Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	1	49

INDEX OF PLANS

Sheet No.	Description
1	Title and Location Map
2	Typical Cross Sections
3-10	Construction Details
11-12	Construction Area Signs
13-26	Traffic Handling Plan
27-30	Pavement Delineation Details and Quantities
31-36	Summary of Quantities
37-38	Electrical Plans
39-49	Revised Standard Plans

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

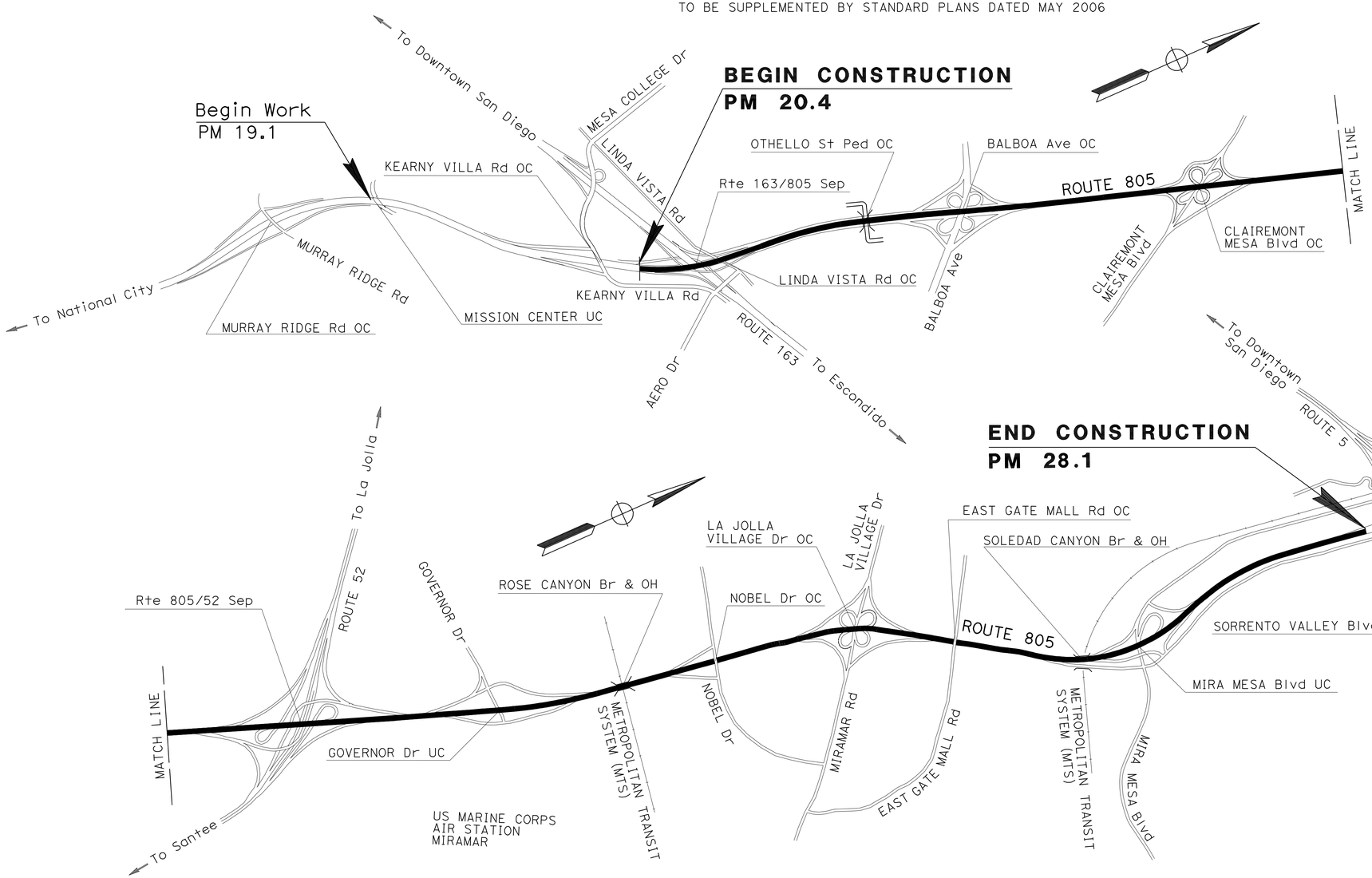
STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN SAN DIEGO COUNTY IN SAN DIEGO FROM 0.2 MILE SOUTH OF ROUTE 163/805 SEPARATION TO 0.4 MILE SOUTH OF ROUTE 5/805 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATION MAP

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

NO SCALE

PROJECT MANAGER: BRUCE LAMBERT

DESIGN ENGINEER: ABDUL MALIKYAR

11-17-10
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

December 13, 2010
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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

CONTRACT No.	11-2M1704
PROJECT ID	1100020042

LAST REVISION 12-03-10

DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	2	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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.

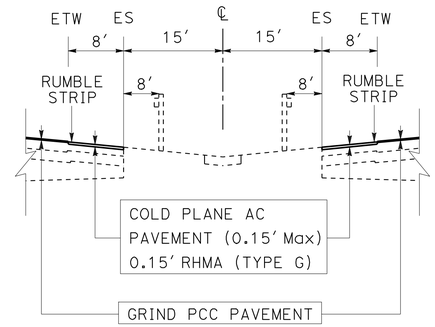
NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. FOG SEAL COAT SHALL BE APPLIED TO ALL HMA/AC SURFACES EXCEPT TRAVELED WAYS.
4. FOR LOCATION AND TYPE OF REMOVE AC DIKE AND PLACE HMA DIKE, SEE SUMMARY OF QUANTITIES SHEET.
5. SEE SUMMARY OF QUANTITIES SHEET FOR LOCATION OF GRIND PCC PAVEMENT AND COLD PLANE AC.
6. FOR LOCATIONS AND DETAILS OF REPLACE CONCRETE, SEE SUMMARY OF QUANTITIES AND CONSTRUCTION DETAILS SHEET.

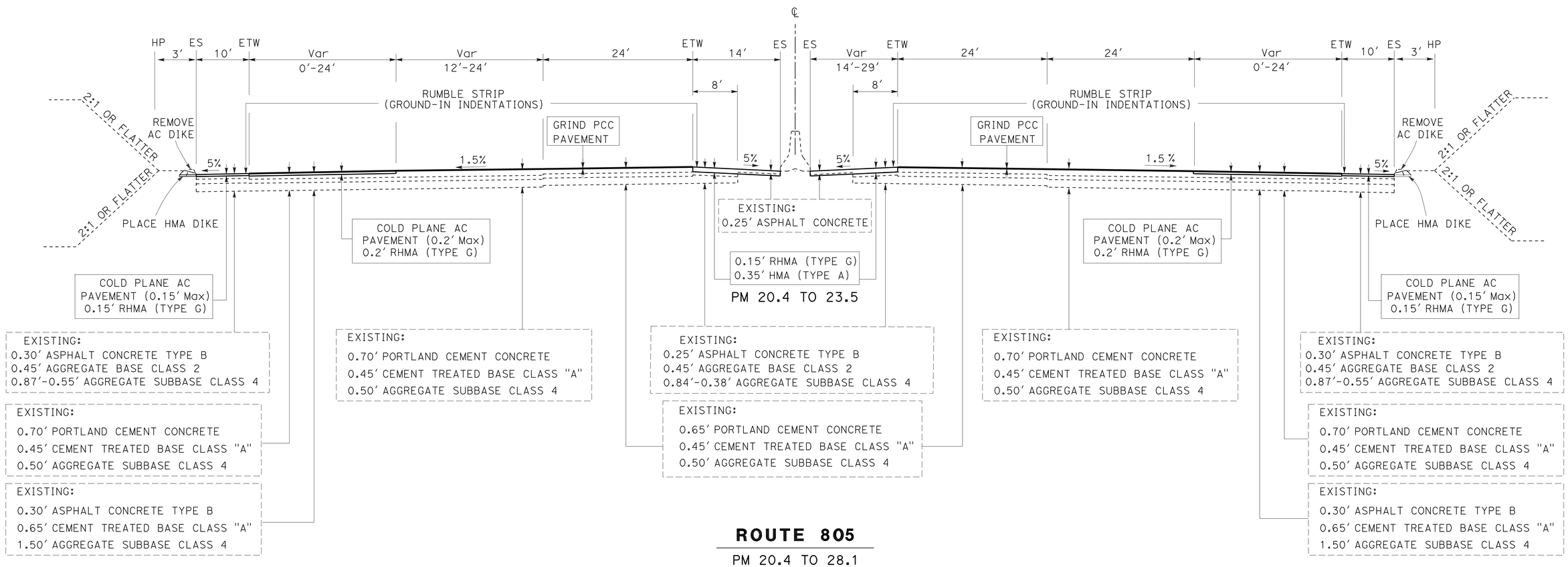
DESIGN DESIGNATION (ROUTE 805)

ADT (2010)	114,500
ADT (2020)	124,200
ADT (2030)	147,600
DHV	16,070
D	50.4%
T	5.5%

MEDIAN TRANSITION



PM 23.7 TO 28.1



ROUTE 805

PM 20.4 TO 28.1

TYPICAL CROSS SECTION

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ

CALCULATED-DESIGNED BY: KENNY T. NGUYEN

CHECKED BY: ABDUL MALIKYAR

REVISED BY

DATE REVISED

LAST REVISION 12-03-10

DATE PLOTTED => 13-DEC-2010

TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	3	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

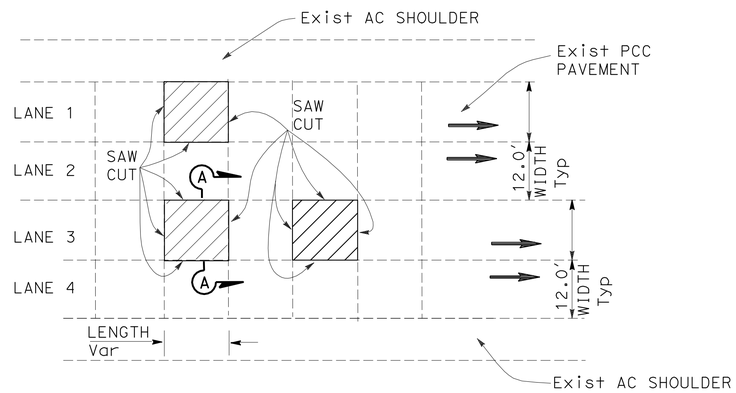
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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.

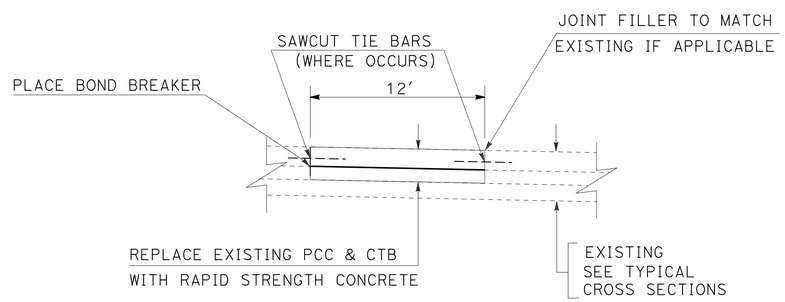
NOTES:

1. SEE SUMMARY OF QUANTITIES FOR DIMENSIONS AND LOCATION OF REPLACE CONCRETE PAVEMENT.
2. FOR DETAILS NOT SHOWN SEE REVISED STANDARD PLAN P8, P10, AND P12 .
3. DOWEL BAR BASKETS SHALL BE USED WHEN TWO OR MORE ADJACENT SLABS ARE REPLACED.
4. DOWEL BARS SHALL BE PLACED AT TRANSVERSE CONTACT JOINTS AND TRANSVERSE WEAKENED PLANE JOINTS ALIGNED WITH THE LONGITUDINAL EDGE OF THE SLAB.



PLAN

REPLACE CONCRETE PAVEMENT
(TYPICAL)



SECTION A-A

REPLACE CONCRETE PAVEMENT (MODIFIED)
TYPICAL DETAIL

LEGEND

REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

CONSTRUCTION DETAILS

NO SCALE **C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	4	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

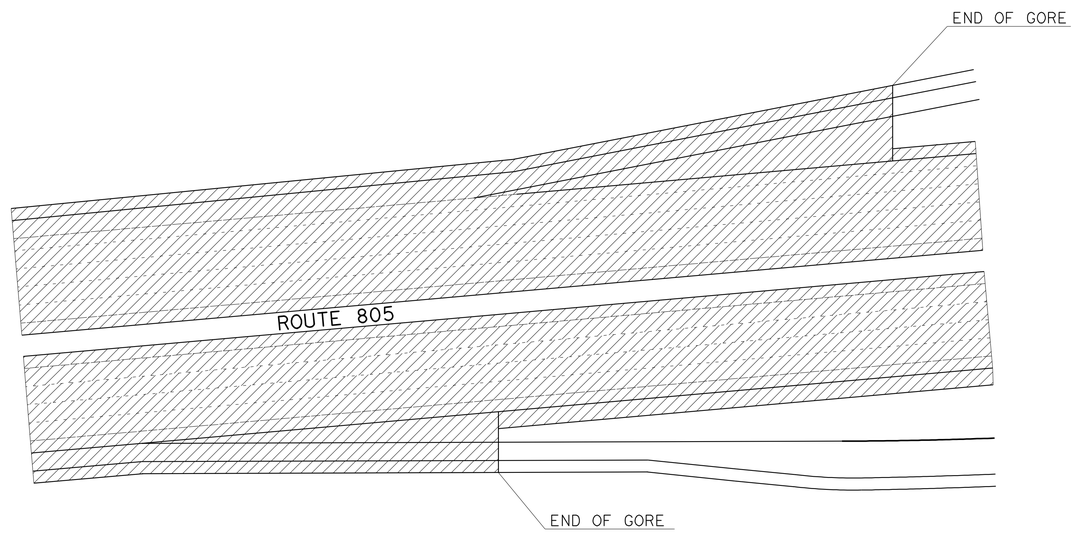
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

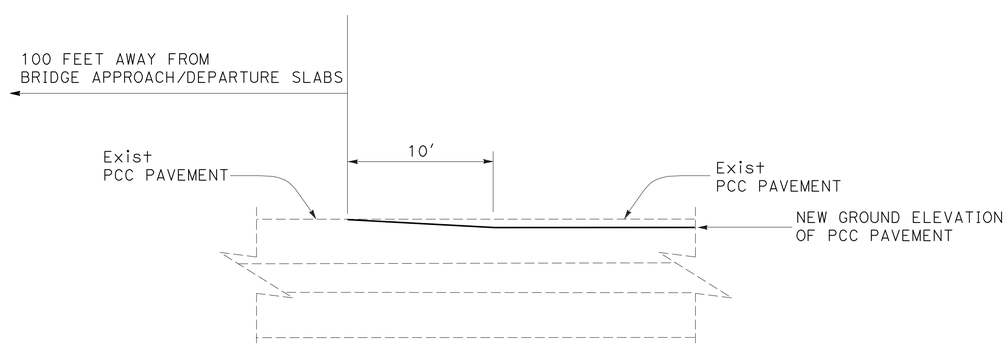
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND:

▨ - LIMIT TYPICAL OF GRINDING AND COLD PLANE AT RAMP GORES.



TYPICAL LIMITS OF WORK



TYPICAL PCC CONFORM DETAIL

FOR BRIDGE APPROACHES/DEPARTURES SLABS

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: SEAN D. HOANG
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

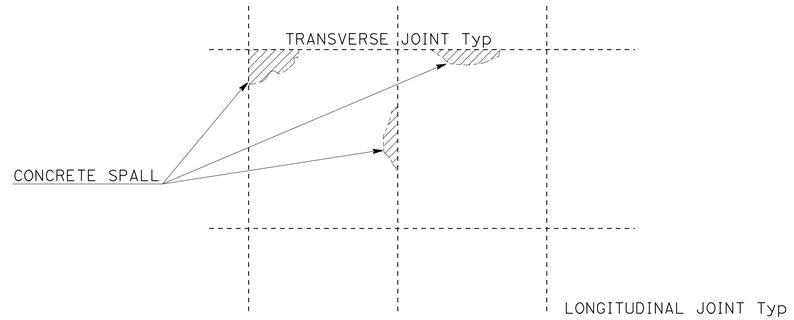
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	5	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ABDUL MALIKYAR
No. C66169
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

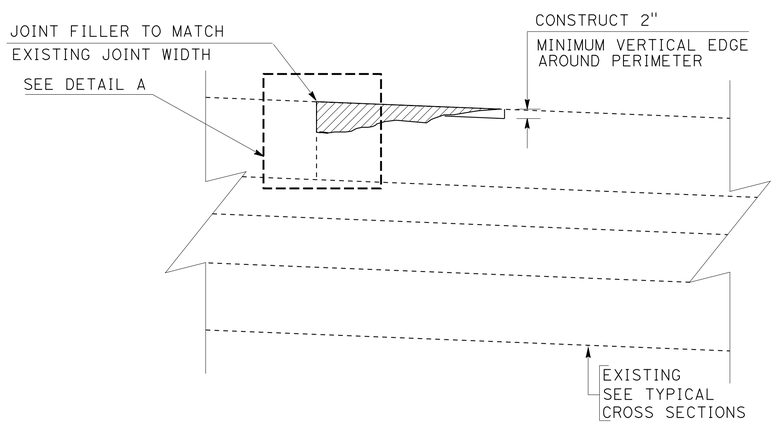
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



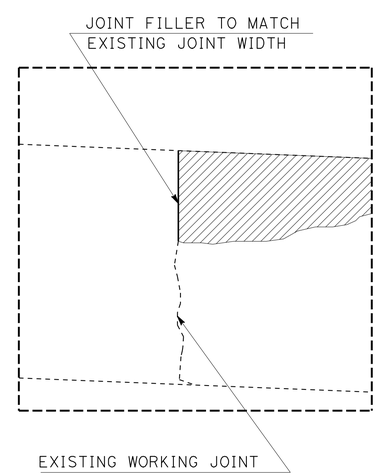
PLAN

LEGEND

REPAIR SPALLED JOINTS



ELEVATION



DETAIL A

REPAIR SPALLED JOINTS

(TYPICAL)

NOTES:

1. LOCATIONS AND QUANTITIES TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ

CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR

REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	6	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

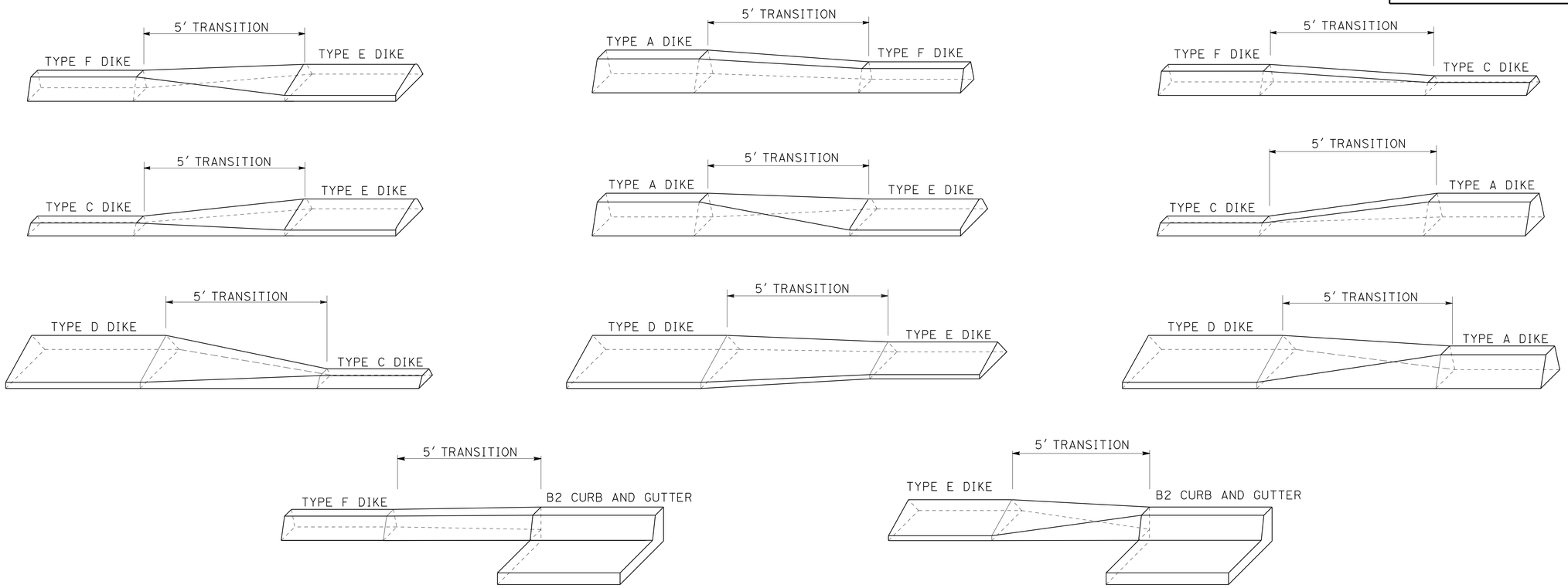
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

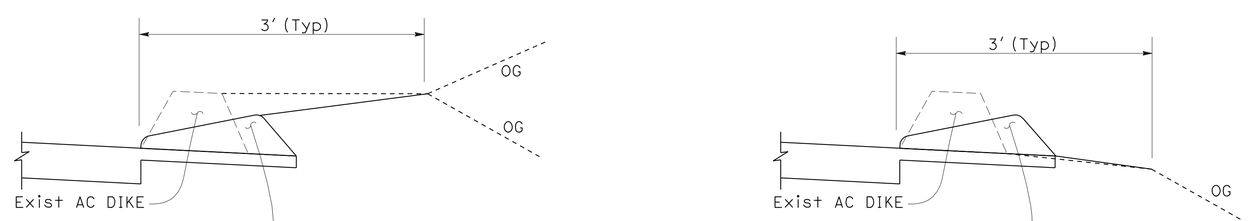
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. CONSTRUCT DIKE TRANSITIONS WITHIN THE LIMITS SHOWN ON THE PLANS FOR THE LOWER DIKE. WHERE BOTH DIKES ARE THE SAME HEIGHT (TYPES E & F) CONSTRUCT THE TRANSITION WITHIN THE LIMITS OF THE MOUNTABLE DIKE.



CURB AND DIKE TRANSITIONS



DIKE BACKFILL DETAILS

CONSTRUCTION DETAILS

NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:19

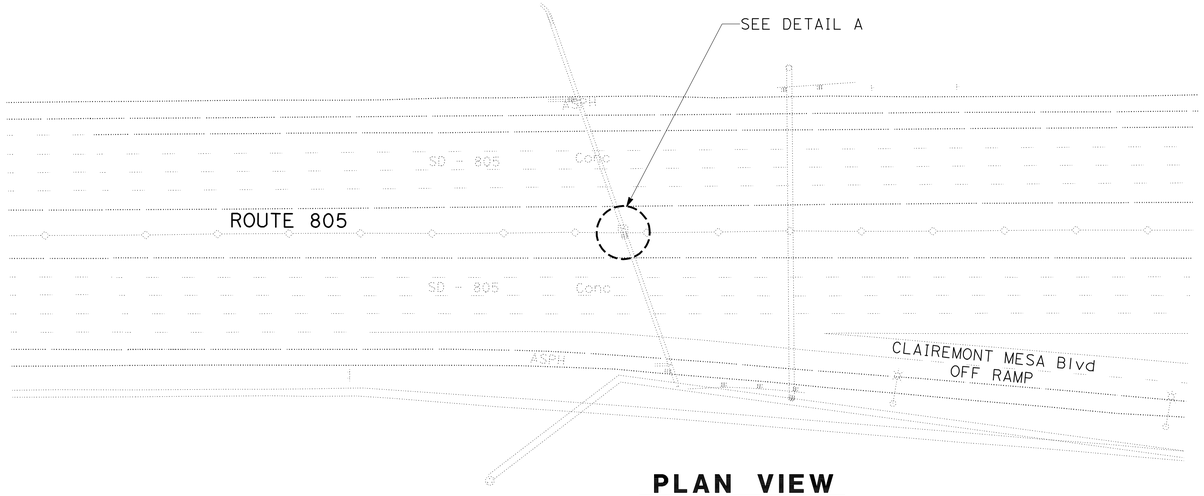
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	7	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

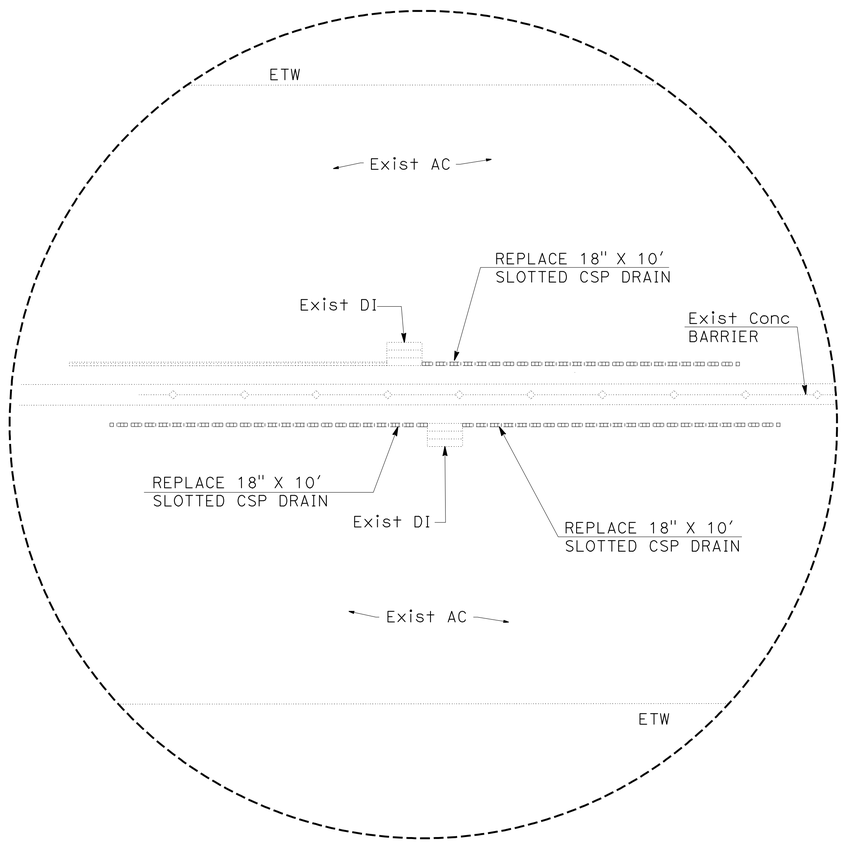
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ABDUL MALIKYAR
No. C66169
Exp. 06-30-12
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.



PLAN VIEW
PM 23.50



REPLACEMENT OF SLOTTED CSP DRAINS
DETAIL A

CONSTRUCTION DETAILS

NO SCALE

C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ

CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR

REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	8	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

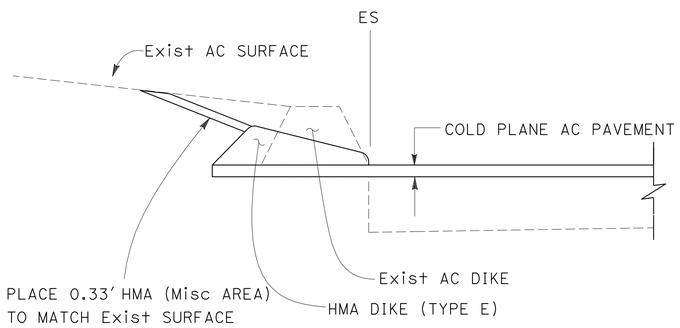
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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:

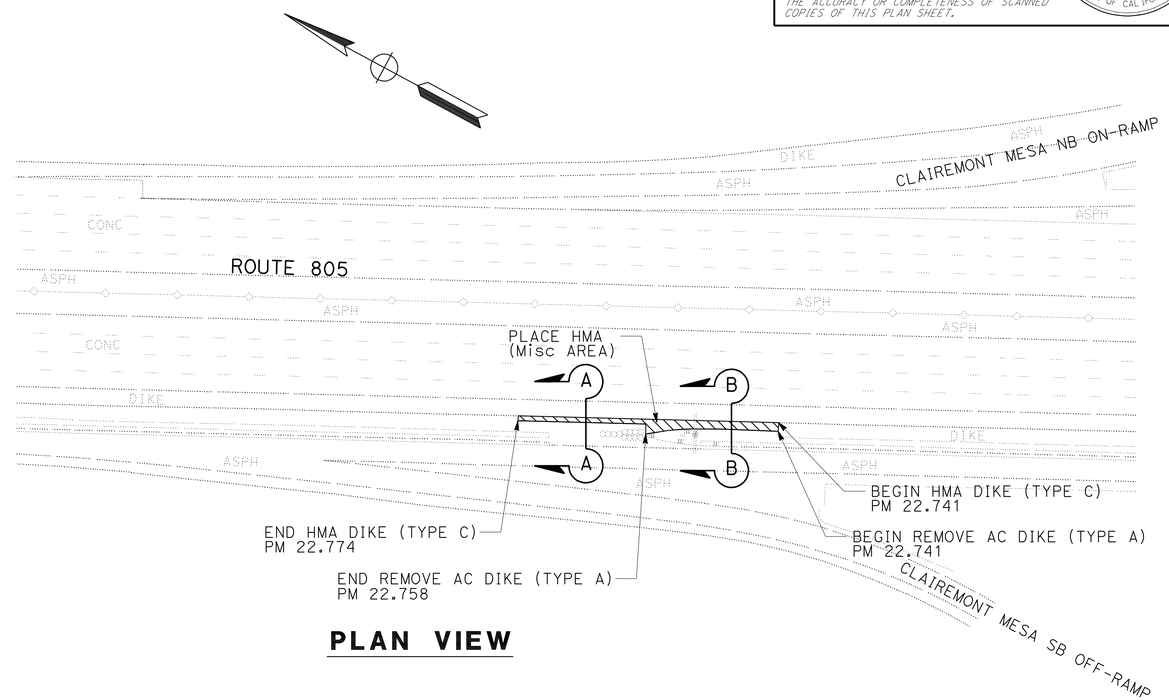
1. FOR ADDITIONAL DIKE LOCATIONS AND DETAILS, SEE OTHER CONSTRUCTION DETAILS AND SUMMARY OF QUANTITIES.
2. Exist UTILITIES AND ELECTRICAL SYSTEMS (NOT SHOWN) WITHIN THE PLACE HMA (Misc AREA) SHALL BE PRESERVED.



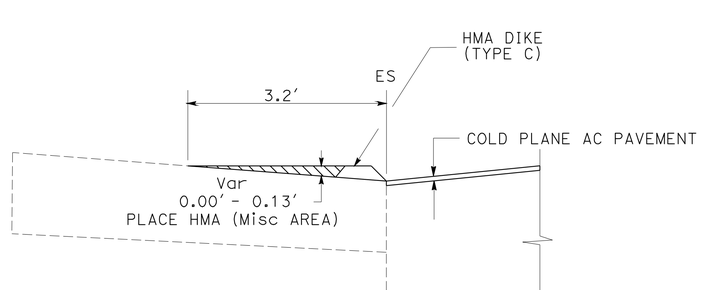
PLACE HMA (Misc AREA) DETAIL

NB 805: PM 21.358-PM 21.722
PM 22.278-PM 22.621

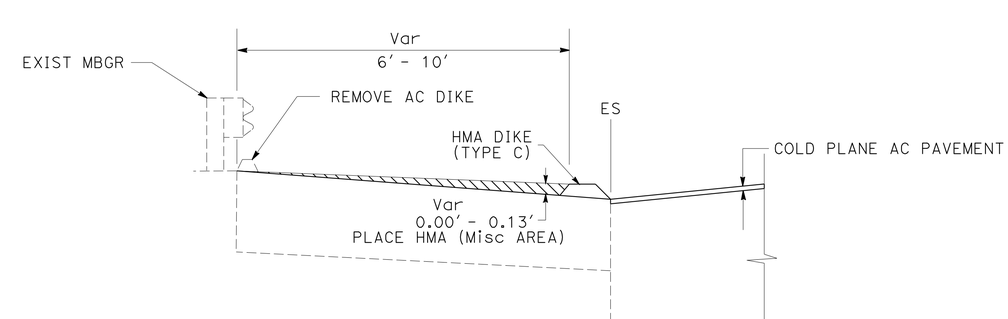
SB 805: PM 21.556-PM 21.919
PM 22.494-PM 22.741
PM 22.774-PM 22.858



PLAN VIEW



SECTION A-A
PM 22.758 TO 22.774



SECTION B-B
PM 22.741 TO 22.758

PLACE HMA (Misc AREA) DETAIL

CONSTRUCTION DETAILS

NO SCALE

C-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	9	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

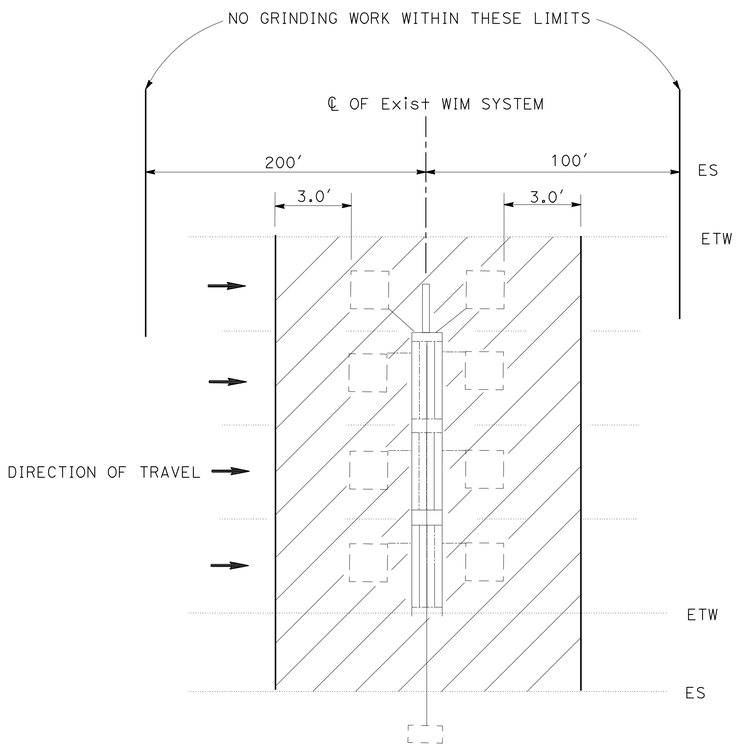
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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:

- NO WORK WITHIN THE HATCH AREA.

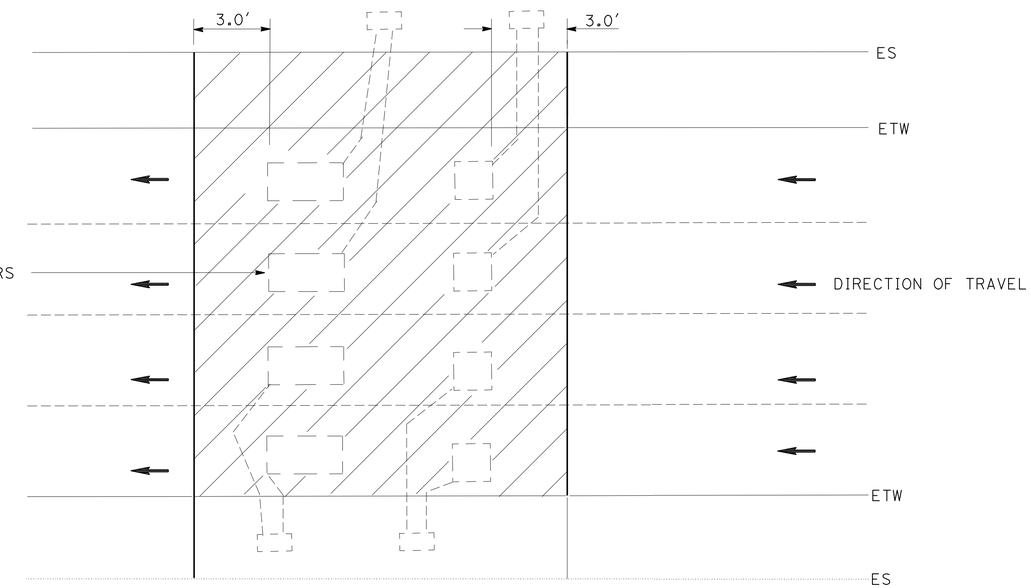


Exist WEIGH IN MOTION (WIM) SYSTEM

ROUTE 805 PM 24.440

NB DIRECTION SHOWN SB DIRECTION SIMILAR

Exist INDUCTIVE LOOP DETECTORS
PROTECT IN PLACE (Typical)
FOR LOCATIONS, SEE SHEET E-2.



Exist INDUCTIVE LOOP DETECTORS

ROUTE 805

CONSTRUCTION DETAILS

NO SCALE

C-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ

CALCULATED-DESIGNED BY: MAHENDRA R. NIRMAL

CHECKED BY: ABDUL MALIKYAR

REVISED BY

DATE REVISED

LAST REVISION 12-03-10

DATE PLOTTED => 13-DEC-2010

TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	10	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

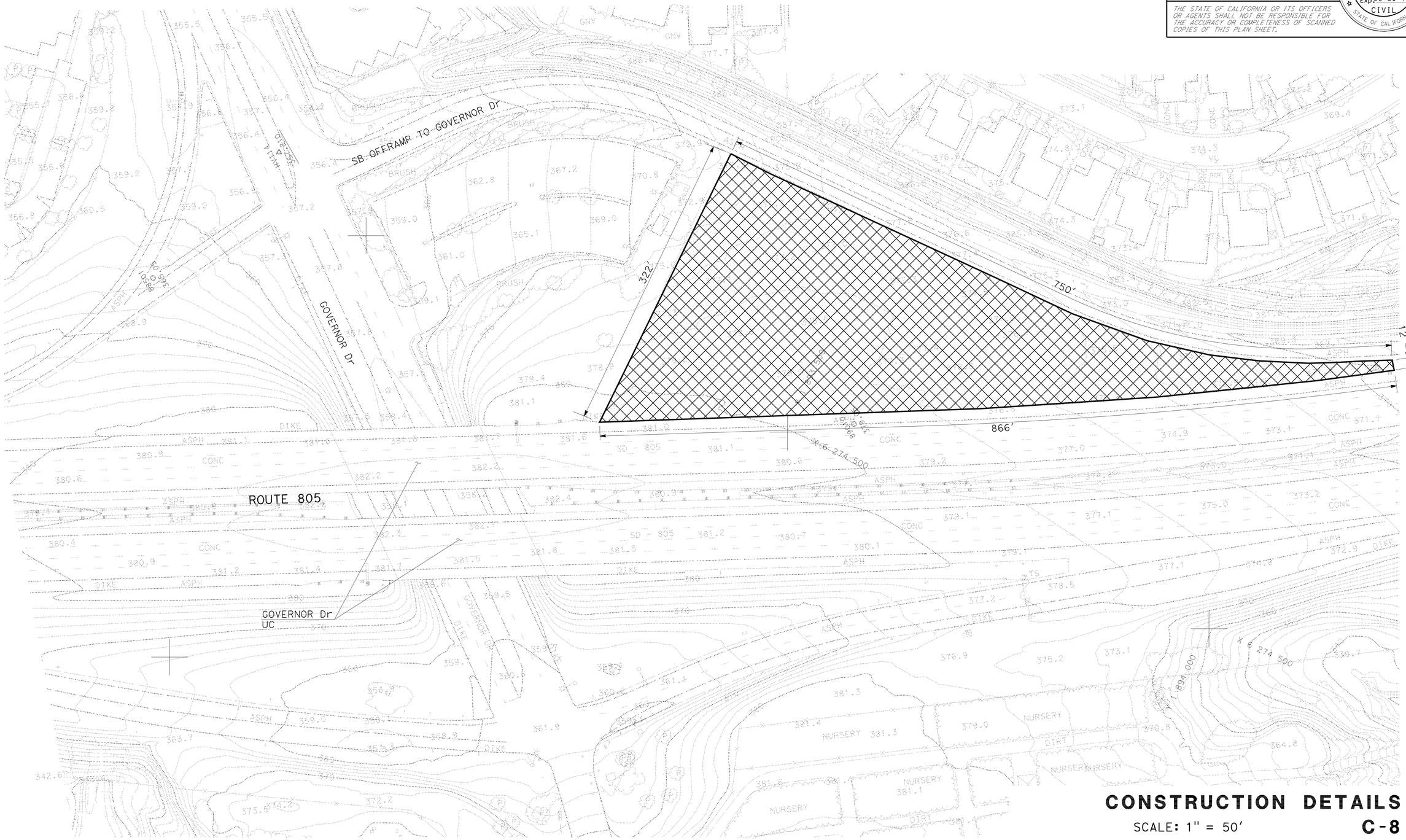
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT DISTRICT OFFICE.

LEGEND:

OPTIONAL AREA FOR CONTRACTOR'S USE



CONSTRUCTION DETAILS

SCALE: 1" = 50'

C-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ

CALCULATED-DESIGNED BY: SEAN D. HOANG

CHECKED BY: ABDUL MALIKYAR

REVISED BY / DATE REVISED

LAST REVISION 12-03-10

DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	11	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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

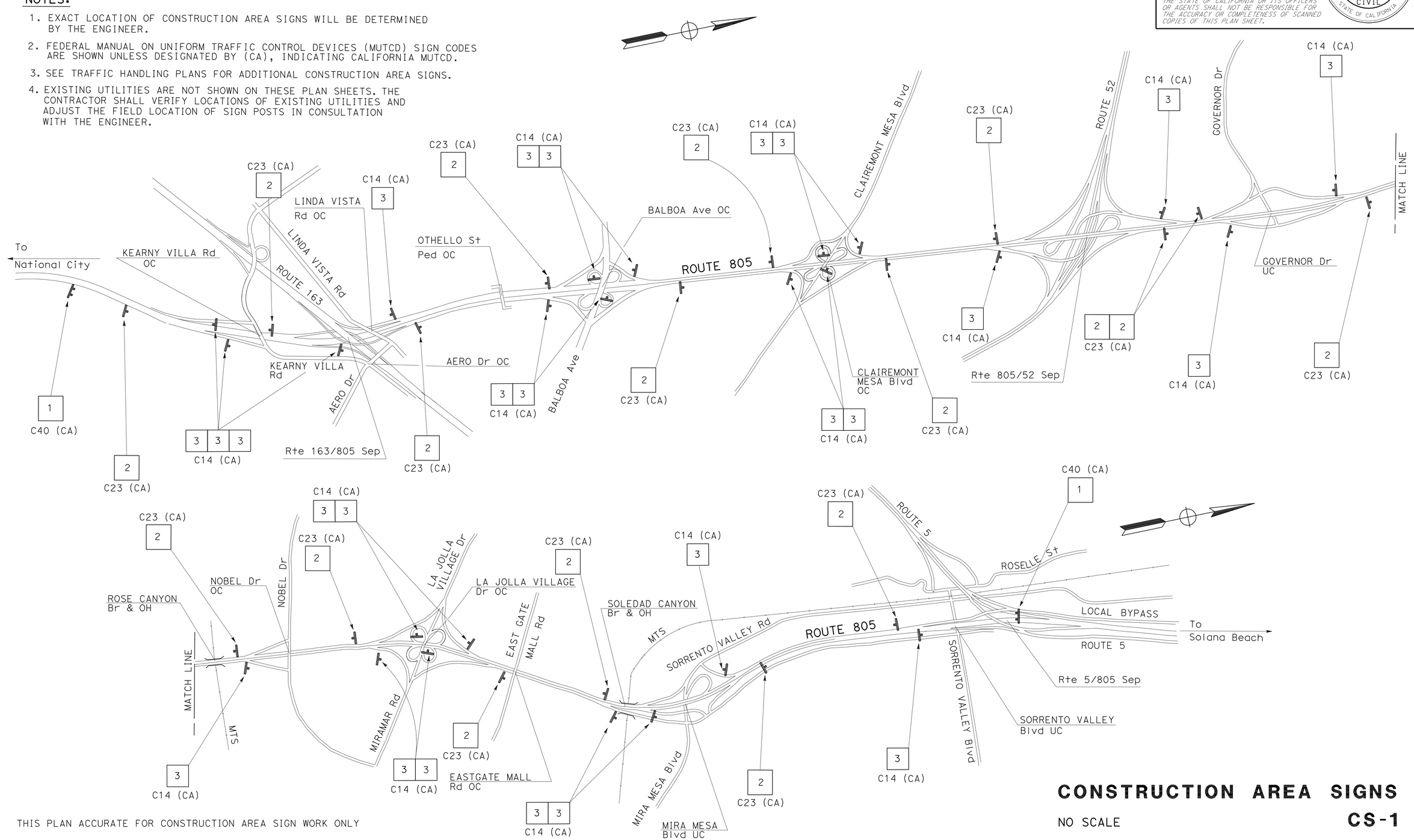
LEGEND:

XX = CONSTRUCTION AREA SIGN

MTS = METROPOLITAN TRANSIT SYSTEM

NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
3. SEE TRAFFIC HANDLING PLANS FOR ADDITIONAL CONSTRUCTION AREA SIGNS.
4. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF SIGN POSTS IN CONSULTATION WITH THE ENGINEER.



THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	12	49

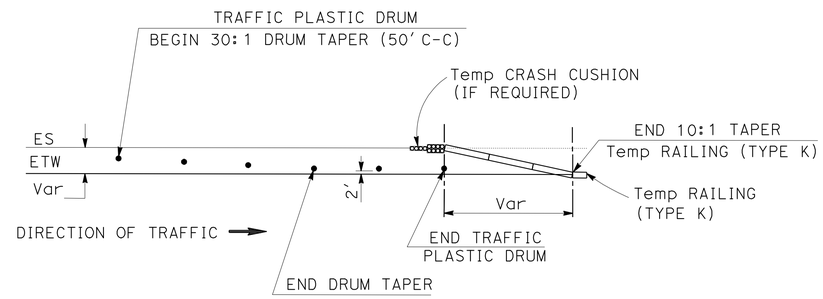
REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

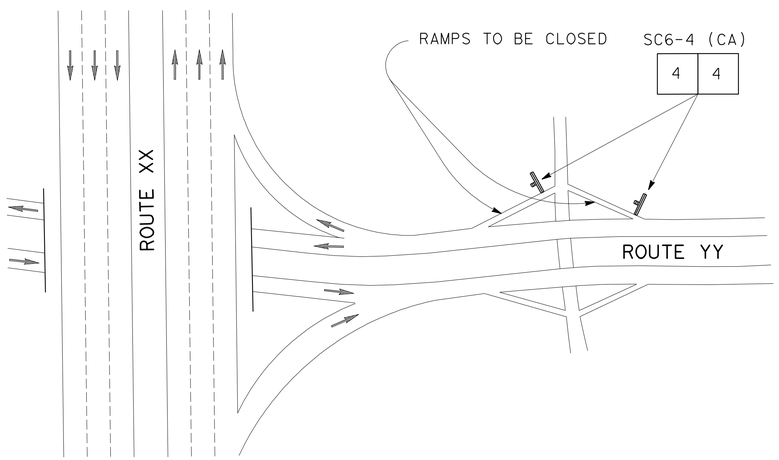
REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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.

TYPICAL PLACEMENT OF TRAFFIC PLASTIC DRUM



TYPICAL- PLACEMENT OF SC6-4 (CA)



CONSTRUCTION AREA SIGNS

SIGN No.	CODE	PANEL SIZE (In)	No. OF POST AND SIZE (In)	No. OF SIGNS	REMARK
1	C40 (CA)	108 X 42	2-4 X 6 (S)	2	
2	C23 (CA)	48 X 48	1-4 X 6 (S)	17	
3	C14 (CA)	48 X 24	1-4 X 4 (S)	25	
4	SC6-4 (CA)	48 X 60	PORTABLE	50	TH-1 TO TH-14
5	SPCL-1	72 X 72		2	
6	SC9 (CA)	36 X 36		196	
7	M4-8a	24 X 18		15	
8	SPCL-2	72 X 72		4	
9	SPCL-3	72 X 72		6	
10	SPCL-4	72 X 72		9	
11	SPCL-5	72 X 72		2	
			TOTAL	328	

(S) DENOTES STATIONARY MOUNTED SIGN

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	13	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

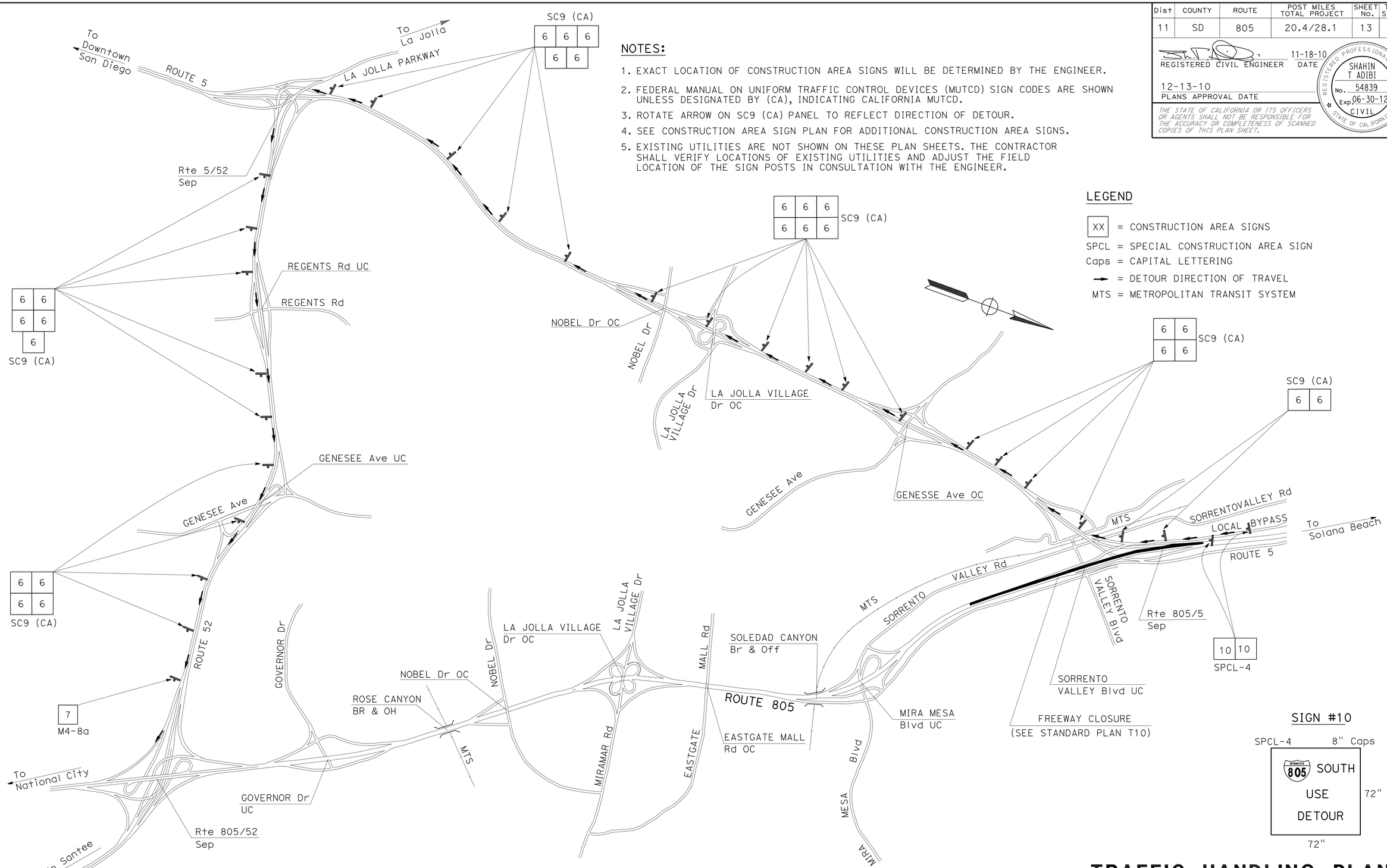
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
3. ROTATE ARROW ON SC9 (CA) PANEL TO REFLECT DIRECTION OF DETOUR.
4. SEE CONSTRUCTION AREA SIGN PLAN FOR ADDITIONAL CONSTRUCTION AREA SIGNS.
5. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF THE SIGN POSTS IN CONSULTATION WITH THE ENGINEER.

LEGEND

XX = CONSTRUCTION AREA SIGNS
SPCL = SPECIAL CONSTRUCTION AREA SIGN
Caps = CAPITAL LETTERING
→ = DETOUR DIRECTION OF TRAVEL
MTS = METROPOLITAN TRANSIT SYSTEM



SIGN #10

SPCL-4 8" Caps

TRAFFIC HANDLING PLAN

NO SCALE

TH-1

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® **TRAFFIC DESIGN**

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	14	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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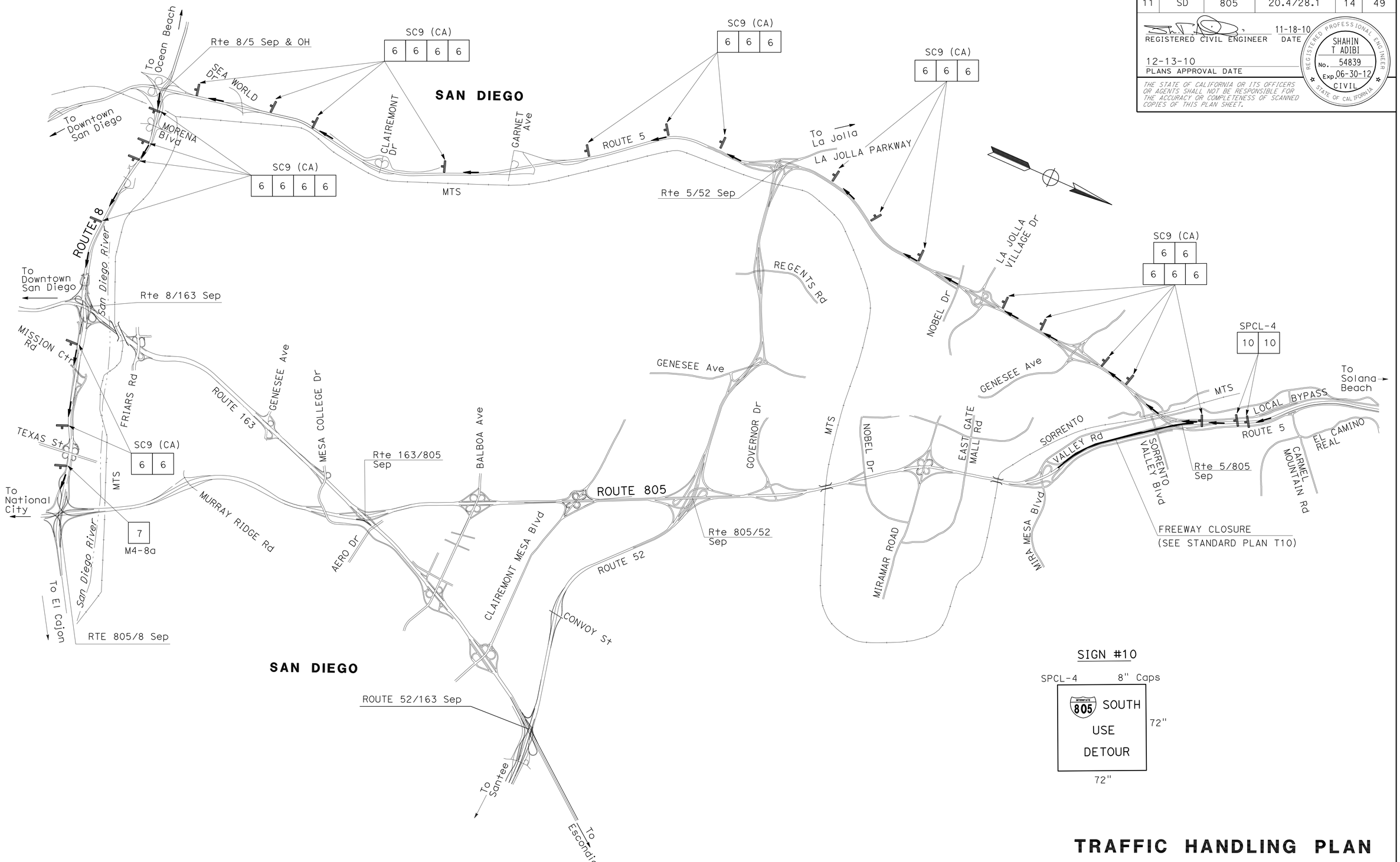

SIGN #10

SPCL-4 8" Caps

TRAFFIC HANDLING PLAN

NO SCALE

TH-2

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: SHAHIN T ADIBI
CHECKED BY: THANH NGUYEN
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:20

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1100020042md002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2828
PROJECT NUMBER & PHASE 11000200421

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	15	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

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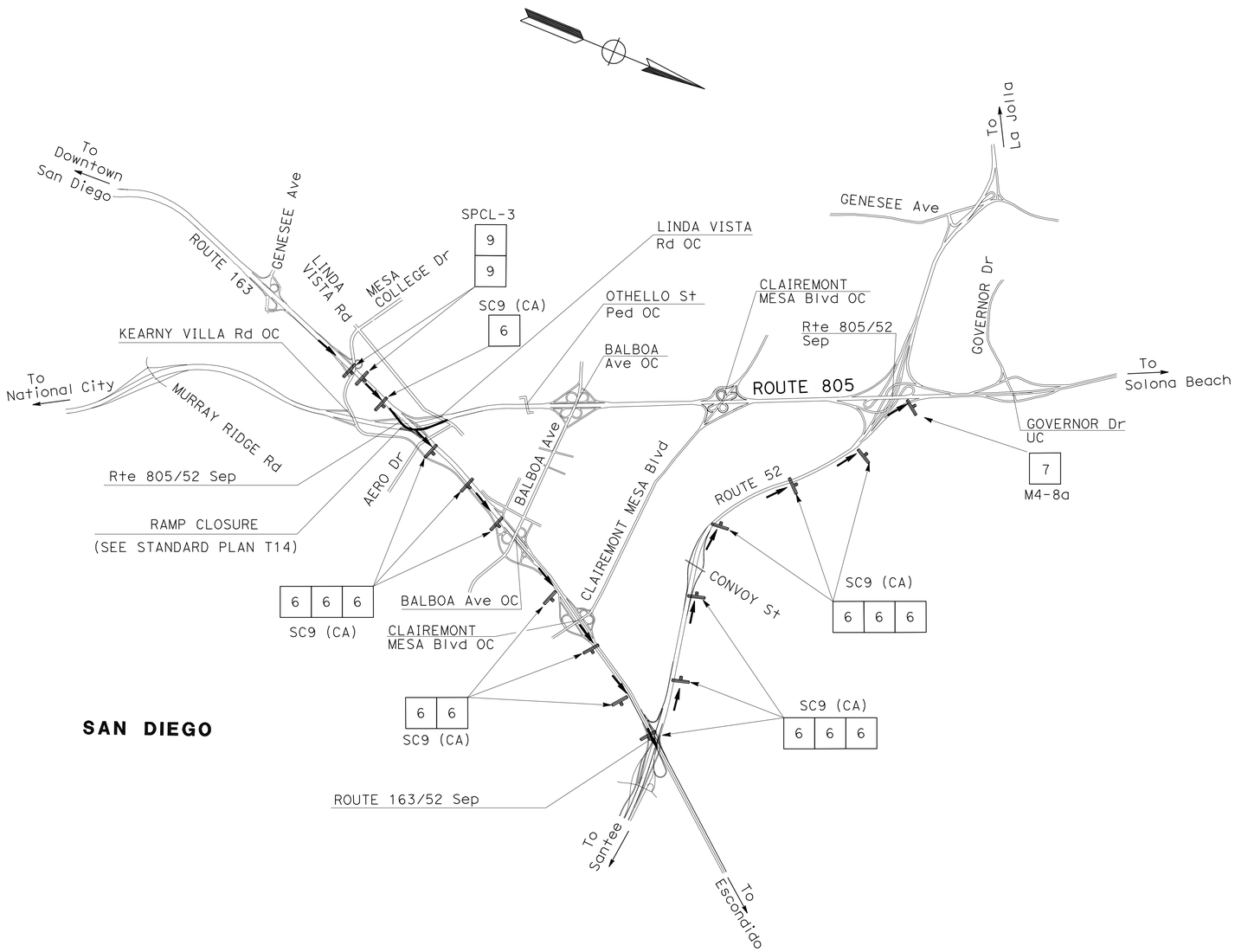
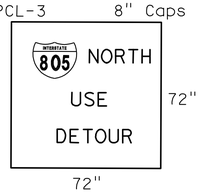


SIGN #9

SPCL-3 8" Caps



TRAFFIC HANDLING PLAN

NO SCALE

TH-3

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

REVISED BY	DATE REVISED
THANH NGUYEN	SHAHIN T ADIBI

CALCULATED-DESIGNED BY / CHECKED BY

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® TRAFFIC DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:20

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11	SD	805	20.4/28.1	16	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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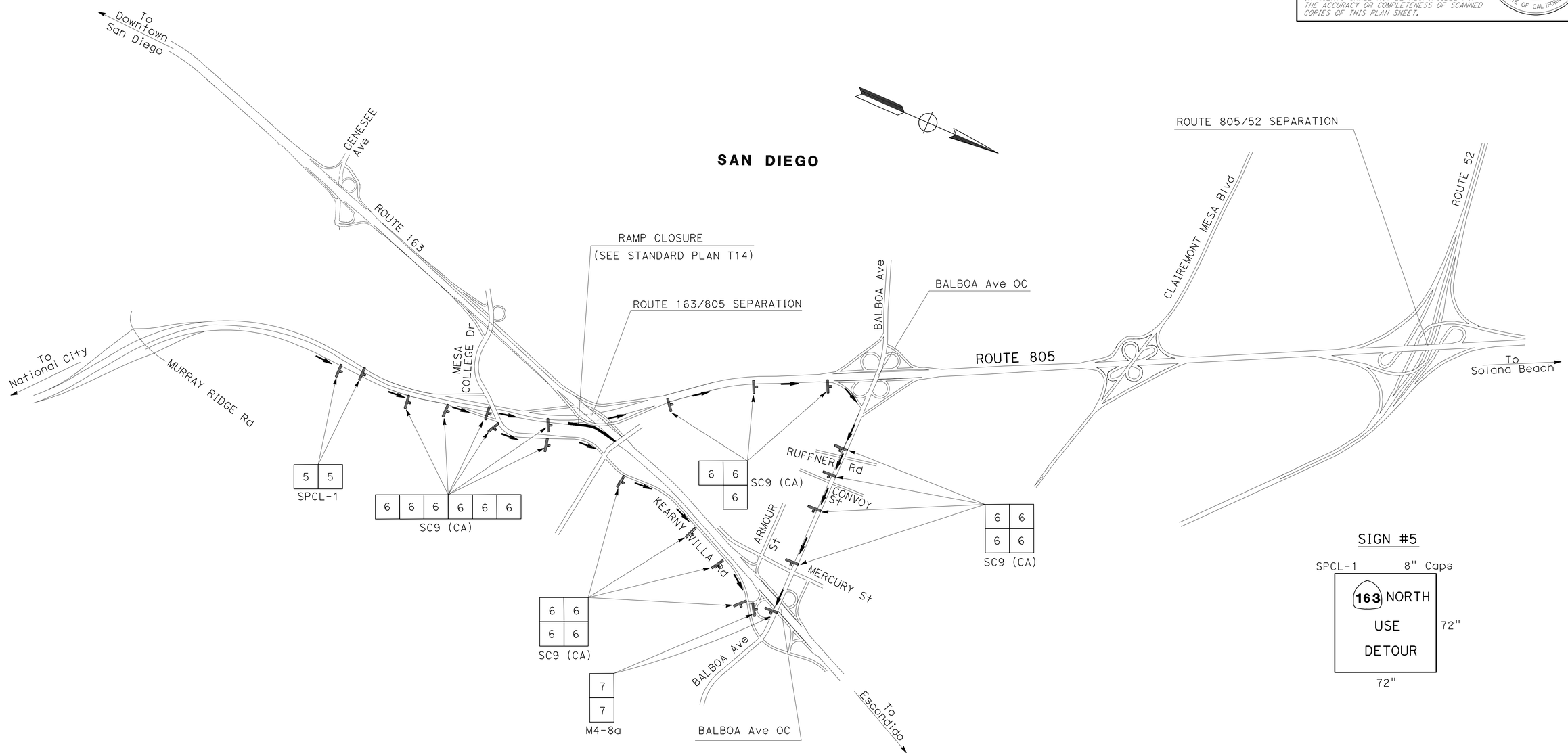

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN

NO SCALE

TH-4

REVISED BY	DATE REVISED
THANH NGUYEN	SHAHIN T ADIBI

CALCULATED-DESIGNED BY / CHECKED BY

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:20

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12-13-10
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SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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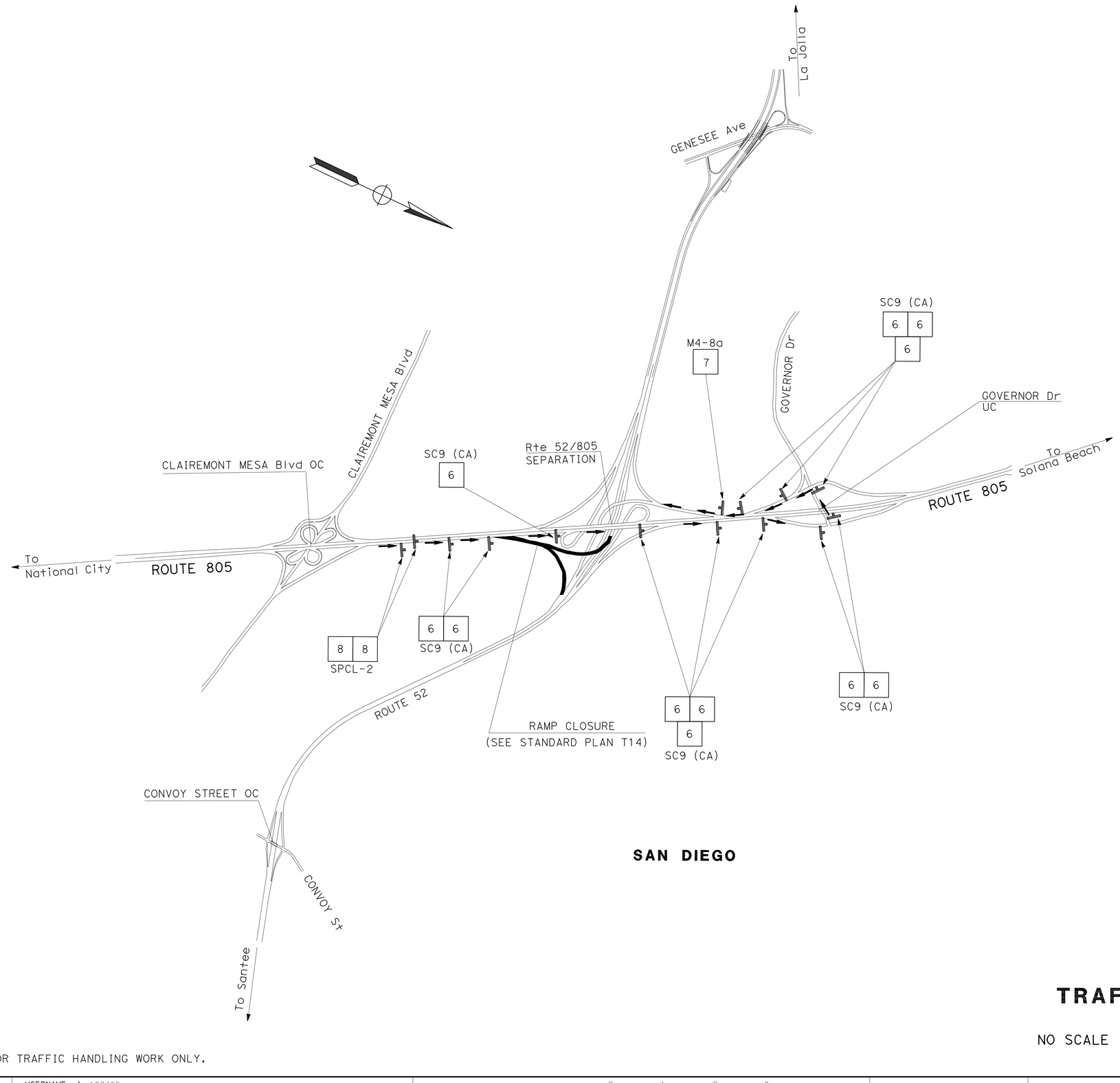

SIGN #8

SPCL-2 8" Caps

52
USE
DETOUR

72"
72"

TRAFFIC HANDLING PLAN

NO SCALE

TH-5

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	18	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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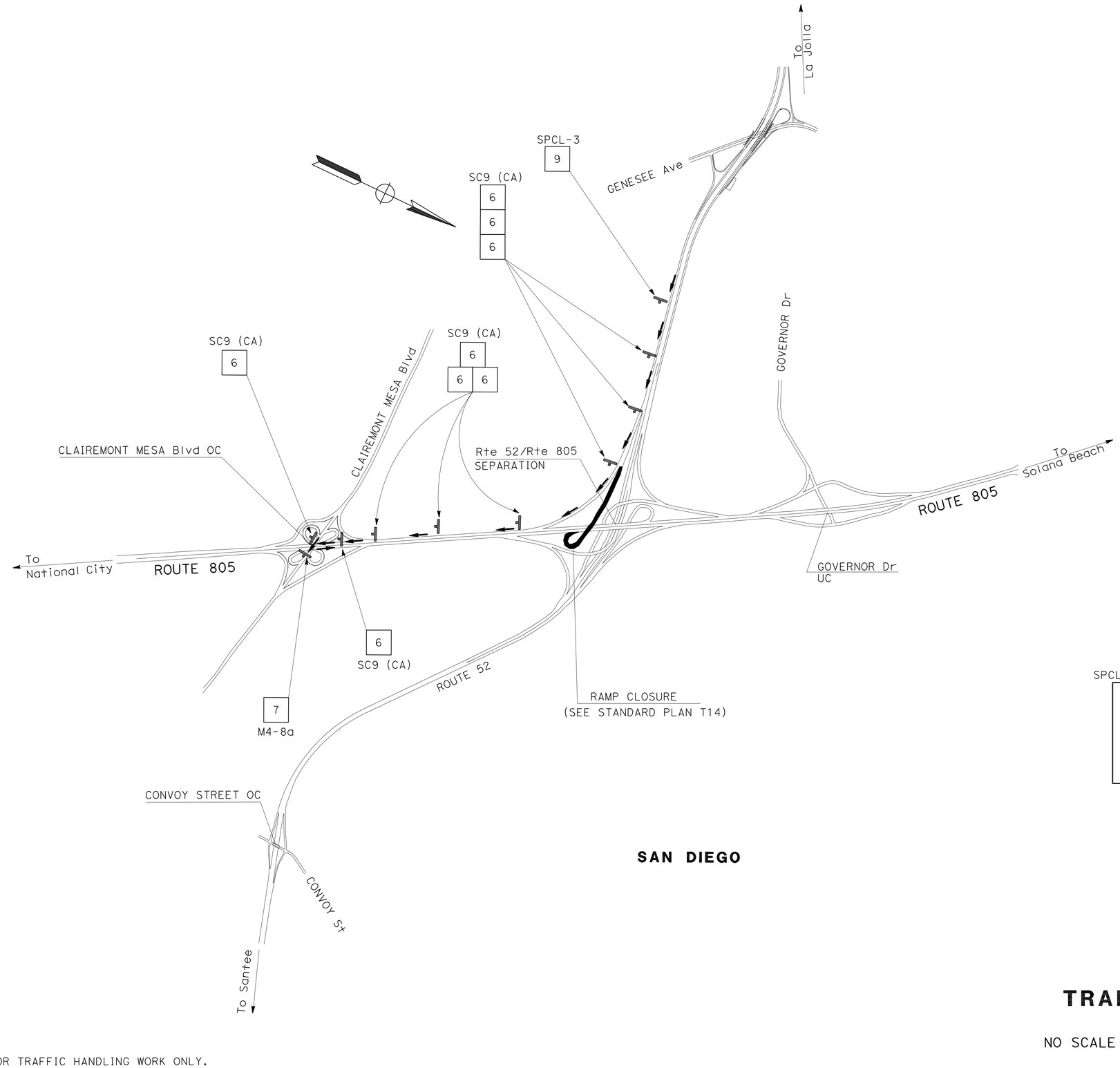
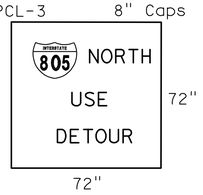


SIGN #9

SPCL-3 8" Caps



THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN

NO SCALE

TH-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	19	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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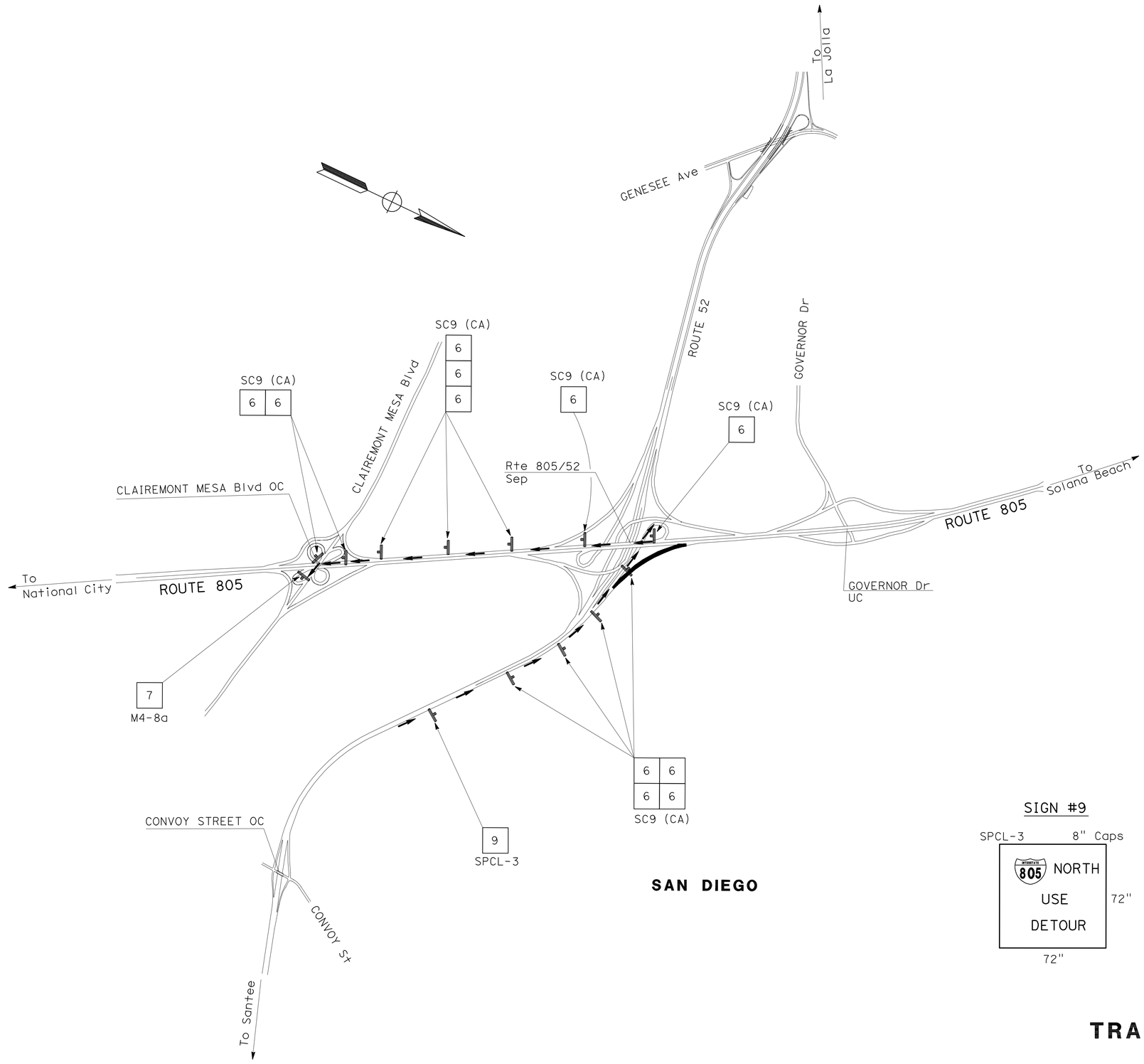

SIGN #9

SPCL-3 8" Caps

TRAFFIC HANDLING PLAN

NO SCALE

TH-7

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	20	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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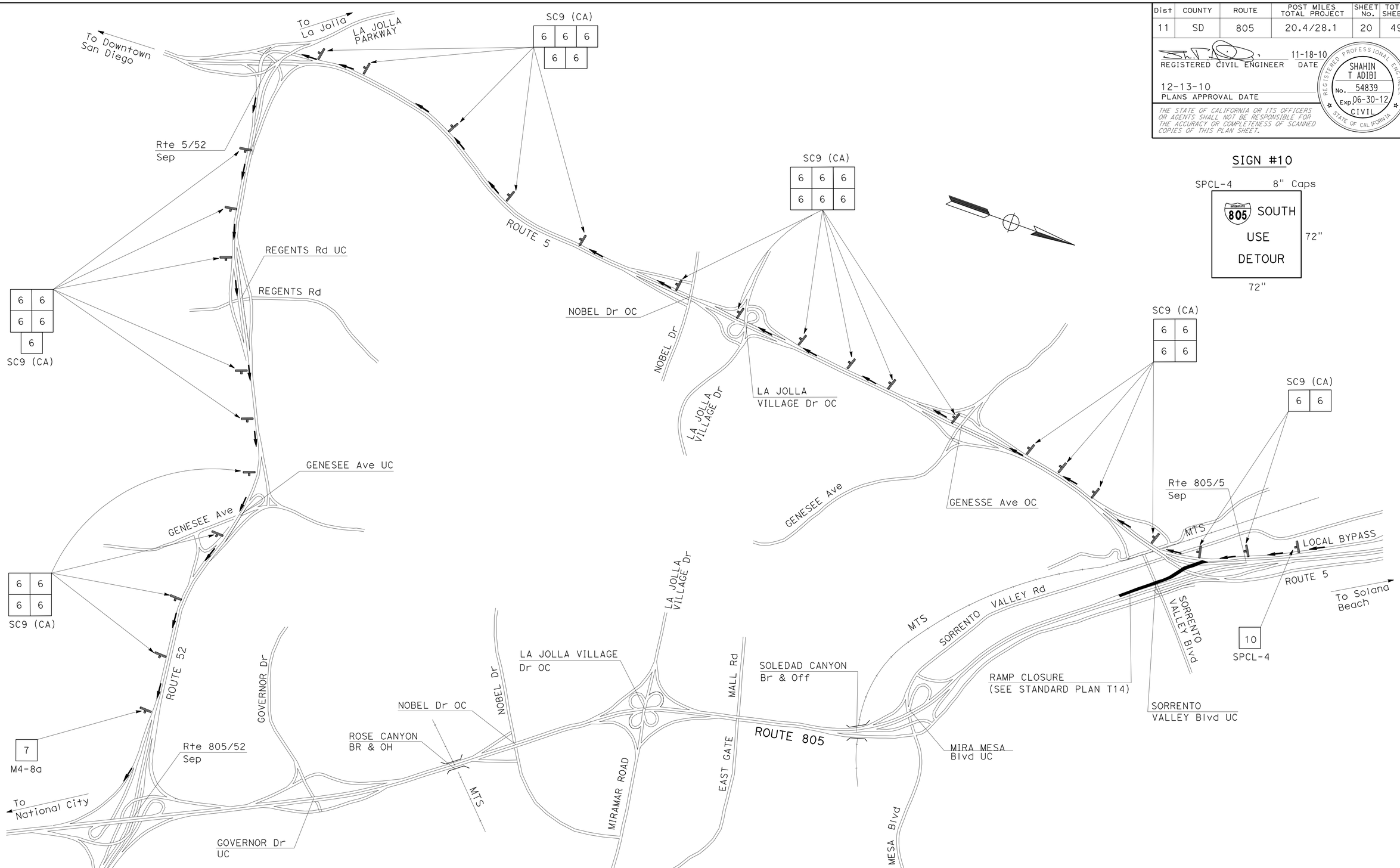

SIGN #10

SPCL-4 8" Caps

INTERSTATE 805 SOUTH
USE
DETOUR

72"

72"

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN

NO SCALE

TH-8

REVISED BY	
DATE REVISED	
CALCULATED-DESIGNED BY	THANH NGUYEN
CHECKED BY	SHAHIN T ADIBI
FUNCTIONAL SUPERVISOR	CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 12-03-10
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	21	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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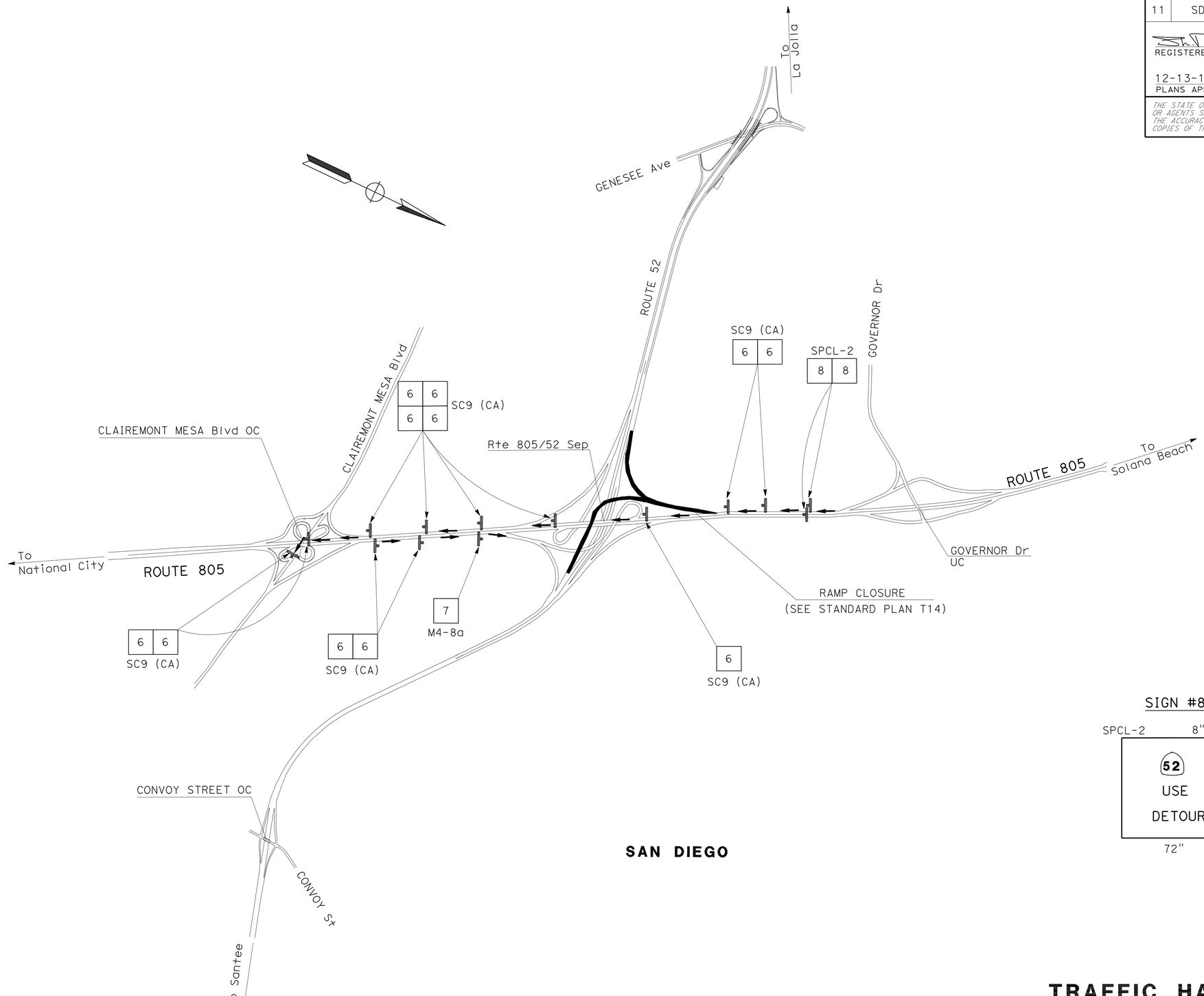

SAN DIEGO

SIGN #8

SPCL-2 8" Caps

52
USE
DETOUR

72"
72"

TRAFFIC HANDLING PLAN

NO SCALE

TH-9

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	22	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
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REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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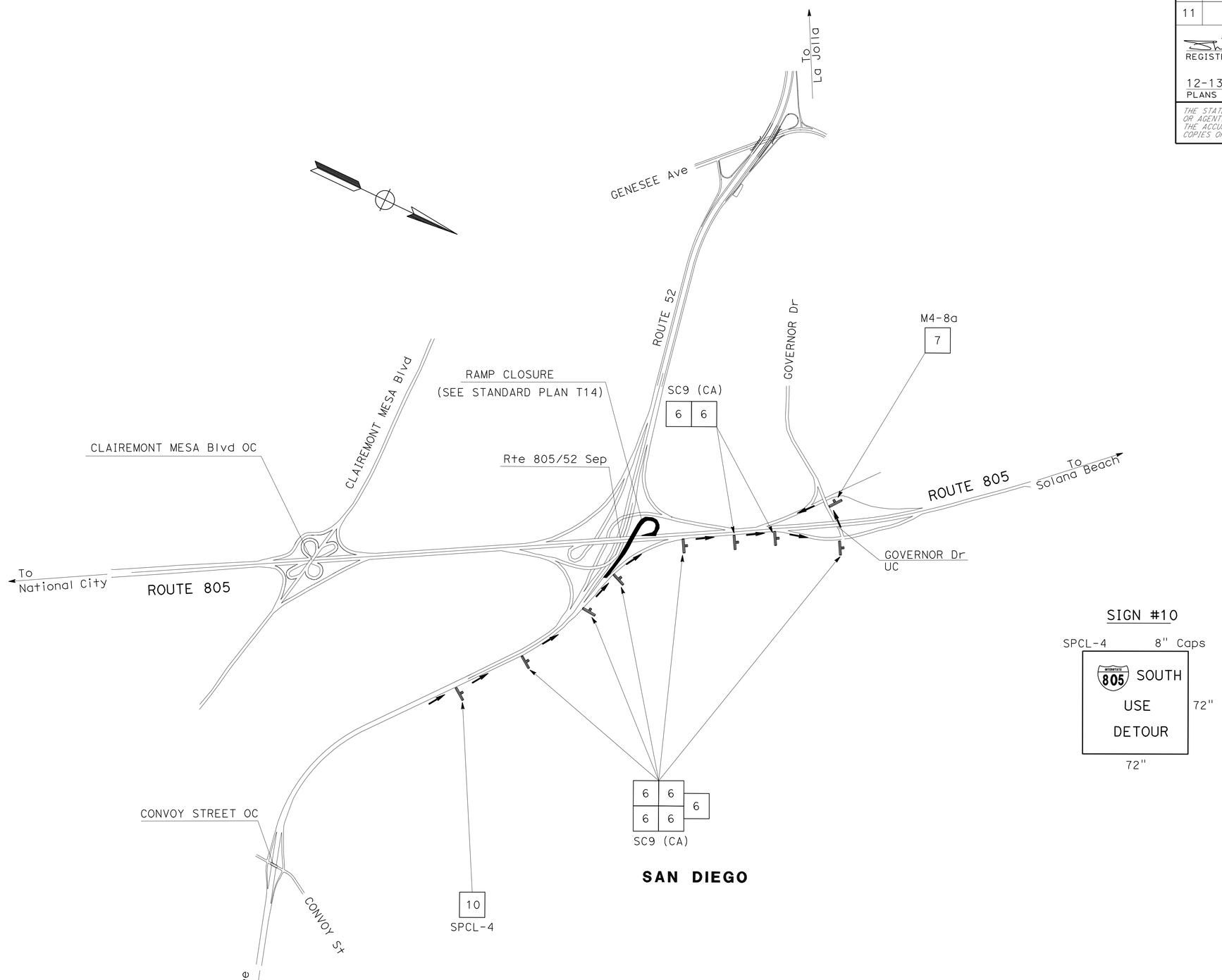

SIGN #10

SPCL-4 8" Caps

TRAFFIC HANDLING PLAN

NO SCALE

TH-10

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: SHAHIN T ADIBI
CHECKED BY:
REVISED BY: THANH NGUYEN
DATE REVISED:

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	23	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

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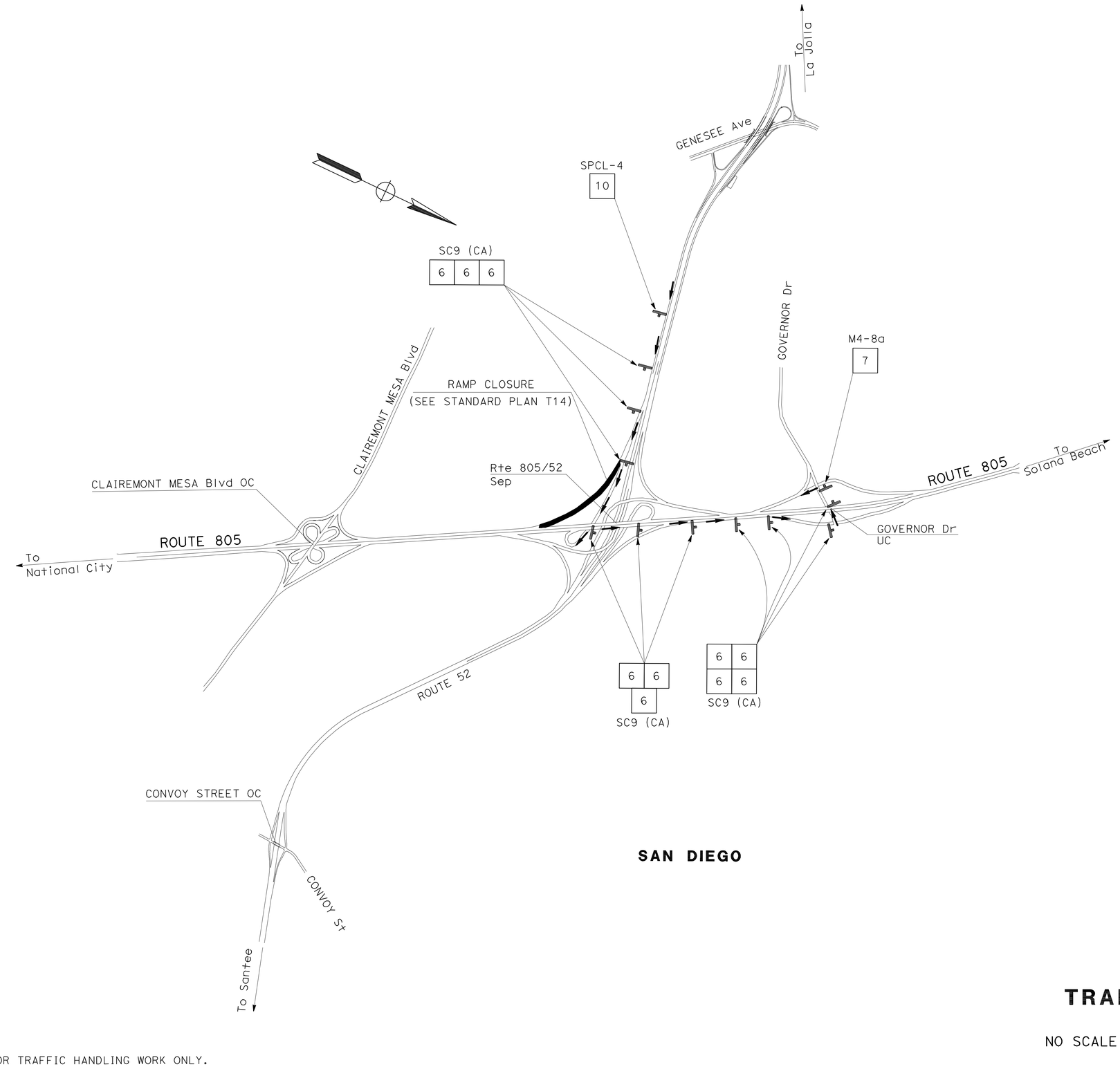
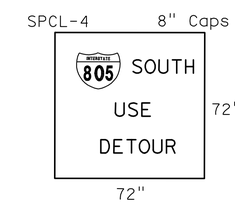


SIGN #10



TRAFFIC HANDLING PLAN

NO SCALE

TH-11

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	24	49

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12-13-10
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REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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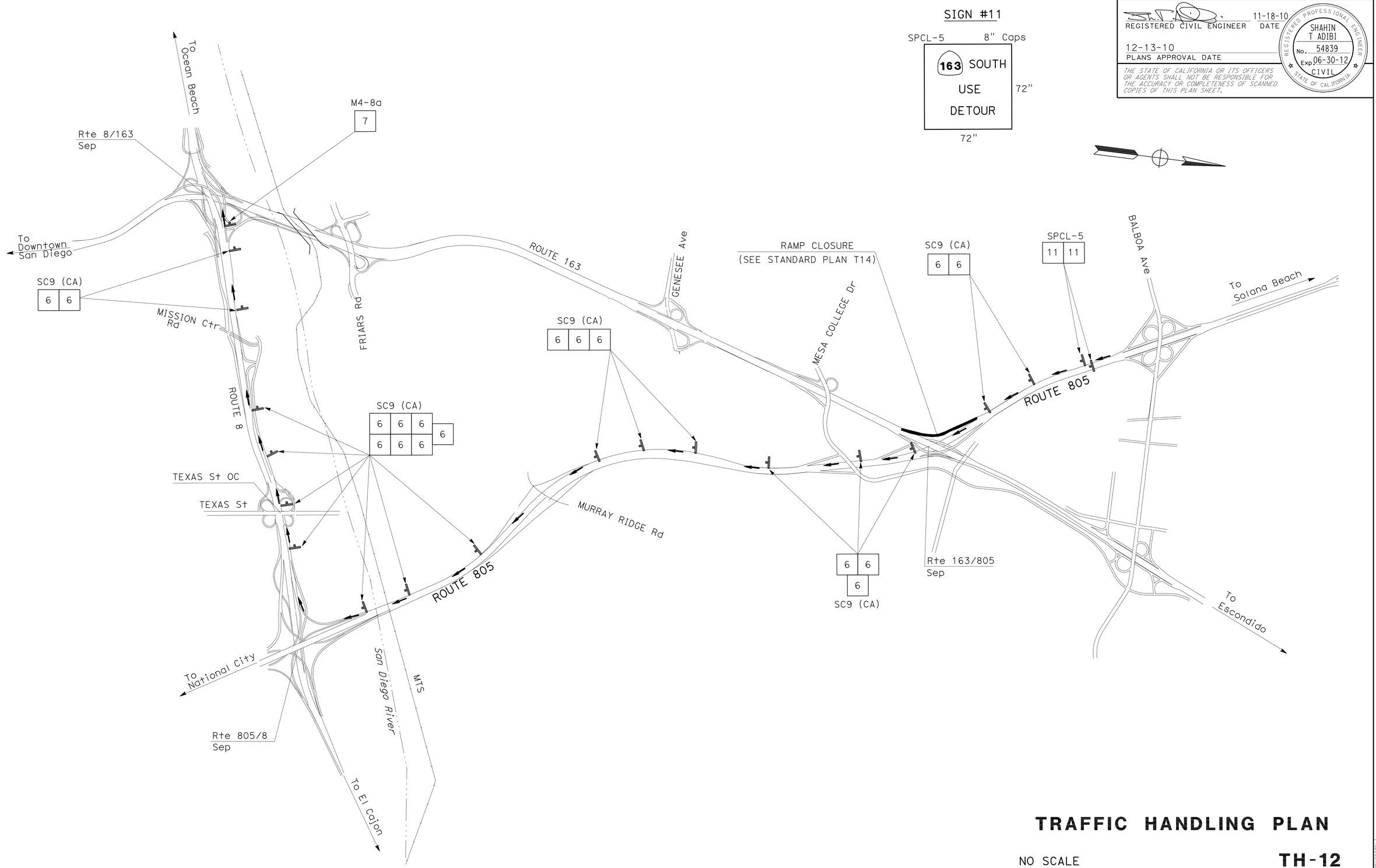

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN

NO SCALE

TH-12

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	25	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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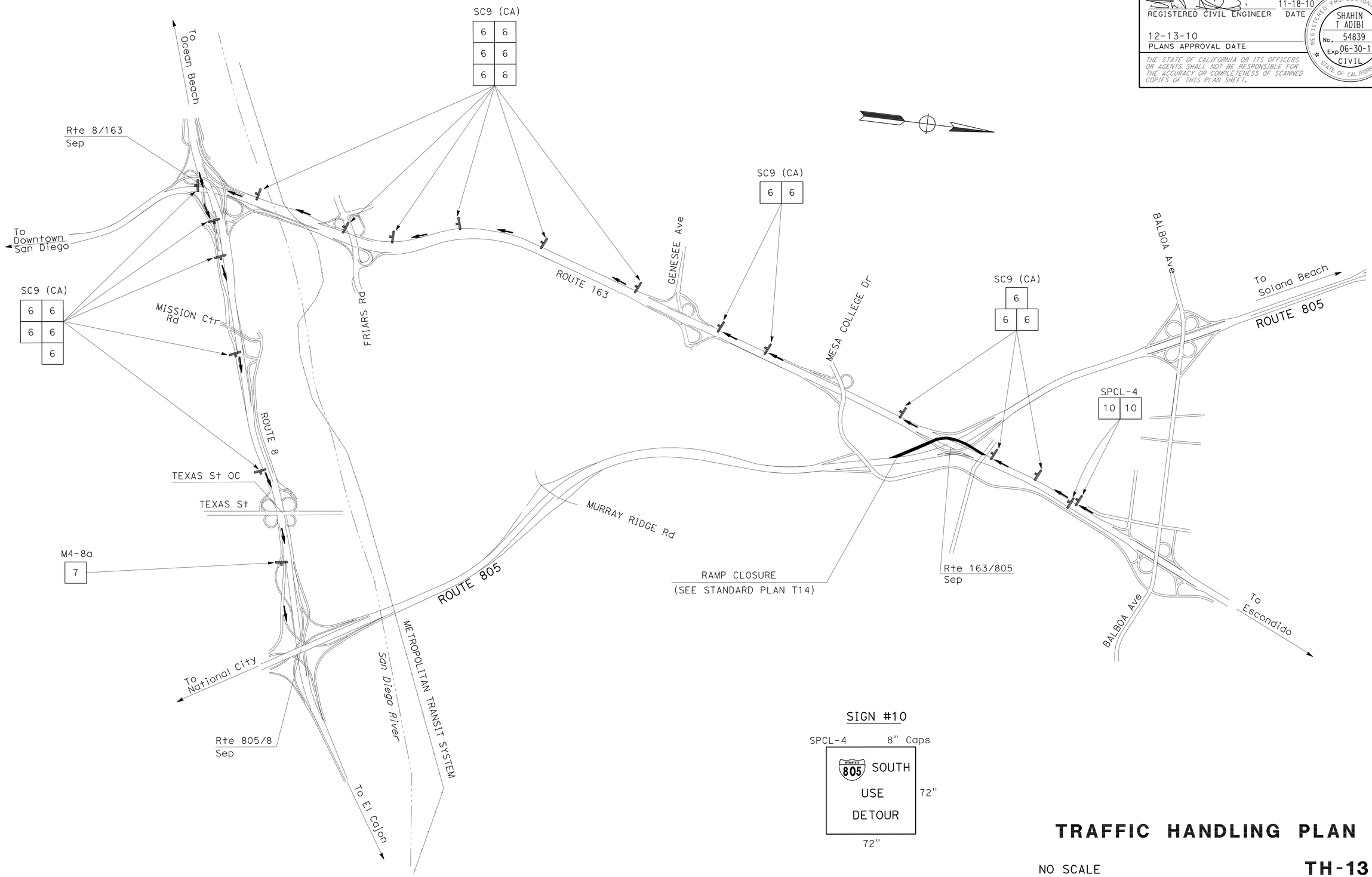

SIGN #10

SPCL-4 8" Caps

INTERSTATE 805 SOUTH
USE
DETOUR

72" × 72"

TRAFFIC HANDLING PLAN

NO SCALE

TH-13

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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12-13-10
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SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
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STATE OF CALIFORNIA

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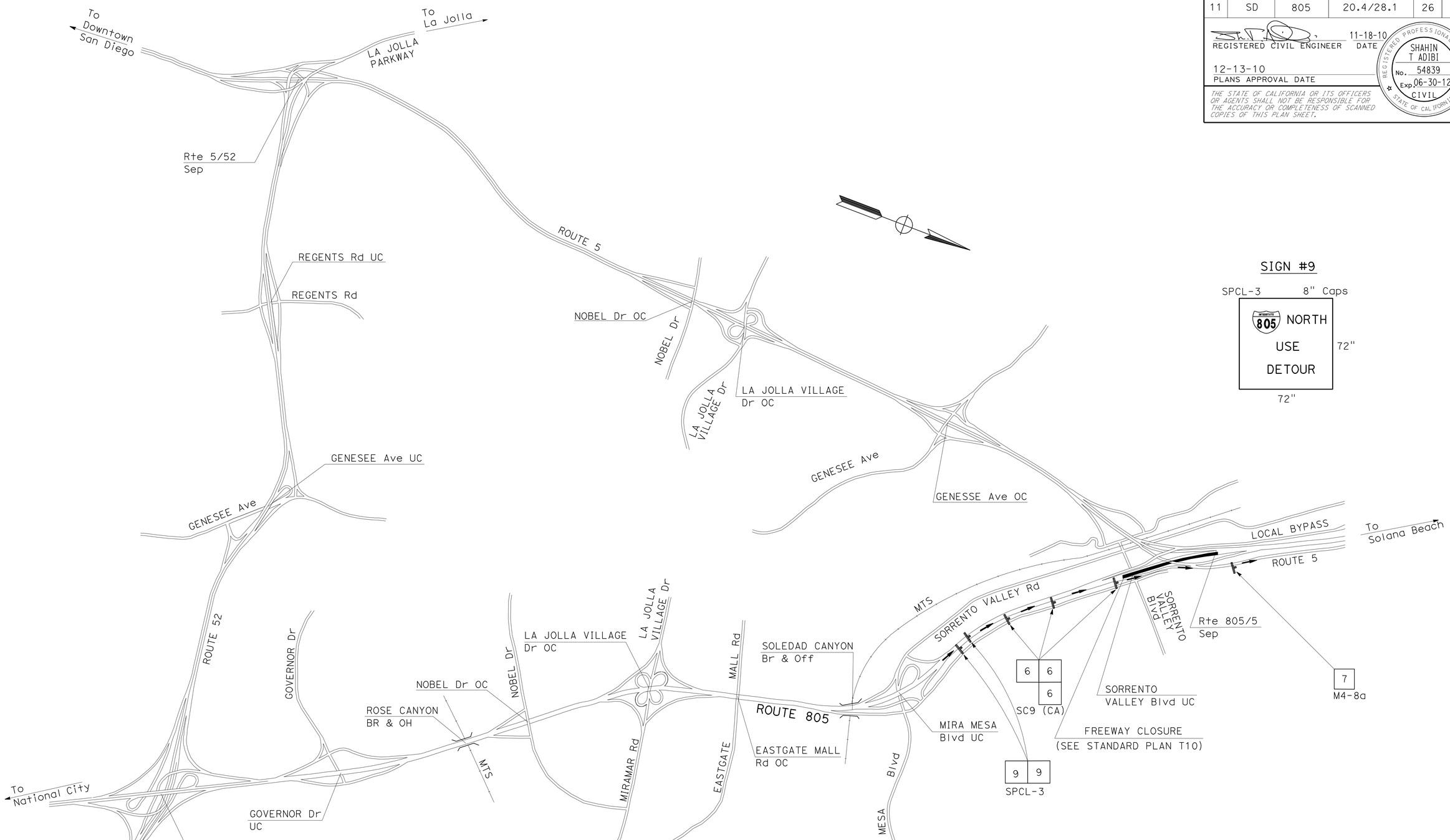


SIGN #9

SPCL-3 8" Caps

805 NORTH
USE
DETOUR

72" × 72"

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN

NO SCALE

TH-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	27	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

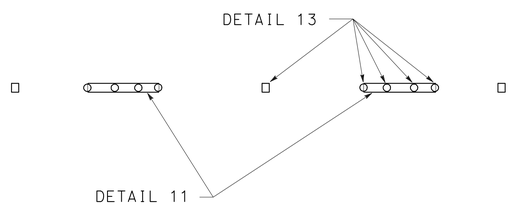
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
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.

DETAIL 11/13 COMBINATION

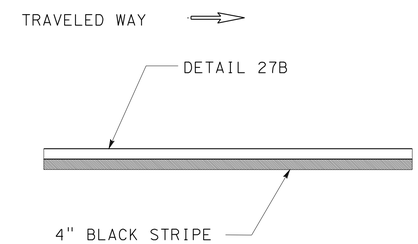
TYPICAL

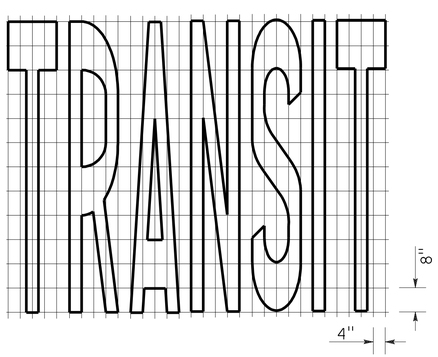


NO SCALE

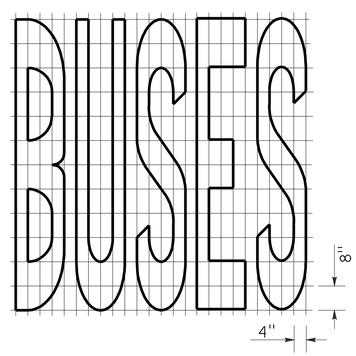
DETAIL 27B (Mod)

TYPICAL

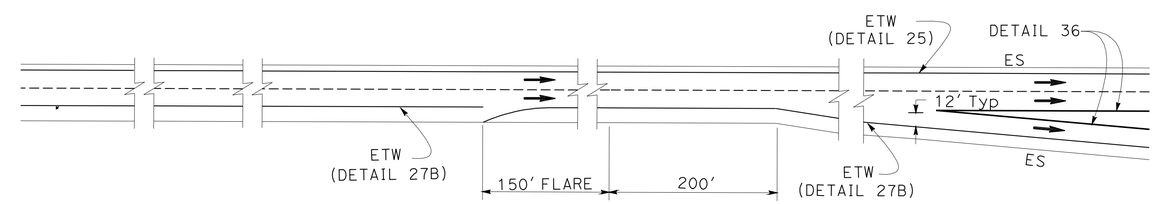




TRANSIT SYMBOL



BUSES SYMBOL



RIGHT EDGELINE FLARE DETAIL

(FOR USE ON ALL EXIT RAMPS EXCEPT WHERE LANE(S) TRAP OFF)

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-09-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	28	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 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. ALL PAVEMENT DELINEATION TO BE REPLACED IN-KIND UNLESS NOTED OTHERWISE.
2. ALL DETAIL 13 SHALL BE REPLACED WITH DETAIL 11/13.

PAVEMENT MARKER SUMMARY								TRAFFIC STRIPE SUMMARY				
ROUTE	DIRECTION	DETAIL No.	NON-REFLECTIVE	RETROREFLECTIVE				PAINT	THERMOPLASTIC			REMARKS
			TYPE A	TYPE C	TYPE G	TYPE D	TYPE H	2-COAT	8" SOLID	4" (BROKEN 17-7)	8" (BROKEN 12-3)	
			EA	EA	EA	EA	EA	LF	LF	LF	LF	
805	SB	11/13	10,076		2,520			120,912				SEE NOTE 2
		14		180								SEE NOTE 1
		25					848	40,656				
		27B						33,317				
		27B (Mod)						7,340				
		36			232				5,504			
		37		48	864						12,936	
		38B			138				1,637			
	ON RAMP FROM LOCAL BYPASS	36A			41				950			
	ON RAMP FROM EAST BOUND OF SORRENTO VALLEY Rd	36A			27				640			
		11/13	68		18			800				SEE NOTE 2
	ON RAMP FROM WEST BOUND OF SORRENTO VALLEY Rd	36A			27				640			SEE NOTE 1
	ON RAMP FROM WEST BOUND OF MIRAMAR Rd	36A			9				211			
	ON RAMP FROM NOBEL Dr	36A			27				640			
	ON RAMP FROM GOVERNOR Dr	36A			12				265			
		8								640		
	ON RAMP FROM WEST BOUND OF Rte 52	36A			9				211			
		8								211		
	ON RAMP FROM EAST BOUND OF Rte 52	36A			16				370			
	ON RAMP FROM WEST BOUND OF CLAIREMONT MESA Blvd	36A			18				425			
	ON RAMP FROM EAST BOUND OF CLAIREMONT MESA Blvd	36A			24				320			
		8								211		
	ON RAMP FROM WEST BOUND OF BALBOA Ave	36A			18				425			
	ON RAMP FROM EAST BOUND OF BALBOA Ave	36A			12				265			
		11/13	24		7			265				SEE NOTE 2
	NB	11/13	9,680		2,421			116,160				SEE NOTE 2
		14		180								SEE NOTE 1
		25					804	38,544				
		27B						38,544				
		36			196				4,646			
		37		72	714						10,666	
		38B			187				2,218			
	ON RAMP FROM Rte 163	36A			9				211			
		11/13	40		10			475				SEE NOTE 2
	ON RAMP FROM EAST BOUND OF BALBOA Ave	36A			9				211			SEE NOTE 1
		8								211		
	ON RAMP FROM WEST BOUND OF BALBOA Ave	36A			22				528			
	SUB-TOTAL		19,888	480	7,587		1,652	397,013	20,317	1,273	23,602	
	TOTAL PDQ-1		19,888	9,719				397,013	20,317	1,273	23,602	

PAVEMENT DELINEATION QUANTITIES
PDQ-1

REVISED BY | DATE REVISED
THANH NGUYEN | SHAHIN T ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	29	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTES:

1. ALL PAVEMENT DELINEATION TO BE REPLACED IN-KIND UNLESS NOTED OTHERWISE.
2. ALL DETAIL 13 SHALL BE REPLACED WITH DETAIL 11/13.
3. TOTAL PAVEMENT MARKER FROM IRRIGATION CROSSOVER

PAVEMENT MARKER SUMMARY / TRAFFIC STRIPE SUMMARY

ROUTE	DIRECTION	DETAIL No.	NON-REFLECTIVE TYPE A EA	RETROREFLECTIVE TYPE C EA	TYPE G EA	TYPE D EA	TYPE H EA	PAINT 2-COAT LF	THERMOPLASTIC 8" SOLID LF	4" (BROKEN 17-7) LF	8" (BROKEN 12-3) LF	REMARKS
805	ON RAMP FROM EAST BOUND OF CLAIREMONT MESA Blvd	36A			9				211			SEE NOTE 1
		8								158		
	ON RAMP FROM WEST BOUND OF CLAIREMONT MESA Blvd	36A			31				740			
	ON RAMP FROM EAST BOUND OF Rte 52	36A			14				320			
		8								320		
	ON RAMP FROM WEST BOUND OF Rte 52	36A			18				425			
		11/13	60		15			700	425			SEE NOTE 2
	ON RAMP FROM GOVERNOR Dr	36A			18				425			SEE NOTE 1
	ON RAMP FROM MIRAMAR Rd	36A			21				480			
	ON RAMP FROM SORRENTO VALLEY Rd	36A			14				320			
		11/13	152		38			1,800				SEE NOTE 2
SUB-TOTAL			212		178			2,500	3,346	478		
TOTAL PDQ-2			212	178				2,500	3,346	478		
TOTAL PDQ-1			19,888	9,719				397,013	20,317	1,273	23,602	
TOTAL PDQ-3			108									SEE NOTE 3
TOTAL			20,208	9,897				399,513	23,663	1,751	23,602	

REMOVE PAVEMENT MARKER (N)

ROUTE	DIRECTION	TYPE (EA) A	C	G	H	REMARKS
805	SB	10168	228	4019	848	
	NB	9932	252	3746	804	
	TOTAL	29997				

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

PAVEMENT DELINEATION QUANTITIES
PDQ-2

REVISED BY | DATE REVISED
THANH NGUYEN | SHAHIN T ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	30	49

REGISTERED CIVIL ENGINEER 11-18-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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IRRIGATION CROSSOVER LOCATIONS

Rte 805 NB/SB	PM	PAVEMENT MARKER NON-REFLECTIVE (EA) TYPE A	REMARKS
	20.50	2	
	20.63	2	
	20.76	2	
	20.89	2	
	21.02	2	
	21.17	2	
	21.26	2	
	21.39	2	
	21.50	2	
	21.59	2	
	21.72	2	
	21.85	2	
	22.02	2	
	22.15	2	
	22.26	2	
	22.37	2	
	22.48	2	
	22.61	2	
	22.74	2	
	22.85	2	
	22.98	2	
	23.11	2	
	23.24	2	
	23.37	2	
	23.48	2	
	23.75	2	
	23.88	2	
	23.99	2	
	24.10	2	
	24.24	2	
	24.36	2	
	24.49	2	
	24.62	2	
	24.75	2	
	24.88	2	
	25.03	2	
	25.16	2	
	25.29	2	
	25.42	2	
	25.53	2	
	25.69	2	
	26.01	2	
	26.14	2	
	26.27	2	
SUB TOTAL		88	

IRRIGATION CROSSOVER LOCATIONS

Rte 805 NB/SB	PM	PAVEMENT MARKER NON-REFLECTIVE (EA) TYPE A	REMARKS
	26.38	2	
	26.53	2	
	26.70	2	
	26.93	2	
	27.02	2	
	27.10	2	
	27.21	2	
	27.31	2	
	27.48	2	
	27.54	2	
TOTAL		*108	

* THIS QUANTITY IS ADDED TO PAVEMENT MARKER SUMMARY.

THERMOPLASTIC PAVEMENT MARKING

ROUTE	DIRECTION	ARROW TYPE VI SQFT	TRANSIT SQFT	BUSES SQFT	ONLY SQFT	REMARKS
805	NB	126	86	48	44	
805	SB	126	86	48	44	
TOTAL		608				

ALL PAVEMENT MARKING TO BE REPLACED IN-KIND UNLESS NOTED OTHERWISE.

MILEPOST MARKERS

ROUTE	DIRECTION	POSTMILE	Qty (EA)	REMARKS
805	SB	28.0	1	
		27.5	1	
		27.0	1	
		26.5	1	
		26.0	1	
		25.5	1	
		25.0	1	
		24.5	1	
		24.0	1	
	NB	24.0	1	
		24.5	1	
		25.0	1	
		25.5	1	
		26.0	1	
		26.5	1	
		27.0	1	
		27.5	1	
		28.0	1	
		TOTAL	18	

PAVEMENT DELINEATION QUANTITIES

PDQ-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: THANH NGUYEN
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	31	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTES:

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

ROADWAY QUANTITIES

LOCATION			LENGTH	TRAVELED WAY WIDTH		GRIND EXISTING CONCRETE PAVEMENT	GORE AREA (N)	SHOULDER WIDTH		SHOULDER AREA (N)		ROADWAY EXCAVATION	COLD PLANE	HOT MIX ASPHALT (TYPE A)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TACK COAT	ASPHALTIC EMULSION (FOG SEAL COAT)	RUMBLE STRIP	DESCRIPTION
								INSIDE	OUTSIDE	INSIDE	OUTSIDE								
	FROM PM	TO PM	LF (N)	LF (N)		SQYD	SQFT	LF (N)		SQFT		CY	SQYD	TON	TON	TON	TON	Sta	
DIRECTION				PCC	AC														
NB Rte 805	20.46	20.52	316.80	48		1,689.60	11,741.24	14	0	4,435.20	0	82.13	1,304.58	114.99	170.75	0.43	0.57	5.28	
	20.52	20.81	1531.20	48		8,166.40	0.00	14	10	21,436.80	15,312.00	396.98	1,701.33	555.77	387.90	0.97	1.29	33.79	
	20.81	20.92	580.80	48		3,097.60	6,679.20	14	0	8,131.20	0	150.58	742.13	210.80	156.33	0.39	0.52	5.81	
	20.92	21.06	739.20	60		4,928.00	0.00	14	10	10,348.80	7,392.00	191.64	821.33	268.30	187.26	0.47	0.62	14.78	
	21.06	21.30	1,267.20	48	12	6,758.40	0.00	14	10	17,740.80	12,672.00	328.53	3,097.60	459.94	535.04	1.20	1.07	25.34	
	21.30	21.35	264.00	48		1,408.00	3,036.00	14	0	3,696.00	0	68.44	337.33	95.82	71.06	0.18	0.24	2.64	
	21.35	21.71	1,900.80	48		10,137.60	0.00	14	10	26,611.20	19,008.00	492.80	2,112.00	689.92	481.54	1.20	1.60	38.02	
	21.71	21.82	580.80	48	12	3,097.60	6,679.20	14	6	8,131.20	3,484.80	150.58	1,903.73	210.81	291.21	0.67	0.64	5.81	
	21.82	21.91	475.20	48		2,534.40	5,464.80	14	0	6,652.80	0	123.20	607.20	172.48	127.91	0.32	0.43	4.75	
	21.91	22.23	1,689.60	48	12	9,011.20	0.00	14	10	23,654.40	16,896.00	438.04	4,130.13	613.26	713.39	1.60	1.42	33.79	
	22.23	22.28	264.00	48	24	1,408.00	3,036.00	14	10	3,696.00	2,640.00	68.44	1,334.67	95.82	188.10	0.41	0.33	5.28	
	22.28	22.64	1,900.80	48		10,137.60	0.00	14	10	26,611.20	19,008.00	492.80	2,112.00	689.92	481.54	1.20	1.60	38.02	
	22.64	22.71	369.60	48	12	1,971.20	4,250.40	14	6	5,174.40	2,217.60	95.82	1,211.47	134.15	185.31	0.42	0.41	3.70	
	22.71	22.83	633.60	48		3,379.20	7,286.40	14	0	8,870.40	0	164.27	809.60	229.97	224.05	0.53	0.57	6.34	
	22.83	23.22	2,059.20	60		13,728.00	0.00	14	10	28,828.80	20,592.00	533.87	2,288.00	747.41	521.66	1.30	1.74	41.18	
	23.22	23.29	369.60	48		1,971.20	6468.00	14	0	5,174.40	0	95.82	718.67	134.15	122.89	0.31	0.41	3.70	
	23.29	23.52	1,214.40	48		6,476.80	0.00	29	10	35,217.60	12,144.00	652.18	1,349.33	913.05	499.93	1.25	1.66	24.29	
	23.52	23.56	211.20	48		1,126.40	4,224.00	22	0	4,646.40	0	86.04	469.33	120.46	93.63	0.23	0.31	2.11	
	23.56	23.74	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	23.74	23.79	264.00	48		1,408.00	0.00	8	10	2,112.00	2,640.00	0.00	528.00	0.00	50.16	0.13	0.17	5.28	
	23.79	23.83	211.20	48		1,126.40	3,168.00	8	0	1,689.60	0	0.00	539.73	0.00	51.27	0.13	0.17	4.22	
	23.83	24.26	2,270.40	60		15,136.00	0.00	8	10	18,163.20	22,704.00	0.00	4,540.80	0.00	431.38	1.08	1.44	45.41	
	24.26	24.30	211.20	48	12	1,126.40	3,168.00	8	10	1,689.60	2,112.00	0.00	1,056.00	0.00	109.24	0.25	0.24	2.11	
	24.30	24.43	686.40	48		3,660.80	0.00	8	10	5,491.20	6,864.00	0.00	1,372.80	0.00	130.42	0.33	0.43	13.73	
	24.43	24.50	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	24.50	24.59	475.20	48		2,534.40	0.00	8	10	3,801.60	4,752.00	0.00	950.40	0.00	90.29	0.23	0.17	9.50	
	24.59	24.67	422.40	48		2,252.80	6,547.20	8	0	3,379.20	0	0.00	1,102.93	0.00	104.78	0.26	0.23	4.22	
	24.67	24.96	1,531.20	60		10,208.00	0.00	8	10	12,249.60	15,312.00	0.00	3,062.40	0.00	290.93	0.73	0.54	30.62	
	24.96	25.07	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	25.07	25.13	316.80	48		1,689.60	3,643.20	8	0	2,534.40	0	0.00	686.40	0.00	65.21	0.16	0.22	3.17	
	25.13	25.32	1,003.20	48		5,350.40	0.00	8	10	8,025.60	10,032.00	0.00	2,006.40	0.00	190.61	0.48	0.63	20.06	
	25.32	25.60	1,478.40	48	12	7,884.80	0.00	8	10	11,827.20	14,784.00	0.00	4,928.00	0.00	530.58	1.17	0.93	29.57	
	25.60	25.65	264.00	48	24	1,408.00	3,036.00	8	10	2,112.00	2,640.00	0.00	1,569.33	0.00	171.38	0.37	0.28	2.64	
	25.65	26.32	3,537.60	48		18,867.20	0.00	8	10	28,300.80	35,376.00	0.00	7,075.20	0.00	672.14	1.68	2.24	70.75	
	26.32	26.41	475.20	48		2,534.40	5,464.80	8	0	3,801.60	0	0.00	1,029.60	0.00	97.81	0.24	0.33	4.75	
	26.41	26.61	1,056.00	48	12	5,632.00	0.00	8	10	8,448.00	10,560.00	0.00	3,520.00	0.00	378.99	0.83	0.67	21.12	
	26.61	26.67	316.80	48	24	1,689.60	4,752.00	8	10	2,534.40	3,168.00	0.00	2,006.40	0.00	217.36	0.48	0.37	3.17	
	26.67	26.73	316.80	48		1,689.60	0.00	8	10	2,534.40	3,168.00	0.00	633.60	0.00	60.19	0.15	0.20	6.33	
	26.73	26.95	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	26.95	27.05	528.00	48		2,816.00	3,643.20	8	10	4,224.00	2,112.00	0.00	1,108.80	0.00	105.34	0.26	0.35	7.36	
	27.05	27.12	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	27.12	27.29	897.60	48		4,787.20	0.00	8	10	7,180.80	8,976.00	0.00	1,795.20	0.00	170.54	0.43	0.57	17.95	
	27.29	27.40	580.80	48		3,097.60	6,679.20	8	0	4,646.40	0	0.00	1,258.40	0.00	119.55	0.30	0.40	5.81	
	27.40	27.70	1,584.00	48		8,448.00	0.00	8	10	12,672.00	15,840.00	0.00	3,168.00	0.00	300.96	0.75	1.00	31.68	NO GRIND ON TRAVELED LANES LEADING TO LOCAL BYPASS
	27.70	28.15	2,376.00	48		12,672.00	0.00	8	0	19,008.00	0	0.00	2,112.00	0.00	200.64	0.50	0.67	23.76	
UNDER DIKE															369.29				
DIKE																	1.56		
MISC AREA																	0.06		
SUBTOTAL 1						207,046.40						4,612.16	73,100.82	6,457.02	10,348.56	24.02	29.30	657.84	

SUMMARY OF QUANTITIES
Q-1

REVISED BY | DATE REVISED
SEAN D. HOANG | ABDUL MALIKYAR
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: EDWARD HAJJ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	32	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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:

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

ROADWAY QUANTITIES

LOCATION			LENGTH	TRAVELED WAY WIDTH		GRIND EXISTING CONCRETE PAVEMENT	GORE AREA (N)	SHOULDER WIDTH		SHOULDER AREA (N)		ROADWAY EXCAVATION	COLD PLANE	HOT MIX ASPHALT (TYPE A)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TACK COAT	ASPHALTIC EMULSION (FOG SEAL COAT)	RUMBLE STRIP	DESCRIPTION
								INSIDE	OUTSIDE	INSIDE	OUTSIDE								
	FROM PM	TO PM	LF (N)	LF (N)		SQYD	SQFT	LF (N)		SQFT		CY	SQYD	TON	TON	TON	TON	Sta	
DIRECTION				PCC	AC														
SB Rte 805	28.15	28.04	580.80	48		3,097.60	0.00	8	0	4,646.40	0	0.00	516.27	0.00	49.05	0.12	0.16	5.81	NO GRIND ON TRAVELED LANES FROM LOCAL BYPASS
	28.04	27.44	3,168.00	48		16,896.00	0.00	8	0	25,344.00	0	0.00	2,816.00	0.00	267.52	0.67	0.89	31.68	
	27.44	27.37	369.60	48		1,971.20	6,468.00	8	0	2,956.80	0	0.00	1,047.20	0.00	99.48	0.25	0.33	3.70	
	27.37	27.23	739.20	48		3,942.40	0.00	8	10	5,913.60	7,392.00	0.00	1,478.40	0.00	140.45	0.35	0.47	14.78	
	27.23	27.15	422.40	48		2,252.80	4,857.60	8	0	3,379.20	0	0.00	915.20	0.00	86.94	0.22	0.29	4.22	
	27.15	27.12	158.40	60		1,056.00	0.00	8	10	1,267.20	1,584.00	0.00	316.80	0.00	30.10	0.08	0.10	3.17	
	27.12	27.05	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	27.05	26.97	422.40	48		2,252.80	0.00	8	10	3,379.20	4,224.00	0.00	844.80	0.00	80.26	0.20	0.27	8.45	
	26.97	26.95	105.60	48		563.20	3,062.40	8	0	844.80	0	0.00	434.13	0.00	41.24	0.10	0.14	1.06	
	26.95	26.73	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	26.73	26.29	2,323.20	60		15,488.00	0.00	8	10	18,585.60	23,232.00	0.00	4,646.40	0.00	441.41	1.10	1.47	46.46	
	26.29	26.24	264.00	60		1,760.00	3,036.00	8	0	2,112.00	0	0.00	572.00	0.00	54.34	0.14	0.18	2.64	
	26.24	26.07	897.60	60		5,984.00	0.00	8	10	7,180.80	8,976.00	0.00	1,795.20	0.00	170.54	0.43	0.57	17.95	
	26.07	25.58	2,587.20	48		13,798.80	0.00	8	10	20,697.60	25,872.00	0.00	5,174.40	0.00	491.57	1.23	1.64	51.74	
	25.58	25.50	422.40	48		2,252.80	4,857.60	8	0	3,379.20	0	0.00	915.20	0.00	86.94	0.22	0.29	4.22	
	25.50	25.26	1,267.2	48		6,758.40	0.00	8	10	10,137.60	12,672.00	0.00	2,534.40	0.00	240.77	0.60	0.80	25.34	
	25.26	25.19	369.60	48		1,972.20	4,250.40	8	0	2,956.80	0	0.00	800.80	0.00	76.08	0.19	0.25	3.70	
	25.19	25.07	633.60	60		4,224.00	0.00	8	10	5,068.80	6,336.00	0.00	1,267.20	0.00	120.38	0.30	0.40	12.67	
	25.07	24.96	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	24.96	24.72	1,267.20	60		8,448.00	0.00	8	10	10,137.60	12,672.00	0.00	2,534.40	0.00	240.77	0.60	0.80	25.34	
	24.72	24.66	316.80	48		1,689.60	3,643.20	8	0	2,534.40	0	0.00	686.40	0.00	65.21	0.16	0.22	3.17	
	24.66	24.50	844.80	48		4,505.60	0.00	8	10	6,758.40	8,448.00	0.00	1,689.60	0.00	160.51	0.40	0.53	16.90	
	24.50	24.43	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	24.43	24.36	369.60	48		1,971.20	0.00	8	10	2,956.80	3,696.00	0.00	739.20	0.00	70.22	0.18	0.23	7.39	
	24.36	24.34	105.60	48		563.20	1,953.60	8	0	844.80	0	0.00	310.93	0.00	29.54	0.07	0.10	1.06	
	24.34	24.26	422.40	60		2,816.00	2,956.80	8	0	3,379.20	0	0.00	704.00	0.00	66.88	0.17	0.22	4.22	
	24.26	24.06	1,056.00	60		7,040.00	0.00	8	10	8,448.00	10,560.00	0.00	2,112.00	0.00	200.64	0.50	0.67	21.12	
	24.06	23.96	528.00	48		2,816.00	6,072.00	8	0	4,224.00	0	0.00	1,144.00	0.00	108.68	0.27	0.36	5.28	
	23.96	23.79	897.60	48		4,787.20	0.00	8	10	7,180.80	8,976.00	0.00	1,795.20	0.00	170.54	0.43	0.57	17.95	
	23.79	23.74	264.00	48		1,408.00	3,036.00	8	0	2,112.00	0	0.00	572.00	0.00	54.34	0.14	0.18	2.64	
	23.74	23.56	BRIDGE	BRIDGE		BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	
	23.56	23.50	316.80	48		1,689.60	0.00	14	10	4,435.20	3,168.00	82.13	352.00	114.99	80.26	0.20	0.27	6.34	
	23.50	23.38	633.60	48		3,379.20	7,286.40	14	0	8,870.40	0	164.27	809.60	229.97	170.54	0.43	0.57	6.34	
	23.38	22.92	2,428.80	60		16,192.00	0.00	14	10	34,003.20	24,288.00	629.69	2,698.67	881.56	615.30	1.54	2.05	48.58	
	22.92	22.87	264.00	48		1,408.00	3036.00	14	0	3,696.00	0	68.44	337.33	95.82	71.06	0.18	0.24	2.64	
	22.87	22.50	1,953.60	48		10,419.20	0.00	14	10	27,350.40	19,536.00	506.49	2,170.67	709.08	494.91	1.24	1.65	39.07	
	22.50	22.42	422.40	48	12	2,252.80	4,857.60	14	6	5,913.60	2,534.40	109.51	1,384.53	153.32	211.79	0.48	0.47	4.22	
	22.42	22.32	528.00	48	12	2,816.00	6,072.00	14	0	7,392.00	0	136.89	1,378.67	191.64	231.29	0.57	0.47	5.28	
	22.32	21.99	1,742.40	48	24	9,292.80	0.00	14	10	24,393.60	17,424.00	451.73	6,582.40	632.43	1,029.95	2.20	1.47	34.85	
	21.99	21.94	264.00	48		1,408.00	3,036.00	14	0	3,696.00	0	68.44	337.33	95.82	71.06	0.18	0.24	2.64	
	21.94	21.58	1,900.80	48		10,137.60	0.00	14	10	26,611.20	19,008.00	492.80	2112.00	689.92	481.54	1.20	1.60	38.02	
	21.58	21.47	580.80	48	12	3,097.60	6,679.20	14	6	8,131.20	3,484.80	150.58	1,903.73	210.81	291.21	0.67	0.64	5.81	
	21.47	21.44	158.40	48	12	844.80	792.00	14	0	2,217.60	0	41.07	299.20	57.49	58.52	0.13	0.11	1.58	
	21.44	21.08	1,900.80	48	24	10,137.60	0.00	14	10	26,611.20	19,008.00	492.80	7,180.80	689.92	1,123.58	2.40	1.60	38.02	
	21.08	20.86	1,161.60	72		9,292.80	0.00	14	10	16,262.40	11,616.00	301.16	1,290.67	421.62	294.27	0.73	0.98	23.23	
	20.86	20.79	369.60	48		1,971.20	4,250.40	14	0	5,174.40	0	95.82	472.27	134.15	99.48	0.25	0.33	3.70	
	20.79	20.46	1,742.40	48		9,292.80	0.00	14	10	24,393.60	17,424.00	451.73	1936.00	632.43	441.41	1.10	1.47	34.85	
UNDER DIKE															390.27				
DIKE																	1.70		
MISC AREA																	0.10		
SUBTOTAL 2						213,947.00						4,243.55	69,608.00	5,940.97	9,800.84	22.62	28.09	637.83	

SUMMARY OF QUANTITIES
Q-2

REVISED BY | DATE REVISED
SEAN D. HOANG | ABDUL MALIKYAR
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: EDWARD HAJJ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	33	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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.

ROADWAY QUANTITIES

LOCATION			LENGTH	TRAVELED WAY WIDTH		GRIND EXISTING CONCRETE PAVEMENT	GORE AREA (N)	SHOULDER WIDTH		SHOULDER AREA (N)		ROADWAY EXCAVATION	COLD PLANE	HOT MIX ASPHALT (TYPE A)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TACK COAT	ASPHALTIC EMULSION (FOG SEAL COAT)	RUMBLE STRIP	DESCRIPTION
								INSIDE	OUTSIDE	INSIDE	OUTSIDE								
	FROM PM	TO PM	LF (N)	LF (N)		SQYD	SQFT	LF (N)		SQFT		CY	SQYD	TON	TON	TON	TON	Sta	
				PCC	AC														
SUBTOTAL 1						207,046.40						4,612.16	73,100.82	6,457.02	10,348.56	24.02	29.30	657.84	
SUBTOTAL 2						213,947.00						4,243.55	69,608.00	5,940.97	9,800.84	22.62	28.09	637.83	
TOTAL						420,993.40						8,855.71	142,708.82	12,397.99	20,149.40	46.64	57.39	1,295.67	

Misc AREA QUANTITIES

LOCATION	BEGIN PM	END PM	PLACE HMA (Misc AREA)	MINOR HMA	ASPHALTIC EMULSION (FOG SEAL COAT)	DESCRIPTION
SB ROUTE 805			SQYD	TON	TON	
	21.556	21.919	70.92	14.96	0.03	SEE C-6 PLAN SHEET FOR DETAIL
	22.494	22.741	48.25	10.18	0.02	
	22.741	22.774	105.13	4.32	0.04	
	22.774	22.858	16.41	3.43	0.01	
NB ROUTE 805	21.358	21.722	71.11	14.86	0.03	
	22.278	22.621	67.01	14.00	0.03	
TOTAL			378.83	61.75*	0.16**	

* SEE DIKE QUANTITIES FOR ITEM TOTAL

SEAL JOINT (EXISTING CONCRETE PAVEMENT) ***

ROUTE	PM	LANE	LF
805 NORTH	20.46-23.56	2-3	16,368
	BRIDGE		
805 NORTH	23.74-24.43	2-3	3,643
	BRIDGE		
805 NORTH	24.50-26.73	2-3	11,774
	BRIDGE		
805 NORTH	26.95-27.05	2-3	528
	BRIDGE		
805 NORTH	27.12-27.70	2-3	3,062
805 SOUTH	20.46-23.56	2-3	16,368
	BRIDGE		
805 SOUTH	23.74-24.43	2-3	3,643
	BRIDGE		
805 SOUTH	24.50-26.73	2-3	11,774
	BRIDGE		
805 SOUTH	26.95-27.05	2-3	528
	BRIDGE		
805 SOUTH	27.12-28.15	2-3	5,438
TOTAL			73,126

*** SEAL JOINT SHALL BE TYPE R. ONLY THE LONGITUDINAL JOINT BETWEEN LANES 2 AND 3 WILL HAVE SEAL JOINT.

DRAINAGE QUANTITIES

REMOVE EXIST SLOTTED CSP DRAIN (N)	18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (0.168" THK)	DESCRIPTION	PM	CONSTRUCTION DETAIL PLAN SHEET
EA	LF			
3	30	REPLACEMENT OF SLOTTED CSP DRAINS	23.50	C-5

REPAIR SPALLED JOINTS

ROUTE	PM	SQYD
805 NORTH	20.46-27.70	207.05
805 SOUTH	20.46-28.15	213.95
	TOTAL	421.00

SUMMARY OF QUANTITIES
Q-3

REVISED BY | DATE REVISED
SEAN D. HOANG | ABDUL MALIKYAR
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: EDWARD HAJJ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	34	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTES:

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

REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

BASE PM	ROUTE	DIRECTION	LANE NUMBER	No. of SLABS (N)	Avg LENGTH (N)	WIDTH (N)	DEPTH PCC (N)	DEPTH CTB (N)	REPLACE CONCRETE PAVEMENT (RSC)	DOWEL BAR (DRILL AND BOND)
				EA	FT	FT	FT	FT	CY	EA
22.994	805	SB	1	2	15	12	0.65	0.45	14.67	16.0
22.994			2	2		12	0.65		14.67	16.0
22.994			3	2		12	0.70		15.33	16.0
22.994			4	2		12	0.70		15.33	16.0
22.994			5	2		12	0.70		15.33	16.0
24.571			4	1		12	0.70		7.67	16.0
24.652			4	1		12	0.70		7.67	16.0
25.981			3	1		12	0.70		7.67	16.0
26.617			3	2		12	0.70		15.33	16.0
26.684			5	2		12	0.70		15.33	16.0
26.716			2	2		12	0.65		14.67	16.0
27.038			3	4		12	0.70		30.67	16.0
27.260			3	2		12	0.70		15.33	16.0
27.283			3	1		12	0.70		7.67	16.0
27.294			3	2		12	0.70		15.33	16.0
27.306			3	2		12	0.70		15.33	16.0
27.350			3	1		12	0.70		7.67	16.0
27.350			PCC Shld	1		10	0.70		6.39	16.0
27.367			3	1		12	0.70		7.67	16.0
27.375			3	3		12	0.70		23.00	16.0
27.385			3	2		12	0.70		15.33	16.0
27.397			3	2		12	0.70		15.33	16.0
27.482			3	2		12	0.70		15.33	16.0
27.490			2	1		12	0.65		7.33	16.0
27.732			4	1		12	0.70		7.67	16.0
27.828			3	1		12	0.70		7.67	16.0
27.828			4	1		12	0.70		7.67	16.0
								TOTAL	349.06	432.0

ABBREVATIONS:

RSC-RAPID STRENGTH CONCRETE

SUMMARY OF QUANTITIES
Q-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	35	49

11-17-10
REGISTERED CIVIL ENGINEER DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ABDUL MALIKYAR
No. C66169
Exp. 06-30-12
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:

* = SEE ROADWAY QUANTITIES FOR ITEM TOTAL.
** = QUANTITY IS LESS THAN 0.01 TON.
(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

DIKE QUANTITIES

LOCATION	BEGIN PM	END PM	PLACE HMA DIKE	REMOVE AC DIKE	MINOR HMA	ASPHALTIC EMULSION (FOG SEAL COAT)	DIKE WIDTH (N)	SHOULDER PAD UNDER DIKE RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	DESCRIPTION	
			LF	LF	TON	TON	LF	TON	NEW DIKE	Exist DIKE
SB ROUTE 805	20.400	20.511	586	586	14.47	0.04	1.33	8.23	TYPE E	TYPE A
	20.511	20.516	26	26	0.33	0.00**	0.67	0.18	TYPE F	TYPE A
	20.516	20.528	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE A
	20.528	20.616	465	465	11.49	0.03	1.33	6.53	TYPE E	TYPE A
	20.616	20.621	26	26	0.33	0.00**	0.67	0.18	TYPE F	TYPE A
	20.621	20.627	32	32	0.23	0.00**	0.50	0.17	TYPE C	TYPE A
	20.627	20.633	32	32	0.23	0.00**	0.50	0.17	TYPE C	TYPE D
	20.633	20.687	285	285	7.04	0.02	1.33	4.00	TYPE E	TYPE A
	20.687	20.692	26	26	0.33	0.00**	0.67	0.18	TYPE F	TYPE A
	20.692	20.704	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE A
	20.704	20.758	285	285	7.04	0.02	1.33	4.00	TYPE E	TYPE A
	21.000	21.164	866	866	21.39	0.05	1.33	12.16	TYPE E	TYPE A
	21.181	21.273	486	486	12.00	0.03	1.33	6.82	TYPE E	TYPE A
	21.273	21.561	1,521	1,521	37.57	0.09	1.33	21.35	TYPE E	TYPE E
	21.556	21.919	1,917	1,917	47.35	0.12	1.33	26.91	TYPE E	TYPE A
	22.494	22.741	1,304	1,304	32.21	0.08	1.33	18.31	TYPE E	TYPE A
	22.741	22.757	84	84	0.61	0.00**	0.50	0.44	TYPE C	TYPE A
	22.757	22.774	90		0.65	0.00**	0.50	0.48	TYPE C	NO DIKE
	22.774	22.858	444	444	10.97	0.03	1.33	6.23	TYPE E	TYPE A
	22.867	23.272	2,138	2,138	119.02	0.21	2.17	48.97	TYPE D	TYPE D
	23.278	23.308	158	158	8.80	0.02	2.17	3.62	TYPE D	TYPE D
	23.316	23.348	169	169	9.41	0.02	2.17	3.87	TYPE D	TYPE D
	23.354	23.386	169	169	9.41	0.02	2.17	3.87	TYPE D	TYPE D
	23.392	23.496	549	549	30.56	0.05	2.17	12.58	TYPE D	TYPE D
	23.496	23.569	385	385	9.51	0.02	1.33	5.40	TYPE E	TYPE A
	23.943	24.024	428	428	10.57	0.03	1.33	6.01	TYPE E	TYPE E
	24.024	24.029	26	26	0.33	0.00**	0.67	0.18	TYPE F	TYPE A
	24.029	24.041	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE A
	24.041	24.194	808	808	19.96	0.05	1.33	11.34	TYPE E	TYPE E
	24.194	24.200	32	32	0.40	0.00**	0.67	0.23	TYPE F	TYPE F
	24.200	24.207	37	37	0.27	0.00**	0.50	0.20	TYPE C	TYPE F
	24.207	24.212	26	26	0.19	0.00**	0.50	0.14	TYPE C	TYPE C
	24.212	24.332	634	634	15.66	0.04	1.33	8.90	TYPE E	TYPE E
	24.349	24.411	327	327	8.08	0.02	1.33	4.59	TYPE E	TYPE E
	24.488	24.653	871	871	48.49	0.09	2.17	19.95	TYPE D	TYPE D
	24.653	24.715	327	327	18.20	0.03	2.17	7.49	TYPE D	TYPE D
	24.715	24.741	137	137	3.38	0.01	1.33	1.92	TYPE E	TYPE A
	24.741	24.757	84	84	0.61	0.00**	0.50	0.44	TYPE C	TYPE C
	24.757	24.953	1,035	1,035	25.56	0.06	1.33	14.53	TYPE E	TYPE A
	25.064	25.082	95	95	1.19	0.00**	0.67	0.67	TYPE F	TYPE F
	25.082	25.089	37	37	0.27	0.00**	0.50	0.20	TYPE C	TYPE F
	25.089	25.094	26	26	0.19	0.00**	0.50	0.14	TYPE C	TYPE C
	25.094	25.145	269	269	14.98	0.03	2.17	6.16	TYPE D	TYPE D
	25.145	25.219	391	391	9.66	0.02	1.33	5.49	TYPE E	TYPE A
	25.219	25.250	164	164	2.06	0.01	0.67	1.16	TYPE F	TYPE A
	25.252	25.589	1,779	1,779	43.94	0.11	1.33	24.98	TYPE E	TYPE E
	25.589	25.724	713	713	17.61	0.04	1.33	10.01	TYPE E	TYPE A
	26.098	26.211	597	597	14.75	0.04	1.33	8.38	TYPE E	TYPE A
	26.220	26.747	2,783	2,783	68.74	0.17	1.33	39.07	TYPE E	TYPE E
	26.955	26.971	84	84	2.07	0.01	1.33	1.18	TYPE E	TYPE E
	26.972	27.050	412	412	10.18	0.03	1.33	5.78	TYPE E	TYPE E
	27.131	27.201	370	370	9.14	0.02	1.33	5.19	TYPE E	TYPE A
	27.226	27.365	734	734	18.13	0.04	1.33	10.30	TYPE E	TYPE E
SUBTOTAL 1			25,458	25,368	756.91*	1.70*		390.27		

SUMMARY OF QUANTITIES
Q-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	36	49

REGISTERED CIVIL ENGINEER 11-17-10 DATE

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ABDUL MALIKYAR No. C66169 Exp. 06-30-12 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:

* = SEE ROADWAY QUANTITIES FOR ITEM TOTAL.
** = QUANTITY IS LESS THAN 0.01 TON.
(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

DIKE QUANTITIES (CONTINUED)

LOCATION	BEGIN PM	END PM	PLACE HMA DIKE	REMOVE AC DIKE	MINOR HMA	ASPHALTIC EMULSION (FOG SEAL COAT)	DIKE WIDTH (N)	SHOULDER PAD UNDER DIKE RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	DESCRIPTION	
			LF	LF	TON	TON	LF	TON	NEW DIKE	Exist DIKE
NB ROUTE 805	20.482	20.501	100	100	2.47	0.01	2.17	2.29	TYPE E	TYPE A
	20.501	20.513	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE C
	20.513	20.538	132	132	3.26	0.01	1.33	1.85	TYPE E	TYPE A
	20.555	20.566	58	58	1.43	0.00**	1.33	0.81	TYPE E	TYPE A
	20.566	20.578	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE C
	20.578	20.597	100	100	1.25	0.00**	0.67	0.71	TYPE F	TYPE F
	20.649	20.800	797	797	19.69	0.05	1.33	11.19	TYPE E	TYPE A
	20.824	20.900	401	401	9.90	0.02	1.33	5.63	TYPE E	TYPE A
	21.358	21.722	1,922	1,922	47.47	0.12	1.33	26.98	TYPE E	TYPE A
	21.793	21.802	48	48	1.19	0.00**	1.33	0.67	TYPE E	TYPE E
	21.805	21.864	312	312	7.71	0.02	1.33	4.38	TYPE E	TYPE E
	22.278	22.621	1,811	1,811	44.73	0.11	1.33	25.42	TYPE E	TYPE A
	22.700	22.830	686	686	16.94	0.04	1.33	9.63	TYPE E	TYPE E
	22.830	23.196	1,932	1,932	107.55	0.19	2.17	44.25	TYPE D	TYPE D
	23.196	23.217	111	111	0.80	0.00**	0.50	0.59	TYPE C	TYPE C
	23.217	23.293	401	401	22.32	0.04	2.17	9.19	TYPE D	TYPE D
	23.519	23.529	53	53	1.31	0.00**	1.33	0.74	TYPE E	TYPE E
	23.529	23.546	90	90	2.22	0.01	1.33	1.26	TYPE E	TYPE A
	23.546	23.551	26	26	0.64	0.00**	1.33	0.37	TYPE E	TYPE E
	23.730	23.742	63	63	1.56	0.00**	1.33	0.88	TYPE E	TYPE E
	23.790	23.916	665	665	37.02	0.07	2.17	15.23	TYPE D	TYPE D
	23.916	23.934	95	95	0.69	0.00**	0.50	0.50	TYPE C	TYPE C
	23.934	24.206	1,436	1,436	79.94	0.14	2.17	32.89	TYPE D	TYPE D
	24.206	24.226	106	106	0.77	0.00**	0.50	0.56	TYPE C	TYPE C
	24.226	24.290	338	338	8.35	0.02	1.33	4.75	TYPE E	TYPE E
	24.291	24.421	686	686	16.94	0.04	1.33	9.63	TYPE E	TYPE E
	24.498	24.504	32	32	1.78	0.00**	2.17	0.73	TYPE D	TYPE D
	24.583	24.652	364	364	8.99	0.02	1.33	5.11	TYPE E	TYPE E
	24.656	24.669	69	69	1.70	0.00**	1.33	0.97	TYPE E	TYPE E
	24.669	24.681	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE C
	24.681	24.830	787	787	9.87	0.02	0.67	5.57	TYPE F	TYPE F
	24.830	24.913	438	438	10.82	0.03	1.33	6.15	TYPE E	TYPE A
	24.913	24.925	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE F
	24.925	24.949	127	127	1.59	0.00**	0.67	0.90	TYPE F	TYPE F
	25.061	25.114	280	280	6.92	0.02	1.33	3.93	TYPE E	TYPE E
	25.114	25.128	74	74	1.83	0.00**	1.33	1.04	TYPE E	TYPE A
	25.128	25.393	1,399	1,399	34.56	0.09	1.33	19.64	TYPE E	TYPE E
	25.393	25.542	787	787	19.44	0.05	1.33	11.05	TYPE E	TYPE A
	25.546	25.556	53	53	0.66	0.00**	0.67	0.37	TYPE F	TYPE A
	25.556	25.639	438	438	10.82	0.03	1.33	6.15	TYPE E	TYPE A
	25.648	26.298	3,432	3,432	84.77	0.21	1.33	48.18	TYPE E	TYPE E
	26.299	26.421	644	644	15.91	0.04	1.33	9.04	TYPE E	TYPE E
	26.421	26.439	95	95	0.69	0.00**	0.50	0.50	TYPE C	TYPE C
	26.439	26.551	591	591	14.60	0.04	1.33	8.30	TYPE E	TYPE E
	26.551	26.570	100	100	0.72	0.00**	0.50	0.53	TYPE C	TYPE C
	26.570	26.602	169	169	4.17	0.01	1.33	2.37	TYPE E	TYPE E
	26.602	26.607	26	26	0.19	0.00**	0.50	0.14	TYPE C	TYPE C
	26.607	26.614	37	37	0.27	0.00**	0.50	0.20	TYPE C	TYPE F
	26.614	26.620	32	32	0.40	0.00**	0.67	0.23	TYPE F	TYPE F
	26.620	26.643	121	121	1.52	0.00**	0.67	0.86	TYPE F	TYPE E
	27.283	27.623	1,795	1,795	44.34	0.11	1.33	25.20	TYPE E	TYPE A
	27.623	27.635	63	63	0.45	0.00**	0.50	0.33	TYPE C	TYPE C
	27.635	27.637	11	11	0.14	0.00**	0.67	0.08	TYPE F	TYPE F
SUBTOTAL 2			24,585	24,585	715.10	1.56		369.29		
SUBTOTAL 1			25,458	25,368	756.91	1.70		390.27		
Misc AREA					61.75	0.16				
TOTAL			50,043	49,953	1,533.76	3.42*		759.56*		

SUMMARY OF QUANTITIES
Q-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DESIGN
FUNCTIONAL SUPERVISOR: EDWARD HAJJ
CALCULATED-DESIGNED BY: KENNY T. NGUYEN
CHECKED BY: ABDUL MALIKYAR
REVISED BY / DATE REVISED

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	37	49

REGISTERED ELCTRICAL ENGINEER — DATE 11-17-10

12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — MAHENDRA R NIRMAL — No. E 10689 — Exp. 06-30-11 — ELECTRICAL — STATE OF CALIFORNIA

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

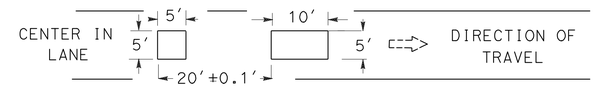
LEGEND:

P - PASSAGE DETECTION
D - DEMAND DETECTION
Q - QUEUE DETECTION
OR - OFF RAMP DETECTION

NOTES:

1 AB Exist DETECTOR LOOPS, REPLACE WITH TYPE A DETECTOR LOOPS.

2 SEE DETAIL 'A' FOR LOOP REPLACEMENT.



DETAIL 'A'

TYPICAL TYPE A LOOP PLACEMENT
NO SCALE

INDUCTIVE LOOP DETECTOR

Rte	POST MILE	LOCATION DESCRIPTION	FACILITIES	DIRECTION	LOCATION OF INDUCTIVE LOOP DETECTORS (N) CENTERED IN LANE — ADVANCE, FRONT, MAIN LANE DETECTOR LOOPS #1	#2	#3	#4	#5	#6	OR DETECTOR LOOPS #1	#2	#3	#4	SEE DETAILS ON SHEET E-2	NOTES	INDUCTIVE LOOP DETECTOR (EA)
805	21.341	SOUTH OF BALBOA Ave	TMS	SB				2(R+)	2(R+)	2(R+)					DETAIL 'B'	1 2	6
805	21.635	AT BALBOA Ave	RAMP METER	SB			2(R+)	2(R+)	2(R+)						DETAIL 'C'	1 2	6
805	21.654	AT BALBOA Ave	RAMP METER	NB				2(R+)	2(R+)						DETAIL 'D'	1 2	4
805	21.680	AT CLAIREMONT MESA Blvd	RAMP METER	SB				2(R+)	2(R+)						DETAIL 'D'	1 2	4
805	21.685	AT CLAIREMONT MESA Blvd	RAMP METER	NB				2(R+)	2(R+)						DETAIL 'D'	1 2	4
805	23.902	SOUTH OF ROUTE 52	COUNT STATION	NB				2(R+)	2(R+)						DETAIL 'D'	1 2	4
R805	23.902	NORTH OF ROUTE 52	TMS	SB				2(R+)	2(R+)	2(R+)					DETAIL 'B'	1 2	6
R805	26.398	NORTH OF EASTGATE MALL	TMS	SB			2(R+)	2(R+)	2(R+)						DETAIL 'C'	1 2	6
																TOTAL	40

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

NOTE:
* - LOOP IDENTIFICATION: 1(2-4-R+)
- 1 → QUANTITY OF LOOPS
- 2 → TRAFFIC PHASE IDENTIFICATION
- 4 → LOOP NUMBER
- R → TERMINATION PULL BOX LOCATION IN DIRECTION OF TRAVEL

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

INDUCTIVE LOOP DETECTOR

E-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC ELECTRICAL

FUNCTIONAL SUPERVISOR: DALE WILSON
CALCULATED-DESIGNED BY: ENRIQUE P. BERNAL
CHECKED BY: MAHENDRA R. NIRMAL
REVISED BY
DATE REVISED

LAST REVISION 12-03-10
DATE PLOTTED => 13-DEC-2010
TIME PLOTTED => 15:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	20.4/28.1	38	49

Mahendra R. Nirmal 11-17-10
REGISTERED ELECTRICAL ENGINEER DATE

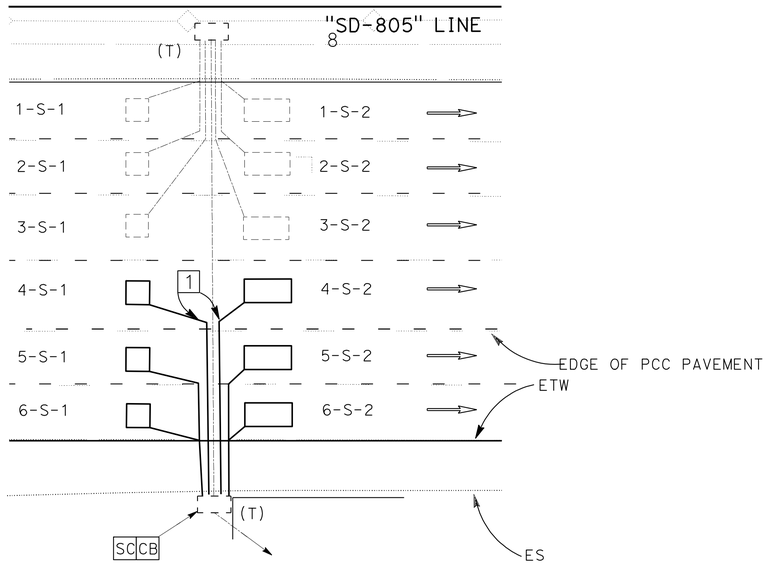
12-13-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER MAHENDRA R NIRMAL No. E 10689 Exp. 06-30-11 ELECTRICAL STATE OF CALIFORNIA

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

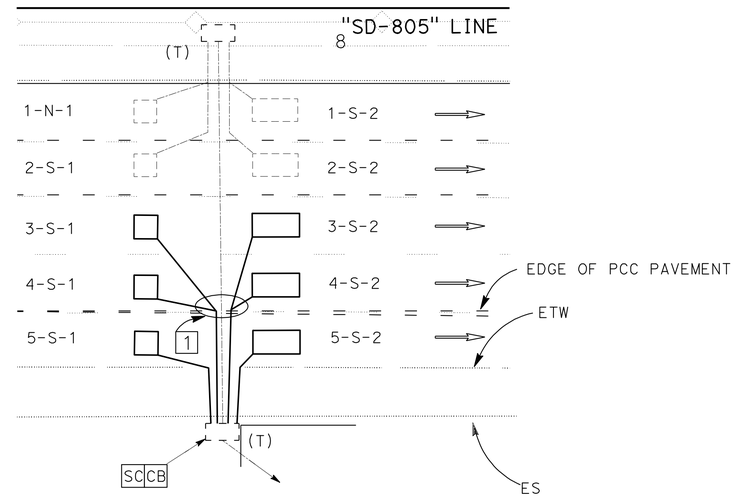
NOTES:

1 -EXTEND TERMINATION CONDUIT TO THE EDGE OF PCC PAVEMENT PER THE DETAIL'E'.



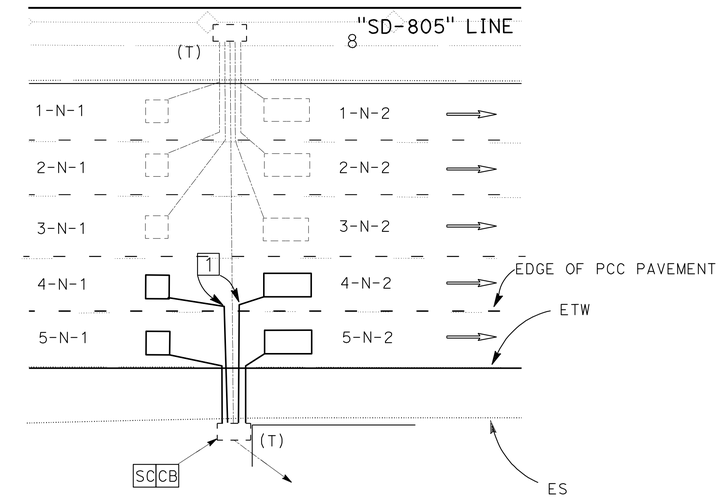
DETAIL 'B'

SB DIRECTION - TWO TMS



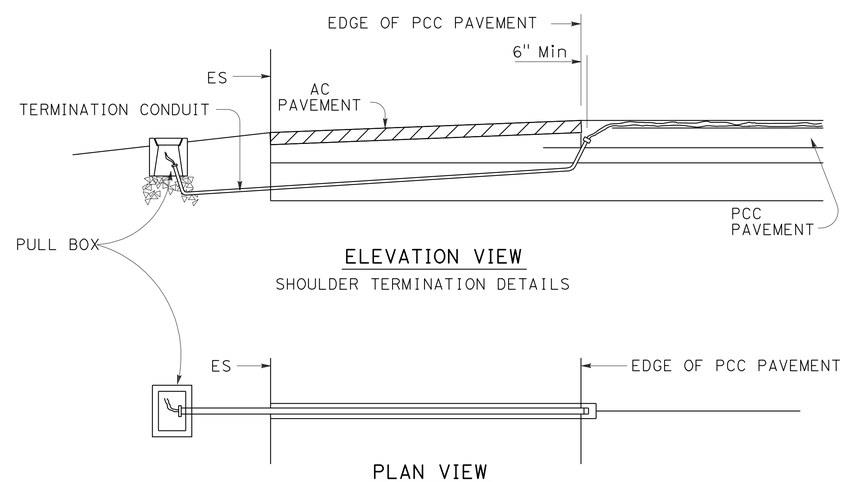
DETAIL 'C'

SB DIRECTION - RAMP METER AND TMS



DETAIL 'D'

THREE RAMP METER AND ONE COUNT STATION
SB DIRECTION SHOWN NB DIRECTION SIMILAR



DETAIL "E"

SEE ES-5D FOR DETAILS NOT SHOWN
NOTE 1

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

INDUCTIVE LOOP DETECTOR

NO SCALE

E-2

REVISED BY | DATE REVISED
MAHENDRA R. NIRMAL | ENRIQUE P. BERNAL
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: DALE WILSON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC ELECTRICAL

LAST REVISION 12-03-10 | DATE PLOTTED => 13-DEC-2010 | TIME PLOTTED => 15:22

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	39	49

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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.

To accompany plans dated 12-13-10

2006 REVISED STANDARD PLAN RSP ES-1A

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast light pole

Double Arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES:

1. 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.
2. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
3. 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	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	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		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

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	40	49

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 12-13-10

CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
C	c	Communication conduit
T	t	Telephone conduit
F	f	Fire alarm conduit
FO	fo	Fiber optic conduit
		Conduit termination (RSP ES-9A C)
R	r	Conduit riser in/on structure or service pole

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION

Type of installation

TYPE H SERVICE - 28'-10" ← Pole height above grade

ILLUMINATED OVERHEAD SIGN

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

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
PV	PV	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
R	Y	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

SIGNAL EQUIPMENT Cont

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

NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. 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

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	41	49

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 12-13-10

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345 — Sign number - Place on post or structure

10 ISL SCI 1.0
- 1.0 — Transformer rating (kVA)
- SCI — Lighting control type
- ISL — Number and type of fixtures

Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"
- 15'-0" — Mast arm length, if shown. Do not place on standard or structure.
- 12345 — Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC
- 2#10, 15#14, 2 DLC — Number and size of conductors and cables
- 1½"C — Size of conduit in inches

Ø1, Ø2, Ø2P, etc.	Traffic phase identification for signal faces, detectors and phase diagrams
1 2 3	Project note numbers
A B C	Equipment description, installation or item numbers
1 2 3	Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100
- 100 — Wind velocity = 100 mph
- 3 — Case 3 arm loading
- 19A — Standard type
- Standard Plan sheet number
- Detail number or letter

MISCELLANEOUS EQUIPMENT

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

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

External conductor
Conductor or bus
Tie point
Contactor coil
Contactor, Contact NO
Terminal blocks
Contactor, Contact NC
Enclosure bond
Grounding electrode
Circuit breaker
Receptacle

PULL BOXES

PROPOSED EXISTING

Pull box-No. 5 unless otherwise indicated or noted.

3 — 9A(21)

Pull box-Additional designations or descriptions

3 = No. 3½ pull box
5 = No. 5 pull box
6 = No. 6 pull box
7 = No. 7 (Ceiling pull box)
8 = No. 8 (Pendant soffit pull box)
9 = No. 9 pull box
9A = No. 9A pull box

(C) = Communications pull box
(E) = Pull box with extension
(S) = Sprinkler control pull box
(21) = Anchor bolts and conduit for future installation of Type 21 Standard
(T) = Traffic pull box

VEHICLE DETECTORS

5 J 9 U
- U = Upper, L = Lower
- Slot number in input file
- Input file (I or J)
- Phase

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
DH	dh	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.

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	42	49

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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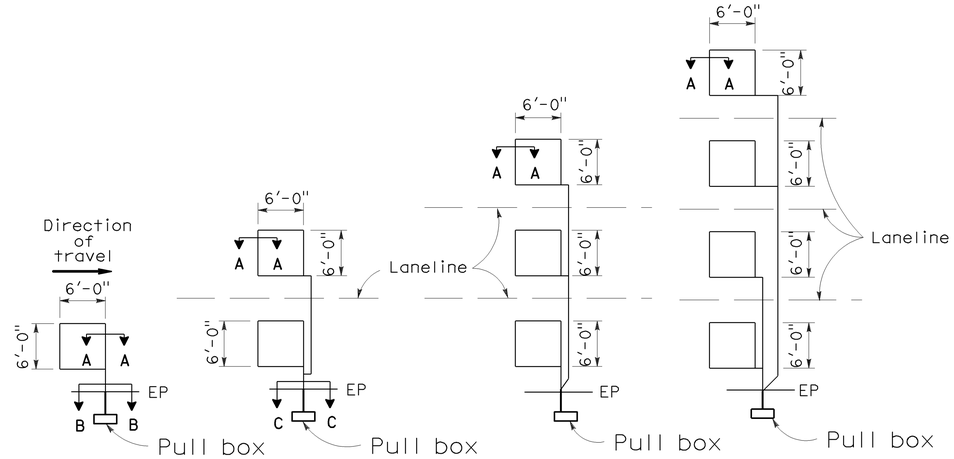
To accompany plans dated 12-13-10

2006 REVISED STANDARD PLAN RSP ES-5A

LOOP INSTALLATION PROCEDURE

1. Loops shall be centered in lanes.
2. Saw slots in pavement for loop conductors as shown in details.
3. 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.
4. Bottom of saw slot shall be smooth with no sharp edges.
5. Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
6. Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
7. 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.
8. 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.
9. No more than 2 twisted pairs shall be installed in one sawed slot.
10. Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
11. 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.
12. Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
13. Fill slots as shown in details.
14. Splice loop conductors to lead-in-cable. Splices shall be soldered.
15. 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.
16. Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
17. Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
18. 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.

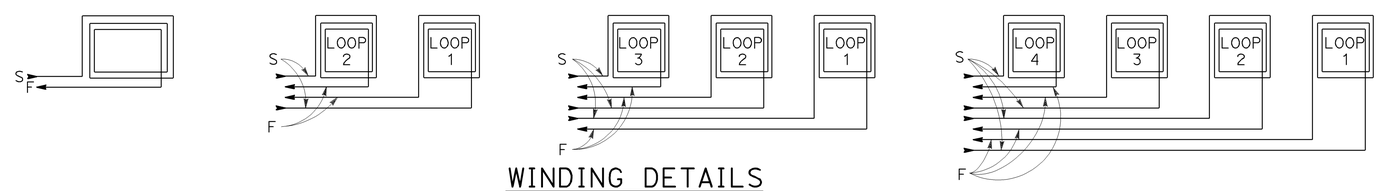


TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

SAWCUT DETAILS

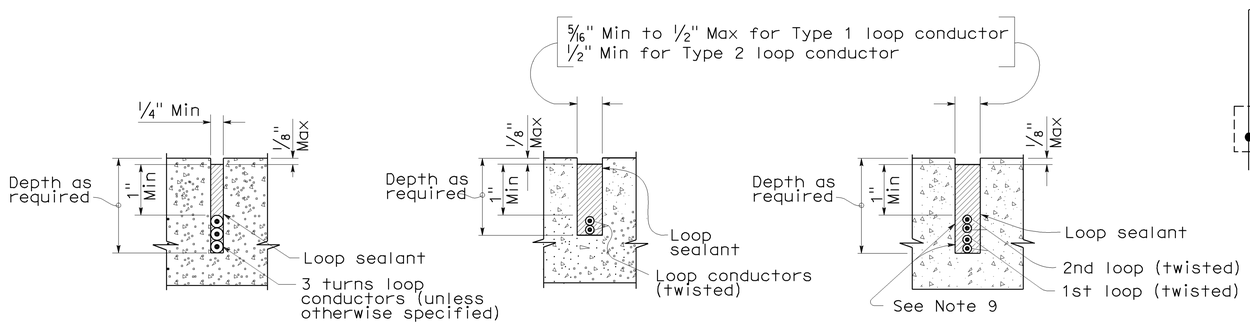
(Type A loop detector configurations illustrated)

1. 1A thru 4A = 1 Type A loop configuration in each lane.
2. 1B thru 4B = 1 Type B loop configuration in each lane.
3. 1C = 1 Type C loop configuration entering lanes as required.
4. 1D thru 4D = 1 Type D loop configuration in each lane.
5. 1E thru 4E = 1 Type E loop configuration in each lane.
6. 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)



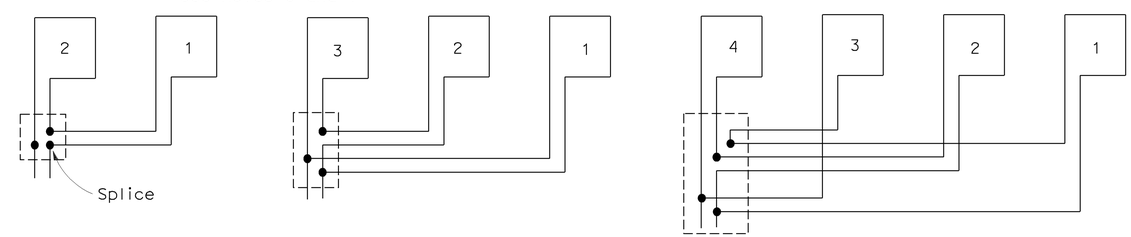
WINDING DETAILS

See Notes 6 and 7



SECTION A-A | SECTION B-B | SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

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

8-17-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	43	49

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-10 CIVIL STATE OF CALIFORNIA

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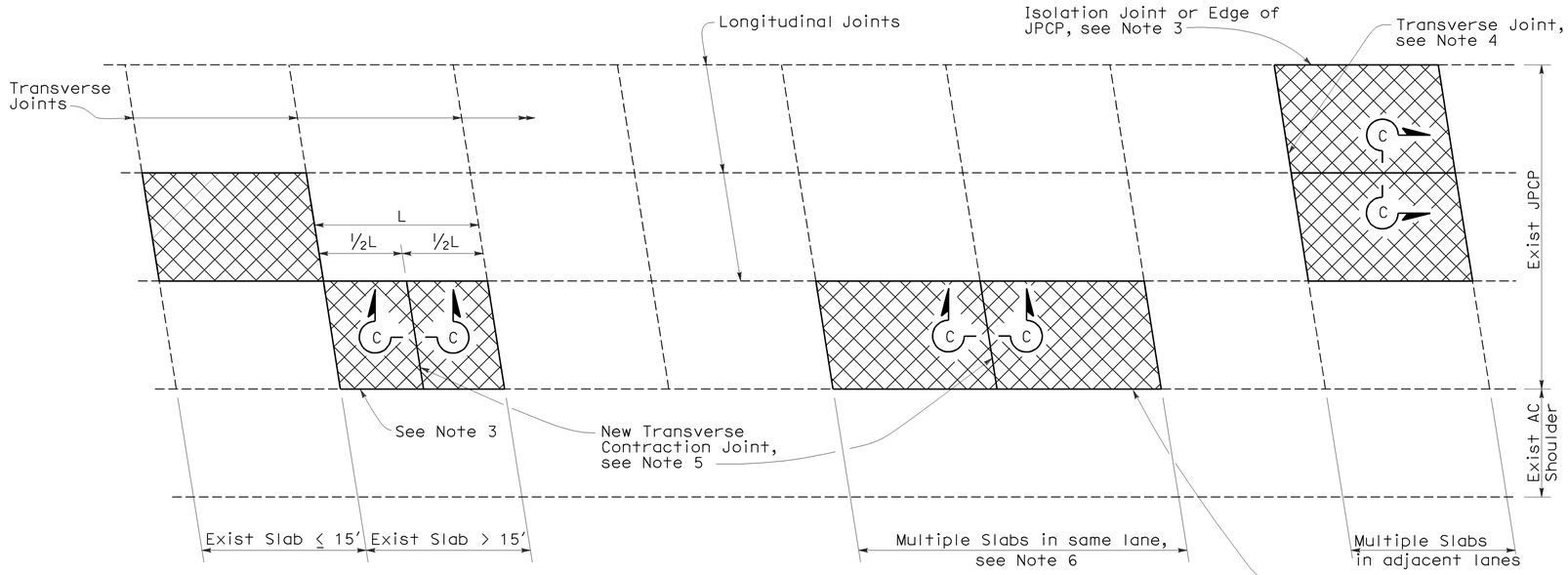
To accompany plans dated 12-13-10



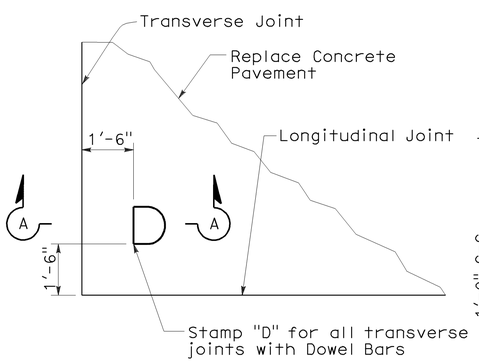
PLAN

NOTES:

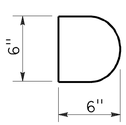
1. For details not shown, see Revised Standard Plan RSP P10.
2. Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1′-0" and the "b" dimension shall be 2′-0".
3. Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
4. For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
5. Transverse joint to match skew of existing joint. Omit dowel bars.
6. This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100′.

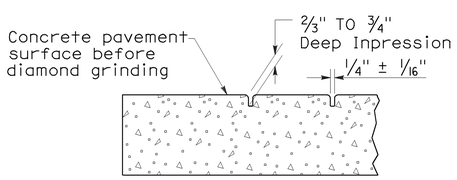
LEGEND

Replace Concrete Pavement (See Slab Layout Detail)

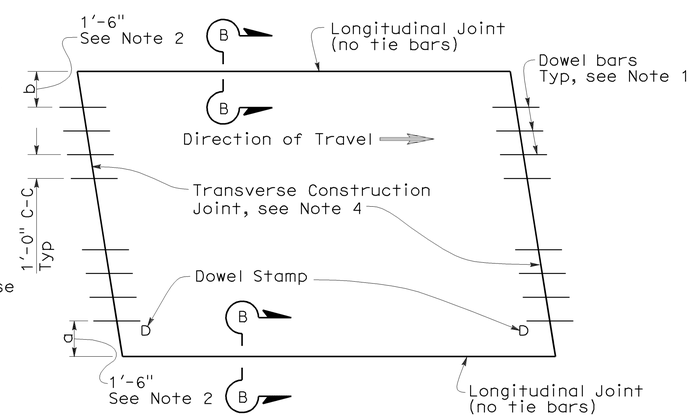


DOWEL STAMP DETAIL

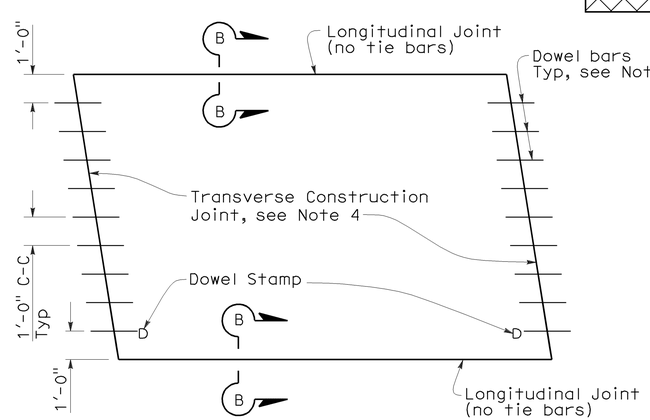




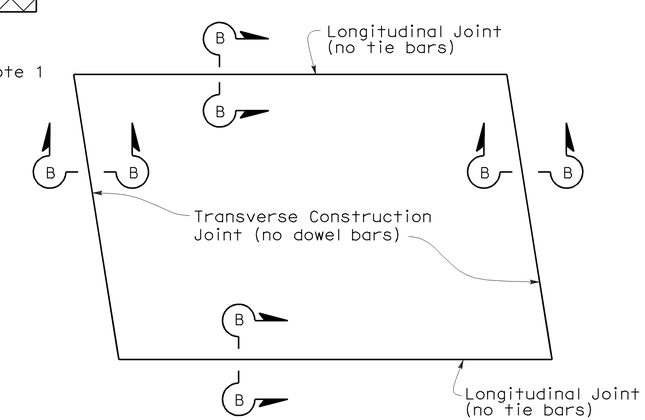
SECTION A-A



TYPE I
(traffic lane lines match longitudinal joints)

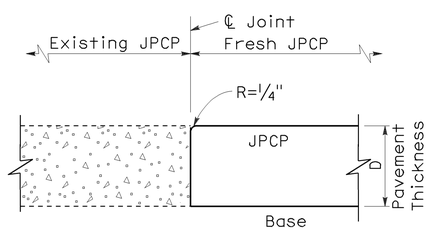


TYPE II
(traffic lane lines do not match longitudinal joints)

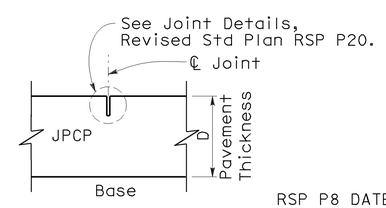


TYPE III
(for short term repairs < 5 yrs design life or for slab replacements with a cracking and seating operation)

SLAB LAYOUT



SECTION B-B



SECTION C-C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT

NO SCALE

RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

2006 REVISED STANDARD PLAN RSP P8

5-8-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	44	49

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-10 CIVIL STATE OF CALIFORNIA

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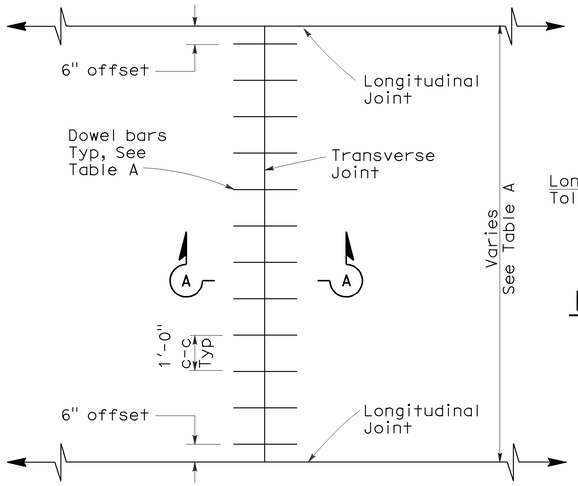
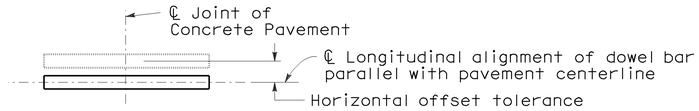
To accompany plans dated 12-13-10

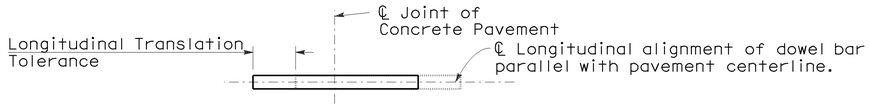


TRANSVERSE JOINT DOWEL BAR LAYOUT



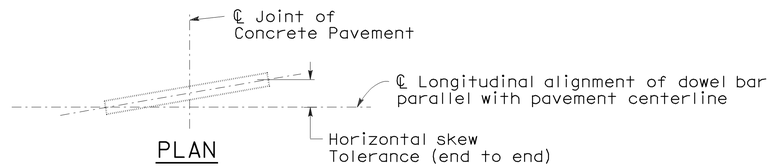
PLAN

HORIZONTAL OFFSET TOLERANCE



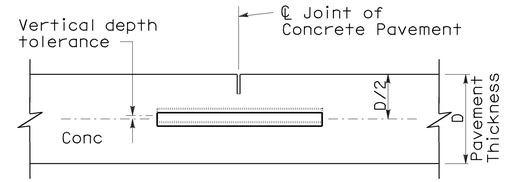
PLAN

LONGITUDINAL TRANSLATION TOLERANCE



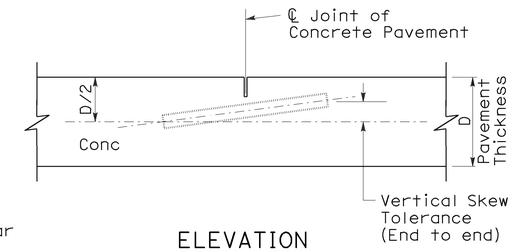
PLAN

HORIZONTAL SKEW TOLERANCE



ELEVATION

VERTICAL DEPTH TOLERANCE



ELEVATION

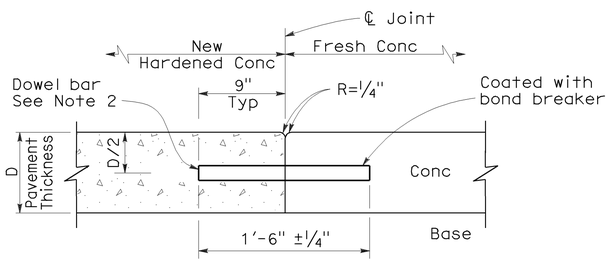
VERTICAL SKEW TOLERANCE

NOTES:

1. See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
2. 1½" Dia smooth dowel bars are to be used with a pavement thickness, D, equal to or greater than 0.70 feet. For pavement thickness, D, less than 0.70 feet, use 1¼" Dia smooth dowel bars.
3. For widths not shown, see Project Plans.
4. If fresh concrete pavement is placed adjacent to existing concrete pavement, the top corner of the existing concrete pavement does not need to be rounded to the ¼" radius, as shown.

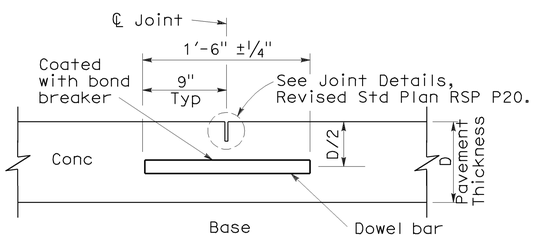
TABLE A (See Note 3)

Dowel Bar Transverse Spacing Table	
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4

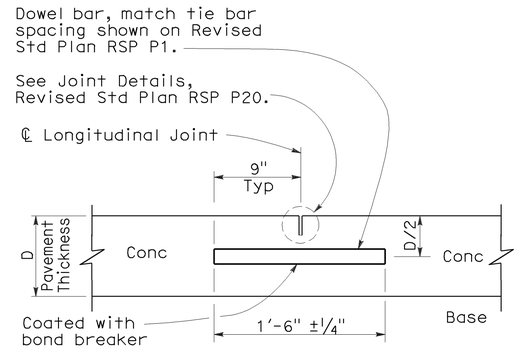


SECTION A-A

TRANSVERSE CONSTRUCTION JOINT DETAIL

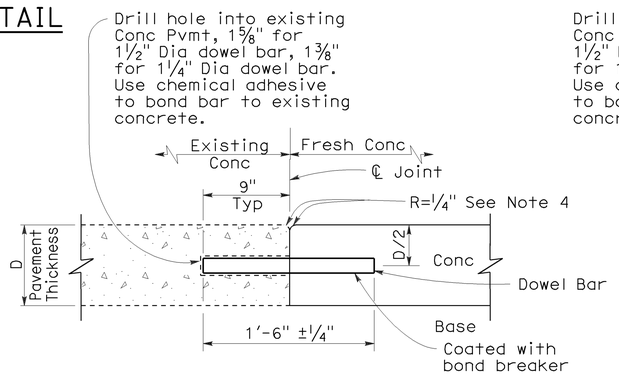


TRANSVERSE CONTRACTION JOINT



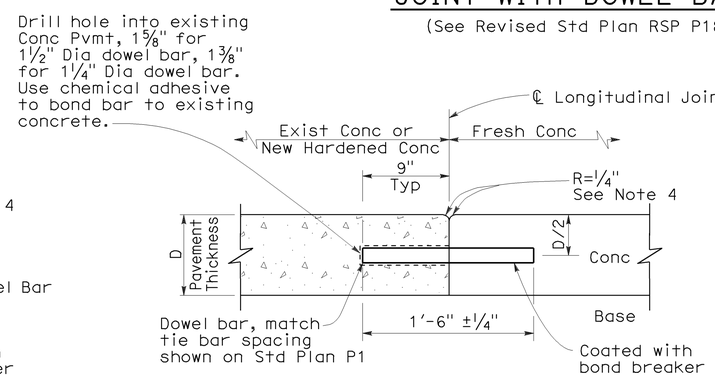
LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS

(See Revised Std Plan RSP P18)



TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT

(Drill and bond locations)



LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS

(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-DOWEL BAR DETAILS

NO SCALE

RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10 DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P10

2006 REVISED STANDARD PLAN RSP P10

5-8-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	45	49

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
William K. Farnbach
No. C49042
Exp. 9-30-10
CIVIL
STATE OF CALIFORNIA

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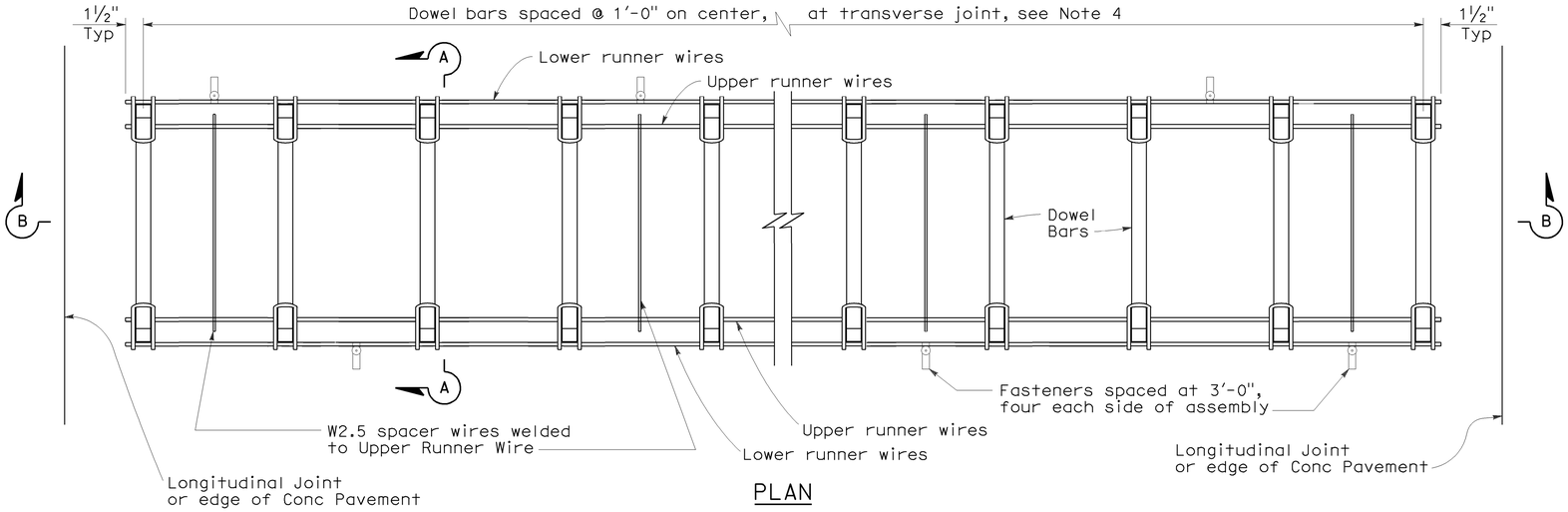
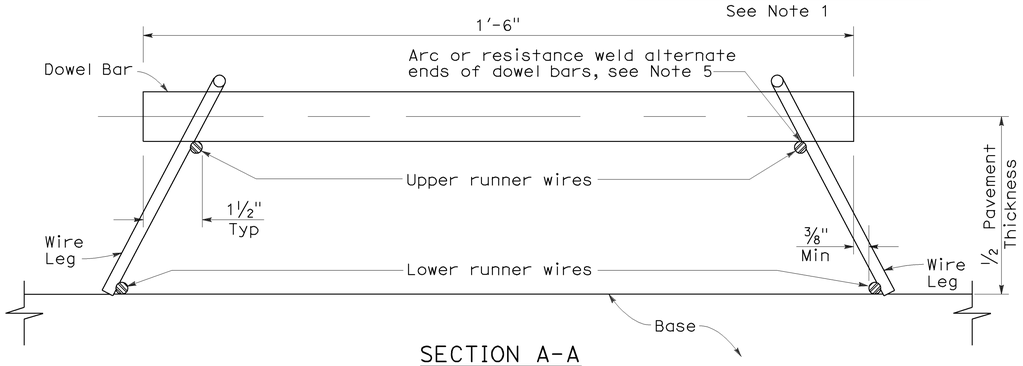
To accompany plans dated 12-13-10



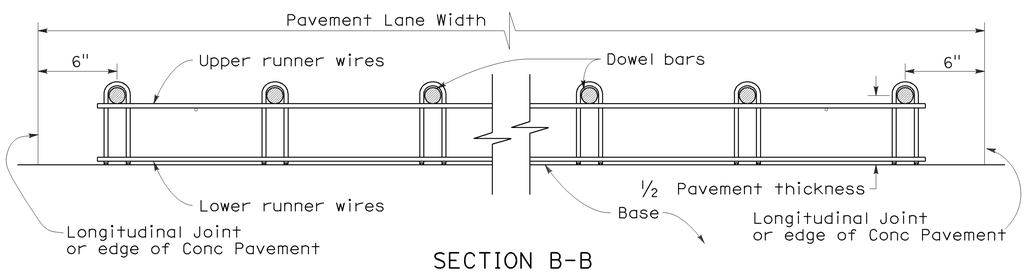
PLAN

DOWEL BAR BASKET (TRANSVERSE JOINT)

See Note 1

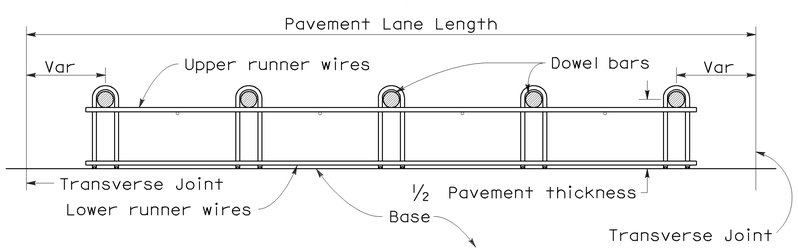


SECTION A-A



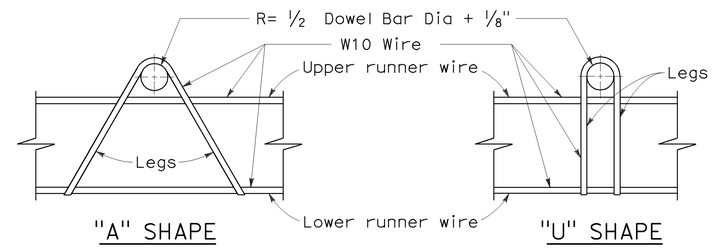
SECTION B-B

See Note 1



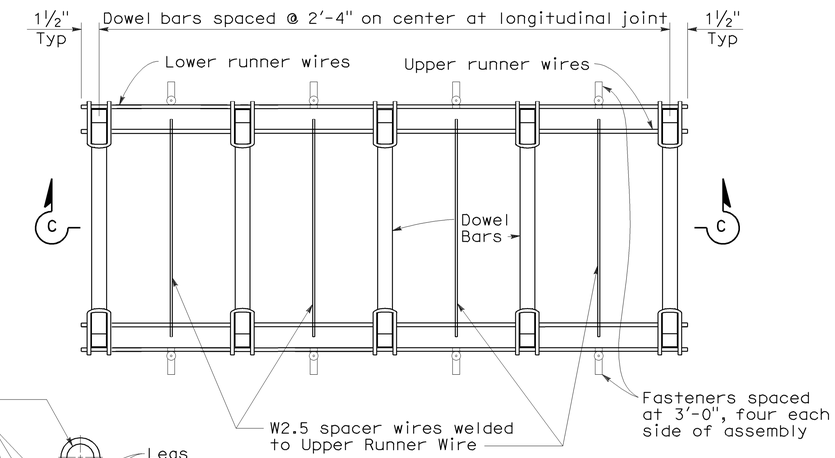
SECTION C-C

See Notes 1 and 4



"A" SHAPE "U" SHAPE

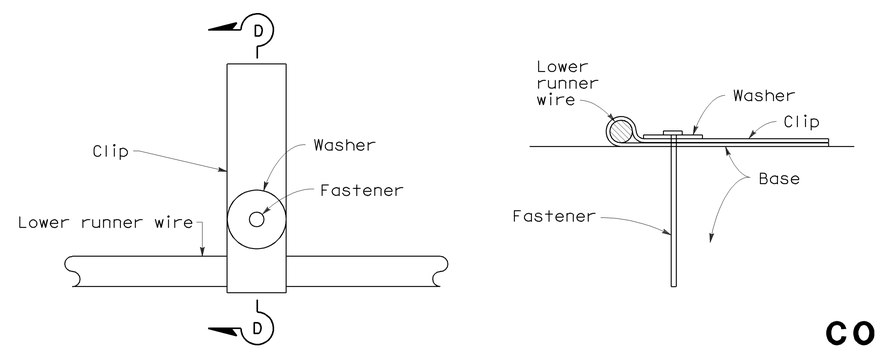
ASSEMBLY FRAME DETAILS



PLAN

DOWEL BAR BASKET (LONGITUDINAL JOINT)

See Note 1



PLAN SECTION D-D

FASTENER DETAIL

NOTES:

1. "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
2. Wire sizes shown are minimum required.
3. All wire intersections are to be resistance welded.
4. Use tie bar spacing for longitudinal dowel bar locations. See Revised Std Plans RSPs P1, P2, and P3 for tie bar requirements.
5. Weld may be at top or bottom of dowel bar.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-DOWEL BAR BASKET DETAILS

NO SCALE

RSP P12 DATED MAY 15, 2009 SUPERSEDES RSP P12 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P12 DATED MAY 1, 2006 - PAGE 125 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P12

2006 REVISED STANDARD PLAN RSP P12

5-8-09

NOTE:

1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	46	49

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-10 CIVIL STATE OF CALIFORNIA

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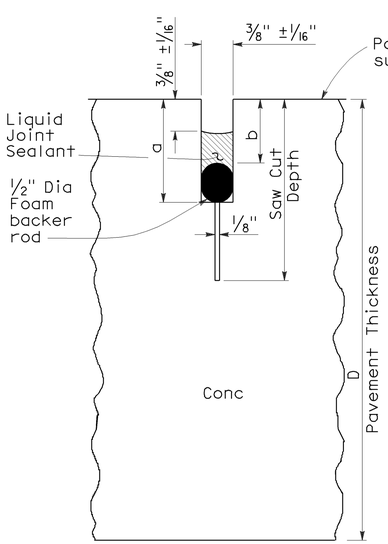
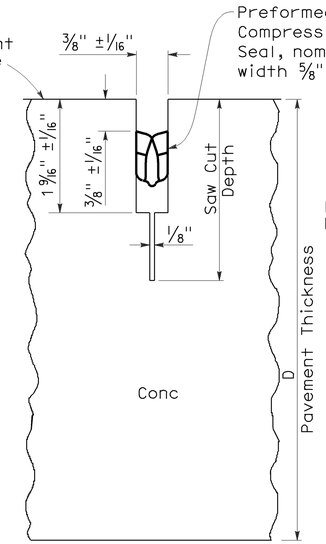
To accompany plans dated 12-13-10



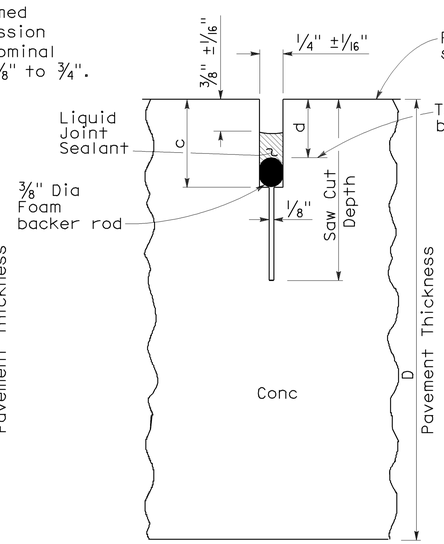
LIQUID SEALANT



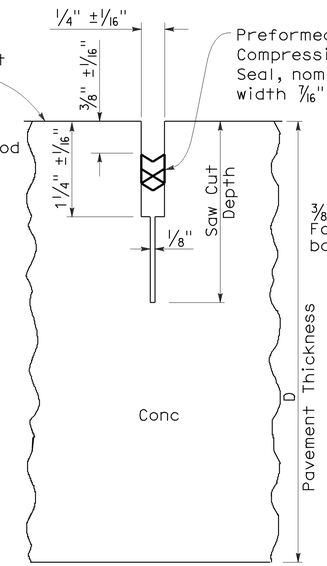
COMPRESSION SEAL

TYPE A1

Transverse Contraction Joints



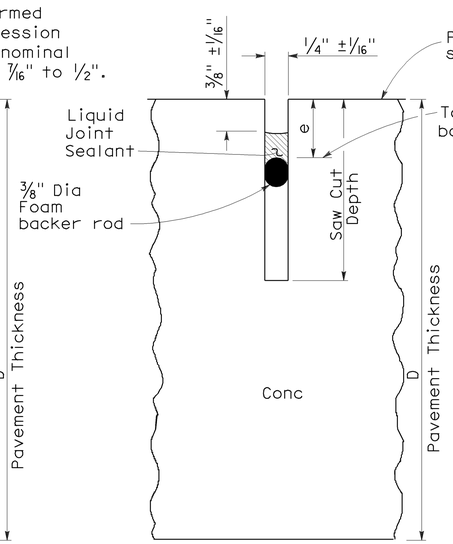
LIQUID SEALANT



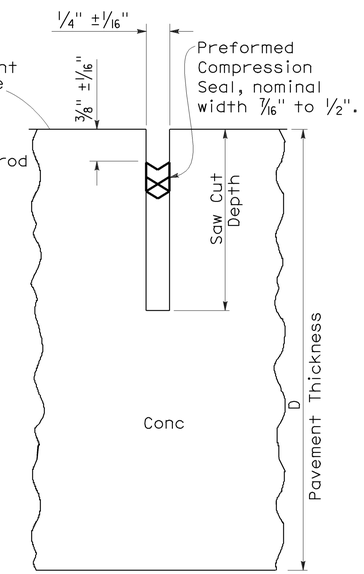
COMPRESSION SEAL

TYPE A2

Longitudinal Contraction Joints



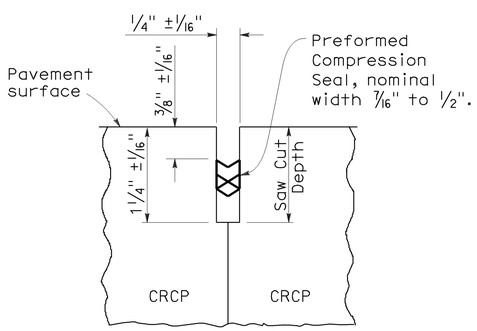
LIQUID SEALANT



COMPRESSION SEAL

TYPE B

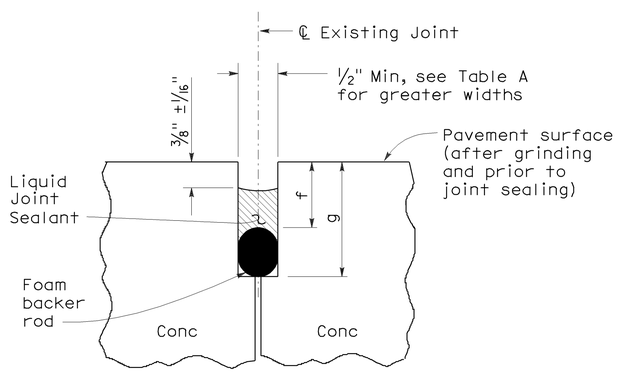
Longitudinal or Transverse Contraction Joint



COMPRESSION SEAL

TYPE C

Transverse and Longitudinal Construction Joints (For CRCP)



LIQUID SEALANT

TYPE R

Retrofit Transverse and Longitudinal Joints

LIQUID SEALANT RESERVOIR DEPTH

LIQUID SEALANT MATERIAL	3/8" Joint Width Type A1		1/4" Joint Width Type A2		1/4" Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILCONE	1" ±1/16"	5/8" ±1/16"	15/16" ±1/16"	9/16" ±1/16"	9/16" ±1/16"
ASPHALT RUBBER	1 3/16" ±1/16"	3/4" ±1/16"	1 1/16" ±1/16"	11/16" ±1/16"	11/16" ±1/16"

TABLE A (TYPE R JOINT)

Sawn Joint Width	Backer Rod Diameter ± 1/16"	DIMENSION "f"	DIMENSION "g"
1"	1 5/16"	7/8"	2 1/4"
7/8"	1 3/16"	13/16"	2"
3/4"	1"	3/4"	1 3/4"
5/8"	7/8"	11/16"	1 1/2"
1/2"	11/16"	5/8"	1 1/4"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-JOINT DETAILS

NO SCALE

RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20
DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P20

2006 REVISED STANDARD PLAN RSP P20

5-8-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	47	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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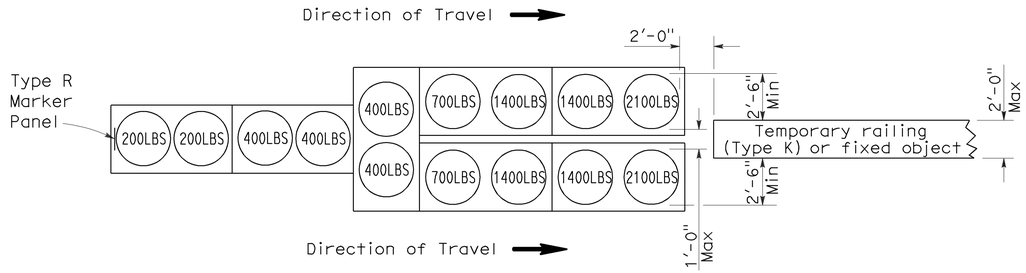
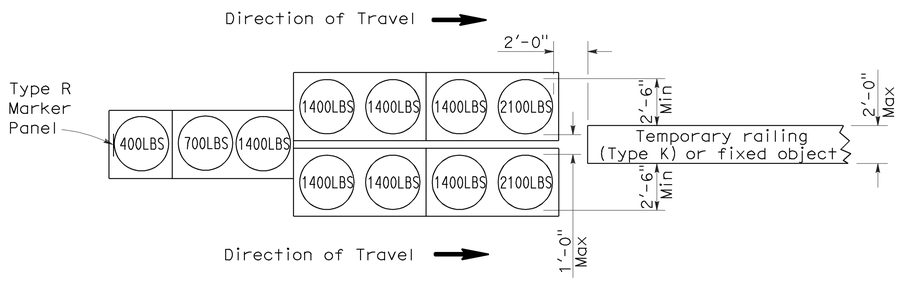
To accompany plans dated 12-13-10



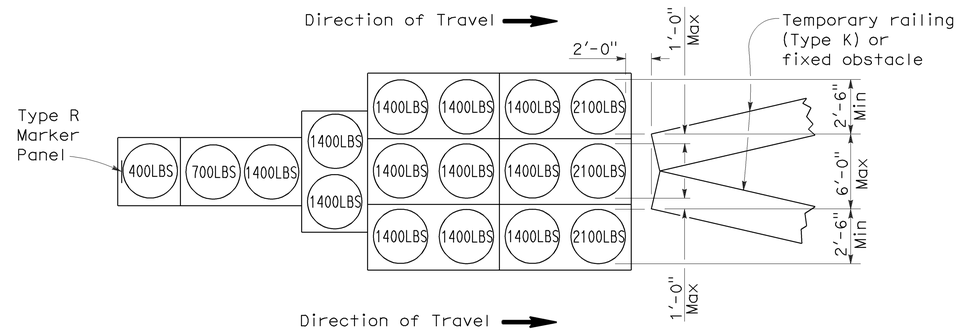
ARRAY 'TU14'

Approach speed 45 mph or more



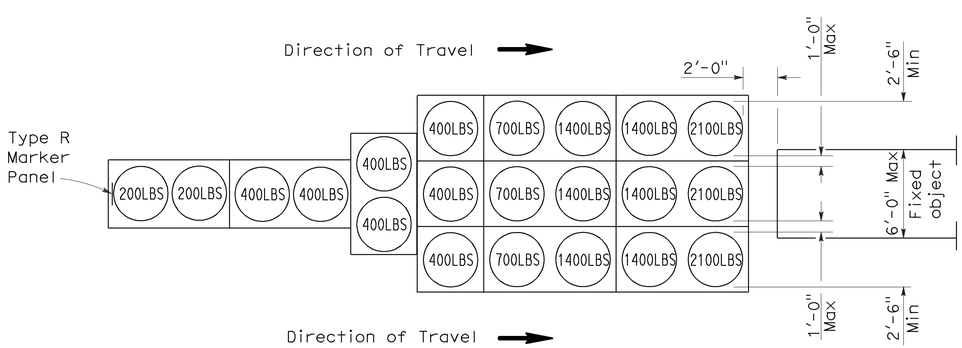
ARRAY 'TU11'

Approach speed less than 45 mph



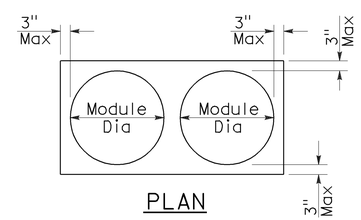
ARRAY 'TU17'

Approach speed less than 45 mph

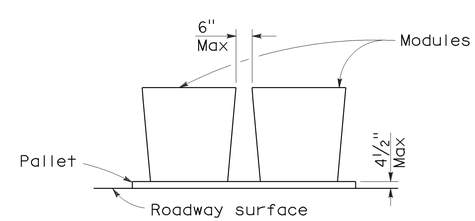


ARRAY 'TU21'

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
11	SD	805	20.4/28.1	48	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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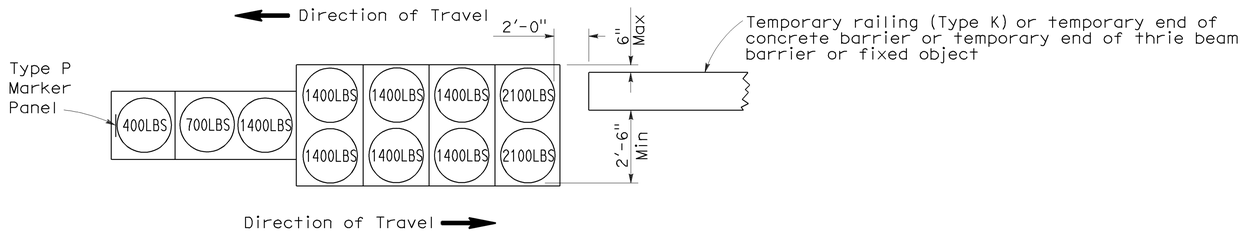
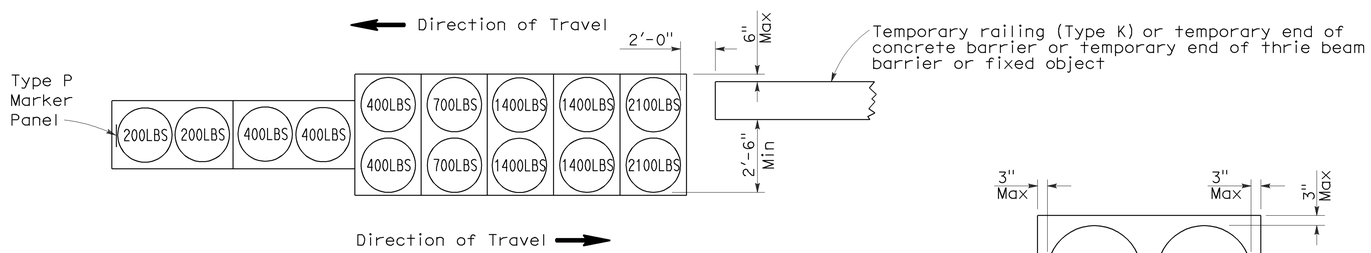
To accompany plans dated 12-13-10



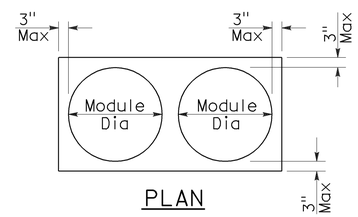
ARRAY 'TB11'

Approach speed less than 45 mph

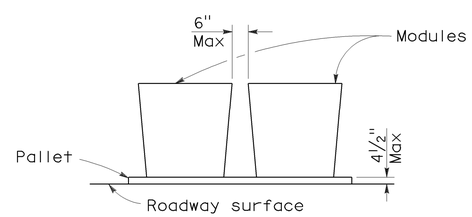


ARRAY 'TB14'

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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	20.4/28.1	49	49

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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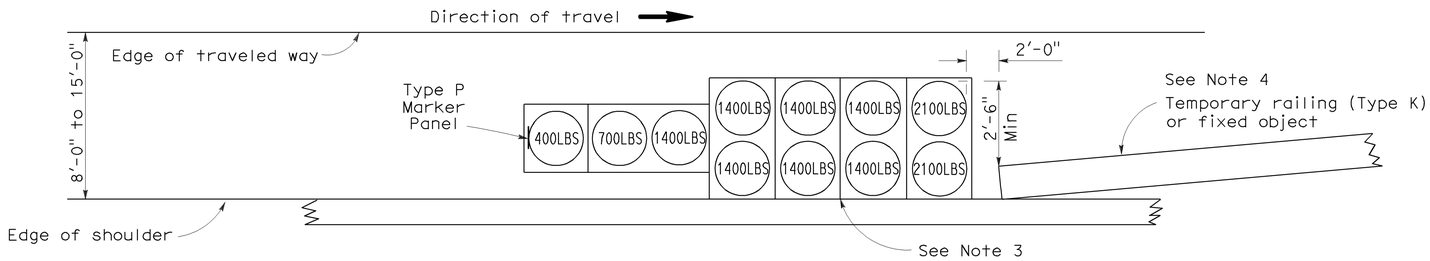
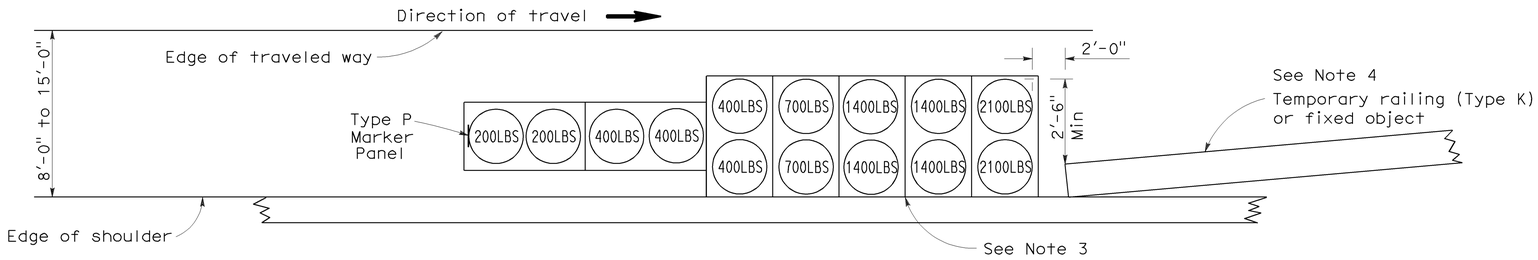
To accompany plans dated 12-13-10



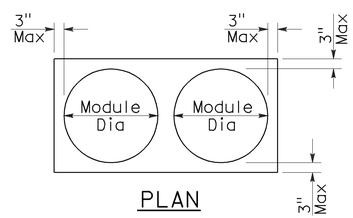
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

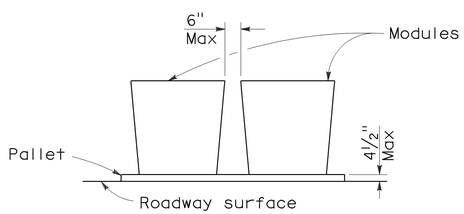


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

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. 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.
4. 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.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. 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.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. 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

5-15-08