INDEX OF PLANS

| SHEET No. | DESCRIPTION |
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| 2 | CONSTRUCTION DETAILS |
| 3 | CONSTRUCTION AREA SIGNS |
| 4-14 | TRAFFIC HANDLING DETAILS |
| 15 | PAVEMENT DELINEATION DETAILS |
| 16 | PAVEMENT DELINEATION QUANTITIES |
| 17 | SUMMARY OF QUANTITIES |
| 18-26 | REVISED STANDARD PLANS |

STRUCTURE PLANS

| | |
|---|---|
| 27-38 | ROUTE 10 BRIDGES |

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

STATE OF CALIFORNIA

# DEPARTMENT OF TRANSPORTATION

ACNHPI-010-1(832)E

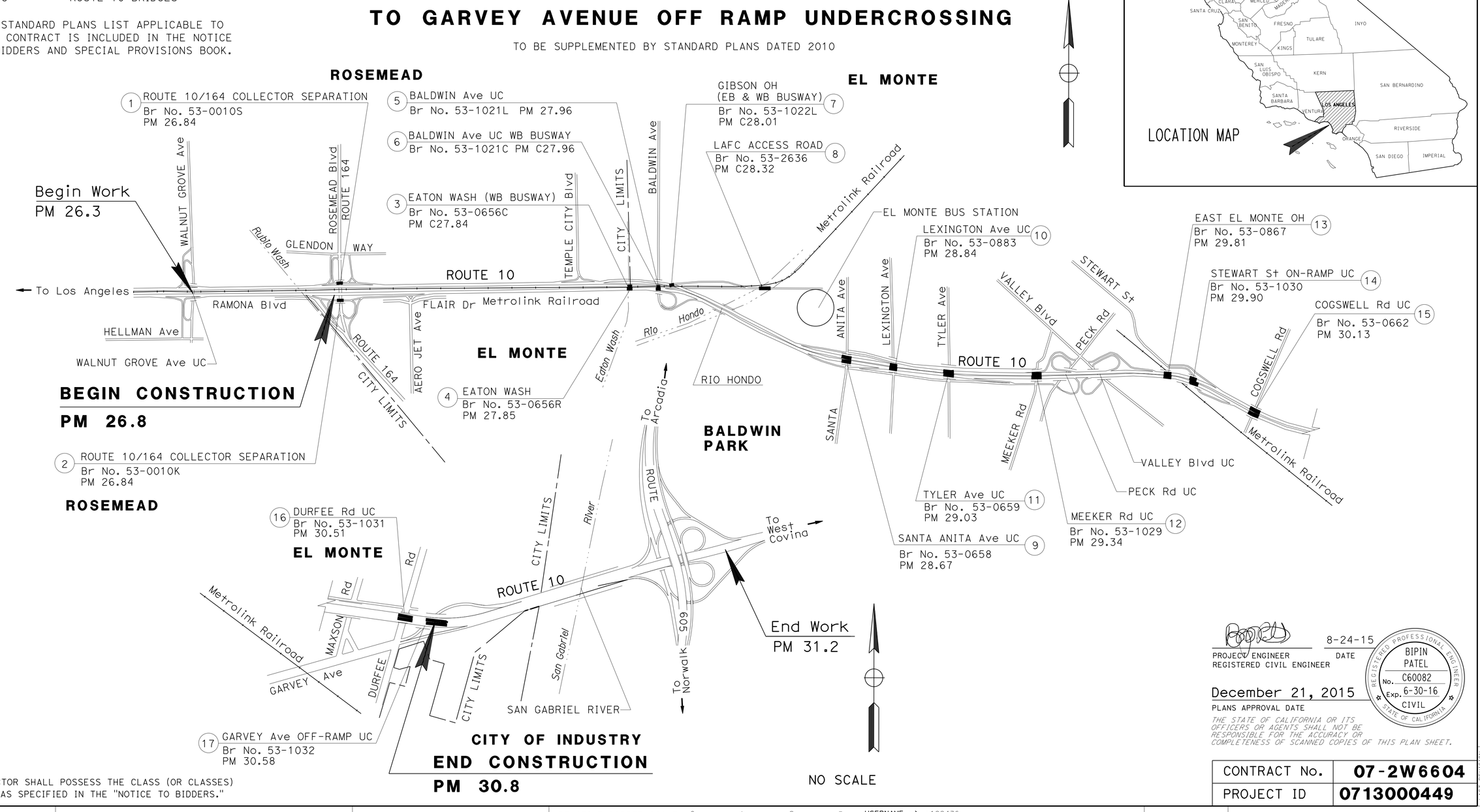
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 1 | 38 |

# PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

## IN LOS ANGELES COUNTY
## IN ROSEMEAD AND EL MONTE
## FROM ROUTE 10/164 SEPARATION
## TO GARVEY AVENUE OFF RAMP UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010


LOCATION MAP




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

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

8-24-15
DATE

BIPIN PATEL
No. C60082
Exp. 6-30-16
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

December 21, 2015
PLANS APPROVAL DATE

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

| | |
|---|---|
| CONTRACT No. | 07-2W6604 |
| PROJECT ID | 0713000449 |

PROJECT MANAGER: OJAS SHETH
DESIGN MANAGER: LARRY WIERING

LAST REVISION 12-21-15
DATE PLOTTED => 24-MAY-2016
TIME PLOTTED => 16:00

BORDER LAST REVISED 10/4/2013 | CALTRANS WEB SITE IS: HTTP//WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s122436 DGN FILE => 72W660ab001.dgn | UNIT 1963 | PROJECT NUMBER & PHASE 07130004491

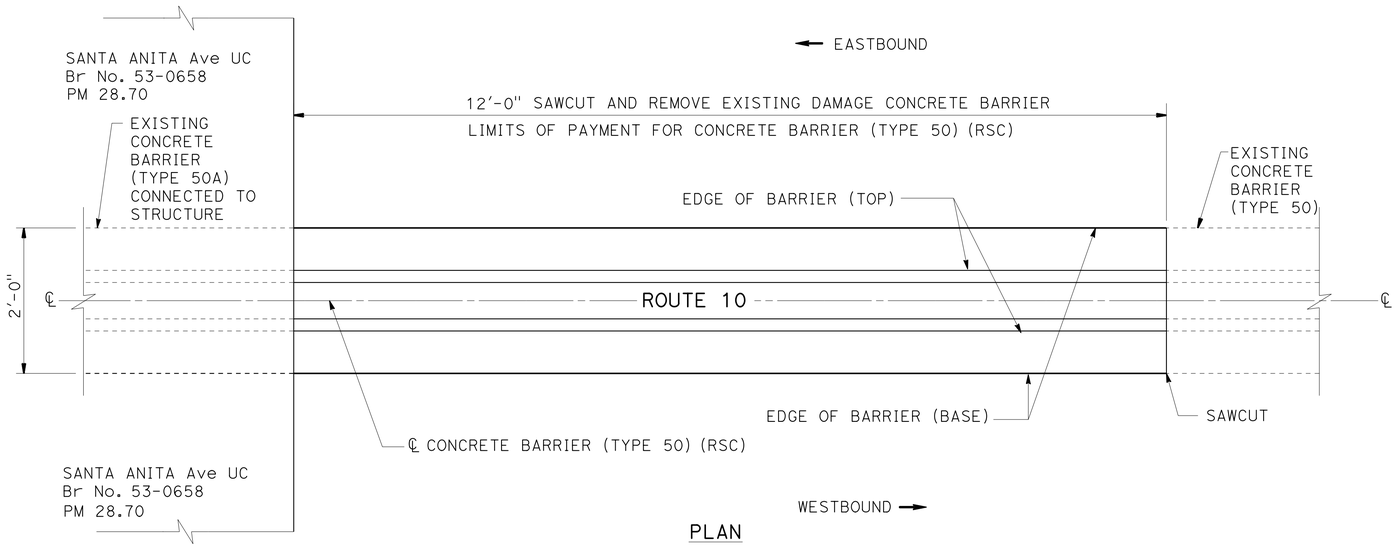
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 2 | 38 |

REGISTERED CIVIL ENGINEER — DATE 8-24-15

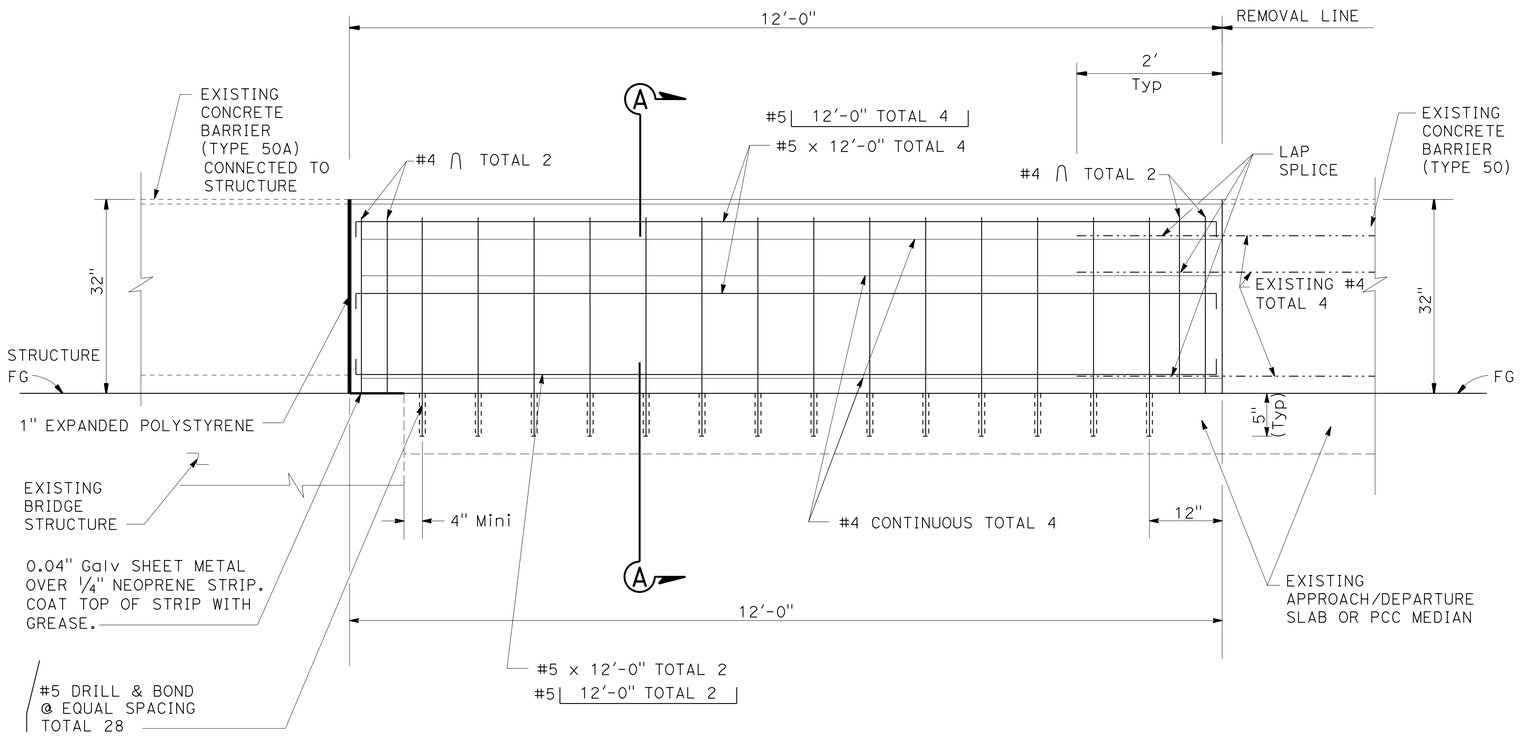
BIPIN PATEL No. C60082 Exp 06-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

12-21-15
PLANS APPROVAL DATE

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




PLAN

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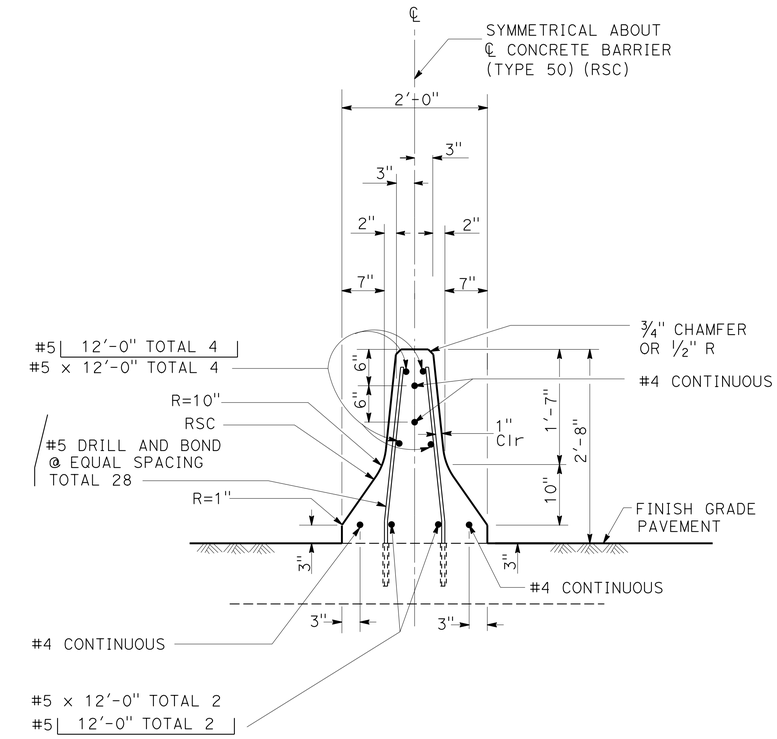



SECTION A-A

# DETAIL CONCRETE BARRIER (TYPE 50) (RSC)

## CONSTRUCTION DETAILS

NO SCALE

C-1

BIPIN PATEL — CALCULATED-DESIGNED BY
LARRY WIERING — CHECKED BY
LARRY WIERING — FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 27-JAN-2016
LAST REVISION TIME PLOTTED => 13:16

BORDER LAST REVISED 7/2/2010
USERNAME => s122436
DGN FILE => 72W660ga001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1963
PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 3 | 38 |

8-24-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

BIPIN PATEL No. C60082 Exp 06-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

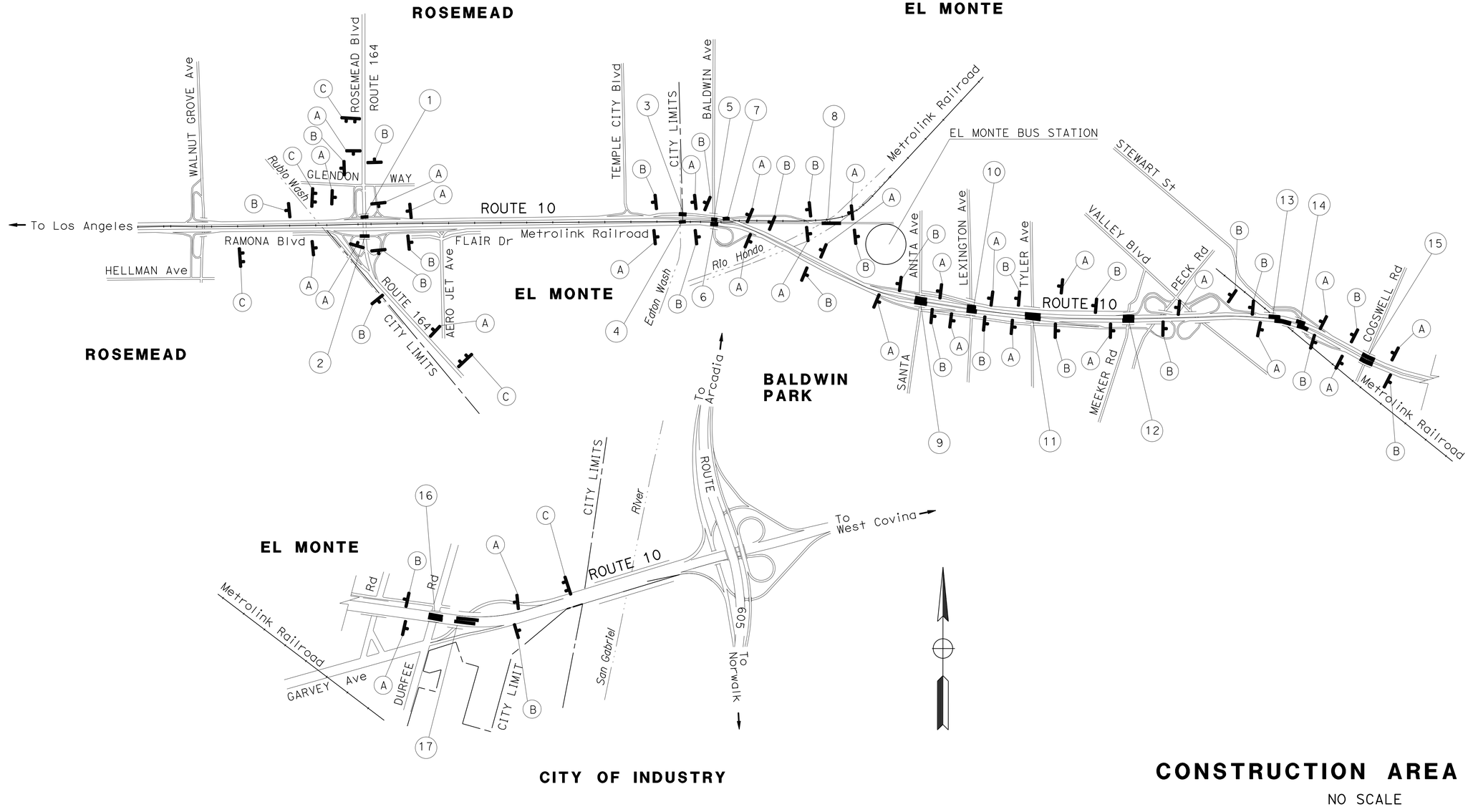


NOTE:

THE ENGINEER DETERMINES THE EXACT LOCATION OF CONSTRUCTION AREA SIGNS.

## STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

| SIGN No. (X) | FEDERAL | CALIFORNIA | PANEL SIZE | SIGN MESSAGE | NUMBER OF POSTS AND SIZE | NUMBER OF SIGNS |
|---|---|---|---|---|---|---|
| A | W20-1 | | 48" x 48" | ROAD WORK AHEAD | 1 - 6" x 6" | 28 |
| B | G20-2 | | 48" X 24" | END ROAD WORK | 1 - 4" x 6" | 27 |
| C | | C40(CA) | 144" x 60" | TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES | 2 - 6" x 8" | 5 |




# CONSTRUCTION AREA SIGNS

NO SCALE

**CS-1**

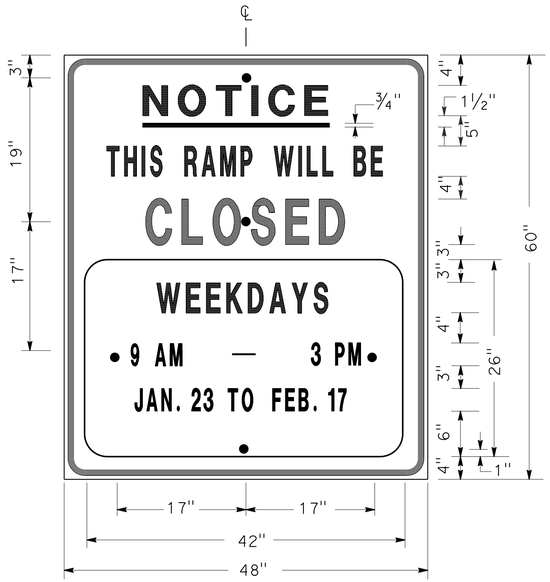
*APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY*

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

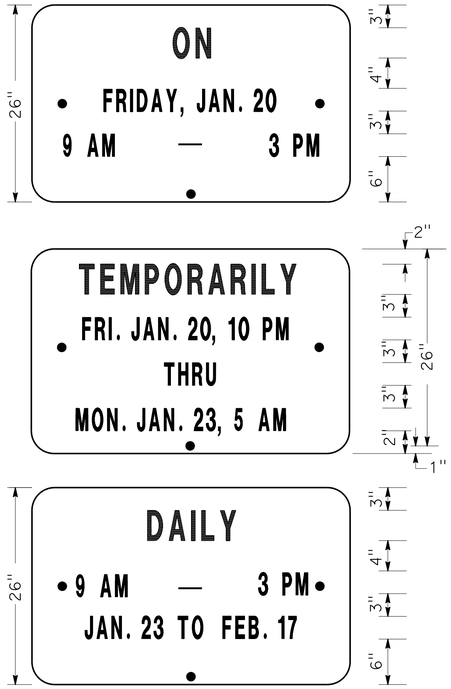
FUNCTIONAL SUPERVISOR: LARRY WIERING
CALCULATED-DESIGNED BY: BIPIN PATEL
CHECKED BY: LARRY WIERING
REVISED BY / DATE REVISED:

LAST REVISION | DATE PLOTTED => 27-JAN-2016
12-21-15 | TIME PLOTTED => 13:16

BORDER LAST REVISED 7/2/2010 | USERNAME => s122436 | DGN FILE => 72W6601a001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 1963 | PROJECT NUMBER & PHASE 07130004491




SIGN SP-1



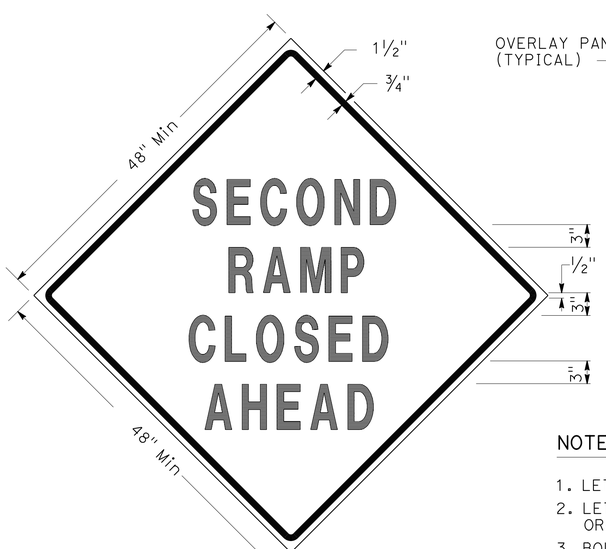

ALTERNATE OVERLAY PANELS (TYPICAL)

NOTES: SIGN SP-1

1. LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
2. BOLT HOLES MUST BE 3/8" DIAMETER.
3. BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
4. SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND.

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

## SPECIAL ADVANCE NOTICE PUBLICITY SIGN



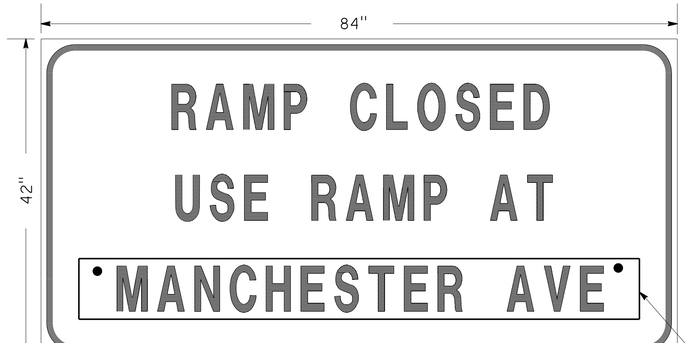

SIGN SP-3


SIGN SP-5

NOTES: SIGNS SP-3 & SP-5

1. LETTERS - 6" SERIES D.
2. LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
3. BOLT HOLES MUST BE 3/8" DIAMETER.
4. BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
5. SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND.
6. SIGN SP-5 MUST BE USED IF THE OFF-RAMP TO BE CLOSED FOLLOWS A FREEWAY OFF-CONNECTOR.

## SPECIAL SIGNS FOR EXIT RAMP CLOSURES




SIGN SP-4

OVERLAY PANEL (TYPICAL)

NOTES: SIGN SP-4

1. LETTERS - 6" SERIES C.
2. LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED WHITE BACKGROUND.
3. BOLT HOLES MUST BE 3/8" DIAMETER.
4. BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
5. SIGNS MUST BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH REVISED STANDARD PLAN RSP T14.

## SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

# TRAFFIC HANDLING DETAILS

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

## SHEET 1 OF 2

NO SCALE

**THD-1**

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 4 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
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.

CALCULATED-DESIGNED BY: JC
CHECKED BY: ALBERT K YU
REVISED BY: JOCELYN C CHIANG
DATE REVISED: 2/14
FUNCTIONAL SUPERVISOR: ALI BAMSHAD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DTM

LAST REVISION DATE PLOTTED => 27-JAN-2016
TIME PLOTTED => 13:16
12-21-15

BORDER LAST REVISED 7/2/2010
USERNAME => s122436
DGN FILE => 72W660me001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1887
PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 5 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA

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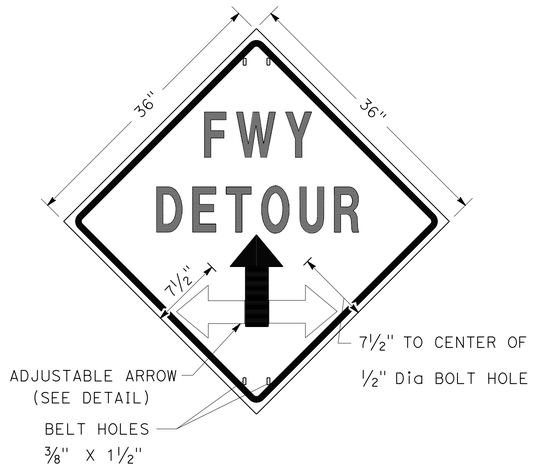


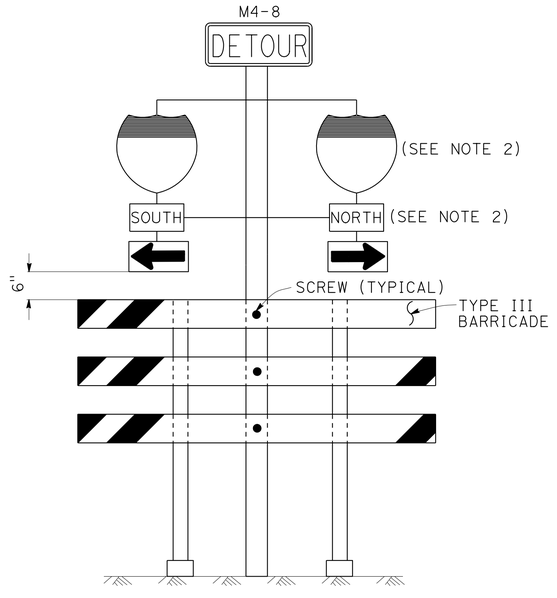

SIGN SP-2

NOTES: SIGN SP-2

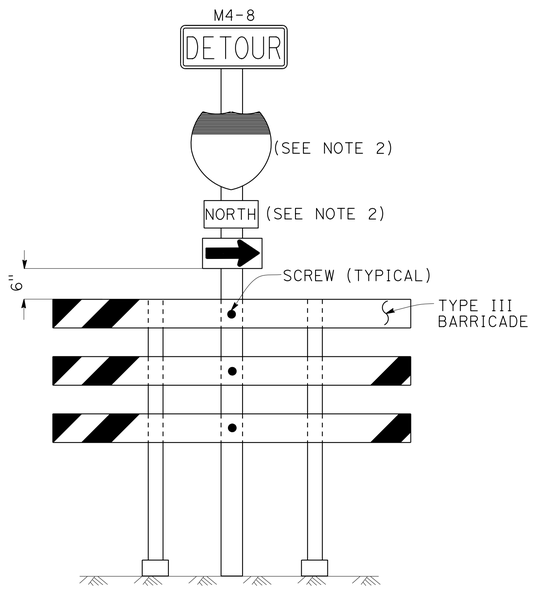
1. LETTERS - 6" SERIES E.
2. LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
3. BASE MATERIAL FOR SIGNS AND ARROWS MUST BE ALUMINUM (MINIMUM 0.06").
4. BELTS (LUGGAGE STRAPS) MUST BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
5. SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND EXCEPT AS OTHERWISE SHOWN ON OTHER TRAFFIC HANDLING DETAILS PLANS.

ABBREVIATION

(CA) CALIFORNIA CODE




SIGN SP-6 (SEE NOTE 1)

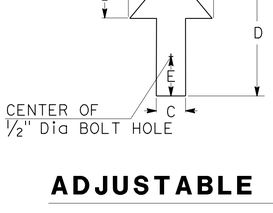



SIGN SP-7 (SEE NOTE 1)

NOTES: SIGNS SP-6 & SP-7

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

## SPECIAL PORTABLE FREEWAY DETOUR SIGNS




| DIMENSIONS | | | | |
|---|---|---|---|---|
| A | B | C | D | E |
| 6" | 3" | 2" | 8" | 1" |

## ADJUSTABLE ARROW DETAIL

# TRAFFIC HANDLING DETAILS

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

## SHEET 2 OF 2

NO SCALE

THD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DTM

FUNCTIONAL SUPERVISOR: ALI BAMSHAD

CALCULATED-DESIGNED BY: ALBERT K YU
CHECKED BY: JOCELYN C CHIANG

REVISED BY: JC
DATE REVISED: 2/14

LAST REVISION: DATE PLOTTED => 27-JAN-2016
12-21-15 TIME PLOTTED => 13:16

BORDER LAST REVISED 7/2/2010
USERNAME => s122436
DGN FILE => 72W660me002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1887
PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 6 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA

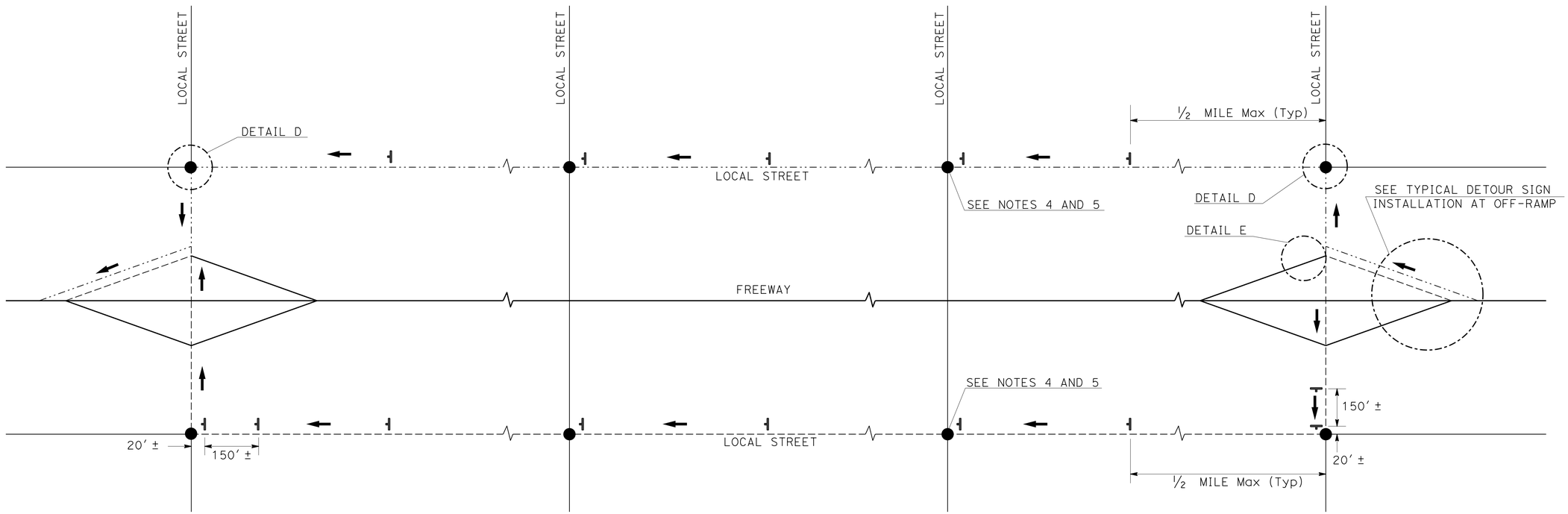
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

## LEGEND

- SIGN SP-2
- AND/OR — DESIGNATED DETOUR ROUTE
- DETOUR DIRECTION
- CONTROLLED INTERSECTION

## NOTES:

1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS MUST NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
4. SP-2 SIGNS MUST BE POSTED AT EACH CONTROLLED INTERSECTION (EXCEPT AT COMMERCIAL PROPERTY, RESIDENTIAL COMPLEX OR T-INTERSECTION FROM ONE-WAY STREET) ALONG THE DESIGNATED DETOUR ROUTE.
5. UNLESS OTHERWISE SHOWN ON OTHER THD PLANS, WHEN CONTROLLED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE ARE CLOSELY SPACED, PLACE SP-2 SIGNS AT CONTROLLED INTERSECTIONS AT A DISTANCE NOT TO EXCEED 1/4 MILE FROM THE PRECEDING DETOUR SIGN.
6. EXCEPT AS OTHERWISE SHOWN ON OTHER PLANS OR SPECIFIED IN THE SPECIAL PROVISIONS, SP-2 SIGNS MUST BE PLACED AS SHOWN ON THIS PLAN.




## TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE
## SHEET 1 OF 3

NO SCALE

**THD-3**

LAST REVISION 12-21-15
DATE PLOTTED => 27-JAN-2016
TIME PLOTTED => 13:16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans
FUNCTIONAL SUPERVISOR: ALI BAMSHAD
CALCULATED-DESIGNED BY: ALBERT K YU
CHECKED BY: JOCELYN C CHIANG
REVISED BY: JC
DATE REVISED: 2/14

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 7 | 38 |

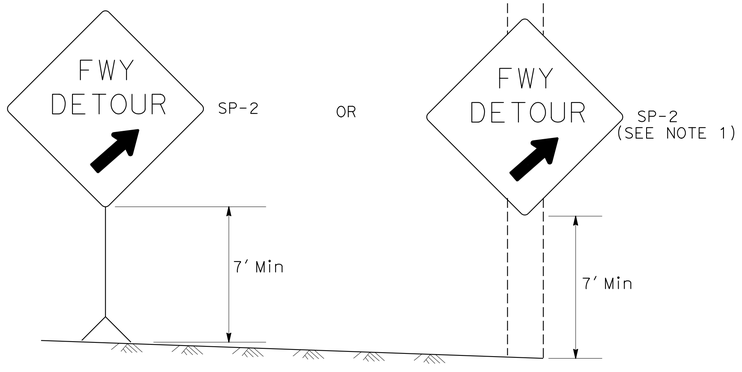
Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA

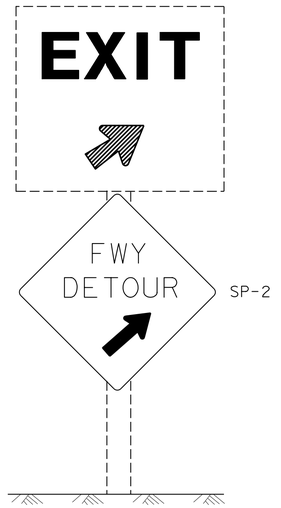
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Exist G85 (CA)

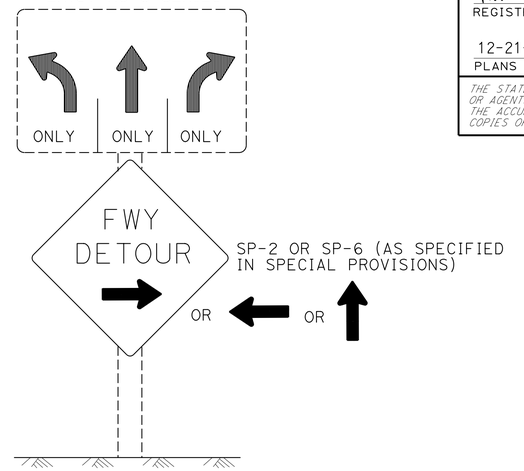

DETAIL A (SEE NOTE 3)

Exist E5-1, G84-2 (CA) OR G84-3 (CA)

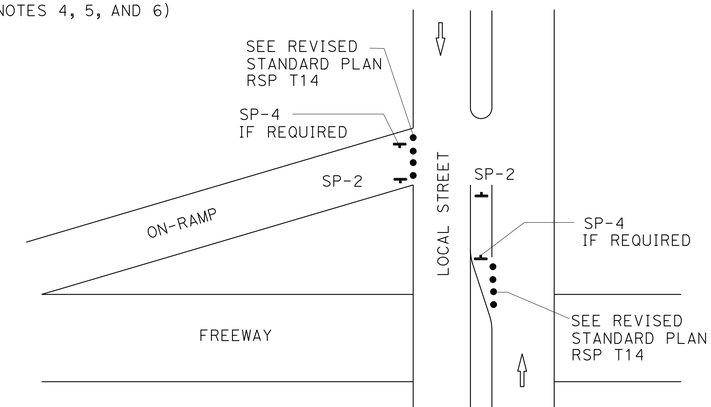



DETAIL B (SEE NOTE 3)

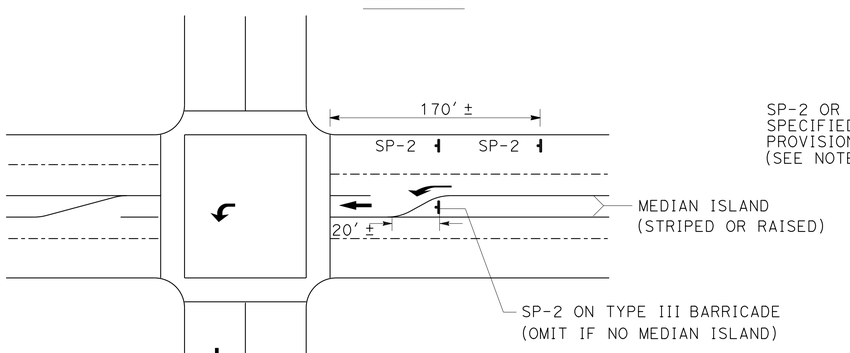
Exist R3-8 SERIES



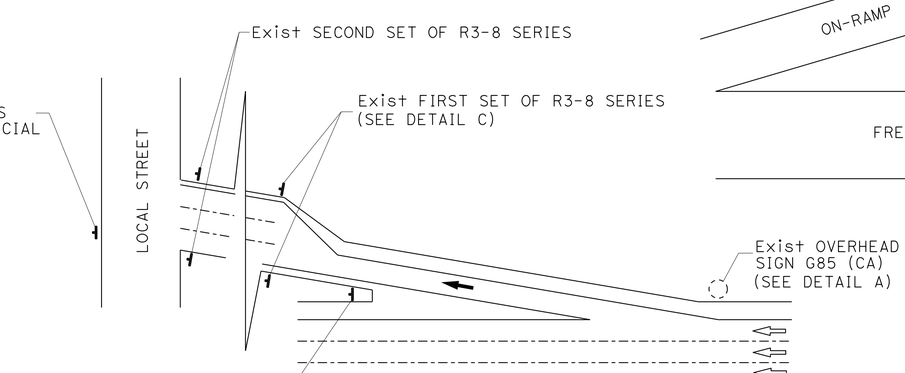

DETAIL C (SEE NOTES 4, 5, AND 6)




DETAIL E




DETAIL D




## TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

LEGEND

- • TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- → DETOUR DIRECTION
- ◌ EXISTING OVERHEAD SIGN

NOTES: SIGN SP-2

1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS MUST NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. OMIT DETAILS A AND B FOR FULL FREEWAY CLOSURES.
4. SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-6 SIGN DETAILS.
5. IF R3-8 SERIES SIGNS ARE NOT PRESENT AT THE OFF-RAMP, SP-2 OR SP-6 SIGNS MUST BE FASTENED ONTO EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
6. EXCEPT FOR DETAILS A & B, OMIT SP-2 SIGNS IF RAMP HAS MANDATORY SINGLE MOVE.

SIGN CODE LEGEND

XXYY-Y: FEDERAL SIGN CODE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

XXYY-Y (CA): CALIFORNIA SIGN CODE PER CALIFORNIA MUTCD

# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE
## SHEET 2 OF 3

NO SCALE

**THD-4**

CALCULATED-DESIGNED BY: JC
CHECKED BY: ALBERT K YU / JOCELYN C CHIANG
REVISED BY / DATE REVISED: 2/14
FUNCTIONAL SUPERVISOR: ALI BAMSHAD
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans

LAST REVISION DATE PLOTTED => 27-JAN-2016
12-21-15 TIME PLOTTED => 13:16

BORDER LAST REVISED 7/2/2010
USERNAME => s122436
DGN FILE => 72W660me004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1887
PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 8 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA

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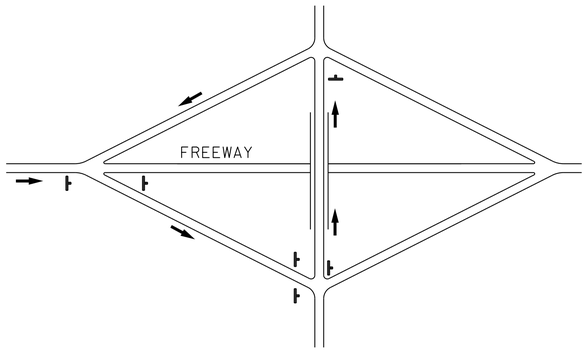


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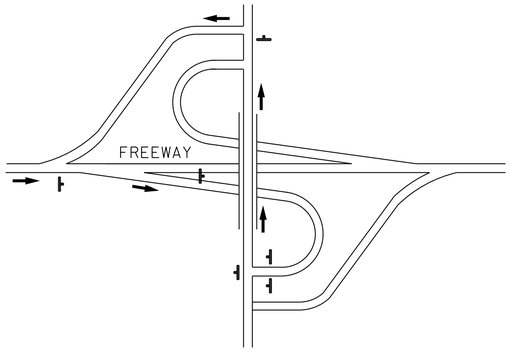
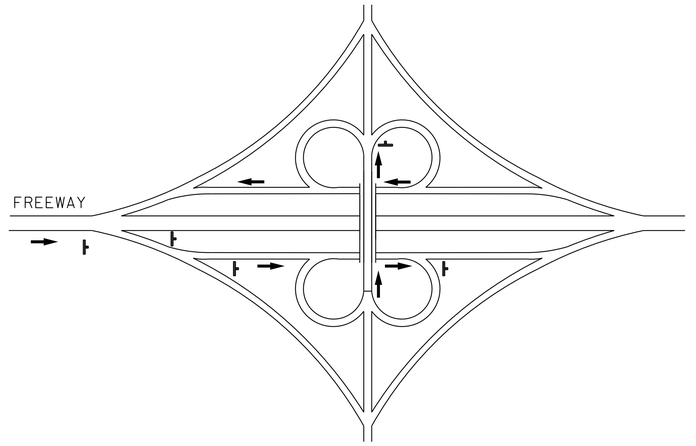
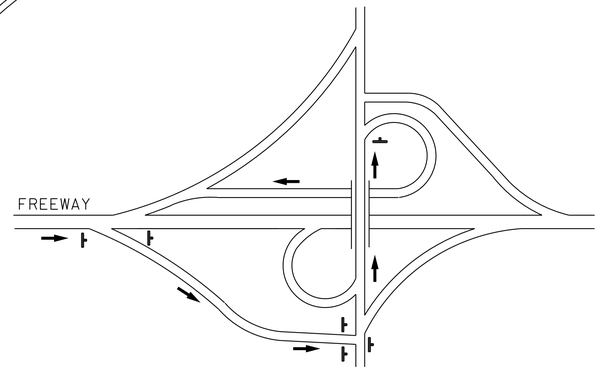


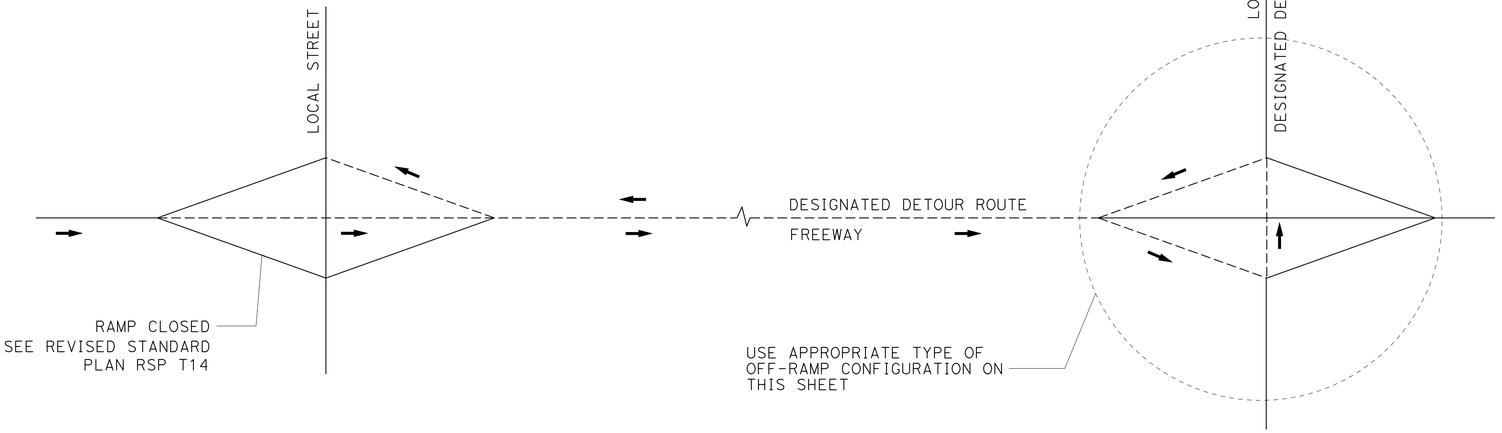

TYPE II

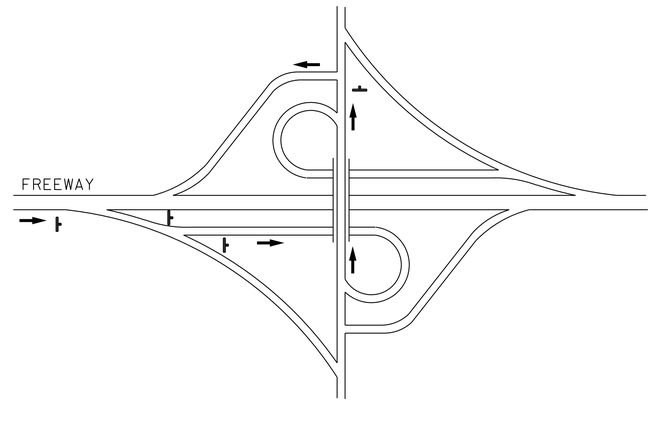



TYPE III




TYPE IV




TYPE V

| TYPE OF OFF-RAMP CONFIGURATION | MINIMUM No. OF SP-2 |
|---|---|
| TYPE I | 6 |
| TYPE II | 6 |
| TYPE III | 5 |
| TYPE IV | 6 |
| TYPE V | 4 |

## TYPICAL DETOUR SIGN INSTALLATION FOR OFF-RAMP CLOSURE

NOTES:

1. FOR RAMP CONFIGURATIONS NOT SHOWN, THE EXACT LOCATIONS AND MINIMUM NUMBER OF SP-2 SIGNS MUST BE DETERMINED BY THE ENGINEER.
2. SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-2 SIGN DETAILS.

LEGEND

- SIGN SP-2
- DETOUR DIRECTION
- ----- DESIGNATED DETOUR ROUTE

# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE
## SHEET 3 OF 3

NO SCALE

**THD-5**

CALCULATED-DESIGNED BY
CHECKED BY
ALBERT K YU
JOCELYN C CHIANG
REVISED BY
DATE REVISED
JC
2/14
FUNCTIONAL SUPERVISOR
ALI BAMSHAD
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans

LAST REVISION | DATE PLOTTED => 27-JAN-2016
TIME PLOTTED => 13:16
12-21-15

BORDER LAST REVISED 7/2/2010
USERNAME => s122436
DGN FILE => 72W660me005.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1887
PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 9 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

ALI R. BAMSHAD No. C48134 Exp. 6-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA



## NOTES:

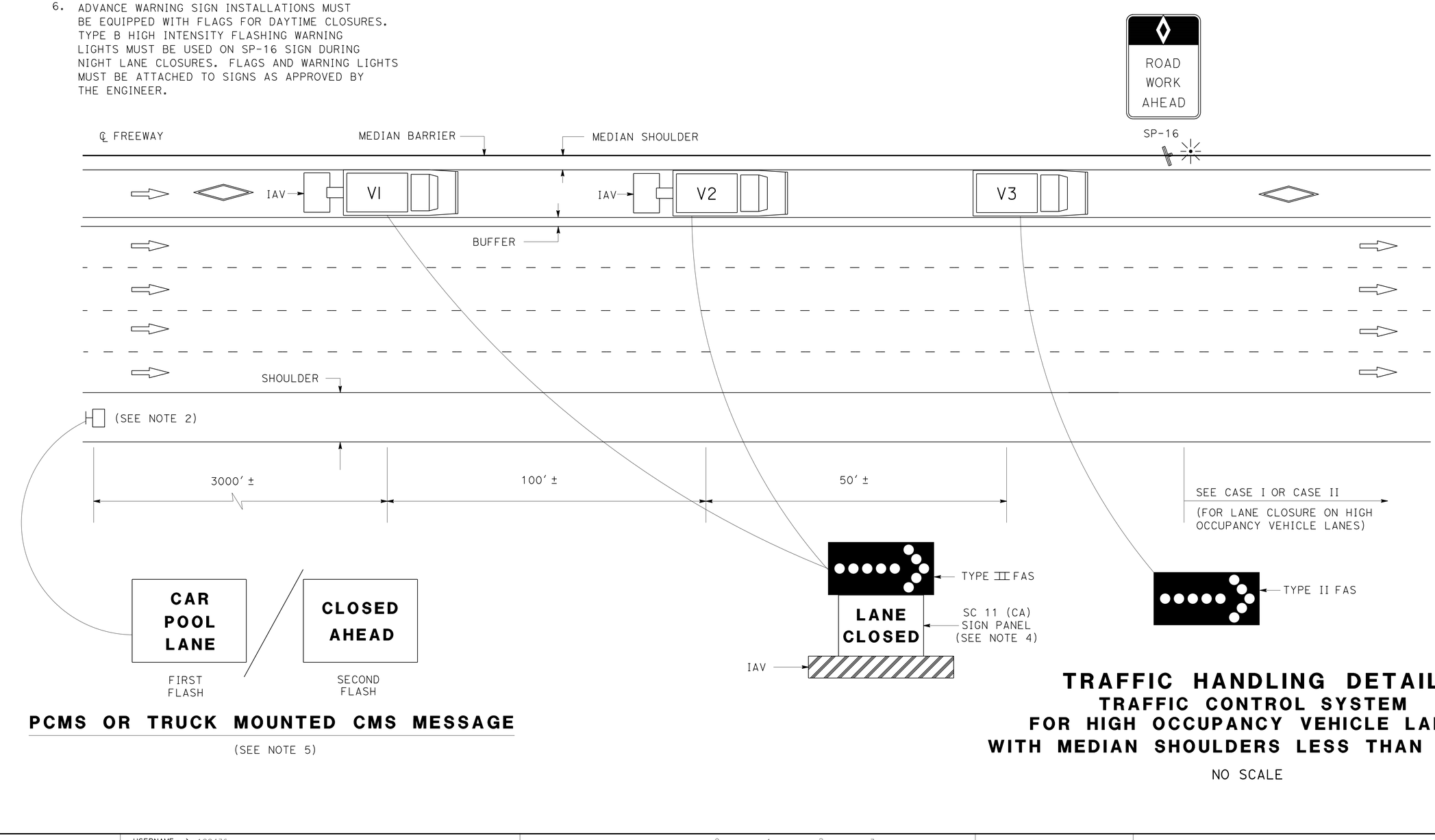
1. LANE CLOSURES MUST NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
2. PCMS MUST BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE HOV LANE.
3. A MINIMUM SIGHT DISTANCE OF 1500' MUST BE PROVIDED IN ADVANCE OF PCMS.
4. VEHICLE-MOUNTED SIGN PANELS MUST BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.
5. PLACE PCMS ON THE MEDIAN SHOULDER WHERE SUFFICIENT ROOM (SUCH AS CHP ENFORCEMENT AREAS) EXISTS.
6. ADVANCE WARNING SIGN INSTALLATIONS MUST BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS MUST BE USED ON SP-16 SIGN DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS MUST BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.

## LEGEND

| | |
|---|---|
| V1, V2 | SHADOW VEHICLES |
| V3 | WORK/APPLICATION VEHICLE |
| | PCMS |
| | PORTABLE FLASHING BEACON |
| | TEMPORARY TRAFFIC CONTROL SIGN |
| | FLASHING ARROW SIGN (FAS) |

## ABBREVIATIONS

| | |
|---|---|
| IAV | IMPACT ATTENUATOR VEHICLE |
| (CA) | CALIFORNIA CODE |
| CHP | CALIFORNIA HIGHWAY PATROL |




## PCMS OR TRUCK MOUNTED CMS MESSAGE

(SEE NOTE 5)

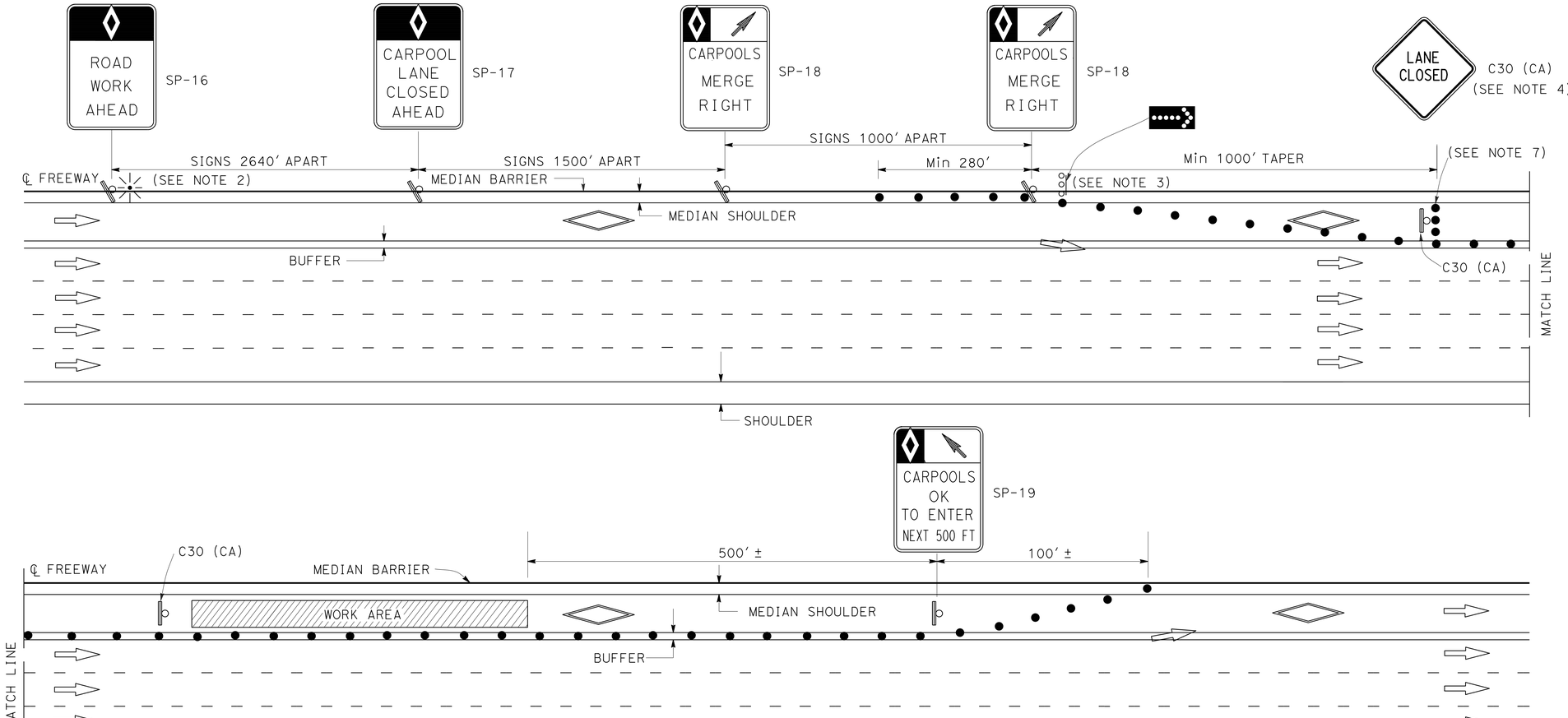
# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR HIGH OCCUPANCY VEHICLE LANES WITH MEDIAN SHOULDERS LESS THAN 8 FEET

NO SCALE

**THD-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DTM
FUNCTIONAL SUPERVISOR: ALI BAMSHAD
CALCULATED-DESIGNED BY: JOCELYN C CHIANG
CHECKED BY: ALBERT K YU
REVISED BY: JC
DATE REVISED: 2/14

LAST REVISION DATE PLOTTED => 27-JAN-2016
LAST REVISION TIME PLOTTED => 13:16




## LEGEND

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

## ABBREVIATIONS

(CA) CALIFORNIA CODE

## SIGN PANEL

SIZE (MIN)

| | |
|---|---|
| SP-16 | 36" X 54" |
| SP-17 | 36" X 54" |
| SP-18 | 36" X 48" |
| SP-19 | 36" X 60" |
| C30 (CA) | 30" X 30" |
| G20-2 | 48" X 24" |

## NOTES: FOR CASE I AND CASE II

1. AT LEAST ONE PERSON MUST BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON NIGHT LANE CLOSURES OR DAY-TIME CLOSURES EXCEEDING 1 MILE LENGTH, INCLUDING TAPERS.
2. ADVANCE WARNING SIGN INSTALLATIONS MUST BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS MUST BE USED ON SP-16 SIGN DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS MUST BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.
3. THE FLASHING ARROW SIGN MUST BE TYPE I.
4. PLACE C30 (CA) SIGNS EVERY 2000' THROUGHOUT THE LENGTH OF LANE CLOSURE.
5. A MINIMUM 1500' OF SIGHT DISTANCE MUST BE PROVIDED WHERE POSSIBLE FOR VEHICLES APPROACHING THE FLASHING ARROW SIGN. LANE CLOSURES MUST NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
6. PORTABLE DELINEATORS PLACED AT ONE-HALF THE SPACING INDICATED FOR TRAFFIC CONES MAY BE USED INSTEAD OF CONES FOR DAYTIME CLOSURES.
7. A MINIMUM OF 3 CONES MUST BE PLACED TRANSVERSELY ACROSS CLOSED LANES WHERE TAPERS END AND EVERY 2000'. TWO TYPE II BARRICADES MAY BE USED INSTEAD OF 3 CONES. THE ALIGNMENT OF CONES OR BARRICADES MAY BE SHIFTED FROM THE TRANSVERSE ALIGNMENT TO PROVIDE ACCESS TO WORK.
8. IF AN INGRESS/EGRESS AREA IS WITHIN 5250' UPSTREAM OR DOWNSTREAM OF THE WORK AREA, LANE CLOSURES MUST BE EXTENDED TO THAT AREA AS SHOWN IN CASE II.
9. SIGNS SP-16, 17, 18, AND 19 MAY BE OVERLAID ON EXISTING CARPOOL SIGNS IN MEDIANS AS APPROVED BY THE ENGINEER.
10. SIGNS SP-16, 17, 18, AND C30 (CA) MUST BE BLACK ON ORANGE BACKGROUND. SIGN SP-19 MUST BE BLACK ON WHITE BACKGROUND. DIAMONDS ON SIGNS MUST BE WHITE.
11. FOR CLOSURE OF LANE(S) ADJACENT TO HOV LANES, SEE CASE II.
12. THE MAXIMUM SPACING BETWEEN CONES MUST BE APPROXIMATELY 50' IN TAPERS AND 100' ON TANGENTS.

# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR HIGH OCCUPANCY VEHICLE LANES AT NON-INGRESS/EGRESS AREAS
## CASE I

NO SCALE

**THD-7**

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 10 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

ALI R. BAMSHAD No. C48134 Exp. 6-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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

| REVISED BY | DATE REVISED |
|---|---|
| JC | 2/14 |

CALCULATED-DESIGNED BY: ALBERT K YU
CHECKED BY: JOCELYN C CHIANG
FUNCTIONAL SUPERVISOR: ALI BAMSHAD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM

LAST REVISION 12-21-15
DATE PLOTTED => 27-JAN-2016
TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 11 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

ALI R. BAMSHAD No. C48134 Exp. 6-30-16 CIVIL
REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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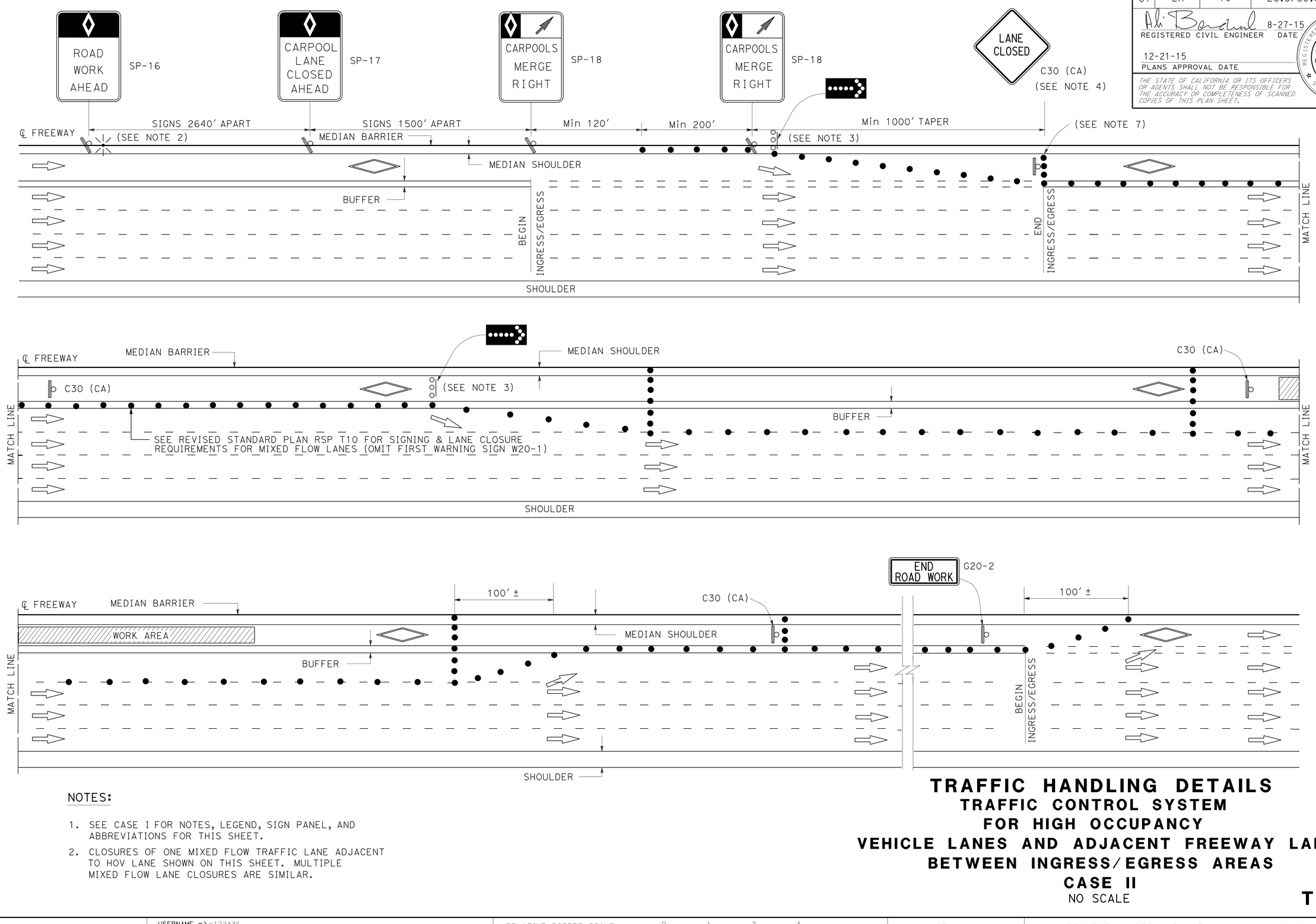


NOTES:

1. SEE CASE I FOR NOTES, LEGEND, SIGN PANEL, AND ABBREVIATIONS FOR THIS SHEET.
2. CLOSURES OF ONE MIXED FLOW TRAFFIC LANE ADJACENT TO HOV LANE SHOWN ON THIS SHEET. MULTIPLE MIXED FLOW LANE CLOSURES ARE SIMILAR.

# TRAFFIC HANDLING DETAILS
## TRAFFIC CONTROL SYSTEM FOR HIGH OCCUPANCY VEHICLE LANES AND ADJACENT FREEWAY LANES BETWEEN INGRESS/EGRESS AREAS
## CASE II

NO SCALE

**THD-8**

| REVISED BY | DATE REVISED |
|---|---|
| JC | 2/14 |

CALCULATED-DESIGNED BY: ALBERT K YU
CHECKED BY: JOCELYN C CHIANG

FUNCTIONAL SUPERVISOR: ALI BAMSHAD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans

LAST REVISION: DATE PLOTTED => 27-JAN-2016
12-21-15 TIME PLOTTED => 13:16

BORDER LAST REVISED 7/2/2010

USERNAME => s122436
DGN FILE => 72W660me008.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 1887 | PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 12 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI R. BAMSHAD
No. C48134
Exp. 6-30-16
CIVIL
STATE OF CALIFORNIA

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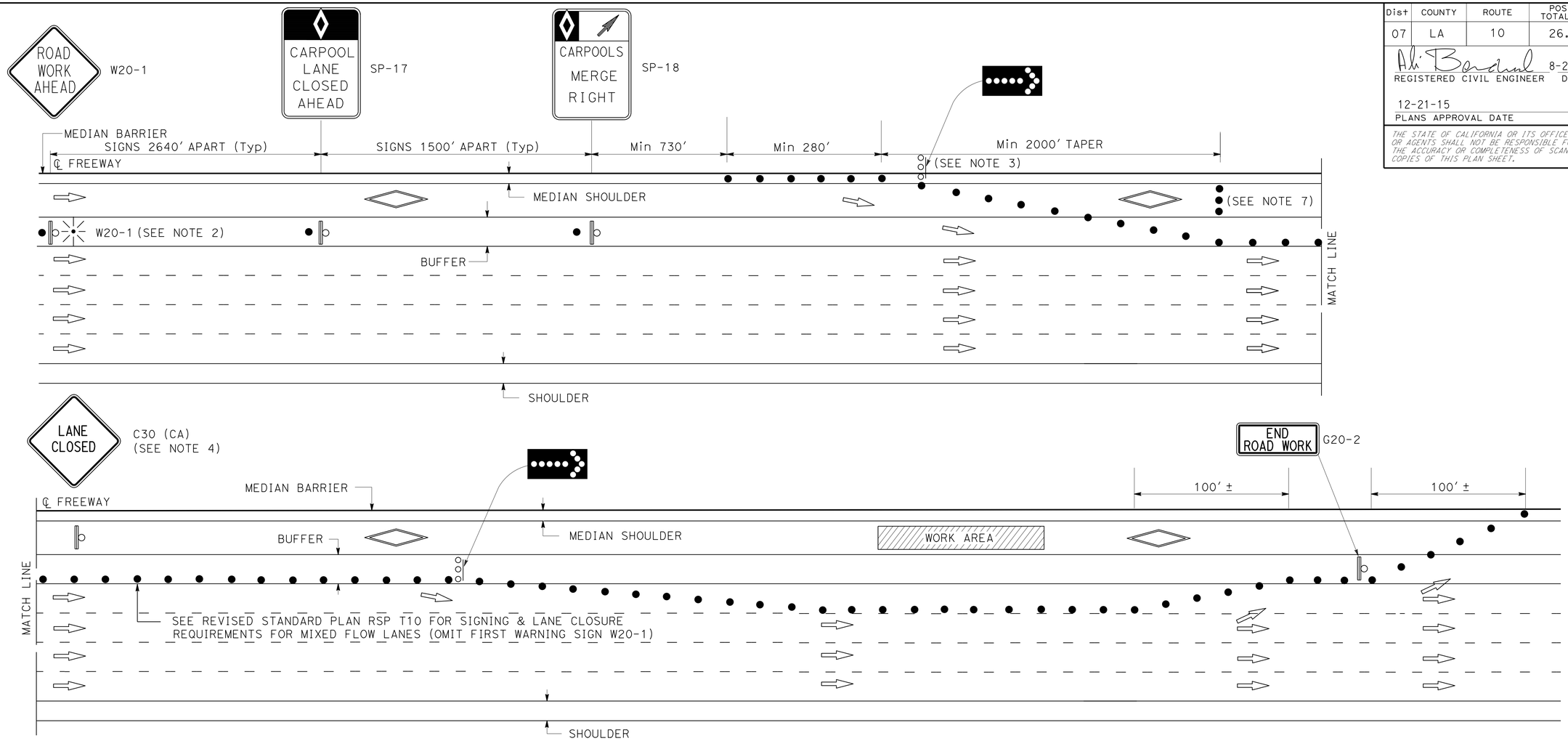


## NOTES:

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

## LEGEND

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

## SIGN PANEL

SIZE (Min)

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

## ABBREVIATIONS

(CA) CALIFORNIA CODE

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

NO SCALE

**THD-9**

REVISED BY: JC | DATE REVISED: 2/14
CALCULATED-DESIGNED BY: ALBERT K YU | CHECKED BY: JOCELYN C CHIANG
FUNCTIONAL SUPERVISOR: ALI BAMSHAD
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans®

LAST REVISION DATE PLOTTED => 27-JAN-2016
TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 13 | 38 |

Ali Bamshad 8-27-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

ALI R. BAMSHAD No. C48134 Exp. 6-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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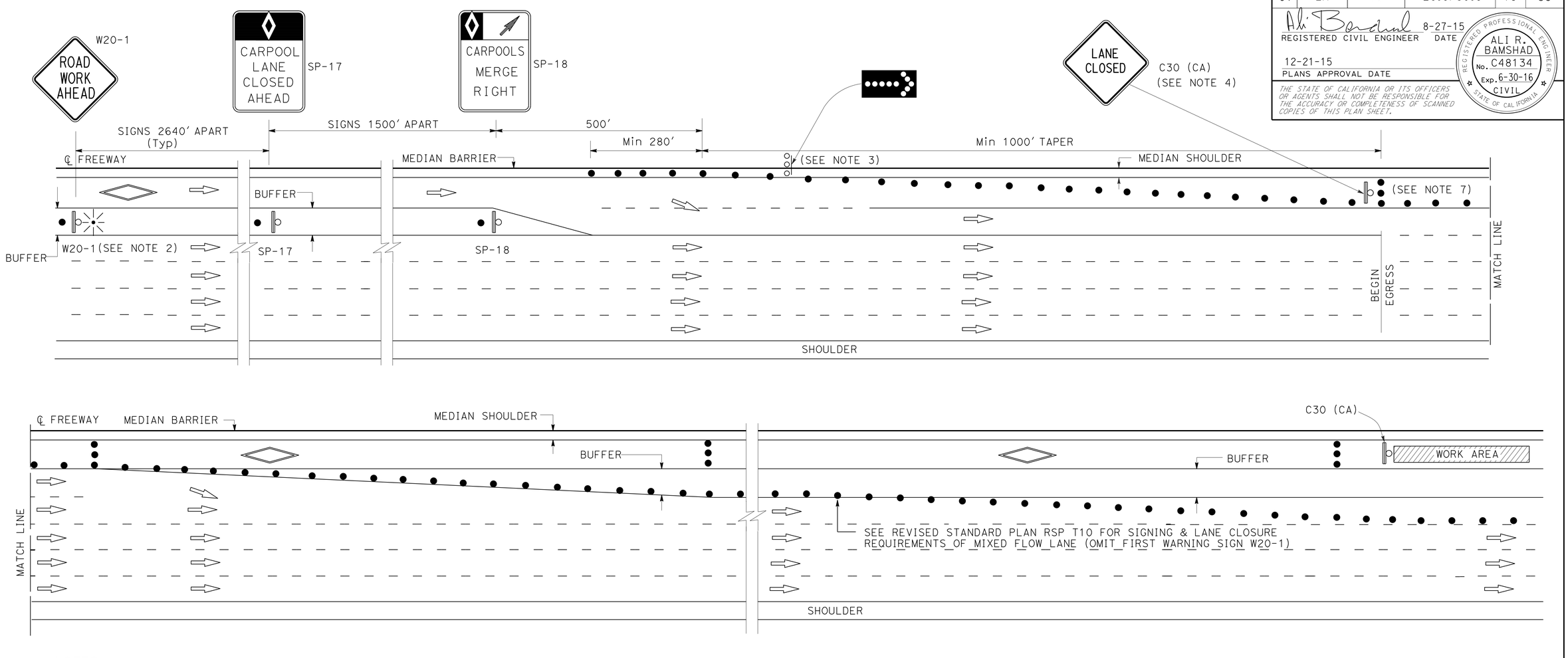



## NOTES:

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

## LEGEND

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

## SIGN PANEL

SIZE (MIN)

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

## ABBREVIATIONS

(CA) CALIFORNIA CODE

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

NO SCALE

**THD-10**

REVISED BY: JC | DATE REVISED: 2/14
CALCULATED-DESIGNED BY: ALBERT K YU | CHECKED BY: JOCELYN C CHIANG
FUNCTIONAL SUPERVISOR: ALI BAMSHAD
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
Caltrans

LAST REVISION: DATE PLOTTED => 27-JAN-2016 | TIME PLOTTED => 13:16 | 12-21-15

BORDER LAST REVISED 7/2/2010 | USERNAME => s122436 | DGN FILE => 72W660me010.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 1887 | PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 14 | 38 |

8-24-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

BIPIN PATEL No. C60082 Exp 06-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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

## NOTES:

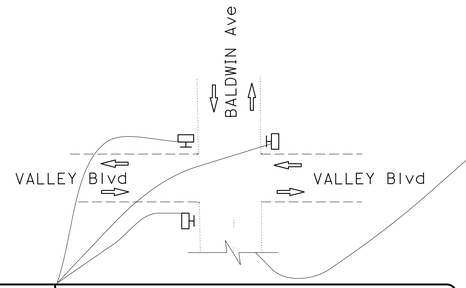
1. SPACING FOR CHANNELIZERS IS 10' UNLESS OTHERWISE SPECIFIED.
2. COVER ALL CONFLICTING SIGNING.
3. CONFLICTING SIGNING AND PAVEMENT DELINEATION MUST BE REMOVED.

## SIGN PANEL SIZE

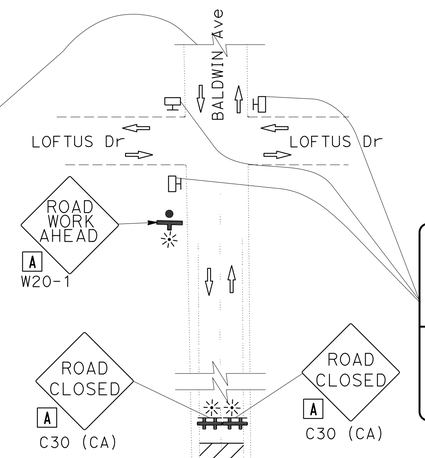
- A 48" X 48"
- B 36" X 36"
- C 30" X 36"

## LEGEND:

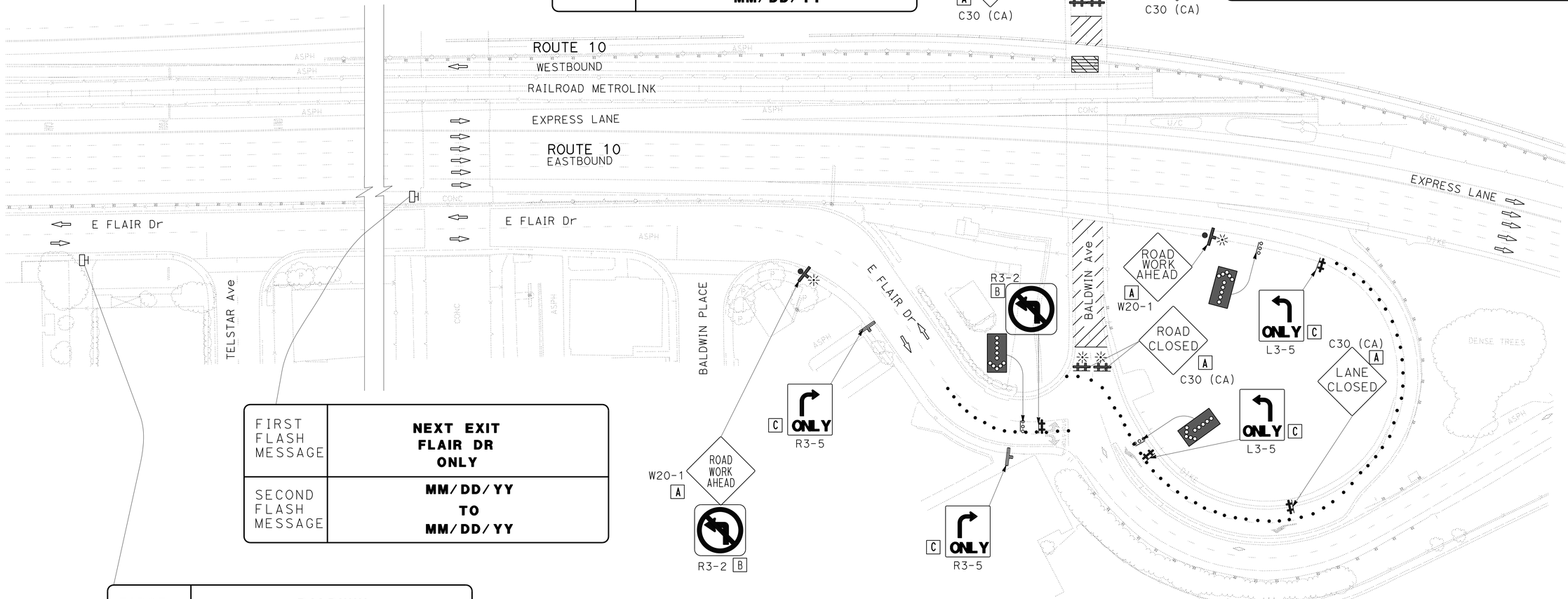
- BRIDGE WORK AREA
- DIRECTION OF TRAVEL
- TYPE II BARRICADES (3 EACH PER LANE)
- ROAD CLOSURE
- • CHANNELIZER (SURFACE MOUNTED)
- TEMPORARY SIGN
- PORTABLE FLASHING BEACON
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PCMS




| | |
|---|---|
| FIRST FLASH MESSAGE | BLDWN AT R10 CLOSD LOCALS OK |
| SECOND FLASH MESSAGE | MM/DD/YY TO MM/DD/YY |




| | |
|---|---|
| FIRST FLASH MESSAGE | BLDWN AT R10 CLOSD LOCALS OK |
| SECOND FLASH MESSAGE | MM/DD/YY TO MM/DD/YY |




| | |
|---|---|
| FIRST FLASH MESSAGE | NEXT EXIT FLAIR DR ONLY |
| SECOND FLASH MESSAGE | MM/DD/YY TO MM/DD/YY |

| | |
|---|---|
| FIRST FLASH MESSAGE | BALDWIN CLOSED AT R10 |
| SECOND FLASH MESSAGE | MM/DD/YY TO MM/DD/YY |

# TRAFFIC HANDLING DETAILS

NO SCALE

**THD-11**

*APPROVED FOR TRAFFIC HANDLING WORK ONLY*

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: LARRY WIERING

CALCULATED-DESIGNED BY: BIPIN PATEL
CHECKED BY: LARRY WIERING

| REVISED BY | DATE REVISED |
|---|---|

LAST REVISION: DATE PLOTTED => 27-JAN-2016 12-21-15 TIME PLOTTED => 13:17

BORDER LAST REVISED 7/2/2010

USERNAME => s122436
DGN FILE => 72W660me011.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 1963

PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 15 | 38 |

8-24-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

BIPIN PATEL No. C60082 Exp 06-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

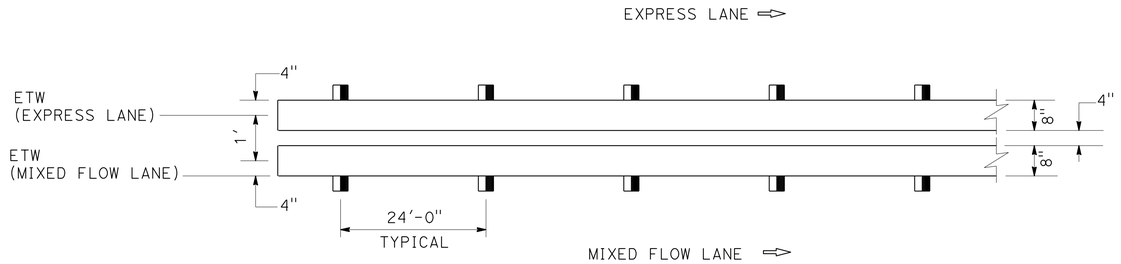


NOTE:

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

LEGEND:

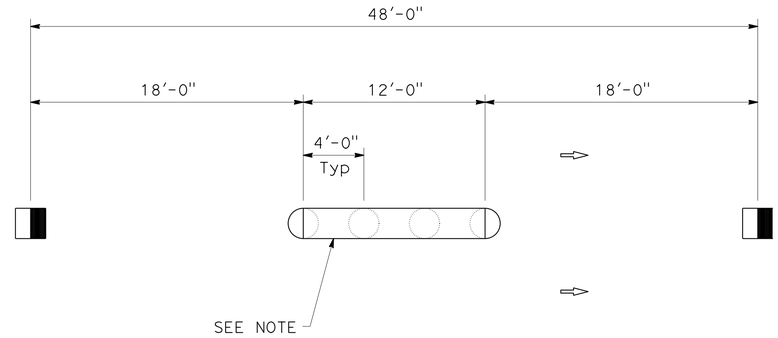
- TYPE G PAVEMENT MARKER
- TYPE H PAVEMENT MARKER
- 4" YELLOW THERMOPLASTIC STRIPE
- 8" WHITE THERMOPLASTIC STRIPE




**DETAIL A**

BUFFER WIDTH-1'

## BUFFER STRIPING DETAIL




## DETAIL 13 (MODIFIED)


## DETAIL 25M

## PAVEMENT DELINEATION DETAILS

NO SCALE

**PDD-1**

REVISED BY | DATE REVISED
BIPIN PATEL | LARRY WIERING
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LARRY WIERING
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
MAINTENANCE ENGINEERING

LAST REVISION 12-21-15 | DATE PLOTTED => 27-JAN-2016 | TIME PLOTTED => 13:17

BORDER LAST REVISED 7/2/2010 | USERNAME => s122436 | DGN FILE => 72W660nb001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 1963 | PROJECT NUMBER & PHASE 07130004491

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 16 | 38 |

REGISTERED CIVIL ENGINEER — DATE 8-24-15

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — BIPIN PATEL — No. C60082 — Exp 06-30-16 — 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.

# PAVEMENT DELINEATION QUANTITIES

| DESCRIPTION | | | | REMOVE THERMOPLASTIC TRAFFIC STRIPE | REMOVE PAVEMENT MARKER | REMOVE THERMOPLASTIC PAVEMENT MARKING | REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE) | THERMOPLASTIC TRAFFIC STRIPE | | | | | | | | | THERMOPLASTIC PAVEMENT MARKING | PAVEMENT MARKER | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | DETAIL | | | | | | | | | | RETROREFLECTIVE | | | NON-REFLECTIVE |
| | | | | | | | | 8 | 13 (MODIFIED) | 27B | 25A | 25M | 25 | 36 | 36A | DETAIL A | 37 | | | | |
| | | | | | | | | 4" WHITE (BROKEN 17-7) | 4" WHITE (BROKEN 36-12) | 4" WHITE | 4" YELLOW | | | 8" WHITE | | | 8" WHITE (BROKEN 12-3) | | TYPE G | TYPE C | TYPE H | TYPE A |
| Loc No. ⓧ | PM | BRIDGE NAME | BRIDGE No. | LF | EA | SQFT | LF | | | | | | | | | | | SQFT | EA | | | |
| 1 | 26.84 | ROUTE 10/164 COLLECTOR SEPARATION | 53-0010S | 210 | 23 | | 172 | | | 175 | 172 | | | | | | 172 | | | 14 | 9 | |
| 2 | 26.84 | ROUTE 10/164 COLLECTOR SEPARATION | 53-0010K | 232 | 26 | | 193 | | | 193 | 193 | | | | | | 193 | | | 16 | 10 | |
| 3 | C27.84 | EATON WASH (WB BUSWAY) | 53-0656C | 64 | 4 | | 64 | | | 64 | 64 | | | | | | | | | | 4 | |
| 4 | 26.85 | EATON WASH | 53-0656R | 269 | 110 | | 64 | | 256 | 64 | | 64 | | | | 128 | 64 | | 28 | | 34 | 48 |
| 5 | 27.96 | BALDWIN AVENUE UC | 53-1021L | 308 | 112 | 36 | 77 | | 308 | 77 | | 77 | | | | 154 | | 36 | 22 | | 42 | 48 |
| 6 | C27.96 | BALDWIN AVENUE UC (WB BUSWAY) | 53-1021C | 41 | 2 | | 41 | | | 41 | | | 41 | | | | | | | | 2 | |
| 10 | 28.84 | LEXINGTON AVENUE UC | 53-0883 | 705 | 214 | 40 | 126 | 35 | 504 | 158 | | 126 | | 126 | 32 | 252 | | 40 | 50 | | 68 | 96 |
| 11 | 29.03 | TYLER AVENUE UC | 53-0659 | 882 | 312 | 54 | 210 | | 840 | 210 | | 210 | | | | 420 | 210 | 54 | 76 | | 108 | 128 |
| 12 | 29.34 | MEEKER ROAD UC | 53-1029 | 633 | 212 | | 108 | 54 | 432 | 162 | | 108 | | | 54 | 216 | 108 | | 56 | | 60 | 96 |
| 14 | 29.90 | STEWART St ON-RAMP UC | 53-1030 | 400 | 136 | | 100 | | 400 | 100 | | 50 | 50 | | | 200 | | | 40 | | 32 | 64 |
| 15 | 30.13 | COGSWELL ROAD UC | 53-0662 | 384 | 166 | | 128 | | 512 | 128 | | 64 | 64 | | | 128 | | | 32 | | 38 | 96 |
| 17 | 30.58 | GARVEY Ave OFF-RAMP UC | 53-1032 | 512 | 113 | | 178 | | 623 | 178 | | | 178 | | | 178 | | | 21 | | 8 | 84 |
| | | | SUBTOTAL | 4,640 | 1,430 | 130 | 1,461 | 89 | 3,875 | 1,550 | 429 | 699 | 333 | 126 | 86 | 1,676 | 747 | 130 | 325 | 30 | 415 | 660 |
| | | | TOTAL | 4,640 | 1,430 | 130 | 1,461 | 89 | 3,875 | 3,011 | | | | 1,888 | | | 747 | 130 | 770 | | | 660 |

## PAVEMENT DELINEATION QUANTITIES

## PDQ-1

BIPIN PATEL — CALCULATED-DESIGNED BY
LARRY WIERING — CHECKED BY
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR: LARRY WIERING
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION => DATE PLOTTED => 27-JAN-2016
12-21-15 TIME PLOTTED => 13:17

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 17 | 38 |

8-24-15
REGISTERED CIVIL ENGINEER DATE

12-21-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
BIPIN PATEL
No. C60082
Exp 06-30-16
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

| PM | LOCATION | CONCRETE BARRIER (TYPE 50) (RSC) | REMOVE CONCRETE BARRIER |
|---|---|---|---|
| | | LF | LF |
| 28.70 | CENTER MEDIAN | 12 | 12 |
| | TOTAL | 12 | 12 |

## TEMPORARY TRAFFIC HANDLING QUANTITY

| PM | LOCATION | CHANNELIZER (SURFACE MOUNTED) |
|---|---|---|
| | | EA |
| 27.96 | BALDWIN Ave UC | 98 |
| | TOTAL | 98 |

# SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
BIPIN PATEL | LARRY WIERING
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: LARRY WIERING
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

LAST REVISION | DATE PLOTTED => 27-JAN-2016
12-21-15 | TIME PLOTTED => 13:40

## M

| | |
|---|---|
| Maint | MAINTENANCE |
| Max | MAXIMUM |
| MB | METAL BEAM |
| MBB | METAL BEAM BARRIER |
| MBGR | METAL BEAM GUARD RAILING |
| Med | MEDIAN |
| MGS | MIDWEST GUARDRAIL SYSTEM |
| MH | MANHOLE |
| Min | MINIMUM |
| Misc | MISCELLANEOUS |
| Misc I & S | MISCELLANEOUS IRON AND STEEL |
| Mkr | MARKER |
| Mod | MODIFIED,<br>MODIFY |
| Mon | MONUMENT |
| MP | METAL PLATE |
| MPGR | METAL PLATE GUARD RAILING |
| MR | MOVEMENT RATING |
| MSE | MECHANICALLY STABILIZED EMBANKMENT |
| Mt | MOUNTAIN, MOUNT |
| Mtl | MATERIAL |
| MVP | MAINTENANCE VEHICLE PULLOUT |

## N

| | |
|---|---|
| N | NORTH |
| NB | NORTHBOUND |
| No. | NUMBER (MUST HAVE PERIOD) |
| Nos. | NUMBERS (MUST HAVE PERIOD) |
| NPS | NOMINAL PIPE SIZE |
| NS | NEAR SIDE |
| NSP | NEW STANDARD PLAN |
| NTS | NOT TO SCALE |

## O

| | |
|---|---|
| Oblr | OBLITERATE |
| OC | OVERCROSSING |
| OD | OUTSIDE DIAMETER |
| OF | OUTSIDE FACE |
| OG | ORIGINAL GROUND |
| OGAC | OPEN GRADED ASPHALT CONCRETE |
| OGFC | OPEN GRADED FRICTION COURSE |
| OH | OVERHEAD |
| OHWM | ORDINARY HIGH WATER MARK |
| O-O | OUT TO OUT |
| Opp | OPPOSITE |
| OSD | OVERSIDE DRAIN |

## P

| | |
|---|---|
| P | PAGE |
| PAP | PERFORATED ALUMINUM PIPE |
| PB | PULL BOX |
| PC | POINT OF CURVATURE,<br>PRECAST |
| PCC | POINT OF COMPOUND CURVE,<br>PORTLAND CEMENT CONCRETE |
| PCMS | PORTABLE CHANGEABLE MESSAGE SIGN |
| PCP | PERFORATED CONCRETE PIPE,<br>PRESTRESSED CONCRETE PIPE |
| PCVC | POINT OF COMPOUND VERTICAL CURVE |
| PEC | PERMIT TO ENTER AND CONSTRUCT |
| Ped | PEDESTRIAN |
| Ped OC | PEDESTRIAN OVERCROSSING |
| Ped UC | PEDESTRIAN UNDERCROSSING |
| Perm Mtl | PERMEABLE MATERIAL |

## P continued

| | |
|---|---|
| PG | PROFILE GRADE |
| PI | POINT OF INTERSECTION |
| PJP | PARTIAL JOINT PENETRATION |
| Pkwy | PARKWAY |
| ℄,PL | PLATE |
| P/L | PROPERTY LINE |
| PM | POST MILE,<br>TIME FROM NOON TO MIDNIGHT |
| PN | PAVING NOTCH |
| POC | POINT OF HORIZONTAL CURVE |
| POT | POINT OF TANGENT |
| POVC | POINT OF VERTICAL CURVE |
| PP | PIPE PILE,<br>PLASTIC PIPE,<br>POWER POLE |
| PPL | PREFORMED PERMEABLE LINER |
| PPP | PERFORATED PLASTIC PIPE |
| PRC | POINT OF REVERSE CURVE |
| PRF | PAVEMENT REINFORCING FABRIC |
| PRVC | POINT OF REVERSE VERTICAL CURVE |
| PS&E | PLANS, SPECIFICATIONS AND ESTIMATES |
| PS, P/S | PRESTRESSED |
| PSP | PERFORATED STEEL PIPE |
| PT | POINT OF TANGENCY |
| PVC | POLYVINYL CHLORIDE |
| Pvmt | PAVEMENT |

## Q

| | |
|---|---|
| Qty | QUANTITY |

## R

| | |
|---|---|
| R | RADIUS |
| R & D | REMOVE AND DISPOSE |
| R & S | REMOVE AND SALVAGE |
| R/C | RATE OF CHANGE |
| RCA | REINFORCED CONCRETE ARCH |
| RCB | REINFORCED CONCRETE BOX |
| RCP | REINFORCED CONCRETE PIPE |
| RCPA | REINFORCED CONCRETE PIPE ARCH |
| Rd | ROAD |
| Reinf | REINFORCED,<br>REINFORCEMENT,<br>REINFORCING |
| Rel | RELOCATE |
| Repl | REPLACEMENT |
| Ret | RETAINING |
| Rev | REVISED, REVISION |
| Rdwy | ROADWAY |
| RHMA | RUBBERIZED HOT MIX ASPHALT |
| Riv | RIVER |
| RM | ROAD-MIXED |
| RP | RADIUS POINT,<br>REFERENCE POINT |
| RR | RAILROAD |
| RSP | ROCK SLOPE PROTECTION,<br>REVISED STANDARD PLAN |
| Rt | RIGHT |
| Rte | ROUTE |
| RW | REDWOOD,<br>RETAINING WALL |
| R/W | RIGHT OF WAY |
| Rwy | RAILWAY |

## S

| | |
|---|---|
| S | SOUTH,<br>SUPPLEMENT |
| SAE | STRUCTURE APPROACH EMBANKMENT |
| Salv | SALVAGE |
| SAPP | STRUCTURAL ALUMINUM PLATE PIPE |
| SB | SOUTHBOUND |
| SC | SAND CUSHION |
| SCSP | SLOTTED CORRUGATED STEEL PIPE |
| SD | STORM DRAIN |
| Sec | SECOND,<br>SECTION |
| Sep | SEPARATION |
| SG | SUBGRADE |
| Shld | SHOULDER |
| Sht | SHEET |
| Sim | SIMILAR |
| ℄ | STATION LINE |
| SM | SELECTED MATERIAL |
| Spec | SPECIAL,<br>SPECIFICATIONS |
| SPP | SLOTTED PLASTIC PIPE |
| SS | SLOPE STAKE |
| SSBM | STRAP AND SADDLE BRACKET METHOD |
| SSD | STRUCTURAL SECTION DRAIN |
| SSPA | STRUCTURAL STEEL PLATE ARCH |
| SSPP | STRUCTURAL STEEL PLATE PIPE |
| SSPPA | STRUCTURAL STEEL PLATE PIPE ARCH |
| SSRP | STEEL SPIRAL RIB PIPE |
| St | STREET |
| Sta | STATION |
| STBB | SINGLE THRIE BEAM BARRIER |
| Std | STANDARD |
| Str | STRUCTURE |
| Surf | SURFACING |
| SW | SIDEWALK,<br>SOUND WALL |
| Swr | SEWER |
| Sym | SYMMETRICAL |
| S4S | SURFACE 4 SIDES |

## T

| | |
|---|---|
| T | SEMI-TANGENT |
| Tan | TANGENT |
| TBB | THRIE BEAM BARRIER |
| Tbr | TIMBER |
| TC | TOP OF CURB |
| TCB | TRAFFIC CONTROL BOX |
| TCE | TEMPORARY CONSTRUCTION EASEMENT |
| Tel | TELEPHONE |
| Temp | TEMPORARY |
| TG | TOP OF GRADE |
| Tot | TOTAL |
| TP | TELEPHONE POLE |
| TPB | TREATED PERMEABLE BASE |
| TPM | TREATED PERMEABLE MATERIAL |
| Trans | TRANSITION |

## T continued

| | |
|---|---|
| TS | TRANSVERSE,<br>TRAFFIC SIGNAL,<br>TUBULAR STEEL |
| Typ | TYPICAL |

## U

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

## V

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

## W

| | |
|---|---|
| W | WEST,<br>WIDTH |
| WB | WESTBOUND |
| WH | WEEP HOLE |
| WM | WIRE MESH |
| WS | WATER SURFACE |
| WSP | WELDED STEEL PIPE |
| Wt | WEIGHT |
| WV | WATER VALVE |
| WW | WINGWALL |
| WWLOL | WINGWALL LAYOUT LINE |

## X

| | |
|---|---|
| X Sec | CROSS SECTION |
| Xing | CROSSING |

## Y

| | |
|---|---|
| Yr | YEAR |
| Yrs | YEARS |

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 18 | 38 |

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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TO ACCOMPANY PLANS DATED 12-21-15

### UNIT OF MEASUREMENT SYMBOLS:

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

TABLE A

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

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

TABLE B

| SYMBOL USED | DEFINITIONS |
|---|---|
| ksi | KIPS PER SQUARE INCH |
| ksf | KIPS PER SQUARE FOOT |
| psi | POUNDS PER SQUARE INCH |
| psf | POUNDS PER SQUARE FOOT |
| $lb/ft^3$, pcf | POUNDS PER CUBIC FOOT |
| tsf | TONS PER SQUARE FOOT |
| mph, MPH * | MILES PER HOUR |
| ø | NOMINAL DIAMETER |
| oz | OUNCE |
| lb | POUND |
| kip | 1,000 POUNDS |
| cal | CALORIE |
| ft | FOOT OR FEET |
| gal | GALLON |

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# ABBREVIATIONS (SHEET 2 OF 2)

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A10B**

2010 REVISED STANDARD PLAN RSP A10B

6-7-13

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 19 | 38 |

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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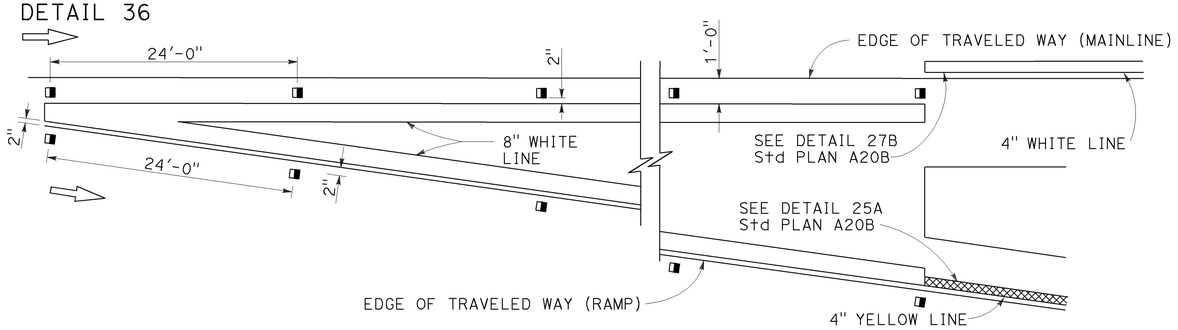
TO ACCOMPANY PLANS DATED 12-21-15

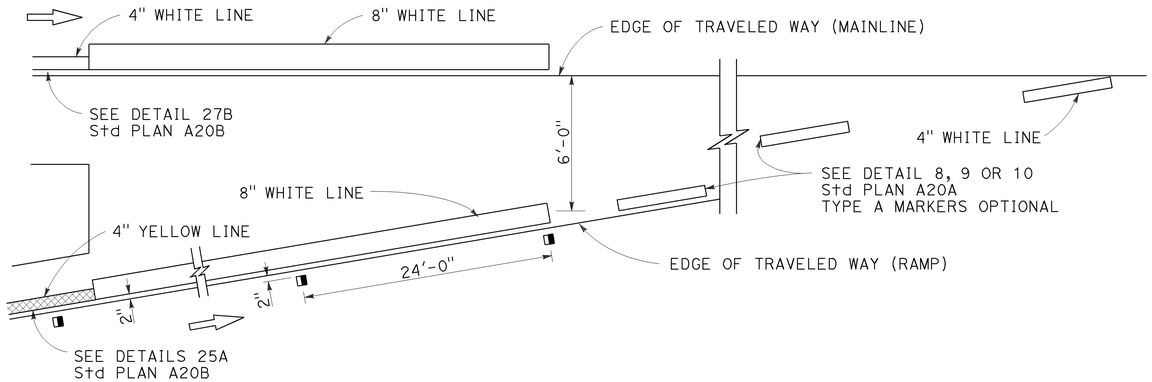
## EXIT RAMP NEUTRAL AREA (GORE) TREATMENT

DETAIL 36



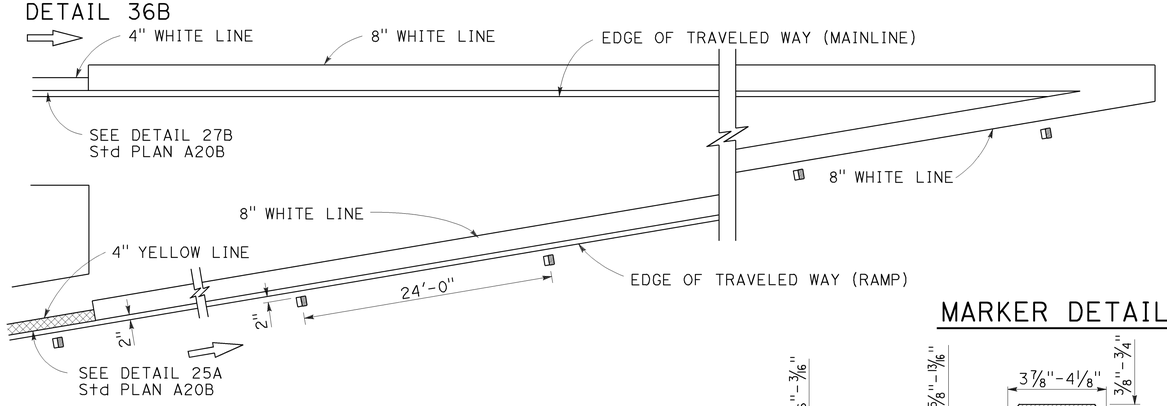

## ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT

DETAIL 36A



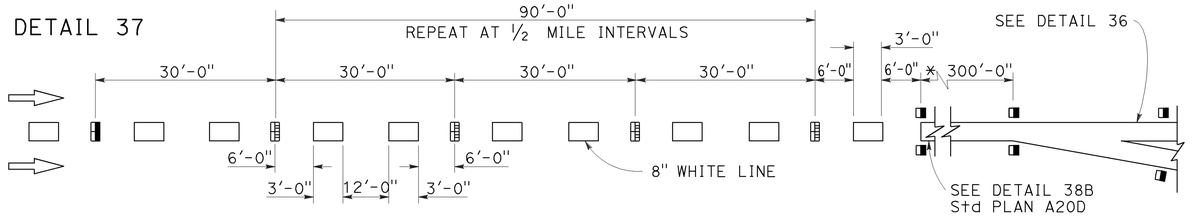

## ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

DETAIL 36B

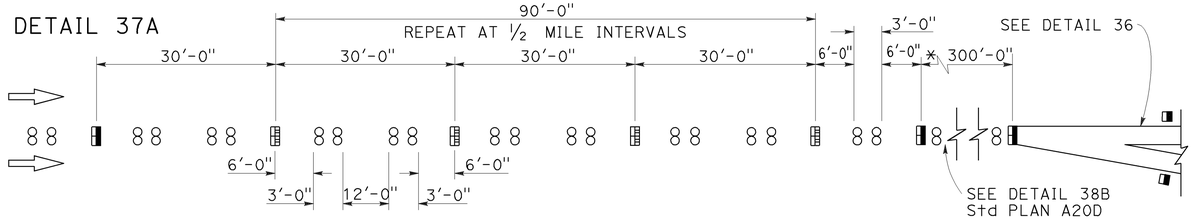



## LANE DROP AT EXIT RAMPS

DETAIL 37



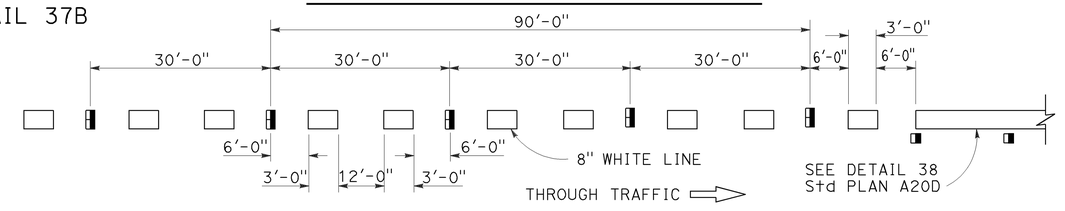

DETAIL 37A



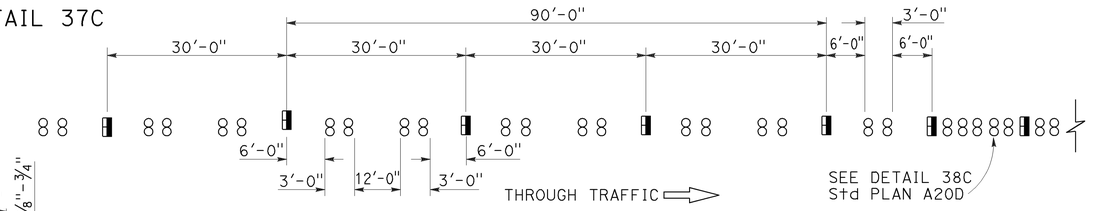

* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

## LANE DROP AT INTERSECTIONS

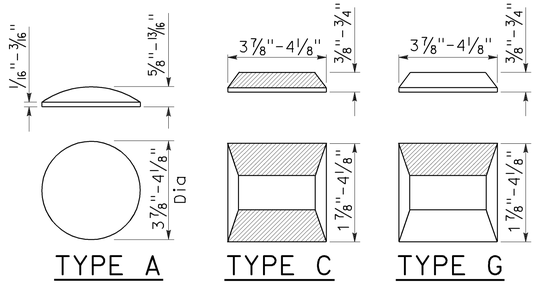
DETAIL 37B




DETAIL 37C




## MARKER DETAILS




LEGEND:

MARKERS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

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

**REVISED STANDARD PLAN RSP A20C**

**2010 REVISED STANDARD PLAN RSP A20C**

4-29-13

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 20 | 38 |

REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 12-21-15

2010 REVISED STANDARD PLAN RSP T9

## TABLE 1

### TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

| SPEED (S) | MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W) | | | | MAXIMUM CHANNELIZING DEVICE SPACING | | |
|---|---|---|---|---|---|---|---|
| | | | | | X | Y | Z ** |
| | TANGENT 2L | MERGING L | SHIFTING L/2 | SHOULDER L/3 | TAPER | TANGENT | CONFLICT |
| mph | ft | ft | ft | ft | ft | ft | ft |
| 20 | 160 | 80 | 40 | 27 | 20 | 40 | 10 |
| 25 | 250 | 125 | 63 | 42 | 25 | 50 | 12 |
| 30 | 360 | 180 | 90 | 60 | 30 | 60 | 15 |
| 35 | 490 | 245 | 123 | 82 | 35 | 70 | 17 |
| 40 | 640 | 320 | 160 | 107 | 40 | 80 | 20 |
| 45 | 1080 | 540 | 270 | 180 | 45 | 90 | 22 |
| 50 | 1200 | 600 | 300 | 200 | 50 | 100 | 25 |
| 55 | 1320 | 660 | 330 | 220 | 55 | 110 | 27 |
| 60 | 1440 | 720 | 360 | 240 | 60 | 120 | 30 |
| 65 | 1560 | 780 | 390 | 260 | 65 | 130 | 32 |
| 70 | 1680 | 840 | 420 | 280 | 70 | 140 | 35 |

* - For other offsets, use the following merging taper length formula for L:
For speed of 40 mph or less, $L = WS^2/60$
For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
W = Width of offset in feet
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

## TABLE 2

### LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING

| SPEED * | Min D ** | DOWNGRADE Min D *** | | |
|---|---|---|---|---|
| | | -3% | -6% | -9% |
| mph | ft | ft | ft | ft |
| 20 | 115 | 116 | 120 | 126 |
| 25 | 155 | 158 | 165 | 173 |
| 30 | 200 | 205 | 215 | 227 |
| 35 | 250 | 257 | 271 | 287 |
| 40 | 305 | 315 | 333 | 354 |
| 45 | 360 | 378 | 400 | 427 |
| 50 | 425 | 446 | 474 | 507 |
| 55 | 495 | 520 | 553 | 593 |
| 60 | 570 | 598 | 638 | 686 |
| 65 | 645 | 682 | 728 | 785 |
| 70 | 730 | 771 | 825 | 891 |

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

## TABLE 3

### ADVANCE WARNING SIGN SPACING

| ROAD TYPE | DISTANCE BETWEEN SIGNS * | | |
|---|---|---|---|
| | A | B | C |
| | ft | ft | ft |
| URBAN - 25 mph OR LESS | 100 | 100 | 100 |
| URBAN - MORE THAN 25 mph TO 40 mph | 250 | 250 | 250 |
| URBAN - MORE THAN 40 mph | 350 | 350 | 350 |
| RURAL | 500 | 500 | 500 |
| EXPRESSWAY / FREEWAY | 1000 | 1500 | 2640 |

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommmended distances.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T9**

4-30-13

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 21 | 38 |

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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



TO ACCOMPANY PLANS DATED 12-21-15

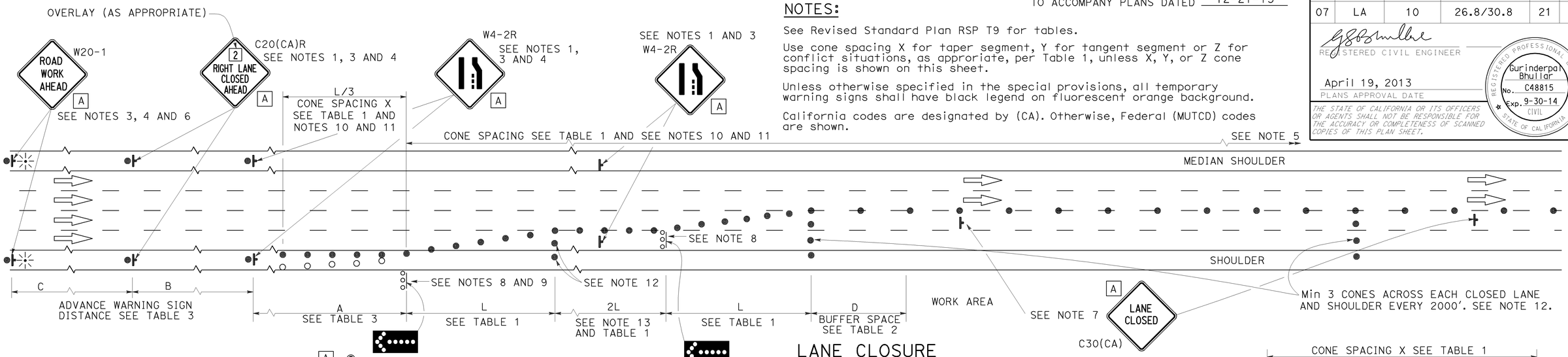
## NOTES:

See Revised Standard Plan RSP T9 for tables.

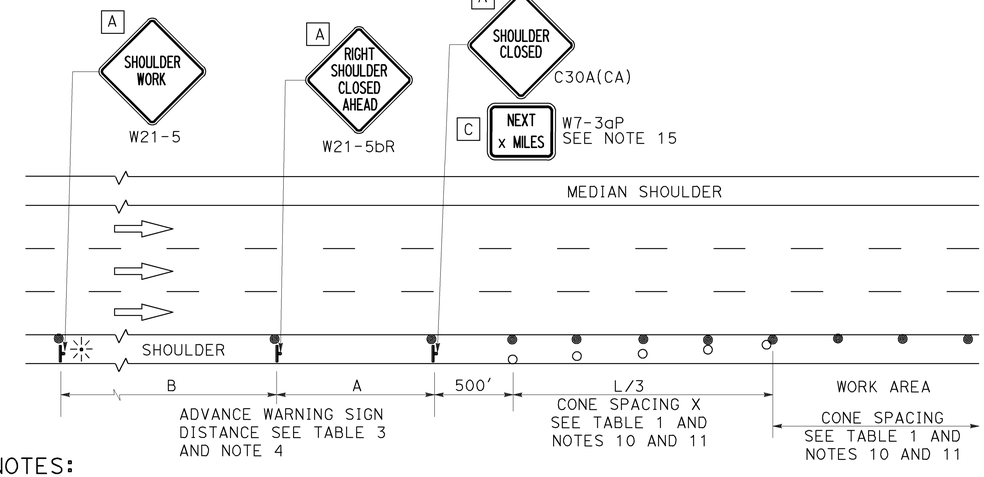
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as approriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

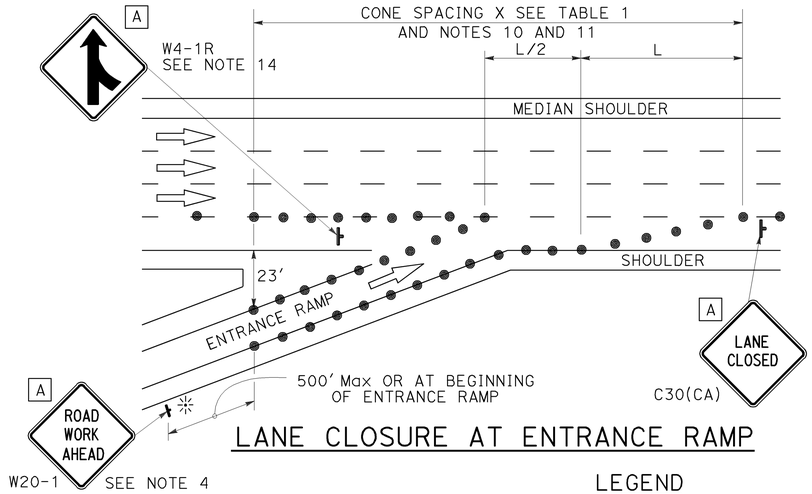
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



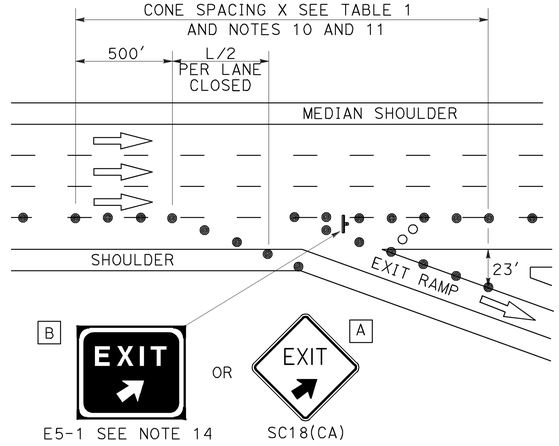

## LANE CLOSURE




## SHOULDER CLOSURE




## LANE CLOSURE AT ENTRANCE RAMP




## LANE CLOSURE AT EXIT RAMP

## NOTES:

1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
7. Place a C30(CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT___MILES" plaque must be used if theshoulder closure extends beyond the distance that can be perceived by road users.

## LEGEND

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

## SIGN PANEL SIZE (Min)

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

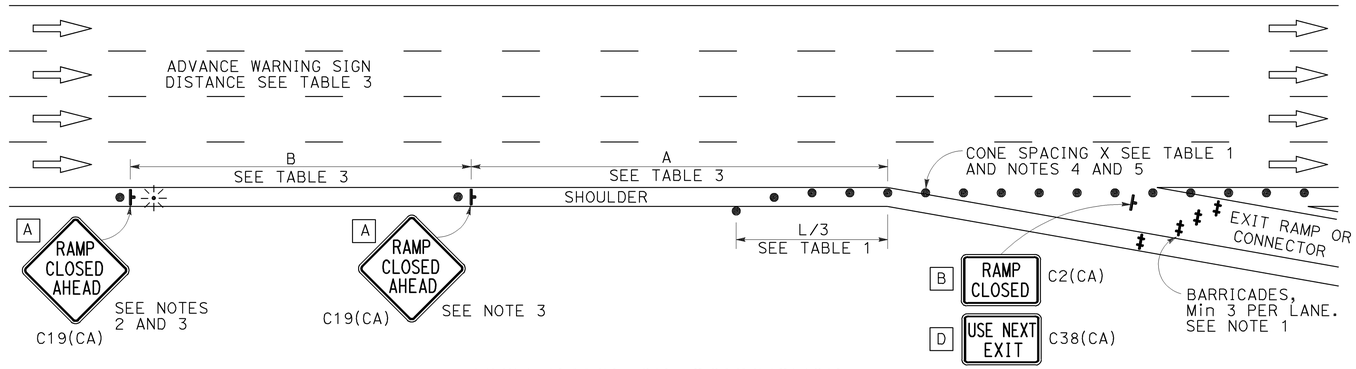
RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

# REVISED STANDARD PLAN RSP T10

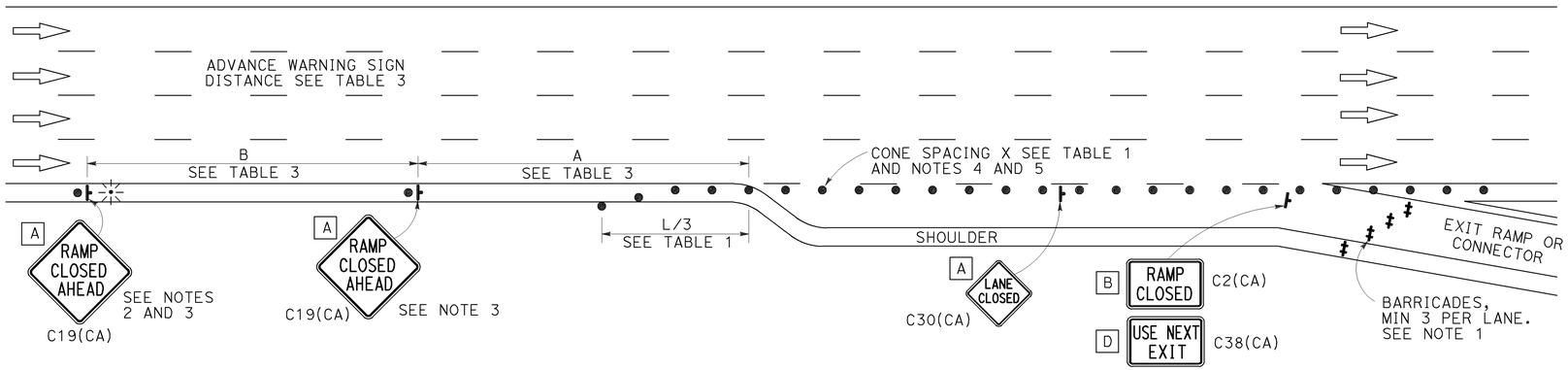
2010 REVISED STANDARD PLAN RSP T10

12-18-12

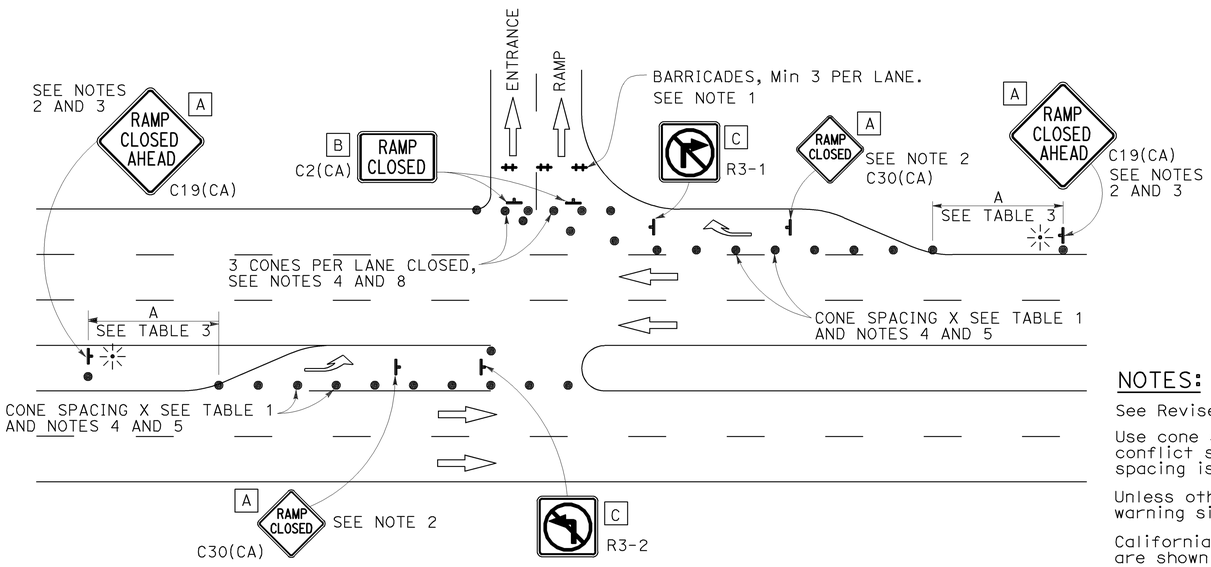
# TYPICAL RAMP CLOSURES



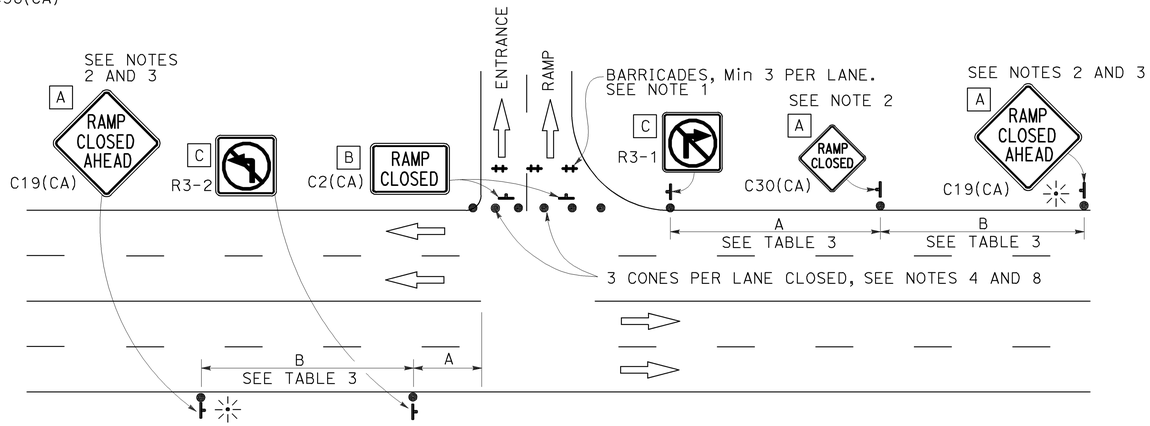

## EXIT RAMP OR CONNECTOR




## EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE




## ENTRANCE RAMP WITH TURNING POCKETS




## ENTRANCE RAMP WITHOUT TURNING POCKETS

## SIGN PANEL SIZE (Min)

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

## LEGEND

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

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 22 | 38 |

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 12-21-15

## NOTES:

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

## NOTES:

See Revised Standard Plan RSP T9 for tables.

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

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

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

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

**REVISED STANDARD PLAN RSP T14**

2010 REVISED STANDARD PLAN RSP T14

12-18-12

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 23 | 38 |

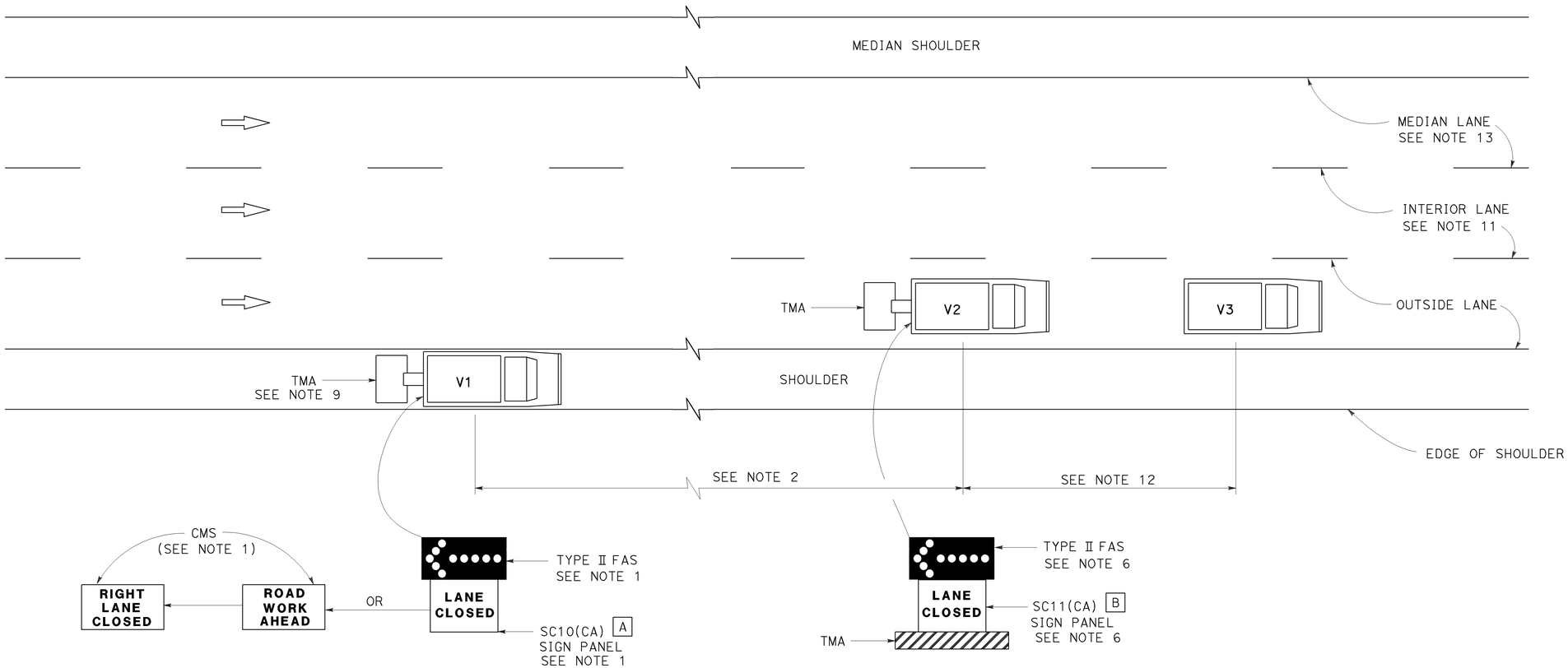
REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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



TO ACCOMPANY PLANS DATED 12-21-15




## SIGN PANEL SIZE (Min)

A 66" x 36"

B 54" x 42"

## LEGEND

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

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

## NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

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

**REVISED STANDARD PLAN RSP T15**

2010 REVISED STANDARD PLAN RSP T15

12-18-12

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 24 | 38 |

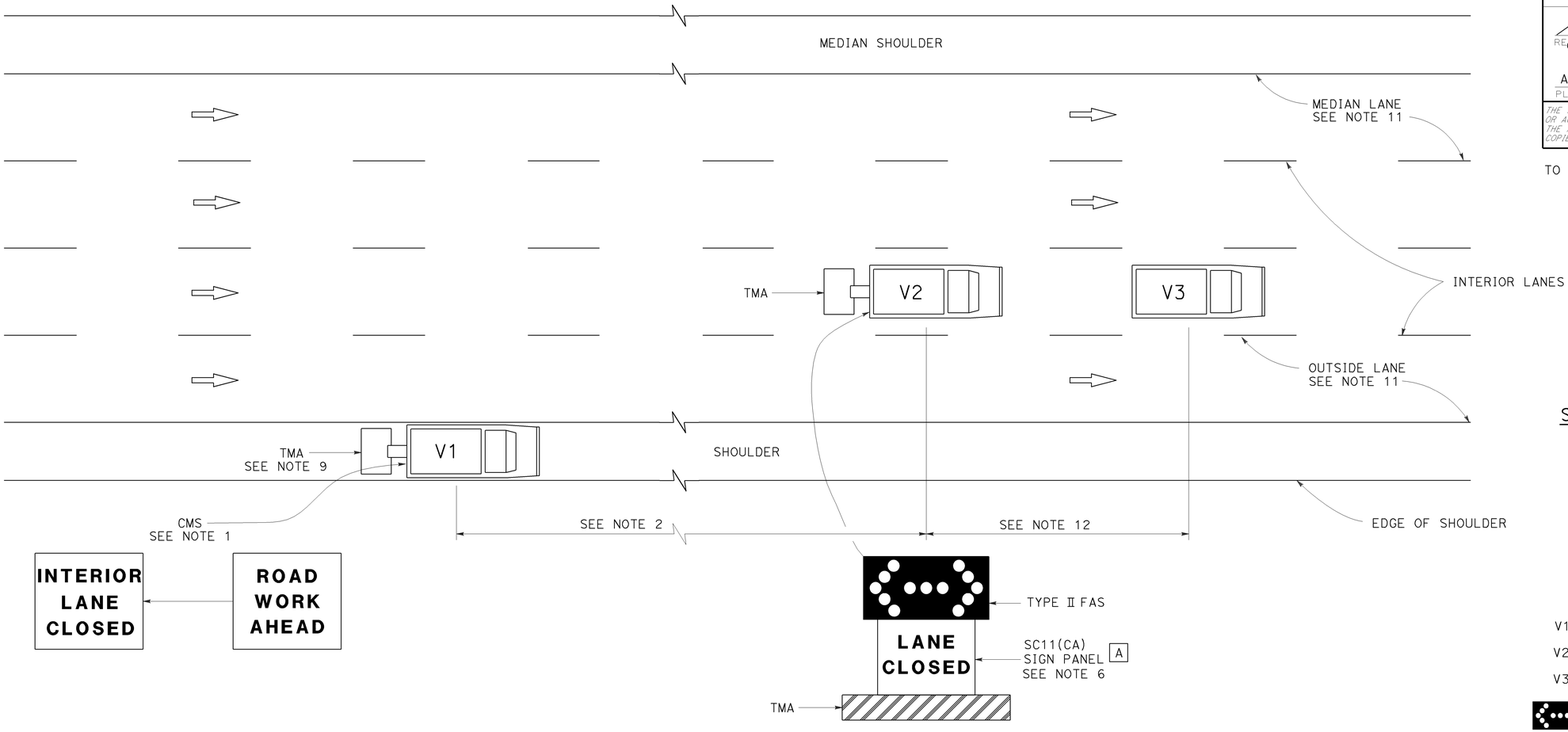
REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 12-21-15




## MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

SIGN PANEL SIZE (Min)

A 54" x 42"

LEGEND

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

NOTES:

1. A changeable message sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500′ should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500′.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11 etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on median lane or outside lane of multilane highways, use Revised Standard Plan T15.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

RSP T16 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T16
DATED MAY 20, 2011 - PAGE 244 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T16**

2010 REVISED STANDARD PLAN RSP T16

12-18-13

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 25 | 38 |

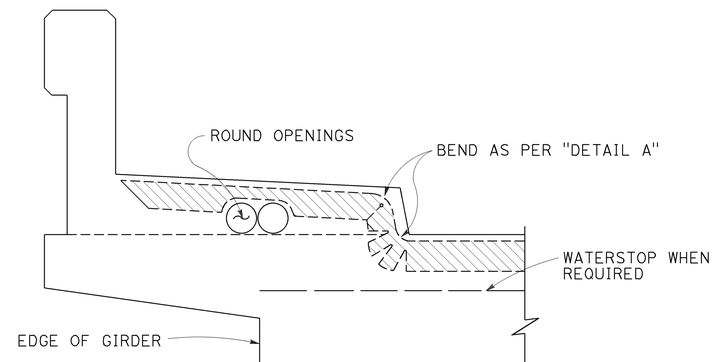
REGISTERED CIVIL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Efthymios Delis — No. C51434 — Exp. 6-30-17 CIVIL — STATE OF CALIFORNIA

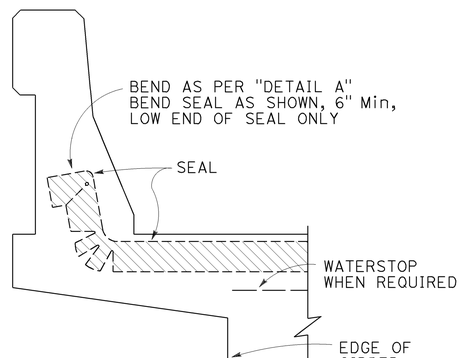
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 12-21-15

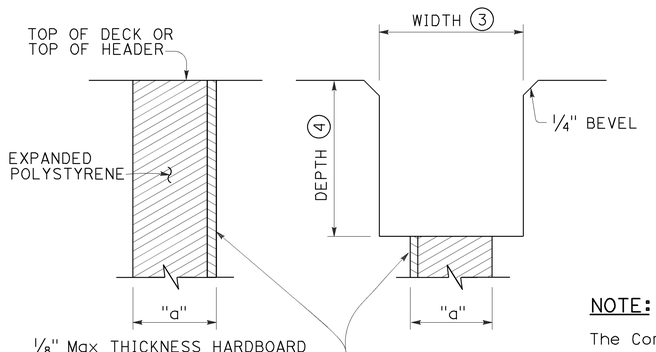



**NOTE:**
Type "B" seal shown. Type "A" seals to comform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



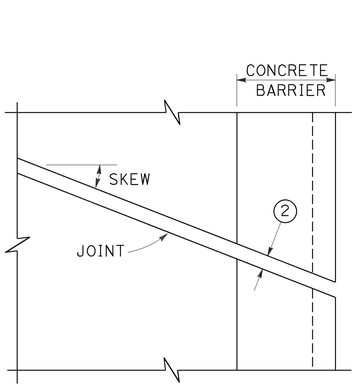

CONCRETE BARRIER




FORMING DETAIL SAWCUT DETAIL

**NOTE:**
The Contractor shall verify all controlling field dimensions before ordering or fabricatiing any material.

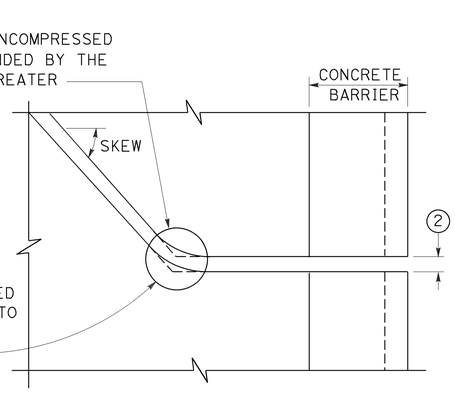
# JOINT SEALS DETAILS



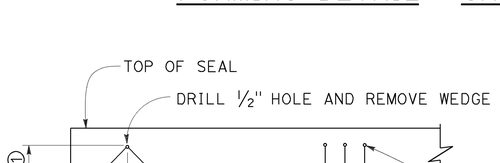

PLAN OF JOINT (SKEW ≤ 20°)

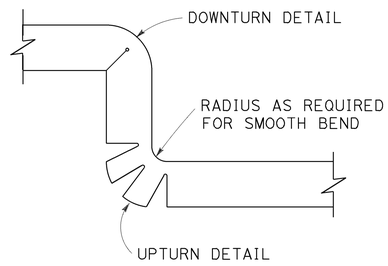
Min ℄ RADIUS TO BE 4 TIMES UNCOMPRESSED WIDTH OF SEAL OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS GREATER

IN LIEU OF SAW CUTTING, THIS AREA MAY BE BLOCKED OUT AND RECONSTRUCTED TO MATCH SAW CUTTING ON BOTH SIDES.




PLAN OF JOINT (SKEW > 20°)



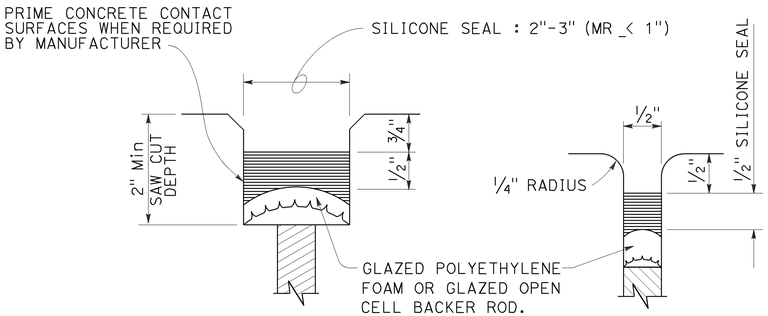




DETAIL A

**NOTES:**
1. Make smooth cuts from the bottom of seal to 1½" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
2. Opening in barrier to match width of sawn deck joint.
3. Sawcut groove widths shall be as ordered by the Engineer.
4. Depth of sawcut: Type A - Depth to be 2" minimum.
   Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position ($W_2$) plus dimensions shown.
5. MR (movement rating) as shown on other plan sheets.
6. Other depths must be approved by the Engineer.
7. A sidewalk joint shall be covered by an expansion joint armor.

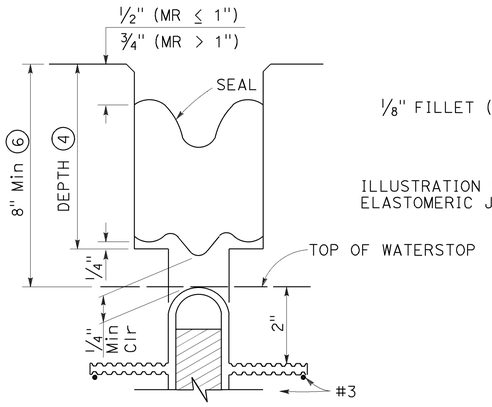
DIMENSIONS "a" OF JOINT REQUIRED

| MOVEMENT RATING (MR) (5) | BRIDGE TYPE | "a" DIMENSION | | |
|---|---|---|---|---|
| | | DECK CONCRETE PLACED | | |
| | | WINTER | FALL-SPRING | SUMMER |
| 2" | ALL EXCEPT CIP/PS | 1½" | 1¼" | ¾" |
| | CIP/PS | 1¼" | 1" | ½" |
| 1½" | ALL EXCEPT CIP/PS | 1¼" | 1" | ½" |
| | CIP/PS | 1" | ¾" | ½" |
| 1" | ALL EXCEPT CIP/PS | 1" | ¾" | ½" |
| | CIP/PS | ¾" | ½" | ½" |
| ½" | ALL EXCEPT CIP/PS | ¾" | ¾" | ½" |
| | CIP/PS | ½" | ½" | ½" |

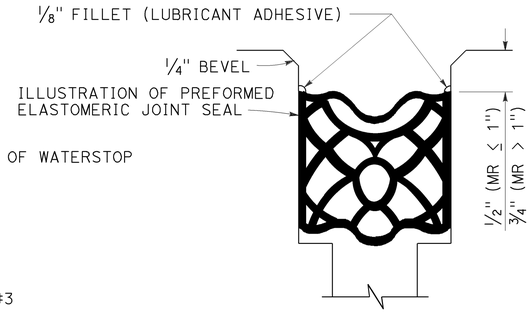



TYPE A SEAL
Movement rating : Silicone = 1" Max

TYPE AL SEAL
Longitudinal joints only




TYPE B JOINT SEAL
IN MINIMUM WIDTH POSITION ($W_2$)




TYPE B SEAL
Movement Rating ≤ 2"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

NO SCALE

RSP B6-21 DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 20, 2011 - PAGE 283 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP B6-21**

**2010 REVISED STANDARD PLAN RSP B6-21**

8-18-15

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 26 | 38 |

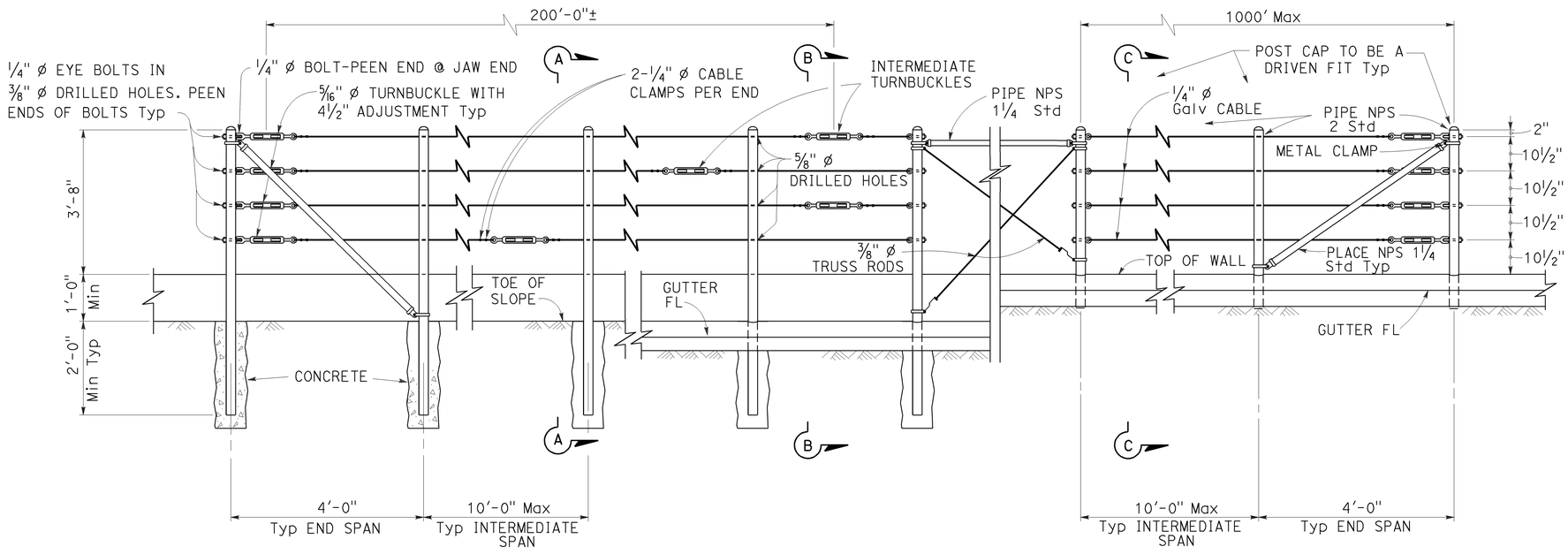
REGISTERED CIVIL ENGINEER

October 21, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Tillat Satter
No. C42892
Exp. 3-31-12
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.

TO ACCOMPANY PLANS DATED 12-21-15

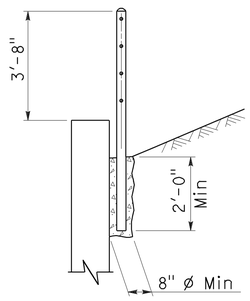



EXISTING WALL (WITHOUT GUTTER)
Existing

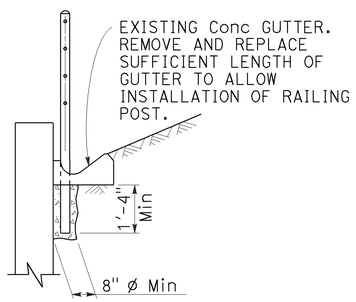
RETAINING WALL (WITH GUTTER)
Existing

RETAINING WALL (WITH GUTTER)
New construction

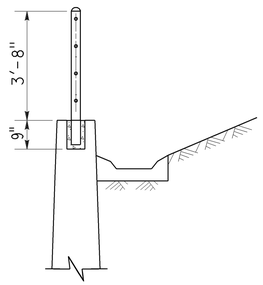
## ELEVATION



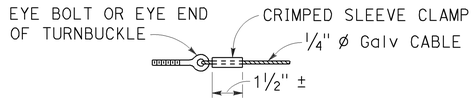

SECTION A-A
Existing



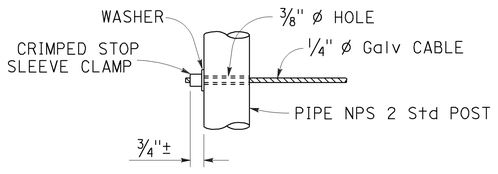

SECTION B-B
Existing



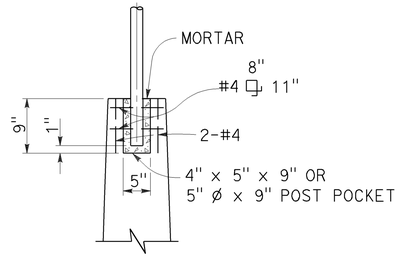

SECTION C-C
New construction




ALTERNATIVE CABLE CONNECTION




ALTERNATIVE DEAD END ANCHORAGE




POST POCKET

NOTES:

1. Maximum distance between turnbuckles shall be 200'-0"±.
2. Intermediate turnbuckles to be placed in adjacent spans.
3. Cable shall not be spliced between intermediate turnbuckles and end posts.
4. Posts to be vertical.
5. Alignment of holes in posts may vary to conform to slope of top of retaining wall.
6. The Contractor shall verify all dependent dimensions in the field before ordering or fabricating any material.
7. Line posts shall be braced horizontally and trussed diagonally in both directions at intervals not to exceed 1000'.
8. Post pockets to be centered in top of wall.
9. Typical end spans, braced in both directions, shall be constructed at changes in line where the angle of deflection is 15° or more.
10. Provide thimbles at all cable loops.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# CABLE RAILING

NO SCALE

RSP B11-47 DATED OCTOBER 21, 2011 SUPERSEDES STANDARD PLAN B11-47 DATED MAY 20, 2011 - PAGE 293 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP B11-47**

**2010 REVISED STANDARD PLAN RSP B11-47**

9-14-11

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 27 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

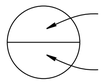
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.*

## INDEX TO PLANS



## STANDARD PLANS DATED 2010

| SHEET NO. | TITLE |
|---|---|
| A10A | ABBREVIATIONS (SHEET 1 OF 2) |
| RSP A10B | ABBREVIATIONS (SHEET 2 OF 2) |
| A10C | LINES AND SYMBOLS (SHEET 1 OF 3) |
| A10D | LINES AND SYMBOLS (SHEET 2 OF 3) |
| A10E | LINES AND SYMBOLS (SHEET 3 OF 3) |
| RSP B6-21 | JOINT SEALS (MAXIMUM MOVEMENT RATING = 2") |
| RSP B11-47 | CABLE RAILING |



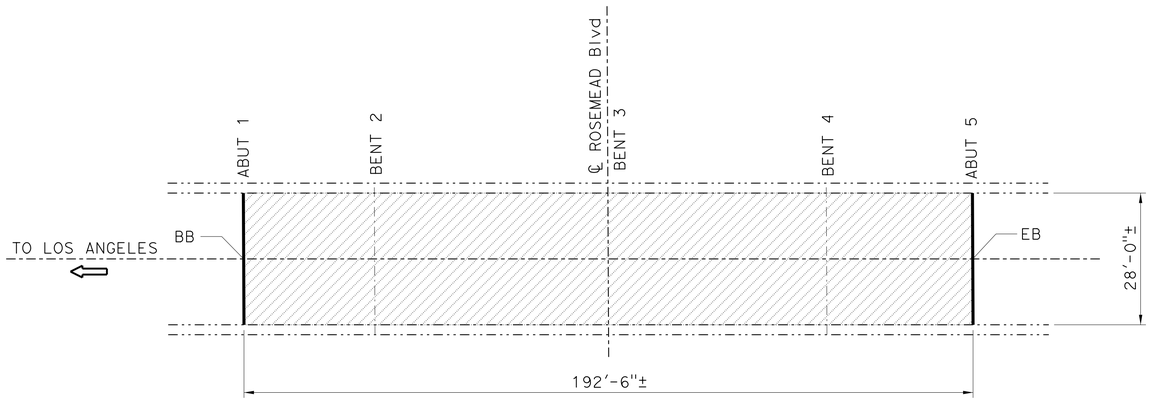

## LEGEND:

Indicates existing.

Indicates direction of traffic.

Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.



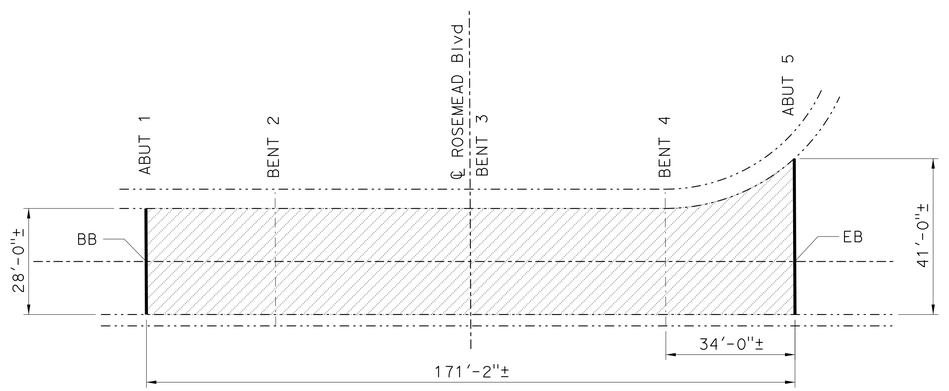

## ROUTE 10/164 COLLECTOR SEPARATION

Br No. 53-0010S, Rte 10, PM 26.84
NO SCALE

ROUTE 10/164 COLLECTOR SEPARATION QUANTITIES — BRIDGE NO. 53-0010S

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 16 | CF |
| REMOVE UNSOUND CONCRETE | 16 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 5,390 | SQFT |
| TREAT BRIDGE DECK | 5,390 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 68 | GAL |
| CLEAN EXPANSION JOINT | 56 | LF |
| JOINT SEAL (MR ½") | 56 | LF |

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.




## ROUTE 10/164 COLLECTOR SEPARATION

Br No. 53-0010K, Rte 10, PM 26.84
NO SCALE

ROUTE 10/164 COLLECTOR SEPARATION QUANTITIES — BRIDGE NO. 53-0010K

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 15 | CF |
| REMOVE UNSOUND CONCRETE | 15 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 5,020 | SQFT |
| TREAT BRIDGE DECK | 5,020 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 63 | GAL |
| CLEAN EXPANSION JOINT | 69 | LF |
| JOINT SEAL (MR ½") | 69 | LF |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| Tony Brake | DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| DESIGN ENGINEER | QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
## GENERAL PLAN NO. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 01 | 12 |

FILE => 07-2W6601-a-gp01.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:17

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 28 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
EDWARD GUOJUN LI
No. C56706
Exp. 06/30/17
CIVIL
STATE OF CALIFORNIA

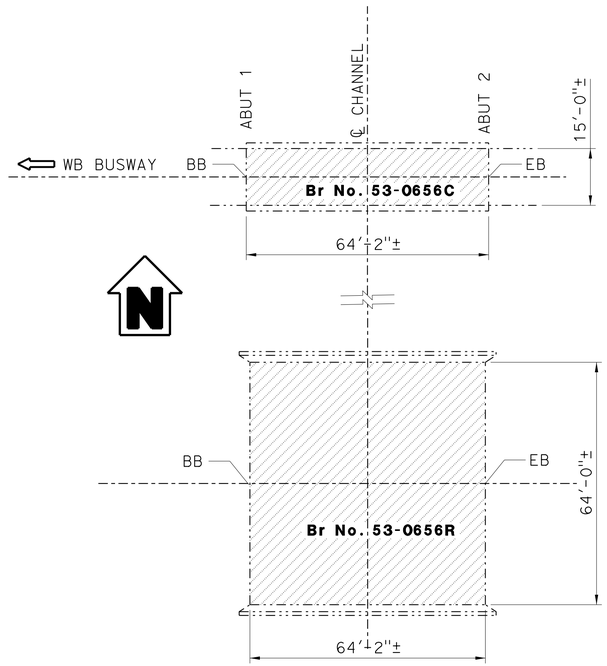
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.*

## LEGEND:

Indicates existing.

Indicates direction of traffic.

Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.




## EATON WASH (WB BUSWAY)

Br No. 53-0656C, Rte 10, PM C27.84
NO SCALE

EATON WASH (WB BUSWAY) BRIDGE NO. 53-0656C

QUANTITIES

| | |
|---|---|
| PUBLIC SAFETY PLAN | LUMP SUM |
| RAPID SETTING CONCRETE (PATCH) | 3 CF |
| REMOVE UNSOUND CONCRETE | 3 CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 970 SQFT |
| TREAT BRIDGE DECK | 970 SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 13 GAL |

## EATON WASH

Br No. 53-0656R, Rte 10, PM 27.85
NO SCALE

EATON WASH BRIDGE NO. 53-0656R

QUANTITIES

| | |
|---|---|
| PUBLIC SAFETY PLAN | LUMP SUM |
| RAPID SETTING CONCRETE (PATCH) | 11 CF |
| REMOVE UNSOUND CONCRETE | 11 CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 4,110 SQFT |
| TREAT BRIDGE DECK | 4,110 SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 52 GAL |

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake
DESIGN ENGINEER

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | | |
| DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | | |
| QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
# GENERAL PLAN NO. 2

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 02 | 12 |

FILE => 07-2W6601-a-gp02.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 29 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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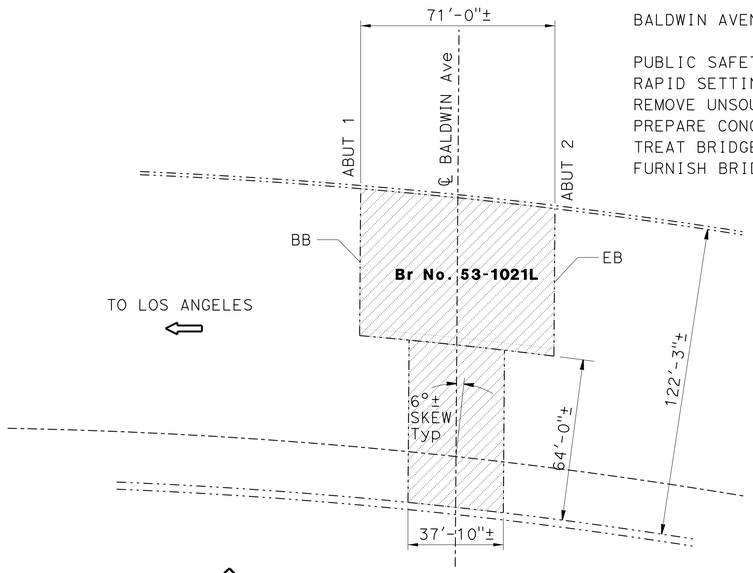



## BALDWIN AVENUE UC

Br No. 53-1021L, Rte 10, PM 27.96
NO SCALE

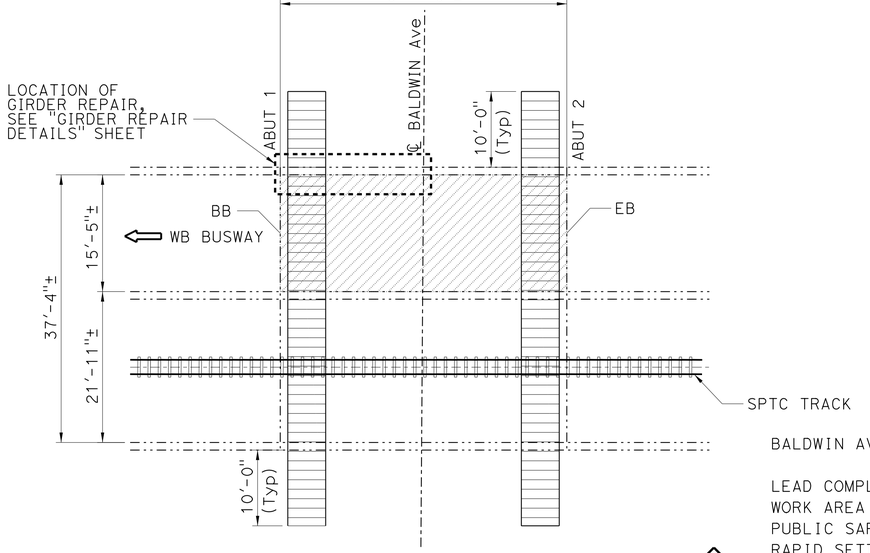
BALDWIN AVENUE UC — BRIDGE NO. 53-1021L

QUANTITIES

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 17 | CF |
| REMOVE UNSOUND CONCRETE | 17 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 6,570 | SQFT |
| TREAT BRIDGE DECK | 6,570 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 83 | GAL |

## LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.
- Indicates repair spalled surfaced area.
- Indicates limits of temporary Covered Pedestrial Walkway underneath structure along Balwin Ave.




## BALDWIN AVENUE UC WB BUSWAY

Br No. 53-1021C, Rte 10, PM C27.96
NO SCALE

BALDWIN AVENUE UC WB BUSWAY — BRIDGE NO. 53-1021C

QUANTITIES

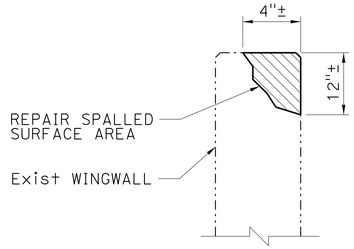
| | | |
|---|---|---|
| LEAD COMPLIANCE PLAN | LUMP | SUM |
| WORK AREA MONITORING (BRIDGE) | LUMP | SUM |
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 2 | CF |
| REMOVE UNSOUND CONCRETE | 2 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 590 | SQFT |
| TREAT BRIDGE DECK | 590 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 8 | GAL |
| HEAT STRAIGHTEN STEEL GIRDERS | LUMP | SUM |
| CLEAN AND PAINT STRUCTURAL STEEL (EXISTING BRIDGE) | LUMP | SUM |

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

GIBSON OH (EB & WB BUSWAY) — BRIDGE NO. 53-1022L

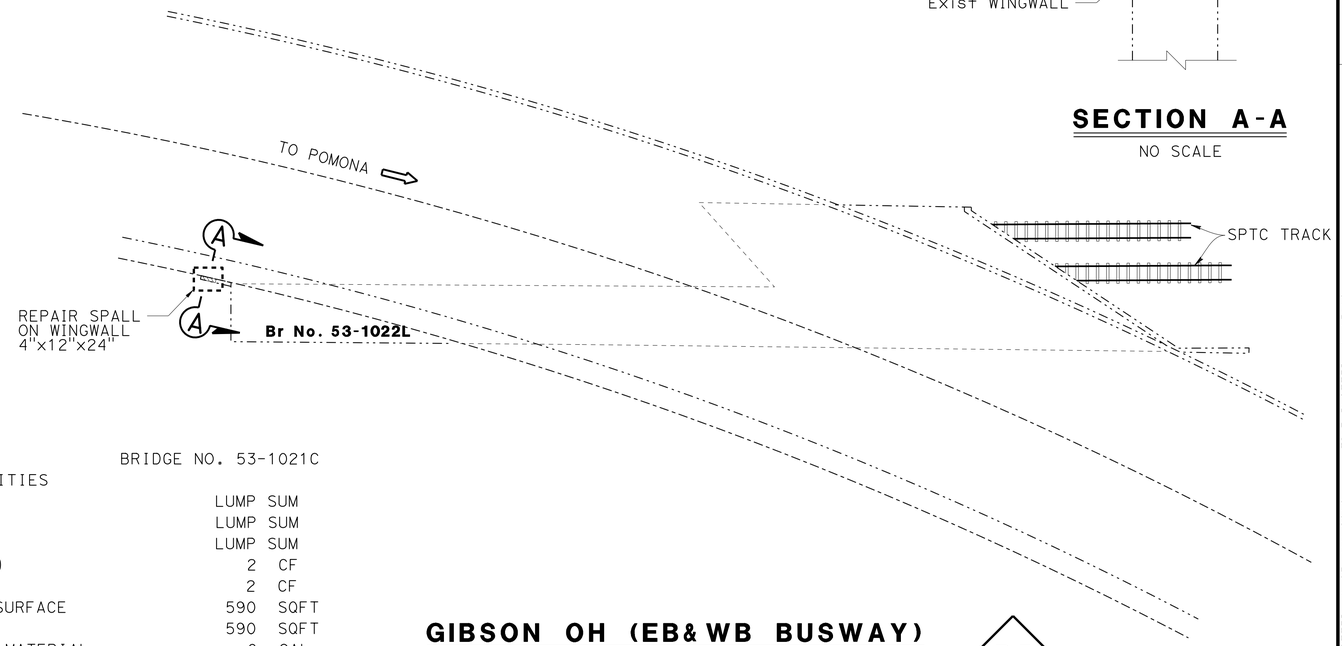
QUANTITIES

| | | |
|---|---|---|
| REPAIR SPALLED SURFACE AREA | 2 | SQFT |




## SECTION A-A

NO SCALE




## GIBSON OH (EB& WB BUSWAY)

Br No. 53-1022L, Rte 10, PM C28.01
NO SCALE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Tony Brake, DESIGN ENGINEER | DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| | DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| | QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
## GENERAL PLAN NO. 3

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 03 | 12 |

FILE => 07-2W6601-a-gp03.dgn

USERNAME => s122236 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 30 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — 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:

Indicates existing.

Indicates direction of traffic.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.

Indicates location of placement of new joint seal.

Indicates limits of paving notch extension.

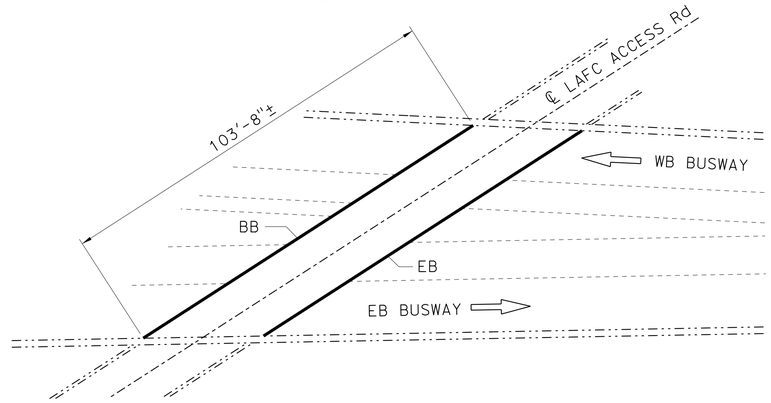
Indicates limits of remove existing PCC and AC approach and place new Structure Approach Type R(30D). For details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.

Indicates limits of remove 3 inches deep concrete deck surface.
Preserve existing reinforcements.
Roughen concrete deck surface to 1/4" amplitude.
Place Structural Concrete, Bridge (RSC).

LAFC ACCESS ROAD BRIDGE NO. 53-2636

QUANTITIES

| | | |
|---|---|---|
| RAPID SETTING CONCRETE (PATCH) | 2 | CF |
| REMOVE UNSOUND CONCRETE | 2 | CF |
| CLEAN EXPANSION JOINT | 208 | LF |
| JOINT SEAL (MR 1/2") | 208 | LF |



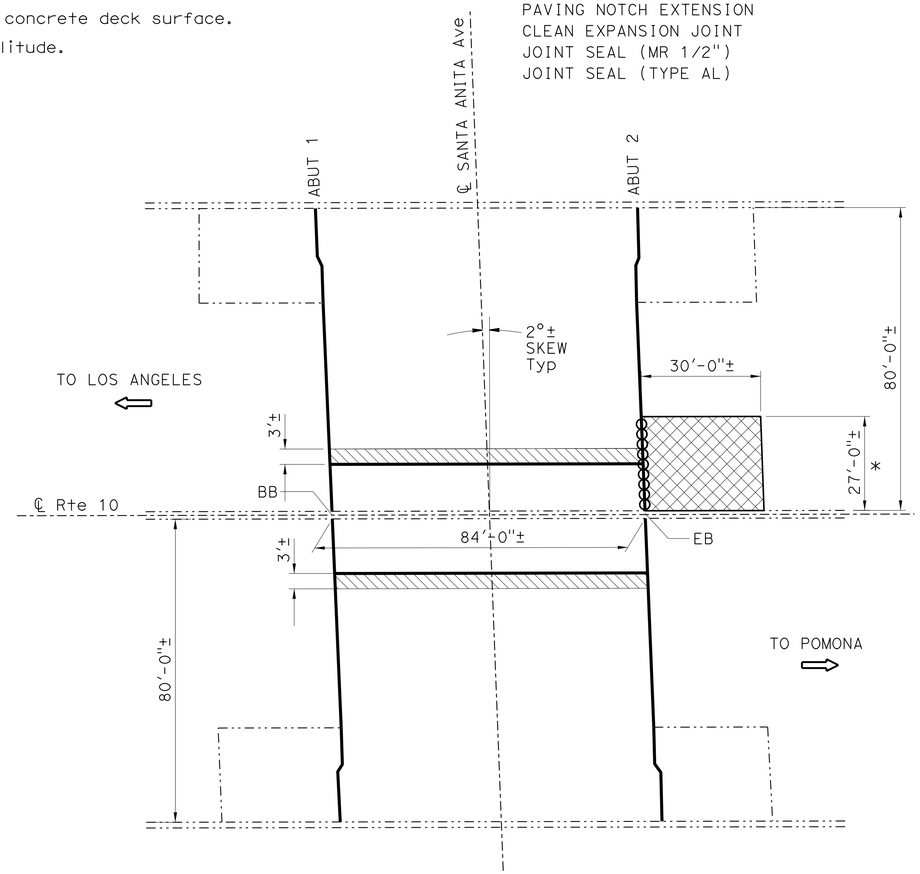

**LAFC ACCESS ROAD**

Br No. 53-2636, Rte 10, PM C28.32
NO SCALE

SANTA ANITA AVENUE UC BRIDGE NO. 53-0658

QUANTITIES

| | | |
|---|---|---|
| RAPID SETTING CONCRETE (PATCH) | 4 | CF |
| REMOVE CONCRETE DECK SURFACE | 504 | SQFT |
| REMOVE UNSOUND CONCRETE | 4 | CF |
| STRUCTURAL CONCRETE, BRIDGE (RSC) | 5 | CY |
| STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) | 36 | CY |
| PAVING NOTCH EXTENSION | 27 | CF |
| CLEAN EXPANSION JOINT | 461 | LF |
| JOINT SEAL (MR 1/2") | 320 | LF |
| JOINT SEAL (TYPE AL) | 168 | LF |




**SANTA ANITA AVENUE UC**

Br No. 53-0658, Rte 10, PM 28.67
NO SCALE

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | | | | | |
|---|---|---|---|---|---|---|
| DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |

Tony Brake
DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
## GENERAL PLAN NO. 4

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 04 | 12 |

FILE => 07-2W6601-a-gp04.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 31 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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LEXINGTON AVENUE UC BRIDGE NO. 53-0883

QUANTITIES

| | LUMP SUM | |
|---|---|---|
| PUBLIC SAFETY PLAN | | |
| RAPID SETTING CONCRETE (PATCH) | 37 | CF |
| REMOVE CONCRETE DECK SURFACE | 378 | SQFT |
| REMOVE UNSOUND CONCRETE | 37 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 12,933 | SQFT |
| TREAT BRIDGE DECK | 12,933 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 162 | GAL |
| STRUCTURAL CONCRETE, BRIDGE (RSC) | 4 | CY |
| CLEAN EXPANSION JOINT | 446 | LF |
| JOINT SEAL (MR 1/2") | 320 | LF |
| JOINT SEAL (TYPE AL) | 126 | LF |

## LEGEND:

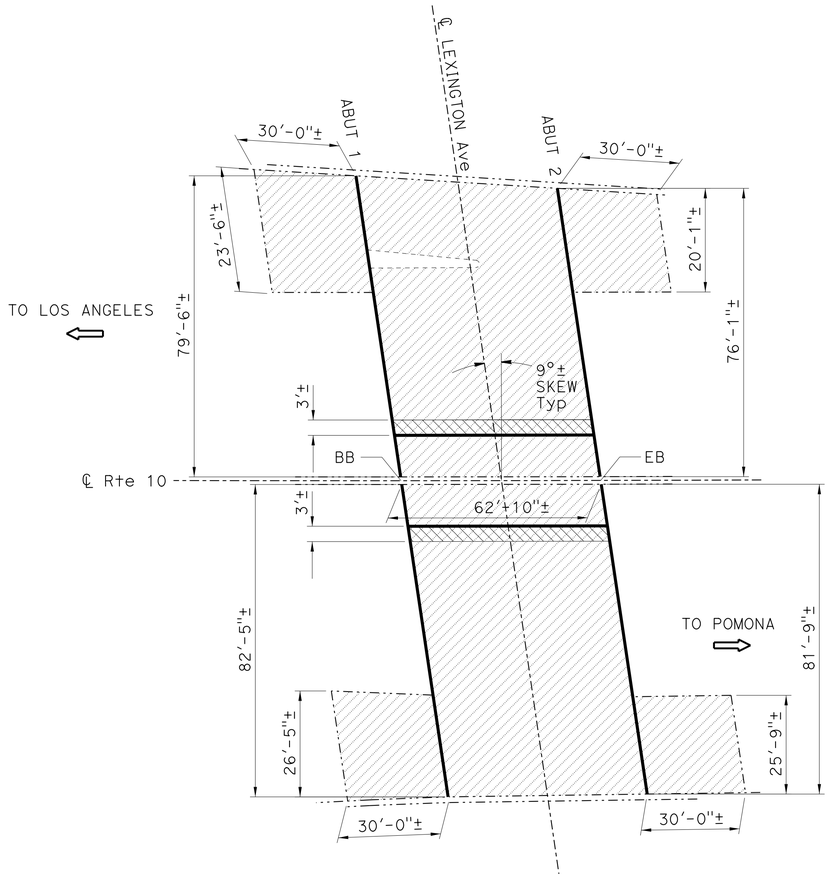
Indicates existing.

Indicates direction of traffic.

Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.

Indicates limits of remove 3 inches deep concrete deck surface. Preserve existing reinforcements. Roughen concrete deck surface to 1/4" amplitude. Place Structural Concrete, Bridge (RSC).



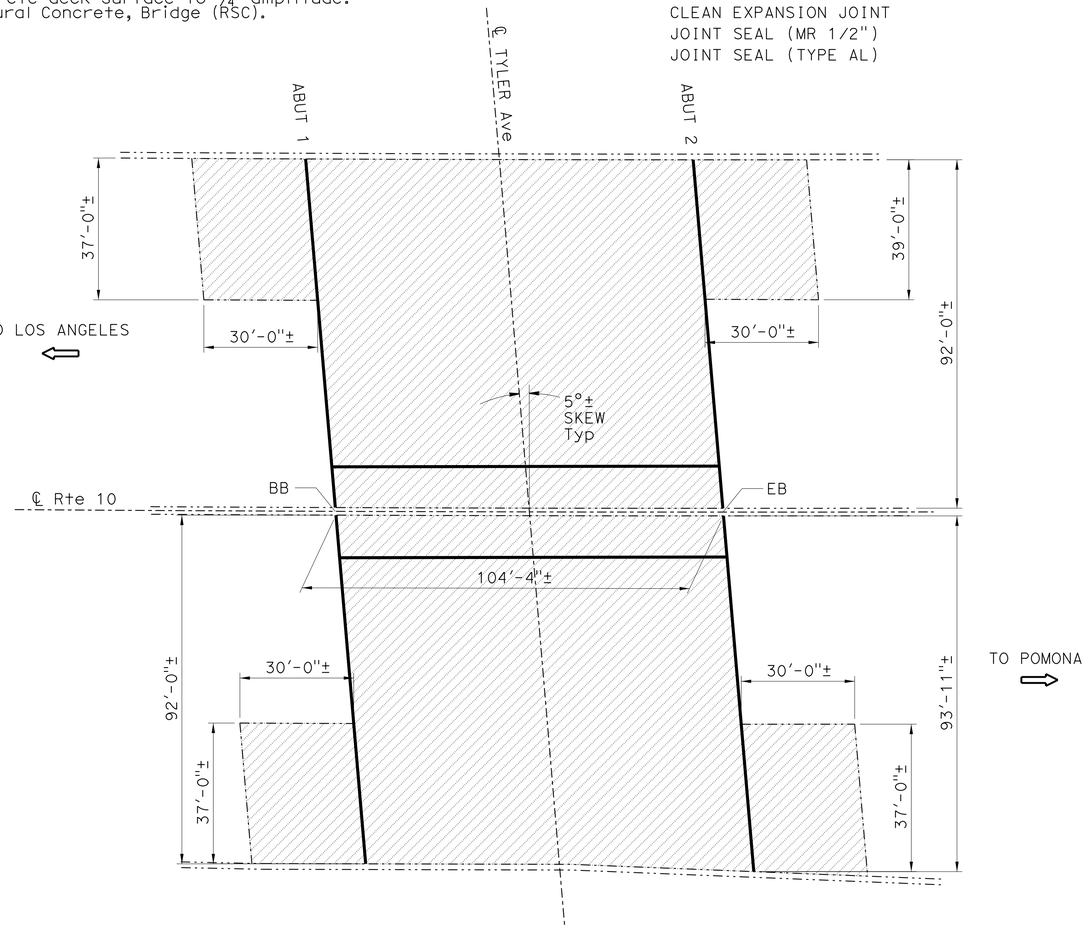

## LEXINGTON AVENUE UC

Br No. 53-0883, Rte 10, PM 28.84
NO SCALE

TYLER AVENUE UC BRIDGE NO. 53-0659

QUANTITIES

| | LUMP SUM | |
|---|---|---|
| PUBLIC SAFETY PLAN | | |
| RAPID SETTING CONCRETE (PATCH) | 64 | CF |
| REMOVE UNSOUND CONCRETE | 64 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 23,800 | SQFT |
| TREAT BRIDGE DECK | 23,800 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 300 | GAL |
| CLEAN EXPANSION JOINT | 579 | LF |
| JOINT SEAL (MR 1/2") | 370 | LF |
| JOINT SEAL (TYPE AL) | 209 | LF |




## TYLER AVENUE UC

Br No. 53-0659, Rte 10, PM 29.03
NO SCALE

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| | DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| Tony Brake | QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |
| DESIGN ENGINEER | | | | | | | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
## GENERAL PLAN NO. 5

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 05 | 12 |

FILE => 07-2W6601-a-gp05.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 32 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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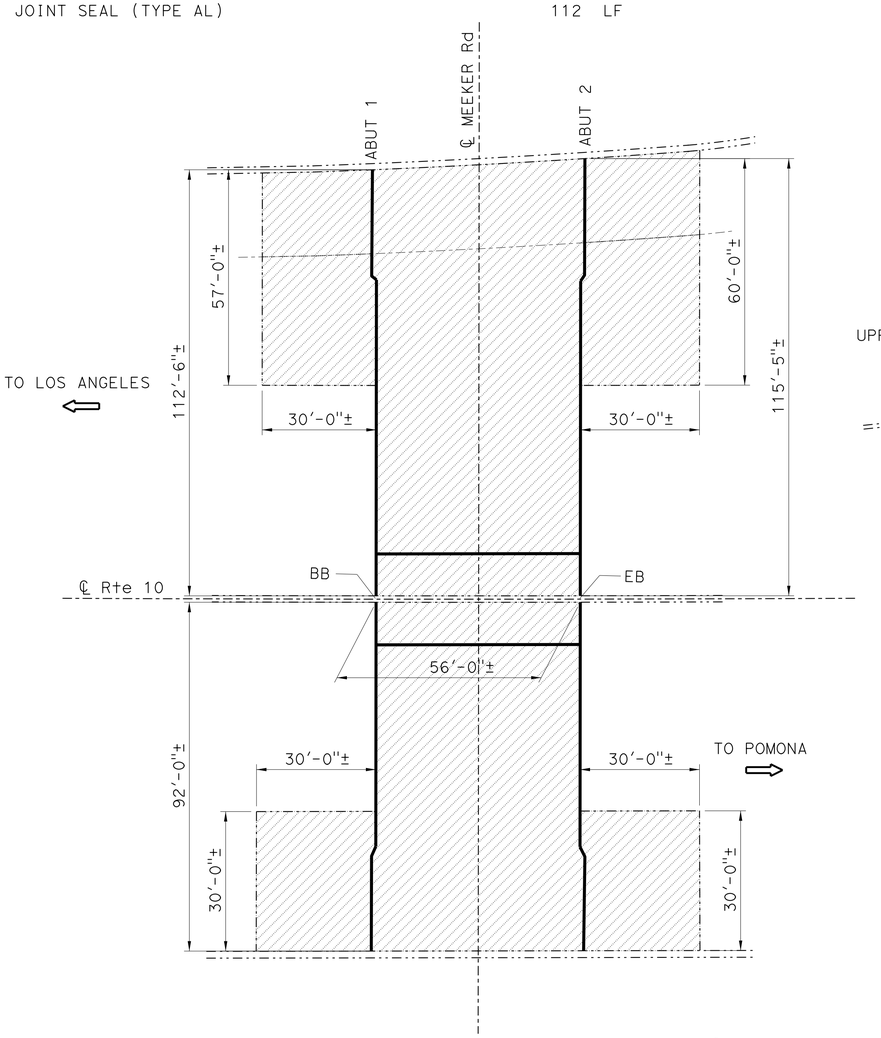
MEEKER ROAD UC BRIDGE NO. 53-1029

QUANTITIES

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 47 | CF |
| REMOVE UNSOUND CONCRETE | 47 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 16,850 | SQFT |
| TREAT BRIDGE DECK | 16,850 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 211 | GAL |
| CLEAN EXPANSION JOINT | 525 | LF |
| JOINT SEAL (MR 1/2") | 413 | LF |
| JOINT SEAL (TYPE AL) | 112 | LF |




## MEEKER ROAD UC

Br No. 53-1029, Rte 10, PM 29.34
NO SCALE

## LEGEND:

Indicates existing.

Indicates direction of traffic.

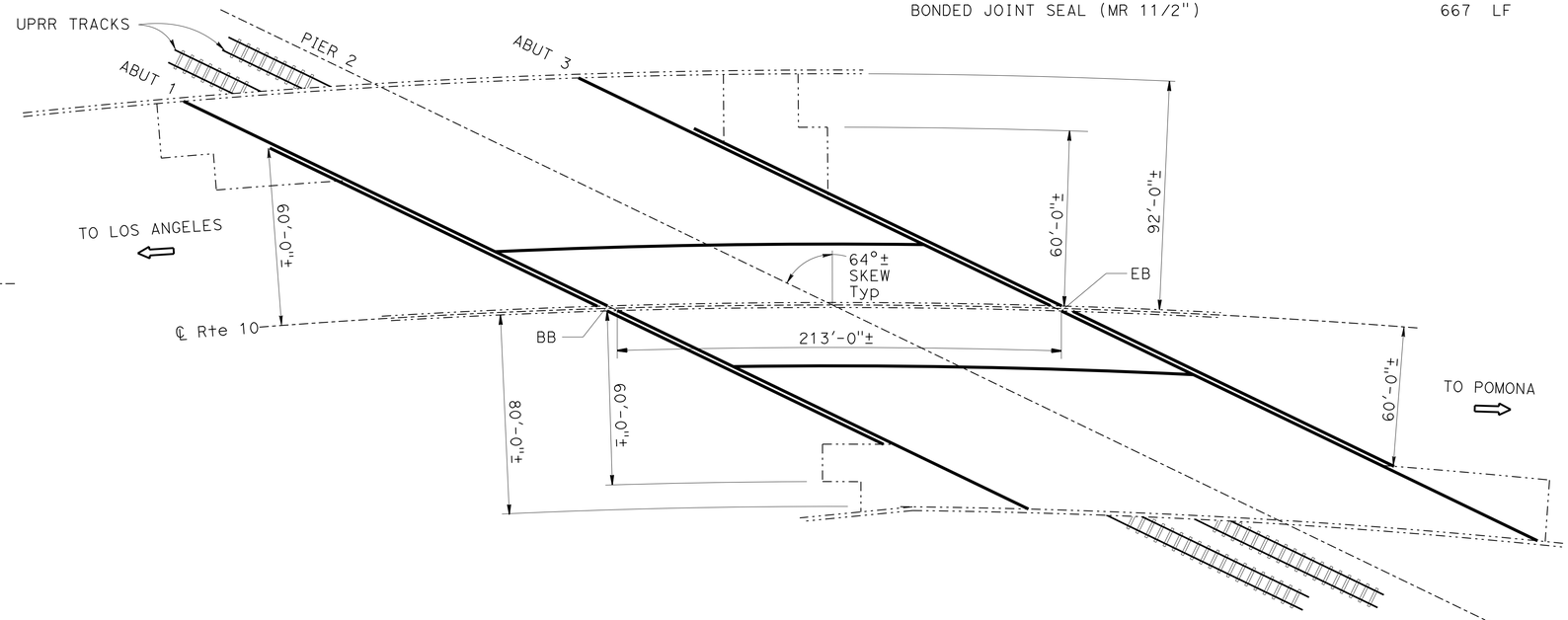
Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.

EAST EL MONTE OH BRIDGE NO. 53-0867

QUANTITIES

| | | |
|---|---|---|
| RAPID SETTING CONCRETE (PATCH) | 6 | CF |
| REMOVE UNSOUND CONCRETE | 6 | CF |
| CLEAN EXPANSION JOINT | 1,760 | LF |
| JOINT SEAL (MR1/2") | 667 | LF |
| JOINT SEAL (TYPE AL) | 426 | LF |
| BONDED JOINT SEAL (MR 11/2") | 667 | LF |




## EAST EL MONTE OH

Br No. 53-0867, Rte 10, PM 29.81
NO SCALE

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Tony Brake DESIGN ENGINEER | DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| | DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| | QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
## GENERAL PLAN NO. 6

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 06 | 12 |

FILE => 07-2W6601-a-gp06.dgn

USERNAME => s122636 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 33 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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## LEGEND:

Indicates existing.

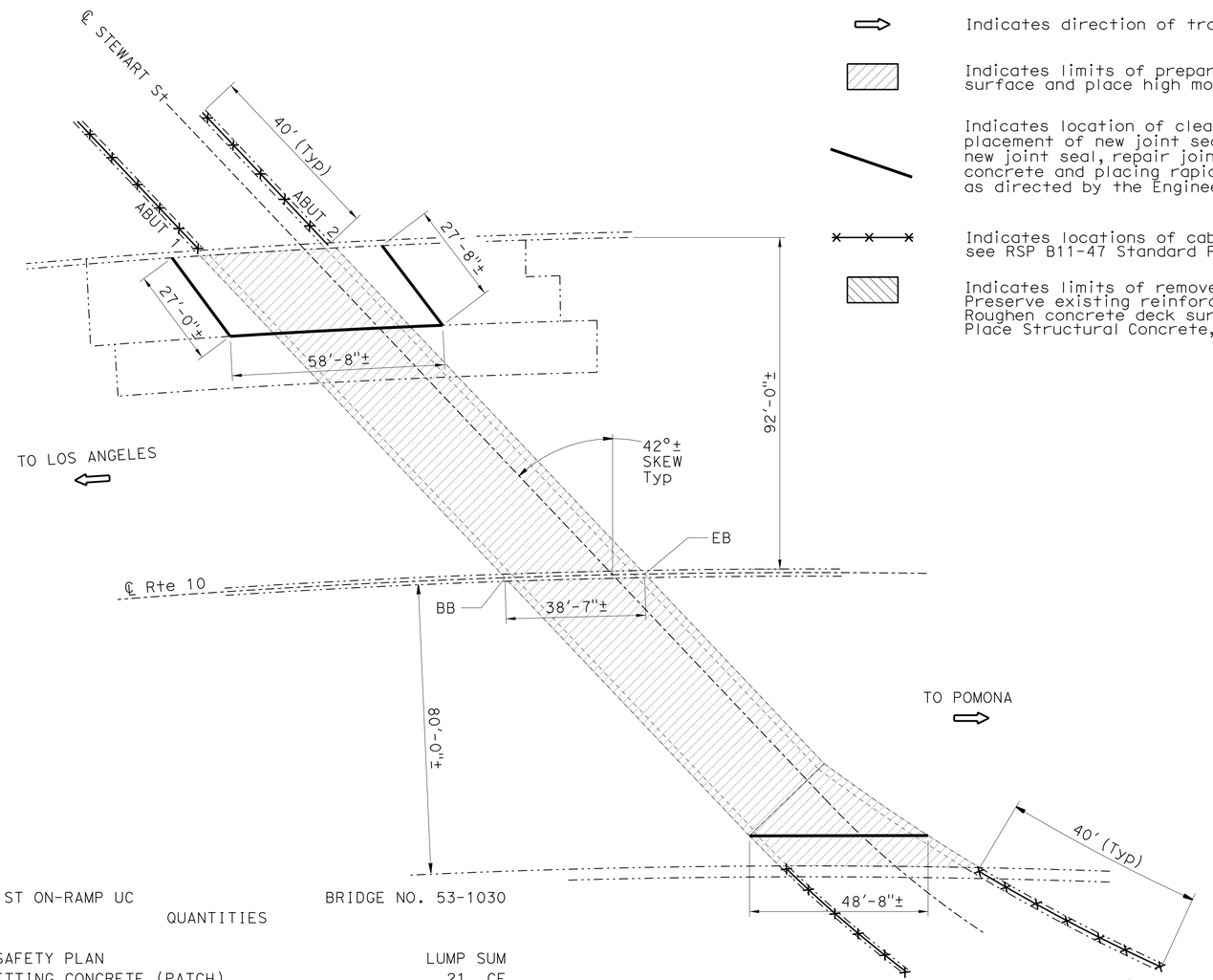
Indicates direction of traffic.

Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.

Indicates locations of cable railing, see RSP B11-47 Standard Plan.

Indicates limits of remove 3 inches deep concrete deck surface. Preserve existing reinforcements. Roughen concrete deck surface to 1/4" amplitude. Place Structural Concrete, Bridge (RSC).




## STEWART ST ON-RAMP UC

Br No. 53-1030, Rte 10, PM 29.90
NO SCALE

STEWART ST ON-RAMP UC BRIDGE NO. 53-1030

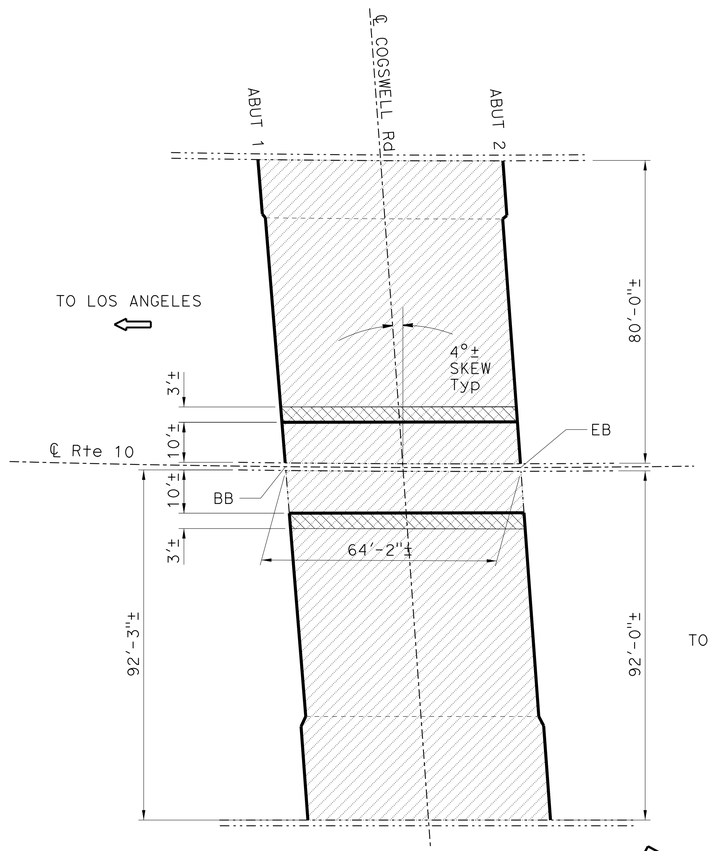
QUANTITIES

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 21 | CF |
| REMOVE UNSOUND CONCRETE | 21 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 6,710 | SQFT |
| TREAT BRIDGE DECK | 6,710 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 84 | GAL |
| CLEAN EXPANSION JOINT | 168 | LF |
| JOINT SEAL (MR 1/2") | 60 | LF |
| JOINT SEAL (TYPE AL) | 108 | LF |
| CABLE RAILING | 160 | LF |

COGSWELL ROAD UC BRIDGE NO. 53-0662

QUANTITIES

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 32 | CF |
| REMOVE CONCRETE DECK SURFACE | 386 | SQFT |
| REMOVE UNSOUND CONCRETE | 32 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 11,060 | SQFT |
| TREAT BRIDGE DECK | 11,060 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 139 | GAL |
| STRUCTURAL CONCRETE, BRIDGE (RSC) | 4 | CY |
| CLEAN EXPANSION JOINT | 454 | LF |
| JOINT SEAL (MR 1/2") | 324 | LF |
| JOINT SEAL (TYPE AL) | 130 | LF |




## COGSWELL ROAD UC

Br No. 53-0662, Rte 10, PM 30.13
NO SCALE

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | | |
| DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | | |
| QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | | |

Tony Brake
DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
# GENERAL PLAN NO. 7

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 07 | 12 |

FILE => 07-2W6601-a-gp07.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 34 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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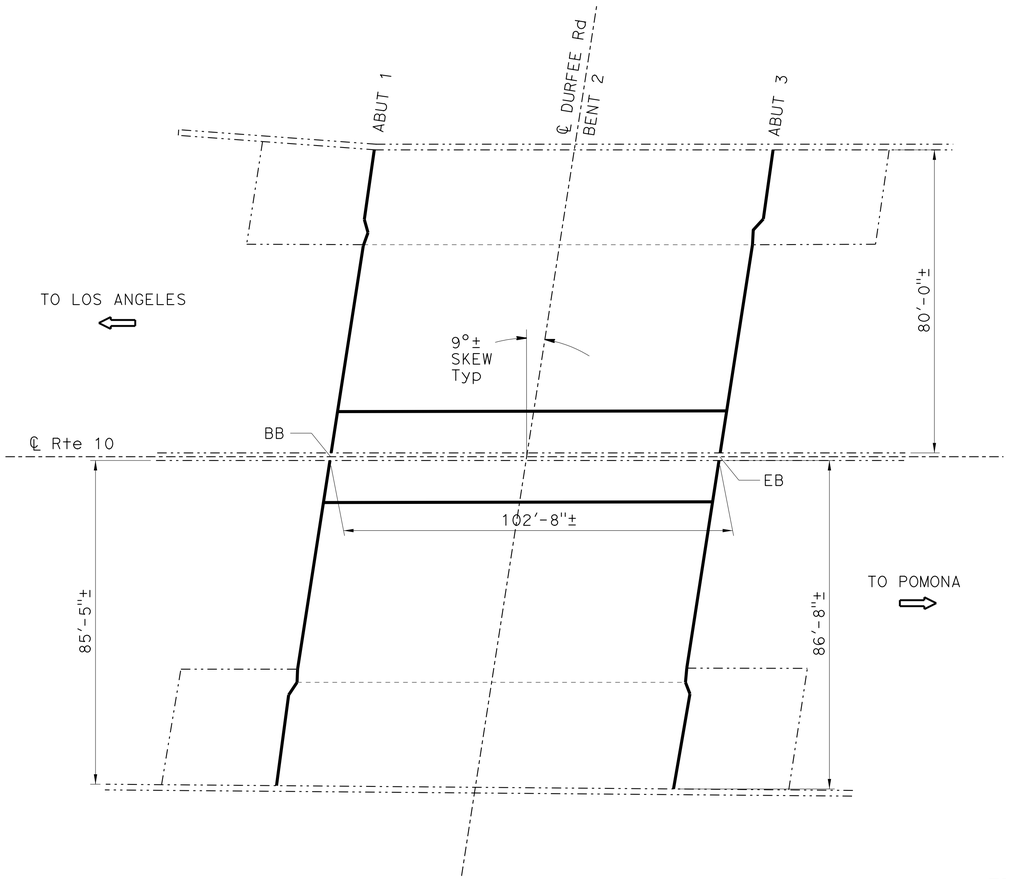
## LEGEND:

Indicates existing.

Indicates direction of traffic.

Indicates limits of prepare concrete bridge deck surface and place high molecular weight methacrylate.

Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal, repair joint by removing unsound concrete and placing rapid setting concrete (patch) as directed by the Engineer.



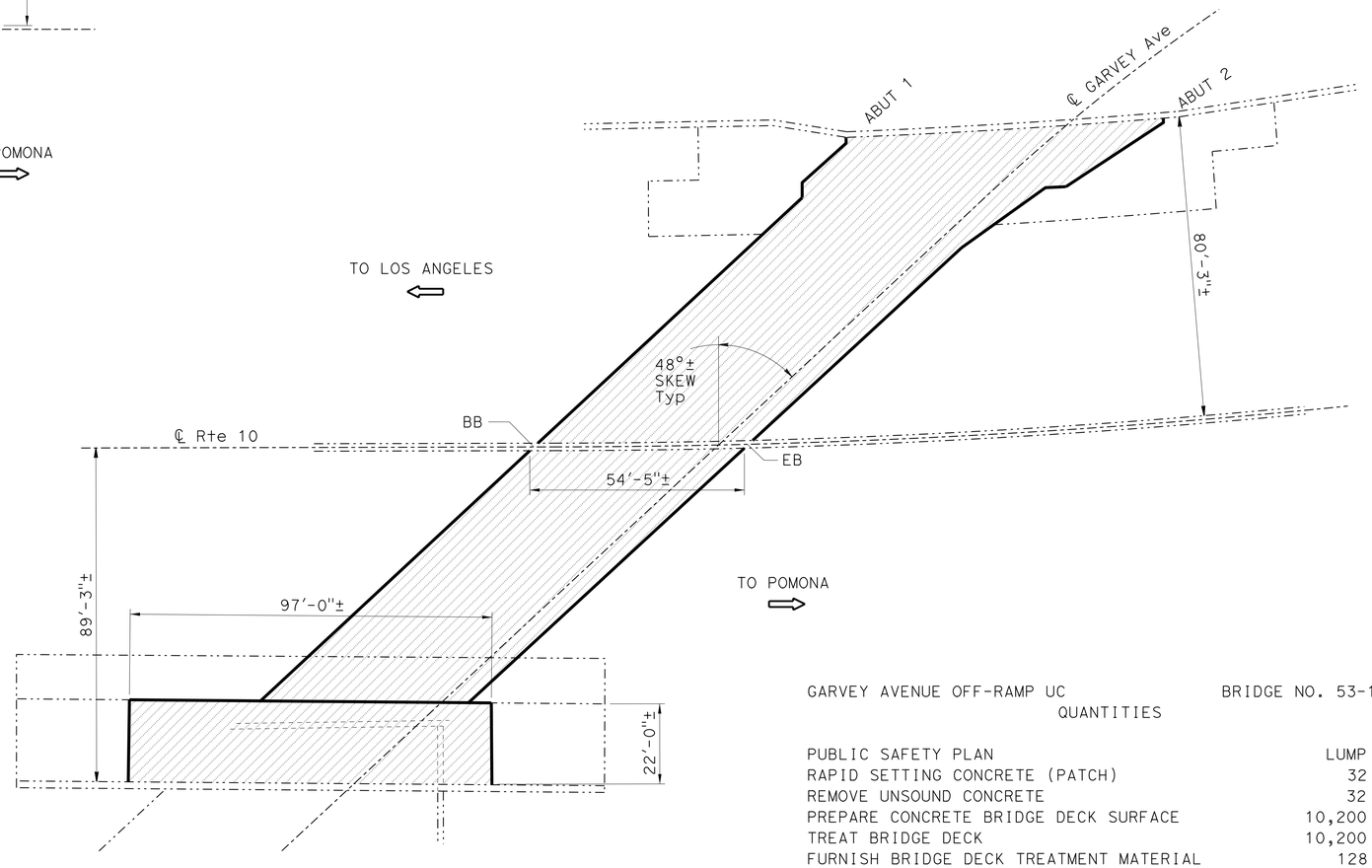

## DURFEE ROAD UC

Br No. 53-1031, Rte 10, PM 30.51
NO SCALE

DURFEE ROAD UC — BRIDGE NO. 53-1031

QUANTITIES

| | | |
|---|---|---|
| RAPID SETTING CONCRETE (PATCH) | 4 | CF |
| REMOVE UNSOUND CONCRETE | 4 | CF |
| CLEAN EXPANSION JOINT | 542 | LF |
| JOINT SEAL (MR 1") | 336 | LF |
| JOINT SEAL (TYPE AL) | 206 | LF |




## GARVEY AVENUE OFF-RAMP UC

Br No. 53-1032, Rte 10, PM 30.58
NO SCALE

GARVEY AVENUE OFF-RAMP UC — BRIDGE NO. 53-1032

QUANTITIES

| | | |
|---|---|---|
| PUBLIC SAFETY PLAN | LUMP | SUM |
| RAPID SETTING CONCRETE (PATCH) | 32 | CF |
| REMOVE UNSOUND CONCRETE | 32 | CF |
| PREPARE CONCRETE BRIDGE DECK SURFACE | 10,200 | SQFT |
| TREAT BRIDGE DECK | 10,200 | SQFT |
| FURNISH BRIDGE DECK TREATMENT MATERIAL | 128 | GAL |
| CLEAN EXPANSION JOINT | 582 | LF |
| JOINT SEAL (TYPE AL) | 97 | LF |
| BONDED JOINT SEAL (MR 1½") | 485 | LF |

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DESIGN | BY Edward Li | CHECKED Tony Brake | LOAD FACTOR DESIGN | LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD | | |
| | DETAILS | BY Tom Dang | CHECKED Edward Li | LAYOUT | BY Tom Dang | CHECKED Edward Li | |
| Tony Brake | QUANTITIES | BY Edward Li | CHECKED HongTien Tran | SPECIFICATIONS | BY Theresa Nedwick | PLANS AND SPECS COMPARED Theresa Nedwick | |
| DESIGN ENGINEER | | | | | | | |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
# GENERAL PLAN NO. 8

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 08 | 12 |

FILE => 07-2W6601-a-gp08.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 35 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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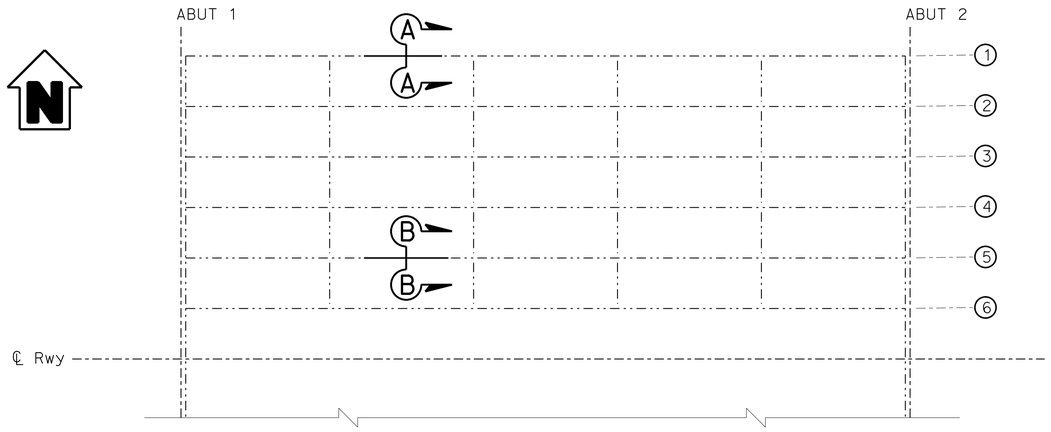


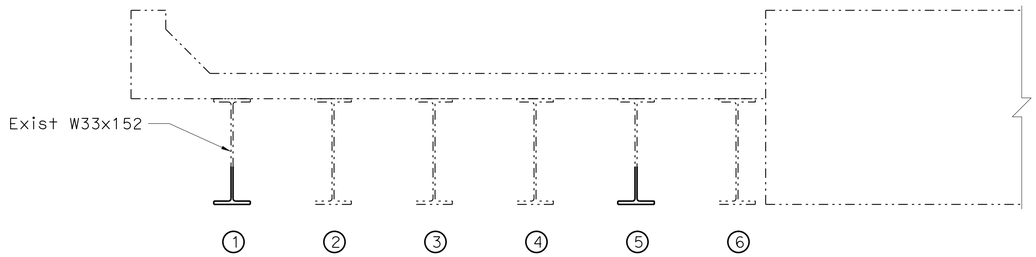

## GIRDER LAYOUT
NO SCALE

## LEGEND:

Indicates existing.

Indicates approx limit of clean and paint bottom flange girders.

(#) Indicates girder number.




## TYPICAL SECTION
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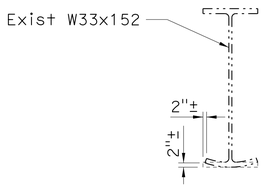
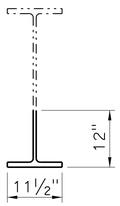
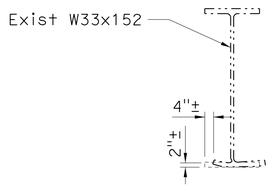


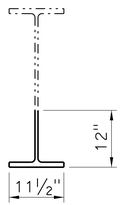

SECTION A-A



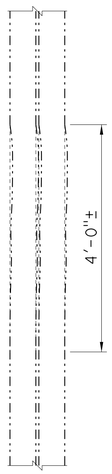

PAINT LIMIT




SECTION B-B

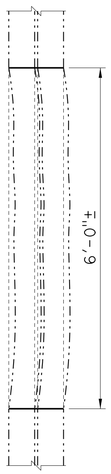



PAINT LIMIT




PLAN VIEW


PAINT LIMIT




PLAN VIEW


PAINT LIMIT

| HEAT STRAIGHTENING TABLE | |
|---|---|
| **WORK ITEM** | **APPROX TOTAL AREA (SQFT)** |
| HEAT STRAIGHTEN STEEL GIRDER | 10 |
| CLEAN AND PAINT STRUCTURAL STEEL (EXISTING BRIDGE) | 56 |

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | BY | CHECKED |
|---|---|---|
| DESIGN | Edward Li | HongTien Tran |
| DETAILS | Tom Dang | Edward Li |
| QUANTITIES | Edward Li | HongTien Tran |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. 53-1021C
POST MILE C27.96

# BALDWIN AVENUE UC (WB BUSWAY)
## ROUTE 10 BRIDGES
## GIRDER REPAIR DETAILS

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 09 | 12 |

FILE => 07-2W6601-b-girdreprdtl.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 36 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

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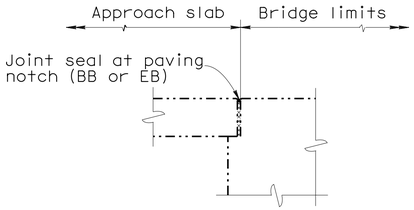
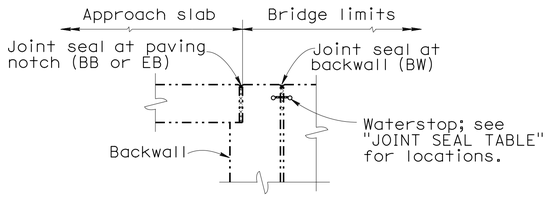
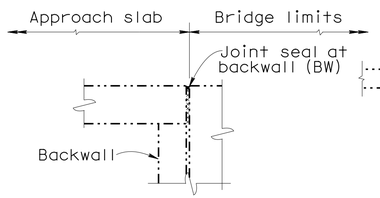


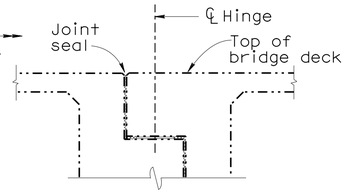

DIAPHRAGM ABUTMENT



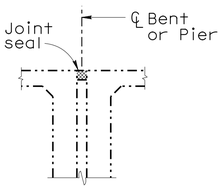

ABUTMENT WITH BACKWALL AND PAVING NOTCH




ABUTMENT WITH BACKWALL




HINGE




BENT OR PIER

# JOINT SEAL LOCATION

NO SCALE

Abutment joint seal is not required with AC roadway pavement transverse contact joint.

## JOINT SEAL TABLE

| BRIDGE NAME | BRIDGE NUMBER | LOCATION | | MINIMUM "MR" (INCHES) | Approx LENGTH (LF) | EXISTING WATERSTOP | Approx DEPTH TO CLEAN EXP JOINT (INCHES) | Approx DEPTH OF JOINT SPALLS (INCHES) | Approx LENGTH OF JOINT SPALLS (LF) | LENGTH TO CLEAN EXP JOINT (LF) |
|---|---|---|---|---|---|---|---|---|---|---|
| ROUTE 10/164 COLLECTOR SEPARATION | 53-0010S | ABUT 1 | PN | 1/2 | 28 | NO | 12 | 3 | 5 | 56 |
| | | ABUT 5 | PN | 1/2 | 28 | NO | 12 | 3 | 5 | |
| ROUTE 10/164 COLLECTOR SEPARATION | 53-0010K | ABUT 1 | BW | 1/2 | 28 | NO | 12 | 3 | 5 | 69 |
| | | ABUT 5 | BW | 1/2 | 41 | NO | 12 | 3 | 5 | |
| LAFC ACCESS ROAD | 53-2636 | BB | BW | 1/2 | 104 | NO | 12 | 3 | 5 | 208 |
| | | EB | BW | 1/2 | 104 | NO | 12 | 3 | 5 | |
| SANTA ANITA AVENUE UC | 53-0658 | ABUT 1 | PN | 1/2 | 160 | NO | 12 | 3 | 5 | 461 |
| | | ABUT 2 | PN | 1/2 | 160 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 168 | NO | 12 | 3 | 5 | |
| LEXINGTON AVENUE UC | 53-0883 | ABUT 1 | PN | 1/2 | 162 | NO | 12 | 3 | 5 | 446 |
| | | ABUT 2 | PN | 1/2 | 159 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 126 | NO | 12 | 3 | 5 | |
| TYLER AVENUE UC | 53-0659 | ABUT 1 | PN | 1/2 | 184 | NO | 12 | 3 | 5 | 579 |
| | | ABUT 2 | PN | 1/2 | 186 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 209 | NO | 12 | 3 | 5 | |
| MEEKER ROAD UC | 53-1029 | ABUT 1 | PN | 1/2 | 205 | NO | 12 | 3 | 5 | 525 |
| | | ABUT 2 | PN | 1/2 | 208 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 112 | NO | 12 | 3 | 5 | |
| EAST EL MONTE OH | 53-0867 | ABUT 1 | PN | 1/2 | 274 | NO | 12 | 3 | 5 | 1,760 |
| | | | BW | 1 1/2* | 393 | NO | 12 | 3 | 5 | |
| | | ABUT 3 | PN | 1/2 | 393 | NO | 12 | 3 | 5 | |
| | | | BW | 1 1/2* | 274 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 426 | NO | 12 | 3 | 5 | |
| STEWART STREET ON-RAMP UC | 53-1030 | ABUT 1 | PN | 1/2 | 30 | NO | 12 | 3 | 5 | 168 |
| | | ABUT 2 | PN | 1/2 | 30 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 108 | NO | 12 | 3 | 5 | |
| COGSWELL ROAD UC | 53-0662 | ABUT 1 | PN | 1/2 | 162 | NO | 12 | 3 | 5 | 454 |
| | | ABUT 2 | PN | 1/2 | 162 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 130 | NO | 12 | 3 | 5 | |
| DURFEE ROAD UC | 53-1031 | ABUT 1 | PN | 1 | 168 | NO | 12 | 3 | 5 | 542 |
| | | ABUT 2 | PN | 1 | 168 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 206 | NO | 12 | 3 | 5 | |
| GARVEY AVENUE OFF-RAMP UC | 53-1032 | ABUT 1 | PN | 1 1/2* | 242 | NO | 12 | 3 | 5 | 582 |
| | | ABUT 2 | PN | 1 1/2* | 243 | NO | 12 | 3 | 5 | |
| | | AL | -- | -- | 97 | NO | 12 | 3 | 5 | |

PN = PAVING NOTCH
BW = BACKWALL
AL = ALUMINUM JOINT
* = USE BONDED JOINT SEAL

## NOTES:

The following notes apply to JOINT SEAL TYPE A:

Install Joint Seal (MR = 1/2") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.

For details not shown see B6-21 Standard Plan.

The following notes apply to JOINT SEAL TYPE B:

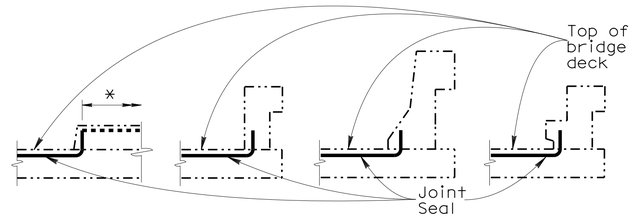
1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.

2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.

3) W1 shall be the smaller of the values determined as follows:
   A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
   B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3.0 PSI.

4) Bend Type B joint seal 6 inches up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.

For details not shown see B6-21 Standard Plan.




BARRIER RAIL

# JOINT SEAL AT LOW SIDE OF DECK

Note: Details shown for illustration purposes only.

For use only where deck joint matches the sidewalk, curb or barrier rail joint.

* Extension of joint seal will be determined by the Engineer if necessary.

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | BY | CHECKED |
|---|---|---|
| DESIGN | Edward Li | HongTien Tran |
| DETAILS | Tom Dang | Edward Li |
| QUANTITIES | Edward Li | HongTien Tran |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES

# MISCELLANEOUS DETAILS NO. 1

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

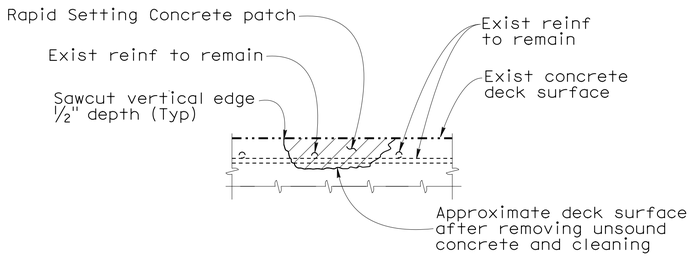
UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 10 | 12 |

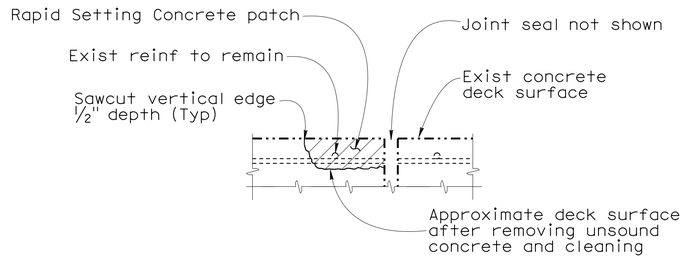
FILE => 07-2W6601-c-miscdtls01.dgn

DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18
USERNAME => s122436




## DECK DAMAGE REPAIR DETAIL

Location will be determined by the Engineer.
Reinforcement may be encountered during deck concrete removal and is to remain undamaged.




## JOINT REPAIR DETAIL

Location will be determined by the Engineer.
Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

CONSTRUCTION NOTES:

1. Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
2. It is responsibility of the Contractor to repair any reinforcement that is accidently cut by saw cutting operations.
3. When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
4. The saw cut depth shall not exceed ½ inch or the concrete cover over the top steel reinforcing bars, whichever is less.
5. Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original spall surface with rapid setting concrete patch.

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 37 | 38 |

Edward Li 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

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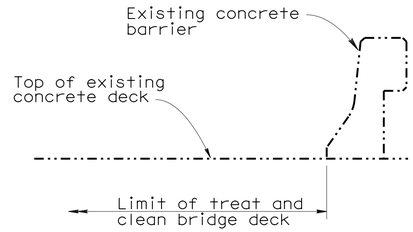
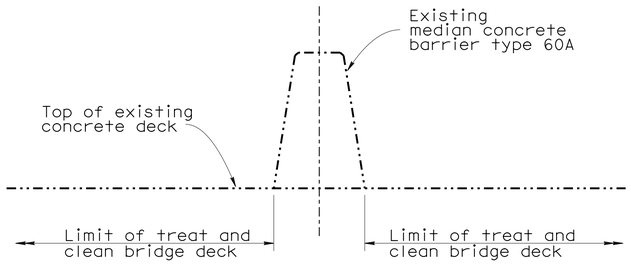
REGISTERED PROFESSIONAL ENGINEER
EDWARD GUOJUN LI
No. C56706
Exp. 06/30/17
CIVIL
STATE OF CALIFORNIA

## DECK REPAIR TABLE
## REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)

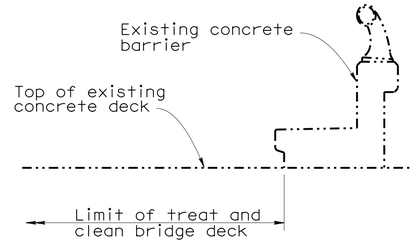
| BRIDGE NAME | BRIDGE NUMBER | APPROXIMATE AREA DAMAGED (%) | APPROXIMATE DEPTH (INCH) |
|---|---|---|---|
| ROUTE 10/164 COLLECTOR SEPARATION | 53-0010S | 1 | 3 |
| ROUTE 10/164 COLLECTOR SEPARATION | 53-0010K | 1 | 3 |
| EATON WASH (WB BUSWAY) | 53-0656C | 1 | 3 |
| EATON WASH | 53-0656R | 1 | 3 |
| BALDWIN AVENUE UC | 53-1021L | 1 | 3 |
| BALDWIN AVENUE UC WB BUSWAY | 53-1021C | 1 | 3 |
| LEXINGTON AVENUE UC | 53-0883 | 1 | 3 |
| TYLER AVENUE UC | 53-0659 | 1 | 3 |
| MEEKER ROAD UC | 53-1029 | 1 | 3 |
| STEWART STREET ON-RAMP UC | 53-1030 | 1 | 3 |
| COGSWELL ROAD UC | 53-0662 | 1 | 3 |
| GARVEY AVENUE OFF-RAMP UC | 53-1032 | 1 | 3 |



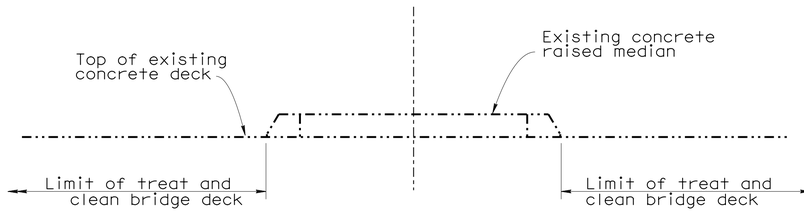

EOD BARRIER



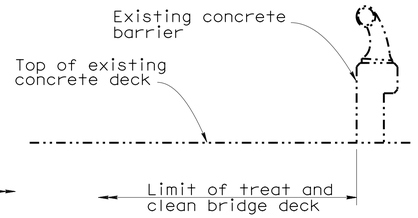

MEDIAN BARRIER




SIDEWALK BARRIER TYPE 2




RAISED MEDIAN




SIDEWALK BARRIER TYPE 1

## TYPICAL LIMITS OF DECK WORK

NO SCALE

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

| | | |
|---|---|---|
| DESIGN | BY Edward Li | CHECKED HongTien Tran |
| DETAILS | BY Tom Dang | CHECKED Edward Li |
| QUANTITIES | BY Edward Li | CHECKED HongTien Tran |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

# ROUTE 10 BRIDGES
# MISCELLANEOUS DETAILS NO. 2

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 4-01-14 | | | | 11 | 12 |

FILE => 07-2W6601-c-miscdtls02.dgn

USERNAME => s122936 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 07 | LA | 10 | 26.8/30.8 | 38 | 38 |

Edward Lu 09/01/15
REGISTERED CIVIL ENGINEER DATE

12/21/15
PLANS APPROVAL DATE

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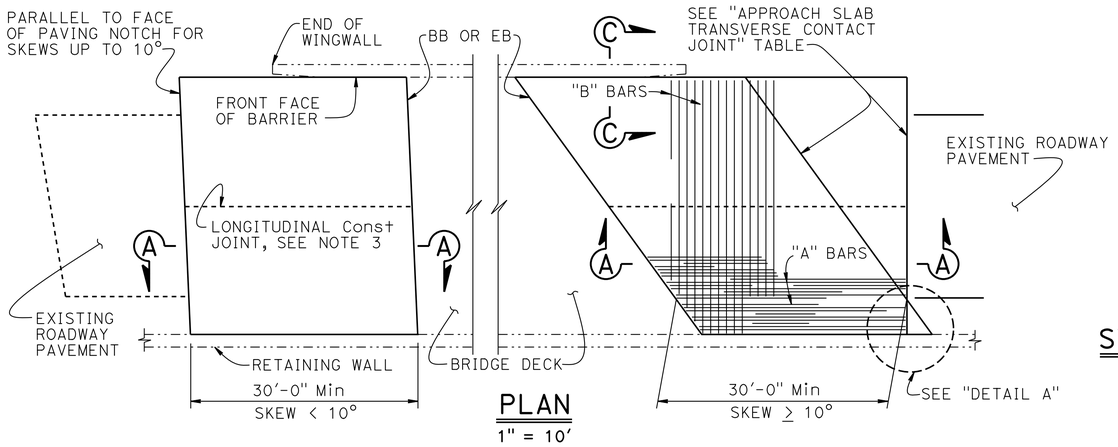
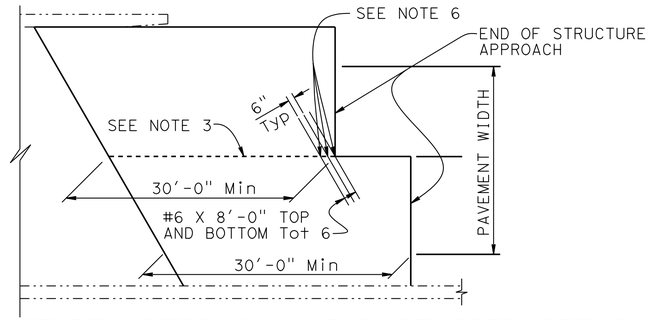
REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/17 — CIVIL — STATE OF CALIFORNIA

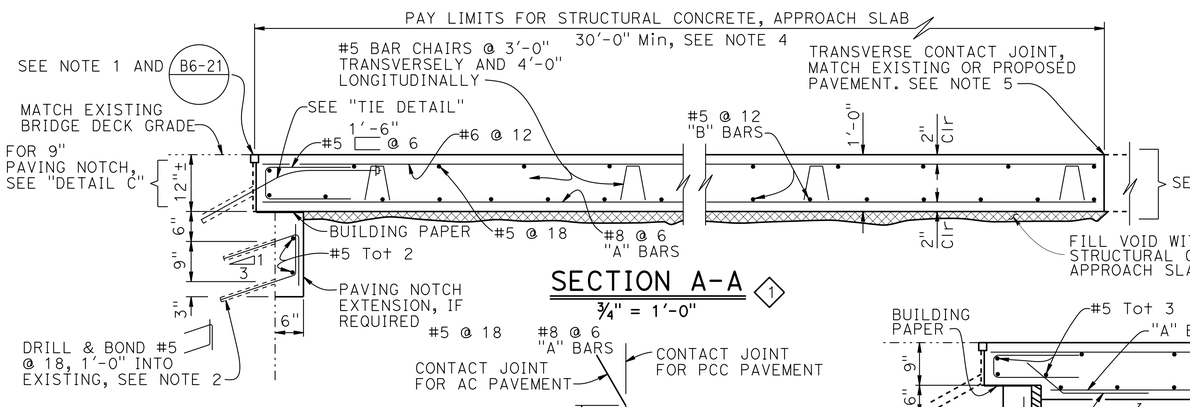



## PLAN
1" = 10'

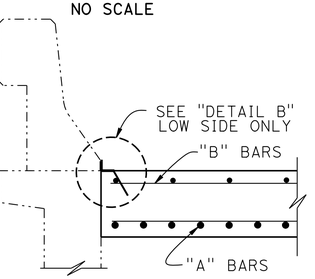



## STRUCTURE APPROACH - END STAGGER DETAIL
NO SCALE

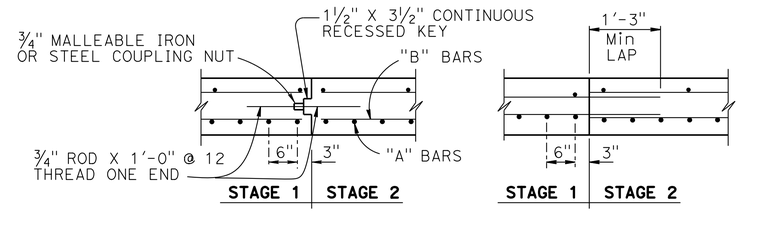
| APPROACH SLAB TRANSVERSE CONTACT JOINT | | |
|---|---|---|
| APPROACH SKEW | WITH AC ROADWAY PAVEMENT | WITH PCC ROADWAY PAVEMENT |
| < 10° | PARALLEL TO FACE OF PN | PARALLEL TO FACE OF PAVING NOTCH |
| 10° - 45° | PARALLEL TO FACE OF PN USE "DETAIL A" | STAGGER LINES 24' TO 36' APART |
| > 45° | PARALLEL TO FACE OF PN USE "DETAIL A" | STAGGER AT EACH LANE LINE |




## SECTION A-A ⟨1⟩
¾" = 1'-0"



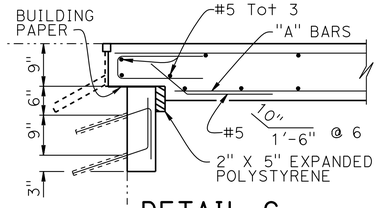

## SECTION C-C
¾" = 1'-0"



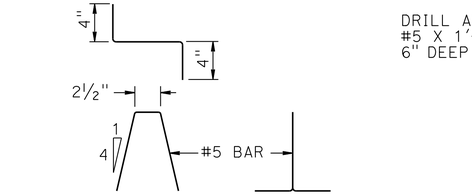




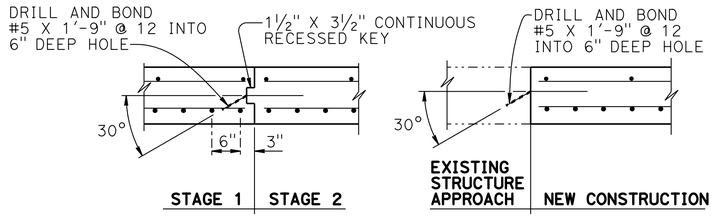
## DETAIL A
No Scale



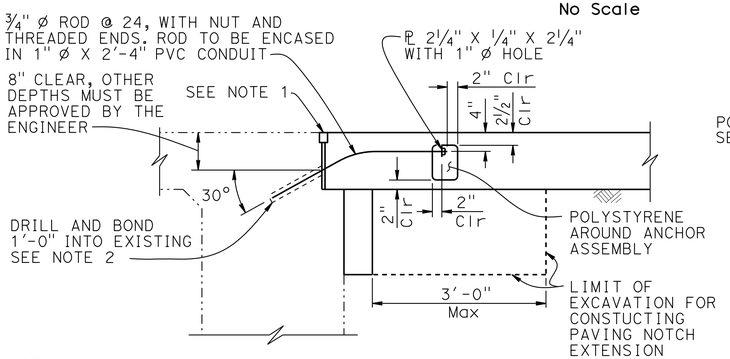

## DETAIL C
¾" = 1'-0"




## BAR CHAIR DETAIL
1½" = 1'-0"



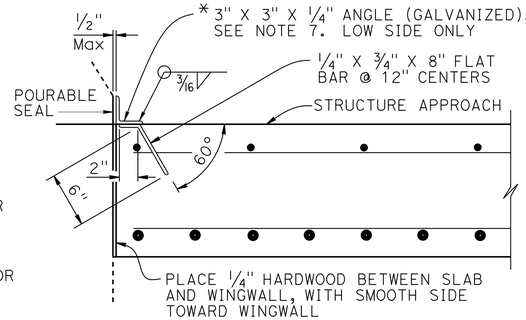

## LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
¾" = 1'-0"




NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

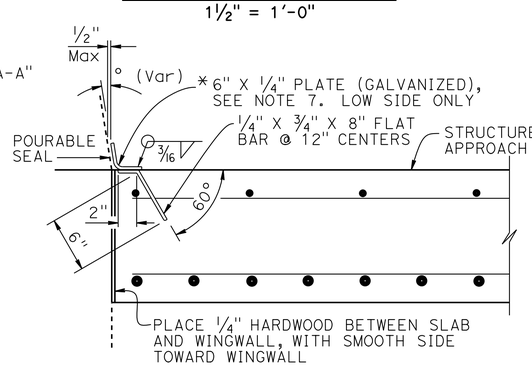
## TIE DETAIL
¾" = 1'-0"

NOTE: For details not shown, see "SECTION A-A"




*(TO BE USED WITH CONCRETE BARRIER WITH VERTICAL FACE)

## DETAIL B
1½" = 1'-0"




*(TO BE USED WITH CONCRETE BARRIER WITH SLOPING FACE)

NOTES:
1. For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
2. Space to avoid existing prestress anchorages and main reinforcement
3. Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
4. Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
5. For transverse contact joint with new PCC paving. refer to Standard Plan P10
6. Couplers are required for stage construction
7. End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

REVISED STANDARD DRAWING

FILE NO. xs3-150

APPROVAL DATE July 2011

⟨1⟩ REVISED

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53-1022L
POST MILE C28.01

# GIBSON OH (EB & WB BUSWAY)
# ROUTE 10 BRIDGES
# STRUCTURE APPROACH TYPE R(30D)

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3489
PROJECT NUMBER & PHASE: 0713000449-1 CONTRACT NO.: 07-2W6604

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| | | | | 12 | 12 |

FILE => 07-2W6601-d-strapptypeR30d.dgn

USERNAME => s122436 DATE PLOTTED => 27-JAN-2016 TIME PLOTTED => 13:18