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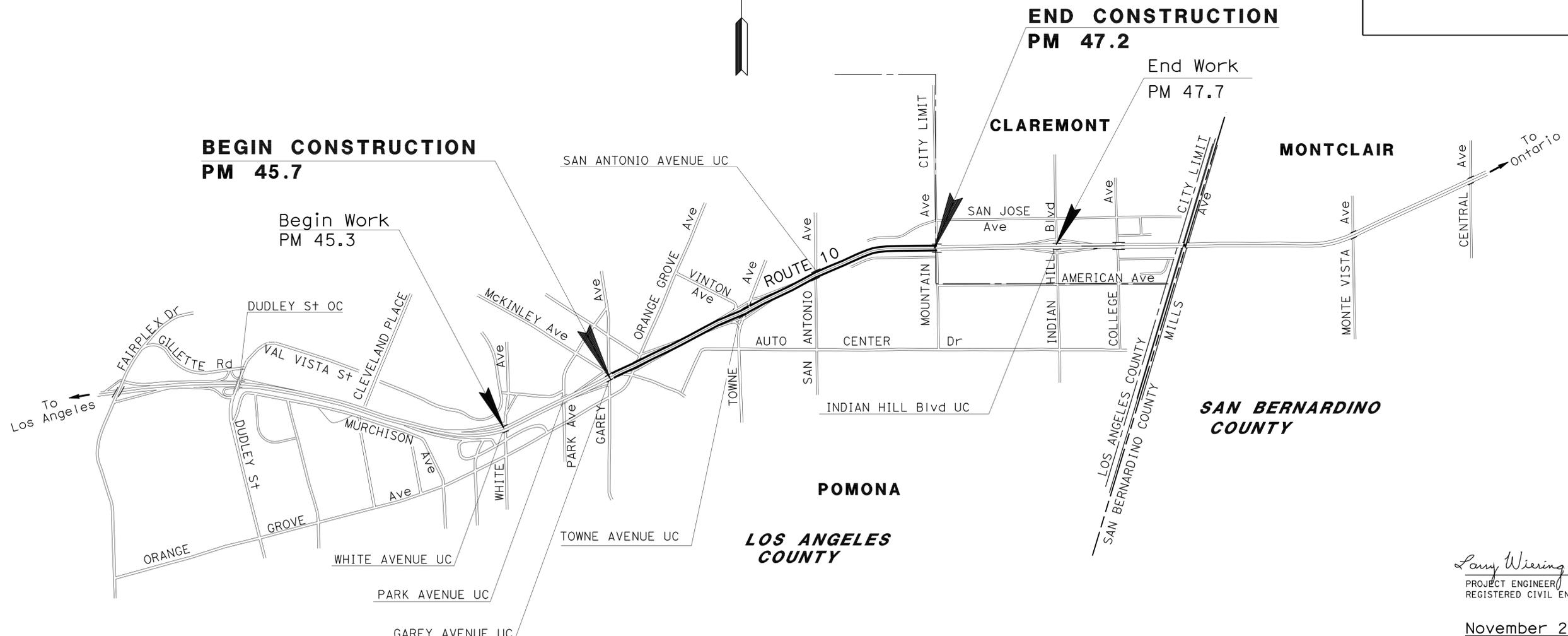
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LOS ANGELES COUNTY
IN POMONA

FROM GAREY AVENUE UNDERCROSSING TO 0.5 MILE
WEST OF INDIAN HILL BOULEVARD UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

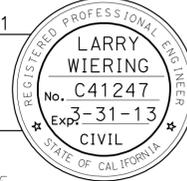


NO SCALE

Larry Wiering 11-4-11
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

November 21, 2011
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.	07-4Y5504
PROJECT ID	0700001877

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR
 HECTOR OBESO

CALCULATED/DESIGNED BY
 CHECKED BY

GEHAN ATTALAH
 LARRY WIERING

REVISED BY
 DATE REVISED

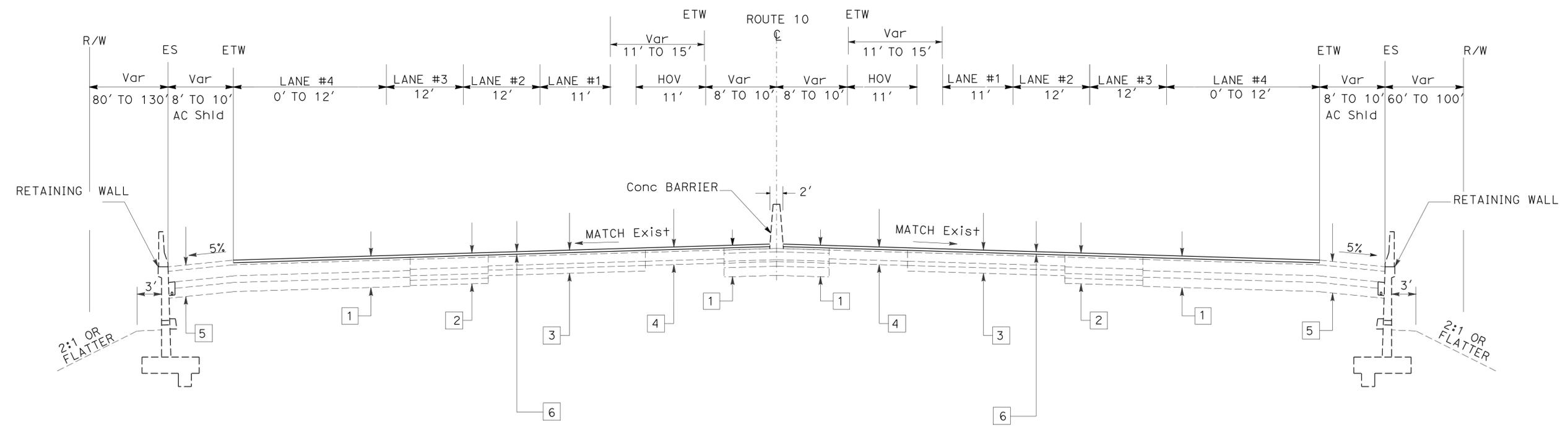
NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
5. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
6. OMIT COLD PLANING AND OVERLAYS FROM 14' BEFORE TO 14' AFTER BRIDGES.

TYPICAL PAVEMENT STRUCTURE SECTIONS

- | | |
|---|--|
| <p>1 Exist
 0.35' AC (TYPE B)
 0.85' PCC
 0.50' LEAN CONCRETE BASE
 0.70' CLASS 3 AB</p> <p>3 Exist
 0.35' AC (TYPE B)
 0.67' PCC
 0.33' CTB
 0.42' CLASS 3 AB</p> <p>5 Exist
 0.40' AC (TYPE B)
 0.45' CLASS 2 AB
 VARIES CLASS 4 AS</p> | <p>2 Exist
 0.35' AC (TYPE B)
 0.75' PCC
 0.50' CLASS A CTB
 0.35' CLASS 3 AB
 0.40' CLASS 4 AS</p> <p>4 Exist
 0.35' AC (TYPE B)
 0.67' PCC
 0.33' CTB</p> <p>6
 0.10' COLD PLANE AC PAVEMENT
 0.10' RHMA-G</p> |
|---|--|

ABBREVIATION:
 RHMA-G RUBBERIZED HOT MIX ASPHALT (GAP GRADED)



PM 45.7/47.2

FROM GARY Ave UNDERCROSSING TO MOUNTAIN Ave UNDERCROSSING

TYPICAL CROSS SECTIONS
 NO SCALE

X-1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	2	26

Larry Wiering 11-4-11
 REGISTERED CIVIL ENGINEER DATE

11-21-11
 PLANS APPROVAL DATE

LARRY WIERING
 No. 41247
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	3	26

Larry Wiering 11-4-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
LARRY WIERING
 No. 41247
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

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NOTES:

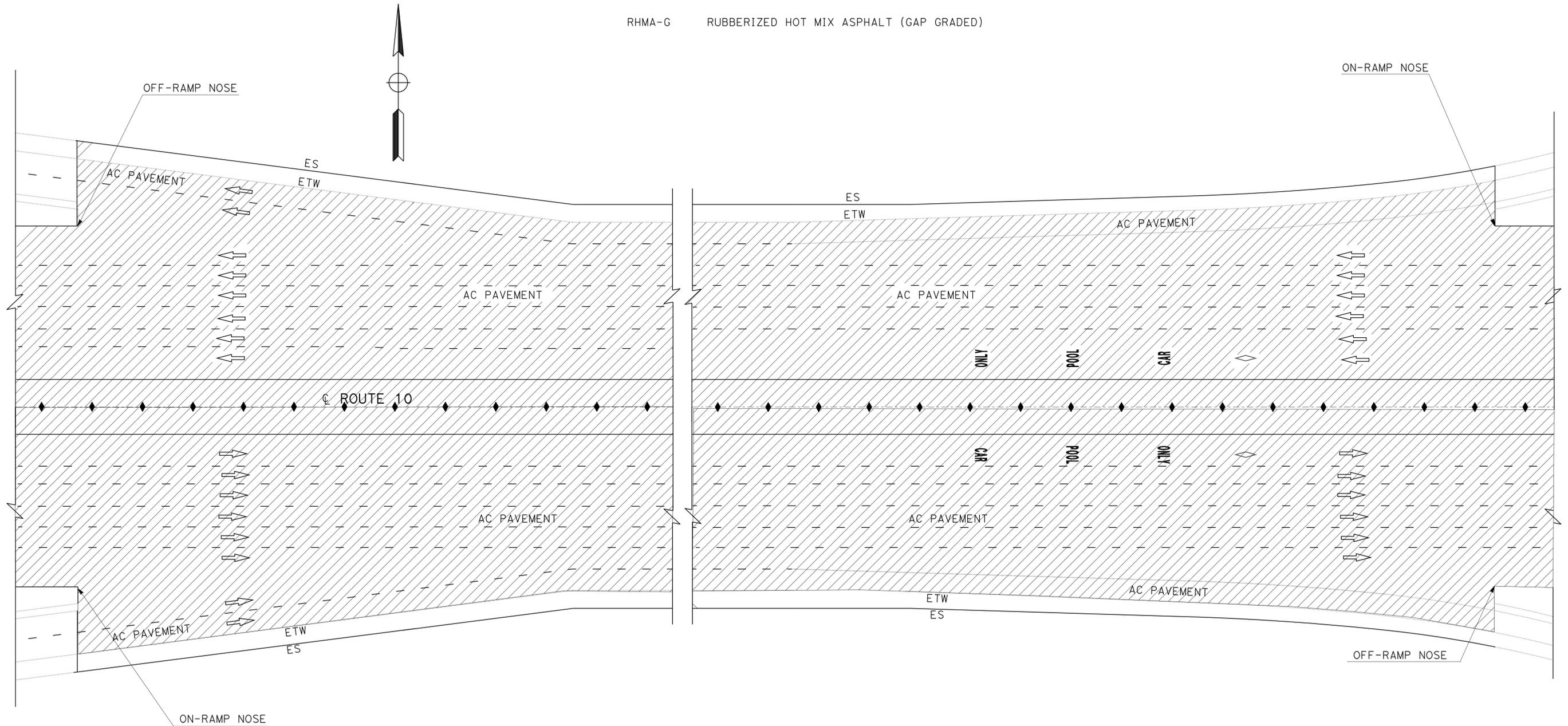
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXACT PAVING LIMITS WILL BE DETERMINED BY THE ENGINEER.
3. OMIT COLD PLANING AND OVERLAYS FROM 14' BEFORE TO 14' AFTER BRIDGES.

LEGEND:

-  0.10' COLD PLANE AND PLACE 0.10' RHMA-G
-  DIRECTION OF TRAVEL

ABBREVIATION:

RHMA-G RUBBERIZED HOT MIX ASPHALT (GAP GRADED)



TYPICAL LIMITS OF AC PAVEMENT COLD PLANING AT ENTRANCE AND EXIT GORES

CONSTRUCTION DETAILS

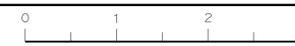
NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans MAINTENANCE ENGINEERING	GEHAN ATTALAH	LARRY WIERING
FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY
HECTOR OBESO		

USERNAME => s125624
DGN FILE => 74Y550ga001.dgn

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1963

PROJECT NUMBER & PHASE

07000018771

LAST REVISION DATE PLOTTED => 14-NOV-2011
 02-14-11 TIME PLOTTED => 16:32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	4	26

Larry Wiering 11-4-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
LARRY WIERING
 No. C41247
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

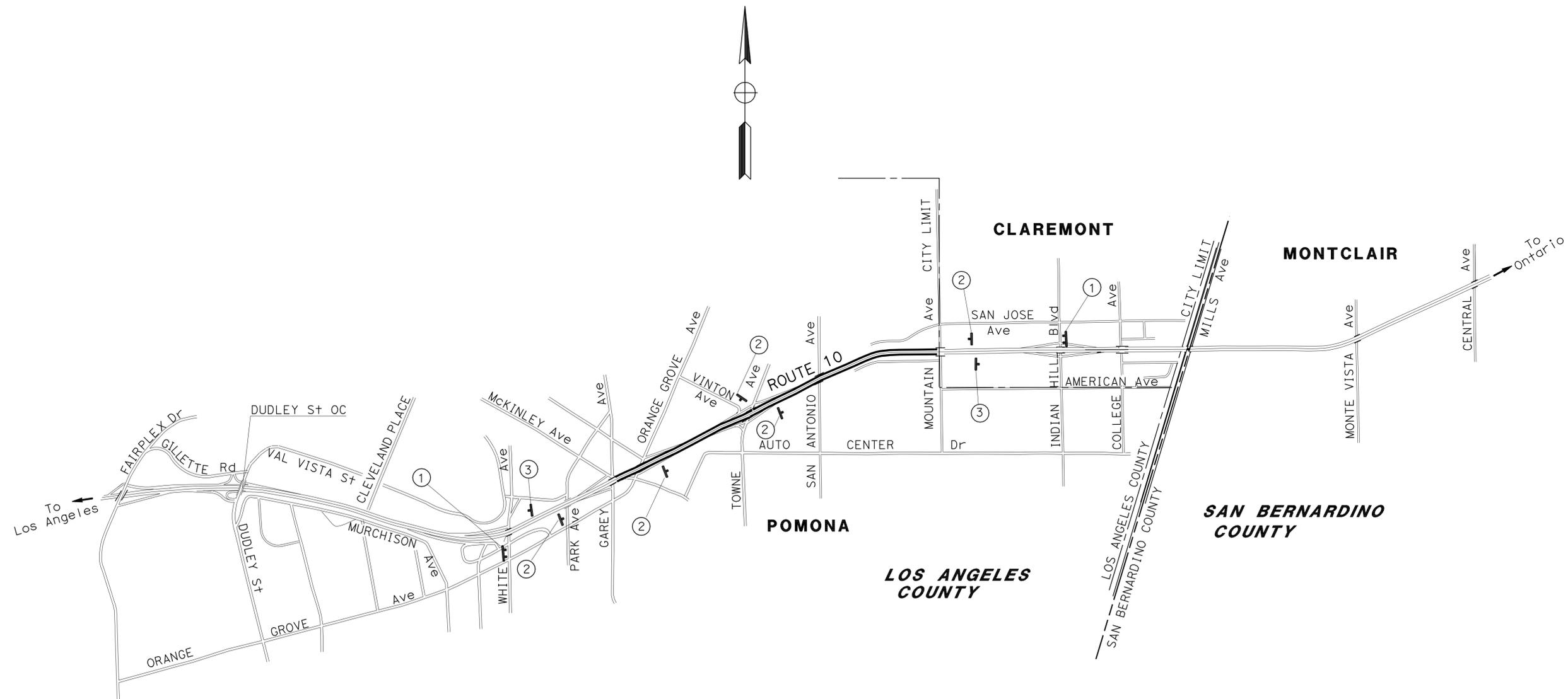
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. "TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES" SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF "ROAD WORK AHEAD" SIGN OR AS DETERMINED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS					
SIGN No. (X)	SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
1	C40 (CA)	144" x 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" x 8"	2
2	W20-1	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	5
3	G20-2	48" x 24"	END ROAD WORK	1 - 4" x 6"	2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: LARRY WIERING
 CALCULATED/DESIGNED BY: GEHAN ATTALAH
 CHECKED BY: LARRY WIERING
 REVISED BY: GEHAN ATTALAH
 DATE REVISED: LARRY WIERING



CONSTRUCTION AREA SIGNS
NO SCALE

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

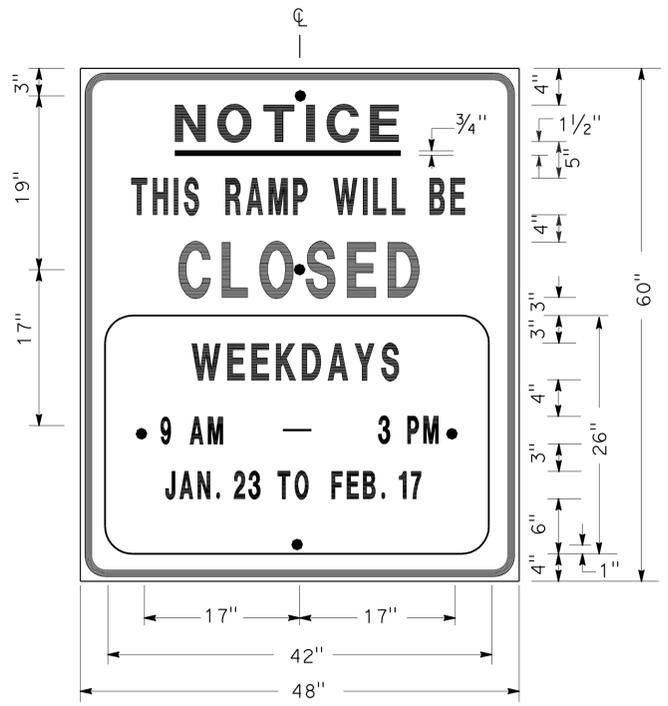
CS-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	5	26

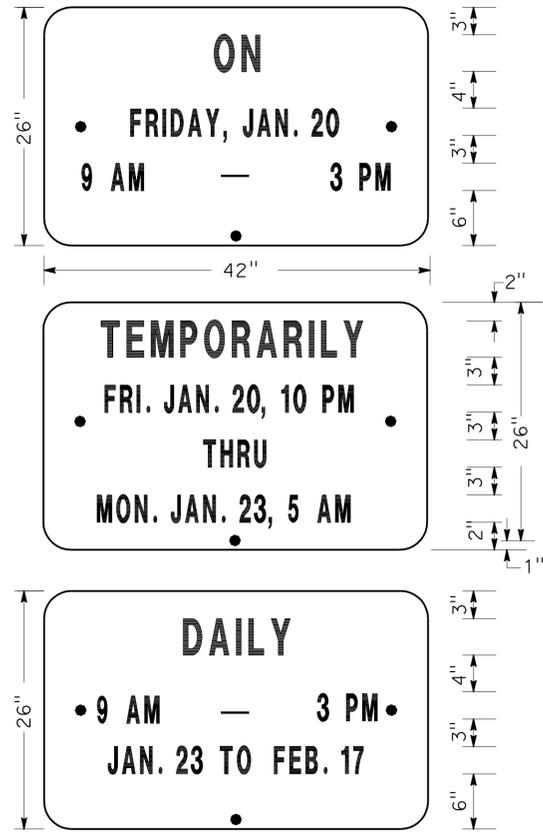
REGISTERED CIVIL ENGINEER DATE: 09-16-11
 11-21-11
 PLANS APPROVAL DATE

MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 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.



SIGN SP-1



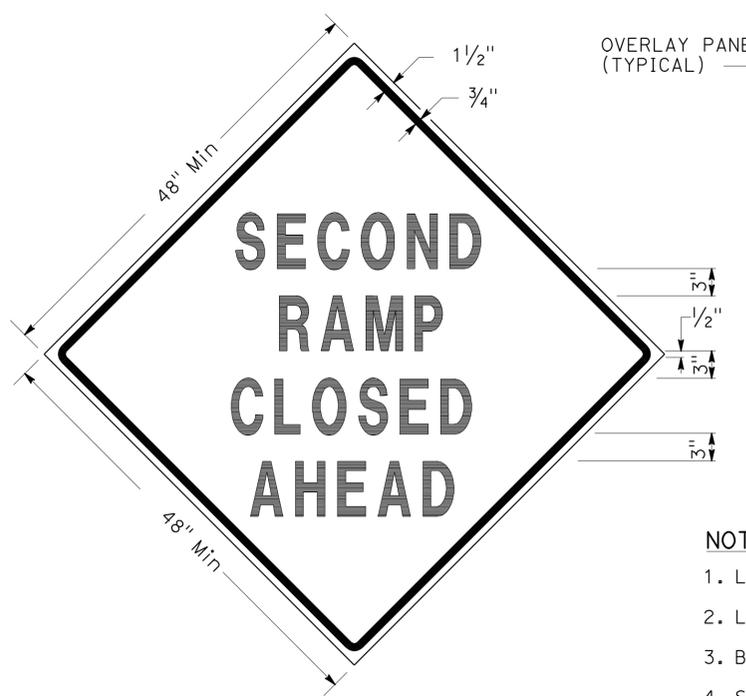
ALTERNATE OVERLAY PANELS (TYPICAL)

- NOTES: (SIGN SP-1)
- SIGNS SHALL HAVE ORANGE RETROREFLECTORIZED BACKGROUND WITH BLACK BORDER AND LETTERS.
 - BOLT HOLES SHALL BE 3/8" DIAMETER.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.

SIZE	BORDER	MARGIN	LETTER SIZE					CORNER RADIUS
	WIDTH	WIDTH	LINE 1	LINE 2*	LINE 3	LINE 4	LINE 5,6 & 7*	
48"x60"	1 1/4"	3/4"	4E	4D	6E	4D		3"
42"x26"	OVERLAY						3D	1 1/2"

* CONDENSED SPACING IF NECESSARY

SPECIAL ADVANCE NOTICE PUBLICITY SIGN



SIGN SP-3

SPECIAL SIGN FOR EXIT RAMP CLOSURES

- NOTES: (SIGNS SP-3 & SP-5)
- LETTERS - 6" SERIES D.
 - LETTERS AND BORDERS - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.



SIGN SP-5



SIGN SP-4

- NOTES: (SIGN SP-4)
- LETTERS - 6" SERIES C.
 - LETTERS AND BORDERS - BLACK ON RETROREFLECTORIZED WHITE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH STANDARD PLAN T14.

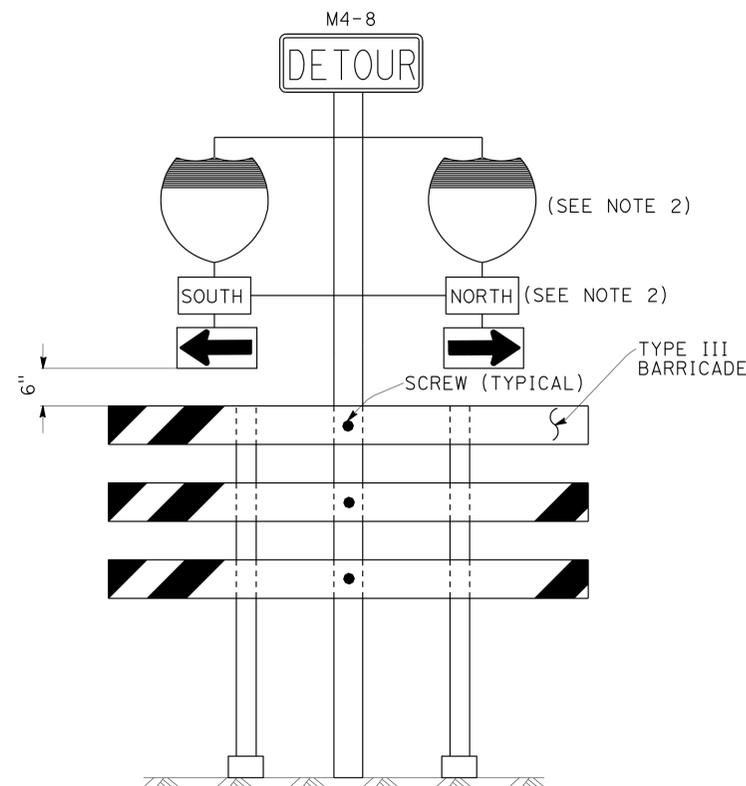
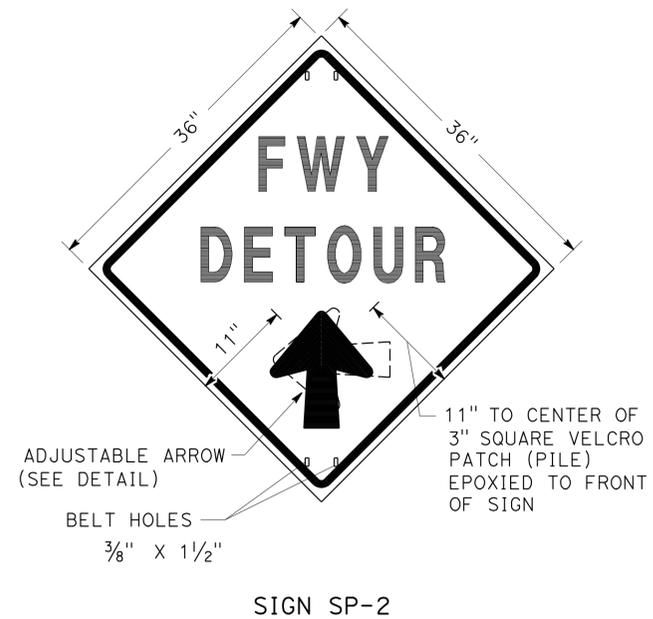
SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURES, DETOUR SIGNS
 AND MISCELLANEOUS DETAILS**

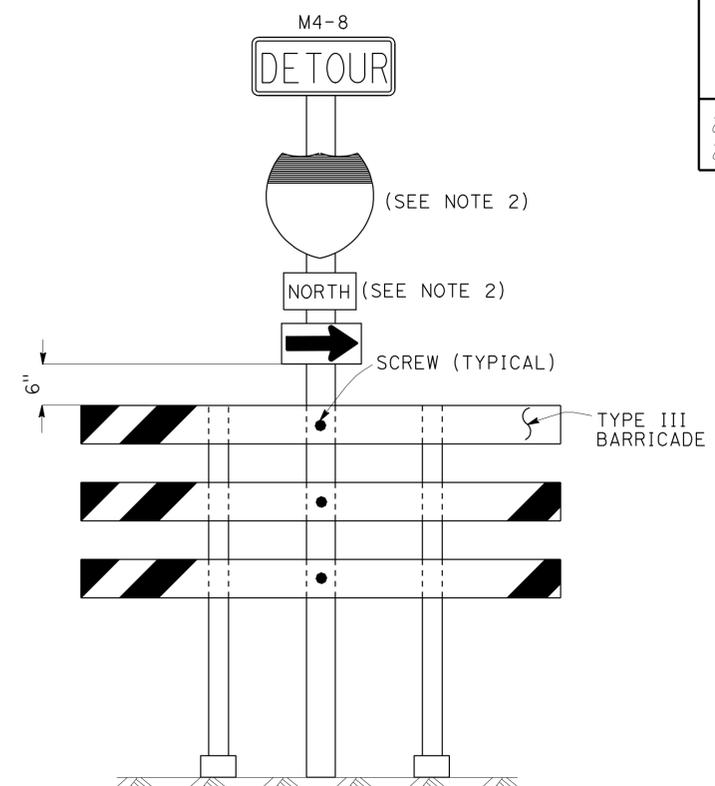
SHEET 1 OF 2

NO SCALE

THD-1



SIGN SP-6 (SEE NOTE 1)



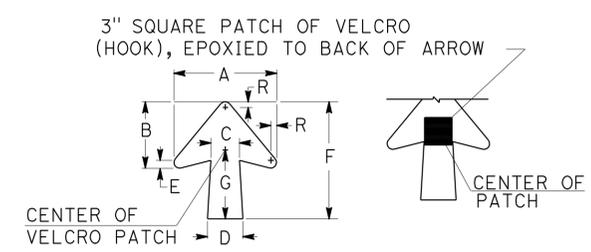
SIGN SP-7 (SEE NOTE 1)

- NOTES:** (SIGN SP-2)
- LETTERS -6" SERIES E.
 - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
 - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND EXCEPT AS OTHERWISE SHOWN ON OTHER TRAFFIC HANDLING DETAILS PLANS.

ABBREVIATION
(CA) CALIFORNIA CODE

- NOTES:** (SIGNS SP-6 & SP-7)
- IN LIEU OF PLACING SIGNS ON TYPE III BARRICADES, SIGNS, INCLUDING POSTS, MAY BE PLACED INTO THE GROUND OR FASTENED ONTO ELECTROLIERS.
 - USE APPROPRIATE ROUTE SHIELD [G26-2(CA), G27-2(CA), G28-2(CA)] AND CARDINAL DIRECTION [NORTH (M3-1), SOUTH (M3-3), EAST (M3-2), WEST (M3-4)]

SPECIAL PORTABLE FREEWAY DETOUR SIGNS



DIMENSIONS							
A	B	C	D	E	F	G	R
11 1/4"	7 1/4"	3 3/8"	4"	7/8"	13"	7 1/2"	5/8"

SPECIAL PORTABLE FREEWAY DETOUR SIGN

ADJUSTABLE ARROW DETAIL

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR RAMP CLOSURES, DETOUR SIGNS
AND MISCELLANEOUS DETAILS
SHEET 2 OF 2
 NO SCALE

THD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DT
 M
 O
 R
 E
 G
 E
 L
 REGISTERED CIVIL ENGINEER
 No. C56816
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	7	26

Martin Oregel 09-16-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE
 No. C56816
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

NOTES:

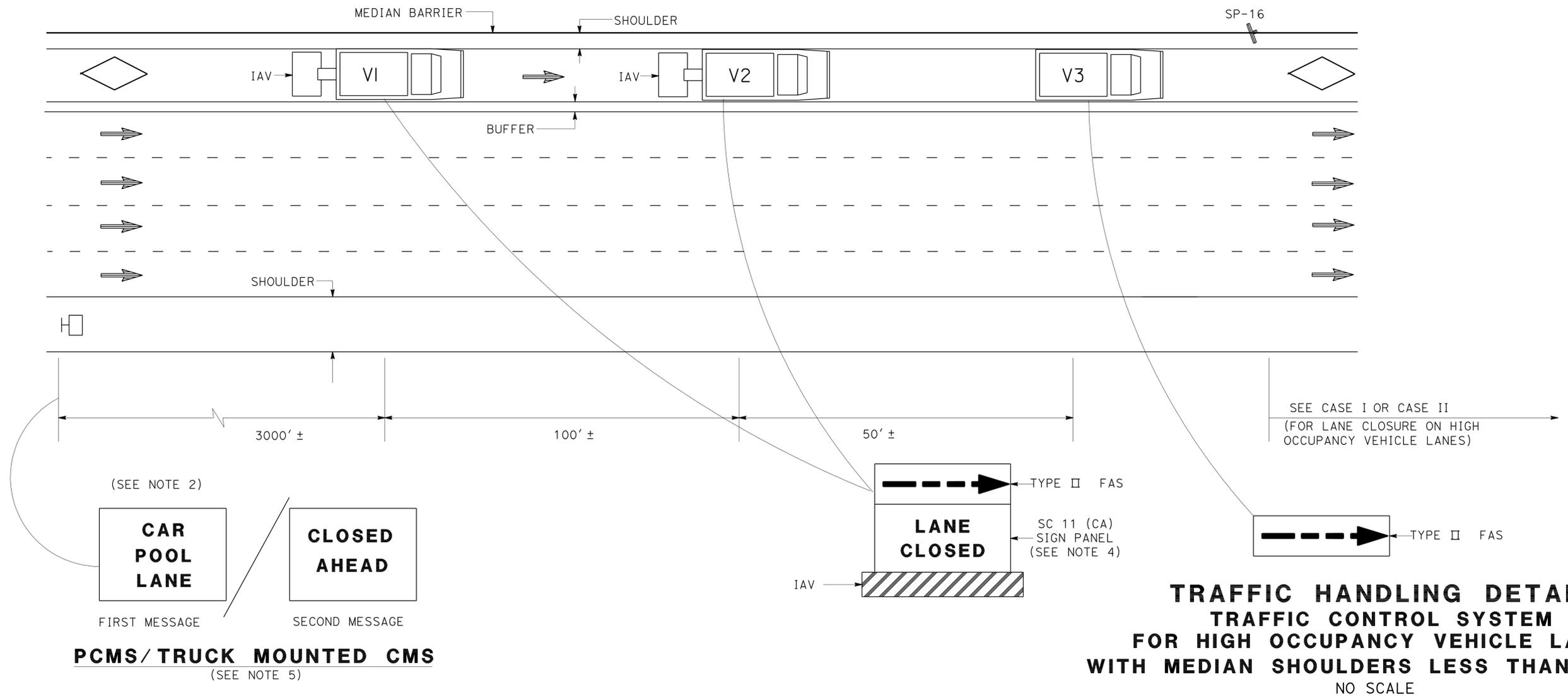
- LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PCMS SHALL BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE HOV LANE.
- A MINIMUM SIGHT DISTANCE OF 1500' SHALL BE PROVIDED IN ADVANCE OF PCMS.
- VEHICLE-MOUNTED SIGN PANELS SHALL BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.
- PLACE PCMS ON THE MEDIAN SHOULDER WHERE SUFFICIENT ROOM (SUCH AS CHP ENFORCEMENT AREAS) EXISTS.

LEGEND

- V1, V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- [Symbol] PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- [Symbol] DIRECTION OF TRAVEL
- [Symbol] HOV LANE

ABBREVIATIONS

- FAS FLASHING ARROW SIGN
- IAV IMPACT ATTENUATOR VEHICLE
- CMS CHANGEABLE MESSAGE SIGN
- (CA) CALIFORNIA CODE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- HOV HIGH OCCUPANCY VEHICLE



**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR HIGH OCCUPANCY VEHICLE LANES
WITH MEDIAN SHOULDERS LESS THAN 8 FEET
NO SCALE**

THD-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DTM

FUNCTIONAL SUPERVISOR: MARTIN OREGEL

DESIGNED BY: [Blank]

CHECKED BY: [Blank]

REVISOR: ALBERT K YU

DATE: 7/10

REVISOR: JOCELYN C CHIANG

DATE: [Blank]

REVISOR: JC

DATE: 7/10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DT M

FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 7/10

LEGEND

- IAV-V1 TRAFFIC CONTROL CREW No. 1
- IAV-V2 TRAFFIC CONTROL CREW No. 2
- CHP CALIFORNIA HIGHWAY PATROL CAR
- CONES FOR INITIAL LANE CLOSURE
- △ CONES FOR SECOND STAGE LANE CLOSURE
- 1 → DIRECTION OF TRAVEL FOR INITIAL LANE CLOSURE
- 2 → DIRECTION OF TRAVEL FOR SECOND STAGE LANE CLOSURE
- ↑↑↑ FLASHING ARROW SIGN
- PORTABLE SIGN
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

NOTES:

1. SEE STANDARD PLAN T10 FOR LANE CLOSURE DETAILS NOT SHOWN.
2. ACTIVATE PCMS ONLY DURING SECOND STAGE LANE CLOSURE INSTALLATION.
3. THE MESSAGE FOR PCMS IS: "SLOW - PREPARE/TO/STOP".

ABBREVIATIONS

- (CA) CALIFORNIA CODE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

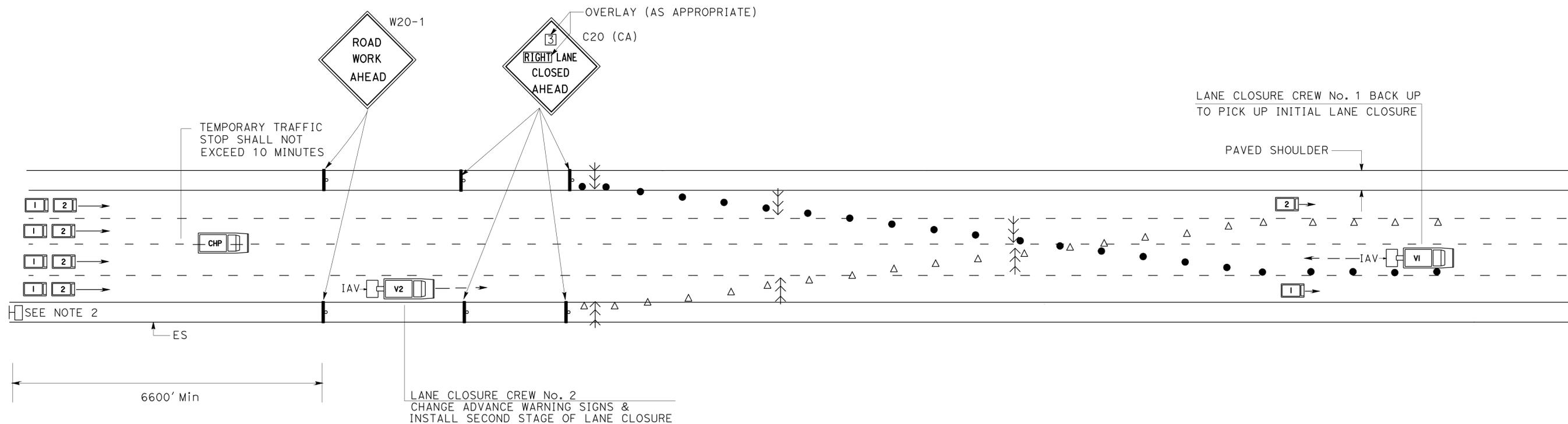
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	8	26

Martin Oregel 09-16-11
 REGISTERED CIVIL ENGINEER DATE

11-21-11
 PLANS APPROVAL DATE

MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 CIVIL

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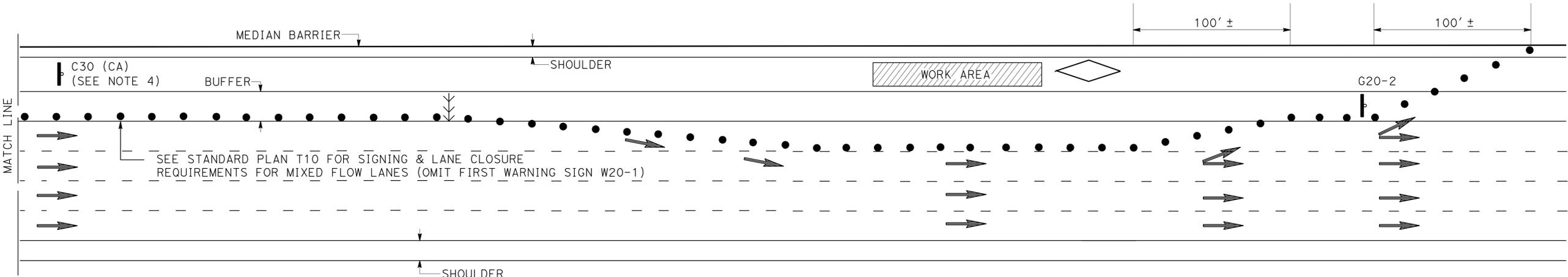
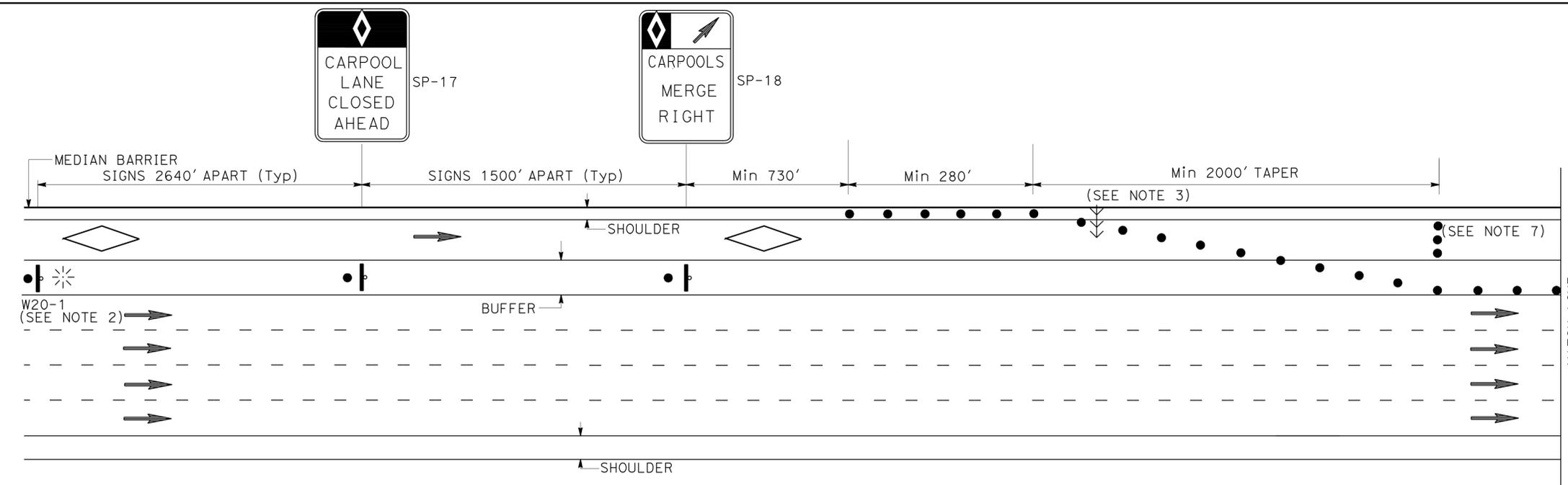
**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR "FLIP-FLOP" OPERATIONS
 NO SCALE**

THD-4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	9	26

Martin Oregel 09-16-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA



NOTES:

- AT LEAST ONE PERSON SHALL BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON NIGHT LANE CLOSURES OR DAY-TIME CLOSURES EXCEEDING 1 MILE LENGTH, INCLUDING TAPERS.
- ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS SHALL BE USED ON W20-1 SIGNS DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS SHALL BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.
- THE FLASHING ARROW SIGN SHALL BE TYPE I.
- PLACE C30 (CA) SIGNS EVERY 2000' THROUGHOUT THE LENGTH OF LANE CLOSURES.
- A MINIMUM 1500' OF SIGHT DISTANCE SHALL BE PROVIDED WHERE POSSIBLE FOR VEHICLES APPROACHING FLASHING ARROW SIGNS. LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PORTABLE DELINEATORS PLACED AT ONE-HALF THE SPACING INDICATED FOR TRAFFIC CONES MAY BE USED INSTEAD OF CONES FOR DAYTIME CLOSURES.
- A MINIMUM OF 3 CONES SHALL BE PLACED TRANSVERSELY ACROSS CLOSED LANES WHERE TAPERS END AND EVERY 2000'. TWO TYPE II BARRICADES MAY BE USED INSTEAD OF 3 CONES. THE ALIGNMENT OF CONES OR BARRICADES MAY BE SHIFTED FROM THE TRANSVERSE ALIGNMENT TO PROVIDE ACCESS TO WORK.
- SIGNS SP-17, SP-18, AND C30 (CA) SHALL BE BLACK ON ORANGE BACKGROUND. DIAMONDS ON SIGNS SHALL BE WHITE.
- THE MAXIMUM SPACING BETWEEN CONES SHALL BE APPROXIMATELY 50' IN A TAPER AND 100' ON TANGENT.

ABBREVIATIONS

- (CA) CALIFORNIA CODE
 HOV HIGH OCCUPANCY VEHICLE

SIGN PANEL SIZE (MIN)

- W20-1 48" X 48"
 SP-17 36" X 54"
 SP-18 36" X 48"
 C30 (CA) 30" X 30"
 G20-2 48" X 24"

LEGEND

- CONE
- FLASHING BEACON
- HOV LANE
- FLASHING ARROW SIGN
- PORTABLE SIGN
- DIRECTION OF TRAVEL

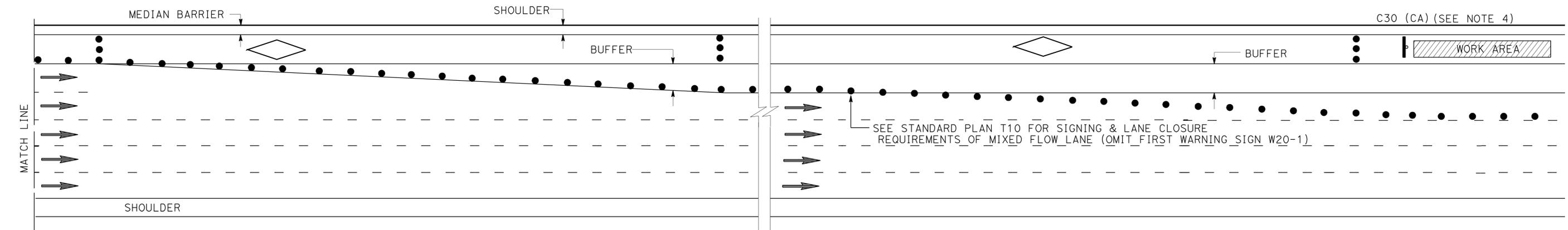
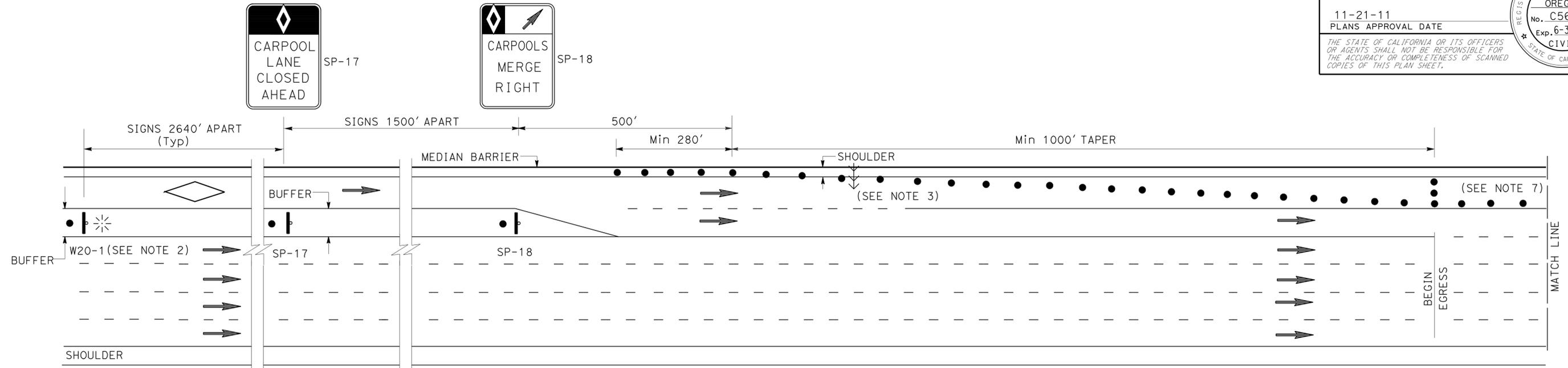
TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR ROUTE 10 (EL MONTE BUSWAY)
AT NON-INGRESS/EGRESS AREAS

CASE I
 NO SCALE

THD-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR
 MARTIN OREGEL
 CHECKED BY
 JOCELYN C CHIANG
 REVISIONS BY
 ALBERT K YU
 DATE REVISIONS
 7/10
 JC

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	10	26
 REGISTERED CIVIL ENGINEER DATE 09-16-11					
11-21-11			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES:

- AT LEAST ONE PERSON SHALL BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON NIGHT LANE CLOSURES OR DAY-TIME CLOSURES EXCEEDING 1 MILE LENGTH, INCLUDING TAPERS.
- ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS SHALL BE USED ON W20-1 SIGNS DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS SHALL BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.
- THE FLASHING ARROW SIGN SHALL BE TYPE I.
- PLACE C30 (CA) SIGNS EVERY 2000' THROUGHOUT THE LENGTH OF LANE CLOSURES.
- A MINIMUM 1500' OF SIGHT DISTANCE SHALL BE PROVIDED WHERE POSSIBLE FOR VEHICLES APPROACHING FLASHING ARROW SIGNS. LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PORTABLE DELINEATORS PLACED AT ONE-HALF THE SPACING INDICATED FOR TRAFFIC CONES MAY BE USED INSTEAD OF CONES FOR DAYTIME CLOSURES.
- A MINIMUM OF 3 CONES SHALL BE PLACED TRANSVERSELY ACROSS CLOSED LANES WHERE TAPERS END AND EVERY 2000'. TWO TYPE II BARRICADES MAY BE USED INSTEAD OF 3 CONES. THE ALIGNMENT OF CONES OR BARRICADES MAY BE SHIFTED FROM THE TRANSVERSE ALIGNMENT TO PROVIDE ACCESS TO WORK.
- SIGNS SP-17, SP-18, AND C30 (CA) SHALL BE BLACK ON ORANGE BACKGROUND. DIAMONDS ON SIGNS SHALL BE WHITE.
- THE MAXIMUM SPACING BETWEEN CONES SHALL BE APPROXIMATELY 50' IN A TAPER AND 100' ON TANGENT.

ABBREVIATIONS

- (CA) CALIFORNIA CODE
- HOV HIGH OCCUPANCY VEHICLE

SIGN PANEL SIZE (MIN)

- W20-1 48" X 48"
- SP-17 36" X 54"
- SP-18 36" X 48"
- C30 (CA) 30" X 30"

LEGEND

-  CONE
-  FLASHING BEACON
-  HOV LANE
-  FLASHING ARROW SIGN
-  PORTABLE SIGN
-  DIRECTION OF TRAVEL

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR ROUTE 10 (EL MONTE BUSWAY)
AND ADJACENT FREEWAY LANES
AT EGRESS AREAS**

**CASE II
NO SCALE**

THD-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

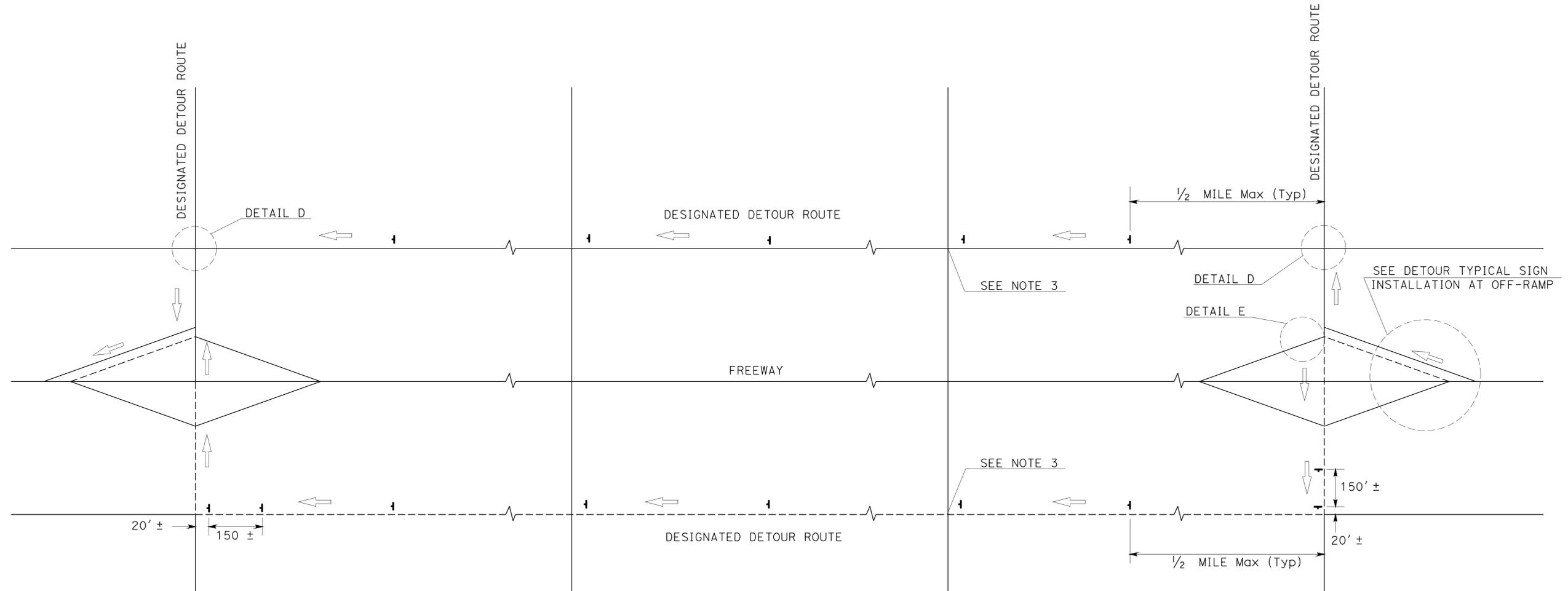
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 7/10
 REVISIONS: ALBERT K YU
 REVISIONS: DATE REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	11	26

Martin Oregel 09-16-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

LEGEND

- TEMPORARY SIGN (SP-2)
- AND/OR DESIGNATED DETOUR ROUTE
-
- DIRECTION OF TRAVEL

NOTES:

1. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
3. SP-2 SIGNS SHALL BE POSTED AT SIGNALIZED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE OR 1/2 MILE MAXIMUM APART.

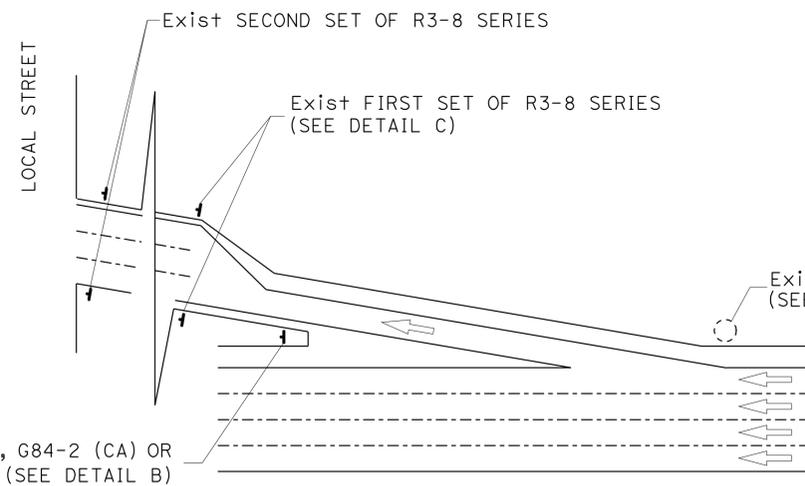
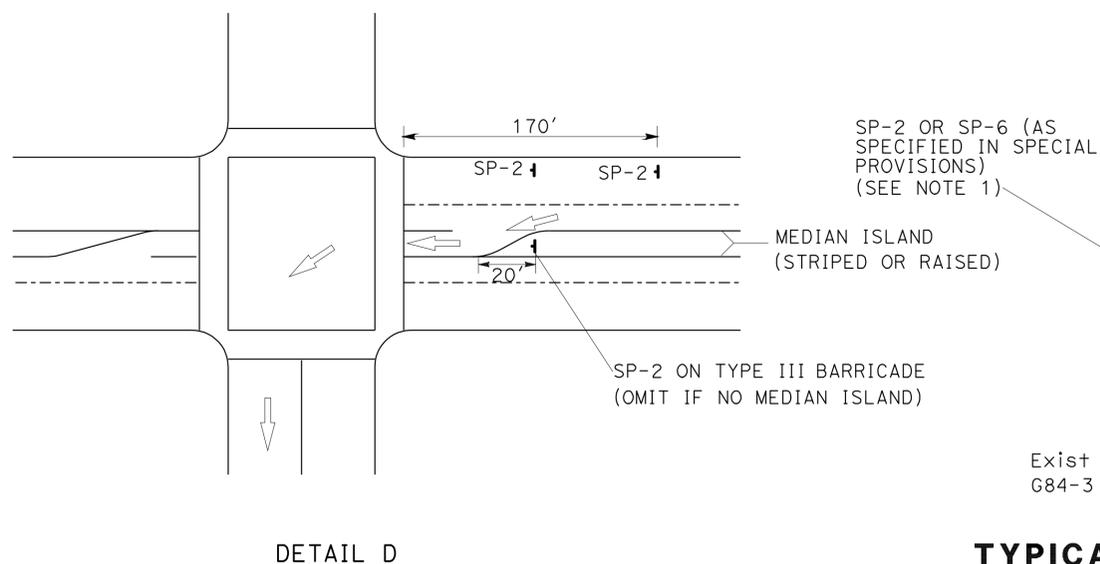
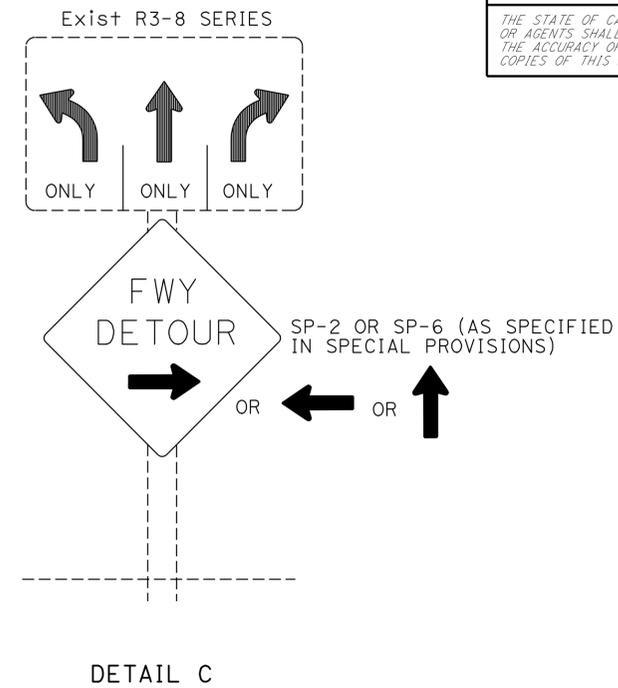
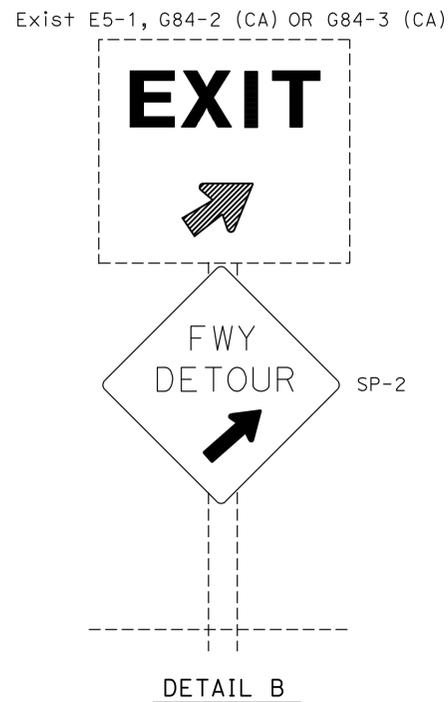
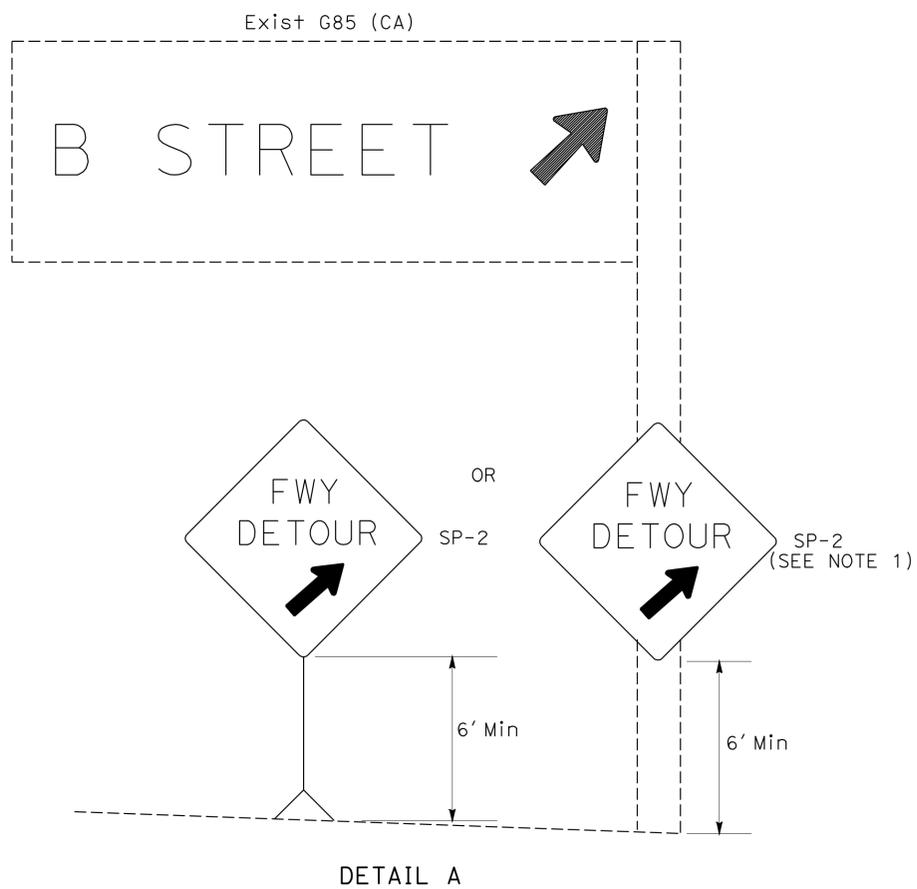
TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 1 OF 2
 NO SCALE

THD-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DTM

FUNCTIONAL SUPERVISOR	MARTIN OREGEL
CALCULATED/DESIGNED BY	ALBERT K YU
CHECKED BY	JOCELYN C CHIANG
REVISOR	JC
DATE	7/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	12	26
			09-16-11 REGISTERED CIVIL ENGINEER DATE		
11-21-11 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

NOTES:

1. TEMPORARY SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POSTS, OR SIGN POSTS.
2. OMIT DETAIL A AND DETAIL B FOR FULL FREEWAY CLOSURES.
3. SEE TRAFFIC HANDLING DETAILS PLAN-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS AND MISCELLANEOUS DETAILS SHEET 2 OF 2 FOR SP-6.

ABBREVIATIONS

(CA) CALIFORNIA CODE

LEGENDS

- TRAFFIC CONE
- ↑ TEMPORARY SIGN
- DIRECTION OF TRAVEL
- EXISTING OVERHEAD SIGN

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 2 OF 2
NO SCALE**

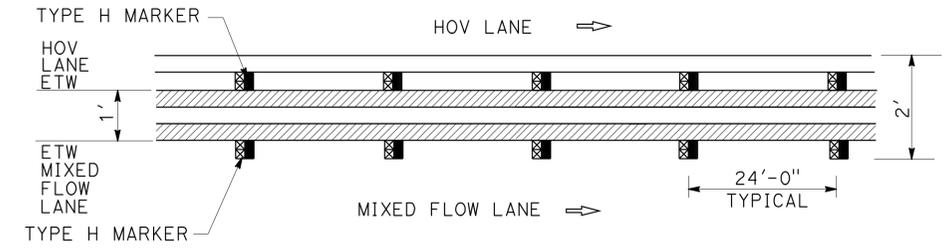
THD-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR
 MARTIN OREGEL
 DTM
 CALCULATED/DESIGNED BY
 ALBERT K YU
 CHECKED BY
 JOCELYN C CHIANG
 REVISOR BY
 JC
 DATE REVISOR
 8/10

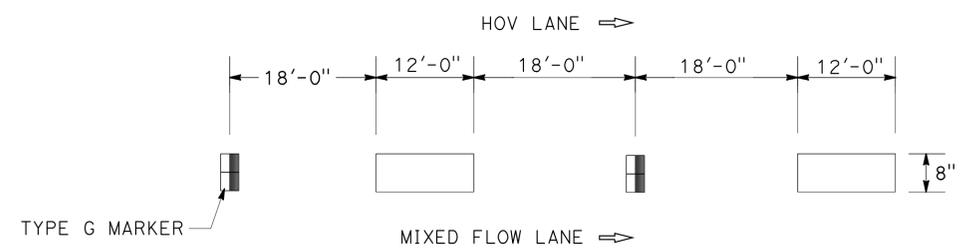
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	13	26

Larry Wiering 11-4-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

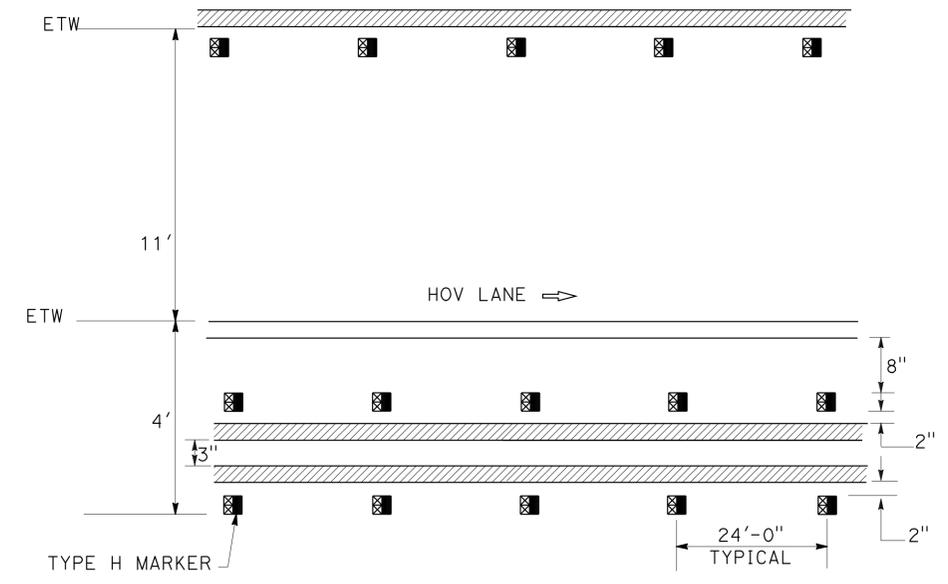
REGISTERED PROFESSIONAL ENGINEER
LARRY WIERING
 No. 41247
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA



DETAIL A - HOV BUFFER STRIPING



DETAIL M-10 - INGRESS/EGRESS STRIPING



DETAIL B - HOV BUFFER STRIPING

BUFFER WIDTH-4'

NOTES:

1. SEE PAVEMENT DELINEATION QUANTITIES FOR LOCATION AND TYPES OF TRAFFIC STRIPES AND PAVEMENT MARKING.
2. CONFLICTING STRIPING SHALL BE REMOVED.
3. USE TYPE C RED-CLEAR RETROREFLECTIVE MARKERS ON DETAIL M-10 AT SEGMENTS WITHIN LIMITS OF DETAIL 14 (MODIFIED).
4. USE TYPE HR RED-YELLOW RETROREFLECTIVE MARKERS ON BUFFER STRIPES AT SEGMENTS WITHIN LIMITS OF DETAILS 14 (MODIFIED).

LEGEND:

- 4" WHITE THERMOPLASTIC STRIPE
- 8" WHITE THERMOPLASTIC STRIPE
- 4" YELLOW THERMOPLASTIC STRIPE
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
- TYPE C RED-CLEAR RETROREFLECTIVE MARKER
- 2-TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKERS
- DIRECTION OF TRAVEL

PAVEMENT DELINEATION DETAILS
NO SCALE

PDD-1

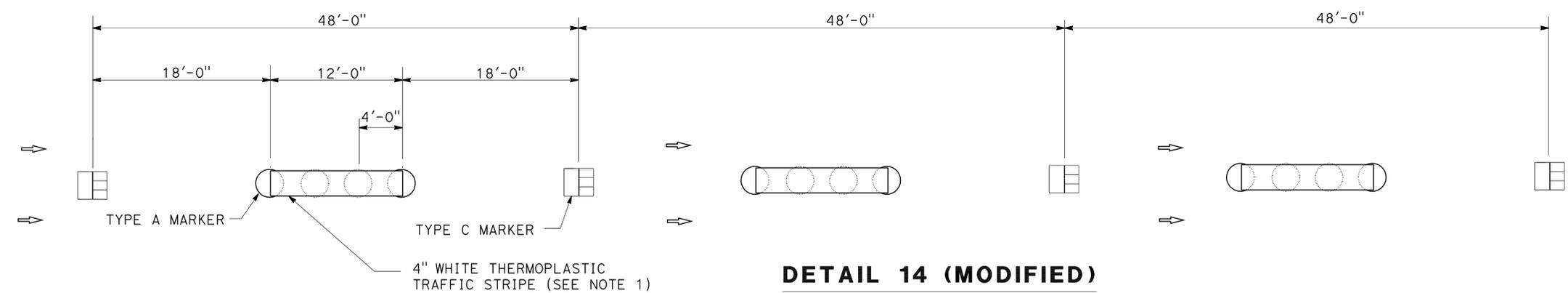
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: HECTOR OBESO
 CALCULATED/DESIGNED BY: LARRY WIERING
 CHECKED BY: LARRY WIERING
 REVISIONS: GEHAN ATTALAH, LARRY WIERING
 REVISOR: LARRY WIERING
 DATE: 11-21-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	14	26

Larry Wiering 11-4-11
 REGISTERED CIVIL ENGINEER DATE
 11-21-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LARRY WIERING
 No. 41247
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

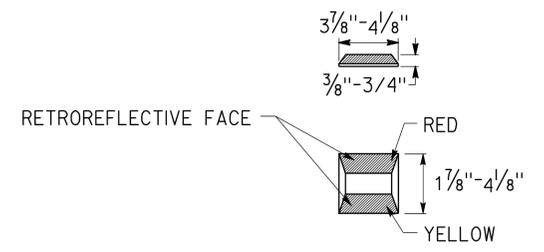
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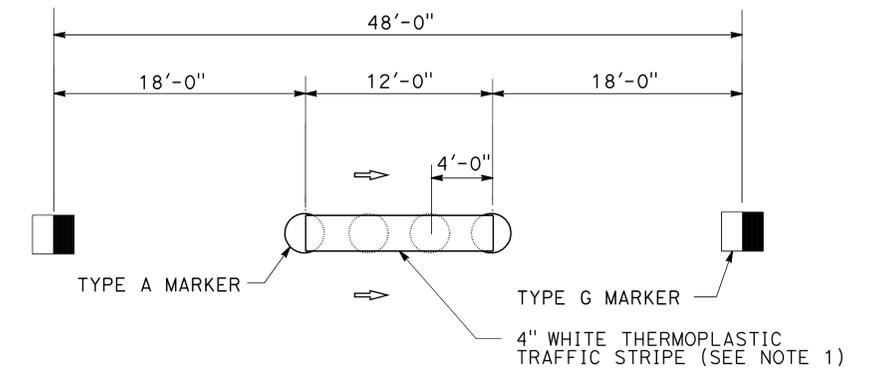
DETAIL 14 (MODIFIED)

NOTE:

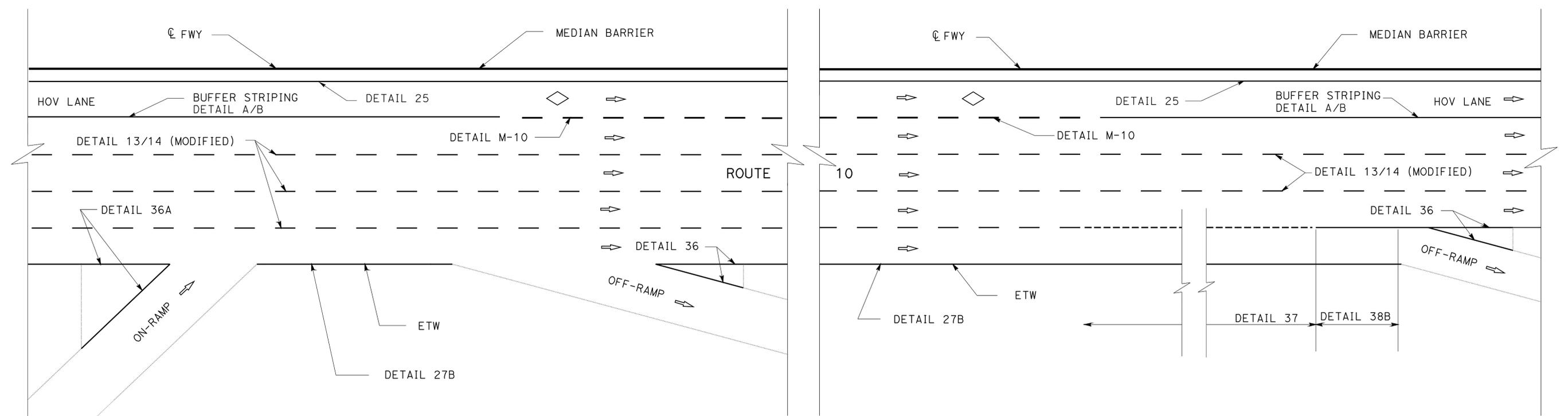
1. APPLY 4" WIDE THERMOPLASTIC TRAFFIC STRIPE ON TOP OF TYPE A NON-REFLECTIVE MARKERS.



TYPE HR
RED-YELLOW RETROREFLECTIVE MARKER



DETAIL 13 (MODIFIED)



RAMPS

MAINLINE LANE DROP TO A ONE LANE EXIT

PAVEMENT DELINEATION DETAILS
NO SCALE

PDD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: HECTOR OBESO
 CALCULATED/DESIGNED BY: LARRY WIERING
 CHECKED BY:
 REVISIONS: GEHAN ATTALAH, LARRY WIERING
 REVISOR: DATE REVISOR: DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	15	26

Larry Wiering 11-4-11
REGISTERED CIVIL ENGINEER DATE

11-21-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
LARRY WIERING
No. C41247
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

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PAVEMENT DELINEATION QUANTITIES

DIRECTION	LOCATION	THERMOPLASTIC TRAFFIC STRIPE										THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER					REMOVE PAVEMENT MARKER
		DETAIL A DETAIL B		DETAIL 27B	DETAIL 25	DETAIL M-10	DETAIL 13/14 (MODIFIED)	DETAIL 8	DETAIL 36	DETAIL 36A	DETAIL 37		RETROREFLECTIVE			NON-REFLECTIVE		
		4" WHITE STRIPE	4" YELLOW STRIPE	4" WHITE STRIPE	4" YELLOW STRIPE	8" WHITE STRIPE BROKEN (36-12)	4" WHITE STRIPE BROKEN (36-12)	4" WHITE STRIPE BROKEN (17-7)	8" WHITE STRIPE	8" WHITE STRIPE BROKEN (12-3)	SYMBOLS AND WORDS		TYPE C	TYPE G	TYPE H	TYPE A	TYPE AY	
		LF	LF	LF	LF	LF	LF	LF	LF	SQFT	EA			EA		EA		
EB	PM 45.7 TO PM 47.2	9,674	19,348	9,674	9,674	910	28,630	455	784	455	665	664	56	656	852	2,275	135	3,974
WB	PM 45.7 TO PM 47.2	9,674	19,348	9,674	9,674	910	28,630	427	1,148	420	420	558	60	588	852	2,275	135	3,910
	SUB TOTAL	19,348	38,696	19,348	19,348	1,820	57,260	882	1,932	875	1,085	1,222	116	1,244	1,704	4,550	270	7,884
	TOTAL	96,740				1,820	57,260	882	2,807		1,085	1,222	3,064			4,820		7,884

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR
LARRY WIERING

CALCULATED-DESIGNED BY
CHECKED BY

GEHAN ATTALLAH
LARRY WIERING

REVISED BY
DATE REVISED

PAVEMENT DELINEATION QUANTITIES

PDQ-1

LAST REVISION | DATE PLOTTED => 14-NOV-2011
00-00-00 | TIME PLOTTED => 16:35

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR
LARRY WIERING

CALCULATED-DESIGNED BY
CHECKED BY

GEHAN ATTALLAH
LARRY WIERING

REVISED BY
DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	16	26

Larry Wiering 11-4-11
REGISTERED CIVIL ENGINEER DATE

11-21-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
LARRY WIERING
No. C41247
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

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ROADWAY QUANTITIES					
LOCATION	DIRECTION	COLD PLANE ASPHALT CONCRETE PAVEMENT	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TACK COAT	CRACK TREATMENT
		SQYD	TON	TON	LNMI
PM 45.7 TO PM 47.2	EB	62,500	4,600	12	6
PM 45.7 TO PM 47.2	WB	62,250	4,400	13	6
TOTAL		124,750	9,000	25	12

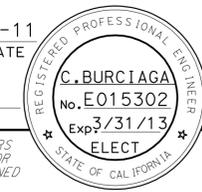
SUMMARY QUANTITIES
Q-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	17	26

 11-14-11
 REGISTERED ELECT ENGINEER DATE

11-21-11
 PLANS APPROVAL DATE

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(RAMP METERING SYSTEM) INDUCTIVE LOOP DETECTOR SCHEDULE (ROUTE 10)

PM	LOCATION	CONTROLLER CABINET No.	SEE DETAIL "A" THIS SHEET FOR TYPICAL LOCATION OF INDUCTIVE LOOP DETECTORS										No. OF STUBOUTS (REPLACE)	
			1	2	3	4	5	6	7	8	9	10		
46.01	EB ORANGE GROVE Ave	rm 0764	X	X	X	X	X	X	X	X	X	X	X	2
46.23	WB TOWNE Ave	rm 0768	X	X	X	X	X							1
46.57	EB TOWNE Ave	rm 0765	X	X	X	X	X	X	X	X	X	X	X	2

X - INSTALL TYPE E INDUCTIVE LOOP DETECTOR.

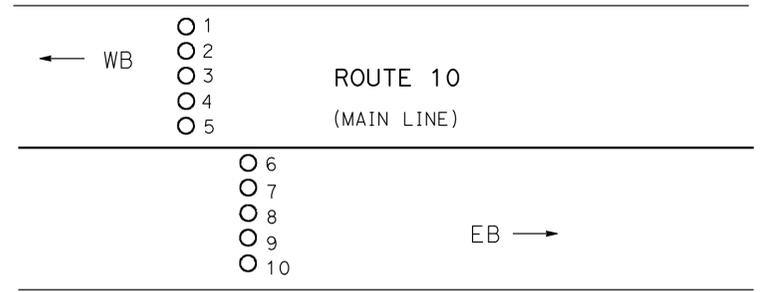
GENERAL NOTES: (SHEETS E-1 TO E-3)

1. ABANDON EXISTING STUBOUTS. INSTALL NEW 2" C STUBOUTS FOR NEW INDUCTIVE LOOP DETECTORS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE EXISTING INDUCTIVE LOOP DETECTORS.
3. NEW INDUCTIVE LOOP DETECTOR SHALL BE SPLICED TO EXISTING dic IN ADJACENT PULL BOX.
4. TAG EXISTING dic IN ADJACENT PULL BOX AND AT CONTROLLER CABINET.
5. ALL NEW HOME RUNS FOR NEW INDUCTIVE LOOP DETECTORS ON THE MAINLINE SHALL BE CUT TO THE RIGHT SHOULDER.
6. ABANDON EXISTING INDUCTIVE LOOP DETECTORS. INSTALL NEW INDUCTIVE LOOP DETECTORS AT SAME LOCATION.

(TRAFFIC MONITORING STATION) INDUCTIVE LOOP DETECTOR SCHEDULE (ROUTE 10)

PM	LOCATION	CONTROLLER CABINET No.	SEE DETAIL "A" THIS SHEET FOR TYPICAL LOCATION OF INDUCTIVE LOOP DETECTORS										No. OF STUBOUTS (REPLACE)	
			1	2	3	4	5	6	7	8	9	10		
46.90	1/3 mile WEST OF MOUNTAIN Ave	+ms 2129	X	X	X	X	X	X	X	X	X	X	X	2
47.20	MOUNTAIN Ave	+ms 2109	X	X	X	X	X	X	X	X	X	X	X	2

X - INSTALL TYPE E INDUCTIVE LOOP DETECTOR.



DETAIL "A"

TYPICAL DETAIL FOR LOOP DETECTOR INSTALLATION

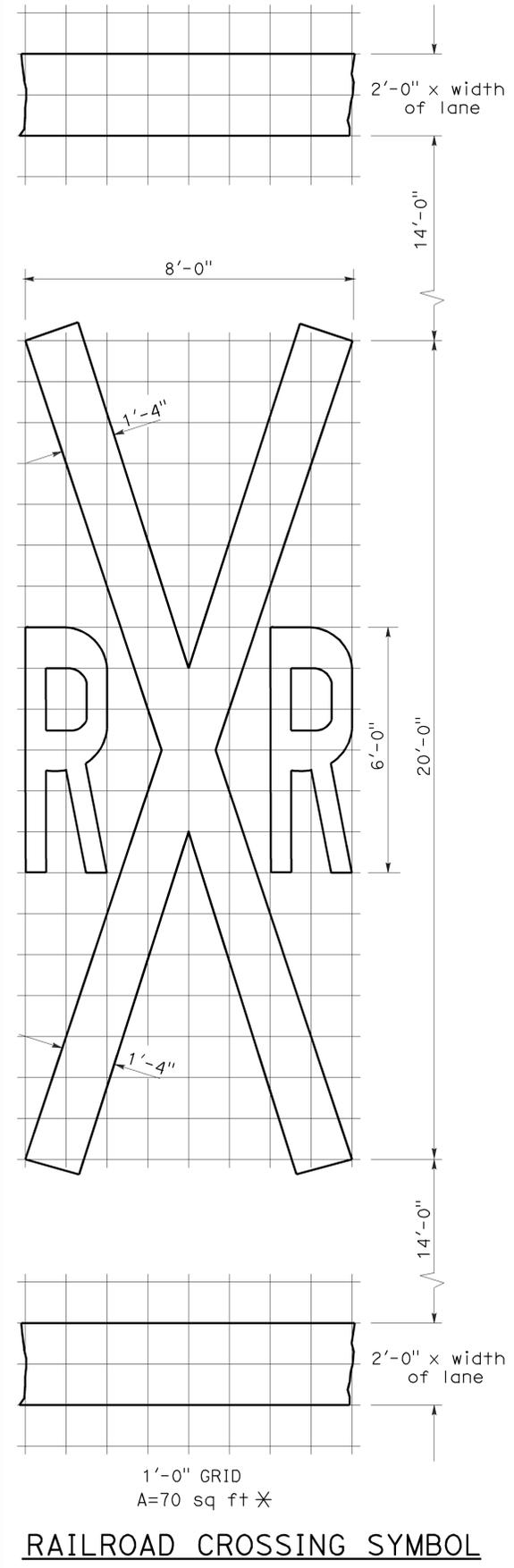
MODIFY RAMP METERING SYSTEM

MODIFY TRAFFIC MONITORING STATION

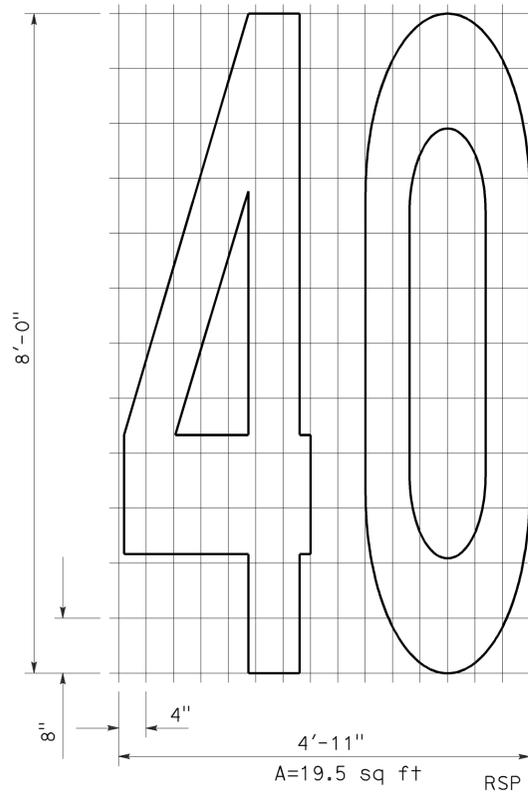
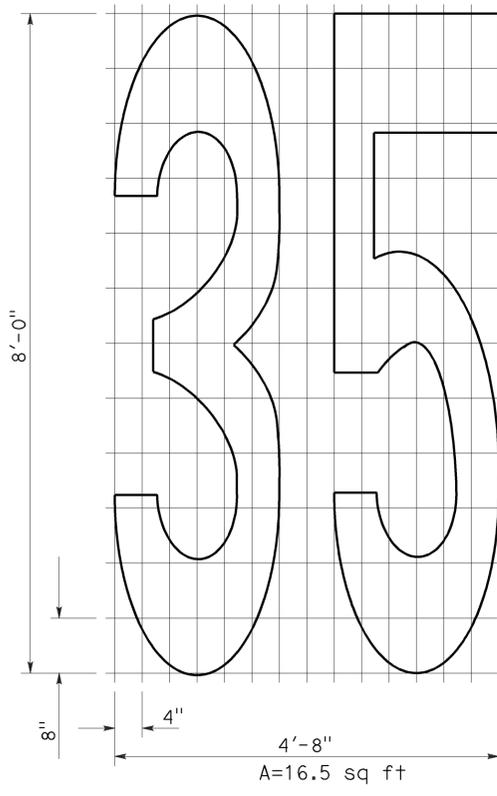
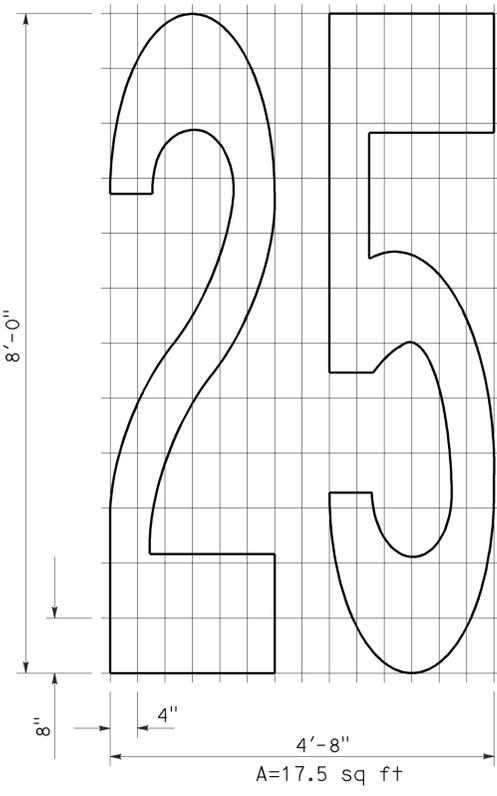
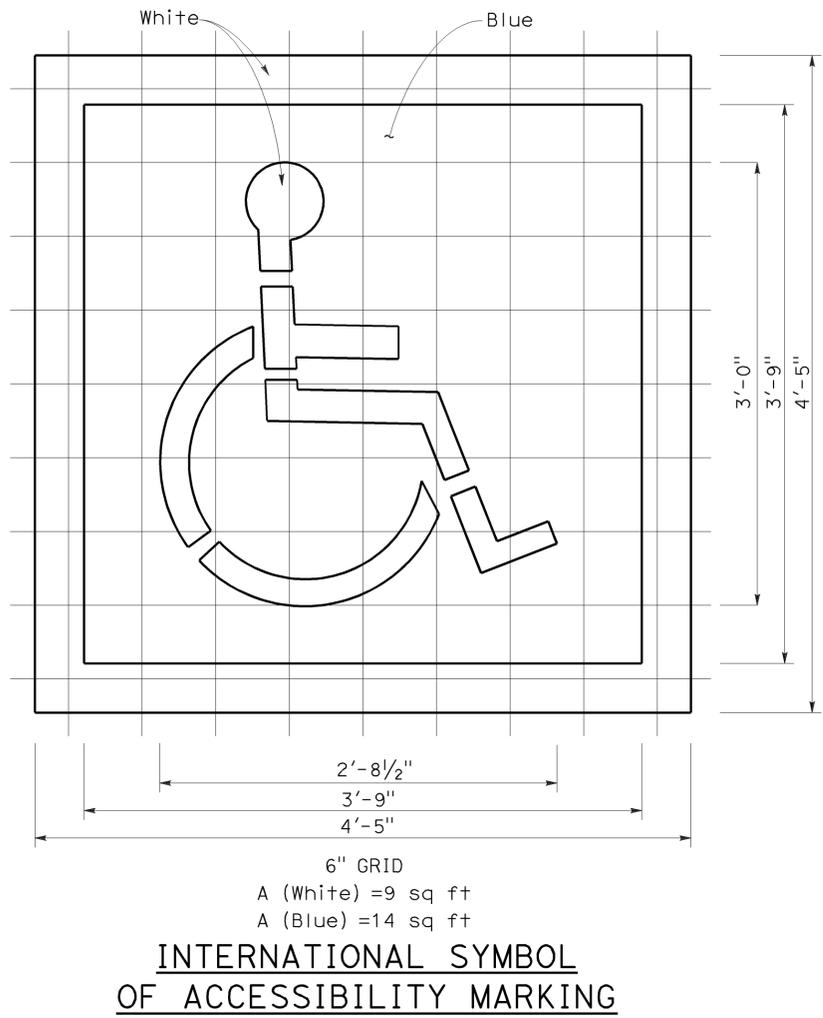
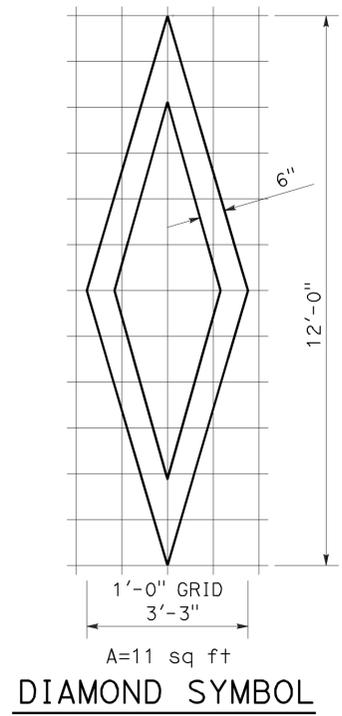
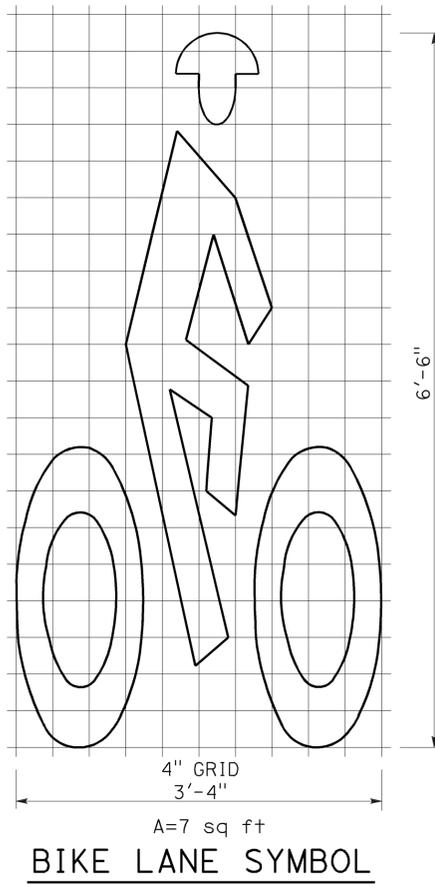
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: YI TSAU
 CALCULATED/DESIGNED BY: CECILIO BURCIAGA
 CHECKED BY: YI TSAU
 REVISED BY: DATE REVISION:

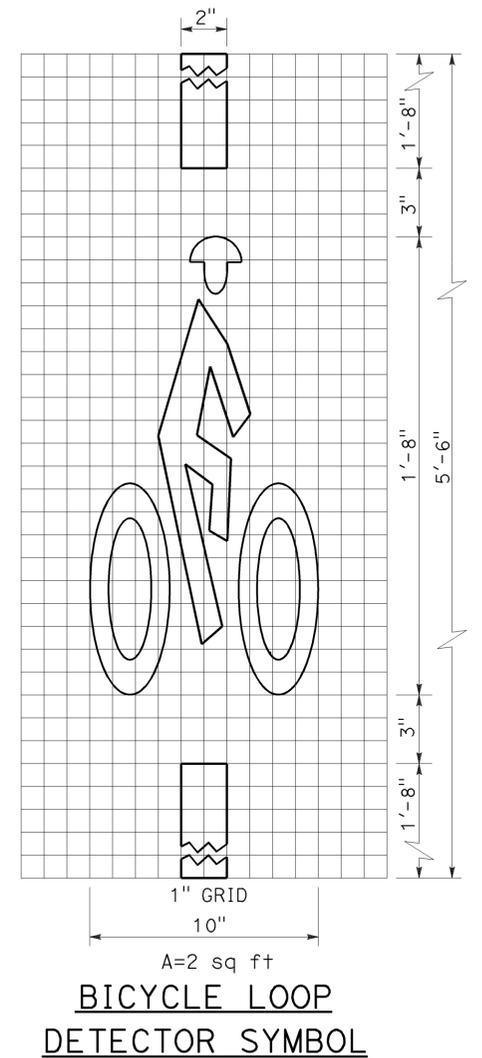
To accompany plans dated 11-21-11



*70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



NUMERALS



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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

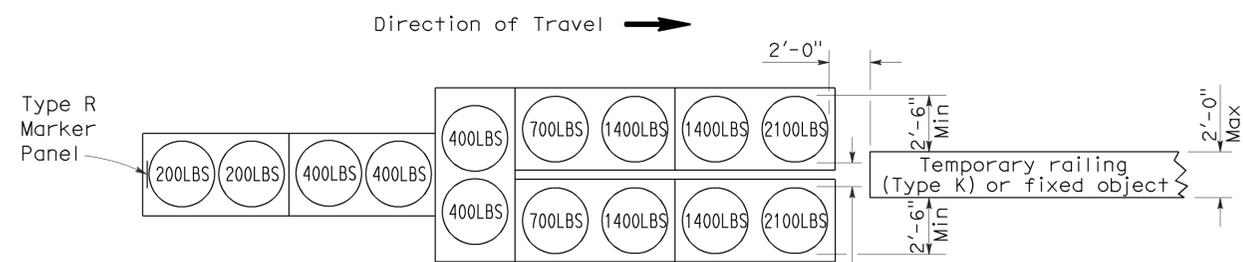
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	19	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

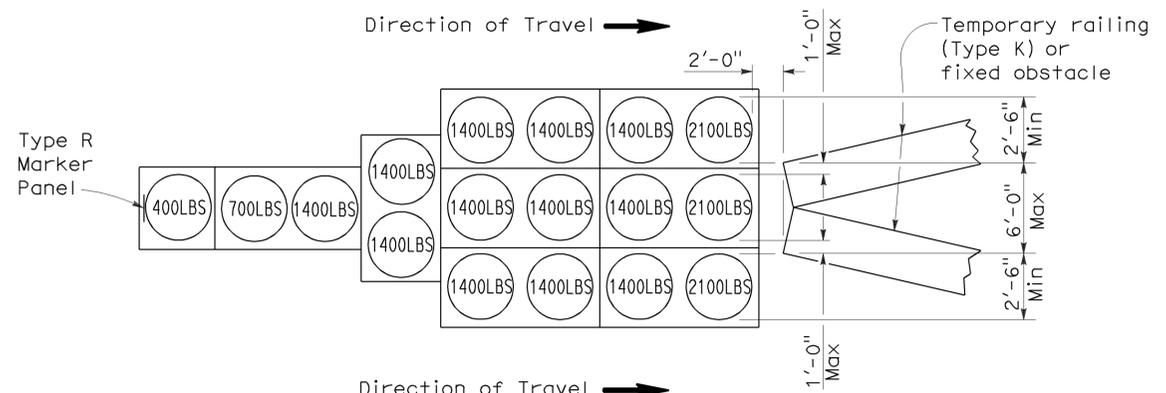
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To accompany plans dated 11-21-11



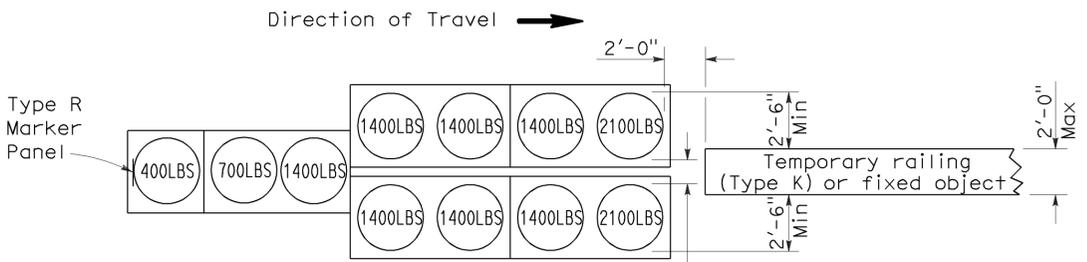
ARRAY 'TU14'

Approach speed 45 mph or more



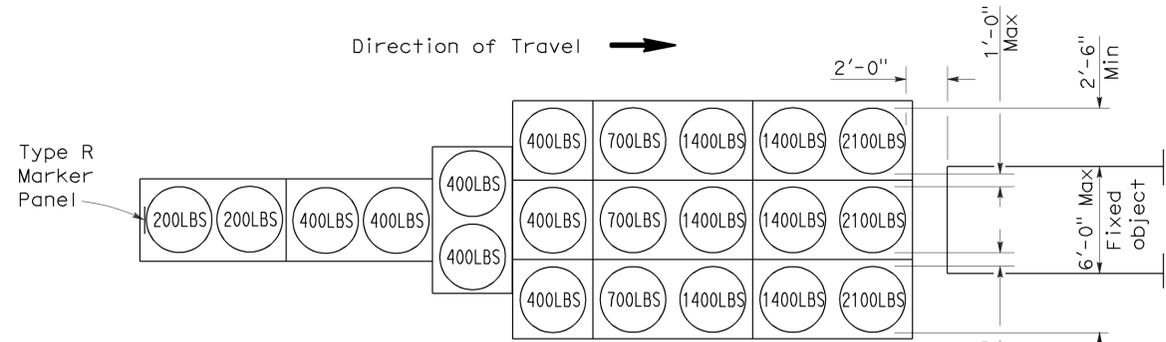
ARRAY 'TU17'

Approach speed less than 45 mph



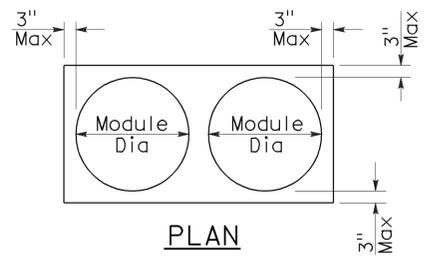
ARRAY 'TU11'

Approach speed less than 45 mph

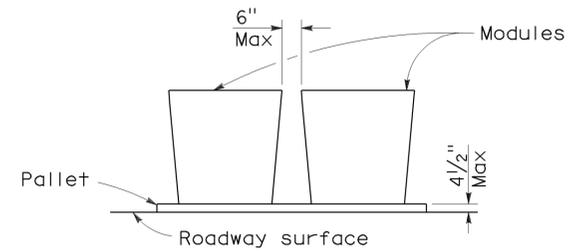


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	20	26

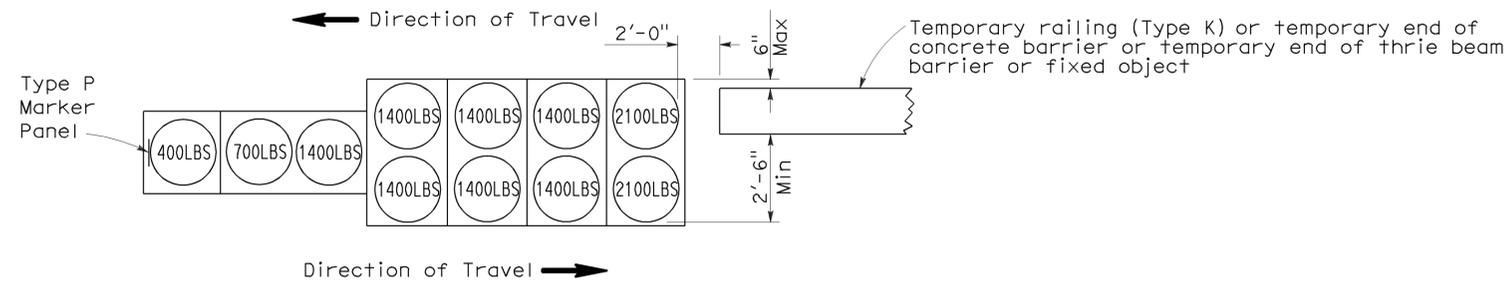
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

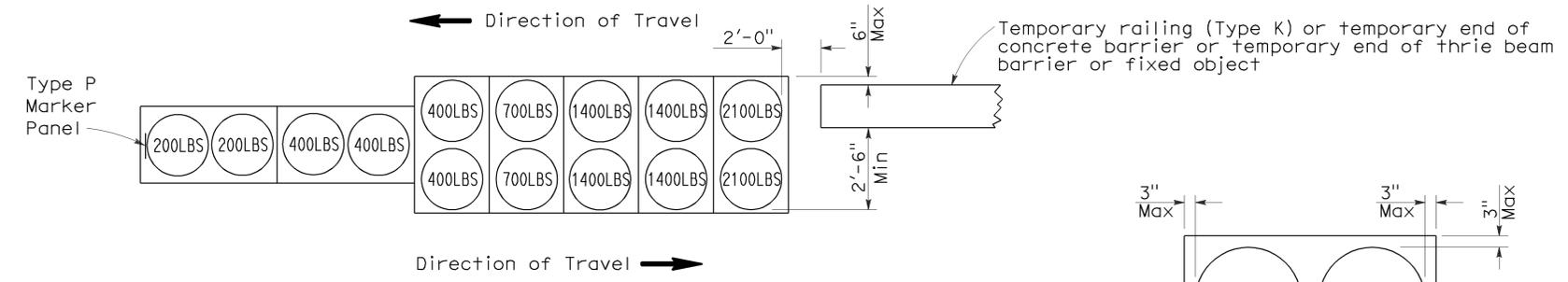
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To accompany plans dated 11-21-11



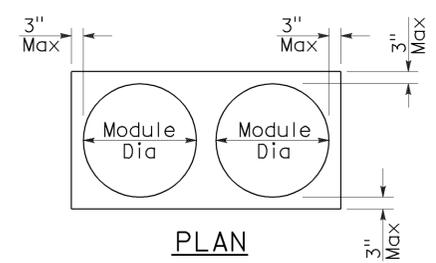
ARRAY 'TB11'

Approach speed less than 45 mph

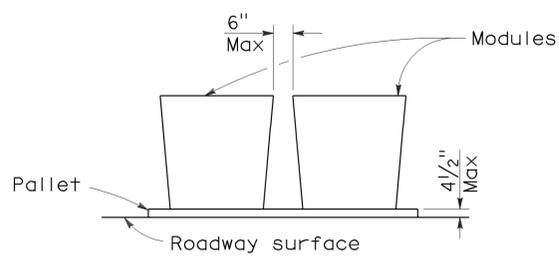


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

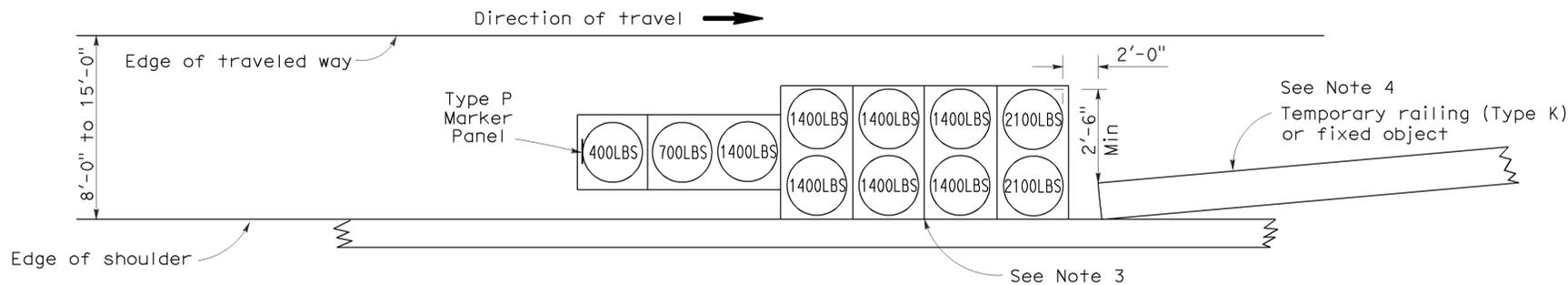
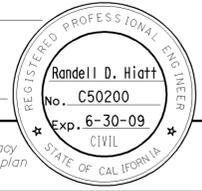
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	21	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

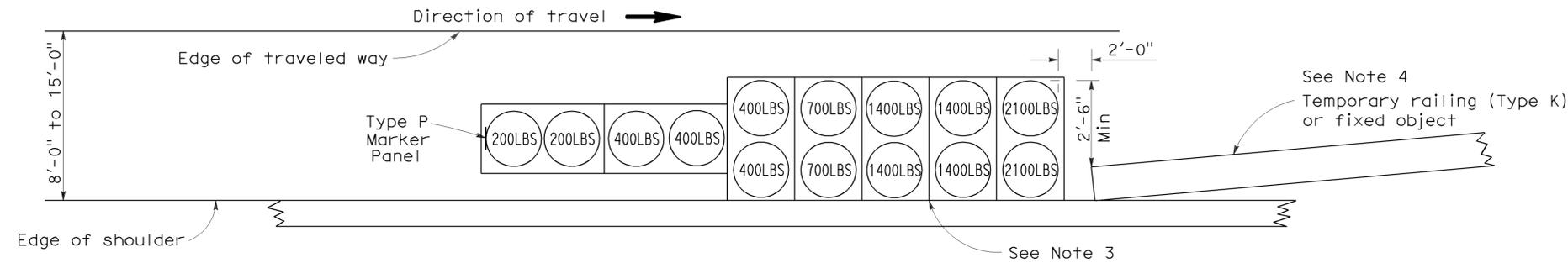
June 6, 2008
PLANS APPROVAL DATE

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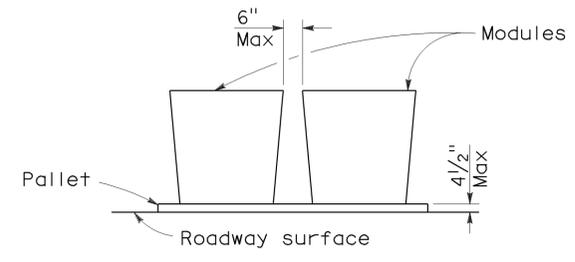
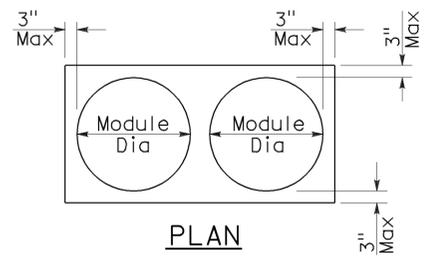
To accompany plans dated 11-21-11



ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**
NO SCALE

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

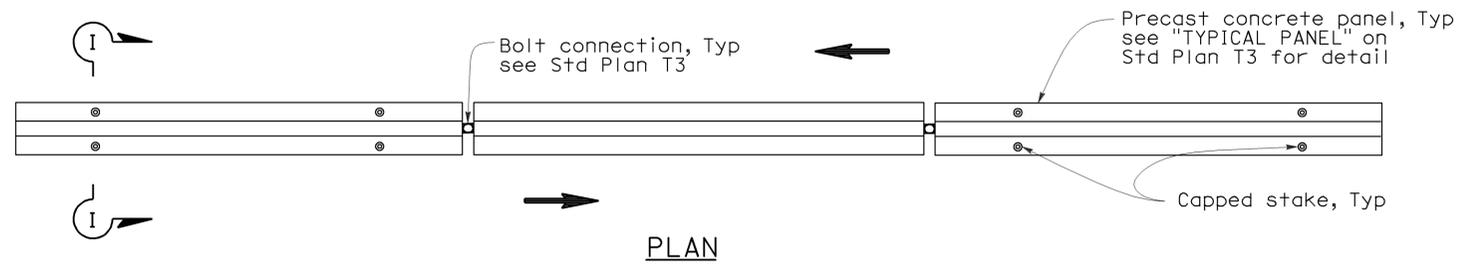
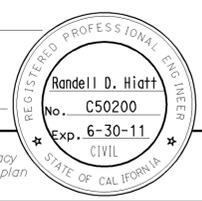
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	45.7/47.2	22	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

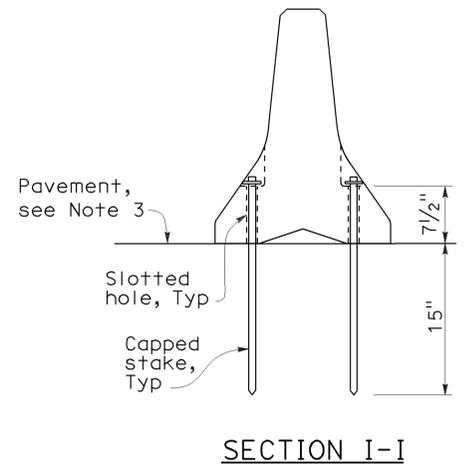
May 20, 2011
PLANS APPROVAL DATE

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To accompany plans dated 11-21-11

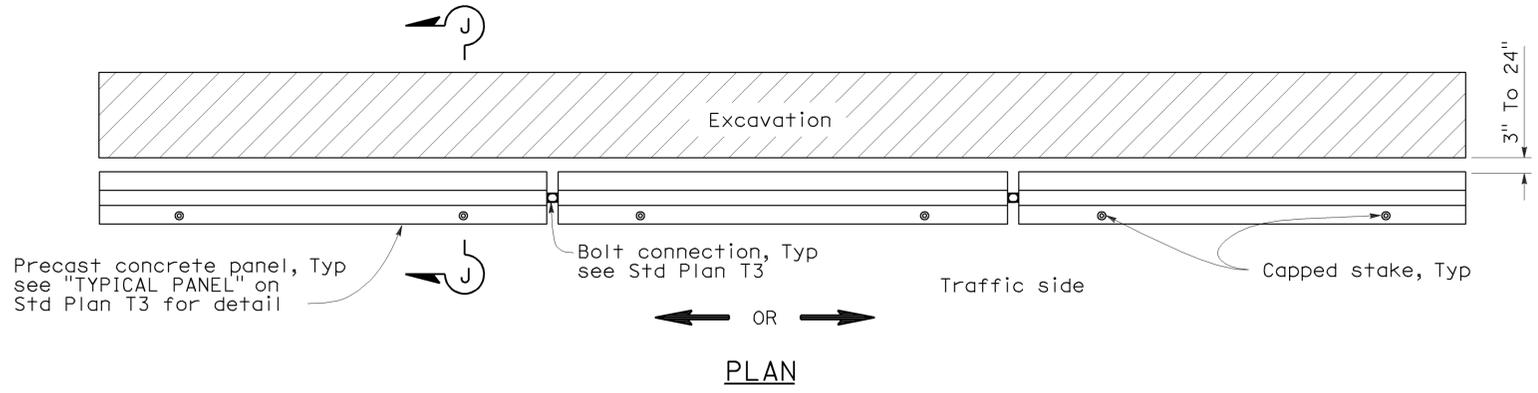


RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1

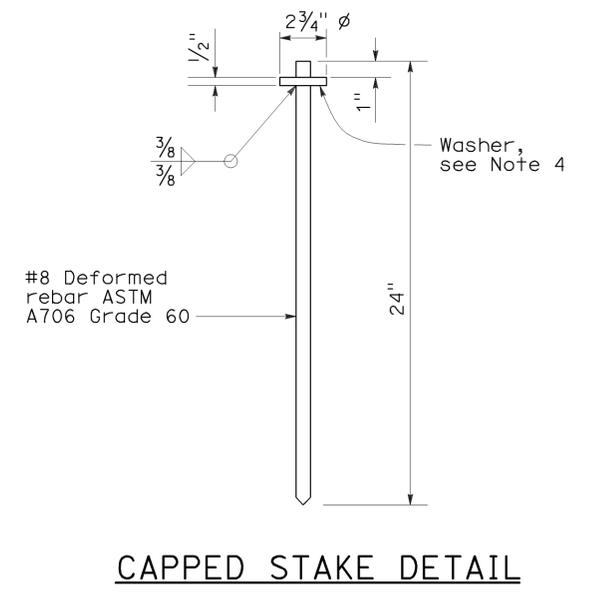
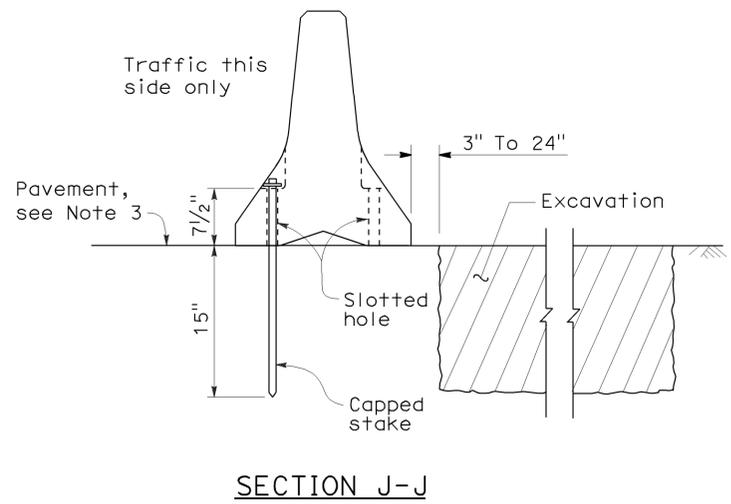


NOTES:

1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by \Rightarrow .



RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION
See Note 2



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY RAILING
(TYPE K)**

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T3A

ELECTROLIERS

STANDARD TYPES	Symbol	Description
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		
32		
35		
36-20A		

NOTES:

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

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	23	26

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 11-21-11

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	24	26

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
		Communication conduit
		Telephone conduit
		Fire alarm conduit
		Fiber optic conduit
		Conduit termination
		Conduit riser in/on structure or service pole

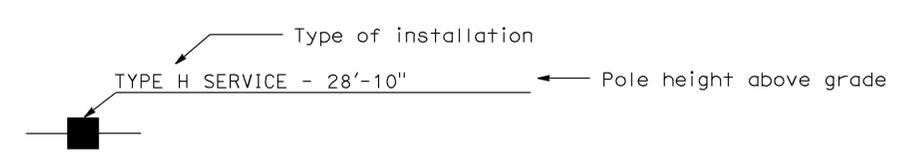
SIGNAL EQUIPMENT

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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT Cont

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

NOTES:

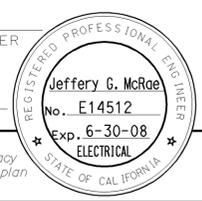
- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SYMBOLS AND ABBREVIATIONS)**
 NO SCALE

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

REVISED STANDARD PLAN RSP ES-1B

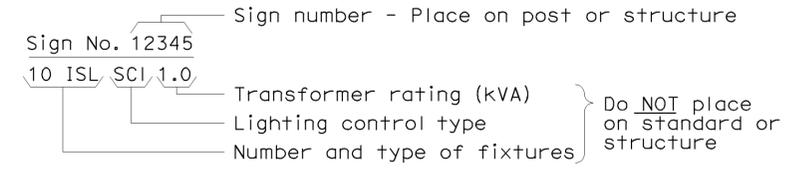
2006 REVISED STANDARD PLAN RSP ES-1B



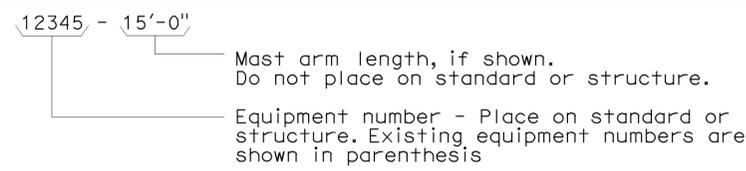
To accompany plans dated 11-21-11

EQUIPMENT IDENTIFICATION

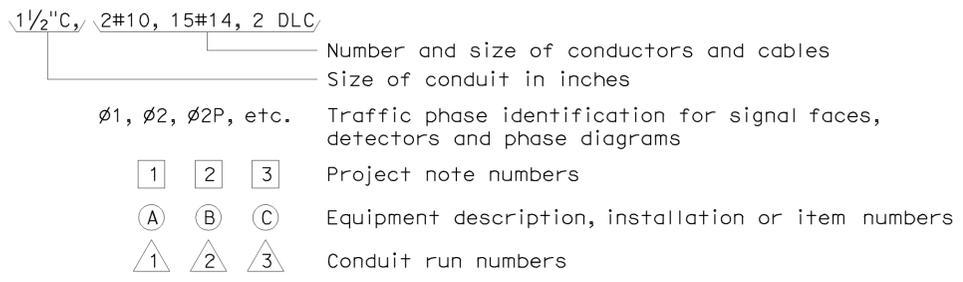
ILLUMINATED SIGN IDENTIFICATION NUMBER:



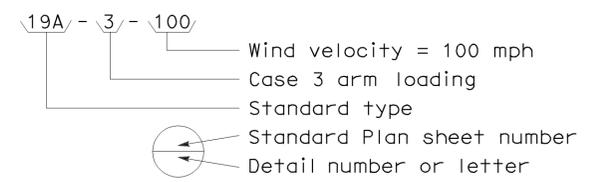
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



CONDUIT AND CONDUCTOR IDENTIFICATION:



SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



MISCELLANEOUS EQUIPMENT

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

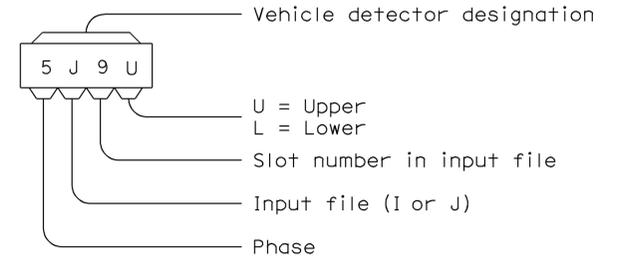
WIRING DIAGRAM LEGEND

P	Pole	----	External conductor
CB	Circuit breaker	—	Conductor or bus
A	Ampere	—●—	Tie point
V	Volt	—/—	Contactor coil
M	Metered	— —	Contactor, Contact NO
UM	Unmetered	— —	Contactor, Contact NC
NB	Neutral bus	⊗	Terminal blocks
GB	Ground bus	⊕	Enclosure bond
G	Equipment grounding conductor	⊕	Grounding electrode
N	Grounded conductor (Neutral)	⊕	Circuit breaker
		Ⓜ	Receptacle

PULL BOXES

PROPOSED	EXISTING	
		Pull box-No. 5 unless otherwise indicated or noted.
		Pull box-Additional designations or descriptions
3		(C) = Communications pull box
5		(E) = Pull box with extension
6		(S) = Sprinkler control pull box
7		(21) = Anchor bolts and conduit for future installation of Type 21 Standard
8		(T) = Traffic pull box
9		
9A		

VEHICLE DETECTORS



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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SYMBOLS AND ABBREVIATIONS)
 NO SCALE

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

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	45.7/47.2	26	26

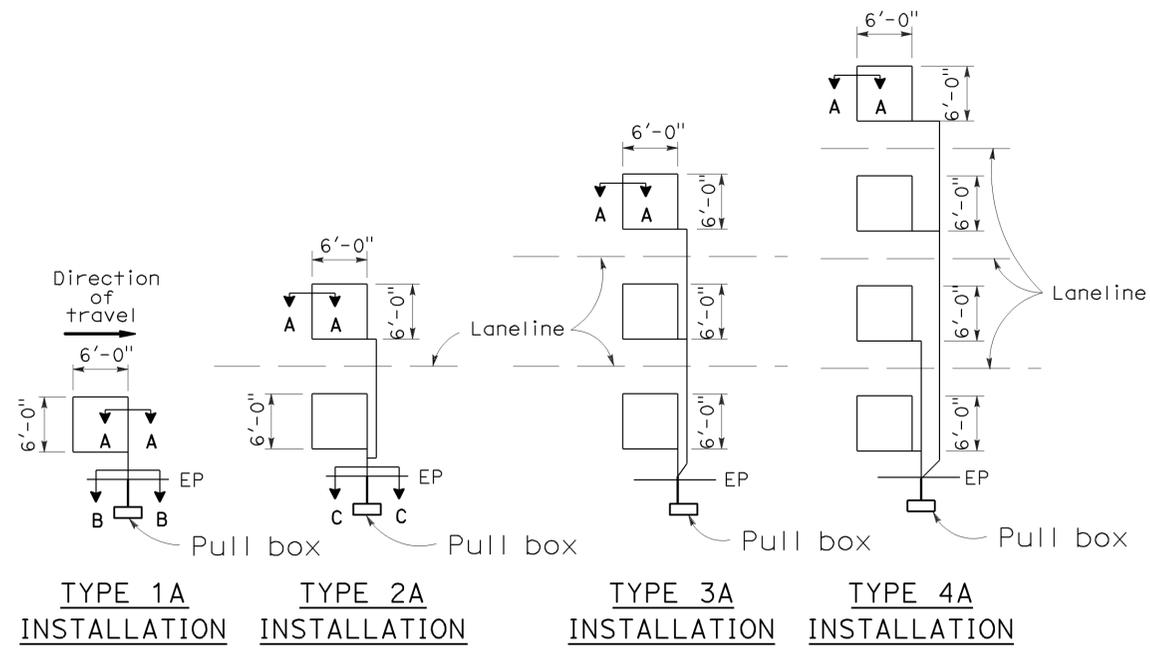
Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

October 5, 2007
 PLANS APPROVAL DATE

To accompany plans dated 11-21-11

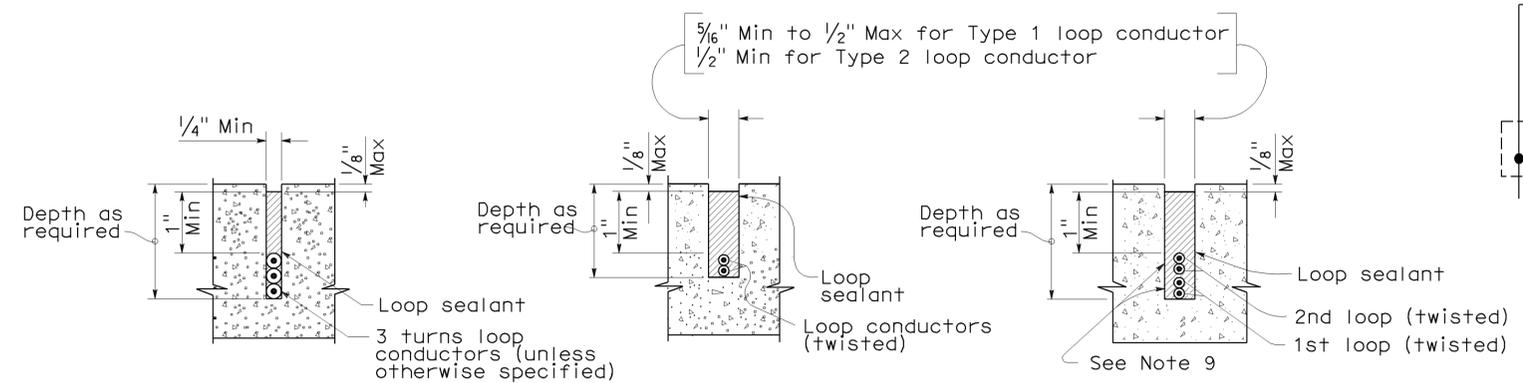
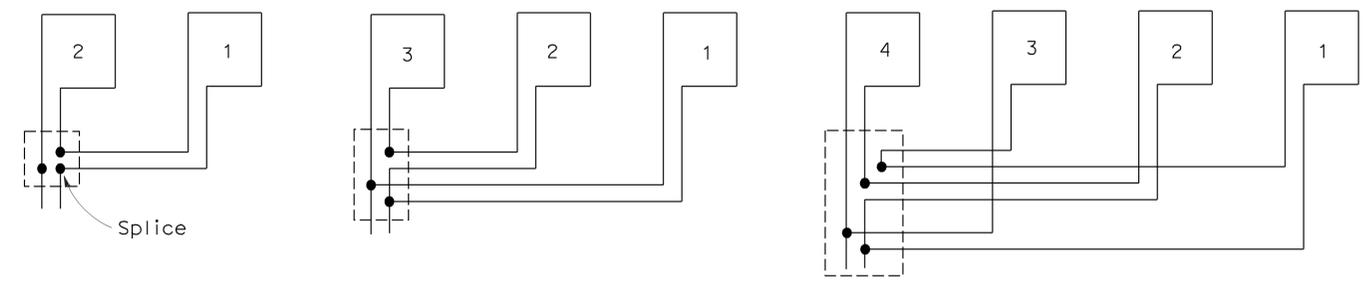
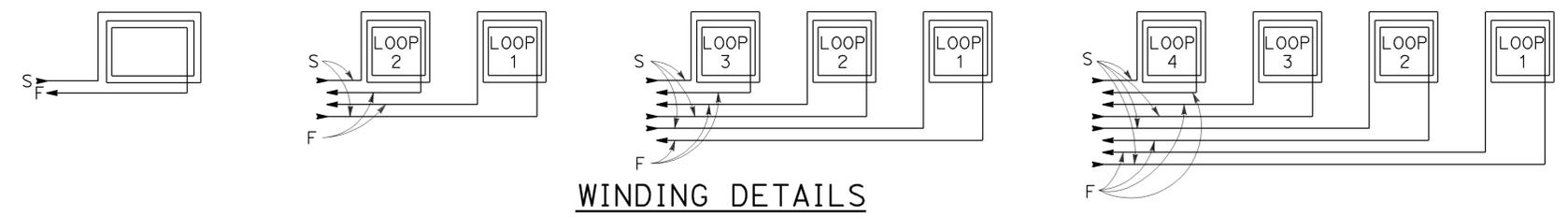
LOOP INSTALLATION PROCEDURE

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



SAWCUT DETAILS

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



ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

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

REVISED STANDARD PLAN RSP ES-5A

2006 REVISED STANDARD PLAN RSP ES-5A