Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	1	11

INDEX OF PLANS

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

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

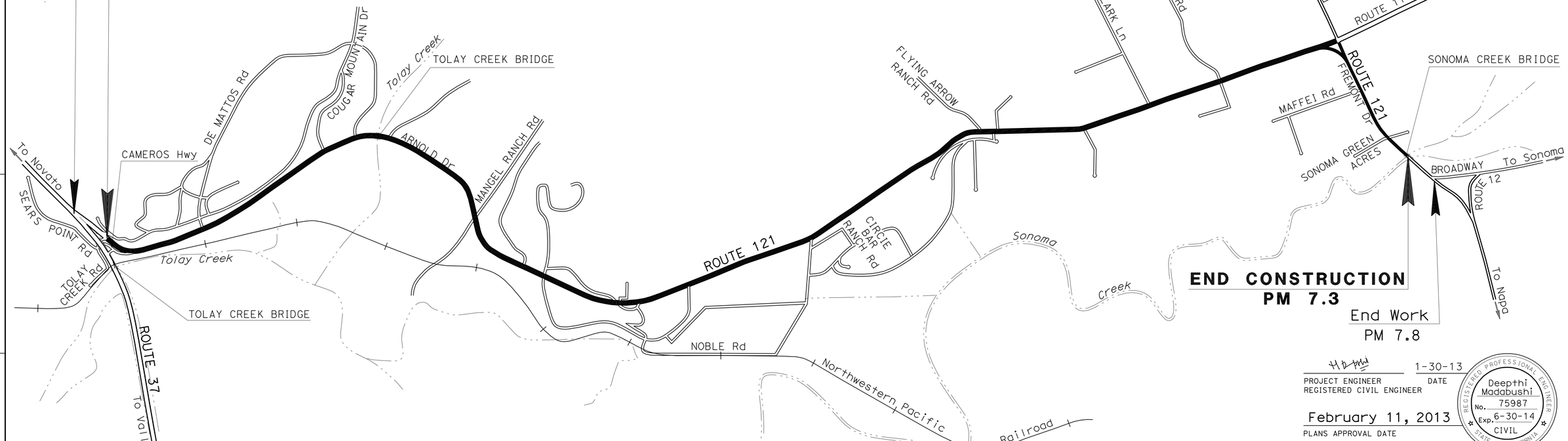
IN SONOMA COUNTY
NEAR SCHELLVILLE
FROM ROUTE 37 TO SONOMA CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

LOCATION MAP

Begin Work (Route 37)
PM 3.4

BEGIN CONSTRUCTION
PM 0.0



NO SCALE

END CONSTRUCTION
PM 7.3

End Work
PM 7.8

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

1-30-13
PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE

Deepthi Madabushi
No. 75987
Exp. 6-30-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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.

PROJECT MANAGER: RAMSES SARGISS
DESIGN MANAGER: VIJITH THILAKARATNE

CONTRACT No.	04-3E3204
PROJECT ID	0412000473

LAST REVISION 01-31-13 DATE PLOTTED => 13-FEB-2013 TIME PLOTTED => 13:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	2	11

1-30-13
REGISTERED CIVIL ENGINEER DATE

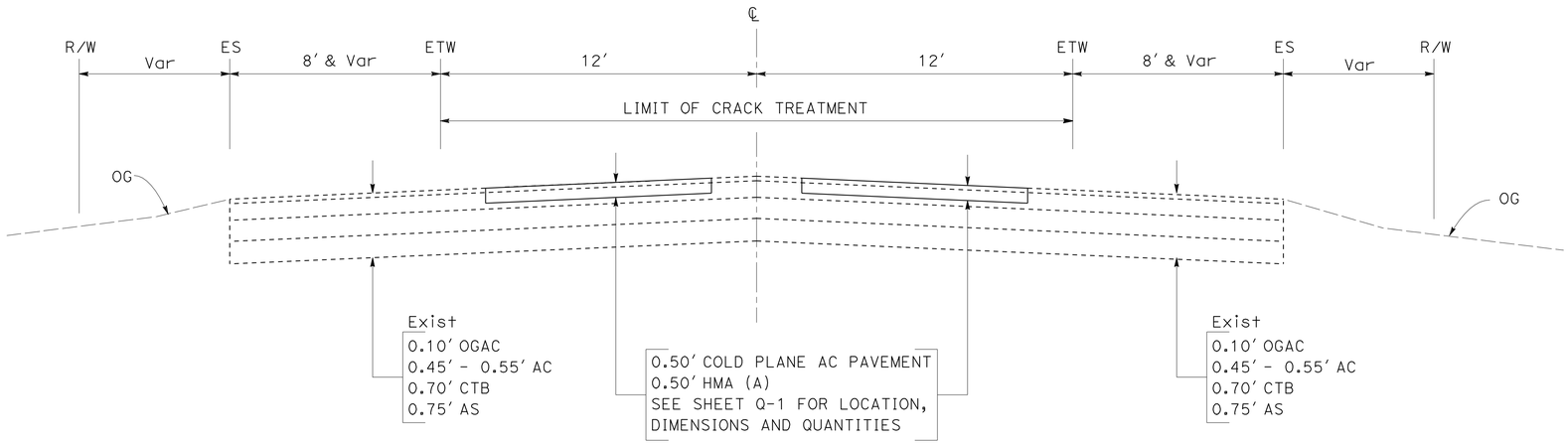
2-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Deepthi Madabushi
No. 75987
Exp 6-30-14
CIVIL
STATE OF CALIFORNIA

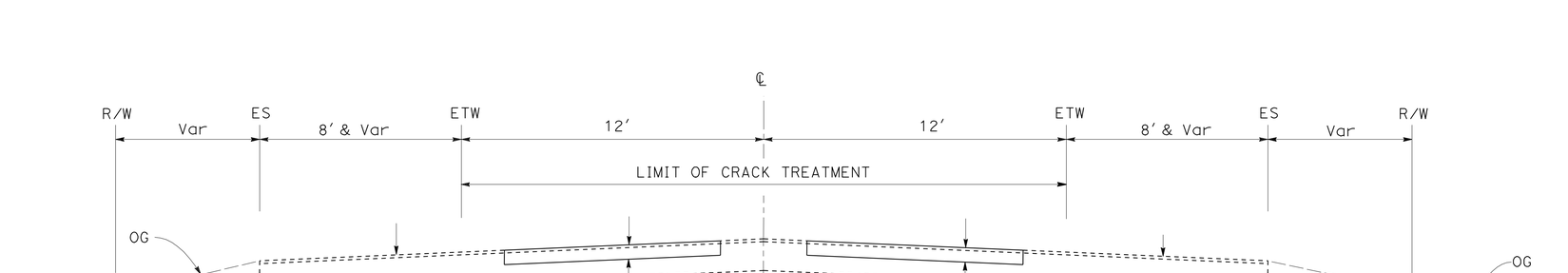
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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. EXISTING UTILITY FACILITIES ARE NOT PLOTTED ON THESE PLANS.



PM 3.4 TO 7.3



PM 0.0 TO 3.4

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
DESIGN
FUNCTIONAL SUPERVISOR: VIJITH THILAKARATNE
CALCULATED-DESIGNED BY: DEEPTHI MADABUSHI
CHECKED BY: BINH HONG
REVISED BY: DM
DATE REVISED: 1/28/13
LAST REVISION: DATE PLOTTED => 13-FEB-2013
01-31-13 TIME PLOTTED => 13:59

BORDER LAST REVISED 7/2/2010
USERNAME => s130819
DGN FILE => 0412000473ca001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0976
PROJECT NUMBER & PHASE 04120004731

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	3	11

REGISTERED CIVIL ENGINEER — 1-31-13 DATE

2-11-13
PLANS APPROVAL DATE

Jerilyn L. Struven No. 49964 Exp. 12-31-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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

CONSTRUCTION AREA SIGNS

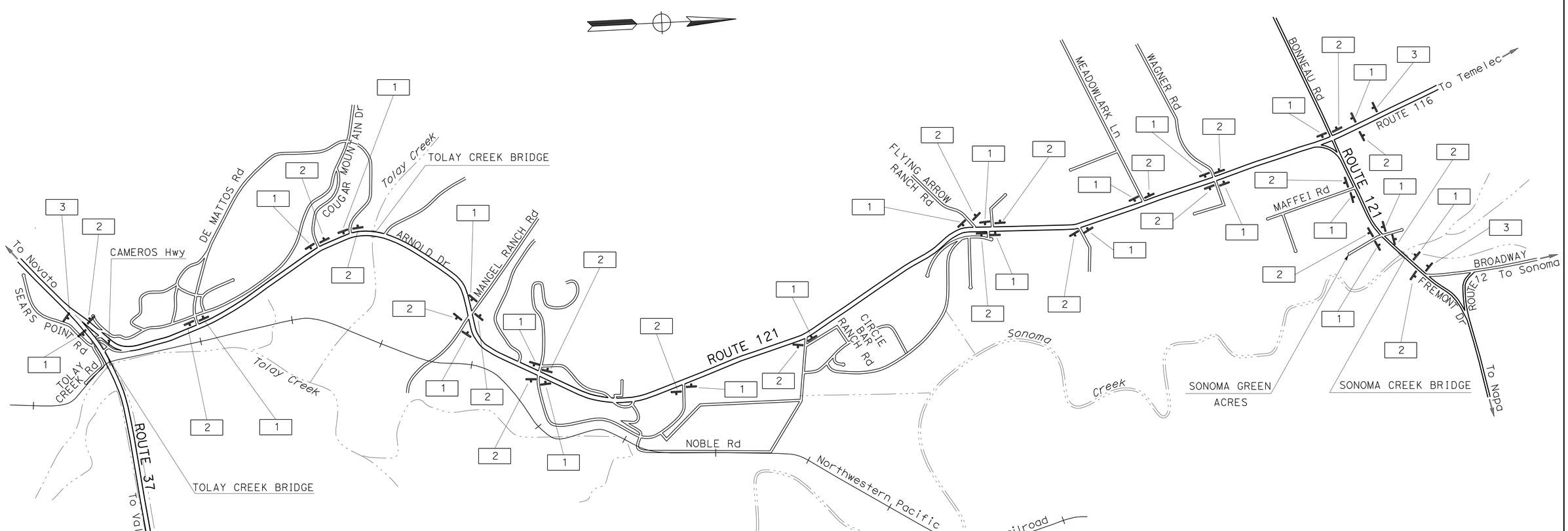
SIGN No.	MUTCD CODE	MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
1	W20-1	ROAD WORK AHEAD	48" x 36"	(ONE) 4" x 6"	23
2	G20-2	END ROAD WORK	36" x 18"	(ONE) 4" x 4"	23
3	C40 (A)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	72" x 36"	(TWO) 4" x 6"	3

LEGEND:

No. CONSTRUCTION AREA SIGN NUMBER

NOTE:

EXACT LOCATION AND POSITION OF SIGN TO BE DETERMINED BY THE ENGINEER.



CONSTRUCTION AREA SIGNS

NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC
Caltrans

FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG
REVISED BY: SL — DATE REVISED: 1/30/13
CALCULATED-DESIGNED BY: STEPHEN LAU
CHECKED BY: JERILYN STRUVEN

LAST REVISION | DATE PLOTTED => 13-FEB-2013
01-31-13 | TIME PLOTTED => 13:59

BORDER LAST REVISED 7/2/2010

USERNAME => s130819
DGN FILE => 04120004731a001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0976

PROJECT NUMBER & PHASE 04120004731

TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

PM	DIRECTION	DETAIL No. OR PAVEMENT MARKING	PAVEMENT MARKER (RETROREFLECTIVE)		THERMOPLASTIC TRAFFIC STRIPE					THERMOPLASTIC PAVEMENT MARKING	
			TYPE D	TYPE H	4" YELLOW	4" WHITE	4" WHITE BROKEN (17'-7')	4" YELLOW BROKEN (36'-12')	4" WHITE BROKEN (36'-12')	WORD	ARROW
			EA		LF					SQFT	
0.0-7.3	NB/SB	27B				5810					
0.0-7.3	NB/SB	29	66		3040						
0.0-7.3	NB/SB	22	182		4300						
0.0-7.3	NB/SB	19	38	75	1770			1770			
0.0-7.3	NB/SB	8					100				
0.0-7.3	NB/SB	6	16						700		
6.8	NB	STOP								22	
6.8	NB	YIELD								24	
6.8	NB	AHEAD (2 EA)								62	
6.8	NB	TYPE I - 18" (2 EA)									50
6.7	SB	TYPE III (L)									42
SUBTOTAL			302	75	9110	5810	100	1770	700	108	92
TOTAL			377		14920		100	2470		200	

ROADWAY QUANTITIES

PM	DIRECTION	LENGTH (N)	WIDTH (N)	COLD PLANE AC PAVEMENT	HMA (TYPE A)	TACK COAT
		LF		SQYD	TON	
0.85		20	12	27	9	0.02
1.05		100	12	133	45	0.09
1.15		600	12	800	270	0.53
1.35		100	12	133	45	0.09
1.55		100	12	133	45	0.09
1.85		100	12	133	45	0.09
1.85		200	12	267	90	0.18
2.25		100	12	133	45	0.09
2.55		100	12	133	45	0.09
3.25	NB	20	6	13	5	0.01
3.85		100	6	67	22	0.04
5.35		100	12	133	45	0.09
6.05		100	6	67	22	0.04
6.85		100	12	133	45	0.09
6.85		100	12	133	45	0.09
6.95		50	12	67	22	0.04
7.05		50	12	67	22	0.04
7.15		50	12	67	22	0.04
7.15		300	12	400	135	0.27
7.10		100	6	67	22	0.04
7.00		100	12	133	45	0.09
7.00		60	12	80	27	0.05
6.90		20	12	27	9	0.02
6.90		30	12	40	14	0.03
6.90		50	6	33	11	0.02
6.80		50	12	67	22	0.04
6.70		100	12	133	45	0.09
6.70		100	12	133	45	0.09
6.30		150	12	200	68	0.13
6.20		200	12	267	90	0.18
6.00		150	12	200	68	0.13
5.60	SB	100	12	133	45	0.09
5.00		100	12	133	45	0.09
5.30		100	12	133	45	0.09
3.60		100	6	67	22	0.04
3.40		500	12	667	225	0.44
2.60		20	12	27	9	0.02
2.30		50	12	67	22	0.04
2.30		50	12	67	22	0.04
2.00		50	12	67	22	0.04
1.60		20	12	27	9	0.02
1.40		1000	12	1333	449	0.89
0.53		200	12	267	90	0.18
0.20		200	12	267	90	0.18
TOTAL				7674	2584	5.09

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

CRACK TREATMENT

PM	Dir	CRACK TREATMENT
		LNMI
0.0 - 7.3	NB/SB	15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	4	11

1-30-13
REGISTERED CIVIL ENGINEER DATE

2-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Deepthi Madabushi
No. 75987
Exp 6-30-14
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.

ABBREVIATION:

LNMI LANE MILE

DM 1/28/13
REVISED BY DATE REVISED
DEEPTHI MADABUSHI BINH HONG
CALCULATED-DESIGNED BY CHECKED BY
FUNCTIONAL SUPERVISOR VIJITH THILAKARATNE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

LAST REVISION DATE PLOTTED => 13-FEB-2013
01-31-13 TIME PLOTTED => 13:59

SUMMARY OF QUANTITIES

Q-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	5	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
PLANS APPROVAL DATE

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

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TYPICAL LANE CLOSURE

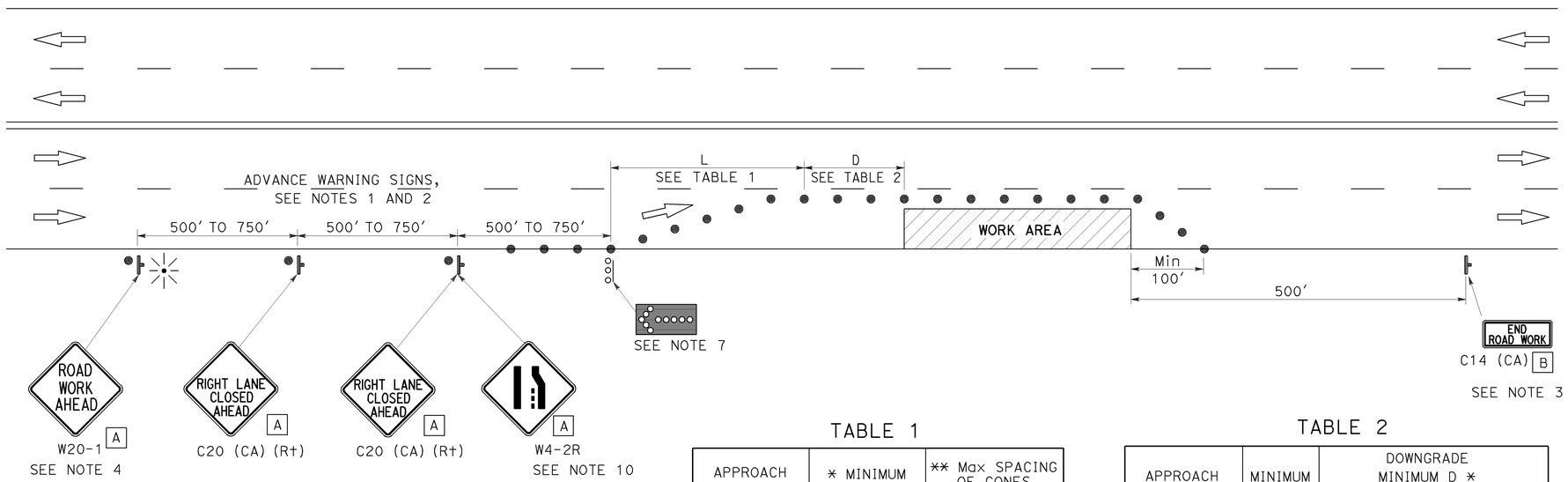

TABLE 1

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.

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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-1

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 10-DEC-2012 | TIME PLOTTED => 09:45

BORDER LAST REVISED 7/2/2010 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0976 | PROJECT NUMBER & PHASE 04120004731

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	6	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
PLANS APPROVAL DATE

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

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REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

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	

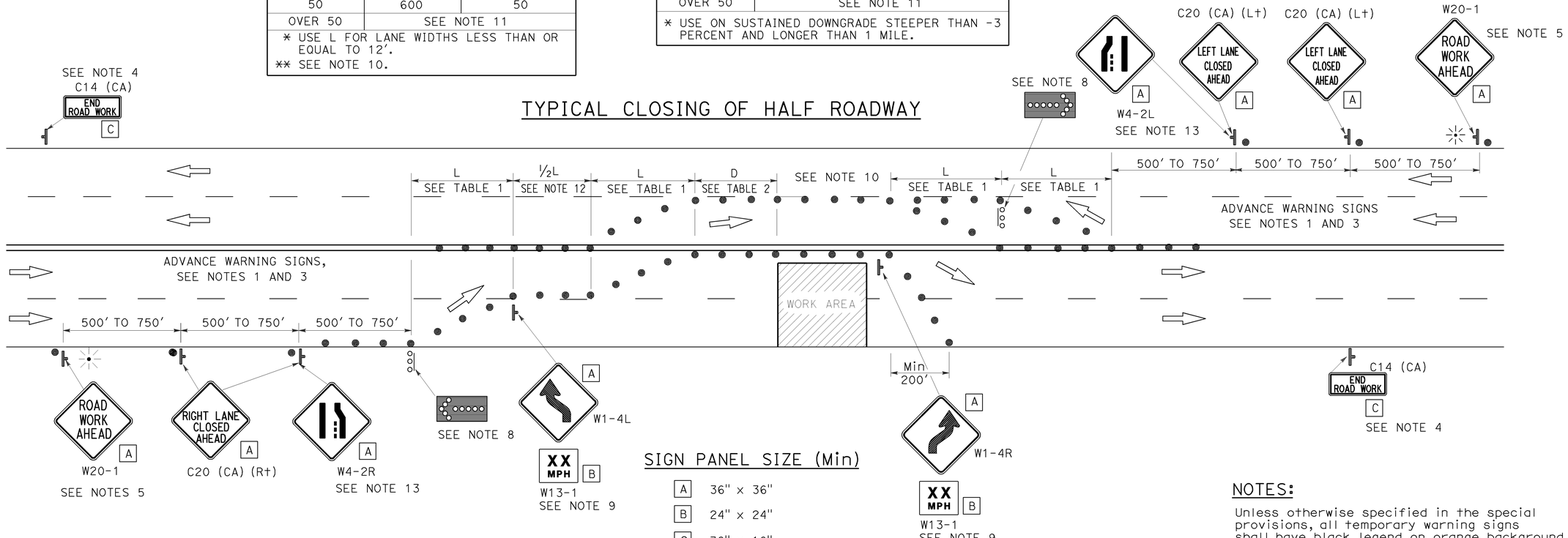
* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.
** SEE NOTE 10.

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.

TYPICAL CLOSING OF HALF ROADWAY



SIGN PANEL SIZE (Min)

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

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:

1. Where Approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. 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.
3. 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.
4. 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.
5. 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.
6. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
7. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
8. Flashing arrow signs shall be either Type I or Type II.
9. 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.
10. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
11. 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.
12. Unless otherwise specified in the special provisions, the (½ L) shown between the two (L) lane closure tapers shall be used.
13. 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

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	7	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
PLANS APPROVAL DATE

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

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REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

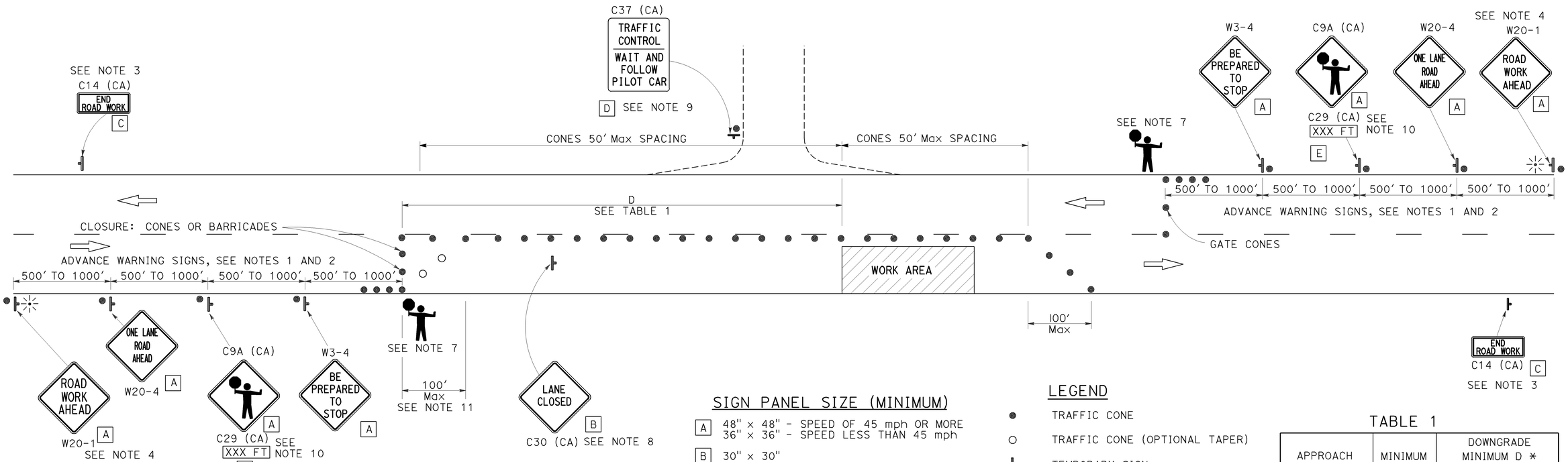
Caltrans

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.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A — 48" x 48" - SPEED OF 45 mph OR MORE; 36" x 36" - SPEED LESS THAN 45 mph
- B — 30" x 30"
- C — 36" x 18"
- D — 36" x 42"
- E — 36" x 9"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

TABLE 1

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
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

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

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
2. 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.
3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____MILES", use a W20-4 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. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
8. Place C30 (CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
9. When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
10. An optional C29 (CA) sign may be placed below the C9A (CA) sign.
11. Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-3

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

BORDER LAST REVISED 7/2/2010 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0976 | PROJECT NUMBER & PHASE 04120004731

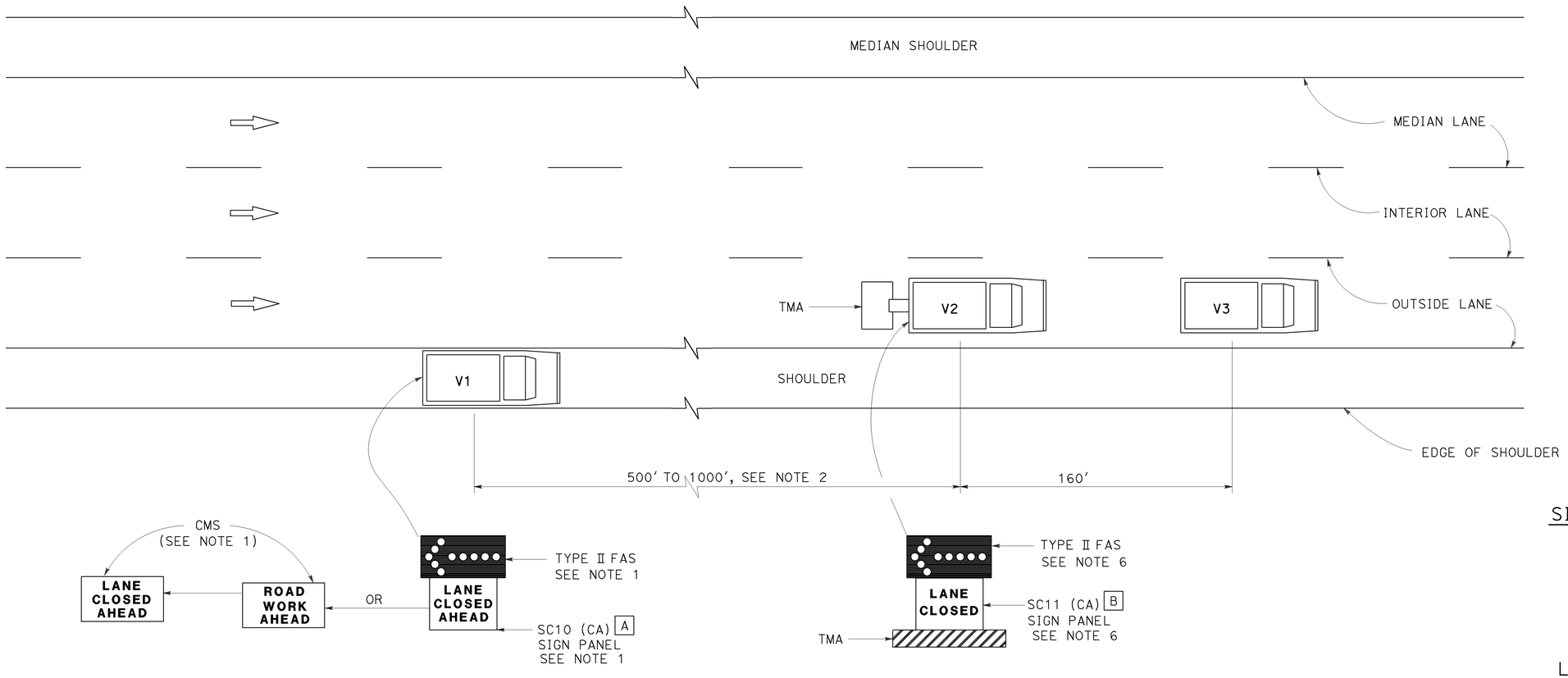
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	8	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
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.



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. A Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1 and used with the SC10 (CA) sign panel. A Type II flashing arrow sign will not be required with the changeable message sign provided the flashing arrow sign symbol is displayed on the changeable message sign board. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "LANE CLOSED AHEAD" message and then the flashing arrow sign symbol. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right.
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. 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.
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 (OUTSIDE AND MEDIAN LANES)

NO SCALE

TCS-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FUNCTIONAL SUPERVISOR
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 10-DEC-2012
TIME PLOTTED => 09:45
00-00-00

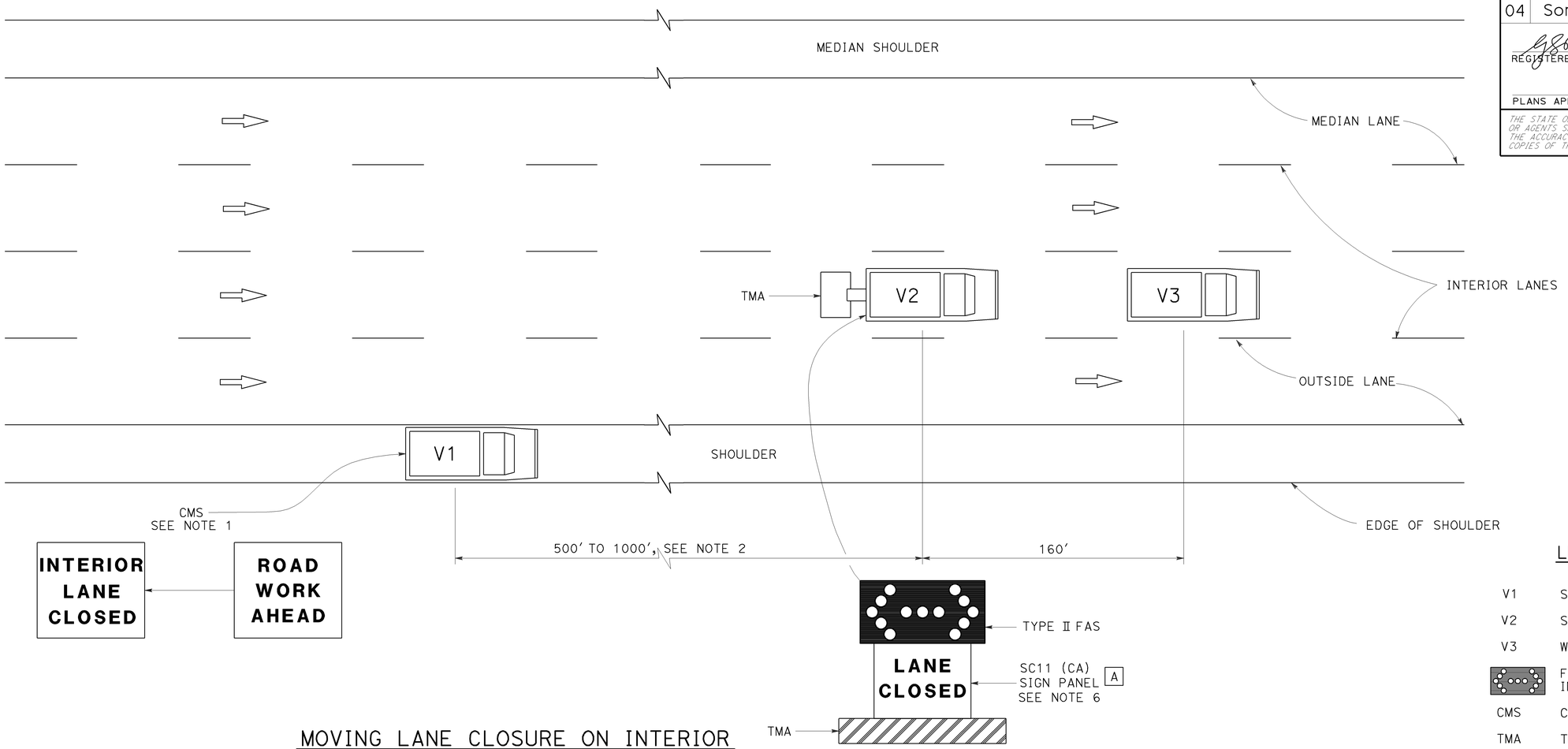
BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0976
PROJECT NUMBER & PHASE 04120004731

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	9	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
PLANS APPROVAL DATE

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



MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

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

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-5

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	10	11

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

2-11-13
PLANS APPROVAL DATE

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

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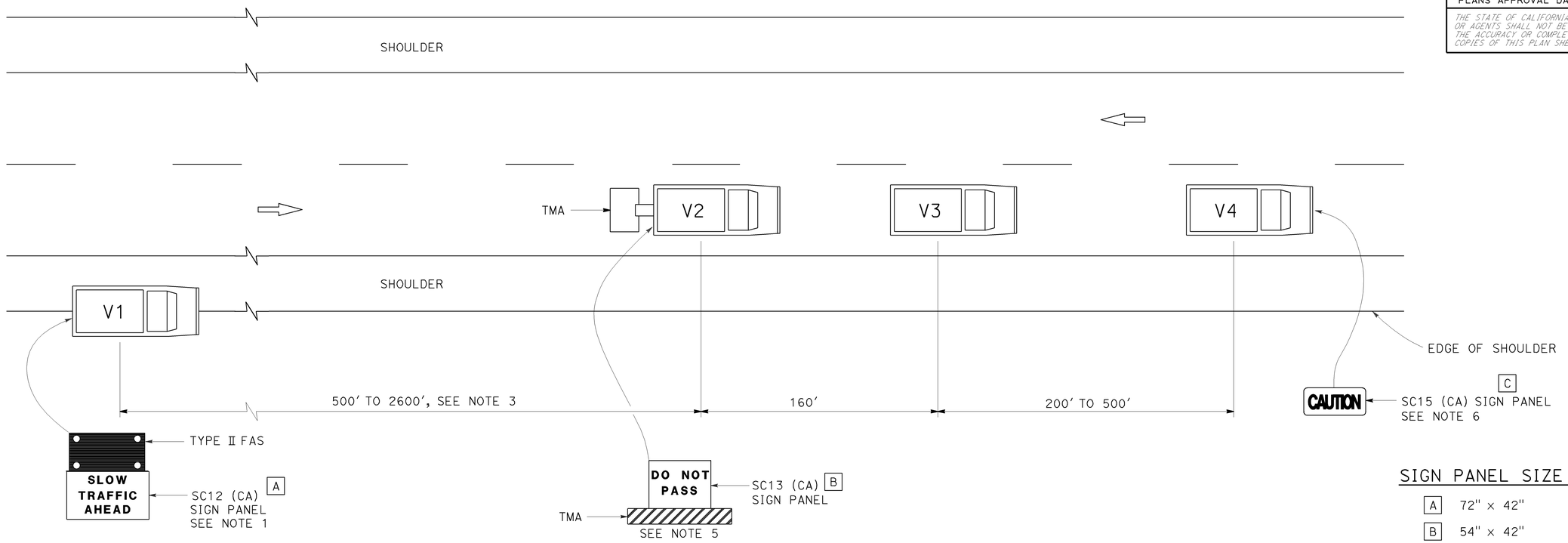

SIGN PANEL SIZE (Min)

A	72" × 42"
B	54" × 42"
C	54" × 24"

LEGEND

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

NOTES:

1. Either a changeable message sign or a SC12 (CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign may be used with the SC12 (CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall 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.
5. Gross Vehicle Weight of shadow vehicle shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2′ or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. 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 TWO LANE HIGHWAYS

NO SCALE

TCS-6

REVISED BY | DATE REVISED
CALCULATED- DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

BORDER LAST REVISED 7/2/2010 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0976 | PROJECT NUMBER & PHASE 04120004731

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	121	0.0/7.3	11	11

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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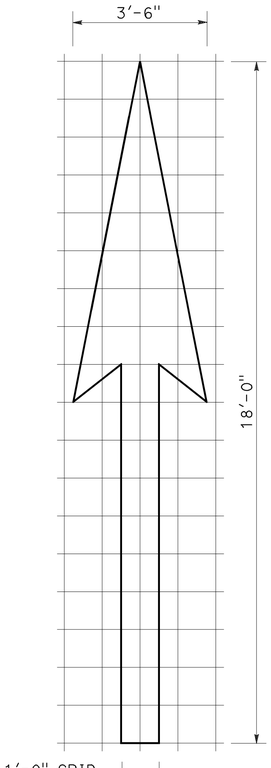
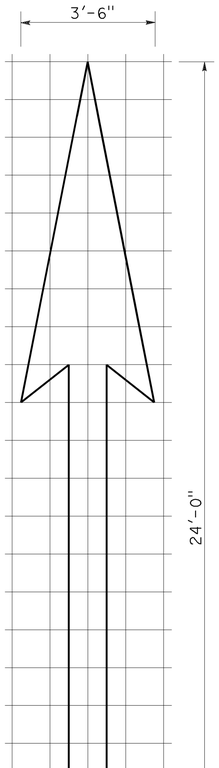
TO ACCOMPANY PLANS DATED 2-11-13

2010 REVISED STANDARD PLAN RSP A24A



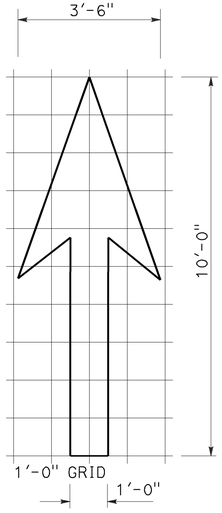
A=25 ft²

TYPE I 18'-0" ARROW



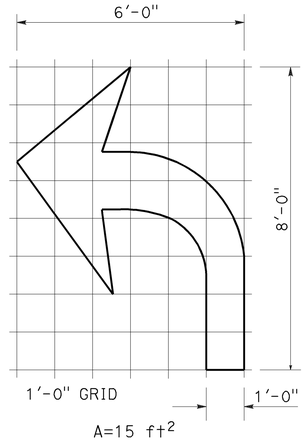
A=31 ft²

TYPE I 24'-0" ARROW



A=14 ft²

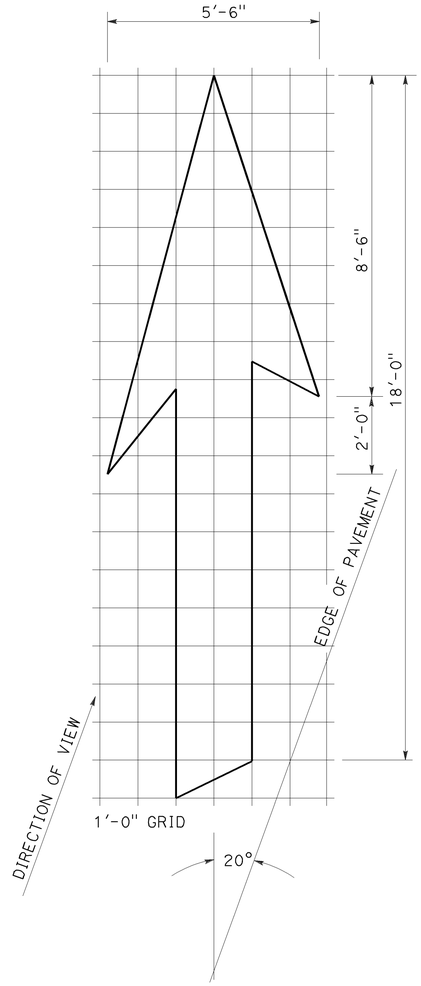
TYPE I 10'-0" ARROW



A=15 ft²

TYPE IV (L) ARROW

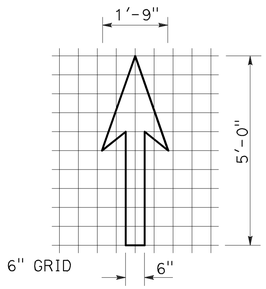
(For Type IV (R) arrow, use mirror image)



A=42 ft²

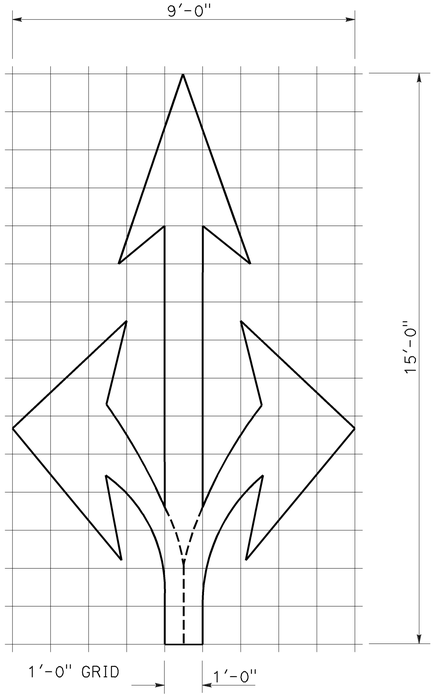
TYPE VI ARROW

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



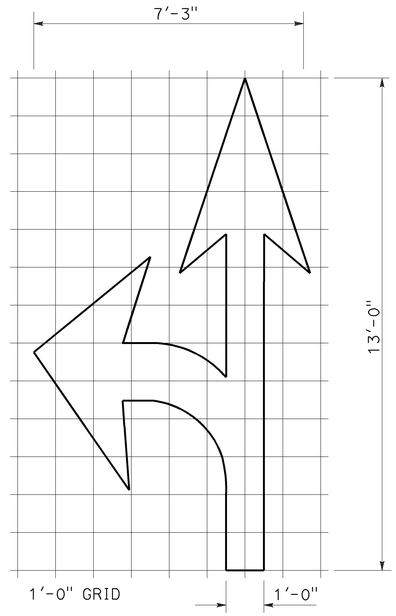
A=3.5 ft²

BIKE LANE ARROW



A=36 ft²

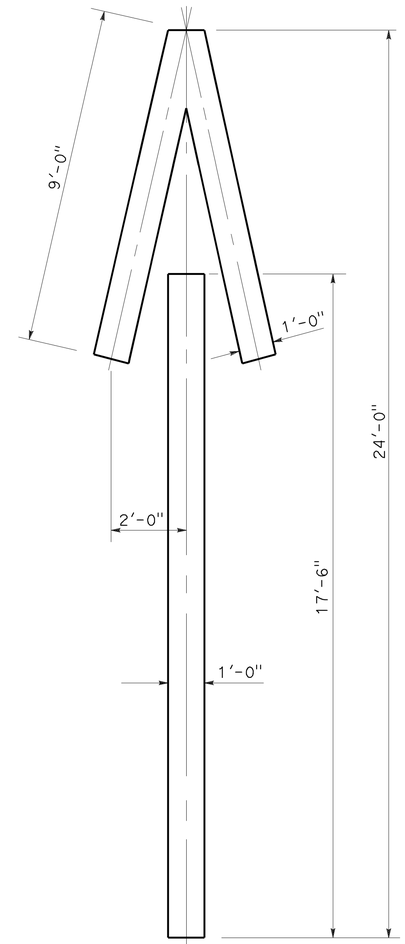
TYPE VIII ARROW



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

3-14-12