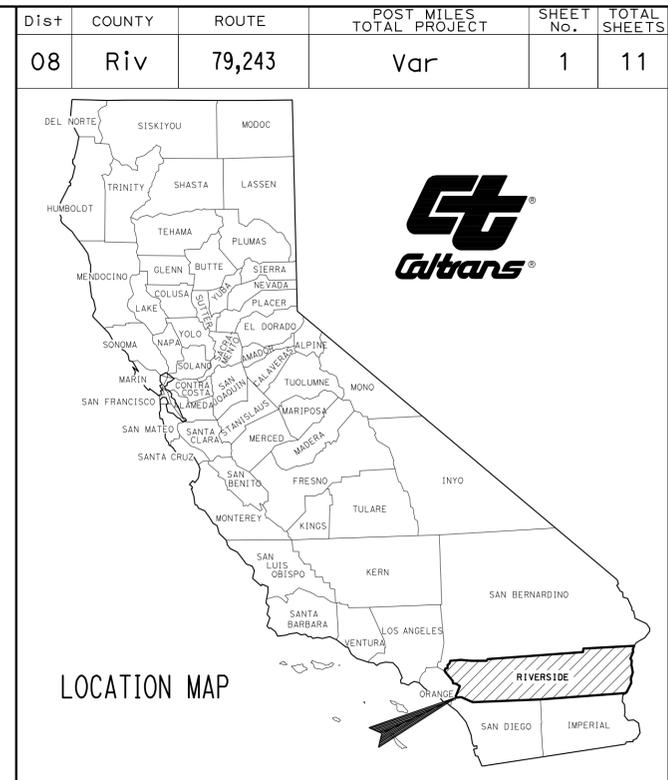


INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-4	CONSTRUCTION DETAILS
5	CONSTRUCTION AREA SIGNS
6	PAVEMENT DELINEATION QUANTITIES
7	SUMMARY OF QUANTITIES
8-11	TRAFFIC CONTROL SYSTEM

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN RIVERSIDE COUNTY
AT VARIOUS LOCATIONS
 TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2010



PROJECT MANAGER CATALINO PINING
DESIGN ENGINEER WILLIAM AMBROSE

William Ambrose 2-6-13
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
February 11, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No.	08-1C4404
PROJECT ID	0812000313

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

NO SCALE

DATE PLOTTED => 06-FEB-2013 TIME PLOTTED => 13:56

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	2	11

<i>William Ambrose</i>	2-6-13
REGISTERED CIVIL ENGINEER	DATE
2-11-13	
PLANS APPROVAL DATE	

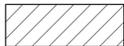
WILLIAM AMBROSE
No. C72098
Exp 6/30/14
CIVIL

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

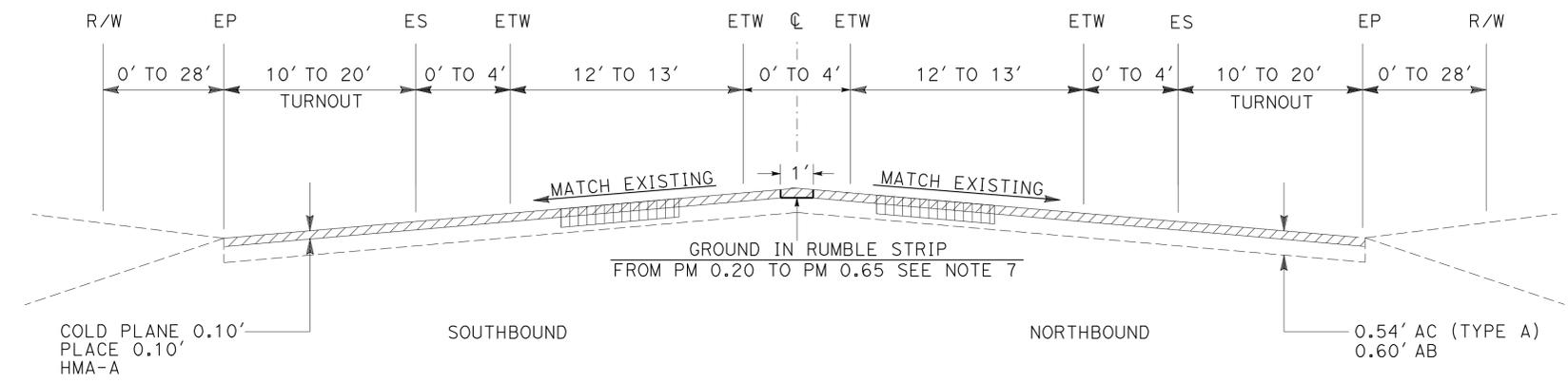
NOTES:

- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- ALL WORK WITHIN STATE RIGHT OF WAY.
- TURNOUTS SHOWN ON THE TYPICAL CROSS SECTIONS ARE NOT CONTINUOUS. SEE Q-1 FOR LOCATIONS.
- FOR RUMBLE STRIP (GROUND-IN INDENTATIONS) DETAILS AND LIMITS SEE STANDARD PLAN A40B AND C-2, PDQ-1 AND Q-1.

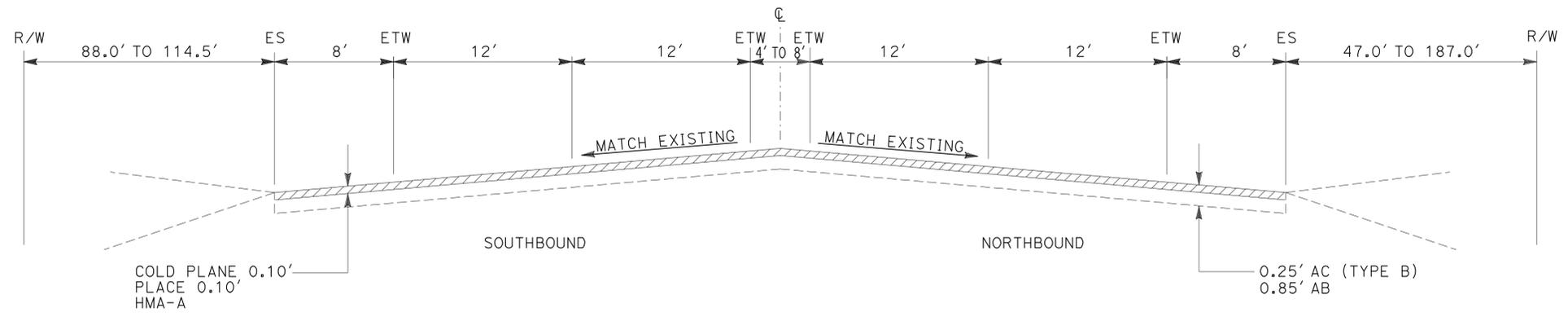
LEGEND:

-  COLD PLANE AND HOTMIX ASPHALT (TYPE A)
-  REPLACE ASPHALT CONCRETE SURFACING SEE SHEET C-1 FOR DETAILS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR KEVIN CHEN
 CALCULATED/DESIGNED BY KEVIN CHEN
 CHECKED BY KEVIN CHEN
 WILLIAM AMBROSE
 KEVIN CHEN
 REVISED BY DATE
 DATE REVISED



ROUTE 243
 PM 0.0 TO PM 1.1
 PM 5.2 TO PM 7.3



ROUTE 79
 PM M32.6 TO PM M33.8

TYPICAL CROSS SECTIONS
 NO SCALE
X-1

LAST REVISION DATE PLOTTED => 06-FEB-2013
 02-06-13 TIME PLOTTED => 13:56

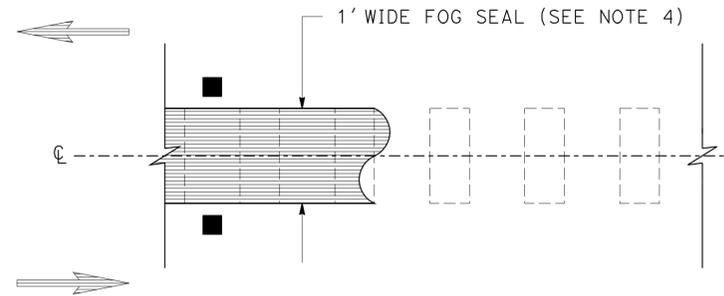
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	4	11
<i>William Ambrose</i> REGISTERED CIVIL ENGINEER			2-6-13 DATE	WILLIAM AMBROSE No. C72098 Exp 6/30/14 CIVIL	
PLANS APPROVAL DATE			2-11-13		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

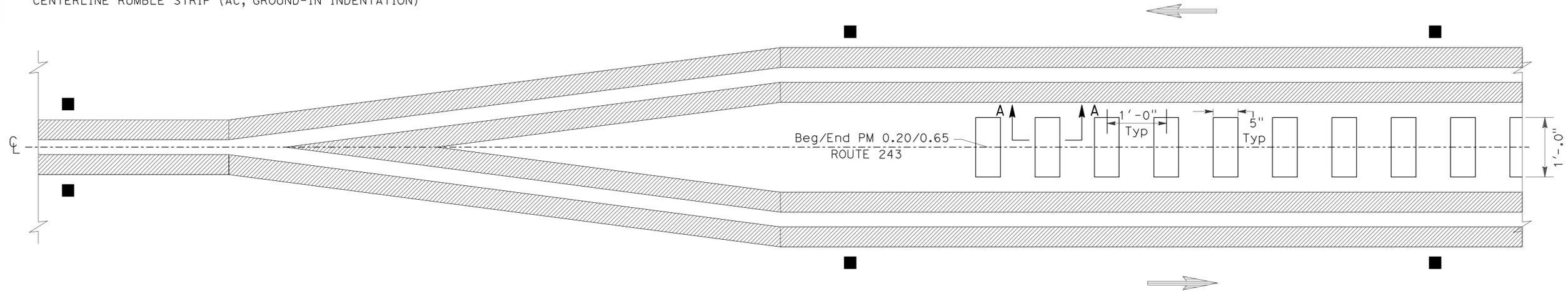
1. ALL WORK WITHIN STATE RIGHT OF WAY.
2. RUMBLE STRIP TO BE GROUND IN AFTER HMA-A OVERLAY.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLAN SHEETS.
4. APPLY FOG SEAL CONTINUOUSLY TO COMPLETELY COVER THE 1-FOOT WIDE CENTERLINE RUMBLE STRIP (GROUND-IN INDENTATIONS).
5. TRAFFIC STRIPES AND MARKERS SHOWN FOR REFERENCE ONLY. SEE PDQ-1 FOR QUANTITIES AND DETAILS.

LEGEND

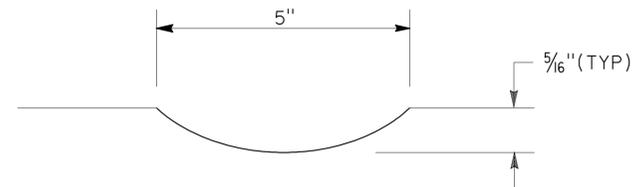
- RECESSED RETROREFLECTIVE MARKER
- ▨ YELLOW THERMOPLASTIC TRAFFIC STRIPE
- ▨ FOG SEAL
- ▭ CENTERLINE RUMBLE STRIP (AC, GROUND-IN INDENTATION)



FOG SEAL DETAIL



PLAN VIEW
CENTERLINE RUMBLE STRIP
(GROUND-IN INDENTATIONS)



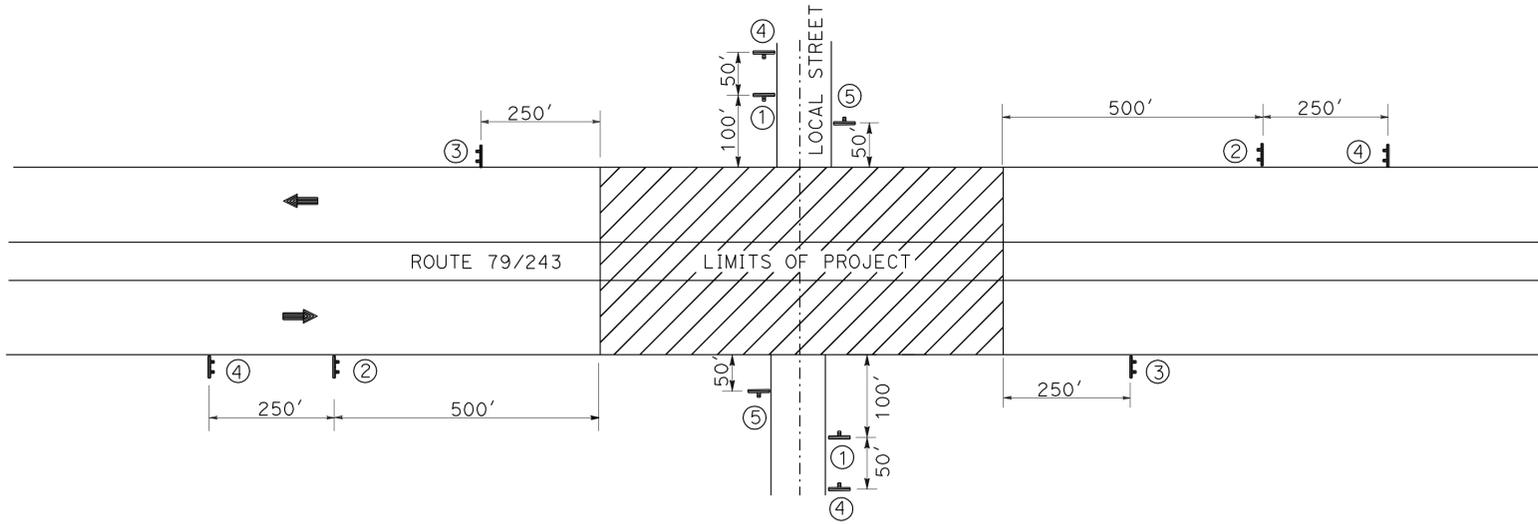
SECTION A-A

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	KUANG CHEN	WILLIAM AMBROSE	WILLIAM AMBROSE
		CHECKED BY	DATE REVISED
		K. CHEN	



TYPICAL INSTALLATION OF CONSTRUCTION AREA SIGNS

PORTABLE CHANGEABLE MESSAGE SIGN

EA
2

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
1	W20-1		36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	7
2	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	4
3	G20-2		36" x 18'	END ROADWORK	1 - 4" x 6"	4
4		C40	108" x 42"	TRAFFIC FINE DOUBLED IN CONSTRUCTION ZONE	2 - 6" x 6"	11
5	G20-2		36" x 18"	END ROADWORK	1 - 4" x 4"	7

(S) DENOTES STATIONARY MOUNTED SIGN
EXACT LOCATION OF THE SIGNS SHAL BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS
NO SCALE
CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: BILL WASSER
MEHDI KAMGAR
BILL WASSER
REVISOR: MEHDI KAMGAR
DATE REVISOR: BILL WASSER
CALCULATED/DESIGNED BY: MEHDI KAMGAR
CHECKED BY: BILL WASSER

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	6	11

M.M. Kamgar Haghighi 2-6-13
REGISTERED CIVIL ENGINEER DATE

2-11-13
PLANS APPROVAL DATE

M. KAMGAR
No. C58039
Exp. 6-30-14
CIVIL

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

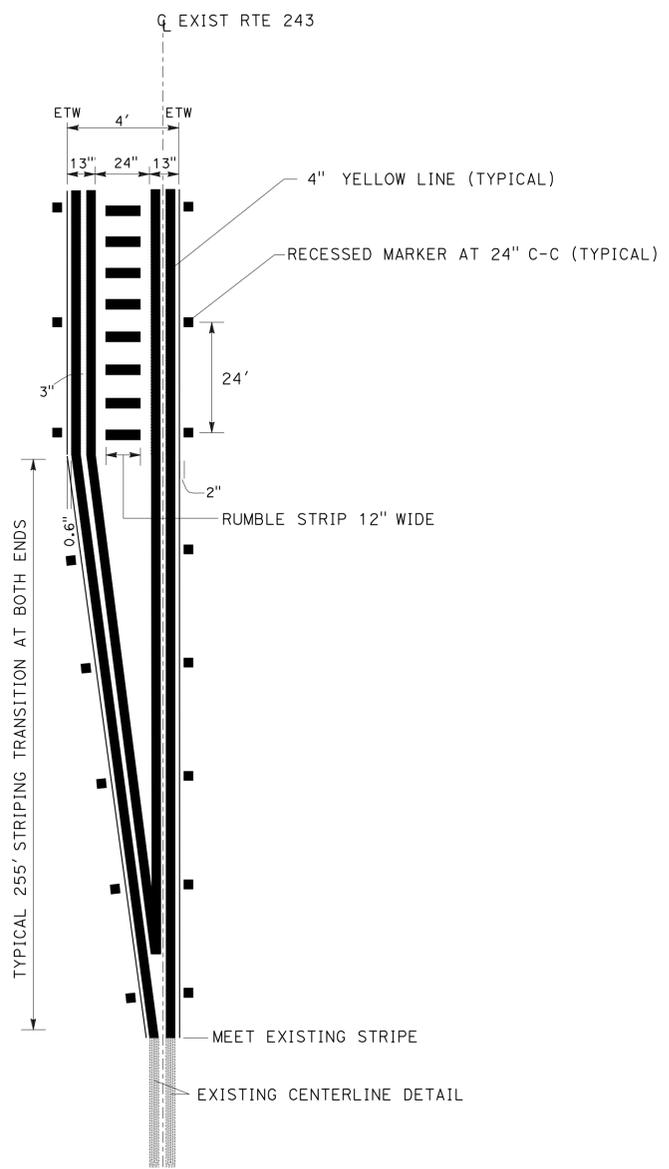
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: BILL WASSER
DESIGNED BY: MEHDI KAMGAR
CHECKED BY: BILL WASSER

REVISOR: MEHDI KAMGAR
DATE: []

REVISOR: BILL WASSER
DATE: []

CALCULATED/DESIGNED BY: []
CHECKED BY: []



TYPICAL CENTERLINE STRIPING DETAIL
FROM PM 0.20 TO 0.65

PAVEMENT DELINEATION QUANTITIES

LOCATION/ STATION	DETAIL No.	PAVEMENT MARKERS		THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	
		RETROREFLECTIVE		4"	4"
		TYPE G	TYPE D	WHITE	YELLOW
		EA		FT	
Riv 79 P.M 32.6/33.8	12	264			12672
	27B			12672	
	29		528		12672
TOTAL		792		38016	

PAVEMENT DELINEATION QUANTITIES

LOCATION/ STATION	DETAIL No.	PAVEMENT MARKERS		THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	
		RETROREFLECTIVE-RECESSED		4"	4"
		TYPE G	TYPE D	WHITE	YELLOW
		EA		FT	
Riv 243 P.M 0.0/1.1	22		190		2144
	27B			11616	
	29		308		7330
SUBTOTAL		498		11616 9474	
Riv 243 P.M 5.2/7.3	22		968		11616
	27B			23232	
SUBTOTAL		968		23232 11616	
TOTAL		1466		34848 21090	

PAVEMENT DELINEATION QUANTITIES
NO SCALE
PDQ-1

LAST REVISION: [] DATE PLOTTED => 06-FEB-2013 02-06-13 TIME PLOTTED => 13:56

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	7	11

William Ambrose 2-6-13
 REGISTERED CIVIL ENGINEER DATE

2-11-13
 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. SNOWPLOW TURNAROUND AREA
SEE SHEET C-1 FOR DETAILS.

COLD PLANE AND HOT MIX ASPHALT (TYPE A)

DESCRIPTION	PM	PM	COLD PLANE AC PAVEMENT (SQYD)	TACK COAT (TON)	HMA-A (TON)
	BEGIN	END			
ROUTE 243	0.00	1.10	20651	2.60	1357
ROUTE 243	5.20	7.30	39424	4.93	2590
ROUTE 79	32.60	32.76	6383	0.80	419
ROUTE 79	32.99	33.20	8378	1.00	550
ROUTE 79	33.20	33.80	25344	3.20	1665
SUBTOTAL			100180	12.53	6581

REPLACE ASPHALT CONCRETE SURFACING

ROUTE	LOCATION			VOLUME
	FROM PM	TO PM	DIRECTION	CY
243	0.00	1.00	NB	48.3
243	5.00	6.00	NB	5.4
243	0.00	1.00	SB	24.3
243	5.00	7.00	SB	64.9
TOTAL				143

(**) EXACT LOCATIONS AND DIMENSIONS OF REPLACE AC SURFACING SHALL BE DETERMINED BY THE ENGINEER.

COLD PLANE AND HOT MIX ASPHALT (TYPE A) ADDITIONAL AREAS

DESCRIPTION	DIRECTION	PM	COLD PLANE AC PAVEMENT	TACK COAT (TON)	HMA-A (TON)
			(SQYD)		
ROUTE 243 (SEE NOTE 1)	NB/SB	0.00	1597	0.20	105
ROUTE 243 TURNOUT	NB	0.12	484	0.06	32
ROUTE 243 TURNOUT	SB	0.12	290	0.04	19
ROUTE 243 TURNOUT	NB	0.42	194	0.02	13
ROUTE 243 TURNOUT	SB	0.89	135	0.02	9
ROUTE 243 TURNOUT	NB	0.91	153	0.02	10
ROUTE 243 TURNOUT	NB	1.05	161	0.02	11
ROUTE 243 TURNOUT	SB	1.10	111	0.01	7
ROUTE 243 INTERSECTION	SB	5.28	381	0.05	25
ROUTE 243 TURNOUT	NB	5.37	188	0.02	12
ROUTE 243 TURNOUT	NB	5.45	289	0.04	19
ROUTE 243 INTERSECTION	SB	5.49	201	0.03	13
ROUTE 243 INTERSECTION	NB	6.02	99	0.01	6
ROUTE 243 TURNOUT	NB	6.51	100	0.01	7
ROUTE 243 INTERSECTION	SB	6.83	38	0.01	2
SUBTOTAL			4421	0.56	290
TOTAL			104,601	13.09	6871

CENTERLINE RUMBLE STRIP (GROUND IN INDENTATIONS)

DESCRIPTION	PM	PM	GROUND IN RUMBLE STRIP	FOG SEAL
	BEGIN	END	(STA)	TON
ROUTE 243	0.20	0.65	23.76	0.2

EXISTING UTILITY PROTECT IN PLACE

DESCRIPTION	PM	DIRECTION	ITEM
ROUTE 243	0.0	NORTHBOUND	MANHOLE

SUMMARY OF QUANTITIES

Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR KEVIN CHEN
 CALCULATED/DESIGNED BY KEVIN CHEN
 WILLIAM AMBROSE
 KEVIN CHEN
 REVISED BY DATE
 DATE REVISION

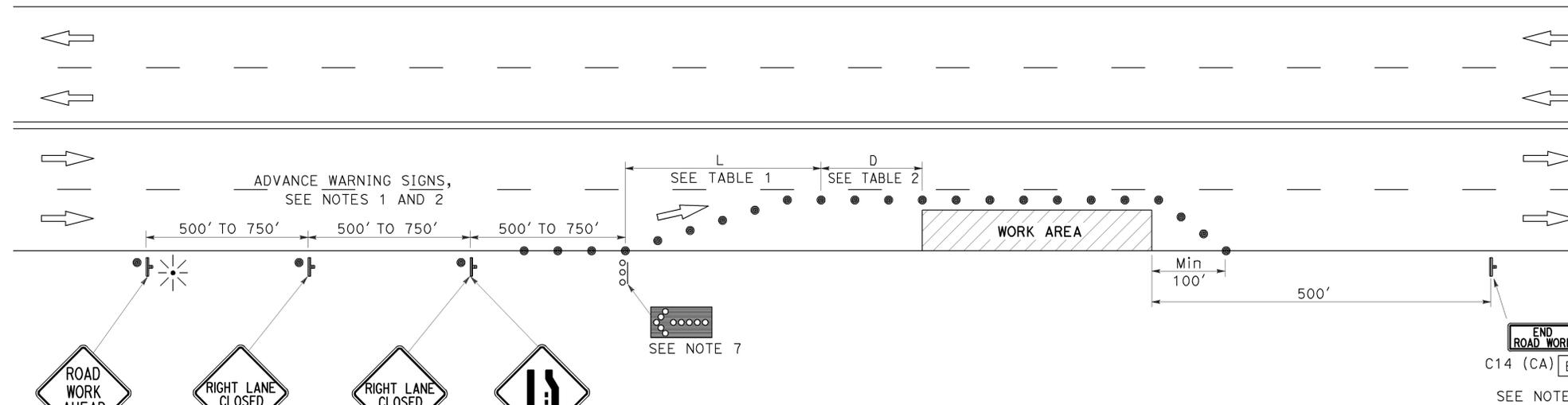


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	8	11

REGISTERED CIVIL ENGINEER *gpbmlr* DATE 12-7-12
 PLANS APPROVAL DATE 2-11-13
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Gurinderpa BhuIlor
 No. C48815
 Exp 9-30-14
 CIVIL
 STATE OF CALIFORNIA

TYPICAL LANE CLOSURE



NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background. California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

LEGEND

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

SIGN PANEL SIZE (Min)

- A 36" x 36"
- B 36" x 18"

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. Each advance warning sign 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.
3. A C14 (CA) "END ROAD WORK" sign, 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.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow sign shall be either Type I or Type II.
8. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
9. For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
10. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.

TABLE 1

APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 AND BELOW	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
Over 50	SEE NOTE 9	
* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.		
** SEE NOTE 8.		

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	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
OVER 50	SEE NOTE 9			
* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.				

FUNCTIONAL SUPERVISOR

DEPARTMENT OF TRANSPORTATION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-1

DATE PLOTTED => 10-DEC-2012
TIME PLOTTED => 09:45
LAST REVISION 02-06-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	9	11

REGISTERED CIVIL ENGINEER: *gpbmiller*
 DATE: 12-7-12
 PLANS APPROVAL DATE: 2-11-13

REGISTERED PROFESSIONAL ENGINEER:
 Gurinderpa Bhuilior
 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.

- LEGEND**
- TRAFFIC CONE
 - ⊥ TEMPORARY SIGN
 - ⬇️ FLASHING ARROW SIGN (FAS)
 - FAS SUPPORT OR TRAILER
 - ⊛ PORTABLE FLASHING BEACON

TABLE 1

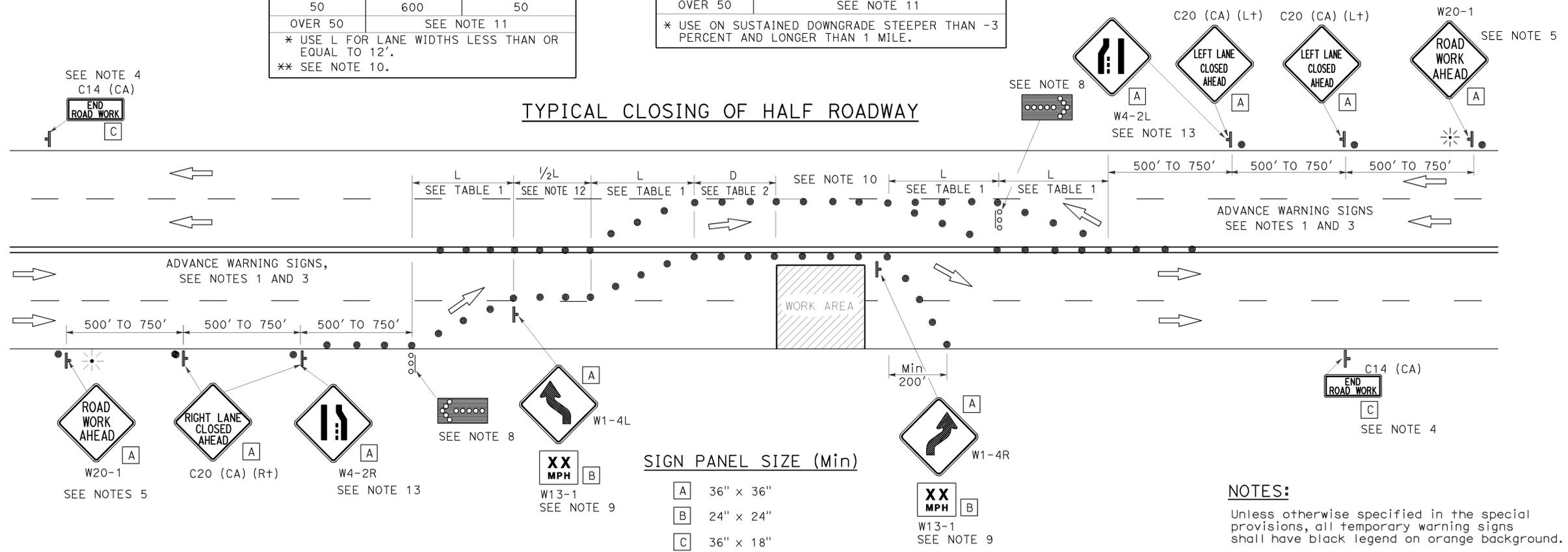
APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 and below	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
OVER 50	SEE NOTE 11	

* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.
 ** SEE NOTE 10.

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	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
OVER 50	SEE NOTE 11			

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.



SIGN PANEL SIZE (Min)

A	36" x 36"
B	24" x 24"
C	36" x 18"

W13-1 SEE NOTE 9
 W1-4L
 W1-4R
 W13-1 SEE NOTE 9
 W1-4R
 W13-1 SEE NOTE 9

NOTES:

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

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

- NOTES:**
- Where Approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
 - At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.
 - Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A C14 (CA) "END ROAD WORK" sign, 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.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT" MILES, use a C20 (CA) sign for the first advance warning sign.
 - All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 - Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
 - Flashing arrow signs shall be either Type I or Type II.
 - Advisory speed will be determined by the Engineer. The W13-1 Sign will not be required when advisory speed is more than the posted or maximum speed limit.
 - The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
 - For approach speeds over 50 mph, use the "Traffic Control System For Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
 - Unless otherwise specified in the special provisions, the (1/2 L) shown between the two (L) lane closure tapers shall be used.
 - When specified in the special provisions, a W4-2 "Lane Ends" symbol sign is to be used in place of the C20 (CA) "RIGHT (LEFT) LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS**
 NO SCALE
TCS-2

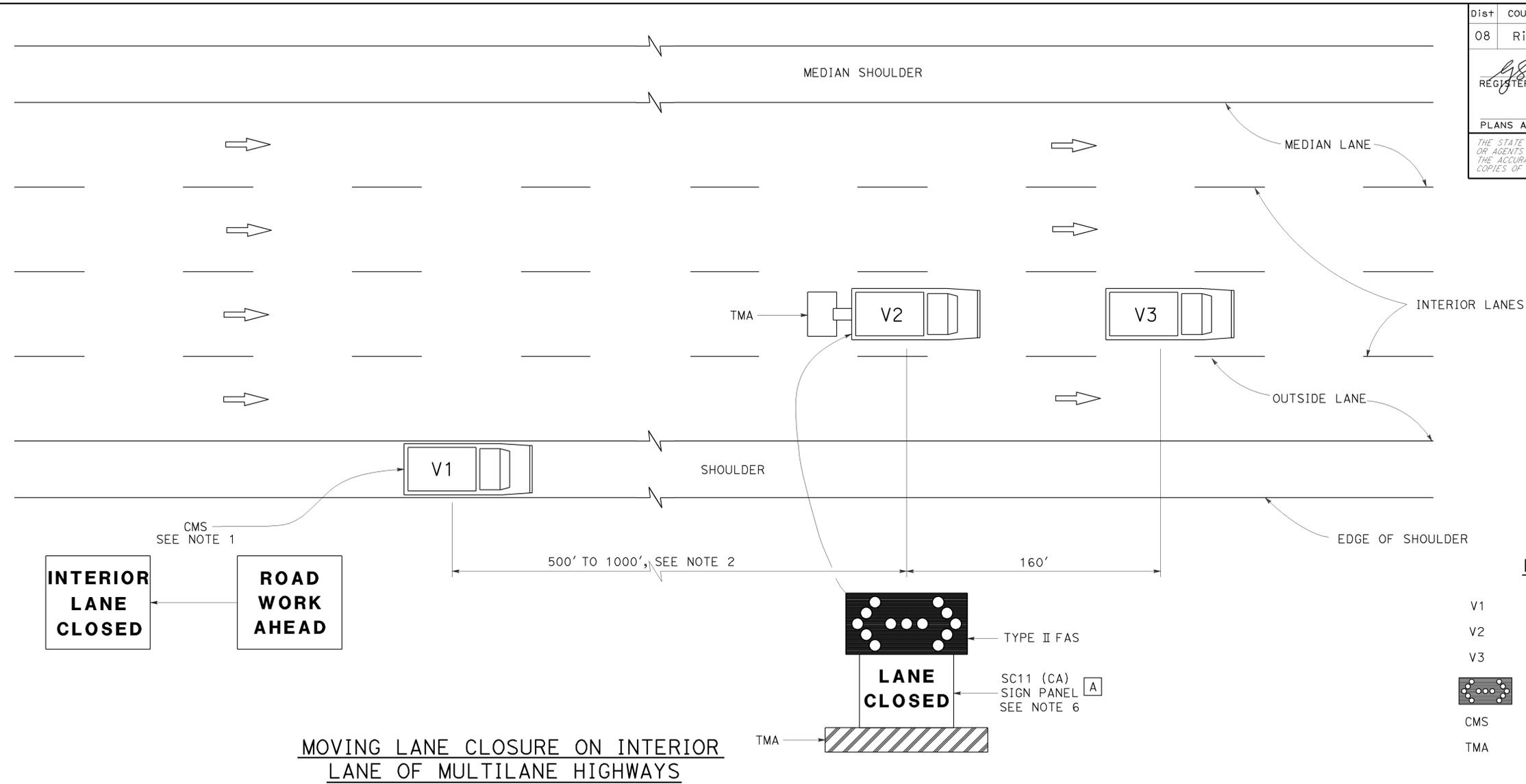
REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75,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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	79, 243	Var	11	11

<i>gbbmlbr</i>	12-7-12
REGISTERED CIVIL ENGINEER	DATE
2-11-13	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER Gurinderpa Bhuilor 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.



LEGEND

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

MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

NOTES:

1. A changeable message 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 "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
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 be Type III, IV, VII, VIII, or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 20,000 pounds and 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.
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. Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. Both V1 and V2 shall be equipped with a truck-mounted attenuator. The Gross Vehicle Weight of V1 and V2 shall be at least 20,000 pounds, respectively.
10. When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required, and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR MOVING LANE CLOSURE
 ON MULTILANE HIGHWAYS
 (INTERIOR LANES)**

NO SCALE **TCS-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Functional Supervisor
 Calculated/Designed By
 Checked By
 Revised By
 Date Revised